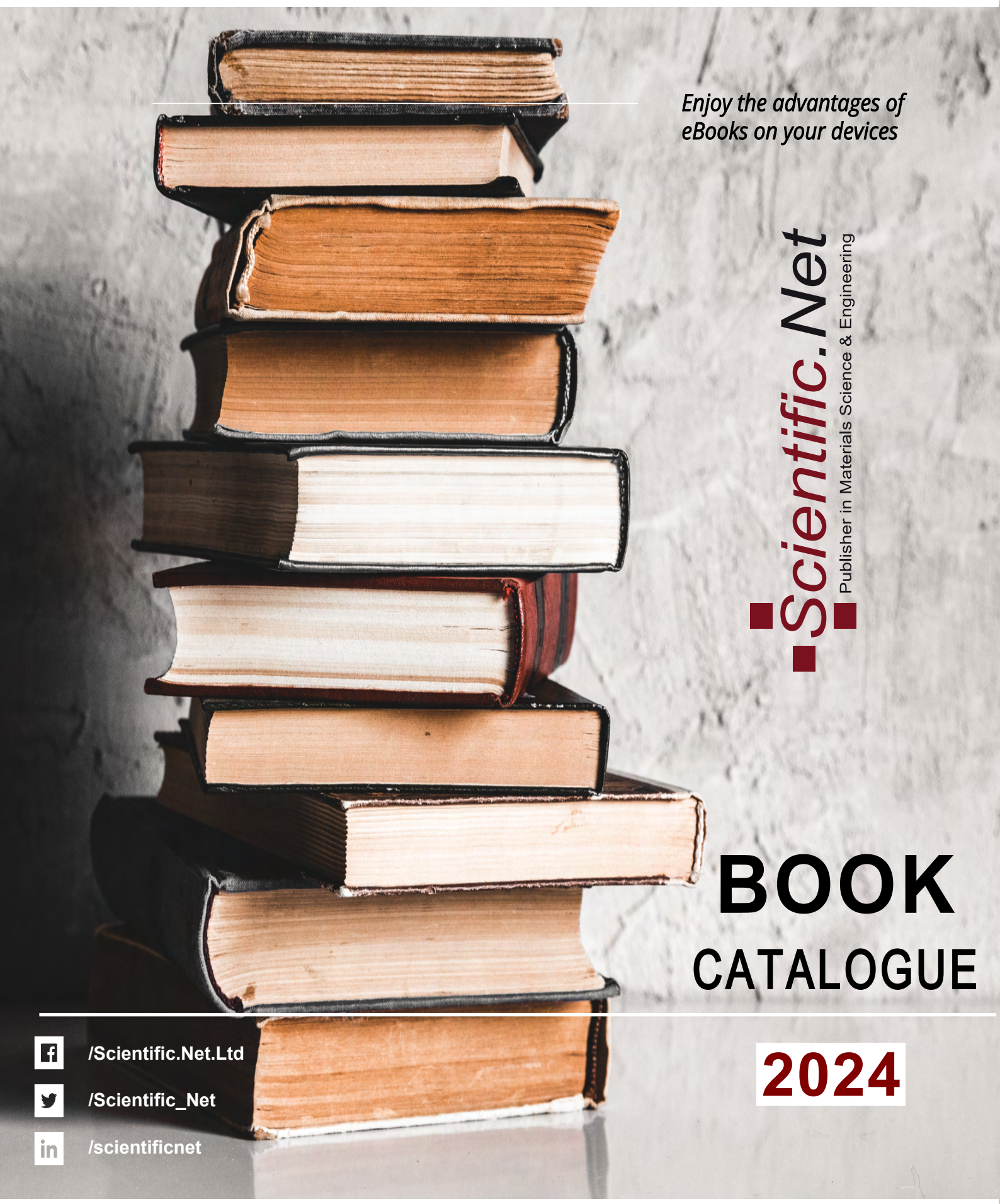

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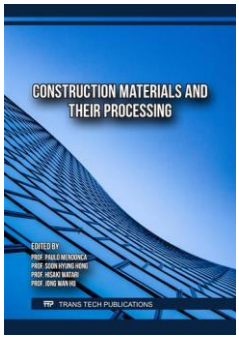

Construction Materials and their Processing

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Paulo Mendonca, Prof. Soon Hyung Hong, Prof. Hisaki Watari and Prof. Jong Wan Hu

The special issue contains articles that are dedicated to the analysis of the latest research results in the area of structural and functional materials and their processing and synthesis technologies, including methods of their applications in machinery and construction. This special edition will be helpful to specialists in machinery, construction and environmental engineering.

Topics: Bioscience and Medicine, Building Materials, Civil Engineering, Construction, Materials Science, Mechanics

Keywords: Air Pollutants, Alloy, Building Materials, Concrete, Construction Technologies, Dry Electropolishing, Environmental Sustainability, Functional Materials, Geotechnics, Groundwater Purification, Induction Hardening, Mechanical Properties, Steel, Strength of Materials, Thin Film, Wooden Materials

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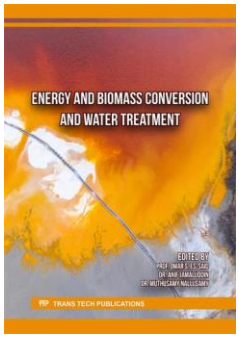

Energy and Biomass Conversion and Water Treatment

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Edited by: Prof. Omar S. Es-Said, Dr. Anif Jamaluddin and Dr. M. Nallusamy

The presented special edition contains articles that are dedicated to the research results in materials science and technologies of materials synthesis and processing and will be helpful to specialists in electrochemistry, energy storage and conversion, biomass processing and environmental engineering.

Topics: Bioscience and Medicine, Materials Science

Keywords: Absorption, Anaerobic Digestion, Biomass Conversion, Biomass Processing, Composite, Electrode Materials, Electrolyte Membrane, Lithium-Ion Battery, Perovskite Solar Cell, Photocatalyst, Polymer, Wastewater Treatment, Water Quality, Water Treatment

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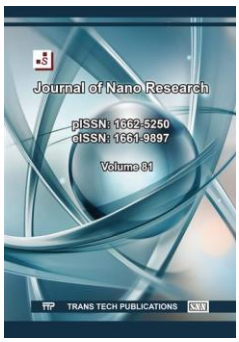

Journal of Nano Research Vol. 81

Edited by: Prof. Efstathios I. Meletis

This volume of the "Journal of Nano Research" includes peer-reviewed articles reflecting the practical research results in the synthesis and properties analysis of nanomaterials and nanoparticles for various engineering goals - photocatalytic applications, micro- and optoelectronics, photovoltaic and electrochemical use in solar cells and energy storage devices, for applications in biomedicine, creating protective coatings, etc. The presented articles collection will be helpful to specialists from many branches of engineering whose activity is related to nanomaterials and nanotechnologies.

Topics: Electronics, Materials Science, Nanoscience

Keywords: Ceramics, Crystalline Structure, Ferromagnetic Material, Nanocomposite, Nanomaterials, Nanotubes, Nanowire, Photocatalytic Activity, Semiconductor, Supercapacitor, Thin Film, Wear Behaviour

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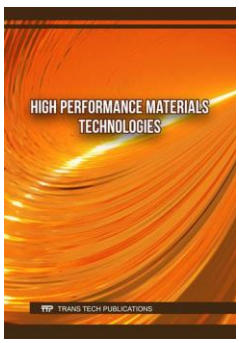

High Performance Materials Technologies

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. D. Palanisamy and Dr. Rendra Panca Anugraha

The articles of this special edition refer to various branches of modern engineering sciences. Still, they are united by one thing - the underlying principles of their research are diffusion phenomena and heat and mass transfer processes. The special edition will be helpful to researchers and engineers from many branches of modern production and engineering science.

Topics: Materials Science, Mechanics

Keywords: Battery Pack, Coating, Cooling, Fluid Dynamics, Heat Transfer, Laser Beam Welding, Lithium-Ion Battery, Magnetohydrodynamics, Nanofluid, Physical Vapor Deposition, Superalloy, Titanium Nitride

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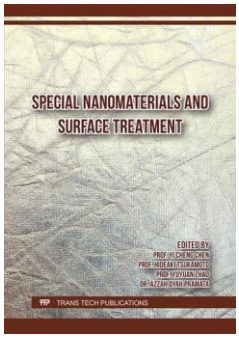

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The special edition is dedicated to the recent issues in modern materials science and technologies of materials synthesis and processing and will be useful to specialists in machinery and chemical production.

Topics: Materials Science, Nanoscience

Keywords: Biosynthesis, Ceramics, Coating, Composite, Direct Laser Deposition, Electropolishing, Finishing, Laser Welding, Mechanical Properties, Nanomaterials, Nanoparticles, Plasma Nitrocarburizing, Single Point Incremental Forming, Steel, Surface Treatment, Thermal Barrier Coating

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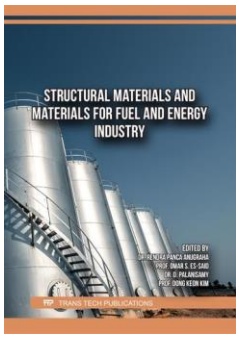

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The special issue contains articles that are dedicated to the analysis of the latest research results and engineering solutions in the area of materials science and materials processing and synthesis technologies. This special edition will be useful to specialists in machinery, chemical production and energy storage.

Topics: Manufacturing, Materials Science, Mechanical Engineering, Nanoscience

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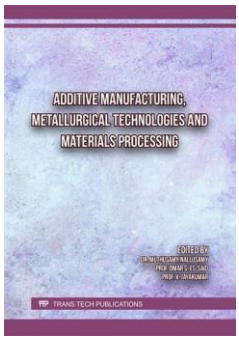

Additive Manufacturing, Metallurgical Technologies and Materials Processing

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Edited by: Dr. M. Nallusamy, Prof. Omar S. Es-Said and Prof. V. Jayakumar

The special issue contains articles that reflect the modern level of research and development in the area of materials processing technologies. The publication will be useful and interesting to specialists in metallurgy and mechanical engineering.

Topics: Manufacturing, Materials Science

Keywords: Additive Manufacturing, Alloy, Casting, Cladding, Composite, Friction Stir Welding, Injection Moulding, Mechanical Properties, Metallurgy, Polymer, Powder Metallurgy, Rolling, Sintering, Steel

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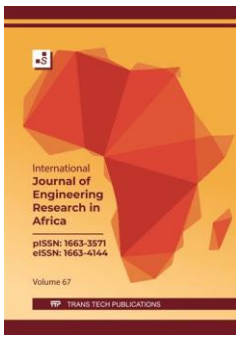

International Journal of Engineering Research in Africa Vol. 67

Edited by: Prof. Akii Okonigbon Akaehomen Ibhadode

The 67th issue of the journal includes articles that present the latest research results in chemical engineering for energy production, friction stir welding of polymers, corrosion rate prediction in pipelines, green building materials and structural mechanics, analysis of opening angle on the efficiency of Michell-Banki turbines without guide blades. There are also described neural networks-based modelling to optimise water productivity of passive solar still and model-based approaches for leak detection in water distribution systems, analysis of photovoltaic systems performance in Moroccan regions and a machine learning scheme for speed prediction in intelligent transportation systems. This volume will be helpful to many engineers in machinery, energy production and construction.

Topics: Building Materials, Construction, General Engineering, Information Technologies, Manufacturing, Materials Science, Mechanical Engineering, Mechanics, Transportation

Keywords: Corrosion Rate, Dune Sand, Earth Brick, Energy Production, Friction Stir Welding, Intelligent Transportation System, Leak Detection, Mechanical Properties, Michell-Banki Turbine, Multiphase Flow Modeling, Natural Gas, Passive Solar Still, Photovoltaic System, Polymer, Rubber Aggregates, Structural Mechanics, Water Distribution Network

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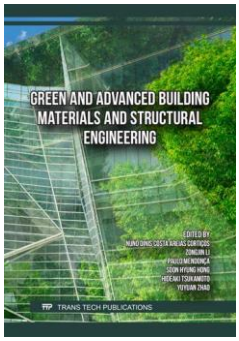

Green and Advanced Building Materials and Structural Engineering

Special topic volume with invited peer-reviewed papers only

Edited by: Nuno Dinis Costa Areias Cortiços, Prof. Zongjin Li, Prof. Paulo Mendonca, Prof. Soon Hyung Hong, Prof. Hideaki Tsukamoto and Prof. Yuyuan Zhao

The special issue contains articles that reflect the modern level of research and development in the area of materials and technologies in modern construction and will be useful to specialists in the construction industry.

Topics: Building Materials, Civil Engineering, Materials Science, Mechanics

Keywords: Ash, Carbide Lime Waste, Cement, Composite, Concrete, Crumb Rubber, Dam Filler, Functionally Graded Concrete, Geopolymer, Geotechnics, Green Building Materials, Mechanical Properties, Paste, Polymer, Portland Cement, Recycled Fine Aggregate, Structural Mechanics, Structural Member

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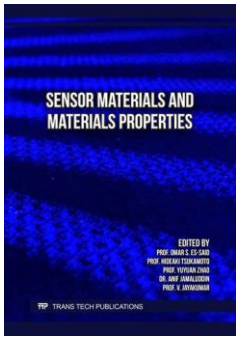

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Edited by: Prof. Omar S. Es-Said, Prof. Hideaki Tsukamoto, Prof. Yuyuan Zhao, Dr. Anif Jamaluddin and Prof. V. Jayakumar

This special edition is dedicated to considering a wide range of issues in the part of materials science that is related to specialised and functional materials and will be helpful to many researchers and engineers.

Topics: Building Materials, Electronics, Materials Science, Mechanics, Nanoscience

Keywords: Alloy, Ceramics, Composite, Corrosion, Electrochemistry, Electrode Materials, Fuel Cell, Functional Materials, Mechanical Properties, Metamaterial, Nanocomposite, Nanoparticles, Perovskite, Polymer, Polymer Electrolyte, Proton Exchange Membrane, Solid Lubricant, Spark Plasma Sintering, Steel, Supercapacitor, Thin Film, Tribological Properties, Wear of Materials

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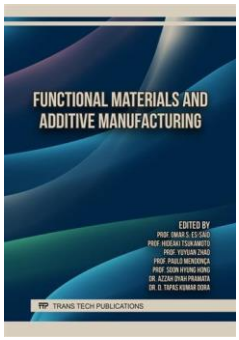

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The presented special issue is dedicated to the recent problems in the area of modern functional and specialised materials: synthesis technologies, properties analysis and features of their applications, and will be helpful to many specialists from many branches of modern production.

Topics: Bioscience and Medicine, Building Materials, Materials Science, Nanoscience

Keywords: Additive Manufacturing, Cathode Materials, Composite, Degradation, Functional Materials, Nanomaterials, Nanoparticle, Polymer, Soil Remediation, Transition Metal Dichalcogenides

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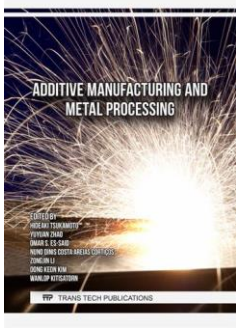

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The special issue contains articles that reflect the modern level of research and development in the area of materials and materials processing technologies and will be useful to specialists in modern machinery.

Topics: Building Materials, Materials Science, Mechanics

Keywords: Additive Manufacturing, Alloy, Composite, Fatigue Life, Fracture, Injection Moulding, Mechanical Properties, Polymer, Selective Metallization, Steel, Strength of Materials, Stress, Structural Element, Tool Wear, Ultrasonic Vibration Welds

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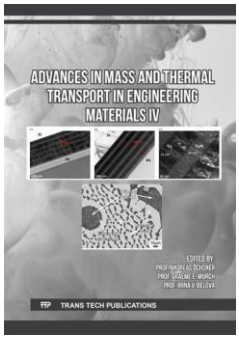

Advances in Mass and Thermal Transport in Engineering Materials IV

Edited by: Prof. Andreas Öchsner, Graeme E. Murch and Irina V. Belova

This special volume of the journal Defect and Diffusion Forum is entitled: *Advances in Mass and Thermal Transport in Engineering Materials IV*. It continues the general theme of how mass and heat diffusion in solids and liquids occur and how these phenomena can be controlled. We start from mass and heat migration at the microscale and carry it through to the macroscale.

Topics: Materials Science, Mechanics, Nanoscience

Keywords: Diffusion, Liquid Phase, Mass Transport, Material Properties, Nanoscale, Numerical Investigation, Theoretical Investigations, Thermal Transport

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Technologies in Materials Research and Application

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Edited by: Prof. Mihail Ionescu, Prof. Tara Chandra, Prof. Christof Sommitsch and Prof. Raj Shabadi

This special issue presents articles reflecting results of research and engineering achievements in the field of development of new and analysis of existing applied methods and means for measurements and testing in the area of materials science. The publication also includes articles dedicated to industrial engineering and operation research issues, assessments of critical process parameters, data analysis, quality prediction, etc. The special edition will be interesting and useful to specialists in materials science as well as in organization and engineering support of industrial production.

Topics: Industrial Engineering, Information Technologies, Materials Science, Mechanical Engineering, Mechanics

Keywords: Critical Process Parameters, Data Analysis, Durability, Equipment, Industrial Engineering, Jominy End Quench Test, Life Cycle Analysis, Measurement, Mechanical Spectroscopy, New Product Development, Operation Research, Production Data, Quality Prediction, Scheduling, Spectroscopy Investigation, Sustainability, Testing, X-Ray Measurement

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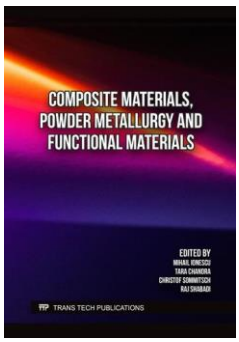

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Edited by: Prof. Mihail Ionescu, Prof. Tara Chandra, Prof. Christof Sommitsch and Prof. Raj Shabadi

This special issue is dedicated to the analysis of the latest research results in the field of applied and functional materials and will be helpful to many researchers and engineers whose activity is related to materials science.

Topics: Manufacturing, Materials Science, Nanoscience

Keywords: Alloy, Amorphous Alloy, Ceramics, Composite, Ferromagnetic Material, Friction Stir Forming, Functional Materials, High Entropy Alloy, High-Temperature Deformation, Hot Pressing, Magnetic Properties, Mechanical Properties, Microstructure, Nanocomposite, Phononic Crystal, Powders Metallurgy, Steel, Superconductor

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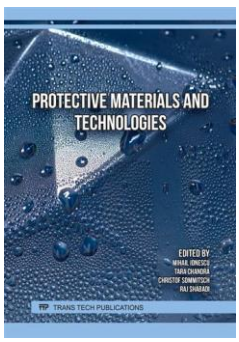

Protective Materials and Technologies

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Mihail Ionescu, Prof. Tara Chandra, Prof. Christof Sommitsch and Prof. Raj Shabadi

The special issue is dedicated to an analysis of the recent achievements in the design and applications of protective coatings and technologies of working surface treatment and will be helpful to engineers whose activity is related to the protection and provision of engineering durability of machine parts and equipment.

Topics: Manufacturing, Materials Science

Keywords: Alloy, Coating, Composite, Corrosion Protection, Electroplating, Mechanical Properties, Passive Shielding, Plasma Spraying, Radiation Protection, Shot-Peening, Steel, Surface Quality

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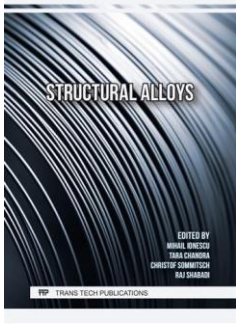


Structural Alloys

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Mihail Ionescu, Prof. Tara Chandra, Prof. Christof Sommitsch and Prof. Raj Shabadi

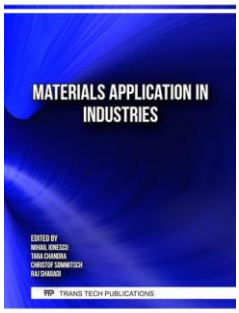
The presented special publication contains articles that reflect the latest research results in the field of materials science that will be helpful to researchers and engineers in the field of mechanical engineering.

Topics: Materials Science, Mechanics

Keywords: Alloy, Aluminum Foam, Annealing, Cold Rolling, Computational Materials Science, Cryorolling, Damage Mechanics, Dislocation Theory, Grain Size, High Entropy Alloy, Mechanical Properties, Microstructure, Plasticity Laws, Recrystallization

Prices:
Print: **US$ 155.00 / EUR 155.00**
eBook Single-User: **US$ 155.00 / EUR 155.00**
eBook Multi-User: **US$ 271.00 / EUR 271.00**

Print: 978-3-0364-0222-2
eBook: 978-3-0364-1222-1
194 pages, 2023
https://www.scientific.net/978-3-0364-0222-2/book



Materials Application in Industries

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Mihail Ionescu, Prof. Tara Chandra, Prof. Christof Sommitsch and Prof. Raj Shabadi

This special issue represents a collection of scientific and engineering research in the area of applied materials used in the processes of transportation and storage of hydrogen, the electronics industry to provide the main manufacturing processes and in the biomedical practice for prosthetics, surgery, etc. The special edition will be interesting and useful to specialists in materials science involved in the mentioned branches of industry and biomedicine.

Topics: Bioscience and Medicine, Electronics, Materials Science, Nanoscience

Keywords: Alloy, Biocompatibility, Biomedical Metals, Carbon Dots, Composite, Corrosion, Hydrogen Embrittlement, Mechanical Properties, Metal Injection Moulding, Microstructure, Nanofabrication, Optical–Emission Properties, Plasma Processing, Polymer, Solder Joint, Steel

Prices:
Print: **US$ 145.00 / EUR 145.00**
eBook Single-User: **US$ 145.00 / EUR 145.00**
eBook Multi-User: **US$ 254.00 / EUR 254.00**

Print: 978-3-0364-0260-4
eBook: 978-3-0364-1260-3
188 pages, 2023
https://www.scientific.net/978-3-0364-0260-4/book

4th International Conference on Advances in Environmental Engineering

Selected peer-reviewed full text papers from the 4th International Scientific Conference on "Advances in Environmental Engineering" (AEE2023), November 20-22, 2023, Ostrava, Czech Republic

Edited by: Prof. Adriana Eštoková, Assoc. Prof. Vojtěch Václavík, Assoc. Prof. Natália Junáková, Assoc. Prof. Tomáš Dvorský and Prof. Magdaléna Bálintová

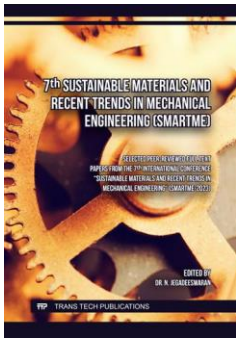
The 4th International Scientific Conference on "Advances in Environmental Engineering" (AEE 2023) aim was to provide an emerging global platform for all researchers and engineers from academia and industry in the V4 region and around the world to present their research results and activities in the field of fundamental and interdisciplinary research of environmental science and technology. The conference provides an international platform for the dissemination of original research results, new ideas and practical developments and discovers advances in the field of environmental engineering and related materials topics. The proceedings present the scientific papers related to the industrial waste materials, their generation and characterisation and potential utilisation in cement composites production.

Topics: Building Materials, Materials Science

Keywords: Aggregates, Bioleaching, Cement, Concrete, Construction Waste, Demolition Waste, Natural Materials, Plastic Degradation, Radioactive Waste, Sand, Sediments, Solid Waste, Waste Treatment

Prices:
Print: **US$ 90.00 / EUR 90.00**
eBook Single-User: **US$ 90.00 / EUR 90.00**
eBook Multi-User: **US$ 158.00 / EUR 158.00**

Print: 978-3-0364-0295-6
eBook: 978-3-0364-1295-5
122 pages, 2023
https://www.scientific.net/978-3-0364-0295-6/book



7th Sustainable Materials and Recent Trends in Mechanical Engineering (SMARTME)

Edited by: Dr. N. Jegadeeswaran

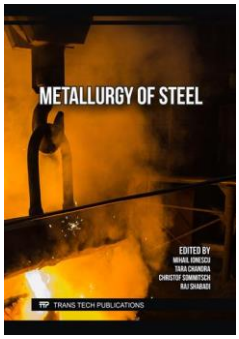
This proceeding presents to the readers' attention the selected submissions from the 7th International Conference "Sustainable Materials and Recent Trends in Mechanical Engineering" (SMARTME-2023, July 14-15, 2023, India) that highlight a diverse range of topics in the sphere of manufacturing materials, processes, techniques, etc. SMARTME-2023 was aimed at providing a platform to PG students, researchers, young aspiring engineers and academicians to present their research findings in the respective fields of research, share ideas and promote dissemination of knowledge and critical discourse in their domains.

Topics: Materials Science, Mechanical Engineering, Nanoscience

Keywords: Additive Manufacturing, Alloys, Aluminum, Carbon Nanotubes, Casting, Composites, Forging, Heat Transfer, Materials Processing and Forming, Mechanical Engineering, Mechatronics, Processes Simulation

Prices:
Print: **US$ 65.00 / EUR 65.00**
eBook Single-User: **US$ 65.00 / EUR 65.00**
eBook Multi-User: **US$ 114.00 / EUR 114.00**

Print: 978-3-0364-0386-1
eBook: 978-3-0364-1386-0
162 pages, 2023
https://www.scientific.net/978-3-0364-0386-1/book



Metallurgy of Steel

Special topic volume with invited peer-reviewed papers only

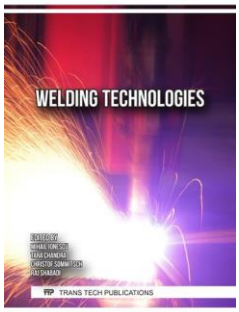
Edited by: Prof. Mihail Ionescu, Prof. Tara Chandra, Prof. Christof Sommitsch and Prof. Raj Shabadi

This special issue is dedicated to the recent achievements in the development of modern metallurgical technologies for steel production and processing and will be helpful to specialists whose activity is related to metallurgical production.

Topics: Manufacturing, Materials Science, Mechanics, Nanoscience

Keywords: Hardening, Hot Deformation, Hot Press Forming, Hot Stamping, Mechanical Properties, Metallurgy, Microalloying, Microstructure, Phase Transformation, Rolling, Steel, Tempering, Thermal Cycle

Prices:			
	Print:	**US$ 180.00 / EUR 180.00**	Print: 978-3-0364-0112-6
	eBook Single-User:	**US$ 180.00 / EUR 180.00**	eBook: 978-3-0364-1112-5
	eBook Multi-User:	**US$ 315.00 / EUR 315.00**	*244 pages, 2023*
			https://www.scientific.net/978-3-0364-0112-6/book



Welding Technologies

Special topic volume with invited peer-reviewed papers only

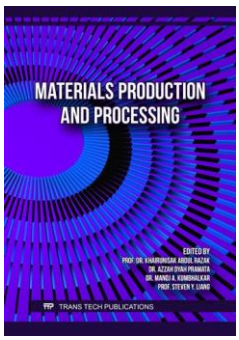
Edited by: Prof. Mihail Ionescu, Prof. Tara Chandra, Prof. Christof Sommitsch and Prof. Raj Shabadi

This special issue is fully dedicated to the recent achievements in the development of modern welding technologies and will be helpful to a wide range of specialists in the field of modern machinery.

Topics: Manufacturing, Materials Science

Keywords: Alloy, Dissimilar Lap Joints, Explosive Welding, Friction Stir Welding, Heat Affected Zone, Heat Treatment, Laser Welding, Mechanical Properties, Microalloying, Phase Transformations, Resistance Spot Welding, Seam Weld, Steel, Ultrasonic Bonding, Welding

Prices:			
	Print:	**US$ 105.00 / EUR 105.00**	Print: 978-3-0364-0016-7
	eBook Single-User:	**US$ 105.00 / EUR 105.00**	eBook: 978-3-0364-1016-6
	eBook Multi-User:	**US$ 184.00 / EUR 184.00**	*132 pages, 2023*
			https://www.scientific.net/978-3-0364-0016-7/book



Materials Production and Processing

Special topic volume with invited peer-reviewed papers only

Edited by: Khairunisak Abdul Razak, Dr. Azzah Dyah Pramata, Dr. Manoj A. Kumbhalkar and Prof. Steven Y. Liang

The presented special edition is dedicated to modern issues in materials science and technologies of materials processing and synthesis and will be useful to specialists in mechanical engineering, electronics, biomedical engineering and chemical production.

Topics: Bioscience and Medicine, Electronics, Materials Science, Nanoscience

Keywords: Alloy, Antibacterial Properties, Biomaterials, Casting, Composite, Friction Stir Welding, Hydrogen Production, Materials Processing, Photovoltaics, Polymer, Steel, Thin Film, Welding

Prices:			
	Print:	**US$ 100.00 / EUR 100.00**	Print: 978-3-0357-1881-2
	eBook Single-User:	**US$ 100.00 / EUR 100.00**	eBook: 978-3-0357-3817-9
	eBook Multi-User:	**US$ 175.00 / EUR 175.00**	*130 pages, 2023*
			https://www.scientific.net/978-3-0357-1881-2/book

Achievements in Additive Manufacturing

Special topic volume with invited peer-reviewed papers only

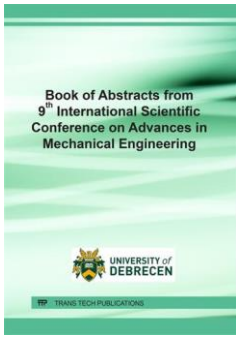
Edited by: Prof. Mihail Ionescu, Prof. Tara Chandra, Prof. Christof Sommitsch and Prof. Raj Shabadi

This special issue is fully dedicated to the recent achievements in the development of modern additive manufacturing and will be helpful to a wide range of specialists in the field of modern machinery.

Topics: Manufacturing, Materials Science

Keywords: Additive Manufacturing, Alloy, Bioprinting, Ceramics, Electron-Beam Powder Bed Fusion, Extrusion, Laser Cladding, Laser Powder Bed Fusion, Mechanical Properties, Postprocessing, Steel, Structure, Vacuum Induction Melting

Prices:			
	Print:	**US$ 155.00 / EUR 155.00**	Print: 978-3-0364-0011-2
	eBook Single-User:	**US$ 155.00 / EUR 155.00**	eBook: 978-3-0364-1011-1
	eBook Multi-User:	**US$ 271.00 / EUR 271.00**	*180 pages, 2023*
			https://www.scientific.net/978-3-0364-0011-2/book



Book of Abstracts from 9th International Scientific Conference on Advances in Mechanical Engineering

Edited by: Mihály Csüllög and Dr. Tamás Mankovits

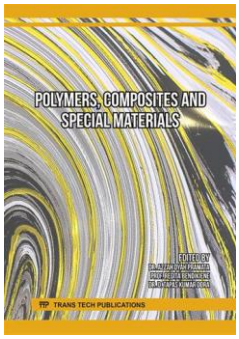
The 9th International Scientific Conference on Advances in Mechanical Engineering (ISCAME, November 9-10, 2023, Debrecen, Hungary) was organized by the Department of Mechanical Engineering (Faculty of Engineering, University of Debrecen) and the Working Commission of Mechanical Engineering (Specialized Committee in Engineering, Regional Committee in Debrecen, Hungarian Academy of Sciences). The main goal of ISCAME is to yearly bring together engineers, scientists, researchers, practitioners from academia and industry to present their original works and share experiences.

Topics: General Engineering, Industrial Engineering, Manufacturing, Materials Science, Mechanical Engineering, Mechanics

Keywords: 3D Printing, Additive Manufacturing, Aluminum, Aluminum Casting Alloy, Bubble Dynamics, CAD, Computational Fluid Dynamic (CFD), Computer Vision, DEM, Dynamic Mechanical Analysis (DMA), Electrical Discharge Machining, Finite-Element Method (FEM), Gear, High-Entropy Alloy, Industrial Process Simulation

Prices:			
	Print:	**US$ 55.00 / EUR 55.00**	Print: 978-3-0364-0445-5
	eBook Single-User:	**US$ 0.00 / EUR 0.00**	eBook: 978-3-0364-1445-4
	eBook Multi-User:	**US$ 0.00 / EUR 0.00**	*140 pages, 2023*

https://www.scientific.net/978-3-0364-0445-5/book



Polymers, Composites and Special Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Azzah Dyah Pramata, Prof. Regita Bendikiene and Dr. D. Tapas Kumar Dora

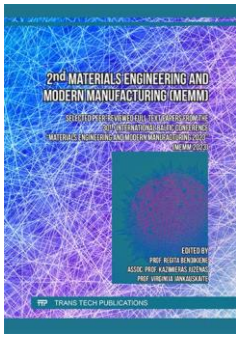
The presented special edition is dedicated to actual issues and the latest achievements in materials science and production technologies and will be useful to many specialists in materials science, mechanical engineering and chemical technologies.

Topics: Building Materials, Materials Science, Nanoscience

Keywords: Alloy, Bioplastic, Ceramics, Coating, Composite, Dye Degradation, Graphene, Mechanical Properties, Nanomaterials, Nanomechanics, Nanotubes, Polymer, Powder Metallurgy, Soil Remediation, Steel, Surface Treatment, Wastewater Treatment

Prices:			
	Print:	**US$ 110.00 / EUR 110.00**	Print: 978-3-0357-1713-6
	eBook Single-User:	**US$ 110.00 / EUR 110.00**	eBook: 978-3-0357-3559-8
	eBook Multi-User:	**US$ 193.00 / EUR 193.00**	*154 pages, 2023*

https://www.scientific.net/978-3-0357-1713-6/book



2nd Materials Engineering and Modern Manufacturing (MeMM)

Selected peer-reviewed full text papers from the 30th International Baltic Conference "Materials Engineering and Modern Manufacturing 2023" (MeMM 2023), October 19-20, 2023, Kaunas, Lithuania

Edited by: Prof. Regita Bendikiene, Kazimieras Juzėnas and Prof. Virginija Jankauskaite

The 30th International Baltic Conference on Materials Engineering and Modern Manufacturing was held October 19-20, 2023, in Kaunas, Lithuania and served as a continuation of the longstanding tradition established by the Materials Societies of Baltic Countries and the Association of Baltic Materials Societies. This book offers a collection of articles presented at the conference to cover the topics of advanced materials, manufacturing processes, state-of-the-art technologies and practical applications of engineering materials and industrial engineering.

Topics: Bioscience and Medicine, Industrial Engineering, Manufacturing, Materials Science, Nanoscience

Keywords: Alloys, Biobased Materials, Coatings, Composites, Nanomaterials, Nanotubes, Polymers, Product Design, Production Processes

Prices:			
	Print:	**US$ 55.00 / EUR 55.00**	Print: 978-3-0357-1771-6
	eBook Single-User:	**US$ 55.00 / EUR 55.00**	eBook: 978-3-0357-3603-8
	eBook Multi-User:	**US$ 96.00 / EUR 96.00**	*84 pages, 2023*

https://www.scientific.net/978-3-0357-1771-6/book

Journal of Biomimetics, Biomaterials and Biomedical Engineering Vol. 63

Edited by: Dr. David Duday, Dr. Sooraj Hussain Nandyala, Dr. Ari Syahidul Shidiq and Dr. Thangaprakash Sengodan

The volume accommodates articles that described the last research results in biomaterials for various applications including drug delivery for cancer treatment, analysis of the effect of curcumin on blood glucose patients with diabetes, antibacterial properties of some plant extracts etc. Here are also presented research results related to brain-computer Interface, classification of lung sound abnormalities and the computational studies of a predictive mathematical model for transdermal and non-invasive diagnosis using biodegradable and hollow microneedle patches.

Topics: Bioscience and Medicine, General Engineering, Materials Science, Mechanics

Keywords: Antibacterial Material, Biocompatibility, Brain-Computer Interface, Cancer Treatment, Chitosan, Composite, Deep Learning, Diabetes, Drug Delivery, Electroencephalogram, Essential Oil, Lung Sound Abnormalities, Nanoparticles, Polymer, Vaccine

Prices:			
	Print:	**US$ 130.00 / EUR 130.00**	Print: 978-3-0364-0463-9
	eBook Single-User:	**US$ 130.00 / EUR 130.00**	eBook: 978-3-0364-1463-8
	eBook Multi-User:	**US$ 228.00 / EUR 228.00**	*164 pages, 2023*

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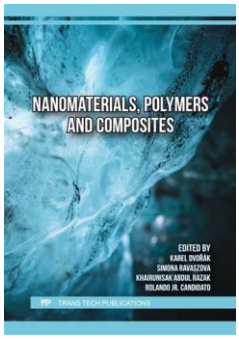


Nanomaterials, Polymers and Composites

Special topic volume with invited peer-reviewed papers only

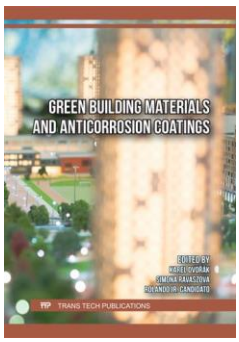
Edited by: Assoc. Prof. Dr. Karel Dvořák, Simona Ravaszova, Khairunisak Abdul Razak and Dr. Rolando T. Candidato Jr.

This special edition is devoted to research results in the area of modern applied materials including for the construction industry and will be useful for many specialists.

Topics: Building Materials, Materials Science, Nanoscience

Keywords: Building Materials, Cement, Composite, Density Functional Theory, Graphene, Limestone, Material Identification, Mechanical Properties, Nanomaterials, Nanowire, Polymer

Prices:			
	Print:	**US$ 95.00 / EUR 95.00**	Print: 978-3-0364-0468-4
	eBook Single-User:	**US$ 95.00 / EUR 95.00**	eBook: 978-3-0364-1468-3
	eBook Multi-User:	**US$ 166.00 / EUR 166.00**	*138 pages, 2023*
			https://www.scientific.net/978-3-0364-0468-4/book



Green Building Materials and Anticorrosion Coatings

Special topic volume with invited peer-reviewed papers only

Edited by: Assoc. Prof. Dr. Karel Dvořák, Simona Ravaszova and Dr. Rolando T. Candidato Jr.

The presented special edition is dedicated to research results in the area of modern green building materials and will be useful to specialists in the construction industry.

Topics: Building Materials, Materials Science, Nanoscience

Keywords: Anticorrosion Coating, Blast-Furnace Slag, Cement, Composite, Corrosion, Forsterite Ceramics, Green Building Materials, Mechanical Properties, Nanocellulose, Polymer, Secondary Materials, Silicate Materials, Steel

Prices:			
	Print:	**US$ 95.00 / EUR 95.00**	Print: 978-3-0364-0467-7
	eBook Single-User:	**US$ 95.00 / EUR 95.00**	eBook: 978-3-0364-1467-6
	eBook Multi-User:	**US$ 166.00 / EUR 166.00**	*128 pages, 2023*
			https://www.scientific.net/978-3-0364-0467-7/book

7th International Conference on Recent Advances in Materials, Minerals and Environment (RAMM)

Selected peer-reviewed full text papers from the 7th International Conference on Recent Advances in Materials, Minerals and Environment (RAMM 2022), July 19-20, 2022, Nibong Tebal, Malaysia

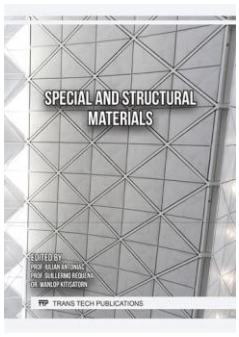
Edited by: Khairunisak Abdul Razak, Prof. Zuhailawati Hussain, Dr. Arjulizan Rusli and Dr. Hareyani Zabidi

This books presents the selected research papers which were presented at the 7th International Conference on Recent Advances in Materials, Minerals and Environment (RAMM 2022) organized by the School of Materials and Mineral Resources Engineering (SMMRE), Universiti Sains Malaysia (USM). Articles reflect the latest achievements in the area of green building materials, namely methods of their preparation and analysis of mechanical properties. This collection will be useful to engineers and researchers in construction.

Topics: Building Materials, Civil Engineering, Materials Science, Mechanics

Keywords: Additive, Cement, Cement Replacement, Concrete, Fire Resistance, Geopolymer, Green Building Materials, Mechanical Properties, Natural Fiber, Polymer Waste

Prices:			
	Print:	**US$ 55.00 / EUR 55.00**	Print: 978-3-0364-0464-6
	eBook Single-User:	**US$ 55.00 / EUR 55.00**	eBook: 978-3-0364-1464-5
	eBook Multi-User:	**US$ 96.00 / EUR 96.00**	*100 pages, 2023*
			https://www.scientific.net/978-3-0364-0464-6/book



Special and Structural Materials

Special topic volume with invited peer-reviewed papers only

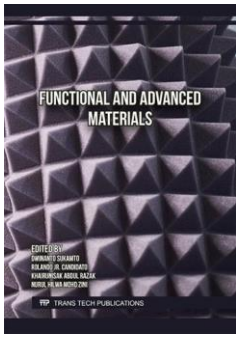
Edited by: Prof. Iulian Antoniac, Prof. Guillermo Requena and Wanlop Kitisatorn

This special edition is dedicated to the results of engineering research properties of materials for various branches of engineering as well as construction and will be useful to many specialists in the mentioned branches of industry.

