

*Enjoy the advantages of
eBooks on your devices*



Scientific Books

Collection 2025



/Scientific.Net.Ltd



/Scientific_Net



/scientificnet

Welcome

In 2022, TTP introduced a new book collection **“Scientific Books Collection” (SBC)**. Recently started, **161 titles** have already been published by the 2024 year-end!

The Scientific Books Collection combines the best of both worlds: top conference contributions from different years but collected around a specific topic/field. These selections offer aggregation plus best-in-class information presenting the newest development in different areas of materials science and engineering. Additionally, all papers are peer-reviewed, being unique for conference papers. The published conferences bring to light the latest academic outputs in the broad area of materials science and engineering, from theoretical and computational research to prototyping and engineering application.

An actual list of the available book titles with short annotations and ToC can be found under **“Books”**.

The Scientific Books Collection is intended for practising engineers, scientific researchers, institutions and research groups, corporations' R&D and programs dedicated to materials science and engineering.

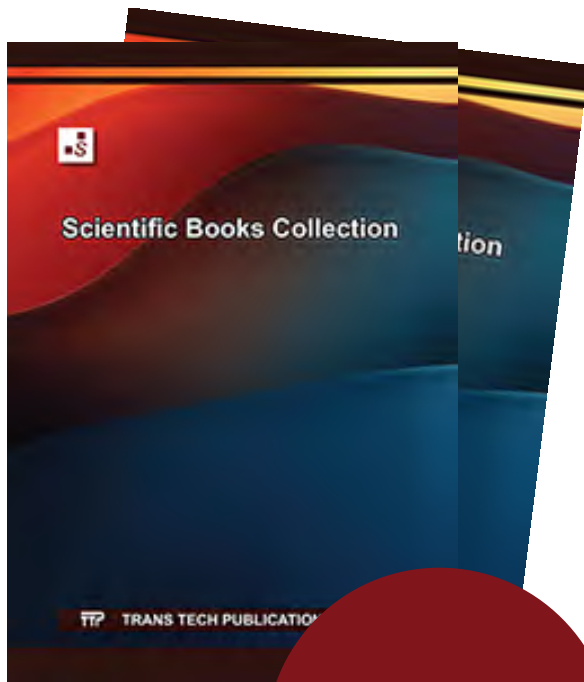
Founded in 1967 in Switzerland, Trans Tech Publications Ltd. keeps up to date with and endorses the latest trends in academic publishing. The editorial and publishing processes are supported by our own online management and publishing system integrated into the Scientific.Net website.

Trans Tech Publications Ltd. strives to meet the high expectations of customers and partners via efficient service and high-quality products.

Anne-Kristin Wohlbier,
CEO



Scientific Books Collection - 2024 selection



**55 Titles
(2024)**

Available as Book or eBook

■ Print	EUR 10'380
■ eBook, Single-User with username	EUR 8'537
■ eBook, Multi-User with IP Access	EUR 14'955
■ Print plus eBook, Single-User	EUR 13'242
■ Print plus eBook, Multi-User	EUR 20'268

Editorial inquiries:

✉ editors@scientific.net

Print Subscription inquiries:

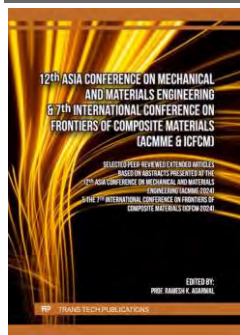
✉ subscriptions@scientific.net

"Scientific Books Collection" presents to the readers the newest development in different areas of materials science and engineering. The collection of invited contributions as well as extended scientific research papers presented and discussed worldwide provides a global overview with solid discussions and in-depth studies.

The Scientific Books Collection is intended for the interest of practical engineers, scientific researchers, institutions and research groups, corporations' R&D and programs dedicated to materials science and engineering.

An actual list of the available book titles with short annotations and ToC can be found under "Books".

www.scientific.net/SBC



12th Asia Conference on Mechanical and Materials Engineering & 7th International Conference on Frontiers of Composite Materials (ACMME & ICFCM)

Volume in the series: 161

Aggregated Book

Edited by: Prof. Ramesh K. Agarwal

This compilation includes the papers selected from two notable conferences: the 12th Asia Conference on Mechanical and Materials Engineering (ACMME 2024) and the 7th International Conference on Frontiers of Composite Materials (ICFCM 2024). Both conferences were held in 2024: ACMME 2024 took place in Kyoto, Japan (June 14-17), while ICFCM 2024 was hosted in Singapore (June 14-16). The presented here research results and engineering solutions will be helpful to specialists in materials and materials processing techniques from various branches of manufacturing.

Topics: Building Materials, Electronics, Materials Science, Nanoscience

Keywords: Additive Manufacturing, Alloy, Ceramics, Composite, Computational Materials Science, Electrochemistry, Electrode Materials, Green Concrete, Materials Informatics, Mechanical Properties, Microelectronics, Nanocomposite, Nanoparticles, Polymer, Post-Processing, Semiconductor, Shot Peening, Steel, Surface Engineering, Welding

Prices: Print: **US\$ 145.00/ EUR 145.00**

Print: 978-3-0364-0459-2

eBook Single-User: **US\$ 145.00/ EUR 145.00**

eBook: 978-3-0364-1459-1

eBook Multi-User: **US\$ 254.00/ EUR 254.00**

176 pages, 2024

<https://www.scientific.net/978-3-0364-0459-2/book>



15th International Conference on Materials and Manufacturing Technology (ICMMT)

Volume in the series: 160

Aggregated Book

Edited by: Nguyen Quang Liem and Prof. Vladimir Khovaylo

We are pleased to introduce you to the collection of articles that were presented at the 15th International Conference on Materials and Manufacturing Technology (ICMMT 2024), which was successfully held in Nha Trang, Vietnam, on March 22-24, 2024. The selected papers provide advances and the latest research results on structural metals, technologies of additive manufacturing and metalworking, nanomaterials and chemical engineering, synthesis and analysis of properties of advanced polymer and composite materials, green building materials, mechatronics and automation.

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

Keywords: Additive Manufacturing, Alloy, Automation, Composite, Computational Materials Science, Friction Stir Processing, Gray Iron, Green Building Materials, High-Speed Milling, Magnetic Properties, Mechanical Properties, Mechatronics, Nanomaterials, Polymer, Steel, Thermoelectric Properties

Prices: Print: **US\$ 140.00/ EUR 140.00**

Print: 978-3-0364-0414-1

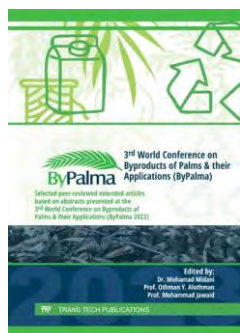
eBook Single-User: **US\$ 140.00/ EUR 140.00**

eBook: 978-3-0364-1414-0

eBook Multi-User: **US\$ 245.00/ EUR 245.00**

174 pages, 2024

<https://www.scientific.net/978-3-0364-0414-1/book>



3rd World Conference on Byproducts of Palms & their Applications (ByPalma)

Volume in the series: 159

Aggregated Book

Edited by: Dr. Mohamad Midani, Prof. Othman Y. Alothman and Prof. Mohammad Jawaid

This edition contains articles based on research results presented at the 3rd World Conference on Byproducts of Palms and their Applications (BYPALMA 2023, Riyadh, Saudi Arabia, 05-08 December 2023). The research results cover a wide range of trends and directions on applications of date palm production byproducts as composite reinforcements, in biotechnologies, chemical and environmental engineering, etc.

Topics: Bioscience and Medicine, Materials Science, Nanoscience

Keywords: Biochar, Biocomposite, Biomass Treatment, Biopolymer, Biosurfactants, Crystalline Nanocellulose, Date Palm Fibre Reinforcement, Date Palm Waste, Mechanical Properties, Nanocomposite

Prices: Print: **US\$ 115.00/ EUR 115.00**

Print: 978-3-0364-0294-9

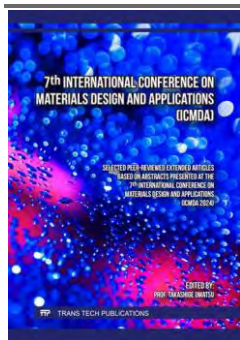
eBook Single-User: **US\$ 115.00/ EUR 115.00**

eBook: 978-3-0364-1294-8

eBook Multi-User: **US\$ 201.00/ EUR 201.00**

144 pages, 2024

<https://www.scientific.net/978-3-0364-0294-9/book>



7th International Conference on Materials Design and Applications (ICMDA)

Volume in the series: 158

Aggregated Book

Edited by: Prof. Takashige Omatsu

This book contains articles based on research results that were presented at the 7th International Conference on Materials Design and Applications (ICMDA 2024, Tokyo, Japan, 09-12 April 2024). The research results cover a wide range of trends and directions in properties research, methods and technologies of synthesis and processing of a wide spectrum of modern materials starting from functional nanomaterials, advanced polymers and composites, and green building materials and finishing with waste recycling, materials for optoelectronics and energy storage and engineering research in mechanics of materials.

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

Keywords: 3D Printing, Applied Mechanics, Catalysts, Cement, Clay Tiles, Coatings, Cocoa Husks, Composites, Electrolytes, Epoxy Resin, Fibers, Functional Materials, Glass Cullet, Green Building Materials, Luminescent Properties, Mechanical Properties, Mechanics of Materials, Nanoparticles, Polymers, Pyrolysis, Quantum Dots, Rubber, Sensors, Slag, Waste Recycling

Prices: Print: **US\$ 125.00/ EUR 125.00** Print: 978-3-0364-0458-5
 eBook Single-User: **US\$ 125.00/ EUR 125.00** eBook: 978-3-0364-1458-4
 eBook Multi-User: **US\$ 219.00/ EUR 219.00** 130 pages, 2024

<https://www.scientific.net/978-3-0364-0458-5/book>



International Conference on Science, Technology and Innovation (CONICIETI)

Volume in the series: 157

Aggregated Book

Edited by: Reyna Durón, Prof. José Luis Ordóñez-Ávila, Mariela Contreras and Dr. Manuel Cardona

The edition contains articles based on scientific and engineering research results that were presented at the 1st International Conference of Science, Technology and Innovation (CONICIETI, 29-30 May 2024, Tegucigalpa, Honduras) hosted by Universidad Tecnológica Centroamericana (UNITEC) in Honduras. This articles collection will be useful to specialists in biomedical engineering, information technology, measurements and sensing, robotics and engineering management.

