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Special Issue Reprint

Boron Nitride Nanostructures

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The research topic of this Special Issue will consider (i) the design of nanostructured boron nitride nanostructures with controlled crystal structures, porosity, and dimensionality, (ii) the functionalization of boron nitride, and (iii) prospective applications of boron nitride nanostructures and materials. It contains six papers dealing with (i) the exfoliation of hexagonal Boron Nitride (h-BN) in liquid phase by ion intercalation, (ii) effective mechanical properties and thickness determinations of Boron Nitride nanosheets using molecular dynamics simulation, (iii) direct observation of inner-layer inward contractions of multiwalled Boron Nitride nanotubes upon in situ heating, (iv) the alignment of Boron Nitride nanofibers in epoxy composite films for thermal conductivity and dielectric breakdown strength improvement, (v) the effect of Boron Nitride on the thermal and mechanical properties of poly(3-hydroxybutyrate-co-3-hydroxyvalerate), and (vi) hexagonal Boron Nitride functionalized with Au nanoparticles—properties and potential biological applications.

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