

*Enjoy the advantages of
eBooks on your devices*

 **Scientific.Net**
Publisher in Materials Science & Engineering

Scientific Books Collection 2023



/Scientific.Net.Ltd



/Scientific_Net



/scientificnet

Welcome

In 2022, TTP introduced a new book collection **“Scientific Books Collection” (SBC)**. Recently started, 34 titles have already been published by the 2022 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.

A selection of conferences and topics:

ICAMEM, ICBMC, ICMENS, ISAM, ICAMS, International World Energy Conference, AUTEX World Textile Conference, Sustainable Green Construction and Nano-Technology, Energy Storage Technology and Applications, Contribution of Metallography to Production Problem Solutions and many others.

These 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.

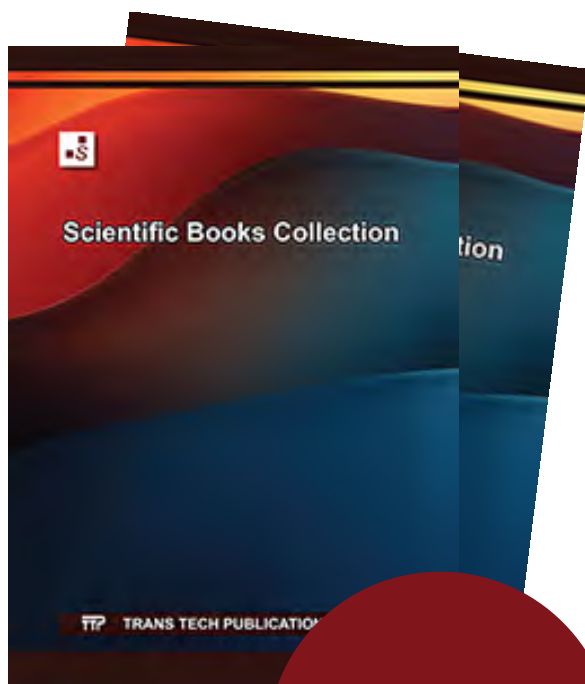
Founded in 1967 in Switzerland, Trans Tech Publications Ltd. keeps up to date with and endorses the latest trends in academic publishing. The editorial and publishing processes are supported by our own online management and publishing system integrated into the Scientific.Net website.

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 - 2022 selection



**34 Titles
(2022)**

Available as Book or eBook

■ Print	EUR 7'116
■ eBook, Single-User with username	EUR 6'159
■ eBook, Multi-User with IP Access	EUR 10'790
■ Print plus eBook, Single-User	EUR 9'293
■ Print plus eBook, Multi-User	EUR 14'325

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



Biorefinery Technologies and Products

Volume in the series: 34

Aggregated Book

Edited by: Dr. Kristine Meile, Dr. Ugis Cabulis and Dr. Mikelis Kirpluks

BTechPro2022 was organised by the Latvian State Institute of Wood Chemistry (LSIWC) and took place on April 27-29, 2022, in Riga, Latvia. The conference attracted young scientists from 9 countries and was devoted to Biorefinery Technologies and bio-based Products (BtechPro). According to the European Commission, Biorefinery can be broadly defined as the sustainable processing of biomass into a portfolio of marketable bio-based products, which could include the co-production of food and feed, materials and chemicals and bioenergy (power, heat/cold, fuels). Attention was paid not only to wood as raw material but also to a wide variety of biomass feedstock, pre-treatment and processing of them. Other topics covered at BTechPro2022: biomass-based materials; bioengineering technologies; synthesis of bio-based chemicals and polymers; characterisation of biorefinery products. The collected research articles cover current problems in biomass processing, starting from pre-treatment and bioengineering technologies to the synthesis and properties analysis of bio-based materials and chemicals. This edition will be of interest to scientists working on biorefinery topics.

Topics: Bioscience and Medicine, Materials Science

Keywords: Bio-Based Materials, Bioengineering Technologies, Biomass Extraction, Biomass Pre-Treatment, Biomass Processing, Biopharmacology, Biorefinery

Prices: Print: **US\$ 185.00/ EUR 185.00** Print: 978-3-0357-1873-7
eBook Single-User: **US\$ 185.00/ EUR 185.00** eBook: 978-3-0357-3799-8
eBook Multi-User: **US\$ 324.00/ EUR 324.00** 204 pages, 2022

<https://www.scientific.net/978-3-0357-1873-7/book>



Industry-Academia Initiatives in Biotechnology and Chemistry

Volume in the series: 33

Aggregated Book

Edited by: Dr. Mohd Fadhilzil Fasihi Mohd Aluwi, Assoc. Prof. Dr. Hazrulrizawati Abd Hamid, Dr. Pui Khoo Hong, Assoc. Prof. Dr. Nina Suhaity Azmi and Dr. Natanamurugaraj Govindan

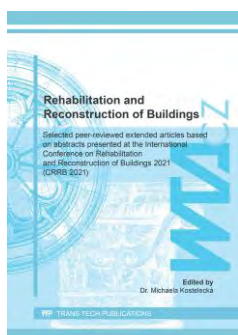
The iCIABC21 held on December 20-21, 2021, aimed to provide a platform for industry and academia to exchange information on the most recent findings and developments in the fields of science and technology. Knowledge and technological preparedness are critical for the long-term sustainability of the Fourth Industrial Revolution (Industry 4.0). The iCIABC brings together researchers, academicians and industry worldwide to exchange ideas, advance knowledge and discuss key issues for industrial material biotechnology and chemistry-related fields. This edition highlights particular areas of promising technological development and supports the unifying themes of the advancement of industry and society. It is devoted to analysing existing and creating new technologies in environmental protection, pharmacology, bioprocessing and chemical production. The main accent is the application of bio-based materials and bio substances in these processes. This book will be helpful to many chemical engineers and technologists from biotechnical and chemical production and pharmacology as well as environmental engineering specialists.