Topics: Bioscience and Medicine, Industrial Engineering, Information Technologies, Mechanical Engineering, Mechanics

Keywords: Biomechanics, Biomedical Engineering, Computer Vision, Convolutional Neural Networks, Cybersecurity, Data Processing, Engineering Management, Health Informatics, Internet of Things, Radioisotope Classifier, Robotics, Sensors

Prices: Print: **US\$ 180.00/ EUR 180.00** Print: 978-3-0364-0223-9
 eBook Single-User: **US\$ 180.00/ EUR 180.00** eBook: 978-3-0364-1223-8
 eBook Multi-User: **US\$ 315.00/ EUR 315.00** 210 pages, 2024

<https://www.scientific.net/978-3-0364-0223-9/book>



12th Aluminium Two Thousand World Congress & 7th International Conference on Extrusion and Benchmark

Volume in the series: 156

Aggregated Book

Edited by: Prof. Lorenzo Donati

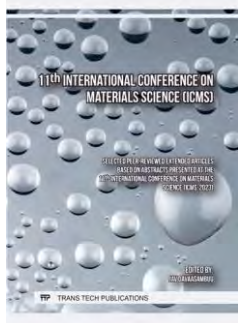
The 12th Aluminium Two Thousand World Congress and the 7th International Conference on Extrusion and Benchmark (Aluminium 2000 & ICEB, 26-30 September 2023, Rome, Modena, Italy) was a prestigious event that brought together leading experts from academia and industry to discuss the latest advancements in aluminum and light alloys' processing and applications. Keynote speakers and contributors presented a wide range of topics, including technical aspects of extrusion, casting, forming, anodizing and coating linked to metallurgical and chemical aspects.

Topics: Manufacturing, Materials Science, Mechanical Engineering, Mechanics

Keywords: Aging, Aluminum Alloys, Anodizing, Benchmark, Casting, Coating, Damage Behaviour, Direct Hot Rolling Extrusion, Homogenisation, Mechanical Properties, Microstructure, Modelling, Quench Rate, Simulation, Surface Segregation

Prices: Print: **US\$ 175.00/ EUR 175.00** Print: 978-3-0364-0380-9
 eBook Single-User: **US\$ 0.00/ EUR 0.00** eBook: 978-3-0364-1380-8
 eBook Multi-User: **US\$ 0.00/ EUR 0.00** 196 pages, 2024

<https://www.scientific.net/978-3-0364-0380-9/book>



11th International Conference on Materials Science (ICMS)

Volume in the series: 155

Aggregated Book

Edited by: Jav Davaasambuu

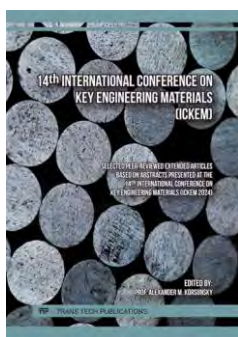
This book contains peer-reviewed papers presented at the 11th International Conference on Materials Science (ICMS 2023) held in Hohhot, China, on October 13-16, 2023, which focused on the study of structure, properties, and applications of new materials as well as techniques of materials characterisation. The conference was organized by Inner Mongolia Association of Science and Technology (China), Inner Mongolia Normal University (China), Inner Mongolia Physical Society (China), the Mongolian Physical Society (Mongolia), the National University of Mongolia, the Institute of Physics and Technology, Mongolian Academy of Sciences (Mongolia), and the Institute of Physical Material Science, SB RAS (Russia).

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

Keywords: Adsorption, Ball-Milling, Biochar, Coatings, Composites, Density Functional Theory, Electrodes, Energy Storage, Functional Materials, Hartree-Fock Equations, HCP Crystals, Lithium-Ion Battery, Luminophores, Magnetic Refrigeration, Magnetocaloric Effect, Nanomaterials, Numerical Investigations, Optical Materials, Photoconductive Antennas, Porous Materials, Rare Earth Elements, Schrodinger Equation, Solar Cells, Thin Films, Young's Modulus

Prices: Print: **US\$ 190.00/ EUR 190.00** Print: 978-3-0357-1144-8
eBook Single-User: **US\$ 190.00/ EUR 190.00** eBook: 978-3-0357-3144-6
eBook Multi-User: **US\$ 333.00/ EUR 333.00** 238 pages, 2024

<https://www.scientific.net/978-3-0357-1144-8/book>



14th International Conference on Key Engineering Materials (ICKEM)

Volume in the series: 154

Aggregated Book

Edited by: Prof. Alexander M. Korsunsky

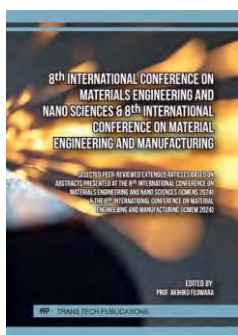
The articles in this book were presented at the 14th International Conference on Key Engineering Materials (ICKEM 2024). This annual conference has been held for fourteen years and aims to provide an international platform for researchers to exchange ideas and achievements in the development and research of materials for various branches of modern manufacturing and construction.

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

Keywords: 3D Printing, Asphalt, Biochar, Biodiesel, Biomass, Biomaterials, Bricks, Building Materials, Carbon Dots, Cement, Composites, Concrete, Damage Energy, Electrodes, Encapsulation, Fibers, Finite Element Simulation, Functional Materials, High Strain, Nanoparticles, Pyrolysis, Rice Husk, Slag, Soil Stabilization, Titanium, Transesterification, Viscoelastic Materials, Wastewater Treatment

Prices: Print: **US\$ 150.00/ EUR 150.00** Print: 978-3-0364-0515-5
eBook Single-User: **US\$ 150.00/ EUR 150.00** eBook: 978-3-0364-1515-4
eBook Multi-User: **US\$ 263.00/ EUR 263.00** 154 pages, 2024

<https://www.scientific.net/978-3-0364-0515-5/book>



8th International Conference on Materials Engineering and Nano Sciences & 8th International Conference on Material Engineering and Manufacturing

Volume in the series: 153

Aggregated Book

Edited by: Prof. Akihiko Fujiwara

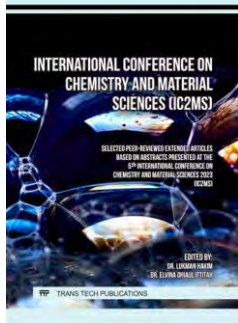
This edition presents the compilation of research papers from the 8th International Conference on Materials Engineering and Nano Sciences (ICMENS 2024) and the 8th International Conference on Material Engineering and Manufacturing (ICMEM 2024), which were successfully held in Kwansei Gakuin University, Osaka, Japan, during March 22-25, 2024, to serve as a platform for experts, researchers, and practitioners from around the world to convene and exchange ideas and the latest advancements in materials science, mechanical engineering and construction. The book will be helpful to specialists in the mentioned branches of engineering practice.

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

Keywords: Additive Manufacturing, Alloys, ANSYS Simulation, Biochar, Building Materials, Carbon Nanotubes (CNT), Ceramics, Chemical Engineering, Coatings, Composites, Concrete, Corrosion, Cutting Parameters, Defects, Dielectric Properties, Electrical Conductivity, Energy Storage, Films, Fly Ash, Geopolymer, Mechanical Engineering, Mechanical Strength, Nanoemulsions, Nanofibers, Nanomaterials, Photocatalysts, Polymerizations, Polymers, Quantum Dots, Resistive Photomemory, Steel, Stereolithography, Stress Intensity Factor, Ultrasonic Vibration, Wastewater Treatment, Wear Resistance, Welding

Prices: Print: **US\$ 230.00/ EUR 230.00** Print: 978-3-0364-0457-8
eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0364-1457-7
eBook Multi-User: **US\$ 347.00/ EUR 347.00** 266 pages, 2024

<https://www.scientific.net/978-3-0364-0457-8/book>



International Conference on Chemistry and Material Sciences (IC2MS)

Volume in the series: 152

Aggregated Book

Edited by: Dr. Lukman Hakim and Dr. Elvina Dhiaul Ifitah

This publication includes the articles from the 5th International Conference on Chemistry and Materials Science (IC2MS 2023) held on October 11-12, 2023, in Malang, Indonesia. The IC2MS series was launched in 2017, with the first meeting that attracted more than 200 participants from over 40 universities/institutions representing such countries as Indonesia, Malaysia, Singapore, Thailand, Japan, Taiwan, Brunei Darussalam, and Australia. Since then, the IC2MS meetings have been held biennially as a joint conference organized by Brawijaya University, Jember University, State University of Malang, and Universiti Teknologi Mara with the aim to build up strong academic relationships and united scientific community. The 2023 event was organized by the Department of Chemistry, Faculty of Mathematics and Natural Sciences, Brawijaya University, which was the initial host of the conference inaugural meeting.

Topics: Bioscience and Medicine, Materials Science, Nanoscience

Keywords: Absorbent, Antibacterial Properties, Biochemistry, Biocomposite, Biopolymer, Bioremediation, Electrochemical Properties, Electrode Material, Inorganic Chemistry, Microplastic, Nanomaterials, Nanoparticles, Organic Synthesis, Pharmacology, Separation, Waste Recycling, Wastewater Treatment

Prices: Print: **US\$ 150.00/ EUR 150.00** Print: 978-3-0364-0453-0
 eBook Single-User: **US\$ 150.00/ EUR 150.00** eBook: 978-3-0364-1453-9
 eBook Multi-User: **US\$ 263.00/ EUR 263.00** 168 pages, 2024

<https://www.scientific.net/978-3-0364-0453-0/book>



9th International Scientific Conference on Advances in Mechanical Engineering

Volume in the series: 151

Aggregated Book

Edited by: Dr. Tamás Mankovits and Mihály Csüllög

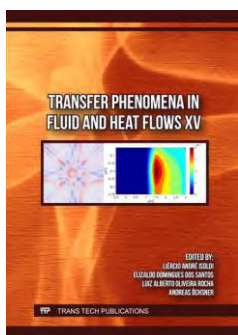
The 9th International Scientific Conference on Advances in Mechanical Engineering (ISCAME, November 9-10, 2023, Debrecen, Hungary) was organized by the Department of Mechanical Engineering (Faculty of Engineering, University of Debrecen) and the Working Commission of Mechanical Engineering (Specialized 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 regarding all aspects of mechanical engineering sciences.

