

Special Issue

Recent Advances in MXenes: Preparation, Properties, and Catalytic Activity

Message from the Guest Editor

Dear colleagues,

MXenes' structure—transition metal atoms layers altered with carbon and/or nitrogen atoms layers—allows for a remarkable diversity in composition and enables adjustment of the MXene properties. The general structure also determines two main fields of MXene applications—preparation of efficient (electro)catalysts for either sensing or energetic purposes and fabrication of electrodes for use in supercapacitors, batteries, and other energy-supplying devices. However, applications and experiments go beyond those two fields with, for example, investigations of polymeric composites containing MXenes, their chemical modifications or their application in remediation processes. The aim of this Special Issue is to present both review articles covering up-to-date advances in MXene synthesis, characterization, and applications, as well as recent experimental works within this area. It is hoped that this collection will enable other researchers to broaden their knowledge and promote the future applications of this promising novel type of nanomaterial.

Guest Editor

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