Topics: Bioscience and Medicine, Materials Science, Nanoscience

Keywords: Adsorbent, Antibacterial Properties, Antioxidant Properties, Biofuel Cell, Biomass, Biotechnology, Drug Delivery, Food Processing, Hydrothermal Conversion, Nanocomposite, Pharmacology, Photocatalytic Degradation, Wastewater Treatment

Prices: Print: **US\$ 185.00/ EUR 185.00** Print: 978-3-0357-2731-9
eBook Single-User: **US\$ 185.00/ EUR 185.00** eBook: 978-3-0357-3815-5
eBook Multi-User: **US\$ 324.00/ EUR 324.00** 212 pages, 2022

<https://www.scientific.net/978-3-0357-2731-9/book>



Rehabilitation and Reconstruction of Buildings

Volume in the series: 32

Aggregated Book

Edited by: Dr. Michaela Kostecká

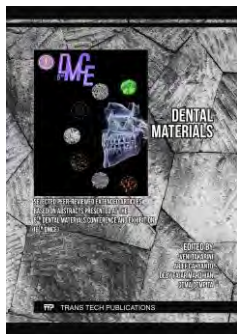
The 23rd CRRB was held in Prague, Czech Republic on November 11-12, 2021. Almost thirty participants mainly from the Czech Republic and Slovak Republic took part in the conference. The objective of the CRRB was to discuss the current results of research and practical developments in the protection and restoration of wood, timber frame and concrete structures and the restoration of stone. The attention was focused on surface treatment, physical-chemical properties and static and dynamics of structures as well. The articles collected from the conference present current research results and practical developments in rehabilitating and reconstructing buildings and facilities. This edition will be helpful to specialists in building materials as well as the rehabilitation and reconstruction of various construction structures.

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

Keywords: Architectural Structure, Building Materials, Buildings, Concrete, Protection, Reconstruction, Rehabilitation, Reliability Assessment, Structures, Wood

Prices: Print: **US\$ 160.00/ EUR 160.00** Print: 978-3-0357-2754-8
eBook Single-User: **US\$ 160.00/ EUR 160.00** eBook: 978-3-0357-2845-3
eBook Multi-User: **US\$ 280.00/ EUR 280.00** 180 pages, 2022

<https://www.scientific.net/978-3-0357-2754-8/book>



Dental Materials

Volume in the series: 31

Aggregated Book

Edited by: Veni Takarini, Dr. Arief Cahyanto, Deby Fajar Mardhian and Gema Gempita

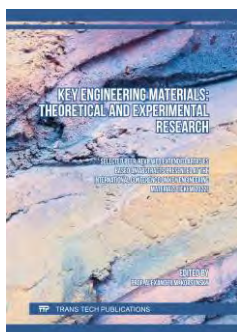
The 6th DMCE was held on July 9-10, 2021, and reached an amazing return of 361 participants. The conference is focused on dental materials and technology. Articles collected from DMCE and published in this edition discuss the latest innovation in dental materials and technology synthesis and applications. The presented book will be helpful to specialists in dental materials and technologies and will contribute to further development and progress in this field.

Topics: Bioscience and Medicine, Materials Science

Keywords: Antibacterial Activity, Bioceramics, Biomaterials, Composite, Cytotoxicity, Dental Cement, Dentistry, Hydroxyapatite, Mechanical Properties, Polymer, Restoration, Zirconia

Prices: Print: **US\$ 165.00/ EUR 165.00** Print: 978-3-0357-1898-0
eBook Single-User: **US\$ 165.00/ EUR 165.00** eBook: 978-3-0357-2523-0
eBook Multi-User: **US\$ 289.00/ EUR 289.00** 176 pages, 2022

<https://www.scientific.net/978-3-0357-1898-0/book>



Key Engineering Materials: Theoretical and Experimental Research

Volume in the series: 30

Aggregated Book

Edited by: Prof. Alexander M. Korsunsky

The ICKEM 2022 was held virtually on March 18-20, 2022. The rapid development of modern technology needs the support of many new materials. Since the third wave of science and technology swept the world, new materials, together with information energy, have been called the three-generation pillars of modern science and technology. Material science has developed into an interdisciplinary and comprehensive discipline. The main goal and feature of ICKEM are to bring scientists, engineers, and industry researchers together to exchange and share their experiences and research results, and discuss the practical challenges encountered and the solutions adopted. The articles collected from ICKEM 2022 introduce readers to the research results and engineering solutions in the area of materials for application in machinery, environmental engineering, biomedicine, electronics and electrical engineering. This edition will be helpful to a wide range of engineers and academics for many branches of modern production.

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

Keywords: Absorption, Alloy, Antioxidant, Biomedical Application, Chemical Technology, Composite, Computational Materials Science, Insulator, Mechanical Properties, Microstructure, Nanocomposite, Nanomaterial, Nanoparticle, Photodegradation, Polymer, Solar Cell

Prices: Print: **US\$ 185.00/ EUR 185.00** Print: 978-3-0357-1735-8
eBook Single-User: **US\$ 185.00/ EUR 185.00** eBook: 978-3-0357-2406-6
eBook Multi-User: **US\$ 324.00/ EUR 324.00** 206 pages, 2022

<https://www.scientific.net/978-3-0357-1735-8/book>



Materials Science, Manufacturing and Civil Engineering

Volume in the series: 29

Aggregated Book

Edited by: Prof. Takashige Omatsu and Prof. Zongjin Li

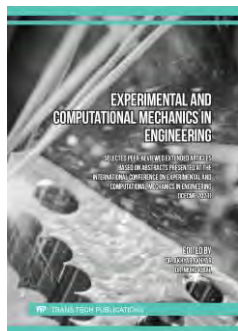
The 6th International Conference on Material Engineering and Manufacturing (ICMEM 2022), the 7th International Conference on Civil Engineering and Materials Science (ICCEMS 2022) and the 5th International Conference on Materials Design and Applications (ICMDA 2022) were held via the online platform during April 15-18, 2022. The participants from Japan, China, France, Malaysia, Mexico, Germany, Peru, Thailand, etc., actively and positively exchanged their experience and knowledge. This edition contains articles from the Conferences which considered wastewater treatment technologies, functional and special materials for electronics and machinery production, assessment properties of materials for additive manufacturing considering the specifics of used additive processes, and analysis of properties of modern green building materials and structural units. The book will be useful to many specialists in materials science in various industrial branches.

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

Keywords: Additive Manufacturing, Adsorption, Biocomposite, Composite, Concrete, Geopolymer, Green Building Materials, Mechanical Properties, Membrane, Microstructure, Mortar, Nanomaterials, Nanoparticles, Photodegradation, Polymer, Shape Memory Alloy, Steel, Structural Element, Wastewater Treatment

Prices: Print: **US\$ 160.00/ EUR 160.00** Print: 978-3-0364-0012-9
eBook Single-User: **US\$ 160.00/ EUR 160.00** eBook: 978-3-0364-1012-8
eBook Multi-User: **US\$ 280.00/ EUR 280.00** 192 pages, 2022

<https://www.scientific.net/978-3-0364-0012-9/book>



Experimental and Computational Mechanics in Engineering

Volume in the series: 28

Aggregated Book

Edited by: Dr. Akhyar Akhyar and Dr. Mohd Iqbal

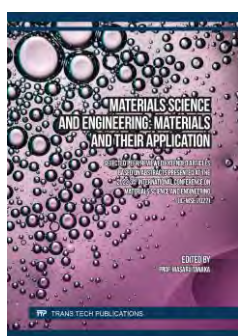
The articles from ICECME 2021 collected in this book are devoted to empowering applied technology and innovation for sustainable development and cover the most recent research results, new ideas, and experiences in materials science, metallurgy, metalworking, and materials synthesis. The authors of the papers represent different countries, including Japan, Germany, Saudi Arabia, India, Malaysia, and Indonesia, thus the book gives information on the worldwide level of research activities in the field. This edition will be helpful to a wide range of engineers and researchers and will serve as a foundation for future collaborative research and publication.