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

Keywords: Additive Manufacturing, Alloys, Composites, Computational Fluid Dynamics, Cracks, Defect Identification, Fault Analysis, Grinding, Heat Transfer, Industry 4.0, Machines, Processing Technologies, Special Materials, Steel, Structural Materials, Surface Roughness, Tools, Transportation Engineering, Vehicles, Vibroacoustics, Wire Electrical Discharge Machining (WEDM)

Prices: Print: **US\$ 225.00/ EUR 225.00** Print: 978-3-0364-0444-8
 eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0364-1444-7
 eBook Multi-User: **US\$ 347.00/ EUR 347.00** 264 pages, 2024

<https://www.scientific.net/978-3-0364-0444-8/book>



Transfer Phenomena in Fluid and Heat Flows XV

Volume in the series: 150

Aggregated Book

Edited by: Liércio André Isoldi, Elizaldo Domingues dos Santos, Luiz Alberto Oliveira Rocha and Prof. Andreas Öchsner

The special publication entitled "Transfer Phenomena in Fluid and Heat Flows XV" continues a series of themed volumes. It presents a collection of articles associated with heat transfer, fluid flow, and related phenomena. The continuous need for improved machines, higher efficiencies, and more detailed and accurate theoretical modeling approaches makes it necessary to showcase the latest trends regularly with small intervals between the different volumes in this topical series. The design of flow systems also plays a significant role in this special issue.

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

Keywords: Atmospheric Emission, Atmospheric Studies, Earth-Air Heat Exchangers, Flow Dynamics, Fluid Flow, Heat Transfer, Wave Energy Converter

Prices: Print: **US\$ 200.00/ EUR 200.00** Print: 978-3-0364-0577-3
 eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0364-1577-2
 eBook Multi-User: **US\$ 347.00/ EUR 347.00** 218 pages, 2024

<https://www.scientific.net/978-3-0364-0577-3/book>



15th International Conference on Sustainable Green Construction and Nano-Technology "Advances in Fire Safety, HVAC-R, and Built Environment"

Volume in the series: 149

Aggregated Book

Edited by: Hamada Shoukry

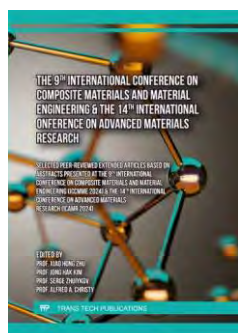
This book contains selected papers presented at the 15th International Conference on Sustainable Green Construction and Nano-Technology (NTC-2024, 02-03 March 2024, Cairo, Egypt), which focus on issues in modern construction and environmental engineering.

Topics: Building Materials, Materials Science, Mechanics, Nanoscience

Keywords: Cement, Compressive Strength, Concrete, Construction, Corrosion Inhibitors, Durability, Energy Efficiency, Green Building Materials, Industrial Waste, Magnetic Water Treatment, Nanoparticles, Natural Materials, Pollutant Removal, Slag, Soil Stabilization, Sustainable Buildings, Wastewater Treatment

Prices: Print: **US\$ 150.00/ EUR 150.00** Print: 978-3-0364-0390-8
eBook Single-User: **US\$ 150.00/ EUR 150.00** eBook: 978-3-0364-1390-7
eBook Multi-User: **US\$ 263.00/ EUR 263.00** 180 pages, 2024

<https://www.scientific.net/978-3-0364-0390-8/book>



The 9th International Conference on Composite Materials and Material Engineering & The 14th International Conference on Advanced Materials Research

Volume in the series: 148

Aggregated Book

Edited by: Prof. Xiao Hong Zhu, Prof. Jong Hak Kim, Prof. Serge Zhuiykov and Prof. Alfred A. Christy

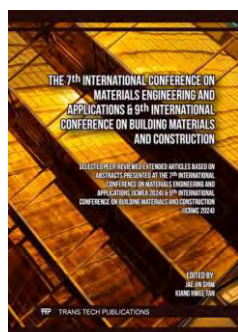
This book contains articles comprising the research results presented at the 9th International Conference on Composite Materials and Material Engineering (ICCMME 2024) and the 14th International Conference on Advanced Materials Research (ICAMR 2024) held in January 2024 in Singapore and Phuket, Thailand, respectively. The collected research results will be helpful to many specialists in materials science, mechanical engineering and construction.

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

Keywords: Additive Manufacturing, Alloys, Antibacterial Properties, Cathodes, Composite Materials, Concrete, Corrosion, Energy Conversion, Energy Storage Devices, Epoxy Resin, Fatigue Strength, Food Packaging, Functional Materials, Gas Desulfurization, Green Building Materials, Heat Transfer, Impact Toughness, Lithium-Ion Batteries, Microstructure, Modeling, Nanoparticles, Natural Fibers, Numerical Investigations, Polymers, Shot Peening, Steel, Thermal Resistance, Waste, Wastewater Treatment

Prices: Print: **US\$ 165.00/ EUR 165.00** Print: 978-3-0364-0477-6
eBook Single-User: **US\$ 165.00/ EUR 165.00** eBook: 978-3-0364-1477-5
eBook Multi-User: **US\$ 289.00/ EUR 289.00** 204 pages, 2024

<https://www.scientific.net/978-3-0364-0477-6/book>



The 7th International Conference on Materials Engineering and Applications & 9th International Conference on Building Materials and Construction

Volume in the series: 147

Aggregated Book

Edited by: Jae Jin Shim and Prof. Kiang Hwee Tan

This edition includes articles presented at the 7th International Conference on Materials Engineering and Applications (ICMEA 2024) and the 9th International Conference on Building Materials and Construction (ICBMC 2024) held on 19-21 January and 26-29 February 2024. The collected research results will be helpful to many civil engineers.

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

Keywords: Building Energy Saving, Cement Replacement, Composite, Concrete, Electromagnetic Shielding, Fly Ash, Green Building Materials, Green Concrete, Mechanical Properties, Mortar, Photothermal Coating, Polymer, Radiative Cooling Materials, Recycled Aggregate

Prices: Print: **US\$ 110.00/ EUR 110.00** Print: 978-3-0364-0456-1
eBook Single-User: **US\$ 110.00/ EUR 110.00** eBook: 978-3-0364-1456-0
eBook Multi-User: **US\$ 193.00/ EUR 193.00** 148 pages, 2024

<https://www.scientific.net/978-3-0364-0456-1/book>



20th International Conference on Silicon Carbide and Related Materials (ICSCRM 2023)

Volume in the series: 146

Aggregated Book

Edited by: Prof. Michele Riccio, Prof. Andrea Irace and Prof. Giovanni Breglio

The presented book includes articles on research results in the area of semiconductors based on silicon carbide, gallium nitride and related materials that are widely used today for the production of power solid-state electronic devices. The recent technologies of crystal growth and wafer production and processing techniques, properties of completed semiconductor solid-state structures and devices circuitry, including their applications in sensors, mechatronics, and quantum systems, are explored and analysed in this edition. The book will be valuable to engineers and researchers whose activity is related to the development and production of solid-state electronics. The collected here articles were presented at the 20th International Conference on Silicon Carbide and Related Materials (ICSCRM 2023, 17-22 September 2023, Sorrento, Italy).

Topics: Electronics, Materials Science, Nanoscience

Keywords: Annealing, Bulk Growth, Characterisation, Defects, Dislocation, Doping, Epilayer, Epitaxial Growth, Etching, Gallium Nitride, Power Electronics, Processing, Semiconductor Devices, Silicon Carbide, Silicon Carbide Polytypes, Silicon Oxide Interface, Substrate, Wafer, Wide Bandgap Semiconductor

Prices: Print: **US\$ 630.00/ EUR 630.00** Print: 978-3-0364-0203-1
eBook Single-User: **US\$ 0.00/ EUR 0.00** eBook: 978-3-0364-1203-0
eBook Multi-User: **US\$ 0.00/ EUR 0.00** 1110 pages, 2024

<https://www.scientific.net/978-3-0364-0203-1/book>



The 2nd International Conference on the Future Sustainable Energy

Volume in the series: 145

Aggregated Book

Edited by: Hasan Sh. Majdi, Azher M. Abed, Salwan Obaid Waheed Khafaji and Mustafa Baqir Hunain

The aim of the Second International Conference on the Future Sustainable Energy (February 20-22, 2024, Al-Mustaqbal University, Iraq) was to create a platform for discussing coherent and coordinated efficient ways of developing new and renewable energy resources, developing green materials and sustainable technologies in architecture and construction, implementing metallic materials to biomedical practice, designing tools and analysing materials processing technologies. The engineering research and design of machines and equipment and investigation of heat and mass transfer phenomena in engineering systems were also presented in this edition. This collection will be interesting to many specialists in materials science and mechanical engineering.

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

Keywords: Alloy, Architecture, Ceramics, Coating, Construction, Cutting Tool, Design, Electrophoretic Deposition, Fuel Cells, Green Concrete, Heat Transfer, Mass Transfer, Mechanical Engineering, Mechanical Properties, Powder Metallurgy, Renewable Energy, Solar Cells, Steel, Sustainable Development, Thermal Properties

Prices: Print: **US\$ 270.00/ EUR 270.00** Print: 978-3-0364-0408-0
eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0364-1408-9
eBook Multi-User: **US\$ 347.00/ EUR 347.00** 438 pages, 2024

<https://www.scientific.net/978-3-0364-0408-0/book>



12th International Conference on Nano and Materials Science & 8th International Conference on Manufacturing Technologies

Volume in the series: 144

Aggregated Book

Edited by: Prof. Ramesh K. Agarwal

The edition contains articles that were presented at the 12th International Conference on Nano and Materials Science (ICNMS 2024) and the 8th International Conference on Manufacturing Technologies (ICMT 2024) which successfully took place on January 12-15, 2024, in Bangkok, Thailand. Collected scientific findings and engineering solutions will be interesting to specialists in materials science and machinery.

