

*Enjoy the many advantages
of ebooks on your devices*

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

CATALOGUE 2021

PRINT/EBOOK

**WITH
ANNOUNCEMENT
ON 2021**



Download full
pdf catalogue from
scientific.net



[/scientificnet](https://www.linkedin.com/company/scientificnet)



[/Scientific.Net.Ltd](https://www.facebook.com/Scientific.Net.Ltd)



[/Scientific_Net](https://twitter.com/Scientific_Net)

Introduction

Dear Customer,

We are proud to share with you our Trans Tech Publications (TTP) Book Catalogue 2021!

The COVID-19 Pandemic has shown us that the online use of academic books and journals has become more important than ever. We have seen online readership increasing dramatically.

And although many conferences we have been publishing did not take place in a physical sense, the online availability of the very same proceedings makes it possible for academicians and corporate researchers, and engineers to stay abreast of their respective fields of interest.

TTP has been able to publish a significant number of new books since the last catalogue in 2019 and is proud to have met and meet our publishing schedule for the years 2020 and 2021.

We would like to thank you for your support, and we hope to see you soon at one of the conferences we will be attending and publishing in the years ahead.

In short about us:

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 online management and publishing system integrated into the Scientific.Net website.

The trademark, Scientific.Net, was created by the company. It represents one of the largest web resources providing high-demand content focused on science and engineering themes. Each year thousands of new academic publications enrich the Scientific.Net collection. It includes academic journals and book series that publish regular and special issues, volumes, conference proceedings, and monographs.

Top-rated higher educational and research institutions, as well as consortia representing entire countries, subscribe to the Scientific.Net online library. Paperback books are sold all over the world through numerous agents and distributors. Modern technology allows our customers to reach online content through mobile devices and enjoy the advantages of an eBook format. The resource has gained popularity due to the single papers purchase option, which serves the needs of individual scientists striving to obtain particular research papers of their interest.

Alongside the traditional subscription-based model, Trans Tech Publications Ltd. has introduced optional Open Access publication for authors who want their work to be distributed under the Creative Commons Attribution 4.0 International License. The amount and use of freely accessible content on Scientific.Net are constantly growing.

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

Anne-Kristin Wohlbier, President/CEO



Contents

5-20 **ANNOUNCEMENT 2021**

7-8 Specialized Collections

9-20 Current Books

21-52 **CURRENT BOOKS 2020**

23-24 Specialized Collections & Monographs

25-52 Current Books

53-80 **BEST SELLING BOOKS**

81 **FOR LIBRARIES: Electronic Resources**

83 **Order Form**

HOW TO ORDER BOOKS/eBOOKS

At the back of this catalogue, you will find an order form which you can send (email/post) to Scientific.Net directly or to your preferred book distributor in your country. All individual orders directly with Scientific.Net are prepaid only.

Scientific.Net works with many book distributors all over the world and has globally no exclusive representatives. So your preferred book distributor can contact us directly at:

 **subscriptions@scientific.net**

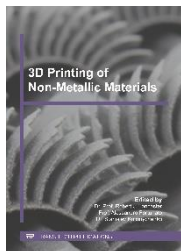
Announcement 2021

Specialized Collections

Current Books



Specialized Collections 2021



■ 3D Printing of Non-Metallic Materials

Edited by: Prof. Robert J. Lancaster, Prof. Alessandro Fortunato and Dr. Stanislav Kolisnichenko

This volume is the second part of a specialised series on "Additive Manufacturing" consisting of papers published by Trans Tech

Publications Inc. during the period of 2018 – 2019. This collection of scientific papers describes a wide range of engineering approaches and solutions in the area of 3D printing technologies of non-metallic materials.

514 pages, 2021

Print (978-3-0357-1504-0)

eBook (978-3-0357-3504-8)

Prices:

Print: **US\$ 300.00/€ 270.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3504-8.html>



■ Bioceramics

Edited by: Dr. Michele Iafisco, Prof. Francesco Baino and Dr. Stanislav Kolisnichenko

This specialised book entitled "Bioceramics" consists of papers published by Trans Tech Publications Inc. over the period of 2018 - 2019 years and introduces the reader to a wide range of research results and

engineering solutions in the area of the development and use of modern bioceramic materials.

670 pages, 2021

Print (978-3-0357-1585-9)

eBook (978-3-0357-3585-7)

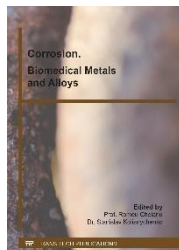
Prices:

Print: **US\$ 320.00/€ 290.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3585-7.html>



■ Corrosion. Biomedical Metals and Alloys

Edited by: Prof. Romeu Chelariu and Dr. Stanislav Kolisnichenko

This issue from the topic series "Corrosion" contains articles published by Trans Tech Publications in 2017 - 2020. The volume covers many aspects of the corrosive behaviour of metallic biomaterials - from

corrosion resistance studies to biocompatible coatings. We hope this collection will be useful and interesting to a broad audience of researchers and engineers from the area of development and research properties of metallic biomaterials and practitioners who utilize implantable and non-implantable devices.

254 pages, 2021

Print (978-3-0357-1861-4)

eBook (978-3-0357-3861-2)

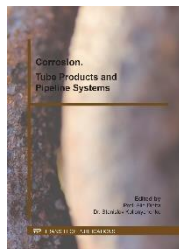
Prices:

Print: **US\$ 190.00/€ 175.00**

eBook Single-User: **US\$ 133.00/€ 123.00**

eBook Unlimited-User: **US\$ 233.00/€ 215.00**

<https://www.scientific.net/978-3-0357-3861-2.html>



■ Corrosion. Tube Products and Pipeline Systems

Edited by: Prof. Alin Dinita and Dr. Stanislav Kolisnichenko

This issue, titled "Corrosion. Tube Products and Pipeline Systems", from the topic series "Corrosion", contains articles published by Trans Tech Publications in 2017 - 2020. The volume presents a wide

range of scientific research results and engineering solutions in the field of a study of corrosion properties and corrosion behaviour of materials and structures of tube and pipelines in the oil, gas, and energy industry; development of technologies and means for the protection of materials and pipe structures against the influence of corrosive environments. We hope this collection will be useful and interesting to a broad audience of researchers and engineers in various industry fields, such as the production and transport of oil and gas, energy, chemicals.

468 pages, 2021

Print (978-3-0357-1300-8)

eBook (978-3-0357-3300-6)

Prices:

Print: **US\$ 300.00/€ 270.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3300-6.html>

Books 2021

■ Advanced Material and Structures

Selected peer-reviewed full text papers from the 3rd ISMSE and 4th ICAMEST

Edited by: Prof. Mosbeh Kaloop and Prof. Seungho Hong

This volume was compiled from papers presented at the 3rd 2020 International Symposium on Material Science and Engineering (ISMSE 2020, August 21-23, 2020, Seoul, South Korea) and papers presented at the 4th International Conference on Advanced Material and Engineering Structural Technology (4th ICAMEST 2020), Seoul, South Korea, during September 11-13, 2020. The volume introduces to the readers the newest research results and findings in the field of materials science, material mechanics, constructional material and structural elements, technologies of environmental engineering.

164 pages, 2021

Print (978-3-0357-1795-2)

eBook (978-3-0357-3795-0)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3795-0.html>

■ Advanced Materials - XVI

Selected peer-reviewed full text research papers from the 16th International Symposium on Advanced Materials (16th ISAM)

Edited by: Dr. Muhammad Muneeb Asim, Mustasim Billah Bhatti, Muhammad Mansoor and Tahir Ikram

The 16th International Symposium on Advanced Materials (ISAM) is a consistent biennial scientific gathering being held since 1989 in Islamabad, Pakistan. This volume is the proceedings of the sixteenth symposia: ISAM-2019, 21-25 October 2019, National Centre for Physics, Islamabad, Pakistan and contains selected peer-reviewed papers that presented the latest research results in the area of advanced materials and technologies of materials processing used in the various branches of human activity.

396 pages, 2021

Print (978-3-0357-1589-7)

eBook (978-3-0357-3589-5)

Prices:

Print: **US\$ 320.00/€ 290.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3589-5.html>

■ Advanced Materials and Application Technologies

Edited by: Chafic-Touma Salame

This volume of the journal encloses peer-reviewed papers rigorously selected according to their high scientific level and topics in the research scope of applied materials sciences, condensed matter physics, energy materials, materials for renewable energy, functional nanomaterials, polymers, building materials, pharmacology, and materials in the biomedical practice, materials for the corrosion inhibition and technologies of anti-corrosion coatings. The volume also presents the practice of research on the academic and industrial levels of processing technologies and industrial devices that may cause severe damage to the environment and public health resulting from the emission of pollutants and toxic waste.

302 pages, 2021

Print (978-3-0357-1832-4)

eBook (978-3-0357-3832-2)

Prices:

Print: **US\$ 210.00/€ 190.00**

eBook Single-User: **US\$ 147.00/€ 133.00**

eBook Unlimited-User: **US\$ 257.00/€ 233.00**

<https://www.scientific.net/978-3-0357-3832-2.html>

■ Advanced Materials and Manufacturing Engineering

Selected peer-reviewed full text papers from the 2nd International Conference on Materials Science and Manufacturing Technology (ICMSMT 2020)

Edited by: Dr. Ramya Muthusamy

This volume collected from papers presented at the 2nd International Conference on Materials Science and Manufacturing Technology 2020 (ICMSMT 2020, 09-10, April 2020, India) and represents the results of scientific research and engineering decisions in the area of the modern materials science and technologies of materials processing.

232 pages, 2021

Print (978-3-0357-1753-2)

eBook (978-3-0357-3753-0)

Prices:

Print: **US\$ 200.00/€ 180.00**

eBook Single-User: **US\$ 140.00/€ 126.00**

eBook Unlimited-User: **US\$ 245.00/€ 221.00**

<https://www.scientific.net/978-3-0357-3753-0.html>

■ Advanced Materials and Technologies VI

Edited by: Dr. Stanislav Kolisnichenko

This volume of the journal "Advanced Materials Research" presents the next edition from the series "Advanced Materials and Technologies". The collection was compiled from peer-reviewed stand-alone papers describing the results of scientific research and engineering solutions dealing with actual problems in materials science and

materials processing technologies. Published articles will be useful for professionals in various engineering branches, for students, and for academic staff.

200 pages, 2021

Print (978-3-0357-1489-0)

eBook (978-3-0357-3489-8)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3489-8.html>

■ Advanced Materials Research Vol. 1160

Edited by: Dr. Lina Kieush

This volume presents peer-reviewed high quality papers that reflect the research of different materials in modern building architecture, as well as their impact on the structural and strength properties of the final product. Moreover, the purpose of this volume is to present studies into the microstructural and mechanical properties of steel. Research might find useful for engineers and scientists in the field of materials science and metallurgy. Eventually, this volume's target audience includes students, postgraduates, and scientists interested in exploring thin films and composites' properties and subsequent application in various industries.

112 pages, 2021

Print (978-3-0357-1195-0)

eBook (978-3-0357-3195-8)

Prices:

Print: **US\$ 130.00/€ 120.00**

eBook Single-User: **US\$ 91.00/€ 84.00**

eBook Unlimited-User: **US\$ 159.00/€ 147.00**

<https://www.scientific.net/978-3-0357-3195-8.html>

■ Advanced Materials Science and Technologies

Selected peer-reviewed papers from the 4th ICMSN, the 5th ICAFM and the 3rd ICACM 2020

Edited by: Prof. Yuyuan Zhao

This volume contains papers that were presented at the 4th International Conference on Materials Sciences and Nanomaterials (ICMSN 2020), the 5th International Conference on Advanced Functional Materials (ICAFM 2020), and the 3rd International Conference on Advanced Composite Materials (ICACM 2020). These conferences were held 8-10 July 2020, virtually in web streaming. Collected articles present scientific research and engineering design results in the area of materials sciences, building materials, and advanced technologies of materials processing.

158 pages, 2021

Print (978-3-0357-1749-5)

eBook (978-3-0357-3749-3)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3749-3.html>

■ Advanced Materials Science III

Selected peer-reviewed full text papers from the 3rd International Conference on Advanced Materials Science (ICOAMS 2020)

Edited by: Sarjito, Waluyo Adi Siswanto and Tri Widodo Besar Riyadi

This volume presents the third series of Advanced Materials Science compiled by the results of the 3rd International Conference on Advanced Materials Science (ICOAMS 2020, 8-9 December 2020, Indonesia). Presented articles reflect the wide range of scientific research results and engineering solutions in materials science and materials processing technologies.

218 pages, 2021

Print (978-3-0357-1872-0)

eBook (978-3-0357-3872-8)

Prices:

Print: **US\$ 180.00/€ 165.00**

eBook Single-User: **US\$ 126.00/€ 116.00**

eBook Unlimited-User: **US\$ 221.00/€ 203.00**

<https://www.scientific.net/978-3-0357-3872-8.html>

■ Advanced Materials, Processing and Testing Technology II

Selected peer-reviewed full text papers from the 2nd International Conference on Advanced Materials, Processing and Testing Technology (AMPTT 2020)

Edited by: Prof. Dajing Fang and Tao Kuang

This collection contains papers from the 2020 2nd International Conference on Advanced Materials, Processing and Testing Technology (AMPTT 2020, May 23-24, 2020, Guangzhou, China) that present results of scientific researches and engineering decisions in the area of materials science and development of materials processing technologies.

410 pages, 2021

Print (978-3-0357-1740-2)

eBook (978-3-0357-3740-0)

Prices:

Print: **US\$ 300.00/€ 270.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3740-0.html>

■ Advances in Material Science

Selected peer-reviewed full text papers from the International Conference on Advances in Material Science (ICAMS 2020)

Edited by: Dr. Sandip A. Kale and Dr. Ajay K. Mishra

This volume contains papers from the International Conference on Advances in Material Science (ICAMS 2020) organized on October 03, 2020, at Ahmednagar. The articles included in this volume describe research on polymers and composites; ceramics and ceramic matrix composites; steel and alloys properties and their processing technologies, materials and technologies for photovoltaics and electrochemistry, nanotechnology research, materials for construction engineering and architecture, materials for pharmacology and biomedical application; electronics and sensors; technologies of environmental engineering and waste recycling.

348 pages, 2021

Print (978-3-0357-1835-5)

eBook (978-3-0357-3835-3)

Prices:

Print: **US\$ 250.00/€ 225.00**

eBook Single-User: **US\$ 175.00/€ 158.00**

eBook Unlimited-User: **US\$ 306.00/€ 277.00**

<https://www.scientific.net/978-3-0357-3835-3.html>

■ Applied Engineering, Materials and Mechanics IV

Selected peer-reviewed full text papers from the 5th International Conference on Applied Engineering, Materials and Mechanics (5th ICAEMM 2020)

Edited by: Prof. Jong Wan Hu

This volume contains papers that were presented on the 5th International Conference on Applied Engineering, Materials and Mechanics (5th ICAEMM 2020, Kuala Lumpur, Malaysia, April 24-26, 2020) and represents for readers the latest research results in the area of material science and engineering technologies.

108 pages, 2021

Print (978-3-0357-1692-4)

eBook (978-3-0357-3692-2)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3692-2.html>

■ Binders, Materials and Technologies in Modern Construction VI

Selected peer-reviewed full text papers from the 18th Conference Silicate Binders (ICBM 2019)

Edited by: Karel Dvořák and Dominik Gazdič

The collection contains papers introduced at the 18th International Conference Silicate Binders 2019 (ICBM

2019, Brno, Czech Republic, 2019) and focuses on the newest knowledge in the field of inorganic binders, conventional and refractory concrete, and other building composites.

196 pages, 2021

Print (978-3-0357-1728-0)

eBook (978-3-0357-3728-8)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3728-8.html>

■ Current Advances in Materials Applications II

Edited by: Dr. Omar S. Dahham

This volume of the journal presents to readers the, which contains articles covering different aspects of the research the properties of the materials and methods their applications in the various branches of human activity.

358 pages, 2021

Print (978-3-0357-1822-5)

eBook (978-3-0357-3822-3)

Prices:

Print: **US\$ 250.00/€ 225.00**

eBook Single-User: **US\$ 175.00/€ 158.00**

eBook Unlimited-User: **US\$ 233.00/€ 215.00**

<https://www.scientific.net/978-3-0357-3822-3.html>

■ Engineering and Innovative Materials IX

Selected peer-reviewed full text papers from the 9th International Conference on Engineering and Innovative Materials (ICEIM 2020)

Edited by: Prof. Muhammad Yahaya and Prof. Takahiro Ohashi

This volume introduces the conference proceedings of 2020 9th International Conference on Engineering and Innovative Materials (ICEIM 2020, Singapore, September 4-6, 2020), which represent the last results of scientific researches and engineering solutions in areas of metal materials and metal processing; materials and technologies for electronics and environmental engineering; building materials; polymers and composites.

180 pages, 2021

Print (978-3-0357-1826-3)

eBook (978-3-0357-3826-1)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3826-1.html>

■ FarEastCon - Materials and Construction III

Selected peer-reviewed full text papers from the International Scientific Conference "FarEastCon" 2020

Edited by: Denis B. Solovov

This volume contains papers presented at the International Scientific Conference "FarEastCon" which took place on October 6-9, 2020 in Vladivostok, Russian Federation. In the selected articles are discussed today's achievements and farsighted researches in the area of materials science and technology used for solving real applied tasks in various areas of industry.

748 pages, 2021

Print (978-3-0357-1776-1)

eBook (978-3-0357-3776-9)

Prices:

Print: **US\$ 380.00/€ 345.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3776-9.html>

■ Frontiers in Molecular Sciences

Selected peer-reviewed full text paper from the International Conference on the Frontiers in Molecular Sciences (ICFMS 2020)

Edited by: Prof. Yana Maolana Syah, Aep Patah, Elvira Hermawati and Muhammad Yudhistira Azis

This volume is a compilation of papers presented in the "International Conference on the Frontiers in Molecular Sciences" (ICFMS) held at Institut Teknologi Bandung, March 3rd, 2020. Articles cover various topics, including inorganic and physical chemistry, materials sciences, and organic and biophysics chemistry. In particular, the book presented recent advances in polymeric coordination and organic materials, emphasizing the methods of preparation and modification. Besides, some computational and docking results on protein materials are also included.

196 pages, 2021

Print (978-3-0357-1763-1)

eBook (978-3-0357-3763-9)

Prices:

Print: **US\$ 180.00/€ 165.00**

eBook Single-User: **US\$ 126.00/€ 116.00**

eBook Unlimited-User: **US\$ 221.00/€ 203.00**

<https://www.scientific.net/978-3-0357-3763-9.html>

■ Functional Materials: Fundamental Research and Industrial Application

Selected peer-reviewed full text papers from the 5th International Conference on Functional Materials Science (5th ICFMS 2020)

Edited by: Risdiana, Budhy Kurniawan, Darminto and A.A. Nugroho

This volume presents papers collected by results of the 5th International Conference on Functional Materials Science

2020 (5th ICFMS 2020, November 11-12, 2020, Indonesia).

This conference was held online and introduced the last research results in the field of functional materials and advanced processing technologies.

434 pages, 2021

Print (978-3-0357-1869-0)

eBook (978-3-0357-3869-8)

Prices:

Print: **US\$ 280.00/€ 255.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3869-8.html>

■ Industrial Science and Technology II

Selected peer-reviewed full text papers from the Symposium on Industrial Science and Technology (SISTEC 2020)

Edited by: Agus Geter Edy Sutjipto, Dr. Farah Hanani Zulkifli, Dr. Ahmad Salihin Samsudin and Dr. Mohamad Ashry Jusoh

The current volume is a collection of the peer-reviewed papers presented at the 2nd Postgraduate Symposium on Industrial Science and Technology 2020 (SISTEC 2020, 26th and 27th August 2020, Malaysia). The SISTEC 2020 was explicitly dedicated to advancing industrial materials science and technology in related industries such as biotechnology, biomedicine, industrial chemistry, electronics, photonics, petrochemical, sensor, environment, and others.

368 pages, 2021

Print (978-3-0357-1757-0)

eBook (978-3-0357-3757-8)

Prices:

Print: **US\$ 250.00/€ 225.00**

eBook Single-User: **US\$ 175.00/€ 158.00**

eBook Unlimited-User: **US\$ 306.00/€ 277.00**

<https://www.scientific.net/978-3-0357-3757-8.html>

■ Innovations and Technologies in Construction

Edited by: Sergey V. Klyuev

The important problems of Building Constructions, Building Materials, Industrial and Civil Construction, and Structural Mechanics and Theory of Structures (from ideas and projects to immediate implementation) are raised, and the ways of their solution and optimization are suggested in the reports presented in frameworks of these topics. Many reports were prepared as a benefit of the state support of science in the forms of grants, federal target programs, resolutions of the Government of the Russian Federation, and other programs.

186 pages, 2021

Print (978-3-0357-1825-6)

eBook (978-3-0357-3825-4)

Prices:

Print: US\$ 180.00/€ 165.00

eBook Single-User: US\$ 126.00/€ 116.00

eBook Unlimited-User: US\$ 221.00/€ 203.00

<https://www.scientific.net/978-3-0357-3825-4.html>

■ Innovative Engineering and Technology III Selected peer-reviewed full text papers from the 13th International UNIMAS Engineering Conference 2020 (EnCon 2020)

Edited by: Lee Yee Yong, Ahmad Beng Hong Kueh, Ivy Ai Wei Tan, Lee Chin Kho, Dayang Nur Salmi Dharmiza Awang Salleh, Lidyana Roslan and Ting Sim Nee

This journal issue presents materials from the 13th International UNIMAS Engineering Conference 2020 (EnCon 2020), which was held online by Universiti Malaysia Sarawak, Sarawak, Malaysia, with the theme "Empowering industry and transforming society through engineering, technology, and management". The collected papers describe the current research results in the areas of materials engineering and processing technologies with a specific focus on the use of bio- and biodegradable materials in channeling various applications in numerous branches of human activity.

206 pages, 2021

Print (978-3-0357-1833-1)

eBook (978-3-0357-3833-9)

Prices:

Print: US\$ 180.00/€ 165.00

eBook Single-User: US\$ 126.00/€ 116.00

eBook Unlimited-User: US\$ 221.00/€ 203.00

<https://www.scientific.net/978-3-0357-3833-9.html>

■ International Symposium on Advanced Material Research IV Selected peer-reviewed full text papers from the 4th International Symposium on Advanced Material Research (4th ISAMR 2020)

Edited by: Prof. Dong Keon Kim

This volume contains articles that were presented at the 4th International Symposium on Advanced Material Research (4th ISAMR 2020, Jeju Island, South Korea during June 19-21, 2020). Published articles cover research results in the area of the materials science and materials processing technologies in the various branches of the modern industry. We hope that this edition will be interesting and useful for many engineers, academics and also for students.

74 pages, 2021

Print (978-3-0357-1720-4)

eBook (978-3-0357-3720-2)

Prices:

Print: US\$ 120.00/€ 110.00

eBook Single-User: US\$ 84.00/€ 77.00

eBook Unlimited-User: US\$ 147.00/€ 135.00

<https://www.scientific.net/978-3-0357-3720-2.html>

■ Mass and Thermal Transport in Materials and Materials Structures

Edited by: Dr. Andreas Öchsner, Prof. Graeme E. Murch, Ali Shokuhfar and João M.P.Q. Delgado

This special topic volume captures a snapshot of the last research results of mass and thermal transfer processes in materials and engineering systems currently under extensive investigation worldwide. The breadth of utilization of the mass and thermal transfer processes in engineering is reflected in the correspondingly wide range of topics covered here. Topics range from the research in atomic-scale right up to the macro scale, from basic research on properties right through to actual engineering applications, from hydrogen diffusion in a Pd-Cu alloy membrane to investigating the water-oil separation process.

204 pages, 2021

Print (978-3-0357-1172-1)

eBook (978-3-0357-3172-9)

Prices:

Print: US\$ 180.00/€ 165.00

eBook Single-User: US\$ 126.00/€ 116.00

eBook Unlimited-User: US\$ 221.00/€ 203.00

<https://www.scientific.net/978-3-0357-3172-9.html>

■ Material and Manufacturing Technology XI Selected peer-reviewed papers from the 11th International Conference on Materials and Manufacturing Technology (11th ICMMT 2020)

Edited by: Prof. Vladimir Khovaylo and Ratchatin Chancharoen

This volume contains papers that were presented on the 11th International Conference on Materials and Manufacturing Technologies (ICMMT 2020), which was held during April 24-26, 2020 in virtual form due to COVID-19 pandemic. The collection represents to readers the latest results of engineering research and technical decisions in the area of materials science and technologies of materials processing.

196 pages, 2021

Print (978-3-0357-1722-8)

eBook (978-3-0357-3722-6)

Prices:

Print: US\$ 200.00/€ 180.00

eBook Single-User: US\$ 140.00/€ 126.00

eBook Unlimited-User: US\$ 245.00/€ 221.00

<https://www.scientific.net/978-3-0357-3722-6.html>

■ Material Engineering and Application III Selected peer-reviewed full text papers from the 5th International Conference on Material Engineering and Application (ICMEA 2020)

Edited by: Prof. Mosbeh Kalooop

This issue is composed of papers introduced at the 5th International Conference on Material Engineering and

Application (ICMEA 2020, August 07-09, 2020, Indonesia). Collected articles represent the last research results in the area of applied materials and materials processing technologies.

102 pages, 2021
Print (978-3-0357-1770-9)
eBook (978-3-0357-3770-7)

Prices:
Print: **US\$ 100.00/€ 90.00**
eBook Single-User: **US\$ 70.00/€ 63.00**
eBook Unlimited-User: **US\$ 123.00/€ 110.00**

<https://www.scientific.net/978-3-0357-3770-7.html>

■ Material Engineering Research II

Selected peer-reviewed full text research paper from the 3rd International Conference on Material Engineering Research (3rd ICMER 2020)

Edited by: Prof. Jong Wan Hu

The 3rd International Conference on Material Engineering Research (3rd ICMER 2020) took place in Incheon National University, Incheon, South Korea, during May 22th-24th, 2020. Papers, collected by the results of this conference, represent to readers the latest research results in the field of applied materials and advanced materials processing technologies.

82 pages, 2021
Print (978-3-0357-1712-9)
eBook (978-3-0357-3712-7)

Prices:
Print: **US\$ 160.00/€ 155.00**
eBook Single-User: **US\$ 118.00/€ 109.00**
eBook Unlimited-User: **US\$ 207.00/€ 191.00**

<https://www.scientific.net/978-3-0357-3712-7.html>

■ Material Science and Engineering Technology IX

Selected peer-reviewed full text papers from the 9th ICMSET, the 9th ICNINN, and the 5th ICMTA

Edited by: Prof. Ramesh K. Agarwal

This volume of the journal collected papers represented at the 9th International Conference on Material Science and Engineering Technology (ICMSET 2020), the 9th International Conference on Nanostructures, Nanomaterials and Nanoengineering (ICNINN 2020), and the 5th International Conference on Materials Technology and Applications (ICMTA 2020), 9-11 October 2020, Kyoto, Japan. The papers provide the readers with an overview of many recent advances in the fields related to materials science and engineering technology, including modeling, analysis, computation, and optimization procedures, as well as experimental methods of the research.

176 pages, 2021
Print (978-3-0357-1784-6)
eBook (978-3-0357-3784-4)

Prices:

Print: **US\$ 160.00/€ 145.00**
eBook Single-User: **US\$ 112.00/€ 102.00**
eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3784-4.html>

■ Material Science and Engineering: Properties and Technologies II

Selected peer-reviewed full text papers from the 7th International Conference on Material Science and Engineering (ICMSE 2020)

Edited by: D. Bhattacharyya and X.Y. Hu

This collection contains the fully refereed papers presented at the 7th International Conference on Material Science and Engineering (ICMSE 2020) was held in Wuhan, Hubei, China at on Dec. 18-20, 2020. The topics of this collection are related to materials science and materials processing technologies in the various industrial branches.

174 pages, 2021
Print (978-3-0357-1762-4)
eBook (978-3-0357-3762-2)

Prices:
Print: **US\$ 160.00/€ 145.00**
eBook Single-User: **US\$ 112.00/€ 102.00**
eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3762-2.html>

■ Materials and Processing Technology IV

Edited by: Dmitry A. Chinakhov

The intensive development of engineering contributes to the emergence of new materials and technologies for their processing. This special issue contains research papers on modern technologies for obtaining and processing materials, technologies for obtaining welded joints, additive technologies, technologies for engineering tasks in mechanical engineering, and materials science. The book is intended for a wide range of specialists engaged in the development and production of heavy-duty metal structures, as well as students, undergraduates, graduate and postgraduate students of technical colleges and universities.

164 pages, 2021
Print (978-3-0357-1839-3)
eBook (978-3-0357-3839-1)

Prices:
Print: **US\$ 180.00/€ 165.00**
eBook Single-User: **US\$ 126.00/€ 116.00**
eBook Unlimited-User: **US\$ 221.00/€ 203.00**

<https://www.scientific.net/978-3-0357-3839-1.html>

■ Materials and Technologies for Engineering Application

Edited by: Is Fatimah, Imam Sahroni, Ruey-an Doong and Riyanto

This volume contains peer-reviewed full text papers, short reports of which were presented on the 2nd International Seminar on Science and Technology (ISSTEC), November 25, 2019, in Yogyakarta, Indonesia. Published articles cover a wide range of scientific research results and engineering solutions in the area of materials science, materials chemistry, chemical technologies for environmental protection, pharmacology, food and perfume industry, synthesis of nanoparticles.

202 pages, 2021

Print (978-3-0357-1769-3)

eBook (978-3-0357-3769-1)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3769-1.html>

■ Materials Engineering and Modern Manufacturing

Edited by: Prof. Regita Bendikiene and Kazimieras Juzėnas

The current volume of the journal contains research papers on ceramics, metals, polymers and other engineering materials. The scope of this volume is to present a wide range of papers on structural and functional materials, manufacturing processes, and technologies. Presented research can be useful for scientists and researchers in the area of materials science and materials application.

218 pages, 2021

Print (978-3-0357-1764-8)

eBook (978-3-0357-3764-6)

Prices:

Print: **US\$ 200.00/€ 180.00**

eBook Single-User: **US\$ 140.00/€ 126.00**

eBook Unlimited-User: **US\$ 245.00/€ 221.00**

<https://www.scientific.net/978-3-0357-3764-6.html>

■ Materials Engineering and Technologies for Production and Processing VI

Selected peer-reviewed full text papers from the 6th International Conference on Industrial Engineering (6th ICIE 2020)

Edited by: Prof. Andrey A. Radionov

This volume of the journal is collected from the papers that were presented at the 6th International Conference on Industrial Engineering (6th ICIE, 18-22 of May 2020). In the 2020 year, ICIE was held as a virtual conference due to the pandemic of COVID-19. The collected papers reflect the last results of scientific research and engineering decisions in

the area of materials science and technologies of materials synthesis, production, and processing.

1102 pages, 2021

Print (978-3-0357-1650-4)

eBook (978-3-0357-3650-2)

Prices:

Print: **US\$ 320.00/€ 290.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3650-2.html>

■ Materials Science and Industrial Applications III

Selected peer-reviewed papers from the 3rd International Conference on Materials Science and Industrial Applications (MSIA 2021)

Edited by: Zhibin You

This MSIA series proceeding includes original, peer-reviewed research papers from the 3rd International Conference on Materials Science and Industrial Applications (MSIA 2021, January 16-17, 2021, China). Presented papers' collection reflects the research results in the field of modern materials science and industrial technologies.

242 pages, 2021

Print (978-3-0357-1805-8)

eBook (978-3-0357-3805-6)

Prices:

Print: **US\$ 190.00/€ 175.00**

eBook Single-User: **US\$ 133.00/€ 123.00**

eBook Unlimited-User: **US\$ 233.00/€ 215.00**

<https://www.scientific.net/978-3-0357-3805-6.html>

■ Materials Science and Manufacturing Engineering

Selected peer-reviewed papers from the 3rd International Conference on Materials Science and Manufacturing Engineering (MSME 2020)

Edited by: Prof. Zhanwen Chen

This issue is a collection of peer-reviewed papers in the area of materials science and materials processing technologies presented at the 3rd International Conference on Materials Science and Manufacturing Engineering (MSME 2020) was held in Sanya, China, during November 5-8, 2020, in a combination of online and offline.

