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Development and Application of 2D Metal Carbides and Nitrides (MXenes)

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Deadline for manuscript submissions:

closed (20 August 2023)

Message from the Guest Editors

This Special Issue publishes original research articles, review articles, and short communications on the application possibilities and the latest developments in 2D metal carbides and nitrides (MXenes). MXenes, owing to their chemical composition, structure, and unique properties, offer great application possibilities. This Special Issue aims to reflect the application possibilities and indicate new trends in the development of these materials.

Articles focusing on methods of obtaining a surface modification, research on catalytic properties, biotechnological applications, and energy storage are invited. Articles describing the production of metal, ceramic, and polymer composites, in which MXene has been used as the reinforcing phase, are also welcome, as well as papers on experimental research and modeling of the structure and mechanical properties, the thermal stability of MXene, and composites with their addition.



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Special issue



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Message from the Editor-in-Chief

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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