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Intelligent Manufacturing

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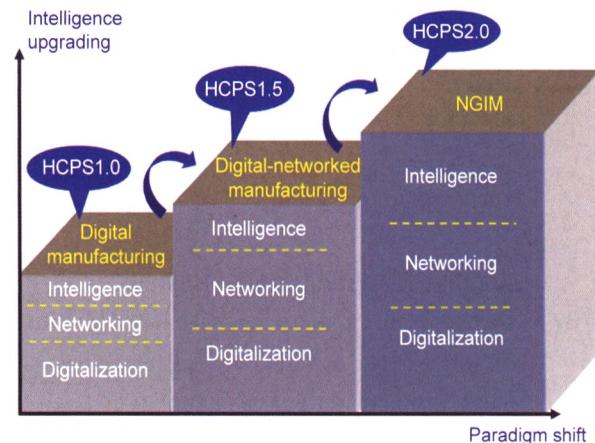
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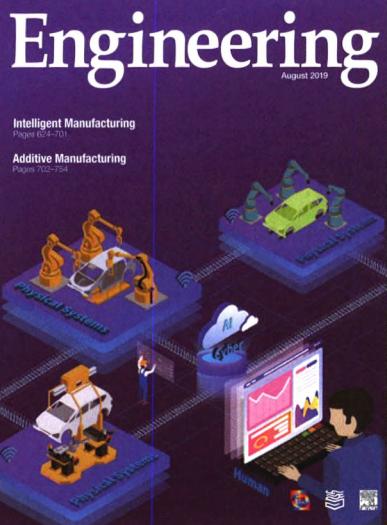
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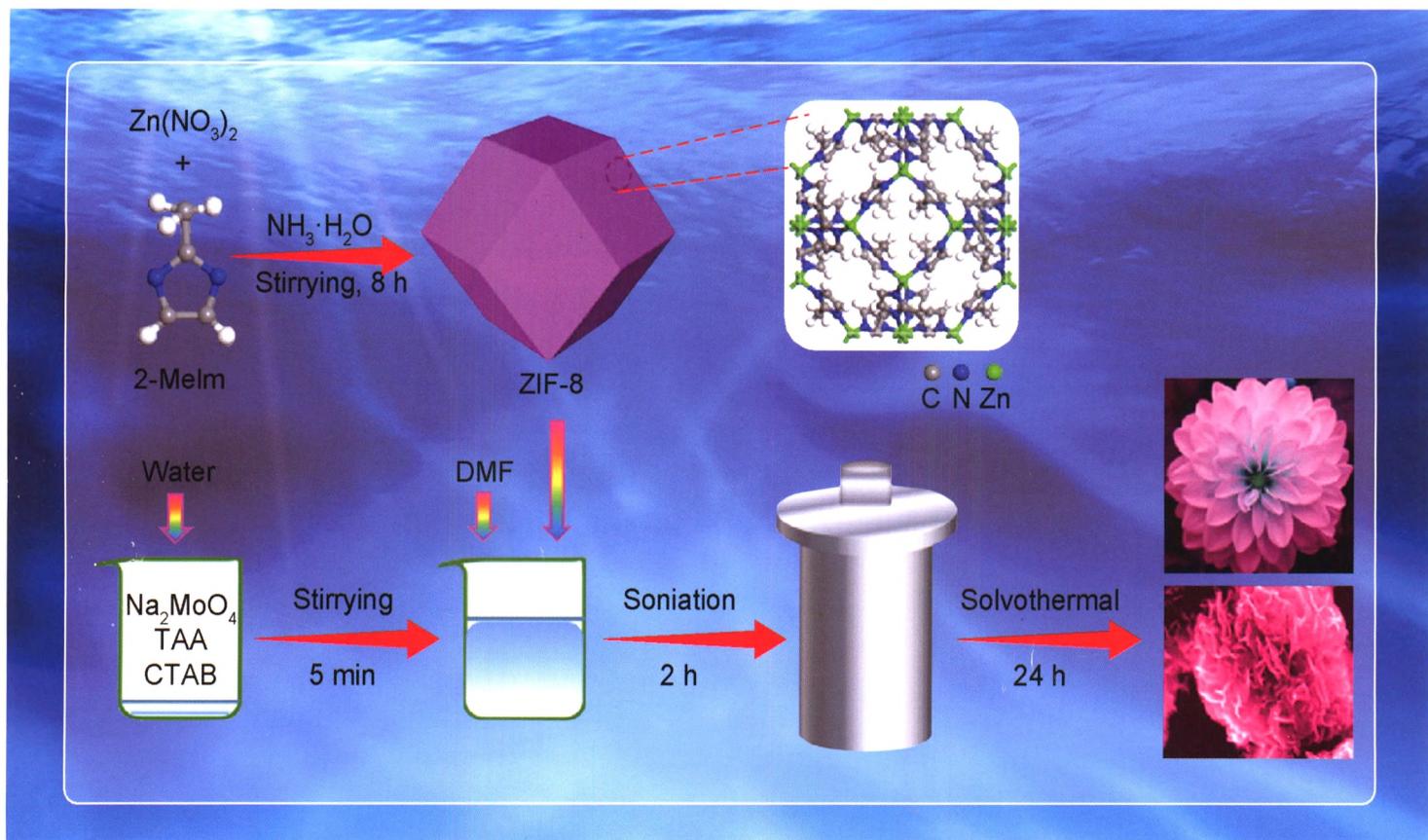


ON THE COVER

An intelligent manufacturing system is a composite intelligent system comprising humans, cyber systems, and physical systems with the aim of achieving specific manufacturing goals at an optimized level. This kind of intelligent system is called a human–cyber–physical system (HCPS). HCPSs can both reveal technological principles and form the technological architecture for intelligent manufacturing. The essence of intelligent manufacturing is to design, construct, and apply HCPSs in various cases and at different levels. This issue reviews the evolutionary footprint of intelligent manufacturing from the perspective of HCPSs, and discusses in depth the implications, characteristics, technical frame, and key technologies of HCPSs for new-generation intelligent manufacturing (NGIM).

Engineering Science and Technology

Create a Better Future



Photocatalytic water purification is an efficient environmental protection method that can be used to eliminate toxic and harmful substances from industrial effluents. A facile one-pot method has been developed to synthesize highly efficient visible-light-responsive 1T/2H-MoS₂/ZIF-8 composites. These photocatalysts have excellent prospects for practical antibiotic-degradation engineering. This study provides new insight into the exploration of metal–organic framework (MOF)-based and 1T/2H-MoS₂ composite materials for environmental purification and restoration.

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