188 pages, 2021

Print (978-3-0357-1868-3)

eBook (978-3-0357-3868-1)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3868-1.html>

■ Materials Science and Technology of Additive Manufacturing

Edited by: Vasily Ploshikhin, Jan-Patrick Jürgens and Marvin Siewert

This book constitutes the proceedings of the conference Materials Science and Technology of Additive Manufacturing 2019 (MSTAM), which took place from 10th to 11th December 2019 in Bremen, Germany. MSTAM is a cutting-edge forum representing modern technological and material-specific trends and challenges in the field of additive manufacturing. The collected articles addressed powder bed fusion and direct energy deposition processes in metal additive manufacturing.

156 pages, 2021

Print (978-3-0357-1663-4)

eBook (978-3-0357-3663-2)

Prices:

Print: **US\$ 120.00/€ 110.00**

eBook Single-User: **US\$ 84.00/€ 77.00**

eBook Unlimited-User: **US\$ 147.00/€ 135.00**

<https://www.scientific.net/978-3-0357-3663-2.html>

■ Materials Structure and Heat and Mass Transfer

Edited by: Prof. Mosbah Zidani and Dr. Hichem Farh

This volume contains articles reflected the last results in numerical simulation of transfer phenomena in heat and fluid flow in the various technical systems and also includes descriptions of engineering decisions for the improvement of effective using renewable energy. The presented issue will be useful for a wide range of engineers and researchers from many branches of engineering science.

548 pages, 2021

Print (978-3-0357-1736-5)

eBook (978-3-0357-3736-3)

Prices:

Print: **US\$ 300.00/€ 270.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3736-3.html>

■ Materials, Computer Engineering and Education Technology

Selected peer-reviewed full text papers from the International Conference on Materials, Computer Engineering and Education Technology (MCEET 2020)

Edited by: Prof. Abdel-Badeeh Mohamed Salem and Prof. Sergei Gorlatch

This book includes papers presented at the International Conference on Materials, Computer Engineering and Education Technology (MCEET 2020, December 19-20, 2020, China). MCEET 2020 provided an excellent international forum for sharing knowledge and results in materials science, machinery design, robotics and

mechatronics, computer engineering, information technologies, and education.

402 pages, 2021

Print (978-3-0357-1882-9)

eBook (978-3-0357-3882-7)

Prices:

Print: **US\$ 200.00/€ 180.00**

eBook Single-User: **US\$ 140.00/€ 126.00**

eBook Unlimited-User: **US\$ 245.00/€ 221.00**

<https://www.scientific.net/978-3-0357-3882-7.html>

■ Mechanical Engineering, Materials Science and Civil Engineering V

Selected peer-reviewed full text papers from the 8th International Conference on Mechanical Engineering, Materials Science and Civil Engineering (ICMEMSCE 2020)

Edited by: Jing Wei Zhao

This volume contains papers introduced at the 8th International Conference on Mechanical Engineering, Materials Science and Civil Engineering (ICMEMSCE 2020), which was held on November 23-24, 2020 (virtual), Bangkok, Thailand. Collected papers reflect the last research results and engineering solutions in the area of materials science and materials processing technologies for the various branches of modern production.

206 pages, 2021

Print (978-3-0357-1866-9)

eBook (978-3-0357-3866-7)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3866-7.html>

■ Metal Materials Processes and Manufacturing

3rd International Conference on Metal Material Processes and Manufacturing (ICMMPM 2020)

Edited by: Prof. Dong Won Jung

This volume contains papers presented at the 2020 3rd International Conference on Metal Material Processes and Manufacturing (ICMMPM 2020, Singapore, 22-23 June 2020). Collected papers describe the results of the last researches in the area of engineering materials and modern materials processing technologies.

198 pages, 2021

Print (978-3-0357-1723-5)

eBook (978-3-0357-3723-3)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3723-3.html>

■ Metallurgy Technology and Materials VIII

Selected peer-reviewed full text papers from the 8th International Conference on Metallurgy Technology and Materials (ICMTM 2020)

Edited by: Prof. Nor Sabirin Mohamed

This volume of the journal contains papers presented on the 8th International Conference on Metallurgy Technology and Materials (ICMTM 2020, 1-2 August 2020, China). Articles cover recent trends and achievements made in the field of metallurgical technologies, biotechnological processes, and materials science.

148 pages, 2021

Print (978-3-0357-1700-6)

eBook (978-3-0357-3700-4)

Prices:

Print: **US\$ 150.00/€ 135.00**

eBook Single-User: **US\$ 105.00/€ 95.00**

eBook Unlimited-User: **US\$ 184.00/€ 166.00**

<https://www.scientific.net/978-3-0357-3700-4.html>

■ Mining Industry: Innovations and Prospects for the Development of Materials Science II

Selected peer-reviewed full text papers from the 8th International Scientific Conference on Innovations and Prospects of Development of Mining Machinery and Electrical Engineering (IPDME 2020)

Edited by: Vyacheslav V. Maksarov, Victor V. Gabov and Nikita V. Martyushev

This volume contains the selected papers presented at the 8th international scientific conference on Innovations and Prospects of Development of Mining Machinery and Electrical Engineering (IPDME 2020, St. Petersburg, Russia, on April 23–24, 2020). Within the framework of the conference, at Saint Petersburg Mining University, there were special sessions on novel materials for mining tools and equipment, materials study and engineering, mineralogy, and ore treatment. All included reviewed papers cover various topics within the field of materials science and present valuable research results.

240 pages, 2021

Print (978-3-0357-1803-4)

eBook (978-3-0357-3803-2)

Prices:

Print: **US\$ 200.00/€ 180.00**

eBook Single-User: **US\$ 140.00/€ 126.00**

eBook Unlimited-User: **US\$ 245.00/€ 221.00**

<https://www.scientific.net/978-3-0357-3803-2.html>

■ Modern Materials and Technologies for Civil and Road Engineering

Edited by: Dr. Ramadhansyah Putra Jaya

This volume papers introduce readers to the last research and achievements in the area of materials for mechanical engineering, modern structural elements and technologies

for civil and road engineering. This book will be interesting for scientists and engineers who work with modern engineering materials for roads and constructions.

308 pages, 2021

Print (978-3-0357-1830-0)

eBook (978-3-0357-3830-8)

Prices:

Print: **US\$ 210.00/€ 190.00**

eBook Single-User: **US\$ 147.00/€ 133.00**

eBook Unlimited-User: **US\$ 257.00/€ 233.00**

<https://www.scientific.net/978-3-0357-3830-8.html>

■ Polymer Science and Engineering II

Selected peer-reviewed full text papers from 4th International Conference on Composite Material, Polymer Science and Engineering (4th CMPSE)

Edited by: Katsuyuki Kida

This book contains papers presented at the 4th International Conference on Composite Material, Polymer Science and Engineering (CMPSE2020), which was held on December 06-07, 2020 (virtual), South Korea. The collected papers are focused on research in the areas of polymers and composites, superalloys, nanomaterials, functional materials, materials for electronic engineering and ceramics, environmental and chemical engineering.

152 pages, 2021

Print (978-3-0357-1829-4)

eBook (978-3-0357-3829-2)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3829-2.html>

■ Properties and Processing Technologies

Edited by: Prof. K. Hemachandra Reddy and Prof. Vikram Kumar Chintamreddy

This volume contains papers presented at the International Conference on Advances in Material Science and Mechanical Engineering (ICAMSME - 2020, 7-9, February 2020, India). The collected articles reflect research results in the area of synthesis, processing, and analysis of properties of various types of composite materials and also a wide variety of materials such as aluminum alloys, glass, steel, and polymeric materials.

154 pages, 2021

Print (978-3-0357-1734-1)

eBook (978-3-0357-3734-9)

Prices:

Print: **US\$ 150.00/€ 135.00**

eBook Single-User: **US\$ 105.00/€ 95.00**

eBook Unlimited-User: **US\$ 184.00/€ 166.00**

<https://www.scientific.net/978-3-0357-3734-9.html>

■ Recent Developments in Materials and its Applications

Edited by: Wasim M.K. Helal

This volume includes the peer-reviewed original articles covering research results and engineering development in the area of materials science and materials processing technologies for the various areas of human activity. This collection will be exciting and useful for many specialists, academics, engineers, and also for students in the field of materials science and its different applications.

94 pages, 2021

Print (978-3-0357-1761-7)

eBook (978-3-0357-3761-5)

Prices:

Print: **US\$ 100.00/€ 90.00**

eBook Single-User: **US\$ 70.00/€ 63.00**

eBook Unlimited-User: **US\$ 123.00/€ 110.00**

<https://www.scientific.net/978-3-0357-3761-5.html>

■ Sheet Metal 2021

Selected peer-reviewed full text papers from the 19th International Conference on Sheet Metal (SheMet 2021)

Edited by: M. Merklein, J. Dufloy, L. Fratini, H. Hagenah, P. Martins, G. Meschut and F. Micari

This volume holds selected papers of the 19th International Conference on Sheet Metal 2021, which provided an excellent platform for the exchange of knowledge for scientists and industry representatives from all over the world. The conference addressed current research and future trends concerning topics related to sheet metals. Besides innovative mechanical joining technologies and the latest developments concerning bonding and welding, the wide-ranging field of sheet metal forming was one of the major issues of the conference. Moreover, SheMet 2021 dealt with research activities regarding incremental forming. As manufacturing technologies are closely associated with the materials to be processed, characterization also represented a key topic.

332 pages, 2021

Print (978-3-0357-1693-1)

eBook (978-3-0357-3693-9)

Prices:

Print: **US\$ 270.00/€ 245.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3693-9.html>

■ Solid State Science and Technology VII

Selected peer-reviewed papers from the 7th International Conference on Solid State Science and Technology (7th ICSSST)

Edited by: Muhd Zu Azhan Yahya, Wan Md Zin Wan Yunus, Nor Laili Azua Jamari, Noor Azilah Mohd Kasim, Wan Yusmawati Wan Yusoff, Fadhilina Che Ros, Norli Abdullah, Dr. Noor Aisyah Ahmad Shah and Norhana Abdul Halim

This volume compiled from materials presented at the 7th International Conference on Solid State Science and Technology 2019 (7th ICSSST 2019, November 11-13, 2019 in Putrajaya, Malaysia) and reflects recent results in the area of materials science and processing technologies. The conference was jointly organized by the Centre for Defence Foundation Studies, National Defence University of Malaysia (NDUM) as host, in cooperation with the Malaysian Solid State Science and Technology Society (MASS). "Enhancing Science and Technology of Advanced Materials for the Fourth Industrial Revolution" was the theme of the conference, and the aim was to provide a platform for the science and technology community to discuss the latest developments and findings.

586 pages, 2021

Print (978-3-0357-1580-4)

eBook (978-3-0357-3580-2)

Prices:

Print: **US\$ 300.00/€ 270.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3580-2.html>

■ Spallation Materials Technology

Edited by: Prof. Kenji Kikuchi

This book describes the spallation material technology for the production of high-intensity neutron sources and the fundamental study of nuclear transmutation devices for long-lived fission products. The techniques relate to material performance evaluation in order to realize neutron production by spallation process due to high-energy protons; other quantum beams application to simulate the particular process and products under high energy proton bombardment to the materials, and the effect of nuclear heat generation brought by the proton beam energy deposit. After more than twenty years of activities, the latest research results are presented on the issues of the use of liquid heavy metals, mercury target, solid target, and radiation materials science that remain to be concerned.

168 pages, 2021

Print (978-3-0357-1594-1)

eBook (978-3-0357-3594-9)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3594-9.html>

■ Structural and Smart Materials IV

Selected peer-reviewed full text papers from the 6th International Conference on Mechanical Structures and Smart Materials (6th ICMSSM 2020)

Edited by: Kheng Lim Goh

This volume presents papers collected as a result of the 6th International Conference on Mechanical Structures and Smart Materials (ICMSSM), which was held on July 25-26, 2020, Ho Chi Minh City, Vietnam. The collection covers the last results of engineering solutions in the area of materials science and technologies of materials synthesis and processing.

258 pages, 2021

Print (978-3-0357-1686-3)

eBook (978-3-0357-3686-1)

Prices:

Print: **US\$ 230.00/€ 210.00**

eBook Single-User: **US\$ 161.00/€ 147.00**

eBook Unlimited-User: **US\$ 282.00/€ 257.00**

<https://www.scientific.net/978-3-0357-3686-1.html>

■ Symposium of Materials Science and Chemistry III

Selected peer-reviewed full text papers from the 6th International Conference on Science and Technology (ICST 2020)

Edited by: Ahmad Kusumaatmaja, Dr. Tutik Dwi Wahyuningsih, Melati Khairuddean, Indriana Kartini, Dr. Roto Roto, Keisuke Ohto, Dwi Siswanta, Dr. Julius Motuzas and Dr. Taufik Abdilllah Natsir

This volume is a collection of selected and reviewed papers presented at the Symposium of Materials Science and Chemistry. This symposium itself was part of the 6th International Conference on Science and Technology 2020 was held on 7-8 September 2020, hosted by Universitas Gadjah Mada, Yogyakarta, Indonesia. The collection offers the readers the latest research results from the particular areas of life sciences, materials engineering, and applied chemical technologies.

464 pages, 2021

Print (978-3-0357-1775-4)

eBook (978-3-0357-3775-2)

Prices:

Print: **US\$ 270.00/€ 245.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3775-2.html>

■ Technologies of Sustainable Development

Selected peer-reviewed full text papers from the 3rd Borneo International Conference on Applied Mathematics and Engineering (3rd BICAME)

Edited by: Andromeda Dwi Laksono

This volume of the journal contains papers presented at the 3rd Borneo International Conference on Applied Mathematics and Engineering 2020 (3rd BICAME 2020, 9 September 2020, Indonesia). The collection describes the last scientific research results and engineering solutions in Energy transition, smart technology, and the global environment for sustainable development.

126 pages, 2021

Print (978-3-0357-1804-1)

eBook (978-3-0357-3804-9)

Prices:

Print: **US\$ 100.00/€ 90.00**

eBook Single-User: **US\$ 70.00/€ 63.00**

eBook Unlimited-User: **US\$ 123.00/€ 110.00**

<https://www.scientific.net/978-3-0357-3804-9.html>

THERMEC 2021

International Conference on Processing & Manufacturing of Advanced Materials Processing, Fabrication, Properties, Applications

Edited by: Mihail Ionescu, Christof Sommitsch, Cecilia Poletti, Ernst Kozeschnik and Tara Chandra

THERMEC 2021 is the 11th International Conference on advanced materials built upon the proven concept and continues the tradition of its seven predecessors, Japan - 1988, Australia - 1997, USA - 2000, Spain - 2003, Canada - 2006, Germany - 2009, Canada - 2011, Las Vegas/USA - 2013, Graz/Austria - 2016, Paris/France - 2018 and Vienna/Austria - 2020. This conference series provides a forum for researchers around the globe to present results on recent advances in the field of materials science and technology of processing and manufacturing of advanced materials. The conference covers aspects of processing, fabrication, structure/property relationships, and applications of both ferrous and non-ferrous materials including biomaterials, materials for aerospace, and other advanced materials.

1944 pages, 2021

Print (978-3-0357-1630-6)

eBook (978-3-0357-3630-4)

Prices:

Print: **US\$ 410.00/€ 390.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3630-4.html>

■ Transfer Phenomena in Fluid and Heat Flows XII

Edited by: Dr. Stanislav Kolisnichenko

This volume of the journal "Defect and Diffusion Forum" presents a special thematic issue: "Processes of Heat and Mass Transfer in Engineering Flows". The collection contains peer-reviewed articles covering theoretical and practical aspects of modeling and numerical investigation of the diffusive convection and magnetohydrodynamic mixed convective flows, heat transfer phenomena in the various media and engineering objects, solving other engineering problems related to heat and mass transfer phenomena.

166 pages, 2021

Print (978-3-0357-1478-4)

eBook (978-3-0357-3478-2)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3478-2.html>

■ Ultra Clean Processing of Semiconductor Surfaces XV

Selected peer-reviewed full text papers from the 15th International Symposium on Ultra Clean Processing of Semiconductor Surfaces (UCPSS)

Edited by: Paul W. Mertens, Kurt Wostyn, Marc Meuris and Marc Heyns

This proceedings volume describes the recent progress in the field of ultra-clean surfaces and surface cleaning and preparation for the production of micro- and nanoelectronic integrated circuits and related subjects. This involves a wide variety of surfaces of mixed composition and with nano-topography with an aspect ratio of lateral dimension/vertical dimension on the order of 1/10. The goal of the processes is to obtain nano precise etching and cleaning, resulting in ultra-clean surfaces with very few residues or defects. This comprises different surface and cleaning steps throughout the entire device manufacturing process.

340 pages, 2021

Print (978-3-0357-1801-0)

eBook (978-3-0357-3801-8)

Prices:

Print: **US\$ 280.00/€ 255.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3801-8.html>

■ Workshop Advances in Materials Sciences

Selected peer-reviewed full text papers from the III International Conference on Advanced Technologies in Aerospace, Mechanical and Automation Engineering - MIST: Aerospace-III

Edited by: Igor Kovalev

The volume contains selected peer-reviewed papers presented at the AMS-Workshop "Advances in Materials Sciences-2020," which took place in the framework of the III International Conference on Advanced Technologies in Aerospace, Mechanical and Automation Engineering - MIST: Aerospace-III, 2020 on November 20-21, 2020 (Krasnoyarsk, Russian Federation). The main topics cover urgent researches and recent results in polymer and metal composites; dispersed materials; metallurgy and metal science, heat treatment of metals and alloys; corrosion and metal protection. This volume will be useful for a wide range of scientists and specialists of research institutes, design organizations, industrial enterprises, and educational institutions interested in materials science.

264 pages, 2021

Print (978-3-0357-1851-5)

eBook (978-3-0357-3851-3)

Prices:

Print: **US\$ 250.00/€ 225.00**

eBook Single-User: **US\$ 175.00/€ 158.00**

eBook Unlimited-User: **US\$ 306.00/€ 277.00**

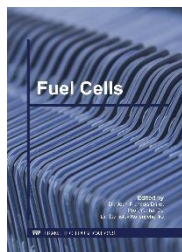
<https://www.scientific.net/978-3-0357-3851-3.html>

Current Books 2020

Specialized Collections & Monographs
Current Books



Specialized Collections & Monographs 2020



■ Fuel Cells

Aggregated Book

Edited by: Dr. Jean-Francois Drillet, Prof. Yanhai Du and Dr. Stanislav Kolisnichenko

The presented collection "Fuel Cells" consists of some selected proceedings papers published by Trans Tech Publications Inc. within the 2017 – 2019 period. It includes a wide range of

engineering solutions and results from scientific research activities in the fuel cells area.

556 pages, 2020

Print (978-3-0357-1548-4)

eBook (978-3-0357-3548-2)

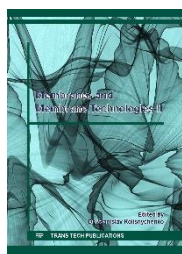
Prices:

Print: **US\$ 350.00/€ 315.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3548-2.html>



■ Membranes and Membrane Technologies II

Edited by: Dr. Stanislav Kolisnichenko

The topic collection "Membranes and Membrane Technologies II" of the latest scientific researches published by Trans Tech Publications from 2018 up to 2019 covers a wide range of engineering solutions in the field

of properties research, development and production of various types of membranes, and their use in the technologies for the treatment of the drink water and wastewater, gas separation, etc. We hope this collection will be useful and interesting to a broad audience of researchers and engineers.

410 pages, 2020

Print (978-3-0357-1435-7)

eBook (978-3-0357-3435-5)

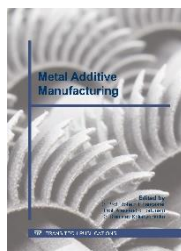
Prices:

Print: **US\$ 270.00/€ 245.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3435-5.html>



■ Metal Additive Manufacturing

Edited by: Prof. Robert J. Lancaster, Prof. Alessandro Fortunato and Dr. Stanislav Kolisnichenko

This volume is the first part of a specialised series on "Additive Manufacturing" consisting of papers published by Trans Tech

Publications Inc. during the period of 2018 – 2019. This collection of scientific papers describes a wide range of engineering approaches and solutions in the area of additive manufacturing technologies for metallic materials.

738 pages, 2020

Print (978-3-0357-1752-5)

eBook (978-3-0357-3752-3)

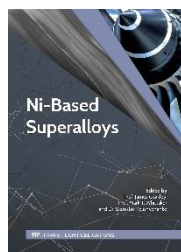
Prices:

Print: **US\$ 300.00/€ 270.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3752-3.html>



■ Ni-Based Superalloys

Edited by: Prof. James Coakley, Prof. Mark T. Whittaker and Dr. Stanislav Kolisnichenko

The first issue of the topic series "Superalloys" contains articles published by Trans Tech Publications in 2017 year. The volume entitled as "Ni-Based Superalloys" provides the readers with a wide range of scientific

research results and engineering solutions in the field of development, a study of properties and processing technologies of nickel-based superalloys. We hope this collection will be useful and interesting to a broad audience of researchers and engineers from the area of machinery.

720 pages, 2020

Print (978-3-0357-1161-5)

eBook (978-3-0357-3161-3)

Prices:

Print: **US\$ 320.00/€ 290.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3161-3.html>



■ Physical and Chemical Properties of Dental Restorative Materials that Affect their Clinical Efficiency

Edited by: Dejan Drakul

The work at hand deals with restorative dental materials that are being used for the treatment of the most common dental

disease – dental caries (but for treatment of cuneiform erosions as well). The materials this work talks about are dental amalgams (metallic dental restorative material), dental resin composites, and glass-ionomer cements. This work looks at these materials from the perspective of their physical and chemical properties that influence the clinical efficiency of these materials (the quality of restorations).

86 pages, 2020

Print (978-3-0357-1798-3)

eBook (978-3-0357-3798-1)

Prices:

Print: **US\$ 100.00/€ 90.00**

eBook Single-User: **US\$ 70.00/€ 63.00**

eBook Unlimited-User: **US\$ 123.00/€ 110.00**

<https://www.scientific.net/978-3-0357-3798-1.html>



■ Superalloys II

Edited by: Prof. Soran Biroscu and Dr. Stanislav Kolisnychenko

The second volume of the topic series “Superalloys” contains articles published by Trans Tech Publications from 2018 up to 2019. This collection presents a wide range of scientific research results and engineering solutions in the field of alloy developments

and performance, physical and mechanical properties, and processing technologies of various types of superalloys. We hope this collection will be beneficial and interesting to a broad audience of researchers and engineers from the area of materials science and engineering.

530 pages, 2020

Print (978-3-0357-1263-6)

eBook (978-3-0357-3263-4)

Prices:

Print: **US\$ 280.00/€ 255.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3263-4.html>

Books 2020

■ 23rd Brazilian Conference on Materials Science and Engineering

Selected peer-reviewed full text papers from 23rd CBECIMAT

Edited by: Lalgudi Venkataraman Ramanathan

This volume is composed of papers presented at the 23rd Brazilian Conference on Materials Science and Engineering (23rd CBECIMAT, 4-8 November 2018, Brazil). Collected articles introduce readers to last research and achievements in the area of applied materials science and technologies of materials synthesis, processing, and production.

534 pages, 2020

Print (978-3-0357-1746-4)

eBook (978-3-0357-3746-2)

Prices:

Print: **US\$ 320.00/€ 290.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3746-2.html>

■ 26th Concrete Days

Selected peer-reviewed full text papers from 26th International Conference Concrete Days

Edited by: Šárka Nenadálová and Petra Johová

This volume contains papers presented at the 26th International Conference Concrete Days 2019 was held in Hradec Kralove, Czech Republic from November 20th – 21st, 2019. The published papers present recent research results in the area of modern concretes and concrete structures, discuss modelling and design of concrete structures, bridges, and buildings, properties of concretes as well as significant structural projects and realizations.

304 pages, 2020

Print (978-3-0357-1668-9)

eBook (978-3-0357-3668-7)

Prices:

Print: **US\$ 300.00/€ 270.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3668-7.html>

■ 7th Asia Conference on Mechanical and Materials Engineering

7th Asia Conference on Mechanical and Materials Engineering (ACMME 2019), Tokyo, Japan

Edited by: Prof. Omar S. Es-Said

This volume contains a selection of papers submitted to the 7th Asia Conference on Mechanical and Materials Engineering (ACMME 2019) held in Tokyo, Japan from June 14-17, 2019. The collection presents recent advances in the field of materials engineering and manufacturing

technologies. We hope that this book will be useful and interesting for many researchers and engineers.

264 pages, 2020

Print (978-3-0357-1620-7)

eBook (978-3-0357-3620-5)

Prices:

Print: **US\$ 300.00/€ 270.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3620-5.html>

■ 8th Asia Conference on Mechanical and Materials Engineering

Selected peer-reviewed full text papers from the 8th Asia Conference on Mechanical and Materials Engineering

Edited by: Prof. Omar S. Es-Said

This volume presents papers collected by the results of the 8th Asia Conference on Mechanical and Materials Engineering (ACMME 2020), which was successfully held online on June 11-14, 2020. This collection provides useful information that will help researchers and practitioners in the development and application of new technologies and processes in the field of materials sciences.

126 pages, 2020

Print (978-3-0357-1705-1)

eBook (978-3-0357-3705-9)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3705-9.html>

■ Achievements and Solutions in Mechanical Engineering II

5th International Conference of Mechanical Engineering (5th ICOMME 2019)

Edited by: Nicolae Dumitru, Nicolae Craciunoiu and Adrian Sorin Rosca

This book presents the newest and actual results of researches that intend to improve theoretical and practical activities in the field of mechanical engineering and automotive, clinical biomechanics, civil engineering, robotics and mechatronics based on the papers presented at the 5th International Conference of Mechanical Engineering (ICOME 2019, October 24-25, 2019, Craiova, Romania).

408 pages, 2020

Print (978-3-0357-1593-4)

eBook (978-3-0357-3593-2)

Prices:

Print: **US\$ 280.00/€ 255.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3593-2.html>

■ Actual Challenges in Materials Science and Processing Technologies

Edited by: Gennadiy Pivnyak, Roman Dychkovskiy, Edgar Cabana, Vasyi Lozynskiy and Pavlo Saik

This volume contains peer-reviewed papers prepared as the event of the National Contact Point "Secure, Clean and Efficient Energy" under the support of the Ministry of Education and Science of Ukraine. This collection covers a wide range of topics regarding solving actual challenges in the area of research structural and building materials, technologies of materials processing and coatings in machinery, environmental engineering, chemical engineering, mineral processing. The presented research results have scientific and analytical justification, as well as practical proof. This volume will be essential reading for those in the related areas and will provide inspiration for future studies and achievement.

206 pages, 2020
Print (978-3-0357-1139-4)
eBook (978-3-0357-3139-2)

Prices:
Print: **US\$ 180.00/€ 165.00**
eBook Single-User: **US\$ 126.00/€ 116.00**
eBook Unlimited-User: **US\$ 221.00/€ 203.00**

<https://www.scientific.net/978-3-0357-3139-2.html>

■ Actual Problems of Engineering Mechanics: Materials Science and Technologies Selected peer-reviewed papers from the 7th International Conference "Actual problems of engineering mechanics" (APEM-2020)

Edited by: Prof. Mykola Surianinov

In this volume collected papers that were presented on the 7th International Conference "Actual problems of engineering mechanics" (APEM-2020, 13 May, Odesa, Ukraine). Published articles describe the last results of scientific research and engineering solutions in the area of building and structural materials, structural and applied mechanics, structural elements and structures in construction, designs of machines, and mechanisms.

318 pages, 2020
Print (978-3-0357-1809-6)
eBook (978-3-0357-3809-4)

Prices:
Print: **US\$ 230.00/€ 210.00**
eBook Single-User: **US\$ 161.00/€ 147.00**
eBook Unlimited-User: **US\$ 282.00/€ 257.00**

<https://www.scientific.net/978-3-0357-3809-4.html>

■ Advanced Materials and Application III Selected peer-reviewed full text papers from 3rd International Symposium on Advanced Materials and Application (ISAMA 2020)

Edited by: Prof. Mosbeh Kaloop

This volume contains papers presented at the 3rd International Symposium on Advanced Materials and Application (ISAMA 2020, February 14-16, 2020 in Seoul, South Korea). Collected articles introduce to the readers with the newest researches results in the field of materials science and materials manufacturing and processing.

182 pages, 2020
Print (978-3-0357-1680-1)
eBook (978-3-0357-3680-9)

Prices:
Print: **US\$ 170.00/€ 155.00**
eBook Single-User: **US\$ 119.00/€ 109.00**
eBook Unlimited-User: **US\$ 208.00/€ 191.00**

<https://www.scientific.net/978-3-0357-3680-9.html>

■ Advanced Materials and Engineering Materials IX Selected peer-reviewed full text papers from the 9th International Conference on Advanced Materials and Engineering Materials (ICAMEM 2020)

Edited by: Prof. Peng Sheng Wei

This collection contains papers submitted on the 9th International Conference on Advanced Materials and Engineering Materials (ICAMEM 2020) held in Bangkok, Thailand 3-5, July, 2020 and introduces for readers the last scientific research in the area of materials science and technologies of materials processing.

568 pages, 2020
Print (978-3-0357-1669-6)
eBook (978-3-0357-3669-4)

Prices:
Print: **US\$ 320.00/€ 290.00**
eBook Single-User: **US\$ 180.00/€ 162.00**
eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3669-4.html>

■ Advanced Materials and Manufacturing Technology IV

Edited by: Hun Guo, Taiyong Wang, Hong Feng Wang and Ji Xu

This special topic volume includes the peer-reviewed articles covering research and development in the area of materials engineering and materials processing technologies in mechanical engineering. This collection will be interesting and useful for many engineers, academics and also for students.

184 pages, 2020
Print (978-3-0357-1387-9)
eBook (978-3-0357-3387-7)

Prices:

Print: **US\$ 150.00/€ 135.00**

eBook Single-User: **US\$ 105.00/€ 95.00**

eBook Unlimited-User: **US\$ 184.00/€ 166.00**

<https://www.scientific.net/978-3-0357-3387-7.html>

■ Advanced Materials and Processing Technologies II

3rd International Conference on Materials Sciences and Nanomaterials (ICMSN 2019) and 3rd International Conference on Advanced Manufacturing and Materials (ICAMM 2019)

Edited by: Prof. Yuyuan Zhao

This volume contains papers presented at the 3rd International Conference on Materials Sciences and Nanomaterials (ICMSN 2019) and the 3rd International Conference on Advanced Manufacturing and Materials (ICAMM 2019). The conference proceeding includes a selection of papers dedicated to actual problems of modern materials science and materials processing technologies. We hope this collection will be useful for a wide range of specialists from many branches.

222 pages, 2020

Print (978-3-0357-1555-2)

eBook (978-3-0357-3555-0)

Prices:

Print: **US\$ 210.00/€ 190.00**

eBook Single-User: **US\$ 147.00/€ 133.00**

eBook Unlimited-User: **US\$ 257.00/€ 233.00**

<https://www.scientific.net/978-3-0357-3555-0.html>

■ Advanced Materials and Technologies IV

Edited by: Dr. Stanislav Kolisnichenko

The presented volume of the journal "Advanced Materials Research" is the regular special issue from the series "Advanced Materials and Technologies" and collected from peer-reviewed stand-alone papers describing the results of research and engineering solutions dealing with actual problems in the area of materials science and materials processing technologies. Published articles will be useful for professionals in various branches of engineering, for students and academic staff concerned with the related specialties.

116 pages, 2020

Print (978-3-0357-1279-7)

eBook (978-3-0357-3279-5)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3279-5.html>

■ Advanced Materials and Technologies V

Edited by: Dr. Stanislav Kolisnichenko

This volume of the journal "Advanced Materials Research" presents the regular special issue of the series "Advanced Materials and Technologies" and collected peer-reviewed stand-alone papers, describing the research results and engineering solutions, which deal with actual problems in the area of materials science and materials processing technologies. The published papers can be useful for professionals in various branches of engineering, for students and academic staff concerned with the related fields.

