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Investigation performance of rodrod ZnO/CdO composites, synthesized in ionic liquid medium as photocatalytic for degradation of air pollutants (SO₂ and NO_x)

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Abstract:

ZnO/CdO rodlike nanocomposites were successfully synthesized by using the hydrothermal method in the ionic liquid medium (4-methylpyridine, 2,2,2-trifluoroacetate). The heterojunction structure of photocatalyst and nanorod structures of ZnO attached to nanoparticles of CdO improved the performance of it compared to pure ZnO and nanoparticles of ZnO/CdO. The conventional hydrothermal method was performed for the synthesis of these composites. The average thickness of nanorods was 53 nm. The samples were characterized by XRD measurements, scanning electron microscopy (SEM), photoluminescence spectroscopy (PL), diffuse reflectance spectroscopy (DRS), BET, X-ray

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