

## **Organic-Inorganic Hybrid Nanomaterials: Synthesis, Modification and Property Investigation**

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In our work, we aim to develop organic-inorganic hybrid materials with emphasis on simplifying the synthetic methods, optimizing their structural control, enhancing their solubility and improving their physicochemical properties. Conjugated molecules with designed structural, chemical and physical properties were chosen as organic building blocks, and low dimensional inorganic materials including 0 D nanoparticles, 2 D nanosheets, graphene for instance, were selected as the inorganic components to synthesize novel hybrid materials with desired properties. These studies could provide useful fundamental guidelines and the material design concepts to the field of materials science and technology.