

عنوان مقاله:

Overview of Borophene as a Potential Candidate in 2D Materials Science for the Energy Applications

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خلاصه مقاله:

Energy problem is one of the serious concerns in modern society; therefore, we have to take hastily an effective action. Hence, researchers are looking for some attractive materials with low-cost, lightweight, and environmentally effective. Recently, 2D materials have taken notable recognition in the field of materials science for multiple energy application, because of its unique electronic and optical properties; and borophene is one of the 2D material which is commendatories than graphene. However, it has not much experimentally explored yet. This review discusses the synthesis process of borophene and discussed energy-related application such as energy storage, optoelectronic, photocatalytic activity, and hydrogen storage. Moreover, this work provides a summary of each application that could .help to understand the importance of borophene materials for energy applications

کلمات کلیدی:

Borophene, Energy Storage, Optoelectronic, Hydrogen storage, Photocatalytic activity

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