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Advanced Functional Nanomaterials for Photocatalytic Water Splitting

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Through mimicking Nature, unique assembled nanostructures can be designed and fabricated to improve certain properties of materials and device performance for targeted applications. In this presentation, we discuss the synthesis, and characterization of novel bio-inspired and biomimetic functional nanomaterials, and their properties. At the same time, we discuss how to apply them to investigate fundamental science in photocatalytic water splitting via creating their hierarchical nanostructured materials. In brief, this talk will focus on the following topics: (a) synthesis of bio-inspired functional nanomaterials; (b) fabrication of unique nanoarchitectures to better understand fundamental science; and (c) Applying these unique nanomaterials and nanostructures to resolve the scientific problems in Photocatalytic Water Splitting.

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