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

Keywords: Alloy, Composite, Computational Materials Science, Corrosion, Friction Stir Welding, Green Building Materials, Mechanical Properties, Nanocomposite, Optoelectronics, Photovoltaics, Polymer, Thermal Engineering, Tribological Properties, Wastewater Treatment

Prices: Print: **US\$ 120.00/ EUR 120.00** Print: 978-3-0364-0455-4
eBook Single-User: **US\$ 120.00/ EUR 120.00** eBook: 978-3-0364-1455-3
eBook Multi-User: **US\$ 210.00/ EUR 210.00** 158 pages, 2024

<https://www.scientific.net/978-3-0364-0455-4/book>



The 2nd Eco-Materials Conference in Africa (CEMA)

Volume in the series: 143

Aggregated Book

Edited by: Prof. Abdellatif Imad, Vincent Sambou, Salam Sawadogo and Bruno Castanie

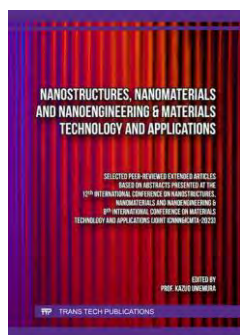
The edition contains articles that were presented at the 2nd Eco-Materials Conference in Africa (CEMA'2022) organized by the African Eco-Materials Society (ECOMAT-AFRICA) from June 15 to 17, 2022, in Saly, Senegal. The presented research results are linked to problems of ecology safety, waste utilisation, applications of natural materials and biowaste for building materials and biogas production, analysis of wood materials applications in construction, etc. This edition will be useful to many specialists whose activity relates to materials science, environmental engineering, construction and biomass processing.

Topics: Building Materials, Materials Science

Keywords: Biochar, Biogas, Biomass, Building Materials, Cement, Construction, Heavy Metal Pollution, Natural Fibers, Natural Materials, Rice Husk, Soil, Stabilised Earth Bricks, Waste, Wastewater Treatment, Water Pollutant, Wood

Prices: Print: **US\$ 115.00/ EUR 115.00** Print: 978-3-0357-1780-8
 eBook Single-User: **US\$ 115.00/ EUR 115.00** eBook: 978-3-0357-2489-9
 eBook Multi-User: **US\$ 201.00/ EUR 201.00** 138 pages, 2024

<https://www.scientific.net/978-3-0357-1780-8/book>



Nanostructures, Nanomaterials and Nanoengineering & Materials Technology and Applications

Volume in the series: 142

Aggregated Book

Edited by: Prof. Kazuo Umemura

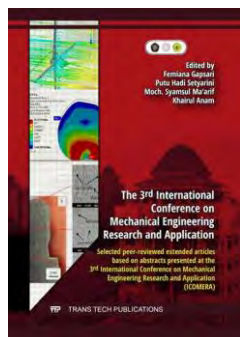
The 2023 12th International Conference on Nanostructures, Nanomaterials and Nanoengineering and the 2023 8th International Conference on Materials Technology and Applications were jointly held in Fukuoka, Japan, from October 27th to October 29th, 2023. These conferences were platforms for the wide exchanges of views on actual issues in modern materials science and development technologies of materials synthesis and processing.

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

Keywords: Acidic Catalyst, Additive Manufacturing, Alloy, Antibacterial Properties, Biomedical Materials, Chemical Technology, Coating, Composite, Forming, Graphene, Hydrogel, Matrix Composite, Mechanical Properties, Nanocomposite, Nanofluid, Nanomaterials, Polymer, Steel, Thermal Properties, Thin Films

Prices: Print: **US\$ 170.00/ EUR 170.00** Print: 978-3-0364-0423-3
 eBook Single-User: **US\$ 170.00/ EUR 170.00** eBook: 978-3-0364-1423-2
 eBook Multi-User: **US\$ 298.00/ EUR 298.00** 250 pages, 2024

<https://www.scientific.net/978-3-0364-0423-3/book>



The 3rd International Conference on Mechanical Engineering Research and Application

Volume in the series: 141

Aggregated Book

Edited by: Femiana Gapsari, Putu Hadi Setyarini, Moch. Syamsul Ma'arif and Khairul Anam

The iCOMERA conference series is a global event focused on advanced research in mechanical engineering that has provided a glimpse into the future by bringing together some of the world's brightest minds. The iCOMERA 2023 was organised and hosted by the Department of Mechanical Engineering of Brawijaya University, Indonesia, Malang, on October 19-21, 2023. The results of research and innovative engineering and industrial solutions were presented at this event.

Topics: Materials Science, Mechanical Engineering, Mechanics, Nanoscience

Keywords: Activated Carbon, Alloy, Applied Mechanics, Bioadsorbent, Carbon Electrode, Casting, Casting Defects, Coating Composite, Corrosion, Corrosion Inhibitor, Direct Current Sputtering, Esterification, Fracture Mechanics, Friction Welding, Hardness, Hydrogen Evolution Reaction, Machine Design, Mechanical Properties, Metal, Nickel Ferrite, Polymer, Reinforcement, Turbine

Prices: Print: **US\$ 210.00/ EUR 210.00** Print: 978-3-0364-0347-2
 eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0364-1347-1
 eBook Multi-User: **US\$ 347.00/ EUR 347.00** 260 pages, 2024

<https://www.scientific.net/978-3-0364-0347-2/book>



The 3rd International Conference on Advances in Materials Science (ICAMS)

Volume in the series: 140

Aggregated Book

Edited by: Dr. Sandip A. Kale and Prof. Sunday Olayinka Oyedepo

This book presents the selected papers from the Third International Conference on Advances in Materials Science (ICAMS 2023) held on 09-10 May 2023, in Ahmednagar, India. The articles included in this edition describe advanced research on mechanical properties and some technologies of processing, corrosion behaviour and corrosion protection of metal materials; materials properties and technologies for sensor engineering; polymer and composite materials, including bio- and nanocomposites. This edition will be helpful to specialists in materials engineering.

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

Keywords: Alloy, Biocomposite, Composite, Corrosion, Corrosion Inhibitor, Corrosion Protection, Mechanical Properties, Nanocomposite, Polymer, Sensor, Steel, Thin Film, Tribology

Prices: Print: **US\$ 145.00/ EUR 145.00** Print: 978-3-0364-0115-7
eBook Single-User: **US\$ 145.00/ EUR 145.00** eBook: 978-3-0364-1115-6
eBook Multi-User: **US\$ 254.00/ EUR 254.00** 172 pages, 2024

<https://www.scientific.net/978-3-0364-0115-7/book>



The 5th International Conference on Materials and Metallurgical Engineering and Technology (ICOMMET)

Volume in the series: 139

Aggregated Book

Edited by: Dr. Azzah Dyah Pramata, Dr. Sutarsis Sutarsis and Dr. Lukman Noerochim

This book features the peer-reviewed selected papers from the 5th International Conference on Materials and Metallurgical Engineering and Technology (ICOMMET). This fifth edition of the conference aimed to analyse the role of innovative materials and technologies in the digital transformation era to reach sustainable development.

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

Keywords: Additive Manufacturing, Alloy, Bioceramics, Biofuel, Biomaterials, Carbon Capture, Casting, Ceramics, Coating Composite, Corrosion Protection, Dye Degradation, Electrode Materials, Electrolytes, Food Chemistry, Hydrogen Production, Metal Injection Moulding, Nanomaterials, Polymer, Solar Cell, Steel, Supercapacitor, Surface Treatment

Prices: Print: **US\$ 320.00/ EUR 320.00** Print: 978-3-0364-0117-1
eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0364-1117-0
eBook Multi-User: **US\$ 347.00/ EUR 347.00** 494 pages, 2024

<https://www.scientific.net/978-3-0364-0117-1/book>



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

Volume in the series: 138

Aggregated Book

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

This book contains research papers that were presented at the 7th International Conference on Recent Advances in Materials, Minerals and Environment (RAMM 2022). This meeting was the 7th in the series of RAMM Conferences organised by the School of Materials and Mineral Resources Engineering (SMMRE), Universiti Sains Malaysia (USM). The conference was attended by local and international academics, postgraduate students, scientists, researchers, engineers, managers, product developers, and business leaders. It was a perfect platform to share, discuss and exchange ideas on the latest developments and recent findings in research studies related to advanced materials and processing technologies, minerals resources, and environmental safety.

Topics: Bioscience and Medicine, Building Materials, Electronics, Environmental Engineering, Manufacturing, Materials Science, Nanoscience

Keywords: 3D Printing, Additive Manufacturing, Alloys, Aluminium, Biomedical Materials, Cement, Composites, Concrete, Energy Storage, Green Building Materials, Nanomaterials, Nanowires, Natural Resource Management, Polymer Materials, Production Processes, Renewable Resources, Sensors, Solar Energy, Waste Treatment

Prices: Print: **US\$ 310.00/ EUR 310.00** Print: 978-3-0364-0105-8
eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0364-1105-7
eBook Multi-User: **US\$ 347.00/ EUR 347.00** 452 pages, 2024

<https://www.scientific.net/978-3-0364-0105-8/book>



2nd International Conference on Sustainable Design, Manufacturing and Materials Engineering

Volume in the series: 137

Aggregated Book

Edited by: Dr. M. Nallusamy

This edition is compiled from articles presented at the 2nd International Conference on Sustainable Design, Manufacturing and Materials Engineering (ISDMME, 5-6 April 2023, Coimbatore, India) and will be useful to a wide range of specialists in industry and construction.

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

Keywords: Activated Carbon, Additive Manufacturing, Adsorption, Aggregate, Alloy, Anaerobic Digestion, Automation, Cement, Composite, Concrete, Friction Stir Welding, Industrial Engineering, Machine Design, Mechanical Properties, Mechatronics, Polymer, Sintering, Steel, Structural Engineering, Water Quality

Prices: Print: **US\$ 220.00/ EUR 220.00** Print: 978-3-0364-0262-8
eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0364-1262-7
eBook Multi-User: **US\$ 347.00/ EUR 347.00** 310 pages, 2024

<https://www.scientific.net/978-3-0364-0262-8/book>



The 18th International Conference on Quality in Research

Volume in the series: 136

Aggregated Book

Edited by: Dr. Sheila Tobing and Dr. Mohammad Akita Indianto

These selected high-quality articles were presented at the 8th International Conference on Quality in Research (QiR 2023, October 23-25, 2023), hosted by the Faculty of Engineering at Universitas Indonesia and were comprised in the current book. This compilation showcases the latest research and achievements in materials and industrial development. Encompassing diverse topics, the book delves into advanced material synthesis, characterization techniques, and innovative technological processes. It will be a valuable resource for academics, scientists, and industry professionals, offering insights into the forefront of these pivotal disciplines.