Topics: Building Materials, Construction, Materials Science, Nanoscience

Keywords: Alloy, Building Materials, Composite, Geopolymer, Graphene, Mechanical Properties, Metal Additive Manufacturing, Microstructure, Nanomaterials, Polymer, Recrystallisation, Steel, Structural Joint, Welding

Prices:			
	Print:	**US$ 140.00 / EUR 140.00**	Print: 978-3-0364-0461-5
	eBook Single-User:	**US$ 140.00 / EUR 140.00**	eBook: 978-3-0364-1461-4
	eBook Multi-User:	**US$ 245.00 / EUR 245.00**	*188 pages, 2023*
			https://www.scientific.net/978-3-0364-0461-5/book



Functional and Advanced Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Dwinanto Sukamto, Dr. Rolando T. Candidato Jr., Khairunisak Abdul Razak and Dr. Nurul Hilwa Mohd Zini

The presented special publication contains articles reflecting the latest research results in materials science, environmental protection and biomedical engineering and will be useful to many specialists in the mentioned branches of engineering.

Topics: Bioscience and Medicine, Materials Science, Nanoscience

Keywords: Alloy, Composite, Distillation, Electrochemical Properties, Electrode, Functional Materials, Leaching, Mechanical Properties, Metallurgy, Mineral Extraction, Natural Fiber, Polymer, Radiotherapy, Steel, Waste Treatment, Zircon

Prices:			
	Print:	**US$ 120.00 / EUR 120.00**	Print: 978-3-0364-0460-8
	eBook Single-User:	**US$ 120.00 / EUR 120.00**	eBook: 978-3-0364-1460-7
	eBook Multi-User:	**US$ 210.00 / EUR 210.00**	*198 pages, 2023*

https://www.scientific.net/978-3-0364-0460-8/book

Journal of Biomimetics, Biomaterials and Biomedical Engineering Vol. 62

Edited by: Dr. Ari Syahidul Shidiq, Prof. Steven Y. Liang and Prof. Mosbeh Kaloop

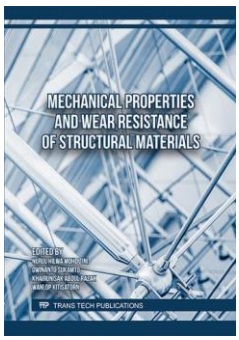
This journal's volume is devoted to bioceramics such as hydroxyapatite for coating titanium bone implants, some dental caries treatment issues, pharma chemistry, chemistry for food production and the original decision for bioremediation of ammonia.

Topics: Bioscience and Medicine, Materials Science, Nanoscience

Keywords: Ammonia Reducing, Anthocyanins, Antibacterial Properties, Bioceramics, Biofilm, Bone Implant, Dental Caries, Food Chemistry, Hydroxyapatite, Nanoparticles

Prices:			
	Print:	**US$ 50.00 / EUR 50.00**	Print: 978-3-0364-0462-2
	eBook Single-User:	**US$ 50.00 / EUR 50.00**	eBook: 978-3-0364-1462-1
	eBook Multi-User:	**US$ 88.00 / EUR 88.00**	*78 pages, 2023*

https://www.scientific.net/978-3-0364-0462-2/book



Mechanical Properties and Wear Resistance of Structural Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Nurul Hilwa Mohd Zini, Dr. Dwinanto Sukamto, Khairunisak Abdul Razak and Wanlop Kitisatorn

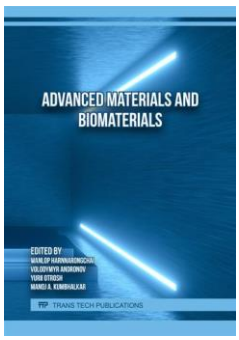
This special edition gives an acquaintance with the latest research results in wear resistance and the strength and corrosion behaviour of structural materials and also describes some solutions for the preparation of green building materials based on the use of industrial waste. The edition will be helpful to specialists in machinery and construction.

Topics: Building Materials, Materials Science, Mechanics

Keywords: Additive Manufacturing, Alloy, Composite, Corrosion, Fracture, Green Building Materials, Mechanical Properties, Steel, Wear Resistance, Welding

Prices:			
	Print:	**US$ 95.00 / EUR 95.00**	Print: 978-3-0364-0085-3
	eBook Single-User:	**US$ 95.00 / EUR 95.00**	eBook: 978-3-0364-1085-2
	eBook Multi-User:	**US$ 166.00 / EUR 166.00**	*142 pages, 2023*

https://www.scientific.net/978-3-0364-0085-3/book



Advanced Materials and Biomaterials

Special topic volume with invited peer-reviewed papers only

Edited by: Wanlop Kitisatorn, Vladimir Andronov, Yurii Otrosh and Dr. Manoj A. Kumbhalkar

The special edition that is brought to your attention includes articles comprising research results in the area of applied materials and manufacturing technologies and will be useful and interesting to specialists in mechanical engineering as well as the nuclear industry, construction, and biomedicine.

Topics: Bioscience and Medicine, Building Materials, Construction, Materials Science, Mechanical Engineering, Mechanics, Nanoscience

Keywords: Biocomposite, Biomaterials, Biopolymer, Coating, Composite, Electrolytic Deposition, Functional Materials, Mechanical Properties, Nanocomposite, Nanomaterials, Nuclear Safety, Polymer, Structural Mechanics

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8th International Conference on Material Science and Smart Materials (MSSM) - selected papers

Selected peer-reviewed full text papers from the 8th International Conference on Materials Science and Smart Materials (MSSM 2022), July 11-13, 2022, London, United Kingdom

Edited by: Dr. Mohamad Ramadan and Prof. Abdul Ghani Olabi

This proceeding edited by Dr. Mohamad Ramadan and Prof. Abdul Ghani Olabi contains articles that were presented at the 8th International Conference on Material Science and Smart Materials (MSSM 2022) that was held at Brunel University London in the UK between the 11th and the 13th of July 2022 and reflects recent achievements in the fields of sensors, thermal engineering, waste management and circular economy. The edition will be interesting and useful to many engineers of modern production and construction.

Topics: Construction, Environmental Engineering, Industrial Engineering, Information Technologies, Materials Science, Mechanical Engineering

Keywords: Circular Economy, Construction Waste, Sensor, Thermal Engineering, Waste Management

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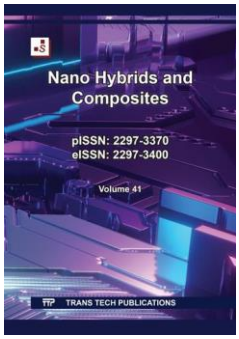

Nano Hybrids and Composites Vol. 41

Edited by: Nicuşor Alin Sîrbu and Dr. Ari Syahidul Shidiq

Collected articles describe the results of properties research, synthesis methods and applications of additive technologies for nanocomposites and composite materials with reinforcement based on natural materials. The applications of 3D printing in biomedical practice are analysed here too. This volume will be helpful to many researchers whose activity is related to composites and additive technologies.

Topics: Bioscience and Medicine, Materials Science, Nanoscience

Keywords: Additive Manufacturing, Biocomposite, Mechanical Properties, Nanocomposite, Natural Fiber

Prices:			
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Engineering Innovations Vol. 7

Edited by: Prof. Afrooz Barnoush, Prof. Elena Gordo Odériz, Prof. Dong Keon Kim, Yurii Otrosh, Dr. Omar S. Dahham and Dr. Manoj A. Kumbhalkar

The 7th volume of the journal Engineering Innovations contains articles that accent the reader's attention on the latest engineering design and results of research in materials science, engineering design, urban transport network development issues, wastewater treatment, investigation of thermophysical properties of alternative engine fuel, etc. The presented articles will be helpful to many engineers and researchers in materials, mechanical engineering, civil engineering and environmental protection.

Topics: Building Materials, Environmental Engineering, Manufacturing, Materials Science, Mechanical Engineering, Mechanics, Transportation

Keywords: 3D Printing, Alternative Fuel, Cable Gland, Combustion Engine, Finite Element Analysis, Gas Diffusion, Heterogeneous Catalysis, Intersection, Lateritic Brick, Mechanical Properties, Milling, Molecular Dynamics Simulation, Nanocrystalline Aluminum, Oxidation, Polymer, Robot Chassis, Shock Wave, Steel, Surface Roughness, Thermophysical Properties, Traffic Congestion, Transportation, TRIZ, Ultrasonic Processing, Wastewater Treatment

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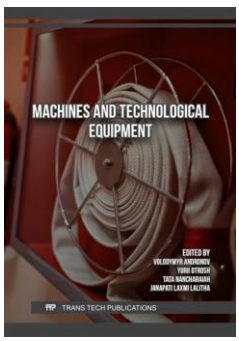

Machines and Technological Equipment

Special topic volume with invited peer-reviewed papers only

Edited by: Vladimir Andronov, Yurii Otrosh, Dr. Tata Nancharaiah and Dr. Janapati Laxmi Lalitha

This special edition contains articles dedicated to the practice of designing technological equipment and machines, researching functional possibilities of existing and designing new equipment used for fire extinguishing goals. The special collection will be helpful to designers and engineers from mechanical engineering.

Topics: General Engineering, Materials Science, Mechanical Engineering, Mechanics

Keywords: Air Foam System, Design, Distillate, Equipment, Fire, Fire Extinguishing Works, Fire Resistance, Machine, Mechatronics, Oil Blend, Process Parameters, Rotary Cavitation Device, Steel, Testing, Thermoelastic Analysis

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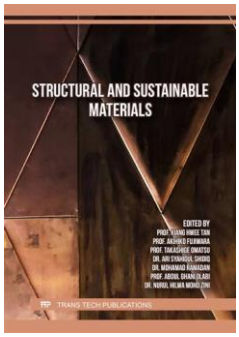

Structural and Sustainable Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Kiang Hwee Tan, Prof. Akihiko Fujiwara, Prof. Takashige Omatsu, Dr. Ari Syahidul Shidiq, Dr. Mohamad Ramadan, Prof. Abdul Ghani Olabi and Dr. Nurul Hilwa Mohd Zini

This special edition presents the latest research results in materials engineering, machinery technologies, construction and chemical technologies for wastewater treatment. The special collection will be helpful to many specialists whose activity is related to materials science, machinery, ecological safety and construction.

Topics: Building Materials, Construction, General Engineering, Materials Science, Mechanical Engineering, Mechanics

Keywords: Alloy, Coating, Computational Materials Science, Concrete, Corrosion, Dye Removal, Geopolymer, Green Building Materials, Machinery Production, Mechanical Properties, Non-Destructive Testing, Steel, Structural Element, Structural Mechanics, Wastewater Treatment

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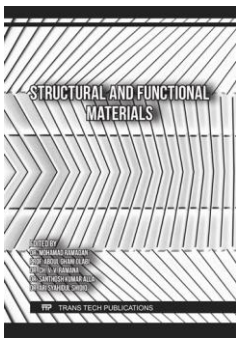

Structural and Functional Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Mohamad Ramadan, Prof. Abdul Ghani Olabi, Dr. CH. V. V. Ramana, Dr. Santhosh Kumar Alla and Dr. Ari Syahidul Shidiq

This special edition presents the latest research results in materials engineering and chemical production and will be helpful to many specialists whose activity is related to materials science, machinery, biotechnologies, alternative sources of energy and ecological safety.

Topics: Materials Science, Nanoscience

Keywords: Alloy, Biochar, Biofuel, Composite, Environmental Safety, Fuel Cells, Functional Materials, Geochemistry, Mechanical Properties, Nanomaterials, Polymer, Steel

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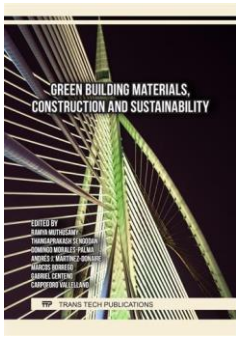

Green Building Materials, Construction and Sustainability

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Ramya Muthusamy, Dr. Thangaprakash Sengodan, Prof. Domingo Morales-Palma, Prof. Andrés J. Martínez-Donaire, Prof. Marcos Borrego Puche, Prof. Gabriel Centeno Báez and Prof. Carpoforo Vallellano

This special collection is devoted to actual issues in developing machinery technologies and the implementation of sustainable development principles in the area of building materials and modern manufacture. The special edition will be useful to specialists in machinery and technologies of materials processing, development of green building materials and waste management activity.

Topics: Building Materials, Civil Engineering, Environmental Engineering, Manufacturing, Materials Science

Keywords: Activated Slag, Additive Manufacturing, Alloy, Carbon Footprint, Cement, Ceramic Waste, Dissimilar Joint, Friction Stir Welding, Geopolymer, Green Building Materials, Green Concrete, Mechanical Properties, Plant Cellulose, Tool, Waste Management, Welding

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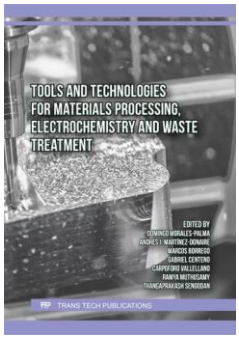

Tools and Technologies for Materials Processing, Electrochemistry and Waste Treatment

Special topic volume with invited peer-reviewed papers only

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This special article collection is devoted to actual issues in developing tools and equipment parts for materials processing technologies, electrochemical engineering and some achievements in the creation of bio-based materials and waste treatment. The special edition will be useful to specialists in machinery and technologies of materials processing, designing of bio-based materials and waste treatment.

Topics: Materials Science, Mechanics, Nanoscience

Keywords: Additive Manufacturing, Alloy, Biocomposite, Composite, Corrosion, Electrochemistry, Equipment, Materials Processing, Polymer, Tools, Waste Recycling

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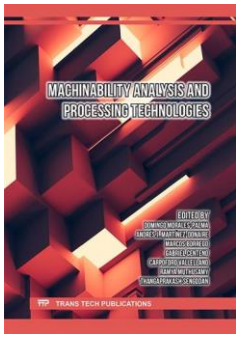

Machinability Analysis and Processing Technologies

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This special article collection is devoted to modern issues in developing materials processing technologies and some achievements in building materials and technologies. The special edition will be useful to specialists in materials processing and engineers from the building industry.

Topics: Building Materials, Construction, Materials Science

Keywords: Additive Manufacturing, Alloy, Building Materials, Composite, Cutting, Dimensional Metrology, Machinability, Mechanical Properties, Milling, Polymer, Steel, Structural Element, Surface Quality, Tool Wear, Turning

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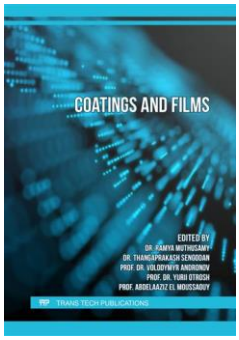

Coatings and Films

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Ramya Muthusamy, Dr. Thangaprakash Sengodan, Vladimir Andronov, Yurii Otrosh and Prof. Abdelaaziz El Moussaouy

This special publication presents to readers the latest engineering investigations in the area of materials science including thin films and nanomaterials for microelectronics and surface treatment technologies in machinery. The special edition will be useful to many researchers and engineers whose activities are related to machinery and electronics.

Topics: Materials Science, Nanoscience

Keywords: Chemical Bath Deposition, Coating, Cold Spraying, Gallium Arsenide, Grinding, Laser Hardening, Low Dimensional Quantum Structure, Optical Properties, Quantum Dots, Quantum Wells, Spray Pyrolysis, Surface Treatment, Thin Films

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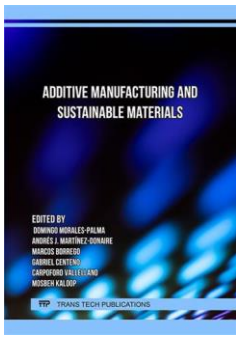

Additive Manufacturing and Sustainable Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Domingo Morales-Palma, Prof. Andrés J. Martínez-Donaire, Prof. Marcos Borrego Puche, Prof. Gabriel Centeno Báez, Prof. Carpoforo Vallellano and Prof. Mosbeh Kaloop

The presented special edition is devoted to recent research results in materials and additive technologies for various applied applications. This edition will be useful to specialists in materials science and additive technologies.

Topics: Building Materials, Materials Science

Keywords: Additive Manufacturing, Alloy, Building Materials, Ceramics, Composite, Mechanical Properties, Polymer, Processing Parameters, Steel, Surface Finishing

Prices:			
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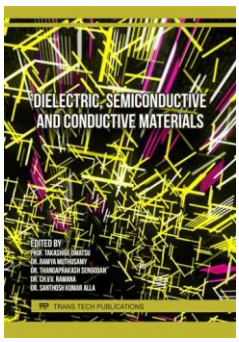

Dielectric, Semiconductive and Conductive Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Takashige Omatsu, Dr. Ramya Muthusamy, Dr. Thangaprakash Sengodan, Dr. CH. V. V. Ramana and Dr. Santhosh Kumar Alla

This special edition presents the latest engineering investigations in the area of functional materials and some chemical technologies for materials recovery and will be useful to many researchers and engineers whose activities are related to opto- and microelectronics, the development of energy conversion and storage devices and chemical technologies.

Topics: Materials Science, Nanoscience

Keywords: Catalyst, Ceramics, Chemical Technology, Composite, Conductive Polymer, Ferrite, Hematite Powder, Hydrometallurgy, Mechanical Properties, Molecular Dynamic Simulation, Nanomaterials, Opto-Electronic Properties, Polymer, Quantum Dots, Semiconductor, Superconducting Properties

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Advances and Innovations

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Edited by: Prof. Domingo Morales-Palma, Prof. Andrés J. Martínez-Donaire, Prof. Marcos Borrego Puche, Prof. Gabriel Centeno Báez, Prof. Carpoforo Vallellano and Prof. Jong Wan Hu

This special edition is dedicated to recent research results in the properties and processing technologies of modern polymer and composite materials, structural metals and technologies and materials for renewable energy and energy storage. The collection will be interesting to engineers and technologists in the machinery and energy industry.

Topics: Manufacturing, Materials Science

Keywords: Composite, Cutting, Delamination, Electrochemical Capacitor, Extrusion, Forming, Grinding, Matrix Composite, Mechanical Properties, Metal Foam, Polymer, Selective Laser Sintering, Solar Energy

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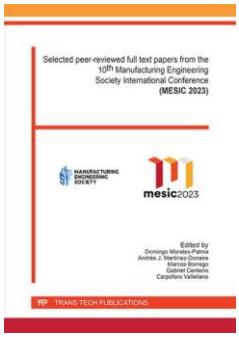

10th Manufacturing Engineering Society International Conference (MESIC 2023)

Selected peer-reviewed full text papers from the 10th Manufacturing Engineering Society International Conference (MESIC 2023), June 28-30, 2023, Sevilla, Spain

Edited by: Prof. Domingo Morales-Palma, Prof. Andrés J. Martínez-Donaire, Prof. Marcos Borrego Puche, Prof. Gabriel Centeno Báez and Prof. Carpoforo Vallellano

This book contains papers presented at the 10th Manufacturing Engineering Society International Conference (MESIC 2023) held in Sevilla (Spain) from 28 to 30 June, 2023. The MESIC was born in 2005 in the shelter of the Manufacturing Engineering Society – *Sociedad de Ingeniería de Fabricación* (MES-SIF) as a biennial event of international scope. It aims the creation of forums for the exchange of experiences between researchers, professionals and academics in the field of engineering material processing and manufacturing. The present edition covers a wide range of research results and engineering solutions on the topics of advances and innovations in manufacturing processes, additive manufacturing, trends in manufacturing systems and automation, metrology and quality in manufacturing, Industry X.0 and digital manufacturing, as well as manufacturing engineering in society. This publication will be helpful to many researchers and engineers in the area of manufacturing engineering.

Topics: General Engineering, Industrial Engineering, Information Technologies, Manufacturing, Materials Science, Mechanical Engineering, Mechanics

Keywords: Automation, Computer-Aided Manufacturing, Digital Twin, Ductile Fracture Analysis, Engineering Education, Engineering Management, Geometrical Deviations, Industrial Heritage, Industrial Measurements, Industry X.0, Mechatronics, Product Design, Quality Assurance System, Reverse Engineering, Robotic Welding, Robotics, Tool Condition

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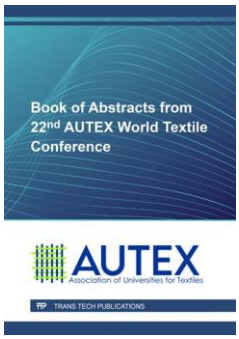

Book of Abstracts from 22nd AUTEX World Textile Conference

Edited by: Prof. Li Jing Wang

The AUTEX conference brings together academics, researchers and industry partners from various universities, research and technological centres and companies who are interested in the amazing areas of fibres, textiles, clothing and more. The conference serves as a platform for exchanging ideas, presenting the latest developments and trends, proposing new solutions, promoting international collaborations, and networking.

Topics: General Engineering, Materials Science

Prices:			
	Print:	**US$ 45.00 / EUR 45.00**	Print: 978-3-0364-0418-9
	eBook Single-User:	**US$ 0.00 / EUR 0.00**	eBook: 978-3-0364-1418-8
	eBook Multi-User:	**US$ 0.00 / EUR 0.00**	*73 pages, 2023*

https://www.scientific.net/978-3-0364-0418-9/book

13th International Conference: Innovative Technologies for Joining Advanced Materials (TIMA): Selected Papers in Engineering Education

Selected peer-reviewed full text papers from the 13th International Conference "Innovative Technologies for Joining Advanced Materials" (TIMA22), November 24-25, 2022, Timișoara, Romania

Edited by: Nicușor Alin Sîrbu

These proceedings include the selected papers presented at the 13th International Conference: Innovative Technologies for Joining Advanced Materials (TIMA 22) held in Timișoara, România, via videoconference, during November 24-25, 2022. The conference takes place every year and is traditionally organized by the National R&D Institute for Welding and Material Testing - ISIM Timișoara in cooperation with "Politehnica" University of Timișoara and Romanian Academy of Technical Science, Timișoara Branch.

Topics: Industrial Engineering, Information Technologies

Keywords: Digital Learning, Digital Transformation, Engineering Education, Microlearning, Training Methodology

Prices:			
	Print:	**US$ 35.00 / EUR 35.00**	Print: 978-3-0364-0403-5
	eBook Single-User:	**US$ 35.00 / EUR 35.00**	eBook: 978-3-0364-1403-4
	eBook Multi-User:	**US$ 61.00 / EUR 61.00**	*66 pages, 2023*
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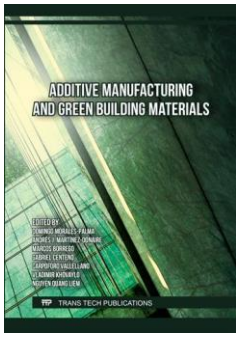

Additive Manufacturing and Green Building Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Domingo Morales-Palma, Prof. Andrés J. Martínez-Donaire, Prof. Marcos Borrego Puche, Prof. Gabriel Centeno Báez, Prof. Carpoforo Vallellano, Prof. Vladimir Khovaylo and Nguyen Quang Liem

The presented special edition is dedicated to recent research in additive technologies for various applied applications and modern green building materials. This collection will be useful to specialists in additive technologies, machinery and construction

Topics: Building Materials, Materials Science

Keywords: Additive Manufacturing, Alloy, Composite, Green Building Materials, Mechanical Properties, Polymer, Processing Parameters, Steel

Prices:			
	Print:	**US$ 175.00 / EUR 175.00**	Print: 978-3-0364-0427-1
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Materials Research and Chemical Production

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Kiang Hwee Tan, Prof. Akihiko Fujiwara, Dr. Ramya Muthusamy, Dr. Thangaprakash Sengodan and Dr. Ari Syahidul Shidiq

This special edition presents to readers the latest engineering investigations in the area of materials science and some chemical technologies and will be useful to many researchers and engineers whose activities are related to machinery and chemical production.

Topics: Bioscience and Medicine, Materials Science, Nanoscience

Keywords: Alloy, Biopolymer, Chemical Technology, Composite, Mechanical Properties, Nanocomposite, Polymer, Steel, Synthesis, Titanium Dioxide

Prices:			
	Print:	**US$ 135.00 / EUR 135.00**	Print: 978-3-0364-0437-0
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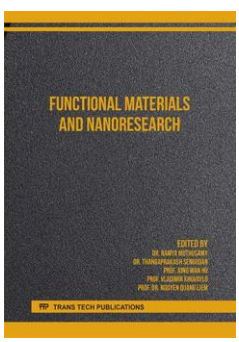

Functional Materials and Nanoresearch

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Ramya Muthusamy, Dr. Thangaprakash Sengodan, Prof. Jong Wan Hu, Prof. Vladimir Khovaylo and Nguyen Quang Liem

This special edition presents the latest research results in materials engineering, including materials synthesis and processing technologies. The collection will be helpful to many specialists whose activity is related to materials science, machinery, microelectronics etc.

Topics: Bioscience and Medicine, Materials Science, Nanoscience

Keywords: Alloy, Biomedical Materials, Ceramics, Dielectric Properties, Glass, Hydrogel, Luminescence Properties, Mechanical Properties, Metalworking, Nanowires, Steel

Prices:			
	Print:	**US$ 105.00 / EUR 105.00**	Print: 978-3-0364-0436-3
	eBook Single-User:	**US$ 105.00 / EUR 105.00**	eBook: 978-3-0364-1436-2
	eBook Multi-User:	**US$ 184.00 / EUR 184.00**	*150 pages, 2023*
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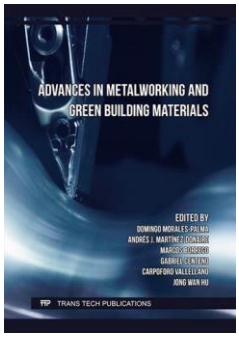

Advances in Metalworking and Green Building Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Domingo Morales-Palma, Prof. Andrés J. Martínez-Donaire, Prof. Marcos Borrego Puche, Prof. Gabriel Centeno Báez, Prof. Carpoforo Vallellano and Prof. Jong Wan Hu

This special edition is dedicated to recent research results in metalworking technologies and modern green building materials. The publication will be helpful to many specialists in machinery and construction.

Topics: Building Materials, Materials Science

Keywords: Alloy, Drawing, Drilling, Forming, Green Building Materials, Laser Texturing, Mechanical Properties, Metalworking, Steel, Surface Treatment, Waste Treatment, Welding

Prices:			
	Print:	**US$ 145.00 / EUR 145.00**	Print: 978-3-0364-0428-8
	eBook Single-User:	**US$ 145.00 / EUR 145.00**	eBook: 978-3-0364-1428-7
	eBook Multi-User:	**US$ 254.00 / EUR 254.00**	*190 pages, 2023*
			https://www.scientific.net/978-3-0364-0428-8/book

International Conference on Future Technologies in Manufacturing, Automation, Design and Energy

Selected peer-reviewed full text papers from the 3rd International Conference on Future Technologies in Manufacturing, Automation, Design and Energy (ICOFT MADE 2022), December 14-16, 2022, Karaikal, India

Edited by: Dr. A. Johnney Mertens and Dr. S. Somasundaram

This proceeding contains the selected papers presented at the 3rd International Conference on Future Technologies in Manufacturing, Automation, Design & Energy (ICOFT MADE 2022), held on December 14-16, 2022, at the National Institute of Technology Puducherry, Karaikal, Puducherry, India. The collected articles focused on promoting the recent trends and progress, advancement and innovations in the field of manufacturing, automation, design & energy. The published edition will be helpful to specialists in manufacturing, production, design, automation and energy engineering.

Topics: Construction, General Engineering, Industrial Engineering, Materials Science, Mechanical Engineering, Mechanics

Keywords: Additive Manufacturing, Alloy, Biomass Conversion, Construction Management, Dissimilar Welding, Electric Vehicle, Mechanical Properties, Mechatronics, Nanoparticles, Robotics, Rocket Engine, Solar Energy, Steel, Thermoplastics

Prices:			
	Print:	**US$ 155.00 / EUR 155.00**	Print: 978-3-0364-0196-6
	eBook Single-User:	**US$ 155.00 / EUR 155.00**	eBook: 978-3-0364-1196-5
	eBook Multi-User:	**US$ 271.00 / EUR 271.00**	*216 pages, 2023*
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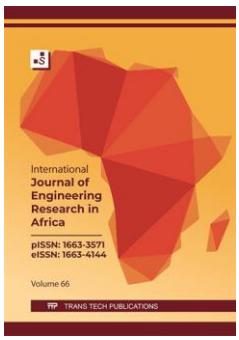

International Journal of Engineering Research in Africa Vol. 66

Edited by: Prof. Akii Okonigbon Akaehomen Ibhadode

This journal's issue includes articles that describe the latest research results in alloy metallurgy, building materials and construction technologies including building seismic provision and results of analytical modelling of mechanical properties of shrink-fitted thick-walled cylinders and nose landing gear for Boeing 777. There is also analysed a hybrid system solar chimney-air soil heat exchanger for natural ventilation and modified particle swarm optimisation for maximum power point tracking for solar photovoltaic systems and presented mathematical modelling of agricultural insurance pricing in Morocco. This volume will be helpful to many engineers in machinery, manufacturing, energy industry and construction.

Topics: Building Materials, Construction, Industrial Engineering, Manufacturing, Materials Science, Mechanical Engineering, Mechanics

Keywords: Agricultural Insurance, Alloy, Boost Converter, Deformation, Earth-Retaining Wall, Food Security, Functionally Graded Material, Heat Exchanger, Life Cycle Assessment, Maximum Power Point Tracking, Mechanical Properties, Mechanics, Mechatronics, Molecular Dynamic Simulation, Natural Fiber Reinforcement, Natural Ventilation, Nose Landing Gear, Passive Cooling System, Photovoltaic System, Pricing Model, Rubber Sand Mixture, Seismic Isolation, Self-Compacting Concrete, Shrink Fitting, Solar Chimney, Solar Energy, Stress Distribution, Thick-Walled Cylinder

Prices:			
	Print:	**US$ 140.00 / EUR 140.00**	Print: 978-3-0364-0417-2
	eBook Single-User:	**US$ 140.00 / EUR 140.00**	eBook: 978-3-0364-1417-1
	eBook Multi-User:	**US$ 245.00 / EUR 245.00**	*156 pages, 2023*
			https://www.scientific.net/978-3-0364-0417-2/book

Advanced Engineering Forum Vol. 50

Edited by: Prof. Dumitru Nedelcu and Prof. Mikkel K. Kragh

This volume of the journal includes articles according to the latest engineering research results in chemical engineering for oil and gas production, building materials such as green concrete and special conductive cement-based materials, modelling of ductile fracture of structural materials based on Rousselier model, power engineering, communication engineering, automation of small medium-sized enterprises in food production, and assessment of the applicability of green manufacturing and sustainable development concepts in real economical circumstance. This volume will be helpful to many engineers in the chemical industry, machinery, power engineering, construction industry, and organisation of modern production.

Topics: Building Materials, Construction, General Engineering, Industrial Engineering, Information Technologies, Manufacturing, Materials Science, Mechanical Engineering, Mechanics

Keywords: Artificial Neural Network, Automation, Cement, Concrete, Ductile Fracture, Emulsion, Fault Detection, Green Manufacturing, Liquid Filling System, Load Flow, Magnetized Water, Mechanical Properties, Multiple Input Multiple Output Antenna, Oil and Gas Production, Power Distribution Network, Power Losses, Power Swing Prediction, Rousselier Model, Surfactant, Sustainable Development, Techno-Economical Effect, Thyristor Controlled Series Compensator (TCSC), Transformer

Prices:			
	Print:	**US$ 120.00 / EUR 120.00**	Print: 978-3-0364-0415-8
	eBook Single-User:	**US$ 120.00 / EUR 120.00**	eBook: 978-3-0364-1415-7
	eBook Multi-User:	**US$ 210.00 / EUR 210.00**	*142 pages, 2023*

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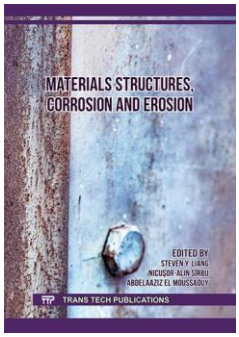

Materials Structures, Corrosion and Erosion

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Steven Y. Liang, Nicuşor Alin Sîrbu and Prof. Abdelaaziz El Moussaouy

The presented special edition is devoted to materials and technologies used in modern manufacturing and will be helpful to a wide range of engineers and researchers from materials science, chemical processing technologies, machinery and opto- and microelectronics.

Topics: Materials Science, Nanoscience

Keywords: Additive Manufacturing, Alloy, Biochar, Cavitation Erosion, Chemical Production, Corrosion, Friction Stir Welding, Incremental Forming, Low Dimensional Quantum Structure, Mechanical Properties, Polymer, Quantum Dot, Steel

Prices:			
	Print:	**US$ 110.00 / EUR 110.00**	Print: 978-3-0364-0396-0
	eBook Single-User:	**US$ 110.00 / EUR 110.00**	eBook: 978-3-0364-1396-9
	eBook Multi-User:	**US$ 193.00 / EUR 193.00**	*156 pages, 2023*

https://www.scientific.net/978-3-0364-0396-0/book

Journal of Nano Research Vol. 80

Edited by: Prof. Efstathios I. Meletis

In this volume are collected peer-reviewed papers that present the latest research results in the field of nanomaterials and nanotechnologies. Nanomaterials as photocatalysts for pollutant photodegradation, synthesis and properties of membrane for salt rejection in water treatment, synthesis polymer foam composite absorbent, mechanical properties of functionally graded carbon nanotube-reinforced composite beam, analysis possibilities of iron oxide nanoparticles applications in biomedical practice, synthesis and study of optical and electrical properties of nano semiconductors for optoelectronics, microelectronics and photovoltaics are the topics of this journal's volume. The presented edition will be helpful to a wide range of specialists from many branches of engineering science and production.

Topics: Bioscience and Medicine, Electronics, Materials Science, Mechanics, Nanoscience

Keywords: Carbon Nanotubes, Electrical Properties, Iron Oxide, Laser Ablation, Monolayer, Nanomaterials, Nanomechanics, Nanoparticles, Optical Properties, Photocatalytic Degradation, Polymer Foam Composite, Semiconductor, Solar Cell, Thermal Insulation

Prices:			
	Print:	**US$ 120.00 / EUR 120.00**	Print: 978-3-0364-0416-5
	eBook Single-User:	**US$ 120.00 / EUR 120.00**	eBook: 978-3-0364-1416-4
	eBook Multi-User:	**US$ 210.00 / EUR 210.00**	*144 pages, 2023*

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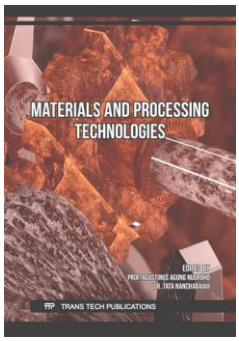

Materials and Processing Technologies

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Agustinus Agung Nugroho and Dr. Tata Nancharaiah

This special issue is devoted to the analysis of the latest engineering solutions in materials science and industrial technologies. The presented edition will be useful to specialists in materials science, metallurgy and environmental protection.

Topics: Materials Science

Keywords: Aluminium, Bio-Reinforcement, Casting, Ceramics, Composite, Dolomite, Fermentation, Food Waste, Photocatalyst, Polymer Composite, Wastewater Treatment

Prices:			
	Print:	**US$ 55.00 / EUR 55.00**	Print: 978-3-0364-0375-5
	eBook Single-User:	**US$ 55.00 / EUR 55.00**	eBook: 978-3-0364-1375-4
	eBook Multi-User:	**US$ 96.00 / EUR 96.00**	*92 pages, 2023*

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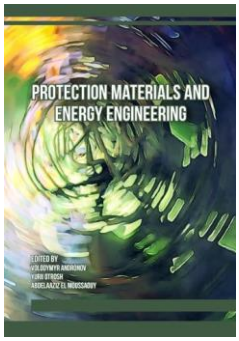

Protection Materials and Energy Engineering

Special topic volume with invited peer-reviewed papers only

Edited by: Vladimir Andronov, Yurii Otrosh and Prof. Abdelaaziz El Moussaouy

The special publication contains articles that reflect the last research results and engineering solutions for environmental protection, solar energy utilisation and fire protection and will be useful for specialists in mentioned engineering and technological areas.

Topics: Materials Science

Keywords: Activated Carbon, Aerosol, Dye Absorption, Fire Extinguishing Substances, Fire Resistant Material, Fire-Resistant Coating, Photovoltaic Modules, Sewage Sludge, Solar Cells, Wastewater Treatment

Prices:			
	Print:	**US$ 210.00 / EUR 210.00**	Print: 978-3-0364-0399-1
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0364-1399-0
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*230 pages, 2023*

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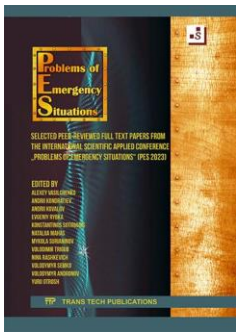


Problems of Emergency Situations

Selected peer-reviewed full text papers from the International Scientific Applied Conference "Problems of Emergency Situations" (PES 2023), May 19, 2023, Kharkiv, Ukraine

Edited by: Dr. Alexey Vasilchenko, Andrii Kondratiev, Dr. Andrii Kovalov, Dr. Evgeniy Rybka, Konstantinos Sotiriadis, Dr. Nataliia Mahas, Mykola Surianinov, Dr. Volodimir Trigub, Dr. Nina Rashkevich, Volodymyr Semko, Vladimir Andronov and Yurii Otrosh

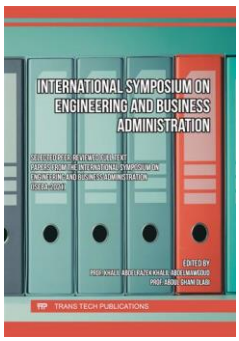
The annual International Scientific Applied Conference "Problems of Emergency Situations" (PES) is organized by the National University of Civil Defence of Ukraine (Ukraine, Kharkiv). This year, the representatives from the Odessa State Academy of Civil Engineering and Architecture (Ukraine, Odessa) were involved as partners. The conference was attended by scientists from 16 countries including Ukraine, Israel, Poland, Turkey, Germany, Sweden, Lithuania, Azerbaijanian Republic, Czech Republic, Malaysia, Iraq, Estonia, Italy, Kazakhstan, Nigeria and Slovakia. The purpose of the conference was to discuss issues related to the problems and prospects of the introduction of the latest developments and technologies aimed at preventing emergencies, minimizing their consequences in the field of civil defence, sharing experience and finding new facets of scientific cooperation, solving problems of recent emergencies that create a global threat to humanity. The scientific program of the conference included plenary and sectional reports in the following areas: emergency prevention; scientific and practical aspects of monitoring and management in the field of civil protection; emergency response and elimination of their consequences; chemical technology and engineering, radiation and chemical protection; environmental safety and labor protection.

Topics: Building Materials, Civil Engineering, Construction, Mechanics

Keywords: Buildings Accident Control, Concrete Structure, Fire Protection, Fire Resistance, Mechanical Properties, Protective Engineering Structure, Structural Mechanics, Technogenic Accident

Prices:			
	Print:	**US$ 55.00 / EUR 55.00**	Print: 978-3-0364-0402-8
	eBook Single-User:	**US$ 55.00 / EUR 55.00**	eBook: 978-3-0364-1402-7
	eBook Multi-User:	**US$ 96.00 / EUR 96.00**	*96 pages, 2023*

https://www.scientific.net/978-3-0364-0402-8/book



International Symposium on Engineering and Business Administration

Selected peer-reviewed full text papers from the International Symposium on Engineering and Business Administration (ISEBA-2021), April 10-12, 2021, Sharjah, UAE

Edited by: Prof. Khalil Abdelrazek Khalil Abdelmawgoud and Prof. Abdul Ghani Olabi

This proceeding edited by Prof. Khalil Abdelmawgoud and Prof. Abdul Ghani Olabi contains articles that were presented at the International Symposium on Engineering and Business Administration that was held at the University of Sharjah between the 10th and the 12th of April 2021 and reflects recent achievements in the fields of engineering and design. The purpose of the Symposium was to provide a forum for both researchers and practitioners around the world to present papers on recent developments in the fields of engineering, design, manufacturing and related topics.

Topics: Building Materials, Construction, Industrial Engineering, Materials Science, Nanoscience, Transportation

Keywords: Business Administration, Chemical Property, Concrete, Construction Technology, Deionization, Engineering Management, Traffic Safety, Transportation Processes, Water Treatment

Prices:			
	Print:	**US$ 180.00 / EUR 180.00**	Print: 978-3-0357-2637-4
	eBook Single-User:	**US$ 180.00 / EUR 180.00**	eBook: 978-3-0357-2535-3
	eBook Multi-User:	**US$ 315.00 / EUR 315.00**	*254 pages, 2023*

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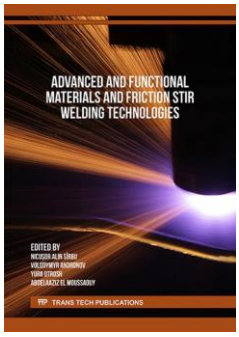

Advanced and Functional Materials and Friction Stir Welding Technologies

Special topic volume with invited peer-reviewed papers only

Edited by: Nicuşor Alin Sîrbu, Vladimir Andronov, Yurii Otrosh and Prof. Abdelaaziz El Moussaouy

This special edition includes articles on research results in materials science and technologies of friction stir welding. The collection will be helpful to engineers-technologists of machinery enterprises and specialists in materials engineering.

