



## 2D Materials for Advanced Devices

Guest Editor:

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### Message from the Guest Editor

The aim of this Special Issue, entitled “2D Materials for Advanced Devices”, is to offer the latest cutting-edge research and development of 2D technology. This issue seeks to publish recent advances in the synthesis of novel and high-quality 2D materials, device fabrication and testing, integration challenges solving, and surface and interface engineering.

- Graphene and its analogs (graphane, graphene oxide, fluorographene, etc.)
- Monoelement 2D materials: silicene, germanene, borophene, phosphorene, arsenene, stanene, bismuthene, tellurene, etc.
- 2D chalcogenides:  $WSe_2$ ,  $MoTe_2$ ,  $TaS_2$ ,  $GaTe$ ,  $InSe$ ,  $Sb_2Te_3$ ,  $Bi_2Se_3$ , etc.
- 2D oxides, carbides, and nitrides
- 2D perovskites, hydroxides, MOFs, MAX phases, MXenes, metal halides, and other novel 2D materials.
- 2D Materials engineering: surfaces, interfaces, heterostructures, alloying, passivation, functionalization, etching, 0D and 1D structures from 2D materials, 2D quantum wells, etc.
- 2D advanced devices and applications
- Physics and materials science at 2D limit





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## Message from the Editor-in-Chief

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