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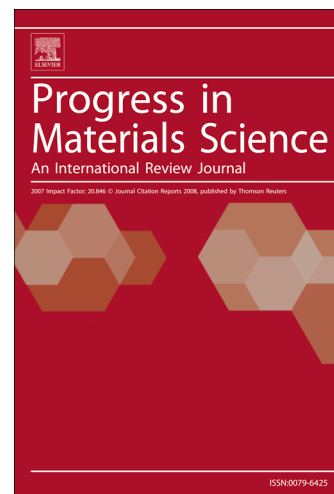
### Biotemplated Synthesis of Inorganic Materials: An Emerging Paradigm for Nanomaterial Synthesis Inspired by Nature

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# **Biotemplated Synthesis of Inorganic Materials: An Emerging Paradigm for Nanomaterial Synthesis Inspired by Nature**

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## **Abstract**

Biom mineralization, the process by which biological systems direct the synthesis of inorganic structures from organic templates, is an exquisite example of nanomaterial self-assembly in nature. Its products include the shells of mollusks and the bones and teeth of vertebrates. By comparison, conventional inorganic synthesis techniques provide limited control over inorganic nanomaterial architecture. Inspired by biom mineralization in nature, over the last two decades, the field of biotemplating has emerged as a new paradigm for inorganic nanomaterial assembly, wherein researchers seek to design novel nano-structures in which inorganic nanomaterial synthesis is directed from an underlying biomolecular template. Here, we

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