Topics: Building Materials, Materials Science

Keywords: Alloy, Cast Iron, Cement, Composite, Concrete, Corrosion, Drilling, Mechanical Properties, Metal, Metal Failure, Shot Peening, Steel, Welding

Prices: Print: **US\$ 110.00/ EUR 110.00** Print: 978-3-0357-1631-3
 eBook Single-User: **US\$ 110.00/ EUR 110.00** eBook: 978-3-0357-3631-1
 eBook Multi-User: **US\$ 193.00/ EUR 193.00** 128 pages, 2022

<https://www.scientific.net/978-3-0357-1631-3/book>



Materials Science and Engineering: Materials and their Application

Volume in the series: 27

Aggregated Book

Edited by: Prof. Masaru Tanaka

The IC-MSE 2022 was successfully virtually held in Suzhou, China, on May 25-27, 2022. The objective of the Conference is to provide a venue for researchers and practitioners in related fields from academia, industry and government to meet in a forum where the latest research results are presented and prospects for future developments in "materials science and engineering" are discussed. The articles coming from universities, research institutes and industries collected in this book present to the readers the recent advances in the field of materials science and engineering, including biomaterials and nanomaterials, chemical synthesis and materials processing technologies, properties' analysis of structural materials and elements in construction, design practice in mechatronics, etc.

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

Keywords: Alloy, Asphalt, Biomaterials, Cement, Composite, Drug Delivery, Energy Harvesting, Molybdenum Disulfide, Nanocomposite, Nanogenerator, Nanoparticles, Pavement, Piezoelectrics, Porous Implant, Triboelectrics

Prices: Print: **US\$ 155.00/ EUR 155.00** Print: 978-3-0357-1886-7
 eBook Single-User: **US\$ 155.00/ EUR 155.00** eBook: 978-3-0357-2794-4
 eBook Multi-User: **US\$ 271.00/ EUR 271.00** 162 pages, 2022

<https://www.scientific.net/978-3-0357-1886-7/book>



Recent Advancements in Biomedical Engineering

Volume in the series: 26

Aggregated Book

Edited by: Dr. Ramji Kalidoss

This book welcomes readers to the articles from ICRABE'21 (engaging ca 80 academic and research institutes across the globe), which was inspired by the fusion of science and engineering principles in healthcare services and products. The conference aims to initiate the exchange of innovative ideas between students, research scholars and faculties. Specifically, applications of nanotechnology in healthcare and environmental protection were emphasised. The book comprises a broad spectrum of techniques to expose the recent advancements in biomedical engineering. The main covered topics are the recent advanced achievements in nanomaterials and nanotechnologies for the application in biomedicine for biosensing and drug delivery, in technologies of environmental engineering, and also in machinery, chemical production, and construction. It will be interesting to engineers and researchers whose activity is related to the application of nanomaterials in modern manufacturing processes.

Topics: Building Materials, Materials Science, Nanoscience

Keywords: Adsorbent, Biosensor, Composite, Concrete, Degradation, Drug Delivery, Food Packaging, Green Synthesis, Lubricant, Metal-Organic Framework, Nanocomposite, Nanomaterials, Nanoparticle, Nanotechnology, Photocatalyst, Polymer, Wastewater

Prices: Print: **US\$ 195.00/ EUR 195.00** Print: 978-3-0357-2702-9
 eBook Single-User: **US\$ 195.00/ EUR 195.00** eBook: 978-3-0357-3702-8
 eBook Multi-User: **US\$ 341.00/ EUR 341.00** 240 pages, 2022

<https://www.scientific.net/978-3-0357-2702-9/book>



Advancement of Materials, Manufacturing and Devices

Volume in the series: 25

Aggregated Book

Edited by: Dr. Ruhayuddin Mohd Zaki, Dr. Khairul Rafezi Ahmad and Dr. Mohd Sobri Idris

The ICAMaDe 2021 was virtually held on June 22, 2021, and provided a forum for researchers, scientists, scholars and experts to share their recent findings on the advancement in the broad fields of Materials Sciences and Engineering towards Manufacturing and Devices. This book comprises selected papers from the conference covering a wide spectrum of research results in applied materials science and technologies of materials synthesis and treatment. Studying of mechanical properties of structural alloys and superalloys, analysis of their microstructure, and corrosion protection are the topics of the first chapter, which will be interesting to researchers from the metallurgy. The next three chapters are devoted to properties research of photovoltaic materials for solar cells, functional ceramics, and special polymers and will be helpful to engineers from electronics, optoelectronics, and specialists in energy storage devices. Here readers can also find sections dedicated to research in chemical engineering technologies and supplementary cementitious materials for building.

Topics: Building Materials, Electronics, Materials Science

Keywords: Alloy, Bio-Waste, Black Silicon, Cementitious Materials, Ceramic, Composite, Corrosion Protection, Electrical Properties, Electrolyte, Extraction, Glycerolysis, Mechanical Properties, Membrane Technology, Photovoltaic Materials, Polymer, Solar Cell, Superalloy, Thin Film

Prices: Print: **US\$ 190.00/ EUR 190.00**
eBook Single-User: **US\$ 190.00/ EUR 190.00**
eBook Multi-User: **US\$ 333.00/ EUR 333.00**

Print: 978-3-0357-1847-8
eBook: 978-3-0357-3790-5
252 pages, 2022

<https://www.scientific.net/978-3-0357-1847-8/book>



Building Materials and Construction & Materials Engineering and Nano Sciences

Volume in the series: 24

Aggregated Book

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

This book collects the selected papers from the 7th ICBMC and the 6th ICMENS 2022 conferences, which discuss the latest research results, innovative ideas and experiences in materials science and engineering, materials properties, measuring methods and applications, nano-optics and nano-photonics. They cover research activities in various countries such as Switzerland, Japan, Spain, Saudi Arabia, Malaysia, Indonesia, and many others.

Nanomaterials and nanostructures for a wide range of applications, chemical extraction and synthesis of materials, composites and polymers, properties and processing technologies of structural steel and alloys, and sustainable building materials are the main topics of this book. The edition will be helpful to specialists in structural materials, nanomaterials, chemical technologies and materials in construction.