Topics: Manufacturing, Materials Science, Nanoscience

Keywords: Alloy, Coal Coke, Composite, Dielectric Properties, Dispersed Materials, Electrical Properties, Friction Stir Spot Welding, Friction Stir Welding, Functional Ceramics, Liquid Working Environment, Mechanical Properties, Nanofluid, Nanomaterials, Piezoceramics, Polymer, Steel, Submerged Friction Stir Welding, Thermal Analysis, Welding Tool

Prices:			
	Print:	**US$ 175.00 / EUR 175.00**	Print: 978-3-0364-0401-1
	eBook Single-User:	**US$ 175.00 / EUR 175.00**	eBook: 978-3-0364-1401-0
	eBook Multi-User:	**US$ 306.00 / EUR 306.00**	*224 pages, 2023*
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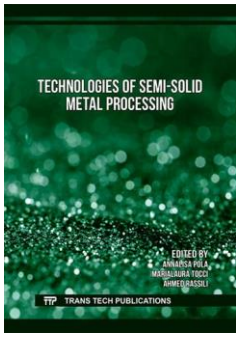

Technologies of Semi-Solid Metal Processing

Special topic volume with invited peer-reviewed papers only

Edited by: Annalisa Pola, Marialaura Tocci and Ahmed Rassili

This special edition is devoted to the technologies of semi-solid processing of non-ferrous alloys and will be helpful to specialists in materials science and engineers from mechanical engineering.

Topics: Materials Science

Keywords: Alloy, Mechanical Properties, Metal Direct Writing, Microstructure, Processing Parameters, Rheocasting, Semi-Solid Casting, Semi-Solid Forging, Semi-Solid Slurry, Solidification, Squeeze Casting, Thixoforming

Prices:			
	Print:	**US$ 85.00 / EUR 85.00**	Print: 978-3-0364-0385-4
	eBook Single-User:	**US$ 85.00 / EUR 85.00**	eBook: 978-3-0364-1385-3
	eBook Multi-User:	**US$ 149.00 / EUR 149.00**	*108 pages, 2023*
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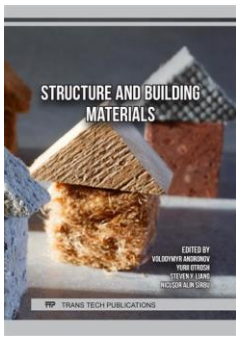

Structure and Building Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Vladimir Andronov, Yurii Otrosh, Prof. Steven Y. Liang and Nicuşor Alin Sîrbu

This special edition is devoted to the investigation of materials and materials processing technologies in construction and will be useful to specialists in construction and building materials production.

Topics: Building Materials, Civil Engineering, Construction, Materials Science

Keywords: Aggregate Replacement, Aggregates, Concrete, Concrete Corrosion, Fly Ash, Foundry Sand, Furnace Slag, Green Building Materials, Mechanical Properties, Sand, Spent Garnets, Steel

Prices:			
	Print:	**US$ 110.00 / EUR 110.00**	Print: 978-3-0364-0398-4
	eBook Single-User:	**US$ 110.00 / EUR 110.00**	eBook: 978-3-0364-1398-3
	eBook Multi-User:	**US$ 193.00 / EUR 193.00**	*152 pages, 2023*
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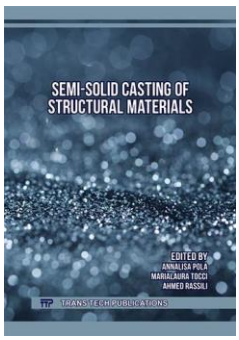


Semi-Solid Casting of Structural Materials

Special topic volume with invited peer-reviewed papers only

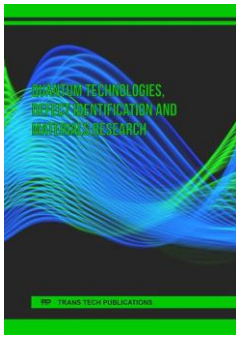
Edited by: Annalisa Pola, Marialaura Tocci and Ahmed Rassili

This special edition is devoted to studying the properties of the semi-solid casting of non-ferrous alloys and corresponding metal matrix composites and will be helpful to metallurgists and engineers from mechanical engineering.

Topics: Materials Science

Keywords: Alloy, Mechanical Properties, Metal Matrix Composite, Microstructure, Modelling, Numerical Analysis, Rheocasting, Rheological Behaviour, Semi-Solid Casting, Semi-Solid Slurry, Solidification, Squeeze Casting, Thixoforming

Prices:			
	Print:	**US$ 160.00 / EUR 160.00**	Print: 978-3-0364-0384-7
	eBook Single-User:	**US$ 160.00 / EUR 160.00**	eBook: 978-3-0364-1384-6
	eBook Multi-User:	**US$ 280.00 / EUR 280.00**	*218 pages, 2023*
			https://www.scientific.net/978-3-0364-0384-7/book



Quantum Technologies, Defect Identification and Materials Research

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Steven Y. Liang, Volodymyr Andronov, Yurii Otrosh, Prof. Abdelaaziz El Moussaouy, Prof. Agustinus Agung Nugroho and Prof. Chafic-Touma Salame

The presented special edition is devoted to materials and technologies used in modern manufacturing and will be helpful to a wide range of engineers and researchers from materials science, processing technologies, machinery and opto- and microelectronics.

Topics: Materials Science, Mechanical Engineering, Mechanics, Nanoscience

Keywords: Applied Mechanics, Defect Detection, Inhomogeneous Materials, Low Dimensional Quantum Structure, Modelling, Photocatalyst, Strength of Materials, Sun Irradiation, Surface Modification, Thermoelectric Technology, Tribology, Visual Inspection, Weld Defect

Prices:			
	Print:	**US$ 110.00 / EUR 110.00**	Print: 978-3-0364-0395-3
	eBook Single-User:	**US$ 110.00 / EUR 110.00**	eBook: 978-3-0364-1395-2
	eBook Multi-User:	**US$ 193.00 / EUR 193.00**	*166 pages, 2023*
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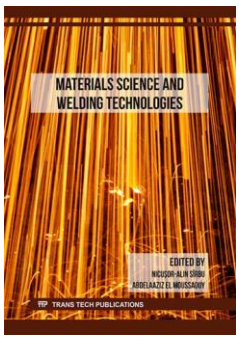


Materials Science and Welding Technologies

Special topic volume with invited peer-reviewed papers only

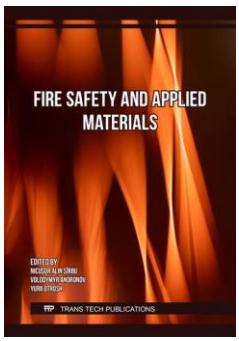
Edited by: Nicuşor Alin Sîrbu and Prof. Abdelaaziz El Moussaouy

The presented special edition includes articles on research results in functional materials and technologies of metal welding. This collection will be helpful to engineers-technologists in machinery and specialists in materials engineering.

Topics: Materials Science, Nanoscience

Keywords: Alloy, Electric Properties, Functional Materials, Gas Metal Arc Welding, Laser Welding, Magnetic Properties, Mechanical Properties, Pyrophosphate Compound, Spot Welding, Steel, Thermoelectric Materials, Transition Metal Dichalcogenides, Tungsten Inert Gas Welding, Ultrasonic Welding, Welded Joint, Welding, Welding Defect

Prices:			
	Print:	**US$ 150.00 / EUR 150.00**	Print: 978-3-0364-0400-4
	eBook Single-User:	**US$ 150.00 / EUR 150.00**	eBook: 978-3-0364-1400-3
	eBook Multi-User:	**US$ 263.00 / EUR 263.00**	*194 pages, 2023*
			https://www.scientific.net/978-3-0364-0400-4/book



Fire Safety and Applied Materials

Special topic volume with invited peer-reviewed papers only

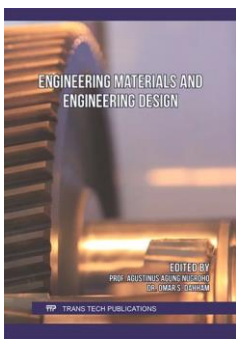
Edited by: Nicuşor Alin Sîrbu, Vladimir Andronov and Yurii Otrosh

This special publication is devoted to recent issues in applied materials science, materials synthesis and treatment technologies, as well as materials for providing fire and explosion safety. The presented edition will be useful to many engineers in materials science, machinery, and specialists in fire and explosion safety.

Topics: Building Materials, Materials Science, Nanoscience

Keywords: Abrasive Waterjet Cutting, Alloy, Clinch Joint, Composite, Electrical Discharge Deposition, Explosion Safety, Explosive Materials, Fire Resistance, Fire Safety, Flammable Properties, Grinding, Hydrogen Explosion, Mechanical Properties, Nanocomposite, Polymer, Steel

Prices:			
	Print:	**US$ 130.00 / EUR 130.00**	Print: 978-3-0364-0397-7
	eBook Single-User:	**US$ 130.00 / EUR 130.00**	eBook: 978-3-0364-1397-6
	eBook Multi-User:	**US$ 228.00 / EUR 228.00**	*178 pages, 2023*
			https://www.scientific.net/978-3-0364-0397-7/book



Engineering Materials and Engineering Design

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Agustinus Agung Nugroho and Dr. Omar S. Dahham

The special edition is devoted to modern engineering solutions and research results in biomaterials, laser applications and design in mechanical engineering. This special collection will be interesting to many engineers and researchers from materials science and machinery.

Topics: Bioscience and Medicine, General Engineering, Materials Science, Mechanical Engineering, Mechanics

Keywords: Aerothermodynamics, Biomaterials, Bolt Joining, Engineering Designing, Hydrogel, Hydroxyapatite, Hypersonic Vehicle, Laser, Mechanical Properties, Piston Extruder, Polymer, Recoil Effect

Prices:			
	Print:	**US$ 90.00 / EUR 90.00**	Print: 978-3-0364-0376-2
	eBook Single-User:	**US$ 90.00 / EUR 90.00**	eBook: 978-3-0364-1376-1
	eBook Multi-User:	**US$ 158.00 / EUR 158.00**	*126 pages, 2023*
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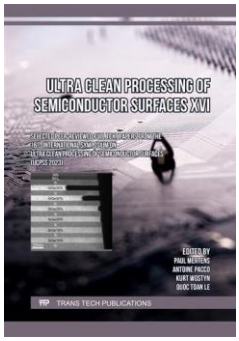

Ultra Clean Processing of Semiconductor Surfaces XVI

Selected peer-reviewed full text papers from the 16th International Symposium on Ultra Clean Processing of Semiconductor Surfaces (UCPSS 2023), September 12-14, 2023, Brugge, Belgium

Edited by: Dr. Paul W. Mertens, Antoine Pacco, Kurt Wostyn and Quoc Toan Le

This proceedings volume contains the proceedings of all presentations of the 16th International Symposium on Ultra Clean Processing of Semiconductor Surfaces (UCPSS) 2023. The subject matter of the UCPSS symposium is ultra-clean processing, isotropic selective etching and surface preparation technology in all steps of the fabrication of micro-and nano-electronic integrated circuits. This volume describes the recent progress in the field of ultra clean surfaces, surface cleaning and preparation for the production of micro- and nano-electronic integrated circuits and related subjects. This involves a wide variety of surfaces of mixed composition and with nano-topography. The goal of the processes is to obtain nano precise etching and cleaning resulting in ultra clean surfaces with a very high degree of perfection, i.e. with minimal amounts of residues or defects. This comprises different surface and cleaning steps throughout the entire device manufacturing process.

Topics: Electronics, Materials Science, Nanoscience

Keywords: Cleaning, Contaminations, Defects, Dielectrics, Etching, Gallium Nitride, Germanium, Integrated Circuit, Interconnects, Molecular Dynamic Simulation, Nanopillars, Pattern Collapse, Semiconductor, Semiconductor Manufacturing, Silicon, Surface Chemistry, Sustainability, Wafer

Prices:			
	Print:	**US$ 270.00 / EUR 270.00**	Print: 978-3-0364-0312-0
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0364-1312-9
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*386 pages, 2023*
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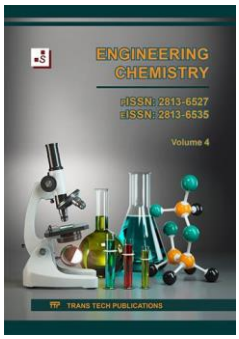


Engineering Chemistry Vol. 4

Edited by: Dr. Omar S. Dahham and Dr. Adhi Dwi Hatmanto

The 4th volume of "Engineering Chemistry" contains articles presenting research results related to oil processing technologies, modelling and simulation of hydrogen production processes using membrane reactors, and features of the transesterification technology of the waste cooking oil in biodiesel production. Some articles are devoted to the latest biotechnologies for biomass processing and chemical analysis of bioactive compounds and antimicrobial components of propolis from various geographic zones. This volume will be useful to specialists from the petroleum industry, applied biotechnologies and hydrogen production.

Topics: Bioscience and Medicine, Materials Science

Keywords: Agarwood, Antimicrobial Component, Bioactive Compound, Biodiesel, Biomass Processing, Catalytic Cracking, Cellulose Depolymerisation, Cooking Oil, De-Emulsification, Essential Oil, Fossil Fuel, Heterogeneous Catalyst, Hydrodistillation, Hydrogen Production, Membrane Reactor, Propolis, Transesterification, Vacuum Gas Oil, Crude Oil

Prices:			
	Print:	**US$ 40.00 / EUR 40.00**	Print: 978-3-0364-0370-0
	eBook Single-User:	**US$ 40.00 / EUR 40.00**	eBook: 978-3-0364-1370-9
	eBook Multi-User:	**US$ 70.00 / EUR 70.00**	*72 pages, 2023*
			https://www.scientific.net/978-3-0364-0370-0/book

International Journal of Engineering Research in Africa Vol. 65

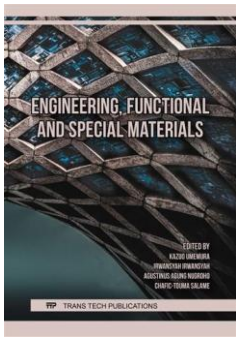
Edited by: Prof. Akii Okonigbon Akaehomen Ibhadode

The 65th issue of the journal includes articles that describe the latest research results in 3D printing, anaerobic digestion of solid municipal waste, analysis of building seismic performance, properties of bio-based insulation material, and soil properties for geotechnical works. There are also designed floating photovoltaic panels, and control systems for hydroponics and analyze means for equipment efficiency improvement through a lean approach in small and medium enterprises. This volume will be helpful to many engineers in machinery, manufacturing and construction.

Topics: Building Materials, Construction, General Engineering, Industrial Engineering, Manufacturing, Materials Science, Mechanical Engineering, Mechanics

Keywords: 3D Printing, Anaerobic Digestion, Building, Control System, Direct Shear Test, Fused Deposition Modelling, Geotechnics, Hemp Waste, Hydroponics, Insulation Material, Lean Manufacturing, Mechanical Properties, Polymer, Seismic Performance, Simulation, Soil, Solid Municipal Waste

Prices:			
	Print:	**US$ 145.00 / EUR 145.00**	Print: 978-3-0364-0377-9
	eBook Single-User:	**US$ 145.00 / EUR 145.00**	eBook: 978-3-0364-1377-8
	eBook Multi-User:	**US$ 254.00 / EUR 254.00**	*138 pages, 2023*
			https://www.scientific.net/978-3-0364-0377-9/book



Engineering, Functional and Special Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Kazuo Umemura, Dr. Irwansyah Irwansyah, Prof. Agustinus Agung Nugroho and Prof. Chafic-Touma Salame

This special edition contains articles on the latest research results on applied materials science and materials treatment technologies. The presented special collection of articles will be useful to researchers and engineers from materials science, machinery and construction.

Topics: Building Materials, Materials Science, Nanoscience

Keywords: Alloy, Asphalt Concrete, Building Materials, Coating, Composite, Forming, Mechanical Properties, Nanomaterials, Perovskite, Polymer, Steel, Tempering, Welding

Prices:			
	Print:	**US$ 180.00 / EUR 180.00**	Print: 978-3-0364-0369-4
	eBook Single-User:	**US$ 180.00 / EUR 180.00**	eBook: 978-3-0364-1369-3
	eBook Multi-User:	**US$ 315.00 / EUR 315.00**	*210 pages, 2023*
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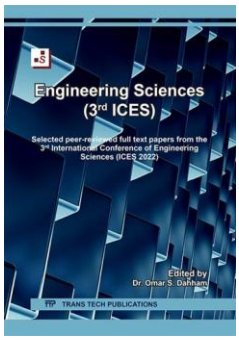


Engineering Sciences (3rd ICES)

Selected peer-reviewed full text papers from the 3rd International Conference of Engineering Sciences (ICES 2022), December 14-15, 2022, Baghdad, Iraq

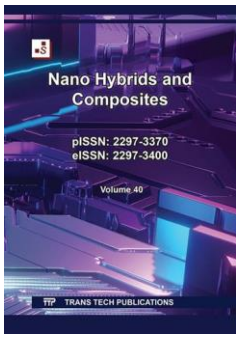
Edited by: Dr. Omar S. Dahham

This volume contains the selected articles that were presented at the 3rd International Conference of Engineering Sciences (ICES 2022), Baghdad, Iraq on December 14-15, 2022. Presented articles describe the latest research in geotechnics, structural engineering and concrete technologies. The collection will be helpful to engineers and researchers in construction technologies and building materials.

Topics: Building Materials, Civil Engineering, Construction, Materials Science, Mechanics

Keywords: Aggregates, Concrete, Curved-Soffit Girder, Filler Additives, Geopolymer, Geotechnics, Mechanical Properties, Railway Ballast, Soil, Superplasticizer, Waffle Slab, Waste Tire Rubber

Prices:			
	Print:	**US$ 50.00 / EUR 50.00**	Print: 978-3-0364-0372-4
	eBook Single-User:	**US$ 50.00 / EUR 50.00**	eBook: 978-3-0364-1372-3
	eBook Multi-User:	**US$ 88.00 / EUR 88.00**	*92 pages, 2023*
			https://www.scientific.net/978-3-0364-0372-4/book



Nano Hybrids and Composites Vol. 40

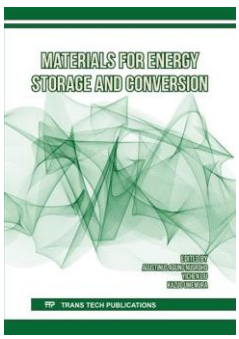
Edited by: Dr. Amir Al-Ahmed, Prof. Yun-Hae Kim and Prof. Agustinus Agung Nugroho

The 40th volume of the journal contains articles that present to readers the research results in properties and some specific features of application metal-oxide and gold nanoparticles, carbon nanotubes, hybrid metal-halide perovskite for optoelectronics application and conducting solid biopolymer electrolytes for sodium-ion batteries. This volume will be helpful to specialists in optoelectronics, energy storage and chemists whose activity is related to applied nanotechnology, and the synthesis and investigation of nanomaterials.

Topics: Materials Science, Nanoscience

Keywords: Biopolymer, Carbon Nanotube, Dysprosium Oxide, Electronic Properties, Nanomaterials, Nanoparticles, Optical Properties, Perovskite, Solid Electrolyte, Titanium Oxide

Prices:			
	Print:	**US$ 75.00 / EUR 75.00**	Print: 978-3-0364-0371-7
	eBook Single-User:	**US$ 75.00 / EUR 75.00**	eBook: 978-3-0364-1371-6
	eBook Multi-User:	**US$ 131.00 / EUR 131.00**	*86 pages, 2023*
			https://www.scientific.net/978-3-0364-0371-7/book



Materials for Energy Storage and Conversion

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Agustinus Agung Nugroho, Yichen Liu and Prof. Kazuo Umemura

This special edition contains articles on the latest research results on materials properties used in devices for energy storage and energy conversion and for power electronics production. Without any doubt, this specialised publication will be useful to professionals in the field of design and production of the aforementioned devices.

Topics: Electronics, Materials Science, Nanoscience

Keywords: Composite, Dye-Sensitized Solar Cell, Electrochemical Cell, Electrode Material, Electrolyte, Lithium-Ion Battery, MOSFET, Photoanode, Photoelectrochemical Cell, Polymer, Power Semiconductor, Short-Circuit, Silicon Carbide, Solar Cell, Supercapacitor

Prices:			
	Print:	**US$ 145.00 / EUR 145.00**	Print: 978-3-0364-0368-7
	eBook Single-User:	**US$ 145.00 / EUR 145.00**	eBook: 978-3-0364-1368-6
	eBook Multi-User:	**US$ 254.00 / EUR 254.00**	*184 pages, 2023*
			https://www.scientific.net/978-3-0364-0368-7/book

Journal of Biomimetics, Biomaterials and Biomedical Engineering Vol. 61

Edited by: Dr. Sooraj Hussain Nandyala, Dr. David Duday and Prof. Kazuo Umemura

This journal's volume contains articles describing the latest research results on biomaterials' properties used in implantology, tissue regeneration, and bone reconstruction. The analysis of the biomimetic approach to the design and calculation of thin shells, biomechanical research of features of human gait, investigation of organic nanoparticles synthesis for use in biosensors and biomedical applications and development of an accelerated variant of the electrocardiogram processing are also presented in this edition.

Topics: Bioscience and Medicine, Information Technologies, Materials Science, Mechanical Engineering, Mechanics

Keywords: Biomaterials, Biomechanics, Biomedical Engineering, Biomimetics, Bone Regeneration, Electrocardiogram, Fibroblast Cell, Gait Analysis, Implant Adapter, Medical Signal Processing, Nanohydroxyapatite, Scaffold, Thin Shell

Prices:			
	Print:	**US$ 135.00 / EUR 135.00**	Print: 978-3-0364-0374-8
	eBook Single-User:	**US$ 135.00 / EUR 135.00**	eBook: 978-3-0364-1374-7
	eBook Multi-User:	**US$ 236.00 / EUR 236.00**	*150 pages, 2023*

https://www.scientific.net/978-3-0364-0374-8/book

Additive Manufacturing Technologies and Advanced Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Agustinus Agung Nugroho, Dr. Adhi Dwi Hatmanto, Prof. Kazuo Umemura and Dr. Omar S. Dahham

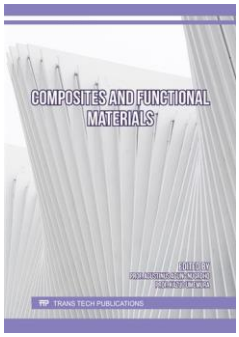
This special edition contains articles on the latest research results and technological solutions in materials science and industrial manufacturing. The special collection will be helpful for specialists from applied materials science, machinery, electronic industry and chemical production.

Topics: Electronics, Materials Science, Nanoscience

Keywords: Additive Manufacturing, Alloy, Composite, Computational Materials Science, Electrode Materials, Failure Analysis, Graphene, Magnetic Properties, Mechanical Properties, Nanomaterials, Physical Chemistry, Point Defect, Polymer, Semiconductor, Steel, Supercapacitor, Superconductor

Prices:			
	Print:	**US$ 155.00 / EUR 155.00**	Print: 978-3-0364-0366-3
	eBook Single-User:	**US$ 155.00 / EUR 155.00**	eBook: 978-3-0364-1366-2
	eBook Multi-User:	**US$ 271.00 / EUR 271.00**	*212 pages, 2023*

https://www.scientific.net/978-3-0364-0366-3/book



Composites and Functional Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Agustinus Agung Nugroho and Prof. Kazuo Umemura

This special edition mainly is devoted to the research results of modern reinforced and zircon-based composites, multifunctional carbon-based materials that can be used in many branches of the industrial sphere including microelectronics. The book will be helpful to many specialists in applied materials science.

Topics: Electronics, Materials Science, Nanoscience

Keywords: Carbon Film, Ceramics, Composite, Functional Materials, Graphene, Mechanical Properties, Semiconductor Structure, Zirconia

Prices:			
	Print:	**US$ 125.00 / EUR 125.00**	Print: 978-3-0364-0363-2
	eBook Single-User:	**US$ 125.00 / EUR 125.00**	eBook: 978-3-0364-1363-1
	eBook Multi-User:	**US$ 219.00 / EUR 219.00**	*162 pages, 2023*

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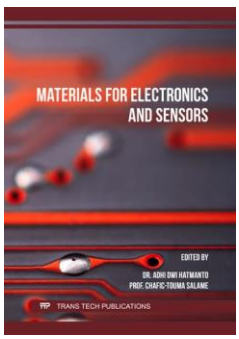

Materials for Electronics and Sensors

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Adhi Dwi Hatmanto and Prof. Chafic-Touma Salame

This special edition contains articles on the latest research results in the physics of charge transfer in heterogeneous systems and methods of various pollutants detection and degradation. The presented special issue will be helpful to specialists in applied physical chemistry research and chemical technologies for various pollutants detection and degradation.

Topics: Materials Science, Nanoscience

Keywords: Absorbent, Absorption, Activated Carbon, Blume-Capel Ising Model, Charge Transfer Rate, Degradation, Dye Removal, Ferrimagnetic Material, Heavy Metals, Magnetic Properties, Metal-Organic Framework, Methylene Blue, Organic Semiconductor, Photodegradation, Pollutant

Prices:			
	Print:	**US$ 145.00 / EUR 145.00**	Print: 978-3-0364-0367-0
	eBook Single-User:	**US$ 145.00 / EUR 145.00**	eBook: 978-3-0364-1367-9
	eBook Multi-User:	**US$ 254.00 / EUR 254.00**	*196 pages, 2023*

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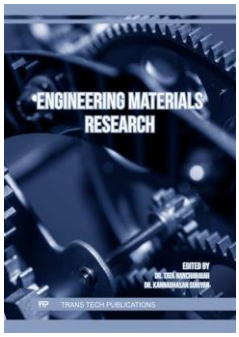

Engineering Materials Research

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Tata Nancharaiah and Dr. Kannadhasan Suriyan

The presented special edition contains a series of articles investigating the latest issues of modern materials science and materials synthesis and processing technologies. This special edition will be helpful to specialists in materials science, machinery, nanomaterials synthesis, construction and chemical production.

Topics: Building Materials, Construction, Materials Science, Nanoscience

Keywords: Alloy, Bio-Waste Processing, Building Materials, Coating, Concrete Unit, Corrosion, Electronic Discharge Machining, Geopolymer, Laser Beam Machining, Mechanical Properties, Nanomaterials, Steel, Surface Treatment

Prices:			
	Print:	**US$ 125.00 / EUR 125.00**	Print: 978-3-0364-0364-9
	eBook Single-User:	**US$ 125.00 / EUR 125.00**	eBook: 978-3-0364-1364-8
	eBook Multi-User:	**US$ 219.00 / EUR 219.00**	*196 pages, 2023*

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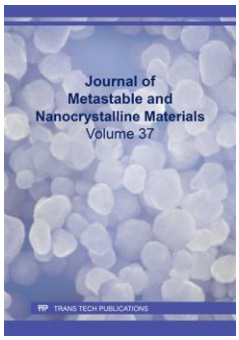


Journal of Metastable and Nanocrystalline Materials Vol. 37

Edited by: Dr. Vinayak Adimule, Dr. Rajendrachari Shashanka and Prof. Agustinus Agung Nugroho

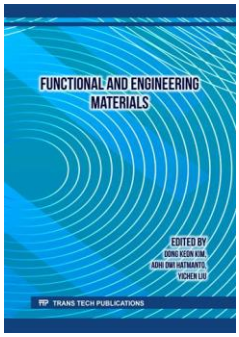
The 37th volume of the Journal of Metastable and Nanocrystalline Materials contains articles that review the photoluminescence and super capacitive properties of carbon dots nanoparticles, bi-functional applications of some nanoparticles and nanocomposites. The results of the controlled synthesis and electrical properties study of semiconductor single crystals are also presented. The application of the maximum entropy method and method of density functional theory for the numerical investigation of the crystalline defects of nanocrystals and optimization calculations on the structure of nanoclusters were also investigated in two of the presented articles. This issue will be helpful to many specialists in applied materials science and nanotechnologies.

Topics: Materials Science, Nanoscience

Keywords: Antioxidant Properties, Biocatalysis, Calculation, Carbon Dots, Crystalline Defect, Density Functional Theory, Electrical Properties, Nanocluster, Nanocomposite, Nanocrystal, Photoluminescence, Single Crystal

Prices:			
	Print:	**US$ 45.00 / EUR 45.00**	Print: 978-3-0364-0365-6
	eBook Single-User:	**US$ 45.00 / EUR 45.00**	eBook: 978-3-0364-1365-5
	eBook Multi-User:	**US$ 79.00 / EUR 79.00**	*78 pages, 2023*

https://www.scientific.net/978-3-0364-0365-6/book



Functional and Engineering Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Dong Keon Kim, Dr. Adhi Dwi Hatmanto and Yichen Liu

This special edition is devoted to an analysis of the results of developing modern technologies and materials for many branches of the industrial sphere and the presented articles will be useful to many engineers and researchers involved in this area.

Topics: Building Materials, Construction, Electronics, Materials Science, Nanoscience

Keywords: Alloy, Biosynthesis, Cement, Composite, Concrete, Construction 3D Printing, Mechanical Properties, Nanoparticles, Physical Metallurgy, Power Electronics, Rare Earth Elements, Recovery Technology, Semiconductor, Soil, Steel

Prices:			
	Print:	**US$ 115.00 / EUR 115.00**	Print: 978-3-0364-0362-5
	eBook Single-User:	**US$ 115.00 / EUR 115.00**	eBook: 978-3-0364-1362-4
	eBook Multi-User:	**US$ 201.00 / EUR 201.00**	*178 pages, 2023*

https://www.scientific.net/978-3-0364-0362-5/book

Unima International Conference on Science and Technology, UNICST 2022

Selected peer-reviewed full text papers from the Unima International Conference on Science and Technology (UNICST 2022), October 11-13, 2022, Tondano, Indonesia

Edited by: Prof. Orbanus Naharia

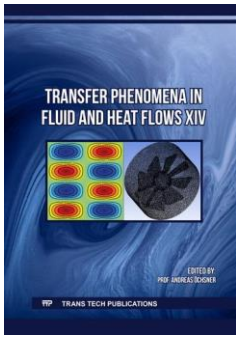
The presented proceeding comprises peer-reviewed full-text papers selected from the Unima International Conference on Science and Technology (UNICST) 2022. The conference is conducted in the field of science and technology to focus on the use of natural resources, namely science materials for implementation in the field of applied research and applications in science and technology learning. The scope of the accepted articles is science materials; the fields of biology, physics, chemistry and technology. Furthermore, the implementation of materials science research is carried out in learning both in schools and universities.

Topics: Bioscience and Medicine, Environmental Engineering, Industrial Engineering, Manufacturing, Materials Science, Mechanical Engineering, Mechanics

Keywords: Agriculture, Civil Engineering, Data Processing, Education, Environmental Engineering, Food Production, Healthcare, Information Technology, Materials Science, Mechanical Engineering, Pedagogy, Pharmacology, Sport, Urban Planning

Prices:			
	Print:	**US$ 90.00 / EUR 90.00**	Print: 978-3-0364-0197-3
	eBook Single-User:	**US$ 90.00 / EUR 90.00**	eBook: 978-3-0364-1197-2
	eBook Multi-User:	**US$ 158.00 / EUR 158.00**	*180 pages, 2023*

https://www.scientific.net/978-3-0364-0197-3/book



Transfer Phenomena in Fluid and Heat Flows XIV

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Andreas Öchsner

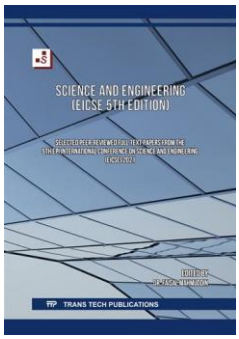
The special issue entitled "Transfer Phenomena in Fluid and Heat Flows XIV" of the Defect and Diffusion Forum continues a series of themed volumes. It presents a collection of articles associated with heat transfer and fluid flow phenomena. These topics can be understood in the broader sense as classical diffusion-related topics. The continuous need for improved machines, higher efficiencies, and more detailed and accurate theoretical modelling approaches makes it necessary to showcase the latest trends regularly with small intervals between the different volumes in this topical series.

Topics: Bioscience and Medicine, Materials Science, Mechanical Engineering, Mechanics

Keywords: Energy Conversion, Engineering System, Fluid Mechanics, Heat Transfer, Modelling, Multiobjective Optimization, Thermodynamics

Prices:			
	Print:	**US$ 200.00 / EUR 200.00**	Print: 978-3-0364-0350-2
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0364-1350-1
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*248 pages, 2023*

https://www.scientific.net/978-3-0364-0350-2/book



Science and Engineering (EICSE 5th edition)

Selected peer-reviewed full text papers from the 5th EPI International Conference on Science and Engineering (EICSE) 2021, September 28-29, 2021, virtual

Edited by: Dr. Faisal Mahmuddin

This publication comprises the articles selected from the 5th EPI International Conference on Science and Engineering (EICSE, September 28-29, 2021, virtual) and is devoted to the investigation of some latest issues in structural mechanics. Vibration research of plate structures, analysis of critical load on quadrilateral and circular hollow pipes under pure bending and pure torsion and also laboratory testing and numerical analysis on reinforced concrete frames with prefabricated cellular lightweight concrete are the main covered topics. It will be interesting to mechanical engineers in structural engineering.

Topics: Building Materials, Civil Engineering, Construction, Mechanics

Keywords: Boundary Conditions, Cellular Lightweight Concrete, Cyclic Load, First Critical Load, Free Vibration, Hollow Pipe, Laminated Rectangular Plate, Marine Structure, Modal Analysis, Natural Frequency, Numerical Simulation, Reinforced Concrete Frame, Ritz Method, Structural Mechanics

Prices:			
	Print:	**US$ 35.00 / EUR 35.00**	Print: 978-3-0364-0335-9
	eBook Single-User:	**US$ 35.00 / EUR 35.00**	eBook: 978-3-0364-1335-8
	eBook Multi-User:	**US$ 61.00 / EUR 61.00**	*68 pages, 2023*

https://www.scientific.net/978-3-0364-0335-9/book

Engineering Innovations Vol. 6

Edited by: Prof. Steven Y. Liang, Prof. Mosbeh Kaloop and Dr. Azher M. Abed

The 6th volume of "Engineering Innovations" presents articles on research results on thermal engineering, mechatronics, application of photogrammetry for the 3D model's building of cultural heritage, and analysis of the advantages of blockchain technologies application in smart contracts in the construction industry. Engineers, technologists, academics, and students will appreciate the articles presented.

Topics: Building Materials, Civil Engineering, Construction, Industrial Engineering, Information Technologies, Materials Science, Mechanical Engineering, Mechanics

Keywords: Blockchain, Brake Control, Construction, Cultural Heritage, Heat Exchanger, Heat Transfer Coefficient, Mechatronics, Natural Materials, Optimal Path Planning, Photogrammetry, Regenerative Brake, Smart Contract

Prices:			
	Print:	**US$ 25.00 / EUR 25.00**	Print: 978-3-0364-0337-3
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	eBook Multi-User:	**US$ 44.00 / EUR 44.00**	*56 pages, 2023*

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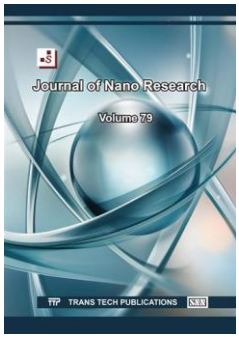

Journal of Nano Research Vol. 79

Edited by: Prof. Efstathios I. Meletis

In this volume are collected peer-reviewed papers which present the latest research results in the field of nanomaterials and nanotechnologies. Nanomaterials as photocatalysts for pollutant photodegradation, the electrochemical properties of mesoporous silica nanoparticles as excellent candidates for applications in supercapacitors and fuel cells, modification of raw pumice with nanocarbon black and borax for the synthesis of thermal insulation material, protective multilayer nano-coating and bending performance of composite nanobeam are the topics of this journal's volume. The presented edition will be helpful to a wide range of specialists from many branches of production.

Topics: Materials Science, Mechanics, Nanoscience

Keywords: Bending Analysis, Carbon Dots, Electrochemical Properties, Functionally Graded Materials, Hydrothermal Synthesis, Mesoporous Silica, Nano Carbon Black, Nano Multilayer Coating, Nanobeam, Nanomaterials, Nanomechanics, Nanoparticles, Photocatalysts, Photodegradation, Pumice, Ribological Properties, Zinc Oxide

Prices:			
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	eBook Single-User:	**US$ 75.00 / EUR 75.00**	eBook: 978-3-0364-1341-9
	eBook Multi-User:	**US$ 131.00 / EUR 131.00**	*98 pages, 2023*

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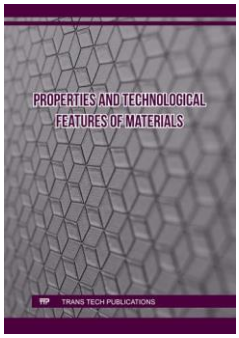

Properties and Technological Features of Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Vinayak Adimule and Dr. Rajendrachari Shashanka

This special edition includes articles that reflected the latest research results in materials science, materials processing and geochemistry. The special issue will be helpful to many specialists in applied materials science and engineering chemistry.

Topics: Building Materials, Materials Science, Nanoscience

Keywords: Alloy, Crystal Lattice, Diatomite, Dislocations, Drilling, Electrochemical Properties, Friction Stir Welding, Friction Stress, Geochemistry, Hybrid Metal-Organic Framework, Mechanical Properties, Metal Matrix Composite, Phosphor, Photocatalyst, Photoluminescence, Rheological Properties, Sediments, Supercapacitor

Prices: Print: **US$ 90.00 / EUR 90.00** Print: 978-3-0364-0339-7
eBook Single-User: **US$ 90.00 / EUR 90.00** eBook: 978-3-0364-1339-6
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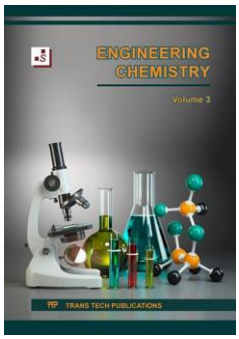


Engineering Chemistry Vol. 3

Edited by: Prof. Steven Y. Liang, Prof. Zongjin Li, Dr. Vinayak Adimule and Dr. Rajendrachari Shashanka

The 3d volume of "Engineering Chemistry" contains articles that are presented research results related to the analysis of synthesis methods, optical properties and review of catalytical possibilities of copper-based metal-organic frameworks. A separate part of the volume is devoted to synthesis methods of hydroxyapatite, calcium carbonate, hydrogel for drug delivery application, and also analysis of the effect of antimicrobial additives on plastic deterioration. Engineers, technologists, academics, and students will appreciate the articles presented.

Topics: Bioscience and Medicine, Materials Science, Nanoscience

Keywords: Antibacterial Additive, Bioceramics, Calcium Carbonate, Catalyst, Copper Metal Oxide, Hydrogel, Hydroxyapatite, Metal-Organic Framework, Optical Properties

Prices: Print: **US$ 35.00 / EUR 35.00** Print: 978-3-0364-0338-0
eBook Single-User: **US$ 35.00 / EUR 35.00** eBook: 978-3-0364-1338-9
eBook Multi-User: **US$ 61.00 / EUR 61.00** *58 pages, 2023*
https://www.scientific.net/978-3-0364-0338-0/book

International Journal of Engineering Research in Africa Vol. 64

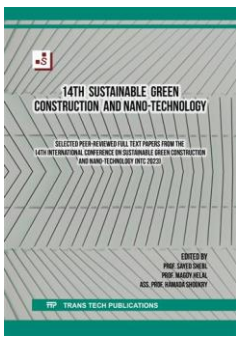
Edited by: Prof. Akii Okonigbon Akaehomen Ibhadode

The 64th volume of the journal represents the research results of mechanical properties and delamination mode of a carbon-fibre-reinforced polymer composite, experimental and numerical studies of viscoelastic behaviour of bituminous mixture with a high rate of reclaimed asphalt pavement, optimisation of energy consumption for a synthetic ammonia's production, modelling of heat processes in the systems that use solar energy and energy management in a related microgrid. There are articles devoted to image processing for automatic navigation technology in agricultural machines and the development of a hybrid artificial Intelligence-based system for supporting the eco-industrialisation of complex manufacturing processes. The volume will be helpful to specialists in machinery, construction, thermal engineering, usage of solar energy, renewable energetics and industrial automation.