186 pages, 2020

Print (978-3-0357-1408-1)

eBook (978-3-0357-3408-9)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3408-9.html>

■ Advanced Materials for Renewable Energy Selected peer-reviewed papers from the Annual International Conference on Renewable Energy (ICORE 2019)

Edited by: Aripriharta Aripriharta and Poppy Puspitasari

The annual International Conference on Renewable Energy (ICORE 2019) was held in Malang, East Java, Indonesia on August 9 – 10, 2019. This conference is hosted by Universitas Negeri Malang, Indonesia in collaboration with the Centre of Advanced Materials for Renewable Energy (CAMRY). This volume contains papers which were presented at the annual International Conference on Renewable Energy (ICORE 2019, Indonesia, August 9 – 10, 2019) and reflect the results of research and engineering design in the area of modern materials and materials processing technologies for the various branches of modern industrial production.

244 pages, 2020

Print (978-3-0357-1627-6)

eBook (978-3-0357-3627-4)

Prices:

Print: **US\$ 210.00/€ 190.00**

eBook Single-User: **US\$ 147.00/€ 133.00**

eBook Unlimited-User: **US\$ 257.00/€ 233.00**

<https://www.scientific.net/978-3-0357-3627-4.html>

■ Advanced Materials in Industrial and Environmental Engineering

Edited by: Andrey G. Syrkov, E.I. Pryakhin, Vyachelsav V. Maksarov and Nikita V. Martyushev

The volume contains papers presented at the Conference Nanophysics and Nanomaterials (St Petersburg, Russia, on 27-28 November 2019). This collection discusses advances in the area of structural materials, nanomaterials and nanotechnologies, metallurgical technologies, coatings and

surface engineering, functional materials, minerals and industrial waste processing, materials for biomedical application.

246 pages, 2020

Print (978-3-0357-1802-7)

eBook (978-3-0357-3802-5)

Prices:

Print: **US\$ 180.00/€ 165.00**

eBook Single-User: **US\$ 126.00/€ 116.00**

eBook Unlimited-User: **US\$ 221.00/€ 203.00**

<https://www.scientific.net/978-3-0357-3802-5.html>

■ **Advanced Materials Research QiR 16**

Selected peer-review full text papers from the 16th International Conference on Quality in Research (16th QiR 2019)

Edited by: Anne Zulfia and Wahyuaji Narottama Putra

This volume contains papers that were presented at the Symposium Metallurgy and Materials Engineering in the framework of the 16th International Conference on Quality in Research (16th QiR, 22 – 24 July 2019, Padang, Indonesia). Collected papers represent to readers the results of scientific research and engineering decisions in the field of metallurgy and welding technologies, functional materials, and materials for energy storage devices, chemical technologies, biomedical materials, and composites.

480 pages, 2020

Print (978-3-0357-1599-6)

eBook (978-3-0357-3599-4)

Prices:

Print: **US\$ 300.00/€ 270.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3599-4.html>

■ **Advanced Materials Research X**

Selected peer-reviewed full text papers from the 10th International Conference on Advanced Materials Research (10th ICAMR-2020)

Edited by: Amanda F. Wu and Alan Kin Tak Lau

This volume contains collected papers that were presented at the 10th International Conference on Advanced Materials Research (10th ICAMR-2020, Okinawa, Japan). These articles reflect the latest achievements in materials science and technologies of materials processing for the various branches of modern industry.

266 pages, 2020

Print (978-3-0357-1648-1)

eBook (978-3-0357-3648-9)

Prices:

Print: **US\$ 210.00/€ 190.00**

eBook Single-User: **US\$ 147.00/€ 133.00**

eBook Unlimited-User: **US\$ 257.00/€ 233.00**

<https://www.scientific.net/978-3-0357-3648-9.html>

■ **Advanced Materials Science II**

2nd International Conference on Advanced Materials Science (ICOAMS 2019)

Edited by: Waluyo Adi Siswanto and Tri Widodo Besar Riyadi

This volume contains papers that were presented at the 2nd International Conference on Advanced Materials Science (ICOAMS 2019, 23-24 October 2019, Universitas Muhammadiyah Surakarta, Indonesia) and introduces readers to the last research results in materials science and technologies of materials processing and synthesis.

214 pages, 2020

Print (978-3-0357-1703-7)

eBook (978-3-0357-3703-5)

Prices:

Print: **US\$ 190.00/€ 175.00**

eBook Single-User: **US\$ 133.00/€ 123.00**

eBook Unlimited-User: **US\$ 233.00/€ 215.00**

<https://www.scientific.net/978-3-0357-3703-5.html>

■ **Advanced Research in Materials Science III**

Selected peer-reviewed full text papers from the 8th International Conference on Materials Science (ICMS 2019)

Edited by: Jav Davaasambuu

This volume contains peer-reviewed papers presented at the 8th International Conference on Materials Science (ICMS 2019) held at Ulan-Ude, Russia, August 24-28, 2019 and focuses on the structures, properties, and applications of new materials as well as their characterization techniques.

168 pages, 2020

Print (978-3-0357-1569-9)

eBook (978-3-0357-3569-7)

Prices:

Print: **US\$ 180.00/€ 165.00**

eBook Single-User: **US\$ 126.00/€ 116.00**

eBook Unlimited-User: **US\$ 221.00/€ 203.00**

<https://www.scientific.net/978-3-0357-3569-7.html>

■ **Advanced Technologies in Material Processing**

Selected peer-reviewed full text papers from the ICECME in conjunction with 9th AIC 2019 International Conference

Edited by: Mohd Iqbal, Iskandar Hasanuddin and Akhyar

This volume contains papers presented at the International Conference on Experimental and Computational Mechanic in Engineering (ICECME, Indonesia, 18-9 September 2019) in conjunction with 9th AIC 2019 International Conference which reflect the last research results and engineering decisions in the area of materials science and technologies of materials processing.

142 pages, 2020
Print (978-3-0357-1655-9)
eBook (978-3-0357-3655-7)

Prices:

Print: **US\$ 170.00/€ 155.00**

eBook Single-User: **US\$ 119.00/€ 109.00**

eBook Unlimited-User: **US\$ 208.00/€ 191.00**

<https://www.scientific.net/978-3-0357-3655-7.html>

■ Advanced Topics in Transport Processes: From Drying and Osmotic Dehydration to Freezing

Edited by: João Delgado and A.G. Barbosa de Lima

This volume is a collection of papers describing recent trends in the development, and application of the heat and mass transfer processes in the field of food preservation, namely the technologies of osmotic dehydration, vacuum drying, freeze drying, cooling, superheated steam drying, heat pump drying and spray drying.

180 pages, 2020

Print (978-3-0357-1645-0)

eBook (978-3-0357-3645-8)

Prices:

Print: **US\$ 300.00/€ 270.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3645-8.html>

■ Advances in Environmental Engineering and Sustainability

Edited by: Adriana Eštoková, Vojtěch Václavík, Tomáš Dvorský and Nadežda Številová

This special issue of the journal aims at the advances in engineering science with special attention to the building materials and materials for environmental applications. Main topics include use of alternative raw materials in building materials production, evaluation of the properties and safety of building materials, impacts of buildings and materials on the environment including indoor air, life cycle assessment of materials (LCA), quality of soil materials, and environmental applications of various materials. This issue provides an integrated view of the trends in the development of environmentally friendly building materials and solving the problems associated with environmental safety and the achievement of sustainable development.

196 pages, 2020

Print (978-3-0357-1658-0)

eBook (978-3-0357-3658-8)

Prices:

Print: **US\$ 210.00/€ 190.00**

eBook Single-User: **US\$ 147.00/€ 133.00**

eBook Unlimited-User: **US\$ 257.00/€ 233.00**

<https://www.scientific.net/978-3-0357-3658-8.html>

■ Advances in Fracture and Damage Mechanics XVIII

18th FDM 2019

Edited by: Prof. S.A. Paipetis and Prof. Ferri M.H. Aliabadi

The volume is a collection of edited papers presented at the 18th International Conference on Fracture and Damage Mechanics (FDM 2019), which was held in Rodos Palace Hotel, Rhodes, Greece. The papers cover a wide range of topics related to fracture and damage mechanics. Studies on failure analysis, fracture mechanics, composites, micromechanics, multiscale modeling as well as probabilistic aspects, computer modeling methods, and non-linear problems are presented for a wide range of structural materials, both monolithic and composite. Studies include fatigue, corrosion, creep, dynamic fracture and durability together with damage tolerance aspects. Selected papers on multiscale and multifunctional composites have been presented together with works on structural health monitoring, remaining life assessment methodologies and predictive modeling.

526 pages, 2020

Print (978-3-0357-1586-6)

eBook (978-3-0357-3586-4)

Prices:

Print: **US\$ 750.00/€ 675.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3586-4.html>

■ Advances in Laser and Surface Material Processing

Edited by: Prof. Tomasz Tański and Dr. Przemysław Snopiński

This special issue entitled „Advances in laser and surface material processing” provides a broad overview of methods of laser surface treatment and modern surface modification technologies applied to engineering materials. The articles focus mainly on the effect of processing conditions on the surface properties, structure as well as the manufacturing process optimization. The major purpose of this book is to present and discuss various problems in surface treatment technology, related to the structure and properties of various materials.

192 pages, 2020

Print (978-3-0357-1652-8)

eBook (978-3-0357-3652-6)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3652-6.html>

■ Advances in Mass and Thermal Transport in Engineering Materials

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

This volume of Diffusion Foundations is entitled Advances in Mass and Thermal Transport in Engineering Materials. The volume was designed to capture a very wide cross-section of research in the area in both experimental and modelling of mass and thermal transport and at both basic and applied levels. It is now very well recognized that the mass and thermal transport processes in engineering materials underpin much of the advance in the development of new materials and the improvement of existing materials. Whether it be the ongoing enhancement of the engineering properties of materials, the materials processing, the in-service longevity of materials or the recycling of materials, mass and thermal transport very frequently play direct and essential roles.

208 pages, 2020

Print (978-3-0357-1222-3)

eBook (978-3-0357-3222-1)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3222-1.html>

■ Alternative Energy Sources, Materials and Technologies II

Second International Conference on Sustainable Energy Resources, Materials and Technologies (ISERMAT 2019)

Edited by: Dr. N. Nallusamy, Dr. M. Suresh, Dr. S. Rajkumar, Dr. K. L. Harikrishna and Dr. S. Somasundaram

This volume contains papers which were presented on the Second International Conference on Sustainable Energy Resources, Materials and Technologies (ISERMAT 2019 on March 14 and 15, 2019, Chennai, India) and reflect the results of researches in the area of development and investigation of the special and functional structural materials and high-tech industrial processes of materials processing. This collection will be useful for specialists from fields of mechanical engineering and materials science.

210 pages, 2020

Print (978-3-0357-1567-5)

eBook (978-3-0357-3567-3)

Prices:

Print: **US\$ 210.00/€ 190.00**

eBook Single-User: **US\$ 147.00/€ 133.00**

eBook Unlimited-User: **US\$ 257.00/€ 233.00**

<https://www.scientific.net/978-3-0357-3567-3.html>

■ Archaeometallurgy

Beginnings of the Use of Metals and Alloys

Edited by: Prof. Chang Ock Choi and Jea-Young Choi

This book comprises results of diverse fields and experimental researches in the area of archaeometallurgy. The Papers are peer-reviewed full text papers, abstracts of which were presented at the Ninth International Conference on the Beginnings of the Use of Metals and Alloys (BUMA IX, University in Busan, Korea, October 16 - 19, 2017). We hope this collection will be useful and interesting for many specialists, whose activity is related to research in the area of anthropology, ancient metallurgy and modern methods in archaeometallurgy.

92 pages, 2020

Print (978-3-0357-1321-3)

eBook (978-3-0357-3321-1)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3321-1.html>

■ Asian BioCeramics 18

18th Asian BioCeramic (ABC)

Edited by: Arief Cahyanto and I Made Joni

This book contains papers collected from the 18th Asian BioCeramic (ABC) Symposium, held in Bandung, Indonesia on 19-20 September 2018 and reflected the most recent research made in the study of bioceramics and their applications. The papers are focused on synthesis, processing, and analysis of bioceramics properties, use of bioceramics for coating and surface modification of implants, application of bioceramics in the treatment of soft and hard tissue, infectious complications treatment, and tissue engineering in maxillofacial and orthopedic applications. The strong contribution related to the application of bioceramics and composite materials in dentistry and orthopedics, which is presented in this book, confirms the importance of these materials for clinical practice.

292 pages, 2020

Print (978-3-0357-1439-5)

eBook (978-3-0357-3439-3)

Prices:

Print: **US\$ 350.00/€ 315.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3439-3.html>

■ Broad Exposure to Science and Technology

Broad Exposure to Science and Technology (BEST 2019)

Edited by: Endarto Y. Wardhono

Broad Exposure to Science and Technology (BEST2019) is a conference program on engineering science which took place on August 7-8, 2019 in Bali, Indonesia. The

conference was organized by the Engineering Faculty of University of Sultan Ageng, UNTIRTA, Indonesia, and supported by UTC Compiègne France, Alliance Sorbonne Universities France. The Conference provided a setting for discussing recent developments in materials science, metallurgy, biomaterials, and chemical technologies. Results of this Conference will be useful and interesting for many researchers and engineers all over the world.

216 pages, 2020
Print (978-3-0357-1573-6)
eBook (978-3-0357-3573-4)

Prices:
Print: **US\$ 210.00/€ 190.00**
eBook Single-User: **US\$ 147.00/€ 133.00**
eBook Unlimited-User: **US\$ 257.00/€ 233.00**

<https://www.scientific.net/978-3-0357-3573-4.html>

■ Chemical, Energy and Environmental Engineering

Selected peer-reviewed full text papers from 2nd International Conference of Chemical, Energy and Environmental Engineering (ICCEE 2019)

Edited by: Ahmed Hassan El-Shazly, Mona Gamaleldien, Marwa Farouk Elkady and Hamdy Aboali

This book contains selected papers presented at the 2nd International Conference of Chemical, Energy and Environmental Engineering: ICCEE 2019, held on 16-18 July 2019, at the Egypt-Japan University of Science and Technology, Alexandria, Egypt. Published articles reflect the recent advances in the field of materials synthesis and development related to chemical and environmental engineering.

256 pages, 2020
Print (978-3-0357-1711-2)
eBook (978-3-0357-3711-0)

Prices:
Print: **US\$ 210.00/€ 190.00**
eBook Single-User: **US\$ 147.00/€ 133.00**
eBook Unlimited-User: **US\$ 257.00/€ 233.00**

<https://www.scientific.net/978-3-0357-3711-0.html>

■ Civil, Architectural, Structural and Constructional Engineering III

Selected peer-reviewed papers from 4th annual international conference on Civil, Architectural, Structural and Constructional Engineering (ICCASC 2019)

Edited by: Prof. Dong Keon Kim

This volume consists of papers that were presented at the 4th annual international conference on Civil, Architectural, Structural and Constructional Engineering (ICCASC 2019, Jeju Island, South Korea, November 15-17, 2019). This collection reflects the last advances and results of research in the area of applied materials science, building materials, and technologies of materials processing and synthesis.

270 pages, 2020
Print (978-3-0357-1472-2)
eBook (978-3-0357-3472-0)

Prices:
Print: **US\$ 160.00/€ 145.00**
eBook Single-User: **US\$ 112.00/€ 102.00**
eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3472-0.html>

■ Composite Materials and Material Engineering IV

Selected peer-reviewed papers from 5th International Conference on Composite Materials and Material Engineering (ICCMME 2020)

Edited by: Jong Hak Kim

This volume contains papers that were presented at the 5th International Conference on Composite Materials and Material Engineering (ICCMME 2020, Seoul, South Korea, January 13-16, 2020) and reflects the last achievements in the field of composite materials, nano- and functional materials, processing technologies and building materials.

186 pages, 2020
Print (978-3-0357-1619-1)
eBook (978-3-0357-3619-9)

Prices:
Print: **US\$ 170.00/€ 155.00**
eBook Single-User: **US\$ 119.00/€ 109.00**
eBook Unlimited-User: **US\$ 208.00/€ 191.00**

<https://www.scientific.net/978-3-0357-3619-9.html>

■ Computational Analysis of Heat Transfer in Fluids and Solids II

Edited by: Prof. Oluwole Daniel Makinde

This special issue on "Computational Analysis of Heat Transfer in Fluids and Solids II" in the journal "Defect and Diffusion Forum" addresses various nonlinear models involving heat transfer phenomenon in fluids and solids. Computational techniques are employed to analyze the engineering solutions in the area of heat and mass transfer and numerical results are discussed in order to demonstrate the salient features of practical engineering and industrial applications. The topics covered in this issue include: tribology, extended surfaces fins, reactive flow problem, Newtonian and non-Newtonian flow, nanofluids dynamics, boundary layer flow, natural convection, hydrodynamic stability, biomechanics, plasma physics, physics of dusty plasma, forced convection, mixed convection, magnetohydrodynamics, thermal radiation, flow in porous media, and irreversibility analysis.

208 pages, 2020
Print (978-3-0357-1601-6)
eBook (978-3-0357-3601-4)

Prices:
Print: **US\$ 160.00/€ 145.00**
eBook Single-User: **US\$ 112.00/€ 102.00**
eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3601-4.html>

■ Congress on Advanced Materials Sciences and Engineering

International Congress on Advanced Materials Science and Engineering (AMSE 2019)

Edited by: Lee Zhi and Masayoshi Tanaka

Advanced materials and technologies are at the heart of many engineering developments that touch our lives and find wide applications in industry. The presented articles are selected from presentations that were given at the International Congress on Advanced Materials Science and Engineering (AMSE, July 22 – 24, 2019, Osaka, Japan). This collection will be interesting and useful for specialists and researchers from various branches of engineering.

178 pages, 2020

Print (978-3-0357-1561-3)

eBook (978-3-0357-3561-1)

Prices:

Print: **US\$ 170.00/€ 155.00**

eBook Single-User: **US\$ 119.00/€ 109.00**

eBook Unlimited-User: **US\$ 208.00/€ 191.00**

<https://www.scientific.net/978-3-0357-3561-1.html>

■ Construction: Materials Processing and Technologies

Edited by: Ghassan H. Abdul Majid, Salah Albermany, Dr. Ahmed J. Obaid and Dr. Laith A. Alasady

This issue of the journal focuses on the advances in engineering science with special attention to the building materials and materials for environmental applications. The main topics include Constructional and Engineering Materials, Structure of materials characterization and testing, the Influence of An Infill, Environmental and Green Materials. The content in this issue provides a modern view of the aims in the development of environmentally friendly building materials and solving the problems associated with environmental safety and enhancement and the achievement of sustainable development also the current issue deals with a new research in green engineering.

144 pages, 2020

Print (978-3-0357-1677-1)

eBook (978-3-0357-3677-9)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3677-9.html>

■ Contemporary Problems in Architecture and Construction II

11th International Conference on Contemporary Problems of Architecture and Construction (11th ICPAC-2019), October 14 - 16, 2019, Yerevan, Armenia

Edited by: Gagik Galstyan, Narine Pirumyan, B.M. Yazyev and Anastasia Lapina

The 11th International Conference on Contemporary Problems of Architecture and Construction (11th ICPAC-2019) was held from October 14 - 16, 2019, on the basis National University of Architecture and Construction of Armenia. The presented, according to the results of the conference collection, raises important problems in construction and architecture - from ideas and projects to their practical implementation on the real objects. We hope this book will be interesting and useful for many specialists in the field of modern construction and architecture.

226 pages, 2020

Print (978-3-0357-1666-5)

eBook (978-3-0357-3666-3)

Prices:

Print: **US\$ 270.00/€ 245.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3666-3.html>

■ Current Advances in Materials Applications

Edited by: Dr. Omar Dahham and Nik Noriman Zulkepli

With the current development of materials science and engineering, many different cost-effective and high-quality materials have come into use in various applications. Nowadays, the materials became multi-functional and required improvements and optimizations in their characteristics. The development of the structure of the material, adapted to each new application, needs the understanding of base matter characteristics, the changes in the microstructure and characteristics of the material during forming processes. Thus, this volume of the journal "Material Science Forum" presents to readers the 1st special issue from the series "Current Advances in Materials Applications," which contains articles covering different aspects of the research the properties of the materials and methods their applications.

656 pages, 2020

Print (978-3-0357-1751-8)

eBook (978-3-0357-3751-6)

Prices:

Print: **US\$ 300.00/€ 270.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3751-6.html>

■ Development and Investigation of Materials Using Modern Techniques II

Selected peer-reviewed full text papers from the 3rd International Conference on Advanced Materials Characterization Techniques (AMCT 2019)

Edited by: Ruhiyuddin Mohd Zaki, Zainal Arifin Ahmad, Khairul Rafezi Ahmad, Khairul Nizar Ismail, Dr. Mohd Sobri Idris, Faizul Che Pa, Mohd Fitri Mohamad Wahid, Wan Mohd Arif W. Ibrahim, Darus Murizam, Noorina Hidayu Jamil, Kasmin Mohd Zaheruddin and Abdul Haq Ibrahim

This volume contains papers that were presented on the 3rd International Conference on Advanced Materials Characterization Techniques (AMCT 2019), held at the Putra Regency Hotel, Kangar, Perlis, Malaysia, from 23rd to 24th July 2019. The collected articles reflect the last achievements in the area of research the properties of materials used in various branches of human activity.

712 pages, 2020

Print (978-3-0357-1582-8)

eBook (978-3-0357-3582-6)

Prices:

Print: **US\$ 320.00/€ 290.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3582-6.html>

■ Diffusion Foundations Vol. 28

Edited by: Dr. Lina Kieush

This volume presents papers on mathematical modelling of magnetohydrodynamic flow and heat transfer in an electro-conductive polymer, as well as numerical analysis of heat transfer through nanofluid flow in different media, including porous media. Additionally, the study of multi-phase flow in a pipeline has been presented, which can be positively addressed in such key branch as the oil and gas industry. Besides, the volume is devoted to numerical analysis to assess the cooling hole's performance embedded in different trenched designs (triangular trench, semi-cylindrical trench, and corrugated trench) for improving the film cooling efficiency over a flat plate. The presented results might find their application in various areas of engineering.

86 pages, 2020

Print (978-3-0357-1743-3)

eBook (978-3-0357-3743-1)

Prices:

Print: **US\$ 100.00/€ 90.00**

eBook Single-User: **US\$ 70.00/€ 63.00**

eBook Unlimited-User: **US\$ 123.00/€ 110.00**

<https://www.scientific.net/978-3-0357-3743-1.html>

■ Energetic Materials and Processes

Edited by: Dr. Zhenyu Du

The special issue on Energetic Materials and Processes brings together scientists from many countries working in universities, research institutes, government laboratories and private industry to discuss state-of-the-art research on new materials and processes for different applications. The main topics of the issue include synthesis of new materials, performance, advanced diagnostics, experimental techniques, theoretical approaches, and computational models for simulating the behaviour of energetic materials under a wide variety of conditions. The issue is a platform for presenting cutting edge fundamental research in chemistry and physics of materials and processes associated with fast chemical processes, frontal high energy reactions, supersonic reactions, ageing, thermal decomposition and mechanical damage of energetics, as well as utilisation and safety of energetic materials, new materials for anti-terroristic activity, new materials for space transportation systems, new technologies of energetic materials in medicine, forensic, mining and civil engineering

564 pages, 2020

Print (978-3-0357-1674-0)

eBook (978-3-0357-3674-8)

Prices:

Print: **US\$ 300.00/€ 270.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3674-8.html>

■ Engineering and Innovative Materials VIII 8th International Conference on Engineering and Innovative Materials (ICEIM 2019)

Edited by: Heng-Chia Hsieh and Muhammad Yahaya

This volume contains papers presented at the 8th International Conference on Engineering and Innovative Materials (ICEIM 19, Tokyo, Japan, September 6-8, 2019) and covers the wide range of scientific and engineering research in the area of modern materials, technologies of materials processing and chemical production.

314 pages, 2020

Print (978-3-0357-1605-4)

eBook (978-3-0357-3605-2)

Prices:

Print: **US\$ 270.00/€ 245.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3605-2.html>

■ Engineering Fluid Flows and Heat Transfer Analysis

Edited by: Dr. Houssem Laidoudi and Prof. Oluwale Daniel Makinde

Engineering systems and materials do experience heating or cooling of some kind during operation. Modelling and

theoretical analysis of heat transfer problems will enhance the functional success of the materials and enable new product development in engineering. The special issue on "Engineering Fluid Flows and Heat Transfer Analysis" of the journal "Diffusion Foundations" presents some novel theoretical analysis of various engineering heat transfer problems. Topics covered in this special issue include reactive fluid flow, magnetohydrodynamics, Newtonian and non-Newtonian fluid flow, natural convection, forced convection, mixed convection, porous media flow, and thermal radiation absorption effects.

182 pages, 2020
Print (978-3-0357-1598-9)
eBook (978-3-0357-3598-7)

Prices:
Print: **US\$ 160.00/€ 145.00**
eBook Single-User: **US\$ 112.00/€ 102.00**
eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3598-7.html>

■ **Engineering Tribology and Materials IV** **Selected peer-reviewed full text papers from 5th International Conference on Engineering Tribology and Applied Technology (ICETAT 2019)**

Edited by: Yunn Lin Hwang

In this volume collected papers presented on the 5th International Conference on Engineering Tribology and Applied Technology 2019 (ICETAT 2019, October 25-26, 2019, Taiwan). The collection of papers reflects the last scientific and engineering results in the area of modern mechanical engineering and mainly focused on mechatronics and robotics.

56 pages, 2020
Print (978-3-0357-1717-4)
eBook (978-3-0357-3717-2)

Prices:
Print: **US\$ 60.00/€ 55.00**
eBook Single-User: **US\$ 42.00/€ 39.00**
eBook Unlimited-User: **US\$ 74.00/€ 68.00**

<https://www.scientific.net/978-3-0357-3717-2.html>

■ **Engineering: Technological Advances and Research Results**

Edited by: Nancy Liu

The collected articles provide the readers with the results of scientific research and engineering decisions in the area of materials science, building engineering, civil engineering and environmental engineering. Short reports were presented at International Conference on Materials Science and Engineering (ICMSE 2019), which held in Kyoto Research Park Corp, Kyoto, Japan

98 pages, 2020
Print (978-3-0357-1497-5)
eBook (978-3-0357-3497-3)

Prices:
Print: **US\$ 90.00/€ 85.00**

eBook Single-User: **US\$ 63.00/€ 60.00**
eBook Unlimited-User: **US\$ 110.00/€ 105.00**

<https://www.scientific.net/978-3-0357-3497-3.html>

■ **FarEastCon - Materials and Construction II** **International Scientific Conference "FarEastCon" 2019**

Edited by: Denis B. Solovev

The International Scientific Conference "FarEastCon" took place on October 1-4, 2019 in Vladivostok, Russian Federation. This collection presents papers reflecting recent advances in the field of materials engineering and technologies for production and processing in the different areas of modern manufacturing.

1070 pages, 2020
Print (978-3-0357-1588-0)
eBook (978-3-0357-3588-8)

Prices:
Print: **US\$ 520.00/€ 470.00**
eBook Single-User: **US\$ 180.00/€ 162.00**
eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3588-8.html>

■ **Frontiers of Composite Materials IV** **Selected peer-reviewed papers from 4th International Conference on Frontiers of Composite Materials (ICFCM 2019) and 4th International Conference on Energy Engineering and Smart Materials (ICEESM 2019)**

Edited by: Darren Martin and Tatiana Perova

This volume of the journal contains papers presented at the 4th International Conference on Frontiers of Composite Materials (ICFCM 2019, Brisbane, Australia, November 13-16, 2019) and the 4th International Conference on Energy Engineering and Smart Materials (ICEESM 2019, Trinity College Dublin, University of Dublin, Ireland, June 22-24, 2019). It reflects the modern trends in the area of development of modern composite materials, technologies of chemical production, building materials and materials for microelectronics, and also for energy production and storage. This collection will be useful for specialists from many branches of engineering sciences and modern production.

246 pages, 2020
Print (978-3-0357-1596-5)
eBook (978-3-0357-3596-3)

Prices:
Print: **US\$ 210.00/€ 190.00**
eBook Single-User: **US\$ 147.00/€ 133.00**
eBook Unlimited-User: **US\$ 257.00/€ 233.00**

<https://www.scientific.net/978-3-0357-3596-3.html>

■ Functional and Functionally Structured Materials IV

Selected, peer reviewed papers from the 20th Chinese Materials Conference 2019 (CMC 2019)

Edited by: Prof. Yafang Han

This volume contains selected and peer-reviewed papers presented at Chinese Materials Conference 2019 (CMC 2019) held in Chengdu City, Sichuan, China, July 10-14, 2019. The Chinese Materials Conference (CMC) is the most important serial conference of Chinese Materials Research Society (C-MRS) and is held each year since the early 1990s. Chinese Materials Conference 2019 had 42 Symposia and 3 Materials Forums covering four fields of energy and environmental materials, advanced functional materials, high-performance structural materials, and design, preparation and characterization of materials. This book will be useful and interesting for many engineers and researchers engaged in materials areas.

1588 pages, 2020

Print (978-3-0357-1566-8)

eBook (978-3-0357-3566-6)

Prices:

Print: **US\$ 550.00/€ 495.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3566-6.html>

■ Functional Materials and Advanced Technologies

4th International Conference on Smart Materials Technologies (4th ICSMT) and 4th International Conference on Advanced Functional Materials (4th ICAFM)

Edited by: Prof. Marina Polyakova

This volume is collected from papers submitted on the 4th International Conference on Smart Materials Technologies (4th ICSMT), held during 21-23 June 2019, Saint-Petersburg, Russia and on the 4th International Conference on Advanced Functional Materials (4th ICAFM) has been successfully held during August 2-5, 2019 in Salt Lake City, USA. The collected articles reflect both theoretical and experimental studies of materials properties for a wide range of their application.

196 pages, 2020

Print (978-3-0357-1519-4)

eBook (978-3-0357-3519-2)

Prices:

Print: **US\$ 210.00/€ 190.00**

eBook Single-User: **US\$ 147.00/€ 133.00**

eBook Unlimited-User: **US\$ 257.00/€ 233.00**

<https://www.scientific.net/978-3-0357-3519-2.html>

■ Functional Materials and Metallurgy III

Selected peer-reviewed papers from 4th International Conference on Functional Materials and Metallurgy (ICFMM), Japan

Edited by: Alexander Pesin and Mikio Ito

This volume is the joint conference proceedings of the 4th International Conference on Functional Materials and Metallurgy (ICFMM) held in Osaka, Japan, during November 27-30, 2019. The presented papers cover wide-variety topics from modern materials science and materials processing technologies, focuses on the important categories, including environmental engineering, electronic materials, and energy materials.

156 pages, 2020

Print (978-3-0357-1662-7)

eBook (978-3-0357-3662-5)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3662-5.html>

■ Functional Materials

Selected peer-reviewed papers from International Conference on Functional Materials (ICFM 2019), Japan

Edited by: Shu Yin and Alexander Pesin

This volume is the joint conference proceedings of the International Conference on Functional Materials (ICFM 2019), held in Sendai, Japan during Sep.4-6, 2019. The presented papers cover wide-variety topics from modern materials science and materials processing technologies, focuses on the important categories, including environmental engineering, electronic materials, and energy materials.

126 pages, 2020

Print (978-3-0357-1600-9)

eBook (978-3-0357-3600-7)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3600-7.html>

■ Geotechnical Engineering Development

Selected peer-reviewed full text papers from International Conference on Geotechnical Engineering-Iraq (ICGE)

Edited by: Dr. Mahdi Karkush

The book contains articles presented at the International Conference on Geotechnical Engineering-Iraq (ICGE-Iraq 2020, 19-20 February 2020) and reflects the last results of the research studies in geotechnical engineering include experimental investigations and theoretical analyses for the behavior of soil and foundations under static and dynamic loadings. Also, the research themes of this book are

extended to include some studies in construction management, construction materials, and structural engineering.

446 pages, 2020

Print (978-3-0357-1716-7)

eBook (978-3-0357-3716-5)

Prices:

Print: **US\$ 320.00/€ 290.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3716-5.html>

■ **Global Stone Congress II**

6th Global Stone Congress (GSC)

Edited by: Nuria F. Castro, Maria H.B.O. Frascá and Cid Chioldi Filho

This volume contains selected, peer-reviewed papers from the 6th edition of the International Stone Congress, the Global Stone Congress 2018 (GSC): Connecting Minds in the World of Stone that was held- 25-28 April 2018, Ilheus, Bahia, Brazil. Presented articles reflect the latest results and achievements in the area of technologies of mining, processing, and application of the natural stone and marble.