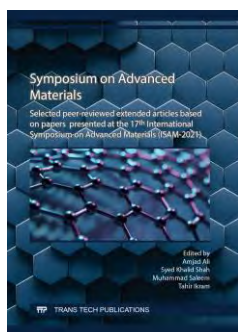
Topics: Building Materials, Materials Science, Nanoscience

Keywords: Alloy, Ash, Black Silicon, Blast Furnace Slag, Building Materials, Cementitious Material, Composite, Concrete, Corrosion Fatigue, Friction Stir Welding, Mechanical Properties, Nanocrystal, Nanomaterials, Nanoparticle, Photocatalyst, Polymer, Sintering, Steel, Thin Film

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: 978-3-0364-0014-3
eBook: 978-3-0364-1014-2
210 pages, 2022

<https://www.scientific.net/978-3-0364-0014-3/book>



Symposium on Advanced Materials

Volume in the series: 23

Aggregated Book

Edited by: Dr. Amjad Ali, Dr. Syed Khalid Shah, Muhammad Saleem and Tahir Ikram

The 17th ISAM was organised by Pakistan Advanced Materials Forum (PAMF) and held in Islamabad, Pakistan, on October 18-22, 2021. Held biennially, the symposium aims to provide a versatile and reputed international forum for researchers, engineers and scientists to present their advanced research and new findings in advanced materials science and technology. This book comprises the results of scientific investigation and engineering analysis of materials' properties and possible conditions for their applications. It includes articles on analysis of corrosion behaviour and corrosion protection of structural metals, fatigue and damage processes materials, investigation of microstructure and features of semiconductor and nanosized materials and structures for photovoltaic and optoelectronic. Functional ceramics and composites are also researched, and the results of studying the properties of materials for biomedical and environmental engineering are presented. This book will be useful not only to engineers but for academic researchers and students also.

Topics: Bioscience and Medicine, Materials Science, Nanoscience

Keywords: Alloy, Biomaterials, Ceramics, Coating, Composite, Corrosion, Damage, Dielectric Properties, Electronic Properties, Failure, Fatigue, Inhibitor, Mechanical Properties, Membrane, Microstructure, Nanomaterials, Nanoparticle, Nanotube, Optical Properties, Photoluminescence, Photovoltaics, Polymer, Steel, Thin Film

Prices: Print: **US\$ 250.00/ EUR 250.00**
eBook Single-User: **US\$ 198.00/ EUR 198.00**
eBook Multi-User: **US\$ 347.00/ EUR 347.00**

Print: 978-3-0357-1316-9
eBook: 978-3-0357-3316-7
378 pages, 2022

<https://www.scientific.net/978-3-0357-1316-9/book>



Advances in Material Science

Volume in the series: 22

Aggregated Book

Edited by: Dr. Sandip A. Kale, Dr. Kishor B. Kale and Dr. Sunday Olayinka Oyedepo

ICAMS 2021 was held on December 16-17, 2021, in Ahmednagar, India, to provide a platform for researchers, scientists, and academicians working worldwide in the field of Materials Science to explore and share their research.

The selected articles from ICAMS 2021 included in this edition describe the results of scientific and engineering research in materials science and materials synthesis and processing technologies. Among the studied topics, there are corrosion behaviour and methods of corrosion protection of structural materials, technologies of surface cladding, functional materials for a wide range of applications, polymers and composites, materials for pharmacology and biomedical use, materials and structural elements for construction, and technologies of industrial waste recycling. The presented book will be helpful to a wide range of specialists in materials science and development technologies of materials processing in machinery and construction.

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

Keywords: Alloy, Antibacterial Properties, Biosorbent, Bitumen Blend, Ceramics, Cladding, Coating, Composite, Concrete, Corrosion, Electrodeposition, Functional Materials, Inhibitor, Mechanical Properties, Metal Matrix Composite, Nanoparticle, Nanotube, Polymer, Steel, Structural Element, Surface Treatment, Waste Recycling

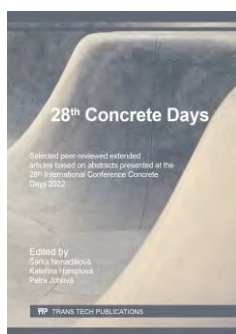
Prices: Print: **US\$ 200.00/ EUR 200.00**
 eBook Single-User: **US\$ 198.00/ EUR 198.00**
 eBook Multi-User: **US\$ 347.00/ EUR 347.00**

Print: 978-3-0357-1545-3

eBook: 978-3-0357-3545-1

224 pages, 2022

<https://www.scientific.net/978-3-0357-1545-3/book>



28th Concrete Days

Volume in the series: 21

Aggregated Book

Edited by: Šárka Nenadállová, Kateřina Hamplová and Petra Johová

This book represents the selected papers from the 28th Concrete Days held May 19-20, 2022, in Prague, Czech Republic. It comprises the results of scientific investigation and engineering solutions in the area of construction and is focused on the properties of various modern concrete and concrete structures.

The reader will find in the book the analysis of the properties and behaviour of concrete, various admixtures, building composites and other materials, as well as studies of various building structures with metal and composite elements, their mechanical properties and fatigue and damage processes. Some issues of technical supervision and sustainable development in the construction sector are also observed. This book will be helpful not only to engineers but also to academic researchers and students involved in activities related to the construction industry.

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

Keywords: 3D Modelling, Alkali, Bending, Cement, Chemical Resistance, Composites, Compressive Tests, Concrete, Construction, Degradation, Design, FEM Analysis, GFRP, Load-Bearing Capacity, Punching, Reinforcement, Shear Resistance, Strengthening, Structure, Sustainability, UHPC

Prices: Print: **US\$ 180.00/ EUR 180.00**
 eBook Single-User: **US\$ 180.00/ EUR 180.00**
 eBook Multi-User: **US\$ 315.00/ EUR 315.00**

Print: 978-3-0357-1725-9

eBook: 978-3-0357-3725-7

192 pages, 2022

<https://www.scientific.net/978-3-0357-1725-9/book>



Advanced Materials and Application

Volume in the series: 20

Aggregated Book

Edited by: Prof. Mosbeh Kaloop

This International Symposium was held on February 18-20, 2022 in Incheon, South Korea. The collected articles present the results of scientific research and engineering design in the area of engineering materials and technologies of their processing, including also analysis of building materials and structural elements' mechanical properties. There was a special focus on materials, technologies and methods for solving environmental problems.

The book will be helpful to specialists and researchers in materials science and technology development in many manufacturing sectors.