Topics: Building Materials, Industrial Engineering, Information Technologies, Manufacturing, Materials Science, Mechanical Engineering, Mechanics

Keywords: Ammonia Production, Bituminous Mixture, Composite, Cryogenic Air Separation, Decision Making System, Delamination, Dune Sand, Eco Process, Economic Analysis, Energy Consumption, Fluidized Bed Hydrodynamics, Heat Exchanger, Heat Transfer, Image Processing, Mechanical Properties, Nanofluid, Photovoltaic Microgrid, Process Simulation, Reclaimed Asphalt Pavement, Solar Energy

Prices: Print: **US$ 145.00 / EUR 145.00** Print: 978-3-0364-0200-0
eBook Single-User: **US$ 145.00 / EUR 145.00** eBook: 978-3-0364-1200-9
eBook Multi-User: **US$ 254.00 / EUR 254.00** *180 pages, 2023*
https://www.scientific.net/978-3-0364-0200-0/book



14th Sustainable Green Construction and Nano-Technology

Selected peer-reviewed full text papers from the 14th International Conference on Sustainable Green Construction and Nano-Technology (NTC 2023), March 03-07, 2023, Sharm El-Sheikh, Egypt

Edited by: Prof. Sayed Shebl, Prof. Magdy Helal and Hamada Shoukry

This volume contains research results in structural reliability structure and structural elements and practical recommendations for a building design that were presented at the 14th International Conference on Sustainable Green Construction and Nano-Technology (NTC 2023, March 03-07, 2023, Egypt). Analysis of the behaviour of reinforced concrete beams strengthened in negative moment region using carbon-fibre-reinforced plastic plates, development of structural health monitoring system for cable-stayed bridges and practice design of sustainable buildings in conditions of a hot climate are discussed here.

Topics: Building Materials, Civil Engineering, Construction, Materials Science, Mechanics

Keywords: Beam, Building Design, Cable-Stayed Bridge, Concrete, Mechanical Properties, Natural Ventilation, Structural Health Monitoring

Prices: Print: **US$ 45.00 / EUR 45.00** Print: 978-3-0364-0334-2
eBook Single-User: **US$ 45.00 / EUR 45.00** eBook: 978-3-0364-1334-1
eBook Multi-User: **US$ 79.00 / EUR 79.00** *62 pages, 2023*
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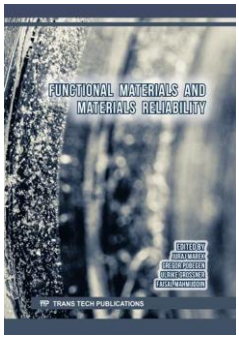

Functional Materials and Materials Reliability

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Juraj Marek, Dr. Gregor Pobegen, Prof. Ulrike Grossner and Dr. Faisal Mahmuddin

This special issue presents the research results and engineering developments in the area of silicon carbide semiconductor materials for power electronics and the latest composite and polymer materials for machinery and textile production. The special edition will be useful to engineers whose activity is related to research and developments in the area of power electronics and modern composite and polymer materials.

Topics: Electronics, Materials Science, Nanoscience

Keywords: Aluminum Foam, Composite, Mechanical Properties, Metal Oxide Semiconductor, MOSFET, Nanotube, Polymer, Reliability, Silicon Carbide, Textile Materials

Prices:			
	Print:	**US$ 190.00 / EUR 190.00**	Print: 978-3-0364-0323-6
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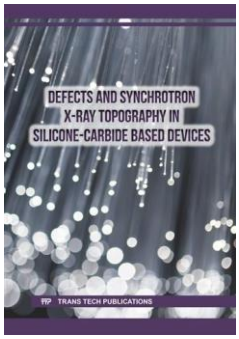

Defects and Synchrotron X-Ray Topography in Silicone-Carbide Based Devices

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Juraj Marek, Dr. Gregor Pobegen and Prof. Ulrike Grossner

The presented special edition is devoted to the latest research in semiconductor materials and devices on silicon carbide and the design and research of machines and equipment. This issue will be helpful to specialists engaged in the design and production of power electronics and to mechanical engineers.

Topics: Electronics, Materials Science, Mechanical Engineering, Mechanics, Nanoscience

Keywords: Aircraft Fuel Dump, Crystal Structure, Crystalline Defect, Defect Inspection, Dislocations, Epilayer, Friction Stir Welding, Heat Transfer, Landfill Gas, Mass Transfer, Point Defects, Polymer, Semiconductor, Silicon Carbide, Spark Ignition Engine, Surface Defects, Synchrotron X-Ray Topography, Wafer

Prices:			
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	eBook Single-User:	**US$ 125.00 / EUR 125.00**	eBook: 978-3-0364-1332-7
	eBook Multi-User:	**US$ 219.00 / EUR 219.00**	*152 pages, 2023*
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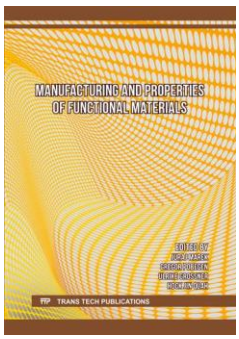

Manufacturing and Properties of Functional Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Juraj Marek, Dr. Gregor Pobegen, Prof. Ulrike Grossner and Dr. Hock Jin Quah

The special edition includes articles that represented the latest research results and engineering solutions in the area of silicon carbide wafer manufacturing for power electronics, functional polymer and composite materials for various applications and special microwave absorption materials for defence from electromagnetic radiation. This special edition will be interesting to semiconductor power device production specialists and many branches of applied materials science.

Topics: Building Materials, Electronics, Materials Science, Nanoscience

Keywords: Carbon Biomass, Carbon Nanotube, Composite, Crystal Growth, Defect, Doping, Etching, Geopolymer, Laser Annealing, Laser Micro-Punching, Microwave Absorption, Physical Vapor Deposition, Polymer, Silicon Carbide, Wafer

Prices:			
	Print:	**US$ 85.00 / EUR 85.00**	Print: 978-3-0364-0326-7
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	eBook Multi-User:	**US$ 149.00 / EUR 149.00**	*126 pages, 2023*
			https://www.scientific.net/978-3-0364-0326-7/book

Engineering Materials, Devices and Equipments

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Faisal Mahmuddin, Dr. Juraj Marek, Dr. Gregor Pobegen and Prof. Ulrike Grossner

This special edition contains a collection of articles on research results in areas of structural metal materials, materials and semiconductor devices for applications in photovoltaic systems and electronic devices based on silicon carbide, and also in the area of building materials. The special edition will be helpful to many specialists whose activity is related to machinery and construction, solar cell production and the electronic industry.

Topics: Building Materials, Electronics, Materials Science, Nanoscience

Keywords: Alloy, Bamboo Structure, Cement, Chemical Etching, Concrete, Diode, Electrical Properties, Field Effect Transistor, Frozen Soil, Hardening, Heat Treatment, Integrated Circuit, Junction Field Effect Transistor, Mechanical Properties, Metal-Organic Chemical Vapor Deposition, Microwave Plasma Coating, MOSFET, Nanocomposites, Plasticiser, Power Electronic Device, Semiconductor, Shaping, Silicon Carbide, Solar Cell, Steel, Thin Film, Wafer Doping, Welding

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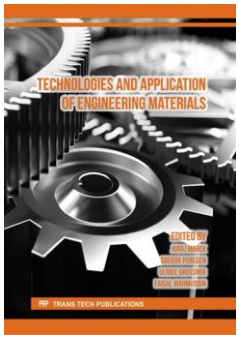

Technologies and Application of Engineering Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Juraj Marek, Dr. Gregor Pobegen, Prof. Ulrike Grossner and Dr. Faisal Mahmuddin

This special issue includes articles devoted to the results of research and engineering developments in the area of silicon carbide semiconductor materials for power electronics and the latest materials for the construction sector. The special edition will be useful to engineers whose activity is related to research and development of power electronic devices and modern construction materials.

Topics: Building Materials, Construction, Electronics, Materials Science, Nanoscience

Keywords: Aggregate Material, Beams, Bipolar Operation, Concrete, Diode, Electrical Properties, Gate Voltage, Geopolymer, Interface Defect, Mechanical Properties, Mortar, MOSFET, Reinforcing, Semiconductor, Silicon Carbide, Sound Absorption, Switching Characteristics

Prices:			
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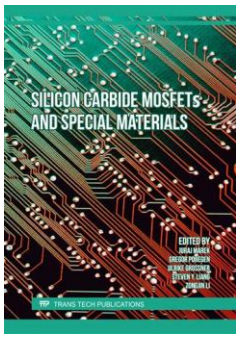

Silicon Carbide MOSFETs and Special Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Juraj Marek, Dr. Gregor Pobegen, Prof. Ulrike Grossner, Prof. Steven Y. Liang and Prof. Zongjin Li

This special issue includes results of research and engineering developments in the area of applied materials and technologies for machinery, biomedical application, additive production and power electronics. The special edition will be useful to engineers whose activity is related to the research and development of composite materials, biomaterials and the production of power electronic devices.

Topics: Bioscience and Medicine, Materials Science, Nanoscience

Keywords: 3D Printing, Bioceramics, Composite, Doping, Electrical Properties, Epitaxial Growth, Interface Defect, Liquid Crystal, Mechanical Properties, Nanomaterials, Nanoparticles, Polymer, Semiconductor, Silicon Carbide, Surface, Thin Film, Wafer

Prices:			
	Print:	**US$ 160.00 / EUR 160.00**	Print: 978-3-0364-0321-2
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	eBook Multi-User:	**US$ 280.00 / EUR 280.00**	*206 pages, 2023*

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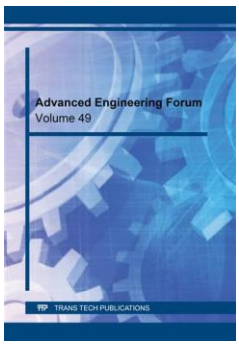

Advanced Engineering Forum Vol. 49

Edited by: Prof. Dumitru Nedelcu, Prof. Mikkel K. Kragh, Dr. Zhibin You and Dr. Zhigang Fang

The 49th volume of the journal includes articles representing the latest research results in chemical engineering, tribology, investigation of a hybrid power system for the loader arm, development of a method of fault identification in the electrical transmission network and series of engineering research in structural engineering and geotechnical facilities. This volume will be helpful to many engineers in the chemical industry, machinery, power engineering and construction industry.

Topics: Building Materials, Civil Engineering, Construction, Manufacturing, Materials Science, Mechanical Engineering, Mechanics

Keywords: Asbestos Fiber, Drilling Fluid, Earthen Dam, Energy Recovery, Erosion Control Dam, Fault Identification, Geotechnical Engineering, Heat Stabilizer, Hybrid Loader Arm, Hybrid Power System, Lubricating Oil, Polymer Additive, Power Network, Retaining Wall, Saturated Porous Media, Signal Processing, Steel Structure, Structural Engineering, Vibration Fatigue, Welded Joint

Prices:			
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	eBook Single-User:	**US$ 95.00 / EUR 95.00**	eBook: 978-3-0364-1336-5
	eBook Multi-User:	**US$ 166.00 / EUR 166.00**	*130 pages, 2023*

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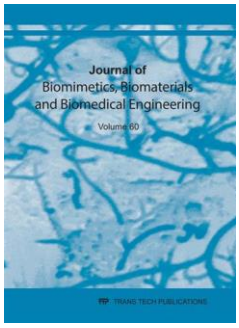

Journal of Biomimetics, Biomaterials and Biomedical Engineering Vol. 60

Edited by: Dr. Sooraj Hussain Nandyala and Dr. David Duday

The content of this journal volume is devoted to three topics of biomedical engineering: analysis of biomaterials properties for applications in bone tissue engineering, drug delivery and cell scaffolds; biomechanical research such as numerical simulation behaviour of the cervical spine, prosthetic head in total hip arthroplasty and dental implants; and the last topic - biomedical signal processing for premature heart ventricular contraction identification and sleep state detection.

Topics: Bioscience and Medicine, General Engineering, Materials Science, Mechanics

Keywords: Anthropometric Measurement, Antimicrobial Activity, Biocomposite, Biomaterials, Bone Cement, Cervical Spine, Chitosan, Collagen, Computational Model, Cytotoxicity, Dental Implant, Drug Delivery, Electrocardiogram, Electroencephalogram, Friction Coefficient, Handgrip Strength, Hydrogel, Hydroxyapatite, Liposomes, Mechanical Properties, Metal-Organic Framework, Nanovesicle, Numerical Simulation, Premature Ventricular Contraction, Scaffold, Signal Processing, Sleep Detection, Total Hip Arthroplasty, Zeolit

Prices:			
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	eBook Multi-User:	**US$ 193.00 / EUR 193.00**	*142 pages, 2023*

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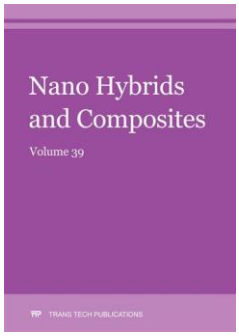

Nano Hybrids and Composites Vol. 39

Edited by: Prof. Ramesh K. Agarwal, Dr. Vinayak Adimule, Dr. Rajendrachari Shashanka and Hamada Shoukry

The 39th volume of the journal contains articles that represent the research results in properties and some specific features of application metal-organic frameworks as materials with an extraordinarily large accessible surface area, green synthesis methods of carbon quantum dots, nanocrystals of titanium suboxide and analysis of the role of carbon nanotubes additions in improving properties of cement-based composites. This journal's volume will be useful to specialists in opto- and microelectronics and chemists whose activity is related to the synthesis and investigation of nanomaterials.

Topics: Building Materials, Materials Science, Nanoscience

Keywords: Carbon Nanotubes, Composite, Dielectric Properties, Green Synthesis, Metal-Organic-Framework, Nanocrystal, Nanomaterials, Quantum Dots, Titanium Suboxide

Prices:			
	Print:	**US$ 75.00 / EUR 75.00**	Print: 978-3-0364-0333-5
	eBook Single-User:	**US$ 75.00 / EUR 75.00**	eBook: 978-3-0364-1333-4
	eBook Multi-User:	**US$ 131.00 / EUR 131.00**	*106 pages, 2023*
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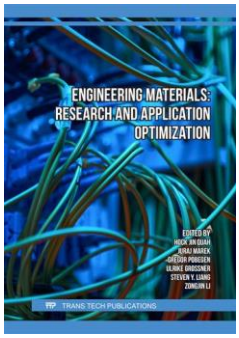

Engineering Materials: Research and Application Optimization

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Hock Jin Quah, Dr. Juraj Marek, Dr. Gregor Pobegen, Prof. Ulrike Grossner, Prof. Steven Y. Liang and Prof. Zongjin Li

This special edition contains a series of articles on research results in areas of materials for applications in opto- and microelectronics and power electronic devices based on silicon carbide. A part of the edition is devoted to properties investigation of green building materials with the use of some waste materials as replacements for conventional components. The issue will be helpful to many specialists whose activity is related to the electronic industry and green construction.

Topics: Building Materials, Electronics, Materials Science, Nanoscience

Keywords: Aluminum Slag, Bitumen Binder, Chemical Etching, Diode, Electrical Properties, Ferrous Foundry Sand, Field Effect Transistor, Geopolymer, Green Building Materials, Light Absorption, Metal-Organic Chemical Vapor Deposition, MOSFET, Nanocomposites, Optical Properties, Power Electronic Device, Semiconductor, Silicon Carbide, Thin Film, Wafer Doping, Waste Tyres

Prices:			
	Print:	**US$ 110.00 / EUR 110.00**	Print: 978-3-0364-0329-8
	eBook Single-User:	**US$ 110.00 / EUR 110.00**	eBook: 978-3-0364-1329-7
	eBook Multi-User:	**US$ 193.00 / EUR 193.00**	*158 pages, 2023*
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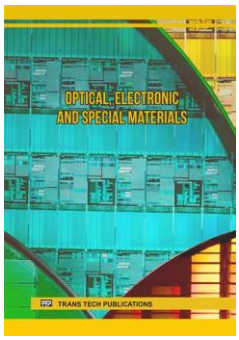

Optical, Electronic and Special Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Juraj Marek, Dr. Gregor Pobegen, Prof. Ulrike Grossner, Dr. Hock Jin Quah and Dr. Azher M. Abed

The presented special issue is devoted to the latest research in materials science and chemical technologies of materials synthesis and processing. This edition will be helpful to specialists engaged in optoelectronics, electronics and to chemical engineers whose activity is related to alternative energy generation and environmental protection.

Topics: Electronics, Materials Science, Nanoscience

Keywords: Activated Carbon, Crystal Structure, Crystalline Defect, Defect Inspection, Dislocations, Epilayer, Fuel Cell, Metal-Organic Chemical Vapor Deposition, Microbial Fuel Cell, Optical Properties, Photoluminescence, Point Defects, Polymer Electrolyte Membrane, Quantum Dots, Semiconductor, Silicon Carbide, Surface Defects, Thin Film, Wafer, Waste Conversion

Prices:			
	Print:	**US$ 95.00 / EUR 95.00**	Print: 978-3-0364-0331-1
	eBook Single-User:	**US$ 95.00 / EUR 95.00**	eBook: 978-3-0364-1331-0
	eBook Multi-User:	**US$ 166.00 / EUR 166.00**	*140 pages, 2023*
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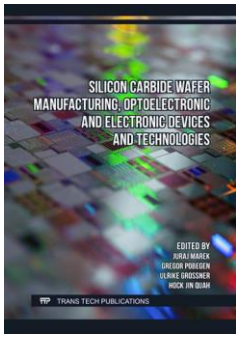

Silicon Carbide Wafer Manufacturing, Optoelectronic and Electronic Devices and Technologies

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Juraj Marek, Dr. Gregor Pobegen, Prof. Ulrike Grossner and Dr. Hock Jin Quah

The special edition includes articles that represented the latest research results and engineering solutions in the area of electronic device design and production. This special edition will be interesting to specialists in semiconductor power device production, microelectronics and optoelectronics.

Topics: Electronics, Materials Science, Nanoscience

Keywords: Chemical Mechanical Polishing, Crystal Growth, Defect, Doping, Electronic Packaging, Epitaxial Growth, Etching, Integrated Circuits, Interconnector, Interfacial Delamination, Ion Implantation, Metal Oxide Semiconductor, Optoelectronics, Physical Vapor Deposition, Quantum Well, Sensor, Silicon Carbide, Surface Damage, Wafer, Wire Bonding

Prices:			
	Print:	**US$ 90.00 / EUR 90.00**	Print: 978-3-0364-0325-0
	eBook Single-User:	**US$ 90.00 / EUR 90.00**	eBook: 978-3-0364-1325-9
	eBook Multi-User:	**US$ 158.00 / EUR 158.00**	*122 pages, 2023*
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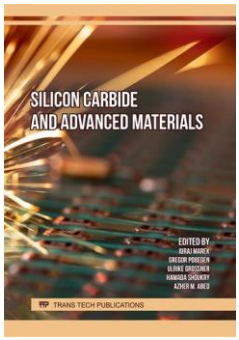

Silicon Carbide and Advanced Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Juraj Marek, Dr. Gregor Pobegen, Prof. Ulrike Grossner, Hamada Shoukry and Dr. Azher M. Abed

This special edition includes articles that reflected the results of the latest research in semiconductors for power electronics, special steel coatings, properties of shape memory alloys and building materials such as cement, concrete and materials for intumescent coatings of structural steel for fire protection. This special edition will be helpful to specialists in the electronics industry and materials science in particular in the area of building materials.

Topics: Building Materials, Electronics, Materials Science, Nanoscience

Keywords: Cement, Concrete, Crystal, Doping, Electrical Properties, Epitaxial Growth, Mechanical Properties, Nanomaterials, Semiconductor, Shape Memory Alloy, Silicate Paint, Silicon Carbide, Steel, Surface, Thin Film, Wafer

Prices:			
	Print:	**US$ 155.00 / EUR 155.00**	Print: 978-3-0364-0320-5
	eBook Single-User:	**US$ 155.00 / EUR 155.00**	eBook: 978-3-0364-1320-4
	eBook Multi-User:	**US$ 271.00 / EUR 271.00**	*194 pages, 2023*
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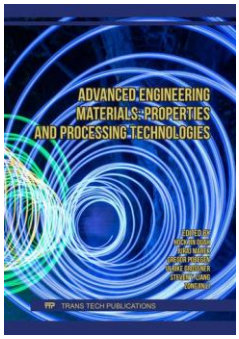

Advanced Engineering Materials: Properties and Processing Technologies

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Hock Jin Quah, Dr. Juraj Marek, Dr. Gregor Pobegen, Prof. Ulrike Grossner, Prof. Steven Y. Liang and Prof. Zongjin Li

This special edition contains a series of articles on research results in areas of structural metal materials, and materials for applications in opto- and microelectronics and power electronic devices based on silicon carbide. The presented edition will be helpful to many specialists whose activity is related to machinery and the electronic industry.

Topics: Electronics, Materials Science, Nanoscience

Keywords: Alloy, Chemical Etching, Die Casting, Die Forged, Diode, Field Effect Transistor, Friction Stir Welding, MOSFET, Nanocomposites, Optical Properties, Silicon Carbide, Single Point Incremental Forming, Steel, Thin Film, Wafer Doping

Prices:			
	Print:	**US$ 120.00 / EUR 120.00**	Print: 978-3-0364-0328-1
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	eBook Multi-User:	**US$ 210.00 / EUR 210.00**	*152 pages, 2023*
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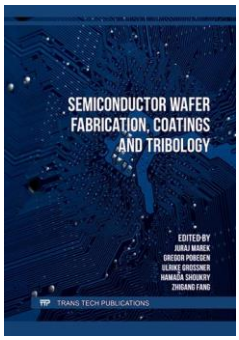

Semiconductor Wafer Fabrication, Coatings and Tribology

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Juraj Marek, Dr. Gregor Pobegen, Prof. Ulrike Grossner, Hamada Shoukry and Dr. Zhigang Fang

The special edition includes articles that represented the latest research results and engineering solutions in the synthesis of nanomaterials, analysis processes of semiconductor wafer fabrication, and some decisions on coatings and exploration of tribological performance of several polymer and composite materials. This special edition will be interesting to specialists in nanomaterials synthesis, semiconductor power device production and protective coatings in machinery.

Topics: Electronics, Materials Science, Nanoscience

Keywords: Brush Plating, Carbon Nanotube, Chemical Vapor Deposition, Coating, Composite, Defect, Doping, Epitaxial Growth, Gallium Oxide, Green Synthesis, Laser Annealing, MOSFET, Nanomaterials, Nanoparticles, Plasma Etching, Polishing, Polymer, Silicon Carbide, Tribology, Wafer

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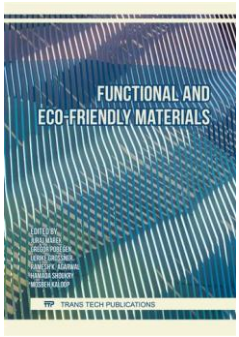

Functional and Eco-Friendly Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Juraj Marek, Dr. Gregor Pobegen, Prof. Ulrike Grossner, Prof. Ramesh K. Agarwal, Hamada Shoukry and Prof. Mosbeh Kaloop

The special edition includes articles that present the latest research results and engineering achievements in applied materials and processing technologies for machinery, biomedicine, micro- and power electronics, and construction practice. The presented special edition will be useful to engineers and researchers from electronics, biomedical engineering and eco-friendly building materials.

Topics: Bioscience and Medicine, Building Materials, Electronics, Materials Science, Nanoscience

Keywords: Alloy, Biomaterials, CMOS, Conductive Ink, Functional Materials, Geopolymer, Green Concrete, MOSFET, Nanoparticles, Semiconductors, Wall Materials

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	eBook Multi-User:	**US$ 245.00 / EUR 245.00**	*176 pages, 2023*
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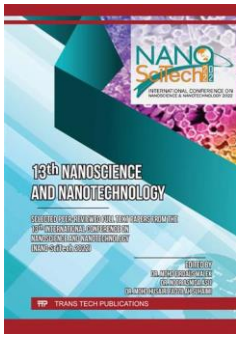

13th Nanoscience and Nanotechnology

Selected peer-reviewed full text papers from the 13th International Conference on Nanoscience and Nanotechnology (NANO-SciTech 2022), March 25-27, 2022, Shah Alam, Malaysia

Edited by: Dr. Mohd Firdaus Malek, Dr. Noor Asnida Asli and Dr. Mohd Husairi Fadzilah Suhaimi

This proceeding contains selected papers presented at the 13th International Conference on Nanoscience and Nanotechnology 2022 (NANO-SciTech 2022, March 25-27, 2022, Shah Alam Selangor, Malaysia). The covered topics are nanoscience and nanotechnology, nanobiotechnology, electronic and optoelectronic nano-devices, piezo and ferroelectric materials, emerging and advanced materials, communications technology and applications, industrial and consumer electronics, nano coating and corrosion, and other related disciplines.

Topics: Construction, Materials Science, Mechanical Engineering, Mechanics, Nanoscience

Keywords: Annealing, Biosynthesis, Biotechnology, Cathode Material, Composite, Dielectric Properties, Electrodeposition, Environmental Protection, Graphene, Hydrothermal Synthesis, Mechanical Engineering, Microwave-Assisted Synthesis, Morphological Properties, Nanoparticles, Nanorods, Nanotube, Polymer, Soil Treatment, Thin Film, Titanium Dioxide, Zinc Oxide

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	eBook Multi-User:	**US$ 114.00 / EUR 114.00**	*152 pages, 2023*
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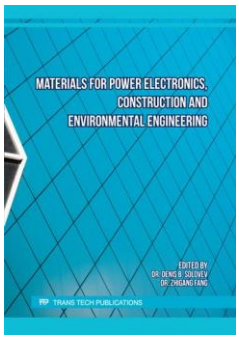

Materials for Power Electronics, Construction and Environmental Engineering

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Denis B. Solovev and Dr. Zhigang Fang

This special edition contains papers representing the latest research results in the properties of structural alloys and semiconductor materials for power electronics, assessment of the load-bearing capacity of structural members and concrete, and analysis technologies of water treatment and waste recycling. The presented special collection will be helpful to engineers in machinery, applied materials science, construction and environmental engineering.

Topics: Building Materials, Construction, Electronics, Materials Science

Keywords: Alloy, Ceramics, Concrete, Hardness, Heavy Metals, Mechanical Properties, Microstructure, MOSFET, Power Semiconductor, Steel, Structural Element, Superalloy, Waste Recycling, Water Treatment, Zeolite

Prices:			
	Print:	**US$ 135.00 / EUR 135.00**	Print: 978-3-0364-0284-0
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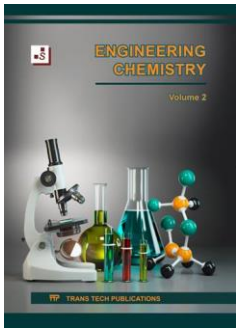

Engineering Chemistry Vol. 2

Edited by: Dr. Angela Justina Kumalaputri, Dr. Vinayak Adimule, Dr. Rajendrachari Shashanka and Dr. Kamal Kishor Dubey

The second issue of the Engineering Chemistry journal contains articles where are presented results of scientific and engineering research related to the analysis of synthesis methods and optical properties of copper-based metal-organic frameworks, and technologies of waste recycling including biomass, organic dyes and low-density polyethylene. This volume will be helpful to researchers and chemical engineers.

Topics: Materials Science

Keywords: Biowaste, Catalytic Cracking, Dye Degradation, Liquid Fuel, Metal-Organic-Framework, Optical Properties, Pyrolysis, Waste Recycling

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	Print:	**US$ 35.00 / EUR 35.00**	Print: 978-3-0364-0307-6
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	eBook Multi-User:	**US$ 61.00 / EUR 61.00**	*82 pages, 2023*
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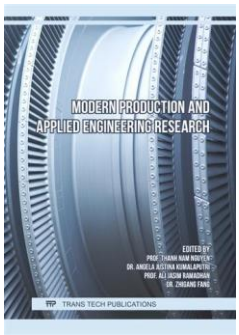

Modern Production and Applied Engineering Research

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Thanh Nam Nguyen, Dr. Angela Justina Kumalaputri, Prof. Ali Jasim Ramadhan and Dr. Zhigang Fang

This special topic publication contains articles devoted to the actual problems in machine design, mechanics of materials, mechatronics, automation, engineering thermodynamics, modern biomass processing technologies and production technologies in mechanical engineering. The presented articles collection will be helpful to specialists in mechanical engineering, biotechnologies and materials science.

Topics: Building Materials, General Engineering, Materials Science, Mechanical Engineering, Mechanics

Keywords: Alloy, Automation, Biotechnology, Engineering Thermodynamics, Heat Transfer, Lignin Separation, Machine Design, Mass Transfer, Mechatronics, Production Technology, Steel, Strength of Materials

Prices:			
	Print:	**US$ 140.00 / EUR 140.00**	Print: 978-3-0364-0293-2
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	eBook Multi-User:	**US$ 245.00 / EUR 245.00**	*202 pages, 2023*
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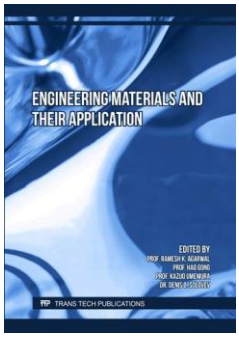

Engineering Materials and their Application

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Ramesh K. Agarwal, Prof. Hao Gong, Prof. Kazuo Umemura and Dr. Denis B. Solovev

This special edition contains papers representing the latest research results in polymers and composites, pharmacology, additive manufacturing, properties of structural metals and assessment of the load-bearing capacity of structural members of buildings. The presented special collection will be helpful to engineers in machinery, applied materials science and construction.

Topics: Bioscience and Medicine, Building Materials, Civil Engineering, Materials Science, Mechanics

Keywords: Additive Manufacturing, Alloy, Beam, Column, Composite, Concrete Element, Hydrogel, Laser Micromachining, Load-Bearing Capacity, Pharmacology, Polymer, Steel, Structural Member

Prices:
Print: **US$ 145.00 / EUR 145.00**
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eBook Multi-User: **US$ 254.00 / EUR 254.00**

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194 pages, 2023
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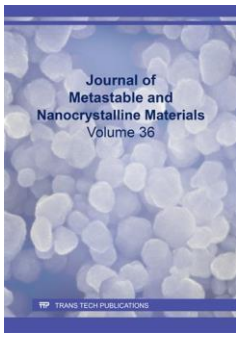

Journal of Metastable and Nanocrystalline Materials Vol. 36

Edited by: Dr. Konstantinos Georgarakis, Prof. Nadezhda L. Voropaeva, Dr. Hock Jin Quah and Dr. Tufan Ghosh

The 36th volume of the Journal of Metastable and Nanocrystalline Materials contains articles based on research results of the crystalline metal materials like that a molecular dynamic simulation of shock wave propagation in aluminium single crystal, the effect of various ternary additions on structure and properties of the nickel-titanium shape memory alloy and also of some parameters' optimisation of the ultrasonication treatment in the production of microbial nanocellulose. The results of the analysis of optical and photoluminescence properties of silicate phosphor, semiconductor oxides and yttrium phosphate nanocomposites are also presented. The catalytic activity of some nanomaterials was also investigated in two presented articles. This journal issue will be helpful to many specialists in applied materials science and nanotechnologies.

Topics: Materials Science, Nanoscience

Keywords: Crystal Structure, Molecular Dynamic Simulation, Nanocatalyst, Nanocellulose, Nanocomposite, Nanoparticle, Optical Properties, Phosphor, Photoluminescence, Shape Memory Alloy, Single Crystal, Ternary Addition, Ultrasonication

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Print: **US$ 45.00 / EUR 45.00**
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76 pages, 2023
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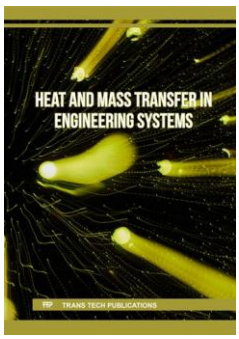

Heat and Mass Transfer in Engineering Systems

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Alokesh Pramanik and Dr. Zhigang Fang

This special topics edition is devoted to the research of heat and mass transfer processes, properties analysis of structural alloys, electrode materials for energy storage devices and catalytic hydroisomerization reaction. The special edition will be useful to a wide range of engineers, technologists and researchers in the mentioned areas.

Topics: Materials Science, Mechanical Engineering, Mechanics

Keywords: Alloy, Blood Flow, Ceramics, Computational Modelling, Convection Flow, Electrode Materials, Electroosmotic Flow, Grain Refinement, Heat Transfer, Hydroisomerization, Magnetohydrodynamic Flow, Mass Transfer, Mechanical Properties, Viscoelastic Fluid

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Print: **US$ 165.00 / EUR 165.00**
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212 pages, 2023
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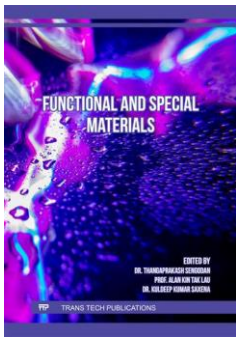

Functional and Special Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Thangaprakash Sengodan, Prof. Alan Kin Tak Lau and Dr. Kuldeep Kumar Saxena

This special edition contains articles that reflect the latest research results in applied materials science and nanotechnologies, and will be helpful to a wide range of specialists in applied materials science from various branches of modern production.

Topics: Materials Science, Nanoscience

Keywords: Ceramics, Composite, Dielectrics, Electrical Properties, Luminescence, Mechanical Properties, Nanomaterials, Nanoparticles, Optical Properties, Quantum Dots, Semiconductors, Superalloy, Thin Film

Prices:
Print: **US$ 95.00 / EUR 95.00**
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162 pages, 2023
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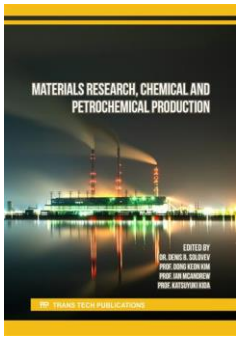

Materials Research, Chemical and Petrochemical Production

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Denis B. Solovev, Prof. Dong Keon Kim, Prof. Ian McAndrew and Prof. Katsuyuki Kida

This special edition contains papers reflecting the latest research results in polymers, composite and ceramic materials, additive manufacturing, bearings tribology and chemical and petrochemical production. The presented special collection will be helpful to engineers in machinery, applied materials science and chemical engineering.

Topics: Materials Science

Keywords: Absorption, Additive Manufacturing, Ceramics, Chemical Engineering, Composite, Electrocatalytic Oxidation, Gas Hydrate, Heavy Metal, Petrochemical Engineering, Polymer, Tribology

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	Print:	**US$ 170.00 / EUR 170.00**	Print: 978-3-0364-0282-6
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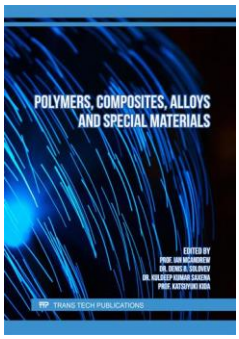

Polymers, Composites, Alloys and Special Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Ian McAndrew, Dr. Denis B. Solovev, Dr. Kuldeep Kumar Saxena and Prof. Katsuyuki Kida

This special topic edition represents articles on the research results in the synthesis, properties research and processing technologies investigation for a wide nomendature of recent polymeric and composite materials, functional and special materials for various application goals, and structural alloys. The publication will be useful to many engineers and researchers from machinery, microelectronics and materials development.

Topics: Materials Science, Nanoscience

Keywords: 3D Printing, Alloy, Biocomposite, Ceramics, Composite, Crack Growth, Magnetic Materials, Magnetorheological Fluid, Metal Matrix Composite, Nanocomposite, Natural Rubber, Polymer, Rolling Contact Fatigue, Superalloy, Tribology, Wood Flour Reinforcement

Prices:			
	Print:	**US$ 130.00 / EUR 130.00**	Print: 978-3-0364-0276-5
	eBook Single-User:	**US$ 130.00 / EUR 130.00**	eBook: 978-3-0364-1276-4
	eBook Multi-User:	**US$ 228.00 / EUR 228.00**	*174 pages, 2023*

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Engineering Innovations Vol. 5

Edited by: Jav Davaasambuu, Prof. Ian McAndrew, Prof. Katsuyuki Kida and Prof. Dong Keon Kim

The 5th volume of "Engineering Innovations" included articles based on research results in materials science, building construction, machine designing and defect monitoring, some technologies and materials for environmental protection and bioreactor parameters identification. Engineers, technologists, academics, and students will appreciate the articles presented.

Topics: Building Materials, Civil Engineering, Environmental Engineering, Information Technologies, Materials Science, Mechanical Engineering, Mechanics

Keywords: Absorption, Ball Bearing, Bioreactor, Bituminous Coal, Blowout Preventer, Concrete Structure, Growth Rates, Internet of Things, Ionic Liquid, Machine Diagnostics, Parameter Identification, Simulation Modelling, Strengthening, Wastewater Monitoring System

Prices:			
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	eBook Multi-User:	**US$ 79.00 / EUR 79.00**	*78 pages, 2023*

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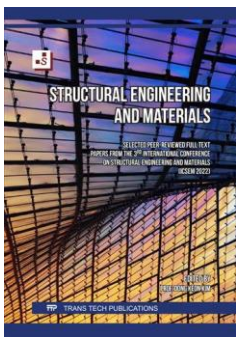

Structural Engineering and Materials

Selected peer-reviewed full text papers from the 3rd International Conference on Structural Engineering and Materials (ICSEM 2022), October 14-16, 2022, Jeju Island, South Korea

Edited by: Prof. Dong Keon Kim

This volume contains the selected articles that were presented at the 3rd annual International Conference on Structural Engineering and Materials (ICSEM 2022, Jeju Island, South Korea, October 14-16, 2022). Published articles cover research results in the area of materials science and materials processing technologies in the various branches of modern industry. This edition will be interesting and useful to many engineers, academics and also to students.

Topics: Building Materials, Civil Engineering, Construction, Materials Science, Mechanics

Keywords: Aggregate Replacement, Architecture, Building Design, Concrete Additives, Green Concrete, Mineral Wool, Natural Fiber, Plastic Waste, Thermal Comfort, Wall Material

Prices:			
	Print:	**US$ 45.00 / EUR 45.00**	Print: 978-3-0364-0288-8
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	eBook Multi-User:	**US$ 79.00 / EUR 79.00**	*72 pages, 2023*

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Journal of Nano Research Vol. 78

Edited by: Prof. Efstathios I. Meletis, Dr. Peter Horňak and Dr. Miloš Matvija

This "Journal of Nano Research" issue collects peer-reviewed articles reflecting the scientific and engineering research results in the synthesis methods, properties analysis, and application methods of nanomaterials and nanoparticles to solve a wide range of engineering objectives. The solutions presented will be practical in machinery and chemical production, environmental protection, medicine, electrochemical water splitting for hydrogen synthesis and more.

Topics: Materials Science, Nanoscience

Keywords: Electrocatalyst, Electrochemical Water Splitting, Graphene, Magnetic Properties, Nanocomposite, Nanofibers, Nanofluid, Nanomaterials, Nanoparticles, Optical Properties, Photocatalyst, Photodegradation, Thermal Properties

Prices:			
	Print:	**US$ 135.00 / EUR 135.00**	Print: 978-3-0364-0287-1
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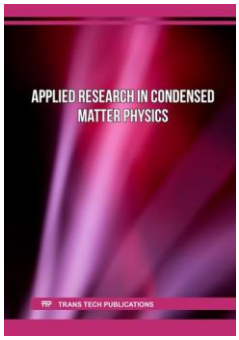

Applied Research in Condensed Matter Physics

Special topic volume with invited peer-reviewed papers only

Edited by: Jav Davaasambuu and Dr. Miloš Matvija

This publication is devoted to modern theoretical and applied research in condensed matter physics and applied engineering materials. The special edition will be useful to many specialists in theoretical and experimental research in materials science.

Topics: Materials Science, Mechanics, Nanoscience

Keywords: Anode Material, Binary Hard-Sphere Mixture, Cathode Material, Chemical Potential, Condensed Matter Physics, Heat Transfer, Integral Equation Theory, Laser Physics, Lithium-Ion Battery, Magnetization Dynamics, Mass Transfer, Metallography Sample Preparation, Nanofluid, Numerical Investigation, Solid Electrolyte

Prices:			
	Print:	**US$ 90.00 / EUR 90.00**	Print: 978-3-0364-0267-3
	eBook Single-User:	**US$ 90.00 / EUR 90.00**	eBook: 978-3-0364-1267-2
	eBook Multi-User:	**US$ 158.00 / EUR 158.00**	*130 pages, 2023*

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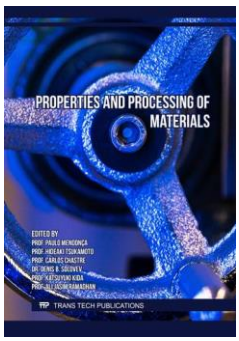

Properties and Processing of Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Paulo Mendonca, Prof. Hideaki Tsukamoto, Prof. Carlos Chastre, Dr. Denis B. Solovev, Prof. Katsuyuki Kida and Prof. Ali Jasim Ramadhan

This special topic publication presents the research results in the synthesis, properties research and processing technologies investigation for a wide nomenclature of recent functional, structural and building materials. The specialised edition will be useful to many engineers and researchers from machinery, materials development and construction.