200 pages, 2020

Print (978-3-0357-1524-8)

eBook (978-3-0357-3524-6)

Prices:

Print: **US\$ 190.00/€ 175.00**

eBook Single-User: **US\$ 133.00/€ 123.00**

eBook Unlimited-User: **US\$ 233.00/€ 215.00**

<https://www.scientific.net/978-3-0357-3524-6.html>

■ **Green Composite Materials, Polymers and Nanotechnology**

Selected peer-reviewed papers from 3rd International Conference on Green Composite Materials and Nanotechnology (GCMN 2019, International Conference on Polymer Synthesis and Application (ICPSA 2019), International Conference on Composite Materials and Meta

Edited by: Chaorong Li, Donald Nield, Qin Wei, Xue Xia Ye and Yulin Zhong

This volume contains a selection of papers that were contributed at the International Conference on Polymer Synthesis and Application (ICPSA 2019) and at the International Conference on Composite Materials and Metallurgical Engineering (CMME 2019) on November 15 to 17, 2019 in Shenzhen, China. The collection features recent results and contemporary research in materials science and technologies of materials processing.

218 pages, 2020

Print (978-3-0357-1689-4)

eBook (978-3-0357-3689-2)

Prices:

Print: **US\$ 200.00/€ 180.00**

eBook Single-User: **US\$ 140.00/€ 126.00**

eBook Unlimited-User: **US\$ 245.00/€ 221.00**

<https://www.scientific.net/978-3-0357-3689-2.html>

■ **High Temperature Corrosion of Stainless Steels: An Alain Galerie Festschrift**

Edited by: Prof. Somrerk Chandra-ambhorn, Prof. Yves Wouters and Wanlop Harnnarongchai

This book provides the basic concepts and the recent research - in thermodynamic, kinetic and mechanical aspects - of the high temperature corrosion of stainless steels. It also includes the reviews of the effects of alloying elements and water vapour on stainless steel oxidation, as well as the development of stainless steel interconnects for solid oxide fuel cells. This festschrift is published in honour of Professor Alain Galerie as an outgrowth of the Alain Galerie Symposium on High Temperature Corrosion held at King Mongkut's University of Technology North Bangkok, Thailand, on 9 July 2018.

172 pages, 2020

Print (978-3-0357-1402-9)

eBook (978-3-0357-3402-7)

Prices:

Print: **US\$ 120.00/€ 110.00**

eBook Single-User: **US\$ 84.00/€ 77.00**

eBook Unlimited-User: **US\$ 147.00/€ 135.00**

<https://www.scientific.net/978-3-0357-3402-7.html>

■ **Industrial Science and Technology**

Symposium on Industrial Science and Technology (SISTEC 2019)

Edited by: Agus Geter Edy Sutjipto, Dr. Farah Hanani Zulkifli and Izan Izwan Misnon

This collection contains the reviewed papers selected after the results of the Postgraduate Symposium on Industrial Science and Technology 2019 (SISTEC 2019, 22- 23 August 2019, Malaysia) and presents readers with recent engineering achievements in the area of materials and technologies. This collection will be useful and interesting for many engineers and specialists.

394 pages, 2020

Print (978-3-0357-1664-1)

eBook (978-3-0357-3664-9)

Prices:

Print: **US\$ 320.00/€ 290.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3664-9.html>

■ Industrial Waste Management

Selected peer-reviewed papers from 2nd Annual Symposium on Solid Waste Refinery (2nd ANSWER)

Edited by: Chandra Wahyu Purnomo

This volume contains selected peer-reviewed papers from 2nd Annual Symposium on Solid Waste Refinery (2nd ANSWER, 13-14 November 2019, Yogyakarta, Indonesia). The collected papers cover the important area of human activity - waste recycling and biomass processing in the context of the sustainable development paradigm.

80 pages, 2020

Print (978-3-0357-1037-3)

eBook (978-3-0357-3037-1)

Prices:

Print: **US\$ 90.00/€ 85.00**

eBook Single-User: **US\$ 63.00/€ 60.00**

eBook Unlimited-User: **US\$ 110.00/€ 105.00**

<https://www.scientific.net/978-3-0357-3037-1.html>

■ Innovative Engineering and Technology II International UNIMAS Engineering Conference on Advanced Materials (ENCON 2018)

Edited by: Siti Noor Linda binti Taib, Norhuzaimin bin Julai and Md. Rezaur Rahman

This volume contains papers that reflect the last research results in the area of building materials, natural fiber-reinforced polymer composites, modern materials and technologies in dye-sensitized solar cells production and chemical technologies in biodiesel production, natural gas processing, and environmental engineering. The collection was compiled from papers presented at the International UNIMAS Engineering Conference on Advanced Materials (ENCON 2018, Kuching, Malaysia, on September 12-14, 2018) and will be useful and interesting for many specialists from the mentioned areas of engineering sciences.

164 pages, 2020

Print (978-3-0357-1393-0)

eBook (978-3-0357-3393-8)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3393-8.html>

■ Innovative Engineering Materials and Technologies

Selected peer-reviewed full text papers from 5th International Conference on Smart Engineering Materials (ICSEM 2020) and 4th International Conference on Innovative Engineering Materials (ICIEM 2020)

Edited by: Prof. Arcady Zhukov

This volume contains papers that presented on the 5th International Conference on Smart Engineering Materials

(ICSEM 2020, March 6-8, 2020, Singapore) and 4th International Conference on Innovative Engineering Materials (ICIEM 2020, May 20-22, 2020, Russia). Included papers reflect the last research results in the various fields of materials science and technologies of materials synthesis and processing.

152 pages, 2020

Print (978-3-0357-1732-7)

eBook (978-3-0357-3732-5)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3732-5.html>

■ Innovative Technologies for Joining Advanced Materials X

Selected full text peer-reviewed papers from 10th International Conference: Innovative Technology for Joining Advanced Materials (TIMA 2019)

Edited by: Dr. Nicușor Alin Sirbu

This volume of proceedings includes the selected papers presented at the 10th International Conference: Innovative Technology for Joining Advanced Materials (TIMA 19) held in Timișoara, Romania, November 7 - 8, 2019. Presented papers are results of research in the area of advanced materials and modern technologies of materials joining and processing with particular attention to practical problems coming from the industry.

206 pages, 2020

Print (978-3-0357-1604-7)

eBook (978-3-0357-3604-5)

Prices:

Print: **US\$ 190.00/€ 175.00**

eBook Single-User: **US\$ 133.00/€ 123.00**

eBook Unlimited-User: **US\$ 233.00/€ 215.00**

<https://www.scientific.net/978-3-0357-3604-5.html>

■ International Symposium on Advanced Material Research III

3rd International Symposium on Advanced Material Research (3rd ISAMR 2019)

Edited by: Prof. Dong Keon Kim

This volume contains articles which were presented at the 3rd International Symposium on Advanced Material Research (3rd ISAMR 2019, Vietnam during June 21th-23th, 2019). Published articles cover research results in the area of the materials science and materials processing technologies in the various branches of the modern industry. We hope that this edition will be interesting and useful for many engineers, academics and also for students.

196 pages, 2020

Print (978-3-0357-1464-7)

eBook (978-3-0357-3464-5)

Prices:

Print: **US\$ 210.00/€ 190.00**

eBook Single-User: **US\$ 147.00/€ 133.00**

eBook Unlimited-User: **US\$ 257.00/€ 233.00**

<https://www.scientific.net/978-3-0357-3464-5.html>

■ Magnetism and its Application

Selected peer-reviewed full text papers from International Conference on Magnetism and Its Application 2019 (ICMIA 2019)

Edited by: Budi Purnama, Darminto and Risdiana

This volume contains the collection of scientific papers that were presented at the International Conference on Magnetism and Its Application 2019 (ICMIA 2019, Surakarta, Indonesia on November 20-21, 2019) and reflect the current research results of magnetic properties of various conventional and nanostructured materials, including magnetic thin films and superconductive materials as well as its applications in various fields of engineering.

348 pages, 2020

Print (978-3-0357-1704-4)

eBook (978-3-0357-3704-2)

Prices:

Print: **US\$ 250.00/€ 225.00**

eBook Single-User: **US\$ 175.00/€ 158.00**

eBook Unlimited-User: **US\$ 306.00/€ 277.00**

<https://www.scientific.net/978-3-0357-3704-2.html>

■ Manufacturing Sciences and Technologies X

Selected full text peer-reviewed papers from 10th ICMST, 3rd ICSMM and FMAT

Edited by: Shen-Ming Chen and Sujana Debnath

This volume contains papers that were presented at the 10th "International Conference on Manufacturing Science and Technology" (ICMST 2019), 3rd "International Conference on Sensors, Materials and Manufacturing" (ICSMM 2019) and 2019 "International Conference on Functional Materials and Applied Technologies" (FMAT 2019). Collected papers reflect the last research results in the field of materials science, modern processing technologies and methods of choosing and optimization of technological parameters.

222 pages, 2020

Print (978-3-0357-1657-3)

eBook (978-3-0357-3657-1)

Prices:

Print: **US\$ 210.00/€ 190.00**

eBook Single-User: **US\$ 147.00/€ 133.00**

eBook Unlimited-User: **US\$ 257.00/€ 233.00**

<https://www.scientific.net/978-3-0357-3657-1.html>

■ Material and Manufacturing Technology X

10th International Conference on Material and Manufacturing Technology (ICMMT 2019)

Edited by: Prof. Mohd Hamdi Bin Abdul Shukor and Prof. Vladimir Khovaylo

This volume contains papers from the 10th International Conference on Material and Manufacturing Technology (ICMMT 2019), which took place in Kuala Lumpur, Malaysia, from 26 to 28 of April, 2019 and presents the results of engineering researches in the area of materials science and technologies of materials processing. We think this papers collection will be useful and interesting for many technical specialists from various fields of modern production.

260 pages, 2020

Print (978-3-0357-1506-4)

eBook (978-3-0357-3506-2)

Prices:

Print: **US\$ 280.00/€ 255.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3506-2.html>

■ Material Engineering and Application II

4th International Conference on Material Engineering and Application (4th ICMEA 2019)

Edited by: Prof. Mosbeh Kaloop

This volume of the journal contains papers presented at the 4th International Conference on Material Engineering and Application (4th ICMEA 2019, Malaysia, August 23-25, 2019). Published articles reflect the modern trends in the area of development and research of modern materials and technologies of processing and synthesis. This collection will be useful for specialists from many branches of engineering sciences and modern production.

414 pages, 2020

Print (978-3-0357-1514-9)

eBook (978-3-0357-3514-7)

Prices:

Print: **US\$ 280.00/€ 255.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3514-7.html>

■ Material Engineering and Manufacturing II

3rd International Conference on Material Engineering and Manufacturing (ICMEM 2019) and 4th International Conference on Materials Engineering and Nanotechnology (ICMEN 2019)

Edited by: Xiao Hong Zhu

The 3rd International Conference on Material Engineering and Manufacturing (ICMEM 2019) and the 4th International Conference on Materials Engineering and Nanotechnology (ICMEN 2019) were dedicated to new research developments and advances in the fields of material engineering, nanotechnology, and manufacturing

technologies. We hope that the presented collection of scientific papers will be interesting and useful for many engineers and researchers.

198 pages, 2020

Print (978-3-0357-1518-7)

eBook (978-3-0357-3518-5)

Prices:

Print: **US\$ 210.00/€ 190.00**

eBook Single-User: **US\$ 147.00/€ 133.00**

eBook Unlimited-User: **US\$ 257.00/€ 233.00**

<https://www.scientific.net/978-3-0357-3518-5.html>

■ Material Engineering and Manufacturing III

Selected peer-reviewed papers from the 4th ICMEM, 3rd ICMDA and 2nd ICBBM (2020)

Edited by: Prof. Takashige Omatsu and Prof. Hongqi Sun

This volume contains papers presented on the 4th International Conference on Material Engineering and Manufacturing (ICMEM 2020), the 3rd International Conference on Materials Design and Applications (ICMDA 2020) and the 2nd International Conference on Biomacromolecules and Biomimetic Materials (ICBBM 2020) which were held successfully on remote in Tokyo, Japan during April 10-13, 2020. Presented articles are focused on fundamental and applied research in the field of materials properties, design of production technologies, and use of engineering materials, within the context of application in mechanical engineering and biomedicine.

184 pages, 2020

Print (978-3-0357-1688-7)

eBook (978-3-0357-3688-5)

Prices:

Print: **US\$ 170.00/€ 155.00**

eBook Single-User: **US\$ 119.00/€ 109.00**

eBook Unlimited-User: **US\$ 208.00/€ 191.00**

<https://www.scientific.net/978-3-0357-3688-5.html>

■ Material Engineering Research

2nd International Conference on Material Engineering Research (2nd ICMER 2019)

Edited by: Prof. Jong Wan Hu

The 2nd International Conference on Material Engineering Research (2nd ICMER 2019) was taken place in Incheon National University, Incheon, South Korea, during May 17th-19th, 2019. Published articles reflect the modern level of developing and exploiting new technology in the field of materials science and advanced materials processing technologies.

192 pages, 2020

Print (978-3-0357-1360-2)

eBook (978-3-0357-3360-0)

Prices:

Print: **US\$ 200.00/€ 180.00**

eBook Single-User: **US\$ 140.00/€ 126.00**

eBook Unlimited-User: **US\$ 245.00/€ 221.00**

<https://www.scientific.net/978-3-0357-3360-0.html>

■ Material Science and Engineering Technology VIII

Selected peer-reviewed papers from 8th International Conference on Material Science and Engineering Technology (ICMSET 2019)

Edited by: Prof. Ramesh K. Agarwal

The proceeding of the 8th International Conference on Material Science and Engineering Technology (ICMSET 2019, Singapore, 19-21 October 2019) consists of papers from the universities, research institutes, and industry. The manuscripts were selected after a rigorous peer-review and provide the readers an overview of recent advances in the fields related to materials science and processing technologies, including modeling, analysis, computation, and optimization methods, as well as the experimental procedures in the research of materials properties and technological decisions.

360 pages, 2020

Print (978-3-0357-1606-1)

eBook (978-3-0357-3606-9)

Prices:

Print: **US\$ 300.00/€ 270.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3606-9.html>

■ Material Science and Engineering: Properties and Technologies

6th International Conference on Material Science and Engineering (ICMSE 2019)

Edited by: Yinyu Hu, Xiao Lian Lv, Zhiyong Zhang and Marcellina Chijoriga

This volume is collected from papers presented on the 6th International Conference on Material Science and Engineering (ICMSE 2019, Wuhan, Hubei, China, 21-23 December 2019). The topic of this collection relates to materials processing technologies of steel and alloys, nanotechnology, engineering materials, modeling and simulation properties and behavior of materials, polymer and composite materials, functional ceramics, and cement materials.

224 pages, 2020

Print (978-3-0357-1609-2)

eBook (978-3-0357-3609-0)

Prices:

Print: **US\$ 230.00/€ 210.00**

eBook Single-User: **US\$ 161.00/€ 147.00**

eBook Unlimited-User: **US\$ 282.00/€ 257.00**

<https://www.scientific.net/978-3-0357-3609-0.html>

■ Materials and Manufacturing Processes

Edited by: Dr. Zhenyu Du

With the progress of the nanotechnology and production methods, composite materials and polymeric materials are becoming lighter, cheaper, more durable, and more

versatile. At present, great progress has been made in design, preparation, and characterization of composite materials and polymeric materials, making them smarter and versatile. By creating new properties using suitable fillers and matrix, the functional composites and polymeric materials can meet the most difficult standards of users, especially in high-tech industries. Advanced composites and polymeric materials reinforced by high-performance carbon fibers and nanofillers are popular in the automotive and aerospace industries thanks to their significant advantages, such as high specific strength to weight ratio and noncorrosion properties. In addition to the improvement of the mechanical performance, composite materials and polymeric materials today are designed to provide new functions dealing with antibacterial, self-cleaning, self-healing, super-hard, solar reflective for desired end-used applications. On the other hand, composite materials and polymeric materials can contribute to reduce environmental issues by providing renewable energy technologies in conjunction with multifunctional, lightweight energy storage systems with high performance and noncorrosive properties. They are also used to prepare a new generation of batteries and directly contribute to H₂ production or CO₂ reduction in fuels and chemicals. This Special Issue aims to collect articles reporting on recent developments dealing with preparative methods, design, properties, structure, characterization methods, as well as promising applications of multifunctional composites and polymeric materials. It covers potential applications in various areas, such as anticorrosion, photocatalyst, absorbers, superhydrophobic, self-cleaning, antifouling/antibacterial, renewable energy, energy storage systems, construction, and electronics.

240 pages, 2020

Print (978-3-0357-1673-3)

eBook (978-3-0357-3673-1)

Prices:

Print: **US\$ 110.00/€ 100.00**

eBook Single-User: **US\$ 77.00/€ 70.00**

eBook Unlimited-User: **US\$ 135.00/€ 123.00**

<https://www.scientific.net/978-3-0357-3673-1.html>

■ Materials and Processing Technologies

Selected peer-reviewed papers from Conference on Mechanical Engineering and Manufacturing (NCMME 2019)

Edited by: Prof. Thanh Nam Nguyen

This volume contains papers congregated by the result of the National Conference on Mechanical Engineering and Manufacturing (NCMME 2019, 18-20 October 2019, Vietnam). The presented collection is a 1st part which describes recent developments in the area of materials science and materials machining.

120 pages, 2020

Print (978-3-0357-1714-3)

eBook (978-3-0357-3714-1)

Prices:

Print: **US\$ 150.00/€ 135.00**

eBook Single-User: **US\$ 105.00/€ 95.00**

eBook Unlimited-User: **US\$ 184.00/€ 166.00**

<https://www.scientific.net/978-3-0357-3714-1.html>

■ Materials and Processing Technology III

Edited by: Dmitry A. Chinakhov

Intensive development of engineering contributes to the emergence of new materials and technologies for their processing. This special issue contains research papers on modern technologies for obtaining and processing materials, technologies for obtaining welded joints, additive technologies, technologies for engineering tasks in mechanical engineering and materials science. The book is intended for a wide range of specialists engaged in the development and production of heavy-duty metal structures, as well as students, undergraduates, graduate and postgraduate students of technical colleges and universities.

192 pages, 2020

Print (978-3-0357-1739-6)

eBook (978-3-0357-3739-4)

Prices:

Print: **US\$ 190.00/€ 175.00**

eBook Single-User: **US\$ 133.00/€ 123.00**

eBook Unlimited-User: **US\$ 233.00/€ 215.00**

<https://www.scientific.net/978-3-0357-3739-4.html>

■ Materials and Technologies in Construction and Architecture II

2nd International Scientific Conference "Construction and Architecture: Theory and Practice for the innovation Development" (CATPID-2019)

Edited by: Batyr M. Yazyev, Stepan V. Litvinov, Anastasia Lapina, Akay Oksana, Alina Yu. Golubeva and Anastasia Kotesova

This volume contains papers collected by the results of the 2nd International Scientific Conference "Construction and Architecture: Theory and Practice for the innovation Development" (CATPID-2019, 1-5 October 2019, Kislovodsk, Russia). The presented conference materials raise important problems in the area of construction and architecture: from ideas, projects and ways for their solving and optimizing to immediate practical implementation. We hope that this collection will be useful and interesting for many specialists and researchers, which activity is related to the construction industry.

762 pages, 2020

Print (978-3-0357-1610-8)

eBook (978-3-0357-3610-6)

Prices:

Print: **US\$ 490.00/€ 445.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3610-6.html>

■ Materials and Technologies in Construction and Architecture III

Selected peer-reviewed full text papers from the 3rd International Scientific Conference "Construction and Architecture: Theory and Practice for the innovation Development" (CATPID-2020)

Edited by: B.M. Yazyev, Stepan V. Litvinov, Anastasia Lapina, Anastasia Kotesova and Akay Oksana

This volume contains papers presented at the International Scientific Conference "Construction and Architecture: Theory and Practice for the Innovative Development" (CATPID-2020, 26-30 September 2020, Nalchik, Russia). Collected papers raise important problems in construction and architecture: from ideas and projects to ways for their implementation and optimizing of existed engineering decisions.

202 pages, 2020
Print (978-3-0357-1745-7)
eBook (978-3-0357-3745-5)

Prices:
Print: **US\$ 170.00/€ 155.00**
eBook Single-User: **US\$ 119.00/€ 109.00**
eBook Unlimited-User: **US\$ 208.00/€ 191.00**

<https://www.scientific.net/978-3-0357-3745-5.html>

■ Materials and Technologies in Engineering II 4th International Conference on Design, Materials and Manufacturing (ICDMM 2019) and 4th International Conference on Material Engineering and Smart Materials (ICMESM 2019)

Edited by: Jesús Toribio and Sergei Alexandrov

This volume contains selected papers from the 4th International Conference on Design, Materials and Manufacturing (ICDMM 2019) and the 4th International Conference on Material Engineering and Smart Materials (ICMESM 2019) which both were held in Salamanca, Spain on August 9-12, 2019. The collected papers are focused on materials science and manufacturing technologies.

130 pages, 2020
Print (978-3-0357-1590-3)
eBook (978-3-0357-3590-1)

Prices:
Print: **US\$ 170.00/€ 155.00**
eBook Single-User: **US\$ 119.00/€ 109.00**
eBook Unlimited-User: **US\$ 208.00/€ 191.00**

<https://www.scientific.net/978-3-0357-3590-1.html>

■ Materials and Technologies in Precision Machinery II

4th International Conference on Precision Machinery and Manufacturing Technology (ICPMMT 2019)

Edited by: Gow-Yi Tzou

This volume contains articles that were submitted to the 4th International Conference on Precision Machinery and Manufacturing Technology (ICPMMT 2019, Kenting,

Taiwan, May 24-26, 2019) and present the last research results in the area of materials science and materials processing technologies. We hope this collection will be interesting and useful for many engineers and academic researchers.

132 pages, 2020
Print (978-3-0357-1660-3)
eBook (978-3-0357-3660-1)

Prices:
Print: **US\$ 160.00/€ 145.00**
eBook Single-User: **US\$ 112.00/€ 102.00**
eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3660-1.html>

■ Materials and Technologies in Precision Machinery III

Selected peer-reviewed full text papers from the 5th International Conference on Precision Machinery and Manufacturing Technology (ICPMMT 2020)

Edited by: Gow-Yi Tzou

This volume contains papers presented at the 5th International Conference on Precision Machinery and Manufacturing Technology (ICPMMT 2020, New Zealand, 3-7 February 2020) which reflect the last research results and engineering decisions in the area of materials science and technologies of materials processing.

108 pages, 2020
Print (978-3-0357-1777-8)
eBook (978-3-0357-3777-6)

Prices:
Print: **US\$ 140.00/€ 130.00**
eBook Single-User: **US\$ 98.00/€ 91.00**
eBook Unlimited-User: **US\$ 172.00/€ 159.00**

<https://www.scientific.net/978-3-0357-3777-6.html>

■ Materials and Technology of Clean Energy Selected peer-reviewed papers from 2nd International Conference on Clean Energy Materials and Technology (ICCEMT 2019)

Edited by: Lang He, Xigao Jian, Fusheng Pan, Zongping Shao, Zhengming Sun and Yuxun Wang

The 2nd International Conference on Clean Energy Materials and Technology (ICCEMT 2019, Suzhou, China, from Nov. 29 to Dec. 1, 2019) was focused mainly on the theme of materials and materials processing technologies used in the production and storage of energy. The conference results also reflect the last investigation in the area of functional ceramics and composites, methods of computational mechanics and materials of biomedical application.

204 pages, 2020
Print (978-3-0357-1640-5)
eBook (978-3-0357-3640-3)

Prices:

Print: **US\$ 170.00/€ 155.00**

eBook Single-User: **US\$ 119.00/€ 109.00**

eBook Unlimited-User: **US\$ 208.00/€ 191.00**

<https://www.scientific.net/978-3-0357-3640-3.html>

■ **Materials Engineering and Science** **International Conference on Materials Engineering and Science (IConMEAS 2018)**

Edited by: Omar Sabbar Dahham and Nik Noriman Zulkepli

This volume of the journal contains papers presented at the International Conference on Materials Engineering and Science (IConMEAS 2018), held at Istanbul, Turkey, August 08-09, 2018 and focuses on the research results in the field of materials science for various branches of industry and construction.

192 pages, 2020

Print (978-3-0357-1409-8)

eBook (978-3-0357-3409-6)

Prices:

Print: **US\$ 220.00/€ 200.00**

eBook Single-User: **US\$ 154.00/€ 140.00**

eBook Unlimited-User: **US\$ 270.00/€ 245.00**

<https://www.scientific.net/978-3-0357-3409-6.html>

■ **Materials Engineering and Technologies for Production and Processing V** **5th International Conference on Industrial Engineering (5th ICIE 2019)**

Edited by: Prof. Andrey A. Radionov

This volume contains papers presented at the 5th International Conference on Industrial Engineering (ICIE) that was held on 25-29 of March 2019, Sochi, Russian Federation. The edition reflects recent advances in the field of materials science, metallurgical and metalworking technologies, surface engineering, and coatings. We hope this collection will be useful for many engineers and researchers from various branches of industry.

1250 pages, 2020

Print (978-3-0357-1500-2)

eBook (978-3-0357-3500-0)

Prices:

Print: **US\$ 300.00/€ 270.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3500-0.html>

■ **Materials for Electronics: Silicon Carbide and Related Materials**

Selected peer-reviewed full text papers from the Asia-Pacific Conference on Silicon Carbide and Related Materials (APCSCRM 2019)

Edited by: Min Lu

These papers were selected from materials of the Asia-Pacific Conference on Silicon Carbide and Related Materials (APCSCRM 2019), July 17-20, 2019, Beijing, China. The collection introduces results of scientific and engineering researches in the area of growth, analysis of structure, and properties of wide bandgap semiconductors and of wide bandgap semiconductor devices.

184 pages, 2020

Print (978-3-0357-1642-9)

eBook (978-3-0357-3642-7)

Prices:

Print: **US\$ 180.00/€ 165.00**

eBook Single-User: **US\$ 126.00/€ 116.00**

eBook Unlimited-User: **US\$ 221.00/€ 203.00**

<https://www.scientific.net/978-3-0357-3642-7.html>

■ **Materials for Modern Technologies VI** **Selected peer-reviewed full text papers from Spring International Conference on Material Sciences and Technology (MST-S 2020)**

Edited by: Sergei Alexandrov and Bingang Xu

This volume presents proceedings of the 2020 Spring International Conference on Material Sciences and Technology (MST-S, August 14-16, 2020, Kunming, China) that reflect the modern level of achievements in applied materials science and industrial technologies.

298 pages, 2020

Print (978-3-0357-1685-6)

eBook (978-3-0357-3685-4)

Prices:

Print: **US\$ 230.00/€ 210.00**

eBook Single-User: **US\$ 161.00/€ 147.00**

eBook Unlimited-User: **US\$ 282.00/€ 257.00**

<https://www.scientific.net/978-3-0357-3685-4.html>

■ **Materials Science and Applied Chemistry III** **Selected peer-reviewed papers from 60th International Scientific Conference of Riga Technical University (RTU) Section of Materials Science and Applied Chemistry - MSAC**

Edited by: Prof. Māris Turks

We are very pleased to introduce the special volume containing the papers presented at the 60th International Scientific Conference of Riga Technical University (RTU) Section of Materials Science and Applied Chemistry - MSAC 2019, held in Riga, Latvia, 24th of October, 2019. The conference MSAC 2019 provided a discussion forum for researchers and practitioners from both academia and

industry in the area of materials science, chemistry, and physics.

340 pages, 2020

Print (978-3-0357-1639-9)

eBook (978-3-0357-3639-7)

Prices:

Print: **US\$ 270.00/€ 245.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3639-7.html>

■ Materials Science and Engineering:

Technological Advances and Research Results

Selected peer-reviewed full text papers from International Conference on Materials Science and Engineering (ICMSE 2019), Kyoto, Japan

Edited by: Nancy Liu

This volume contains papers presented at the 2019 International Conference on Materials Science and Engineering (ICMSE 2019), which held in Kyoto Research Park Corp, Kyoto, Japan during Dec 26-28, 2019. The collected articles provide readers the results of scientific research and of engineering decisions in the area of materials science, processing technologies and chemical technologies for environmental engineering and textile production.

188 pages, 2020

Print (978-3-0357-1641-2)

eBook (978-3-0357-3641-0)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3641-0.html>

■ Materials Science and Industrial Applications II

Selected peer-reviewed papers from the 2nd International Conference on Materials Science and Industrial Applications (MSIA 2020)

Edited by: Dr. Zhi Gang Fang

This volume contains original, peer-reviewed research papers from the 2nd International Conference on Materials Science and Industrial Applications (MSIA 2020), which was held on January 11-12, 2020 in Xi'an, China. The presented collection reflects the last results of researches and engineering decisions in the area of materials science and technologies of materials synthesis and processing.

256 pages, 2020

Print (978-3-0357-1595-8)

eBook (978-3-0357-3595-6)

Prices:

Print: **US\$ 230.00/€ 210.00**

eBook Single-User: **US\$ 161.00/€ 147.00**

eBook Unlimited-User: **US\$ 282.00/€ 257.00**

<https://www.scientific.net/978-3-0357-3595-6.html>

■ Materials Science and Metallurgical Technology II

International Russian Conference on Materials Science and Metallurgical Technology (RusMetalCon 2019)

Edited by: Prof. Andrey A. Radionov

This volume contains papers which were presented at the International Russian Conference on Materials Science and Metallurgical Technology (RusMetalCon-2019, October 1-4, 2019, Chelyabinsk, Russian Federation) and are devoted to discussion of the latest achievements in the field of material science and metallurgical technologies: design, synthesis and characterization of material, pyrometallurgical processes, foundry production, welding, metal forming, additive manufacturing. We hope this collection will be useful and interesting for many researchers and engineers from industrial enterprises.

890 pages, 2020

Print (978-3-0357-1576-7)

eBook (978-3-0357-3576-5)

Prices:

Print: **US\$ 280.00/€ 255.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3576-5.html>

■ Materials Science and Smart Materials

Selected peer-reviewed papers from 6th International Conference on Material Science and Smart Materials (MSSM 2019)

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

This volume contains articles that were presented at the 6th International Conference on Material Science and Smart Materials (MSSM 2019) that was held at Aston University in the UK between 23rd and 26th of July 2019 and reflects recent achievements in the fields of materials development, their application, processing, and manufacturing technologies.

128 pages, 2020

Print (978-3-0357-1577-4)

eBook (978-3-0357-3577-2)

Prices:

Print: **US\$ 110.00/€ 100.00**

eBook Single-User: **US\$ 77.00/€ 70.00**

eBook Unlimited-User: **US\$ 135.00/€ 123.00**

<https://www.scientific.net/978-3-0357-3577-2.html>

■ Materials Science: Properties and Technologies II

Selected peer-reviewed full text papers from the 4th Annual International Conference on Material Science and Engineering Technology (4th ICMSET 2020)

Edited by: Prof. Jong Wan Hu

This collection contains papers from the 4th Annual International Conference on Material Science and Engineering Technology (4th ICMSET 2020, Fukuoka, Japan, March 20-22, 2020) and presents the last research results and engineering decisions in the area of materials science and engineering technologies.

154 pages, 2020

Print (978-3-0357-1696-2)

eBook (978-3-0357-3696-0)

Prices:

Print: **US\$ 170.00/€ 155.00**

eBook Single-User: **US\$ 119.00/€ 109.00**

eBook Unlimited-User: **US\$ 208.00/€ 191.00**

<https://www.scientific.net/978-3-0357-3696-0.html>

■ Mechanical Engineering and Science

Selected peer-reviewed papers from 2nd Mechanical Engineering and Science Postgraduate International Conference (MESPIC)

Edited by: Idris Saad, Solehuiddin Shuib, Noriah Yusoff, Abdul Halim Abdullah, Mohd Hafiz Mohd Noh and Nur Faiqa Ismail

This volume consists of technical papers that were presented at the Mechanical Engineering and Science Postgraduate International Conference (MESPIC). It was the second Postgraduate International Conference organized by the Faculty of Mechanical Engineering, Universiti Teknologi MARA (UiTM) Shah Alam. Collected papers are divided into some sub-disciplines, namely, materials science and materials processing technologies, mechatronics and robotics, design of machines and equipment, biomedical engineering, engineering management, ergonomics, and product design.

