

Special Issue

MXenes and MAX Phases: Synthesis, Properties and Application

Message from the Guest Editor

MXenes are a novel family of two-dimensional materials consisting of carbides, nitrides, and carbonitrides of transition and refractory metals. Characterized by a unique structure and extraordinary properties, Every MXenes-focused research group contributes to the worldwide effort towards a deeper understanding of their structure, properties, and fabrication and obtaining new MXene parental structures. Therefore, we are pleased to invite you to contribute your valuable research to this Special Issue, entitled “MXenes and MAX Phases: Synthesis, Properties and Application”.

This Special Issue will gather original research and review articles, as well as short communications, related to the synthesis/fabrication, modification/functionalization, and property characterization of MXene and MAX phase structures. Authors are encouraged to submit both theoretical and experimental research performed on powder forms and thin layers of the aforementioned structures, alongside applied research related to their utilization in different branches of science, from energy harvesting/storage systems, membranes, sensors, and catalysts to the fields of nanomedicine and biotechnology.

Guest Editor

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Message from the Editorial Board

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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