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# Synthesis, Manipulation, Properties and Applications of Layered Materials

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### **Message from the Guest Editors**

Layered materials such as graphite, hexagonal boron nitride, and transition metal dichalcogenides possess a layered structure where the layers interact with each other via a weak van der Waals force. This class of materials exhibits fascinating electronic and optical properties, which are strongly influenced by the number of layers, or by the interaction with substrate and the external environment—for instance, via mechanical strain, or doping.

Furthermore, the individual layers could be thought of as building blocks and thus assembled together to form artificial structures, called van der Waals heterostructures, with unique physical properties.

As a consequence, they have recently received renewed attention because of their potential applications in a number of electronic devices, from sensors to memories, from transistors to solar cells, from batteries and supercapacitors to fuel cells.

We kindly invite you to submit your work for this Special Issue. Experimental studies as well as theoretical investigations are appreciated. Full research papers, communications, and reviews are all welcome.







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## Message from the Editor-in-Chief

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