286 pages, 2020

Print (978-3-0357-1682-5)

eBook (978-3-0357-3682-3)

Prices:

Print: **US\$ 150.00/€ 135.00**

eBook Single-User: **US\$ 105.00/€ 95.00**

eBook Unlimited-User: **US\$ 184.00/€ 166.00**

<https://www.scientific.net/978-3-0357-3682-3.html>

■ Mechanical Engineering: Advanced Materials Processing Technology

Selected peer-reviewed papers from 4th The International Conference on Mechanical Engineering (ICOME 2019)

Edited by: Suwarno Suwarno, Vivien Djanali, Fahmi Mubarak and Bambang Pramujati

The present book is a contribution from the 4th The International Conference on Mechanical Engineering 2019 (ICOME 2019), which was held in Yogyakarta, Indonesia on August 28-29, 2019. The book consists of papers devoted to the study of materials properties and materials processing technologies used in modern mechanical engineering.

242 pages, 2020

Print (978-3-0357-1687-0)

eBook (978-3-0357-3687-8)

Prices:

Print: **US\$ 180.00/€ 165.00**

eBook Single-User: **US\$ 126.00/€ 116.00**

eBook Unlimited-User: **US\$ 221.00/€ 203.00**

<https://www.scientific.net/978-3-0357-3687-8.html>

■ Mechatronics and Industrial Machines

Selected peer-reviewed papers from Conference on Mechanical Engineering and Manufacturing (NCMME 2019)

Edited by: Prof. Thanh Nam Nguyen

This volume contains papers congregated by the result of the National Conference on Mechanical Engineering and Manufacturing (NCMME 2019, 18-20 October 2019, Vietnam). The presented collection is a 2nd part which describes recent developments in the area of mechatronics, robotics, and engineering design.

152 pages, 2020

Print (978-3-0357-1446-3)

eBook (978-3-0357-3446-1)

Prices:

Print: **US\$ 150.00/€ 135.00**

eBook Single-User: **US\$ 105.00/€ 95.00**

eBook Unlimited-User: **US\$ 184.00/€ 166.00**

<https://www.scientific.net/978-3-0357-3446-1.html>

■ Metal Materials Processes and Manufacturing

2nd International Conference on Metal Material Processes and Manufacturing (ICMMPM 2019)

Edited by: Prof. Dong Won Jung

The 2nd International Conference on Metal Material Processes and Manufacturing (ICMMPM 2019, July 30-31, 2019, Jeju Island, South Korea) reflects the main tendencies in the field of research and development of functional materials and metalworking technologies, solutions in special technologies and materials for the MEMS production, applied biotechnologies, waste recycling and computational materials science.

302 pages, 2020
Print (978-3-0357-1632-0)
eBook (978-3-0357-3632-8)

Prices:

Print: **US\$ 250.00/€ 225.00**

eBook Single-User: **US\$ 175.00/€ 158.00**

eBook Unlimited-User: **US\$ 306.00/€ 277.00**

<https://www.scientific.net/978-3-0357-3632-8.html>

■ **Metallography and Fractography XVII**

Selected full text papers from the 17th International Symposium on Metallography, Fractography and Materials Science (2019)

Edited by: Peter Horňák, Margita Longauerová and Miloš Matviĵa

This volume contains selected papers presented at the 17th International Symposium on Metallography, Fractography and Materials Science (April 24 – 26, 2019, Nový Smokovec, High Tatras Mountains, Slovak Republic). Collected articles focus on not only research in the field of steel, alloys, and metallic materials but also in the field of numerous modern materials and technologies - ceramics, composites, amorphous materials, special coatings, and powder metallurgy.

470 pages, 2020

Print (978-3-0357-1612-2)

eBook (978-3-0357-3612-0)

Prices:

Print: **US\$ 300.00/€ 270.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3612-0.html>

■ **Microscopy in the Field of Materials Research II**

36th International Conference of the Microscopy Society of Thailand (MST 36)

Edited by: Dr. Chanchana Thanachayanont, Thapanee Sarakonsri and Dr. Nattapol Laorodphan

This volume contains peer-reviewed papers presented in the 36th International Conference of the Microscopy Society of Thailand (MST 36), which was held in Thailand, from 26th - 29th March 2019. The papers involve the application of modern microscopy and microanalysis techniques on materials research, for instance, steel, alloys, cement, carbon-based materials, biomaterials and nanomaterials.

170 pages, 2020

Print (978-3-0357-1560-6)

eBook (978-3-0357-3560-4)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3560-4.html>

■ **Mining Industry: Innovations and Prospects for the Development of Materials Science**

7th International Scientific Conference on Innovations and Prospects of Development of Mining Machinery and Electrical Engineering (IPDME 2019)

Edited by: Vyacheslav V. Maksarov, Viktor V. Gabov, Denis Zadkov and Nikita V. Martynushev

This volume contains the selected papers presented at the 7th international scientific conference on Innovations and Prospects of Development of Mining Machinery and Electrical Engineering (IPDME 2019, St. Petersburg, Russia, on April 24–27, 2019). Within the framework of the conference, at Saint Petersburg Mining University, there were special sessions on novel materials for mining tools and equipment, materials study and engineering, mineralogy, and ore treatment. All included reviewed papers cover various topics within the field of materials science and present valuable research results.

180 pages, 2020

Print (978-3-0357-1625-2)

eBook (978-3-0357-3625-0)

Prices:

Print: **US\$ 210.00/€ 190.00**

eBook Single-User: **US\$ 147.00/€ 133.00**

eBook Unlimited-User: **US\$ 257.00/€ 233.00**

<https://www.scientific.net/978-3-0357-3625-0.html>

■ **Modern and Renewable Materials in Civil Engineering**

Prepared to the 20th Anniversary of the Faculty of Civil Engineering of the VSB - Technical University of Ostrava

Edited by: Jiri Brozovsky

This book was prepared for the 20th anniversary of the Faculty of Civil Engineering of the VSB - Technical University of Ostrava, in Ostrava, Czech Republic. The main aim of the book is to present results in the area of research and application of modern building materials and structures in civil engineering. The contributions include not only material research, but they also present the application of those materials and results and consequences of their use.

170 pages, 2020

Print (978-3-0357-1159-2)

eBook (978-3-0357-3159-0)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3159-0.html>

■ Nano Engineering and Materials Technologies IV

8th International Conference on Nanostructures, Nanomaterials and Nanoengineering (ICNNN 2019) and 4th International Conference on Materials Technology and Applications (ICMTA 2019)

Edited by: Prof. Hao Gong and Prof. Kazuo Umemura

This issue includes selected papers from the 8th International Conference on Nanostructures, Nanomaterials and Nanoengineering 2019 (ICNNN 2019) and from 2019 International Conference on Materials Technology and Applications (ICMTA 2019), Kyoto, Japan, 11th-14th Oct, 2019 and reflects research results of materials for the biomedical application, polymers and composites, structural materials (alloys, steel and building materials), functional and special materials, carbon nanotube and graphene, nanomaterials, chemical technologies for the various applications.

358 pages, 2020

Print (978-3-0357-1587-3)

eBook (978-3-0357-3587-1)

Prices:

Print: **US\$ 300.00/€ 270.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3587-1.html>

■ New Material and Chemical Industry

4th International Conference on New Material and Chemical Industry (NMCI 2019)

Edited by: Shixuan Xin

This volume of the journal collected from papers presented at the 4th International Conference on New Material and Chemical Industry (NMCI 2019, Xiamen, China, 16-18 November 2019). The conference was an annual forum for researchers and engineers in the area of modern materials science and chemical production.

366 pages, 2020

Print (978-3-0357-1651-1)

eBook (978-3-0357-3651-9)

Prices:

Print: **US\$ 400.00/€ 360.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3651-9.html>

■ New Polymer Composite Materials II

Selected peer-reviewed full text papers from XVI International Scientific and Practical Conference "New Polymer Composite Materials"

Edited by: Svetlana Khashirova, Azamat Zhansitov and Amina Vindizheva

This issue of the journal presents materials of the XVI INTERNATIONAL SCIENTIFIC AND PRACTICAL CONFERENCE «NEW POLYMER COMPOSITE MATERIALS»,

which was held in the Kh.M. Berbekov Kabardino-Balkarian State University. The content of the presented papers reflects the results of research in the field of polymer synthesis and the development of new polymer composite materials, as well as the various aspects of their application.

618 pages, 2020

Print (978-3-0357-1800-3)

eBook (978-3-0357-3800-1)

Prices:

Print: **US\$ 320.00/€ 290.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3800-1.html>

■ Novel Trends in Production Devices and Systems VI

NTPDS VI

Edited by: Daynier Rolando Delgado Sobrino and Karol Velišek

The present publication arises as a result of the cooperation between the Institute of Production Technologies (IPT), belonging to the Faculty of Materials Science and Technology (MTF) of the Slovak University of Technology (STU) and TRANS TECH PUBLICATIONS INC. For the seventh time, the book aims at publishing scientific achievements on the Materials Science and Production Technologies fields, as well as at enhancing the worldwide cooperation and recognition among young and senior academicians and/or practitioners. Some of the main topics included in the book are those related but not limited to the trends in Materials Science and their application in industry, e.g.: composites and biomaterials, polymers, materials weldability, analysis of metals and alloys, numerical analysis and simulation of materials, etc. Most of these topics keep a direct relation to the production technologies and systems and thus, always keeping a special focus on the materials used, there are also topics in the book addressing key production processes, technologies and systems.

338 pages, 2020

Print (978-3-0357-1726-6)

eBook (978-3-0357-3726-4)

Prices:

Print: **US\$ 230.00/€ 210.00**

eBook Single-User: **US\$ 161.00/€ 147.00**

eBook Unlimited-User: **US\$ 282.00/€ 257.00**

<https://www.scientific.net/978-3-0357-3726-4.html>

■ Pharmaceutical and Biomedical Materials and Technology II

Selected peer reviewed full text papers from the 3rd International Conference and Exhibition on Pharmaceutical Sciences and Technology (PST 2020)

Edited by: Jirapornchai Suksaeree

This volume consists of the selected papers presented at the 3rd International conference and exhibition on

Pharmaceutical Sciences and Technology (PST 2020) which was held during 19-20 May 2020, College of Pharmacy, Rangsit University, Thailand. The theme of the conference is "Innovation in Pharmaceutical Sciences". This research collection brings together multidisciplinary research results covering the researches in the field of materials for pharmaceutical and biomedical applications, cosmeceuticals and cosmetic ingredients, nanomaterials for pharmaceuticals, material characterization as well as technologies of their modification and processing. We hope the volume will offer the readers a good opportunity to access state-of-the-art developments and future directions of researches on materials and technology in pharmacology.

330 pages, 2020
Print (978-3-0357-1719-8)
eBook (978-3-0357-3719-6)

Prices:

Print: **US\$ 230.00/€ 210.00**

eBook Single-User: **US\$ 161.00/€ 147.00**

eBook Unlimited-User: **US\$ 282.00/€ 257.00**

<https://www.scientific.net/978-3-0357-3719-6.html>

■ Physical Properties and Application of Advanced Materials

13th International Conference on the Physical Properties and Application of Advanced Materials (ICPMAT)

Edited by: Kenji Matsuda, Pham Mai Khanh, Dang Quoc Khanh and Dr. Le Van Lich

This volume was compiled from the proceedings of the 13th International Conference on the Physical Properties and Application of Advanced Materials (ICPMAT), which was held at Hanoi University of Science and Technology, Vietnam from September 4 to 7, 2018. The presented collection of papers contains the newest research results and achievements in the field of physical properties and the application of advanced structural and functional materials. We hope this collection will be interesting and useful for many specialists from the area of materials science and metallurgical technologies.

254 pages, 2020
Print (978-3-0357-1458-6)
eBook (978-3-0357-3458-4)

Prices:

Print: **US\$ 250.00/€ 225.00**

eBook Single-User: **US\$ 175.00/€ 158.00**

eBook Unlimited-User: **US\$ 306.00/€ 277.00**

<https://www.scientific.net/978-3-0357-3458-4.html>

■ Physics and Technology of Nanostructured Materials V

Selected full text papers from the 5th Asian School-Conference on Physics and Technology of Nanostructured Materials (ASCO-Nanomat 2020)

Edited by: Prof. Nikolay Gennadievich Galkin

The book contains articles of the 5th Asian School-Conference on Physics and Technology of Nanostructured Materials, which was held in Vladivostok, Russian Federation, from July 30 to August 3, 2020. Collected articles are devoted to various aspects of researches in the area of condensed matter physics and physics of low-dimensional structures, technologies of nanostructured coatings, laser physics, meta- and nanostructured materials, functional materials, and nanocomposites.

400 pages, 2020
Print (978-3-0357-1793-8)
eBook (978-3-0357-3793-6)

Prices:

Print: **US\$ 300.00/€ 270.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3793-6.html>

■ Physics Symposium: Key Research in Materials Science

4th Padjadjaran International Physics Symposium (PIPS 2019)

Edited by: Ayi Bahtiar, Togar Saragi, Sahrul Hidayat and Lusi Safriani

This volume is compiled from materials presented at the 4th Padjadjaran International Physics Symposium (PIPS), which was held on November 13-14, 2019 in Bandung, Indonesia and reflects recent results in organics and inorganics materials for solar cells, materials for application in batteries and supercapacitors, modelling, synthesis, and characterization of new emerging advanced in magnetics materials and superconductors, carbon materials, ceramics, materials for biomedical practice, polymers and composites, and other functional materials.

376 pages, 2020
Print (978-3-0357-1697-9)
eBook (978-3-0357-3697-7)

Prices:

Print: **US\$ 270.00/€ 245.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3697-7.html>

■ Polymer Science and Engineering

Selected peer-reviewed full text papers from 3rd International Conference on Composite Material, Polymer Science and Engineering (3rd CMPSE)

Edited by: Katsuyuki Kida

The proceeding book contains papers from the 3rd International Conference on Composite Material, Polymer Science and Engineering (3rd CMPSE), which was held on October 24th and 25th, 2019 in Bangkok, Thailand. The main topics are technologies of materials joining; mechanical properties and mechanical testing; properties of functional materials, composites, polymer composites, and fibers; properties of materials and structures in construction.

236 pages, 2020

Print (978-3-0357-1638-2)

eBook (978-3-0357-3638-0)

Prices:

Print: US\$ 230.00/€ 210.00

eBook Single-User: US\$ 161.00/€ 147.00

eBook Unlimited-User: US\$ 282.00/€ 257.00

<https://www.scientific.net/978-3-0357-3638-0.html>

■ Problems and Prospects for the

Development of Materials Science

International Scientific and Practical Conference "Materials Science, Mechanical Engineering and Energy: Problems and Prospects for Development" (MSMEE 2019)

Edited by: Alexander Saprykin

This volume contains papers from the International Scientific and Practical Conference "Materials Science, Mechanical Engineering and Energy: Problems and Prospects for Development" (MSMEE 2019, June 27-28, 2019, Barnaul, Russia) where they present results of the innovative approaches in the development of integration solutions in materials science and materials processing technologies and cover priority areas of research.

218 pages, 2020

Print (978-3-0357-1676-4)

eBook (978-3-0357-3676-2)

Prices:

Print: US\$ 200.00/€ 180.00

eBook Single-User: US\$ 140.00/€ 126.00

eBook Unlimited-User: US\$ 245.00/€ 221.00

<https://www.scientific.net/978-3-0357-3676-2.html>

■ Problems of Emergency Situations: Materials and Technologies

Selected peer-reviewed full text papers from International Scientific Applied Conference "Problems of Emergency Situations" (PES 2020)

Edited by: Prof. Volodymyr Andronov

This collection contains papers presented at the annual International Scientific Applied Conference "Problems of

Emergency Situations" is organized by the National University of Civil Defence of Ukraine (Ukraine, Kharkiv). The purpose of the conference was to discuss issues related to the problems and prospects of the introduction of the latest developments in the sphere of materials and technologies aimed at preventing emergencies of industrial and civil facilities and minimizing their consequences for the goal of the civil safety.

298 pages, 2020

Print (978-3-0357-1747-1)

eBook (978-3-0357-3747-9)

Prices:

Print: US\$ 210.00/€ 190.00

eBook Single-User: US\$ 147.00/€ 133.00

eBook Unlimited-User: US\$ 257.00/€ 233.00

<https://www.scientific.net/978-3-0357-3747-9.html>

■ Processing and Characterization of Materials

International Conference on Processing and Characterization of Materials (ICPCM 2018)

Edited by: Dr. Archana Mallik

This volume is the amalgamation of papers presented at International Conference on Processing and Characterization of Materials (ICPCM 2018) which was held in National Institute of Technology Rourkela, Odisha, India during 6th – 8th December 2018 and contains results of investigations in the fields of study properties of steel, alloys and composites, properties of materials for electronics, optoelectronics and for energy, nuclear, aviation and defense applications including materials processing and metal extraction technologies, microstructural characterization, materials surface modification, deposition of thin films and special coatings, corrosion, etc.

562 pages, 2020

Print (978-3-0357-1503-3)

eBook (978-3-0357-3503-1)

Prices:

Print: US\$ 320.00/€ 290.00

eBook Single-User: US\$ 180.00/€ 162.00

eBook Unlimited-User: US\$ 315.00/€ 284.00

<https://www.scientific.net/978-3-0357-3503-1.html>

■ Recent Advances in Materials Science and Engineering II

2nd International Conference on Material Science and Engineering: Recent Advances and Challenges (ICMSE-RAC 2019)

Edited by: Mohamed M. Rashad and Taha Mattar

This special issue involves selected papers from the 2nd International Conference on Materials Science and Engineering: Recent Advances and Challenges (ICMSE-RAC 2019) hosted by Central Metallurgical Research and Development Institute (CMRDI) which was held at Cairo, Egypt during 11-13 March 2019. The present volume focuses on the development and challenges of a wide range of materials including minerals, metals, ceramics and

nanostructured materials. This collection will be beneficial and interesting for the researchers concerning various fields in materials science and engineering.

412 pages, 2020

Print (978-3-0357-1534-7)

eBook (978-3-0357-3534-5)

Prices:

Print: **US\$ 370.00/€ 335.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3534-5.html>

■ Recent Progress on Mass Transport Related Processes in Engineering Materials

Edited by: Dr. Andreas Öchsner, Graeme Murch, Ali Shokuhfar and João Delgado

Research on mass and thermal transport in engineering materials continues to be a rapidly expanding major area of materials science and engineering. It is an exciting area. It is clear that gaining an in-depth understanding of mass and thermal transport underpins the major breakthroughs needed in the development of new materials for new technologies and the improvement of existing materials in service. This topical volume, which is entitled "Recent Progress in Mass Transport in Engineering Materials", was designed to capture a very wide and significant cross section of contemporary international research on mass and thermal transport. It ranges from basic strategic research through to quite applied areas. This volume spans, for example, the modelling of multiphase fluid flow in porous media for enhanced oil recovery to heat transfer in fixed bed reactors, from the modelling of the drying processes to the growing of indium oxide thin films. We thank the authors for their participation in this volume and the reviewers for their time and efforts.

212 pages, 2020

Print (978-3-0357-1546-0)

eBook (978-3-0357-3546-8)

Prices:

Print: **US\$ 210.00/€ 190.00**

eBook Single-User: **US\$ 147.00/€ 133.00**

eBook Unlimited-User: **US\$ 257.00/€ 233.00**

<https://www.scientific.net/978-3-0357-3546-8.html>

■ Rehabilitation and Reconstruction of Buildings III

Selected peer-reviewed full text papers from the 21st Conference on the Rehabilitation and Reconstruction of Buildings (CRRB)

Edited by: Michaela Kostecká

Proceedings of the 21st Conference on the Rehabilitation and Reconstruction of Buildings (CRRB, Prague, Czech Republic, November 28-29, 2019) are the result of the discussion of new trends and procedures in the field of rehabilitation and reconstruction of buildings and structures. This collection will be useful and interesting for

many engineers and researchers which activity is related to this area of construction.

200 pages, 2020

Print (978-3-0357-1653-5)

eBook (978-3-0357-3653-3)

Prices:

Print: **US\$ 170.00/€ 155.00**

eBook Single-User: **US\$ 119.00/€ 109.00**

eBook Unlimited-User: **US\$ 208.00/€ 191.00**

<https://www.scientific.net/978-3-0357-3653-3.html>

■ Research, Invention and Innovation

Selected peer-reviewed papers from Research, Invention, and Innovation Congress (RI2C 2019)

Edited by: Somrer Chandra-Ambhorn, Dr. Wanlop Harnnarongchai, Prof. Pitthaya Jamsawang, Chantaporn Phalakornkule and Sutthisak Phongthanapanich

This volume contains the selected papers presented to the 2019 Research, Invention, and Innovation Congress (RI2C 2019) held in Bangkok, Thailand from December 11 – 13, 2019. The collection reflects recent advances in the field of applied materials science, materials processing, building materials, applied chemistry, and technologies of chemical production. This collection will be useful for many scientists and engineers whose activity is related to industrial production.

422 pages, 2020

Print (978-3-0357-1672-6)

eBook (978-3-0357-3672-4)

Prices:

Print: **US\$ 300.00/€ 270.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3672-4.html>

■ Semiconductor Materials and Technology

International Conference on Semiconductor Materials and Technology (ICoSeMT 2019)

Edited by: Dr. Mohd Syamsul Nasyriq Samsol

International Conference on Semiconductor Materials and Technology (ICoSeMT 2019, 29-30 April 2019, Penang, Malaysia) was an inaugural event organized by the Institute of Nano Optoelectronics Research and Technology (INOR) and Universiti Sains Malaysia (USM) in conjunction with the 50th Anniversary of USM. This volume presents for readers the collection of papers that were represented on this event and reflects the modern trends in the area of materials science and technologies for opto- and microelectronics, photovoltaic systems, and photocatalysis, in analyze properties of modern functional materials, polymers, and composites. This collection will be useful for specialists from many branches of modern manufacture.

256 pages, 2020

Print (978-3-0357-1681-8)

eBook (978-3-0357-3681-6)

Prices:

Print: **US\$ 230.00/€ 210.00**

eBook Single-User: **US\$ 161.00/€ 147.00**

eBook Unlimited-User: **US\$ 282.00/€ 257.00**

<https://www.scientific.net/978-3-0357-3681-6.html>

■ Seminar on Advances in Materials Science and Engineering

4th International Seminar on Advances in Materials Science and Engineering (ISAMSE 2019)

Edited by: Tao Feng

The book is collected from papers that were presented at the 2019 4th International Seminar on Advances in Materials Science and Engineering (ISAMSE 2019, August 16-18, 2019, Shanghai, China) and it introduces the recent research results in the area of materials science and technologies of materials processing. We hope this collection will be useful and interesting for many researchers and engineers in their professional activity.

268 pages, 2020

Print (978-3-0357-1629-0)

eBook (978-3-0357-3629-8)

Prices:

Print: **US\$ 210.00/€ 190.00**

eBook Single-User: **US\$ 147.00/€ 133.00**

eBook Unlimited-User: **US\$ 257.00/€ 233.00**

<https://www.scientific.net/978-3-0357-3629-8.html>

■ Silicon Carbide and Related Materials 2019 Selected peer-reviewed papers from International Conference on Silicon Carbide and Related Materials 2019 (ICSCRM 2019)

Edited by: Hiroshi Yano, Dr. Takeshi Ohshima, Kazuma Eto, Shinsuke Harada, Takeshi Mitani and Yasunori Tanaka

This volume contains papers from the 18th International Conference on Silicon Carbide and Related Materials 2019 (ICSCRM 2019), held in Kyoto, Japan, from September 29 through October 4, 2019. The collection reflects the results of the last research efforts on properties of silicon carbide and related materials for the goal of their use in power electronics. Presented articles, cover the wide range of topics: crystal growth and wafer manufacturing, characterization and defect engineering, MOS gate stacks and device processing, power devices, and integrated circuits packaging.

1196 pages, 2020

Print (978-3-0357-1579-8)

eBook (978-3-0357-3579-6)

Prices:

Print: **US\$ 500.00/€ 450.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3579-6.html>

■ Solid State Science and Technology XXX

Selected peer-review full text papers from the 30th Regional Conference of Solid State Science and Technology (RCSSST)

Edited by: Syahida Suhaimi, Lailatun Nazirah Ozair and Azira Khalil

This volume contains selected peer-review full text papers from the 30th Regional Conference of Solid State Science and Technology (RCSSST), Malaysia, 2018. The collection represents results of the scientific researches in the area of materials for electrotechnical engineering, electronics, optoelectronics, fuel cells and solar cells production, energy storage, investigation of properties and application methods of functional materials, nanomaterials, glasses, and biomaterials.

378 pages, 2020

Print (978-3-0357-1452-4)

eBook (978-3-0357-3452-2)

Prices:

Print: **US\$ 330.00/€ 300.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3452-2.html>

■ Superplastic Forming

Selected peer-reviewed full text papers from 13th European Conference on Superplastic Forming (EuroSPF 2019)

Edited by: Prof. Donato Sorgente and Gianfranco Palumbo

The book includes some of the works presented in the 13th European Conference on Superplastic Forming (EuroSPF 2019). The EuroSPF Conference is focused on all aspects related to Super Plastic Forming and SPF/DB (Super Plastic Forming/Diffusion Bonding). The purpose of the annual EuroSPF Conference is to act as a platform for transfer of knowledge between academic and industrial leaders in the field of SPF including material science, process simulation, press design, die optimisation, part manufacturing, innovative low cost processes modelling, tool design, lubrication, industrial applications of SPF and similar topics.

74 pages, 2020

Print (978-3-0357-1621-4)

eBook (978-3-0357-3621-2)

Prices:

Print: **US\$ 100.00/€ 90.00**

eBook Single-User: **US\$ 70.00/€ 63.00**

eBook Unlimited-User: **US\$ 123.00/€ 110.00**

<https://www.scientific.net/978-3-0357-3621-2.html>

■ Symposium of Materials Science and Chemistry II

5th International Conference on Science and Technology (ICST 2019)

Edited by: Dr. Tutik Dwi Wahyuningsih, Roto Roto, Rohana Adnan, Laurent Commeiras, Kuwat Triyana, Indriana Kartini, Dr. Julius Motuzas and Dwi Siswanta

This volume of peer-reviewed papers is from the symposium of life sciences, materials, and applied chemistry. It provides an opportunity for readers to connect with a selection of refereed papers presented during the 5th International Conference on Science and Technology (ICST 2019, July 30-31, 2019, Yogyakarta, Indonesia). The papers published here reflect on the multiple dimensions of the properties of materials and their application, development technologies of synthesis and processing for goals of biomedicine, pharmacology, food production, agriculture, biomass processing, and environmental engineering.

600 pages, 2020

Print (978-3-0357-1613-9)

eBook (978-3-0357-3613-7)

Prices:

Print: **US\$ 300.00/€ 270.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3613-7.html>

■ Technology and Innovation for Sustainable Development: Turning Digital Disruptions into Opportunities

Selected peer-reviewed papers from the 10th RMUTP International Conference on Science, Technology and Innovation for Sustainable Development: Turning Digital Disruptions into Opportunities 2019 (10th RMUTP ICON SCI-2019)

Edited by: Noppakun Sanpo, Jirasak Tharajak and Paisan Kanthang

This volume contains papers from the 10th RMUTP International Conference on Science, Technology and Innovation for Sustainable Development: Turning Digital Disruptions into Opportunities 2019 (10th RMUTP ICON SCI-2019, 4-5 June 2019, Bangkok, Thailand). Presented articles reflect the last achievements and research results in the area of food chemistry and phytochemical analysis; in the technique of coatings and surface treatment; in environmental engineering and applied technologies.

130 pages, 2020

Print (978-3-0357-1644-3)

eBook (978-3-0357-3644-1)

Prices:

Print: **US\$ 110.00/€ 100.00**

eBook Single-User: **US\$ 77.00/€ 70.00**

eBook Unlimited-User: **US\$ 135.00/€ 123.00**

<https://www.scientific.net/978-3-0357-3644-1.html>

■ THE "A" Coatings

Selected peer-reviewed papers from the 14th International Conference 2020 "THE A COATINGS"

Edited by: Marion Merklein, Konstantinos Dionysios Bouzakis, Nikolaos Michailidis, Berend Denkena and Kirsten Bobzin

The book publishes selected papers from the 14th International Conference 2020 "THE A COATINGS" (19th - 20th November 2020, Nuremberg, Germany). The conference was focussed on coatings and research regarding coatings in different fields. Articles describe the results of research and development deposition process technologies, new coatings, surface properties, tribology, numerical simulation and modeling as well as the application of coatings for tools and products.

158 pages, 2020

Print (978-3-0357-1695-5)

eBook (978-3-0357-3695-3)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3695-3.html>

■ Transfer Phenomena in Fluid and Heat Flows XI

Edited by: Luiz Rocha, Antonio Ferreira Miguel and Dr. Andreas Öchsner

The topics covered in this special issue are related to the research of the phenomena of heat and mass transfer in the various areas of engineering and range from mathematics models and methods of numerical analysis of heat and mass transfer processes in generalized technical systems to the development of technologies in food and biomass processing and creation of real technical solutions in mechanical engineering.

230 pages, 2020

Print (978-3-0357-1390-9)

eBook (978-3-0357-3390-7)

Prices:

Print: **US\$ 230.00/€ 210.00**

eBook Single-User: **US\$ 161.00/€ 147.00**

eBook Unlimited-User: **US\$ 282.00/€ 257.00**

<https://www.scientific.net/978-3-0357-3390-7.html>

■ Vacuum Heat Treatment II

Selected peer-reviewed full text papers from the 27th National Conference on Heat Treatment (November 26 - 28, 2019, Jihlava, Czech Republic)

Edited by: Prof. Peter Jurčí

This volume contains papers presented during the 27th National Conference on Heat Treatment, held on November 26 - 28, 2019 in Jihlava, Czech Republic. Papers are focused on many aspects of the modern technologies of heat treatment of metallic materials: heat treatment of 3D

printed alloys and intermetallic compounds, cryogenic treatment of tool steels and cemented carbides, research of the effect of heat treatment on the microstructure and properties of metal materials.

122 pages, 2020

Print (978-3-0357-1733-4)

eBook (978-3-0357-3733-2)

Prices:

Print: **US\$ 150.00/€ 135.00**

eBook Single-User: **US\$ 105.00/€ 95.00**

eBook Unlimited-User: **US\$ 184.00/€ 166.00**

<https://www.scientific.net/978-3-0357-3733-2.html>

■ Waste and Biomass Application

Selected peer-reviewed papers from 2nd Annual Symposium on Solid Waste Refinery (2nd ANSWER)

Edited by: Chandra Wahyu Purnomo

This volume contains selected peer-reviewed papers from 2nd Annual Symposium on Solid Waste Refinery (2nd ANSWER, 13-14 November 2019, Yogyakarta, Indonesia).

The collected papers cover the important area of human activity - waste recycling and biomass processing in the context of the sustainable development paradigm.

148 pages, 2020

Print (978-3-0357-1698-6)

eBook (978-3-0357-3698-4)

Prices:

Print: **US\$ 190.00/€ 175.00**

eBook Single-User: **US\$ 133.00/€ 123.00**

eBook Unlimited-User: **US\$ 233.00/€ 215.00**

<https://www.scientific.net/978-3-0357-3698-4.html>

Best Selling Books



Best Selling Books



■ 12th EnviBuild – Buildings and Environment – From Research to Application

Proceedings of the 12th international enviBUILD conference

Edited by: Ulrich Pont, Matthias Schuss and Ardeshtir Mahdavi

This collection of contributions is based on the results of the enviBUILD conference (Vienna, Austria) and presents for readers the variety of scientific and engineering approaches in the modern architecture, designing, and planning of buildings and city environment used in the modern civil engineering.

700 pages, 2019
Print (978-3-0357-1202-5)
eBook (978-3-0357-3202-3)

Prices:

Print: **US\$ 350.00/€ 315.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3202-3.html>

■ 22nd Brazilian Conference on Materials Science and Engineering

22nd CBECIMAT

Edited by: Clodomiro Alves Junior

The 22nd Brazilian Conference on Materials Science and Engineering (CBECIMAT) is the traditional national meeting of the Materials Science and Engineering community occurring since 1974. The presented in this collection papers cover a wide range of topics in materials structure, processing technologies, characterization, and application.