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

Keywords: Alloy, Composite, Construction, Corrosion, Engineering Management, Mechanical Properties, Minerals Extraction, Nanomaterials, Polymer, Steel

Prices: Print: **US\$ 145.00/ EUR 145.00** Print: 978-3-0364-0314-4
eBook Single-User: **US\$ 145.00/ EUR 145.00** eBook: 978-3-0364-1314-3
eBook Multi-User: **US\$ 254.00/ EUR 254.00** 174 pages, 2024

<https://www.scientific.net/978-3-0364-0314-4/book>



The 6th International Conference on Science and Engineering

Volume in the series: 135

Aggregated Book

Edited by: Dr. Shofwatul Uyun, Dr. Khusna Dwijayanti, Prof. Hsiang-Lin Liu, Dr. Noor Baity Saidy, Dr. Muhammad Syafiq, Dr. Denni Kurniawan, Agessty Ika Nurlita, Andi Andi, Deddy Rahmadi, Dien F. Awaliyah, Dwi Otik Kurniawati, Gita Miranda Warsito, Mandahadi Kusuma, Priyagung Dhemi Widiakongko and Siti Fatimah

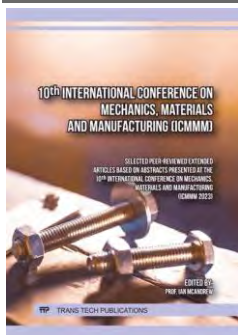
The International Conference on Science and Engineering 2023 (ICSE2023, 7-9 August 2023) was organised by the Faculty of Science and Technology, UIN Sunan Kalijaga Yogyakarta, and was focused on "Current Trends on Science and Engineering for Sustainable Society" as the theme. The conference aimed to explore the latest research and trends in science and engineering, with a strong emphasis on creating a sustainable environment by responsibly using resources and ensuring social and economic equity for future generations.

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

Keywords: Additive Manufacturing, Agriculture, Biocomposite, Biofuel, Biomass, Biomedical Engineering, Biopolymer, Data Processing, Food Production, Glass, Image Processing, Industrial Engineering, Information Technology, Mechanical Properties, Operational Research, Plasma Arc Machining, Steel

Prices: Print: **US\$ 290.00/ EUR 290.00** Print: 978-3-0364-0263-5
eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0364-1263-4
eBook Multi-User: **US\$ 347.00/ EUR 347.00** 454 pages, 2024

<https://www.scientific.net/978-3-0364-0263-5/book>



10th International Conference on Mechanics, Materials and Manufacturing (ICMMM)

Volume in the series: 134

Aggregated Book

Edited by: Prof. Ian McAndrew

The 10th International Conference on Mechanics, Materials and Manufacturing (ICMMM 2023) was held in Washington, D. C., USA, August 18-20, 2023. The conference provided a platform for engineers and scientists to present research results in applied materials, materials processing technologies, machinery, production engineering and management.

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

Keywords: Alloy, Coating, Composite, Computational Mechanics, Electrochemical Plating, Green Building Materials, Heat Treatment, Lean Manufacturing, Mechanical Properties, Mechatronics, Production Management, Rolling, Vickers Hardness

Prices: Print: **US\$ 110.00/ EUR 110.00** Print: 978-3-0364-0043-3
eBook Single-User: **US\$ 110.00/ EUR 110.00** eBook: 978-3-0364-1043-2
eBook Multi-User: **US\$ 193.00/ EUR 193.00** 132 pages, 2024

<https://www.scientific.net/978-3-0364-0043-3/book>



International Conference on Advanced Materials, Modern Manufacturing and Computerized Automation (IAMMCA)

Volume in the series: 133

Aggregated Book

Edited by: Dr. Shanmugam Thillikani

This edition includes articles presented at the International Conference on Advanced Materials, Modern Manufacturing and Computerized Automation (IAMMCA2023, 23-24 June 2023, Tirunelveli, India). The collection will be useful to engineers and researchers in mechanical engineering, applied materials and chemical production.

Topics: Manufacturing, Materials Science, Mechanical Engineering, Nanoscience

Keywords: Additive Manufacturing, Alloy, Carbon Nanotube, Composite, Dissimilar Joining, Forging, Friction Stir Welding, Functional Materials, Mechanical Properties, Milling, Polymer, Steel

Prices: Print: **US\$ 110.00/ EUR 110.00** Print: 978-3-0364-0346-5
eBook Single-User: **US\$ 110.00/ EUR 110.00** eBook: 978-3-0364-1346-4
eBook Multi-User: **US\$ 193.00/ EUR 193.00** 138 pages, 2024

<https://www.scientific.net/978-3-0364-0346-5/book>



The 5th International Conference on Science and Technology Applications

Volume in the series: 132

Aggregated Book

Edited by: Bornok Sinaga, Dr. Deny Setiawan and Dr. Juniastel Rajagukguk

In the presented edition based on results of the 5th International Conference on Science and Technology Applications (ICoSTA-2023), the reader can find the latest research results in the field of application of materials and modern technologies. Synthesis techniques, properties, and structural analysis of various types of materials, such as nanocomposites, optical materials, structural materials, etc., are analysed in this collection of articles. Technologies of waste treatment, biomass processing and computational research in geology and geophysics are also presented in this edition. This book will be helpful to a wide range of specialists in the fields of materials sciences, environmental engineering, and geophysics.

Topics: Building Materials, Information Technologies, Materials Science, Mechanics, Nanoscience

Keywords: Biomass Processing, Bioplastic, Catalysts, Computational Research, Concrete, Conductive Materials, Data Processing, Electrodes, Fuel, Functional Materials, Geology, Geophysics, Glasses, Nanomaterials, Pyrolysis, Stainless Steel, Structural Materials, Supercapbatteries, Waste Treatment, Welding

Prices: Print: **US\$ 135.00/ EUR 135.00** Print: 978-3-0364-0383-0
eBook Single-User: **US\$ 135.00/ EUR 135.00** eBook: 978-3-0364-1383-9
eBook Multi-User: **US\$ 236.00/ EUR 236.00** 170 pages, 2024

<https://www.scientific.net/978-3-0364-0383-0/book>



8th International Conference on Material Engineering and Application (ICMEA)

Volume in the series: 131

Aggregated Book

Edited by: Prof. Mosbeh Kaloop

This publication contains articles that were presented at the 8th International Conference on Material Engineering and Application (ICMEA), held on August 18-20, 2023 in Incheon, South Korea. Published articles cover research results in the area of materials science and materials processing technologies in the various branches of the modern industry. We believe this edition will be interesting and useful to many engineers, academics as well as students.

Topics: Civil Engineering, Manufacturing, Materials Science, Mechanical Engineering, Mechanics, Nanoscience

Keywords: Architecture, Biosensors, Chemical Engineering, Civil Engineering, Electrochemistry, Food Engineering, Functional Materials, Heat Pump, Production, Renewable Energy, Solar Dryer

Prices: Print: **US\$ 75.00/ EUR 75.00** Print: 978-3-0364-0303-8
 eBook Single-User: **US\$ 75.00/ EUR 75.00** eBook: 978-3-0364-1303-7
 eBook Multi-User: **US\$ 131.00/ EUR 131.00** 60 pages, 2024

<https://www.scientific.net/978-3-0364-0303-8/book>



2nd International Scientific-Practical Conference Machine Building and Energy: New Concepts and Technologies (MBENCT)

Volume in the series: 130

Aggregated Book

Edited by: Prof. Subhan Namazov, Prof. Nizami Yusubov and Prof. Sylvio Simon

This edition includes selected articles presented at the 2nd International Scientific-Practical Conference "Machine Building and Energy: New Concepts and Technologies" (MBENCT 2023, December 4-5, 2023, AzTU, Baku, Azerbaijan). The purpose of the Conference was to formulate new challenges that create a scientific and technological basis that determines the increase in environmental safety and the economic efficiency of the infrastructure in connection with the development of production and energy fields. The publication will be useful to specialists in machine-building, energy and modern communication and information technologies.

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

Keywords: Additive Manufacturing, Alloys, Applied Mechanics, Automation, Communication, Composite, Control, Crack, Defect, Electric Network, Electronics, Energy Efficiency, Energy Production, Engine, Environmental Protection, Equipment, Fault, Functional Materials, Heat Transfer, Heavy Metals, Hot Stamping, Information Security, Information Technology, Machines, Materials Processing, Mechatronics, Metrology, Nanoparticles, Polymer, Production Engineering, Pyrolysis, Renewable Energy, Steel, Thin Films, Tools, Traffic Safety, Transportation, Waste Treatment, Wastewater

Prices: Print: **US\$ 310.00/ EUR 310.00** Print: 978-3-0364-0317-5
 eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0364-1317-4
 eBook Multi-User: **US\$ 347.00/ EUR 347.00** 594 pages, 2024

<https://www.scientific.net/978-3-0364-0317-5/book>



12th International Conference on Material Science and Engineering Technology

Volume in the series: 129

Aggregated Book

Edited by: Prof. Ramesh K. Agarwal

This edition contains papers presented at 2023 the 12th International Conference on Material Science and Engineering Technology (ICMSET 2023, Fukuoka, Japan) held in a hybrid format on November 24-26, 2023. We hope these research results will be useful to many engineers and researchers in their practical activities.

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

Keywords: 3D Printing, Biomaterials, Composite, Green Building Materials, High Entropy Alloy, Hydroxyapatite, Mechanical Properties, Mesoporous Silica, Nanomaterials, Polymer, Shape Memory Alloy, Transition-Metal Dichalcogenides

Prices: Print: **US\$ 105.00/ EUR 105.00** Print: 978-3-0357-1790-7
 eBook Single-User: **US\$ 105.00/ EUR 105.00** eBook: 978-3-0357-2501-8
 eBook Multi-User: **US\$ 184.00/ EUR 184.00** 138 pages, 2024

<https://www.scientific.net/978-3-0357-1790-7/book>



International Conference on Industrial Sciences, Engineering and Technology toward Digital Era (eICISSET)

Volume in the series: 128

Aggregated Book

Edited by: Dr. Agus Geter Edy Sutjipto

This edition collects the selected peer-reviewed full-text papers from the International Conference on Industrial Sciences, Engineering and Technology toward Digital Era 2023 (eICISSET 2023) held at Universitas Indo Global Mandiri, Palembang, Indonesia, on 08-09 August 2023. The eICISSET 2023 was a conference event attended by postgraduate students and researchers from four countries to share their research activities and exchange new knowledge based on current applied developments and achievements in engineering sciences.

