

applied sciences Submit to Applied Sciences Review for Applied Sciences Share

- Journal Menu Applied Sciences Home Aims & Scope Editorial Board Reviewer Board Topics Board Instructions for Authors Special Issues Sections & Collections Article Processing Charge Indexing & Archiving Most Cited & Viewed Journal Statistics Journal History Journal Awards Society Collaborations Editorial Office

Journal Browser Volume Issue Go Forthcoming issue Current issue Vol. 11 (2021) Vol. 5 (2015) Vol. 10 (2020) Vol. 4 (2014) Vol. 9 (2019) Vol. 3 (2013) Vol. 8 (2018) Vol. 2 (2012) Vol. 7 (2017) Vol. 1 (2011) Vol. 6 (2016)



Highly Accessed Articles

Article Multi-Temporal Land Cover Change Mapping Using Google Earth Engine and Ensemble Learning Methods by Nimisha Wagle et al. Appl. Sci. 2020 Published: 15 November 2020

Article An openBIM Approach to IoT Integration with Incomplete As-Built Data by Nicola Moretti et al. Appl. Sci. 2020 Published: 23 November 2020

Article Effects of a Combination of Elderberry and Reishi Extracts on the Duration and Severity of Respiratory Tract Infections in Elderly Subjects: A Randomized Controlled Trial by Carlos Gracián-Alcaide et al. Appl. Sci. 2020 Published: 21 November 2020

Article Integrated Control and Protection Architecture for Islanded PV-Battery DC Microgrids: Design, Analysis and Experimental Verification by Ail Abdali et al. Appl. Sci. 2020 Published: 10 December 2020

Latest Books Reprint Book Indoor Air Quality Editor: Dikaia E. Saraga

Reprint Book Applications of Remote Image Capture System in Agriculture Editors: José Miguel Molina Martínez, Ginés García-Mateos

Reprint Book Applications of Remote Image Capture System in Agriculture

More Open Access Books...



Applied Sciences

Applied Sciences (ISSN 2076-3417; CODEN: ASPCC7) is an international peer-reviewed open access journal on all aspects of applied natural sciences published semimonthly online by MDPI.

- Open Access —free for readers, with article processing charges (APC) paid by authors or their institutions. High Visibility: Indexed by the Science Citation Index Expanded (Web of Science) [search for "Applied Sciences-Base"], Scopus, Inspec (IET) and other databases. CiteScore (2019 Scopus data): 2.4, which equals rank 85/299 (Q2) in 'General Engineering' and 233/460 in 'General Materials Science'. Rapid Publication: manuscripts are peer-reviewed and a first decision provided to authors approximately 14 days after submission; acceptance to publication is undertaken in 3.6 days (median values for papers published in this journal in the first half of 2020). Recognition of Reviewers: reviewers who provide timely, thorough peer-review reports receive vouchers entitling them to a discount on the APC of their next publication in any MDPI journal, in appreciation of the work done.

Impact Factor: 2.474 (2019) ; 5-Year Impact Factor: 2.458 (2019)

Imprint Information Journal Flyer Open Access

Latest Articles

Open Access Article Progressive Failure Analysis in Open-Hole Tensile Composite Laminates of Airplane Stringers Based on Tests and Simulations by Jian Shi, Mingbo Tong, Chuwei Zhou, Congjie Ye and Xindong Wang Appl. Sci. 2021, 11(1), 185; https://doi.org/10.3390/app11010185 (registering DOI) - 27 Dec 2020

Abstract The failure types and ultimate loads for eight carbon-epoxy laminate specimens with a central circular hole subjected to tensile load were tested experimentally and simulated using two different progressive failure analysis (PFA) methodologies. The first model used a lamina level modeling based on [...] Read more. (This article belongs to the Section Aerospace Science and Engineering)

Open Access Feature Paper Article Multi-Field Models of Fiber Reinforced Concrete for Structural Applications by Yaming Pan, Jingu Kang, Sonoko Ichimaru and John E. Bolander Appl. Sci. 2021, 11(1), 184; https://doi.org/10.3390/app11010184 (registering DOI) - 27 Dec 2020

Abstract Short fiber reinforcement is added to concrete materials to improve a variety of performance measures related to structural safety, serviceability, and health diagnosis. Mesoscale models have been developed to understand the individual and collective actions of these fibers on various material properties. Those [...] Read more. (This article belongs to the Special Issue Recent Advances in Testing and Modelling Reinforced Concrete Structures)

Open Access Article Characterization of Magnetite-Silica Magnetic Fluids by Laser Scattering by Elena N. Velichko, Elina K. Nepomnyashchaya, Kamil G. Gareev, Javier Martinez and Marco C. Malcas Appl. Sci. 2021, 11(1), 183; https://doi.org/10.3390/app11010183 (registering DOI) - 27 Dec 2020

Abstract The paper is concerned with structural, morphological and magnetic properties of magnetite-silica magnetic fluids. The granulometric composition of the magnetic fluids was investigated by scanning and transmission electron microscopy, the phase composition was studied by X-ray diffraction and reflection high-energy electron diffraction, and [...] Read more. (This article belongs to the Special Issue Nanocomposite Materials: Synthesis, Properties and Applications)

Open Access Article Reliability of Supply and the Impact of Weather Exposure and Protection System Failures by Erlend Sande Kiel and Gerd Hovin Kjelle Appl. Sci. 2021, 11(1), 182; https://doi.org/10.3390/app11010182 (registering DOI) - 27 Dec 2020

Abstract Extreme weather is known to cause failure bunching in electrical transmission systems. However, protection systems can also contribute to the worsening of the system state through various failure modes—spontaneous, missing or unwanted operation. The latter two types of failures only occur when an [...] Read more. (This article belongs to the Special Issue Probabilistic Methods for Power System Resilience Assessment)