680 pages, 2018
Print (978-3-0357-1288-9)
eBook (978-3-0357-3288-7)

Prices:

Print: **US\$ 350.00/€ 315.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3288-7.html>



■ 22nd Symposium on Composites

22nd Symposium on Composites 2019

Edited by: Joachim M. Hausmann

The “22nd Symposium on Composites”, held in the science city of Kaiserslautern, Germany, from June 26-28, 2019, covered a wide range of composite-related topics including polymer, metal

and ceramic matrix composites, hybrid structures and materials, coatings, manufacturing technologies, testing and simulation, smart materials, biocomposites and recycling. This conference was organized by the “Gemeinschaftsausschuss Verbundwerkstoffe (GAV)” within the “Deutsche Gesellschaft für Materialkunde e.V. (DGM)” in cooperation with the „Institut für Verbundwerkstoffe GmbH (IVW)” and the University of Kaiserslautern. Researchers from different scientific institutions and technology companies presented and discussed the latest developments and trends in all kinds of composites.

690 pages, 2019
Print (978-3-0357-1453-1)
eBook (978-3-0357-3453-9)

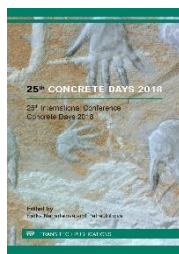
Prices:

Print: **US\$ 750.00/€ 675.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3453-9.html>



■ 25th Concrete Days 2018

25th International Conference Concrete Days 2018

Edited by: Šárka Nenadálová and Petra Johová

The 25th International Conference Concrete Days 2018 was held in Prague, Czech Republic from November 21st – 22nd, 2018. The published papers present recent research results in the area of

modern concretes and concrete structures, discuss modeling and design of concrete structures, bridges, and buildings, properties of concretes as well as significant structural projects and realizations.

278 pages, 2019
Print (978-3-0357-1459-3)
eBook (978-3-0357-3459-1)

Prices:

Print: **US\$ 370.00/€ 335.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3459-1.html>



■ Achievements and Solutions in Mechanical Engineering

4th International Conference of Mechanical Engineering (4th ICOME 2017)

Edited by: Nicolae Craciunoiu, Nicolae Dumitru and Dr. Adrian Sorin Roșca

This book presents the newest

and actual research results that intend to improve theoretical and practical activities in the field of mechanical engineering, based on the papers presented at the 4th International Conference of Mechanical Engineering (ICOME 2017, October 11-12, 2017, Craiova, Romania).

414 pages, 2018

Print (978-3-0357-1257-5)

eBook (978-3-0357-3257-3)

Prices:

Print: **US\$ 200.00/€ 180.00**

eBook Single-User: **US\$ 140.00/€ 126.00**

eBook Unlimited-User: **US\$ 245.00/€ 221.00**

<https://www.scientific.net/978-3-0357-3257-3.html>



■ Adaptive Materials Research for Architecture

Edited by: Dr. Santina Di Salvo

The volume "Adaptive Materials Research for Architecture" is a Special Issue of the journal "Advanced Material Research". The goal of this volume is to spread knowledge on studies, analyses and results of scientific research carried out by academics,

researchers, and scientists regarding the soundest issues related to smart materials, innovative technologies and ongoing researches in the field of adaptive materials in past and current architectural practice.

130 pages, 2018

Print (978-3-0357-1428-9)

eBook (978-3-0357-3428-7)

Prices:

Print: **US\$ 140.00/€ 130.00**

eBook Single-User: **US\$ 98.00/€ 91.00**

eBook Unlimited-User: **US\$ 172.00/€ 159.00**

<https://www.scientific.net/978-3-0357-3428-7.html>

■ Advanced Manufacturing Technologies and Technologies for Polymeric and Composite Products

9th International Conference of Advanced Manufacturing Technologies, (ICAMaT 2018) and 2nd International Conference on Technologies for Polymeric and Composite Products (POLCOM 2018)

Edited by: Prof. Tom Savu, Constantin Gheorghe OPRAN, Prof. Giuseppe Lamanna, Manuela Roxana Dîjmărescu and Ioan - Cristian Tarba

This issue of the journal is prepared according to the results of the two conferences: the 2nd International Conference on Technologies for Polymeric and Composite Products (POLCOM 2018) and the 9th International Conference of Advanced Manufacturing Technologies, (ICAMaT 2018) that were held together in Bucharest, Romania, 1- 2 November 2018. We hope that the collected papers will be interesting and useful for many specialists in the area of materials science and materials processing, designing and production in machinery, biomedical engineering, in the practice of industrial engineering.

520 pages, 2019

Print (978-3-0357-1549-1)

eBook (978-3-0357-3549-9)

Prices:

Print: **US\$ 700.00/€ 630.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3549-9.html>



■ Advanced Materials – XV International Symposium on Advanced Materials Islamabad, Pakistan

Edited by: Tahir Ikram, Mustasim Billah Bhatti, Muhammad Mansoor and Ejaz Ahmed Mukhtar

This book is the proceedings of the 15th International Symposium on Advanced Materials (ISAM-2017, October 16-20, 2017, Islamabad, Pakistan) and contains the selected peer reviewed papers which reflect recent achievements in the field of materials sciences and technologies of their processing and synthesis. We hope that this collection will be useful and interesting for the wide range of researchers and engineers.

356 pages, 2018

Print (978-3-0357-1197-4)

eBook (978-3-0357-3197-2)

Prices:

Print: **US\$ 250.00/€ 225.00**

eBook Single-User: **US\$ 175.00/€ 158.00**

eBook Unlimited-User: **US\$ 306.00/€ 277.00**

<https://www.scientific.net/978-3-0357-3197-2.html>

■ Advanced Materials and Engineering Materials VII

7th International Conference on Advanced Materials and Engineering Materials (7th ICAMEM 2018)

Edited by: Prof. Peng Sheng Wei

This book contains articles which were introduced at the 7th International Conference on Advanced Materials and Engineering Materials (ICAMEM 2018, May 17-18, 2018, Bangkok, Thailand) and presents to readers the results of the innovative research in the area of the modern materials science and technologies of materials processing. We hope that this collection will be useful and interesting for many researchers and engineers.

640 pages, 2018

Print (978-3-0357-1371-8)

eBook (978-3-0357-3371-6)

Prices:

Print: **US\$ 320.00/€ 290.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3371-6.html>

■ Advanced Materials and Technologies III

Edited by: Dr. Stanislav Kolisnychenko

The presented volume of the journal "Advanced Materials Research" is collected from peer-reviewed stand-alone papers describing the results of research and engineering solutions dealing with actual problems in the area of materials science and materials processing technologies. Published articles will be useful for professionals in various branches of engineering, for students and academic staff concerned with the related specialties.

100 pages, 2019

Print (978-3-0357-1077-9)

eBook (978-3-0357-3077-7)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3077-7.html>



■ Advanced Research in Materials Science

The 6th International Conference on Materials Science (6th ICMS 2017)

Edited by: Jav Davaasambuu and Jadambaa Temuujin

This volume contains peer-reviewed papers presented at the 6th International Conference on Materials Science (ICMS2017, Mongolia, August 18-21, 2017) and focuses on the research of the structure of materials, their properties and characterization techniques

as well as their applications in various areas of engineering practice.

152 pages, 2018

Print (978-3-0357-1253-7)

eBook (978-3-0357-3253-5)

Prices:

Print: **US\$ 150.00/€ 135.00**

eBook Single-User: **US\$ 105.00/€ 95.00**

eBook Unlimited-User: **US\$ 184.00/€ 166.00**

<https://www.scientific.net/978-3-0357-3253-5.html>

■ Advanced Topics in Heat and Mass Transfer and Fluid Flow Phenomena in Multiphase Systems

Edited by: João Delgado and A.G. Barbosa de Lima

This volume, entitled "Advanced Topics in Heat and Mass Transfer and Fluid Flow Phenomena in Multiphase Systems", is aimed to provide a collection of recent contributions in the field of transport and fluid flow phenomena in multiphase systems and we hope that this publication will be useful and interesting for many researchers and engineers.

166 pages, 2019

Print (978-3-0357-1443-2)

eBook (978-3-0357-3443-0)

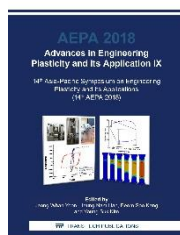
Prices:

Print: **US\$ 145.00/€ 135.00**

eBook Single-User: **US\$ 102.00/€ 95.00**

eBook Unlimited-User: **US\$ 179.00/€ 166.00**

<https://www.scientific.net/978-3-0357-3443-0.html>



■ Advances in Engineering Plasticity and its Application IX

14th Asia-Pacific Symposium on Engineering Plasticity and its Applications (14th AEPA 2018)

Edited by: Jeong Whan Yoon, Heung Nam Han, Beom Soo Kang and Young Suk Kim

This edition includes the selected papers in the area of engineering plasticity, which were presented at the 14th Asia-Pacific Symposium on Engineering Plasticity and its Applications (AEPA 2018) was held on Jeju Island, Korea during December 2-7, 2018.

358 pages, 2019

Print (978-3-0357-1362-6)

eBook (978-3-0357-3362-4)

Prices:

Print: **US\$ 320.00/€ 290.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3362-4.html>

■ **Advances in Fracture and Damage Mechanics XVII**

The 17th International Conference on Fracture and Damage Mechanics (FDM 2018)

Edited by: Luis Rodríguez-Tembleque, Jaime Domínguez and Ferri M.H. Aliabadi

This volume is a collection of edited papers presented at the 17th International Conference on Fracture and Damage Mechanics (FDM 2018), held on 4-6 September 2018, Seville, Spain. The conference served as a forum to promote and exchange latest theoretical, computational and experimental research works on fracture, damage mechanics, structural integrity, and durability.

684 pages, 2018

Print (978-3-0357-1350-3)

eBook (978-3-0357-3350-1)

Prices:

Print: **US\$ 320.00/€ 290.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3350-1.html>



■ **Advances in Materials Science and Engineering Technology**

The Waikato Young Research Engineers Symposium (WYRES 2017)

Edited by: Leandro Bolzoni

This volume contains refereed invited papers from those presented at WYRES (The Waikato Young Research Engineers Symposium) held at the University of Waikato in Hamilton (New Zealand) in November 2017. The conference aimed at providing a forum for the discussion and review of the latest advances and trends in engineering and technology. The selected papers cover a wide range of topics related to the materials science, mechanical engineering, control and robotics, signal and video processing, power electronics.

140 pages, 2018

Print (978-3-0357-1319-0)

eBook (978-3-0357-3319-8)

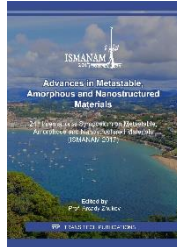
Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3319-8.html>



■ **Advances in Metastable, Amorphous and Nanostructured Materials**

24th International Symposium on Metastable, Amorphous and Nanostructured Materials (ISMANAM 2017)

Edited by: Prof. Arcady Zhukov

This special volume is collected from some papers presented at

the 24th International Symposium on Metastable, Amorphous and Nanostructured Materials (ISMANAM 2017, June 18-23, 2017, San Sebastian, Spain) and reflects recent results of research and developments in the field of metastable, amorphous and nanostructured materials and intermetallic compounds. We hope this collection will be interesting and useful for many specialists on modern materials science.

70 pages, 2019

Print (978-3-0357-1252-0)

eBook (978-3-0357-3252-8)

Prices:

Print: **US\$ 145.00/€ 135.00**

eBook Single-User: **US\$ 102.00/€ 95.00**

eBook Unlimited-User: **US\$ 179.00/€ 166.00**

<https://www.scientific.net/978-3-0357-3252-8.html>

■ **Advances in Nanostructured Materials for Multifunctional Applications: Synthesis, Characterization and Properties**

Edited by: Luz Stella Gomez-Villalba

This volume presents the recent research progress in the synthesis, characterization techniques, properties and interactions of nanostructured materials for multifunctional applications. The opportunity to apply singular or hybrid nanomaterials proves to be a constant challenge in order to optimize its use, achieving simultaneous results for its application in different branches of research. It is focused on the study of structures and their effect on the properties of solids, using different experimental techniques and practical applications of nanostructured materials in the context of the latest achievements in the area of research of solid-state phenomena.

168 pages, 2019

Print (978-3-0357-1320-6)

eBook (978-3-0357-3320-4)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3320-4.html>

■ Applied Electromagnetic Engineering for Advanced Materials from Macro-to Nanoscale under Static-to Shock Loading

10th Japanese-Mediterranean Workshop on Applied Electromagnetic Engineering for Magnetic, Superconducting, Multifunctional and Nano Materials (10th JAPMED)

Edited by: A.G. Mamalis, Masato Enokizono, Antonios Kladas, T. Sawada, Mustafa Güden and Prof. Mustafa M. Demir

This collection of selected, peer reviewed papers from the 10th Japanese-Mediterranean Workshop on Applied Electromagnetic Engineering for Magnetic, Superconducting, Multifunctional and Nano Materials (JAPMED'10, Izmir, Turkey on July 4-8, 2017) gives readers the coverage of results of scientific and engineering researches in the fields of modern advanced technologies: nanomaterials and applied nanotechnology, precision and ultra precision processing, functional and multifunctional materials for various branches of the modern manufacturing.

276 pages, 2018

Print (978-3-0357-1221-6)

eBook (978-3-0357-3221-4)

Prices:

Print: **US\$ 170.00/€ 155.00**

eBook Single-User: **US\$ 119.00/€ 109.00**

eBook Unlimited-User: **US\$ 208.00/€ 191.00**

<https://www.scientific.net/978-3-0357-3221-4.html>

■ Applied Geology of Oil and Gas

Edited by: Marsel Kadyrov

This collection of articles is the result of complex studies for several years in the area of applied geology and development of oil and gas fields. The materials of the collection can be useful for engineers, scientists, teachers, post-graduate students and students of geological study programs of higher educational institutions.

190 pages, 2018

Print (978-3-0357-1473-9)

eBook (978-3-0357-3473-7)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3473-7.html>



■ BaltSilica 2018 8th International Conference on Silicate Materials (8th ICSM)

Edited by: Gundars Mežinskis, Līga Grase, Ruta Švinka, Ilona Pavlovskā, Jānis Grabis, Kēstutis Baltakys and Irina Hussainova

This volume contains papers presented at the 8th International

Conference on Silicate Materials which was held from May 30th to June 1st, 2018 in Riga, Latvia. We hope that this collection will be interesting for many researchers, technologists, and engineers whose activity are related to silicate, aluminium silicate and calcium silicate building materials; inorganic nanomaterials and various functional materials for industrial application.

148 pages, 2018

Print (978-3-0357-1440-1)

eBook (978-3-0357-3440-9)

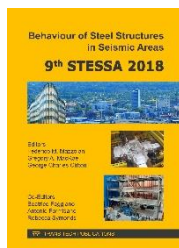
Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3440-9.html>



■ Behaviour of Steel Structures in Seismic Areas 9th STESSA 2018

Edited by: Federico M. Mazzolani, Gregory A. MacRae and George Charles Clifton

This collection of papers and keynote lectures presented at the 9th International Conference on the Behaviour of Steel Structures

in Seismic Areas (Stessa2018, Christchurch, New Zealand, February 14-17, 2018) is a comprehensive overview of the recent state-of-the-art developments in the field of seismic resistant steel structures. The book is a valuable source for all stakeholders involving scientists, professionals, companies, and authorities dealing with the reduction of the seismic risk in earthquake prone countries.

1210 pages, 2018

Print (978-3-0357-1301-5)

eBook (978-3-0357-3301-3)

Prices:

Print: **US\$ 490.00/€ 445.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3301-3.html>



■ Binders, Materials and Technologies in Modern Construction V

17th International Conference Silicate Binders (ICBM 2018)

Edited by: Karel Dvořák and Dominik Gazdík

This book was prepared by results of the 17th International Conference Silicate Binders (ICBM

2018) that was held December 6 in Brno, Czech Republic and focused on the scientific and practical knowledge of inorganic binders and materials. The most important topics were chemistry and technology of cement and other hydraulic and silicate binders and chemistry and technology of lime and gypsum based binders. We hope this collection will be useful for many specialists in the field of building materials.

240 pages, 2019

Print (978-3-0357-1550-7)

eBook (978-3-0357-3550-5)

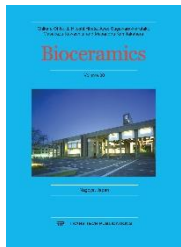
Prices:

Print: **US\$ 250.00/€ 225.00**

eBook Single-User: **US\$ 175.00/€ 158.00**

eBook Unlimited-User: **US\$ 306.00/€ 277.00**

<https://www.scientific.net/978-3-0357-3550-5.html>



■ Bioceramics 30

30th Symposium and Annual Meeting of the International Society for Ceramics in Medicine (ISCM)

Edited by: Chikara Ohtsuki, Hitoshi Hirata, Ayae Sugawara-Narutaki, Masakazu Kawashita and Masanobu Kamitakahara

This volume contains papers

corresponding to communications presented at 30th Symposium and Annual Meeting of the International Society for Ceramics in Medicine (ISCM, October 26–29, 2018, Nagoya, Japan) and it continues the tradition of the Bioceramics series offering, generally to young researchers, the ability to publish the work they are eager to present to the community of specialists participating in the meeting. The originality of the Bioceramics series is that the papers are available before the meeting to allow deeper, more detailed discussions than those occurring in classical meetings where exchanges are often hampered by the limited time devoted to presentations. These papers might not be perfect, but we believe that the basis for the discussions they provide is irreplaceable.

322 pages, 2018

Print (978-3-0357-1374-9)

eBook (978-3-0357-3374-7)

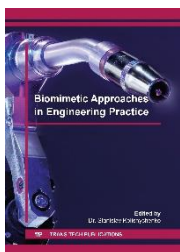
Prices:

Print: **US\$ 270.00/€ 245.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3374-7.html>



■ Biomimetic Approaches in Engineering Practice

Edited by: Dr. Stanislav Kolisnichenko

Presented for your attention the special collection "Biomimetic Approaches in Engineering Practice" consists of papers published by Trans Tech Publications Inc. from 2010 up to 2016 and covers a wide range of

engineering solutions in the fields of mechanical engineering, materials science, mechatronics, robotics, and architecture, where the principles of bionics were used in the design and research process.

1852 pages, 2018

Print (978-3-0357-1445-6)

eBook (978-3-0357-3445-4)

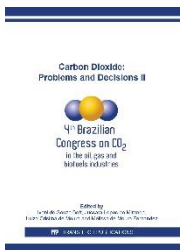
Prices:

Print: **US\$ 360.00/€ 325.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3445-4.html>



■ Carbon Dioxide:

Problems and Decisions II 4th Brazilian Congress on CO2 in the Oil, Gas and Biofuels Industries (4th BCO2 2018)

Edited by: Ivani de Souza Bott, Jussara Lopes de Miranda, Luiza Cristina de Moura and Melissa de Moura Fernandez

This volume is the 4th edition of the Brazilian Congress on CO2 in the Oil, Gas and Biofuels Industries (June 28 - 29h 2018, Rio de Janeiro, Brazil). The main objective of Congress was the promotion and discussion of technical decisions associated with a decrease of CO2 emissions in the process of growing the energy demand in a scenario of one of the most challenging tasks of the 21st century, greenhouse gas emission restrictions.

154 pages, 2019

Print (978-3-0357-1554-5)

eBook (978-3-0357-3554-3)

Prices:

Print: **US\$ 180.00/€ 165.00**

eBook Single-User: **US\$ 126.00/€ 116.00**

eBook Unlimited-User: **US\$ 221.00/€ 203.00**

<https://www.scientific.net/978-3-0357-3554-3.html>

■ Computational Science and Engineering 3rd International Conference on Computational Science and Engineering (ICCSE 2018)

Edited by: Rayner Alfred, Ag. Asri Ag Ibrahim, Joe Henry Obit, Raymond Alfred and Kim On Chin

This book is the proceedings of the Third International Conference on Computational Science and Engineering (ICCSE2018, August 29-30, 2018, Kota Kinabalu, Sabah, Malaysia) and contains the selected peer-reviewed papers which reflect recent achievements in the field of application of the computational methods and algorithms in scientific research and engineering design. We hope that this volume of the journal will be useful, interesting and informative for a wide range of scientists, engineers, and students.

310 pages, 2019

Print (978-3-0357-1401-2)

eBook (978-3-0357-3401-0)

Prices:

Print: **US\$ 230.00/€ 210.00**

eBook Single-User: **US\$ 161.00/€ 147.00**

eBook Unlimited-User: **US\$ 282.00/€ 257.00**

<https://www.scientific.net/978-3-0357-3401-0.html>

■ Contemporary Advances in Diffusion in Solids

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

This volume was designed to capture a wide cross-section of contemporary international diffusion research by presenting advances in both experimental aspects and modelling of diffusion at both basic science and applied levels.

196 pages, 2019

Print (978-3-0357-1563-7)

eBook (978-3-0357-3563-5)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3563-5.html>

■ Defect-Mediated Degradation of Diffusion Barriers

Edited by: David J. Fisher

The wide practical use of the diffusion barrier phenomenon in the various areas of science and modern engineering is impossible without the studying of all aspects of their creation, functioning and degradation. The present monograph covers a specific and important aspect of the diffusion barriers damaging process - the deleterious effect of atomic-scale defects in the structure of diffusion barriers.

130 pages, 2018

Print (978-3-0357-1346-6)

eBook (978-3-0357-3346-4)

Prices:

Print: **US\$ 140.00/€ 125.00**

eBook Single-User: **US\$ 98.00/€ 88.00**

eBook Unlimited-User: **US\$ 172.00/€ 154.00**

<https://www.scientific.net/978-3-0357-3346-4.html>

■ Diffusion and Thermal Transport in Bulk and Nano-Materials

Edited by: Prof. Helmut Mehrer

This volume is dedicated to the memory of Professor Dr. Nicolaas Augustinus Stolwijk whose works were related with study of a wide spectrum of diffusion processes in metals, intermetallic compounds, semiconductors, solar grade silicon, polymer electrolytes and in minerals.

138 pages, 2019

Print (978-3-0357-1460-9)

eBook (978-3-0357-3460-7)

Prices:

Print: **US\$ 145.00/€ 135.00**

eBook Single-User: **US\$ 102.00/€ 95.00**

eBook Unlimited-User: **US\$ 179.00/€ 166.00**

<https://www.scientific.net/978-3-0357-3460-7.html>

■ Diffusion Controlled Growth and Oxidation of Metal-Silicides

Edited by: Prof. Alope Paul

Silicide intermetallics are widely used in various applications such as microelectronics, structural and coating industries. Some aspects of the diffusion-controlled growth and oxidation of metal-silicides are presented in this volume of the journal.

202 pages, 2019

Print (978-3-0357-1505-7)

eBook (978-3-0357-3505-5)

Prices:

Print: **US\$ 170.00/€ 155.00**

eBook Single-User: **US\$ 119.00/€ 109.00**

eBook Unlimited-User: **US\$ 208.00/€ 191.00**

<https://www.scientific.net/978-3-0357-3505-5.html>

■ Diffusion Foundations Vol. 16 Fluid Mechanics and Heat Transfer in Applied Engineering

Edited by: Dr. Houssem Laidoudi and Prof. Oluwole Daniel Makinde

This special topics volume "Fluid Mechanics and Heat Transfer in Applied Engineering" contains some recent results in the area of computational research on the mixed and forced convection heat transfer from the confined obstacle cylinder and fluid flow for film cooling. We hope that the presented modest effort and results will be useful for different fields of engineering applications as well as academic researches.

202 pages, 2018
Print (978-3-0357-1307-7)
eBook (978-3-0357-3307-5)

Prices:
Print: **US\$ 150.00/€ 135.00**
eBook Single-User: **US\$ 105.00/€ 95.00**
eBook Unlimited-User: **US\$ 184.00/€ 166.00**

<https://www.scientific.net/978-3-0357-3307-5.html>



■ Diffusion Foundations Vol. 23

Thermo-Mechanical Properties of Polymer Composites

Edited by: Dr. Inamuddin, Anish Khan and Abdullah Mohamed Asiri

This volume contains papers describing the results of some research in the area of application

diffusion and transport phenomena in polymer composite materials and substances for the industrial and engineering goals. We hope that the presented papers will be interesting and useful for many engineers and researchers.

244 pages, 2019
Print (978-3-0357-1271-1)
eBook (978-3-0357-3271-9)

Prices:
Print: **US\$ 200.00/€ 180.00**
eBook Single-User: **US\$ 140.00/€ 126.00**
eBook Unlimited-User: **US\$ 245.00/€ 221.00**

<https://www.scientific.net/978-3-0357-3271-9.html>

■ Diffusion in High-Tech Materials

Edited by: Prof. Helmut Mehrer

This volume is dedicated to the memory of Professor Dr. Nicolaas Augustinus Stolwijk whose works were related to the study of a wide spectrum of diffusion processes in metals, intermetallic compounds, semiconductors, solar grade silicon, polymer electrolytes and in minerals.

160 pages, 2018
Print (978-3-0357-1290-2)
eBook (978-3-0357-3290-0)

Prices:
Print: **US\$ 145.00/€ 135.00**
eBook Single-User: **US\$ 102.00/€ 95.00**
eBook Unlimited-User: **US\$ 179.00/€ 166.00**

<https://www.scientific.net/978-3-0357-3290-0.html>



■ Diffusion in Materials DIMAT-2017

10th International Conference on Diffusion in Materials

Edited by: Prof. Eugen Rabkin, Amy Novick-Cohen, Leonid Klingner and Nachum Frage

This volume contains the selection of papers presented at the 10th International Conference on

Diffusion in Materials (DIMAT-2017, Haifa, Israel, May 7-12, 2017) that are related to the less-traditional field of science and technology where fundamental understanding of the kinetics of atom movements and diffusion phenomena are important, such as mineralogy, energy storage and conversion, polymers and hybrid organic-inorganic materials and more.

212 pages, 2018
Print (978-3-0357-1130-1)
eBook (978-3-0357-3130-9)

Prices:
Print: **US\$ 165.00/€ 150.00**
eBook Single-User: **US\$ 116.00/€ 105.00**
eBook Unlimited-User: **US\$ 203.00/€ 184.00**

<https://www.scientific.net/978-3-0357-3130-9.html>



■ Direct Digital Manufacturing and Polymers

2nd International Conference on Direct Digital Manufacturing and Polymers (2nd CDDMAP)

Edited by: Geoffrey Mitchell, Nuno Alves and Artur Jorge dos Mateus

This special issue contains selected papers presented at the 2nd International Conference on Direct Digital Manufacturing and Polymers (2nd CDDMAP 2017) held in Marinha Grande, Portugal. The presented papers are consider some aspects of using the Direct Digital Manufacturing technologies in industry and biomedicine.

354 pages, 2019
Print (978-3-0357-1243-8)
eBook (978-3-0357-3243-6)

Prices:
Print: **US\$ 370.00/€ 335.00**
eBook Single-User: **US\$ 180.00/€ 162.00**
eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3243-6.html>

■ Ecological Materials in Civil Construction

Edited by: Peter Alekseev

This collection is dedicated to the development and research of the application of environmentally friendly building materials and innovative technologies in construction. The authors of the articles present the results of laboratory studies and industrial applications of innovative decisions in the construction.

148 pages, 2019

Print (978-3-0357-1527-9)

eBook (978-3-0357-3527-7)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3527-7.html>

■ Eco-Materials Processing and Design XVIII

18th International Symposium on Eco-Materials Processing and Design (18th ISEPD 2017)

Edited by: Junichi Hojo, Tohru Sekino, Jian Feng Yang, Hyung Sun Kim and Wen Bin Cao

This collection contains peer-reviewed selected papers from the 18th International Symposium on Eco-Materials Processing and Design (18th ISEPD 2017, February 17-20, 2017, Okinawa, Japan) and covers wide range of research results in the area of materials development and materials processing technologies, including environmentally-friendly and energy saving processes, advanced nano-, hybrid-, porous- and biomaterials, functional ceramics, materials for fuel cells as well as for catalysis and adsorption processes, steel, alloys, electrical insulating materials, etc.

216 pages, 2018

Print (978-3-0357-1187-5)

eBook (978-3-0357-3187-3)

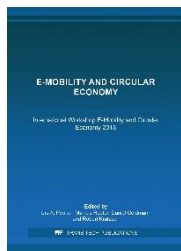
Prices:

Print: **US\$ 220.00/€ 200.00**

eBook Single-User: **US\$ 154.00/€ 140.00**

eBook Unlimited-User: **US\$ 270.00/€ 245.00**

<https://www.scientific.net/978-3-0357-3187-3.html>



■ E-Mobility and Circular Economy

International Workshop E-Mobility and Circular Economy 2018

Edited by: Urs A. Peuker, Markus Reuter, Daniel Goldmann and Robert Kratzsch

The International Workshop E-Mobility and Circular Economy,

which has been jointly organized by TU Bergakademie Freiberg, Helmholtz Institute Freiberg for Resource Technology and TU Clausthal, was held in 2018. The

conference was dedicated to key technological and economical questions which arise in the recycling of materials commonly used in e-mobility and electronics. It was aimed both at presenting new solutions for mechanical and metallurgic recycling and the substitution of conventional engineering materials. As there is an increasing need for rare chemical species in the generation of certain electronic, electrical, and mechanical properties in e-mobility and electronics, there was an additional focus on trace elements.

202 pages, 2019

Print (978-3-0357-1280-3)

eBook (978-3-0357-3280-1)

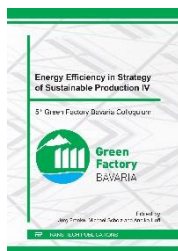
Prices:

Print: **US\$ 230.00/€ 210.00**

eBook Single-User: **US\$ 161.00/€ 147.00**

eBook Unlimited-User: **US\$ 282.00/€ 257.00**

<https://www.scientific.net/978-3-0357-3280-1.html>



■ Energy Efficiency in Strategy of Sustainable Production IV

5th Green Factory Bavaria Colloquium

Edited by: Jörg Franke, Michael Scholz and Annika Höft

The Green Factories in Bavaria bundle up the research skills of all relevant fields for energy efficient

production, e.g. Mechanical Engineering/Manufacturing Technology, Electrical Engineering, Information Technology, Process Engineering, Materials Science and Economic Science. They also consider all major types of energy, e.g. for motion, illumination, information processing, manufacturing processes and thermal control. Furthermore, Green Factories address the use of energy in production, logistics and administration. With the clear focus on energy efficiency in the production and Bavarian-wide, interdisciplinary collaboration, these Green Factories have to be expanded into an international research network.

232 pages, 2018

Print (978-3-0357-1391-6)

eBook (978-3-0357-3391-4)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3391-4.html>

■ Engineering and Innovative Materials VI 6th ICEIM 2017

Edited by: Prof. Takahiro Ohashi and Prof. Muhammad Yahaya

This book consists of the papers that were introduced at the 6th International Conference on Engineering and Innovative Materials (ICEIM 2017, Tokyo, September 3-5, 2017) and we hope that this collection will be interesting and useful for many specialists from the area of materials science in the various branches of production.

400 pages, 2018
Print (978-3-0357-1209-4)
eBook (978-3-0357-3209-2)

Prices:
Print: **US\$ 170.00/€ 155.00**
eBook Single-User: **US\$ 119.00/€ 109.00**
eBook Unlimited-User: **US\$ 208.00/€ 191.00**

<https://www.scientific.net/978-3-0357-3209-2.html>

■ Engineering Technology: Properties and Technologies

3rd International Conference on Material Science and Engineering Technology (3rd ICMSET 2019)

Edited by: Prof. Jong Wan Hu

The objective of 3rd International Conference on Material Science and Engineering Technology (ICMSET 2019) is to bring together academics, scientists, engineers, postgraduates and other professionals in the area of material science and engineering technology from all over the world. It provides a high-standard international forum to introduce, to exchange and to discuss recent advances novel and practical techniques or application in the field of material engineering and application. The proceedings introduce to the readers with newest researches results and findings in the field of Material Property and Testing, Material Application and Design, Material Simulation and Analysis and Material Manufacturing and Process.