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

Keywords: Biocomposites, Biodiversity, Biotechnology, Ceramics, Conflict Management, Corrosion Protection, Cracking Protection, Deep Learning, Electronics, Machine Learning, Mechatronics, Nanocrystalline Materials, Natural Language Processing, Neural Networks, Risk Assessment, Robotics, Thin Films

Prices: Print: **US\$ 125.00/ EUR 125.00** Print: 978-3-0364-0261-1
 eBook Single-User: **US\$ 125.00/ EUR 125.00** eBook: 978-3-0364-1261-0
 eBook Multi-User: **US\$ 219.00/ EUR 219.00** 154 pages, 2024

<https://www.scientific.net/978-3-0364-0261-1/book>



5th International Conference on Nanomaterials, Materials and Manufacturing Engineering & 7th International Conference on Sensors, Materials and Manufacturing

Volume in the series: 127

Aggregated Book

Edited by: Prof. Dao Hua Zhang and Prof. Parames Chutima

This book offers to the readers' attention the research results presented at the 5th International Conference on Nanomaterials, Materials and Manufacturing Engineering (ICNMM 2023) and 7th International Conference on Sensors, Materials and Manufacturing (ICSMM 2023) that were successfully held in Tokyo, Japan (October 16-18, 2023), and Chiang Mai, Thailand (November 22-24, 2023), respectively. The events brought together researchers from Asian Pacific nations, North America and Europe to exchange their research results and address open issues in nanomaterials, sensors, carbon materials, biomaterials, manufacturing engineering and many other fields.

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

Keywords: Additive Manufacturing, Alloy, Biocomposite, Biomaterials, Composite, Friction Welding, Hydroxyapatite, Magnetic Properties, Mechanical Properties, Membrane, Nanocomposite, Nanomaterials, Pharmacology, Polymer, Steel, Wastewater Treatment, Water Purification

Prices: Print: **US\$ 150.00/ EUR 150.00** Print: 978-3-0364-0474-5
 eBook Single-User: **US\$ 150.00/ EUR 150.00** eBook: 978-3-0364-1474-4
 eBook Multi-User: **US\$ 263.00/ EUR 263.00** 184 pages, 2024

<https://www.scientific.net/978-3-0364-0474-5/book>



7th International Conference on Nanomaterials and Biomaterials & 5th Asia Conference on Material and Manufacturing Technology

Volume in the series: 126

Aggregated Book

Edited by: Prof. Steven Y. Liang

This edition represents a selection of the contributions from the 2023 7th International Conference on Nanomaterials and Biomaterials and the 2023 5th Asia Conference on Material and Manufacturing Technology held in Chiang Mai, Thailand, during November 22-24, 2023, in the hybrid form.

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

Keywords: Alloy, Artificial Saliva, Biomedical Materials, Building Materials, Composite, Drug Delivery, Electrospun Membrane, Extrusion, Forming, Geopolymer, Green Synthesis, Hot Forging, Laser Quenching, Magnetic Hyperthermia, Mechanical Properties, Mechatronics, Mortar, Nanocomposites, Nanomaterials, Nanoparticles, Optical Properties, Photocatalytic Activity, Polymer, Steel, Thermodynamic Properties, Welding

Prices: Print: **US\$ 210.00/ EUR 210.00** Print: 978-3-0364-0258-1
 eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0364-1258-0
 eBook Multi-User: **US\$ 347.00/ EUR 347.00** 262 pages, 2024

<https://www.scientific.net/978-3-0364-0258-1/book>



5th International Conference on Advances in Materials, Mechanical and Manufacturing & 12th International Conference on Engineering and Innovative Materials

Volume in the series: 125

Aggregated Book

Edited by: Prof. Hisaki Watari, Prof. Sergei Alexandrov and Prof. Muhammad Yahaya

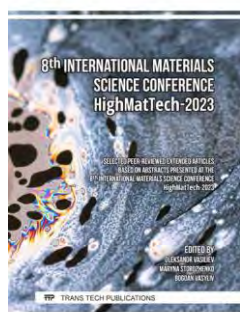
This edition comprises articles presented at the 5th International Conference on Advances in Materials, Mechanical and Manufacturing (AMMM 2023) and the 12th International Conference on Engineering and Innovative Materials (ICEIM 2023). These conferences were held on September 1-3, 2023, in Osaka, Japan. The included articles represent the latest research results in materials science and materials processing technologies used in various industrial branches, including construction and electrical engineering.

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

Keywords: 3D Concrete Printing Technology, Alloy, Biomechanics, Composite, Concrete, Electrical Materials, Mechanical Properties, Metalworking, Nanomaterials, Phase Change Material, Polymer, Shape Memory Material, Structural Mechanics, Superalloy

Prices: Print: **US\$ 120.00/ EUR 120.00** Print: 978-3-0364-0248-2
eBook Single-User: **US\$ 120.00/ EUR 120.00** eBook: 978-3-0364-1248-1
eBook Multi-User: **US\$ 210.00/ EUR 210.00** 146 pages, 2024

<https://www.scientific.net/978-3-0364-0248-2/book>



8th International Materials Science Conference HighMatTech-2023

Volume in the series: 124

Aggregated Book

Edited by: Dr. Oleksandr Vasiliev, Maryna Storozhenko and Dr. Bogdan Vasylyv

This book comprises the selected peer-reviewed papers presented at the 8th International Materials Science Conference HighMatTech-2023, Kyiv, Ukraine, held on October 2-6, 2023. This edition is dedicated to the latest research in the development and application of metals and alloys, ceramics and composite materials, low-dimensional and nanomaterials, films, and coatings. This collection will be useful to researchers and engineers in materials science.

Topics: Materials Science, Nanoscience

Keywords: Amorphous Alloy, Ceramics, Composite, Corrosion, Crystallization, Forming, High-Entropy Alloy, Microstructure, Nanocomposite, Nanomaterials, Protective Coating, Steel, Structural Metal, Welding

Prices: Print: **US\$ 230.00/ EUR 230.00** Print: 978-3-0364-0290-1
eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0364-1290-0
eBook Multi-User: **US\$ 347.00/ EUR 347.00** 278 pages, 2024

<https://www.scientific.net/978-3-0364-0290-1/book>



The 2023 9th International Conference on Advanced Engineering and Technology

Volume in the series: 123

Aggregated Book

Edited by: Prof. Jong Wan Hu and Prof. Mosbeh Kaloop

This edition contains articles that were presented at an annual 9th International Conference on Advanced Engineering and Technology (ICAET 2023) held in Incheon, South Korea, on May 19-21, 2023. Published articles cover research results in materials science and materials processing and synthesis, designing and researching functional possibilities of machines, machine parts and equipment, and analysing and designing an optimisation production system based on Industry 4.0. We hope that this edition will be interesting and useful to many engineers, academics and also students.

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

Keywords: Additive Manufacturing, Construction, Food Production, Machine Design, Mechatronics, Production System, Synthesis

Prices: Print: **US\$ 100.00/ EUR 100.00** Print: 978-3-0364-0233-8
eBook Single-User: **US\$ 100.00/ EUR 100.00** eBook: 978-3-0364-1233-7
eBook Multi-User: **US\$ 175.00/ EUR 175.00** 108 pages, 2024

<https://www.scientific.net/978-3-0364-0233-8/book>



29th Concrete Days 2023

Volume in the series: 122

Aggregated Book

Edited by: Dr. Šárka Nenadálová, Petra Johová and Kateřina Hamplová

The 29th International Conference Concrete Days 2023 was organised by the Czech Concrete Society and was successfully held in Hradec Kralove on November 7-8, 2023. The published papers from the Conference presented in this edition showcase recent research results in the area of modern concretes and concrete structures, discuss the modelling and design of concrete structures, bridges, tunnels, and buildings, properties of concretes as well as significant structural projects and their realisations.

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

Keywords: Bridge Engineering, Bridge Monitoring, Cement, Column, Composite, Concrete, Durability, Fiber, Flat Slab, Fly Ash, Mechanical Properties, Post-Tensioned Structures, Precast Segment, Prestressing Analysis, Reinforcement, Steel, Structural Mechanics

Prices: Print: **US\$ 230.00/ EUR 230.00** Print: 978-3-0364-0313-7
 eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0364-1313-6
 eBook Multi-User: **US\$ 347.00/ EUR 347.00** 266 pages, 2024

<https://www.scientific.net/978-3-0364-0313-7/book>



International Conference on Sustainable Engineering and Materials Development

Volume in the series: 121

Aggregated Book

Edited by: Dr. Abiodun Ayodeji Abioye, Prof. Oluseyi O. Ajayi, Dr. Bukola Joseph Babalola, Prof. Olanrewaju Adesina and Dr. Olufemi Eyiotope Bamidele

The articles in this edition were presented at the 2023 International Conference on Sustainable Engineering and Materials Development (ICSEMD 2023) held in Canada on 28-30 May 2023. These articles have been carefully selected for their extensive coverage of recent advancements in advanced materials and sustainable materials processing technology, technical systems research and design, and industrial engineering practices. This edition will be useful to specialists involved in modern industrial production.

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

Keywords: Alloy, Biofuel, Composite, Corrosion, Corrosion Protection, Environmental Engineering, Green Building Materials, Industrial Engineering, Lean Manufacturing, Machine Design, Mechanical Properties, Nanofluid, Nanomaterials, Renewable Energy, Steel, Sustainability

Prices: Print: **US\$ 260.00/ EUR 260.00** Print: 978-3-0364-0153-9
 eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0364-1153-8
 eBook Multi-User: **US\$ 347.00/ EUR 347.00** 384 pages, 2024

<https://www.scientific.net/978-3-0364-0153-9/book>



22nd AUTEX World Textile Conference

Volume in the series: 120

Aggregated Book

Edited by: Prof. Li Jing Wang

This book is a collection of selected full text peer-reviewed papers abstracts of which were presented at the Autex 2023 conference held at RMIT University in Melbourne. The theme of the book is about Textiles Innovation and Future Fashion. The topics include Advanced Materials and Applications, Wearable Technologies and Digital Applications, Future Fashion, Textile Biomaterials and Engineering, and Textile Supply Chain, Circularity and Sustainability. The book covers the results of research work in textile and clothing science, technology and design.

