



Synthesis, Properties and Applications of 2D Materials

Guest Editors:

Dr. Amit Pawbake

Dr. Dattatray J. Late

Dr. Ranjit Kashid

Dr. Carino Ferrante

Deadline for manuscript
submissions:

closed (30 June 2021)

Message from the Guest Editors

Two-dimensional nanomaterials, including metals, oxides, transition metal dichalcogenides, and their heterostructures, have received attention due to their versatile physiochemical properties such as superconductivity, magnetization, and charge density wave, which are suitable for different applications. Further modification of these materials via defect engineering, nanoparticles deposition, Li intercalation, electron beam and light irradiation, alloying, dimension tuning, etc., lead to interesting properties suitable for various tunable device applications. Due to their superior mechanical flexibility, controllable electrical properties, planar fabrication properties, high surface-to-volume ratio, etc., 2D materials and their heterostructures have emerged as suitable materials for sensing and optoelectronics applications.

We invite researchers to contribute to this Special Issue on the synthesis, properties, and applications of 2D materials. We aim to cover the properties, structure, and fundamental understanding of the 2D materials.





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Editor-in-Chief

Prof. Dr. Alessandra Toncelli

Department of Physics, University
of Pisa, 56126 Pisa, Italy

Message from the Editor-in-Chief

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Crystals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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