132 pages, 2019
Print (978-3-0357-1326-8)
eBook (978-3-0357-3326-6)

Prices:
Print: **US\$ 160.00/€ 145.00**
eBook Single-User: **US\$ 112.00/€ 102.00**
eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3326-6.html>

■ Engineering Thermodynamics, Heat Transfer and Fluid Flow in Natural and Industrial Processes

Edited by: Prof. Giulio Lorenzini

Modern Engineering and Physics very often deal with the need for the design of natural or induced phenomena and processes and this is especially true in the problems involving heat transfer or fluid flows, often on the basis of a Thermodynamic viewpoint or of the Constructal Law.

These broad areas of research are presented in this special issue of the journal "Defect and Diffusion Forum".

446 pages, 2018
Print (978-3-0357-1329-9)
eBook (978-3-0357-3329-7)

Prices:
Print: **US\$ 245.00/€ 225.00**
eBook Single-User: **US\$ 172.00/€ 158.00**
eBook Unlimited-User: **US\$ 301.00/€ 277.00**

<https://www.scientific.net/978-3-0357-3329-7.html>

■ Engineering Tribology and Materials II 3rd International Conference on Engineering Tribology and Applied Technology (ICETAT 2017)

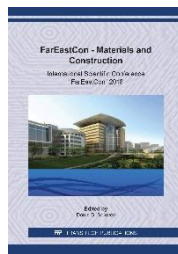
Edited by: Yunn Lin Hwang

This volume contains research papers that were presented at the 3rd International Conference on Engineering Tribology and Applied Technology 2017 (ICETAT2017, October 6-7, 2017, Kun Shan University, Tainan, Taiwan) and covers topics relating to research and engineering practice in tribology and applied technologies in the machinery designing.

74 pages, 2018
Print (978-3-0357-1249-0)
eBook (978-3-0357-3249-8)

Prices:
Print: **US\$ 120.00/€ 110.00**
eBook Single-User: **US\$ 84.00/€ 77.00**
eBook Unlimited-User: **US\$ 147.00/€ 135.00**

<https://www.scientific.net/978-3-0357-3249-8.html>



■ FarEastCon - Materials and Construction International Scientific Conference "FarEastCon" 2018

Edited by: Dr. Denis B. Solovev

The International Scientific Conference "FarEastCon" took place on October 2-4, 2018 in Vladivostok, Russian Federation. This collection presents papers reflecting recent advances in the

field of materials engineering and technologies for production and processing in the different areas of modern manufacturing.

1080 pages, 2019
Print (978-3-0357-1292-6)
eBook (978-3-0357-3292-4)

Prices:
Print: **US\$ 530.00/€ 480.00**
eBook Single-User: **US\$ 180.00/€ 162.00**
eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3292-4.html>

■ Frontiers of Composite Materials II 2nd International Conference on Frontiers of Composite Materials (ICFCM 2017)

Edited by: Darren Martin

Structural materials is a hot research branch in the field of material science. In light of the fast-paced development of structural materials, it is of interest to keep an eye on the state-of-the-art research and development and to facilitate collaboration in multidisciplinary research areas. With this end in view was held 2017 2nd International Conference on Frontiers of Composite Materials (2nd ICFCM 2017) in Melbourne, Australia during November 15-17, 2017.

180 pages, 2018

Print (978-3-0357-1207-0)

eBook (978-3-0357-3207-8)

Prices:

Print: **US\$ 150.00/€ 135.00**

eBook Single-User: **US\$ 105.00/€ 95.00**

eBook Unlimited-User: **US\$ 184.00/€ 166.00**

<https://www.scientific.net/978-3-0357-3207-8.html>

■ Functional Thin Films and Special Coatings

Edited by: Prof. Tomasz Tański and Dr. Przemysław Snopiński

This volume provides an overview of thin film materials and coatings, design and manufacture for a wide variety of application areas. In particular, the topics of interest include fabrication of thin films by electrospinning, a thin film for solar energy conversion, optical and electrical investigation of thin films and special coatings, applications of PVD/ALD coatings, low friction thin layers. We hope that the presented research results and recommendations will be interesting and useful for engineers and researchers from various areas of engineering.

166 pages, 2019

Print (978-3-0357-1486-9)

eBook (978-3-0357-3486-7)

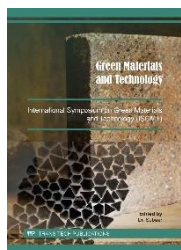
Prices:

Print: **US\$ 190.00/€ 175.00**

eBook Single-User: **US\$ 133.00/€ 123.00**

eBook Unlimited-User: **US\$ 233.00/€ 215.00**

<https://www.scientific.net/978-3-0357-3486-7.html>



■ Green Materials and Technology International Symposium on Green Materials and Technology (ISGMT)

Edited by: Dr. Subaer

This volume consists of peer-reviewed papers presented at the 1st International Symposium on Green Materials and Technology

(1st ISGMT) on September 29th – 30th, 2018 in Sahid Jaya Hotel Makassar, Indonesia. We hope that the articles provided in this volume can be useful for academics,

researchers, and specialists from the area of green materials synthesis and related fields.

314 pages, 2019

Print (978-3-0357-1451-7)

eBook (978-3-0357-3451-5)

Prices:

Print: **US\$ 300.00/€ 270.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3451-5.html>

■ Green Trends in Mechanical Engineering International Conference on Green Trends in Mechanical Engineering Sciences (ICGTMES)

Edited by: S.R. Jayaram, Lingappa M. Shashank, Y. M. Shashidhara and M.S. Srinath

This volume of the journal contains papers which were presented at the International Conference on Green Trends in Mechanical Engineering Sciences (ICGTMES) that was held on October 3-5, 2018, Karnataka, India. The focus of the conference was to open a new paradigm to deliberate on eco-friendly and robust design, use of materials with less environmental impact, use of fewer materials, optimal utilization of resources during manufacturing processes. We hope that the presented papers will be interesting and useful for many specialists in the field of mechanical engineering and materials science.

340 pages, 2019

Print (978-3-0357-1476-0)

eBook (978-3-0357-3476-8)

Prices:

Print: **US\$ 210.00/€ 190.00**

eBook Single-User: **US\$ 147.00/€ 133.00**

eBook Unlimited-User: **US\$ 257.00/€ 233.00**

<https://www.scientific.net/978-3-0357-3476-8.html>

■ Heat Treatment and Plastic Deformation of Non-Ferrous Alloys

Edited by: Prof. Tomasz Tański and Dr. Przemysław Snopiński

This volume contains articles presenting the most recently introduced non-ferrous alloys and composites processed with the aim to improve their mechanical properties. The presented articles also describe the relationship between the microstructure and mechanical strength for the selected non-ferrous alloys and composites.

158 pages, 2018

Print (978-3-0357-1339-8)

eBook (978-3-0357-3339-6)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3339-6.html>

■ High-Performance Ceramics X

The 10th China International Conference on High-Performance Ceramics (CICC-10)

Edited by: Wei Pan and Jianghong Gong

This book contains the papers presented at the Tenth International Conference on High-Performance Ceramics (CICC-10), which was held from November 4 to 7, 2017, in Nanchang, China. The Collection covers most aspects in the field of high-performance ceramics (advanced ceramics), including processing, microstructures, and properties of structural and functional ceramics. Especially, the papers gave an overview of the most recent development in high-performance ceramics in China.

994 pages, 2018

Print (978-3-0357-1176-9)

eBook (978-3-0357-3176-7)

Prices:

Print: **US\$ 450.00/€ 405.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3176-7.html>



■ Infrastructure Technology

3rd International Conference on Science and Technology (ICST 2017), 1st Infrastructure Technology Symposium

Edited by: Djoko Legono, Radiantia Triatmaja, Prof. Priyosulistyo, Veerasak Likhitrungsilp, Lim Pang Zen,

Teuku Faisal Fathani, Ali Awaludin, Intan Supraba, Imam Muthohar, Dr. Endita, Fikri Faris and Dr. Inggar Septhia Irawati

The 1st Infrastructure Technology Symposium was held as part of the 3rd International Conference on Science and Technology (ICST 2017, Yogyakarta, Indonesia, July 11-12, 2017). It was aimed at providing a platform for researchers, engineers, and academicians to present their latest research findings and exchanging knowledge in the field of Civil Engineering. The presented papers are published in this book and we hope this volume will be interesting and useful for many researchers, engineers, and academicians whose activity are related to the field of Civil Engineering.

178 pages, 2018

Print (978-3-0357-1269-8)

eBook (978-3-0357-3269-6)

Prices:

Print: **US\$ 165.00/€ 150.00**

eBook Single-User: **US\$ 116.00/€ 105.00**

eBook Unlimited-User: **US\$ 203.00/€ 184.00**

<https://www.scientific.net/978-3-0357-3269-6.html>



■ Innovation for Sustainable Development

8th RMUTP ICON SCI-2017

Edited by: Noppakun Sanpo, Jirasak Tharajak and Paisan Kanthang

This volume of the journal contains papers collected by results of the 8th RMUTP International Conference on

Science, Technology and Innovation for Sustainable Development: Challenges towards the Digital Society 2017 (8th RMUTP ICON SCI-2017, June 22-23, 2017, Bangkok, Thailand) organized by Rajamangala University of Technology Phra Nakhon. We hope that the presented results of engineering researches and solutions in the various branches of the modern production will be useful for many engineers and researchers.

316 pages, 2018

Print (978-3-0357-1276-6)

eBook (978-3-0357-3276-4)

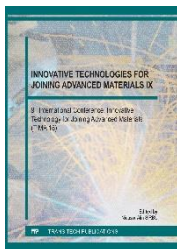
Prices:

Print: **US\$ 170.00/€ 155.00**

eBook Single-User: **US\$ 119.00/€ 109.00**

eBook Unlimited-User: **US\$ 208.00/€ 191.00**

<https://www.scientific.net/978-3-0357-3276-4.html>



■ Innovative Technologies for Joining Advanced Materials IX

9th International Conference: Innovative Technology for Joining Advanced Materials (TIMA 18)

Edited by: Dr. Nicușor Alin Sirbu

This volume of proceedings includes the selected papers

presented at the 9th International Conference: Innovative Technology for Joining Advanced Materials (TIMA 18) held in Timisoara, Romania, during November 1 - 2, 2018. In the presented collection, particular attention is paid to specific problems in the joining of the various structural materials and developing the modern joining technologies.

140 pages, 2019

Print (978-3-0357-1457-9)

eBook (978-3-0357-3457-7)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3457-7.html>

■ Innovative Technologies in Engineering: From Design to Competitive Product IX International Scientific and Technical Conference on Engineering - Innovation Technologies in Engineering: from Design to Production of Competitive Products

Edited by: Anatoly Suslov, Vladimir Lysak, Prof. Juliy L. Chigirinskiy, Dmitriy V. Kraynev and Yulia Zhiteneva

This book is the collection of papers presented at the IX International Scientific and Technical Conference on Engineering - Innovation Technologies in Engineering: from Design to Production of Competitive Products, which was held by Volgograd State Technical University in September 2017, Russia. The papers cover various aspects of the key stages of modern engineering, including innovative design of engineering products, advanced techniques in blank production, in additive manufacturing, in abrasive machining and in abrasive tool manufacturing, electro-physicochemical and mixed methods of processing, and technologies for monitoring and assembly of machines, as well as product quality management in engineering.

234 pages, 2019

Print (978-3-0357-1267-4)

eBook (978-3-0357-3267-2)

Prices:

Print: **US\$ 210.00/€ 190.00**

eBook Single-User: **US\$ 147.00/€ 133.00**

eBook Unlimited-User: **US\$ 257.00/€ 233.00**

<https://www.scientific.net/978-3-0357-3267-2.html>

■ International Conference on Machining, Materials and Mechanical Technologies - Supplement book Supplement book to Key Engineering Materials Volume 825

Edited by: Huy Bich Nguyen

This volume contains the selected papers presented at the 2018 International Conference on Machining, Materials and Mechanical Technologies (IC3MT 2018), which was held in Ho Chi Minh City, Vietnam on 19th-22nd of September 2018. We hope this collection will be interesting and useful for many researchers and engineers from various fields of materials science and mechanical engineering.

182 pages, 2019

Print (978-3-0357-1275-9)

eBook (978-3-0357-3275-7)

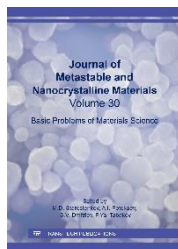
Prices:

Print: **US\$ 200.00/€ 180.00**

eBook Single-User: **US\$ 140.00/€ 126.00**

eBook Unlimited-User: **US\$ 245.00/€ 221.00**

<https://www.scientific.net/978-3-0357-3275-7.html>



■ Journal of Metastable and Nanocrystalline Materials Vol. 30

Basic Problems of Materials Science

Edited by: Mikhail D. Starostenkov, Aleksandr I. Potekaev, Sergey V. Dmitriev and Prof. P. Ya. Tabakov

This collection includes research results reflecting the solution on the main task of material science - research of the structure of materials. The presented articles devoted to the study of the structure of the materials at the nanoscale using real experiment and computer modeling. We hope this collection will be useful and interesting for many researchers and engineers from the area of the modern materials science.

78 pages, 2018

Print (978-3-0357-1331-2)

eBook (978-3-0357-3331-0)

Prices:

Print: **US\$ 145.00/€ 130.00**

eBook Single-User: **US\$ 102.00/€ 91.00**

eBook Unlimited-User: **US\$ 179.00/€ 159.00**

<https://www.scientific.net/978-3-0357-3331-0.html>

■ Key Engineering Materials IX 9th International Conference on Key Engineering Materials (9th ICKEM 2019)

Edited by: Prof. Alexander M. Korsunsky

This volume contains papers from the 9th International Conference on Key Engineering Materials (9th ICKEM 2019). The 2019 edition of the ICKEM conference was held in Oxford University, the United Kingdom on Mar. 29 - Apr. 1, 2019. The collected papers are focused on research in the areas of biomaterials, novel composite and polymer materials, ceramics, steel, alloys, building materials, materials processing technology, material performance analysis, and engineering evaluation.

548 pages, 2019

Print (978-3-0357-1480-7)

eBook (978-3-0357-3480-5)

Prices:

Print: **US\$ 620.00/€ 560.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3480-5.html>



■ Marine Systems and Technologies

The Annual International Seminar on Marine Technology (SENTA 2016)

Edited by: Dr. Ketut Suastika and Teguh Putranto

The annual International Seminar on Marine Technology (SENTA 2016) was held at Institut

Teknologi Sepuluh Nopember (ITS), Surabaya, Indonesia, on 15-16 December 2016. This proceeding documents selected, peer-reviewed manuscripts that were presented at the seminar. The topics cover coastal and natural resources management, marine energy development and exploration, marine transportation and logistics, marine machinery and system, ship design, construction, production and recycling as well as offshore structures. Hopefully, the book will be of great value for researchers, academicians and engineers in the field of marine technology and can contribute to a sustainable marine technology development.

244 pages, 2018
Print (978-3-0357-1150-9)
eBook (978-3-0357-3150-7)

Prices:
Print: **US\$ 155.00/€ 135.00**
eBook Single-User: **US\$ 105.00/€ 95.00**
eBook Unlimited-User: **US\$ 184.00/€ 166.00**

<https://www.scientific.net/978-3-0357-3150-7.html>

■ Material and Manufacturing Technology IX 9th International Conference on Material and Manufacturing Technology (9th ICMMT 2018)

Edited by: Prof. Vladimir Khovaylo and Ghenadii Korotcenkov

The 9th International Conference on Material and Manufacturing Technology (ICMMT 2018) was held in NUST MISIS, Moscow, Russia on April 28-30, 2018. The selected papers present to the readers the recent advances in the field of materials science and materials processing technologies.

130 pages, 2018
Print (978-3-0357-1355-8)
eBook (978-3-0357-3355-6)

Prices:
Print: **US\$ 150.00/€ 135.00**
eBook Single-User: **US\$ 105.00/€ 95.00**
eBook Unlimited-User: **US\$ 184.00/€ 166.00**

<https://www.scientific.net/978-3-0357-3355-6.html>

■ Materials and Processing Technology II

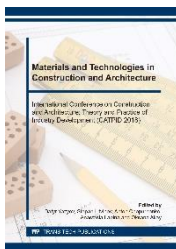
Edited by: Dr. Dmitry A. Chinakhov

Intensive development of engineering contributes to the emergence of new materials and technologies for their processing. This special issue contains research papers on modern technologies for obtaining and processing materials, additive technologies and technologies of welded joints, computer technologies for engineering tasks in materials science. The book is intended for a wide range of specialists engaged in the development and production of heavy-duty metal structures, as well as students, undergraduates, graduate and postgraduate students of technical colleges and universities.

220 pages, 2018
Print (978-3-0357-1397-8)
eBook (978-3-0357-3397-6)

Prices:
Print: **US\$ 220.00/€ 200.00**
eBook Single-User: **US\$ 154.00/€ 140.00**
eBook Unlimited-User: **US\$ 270.00/€ 245.00**

<https://www.scientific.net/978-3-0357-3397-6.html>



■ Materials and Technologies in Construction and Architecture

International Conference on Construction and Architecture: Theory and Practice of Industry Development (CATPID 2018)

Edited by: Prof. Batyr Zayzev, Stepan V. Litvinov, Anton

Chepurnenko, Anastasia Lapina and Akay Oksana

The CATPID-2018 conference was aimed at providing an opportunity for scientists, graduate students and representatives of the construction industry to generalize the results of the latest achievements in the field of industrial and civil construction (design, organization of all types of work, construction materials, etc.), discussing the promising areas of the building industry development and establishing useful partner relationships for future interaction. The presented conference materials raise important problems of construction and architecture (from ideas and project to immediate implementation), as well as the ways for their solving and optimizing.

1340 pages, 2018
Print (978-3-0357-1367-1)
eBook (978-3-0357-3367-9)

Prices:
Print: **US\$ 485.00/€ 440.00**
eBook Single-User: **US\$ 180.00/€ 162.00**
eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3367-9.html>

■ Materials Engineering and Technologies for Production and Processing IV

4th International Conference on Industrial Engineering (4th ICIE 2018)

Edited by: Prof. Andrey Radionov

The presented volume contains the scientific articles selected by results of the 4th International Conference on Industrial Engineering (4th ICIE, May 15-18, 2018, Moscow, Russian Federation) which reflect the current achievements in area of materials science, metallurgy, metalworking technologies, polymers, composite materials, ceramics, building materials and chemical technologies. We hope that this collection will be useful and interesting for engineers and researchers from mentioned branches of the engineering science.

1444 pages, 2018
Print (978-3-0357-1338-1)
eBook (978-3-0357-3338-9)

Prices:

Print: **US\$ 620.00/€ 560.00**
eBook Single-User: **US\$ 180.00/€ 162.00**
eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3338-9.html>

■ Materials Properties and Technologies of Processing

Edited by: Gennadiy Pivnyak, Roman Dychkovskiy, Edgar Cáceres Cabana and Adam Smoliński

This volume contains peer-reviewed papers prepared as the event of the National Contact Point "Secure, Clean and Efficient Energy" under the support of the Ministry of Education and Science of Ukraine. Selected papers at this volume cover a wide range of topics regarding physical and chemical geotechnologies also as solid body mechanics and provide the recent knowledge and achievement. Presented works together with scientific substantiation have an analytical justification and practical proof of received results. We believe the volume will be essential reading for those in the related areas and will provide an inspiration for future studies and achievement.

216 pages, 2019
Print (978-3-0357-1498-2)
eBook (978-3-0357-3498-0)

Prices:

Print: **US\$ 280.00/€ 255.00**
eBook Single-User: **US\$ 180.00/€ 162.00**
eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3498-0.html>

■ Materials Science and Applied Chemistry II 59th International Scientific Conference of Riga Technical University (RTU), Section of Materials Science and Applied Chemistry - MSAC 2018

Edited by: Prof. Māris Turks

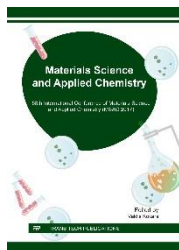
This volume contains the papers presented at the 59th International Scientific Conference of Riga Technical University (RTU), Section of Materials Science and Applied Chemistry - MSAC 2018, held in Riga, Latvia, 26th of October 2018. We hope this collection will be interesting and useful for many chemical engineers from various branches of modern production.

360 pages, 2019
Print (978-3-0357-1407-4)
eBook (978-3-0357-3407-2)

Prices:

Print: **US\$ 420.00/€ 380.00**
eBook Single-User: **US\$ 180.00/€ 162.00**
eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3407-2.html>



■ Materials Science and Applied Chemistry 58th International Conference of Materials Science and Applied Chemistry (MSAC 2017)

Edited by: Valdis Kokars

The special edition of the journal "Key Engineering Materials" contains papers that were

presented to the 58th International Conference of Materials Science and Applied Chemistry (MSAC 2017, 20th October, 2017, Riga, Latvia). The main objective of this collection is to present the latest scientific findings obtained in the fields of materials science and chemistry.

432 pages, 2018
Print (978-3-0357-1238-4)
eBook (978-3-0357-3238-2)

Prices:

Print: **US\$ 300.00/€ 270.00**
eBook Single-User: **US\$ 180.00/€ 162.00**
eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3238-2.html>

■ Materials Science and Metallurgical Technology

International Russian Conference on Materials Science and Metallurgical Technology (RusMetalCon 2018)

Edited by: Prof. Andrey A. Radionov

This collection contains papers that were presented at the International Russian Conference on Materials Science and Metallurgical Technology has taken place on October 1-4, 2018. We hope this collection will be useful and interesting for engineers and researchers in the field of material science and metallurgical technologies.

1030 pages, 2019

Print (978-3-0357-1376-3)

eBook (978-3-0357-3376-1)

Prices:

Print: **US\$ 550.00/€ 495.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3376-1.html>



■ Membranes and Membrane Technologies

Edited by: Dr. Stanislav Kolisnichenko

The topic collection "Membranes and Membrane Technologies" consists of papers published by Trans Tech Publications Inc. from 2012 up to 2017 and it covers a wide range of engineering solutions in the field of properties

research, development, and production of various types of membranes and their use in the technologies for the treatment of the drink water and wastewater, gas separation, bioindustry, etc. We hope this collection will be useful and interesting to a broad audience of researchers and engineers.

2002 pages, 2019

Print (978-3-0357-1422-7)

eBook (978-3-0357-3422-5)

Prices:

Print: **US\$ 700.00/€ 630.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3422-5.html>

■ Metallurgy Technology and Materials VI 6th International Conference on Metallurgy Technology and Materials (6th ICMTM 2018)

Edited by: Nor Sabirin Mohamed

This book consists of papers presented during the 6th International Conference on Metallurgy Technology and Materials (ICMTM2018) which was held on 30-31 May 2018 in Xi'an, China. This collection contains the research results in the area of the structural materials, metallurgical technologies, polymers and modern composites, functional ceramics, technologies of coatings and surface engineering, nanomaterials for the various applications, chemical technologies in the ore processing and bio-production, building materials. We hope that this volume will be useful and interesting for the wide range of academics, engineers and students.

300 pages, 2018

Print (978-3-0357-1372-5)

eBook (978-3-0357-3372-3)

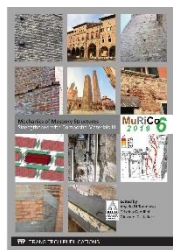
Prices:

Print: **US\$ 250.00/€ 225.00**

eBook Single-User: **US\$ 175.00/€ 158.00**

eBook Unlimited-User: **US\$ 306.00/€ 277.00**

<https://www.scientific.net/978-3-0357-3372-3.html>



■ Mechanics of Masonry Structures Strengthened with Composite Materials III

6th International Conference on Mechanics of Masonry Structures Strengthened with Composite Materials (MuRiCo 6, 2019)

Edited by: Prof. Angelo Di

Tommaso, Prof. Cristina Gentilini and Giovanni Castellazzi

This book collected from papers presented on the 6th International Conference on Mechanics of Masonry Structures Strengthened with Composite Materials (MuRiCo6, June 26-28, 2019, Bologna, Italy). The aim of this collection is to present and review the latest achievements in modelling, testing and controlling masonry structures strengthened with composite materials. The innovative strengthening apparatus here considered consists of composites with continuous fibres (carbon, steel, basalt, aramid, glass, PBO6 etc.) reinforcing polymer or inorganic matrices. The special problems regarding the strengthening of monumental historic constructions, considering appropriate techniques in the domain of architecture structural conservation, are focused in many scientific articles authored by eminent scientists.

702 pages, 2019

Print (978-3-0357-1565-1)

eBook (978-3-0357-3565-9)

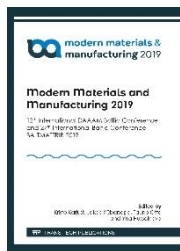
Prices:

Print: **US\$ 980.00/€ 885.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3565-9.html>



■ Modern Materials and Manufacturing 2019 12th International DAAAM Baltic Conference and 27th International Baltic Conference BALTMATRIB 2019

Edited by: Kristo Karjust, Jakob
Kübarsepp, Tauno Otto and Irina
Hussainova

This volume contains papers, presented to the conference Modern Materials and Manufacturing 2019 (MMM 2019, 24 - 26 April 2019, Tallinn, Estonia). The topics of the presented papers are focused, on the one hand, on various areas of materials engineering, such as alloys, ceramics, polymers, coatings, tribology, etc., and on the other hand, on different aspects of modern technologies of additive manufacturing. We hope this collection will be interesting for many specialists whose activity related to materials and technologies of materials processing in the various areas of modern production.

318 pages, 2019

Print (978-3-0357-1513-2)

eBook (978-3-0357-3513-0)

Prices:

Print: **US\$ 410.00/€ 370.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3513-0.html>

■ Modern Problems in Materials Processing, Manufacturing, Testing and Quality Assurance II

Edited by: Anatoly Surzhikov

The collection contains the results of researches conducted in the School of Non-Destructive Testing of Tomsk Polytechnic University, Russia, which covers the different aspects of materials science and non-destructive testing fields. We hope this book will be useful for many specialists from the area of engineering sciences.

372 pages, 2019

Print (978-3-0357-1617-7)

eBook (978-3-0357-3617-5)

Prices:

Print: **US\$ 410.00/€ 370.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3617-5.html>

■ Modern Problems in Materials Processing, Manufacturing, Testing and Quality Assurance

Edited by: Dr. Anatoliy Surzhikov

This special topic volume contains the results of research works covering the different aspects of modern materials science and technologies of materials processing. We hope that this book will be interesting for many researchers in the fields of materials science and production technologies.

174 pages, 2019

Print (978-3-0357-1483-8)

eBook (978-3-0357-3483-6)

Prices:

Print: **US\$ 170.00/€ 155.00**

eBook Single-User: **US\$ 119.00/€ 109.00**

eBook Unlimited-User: **US\$ 208.00/€ 191.00**

<https://www.scientific.net/978-3-0357-3483-6.html>



■ New Methods of Damage and Failure Analysis of Structural Parts

The conference "New Methods of Damage and Failure Analysis of Structural Parts"

(September 10-14, 2018, Technical University of Ostrava-VSB, Czech)

Edited by: Prof. Bohumír Strnadel

The book covers a broad range of topics related to damage, failure, wear structural materials and parts and some technological aspects that provide the necessary strength properties of these materials. The collection contains the results of research and analysis of the fracture behavior of the materials that are subject to fatigue, stress corrosion cracking and extreme plastic deformation including analysis of the failures. Several papers focus on the microstructure of materials and prediction of their lifespan based on the knowledge of damage processes. The articles present various aspects of experimental, theoretical and computational investigations with an emphasis on the direct applications in engineering. The book was comprised of the papers presented at the conference "New Methods of Damage and Failure Analysis of Structural Parts" (September 10-14, 2018, Technical University of Ostrava-VSB, Czech).

160 pages, 2019

Print (978-3-0357-1447-0)

eBook (978-3-0357-3447-8)

Prices:

Print: **US\$ 230.00/€ 210.00**

eBook Single-User: **US\$ 161.00/€ 147.00**

eBook Unlimited-User: **US\$ 282.00/€ 257.00**

<https://www.scientific.net/978-3-0357-3447-8.html>

■ New Perspectives on Mass and Thermal Transport in Engineering Materials

Edited by: Dr. Andreas Öchsner, Prof. Graeme E. Murch, Ali Shokuhfar and João Delgado

The present volume attempts to capture some of this excitement by providing a cross-section of contemporary research in mass transfer and thermal processes in the modern engineering materials and technologies. The volume spans both experiment and modelling and covers both basic research and applied research. Topics covered are broad, covering heat exchange in porous media to the drying of sisal fibre, from the role of nanoparticles for enhanced oil recovery to the atomistic of grain boundary diffusion and segregation.

264 pages, 2019

Print (978-3-0357-1562-0)

eBook (978-3-0357-3562-8)

Prices:

Print: **US\$ 210.00/€ 190.00**

eBook Single-User: **US\$ 147.00/€ 133.00**

eBook Unlimited-User: **US\$ 257.00/€ 233.00**

<https://www.scientific.net/978-3-0357-3562-8.html>

■ Non-Traditional Cement and Concrete 6th International Conference Non-Traditional Cement and Concrete 2017

Edited by: Šárka Nenadálová, Vlastimil Bílek, Zbyněk Keršner, Stanislav Seidl and Dr. Hana Šimonová

This book is based on the results of the 6th International Conference Non-Traditional Cement and Concrete 2017 (Brno, Czech Republic from June 19 to June 22, 2017) and includes recent results of the scientific research in the area of non traditional cements and concretes, especially alkali activated materials, geopolymers, clinker-free binders, durability, high performance concrete, microstructure study etc. We hope that this collection will be useful for many specialists whose activities are related to building materials.

226 pages, 2018

Print (978-3-0357-1096-0)

eBook (978-3-0357-3096-8)

Prices:

Print: **US\$ 170.00/€ 155.00**

eBook Single-User: **US\$ 119.00/€ 109.00**

eBook Unlimited-User: **US\$ 208.00/€ 191.00**

<https://www.scientific.net/978-3-0357-3096-8.html>

■ Non-Traditional Technologies in the Mining Industry

Edited by: Gennadiy Pivnyak, Roman Dichkovskiy, Edgar Cáceres Cabana and Adam Smoliński

This volume contains peer-reviewed papers prepared as the event of the National Contact Point "Secure, Clean and Efficient Energy" under the support of the Ministry of Education and Science of Ukraine. Selected papers in this

volume cover a wide range of topics regarding non-traditional technologies in the mining industry and provide the most recent knowledge and achievement. Presented works together with scientific substantiation has an analytical justification and practical proof of the received results. We believe the volume will be essential reading for those in the related areas and will provide an inspiration for future studies and achievement.

280 pages, 2018

Print (978-3-0357-1415-9)

eBook (978-3-0357-3415-7)

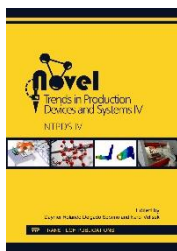
Prices:

Print: **US\$ 225.00/€ 205.00**

eBook Single-User: **US\$ 158.00/€ 144.00**

eBook Unlimited-User: **US\$ 277.00/€ 252.00**

<https://www.scientific.net/978-3-0357-3415-7.html>



■ Novel Trends in Production Devices and Systems IV NTPDS IV

Edited by: Daynier Rolando Delgado Sobrino and Karol Velišek

The present publication arises as a result of the cooperation between the Institute of Production

Technologies (IPT), belonging to the Faculty of Materials Science and Technology (MTF) of the Slovak University of Technology (STU) and TRANS TECH PUBLICATIONS INC. For the fifth time, the book aims at publishing scientific achievements on the Materials Science and Production Technologies fields, as well as at enhancing the worldwide cooperation and recognition among young and senior academicians and/or practitioners. Some of the main topics included in the book are those related but not limited to the trends in Materials Science and their application in industry, e.g.: composites and biomaterials, polymers, materials weldability, analysis of metals and alloys, numerical analyses and simulation of materials, etc. Most of these topics keep a direct relation to the production technologies and systems and thus, always keeping a special focus on the materials used, there are also topics in the book addressing key production processes, technologies and systems.

