

Self-assembled Functional Nanocomposites**Ying-Hao Chu**

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Self-assembled functional nanocomposites have fascinated oxide family to next level for decades in addition to conventional heterstructure and superlattice, because it provides degree of freedom to explore condensed matter physics and design coupled multifunctionalities. Recently, of particular interest is the Self-assembled perovskite-spinel nanocomposites, covering wide spectrum of promising applications. In this talk, taking care from the fabrication aspect, growth control and mechanisms are discussed thoroughly, providing researchers a comprehensive blueprint to construct self-assembled functional nanocomposites. Following the fabrication section, the state-of-art design concepts for multifunctionalities are proposed and reviewed by outstanding examples. Summarizing by outlook of this field, we are excitedly expecting this field to rise with significant contributions ranging from scientific value to practical applications in the foreseeable future.

