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A nanosheet-like α -Bi₂O₃/g-C₃N₄ heterostructure modified by plasmonic metallic Bi and oxygen vacancies with high photodegradation activity of organic pollutants

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Abstract

Bi/α-Bi₂O₃ nanoparticles rich in oxygen vacancies in the surface and subsurface loading on g-C₃N₄

nanosheets were realized via a calcination-photoreduction technique, during which the emergence of

oxygen vacancies and the generation of metallic Bi from α-Bi₂O₃ decomposition were achieved

simultaneously. The co-occurrence of Bi nanoparticles and oxygen vacancies was favorable for the

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1

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