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Title: Enhanced Photoelectrochemical Performance of Z-scheme g-C₃N₄/BiVO₄ Photocatalyst

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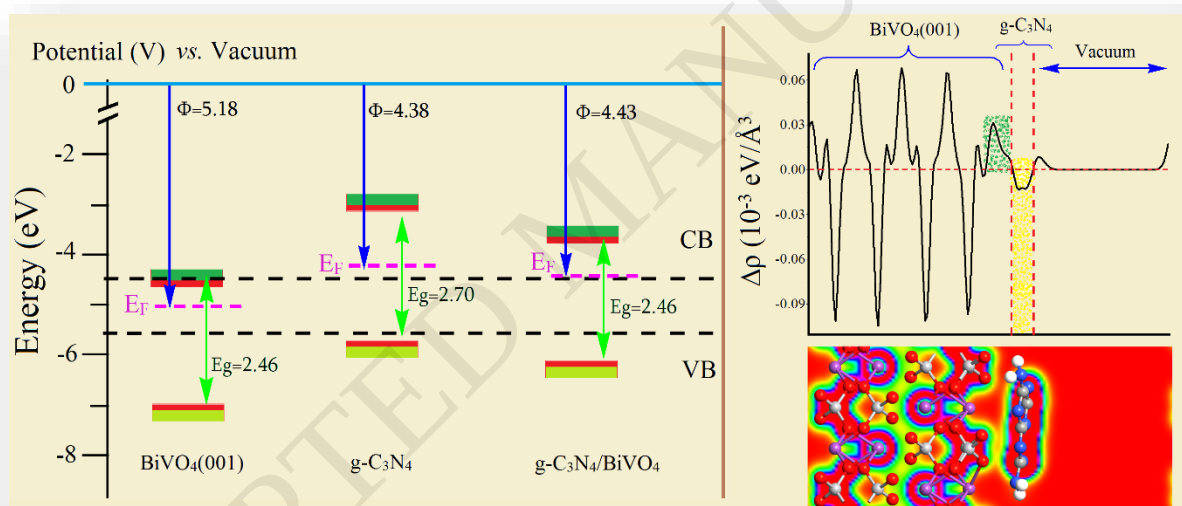
Enhanced Photoelectrochemical Performance of Z-scheme $g\text{-C}_3\text{N}_4/\text{BiVO}_4$ Photocatalyst

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Graphical Abstract:



Highlights

- Comparative Experimental and DFT study of $g\text{-C}_3\text{N}_4/\text{BiVO}_4$, Z-scheme heterojunction is performed.
- $g\text{-C}_3\text{N}_4/\text{BiVO}_4$ heterojunction has boosted the performance of BiVO_4 to four times.
- Highest photocurrent is obtained for $g\text{-C}_3\text{N}_4/\text{BiVO}_4$ (0.42 mAcm^{-2} at 1.23 V vs. RHE).
- The superiority of this heterojunction is due to low mismatch (0.02%); confirmed from periodic DFT simulations.

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