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

Keywords: 3D Non-Crimp Fabric Manufacturing, Apparel Industry, Composite, Cotton, Dying, Fabric, Fashion, Fiber, Friction Spun Yarn, Functional Clothing, Knit Structure, Mechanical Properties, Mercerising, Polymer, Smart Textile, Textile Finishing, Training, Weave Fabric, Yarn

Prices: Print: **US\$ 210.00/ EUR 210.00** Print: 978-3-0364-0301-4
 eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0364-1301-3
 eBook Multi-User: **US\$ 347.00/ EUR 347.00** 322 pages, 2024

<https://www.scientific.net/978-3-0364-0301-4/book>



Symposium on Industrial Science and Technology

Volume in the series: 119

Aggregated Book

Edited by: Gaanty Pragas Maniam, Dr. Farah Hanani Zulkifli, Jose Rajan and Assoc. Prof. Dr. Ahmad Salihin Samsudin

This book presents the selected research papers which were presented at the 4th Symposium on Industrial Science and Technology (SISTEC2022) organised by the Faculty of Industrial Sciences and Technology, Universiti Malaysia Pahang Al-Sultan Abdullah, held from 23rd to 24th of November, 2022. The published articles cover a diverse range of research topics in bio-based polymers and composites, advanced functional materials, biotechnology, green chemistry, renewable energy and biomedicine. This collection of research papers should indeed be valuable to researchers in materials sciences and chemical technologies.

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

Keywords: Biocomposite, Biodiesel, Biopolymer, Biotechnology, Food Production, Functional Materials, Graphene, Green Chemistry, Heavy Metals, Kaolin, Nanomedicine, Nanoparticles, Phytomedicine, Pollutants Removal, Wood Waste Blending

Prices: Print: **US\$ 175.00/ EUR 175.00** Print: 978-3-0364-0054-9
 eBook Single-User: **US\$ 175.00/ EUR 175.00** eBook: 978-3-0364-1054-8
 eBook Multi-User: **US\$ 306.00/ EUR 306.00** 230 pages, 2024

<https://www.scientific.net/978-3-0364-0054-9/book>



2022 International Conference on Machining, Materials and Mechanical Technologies

Volume in the series: 118

Aggregated Book

Edited by: Keiji Yamada, Prof. Yi Cheng Chen and Prof. Li-Gang Lin

This edition contains articles that were presented at the 4th International Conference on Machining, Materials and Mechanical Technologies (IC3MT 2022, Taipei, Taiwan, 11-14 November 2022) which address the latest developments in materials science, nanomaterials and nanotechnologies, coatings and surface treatment procedures, as well as metal processing technologies and engineering solutions in the design of machines and mechatronics systems. The publication will be helpful to specialists in mechanical engineering.

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

Keywords: Burnishing, Coating, Composite, Cutting, Drilling, Electropolishing, Fatigue Analysis, Friction Welding, Hydrostatic Bearing, Machine, Machine Measurement, Mechanical Properties, Mechatronics, Nanomaterials, Nanoprocessing, Single Point Incremental Sheet Forming, Steel, Surface Treatment, Tool

Prices: Print: **US\$ 145.00/ EUR 145.00** Print: 978-3-0364-0152-2
 eBook Single-User: **US\$ 145.00/ EUR 145.00** eBook: 978-3-0364-1152-1
 eBook Multi-User: **US\$ 254.00/ EUR 254.00** 194 pages, 2024

<https://www.scientific.net/978-3-0364-0152-2/book>



The 4th International Seminar on Fundamental and Application of Chemical Engineering

Volume in the series: 117

Aggregated Book

Edited by: Dr. Hikmatun Ni'mah, Prof. Jan Degreve, Prof. Manabu Shimada, Prof. Yi-Hsu Ju, Prof. Arshad Ahmad, Dr. Rendra Panca Anugraha, Dr. Fahmi Fahmi, Dr. Wahyu Meka, Dr. Mohammad Irwan Fatkhur Rozy, Annas Wiguno and Rizky Tetrisyanda

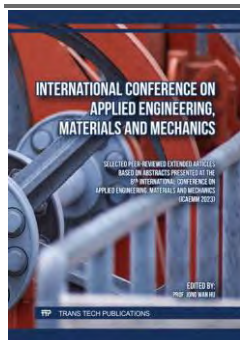
This edition comprises articles that were presented at the 4th International Seminar on Fundamental and Application of Chemical Engineering (ISFACHE 2022, Surabaya, Indonesia, October 26-27, 2022, Indonesia, online). Articles showcase the latest research findings in the field of chemical engineering, biotechnologies, bio-based materials and technologies of biofuel production, waste recycling, wastewater treatment and energy storage. The publication will be relevant to many specialists of various profiles.

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

Keywords: Biocomposites, Biofuel Production, Biomaterials, Biopolymers, Bioprocess Engineering, Biotechnology, Catalysis, Chemical Engineering, Energy Storage, Food Production, Functional Nanomaterials, Waste Recycling Wastewater Treatment

Prices: Print: **US\$ 225.00/ EUR 225.00** Print: 978-3-0364-0175-1
 eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0364-1175-0
 eBook Multi-User: **US\$ 347.00/ EUR 347.00** 402 pages, 2024

<https://www.scientific.net/978-3-0364-0175-1/book>



International Conference on Applied Engineering, Materials and Mechanics

Volume in the series: 116

Aggregated Book

Edited by: Prof. Jong Wan Hu

This edition contains articles that were presented at the 8th International Conference on Applied Engineering, Materials and Mechanics (8th ICAEMM 2023, Seoul, South Korea, on July 14-16, 2023) and represents the latest research results in materials science and materials processing technologies that used in many industrial branches, including construction and environmental engineering.

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

Keywords: Building Materials, Catalysts, Composites, Concrete, Environmental Protection, Functional Materials, Metal-Organic Frameworks, Nanomaterials, Sensors, Wastewater Treatment, Water Purification

Prices: Print: **US\$ 105.00/ EUR 105.00** Print: 978-3-0364-0291-8
 eBook Single-User: **US\$ 105.00/ EUR 105.00** eBook: 978-3-0364-1291-7
 eBook Multi-User: **US\$ 184.00/ EUR 184.00** 134 pages, 2024

<https://www.scientific.net/978-3-0364-0291-8/book>



International Conference on Advancements in Materials, Manufacturing & Automation

Volume in the series: 115

Aggregated Book

Edited by: Prof. V. Jayakumar, Prof. J. Paulo Davim and Dr. V. Dhinakaran

The presented edition contains articles presented at the First International Conference on Advancements in Materials, Manufacturing and Automation (AMMA-2023, 7-8 April 2023) organised by the Department of Mechanical Engineering, Amrita School of Engineering, Chennai, India. The book focuses on recent achievements in materials science, manufacturing technologies, and machinery. The edition will be helpful to engineers from the industrial sector and academic researchers.

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

Keywords: Additive Manufacturing, Alloy, Artificial Intelligence, Composite, Electro Discharge Machining, Emission Characteristic, Engine, Extruding, Friction Stir Welding, Heat Transfer, Laser Cladding, Machine Designing, Mass Transfer, Mechanical Properties, Mechatronics, Polymer, Solid Lubricant, Steel, Stir Casting, Tribology

Prices: Print: **US\$ 245.00/ EUR 245.00** Print: 978-3-0357-1602-3
 eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0357-2528-5
 eBook Multi-User: **US\$ 347.00/ EUR 347.00** 282 pages, 2024

<https://www.scientific.net/978-3-0357-1602-3/book>



Building Materials and Materials Engineering & Nanoscience and Technology

Volume in the series: 114

Aggregated Book

Edited by: Prof. Paulo Mendonca and Prof. Soon Hyung Hong

This compilation of papers encompasses the results of two conferences, namely, the 7th International Conference on Building Materials and Materials Engineering (ICBMM 2023) and the 6th International Conference on Nanoscience and Technology (ICNST 2023) which were successfully held in Porto, Portugal, and Tokyo, Japan, respectively. The edition will be helpful to specialists in materials science, electrochemistry, building materials and construction.

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

Keywords: Additive Manufacturing, Battery, Cement, Concrete, Electrode Materials, Geopolymer, Geotechnics, Green Building Materials, Mechanical Properties, Metal Creep, Mortar, Steel, Structural Elements, Supercapacitor, Surface Defect, Wood

Prices: Print: **US\$ 145.00/ EUR 145.00** Print: 978-3-0364-0257-4
 eBook Single-User: **US\$ 145.00/ EUR 145.00** eBook: 978-3-0364-1257-3
 eBook Multi-User: **US\$ 254.00/ EUR 254.00** 158 pages, 2024

<https://www.scientific.net/978-3-0364-0257-4/book>



The International Conference on Energy Storage Technology and Applications

Volume in the series: 113

Aggregated Book

Edited by: Dr. Anif Jamaluddin, Dr. Hendri Widiyandari and Dr. Agus Purwanto

The International Conference on Energy Storage Technology and Applications (ICESTA-2022) was organized by the Centre of Excellence for Electrical Energy Storage Technology, Universitas Sebelas Maret, Surakarta, Indonesia, and held on October 27, 2022. The conference focused on activities related to the development of advanced and state-of-the-art energy storage technologies to support electric vehicles and renewable energy. It caters as a strategic platform for researchers to gather and exchange ideas in realizing an innovation-driven approach to conducting applied research through collaboration with industry, research institutes, private organizations, and public organizations.