Open Access Article On the Use of Composite Indicators for Mobile Communications Network Management in Smart Sustainable Cities by Carmen Botella-Mascarell, Joaquín Pérez, Juan Soria and Sandra Roger Appl. Sci. 2021, 11(1), 181; https://doi.org/10.3390/app11010181 (registering DOI) - 27 Dec 2020

Abstract Beyond 5G networks will be fundamental towards enabling sustainable mobile communication networks. One of the most challenging scenarios will be met in ultra-dense networks that are deployed in densely populated areas. In this particular case, mobile network operators should benefit from new assessment [...] Read more. (This article belongs to the Special Issue Optimization, Processing, and Visualization of Data for Sustainability)

Open Access Article Incentive Price-Based Demand Response in Active Distribution Grids by Karthikayan Nainar, Jayakrishnan Radhakrishna Pillai and Birgitte Bak-Jensen Appl. Sci. 2021, 11(1), 180; https://doi.org/10.3390/app11010180 (registering DOI) - 27 Dec 2020

Abstract Integration of PV power generation systems at distribution grids, especially at low-voltage (LV) grids, brings in operational challenges for distribution system operators (DSOs). These challenges include grid over-voltages and overloading of cables during peak PV power production. Battery energy storage systems (BESS) are [...] Read more. (This article belongs to the Special Issue Future Distribution Network Solutions)

Open Access Article Dynamic Pad Surface Metrology Monitoring by Swing-Arm Chromatic Confocal System by Chao-Chang A. Chen, Jen-Chieh Li, Wei-Cheng Liao, Yong-Jie Clou and Chun-Chen Chen Appl. Sci. 2021, 11(1), 179; https://doi.org/10.3390/app11010179 (registering DOI) - 27 Dec 2020

Abstract This study aims to develop a dynamic pad monitoring system (DPMS) for measuring the surface topography of polishing pad. Chemical mechanical planarization/polishing (CMP) is a vital process in semiconductor manufacturing. The process is applied to assure the substrate wafer or thin film on [...] Read more. (This article belongs to the Special Issue Manufacturing Metrology)

Open Access Article The Influence of Image Processing and Layer-to-Background Contrast on the Reliability of Flatbed Scanner-Based Characterisation of Additively Manufactured Layer Contours by David Blanco, Pedro Fernández, Alejandro Fernández, Braulio J. Alvarez and J. Carlos Rico Appl. Sci. 2021, 11(1), 178; https://doi.org/10.3390/app11010178 (registering DOI) - 27 Dec 2020

Abstract Flatbed scanners (FBSs) provide non-contact scanning capabilities that could be used for the on-machine verification of layer contours in additive manufacturing (AM) processes. Layer-wise contour deviation assessment could be critical for dimensional and geometrical quality improvement of AM parts, because it would allow [...] Read more. (This article belongs to the Special Issue Intelligent Processing on Image and Optical Information, Volume II)

More Articles...

E-Mail Alert Add your e-mail address to receive forthcoming issues of this journal: Enter Your E-Mail Address. Subscribe

- News 15 December 2020 MDPI adopts C4DISC principles to improve diversity and inclusion in scholarly communications 14 December 2020 Article Layout and Templates Revised for Future Volumes 11 December 2020 2020 "Highly Cited Researchers" on MDPI Journal's Editorial Boards More News & Announcements...

10th Anniversary of Applied Sciences Guest Editor Prof. Dr. Takayoshi Kobayashi Deadline 31 December 2020 Special Issue Invitation to submit

Conferences

Announce Your Conference 3-4 February 2021 4th International EPNOE Junior Scientist Meeting

26-28 May 2021 8th International Symposium on Sensor Science I3S 2021

8-11 June 2021 The 22nd International Symposium on Laser Precision Microfabrication LPM2021

More Conferences...

Special Issues

Edit a Special Issue Special Issue in Applied Sciences Integrated Nonlinear Optical Frequency Conversion Guest Editor: Suman Fathpour Deadline: 31 December 2020

Special Issue in Applied Sciences Monitoring the Prairie: Applications of Geospatial Research Techniques to the Study of Grassland and Prairie Environments Guest Editors: Douglas G. Goodin, Laura M. Moley Deadline: 10 January 2021

Special Issue in Applied Sciences Advances in Control of Power Electronic Converters Guest Editors: Oswaldo Lopez Santos, Germain Garcia Deadline: 20 January 2021

Special Issue in Applied Sciences Ion-exchange in Glasses and Crystals: from Theory to Applications Guest Editors: Jesús Linares Beiras, Giancarlo Righini Deadline: 31 January 2021

More Special Issues

Topical Collections

Topical Collection in Applied Sciences Confined Quantum Systems Collection Editor: Serghei Klimin

Topical Collection in Applied Sciences Progress in Liquid Atomization and Spray Systems Collection Editors: Miguel R. Oliveira Panão, Ana Sofia Malta

Topical Collection in Applied Sciences Fishery Acoustics Collection Editor: Kiseon Kim

Topical Collection in Applied Sciences Single Photon Technologies: Volume II Collection Editor: Ivan Rech

More Topical Collections

Jobs in Research

Post New Job Opening

MDPI Further Information Guidelines MDPI Initiatives Follow MDPI Article Processing Charges For Authors Institutional Open Access Program (IOAP) Pay an Invoice For Reviewers Sciforum Preprints Scilit SciProfiles MDPI Books Encyclopedia JAMS Proceedings MDPI Blog Open Access Policy For Librarians Contact MDPI For Publishers Jobs at MDPI For Societies