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dimensional Pt-BiOBr nanocomposite**

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**Abstract**

Photoelectrocatalytic oxidation based on noble/semiconductor has been a renewed interest in the past decades. The lack of high-performance semiconductor support remaining a challenge for the harvesting and conversion of solar energy. Here, we report the syntheses of two dimensional (2D) BiOBr nanosheets with the superiorities of suitable band gaps, nontoxic, corrosion resistant and so on. These features enable them unprecedented performance for acting as the visible-light-driven support towards alcohol oxidation. Firstly, the pure BiOBr nanosheet has negligible activity towards alcohol oxidation. After the deposition of Pt nanoparticles (NPs), the as-prepared Pt-BiOBr composites show superior electrocatalytic activities toward

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