Topics: Electronics, Industrial Engineering, Manufacturing, Materials Science, Mechanical Engineering

Keywords: Battery, Electrochemistry, Energy Management System, Energy Storage Materials, Fuel Cell, Industrial Engineering, Photocatalysis, Solar Cell, Supercapacitor

Prices: Print: **US\$ 195.00/ EUR 195.00** Print: 978-3-0364-0179-9
 eBook Single-User: **US\$ 195.00/ EUR 195.00** eBook: 978-3-0364-1179-8
 eBook Multi-User: **US\$ 341.00/ EUR 341.00** 206 pages, 2024

<https://www.scientific.net/978-3-0364-0179-9/book>



8th International Conference on Civil Engineering and Materials Science & 9th International Conference on Architecture, Materials and Construction

Volume in the series: 112

Aggregated Book

Edited by: Nuno Dinis Costa Areias Cortiços and Prof. Zongjin Li

This book contains articles based on scientific and engineering research results in modern building materials, construction technologies and architecture that were presented at the 8th International Conference on Civil Engineering and Materials Science (ICCEMS 2023) and the 9th International Conference on Architecture, Materials and Construction (ICAMC 2023), co-held in Singapore, from June 14th to 16th, 2023. The edition will be helpful to a wide range of specialists in construction and architecture.

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

Keywords: Architectural Heritage, Cement, Concrete, Corrosion, Energy Efficiency, Geotechnics, Green Building Materials, Mechanical Properties, Protection, Spatial Planning, Structural Engineering, Structural Metals, Sustainable Architecture, Thermal Comfort, Tiles

Prices: Print: **US\$ 195.00/ EUR 195.00** Print: 978-3-0364-0356-4
 eBook Single-User: **US\$ 195.00/ EUR 195.00** eBook: 978-3-0364-1356-3
 eBook Multi-User: **US\$ 341.00/ EUR 341.00** 198 pages, 2024

<https://www.scientific.net/978-3-0364-0356-4/book>



The 11th Asia Conference on Mechanical and Materials Engineering

Volume in the series: 111

Aggregated Book

Edited by: Prof. Omar S. Es-Said

This book presents scientific and engineering research results in materials science, materials processing technologies, mechanical engineering and manufacturing that were presented at the 11th Asia Conference on Mechanical and Materials Engineering (Sapporo, Japan, June 8-11, 2023). The edition will be helpful to a wide range of specialists in modern production.

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

Keywords: Additive Manufacturing, Alloys, Bio-Based Materials, Defect Identification, Design of Machine Parts, Engineering Management, Fluid Dynamics, Functional Materials, Heat Transfer, Nanomaterials, Processing Technologies, Sensor Materials, Steel, Waste, Water Treatment, Wear of Materials, Welding

Prices: Print: **US\$ 285.00/ EUR 285.00** Print: 978-3-0364-0255-0
 eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0364-1255-9
 eBook Multi-User: **US\$ 347.00/ EUR 347.00** 382 pages, 2024

<https://www.scientific.net/978-3-0364-0255-0/book>



7th International Conference on Materials Sciences and Nanomaterials & 6th International Conference on Advanced Composite Materials

Volume in the series: 110

Aggregated Book

Edited by: Prof. Hideaki Tsukamoto and Prof. Yuyuan Zhao

We are pleased to present the selection of contributions from the 2023 7th International Conference on Materials Sciences and Nanomaterials (ICMSN 2023) which was held in Cambridge, United Kingdom, during July 11-13, 2023, and the 2023 6th International Conference on Advanced Composite Materials (ICACM 2023) which was held in Hosei University, Tokyo, Japan, during August 23-25, 2023. These contributions from the ICMSN 2023 and ICACM 2023 included submissions from universities, research institutes and industries. All of the papers were peer-reviewed by the conference committee members and international reviewers. They were selected based on their quality and relevance to the subjects of the conferences. The fields of this selection included structural materials, nanomaterials, electronic materials, material chemistry, polymers and composites, mechanics of composite materials, materials processing engineering, and so on.

Topics: Materials Science, Mechanics, Nanoscience

Keywords: Additive Manufacturing, Applied Mechanics, Ceramics, Composite, Forming, Graphene, Mechanical Properties, Metallization, Nanomaterials, Nanoparticles, Perovskite, Physicochemical Properties, Polymer, Steel, Structural Mechanics, Welding

Prices: Print: **US\$ 190.00/ EUR 190.00** Print: 978-3-0364-0256-7
 eBook Single-User: **US\$ 190.00/ EUR 190.00** eBook: 978-3-0364-1256-6
 eBook Multi-User: **US\$ 333.00/ EUR 333.00** 218 pages, 2024

<https://www.scientific.net/978-3-0364-0256-7/book>



The 4th Research, Invention, and Innovation Congress (RI2C 2023)

Volume in the series: 109

Aggregated Book

Edited by: Prof. Somrer Chandra-Ambhorn, Dr. Kampanart Theinnoi and Wanlop Kitisatarn

This book is a collection of the selected peer-reviewed papers presented at the 2023 4th Research, Invention, and Innovation Congress (RI2C), organized by the Science and Technology Research Institute (STRI), King Mongkut's University of Technology North Bangkok, during August 24-25, 2023. The RI2C 2023 was aimed at highlighting and sharing new knowledge as well as contributing to the Innovation for Better Life. The selected articles delve into various facets of materials science and technology and present the results of research dedicated to, amongst others, sustainable materials, materials for biomedical applications, functional materials, corrosion and oxidation processes as well as engineering and mechanics of materials. The insights presented in this edition promise to provide valuable knowledge and perspectives to professionals within these disciplines and will be helpful to engineers and researchers involved in materials, biomedical engineering, and eco-friendly building materials fields of science.

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

Keywords: Alloy, Biocomposite, Biomaterials, Biopolymer, Composite, Corrosion, Failure Criteria, Mechanical Properties, Mechanics of Materials, Nanomaterials, Oxidation, Polymer, Steel, Tool Wear

Prices: Print: **US\$ 145.00/ EUR 145.00** Print: 978-3-0364-0348-9
 eBook Single-User: **US\$ 145.00/ EUR 145.00** eBook: 978-3-0364-1348-8
 eBook Multi-User: **US\$ 254.00/ EUR 254.00** 166 pages, 2024

<https://www.scientific.net/978-3-0364-0348-9/book>



International Conference of Food Security, Livelihoods, and Technology

Volume in the series: 108

Aggregated Book

Edited by: Dr. Dwinanto Sukamto and Dr. Mekro Permana Pinem

This conference book contains the written versions of the selected peer-reviewed contributions presented during the International Conference of Food Security, Livelihoods, and Technology (ICFSL 2022), held by Universitas Sultan Ageng Tirtayasa on December 6, 2022. The Conference provided a forum for discussing recent developments in various engineering and live science topics, including food security, agriculture, food engineering, material science, and engineering. The Conference provided a good opportunity for participants to present and discuss topics in their respective research areas.

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

Keywords: Biocomposite, Biomaterials, Chemical Engineering, Functional Materials, Green Building Materials, Mechatronics, Natural Fiber, Production Processes, Steel Slag, Waste Treatment

Prices: Print: **US\$ 135.00/ EUR 135.00** Print: 978-3-0357-1846-1
 eBook Single-User: **US\$ 135.00/ EUR 135.00** eBook: 978-3-0357-3785-1
 eBook Multi-User: **US\$ 236.00/ EUR 236.00** 146 pages, 2024

<https://www.scientific.net/978-3-0357-1846-1/book>



5th International Conference on Materials Science and Manufacturing Technology

Volume in the series: 107

Aggregated Book

Edited by: Dr. Ramya Muthusamy and 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 Fifth International Conference on Materials Science and Manufacturing Technology 2023 (ICMSMT 2023, April 13-14, 2023, Coimbatore, Tamil Nadu, India).

Topics: Bioscience and Medicine, Building Materials, Civil Engineering, Information Technologies, Manufacturing, Materials Science, Mechanics, Nanoscience

Keywords: Alloys, Biomaterials, Ceramics, Civil Engineering, Coatings, Composites, Corrosion Protection, Cutting, Defects, Electrochemistry, Failures, Friction Stir Processing, Glasses, Green Building Materials, Liquid-Crystals, Manufacturing Engineering, Materials Processing, Mechanical Properties, Microstructure, Nanomaterials, Nanoparticles, Photoluminescence, Quantum Dots, Steel, Thin Films, Waste Treatment, Welding

Prices: Print: **US\$ 320.00/ EUR 320.00**
 eBook Single-User: **US\$ 198.00/ EUR 198.00**
 eBook Multi-User: **US\$ 347.00/ EUR 347.00**

Print: 978-3-0364-0193-5
 eBook: 978-3-0364-1193-4
 740 pages, 2024

<https://www.scientific.net/978-3-0364-0193-5/book>

Order Form

Fill in this form and send to your local book supplier or to Trans Tech Publications Ltd.

Trans Tech Publications Ltd

www.scientific.net

Seestrasse 24c

CH-8806 Baech

Switzerland

office@scientific.net

accounting@scientific.net

Title	Type (Print/eBook)	Price ¹
1.		
2.		
3.		
4.		
5.		
6.		

Total: US\$/EUR

First Name* _____
Last Name* _____
Street* _____
City* _____
Zip* _____
Country* _____
VAT (if available) _____
Tel. _____
Email* _____
Organisation _____
Signature: _____

I would like to receive:

- ☐ an invoice only (wire transfer)
- ☐ an invoice² with online payment link
- ☐ Please inform me about new publications in _____ (topic) through TTP's monthly email of new and forthcoming books

¹ Prices are exclusive of local tax or VAT

- ✓ SINGLE PRINT (1 COPY) AIRMAIL SHIPPING COSTS:
 - Europe - EUR 35 • ROW/USA - EUR 55
- ✓ May be changed without notice. For orders of multiple copies/titles lower airmail/shipping costs will apply
- ✓ US dollar prices are given for US or Canadian customers only

² 4% processing fee will be added to the invoiced amount (minimum €20)

Why is it so easy to publish with Scientific.Net ?

- **Usability.** You can obtain all the information from our website. It is structured and competently organized, providing a functional and informative view for the readers and easy online accessibility for the authors.
- **Up-to-date.** You will be timely and duly notified of how the process moves on and what your next step is.
- **Transparency.** Your paper will be a subject of our rigorous and unbiased peer-review.
- **Reputation.** Our content is highly internationally recognized.
- **Sweet bonus.** Special offers for all our contributors are available!

Whether you are a prominent beginning scientist endeavoring to publish your standalone paper or a scholar taking part in a Conference - join us!

Uniting our strengths, we can advance science and the world of innovations.