454 pages, 2018

Print (978-3-0357-1265-0)

eBook (978-3-0357-3265-8)

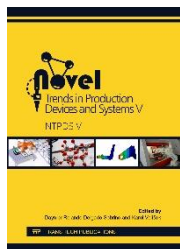
Prices:

Print: **US\$ 275.00/€ 250.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3265-8.html>



■ Novel Trends in Production Devices and Systems V

NTPDS V

Edited by: Daynier Rolando Delgado Sobrino and Karol Velišek

The present publication arises from the cooperation between the Institute of Production

Technologies (IPT), belonging to the Faculty of Materials Science and Technology (MTF) of the Slovak University of Technology (STU) and TRANS TECH PUBLICATIONS LTD. For the fifth time, the book aims at publishing scientific achievements on the Materials Science and Production Technologies fields, as well as at enhancing the worldwide cooperation and recognition among young and senior academicians and/or practitioners. The book addresses trends in Materials Science and their application in industry, e.g.: composites and biomaterials, polymers, materials weldability, analysis of metals and alloys, numerical analyses and simulation of materials and etc. Most of these topics keep a direct relation to production technologies and systems and thus, always keeping a special focus on the used materials. The book also addresses some key production processes, technologies and systems.

380 pages, 2019

Print (978-3-0357-1515-6)

eBook (978-3-0357-3515-4)

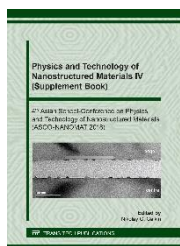
Prices:

Print: **US\$ 350.00/€ 315.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3515-4.html>



■ Physics and Technology of Nanostructured Materials IV (Supplement Book)

4th Asian School-Conference on Physics and Technology of Nanostructured Materials (ASCO-NANOMAT 2018)
Edited by: Nikolay G. Galkin

This volume contains papers, which were presented on the 4th Asian School-Conference on Physics and Technology of Nanostructured Materials (ASCO-NANOMAT, September 23-28, 2018, Vladivostok, Russia). The represented research results reflect the recent tendencies in the area of development nanostructured materials, semiconductors, functional materials, coatings, and surfaces.

228 pages, 2019

Print (978-3-0357-1568-2)

eBook (978-3-0357-3568-0)

Prices:

Print: **US\$ 200.00/€ 180.00**

eBook Single-User: **US\$ 140.00/€ 126.00**

eBook Unlimited-User: **US\$ 245.00/€ 221.00**

<https://www.scientific.net/978-3-0357-3568-0.html>



■ Porous Metals and Metallic Foams

10th International Conference on Porous Metals and Metallic Foams (MetFoam 2017)

Edited by: Huiping Tang, Dong Hui Yang, Lei Wang, Yong Liu, Jianzhong Wang and Jianqing Chen

The book contains selected papers,

which were presented at the 10th International Conference on Porous Metals and Metallic Foams (MetFoam 2017, Nanjing, China, from 14 to 17 September, 2017) which cover the latest developments in the field of porous metals and metallic foams, including design, fabrication, characterization, modeling and application. A strong emphasis was placed on topics of current interest, such as porous biomaterials, nanoporous structure, lattice structure, lotus-type porous metals, metallic foam, and metal fiber.

406 pages, 2018

Print (978-3-0357-1231-5)

eBook (978-3-0357-3231-3)

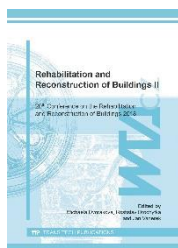
Prices:

Print: **US\$ 280.00/€ 255.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3231-3.html>



■ Rehabilitation and Reconstruction of Buildings II

20th Conference on the Rehabilitation and Reconstruction of Buildings 2018

Edited by: Michaela Dvorakova, Rostislav Drochytka and Jan Vanerek

The 20th Conference on the Rehabilitation and Reconstruction of Buildings (28 - 29 November 2018, Brno, Czech Republic) addresses the issue of building rehabilitation, a field which can be typically classified into the following areas of interest: 1. Flaws and failures affecting historical and contemporary buildings; 2. Advanced materials used in buildings reconstruction and 3. Fire safety of buildings. The scientific papers include the areas of remediation of wood structures, building surface treatments (plasters), repair mortars, stone restoration, rehabilitation of masonry, rehabilitation of concrete

structures, physicochemical properties of building materials, statics and dynamics of buildings and rehabilitation of timber-frame structures.

194 pages, 2019

Print (978-3-0357-1492-0)

eBook (978-3-0357-3492-8)

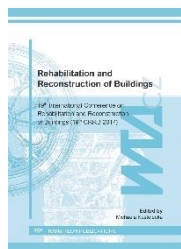
Prices:

Print: **US\$ 230.00/€ 210.00**

eBook Single-User: **US\$ 161.00/€ 147.00**

eBook Unlimited-User: **US\$ 282.00/€ 257.00**

<https://www.scientific.net/978-3-0357-3492-8.html>



■ Rehabilitation and Reconstruction of Buildings 19th International Conference on Rehabilitation and Reconstruction of Buildings (19th CRRB 2017)

Edited by: Michaela Kostecká

Proceedings of the "19th Conference on the Rehabilitation and Reconstruction of Buildings"

are the result of discussion new trends and procedures in the field of rehabilitation and reconstruction of buildings and structures. This collection will be useful and interesting for many engineers and researchers which activity is related to this area of construction.

236 pages, 2018

Print (978-3-0357-1361-9)

eBook (978-3-0357-3361-7)

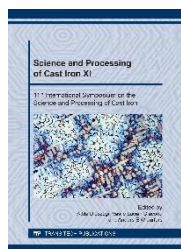
Prices:

Print: **US\$ 250.00/€ 225.00**

eBook Single-User: **US\$ 175.00/€ 158.00**

eBook Unlimited-User: **US\$ 306.00/€ 277.00**

<https://www.scientific.net/978-3-0357-3361-7.html>



■ Science and Processing of Cast Iron XI 11th International Symposium on the Science and Processing of Cast Iron

Edited by: Attila Diószegi, Vasile Lucian Diaconu and Anders E W Jarfors

The goal of this book is to present for readers the articles from the

11th International Symposium on the Science and Processing of Cast Iron that was held in September 2017 in Jönköping, Sweden. The content of the book reflects the state of the art, research and development tendencies of cast iron as the main engineering cast material also in the 21st century.

546 pages, 2018

Print (978-3-0357-1055-7)

eBook (978-3-0357-3055-5)

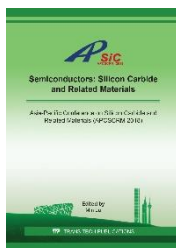
Prices:

Print: **US\$ 490.00/€ 445.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3055-5.html>



■ Semiconductors: Silicon Carbide and Related Materials

Asia-Pacific Conference on Silicon Carbide and Related Materials (APCSCRM 2018)

Edited by: Min Lu

The Asia-Pacific Conference on Silicon Carbide and Related Materials (APCSCRM 2018) was

held on July 9-12, 2018 in Beijing, China. This collection compiled by results of this conference and reflect new developments in the areas of wide bandgap semiconductors (SiC, GaN, Ga₂O₃, and etc.) and their device fabrication, including advances in the bulk and epitaxial growth, material structure and property, photoelectron and electronic device. We hope that this edition will be interesting and useful for many specialists from the area of research and designing of semiconductor materials and semiconductor devices.

226 pages, 2019

Print (978-3-0357-1385-5)

eBook (978-3-0357-3385-3)

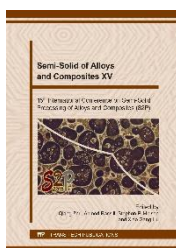
Prices:

Print: **US\$ 320.00/€ 290.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3385-3.html>



■ Semi-Solid of Alloys and Composites XV

15th International Conference on Semi-Solid Processing of Alloys and Composites (S2P)

Edited by: Qiang Zhu, Ahmed Rassili, Stephen P. Midson and Xiao Gang Hu

The 15th International conference on Semi-Solid Processing of Alloys

and Composites (S2P) are dedicated to the science and technology of semi-solid processing of metals, alloys and composites. Since the discovery of the distinctive flow behavior of metals in the semi-solid state during the early seventies, this fascinating technology has experienced a dynamic and turbulent development history, which has led to a whole family of new production processes, new equipment, and industrial applications with the goal of exploiting this characteristic flow behavior for technical and economic benefits.

520 pages, 2019
Print (978-3-0357-1373-2)
eBook (978-3-0357-3373-0)

Prices:

Print: **US\$ 410.00/€ 370.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3373-0.html>



■ Silicon Carbide and Related Materials 2018 12th European Conference on Silicon Carbide and Related Materials (ECSCRM 2018)

Edited by: Peter M. Gammon, Vishal A. Shah, Richard A. McMahon, Michael R. Jennings, Oliver Vavasour, Faye Padfield and Philip A. Mawby

This volume contains selected papers from the 12th European Conference on Silicon Carbide and Related Materials (ECSCRM 2018), held in Birmingham, UK, in September 2018. Researchers discussed the latest progress in the field of silicon carbide semiconductors, including their development and production, and their application in the power electronic devices. The papers address silicon carbide growth, including bulk, epitaxial, and thin film growth; theory and characterization, including fundamentals and material properties, point and extended defects, and surfaces and interfaces; processing, focusing on doping, implantation, and contact, dielectric growth and characterization, and etching and machining; devices, including diodes, power MOSFETs, JFETs and IGBTs; reliability, circuits and applications. The contributors are academics and industrialists from around the world.

916 pages, 2019
Print (978-3-0357-1332-9)
eBook (978-3-0357-3332-7)

Prices:

Print: **US\$ 730.00/€ 660.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3332-7.html>



■ Solid Compounds of Transition Elements III 21st International Conference on Solid Compounds of Transition Elements (SCTE 2018)

Edited by: Prof. Ernst Bauer, Daniel Fruchart, Herwig Michor and Herbert Müller

This volume of the journal contains papers presented at the 21st International Conference on Solid Compounds of Transition Elements,

SCTE 2018 which was held in the Technische Universität Wien, Austria, from March 25 to March 29, 2018. The conference was dedicated to fundamental and applied research regarding structure, crystal chemistry, chemical bonding, as well as with magnetic, thermodynamic, phononic and electronic properties of different classes of intermetallic compounds. Hydrides, borides, carbides, silicides and homologues, pnictides, chalcogenides, oxides and halides (especially those of low oxidation states exhibiting metal or semimetal properties) were in the focus of the conference also.

232 pages, 2019
Print (978-3-0357-1302-2)
eBook (978-3-0357-3302-0)

Prices:

Print: **US\$ 190.00/€ 175.00**

eBook Single-User: **US\$ 133.00/€ 123.00**

eBook Unlimited-User: **US\$ 233.00/€ 215.00**

<https://www.scientific.net/978-3-0357-3302-0.html>



■ Solid State Science and Technology VI 6th International Conference on Solid State Science and Technology (6th ICSSST)

Edited by: S.M. Iskandar, Najmee Mohamad Saiful and Hidayat Ahmad Suhaimi Faris

This volume was collected on the results of the 6th International Conference on Solid State Science and Technology (ICSSST2017, 13 – 16 November 2017, Penang, Malaysia) and the main objective of this volume is to present the latest findings of researches on solid-state science and technology in all aspects of physical and chemical properties, preparation and characterization techniques, optical properties; macro-, micro- and nanostructures. We hope this book will be useful for many engineers and researchers in the area of materials science.

364 pages, 2019
Print (978-3-0357-1272-8)
eBook (978-3-0357-3272-6)

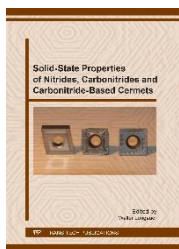
Prices:

Print: **US\$ 230.00/€ 210.00**

eBook Single-User: **US\$ 161.00/€ 147.00**

eBook Unlimited-User: **US\$ 282.00/€ 257.00**

<https://www.scientific.net/978-3-0357-3272-6.html>



■ Solid-State Properties of Nitrides, Carbonitrides and Carbonitride-Based Cermets

Edited by: Walter Lengauer

The present collection of papers should give insight into too complicated, but rather interesting nature of cermets together with ongoing research and application.

The papers based on research results of some most important laboratories which fruitfully have enlarged and are still enlarging the knowledge in this field.

112 pages, 2018

Print (978-3-0357-1245-2)

eBook (978-3-0357-3245-0)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3245-0.html>



■ Special Concrete and Composites 2017

14th International Conference on Special Concrete and Composites

Edited by: Pavel Reiterman

The 14th International Conference "Special Concrete and Composites" (October 10-11, 2017, Skalský Dvůr, Czech Republic) was focused

on the problems of preparing and use of the special concretes and composites in the practice of the contemporary construction. We hope that published results will be useful for many specialists from the area of building materials and concrete structures. Using of special concretes and composites is often closely connected with severe loading conditions of final elements. Design and development of the mentioned materials must take account of basic properties of all components because they can be special by their binder system, used fillers or by other technological solutions.

302 pages, 2018

Print (978-3-0357-1240-7)

eBook (978-3-0357-3240-5)

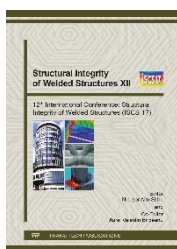
Prices:

Print: **US\$ 210.00/€ 190.00**

eBook Single-User: **US\$ 147.00/€ 133.00**

eBook Unlimited-User: **US\$ 257.00/€ 233.00**

<https://www.scientific.net/978-3-0357-3240-5.html>



■ Structural Integrity of Welded Structures XII

12th International Conference: Structural Integrity of Welded Structures (ISCS 17)

Edited by: Dr. Nicușor Alin Sirbu and Aurel Valentin Birdeanu

This volume includes the selected papers presented at the 12th International Conference:

Structural Integrity of Welded Structures (ISCS 17, Timișoara, Romania, November 9 - 10, 2017) and is focused on the actual problems of structural integrity, application of the welded technologies and welded structures and advanced structural materials in the modern mechanical engineering.

176 pages, 2018

Print (978-3-0357-1277-3)

eBook (978-3-0357-3277-1)

Prices:

Print: **US\$ 160.00/€ 145.00**

eBook Single-User: **US\$ 112.00/€ 102.00**

eBook Unlimited-User: **US\$ 196.00/€ 179.00**

<https://www.scientific.net/978-3-0357-3277-1.html>

■ Studies on Conversion of FA's and FFA's to Alkyl Esters Using WCO's of Different Origin

Edited by: Dr. Susarla Venkata Ananta Rama Sastry and Prof. K.V. Rao

This study examines the biodiesel production from waste cooking oils of different origin by conversion of fatty acids and free fatty acids to alkyl esters.

80 pages, 2019

Print (978-3-0357-1572-9)

eBook (978-3-0357-3572-7)

Prices:

Print: **US\$ 200.00/€ 180.00**

eBook Single-User: **US\$ 140.00/€ 126.00**

eBook Unlimited-User: **US\$ 245.00/€ 221.00**

<https://www.scientific.net/978-3-0357-3572-7.html>

■ Superplasticity in Advanced Materials - ICSAM 2018

The 13th International Conference on Superplasticity in Advanced Materials (ICSAM 2018)

Edited by: Goroh Itoh, Rustam Kaibyshev, Eric M. Taleff, Marina Tikhonova and Dr. Eiichi Sato

This volume includes selected and peer reviewed papers presented at the 13th International Conference on Superplasticity in Advanced Materials (ICSAM 2018), August 19-22, 2018, St. Petersburg, Russia. We hope this collection will be interesting and useful for many specialists whose scientific and engineering activity is related to the area of superplastic materials, research of the mechanisms of superplasticity and superplastic processing technologies.

494 pages, 2018
Print (978-3-0357-1345-9)
eBook (978-3-0357-3345-7)

Prices:

Print: **US\$ 300.00/€ 270.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3345-7.html>



■ Surface Modification Technologies

33rd Surface Modification Technologies Conference (SMT33)

Edited by: Antonello Astarita, T.S. Sudarshan, Antonino Squillace and Pierpaolo Carlone

The book is a collection of the papers and the keynote lectures

presented at the 33rd Surface Modification Technologies Conference (SMT33) which was held in Naples on 26 to 28 June 2019. The conference was focused on surface engineering and covered the following areas: corrosion, treatments, characterization, additive manufacturing, coatings, modification technologies. This book transfers up-to-date knowledge from scientist and experts to the common practice, representing a valuable resource for engineers, designers, researchers, and students.

488 pages, 2019
Print (978-3-0357-1525-5)
eBook (978-3-0357-3525-3)

Prices:

Print: **US\$ 600.00/€ 540.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3525-3.html>



■ Sustainable Materials Science and Technology II

2nd International Conference on Sustainable Materials Science and Technology (SMST 2018)

Edited by: Antonio Macías García, Eduardo Manuel Cuerda Correa and Joaquín R. Domínguez Vargas

This book includes selected articles from the 2nd International Conference on Sustainable Materials Science and Technology (SMST 2, 19-21 July 2018, Spain) and reflects the research results in the different fields of materials science, biomaterials, construction materials, etc. The presented scientific contributions show the importance of materials in contemporary society.

68 pages, 2019
Print (978-3-0357-1254-4)
eBook (978-3-0357-3254-2)

Prices:

Print: **US\$ 145.00/€ 135.00**

eBook Single-User: **US\$ 102.00/€ 95.00**

eBook Unlimited-User: **US\$ 179.00/€ 166.00**

<https://www.scientific.net/978-3-0357-3254-2.html>

■ Sustainable Materials

International Conference on Sustainable Materials (ICoSM 2018)

Edited by: Heah Cheng-Yong, Mohd Arif Anuar Mohd Salleh, Mohd Firdaus Omar, Sharifah Shahnaz Syed Bakar, Farah Farhana Zainal, Dewi Suriyani Che Halin, Liew Yun-Ming, Khairul Rafezi Ahmad and Mohd. Mustafa AlBakri Abdullah

This book contains articles which were introduced at the International Conference on Sustainable Materials (ICoSM 2018, 16 April, 2018, Bangkok, Thailand) and presents to readers the results of the innovative research in the area of the sustainable materials - one of the most dynamics directions of research in the modern materials science.

516 pages, 2018
Print (978-3-0357-1330-5)
eBook (978-3-0357-3330-3)

Prices:

Print: **US\$ 320.00/€ 290.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3330-3.html>

■ Symposium of Materials Science and Chemistry

4th International Conference on Science and Technology (4th ICST 2018)

Edited by: Dr. Roto, Indriana Kartini, Dr. Julius Motuzas, Kuwat Triyana, Dwi Siswanta, Dr. Tutik Dwi Wahyuningsih and Ahmad Kusumaatmaja

We introduce the proceedings of the Material Science and Chemistry Symposium, one of the symposia in the 4th International Conference on Science and Technology (4th ICST 2018) that was held in Yogyakarta, Indonesia on 7-8 August 2018. The published papers present results of the multiple researches on the properties of materials and technologies in area of pharmacology, food production, modern biomanufacturing and chemical industry, nanomaterials, functional and structural materials. This collection will be interesting and useful for many specialists from different branches of the modern production.

316 pages, 2019
Print (978-3-0357-1403-6)
eBook (978-3-0357-3403-4)

Prices:

Print: **US\$ 270.00/€ 245.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3403-4.html>

■ Technological Innovation for Sustainable Development

9th RMUTP International Conference on Science, Technology and Innovation for Sustainable Development (9th RMUTP ICON SCI-2018)

Edited by: Noppakun Sanpo, Jirasak Tharajak and Paisan Kanthang

This volume contains papers from the 9th RMUTP International Conference on Science, Technology and Innovation for Sustainable Development: Challenges towards the Digital Society 2018 (9th RMUTP ICON SCI-2018, 21-22 June 2018, Bangkok, Thailand) which present readers with results of the last researches in the field of phytochemistry and biotechnologies, materials science and mechanical engineering, environmental engineering and waste recycling.

318 pages, 2019

Print (978-3-0357-1410-4)

eBook (978-3-0357-3410-2)

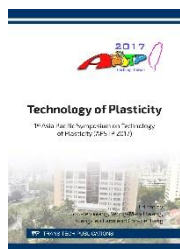
Prices:

Print: **US\$ 250.00/€ 225.00**

eBook Single-User: **US\$ 175.00/€ 158.00**

eBook Unlimited-User: **US\$ 306.00/€ 277.00**

<https://www.scientific.net/978-3-0357-3410-2.html>



■ Technology of Plasticity

1st Asia Pacific Symposium on Technology of Plasticity (APSTP 2017)

Edited by: Gou-Jen Wang, Dr. Yeong-Maw Hwang, Kuang-Jau Fann and Cho-Pei Jiang

This special volume includes the papers presented at the First Asia Pacific Symposium on Technology of Plasticity (APSTP 2017, National Chung Hsing University, Taichung, Taiwan, November 22-25, 2017) and covers the results of research and development in the area of the metal plasticity, metal forming processes and related technologies.

268 pages, 2018

Print (978-3-0357-1303-9)

eBook (978-3-0357-3303-7)

Prices:

Print: **US\$ 190.00/€ 175.00**

eBook Single-User: **US\$ 133.00/€ 123.00**

eBook Unlimited-User: **US\$ 233.00/€ 215.00**

<https://www.scientific.net/978-3-0357-3303-7.html>

■ The 61st Brazilian Ceramic Conference

61st Brazilian Ceramic Congress (61st CBC)

Edited by: Eliana Navarro Santos Muccillo

This volume of the journal contains articles which were presented on the 61st Brazilian Ceramic Congress, which was held from June 4th to 7th 2017 in Gramado, Brazil. These publications contain the research results in the area of the synthesis, processing, and characterization of ceramic, ceramic-based materials and composites, biomaterials and technologies of building materials production and waste processing in construction.

154 pages, 2019

Print (978-3-0357-1369-5)

eBook (978-3-0357-3369-3)

Prices:

Print: **US\$ 175.00/€ 160.00**

eBook Single-User: **US\$ 123.00/€ 112.00**

eBook Unlimited-User: **US\$ 215.00/€ 196.00**

<https://www.scientific.net/978-3-0357-3369-3.html>

■ The Dislocation-Particle Analogy and Plasma-Crystal Models

Edited by: Prof. David J. Fisher

The present monograph focuses on the very fruitful method of equating particle-physics phenomena - where the speed of light is a key factor - to dislocation-motion in solids - where the speed of sound plays an analogous role. The so-called 'dusty plasma' has proved to be a very useful substitute and its use confirms that the particle/dislocation analogy is well-founded.

126 pages, 2018

Print (978-3-0357-1471-5)

eBook (978-3-0357-3471-3)

Prices:

Print: **US\$ 150.00/€ 135.00**

eBook Single-User: **US\$ 105.00/€ 95.00**

eBook Unlimited-User: **US\$ 184.00/€ 166.00**

<https://www.scientific.net/978-3-0357-3471-3.html>

■ THERMEC 2018

10th International Conference on Processing and Manufacturing of Advanced Materials

Edited by: R. Shabadi, Mihail Ionescu, M. Jeandin, C. Richard and Tara Chandra

This book presents the proceedings of the THERMEC'2018: 10th International Conference on Processing and Manufacturing of Advanced Materials, which took place between July 09 and July 13, 2018 in Paris, France, under the co-sponsorship of Universite de Lille, MINES ParisTech, PSL and Universite de Tours, France. The presented book will be useful for many researchers and engineers/technologists working in different aspects of processing and fabrication of materials, structure/property evaluation and applications of both ferrous and nonferrous materials including biomaterials, smart materials as well as

the advanced measurement techniques in the materials science.

2604 pages, 2018
Print (978-3-0357-1208-7)
eBook (978-3-0357-3208-5)

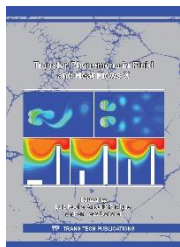
Prices:

Print: **US\$ 720.00/€ 650.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3208-5.html>



■ Transfer Phenomena in Fluid and Heat Flows X

Edited by: Luiz Alberto Oliveira Rocha, Antonio Ferreira Miguel and Dr. Andreas Öchsner

This special issue "Transfer Phenomena in Fluid and Heat Flows X" in the journal "Defect and Diffusion Forum" presents a collection of peer-reviewed works

associated with diffusion phenomena, the motion of the fluid flow and heat transfer in the technical and natural systems.

218 pages, 2019
Print (978-3-0357-1592-7)
eBook (978-3-0357-3592-5)

Prices:

Print: **US\$ 320.00/€ 290.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3592-5.html>

■ Transport Phenomena in Single and Multiphase Systems: New Developments at Different Fields

Edited by: João Delgado and A.G. Barbosa de Lima

This volume, entitled "Transport Phenomena in Single and Multiphase Systems: New Developments at Different Fields" includes articles that discuss some of the most important theoretical advances, computational developments and technological applications of heat and mass transfer and fluid flow phenomena at different engineering fields.

174 pages, 2019
Print (978-3-0357-1547-7)
eBook (978-3-0357-3547-5)

Prices:

Print: **US\$ 300.00/€ 270.00**

eBook Single-User: **US\$ 180.00/€ 162.00**

eBook Unlimited-User: **US\$ 315.00/€ 284.00**

<https://www.scientific.net/978-3-0357-3547-5.html>

■ Tribology in Manufacturing Processes and Joining by Plastic Deformation II

8th International Conference on Tribology in Manufacturing Processes and Joining by Plastic Deformation (ICTMP2018)

Edited by: Niels Bay and Chris V Nielsen

The present book contains the papers presented at the 8th International Conference on Tribology in Manufacturing Processes and Joining by Plastic Deformation (ICTMP2018, Elsinore, Denmark, June 24-26, 2018). The aim of the conference is to present the latest research and development on tribology in manufacturing processes.

490 pages, 2018
Print (978-3-0357-1299-5)
eBook (978-3-0357-3299-3)

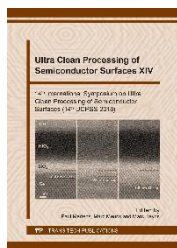
Prices:

Print: **US\$ 250.00/€ 225.00**

eBook Single-User: **US\$ 175.00/€ 158.00**

eBook Unlimited-User: **US\$ 306.00/€ 277.00**

<https://www.scientific.net/978-3-0357-3299-3.html>



■ Ultra Clean Processing of Semiconductor Surfaces XIV

14th International Symposium on Ultra Clean Processing of Semiconductor Surfaces (14th UCPSS 2018)

Edited by: Paul Mertens, Marc Meuris and Marc Heyns

The 14th International Symposium on Ultra Clean Processing of Semiconductor Surfaces (14th UCPSS 2018, Leuven, Belgium, September 3-5, 2018) was organized by IMEC and the scope of this symposium includes all issues related to contamination, cleaning and surface preparation in mainstream large-scale Integrated Circuit manufacturing. This collection will be interesting and useful for experts in the field of microelectronics.

356 pages, 2018
Print (978-3-0357-1417-3)
eBook (978-3-0357-3417-1)

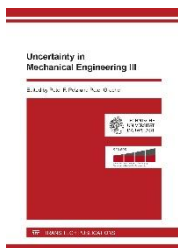
Prices:

Print: **US\$ 250.00/€ 225.00**

eBook Single-User: **US\$ 175.00/€ 158.00**

eBook Unlimited-User: **US\$ 306.00/€ 277.00**

<https://www.scientific.net/978-3-0357-3417-1.html>



■ Uncertainty in Mechanical Engineering III

Edited by: Peter F. Pelz and Peter Groche

Collection of selected, peer-reviewed papers from the 3rd International Conference on Uncertainty in Mechanical Engineering (ICUME). The aim of ICUME is to discuss criteria, methods, and technologies to

describe, evaluate and control uncertainty in mechanical engineering applications. International scholars and specialists come together and provide a broad discussion forum on the description, evaluation, avoidance, elimination of and adaptation to uncertainty. It is the aim to control uncertainty throughout the entire lifetime in planning, development, production, and usage of mechanical structures and systems. Engineers, mathematicians and other experts working in uncertainty evaluation exchange the latest research results and share their experiences in uncertainty control.

326 pages, 2018

Print (978-3-0357-1310-7)

eBook (978-3-0357-3310-5)

Prices:

Print: **US\$ 175.00/€ 160.00**

eBook Single-User: **US\$ 123.00/€ 112.00**

eBook Unlimited-User: **US\$ 215.00/€ 196.00**

<https://www.scientific.net/978-3-0357-3310-5.html>

■ Vacuum Heat Treatment

Conference on Vacuum Heat Treatment and Heat Treatment of Tools 2018

Edited by: Prof. Peter Jurči

This volume contains papers collected by results of the Conference on Vacuum Heat Treatment and Heat Treatment of Tools that was held on November 20 - 21, 2018 in Puchov, Slovakia. The published papers cover different fields of the main conference topic, such as heat treatment of tool steels in a vacuum; thermo-chemical treatment of tool steels; cryogenic treatments; interrelationships between the treatment parameters, obtained microstructures and resulting mechanical properties; distortion behaviour of components, and wear performance of tools and engineering components.

144 pages, 2019

Print (978-3-0357-1551-4)

eBook (978-3-0357-3551-2)

Prices:

Print: **US\$ 180.00/€ 165.00**

eBook Single-User: **US\$ 126.00/€ 116.00**

eBook Unlimited-User: **US\$ 221.00/€ 203.00**

<https://www.scientific.net/978-3-0357-3551-2.html>

■ XIV International Scientific and Practical Conference "New Polymer Composite Materials"

Edited by: Svetlana Yu. Khashirova, Azamat A. Zhansitov and Igor V. Dolbin

This issue of the journal presents materials of the XIV International Scientific and Practical Conference "New Polymer Composite Materials", which was held from 4 to 8 July 2018 in the Kh.M. Berbekov Kabardino-Balkarian State University, Russia. The content of the reports presented reflects the results of research in the field of polymer synthesis and the development of new polymer composite materials, as well as the application aspects arising from them.

182 pages, 2018

Print (978-3-0357-1493-7)

eBook (978-3-0357-3493-5)

Prices:

Print: **US\$ 170.00/€ 155.00**

eBook Single-User: **US\$ 119.00/€ 109.00**

eBook Unlimited-User: **US\$ 208.00/€ 191.00**

<https://www.scientific.net/978-3-0357-3493-5.html>

For Libraries: Electronic Resources

Our eBook programme includes **more than 4000 titles** across our subject areas and contains monographs, handbooks, and proceedings (& subject Collections). Purchase of our eBook collections provides the most cost-effective acquisition option for gaining comprehensive access to this highly relevant body of scholarly content.

Our publications are in disciplines such as:

- Materials Science
- Building Materials
- General Engineering
- Mechanical Engineering
- Bioscience & Medicine
- Manufacturing
- Electronics
- Construction
- Civil Engineering
- Mechanics
- Nanoscience
- Computer Science
- Information Technologies
- Industrial Engineering
- Environmental Engineering

Benefits to libraries:

- Outright purchase
- Perpetual access rights
- Multiple concurrent users
- Long-time preservation
- COUNTER-compliant usage statistics
- Pick & Choose licensing options as well as package options

Benefits to our library users:

- 24/7 access on **www.scientific.net**
- Freedom to use offline or print
- Advanced search options

The state-of-the-art platform Scientific.Net offers advanced search & retrieve options of our information both to librarians and readers/users.

If so required, physical carriers for archival purposes are also available (on request only).

For more information about our collections, title lists, license terms, please visit **insights.scientific.net/for-libraries/** where you can also ask for free trial periods (library only)

✉ Please contact TTP for all licensing options at **subscriptions@scientific.net**

Order Form

Prices mentioned in the catalogue are exclusive of local tax or VAT and shipping.

Prices may be changed without notice. US dollar prices are given for US or Canadian customers only.

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

Trans Tech Publications Ltd

www.scientific.net

Kapellweg 8
CH-8806 Baech
Switzerland

office@scientific.net
accounting@scientific.net

Title	Type (Print/eBook)	Price
1.		
2.		
3.		
4.		
5.		
6.		
Total: US\$/EUR		

First Name * _____

Last Name * _____

Street * _____

City * _____

Zip * _____

Country * _____

VAT (if available) _____

Tel. _____

Email * _____

Organization _____

Signature: _____

☐ Please Invoice me

☐ CREDIT CARD payments (PayPal Invoice will be sent to your email, 6% handling charges, minimum EUR 20,-)

☐ Please inform me about new publications in _____ (topic)
through TTP's monthly email of new
and forthcoming books

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.