Topics: Building Materials, Materials Science, Nanoscience

Keywords: Alloy, Concrete, Crack Initiation, Cutting, Fracture Surface, Hydrothermal Synthesis, Mechanical Properties, Mechanics of Materials, Mortar, Nanomaterials, Nanoparticles, Selective Laser Melting, Single Point Incremental Forming, Steel, Welding

Prices:			
	Print:	**US$ 145.00 / EUR 145.00**	Print: 978-3-0364-0275-8
	eBook Single-User:	**US$ 145.00 / EUR 145.00**	eBook: 978-3-0364-1275-7
	eBook Multi-User:	**US$ 254.00 / EUR 254.00**	*182 pages, 2023*

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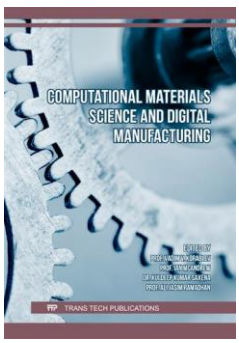

Computational Materials Science and Digital Manufacturing

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Vadim V. Korablev, Prof. Ian McAndrew, Dr. Kuldeep Kumar Saxena and Prof. Ali Jasim Ramadhan

The special publication is devoted to the current issues in materials science and investigations of industrial materials synthesis and processing technologies. In this issue, solutions in the field of computational materials science and digital manufacturing occupy a special place. Modelling of friction stir welding, hot rolling, convention welding, numerical investigation of materials properties using computational materials science methods, and the modelling of the technological equipment allow the creation of a digital twin of the technological process and the transition to digital manufacturing. The tribology research, creation of biotechnology for the production of epoxidised rubber seed oil via lipase-catalyzed epoxidation, bioceramics synthesis and analysis of biocompatible coating on the magnesium alloy which can be used in biomedicine, a study of wastewater treatment processes features and investigation on building materials are also subjects of scientific and engineering research presented in this edition. This special publication will interest materials science, manufacturing technologies, machinery, biomedical engineering, and construction specialists.

Topics: Bioscience and Medicine, Building Materials, Information Technologies, Materials Science

Keywords: Alloy, Bioceramics, Biomaterials, Biotechnology, Building Materials, Composite, Computational Materials Science, Digital Manufacturing, Friction Stir Welding, Lubricant, Modelling, Polymer, Steel, Tribology, Wastewater Treatment

Prices:			
	Print:	**US$ 200.00 / EUR 200.00**	Print: 978-3-0364-0271-0
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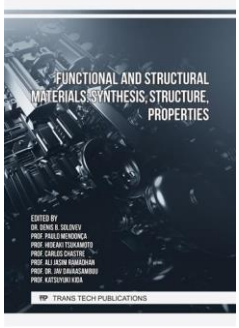

Functional and Structural Materials: Synthesis, Structure, Properties

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Hideaki Tsukamoto, Prof. Paulo Mendonca, Prof. Carlos Chastre, Prof. Katsuyuki Kida, Prof. Ali Jasim Ramadhan, Dr. Denis B. Solovev and Jav Davaasambuu

The current special topic edition presents to readers the latest research results in the synthesis, properties research and treatment technologies investigation for a wide range of modern functional and structural materials. This specialised publication will be useful to many engineers and researchers from machinery, materials development and chemical production.

Topics: Materials Science, Nanoscience

Keywords: Alloy, Anodisation, Coating, Composite, Detonation Spraying, Laser Treatment, Magnetic Properties, Mechanical Properties, Mechanics of Materials, Nanocatalysts, Nanomaterials, Nanoparticles, Nanotubes, Pulsed Laser Ablation, Steel, Surface Engineering

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	eBook Multi-User:	**US$ 333.00 / EUR 333.00**	*238 pages, 2023*
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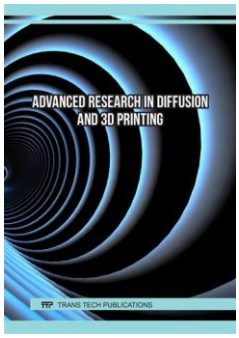

Advanced Research in Diffusion and 3D Printing

Special topic volume with invited peer-reviewed papers only

Edited by: Assoc. Prof. Dr. Triwiyanto Triwiyanto

This special edition collected research articles on two specialised topics - heat and mass transfer in engineering systems and 3D printing applications in biomedical practice. The presented book will be helpful not only to engineers and researchers but also to students and academic staff.

Topics: Bioscience and Medicine, Materials Science, Mechanics, Nanoscience

Keywords: 3D Printing, Computational Analysis, Heart Model, Heat Transfer, Mass Transfer, Modelling, Nanofluid, Nanoparticle, Polymer, Radiative Flow, Scaffold

Prices:			
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	eBook Multi-User:	**US$ 114.00 / EUR 114.00**	*106 pages, 2023*
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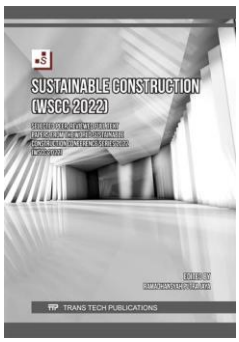

Sustainable Construction (WSCC 2022)

Selected peer-reviewed full text papers from the World Sustainable Construction Conference Series 2022 (WSCC 2022), October 14-15, 2022, Kuala Lumpur, Malaysia

Edited by: Ramadhansyah Putra Jaya

This volume is the collection of selected peer-reviewed articles which were presented at the World Sustainable Construction Conference Series 2022 (WSCC 2022), held in Kuala Lumpur, Malaysia, in October 2022. This proceeding includes articles reflecting the current level of development and the degree of implementation of the concept of sustainability in the construction sector. The presented collection will be helpful and interesting to engineers from various branches of modern construction.

Topics: Building Materials, Civil Engineering, Construction, Industrial Engineering, Materials Science

Keywords: Asphalt Mixture, Basalt Rebars, Bitumen Additive, Concrete, Construction Project, Geotechnics, Green Roof, Kenaf Fiber, Lighting Audit, Mechanical Properties, Reinforced Concrete Beam, Reinforcement, Risk Management, Shoreline Sediment, Soil Anchorage System, Tsunami Hazard

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	eBook Multi-User:	**US$ 298.00 / EUR 298.00**	*244 pages, 2023*
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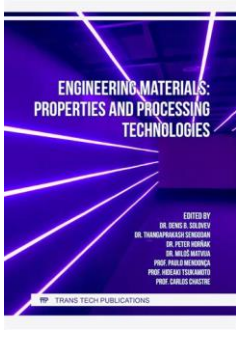

Engineering Materials: Properties and Processing Technologies

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Denis B. Solovev, Dr. Thangaprakash Sengodan, Dr. Peter Horňak, Dr. Miloš Matvija, Prof. Paulo Mendonca, Prof. Hideaki Tsukamoto and Prof. Carlos Chastre

This special topic edition is devoted to current issues in materials science and materials processing technologies. The publication will be helpful to materials science, machine building and construction specialists.

Topics: Building Materials, Materials Science, Nanoscience

Keywords: Additive Manufacturing, Alloy, Asphalt, Building Materials, Casting, Cement, Ceramics, Cladding, Composite, Concrete, Heat Treatment, Mechanical Properties, Microstructure, Mortar, Nanocomposite, Polymer, Steel, Welding

Prices:			
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	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*318 pages, 2023*
			https://www.scientific.net/978-3-0364-0274-1/book

Journal of Nano Research Vol. 77

Edited by: Prof. Efstathios I. Meletis

This "Journal of Nano Research" volume includes peer-reviewed articles reflecting the practical research results in the synthesis and properties analysis of nanomaterials and nanoparticles for various engineering goals - catalytic and photocatalytic applications, photovoltaic and electrochemical use in solar cells and energy storage devices, for applications as a biocompatible fluid for magnetic hyperthermia therapy and micro- and optoelectronics production. The presented collection will be helpful to specialists from many branches of engineering whose activity is related to nanomaterials and nanotechnologies.

Topics: Bioscience and Medicine, Materials Science, Nanoscience

Keywords: Electrochemical Properties, Magnetic Properties, Nanocatalyst, Nanocomposite, Nanoparticle, Nanowire, Optical Properties, Perovskite, Photocatalysis, Photovoltaic Characteristics, Quantum Dots, Ultrasonic Treatment

Prices:			
	Print:	**US$ 155.00 / EUR 155.00**	Print: 978-3-0364-0286-4
	eBook Single-User:	**US$ 155.00 / EUR 155.00**	eBook: 978-3-0364-1286-3
	eBook Multi-User:	**US$ 271.00 / EUR 271.00**	*176 pages, 2023*
			https://www.scientific.net/978-3-0364-0286-4/book

International Journal of Engineering Research in Africa Vol. 63

Edited by: Prof. Akii Okonigbon Akaehomen Ibhadode

This volume of the journal represents the research results of properties and synthesis technologies for a multifunctional hydrogel material, concrete with aggregate from plastic waste, numerical modelling of natural convection processes in the elliptical cylinders, analysed the wastewater treatment technologies based on the use of natural chemicals and based on electroflotation and electrocoagulation. There are articles devoted to communication engineering, energy management in microgrids and potential assessment of wind energy in conditions of Ethiopia. The volume will be helpful to specialists in machinery, communication and construction, environmental protection and energetics.

Topics: Building Materials, Environmental Engineering, General Engineering, Information Technologies, Materials Science, Mechanical Engineering

Keywords: Antenna, Communication, Concrete, Electrocoagulation, Energy Management, Gel, Heat Transfer, Mass Transfer, Microgrid, Natural Convection, Numerical Modelling, Potential Assessment, Recycled Aggregate, Wastewater Treatment, Water Quality, Wind Energy, Wireless Sensor Network

Prices:			
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	eBook Multi-User:	**US$ 289.00 / EUR 289.00**	*192 pages, 2023*
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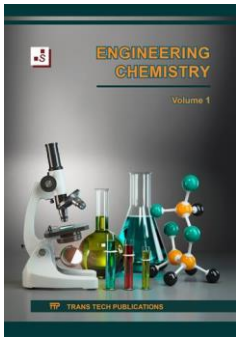


Engineering Chemistry Vol. 1

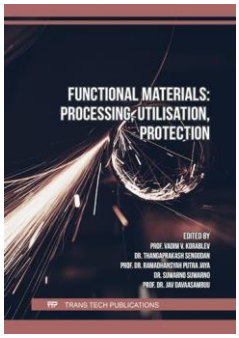
Edited by: Dr. Angela Justina Kumalaputri, Dr. Zhi Gang Fang and Prof. Ramesh K. Agarwal

We are glad to present to your attention a new journal, "Engineering Chemistry". The first volume contains articles on three topical directions: biofuel production, hydrometallurgy and environmental protection. Membrane microfiltration of glycerol from biodiesel, analysis of challenges in syngas fermentation for bioethanol production, a method for controlling the purity of produced dimethyl ether, investigation of extraction technology for manganese sulfate solution purification in hydrometallurgical production and the review of progress on the use of carbonaceous catalysts activated persulfate for degradation of antibiotic pollutants in wastewater are the topics of articles collected here.

Topics: Materials Science

Keywords: Antibiotic Pollutants, Biocatalyst, Biodiesel, Bioethanol, Biotechnology, Degradation, Dimetil Eter, Fermentation, Glycerol, Hydrometallurgy, Manganese Sulfate, Membrane, Microfiltration, Purification, Reactive Distillation, Spherical Colloidal Cluster, Syngas, Wastewater Treatment

Prices:			
	Print:	**US$ 35.00 / EUR 35.00**	Print: 978-3-0364-0292-5
	eBook Single-User:	**US$ 35.00 / EUR 35.00**	eBook: 978-3-0364-1292-4
	eBook Multi-User:	**US$ 61.00 / EUR 61.00**	*74 pages, 2023*
			https://www.scientific.net/978-3-0364-0292-5/book



Functional Materials: Processing, Utilisation, Protection

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Vadim V. Korablev, Dr. Thangaprakash Sengodan, Ramadhansyah Putra Jaya, Dr. Suwarno Suwarno and Jav Davaasambuu

This book collected articles based on the results of scientific and engineering research in the area of structural metals treatment, their corrosion behaviour and corrosion protection, features of friction welding technologies, properties of glasses, functional ceramics and materials for micro- and optoelectronics and also of various cement replacement materials. The special edition will be helpful to specialists in machinery, micro- and optoelectronics and construction.

Topics: Building Materials, Materials Science

Keywords: Alloy, Cement Replacement Materials, Ceramics, Coating, Corrosion, Corrosion Protection, Friction Welding, Glass, Hardness, Hydrogen Embrittlement, Mechanical Properties, Photoluminescence Properties, Steel, Surface Treatment

Prices:			
	Print:	**US$ 195.00 / EUR 195.00**	Print: 978-3-0364-0269-7
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	eBook Multi-User:	**US$ 341.00 / EUR 341.00**	*254 pages, 2023*
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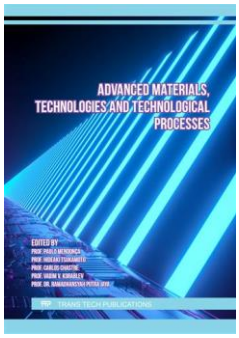

Advanced Materials, Technologies and Technological Processes

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Paulo Mendonca, Prof. Hideaki Tsukamoto, Prof. Carlos Chastre, Prof. Vadim V. Korablev and Ramadhansyah Putra Jaya

This special edition is devoted to recent issues in materials science and technologies of materials synthesis and processing used in machine building, biomedical engineering, civil construction and geotechnics. This special publication will interest researchers and engineers from mentioned engineering and industrial areas.

Topics: Bioscience and Medicine, Building Materials, Civil Engineering, Materials Science, Mechanics

Keywords: Additive Technologies, Aggregate Replacement Materials, Alloy, Antibacterial Properties, Biomedical Engineering, Column, Composite, Concrete, Fine Aggregate, Polymer, Shape Memory Alloy, Soil, Steel, Structural Element, Thin Film, Ultrasonic Impact Treatment, Welding

Prices:			
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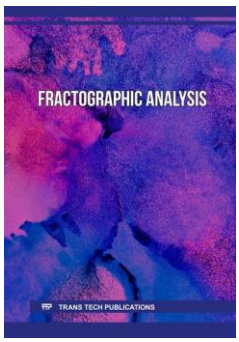

Fractographic Analysis

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Peter Horňak, Dr. Miloš Matvija and Prof. Ali Jasim Ramadhan

The presented special publication includes a series of articles on two topics from applied materials research - fractographic analysis of structural metal materials and analysis properties and deposition technologies of thin films and coatings for optical and photovoltaic applications. This special edition will be helpful to many specialists from machinery and micro-, optoelectronics and optics.

Topics: Materials Science, Mechanics

Keywords: Alloy, Antireflective Coating, Brass, Creep Resistance, Fatigue Behaviour, Fractography, Metallography, Microstructure, Optics, Photovoltaics, Steel, Superalloy, Thin Film

Prices:			
	Print:	**US$ 70.00 / EUR 70.00**	Print: 978-3-0364-0266-6
	eBook Single-User:	**US$ 70.00 / EUR 70.00**	eBook: 978-3-0364-1266-5
	eBook Multi-User:	**US$ 123.00 / EUR 123.00**	*94 pages, 2023*
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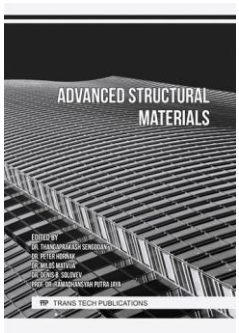

Advanced Structural Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Thangaprakash Sengodan, Dr. Peter Horňak, Dr. Miloš Matvija, Dr. Denis B. Solovev and Ramadhansyah Putra Jaya

This special topic edition is devoted to current issues in materials science and materials synthesis and processing technologies. The publication will be useful to materials science, machinery and construction specialists.

Topics: Building Materials, Materials Science

Keywords: 3D Printing, Alloy, Buildings Materials, Ceramics, Composite, Concrete, Mechanical Properties, Metal Matrix Composite, Metallurgy, Microstructure, Polymer, Steel, Stir Casting, Wood

Prices:			
	Print:	**US$ 190.00 / EUR 190.00**	Print: 978-3-0364-0272-7
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	eBook Multi-User:	**US$ 333.00 / EUR 333.00**	*232 pages, 2023*
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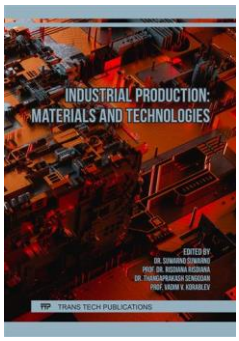

Industrial Production: Materials and Technologies

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Suwarno Suwarno, Prof. Risdiana Risdiana, Dr. Thangaprakash Sengodan and Prof. Vadim V. Korablev

This special edition includes articles on research results in materials science and materials processing technologies used in modern production. Technologies of structural metals processing, their wear resistance and strength, powder metallurgy, synthesis methods, properties and applications of iron oxide and ferrites, modern composite materials and materials and technologies in the oil and gas industry are subjects of the publication. This specialised edition will be helpful to many engineers and researchers whose activities are related to industrial production.

Topics: Materials Science, Nanoscience

Keywords: Alloy, Composite, Contact Fatigue, Crack, Failure Probability, Ferrite, Friction Stir Welding, Iron Oxide, Mechanical Properties, Mould Casting, Nanocomposite, Nanoparticles, Polymer, Powder Metallurgy, Steel, Strength of Materials, Surface Finish, Wear Resistance

Prices:			
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	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*356 pages, 2023*
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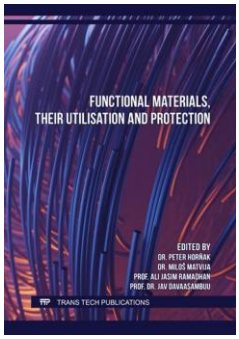

Functional Materials, their Utilisation and Protection

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Peter Horňak, Dr. Miloš Matvija, Prof. Ali Jasim Ramadhan and Jav Davaasambuu

This thematic issue introduces the latest research results in materials science, including the analysis of the possibilities of application of high entropy alloys for hydrogen storage, properties of piezoceramics and ferroelectric, corrosion behaviour of structural materials, and investigation of functional thin films' properties and synthesis technologies and the optical properties of gallium arsenide nanoparticles obtained by laser ablation in liquid acetone. The presented edition will be useful to a wide range of specialists in materials science both at the theoretical and practical levels.

Topics: Materials Science, Nanoscience

Keywords: Ceramics, Corrosion, Ferroelectric, High Entropy Alloy, Nanoparticle, Semiconductor, Slag, Steel, Thin Film

Prices:			
	Print:	**US$ 100.00 / EUR 100.00**	Print: 978-3-0364-0265-9
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	eBook Multi-User:	**US$ 175.00 / EUR 175.00**	*128 pages, 2023*
			https://www.scientific.net/978-3-0364-0265-9/book

Achievements and Solutions in Materials Science and Engineering Data Processing

Special topic volume with invited peer-reviewed papers only

Edited by: Assoc. Prof. Dr. Triwiyanto Triwiyanto, Dr. Kannadhasan Suriyan, Dr. Suwarno Suwarno, Dr. Spiridon (Spiros) Koutsonas and Prof. Giovanni Minafò

Presented to your attention, this special edition contains articles that reflect the latest research achievements and engineering solutions in materials science, technologies of additive manufacturing, thermal engineering and medical signal and image processing. This edition will be helpful to researchers and engineers whose professional activity is related to materials science, machinery and biomedical engineering.

Topics: Bioscience and Medicine, Building Materials, Information Technologies, Materials Science, Mechanical Engineering, Mechanics

Keywords: Additive Manufacturing, Biomedical Engineering, Composite, Concrete, Image Processing, Mechanical Properties, Medical Image, Polymer, Steel, Thermal Engineering

Prices:			
	Print:	**US$ 135.00 / EUR 135.00**	Print: 978-3-0364-0238-3
	eBook Single-User:	**US$ 135.00 / EUR 135.00**	eBook: 978-3-0364-1238-2
	eBook Multi-User:	**US$ 236.00 / EUR 236.00**	*160 pages, 2023*
			https://www.scientific.net/978-3-0364-0238-3/book

Science and Technology Applications

Selected peer-reviewed full text papers from the 4th International Conference on Science and Technology Applications (ICoSTA), November 01-02, 2022, Medan, Indonesia

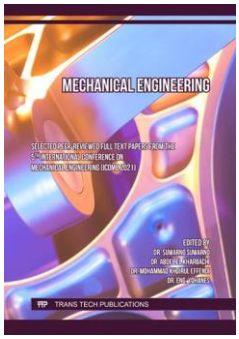
Edited by: Bornok Sinaga, Dr. Juniastel Rajagukguk, Dr. R. Rajaramakrishna, Dr. Topan Setiadipura, Dr. Mati Horprathum and Dr. Saronom Silaban

The presented proceedings include selected articles from the 4th International Conference on Science and Technology Applications (ICoSTA). The edition presents research results and engineering solutions on actual issues in areas of structural mechanics, nuclear reactor exploitation and thermal energy equipment design, measurement methods and sensors applications, methods and algorithms of data and image processing, materials for biomedical engineering, modern biotechnologies and technologies for environmental protection and plant cultivation, waste and biomass conversion technologies, as well as quality control and failure analysis in power plant equipment. The publication will be helpful to specialists in mechanical engineering, biomedicine, power energy production, information technologies and engineering measurements, environmental engineering and agriculture.

Topics: Bioscience and Medicine, Civil Engineering, Environmental Engineering, Information Technologies, Manufacturing, Materials Science, Mechanical Engineering, Mechanics

Keywords: Biomaterials, Biotechnology, Convolutional Neural Network, Data Processing, Environmental Protection, Geothermal Fluid, Heat Exchanger, Image Processing, Measurement, Monitoring, Nuclear Reactor, Plant Cultivation, Safety, Sensor, Structural Mechanics

Prices:			
	Print:	**US$ 175.00 / EUR 175.00**	Print: 978-3-0364-0241-3
	eBook Single-User:	**US$ 175.00 / EUR 175.00**	eBook: 978-3-0364-1241-2
	eBook Multi-User:	**US$ 306.00 / EUR 306.00**	*240 pages, 2023*
			https://www.scientific.net/978-3-0364-0241-3/book



Mechanical Engineering

Selected peer-reviewed full text papers from the 5th International Conference on Mechanical Engineering (ICOME 2021), August 25-26, 2021, virtual

Edited by: Dr. Suwarno Suwarno, Dr. Abdel El Kharbachi, Dr. Mohammad Khoirul Effendi and Dr. Yohanes Yohanes

This edition contains articles presented and selected from 5th International Conference on Mechanical Engineering (ICOME 2021), virtually held on August 25-26, 2021. The publication considers actual issues in engineering research and design in areas of machinery, biomedical engineering, waste and biomass conversion technologies, as well as quality control and failure analysis in power plant equipment. The publication will be useful to specialists in mechanical engineering, biomedicine, power energy production and environmental engineering.

Topics: Bioscience and Medicine, Environmental Engineering, Information Technologies, Manufacturing, Materials Science, Mechanical Engineering, Mechanics

Keywords: Biomass Conversion, Biomaterials, Biomedical Engineering, Computational Modelling, Design, Equipment, Failure Analysis, Machine Parts, Mechanical Engineering, Mechanical Properties, Power Plant, Quality Control

Prices:			
	Print:	**US$ 75.00 / EUR 75.00**	Print: 978-3-0364-0239-0
	eBook Single-User:	**US$ 75.00 / EUR 75.00**	eBook: 978-3-0364-1239-9
	eBook Multi-User:	**US$ 131.00 / EUR 131.00**	*120 pages, 2023*
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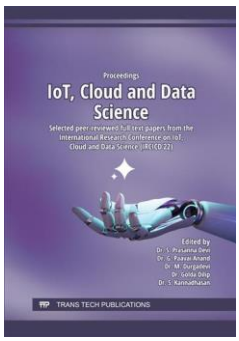


Proceedings: IoT, Cloud and Data Science

Selected peer-reviewed full text papers from the International Research Conference on IoT, Cloud and Data Science (IRCICD'22), May 06-07, 2022, Chennai, India

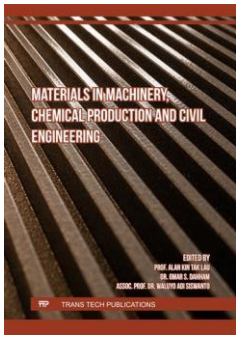
Edited by: Dr. S. Prasanna Devi, Dr. G. Paavai Anand, Dr. M. Durgadevi, Dr. Golda Dilip and Dr. S. Kannadhasan

This edition collects the selected peer-reviewed full text papers from the International Research Conference on IoT, Cloud and Data Science (IRCICD'22), held on May 06-07, 2022, in Chennai, India. One of the most significant characteristics of the evolving digital age is the convergence of technologies that includes sensors (Internet of Things: IoT), data storage (cloud), information management (databases), data collection (big data), data applications (analytics), knowledge discovery (data science), algorithms (machine learning), transparency (open data) and API services (micro services, containerization). The Research Conference on IoT, Cloud and Data Science - IRCICD'22 aimed at bringing together researchers from the industry, academicians and business delegates, scholars and graduate students to exchange and share their experiences, new ideas, and research results across aspects of IoT, Cloud and Data Sciences. The conference focused on promoting recent advances and innovation in the field of IoT, Cloud and Data Science.

Topics: Computers, Information Technologies

Keywords: Artificial Intelligence, Big Data, Blockchain, Cloud Technology, Clustering, Data Classification, Data Mining, Data Processing, Database, Dataset, Deep Learning, Facial Recognition, Image Processing, Internet of Things, Machine Learning, Mechatronics, Natural Language Processing, Neural Networks, Security, Sentiment Analysis

Prices:			
	Print:	**US$ 245.00 / EUR 245.00**	Print: 978-3-0364-0151-5
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0364-1151-4
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*924 pages, 2023*
			https://www.scientific.net/978-3-0364-0151-5/book



Materials in Machinery, Chemical Production and Civil Engineering

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Alan Kin Tak Lau, Dr. Omar S. Dahham and Waluyo Adi Siswanto

This special edition is devoted to the latest research in machinery, chemical production and civil engineering. Articles will be helpful to researchers and specialists in machinery, chemical production and civil engineering.

Topics: Bioscience and Medicine, Building Materials, Materials Science, Nanoscience

Keywords: Annealing Temperature, Antibacterial Activity, Asphalt Binder, Biomaterial, Cellular Glass, Concrete, Forging, Graphene Oxide, Hydrogen Production, Machining, Mechanochemical Synthesis, Nanomaterials, Nanosheet, Nanotube, Steel, Thin Film, Waste Aluminum Foil

Prices:			
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	eBook Multi-User:	**US$ 236.00 / EUR 236.00**	*182 pages, 2023*
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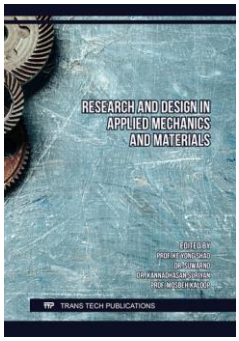

Research and Design in Applied Mechanics and Materials

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Ke Yong Shao, Dr. Suwarno Suwarno, Dr. Kannadhasan Suriyan and Prof. Mosbeh Kaloop

This special edition contains research articles on actual issues of research and design in machinery and mechatronics as well as an analysis of composite materials properties. This special publication will be useful to specialists in mechanical engineering, mechatronics, alternative energy and materials science.

Topics: General Engineering, Materials Science, Mechanical Engineering, Mechanics

Keywords: Composite, Damage Analysis, Electric Vehicle, Electrode Material, Finite Element Analysis, Fuel Cells, Fuzzy Control, Mechanical Engineering, Mechanoluminescence, Mechatronics, Nanocomposite, Quality Control, Radio Frequency Identification, Routing Protocol, Thermal Analysis, Vibration Power Generator, Water Electrolysis, Wireless Sensor Network

Prices:			
	Print:	**US$ 115.00 / EUR 115.00**	Print: 978-3-0364-0237-6
	eBook Single-User:	**US$ 115.00 / EUR 115.00**	eBook: 978-3-0364-1237-5
	eBook Multi-User:	**US$ 201.00 / EUR 201.00**	*164 pages, 2023*

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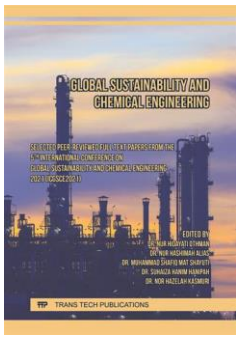

Global Sustainability and Chemical Engineering

Selected peer-reviewed full text papers from the 5th International Conference on Global Sustainability and Chemical Engineering 2021 (ICGSCE2021), September 14-15, 2021, Shah Alam, Malaysia

Edited by: Dr. Nur Hidayati Othman, Dr. Nur Hashimah Alias, Dr. Muhammad Shafiq Mat Shayuti, Dr. Suhaiza Hanim Hanipah and Dr. Nor Hazelah Kasmuri

This book was collected from selected papers presented at the 5th International Conference on Global Sustainability and Chemical Engineering (ICGSCE) 2021, organised by the School of Chemical Engineering, College of Engineering, Universiti Teknologi MARA, Malaysia. Collected articles cover recent trends and progress in developing advanced materials and technologies in the engineering field.

Topics: Bioscience and Medicine, Environmental Engineering, Materials Science

Keywords: Activated Carbon, Antioxidant Activity, Biotechnology, Food Production, Landfill Gas, Membrane, Oil Flotation, Resource Assessment, Seawater Desalination, Wastewater Treatment

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	Print:	**US$ 75.00 / EUR 75.00**	Print: 978-3-0364-0236-9
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	eBook Multi-User:	**US$ 131.00 / EUR 131.00**	*98 pages, 2023*

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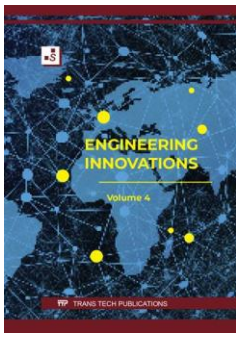

Engineering Innovations Vol. 4

Edited by: Prof. Jong Wan Hu, Prof. Yuyuan Zhao, Prof. Omar S. Es-Said, Assoc. Prof. Dr. Norzahir Sapawe and Assoc. Prof. Dr. Triwiyanto Triwiyanto

The 4th volume of the journal "Engineering Innovations" contains articles devoted to research results in machine and equipment design and some issues in biomedical engineering, such as the 3D printing of unique scaffolds for drug delivery and health informatics. There also are finite element analysis of damage of the cylindrical roller bearing of shot blasting machine, the development of the method for enhancing the energy efficiency of the heat exchanger, vibration analysis of mini unmanned aerial vehicle and some examples of the computational design of technological equipment.

Topics: Bioscience and Medicine, General Engineering, Information Technologies, Manufacturing, Materials Science, Mechanical Engineering, Mechanics

Keywords: 3D Printing, Biomedical Engineering, Crack Geometry, Cylindrical Roller Bearing, Drug Delivery, Finite Element Analysis, Fracture Toughness, Health Informatics, Heat Exchanger, Injectable Bone Substitute, Loading Rate, Mechanical Engineering, Multi-Cyclone Separator, Scaffold, Unmanned Aerial Vehicle, Vibrational Analysis

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	eBook Multi-User:	**US$ 88.00 / EUR 88.00**	*74 pages, 2023*

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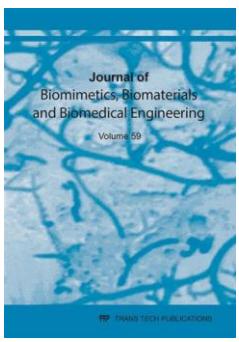

Journal of Biomimetics, Biomaterials and Biomedical Engineering Vol. 59

Edited by: Dr. David Duday, Dr. Sooraj Hussain Nandyala, Assoc. Prof. Dr. Triwiyanto Triwiyanto and Prof. Chafic-Touma Salame

This journal issue presents the last research results in applied biomaterials, antibacterial activity and biological compatibility of nanoparticles for pharmacology applications. A critical overview of synthetic and natural polymeric drug delivery systems, analysis of bioceramic coatings for dental and orthopaedic implants, results of biomechanics knee research in arthroplasty, comparison of heart rate signal for a different location in fingertip and wrist as well as evaluation of application the metal-oxide semiconductor in smartphone to test X-Ray tube radiation leakage are also presented in this journal's volume.

Topics: Bioscience and Medicine, Electronics, Materials Science, Mechanics

Keywords: Antibacterial Activity, Bioceramics, Biomaterials, Biomedical Engineering, Biopolymer, Drug Delivery System, Germanium Coating, Hearth Rate Signal Detection, Hydroxyapatite, Nanoparticles, Organoid, Orthopedic Implant, Radiation Leakage, Zirconium Oxide

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	eBook Multi-User:	**US$ 254.00 / EUR 254.00**	*162 pages, 2023*

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Journal of Metastable and Nanocrystalline Materials Vol. 35

Edited by: Dr. Konstantinos Georgarakis, Prof. Nadezhda L. Voropaeva and Waluyo Adi Siswanto

This collection contains research results on technologies of synthesis and analysis of synthesised nanomaterials. The presented articles consider a wide range of nanoscale materials forms: nanopowders, nanoparticles and nanofibers. We hope this collection will be useful and interesting to many researchers and engineers in modern materials science.

Topics: Materials Science, Nanoscience

Keywords: Biosynthesis, Carboxyl Cellulose, Hydrothermal Pyrolysis, Nanocomposite, Nanofiber, Nanomaterials, Nanoparticles, Silica, Synthesis, Tungsten Carbide

Prices:			
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	eBook Single-User:	**US$ 55.00 / EUR 55.00**	eBook: 978-3-0364-1219-1
	eBook Multi-User:	**US$ 96.00 / EUR 96.00**	*46 pages, 2023*

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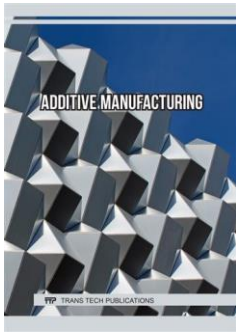

Additive Manufacturing

Special topic volume with invited peer-reviewed papers only

Edited by: Persia Ada N. de Yro and Dr. Omar S. Dahham

This edition presents research results and analysis of the practical use of 3D technologies in various industrial branches - from mechatronics and biomedical applications to education. The next topics are analysis of the coumarin absorption spectrum with various solvents and morphological and optical study of black silicone textured by chemical etching. The presented research results will be interesting and helpful for additive and chemical technologies specialists.

Topics: Materials Science

Keywords: Absorption Spectrum, Additive Manufacturing, Black Silicon, Chemical Etching, Composite, Coumarin, Dye, Polymer, Solvent, Surface Properties

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	eBook Multi-User:	**US$ 114.00 / EUR 114.00**	*62 pages, 2023*

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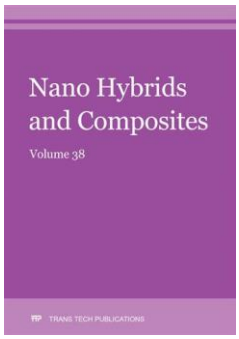

Nano Hybrids and Composites Vol. 38

Edited by: Dr. Amir Al-Ahmed, Prof. Yun-Hae Kim and Waluyo Adi Siswanto

The articles in this edition reflect the latest results of applied nanomaterials research. The properties of various synthesised nanomaterials were studied and analysed for applications in microelectronics, pharmacology, water photolysis, etc. The properties of polymers and composites in processes of 3D printing and plastic welding by hot gas are also considered in some articles. This volume will be helpful to specialists in applied nanomaterials and mechanical engineering.

Topics: Materials Science, Nanoscience

Keywords: 3D Printing, Composite, Dielectric Properties, Hot Gas Welding, Hybrid Films, Mechanical Properties, Nanocomposite, Nanomaterials, Nanoparticles, Nanotube, Optical Properties, Photocatalytic Activity, Polymer, Synthesis

Prices:			
	Print:	**US$ 130.00 / EUR 130.00**	Print: 978-3-0364-0220-8
	eBook Single-User:	**US$ 130.00 / EUR 130.00**	eBook: 978-3-0364-1220-7
	eBook Multi-User:	**US$ 228.00 / EUR 228.00**	*106 pages, 2023*

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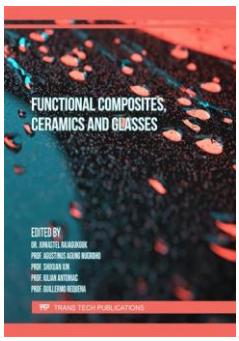

Functional Composites, Ceramics and Glasses

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Juniastel Rajagukguk, Prof. Agustinus Agung Nugroho, Prof. Shixuan Xin, Prof. Iulian Antoniac and Prof. Guillermo Requena

This special edition is dedicated to analysing properties and possible methods of treatment and applications of the comprehensive nomenclature of modern special and functional materials: polymers and composites, ceramics, metal oxides, dielectrics, semiconductors, glasses, etc. This edition will be helpful to researchers and engineers whose professional activityis related to materials science, micro- and optoelectronics, optical engineering and machinery.

Topics: Materials Science, Nanoscience

Keywords: Ceramics, Composite, Crystal Structure, Dielectric Properties, Electrochemical Properties, Magnetic Properties, Mechanical Properties, Nanoparticles, Photocatalytic Activity, Photoluminescence Properties, Polymer

Prices:			
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	eBook Multi-User:	**US$ 289.00 / EUR 289.00**	*194 pages, 2023*

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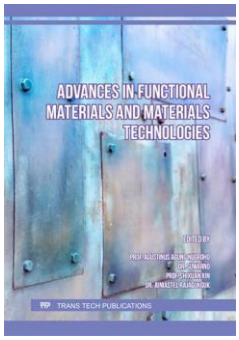

Advances in Functional Materials and Materials Technologies

Special topic volume with invited peer-reviewed papers only

Edited by: Prof. Agustinus Agung Nugroho, Dr. Suwarno Suwarno, Prof. Shixuan Xin and Dr. Juniastel Rajagukguk

This special edition is devoted to the latest research in materials science and technologies of materials processing. The published articles will be helpful to researchers and specialists in machinery and construction.

Topics: Building Materials, Materials Science, Nanoscience

Keywords: Alloy, Annealing Temperature, Building Materials, Cement, Ceramsite, Cladding, Coating, Corrosion, Electromagnetic Absorber, Ferrite, Ferrofluid, Iron Oxide, Magnetic Nanoparticles, Magnetic Properties, Mortar, Natural Aging, Polymer, Steel, Surface Treatment

Prices:

Print:	**US$ 180.00 / EUR 180.00**	Print: 978-3-0364-0234-5
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eBook Multi-User:	**US$ 315.00 / EUR 315.00**	*202 pages, 2023*

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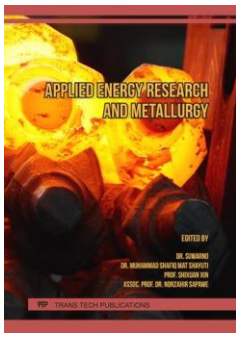

Applied Energy Research and Metallurgy

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Suwarno Suwarno, Dr. Muhammad Shafiq Mat Shayuti, Prof. Shixuan Xin and Assoc. Prof. Dr. Norzahir Sapawe

This special edition is devoted to the latest research in materials science and technologies of materials synthesis and processing. The published articles will be helpful to researchers and specialists in metallurgy, metalworking, powder metallurgy, electrochemistry, the oil and gas industry and materials for construction.

Topics: Building Materials, Materials Science

Keywords: Alloy, Composite, Concrete, Deep Drawing, Emulsification, Lithium-Ion Batteries, Lithium-Metal Batteries, Mechanical Properties, Metallurgy, Milling, Mortar, Powder Metallurgy, Quenching, Steel, Surfactant, Water Condensation Rate, Welding

Prices:

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eBook Single-User:	**US$ 195.00 / EUR 195.00**	eBook: 978-3-0364-1101-9
eBook Multi-User:	**US$ 341.00 / EUR 341.00**	*208 pages, 2023*

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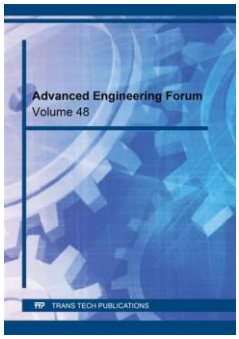

Advanced Engineering Forum Vol. 48

Edited by: Prof. Dumitru Nedelcu and Prof. Mikkel K. Kragh

The 48th volume of the journal includes articles on research results in geotechnical engineering, seismic and waterproofing resistances of structures, building materials, designing of fractal antenna for wireless communication, analysis of agricultural waste heating value, electrohydrodynamic drying and more. The engineers, students and scientific investigators working in the various engineering fields will find this volume of value.