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

Keywords: Aluminum Alloy, Cast Iron, Casting, Concrete, Concrete Column, Copper Tannate, Mechanical Properties, Metal Matrix Composite, Photocatalytic Degradation, Thin Wire

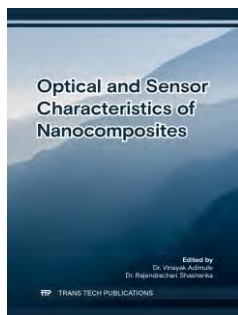
Prices: Print: **US\$ 105.00/ EUR 105.00**
 eBook Single-User: **US\$ 105.00/ EUR 105.00**
 eBook Multi-User: **US\$ 184.00/ EUR 184.00**

Print: 978-3-0357-1671-9

eBook: 978-3-0357-3671-7

114 pages, 2022

<https://www.scientific.net/978-3-0357-1671-9/book>



Optical and Sensor Characteristics of Nanocomposites

Volume in the series: 19

Aggregated Book

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

This book presents the research results on the optical, sensory, and photocatalytic properties of hybrid nanocomposites with applications focused on optical and sensor studies and presents the unique techniques of synthesis and microstructure analysis of functional nanocomposites. Some results covered in this edition are devoted to structural changes upon interaction with the light, also sensitivity and selectivity during electrochemical systems. Some articles deal with analysing the use of MOFs' unique optical and sensory properties, nanostructured rare earth metal oxides, and inorganic nanocomposites in real sensor structures. Most of the research results are first reported, and the book will be helpful to specialists in sensor engineering, optoelectronics, and photocatalysis.

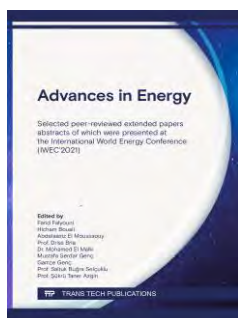
Topics: Bioscience and Medicine, Materials Science, Nanoscience

Keywords: Biosensor, Electrochemical Properties, Graphene, Graphene Oxide, Hybrid Metal-Oxide, Metal-Organic Frame Work, Microstructure, Nanocomposite, Nanoparticle, Optical Properties, Photocatalyst, Photodegradation, Sensory Properties, Synthesis

Prices: Print: **US\$ 210.00/ EUR 210.00**
eBook Single-User: **US\$ 198.00/ EUR 198.00**
eBook Multi-User: **US\$ 347.00/ EUR 347.00**

Print: 978-3-0364-0033-4
eBook: 978-3-0364-1033-3
208 pages, 2022

<https://www.scientific.net/978-3-0364-0033-4/book>



Advances in Energy

Volume in the series: 18

Aggregated Book

Edited by: Farid Falyouni, Hicham Bouali, Abdelaziz El Moussaouy, Prof. Driss Bria, Dr. Mohamed El Malki, Mustafa Serdar Genç, Gamze Genç, Prof. Saltuk Buğra Selçuklu and Prof. Şükrü Taner Azgin

This International World Energy Conference was held December 03-04, 2021, in Kayseri, Turkey and is a premier venue for engaging scholars and practitioners who are passionate and well driven to make a change in transitioning the world to a sustainable energy future. It reflects the last advances in semiconductor physics that define the modern trend in developing micro-, optoelectronics, photonic devices, and photovoltaics. Analysis of the possibility of the modified clay to absorb the industrial dye and numerical simulation of direct tensile test of reinforced concrete are also presented.

This edition will be helpful to many specialists in their theoretical and experimental studies.

Topics: Building Materials, Materials Science, Nanoscience

Keywords: Acoustics, Construction, Electron Transport, Electronic Properties, First-Principles Study, Optical Properties, Photonics, Quantum Dots, Semiconductor, Solid-State Physics

Prices: Print: **US\$ 200.00/ EUR 200.00**
eBook Single-User: **US\$ 198.00/ EUR 198.00**
eBook Multi-User: **US\$ 347.00/ EUR 347.00**

Print: 978-3-0357-1814-0
eBook: 978-3-0357-3783-7
168 pages, 2022

<https://www.scientific.net/978-3-0357-1814-0/book>



Current Advances in Materials Applications

Volume in the series: 17

Aggregated Book

Edited by: Dr. Omar S. Dahham

This book contains articles covering various aspects of materials properties research and methods of their applications in the various branches of human activity: different cost-effective and high-quality materials, multi-functional materials improved and optimized in their characteristics. And the structure of materials is adapted and explained to each new application. It will be helpful to engineers and researchers from many manufacturing branches.

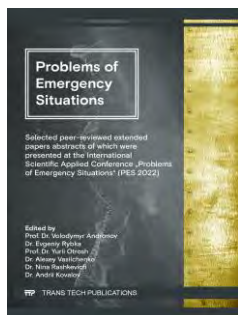
Topics: Bioscience and Medicine, Building Materials, Materials Science, Nanoscience

Keywords: Alloy, Biomaterials, Building Materials, Composite, Laser Deposition, Mechanical Properties, Microstructure, Nanomaterials, Nanoparticle, Polymer, Steel

Prices: Print: **US\$ 210.00/ EUR 210.00**
eBook Single-User: **US\$ 198.00/ EUR 198.00**
eBook Multi-User: **US\$ 347.00/ EUR 347.00**

Print: 978-3-0364-0037-2
eBook: 978-3-0364-1037-1
252 pages, 2022

<https://www.scientific.net/978-3-0364-0037-2/book>



Problems of Emergency Situations

Volume in the series: 16

Aggregated Book

Edited by: Volodymyr Andronov, Dr. Evgeniy Rybka, Yurii Otrosh, Dr. Alexey Vasilchenko, Dr. Nina Rashkevich and Dr. Andrii Kovalov

This International Scientific Applied Conference took place on May 19, 2022, in Kharkiv, Ukraine, and focused on issues related to the problems and prospects of the introduction of the latest developments and technologies aimed at preventing emergencies, minimizing its consequences in the field of civil defence, sharing experience and finding new facets of scientific cooperation, solving problems of recent emergencies and create a global threat to humanity.

The book will be interesting for many specialists whose activities are connected to engineering design in machinery, and the creation and exploitation of systems for the identification of emergencies.

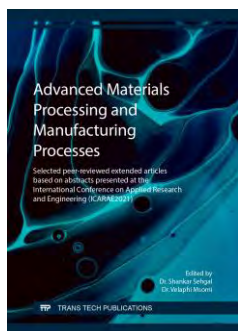
Topics: Building Materials, Civil Engineering, Information Technologies, Manufacturing, Materials Science, Mechanical Engineering

Keywords: Alloy, Building Materials, Chemical Technology, Coating, Composite, Electrochemical Properties, Emergency Event, Environmental Engineering, Fault Tolerance, Fire Retardant Materials, Fire-Extinguishing Materials, Fire-Resistance, Gas Sorption, Information System, Mechanical Engineering, Mechanical Properties, Polymer, Steel

Prices: Print: **US\$ 310.00/ EUR 310.00**
eBook Single-User: **US\$ 198.00/ EUR 198.00**
eBook Multi-User: **US\$ 347.00/ EUR 347.00**

Print: 978-3-0357-1634-4
eBook: 978-3-0357-3634-2
466 pages, 2022

<https://www.scientific.net/978-3-0357-1634-4/book>



Advanced Materials Processing and Manufacturing Processes

Volume in the series: 15

Aggregated Book

Edited by: Dr. Shankar Sehgal and Dr. Velaphi Msomi

This International Conference was virtually held on November 26-28, 2021.

