

Special Issue

Advances in Two-Dimensional Materials: From Synthesis to Applications

Message from the Guest Editor

Two-dimensional (2D) materials have gained tremendous attention due to their unique properties and potential applications in various fields. This Special Issue is to highlight recent breakthroughs in the field of 2D materials, spanning the entire spectrum from synthesis to applications. We aim to provide a comprehensive overview of the cutting-edge research, with a focus on the latest advances and emerging trends. In particular, the topic of interest includes but is not limited to: - The synthesis and characterization of 2D materials; - The physical and chemical properties of 2D materials; - Structure–property relationships in 2D materials; - Modification of 2D materials via heterojunctions; - Modification of 2D materials via doping; - Transport phenomena and electronic properties of 2D materials; - Defect engineering, strain engineering, and surface functionalization; - The applications in energy storage and conversion, electronics, sensing, and biomedical fields. We look forward to receiving your contributions.

Guest Editor

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About the Journal

Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

Coatings is a well-established, peerreviewed, online journal dedicated to the vibrant field of surface science and engineering. Coatings publishes original research articles that report cutting-edge results and review papers that make the point on the hottest research topics.

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