Topics: Building Materials, Construction, Industrial Engineering, Manufacturing, Materials Science, Mechanical Engineering, Mechanics

Keywords: Agricultural Waste, Cement, Ceramic Waste, Corona Discharge, Electrical Power Load, Electrohydrodynamic Drying, Forecasting, Fractal Antenna, Fracture Pressure, Frost Resistance, Heating Value, Macadam, Oil Reservoir, Peak Electricity, Sediment, Seismic Isolation, Steel Reinforcement, Tuff, Waterproof Construction, Wireless Communication

Prices:

Print:	**US$ 130.00 / EUR 130.00**	Print: 978-3-0357-2654-1
eBook Single-User:	**US$ 130.00 / EUR 130.00**	eBook: 978-3-0357-3846-9
eBook Multi-User:	**US$ 228.00 / EUR 228.00**	*144 pages, 2023*

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Advanced Materials Science: Selected Articles from ICoAMS 2022

Selected peer-reviewed full text papers from the 5th International Conference on Advanced Materials Science (ICoAMS 2022), August 24-25, 2022, Indonesia, virtual

Edited by: Sarjito Sarjito, Waluyo Adi Siswanto, Assoc. Prof. Dr. Mohammad Sukri Mustapa, Assoc. Prof. Dr. Tri Widodo Besar Riyadi and Assoc. Prof. Dr. Agus Dwi Anggono

The presented proceedings contain the selected peer-reviewed full text papers from the 5th International Conference on Advanced Materials Science (ICoAMS 2022) held on August 24-25, 2022, at the Universitas Muhammadiyah Surakarta, Indonesia, virtually. The collected articles describe the results of research and engineering achievements in biomass processing, biomaterials and environmental protection, including water treatment. This edition will be helpful to specialists in environmental engineering and biotechnologies.

Topics: Bioscience and Medicine, Environmental Engineering, Manufacturing, Materials Science

Keywords: Adsorption, Biomass, Biomaterials, Biotechnology, Composite, Environmental Protection, Polymer, Pyrolysis, Water Treatment

Prices:

Print:	**US$ 80.00 / EUR 80.00**	Print: 978-3-0364-0208-6
eBook Single-User:	**US$ 80.00 / EUR 80.00**	eBook: 978-3-0364-1208-5
eBook Multi-User:	**US$ 140.00 / EUR 140.00**	*76 pages, 2023*

https://www.scientific.net/978-3-0364-0208-6/book

Machines and Equipment: Materials Research, Technologies and Design

Special topic volume with invited peer-reviewed papers only

Edited by: Dr. Ramya Muthusamy, Dr. Thangaprakash Sengodan, Waluyo Adi Siswanto, Prof. Jong Wan Hu and Prof. Omar S. Es-Said

This edition presents the newest and actual results of research that intend to improve theoretical and practical activities in the field of materials science and mechanical engineering. Organic synthesis of the biologically active heterocyclic compound, cracking process analysis for thermal resistive steel, machine, machine parts and equipment design are the main topics of this issue. The edition will be helpful to a wide range of engineers and researchers.

Topics: Building Materials, Electronics, Information Technologies, Manufacturing, Materials Science, Mechanical Engineering, Mechanics

Keywords: Austenitic Steel, Crack Identification, Cracking, Dielectric Resonating Antenna, Digital Tracking, Disc Brakes, Exhaust Gas, Fibre Bragg Grating, Heat Recovery System, Heat Resistance, Image Processing, Masonry, Material Failure, Microwave Irradiation, Modelling, Organic Synthesis, Sensor, Thermal Analysis, Welding Head, Welding Machine

Prices:			
	Print:	**US$ 110.00 / EUR 110.00**	Print: 978-3-0357-2898-9
	eBook Single-User:	**US$ 110.00 / EUR 110.00**	eBook: 978-3-0357-3855-1
	eBook Multi-User:	**US$ 193.00 / EUR 193.00**	*120 pages, 2023*

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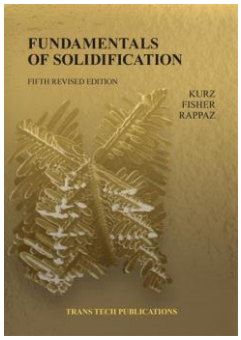

Fundamentals of Solidification 5th Edition

Volume in the series: 103

Edited by: Prof. Wilfried Kurz, Dr. David J. Fisher and Prof. Michel Rappaz

Since the 4th 1998 edition, there have been numerous crucial advances to the modelling and the basic understanding of solidification phenomena, and with its linking to experimental results. These topics have been incorporated into this 5th Fully Revised Edition, as well as a new final chapter on microstructure selection which explains how to combine the concepts of the preceding chapters for modelling real microstructures, in complex processes such as additive manufacturing. This new 5th edition is of high interest to undergraduate and graduate levels and professionals. For orders you are welcome to download the Order Form.

With its numerous new topics - also borne out by the new authorship - students and teachers, scientists and engineers will greatly benefit from this new book. The topics are presented in the same praised manner as in previous editions, readable at three levels:

- an initial feel for the subject is obtained by consulting the figures and their detailed captions;
- a deeper understanding of the underlying physics is found by working through the main text;
- 15 appendices offer a detailed analysis of the various theories, by providing detailed derivations of the relevant equations.

Particularly Novel: the final chapter 8 on *microstructure-selection* explains how to combine the concepts of the preceding chapters to model the real microstructures formed during complex processes such as additive manufacturing, and the new detailed *phase-field* appendix which opens the door to the accurate computer-modelling of growth-forms.

This book has a companion book Solutions Manual which is available separately.

Topics: Materials Science

Keywords: Alloy Dendrite, Cast Iron (Fe-C), Cellular Interface, Columnar Dendrite, Columnar Zone, Concentration Gradient, Constitutional Undercooling, Cooling Rate, Curvature, Curvature Undercooling, Dendrite Growth Rate, Dendrite Spacing, Dendrite Tip, Dendrite Tip Radius, Diffuse Interface, Diffusion Coefficient, Diffusion Coupled Growth, Diffusion in Liquids, Diffusion Length, Directional Growth, Distribution Coefficient, Equiaxed Dendrite, Eutectic Al-Si, Extremum Growth Criterion, Fluid Flow, Flux Balance, Gibbs Free Energy, Gibbs-Thomson Effect, Growth Defects, Heat Flux, Interface Curvature, Interface Perturbation, Lever Rule, Local Equilibrium, Mass Balance, Microscopic Solvability, Non-Faceted Interface, Nucleation Critical Radius, Nucleation Rate, Nucleation Undercooling, Phase Diagram, Rapid Solidification, Solute Boundary Layer, Steady State, Steady-State Solidification, Temperature Gradient, Volume Fraction Eutectic

Prices:			
	Print:	**US$ 49.50 / EUR 49.50**	Print: 978-3-0364-0015-0
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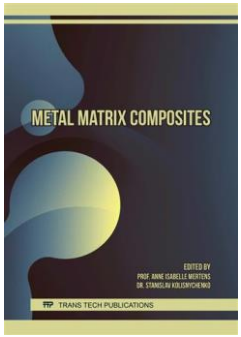


Metal Matrix Composites

Volume in the series: 36

Aggregated Book

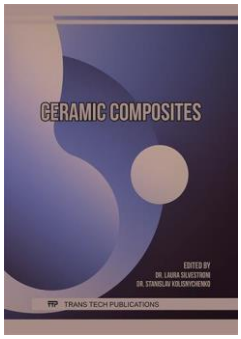
Edited by: Prof. Anne Isabelle Mertens and Dr. Stanislav Kolisnychenko

This book reviews the latest achievements in creating and investigating metal matrix composite materials. The edition contains articles published in the last few years by Trans Tech Publications Ltd., covering many aspects of the synthesis and properties' investigation, processing technologies, and application of these composite materials.

Topics: Manufacturing, Materials Science, Nanoscience

Keywords: Alloy, Ceramics, Coating, Drilling, Extrusion, Hybrid Metal Matrix Composite, Laser Deposition, Laser Powder Bed Fusion, Mechanical Properties, Metal Matrix Composite, Microstructure, Microwave Sintering, Milling, Powder Metallurgy, Reinforcement, Rheo-Squeeze Casting, Selective Laser Melting, Semi-Solid Processing, Steel, Stir Casting, Tribological Properties, Welding

Prices:			
	Print:	**US$ 250.00 / EUR 250.00**	Print: 978-3-0357-2896-5
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0357-3898-8
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*676 pages, 2023*
			https://www.scientific.net/978-3-0357-2896-5/book



Ceramic Composites

Volume in the series: 35

Aggregated Book

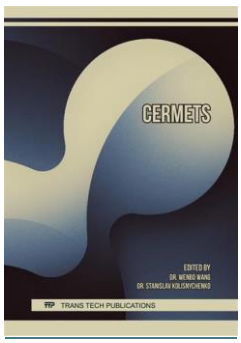
Edited by: Dr. Laura Silvestroni and Dr. Stanislav Kolisnychenko

This book collects some of the latest achievements in synthesis, processing, analysis of properties and technologies of ceramic composite materials' machining and application. This edition contains selected articles published by Trans Tech Publications Ltd. over the last few years.

Topics: Materials Science

Keywords: Ceramic Matrix Composite, Coating, Compaction, Cutting, Dielectric Properties, Forming Pressure, Glass-Ceramics, Heat Treatment, Injection Molding, Joining, Luminescence Properties, Mechanical Properties, Microstructure, Powders Metallurgy, Reinforcement, Sintering, Spark Plasma Sintering, Thermal Shock Resistance, Wet-Chemical Coating, Wire Electric Discharge Machining

Prices:			
	Print:	**US$ 250.00 / EUR 250.00**	Print: 978-3-0357-2897-2
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0357-3899-5
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*392 pages, 2023*
			https://www.scientific.net/978-3-0357-2897-2/book



Cermets

Volume in the series: 34

Aggregated Book

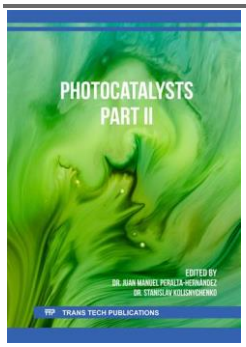
Edited by: Dr. Wenbo Wang and Dr. Stanislav Kolisnychenko

This book, a review of the latest trends in the area of synthesis, properties research, treatment and applications of cermets, contains articles published by Trans Tech Publications Ltd. in the last few years. The edition will be helpful and interesting to a broad audience of materials science and machinery specialists.

Topics: Materials Science

Keywords: Ball Milling, Ceramic Phase, Cermet, Coating, Composite, Cryomilling, Explosive Loading, Hard Turning, Mechanical Properties, Metallic Phase, Microstructure, Powder Metallurgy, Sintering

Prices:			
	Print:	**US$ 125.00 / EUR 125.00**	Print: 978-3-0364-0296-3
	eBook Single-User:	**US$ 125.00 / EUR 125.00**	eBook: 978-3-0364-1296-2
	eBook Multi-User:	**US$ 219.00 / EUR 219.00**	*218 pages, 2023*
			https://www.scientific.net/978-3-0364-0296-3/book



Photocatalysts. Part II

Volume in the series: 33

Aggregated Book

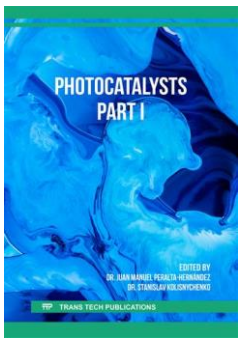
Edited by: Dr. Juan Manuel Peralta-Hernández and Dr. Stanislav Kolisnychenko

Synthesis methods, analysis of photocatalytic properties and technological features of the application of photo-catalytically active materials for environmental pollution degradation, in the composition of modern building materials, and in the processes of energy conversion are topics of the presented specialised collection. This book is the second part of the series "Photocatalysts" which contains articles published by Trans Tech Publications Ltd. in the last few years. The edition will be helpful and interesting to a broad audience of photocatalysis and environmental protection specialists.

Topics: Building Materials, Materials Science, Nanoscience

Keywords: Air Pollution, Carbon Quantum Dots, Cement, Composite, Concrete, Graphene, Green Synthesis, Light Absorption, Metal Oxide Semiconductor, Methanol, Nanocomposite, Nanoparticles, Organic Dye, Photocatalysis, Photocatalyst, Photocatalytic Fuel Cell, Photocatalytic Hydrogen Production, Photodegradation, Pollutant, Polluted Building Components, Surface Modification, Ternary Composite Photocatalyst, Thin Film, Wastewater Treatment, Water Pollution

Prices:			
	Print:	**US$ 320.00 / EUR 320.00**	Print: 978-3-0364-0309-0
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0364-1309-9
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*528 pages, 2023*
			https://www.scientific.net/978-3-0364-0309-0/book



Photocatalysts. Part I

Volume in the series: 32

Aggregated Book

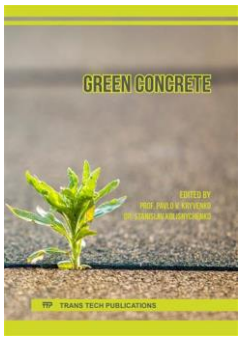
Edited by: Dr. Juan Manuel Peralta-Hernández and Dr. Stanislav Kolisnychenko

Synthesis methods, analysis of photocatalytic properties and technological features of the application of photo-catalytically active materials for environmental pollution degradation for other applications are topics of the presented specialised collection. This book is the first part of the series "Photocatalysts" which contains articles published by Trans Tech Publications Ltd. in the last few years. The edition will be helpful and interesting to a broad audience of photocatalysis and environmental protection specialists.

Topics: Bioscience and Medicine, Materials Science, Nanoscience

Keywords: Air Pollution, Antimicrobial Activity, Carbon Quantum Dots, Composite, Graphene, Green Synthesis, Heteroatom Doping, Light Absorption, Metal Oxide Semiconductor, Nanocomposite, Nanoparticles, Organic Dye, Photocatalysis, Photocatalyst, Photodegradation, Pollutant, Surface Modification, Ternary Composite Photocatalyst, Thin Film, Wastewater Treatment, Water Pollution

Prices:			
	Print:	**US$ 320.00 / EUR 320.00**	Print: 978-3-0364-0299-4
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0364-1299-3
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*600 pages, 2023*
			https://www.scientific.net/978-3-0364-0299-4/book



Green Concrete

Volume in the series: 31

Aggregated Book

Edited by: Prof. Pavlo V. Kryvenko and Dr. Stanislav Kolisnychenko

This book, a review of the latest trends in the development, properties research, and production of green concrete, contains articles published by Trans Tech Publications Ltd. in the last few years. The edition will be helpful and interesting to a broad audience of specialists in the concrete production and construction industry.

Topics: Building Materials, Construction, Materials Science

Keywords: Aggregate, Asphalt Dust Waste, Blast Furnace Slag, Calcinated Clay, Cement Components, Concrete Constituents, Demolition Waste, Durability, Environmental Efficiency, Fibre Waste, Fillers, Fly Ash, Foundry Sand, Geopolymer Concrete, Glass Waste, Green Concrete, Recycling, Reinforcement, Rice Husk Ash, Rubber Crumb, Self-Compacting Concrete, Sustainability, Wood Ash

Prices:			
	Print:	**US$ 290.00 / EUR 290.00**	Print: 978-3-0364-0095-2
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0364-1095-1
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*560 pages, 2023*
			https://www.scientific.net/978-3-0364-0095-2/book

Sustainable Materials

Volume in the series: 30

Aggregated Book

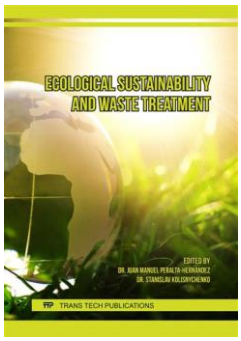
Edited by: Prof. Jose Luis Rivera-Armenta and Dr. Stanislav Kolisnychenko

This book, a review of the latest trends in the practice of production and synthesis of various types of materials on principles of sustainability, contains articles published by Trans Tech Publications Ltd. in the last few years. The edition will be helpful and interesting to a broad audience of specialists in materials science.

Topics: Materials Science, Nanoscience

Keywords: Aluminum Dross Waste, Bioceramics, Biocomposite, Biodegradation, Biomass, Biopolymer, Coating, Filler, Fly Ash, Inorganic Waste, Lubricant, Mechanical Properties, Natural Fiber, Organic Inhibitor, Organic Waste, Slag, Supercapacitor, Sustainability

Prices:			
	Print:	**US$ 290.00 / EUR 290.00**	Print: 978-3-0364-0120-1
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0364-1120-0
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*322 pages, 2023*
			https://www.scientific.net/978-3-0364-0120-1/book



Ecological Sustainability and Waste Treatment

Volume in the series: 29

Aggregated Book

Edited by: Dr. Juan Manuel Peralta-Hernández and Dr. Stanislav Kolisnychenko

This book, a review of the latest trends in the practice of ecological protection and waste treatment, contains articles published by Trans Tech Publications Ltd. in the last few years. The edition will be helpful and interesting to a broad audience of specialists in environmental engineering and engineers-technologists.

Topics: Construction, Environmental Engineering, Industrial Engineering, Manufacturing, Materials Science, Nanoscience

Keywords: Agro Waste, Biomass, Construction, Environmental Engineering, Environmental Impact, Hydrothermal Liquefaction, Mine Drainage, Soil Fertility, Sustainable Development, Waste Management, Waste Treatment, Wastewater Treatment, Water Resources, Water Treatment

Prices:			
	Print:	**US$ 230.00 / EUR 230.00**	Print: 978-3-0364-0122-5
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0364-1122-4
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*266 pages, 2023*
			https://www.scientific.net/978-3-0364-0122-5/book

Scientific Books Collection

Published 2023

International Conference on Recent Advances in Mechanical Engineering and Nanomaterials

Volume in the series: 106

Aggregated Book

Edited by: Dr. Manoj A. Kumbhalkar and Dr. Radheshyam H. Gajghat

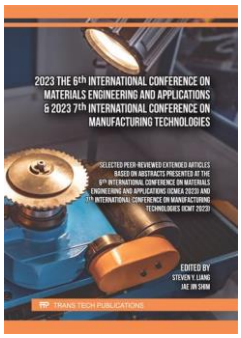
ICRAMEN 2023 was a two day event that aimed to showcase state-of-the-art methodologies and technologies in mechanical engineering and nanomaterials. It focused on new ideas to pave the way and disseminate the latest innovations and practices in the related fields. It provided opportunities to network, collaborate, and exchange ideas with renowned leaders, scientists, and researchers in engineering and technology. As a platform for industry and academia fostering innovative ideas, theories, frameworks, and applications, ICRAMEN 2023 encouraged recent and futuristic advancements, challenges, and new strategies in the frontiers of science, engineering and nanomaterials.

Topics: Materials Science, Mechanical Engineering, Mechanics, Nanoscience

Keywords: Alloys, Cement, Energy, Functional Composites, Machine Learning, Materials Forming, Materials Processing, Mechanics, Modeling, Monitoring and Control Systems, Nanocomposites, Production Equipment, Production Processes, Steel, Welding

Prices:			
	Print:	**US$ 70.00 / EUR 70.00**	Print: 978-3-0364-0231-4
	eBook Single-User:	**US$ 70.00 / EUR 70.00**	eBook: 978-3-0364-1231-3
	eBook Multi-User:	**US$ 123.00 / EUR 123.00**	*112 pages, 2023*

https://www.scientific.net/978-3-0364-0231-4/book



2023 The 6th International Conference on Materials Engineering and Applications & 2023 7th International Conference on Manufacturing Technologies

Volume in the series: 105

Aggregated Book

Edited by: Prof. Steven Y. Liang and Jae Jin Shim

The 2023 6th International Conference on Materials Engineering and Applications (ICMEA 2023) and the 2023 7th International Conference on Manufacturing Technologies (ICMT 2023) were successfully held in Singapore and online on January 13-15, 2023. After the rigorous review process, 28 papers were accepted and included in this conference book. Covered topics include metallic materials, metalworking and mechanical properties, biomedical materials and coatings, solid mechanics and defect identification, materials chemistry and materials application in chemical engineering, preparation and properties of advanced building materials, nanolithography technology and material physics, material forming and mechanical manufacturing. We hope that this edition will serve as an important research source of references and knowledge, which will lead to not only scientific and engineering findings but will also result in new products and technologies.

Topics: Bioscience and Medicine, Building Materials, Electronics, Manufacturing, Materials Science, Mechanical Engineering, Mechanics

Keywords: Alloys, Bioceramic, Biomedical Materials, Cement, Chemical Production, Coatings, Concrete, Contact Mechanics, Defect Identification, Green Building Materials, Mechanical Properties, Microelectronics, Microtubes, Optoelectronics, Photocatalysts, Polymer Materials, Steel, Strength of Materials, Structural Metals, Tribology, Waste

Prices:			
	Print:	**US$ 155.00 / EUR 155.00**	Print: 978-3-0364-0252-9
	eBook Single-User:	**US$ 155.00 / EUR 155.00**	eBook: 978-3-0364-1252-8
	eBook Multi-User:	**US$ 271.00 / EUR 271.00**	*218 pages, 2023*

https://www.scientific.net/978-3-0364-0252-9/book

International Conference on Processing and Manufacturing of Advanced Materials Processing, Fabrication, Properties, Applications - THERMEC 2023

Volume in the series: 104

Edited by: Prof. Mihail Ionescu, Prof. Tara Chandra, Prof. Christof Sommitsch and Prof. Raj Shabadi

This book presents full text peer-reviewed papers presented at the THERMEC 2023, the 12th International Conference on Processing and Manufacturing of Advanced Materials, which took place between July 03 and July 07, 2023, in Vienna, Austria, under the co-sponsorship of TU Wien and Graz University of Technology. The Conference was also under the auspices of professional organizations from Japan, Korea, France, Italy, The Netherlands, Germany, Brazil, Austria, India, and Canada. The Conference brought together researchers and engineers/technologists working in different aspects of processing, fabrication, structure/property evaluation and applications of both, ferrous and nonferrous materials including biomaterials, smart/intelligent materials as well as advanced characterisation techniques.

Topics: Building Materials, Manufacturing, Materials Science, Nanoscience

Keywords: Additive Manufacturing, Alloy, Biomaterials, Casting, Ceramics, Coating, Composite, Computational Materials Science, Forming, Friction Stir Welding, Functional Materials, Hot-Pressing, Hydrogen Embrittlement, Industrial Engineering, Integrated Circuit Packaging, Measurement, Mechanical Properties, Metallurgy, Microstructure, Modelling, Nanomaterials, Operation Research, Plating, Powder Metallurgy, Rolling, Semiconductor, Sintering, Soldering, Solidification, Steel, Surface Engineering, Testing Methods, Welding

Prices:			
	Print:	**US$ 370.00 / EUR 370.00**	Print: 978-3-0364-0104-1
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0364-1104-0
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*1320 pages, 2023*

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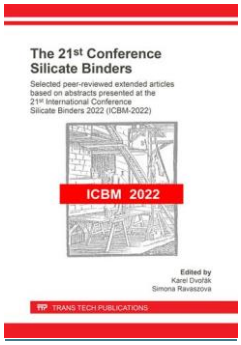


The 21st Conference Silicate Binders

Volume in the series: 103

Aggregated Book

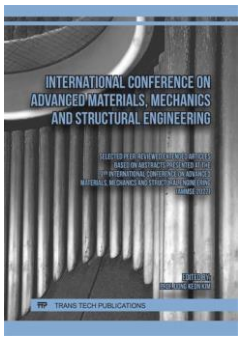
Edited by: Assoc. Prof. Dr. Karel Dvořák and Simona Ravaszova

This publication contains papers published in the framework of the 21st International Conference Silicate Binders 2022. It contains research results in the field of cement and similar inorganic binders. It also contains research results on cement composites, concrete, and geopolymers.

Topics: Building Materials, Civil Engineering, Construction, Materials Science

Keywords: Cement, Cement-Based Composites, Composite, Concrete, Contemporary Composite Materials, Green Building Materials, Lime-Based Composites, Limestone, Silicate Materials

Prices:			
	Print:	**US$ 95.00 / EUR 95.00**	Print: 978-3-0364-0202-4
	eBook Single-User:	**US$ 95.00 / EUR 95.00**	eBook: 978-3-0364-1202-3
	eBook Multi-User:	**US$ 166.00 / EUR 166.00**	*132 pages, 2023*
			https://www.scientific.net/978-3-0364-0202-4/book



International Conference on Advanced Materials, Mechanics and Structural Engineering

Volume in the series: 102

Aggregated Book

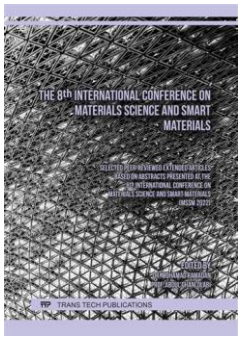
Edited by: Prof. Dong Keon Kim

The primary objective of the 9th International Conference on Advanced Materials, Mechanics and Structural Engineering (9th AMMSE 2022, South Korea, December 16-18, 2022) was to provide a world-class forum for the exchange of original ideas, new information and the latest research results in the area of material science and engineering technology.

Topics: Building Materials, Materials Science, Mechanical Engineering

Keywords: Alloy, Composite, Concrete, Construction 3D Printing, Equipment Design, High-Temperature Deformation, Magnetorheological Elastomer, Mechanical Properties, Physical Metallurgy, Soil-Cement Matrice, Steel

Prices:			
	Print:	**US$ 45.00 / EUR 45.00**	Print: 978-3-0364-0164-5
	eBook Single-User:	**US$ 45.00 / EUR 45.00**	eBook: 978-3-0364-1164-4
	eBook Multi-User:	**US$ 79.00 / EUR 79.00**	*90 pages, 2023*
			https://www.scientific.net/978-3-0364-0164-5/book



The 8th International Conference on Materials Science and Smart Materials

Volume in the series: 101

Aggregated Book

Edited by: Dr. Mohamad Ramadan and Prof. Abdul Ghani Olabi

This book collected the peer-reviewed full text articles that were selected from the 8th International Conference on Materials Science and Smart Materials (MSSM 2022) successfully held at Brunel University London (the UK, July 11-13, 2022). This edition comprised articles to reflect recent achievements in the fields of materials science: their development, application and processing, mechanical engineering including mechatronics and sensors, fuel cells engineering, circular economy and waste management.

Topics: Building Materials, Environmental Engineering, Industrial Engineering, Materials Science, Mechanical Engineering, Mechanics, Nanoscience

Keywords: Biochar, Carbon Nanotubes, Circular Economy, Composite, Construction Waste, Corrosion Resistance, Demolition Waste, Fuel Cells, Heat Waste, Mechanical Engineering, Mechanical Properties, Mechatronics, Microbial Fuel Cells, Micromachining, Polymer, Sensor, Steel, Stress Corrosion Cracking, Waste Management

Prices:			
	Print:	**US$ 135.00 / EUR 135.00**	Print: 978-3-0364-0055-6
	eBook Single-User:	**US$ 135.00 / EUR 135.00**	eBook: 978-3-0364-1055-5
	eBook Multi-User:	**US$ 236.00 / EUR 236.00**	*196 pages, 2023*
			https://www.scientific.net/978-3-0364-0055-6/book

14th International Conference on Materials and Manufacturing Technologies

Volume in the series: 100

Aggregated Book

Edited by: Prof. Vladimir Khovaylo and Nguyen Quang Liem

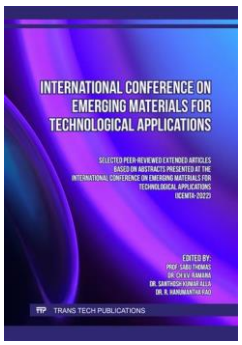
The 14th International Conference on Materials and Manufacturing Technologies (ICMMT 2023) is a premier, annual forum for researchers and scholars from multiple disciplines providing an opportunity to come together and share knowledge, discuss ideas, exchange information, and learn about cutting-edge research in diverse fields with common themes of materials and manufacturing technologies.

Topics: Building Materials, Materials Science, Nanoscience

Keywords: Alloys, Cement, Green Building Materials, Laser Processing, Microstructure, Nanocomposites, Nanomaterials, Steel, Synthesis, Waste

Prices:			
	Print:	**US$ 30.00 / EUR 30.00**	Print: 978-3-0364-0229-1
	eBook Single-User:	**US$ 30.00 / EUR 30.00**	eBook: 978-3-0364-1229-0
	eBook Multi-User:	**US$ 53.00 / EUR 53.00**	*76 pages, 2023*

https://www.scientific.net/978-3-0364-0229-1/book



International Conference on Emerging Materials for Technological Applications

Volume in the series: 99

Aggregated Book

Edited by: Prof. Sabu Thomas, Dr. CH. V. V. Ramana, Dr. Santhosh Kumar Alla and Dr. R. Hanumantha Rao

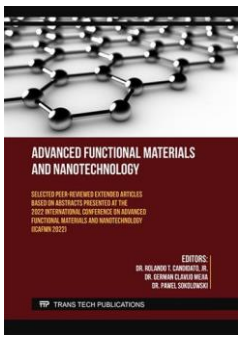
This book is compiled of articles presented at the International Conference on Emerging Materials for Technological Applications (ICEMTA-2022, 23-25 November 2022, Visakhapatnam, India) and is dedicated to the current issues related to the investigation of materials utilised for various engineering applications. Structural, mechanical, dielectric and photoluminescence properties as well as current issues related to methods of chemical research and assessment are discussed here.

Topics: Materials Science, Nanoscience

Keywords: Alloys, Ceramics, Chemical Research, Composite, Dielectric Properties, Functional Composites, Mechanical Properties, Nanocomposite, Nanoparticles, Photoluminescence Properties, Structural Metals

Prices:			
	Print:	**US$ 80.00 / EUR 80.00**	Print: 978-3-0364-0154-6
	eBook Single-User:	**US$ 80.00 / EUR 80.00**	eBook: 978-3-0364-1154-5
	eBook Multi-User:	**US$ 140.00 / EUR 140.00**	*128 pages, 2023*

https://www.scientific.net/978-3-0364-0154-6/book



Advanced Functional Materials and Nanotechnology

Volume in the series: 98

Aggregated Book

Edited by: Dr. Rolando T. Candidato Jr., Dr. German Clavijo Mejia and Dr. Pawel Sokolowski

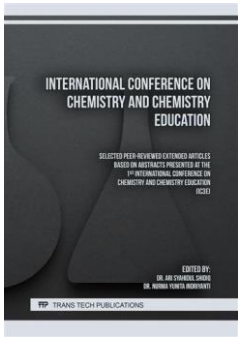
This collection is compiled of articles selected from the 2022 International Conference on Advanced Functional Materials and Nanotechnology (ICAFMN 2022) which took place on October 27-29, 2022, Philippines. The conference was focused on the latest advancements in functional materials and nanotechnology and aimed to bring together cutting-edge research from leading experts and researchers to highlight the state-of-the-art developments and achievements in the field. The collected research papers are dedicated to the simulation, synthesis, and characterisation of modern materials. Moreover, the papers discuss advances in theoretical modelling, fabrication techniques, and the integration of functional materials into real-world applications.

Topics: Bioscience and Medicine, Materials Science, Nanoscience

Keywords: Anticorrosion Coatings, Atomic Force Microscopy, Biopolymers, Composites, Functional Materials, Identification Materials, Monte Carlo Simulation, Nanocellulose, Radiotherapy, Thin Films

Prices:			
	Print:	**US$ 85.00 / EUR 85.00**	Print: 978-3-0364-0183-6
	eBook Single-User:	**US$ 85.00 / EUR 85.00**	eBook: 978-3-0364-1183-5
	eBook Multi-User:	**US$ 149.00 / EUR 149.00**	*154 pages, 2023*

https://www.scientific.net/978-3-0364-0183-6/book



International Conference on Chemistry and Chemistry Education

Volume in the series: 97

Aggregated Book

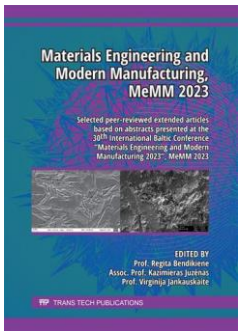
Edited by: Dr. Ari Syahidul Shidiq and Dr. Nurma Yunita Indriyanti

This collection presents selected papers from the 1st International Conference on Chemistry and Chemistry Education (IC3E) which was held in Surakarta, Indonesia on August 19-20, 2022. All papers were exposed to blind peer review by the conference committee and the international reviewers. The thematics of these research results are wide and include composites, materials for biomedical applications, nano-scale materials, technologies of wastewater treatment and biofuel synthesis, food chemistry and biocomposites.

Topics: Bioscience and Medicine, Materials Science, Nanoscience

Keywords: Adsorbent, Antibacterial Activity, Biocomposite, Biocomposites, Biofuel, Biomaterials, Bioremediation, Drug Delivery, Dye Removal, Food Chemistry, Limonite Ore, Nanoparticle, Titania Synthesis, Wastewater Treatment

Prices:			
	Print:	**US$ 150.00 / EUR 150.00**	Print: 978-3-0364-0044-0
	eBook Single-User:	**US$ 150.00 / EUR 150.00**	eBook: 978-3-0364-1044-9
	eBook Multi-User:	**US$ 263.00 / EUR 263.00**	*242 pages, 2023*
			https://www.scientific.net/978-3-0364-0044-0/book



Materials Engineering and Modern Manufacturing, MeMM 2023

Volume in the series: 96

Aggregated Book

Edited by: Prof. Regita Bendikiene, Kazimieras Juzėnas and Prof. Virginija Jankauskaite

This book presents the collection of articles selected from the 30th International Baltic Conference on Materials Engineering and Modern Manufacturing, MeMM 2023 (October 19-20, 2023, Kaunas, Lithuania). The main objective of this book is to offer a comprehensive collection of articles covering a wide range of topics including advanced materials, manufacturing processes, state-of-the-art technologies and practical applications of engineering materials and industrial engineering. The 2023 meeting "Materials Engineering and Modern Manufacturing" served as a continuation of the longstanding tradition established by the Materials Societies of Baltic Countries and the Association of Baltic Materials Societies, consistently having been organizing conferences of significant importance in this field. This conference is the latest step in the long-standing sharing of knowledge and insights about materials engineering and modern manufacturing. Let it be an even brighter platform to share innovative research, promote international collaboration and inspire the next generation of scientists and engineers. May the conference consistently push the boundaries of knowledge about materials engineering and modern manufacturing, contributing to progress that benefits society as a whole.

Topics: Bioscience and Medicine, Manufacturing, Materials Science, Nanoscience

Keywords: Alloys, Biobased Materials, Coatings, Composites, Nanomaterials, Nanotubes, Polymers, Product Design, Production Processes

Prices:			
	Print:	**US$ 120.00 / EUR 120.00**	Print: 978-3-0364-0251-2
	eBook Single-User:	**US$ 120.00 / EUR 120.00**	eBook: 978-3-0364-1251-1
	eBook Multi-User:	**US$ 210.00 / EUR 210.00**	*156 pages, 2023*
			https://www.scientific.net/978-3-0364-0251-2/book

International Conference on Material Engineering Research

Volume in the series: 95

Aggregated Book

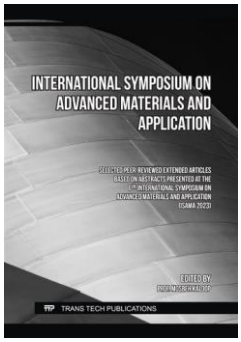
Edited by: Prof. Jong Wan Hu

The 6th International Conference on Material Engineering Research (6th ICMER 2023) took place in Jeju Island, South Korea, on April 14-16, 2023. The primary objective of ICMER 2023 was to provide a world-class forum for the exchange of original ideas, new information, and the latest research results in the area of materials science and engineering technology.

Topics: Building Materials, Materials Science, Mechanical Engineering, Nanoscience

Keywords: 3D Printing, Alloys, Biomedical Materials, Coating, Energy Storage, Forging, Green Building Materials, Manufacturing Technologies, Natural Fibers, Numerical Modelling, Renewable Energy, Solar Energy, Steel, Waste Treatment

Prices:			
	Print:	**US$ 90.00 / EUR 90.00**	Print: 978-3-0364-0214-7
	eBook Single-User:	**US$ 90.00 / EUR 90.00**	eBook: 978-3-0364-1214-6
	eBook Multi-User:	**US$ 158.00 / EUR 158.00**	*144 pages, 2023*
			https://www.scientific.net/978-3-0364-0214-7/book



International Symposium on Advanced Materials and Application

Volume in the series: 94

Aggregated Book

Edited by: Prof. Mosbeh Kaloop

The 2023 International Symposium on Advanced Materials and Application (ISAMA 2023) took place in Incheon, South Korea, on February 17-19, 2023. The objective of ISAMA 2023 was to bring together scientists, engineers, postgraduates and other professionals in the area of materials science, materials applications and engineering technology from all over the world for the discussion of recent achievements in the field.

Topics: Bioscience and Medicine, Building Materials, Materials Science

Keywords: Asphalt Concrete, Chlorhexidine, Dentistry, Electronics Waste, Green Composite, Lime, Mechanical Properties, Mortar, Natural Fibers, Secondary Caries, Waste Recycling

Prices:			
	Print:	**US$ 40.00 / EUR 40.00**	Print: 978-3-0364-0182-9
	eBook Single-User:	**US$ 40.00 / EUR 40.00**	eBook: 978-3-0364-1182-8
	eBook Multi-User:	**US$ 70.00 / EUR 70.00**	*60 pages, 2023*

https://www.scientific.net/978-3-0364-0182-9/book

International Scientific Applied Conference "Problems of Emergency Situations"

Volume in the series: 93

Aggregated Book

Edited by: Dr. Alexey Vasilchenko, Andrii Kondratiev, Dr. Andrii Kovalov, Dr. Evgeniy Rybka, Konstantinos Sotiriadis, Dr. Nataliia Mahas, Mykola Surianinov, Dr. Volodimir Trigub, Dr. Nina Rashkevich, Volodymyr Semko, Vladimir Andronov and Yurii Otrosh

The annual International Scientific Applied Conference "Problems of Emergency Situations" is organized by the National University of Civil Defence of Ukraine (Ukraine, Kharkiv). This year, the representatives from the Odessa State Academy of Civil Engineering and Architecture (Ukraine, Odessa) were involved as partners. The purpose of the conference was to discuss issues related to the problems and prospects of the introduction of the latest developments and technologies aimed at preventing emergencies, minimizing their consequences in the field of civil defence, sharing experience and finding new facets of scientific cooperation, solving problems of emergencies that create a global threat to humanity.

Topics: Building Materials, Civil Engineering, Construction, Industrial Engineering, Manufacturing, Materials Science, Mechanical Engineering, Mechanics

Keywords: Accident Prevention, Aerosol, Alloy, Building Materials, Coating, Composite, Concrete, Dispersed Materials, Emergency, Environmental Protection, Equipment, Explosion Safety, Fire Extinguishing, Fire Resistance, Fire Safety, Hydrogel, Machines, Mechanical Properties, Nuclear Safety, Polymer, Radiation, Risk Management, Steel, Structural Element, Structural Mechanics, Structurally Inhomogeneous Materials, Surface Engineering, Wood

Prices:			
	Print:	**US$ 290.00 / EUR 290.00**	Print: 978-3-0364-0198-0
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0364-1198-9
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*582 pages, 2023*

https://www.scientific.net/978-3-0364-0198-0/book

The 8th International Conference on Composite Materials and Material Engineering & 13th International Conference on Advanced Materials Research & 6th International Conference on Frontiers of Composite Materials

Volume in the series: 92

Aggregated Book

Edited by: Prof. Kazuo Umemura, Prof. Jong Hak Kim, Prof. Xiaohong Zhu and Prof. Alan Lau

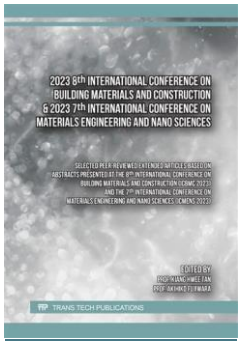
This publication contains papers that were presented at the 8th International Conference on Composite Materials and Material Engineering (ICCMME 2023, January 6-8, 2023, Tokyo, Japan), 13th International Conference on Advanced Materials Research (ICAMR 2023, January 13-15, 2023, hybrid), and 6th International Conference on Frontiers of Composite Materials (ICFCM 2022, December 28-30, 2022, hybrid). The conference programs covered a wide range of topics related to modern materials science and materials processing technologies. This collection will be helpful to many researchers and engineers.

Topics: Building Materials, Materials Science, Mechanics, Nanoscience

Keywords: Additive Manufacturing, Asphalt Concrete, Biomass Conversion, Biomaterials, Ceramics, Composite, Electrochemical Cell, Electrochemistry, Failure Analysis, Furnace Slag, Materials Flaw Identification, Nanomaterials, Polymer, Polymer Electrolyte, Steel

Prices:			
	Print:	**US$ 150.00 / EUR 150.00**	Print: 978-3-0357-1855-3
	eBook Single-User:	**US$ 150.00 / EUR 150.00**	eBook: 978-3-0357-3794-3
	eBook Multi-User:	**US$ 263.00 / EUR 263.00**	*222 pages, 2023*

https://www.scientific.net/978-3-0357-1855-3/book



2023 8th International Conference on Building Materials and Construction & 2023 7th International Conference on Materials Engineering and Nano Sciences

Volume in the series: 91

Aggregated Book

Edited by: Prof. Kiang Hwee Tan and Prof. Akihiko Fujiwara

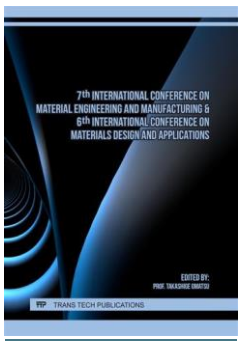
The 8th International Conference on Building Materials and Construction (ICBMC 2023, Kyoto, Japan, online during March 17-20, 2023) and the 7th International Conference on Materials Engineering and Nano Sciences (ICMENS 2023, Chiba University, Chiba, Japan, online during April 7-10, 2023) were successful events with a strong academic atmosphere, which helped participants to exchange scientific and technological ideas. This edition is compiled from the results of these conferences and presents the latest research results on biopolymers, composite materials, chemical technologies, electro- and photochemistry, green building materials and structural mechanics.