The main objective was to bring together engineers, industrial experts, and academics to share and exchange their research results and experiences related to their fields. This conference was also used as the platform for networking and the creation of collaboration and presents the results of the research in materials science and materials processing technologies analysis.

The research results and engineering solutions collected in this book will be helpful to machinery, chemical production, and energy conversion specialists.

Topics: Materials Science, Nanoscience

Keywords: Alloy, Ceramics, Composite, Computational Material Science, Fluid Flow, Fuel Cell, Injection Molding, Materials Processing, Metal Matrix Composite, Micro Forming, Milling, Numerical Modelling, Polymer, Semiconductor, Tool Wear, Water Treatment

Prices: Print: **US\$ 290.00/ EUR 290.00**
eBook Single-User: **US\$ 198.00/ EUR 198.00**
eBook Multi-User: **US\$ 347.00/ EUR 347.00**

Print: 978-3-0357-1699-3
eBook: 978-3-0357-2274-1
282 pages, 2022

<https://www.scientific.net/978-3-0357-1699-3/book>



Advanced Materials and Engineering Materials

Volume in the series: 14

Aggregated Book

Edited by: Prof. Peng Sheng Wei

This book presents the latest ideas and technologies in the sphere of advanced materials science and nanotechnology, specifically: the analysis of ceramics and glass properties, steel corrosion, results on the mechanics of materials (modelling and experimental testing), materials polishing processes, 3D technology, and chemical engineering. The book is based on the results of the 11th ICAMEM held virtually on March 29-30, 2022.

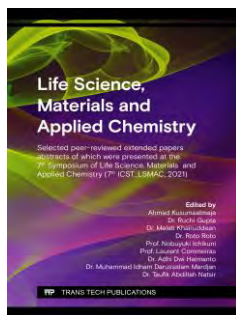
Topics: Materials Science, Mechanics

Keywords: 3D Printing, Alloy, Ceramics, Corrosion, Forming, Glass, Leaching, Lubricant, Mechanical Properties, Phosphate Pigment, Polishing, Polymer, Solid Mechanics, Steel, Stress Model, Tensile Properties, Welding

Prices: Print: **US\$ 190.00/ EUR 190.00**
eBook Single-User: **US\$ 190.00/ EUR 190.00**
eBook Multi-User: **US\$ 333.00/ EUR 333.00**

Print: 978-3-0357-2778-4
eBook: 978-3-0357-2885-9
222 pages, 2022

<https://www.scientific.net/978-3-0357-2778-4/book>



Life Science, Materials and Applied Chemistry

Volume in the series: 13

Aggregated Book

Edited by: Ahmad Kusumaatmaja, Dr. Ruchi Gupta, Dr. Melati Khairuddean, Dr. Roto Roto, Prof. Nobuyuki Ichikuni, Prof. Laurent Commeiras, Dr. Adhi Dwi Hatmanto, Dr. Muhammad Idham Darussalam Mardjan and Dr. Taufik Abdullah Natsir

The 7th International Conference was held in Yogyakarta, Indonesia, 7-8 Sept 2021. It represents to readers the series of research in applied chemistry and chemical technologies with a focus on chemical technologies of environmental engineering, agricultural chemistry, biomaterials and pharmaceutical chemistry, technologies of chemical production and biomass processing, computational materials research, and chemical aspects of sensor development. The book will be helpful to many engineers and researchers.

Topics: Bioscience and Medicine, Materials Science, Nanoscience

Keywords: Absorption, Agricultural Chemistry, Biosensor, Biotechnology, Computational Materials Science, Environmental Chemistry, Nanoparticle, Pharmaceutical Chemistry, Physical Chemistry

Prices: Print: **US\$ 240.00/ EUR 210.00** Print: 978-3-0357-1684-9
eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0357-3684-7
eBook Multi-User: **US\$ 347.00/ EUR 347.00** 304 pages, 2022

<https://www.scientific.net/978-3-0357-1684-9/book>



Manufacturing Science and Technology

Volume in the series: 12

Aggregated Book

Edited by: Prof. Steven Y. Liang

The 2021 3rd Asia Conference on Material and Manufacturing Technology, the 2021 5th International Conference on Advanced Manufacturing and Materials and the 12th International Conference on Manufacturing Science and Technology were successfully held via an online platform and collected articles on materials and manufacturing which will promote scientific and engineering findings as well as new products and technologies. Selected contributions introduce readers to the last research results and engineering solutions in materials science and technologies of materials synthesis and processing.

Topics: Building Materials, Materials Science, Nanoscience

Keywords: Additive Manufacturing, Alloy, Cement, Composite, Concrete, Gas Welding, Geopolymer, Injection Molding, Microstructure, Nanoparticle, Optical Properties, Photodegradation, Polymer, Silicon Carbide, Steel, Surface Treatment, Water Treatment

Prices: Print: **US\$ 218.00/ EUR 218.00** Print: 978-3-0357-1754-9
eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0357-3744-8
eBook Multi-User: **US\$ 347.00/ EUR 347.00** 218 pages, 2022

<https://www.scientific.net/978-3-0357-1754-9/book>



20th Autex World Textile Conference - Unfolding the Future

Volume in the series: 11

Aggregated Book

Edited by: Fernando B.N. Ferreira, Ana Maria Rocha, Andrea Zille, António Dinis Marques and Raul Figueiro

Unfold the Future with findings from the 20th Autex. In the textile industrial sector, fibrous materials are more and more important and omnipresent, and Autex was the platform to collect the state-of-the-art contributions related to textiles, from materials to technology, from design to merchandising, from education to products, from sustainability to a circular economy, thus revealing and unfolding the future of this industrial sector for readers. The conference took place on September 5-9, 2021, in Portugal, and is recognized as a reference among the textile scientific community gathering a large number of researchers every year.

