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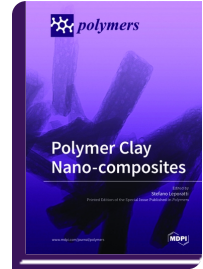
## **Polymer Clay Nano-composites**

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ISBN 978-3-03921-652-9 (Softback)

ISBN 978-3-03921-653-6 (PDF)



This Special Issue focuses on the current state-of-the-art of “Polymer Clay Nano-Composites” for biomedical, anticorrosion, antibacterial, and other applications. Clay–polymer composite nanomaterials represent an emerging area of research. Loading polymers with clay particles essentially enhances the composite strength features. Of particular interest are different nano-assembly methods, such as silane mono and multilayers, polyelectrolyte layer-by-layer assembly, and others. An important development was reached for tubular and fibrous clay nanoparticles, such as halloysite, sepiolite, and imogolite. Polymer clay nanoparticles can be prepared as sheets with 1-nm thickness and width of a few hundred nm (e.g., kaolin and montmorillonite). Fibrous clays significantly reinforce the nano-composites in the assembly with biopolymers and other green polymers, leading to functional hybrid bio nano-composites. The scope of this Special Issue comprehensively includes the synthesis and characterization of polymer clay nano-composites used for several applications, including nano-clay polymer composites and hybrid nano-assemblies.



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