Topics: Building Materials, Materials Science, Mechanical Engineering, Mechanics, Nanoscience

Keywords: Biopolymers, Chemical Technology, Composite, Electrochemistry, Green Building Materials, Mechanical Properties, Nanoparticles, Natural Fiber, Photochemistry, Recycling, Structural Mechanics, Thin Films

Prices:			
	Print:	**US$ 105.00 / EUR 105.00**	Print: 978-3-0364-0253-6
	eBook Single-User:	**US$ 105.00 / EUR 105.00**	eBook: 978-3-0364-1253-5
	eBook Multi-User:	**US$ 184.00 / EUR 184.00**	*150 pages, 2023*

https://www.scientific.net/978-3-0364-0253-6/book



7th International Conference on Material Engineering and Manufacturing & 6th International Conference on Materials Design and Applications

Volume in the series: 90

Aggregated Book

Edited by: Prof. Takashige Omatsu

The 7th International Conference on Material Engineering and Manufacturing (ICMEM 2023) and the 6th International Conference on Materials Design and Applications (ICMDA 2023) have been successfully held at the Chiba University, Chiba, Japan, April 7-10, 2023. This book comprises the selected peer-reviewed articles from the conferences to present the research results related to the latest advanced topics and trends in the fields of materials engineering, materials processing technologies and applications.

Topics: Materials Science, Nanoscience

Keywords: Alloy, Composite, Computational Materials Science, Electrostatic Discharge Machining, Mechanical Properties, Nanomaterials, Non-Destructive Testing, Phononic Crystal, Polymer, Recycling

Prices:			
	Print:	**US$ 105.00 / EUR 105.00**	Print: 978-3-0364-0254-3
	eBook Single-User:	**US$ 105.00 / EUR 105.00**	eBook: 978-3-0364-1254-2
	eBook Multi-User:	**US$ 184.00 / EUR 184.00**	*146 pages, 2023*

https://www.scientific.net/978-3-0364-0254-3/book

3rd International Conference of Engineering Sciences

Volume in the series: 89

Aggregated Book

Edited by: Dr. Omar S. Dahham

This book contains the selected peer-reviewed articles that were presented at the 3rd International Conference of Engineering Sciences (ICES 2022), Baghdad, Iraq, held on December 14-15, 2022. This edition is dedicated to the latest research in materials science, chemical technologies, geotechnics, building materials, and laser engineering.

Topics: Building Materials, Construction, Materials Science, Mechanical Engineering

Keywords: Alloy, Asphalt, Biotechnology, Catalyst, Chemical Technology, Composite, Concrete, Engineering Design, Geotechnics, Laser, Mechanical Properties, Membrane Reactor, Nanomaterials, Steel, Structural Engineering, Wastewater Treatment

Prices:			
	Print:	**US$ 145.00 / EUR 145.00**	Print: 978-3-0364-0199-7
	eBook Single-User:	**US$ 145.00 / EUR 145.00**	eBook: 978-3-0364-1199-6
	eBook Multi-User:	**US$ 254.00 / EUR 254.00**	*198 pages, 2023*

https://www.scientific.net/978-3-0364-0199-7/book

International Conference on Mechanical Structures and Smart Materials

Volume in the series: 88

Aggregated Book

Edited by: Dr. Nurul Hilwa Mohd Zini

2023 8th International Conference on Mechanical Structures and Smart Materials (ICMSSM2023) was held from the 8th to the 9th of July, 2023 in Bangkok, Thailand. The conference covered invited, oral, and poster presentations from scientists to establish platforms for collaborative research projects in the area of materials science, mechanical structures and functional and smart materials.

Topics: Materials Science, Mechanical Engineering, Mechanics, Nanoscience

Keywords: Composites, Electrical Conductivity, Flexural Properties, Functional Materials, Nanomaterials, Residual Stress, Steel, Structural Materials, Thermal Engineering, Wear Resistance, Welding

Prices: Print: **US$ 65.00 / EUR 65.00** Print: 978-3-0357-2785-2
eBook Single-User: **US$ 65.00 / EUR 65.00** eBook: 978-3-0357-3886-5
eBook Multi-User: **US$ 114.00 / EUR 114.00** *112 pages, 2023*
https://www.scientific.net/978-3-0357-2785-2/book

The International Congress on Educational Research, Materials Science and Engineering

Volume in the series: 87

Aggregated Book

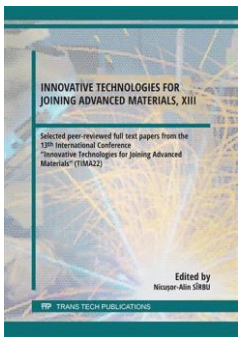
Edited by: Prof. Abdelaaziz El Moussaouy, Prof. Farid Falyouni, Prof. Hamid Magrez, Faouaz Jeffali, Prof. Driss Bria and Dr. Mohamed El Malki

The International Congress on Educational Research, Materials Science and Engineering (ICEMSE 2022) is organized by Mohammed First University - Oujda represented by the Laboratory of Materials, Waves, Energy and Environment (LaMOn2E) in collaboration with other partners. The 2022 meeting was held on October 25-27, 2022, at Saïdia, Morocco. The general aim of the conference is to provide an opportunity for researchers and professionals from various fields with cross-disciplinary interests to bridge the knowledge gap, and to serve as a forum for interdisciplinary researchers in different areas related to the interaction between engineering, materials science, and education. The ICEMSE'2022 invited research papers that cover these topics. Throughout this event, a wide range of themes related to educational research, engineering, and materials science innovation were addressed and exposed. These days were animated by professors and researchers emeritus in the fields of conference topics in the form of Oral/Poster contributions, workshops, and round tables.

Topics: Materials Science, Nanoscience

Keywords: Adsorption, Ceramics, Dielectric Properties, Electrical Properties, Electromagnetic Filter, Environmental Protection, Liquid Chromatography, Low Dimensional Quantum Structure, Magnetic Properties, Quantum Dots, Solar Cell, Transition Metal Dichalcogenides, Wastewater Treatment

Prices: Print: **US$ 180.00 / EUR 180.00** Print: 978-3-0364-0181-2
eBook Single-User: **US$ 180.00 / EUR 180.00** eBook: 978-3-0364-1181-1
eBook Multi-User: **US$ 315.00 / EUR 315.00** *320 pages, 2023*
https://www.scientific.net/978-3-0364-0181-2/book



Innovative Technologies for Joining Advanced Materials, XIII

Volume in the series: 86

Aggregated Book

Edited by: Nicuşor Alin Sîrbu

This book includes the selected papers presented at the 13th International Conference: Innovative Technology for Joining Advanced Materials (TIMA 22) held in Timişoara, România, by videoconference, during November 24-25, 2022. The conference takes place every year and is traditionally organized by the National R&D Institute for Welding and Material Testing - ISIM Timişoara in cooperation with "Politehnica" University of Timişoara and Romanian Academy of Technical Science, Timişoara Branch.

Topics: Building Materials, Construction, Industrial Engineering, Materials Science, Mechanics

Keywords: Abrasive Waterjet Cutting, Additive Manufacturing, Alloy, Building Materials, Cavitation Erosion, Clinching, Composite, Corrosion, Electrical Discharge Deposition, Engineering Education, Friction Stir Welding, Joining, Laser Welding, Mechanical Properties, Microstructure, Nanomaterials, Polymer, Steel, Welded Connection, Welding

Prices: Print: **US$ 320.00 / EUR 320.00** Print: 978-3-0364-0041-9
eBook Single-User: **US$ 198.00 / EUR 198.00** eBook: 978-3-0364-1041-8
eBook Multi-User: **US$ 347.00 / EUR 347.00** *480 pages, 2023*
https://www.scientific.net/978-3-0364-0041-9/book

10th Manufacturing Engineering Society International Conference (MESIC)

Volume in the series: 85

Aggregated Book

Edited by: Prof. Domingo Morales-Palma, Prof. Andrés J. Martínez-Donaire, Prof. Marcos Borrego Puche, Prof. Gabriel Centeno Báez and Prof. Carpoforo Vallellano

This book contains full text peer-reviewed papers presented at the 10th Manufacturing Engineering Society International Conference (MESIC 2023) held in Sevilla (Spain) from 28 to 30 June 2023 and covers a wide range of research results and engineering solutions on the topics of advances and innovations in manufacturing processes, additive manufacturing, trends in manufacturing systems and automation, metrology and quality in manufacturing, Industry X.0 and digital manufacturing, as well as manufacturing engineering in society. This publication will be helpful to many researchers and engineers in the industrial area.

Topics: General Engineering, Industrial Engineering, Information Technologies, Manufacturing, Materials Science, Mechanical Engineering, Mechanics

Keywords: Additive Manufacturing, Alloy, Automation, Composite, Design, Digital Manufacturing, Engineering Education, Engineering Management, History of Technology, Industrial Equipment, Industrial Heritage, Industrial Measurements, Manufacturing Parameters, Mechanical Properties, Mechatronics, Metalworking, Metrology, Polymer, Processing Technology, Product Design, Product Quality Control, Rapid Prototyping, Reverse Engineering, Robotics, Steel, Tool

Prices:			
	Print:	**US$ 590.00 / EUR 590.00**	Print: 978-3-0364-0145-4
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0364-1145-3
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*1444 pages, 2023*

https://www.scientific.net/978-3-0364-0145-4/book

6th International Conference on Functional Materials Science

Volume in the series: 84

Aggregated Book

Edited by: Prof. Agustinus Agung Nugroho, Prof. Darminto Darminto and Prof. Risdiana Risdiana

The 6th International Conference on Functional Materials Science 2022 (6th ICFMS 2022) is the sixth activities for gathering and discussing some research in materials sciences. The main theme of the ICFMS 2022 was "Trend in Functional Materials: From Fundamental to Applications". This conference was organized by the Institut Teknologi Sepuluh Nopember (ITS) together with Padjadjaran University, Bandung Institute of Technology (ITB), University of Indonesia (UI), and Gadjah Mada University (UGM). This conference aimed to improve and continue communication among researchers in materials sciences and related fields. The scope of experimental results presented in ICFMS 2022 is in the range of materials sciences including Advanced and Functional Materials, Energy Conversion, Materials and Devices, New Materials for Energy, Biomaterials, Theoretical/Modeling/Computer Simulations of Functional Materials, Spectroscopy forAdvanced Materials, Hybrid and Composite Materials and Magnetic Materials.

Topics: Bioscience and Medicine, Building Materials, Materials Science, Nanoscience

Keywords: Aluminum Casting, Biomaterials, Carbon Materials, Ceramics, Composite, Computational Materials Science, Concrete, Electrical Properties, Electrode Materials, Electrolytes, Environmental Protection, Food Waste, Graphene, Graphene Oxide, Hydrogel, Hydroxyapatite, Magnetic Properties, Nanomaterials, Nanoparticles, Natural Dolomite, Photocatalyst, Polymer, Porous Ceramic Filter, Solar Cell, Superconductor, Surface Modification, Thermal Decomposition, Titanium Dioxide, Zirconia

Prices:			
	Print:	**US$ 280.00 / EUR 280.00**	Print: 978-3-0364-0174-4
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0364-1174-3
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*382 pages, 2023*

https://www.scientific.net/978-3-0364-0174-4/book

Asia-Pacific Conference on Silicon Carbide and Related Materials 2022

Volume in the series: 83

Aggregated Book

Edited by: Yichen Liu, Heng Yu Xu and Ying Xi Niu

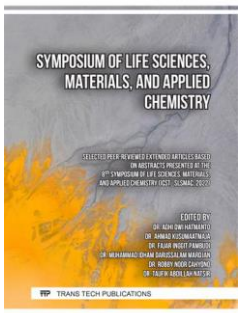
Full-text papers selected by peer review from the submissions to the Asia Pacific Conference on Silicon Carbide and Related Materials (APCSRM 2022, November 14-16, 2022, Xuzhou, China) and presented in this book cover cutting-edge research on silicon carbide and related materials in the direction of materials, devices, and applications.

Topics: Electronics, Materials Science, Nanoscience

Keywords: Electrical Properties, Gate Oxide Breakdown, Integrated Circuit Packaging, MOS Capacitor, MOSFET, Power Device, Power Electronics, Silicon Carbide

Prices:			
	Print:	**US$ 80.00 / EUR 80.00**	Print: 978-3-0364-0053-2
	eBook Single-User:	**US$ 80.00 / EUR 80.00**	eBook: 978-3-0364-1053-1
	eBook Multi-User:	**US$ 140.00 / EUR 140.00**	*104 pages, 2023*

https://www.scientific.net/978-3-0364-0053-2/book



Symposium of Life Sciences, Materials, and Applied Chemistry

Volume in the series: 82

Aggregated Book

Edited by: Dr. Adhi Dwi Hatmanto, Dr. Ahmad Kusumaatmaja, Dr. Fajar Inggit Pambudi, Dr. Muhammad Idham Darussalam Mardjan, Dr. Robby Noor Cahyono and Dr. Taufik Abdillah Natsir

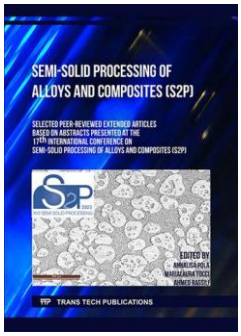
This book is a collection of selected and reviewed papers presented at the Symposium of Materials Science and Chemistry. This symposium was part of the 8th International Conference on Science and Technology 2022, held on September 7-8, 2022, hosted by Universitas Gadjah Mada, Yogyakarta, Indonesia. The collection offers the readers the latest research results from the particular areas of analytical, environmental, and green chemistry, biomaterials, condensed materials, molecular sieves and applications, nanomaterials, nanotechnology, organic chemistry and life sciences, organic polymers, physical and theoretical chemistry, and zeolites.

Topics: Bioscience and Medicine, Materials Science, Nanoscience

Keywords: Absorption, Biomass Processing, Biosynthesis, Cellulose, Dye Degradation, Functional Materials, Heavy Metals, Nanoparticles, Nanosilica, Pharmacology, Photodegradation, Physical Chemistry, Phytochemistry, Wastewater Treatment

Prices:			
	Print:	**US$ 180.00 / EUR 180.00**	Print: 978-3-0364-0084-6
	eBook Single-User:	**US$ 180.00 / EUR 180.00**	eBook: 978-3-0364-1084-5
	eBook Multi-User:	**US$ 315.00 / EUR 315.00**	*284 pages, 2023*

https://www.scientific.net/978-3-0364-0084-6/book



Semi-Solid Processing of Alloys and Composites (S2P)

Volume in the series: 81

Aggregated Book

Edited by: Annalisa Pola, Marialaura Tocci and Ahmed Rassili

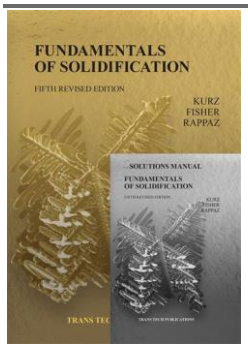
The present edition of the International Conference on Semi-Solid Processing of Alloys and Composites (S2P) is the 17th of a series of conferences on semisolid processing of metals and composites started in 1990 in France. The topics of interest are many: development of innovative materials and composites, microstructural and mechanical characterization, semi-solid material preparation and related technologies, modelling and simulation, industrial applications, interactions between semisolid processing and additive manufacturing. As known, semisolid processing is a foundry process in which the mold is filled with partially solid metal, instead of liquid metal. This allows to avoid a turbulent flow of the liquid metal, leading to lower porosities due to gas entrapment, while ensuring optimum filling of the die, even when thin walls are present. Also, shrinkage porosities are reduced since the alloy is partially solid during the mold filling. These features, typical only of semisolid processing, are gaining new interest, for instance, for the production of heat sinks with complex geometries and thin walls as the one used in electric vehicles. In addition, mechanical properties are improved, as well as the corrosion and wear resistance, due to the peculiar globular microstructure, resulting in the possibility to manufacture high-performance structural components. At the same time, the metal fills the die at a lower temperature than in conventional foundry process, resulting in a prolonged lifetime of the die. Last but not least, the surface finish of these castings is extremely good. The conference has been organized by the Italian Association of Metallurgy (AIM) and the University of Brescia (Italy).

Topics: Materials Science

Keywords: Alloy, Composite, Die Casting, Extruding, Mechanical Properties, Microstructure, Modelling, Phase Transformation, Rheocasting, Rheology, Semi-Solid Processing, Thixomolding

Prices:			
	Print:	**US$ 245.00 / EUR 245.00**	Print: 978-3-0364-0180-5
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0364-1180-4
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*298 pages, 2023*

https://www.scientific.net/978-3-0364-0180-5/book



Fundamentals of Solidification 5th edition with Solutions Manual

Volume in the series: 80

Edited by: Prof. Wilfried Kurz, Dr. David J. Fisher and Prof. Michel Rappaz

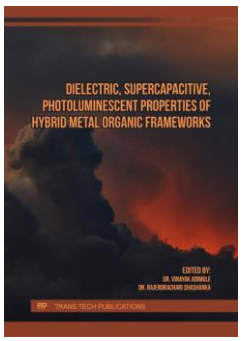
Since the 4th 1998 edition, there have been numerous crucial advances to the modelling and the basic understanding of solidification phenomena, and with its linking to experimental results. These topics have been incorporated into this 5th Fully Revised Edition, as well as a new final chapter on microstructure selection which explains how to combine the concepts of the preceding chapters for modelling real microstructures, in complex processes such as additive manufacturing.
This new 5th edition is of high interest to undergraduate and graduate levels and professionals.
With its numerous new topics - also borne out by the new authorship - students and teachers, scientists and engineers will greatly benefit from this new book. The topics are presented in the same praised manner as in previous editions, readable at three levels:
- an initial feel for the subject is obtained by consulting the figures and their detailed captions;
- a deeper understanding of the underlying physics is found by working through the main text;
- 15 appendices offer a detailed analysis of the various theories, by providing detailed derivations of the relevant equations.
Particularly Novel: the final chapter 8 on *microstructure-selection* explains how to combine the concepts of the preceding chapters to model the real microstructures formed during complex processes such as additive manufacturing, and the new detailed *phase-field* appendix which opens the door to the accurate computer-modelling of growth-forms.
This edition goes with a companion *Solutions Manual* offering model solutions to 133 problems (exercises).

Topics: Materials Science

Keywords: Alloy Dendrite, Cast Iron (Fe-C), Cellular Interface, Columnar Dendrite, Columnar Zone, Concentration Gradient, Constitutional Undercooling, Cooling Rate, Curvature, Curvature Undercooling, Dendrite Growth Rate, Dendrite Spacing, Dendrite Tip, Dendrite Tip Radius, Diffuse Interface, Diffusion Coefficient, Diffusion Coupled Growth, Diffusion in Liquids, Diffusion Length, Directional Growth, Distribution Coefficient, Equiaxed Dendrite, Eutectic Al-Si, Extremum Growth Criterion, Fluid Flow, Flux Balance, Gibbs Free Energy, Gibbs–Thomson Effect, Growth Defects, Heat Flux, Interface Curvature, Interface Perturbation, Lever Rule, Local Equilibrium, Mass Balance, Microscopic Solvability, Non-Faceted Interface, Nucleation Critical Radius, Nucleation Rate, Nucleation Undercooling, Phase Diagram, Rapid Solidification, Solute Boundary Layer, Steady State, Steady-State Solidification, Temperature Gradient, Volume Fraction Eutectic

Prices:			
	Print:	**US$ 70.00 / EUR 70.00**	Print: 978-3-0364-0358-8
	eBook Single-User:	**US$ 190.00 / EUR 190.00**	eBook: 978-3-0364-1358-7
	eBook Multi-User:	**US$ 330.00 / EUR 330.00**	*456 pages, 2023*

https://www.scientific.net/978-3-0364-0358-8/book



Dielectric, Supercapacitive, Photoluminescent Properties of Hybrid Metal Organic Frameworks

Volume in the series: 79

Aggregated Book

Edited by: Dr. Vinayak Adimule and Dr. Rajendrachari Shashanka

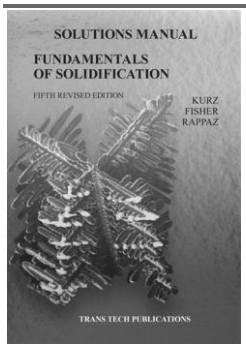
This book reflects novel aspects in the study of functional properties and practical applications of metal-organic frameworks (MOFs) and some special nanomaterials. The unique optical and photoluminescence features, the possibility for use in energy storage and biosensing for detection of various biomolecules, usage in heterogeneous catalysis, etc. are defining their wide applications in various branches of science and engineering. Many of the topics covered in this collection are devoted also to investigating the effect of varying temperatures on enhancing photoluminescence, and dielectric and electrochemical features of these materials. Many articles focus on the synthesis of novel series of MOFs, and functional nanocomposite materials used for the synthesis of hybrid supercapacitors. Most of the here-presented articles are first-time reported experimental work. This book will be helpful to specialists in biosensing, photoluminescent materials, supercapacitors, and electrical and electronic fields.

Topics: Materials Science, Nanoscience

Keywords: Catalytic Properties, Dielectric Properties, Electrochemical Properties, Hybrid Metal-Organic Framework, Metal-Organic Framework, Nanocomposite, Nanoparticles, Optical Properties, Photoluminescence, Supercapacitor, Synthesis

Prices:			
	Print:	**US$ 155.00 / EUR 155.00**	Print: 978-3-0364-0132-4
	eBook Single-User:	**US$ 155.00 / EUR 155.00**	eBook: 978-3-0364-1132-3
	eBook Multi-User:	**US$ 271.00 / EUR 271.00**	*132 pages, 2023*

https://www.scientific.net/978-3-0364-0132-4/book



Fundamentals of Solidification 5th edition - Solutions Manual

Volume in the series: 78

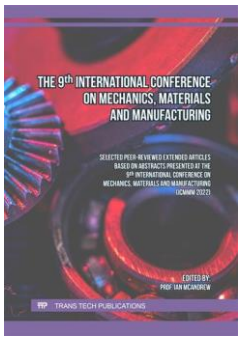
Edited by: Prof. Wilfried Kurz, Dr. David J. Fisher and Prof. Michel Rappaz

Solutions Manual is a companion book to the *Fundamentals of Solidification 5th edition* offering model solutions to 133 problems (exercises). The 5th edition of Fundamentals of Solidification (2023) includes new contributions on phase-field modelling and a new 8th Chapter on microstructure selection. It explains how to combine the concepts of the seven preceding chapters of the book so as to model the real microstructures that form during complex processes such as additive manufacturing ... which are still a challenge or are out of reach of numerical simulation. This Solutions Manual, together with the 5t edition of the main text, will offer its readership a good start in the field, and prepare them for tackling more involved treatments of solidification. The main book *Fundamentals of Solidification 5th fully revised edition* is available separately.

Topics: Materials Science

Keywords: Alloy Dendrite, Cast Iron (Fe-C), Cellular Interface, Columnar Dendrite, Columnar Zone, Concentration Gradient, Constitutional Undercooling, Cooling Rate, Curvature, Curvature Undercooling, Dendrite Growth Rate, Dendrite Spacing, Dendrite Tip, Dendrite Tip Radius, Diffuse Interface, Diffusion Coefficient, Diffusion Coupled Growth, Diffusion in Liquids, Diffusion Length, Directional Growth, Distribution Coefficient, Equiaxed Dendrite, Eutectic Al-Si, Extremum Growth Criterion, Fluid Flow, Flux Balance, Gibbs Free Energy, Gibbs–Thomson Effect, Growth Defects, Heat Flux, Interface Curvature, Interface Perturbation, Lever Rule, Local Equilibrium, Mass Balance, Microscopic Solvability, Non-Faceted Interface, Nucleation Critical Radius, Nucleation Rate, Nucleation Undercooling, Phase Diagram, Rapid Solidification, Solute Boundary Layer, Steady State, Steady-State Solidification, Temperature Gradient, Volume Fraction Eutectic

Prices:			
	Print:	**US$ 27.50 / EUR 27.50**	Print: 978-3-0364-0142-3
	eBook Single-User:	**US$ 80.00 / EUR 80.00**	eBook: 978-3-0364-1142-2
	eBook Multi-User:	**US$ 140.00 / EUR 140.00**	*84 pages, 2023*
			https://www.scientific.net/978-3-0364-0142-3/book



The 9th International Conference on Mechanics, Materials and Manufacturing

Volume in the series: 77

Aggregated Book

Edited by: Prof. Ian McAndrew

The book comprises peer-reviewed papers from the 2022 9th International Conference on Mechanics, Materials and Manufacturing (ICMMM 2022) held from August 26-28, 2022 in Washington, USA. ICMMM aims to provide a platform for scholars, engineers, and scientists to present robust research demonstrating the expanding frontiers in mechanics, materials and manufacturing. The topics covered in this book include new composite and polymer materials and analysis of their properties, advanced engineering materials and their applications, materials processing, forming and manufacturing technology, engineering mechanics and computational mechanics.

Topics: Building Materials, Materials Science, Mechanical Engineering, Mechanics, Nanoscience

Keywords: Additive Manufacturing, Alloy, Buildings Materials, Composite, Concrete, Mechanical Engineering, Mechanical Properties, Modeling, Polymer

Prices:			
	Print:	**US$ 75.00 / EUR 75.00**	Print: 978-3-0357-1710-5
	eBook Single-User:	**US$ 75.00 / EUR 75.00**	eBook: 978-3-0357-3670-0
	eBook Multi-User:	**US$ 131.00 / EUR 131.00**	*134 pages, 2023*
			https://www.scientific.net/978-3-0357-1710-5/book

5th EPI International Conference on Science and Engineering (EICSE)

Volume in the series: 76

Aggregated Book

Edited by: Dr. Faisal Mahmuddin

This book presents the latest research results in materials science, engineering science, and technology which were introduced at the 5th EPI International Conference on Science and Engineering 2021, Indonesia. The edition will be interesting and useful to researchers and engineers from materials science, microelectronics, mechanical engineering, civil engineering and architecture.

Topics: Building Materials, Civil Engineering, Construction, Electronics, Materials Science, Mechanics

Keywords: 3D Printing, Alloy, Building Materials, Composite, Conductive Glass, Electrical Discharge Machining, Heat Treatment, Mechanical Properties, Polymer, Quenching, Solar Cell, Steel, Structural Mechanics, Welding

Prices:			
	Print:	**US$ 190.00 / EUR 190.00**	Print: 978-3-0357-2772-2
	eBook Single-User:	**US$ 190.00 / EUR 190.00**	eBook: 978-3-0357-3838-4
	eBook Multi-User:	**US$ 333.00 / EUR 333.00**	*288 pages, 2023*
			https://www.scientific.net/978-3-0357-2772-2/book

2nd International Conference on Semiconductor Materials and Technology (ICoSeMT 2021)

Volume in the series: 75

Aggregated Book

Edited by: Dr. Hock Jin Quah

This book consists of the selected articles by authors who participated in the 2nd International Conference on Semiconductor Materials and Technology (ICoSeMT 2021, 8-9 November 2021, Malaysia), which ensured that all manuscripts underwent a peer review process. This conference edition aimed to provide insight into the recent advancement and development in the area of optical and electronic materials, optoelectronics and electronics devices, organic and polymeric materials, and packaging technology. The structural, optical, chemical, electrical, and sensing characteristics of various types of semiconductor materials in the form of thin films and nanostructures have been reported in this book. Simulation and experimental studies regarding metal-oxide-semiconductor-based devices, high electron mobility transistors, and other devices are also presented.

Topics: Electronics, Materials Science, Nanoscience

Keywords: Composite, Dielectric Properties, Electrical Properties, Etching, Graphene, Microvawe Absorption, MOSFET, Nanocatalyst, Nanocomposite, Nanomaterials, Nanoparticle, Optical Properties, Packaging, Polymer, Quantum Dots, Semiconductor, Sensor, Thin Film

Prices:			
	Print:	**US$ 175.00 / EUR 175.00**	Print: 978-3-0364-0006-8
	eBook Single-User:	**US$ 175.00 / EUR 175.00**	eBook: 978-3-0364-1006-7
	eBook Multi-User:	**US$ 306.00 / EUR 306.00**	*252 pages, 2023*

https://www.scientific.net/978-3-0364-0006-8/book

3rd International Conference on Structural Engineering and Materials

Volume in the series: 74

Aggregated Book

Edited by: Prof. Dong Keon Kim

This book contains articles that were presented at the annual International Conference on Structural Engineering and Materials (ICSEM 2022, Jeju Island, South Korea) during October 14-16, 2022. Published articles cover research results in the area of materials science and materials processing technologies in the various branches of modern industry. The publication will be interesting and useful to many engineers, academics and also to students.

Topics: Building Materials, Civil Engineering, Construction, Environmental Engineering, Information Technologies, Materials Science, Mechanics

Keywords: Absorbent, Architectural Design, Building Materials, Ceramics, Composite, Concrete Additive, Ecological Safety, Polymer, Structural Mechanics, Wastewater

Prices:			
	Print:	**US$ 125.00 / EUR 125.00**	Print: 978-3-0357-1875-1
	eBook Single-User:	**US$ 125.00 / EUR 125.00**	eBook: 978-3-0357-3875-9
	eBook Multi-User:	**US$ 219.00 / EUR 219.00**	*172 pages, 2023*

https://www.scientific.net/978-3-0357-1875-1/book

The 5th International Conference on Mechanical Engineering and Applied Composite Materials

Volume in the series: 73

Aggregated Book

Edited by: Prof. Katsuyuki Kida and Prof. Kunjie Yuan

The 5th International Conference on Mechanical Engineering and Applied Composite Materials (MEACM2022) was held on December 28-29, 2022, in Beijing, China (virtual). The conference program covered invited, oral, and poster presentations from scientists working in similar areas to establish platforms for collaborative research projects in this field. This conference brought together leaders from materials and mechanical engineering to exchange and share their experiences, present research results, explore collaborations and spark new ideas, set up new projects and exploit new technology in these fields.

Topics: Materials Science, Mechanical Engineering, Mechanics, Nanoscience

Keywords: Alloy, Bearing, Ceramics, Composite, Crack Growing, Fatigue, Fracture Surface, Mechanical Engineering, Mechanical Properties, Mechanics of Materials, Microstructure, Nanometric Cutting, Polymer, Rolling Contact Fatigue, Single Point Incremental Forming, Steel, Tensile Cyclic Loading, Tribology

Prices:			
	Print:	**US$ 65.00 / EUR 65.00**	Print: 978-3-0364-0029-7
	eBook Single-User:	**US$ 65.00 / EUR 65.00**	eBook: 978-3-0364-1029-6
	eBook Multi-User:	**US$ 114.00 / EUR 114.00**	*98 pages, 2023*

https://www.scientific.net/978-3-0364-0029-7/book

The 4th International Conference on Science and Technology Applications

Volume in the series: 72

Aggregated Book

Edited by: Bornok Sinaga, Dr. Juniastel Rajagukguk, Dr. R. Rajaramakrishna, Dr. Topan Setiadipura, Dr. Mati Horprathum and Dr. Saronom Silaban

In this book, the reader will find some of the latest research results in the field of engineering science and materials application which were presented at the 4th International Conference on Science and Technology Applications (ICoSTA, November 1-2, 2022, Medan, Indonesia). Synthesis techniques, process characterization and structural analysis of several types of materials such as nanocomposites and optical materials are interesting discussions that are specifically comprised here in one of the chapters. Special chapters related to research on natural materials and fundamental science related to the observation of physical properties, etc. are also presented in this book. The book will be helpful to a wide range of specialists in the field of material sciences, mechanical engineering, construction, environmental protection, applied mechanics and signal and image processing.

Topics: Bioscience and Medicine, Building Materials, Civil Engineering, Construction, General Engineering, Information Technologies, Materials Science, Mechanical Engineering, Mechanics

Keywords: Biotechnology, Building Materials, Composite, Construction Technology, Data Processing, Glass, Image Processing, Measurement, Nuclear Reactor, Optical Materials, Plant Cultivation, Polymer, Sensor, Steel, Structural Mechanics, Thermal Energy Equipment, Welding

Prices:			
	Print:	**US$ 210.00 / EUR 210.00**	Print: 978-3-0364-0137-9
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0364-1137-8
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*342 pages, 2023*
			https://www.scientific.net/978-3-0364-0137-9/book

14th International Conference on Sustainable Green Construction and Nano -Technology, NTC-2023

Volume in the series: 71

Aggregated Book

Edited by: Prof. Sayed Shebl, Prof. Magdy Helal and Hamada Shoukry

The presented book contains selected papers presented at the 14th international conference on ''Sustainable Green Construction and Nano-Technology, NTC-2023'' which was held in Sharm El-Sheikh, Egypt, on 03-07 March 2023 and was organized by the Housing and Building National Research Center (HBRC) jointly with the Egyptian Russian University (ERU) and Kalashnikov Izhevsk State technical university (ISTU). NTC 2023 was organized to discuss and highlight the application of recent research results in the field of green sustainable constriction and nano-technology applications to provide an opportunity for scientists and industry experts to exchange ideas and experience.

Topics: Building Materials, Civil Engineering, Construction, Materials Science, Mechanics, Nanoscience

Keywords: Aggregate, Building Design, Building Materials, Cement, Clay, Concrete, Green Synthesis, Limestone, Mechanical Properties, Mortar, Nanocomposite, Nanoparticles, Nanotubes, Reinforcement, Solid Waste, Steel, Structural Element, Structural Health Monitoring

Prices:			
	Print:	**US$ 190.00 / EUR 190.00**	Print: 978-3-0364-0173-7
	eBook Single-User:	**US$ 190.00 / EUR 190.00**	eBook: 978-3-0364-1173-6
	eBook Multi-User:	**US$ 333.00 / EUR 333.00**	*272 pages, 2023*
			https://www.scientific.net/978-3-0364-0173-7/book

5th International Conference on Materials Science and Industrial Applications (MSIA 2023)

Volume in the series: 70

Aggregated Book

Edited by: Dr. Zhibin You and Dr. Zhigang Fang

The 5th International Conference on Materials Science and Industrial Applications (MSIA 2023, January 12-13, 2023 in Xi'an, China) aimed to bring together leading academic scientists and researchers to exchange and share their experiences and research results on many aspects of applied materials science and industrial applications of materials.

Topics: Materials Science, Mechanics

Keywords: Alloy, Battery, Chemical Engineering, Coating, Composite, Electrode Materials, Fatigue, Mechanical Properties, Polymer, Steel, Strength of Materials, Tribological Properties

Prices:			
	Print:	**US$ 95.00 / EUR 95.00**	Print: 978-3-0364-0071-6
	eBook Single-User:	**US$ 95.00 / EUR 95.00**	eBook: 978-3-0364-1071-5
	eBook Multi-User:	**US$ 166.00 / EUR 166.00**	*146 pages, 2023*
			https://www.scientific.net/978-3-0364-0071-6/book

11th International Conference on Material Science and Engineering Technology and 11th International Conference on Nanostructures, Nanomaterials and Nanoengineering

Volume in the series: 69

Aggregated Book

Edited by: Prof. Ramesh K. Agarwal, Prof. Hao Gong and Prof. Kazuo Umemura

This book presents selected articles from the 2022 11th International Conference on Material Science and Engineering Technology (ICMSET 2022) and the 11th International Conference on Nanostructures, Nanomaterials and Nanoengineering 2022 (ICNNN 2022) that were held as a hybrid (Tokyo, Japan and online) event on November 26-28, 2022. The collected papers are devoted to the recent state of research in the area of applied materials. These findings will be valuable and helpful to researchers and engineers in their future investigations.

Topics: Building Materials, Electronics, Materials Science, Nanoscience

Keywords: Alloy, Building Materials, Ceramics, Composite, Green Synthesis, Materials Chemistry, Mechanical Properties, Microstructure, Nanomaterials, Polymer, Quantum Dot, Solid Mechanics, Steel

Prices:			
	Print:	**US$ 135.00 / EUR 135.00**	Print: 978-3-0357-1838-6
	eBook Single-User:	**US$ 135.00 / EUR 135.00**	eBook: 978-3-0357-3721-9
	eBook Multi-User:	**US$ 236.00 / EUR 236.00**	*196 pages, 2023*
			https://www.scientific.net/978-3-0357-1838-6/book

The 4th Asia Conference on Material and Manufacturing Technology and the 6th International Conference on Nanomaterials and Biomaterials

Volume in the series: 68

Aggregated Book

Edited by: Prof. Steven Y. Liang and Prof. Zongjin Li

This book contains papers submitted to and selected from the 4th Asia Conference on Material and Manufacturing Technology (ACMMT 2022) and the 6th International Conference on Nanomaterials and Biomaterials (ICNB 2022). All papers were subjected to peer review by conferences committee members and international reviewers. The papers were selected based on their quality and relevance to the conferences' topics. There are present recent research results in the field of composites, metal alloy materials and technologies of their processing, materials for biomedical applications, nanoscale materials and green building materials, etc.

Topics: Bioscience and Medicine, Building Materials, Civil Engineering, Construction, Materials Science, Mechanical Engineering

Keywords: 3D-Printing, Alloy, Bioceramics, Biomaterials, Building Materials, Ceramics, Coating, Composite, Forging, Forming, Liquid Crystal, Mechatronics, Metal, Nanoparticles, Polymer, Steel, Thin Film, Wire Arc Spray

Prices:			
	Print:	**US$ 160.00 / EUR 160.00**	Print: 978-3-0364-0201-7
	eBook Single-User:	**US$ 160.00 / EUR 160.00**	eBook: 978-3-0364-1201-6
	eBook Multi-User:	**US$ 280.00 / EUR 280.00**	*238 pages, 2023*
			https://www.scientific.net/978-3-0364-0201-7/book

The 10th International Conference on Materials Science

Volume in the series: 67

Aggregated Book

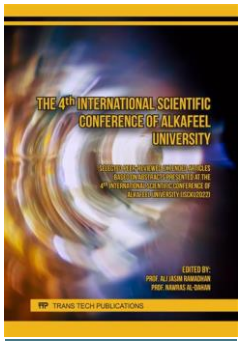
Edited by: Jav Davaasambuu, Dr. Galsan Sevjidsuren and Dr. Tsogbayar Tsednee

This book contains peer-reviewed papers presented at the 10th International Conference on Materials Science (ICMS 2021) held in Ulaanbaatar, Mongolia, on November 19-20, 2021, focusing on the study of structure, properties, and applications of new materials as well as techniques of materials characterization. The conference was organized by the Mongolian Physical Society, the National University of Mongolia, the Mongolian Academy of Sciences, Inner Mongolia Normal University (China), and the Institute of Physical Material Science, SB RAS (Russia).

Topics: Environmental Engineering, Materials Science, Nanoscience

Keywords: Absorption, Alloy, Anode Material, Bimetallic Nanocatalyst, Condensed Matter Physics, Electronic Structure, Magnetization Dynamics, Molecular Structure, Photoluminescence Properties, Photophysical Properties, Quantum Well, Sol-Gel Synthesis, Solid Electrolyte, Steel, Thin Film

Prices:			
	Print:	**US$ 120.00 / EUR 120.00**	Print: 978-3-0357-1702-0
	eBook Single-User:	**US$ 120.00 / EUR 120.00**	eBook: 978-3-0357-2312-0
	eBook Multi-User:	**US$ 210.00 / EUR 210.00**	*196 pages, 2023*
			https://www.scientific.net/978-3-0357-1702-0/book



The 4th International Scientific Conference of Alkafeel University

Volume in the series: 66

Aggregated Book

Edited by: Prof. Ali Jasim Ramadhan and Prof. Nawras Al-Dahan

The 4th International Scientific Conference of Alkafeel University "ISCKU2022" took place in Al-Najaf Al-Ashraf (Iraq), during December 20-21, 2022. ISCKU2022 is an annual conference that aims to bring participants together from academic, engineering and government institutions worldwide to attend the conference, share field trial experiences and lessons with other enthusiasts, exchange novel ideas, discuss innovative fields and explore enabling technologies for a variety of applications. ISCKU2022 has been an active platform that provides participants with ample opportunities to establish research relationships, find partners for future collaboration, and develop opportunities for cooperation.

Topics: Materials Science, Mechanical Engineering, Mechanics, Nanoscience

Keywords: Ceramics, Composite, Environmental Protection, Heat Transfer, Mass Transfer, Nanomaterials, Nanoparticle, Photovoltaics, Polymer, Semiconductor, Thermodynamics, Thin Film

Prices:			
	Print:	**US$ 190.00 / EUR 190.00**	Print: 978-3-0364-0148-5
	eBook Single-User:	**US$ 190.00 / EUR 190.00**	eBook: 978-3-0364-1148-4
	eBook Multi-User:	**US$ 333.00 / EUR 333.00**	*248 pages, 2023*

https://www.scientific.net/978-3-0364-0148-5/book

The 6th International Conference on Building Materials and Materials Engineering and 5th International Conference on Advanced Composite Materials

Volume in the series: 65

Aggregated Book

Edited by: Prof. Paulo Mendonca, Prof. Hideaki Tsukamoto and Prof. Carlos Chastre

This book is compiled by results of the 6th International Conference on Building Materials and Materials Engineering (ICBMM 2022) and the 5th International Conference on Advanced Composite Materials (ICACM 2022). The covered topics include composite materials and structures, biomedical materials and nanostructures for medical applications, metal processing and forming, concrete materials and geopolymer mortars, advanced building materials and properties, structural engineering materials and structural mechanics.

