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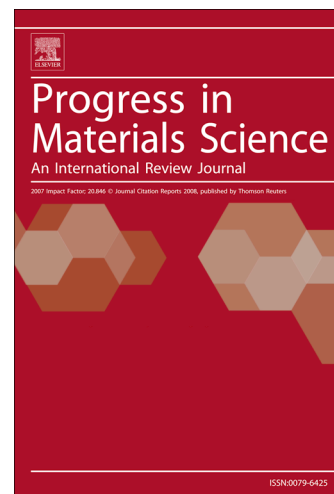
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Recent Advances in Two-dimensional Transition Metal Dichalcogenides-Graphene Heterostructured Materials for Electrochemical Applications

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Abstract

Recently, the research effort on two-dimensional transition metal dichalcogenides/graphene (2D-TMDs/Gr) hybrids has grown. These hybrids are emerging as a promising strategy for the preparation of advanced multifunctional materials with effectively upgraded properties, as well as performances. Due to their outstanding electrical, physical, and chemical properties, these materials have been extensively considered for various applications, both in academia, and industry. This review systematically assesses the important progress to date in the development of 2D-TMDs/Gr hybrids. The synthesis methods of 2D-TMDs/Gr hybrids for fabricating diverse types of nanostructured architectures are highlighted. In addition, the relationships between morphological and structural characteristics, and the physicochemical properties of 2D-TMDs/Gr hybrids, are recognized in detail. This review also discusses

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