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

Keywords: Antimicrobial Property, Bio-Fabric, Coating, Composite, Conductive Fiber, Conductive Polymer, Dyeing, Electrospinning, Fabric, Fiber, Knitting, Mechanical Properties, Nanofibers, Plasma Treatment, Polymer, Reinforcing Fabric, Smart Textile, Spinning, Textile, Yarn

Prices: Print: **US\$ 572.00/ EUR 572.00** Print: 978-3-0357-1774-7
eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0357-2478-3
eBook Multi-User: **US\$ 347.00/ EUR 347.00** 806 pages, 2022

<https://www.scientific.net/978-3-0357-1774-7/book>



Sustainable Green Construction and Nano-Technology

Volume in the series: 10

Aggregated Book

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

The 13th NTC-2022 was held in Hurghada, Egypt, on March 18-22, 2022, to discuss and highlight the application of recent research results in green sustainable construction and nanotechnology and to provide an opportunity for scientists and industry experts to exchange ideas and experiences. Collected articles represent the latest research results in the areas of materials for sustainable construction, synthesis and application of some functional and nanostructured materials, and technologies and materials for wastewater treatment.

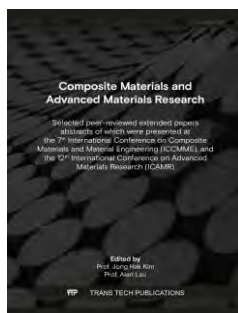
Topics: Building Materials, Construction, Materials Science, Nanoscience

Keywords: Building Materials, Cement, Concrete, Nanofluid, Nanomaterials, Nanoparticle, Polymer, Semiconductor, Wastewater Treatment

Prices: Print: **US\$ 236.00/ EUR 236.00**
 eBook Single-User: **US\$ 198.00/ EUR 198.00**
 eBook Multi-User: **US\$ 347.00/ EUR 347.00**

Print: 978-3-0357-1781-5
 eBook: 978-3-0357-3781-3
 236 pages, 2022

<https://www.scientific.net/978-3-0357-1781-5/book>



Composite Materials and Advanced Materials Research

Volume in the series: 9

Aggregated Book

Edited by: Prof. Jong Hak Kim and Prof. Alan Lau

The 7th ICCMME 2022 and the 12th ICAMR 2022 aimed to provide a platform for finding existing problems, future challenges and future joint research opportunities between various institutions for composite materials and engineering applications. Presented articles from the conferences comprised in this collection are related to materials science and reflect the latest research results in this area as well as provide readers with an extensive overview of the latest composite materials and serve as a valuable reference for further research.

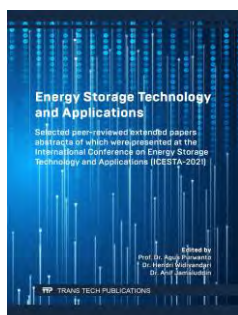
Topics: Bioscience and Medicine, Building Materials, Materials Science, Nanoscience

Keywords: Additive Manufacturing, Alloy, Biomedical Materials, Building Materials, Composite, Functional Materials, Materials Forming, Membrane, Nanoparticles, Polymer, Steel

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

Print: 978-3-0357-1637-5
 eBook: 978-3-0357-3637-3
 198 pages, 2022

<https://www.scientific.net/978-3-0357-1637-5/book>



Energy Storage Technology and Applications

Volume in the series: 8

Aggregated Book

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

This book collects papers from ICESTA-2021 organized by the Centre of Excellence for Electrical Energy Storage Technology, Universitas Sebelas Maret, Surakarta, Indonesia, held online on October 27, 2021. 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. The collection of papers from ICESTA-2021 comprised in this book dedicates to research on materials used in energy storage and conversion devices including materials synthesizing, optimisation and characterization.

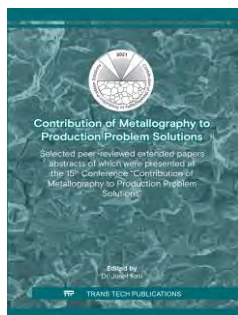
Topics: Materials Science, Nanoscience

Keywords: Anode, Cathode, Electrochemical Properties, Ferroelectrics, Fuel Cell, Li-Ion Battery, Polymer, Polymer Electrolyte, Proton Exchange Membrane, Separator, Sodium-Ion Battery

Prices: Print: **US\$ 188.00/ EUR 188.00**
 eBook Single-User: **US\$ 198.00/ EUR 198.00**
 eBook Multi-User: **US\$ 347.00/ EUR 347.00**

Print: 978-3-0357-1706-8
 eBook: 978-3-0357-2313-7
 188 pages, 2022

<https://www.scientific.net/978-3-0357-1706-8/book>



Contribution of Metallography to Production Problem Solutions

Volume in the series: 7

Aggregated Book

Edited by: Dr. Josef Kasl

The 15th conference on metallography was held on September 21-23, 2021, in Mariánské Lázně, Czech Republic. It was focused on the application of metallography in industrial practice - for the solution of production problems, elucidation of premature failure of machine components and constructions during service, breakdowns or accidents. In addition, some results of new research projects which could improve manufacturing technology or the quality of machine products were presented. Among other contributions from the conference collected in this book, individual papers deal with failure causes and fracture mechanisms, insufficient material properties and incorrect function of the components. Using metallographic analyses, which include light and electron microscopy, spectroscopic methods, and physical methods for the detection of defects, material structures are also investigated. Results are correlated with material properties, and recommendations for production improvement are given.

Topics: Materials Science

Keywords: Alloy, Creep Damage, Electron Microscopy, Failure Analysis, Fractography, Light Microscopy, Metallography, Microstructure, Processing Technology, Spectroscopy, Steel, Superalloy, X-Ray Diffraction

Prices: Print: **US\$ 206.00/ EUR 206.00** Print: 978-3-0357-2694-7
eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0357-3694-6
eBook Multi-User: **US\$ 347.00/ EUR 347.00** 206 pages, 2022

<https://www.scientific.net/978-3-0357-2694-7/book>



Spring International Conference on Material Sciences and Technology

Volume in the series: 6

Aggregated Book

Edited by: Dr. Alokesh Pramanik

With the rapid development of engineering and technology, there are many new research approaches to be validated, probing questions to be asked, and fresh ideas to be discussed. Following this rapid trend, MST-S has done a lot of work in promoting information exchange in advanced research and development of engineering and technology. This book contains articles from MST-S 2022 (August 13-15, 2022, Xiamen, China) and presents recent and important results of developments in materials science, with a focus on metallurgical technologies, alloys, technologies of materials processing, polymers, composites, and methods of computational materials science.