Topics: Bioscience and Medicine, Building Materials, Civil Engineering, Construction, Materials Science, Mechanics

Keywords: Alloy, Biomaterials, Biomedical Engineering, Building Materials, Cladding, Composite, Concrete, Construction Waste, Geotechnics, Mechanical Properties, Mortar, Soil, Structural Element, Structural Mechanics

Prices:			
	Print:	**US$ 175.00 / EUR 175.00**	Print: 978-3-0364-0013-6
	eBook Single-User:	**US$ 175.00 / EUR 175.00**	eBook: 978-3-0364-1013-5
	eBook Multi-User:	**US$ 306.00 / EUR 306.00**	*238 pages, 2023*

https://www.scientific.net/978-3-0364-0013-6/book

Modern Materials for Engineering and Research

Volume in the series: 64

Aggregated Book

Edited by: Dr. Thangaprakash Sengodan, Dr. Chandrasekara Adake, Dr. D.M. Sangeetha and Dr. Sunil Raykar

This book collected research articles to promote the integration of advanced areas in Materials Science and Engineering. The field of advanced engineering and physical materials has not only helped the development of various fields in science and technology but also contributes to the improvement of the quality of human life to a great extent. The main focus of the publication is on state-of-the-art technologies and advances in engineering materials and physical sciences. The collected articles were presented at the First International Conference on Modern Materials for Engineering and Research (ICMMER 2022, 29–30 September 2022, Tiruchengode, Tamil Nadu, India).

Topics: Materials Science, Nanoscience

Keywords: Alloy, Casting, Coating, Composite, Corrosion Inhibition, Dielectric Properties, Mechanical Properties, Microstructure, Nanoparticles, Optical Properties, Polymer, Quantum Dot, Semiconductor, Steel, Thin Film, Welding

Prices:			
	Print:	**US$ 245.00 / EUR 245.00**	Print: 978-3-0357-1758-7
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0357-3758-5
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*388 pages, 2023*

https://www.scientific.net/978-3-0357-1758-7/book

The 6th International Conference on Advanced Materials and Engineering Structural Technology

Volume in the series: 63

Aggregated Book

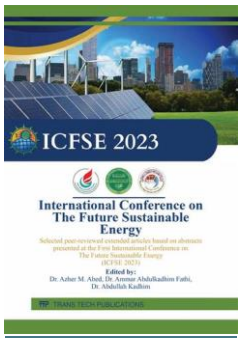
Edited by: Prof. Mosbeh Kaloop

The primary objective of the 6th International Conference on Advanced Materials and Engineering Structural Technology (6th ICAMEST 2022, Jeju Island, South Korea, November 18-20, 2022) is to provide a world-class forum for exchanging original ideas and new information as well as discuss the latest research results in the field of materials science and advanced technologies.

Topics: Building Materials, Civil Engineering, Construction, Industrial Engineering, Materials Science, Mechanics, Nanoscience

Keywords: Alloy, Biomaterials, Construction Project, Nanomaterials, Photogrammetry, Polymer, Structural Mechanics

Prices:			
	Print:	**US$ 30.00 / EUR 30.00**	Print: 978-3-0364-0140-9
	eBook Single-User:	**US$ 30.00 / EUR 30.00**	eBook: 978-3-0364-1140-8
	eBook Multi-User:	**US$ 53.00 / EUR 53.00**	*58 pages, 2023*
			https://www.scientific.net/978-3-0364-0140-9/book



International Conference on The Future Sustainable Energy

Volume in the series: 62

Aggregated Book

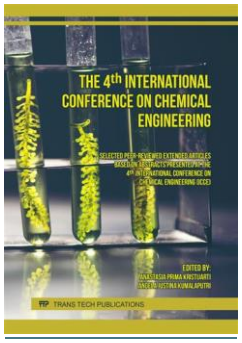
Edited by: Dr. Azher M. Abed, Dr. Ammar Abdulkadhim Fathi and Dr. Abdullah Kadhim

The aim of the First International Conference on The Future Sustainable Energy (ICFSE 2023) was to create a platform for efficient discussion of coherent and coordinated ways of developing new and renewable energy resources of the region and providing access to them for all and to capture the substantial role that clean energy technology plays in addressing many challenges in modern society. The ICFSE 2023 successfully took place on March 1-2, 2023, at Al-Mustaqbal University College (MUC), Iraq.

Topics: Materials Science, Mechanical Engineering, Mechanics

Keywords: Activated Carbon, Alloy, Fuel Cell, Heat Transfer, Membrane, Nanofluid, Steel, Waste Conversion

Prices:			
	Print:	**US$ 45.00 / EUR 45.00**	Print: 978-3-0364-0204-8
	eBook Single-User:	**US$ 45.00 / EUR 45.00**	eBook: 978-3-0364-1204-7
	eBook Multi-User:	**US$ 79.00 / EUR 79.00**	*116 pages, 2023*
			https://www.scientific.net/978-3-0364-0204-8/book



The 4th International Conference on Chemical Engineering

Volume in the series: 61

Aggregated Book

Edited by: Anastasia Prima Kristijarti and Dr. Angela Justina Kumalaputri

This book introduces scientific research results on analysing and developing chemical technologies for environmental protection, biowaste processing, biofuel production and bioproduction. These articles were presented at the 4th International Conference on Chemical Engineering (ICCE) which was successfully held online on the 6th of October 2022. The edition will be helpful to specialists in chemical technologies and chemical production.

Topics: Bioscience and Medicine, Materials Science

Keywords: Activated Carbon, Biofuel, Biomass, Biotechnology, Distillation, Environmental Protection, Lignocellulose, Pyrolysis

Prices:			
	Print:	**US$ 55.00 / EUR 55.00**	Print: 978-3-0364-0077-8
	eBook Single-User:	**US$ 55.00 / EUR 55.00**	eBook: 978-3-0364-1077-7
	eBook Multi-User:	**US$ 96.00 / EUR 96.00**	*138 pages, 2023*
			https://www.scientific.net/978-3-0364-0077-8/book

World Sustainable Construction Conference 2022

Volume in the series: 60

Aggregated Book

Edited by: Ramadhansyah Putra Jaya

This book is the collection of selected peer-reviewed articles which were presented at the World Sustainable Construction Conference Series 2022 (WSCC 2022), held in Kuala Lumpur, Malaysia, in October 2022. Collected articles cover a wide range of topics: Innovative Material for Sustainable Construction, Green Technology; Road Materials and Pavement Design, Processing and Applications, and statistical techniques for empirical model building.

Topics: Building Materials, Civil Engineering, Construction, Industrial Engineering, Materials Science

Keywords: Aggregate, Asphalt Mixture, Cement, Component Replacement, Concrete Mixture, Construction Waste, Demolition Waste, Fillers, Fine Aggregate, Fly Ash, Green Concrete, Green Roof, Management, Mechanical Properties, Metal, Polymer, Recycle Aggregate, Reinforcement, Sustainability

Prices:			
	Print:	**US$ 230.00 / EUR 230.00**	Print: 978-3-0357-1860-7
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0357-2791-3
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*378 pages, 2023*
			https://www.scientific.net/978-3-0357-1860-7/book

The 7th International Conference on New Material and Chemical Industry

Volume in the series: 59

Aggregated Book

Edited by: Prof. Shixuan Xin and Prof. Manuel F. M. Costa

In this book, readers will find the articles selected from and presented at the Seventh International Conference on New Material and Chemical Industry (online, November 16-17, 2022). NMCI2022 is committed to providing a platform for academic scientists, researchers and scholars to exchange and share their experiences and research results on all aspects of materials science and chemical industry, and discuss the practical challenges encountered and the solutions adopted.

Topics: Building Materials, Materials Science

Keywords: Battery, Building Materials, Ceramics, Composite, Lithium, Polymer, Steel, Welding

Prices:			
	Print:	**US$ 65.00 / EUR 65.00**	Print: 978-3-0357-1667-2
	eBook Single-User:	**US$ 65.00 / EUR 65.00**	eBook: 978-3-0357-3667-0
	eBook Multi-User:	**US$ 114.00 / EUR 114.00**	*126 pages, 2023*
			https://www.scientific.net/978-3-0357-1667-2/book

The 2nd International Conference on Magnetism and its Applications

Volume in the series: 58

Aggregated Book

Edited by: Prof. Agustinus Agung Nugroho, Budi Purnama and Prof. Risdiana Risdiana

The 2nd International Conference on Magnetism and Its Applications (ICMIA) was organised by the Indonesian Magnetic Society (IMS) and held on June 2-3, 2022, in Prime Plaza Hotel Sanur, Bali, Indonesia. ICMIA is an extension of a long history of magnetic meetings in Indonesia, namely Seminar Bahan Magnet (SMM) or Magnetic Materials Seminar. The last SMM was the 9th meeting held in 2015 in Palembang, organised by the Indonesian Magnetic Club and hosted by the Faculty of Mathematics and Natural Sciences (FMIPA) – Sriwijaya University. The ICMIA in 2019 was the first international conference organized by IMS and the Department of Physics – Universitas Sebelas Maret Surakarta. The IMS as a form of legal professional organization of the Indonesian Magnetic Club was established in 2018. The conference aims to facilitate an exchange of information to get acquainted and strengthen collaboration among participants. The conference was attended by invited speakers competent in their fields to present the current leading issues on magnetism and its applications. The main concern was that during the pandemic, the conference should follow the public health guideline and apply the bubble system.

Topics: Materials Science, Nanoscience

Keywords: Adsorbent, Antibacterial Properties, Cuprate Superconductor, Dielectric Properties, Ferrite, Ferrofluid, Functional Materials, Iron Oxide, Magnetic Materials, Magnetic Moment, Magnetic Properties, Magnetocrystalline Anisotropy, Magnetoresistance Properties, Microstructure, Microwave Absorption, Modelling, Nanocomposite, Nanoparticle, Optical Properties, Photocatalytic Activity, Photoelectrochemical Water Splitting, Synthesis

Prices:			
	Print:	**US$ 145.00 / EUR 145.00**	Print: 978-3-0364-0076-1
	eBook Single-User:	**US$ 145.00 / EUR 145.00**	eBook: 978-3-0364-1076-0
	eBook Multi-User:	**US$ 254.00 / EUR 254.00**	*214 pages, 2023*
			https://www.scientific.net/978-3-0364-0076-1/book

Electronics, Biomedical Engineering, and Health Informatics (3rd edition)

Volume in the series: 57

Aggregated Book

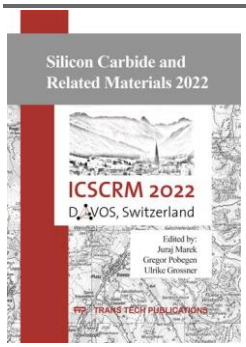
Edited by: Assoc. Prof. Dr. Triwiyanto Triwiyanto

This book highlights actual topics on biomedical engineering and health informatics. The themes were chosen because of the current revolutionary growth and development in medical electronics, and intelligent system in biomedical based on signal and image processing. This edition will be attractive to many researchers in biomedical engineering and will become a beneficial source for future research. The articles comprised here were selected from the 3rd International Conference on Electronics, Biomedical Engineering, and Health Informatics (ICEBEHI 2022), held on October 04-05, 2022, Surabaya, Indonesia.

Topics: Bioscience and Medicine, Electronics, Information Technologies, Materials Science, Mechanics

Keywords: Arthroplasty, Biomaterials, Biomedical Engineering, Health Informatics, Machine Learning, Medical Electronics, Medical Image Processing, Medical Signal Processing, Organoid, Prosthetic, Rehabilitation

Prices:			
	Print:	**US$ 170.00 / EUR 170.00**	Print: 978-3-0364-0072-3
	eBook Single-User:	**US$ 170.00 / EUR 170.00**	eBook: 978-3-0364-1072-2
	eBook Multi-User:	**US$ 298.00 / EUR 298.00**	*202 pages, 2023*
			https://www.scientific.net/978-3-0364-0072-3/book



International Conference on Silicon Carbide and Related Materials ICSCRM 2022

Volume in the series: 56

Aggregated Book

Edited by: Dr. Juraj Marek, Dr. Gregor Pobegen and Prof. Ulrike Grossner

The International Conference on Silicon Carbide and Related Materials (ICSCRM) is the most important technical conference series on silicon carbide (SiC) and related materials. Started in Washington, D.C. in 1987, the conference series developed into a bi-annual global forum on SiC from its crystal growth to the reliability in application. After five conferences in the U.S., ICSCRM has been held every two years, alternating between USA, Europe, and Japan. The last three Conferences were held in Giardini Naxos, Italy (2015), Washington, D.C. , USA (2017), and Kyoto, Japan (2019). Due to the pandemic situation in 2020 and 2021, the alternating European edition, the 13th ECSCRM, has been held in 2021, and the 19th ICSCRM has been postponed to 2022. The 19th edition of ICSCRM will be the last of its kind – starting in 2023, the conference series will be united with the European edition. It will form an annual event under the well-established name ICSCRM and a new rotation schedule integrating the SiC communities worldwide.

Topics: Materials Science

Keywords: Basal Plane Dislocation, Chemical Vapor Deposition, Crystal, Defect Inspection, Diode, Dislocation, Doping, Electrical Properties, Epitaxial Growth, Etching, High Power Device, Implantation, Integrated Circuit, JFET, Laser Annealing, MOSFET, Passivation, Point Defect, Reliability, Schottky Diode, Silicon Carbide, Star-Defect, Substrate, Thin Film, Wafer

Prices:			
	Print:	**US$ 320.00 / EUR 320.00**	Print: 978-3-0364-0167-6
	eBook Single-User:	**US$ 0.00 / EUR 0.00**	eBook: 978-3-0364-1167-5
	eBook Multi-User:	**US$ 0.00 / EUR 0.00**	*836 pages, 2023*
			https://www.scientific.net/978-3-0364-0167-6/book

Mechanical Engineering (ICOME 5th edition)

Volume in the series: 55

Aggregated Book

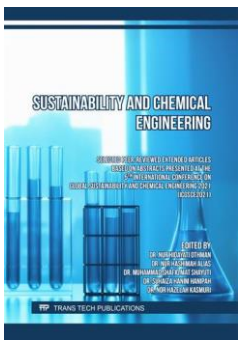
Edited by: Dr. Suwarno Suwarno, Dr. Abdel El Kharbachi, Dr. Mohammad Khoirul Effendi and Dr. Yohanes Yohanes

This book discusses the recent challenges and trends in metallurgy, metalworking, friction welding technologies, composite materials, materials for biomedical applications, mechanical engineering, thermal engineering, mechatronics, and failure analysis of power plant equipment. The book can be a valuable reference for students, researchers, and engineers in materials and mechanical engineering. It was collected from the selected articles presented at the 5th International Conference on Mechanical Engineering (ICOME 2021, August 25-26, 2021, Surabaya, Indonesia).

Topics: Bioscience and Medicine, General Engineering, Materials Science, Mechanical Engineering, Mechanics

Keywords: Alloy, Bioceramics, Biomass Conversion, Cladding, Coating, Composite, Corrosion, Design, Failure Analysis, Friction Welding, Hydroxyapatite, Implant, Inhibitor, Machine Parts, Mechanical Engineering, Mechanical Properties, Mechatronics, Metallurgy, Metalworking, Polymer, Polymer Composite, Powder Metallurgy, Power Plant, Steel, Thermal Engineering, Turbine, Waste Conversion

Prices:			
	Print:	**US$ 230.00 / EUR 230.00**	Print: 978-3-0357-2750-0
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0357-2838-5
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*378 pages, 2023*
			https://www.scientific.net/978-3-0357-2750-0/book



Sustainability and Chemical Engineering

Volume in the series: 54

Aggregated Book

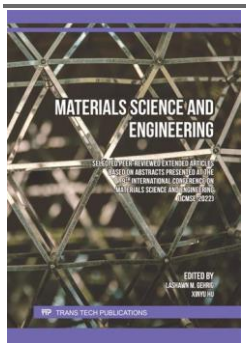
Edited by: Dr. Nur Hidayati Othman, Dr. Nur Hashimah Alias, Dr. Muhammad Shafiq Mat Shayuti, Dr. Suhaiza Hanim Hanipah and Dr. Nor Hazelah Kasmuri

The collected in this edition articles cover recent trends and progress in developing advanced materials and technologies in the engineering field. This book comprised the selected papers presented at the 5th International Conference on Global Sustainability and Chemical Engineering (ICGSCE) 2021, organised by the School of Chemical Engineering, College of Engineering, Universiti Teknologi MARA, Malaysia.

Topics: Bioscience and Medicine, Materials Science

Keywords: Biotechnology, Composite, Crude Palm Oil, Food Processing, Landfill Gas, Oil Sorption, Petroleum Engineering, Polymer, Separation, Surfactant, Wastewater Treatment

Prices:			
	Print:	**US$ 75.00 / EUR 75.00**	Print: 978-3-0364-0035-8
	eBook Single-User:	**US$ 75.00 / EUR 75.00**	eBook: 978-3-0364-1035-7
	eBook Multi-User:	**US$ 131.00 / EUR 131.00**	*154 pages, 2023*
			https://www.scientific.net/978-3-0364-0035-8/book



Materials Science and Engineering

Volume in the series: 53

Aggregated Book

Edited by: Lashawn M. Gehrig and Dr. Xinyu Hu

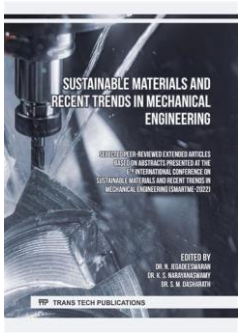
This edition presents the articles devoted mainly to materials processing technologies of steel and alloys, materials properties and advanced manufacturing technologies in the related fields of materials. All of them were selected from the 9th International Conference on Materials Science and Engineering (ICMSE2022) which was held in Wuhan, China on December 24-26, 2022. It is one of the leading international conferences for presenting novel and fundamental advances in the field of material science and engineering.

Topics: Building Materials, Materials Science

Keywords: Building Materials, Chemical Technology, Composite, Corrosion, Electrode Material, Electrolytic Machining, Mechanical Properties, Polymer, Semiconductor, Steel, Supercapacitor, Wastewater Treatment

Prices:			
	Print:	**US$ 90.00 / EUR 90.00**	Print: 978-3-0364-0063-1
	eBook Single-User:	**US$ 90.00 / EUR 90.00**	eBook: 978-3-0364-1063-0
	eBook Multi-User:	**US$ 158.00 / EUR 158.00**	*158 pages, 2023*

https://www.scientific.net/978-3-0364-0063-1/book



Sustainable Materials and Recent Trends in Mechanical Engineering

Volume in the series: 52

Aggregated Book

Edited by: Dr. N. Jegadeeswaran, Dr. Kalavara Saddashiva Reddy Narayana Swamy and Dr. S.M. Dasharath

The presented research papers are devoted to the latest achievements in applied materials and technologies of materials processing. This publication will be helpful to engineers and researchers whose activity is related to materials science and machinery. The comprised articles were presented at the 6th International Conference on Sustainable Materials and Recent Trends in Mechanical Engineering (SMARTME -2021, July 8-9, 2022, Bangalore, India).

Topics: Materials Science, Nanoscience

Keywords: Alloy, Coating, Composite, Machining, Mechanical Properties, Steel, Tribology

Prices:			
	Print:	**US$ 85.00 / EUR 85.00**	Print: 978-3-0364-0022-8
	eBook Single-User:	**US$ 85.00 / EUR 85.00**	eBook: 978-3-0364-1022-7
	eBook Multi-User:	**US$ 149.00 / EUR 149.00**	*134 pages, 2023*

https://www.scientific.net/978-3-0364-0022-8/book

Green Chemical Engineering and Technology

Volume in the series: 51

Aggregated Book

Edited by: Assoc. Prof. Dr. Norzahir Sapawe and Dr. Noor Faizah Che Harun

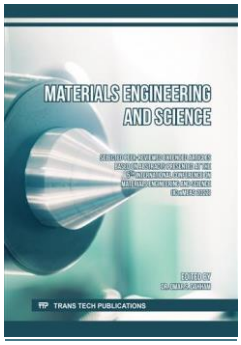
The presented book covers all aspects of green chemical engineering and technology research, with an aim to provide an overview of the scientific, economic and environmental issues especially in green economy. All papers are green technology-related, specifically to environmental, sustainable and clean technologies; bioengineering (bioprocesses, biocatalysts, and bioproducts); food and agricultural based technology and products; polymers, catalysis and advanced materials; forensic science and biotechnology; process designs, integration and optimization; process modelling, safety and health; and renewable energy. The articles were collected by the results of the 5th International Conference on Green Chemical Engineering and Technology 2021 (5th GCET 2021, December 2021, Malaysia), a biannual international conference that began in 2013. It demonstrates the Universiti Kuala Lumpur Branch Campus Malaysian Institute of Chemical and Bioengineering Technology (UniKL MICET) full commitment to enhancing research and development activities in green technology and related areas.

Topics: Bioscience and Medicine, Building Materials, Manufacturing, Materials Science, Mechanical Engineering

Keywords: Absorption, Battery, Bio Additive, Bio-Based Materials, Biocomposite, Biopolymer, Biotechnology, Building Materials, Chemical Engineering, Coating, Composite, Corrosion, Environmental Protection, Green Synthesis, Membrane, Organic Inhibitor, Pollutant, Polymer, Polymer Electrolyte, Pyrolisis, Surface Treatment, Waste Recycling

Prices:			
	Print:	**US$ 320.00 / EUR 320.00**	Print: 978-3-0364-0007-5
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0364-1007-4
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*604 pages, 2023*

https://www.scientific.net/978-3-0364-0007-5/book



Materials Engineering and Science

Volume in the series: 50

Aggregated Book

Edited by: Dr. Omar S. Dahham

This book contains the selected papers presented at the 5th International Conference on Materials Engineering and Science (IConMEAS 2022), which was held at İstanbul Topkapı Üniversitesi, Istanbul, Turkey on August 22-23, 2022. The main objective of IConMEAS 2022 is to provide a comprehensive global forum for experts and participants from academia and industry to exchange ideas and present results of ongoing research.

Topics: Bioscience and Medicine, Building Materials, Environmental Engineering, Materials Science, Nanoscience

Keywords: Alloy, Aser Cladding, Biomaterials, Coating, Composite, Concrete, Deep Drawing, Environmental Protection, Hardness, Laser Processing, Mechanical Properties, Nanocomposite, Nanomaterials, Polymer, Steel, Thin Film, Wire Electrical Discharge Machining

Prices:			
	Print:	**US$ 290.00 / EUR 290.00**	Print: 978-3-0364-0100-3
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0364-1100-2
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*508 pages, 2023*
			https://www.scientific.net/978-3-0364-0100-3/book

Additive Manufacturing

Volume in the series: 49

Aggregated Book

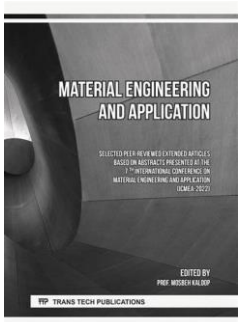
Edited by: Persia Ada N. de Yro and Gerald Mari O. Quiachon

This edition introduces to readers the articles devoted to researching additive manufacturing technologies and solving pressing problems in this area. Possible ways of using additive technologies to manufacture machine parts in modern mechanical engineering are also analysed. The book will be helpful to many engineers, academics and students whose activities are related to 3D printing. All presented articles were introduced at the 2021 ASEAN Conference on Additive Manufacturing (ACAM 2021, October 28-29, 2021, the Philippines).

Topics: Materials Science

Keywords: 3D Printing, Additive Manufacturing, Alloy, Composite, Mechanical Properties, Microstructure, Polymer, Steel

Prices:			
	Print:	**US$ 70.00 / EUR 70.00**	Print: 978-3-0357-1756-3
	eBook Single-User:	**US$ 70.00 / EUR 70.00**	eBook: 978-3-0357-3756-1
	eBook Multi-User:	**US$ 123.00 / EUR 123.00**	*112 pages, 2023*
			https://www.scientific.net/978-3-0357-1756-3/book



Material Engineering and Application

Volume in the series: 48

Aggregated Book

Edited by: Prof. Mosbeh Kaloop

The presented articles cover research results in the area of materials science and materials processing technologies in the various branches of modern industry. This edition will be interesting and useful to many engineers, academics and also to students. The collected research results were presented at the 7th International Conference on Material Engineering and Application which was held in Indonesia during July 15-17, 2022.

Topics: Building Materials, Materials Science

Keywords: Aggregate, Asphalt, Biodiesel, Composite, Concrete, Electrochemistry, Electrolyte, Fractional Distillation, Fuel Production, Water Electrolysis

Prices:			
	Print:	**US$ 50.00 / EUR 50.00**	Print: 978-3-0364-0051-8
	eBook Single-User:	**US$ 50.00 / EUR 50.00**	eBook: 978-3-0364-1051-7
	eBook Multi-User:	**US$ 88.00 / EUR 88.00**	*106 pages, 2023*
			https://www.scientific.net/978-3-0364-0051-8/book

Technologies and Materials for Renewable Energy, Environment and Sustainability

Volume in the series: 47

Aggregated Book

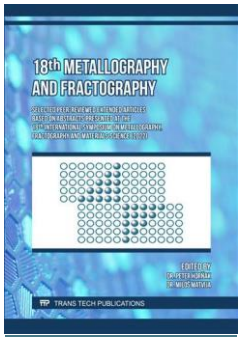
Edited by: Prof. Chafic-Touma Salame

This book presents papers selected from the 12th TMREES and related to engineering materials and advanced technologies for sustainable development. This collection can serve as a good reference for many specialists in advanced materials and applications. The 12th TMREES 2022 was held on May 09-11, 2022, in Metz-Grand Est, France. TMREES Conference Series: Technologies and Materials for Renewable Energy, Environment and Sustainability aims to promote sustainable, healthy and diverse ecosystems; encourage and support the sustainability and development of security systems through green-based and clean resources, bringing together participants from international organizations, universities, industry and administrative to exchange innovative ideas, explore enabling technologies, share experiences in sustainability issues and open a new windowon the circumstances of the classical energy sources and their harmful impact on the society.

Topics: Building Materials, Materials Science, Nanoscience

Keywords: Alloy, Bulding Materials, Composite, Fuel, Luminescence Properties, Waste Recycling, Wastewater Treatment

Prices:			
	Print:	**US$ 95.00 / EUR 95.00**	Print: 978-3-0364-0040-2
	eBook Single-User:	**US$ 95.00 / EUR 95.00**	eBook: 978-3-0364-1040-1
	eBook Multi-User:	**US$ 166.00 / EUR 166.00**	*136 pages, 2023*
			https://www.scientific.net/978-3-0364-0040-2/book



18th Metallography and Fractography

Volume in the series: 46

Aggregated Book

Edited by: Dr. Peter Horňak and Dr. Miloš Matvija

This book was created from invited lectures and conference contributions of the "Metallography & Fractography 2022" conference, which is featured as an essential event for the presentation of results achieved in materials science and engineering. The conference participants come from universities, academic research institutions and different branches of industry withan interest in materials science and engineering. The conference also has strong support from companies that are experts in unique experimental equipment. The conference's ambition is regularly to expand the program to cover new approaches, new advanced materials and technologies, new findings in fundamental research and practical production, and to intensify international contacts.

Topics: Materials Science, Nanoscience

Keywords: Additive Technology, Alloy, Annealing, Bronze, Cavitation, Ceramics, Coating, Cold Deformation, Cold Drawing, Composite, Corrosion, Creep Resistance, Etching, Fractography, Low Cycle Fatigue, Mechanical Properties, Melting, Metallography, Microstructure, Nanomaterials, Nanoparticles, Polymer, Sintering, Steel

Prices:			
	Print:	**US$ 200.00 / EUR 200.00**	Print: 978-3-0364-0078-5
	eBook Single-User:	**US$ 198.00 / EUR 198.00**	eBook: 978-3-0364-1078-4
	eBook Multi-User:	**US$ 347.00 / EUR 347.00**	*250 pages, 2023*
			https://www.scientific.net/978-3-0364-0078-5/book

Advances in Materials Research 2.0

Volume in the series: 45

Aggregated Book

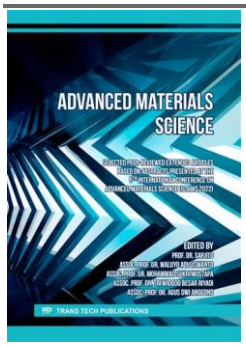
Edited by: Dr. G. Kumaresan, Dr. N. Siva Shanmugam and Dr. V. Dhinakaran

The presented collection of the articles describes research results and engineering solutions in materials science, materials processing, civil construction, machines and equipment design, thermal engineering, power engineering, and mechatronics. The publication will be helpful to many engineers from the industrial sector. The comprised papers were presented at the International Conference on Advances in Materials Research (ICAMR 2.0, 2021).

Topics: Building Materials, Civil Engineering, Construction, General Engineering, Materials Science, Mechanical Engineering, Mechanics

Keywords: Alloy, Coating, Combustion Characteristics, Composite, Concrete, Cryogenic Treatment, Earthquake Resistant, Friction Welding, Fuel, Geopolymer, Honeycomb Structure, Internal Combustion Engine, Laser Machining, Machine Design, Mechanical Properties, Mechatronics, Metal Matrix Composite, Numerical Analysis, Power Engineering, Power Electronics, Seismic Analysis, Steel, Structural Analysis, Superalloy, Thermal Engineering, Turbine Rotor Blade

Prices:			
	Print:	**US$ 140.00 / EUR 140.00**	Print: 978-3-0357-1891-1
	eBook Single-User:	**US$ 140.00 / EUR 140.00**	eBook: 978-3-0357-3891-9
	eBook Multi-User:	**US$ 245.00 / EUR 245.00**	*182 pages, 2023*
			https://www.scientific.net/978-3-0357-1891-1/book



Advanced Materials Science

Volume in the series: 44

Aggregated Book

Edited by: Sarjito Sarjito, Waluyo Adi Siswanto, Assoc. Prof. Dr. Mohammad Sukri Mustapa, Assoc. Prof. Dr. Tri Widodo Besar Riyadi and Assoc. Prof. Dr. Agus Dwi Anggono

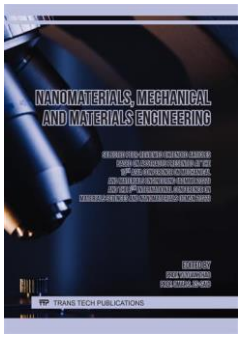
This edition delivers the latest research results in materials science covering the wide range of materials, from structural metals, polymers and composites to biomaterials for various use, modern biotechnologies, technologies in chemical production and environmental protection. The collection was prepared by the results of the 5th International Conference on Advanced Materials Science (ICoAMS 2022, August 2022, Indonesia) and will be helpful to engineers and researchers in materials science and machinery.

Topics: General Engineering, Materials Science, Mechanical Engineering, Mechanics, Nanoscience

Keywords: Alloy, Biomaterials, Biotechnology, Chemical Technology, Composite, Environmental Protection, Machinery, Polymer, Pyrolisis, Steel, Structural Metal

Prices:
Print: **US$ 175.00 / EUR 175.00**
eBook Single-User: **US$ 175.00 / EUR 175.00**
eBook Multi-User: **US$ 306.00 / EUR 306.00**

Print: 978-3-0364-0116-4
eBook: 978-3-0364-1116-3
242 pages, 2023
https://www.scientific.net/978-3-0364-0116-4/book



Nanomaterials, Mechanical and Materials Engineering

Volume in the series: 43

Aggregated Book

Edited by: Prof. Yuyuan Zhao and Prof. Omar S. Es-Said

This collection of the articles will be helpful to specialists in engineering materials, nanomaterials, microelectronics, construction and machinery production. The articles comprised in the book were selected from the 10th Asia Conference on Mechanical and Materials Engineering (ACMME 2022) and the 6th International Conference on Materials Sciences and Nanomaterials (ICMSN 2022).

Topics: Building Materials, Information Technologies, Materials Science, Mechanical Engineering, Mechanics, Nanoscience

Keywords: Alloy, Buildings Materials, Ceramics, Coating, Composite, Forming, Friction Welding, Mechanical Engineering, Nanomaterials, Polymer, Powder Metallurgy, Steel, Thin Film

Prices:
Print: **US$ 150.00 / EUR 150.00**
eBook Single-User: **US$ 150.00 / EUR 150.00**
eBook Multi-User: **US$ 263.00 / EUR 263.00**

Print: 978-3-0357-1876-8
eBook: 978-3-0357-3876-6
214 pages, 2023
https://www.scientific.net/978-3-0357-1876-8/book

Material Engineering Research

Volume in the series: 42

Aggregated Book

Edited by: Prof. Jong Wan Hu

The 5th International Conference on Material Engineering Research (5th ICMER 2022) took place at the Incheon National University, Incheon, South Korea, during April 15-17, 2022. Currently, the entire world is struggling against the virulent COVID-19 pandemic. So, the conference was held as a remote presentation through video meetings. The primary objective of ICMER 2022 is to provide a world-class forum for exchanging original ideas and new information, the latest research and for discussing scientific progress. Also, it was held to bring together academics, scientists, engineers, postgraduates and other professionals in the area of material science and engineering technology from all over the world.

Topics: Bioscience and Medicine, Building Materials, Civil Engineering, Materials Science, Mechanical Engineering, Mechanics, Nanoscience

Keywords: Biodiesel, Building Materials, Composite, Luminescence Properties, Mechanical Engineering, Mechanical Properties, Metal, Nanocrystal, Polymer, Pyrolysis

Prices:
Print: **US$ 80.00 / EUR 80.00**
eBook Single-User: **US$ 80.00 / EUR 80.00**
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Advances in Materials, Mechanical and Manufacturing Technologies

Volume in the series: 41

Aggregated Book

Edited by: Prof. Vladimir Khovaylo, Nguyen Quang Liem and Prof. Takahiro Ohashi

This book introduces a series of research results and engineering solutions in materials science and materials processing technologies. Nanoscale and conventional composite and polymer materials, ceramics, alloys, materials for photovoltaics and batteries, building materials, wastewater treatment, and some materials processing technologies are the main topics of this edition. The book comprises the results of the 4th International Conference on Advances in Materials, Mechanical and Manufacturing (AMMM 2022), the 11th International Conference on Engineering and Innovative Materials (ICEIM 2022) and the 13th International Conference on Materials and Manufacturing Technologies (ICMMT 2022).

Topics: Bioscience and Medicine, Building Materials, Materials Science

Keywords: Additive Manufacturing, Alloy, Building Materials, Ceramics, Composite, End Milling, Friction Stir Forming, Hot Forging, Laser Metal Deposition, Lithium Dendrite, Metal-Organic Framework, Nanomaterials, Organic Solar Cell, Polymer, Wastewater Treatment

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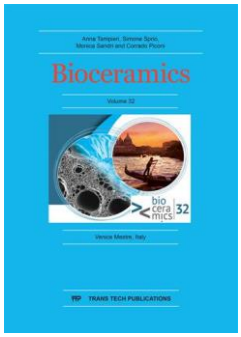

Bioceramics 32

Volume in the series: 40

Aggregated Book

Edited by: Prof. Anna Tampieri, Dr. Simone Sprio, Monica Sandri and Corrado Piconi

This issue represents the research results in synthesis and processing technologies of bioceramic materials for various biomedical applications, from bone regeneration and dental restoration to drug delivery systems and skin tissue engineering. The edition will be helpful to specialists in biomaterials and tissue engineering. The articles collected in this book were presented at the 32nd Symposium and Annual Meeting of the International Society of Ceramics in Medicine (Bioceramics 32).

Topics: Bioscience and Medicine, Materials Science, Nanoscience

Keywords: Additive Technologies, Apatite, Bioceramics, Biocompatibility, Bone Regeneration, Calcium Carbonate, Calcium Phosphate, Cytocompatibility, Dental Restoration, Drug Delivery, Hydroxyapatite, Microstructure, Nanocomposite, Osteoconductivity, Scaffold, Tissue Engineering

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Mechanical Automation and Engineering Materials

Volume in the series: 39

Aggregated Book

Edited by: Prof. Ke Yong Shao

This publication proposes to readers research results to reflect the last achievements in materials science, mechanical engineering and mechatronics. The issue contains the selected articles presented at the International Conference on Mechanical Automation and Engineering Materials (MAEM 2022, online during June 18-19, 2022).

Topics: Electronics, General Engineering, Materials Science, Mechanical Engineering, Mechanics

Keywords: Alloy, Designing, Fatigue Properties, Mechanical Engineering, Mechatronics, Quenching, Steel

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Materials Science and Manufacturing Technology (4th Edition)

Volume in the series: 38

Aggregated Book

Edited by: Dr. Ramya Muthusamy and Dr. Thangaprakash Sengodan

Materials and technologies are significant elements for all kinds of high-tech industries that pave the road for advancements in the manufacturing area. With the rapid development of computer technologies, communications, and network technology, the traditional manufacturing process has evolved into intelligent, more technologically flexible and efficient manufacturing. This book is a collection of research articles on recent materials science, manufacturing technologies, and machine design advancements. The articles presented here were selected from the Fourth International Conference on Materials Science and Manufacturing Technology 2022 (ICMSMT 2022, April 8-9, 2022, Coimbatore, Tamil Nadu, India).

Topics: Building Materials, Materials Science, Mechanical Engineering

Keywords: Alloy, Applied Mechanics, Building Materials, Casting, Ceramics, Coating, Composite, Computational Materials Science, Corrosion Protection, Cutting, Friction Stir Processing, Liquid Crystal, Luminescence, Mechanical Engineering, Mechanical Properties, Organic Synthesis, Polymer, Powder Metallurgy, Steel, Structural Analysis, Thin Film, Tuning, Welding

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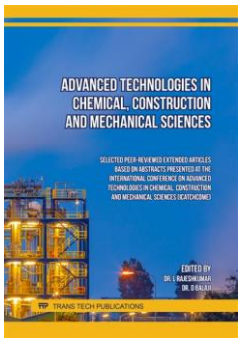

Advanced Technologies in Chemical, Construction and Mechanical Sciences

Volume in the series: 37

Aggregated Book

Edited by: Dr. L Rajeshkumar and Dr. D Balaji

This book presents and discusses the latest technologies and engineering advancements in materials science. It collects the results of the International Conference on Advanced Technologies in Chemical, Construction and Mechanical Sciences (ICATCHCOME 2022) organised in March 2022 by the Center for Research and Development, KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India. The meeting provided an environment for academicians and industry personnel to present their research results and engineering solutions on the conference topics.

Topics: Materials Science, Nanoscience

Keywords: Alloy, Ceramics, Composite, Heat Treatment, Mechanical Properties, Metal Oxide, Metallurgy, Nanomaterials, Nanotube, Polymer, Steel

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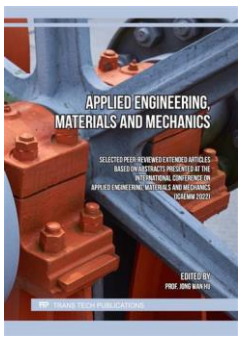

Applied Engineering, Materials and Mechanics

Volume in the series: 36

Aggregated Book

Edited by: Prof. Jong Wan Hu

The main topics covered in this book are nanocomposites and bioceramics, materials used in the electronic industry, building materials, materials strength and structural integrity research, and mechanical engineering research. This book will be helpful to many specialists in machinery. The edition includes research results presented at the 7th International Conference on Applied Engineering, Materials and Mechanics (7th ICAEMM 2022) held in Jeju Island, South Korea, on May 27-29, 2022.

Topics: Building Materials, Materials Science, Mechanical Engineering, Mechanics, Nanoscience

Keywords: Bioceramics, High Electron Mobility Transistor, Hydroxyapatite, Lead-Free Solder, Limestone, Mechanical Engineering, Mechanical Properties, Nanocomposite, Nanopowder, Soil Cement, Strength of Materials, Structural Integrity

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20th Silicate Binders

Volume in the series: 35

Aggregated Book

Edited by: Assoc. Prof. Dr. Karel Dvořák and Dr. Dominik Gazdič

The book is devoted to scientific research results and analysis of practical findings on the technologies of preparation and applications of cement and other hydraulic, silicate, lime and gypsum-based binders. Particular attention was paid to studying the behaviour of these mentioned binders in different building materials such as concrete, inorganic insulation and solidified sludges. Here, the selected articles from the 20th International Conference Silicate Binders 2021 (Brno, Czech Republic) are collected.

Topics: Building Materials, Civil Engineering, Materials Science

Keywords: Alkali-Activated Matrix, Blast Furnace Slag, Building Materials, Cement, Cement Based Composite, Concrete, Corrosion Resistance, Fly Ash, Gypsum Plaster, Inorganic Binders, Lime

Prices:
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