Topics: Materials Science

Keywords: Additive Manufacture, Alloy, Composite, Computational Materials Science, Injection Molding, Mechanical Properties, Melting, Microstructure, Polymer

Prices: Print: **US\$ 220.00/ EUR 220.00** Print: 978-3-0357-2679-4
eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0357-2608-4
eBook Multi-User: **US\$ 347.00/ EUR 347.00** 224 pages, 2022

<https://www.scientific.net/978-3-0357-2679-4/book>



Mechanical Engineering

Volume in the series: 5

Aggregated Book

Edited by: Prof. Thanh Nam Nguyen

The NSCME conference is aimed at creating a forum allowing professors, researchers, experts, engineers and students worldwide an opportunity to discuss state-of-the-art technologies, exchange recent developments and new ideas, and share their research experiences in the fields of machining, materials, mechanical engineering and mechatronics. This book collects articles from the 6th NSCME, which was held in Ho Chi Minh City, Vietnam (November 2021). It will be helpful to many engineers whose activity is related to materials science, machining technologies, and mechanical engineering.

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

Keywords: 3D Printing, Engine, Engineering Management, Machining, Mass Transfer, Mechanical Engineering, Mechatronics, Polymer, Steel, Thermal Engineering, Tool

Prices: Print: **US\$ 198.00/ EUR 198.00** Print: 978-3-0357-1635-1
eBook Single-User: **US\$ 198.00/ EUR 198.00** eBook: 978-3-0357-3635-9
eBook Multi-User: **US\$ 347.00/ EUR 347.00** 208 pages, 2022

<https://www.scientific.net/978-3-0357-1635-1/book>



Innovative Technologies for Joining Advanced Materials XII

Volume in the series: 4

Aggregated Book

Edited by: Nicușor-Alin SÎRBU

The 12th TIMA21 which was held in Timișoara, Romania, by videoconference (November 25-26, 2021), paid particular attention to practical problems in the area of new joining technologies, mechanical and structural characterization of advanced materials and joints, corrosion and assessment of damage state. The volume includes selected papers in which the authors reveal the results of their own research and development activity, carried out in the frame of their institutes, universities and economic field from Romania, Hungary, Serbia, Ukraine, Bulgaria, and Latvia.

Topics: Building Materials, Materials Science

Keywords: Additive Manufacturing, Alloy, Arc Welding, Composite, Concrete, Corrosion, Fatigue Behaviour, Friction Stir Welding, Heat Treatment, Inert Gas Environment, Mechanical Properties, Polymer, Shape Memory Alloy, Soldering, Steel, Thermal Stresses, Ultrasonic Welding, Wire Electrical Discharge Machining

Prices: Print: **US\$ 352.00/ EUR 352.00**
eBook Single-User: **US\$ 198.00/ EUR 198.00**
eBook Multi-User: **US\$ 347.00/ EUR 347.00**

Print: 978-3-0357-1406-7
eBook: 978-3-0357-3406-5
458 pages, 2022

<https://www.scientific.net/978-3-0357-1406-7/book>



Chemical Sciences

Volume in the series: 3

Aggregated Book

Edited by: Prof. Young Gun Ko, Prof. Yuichi Kamiya, Prof. Pranot Potiyaraj, Dr. Anna Artati, Prof. Judeh Zaher, Dr. Bambang Purwono, Dr. Mardiana Binti Saaid, Dr. Dwi Siswanta, Dr. Roto Roto and Dr. Muhammad Idham Darussalam Mardjan

The ICCS was held on November 29-30, 2021, in Yogyakarta, Indonesia to exchange experience and findings in the area related to chemical sciences. The collected papers reflect the latest research results in the field of chemical technologies of environmental protection and agricultural chemistry, electrochemical engineering and chemistry of food processing, modern biotechnologies, and pharmaceutical chemistry. The book will be helpful to specialists in the chemical and pharmaceutical industries.

Topics: Bioscience and Medicine, Materials Science

Keywords: Antibacterial Property, Antioxidant, Biodegradation, Biotechnology, Catalyst, Chemical Kinetics, Electrochemistry, Electrolyte Membrane, Esterification, Extraction, Fuel Cell, Inhibitor, Nanocomposite, Nanoparticle, Pharmacology, Synthesis, Urea Fertilizer, Waste Recycling, Water Treatment

Prices: Print: **US\$ 253.00/ EUR 253.00**
eBook Single-User: **US\$ 198.00/ EUR 198.00**
eBook Multi-User: **US\$ 347.00/ EUR 347.00**

Print: 978-3-0364-0021-1
eBook: 978-3-0364-1021-0
360 pages, 2022

<https://www.scientific.net/978-3-0364-0021-1/book>



Mechanical Engineering, Materials Science and Civil Engineering

Volume in the series: 2

Aggregated Book

Edited by: Prof. Jing Wei Zhao

This collection represents the results of engineering research in materials science and materials processing technologies for modern mechanical engineering and construction which were virtually presented during the ICMEMSC2021 held on December 6-7, 2021. The conference aims to bring together researchers, scientists, engineers, and scholar students to exchange and share their experiences, new ideas, and research results about all aspects of materials science in education, and discuss the practical challenges encountered and the solutions adopted.

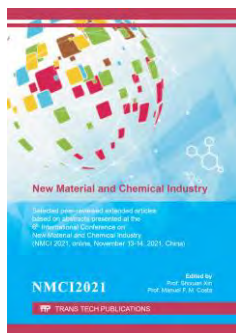
Topics: Manufacturing, Materials Science

Keywords: Alloy, Casting, Ceramics, Composite, Concrete, Corrosion Protection, Heat Treatment, Laser Welding, Mechanical Properties, Microstructure, Permeable Brick, Polymer, Rock Strength, Steel, Superalloy, Surface Roughness, Turning

Prices: Print: **US\$ 165.00/ EUR 165.00**
eBook Single-User: **US\$ 165.00/ EUR 165.00**
eBook Multi-User: **US\$ 289.00/ EUR 289.00**

Print: 978-3-0357-1765-5
eBook: 978-3-0357-2469-1
168 pages, 2022

<https://www.scientific.net/978-3-0357-1765-5/book>

**New Material and Chemical Industry**

Volume in the series: 1

Aggregated Book

Edited by: Prof. Shixuan Xin and Prof. Manuel F. M. Costa

The NMCI 2021 Conference was organized for academic exchanges and discussions on a wide range of materials science and the chemical industry. The articles collected during the conference reflect the results of the last achievements in materials science and the development of materials processing technologies in various spheres of human activity. The findings cover a broad spectrum of materials science topics and will be interesting to many specialists involved in the field.

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

Keywords: Alloy, Clay, Concrete, Electrode, Graphene, Mechanical Properties, Membrane Separation, Mortar, Polishing, Polymer, Quantum Dots, Rubber, Steel

Prices: Print: **US\$ 110.00/ EUR 110.00**
 eBook Single-User: **US\$ 110.00/ EUR 110.00**
 eBook Multi-User: **US\$ 193.00/ EUR 193.00**

Print: 978-3-0357-1890-4
eBook: 978-3-0357-3890-2
126 pages, 2022

<https://www.scientific.net/978-3-0357-1890-4/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.