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# Light-tuned switching of charge transfer channel for simultaneously boosted photoactivity and stability

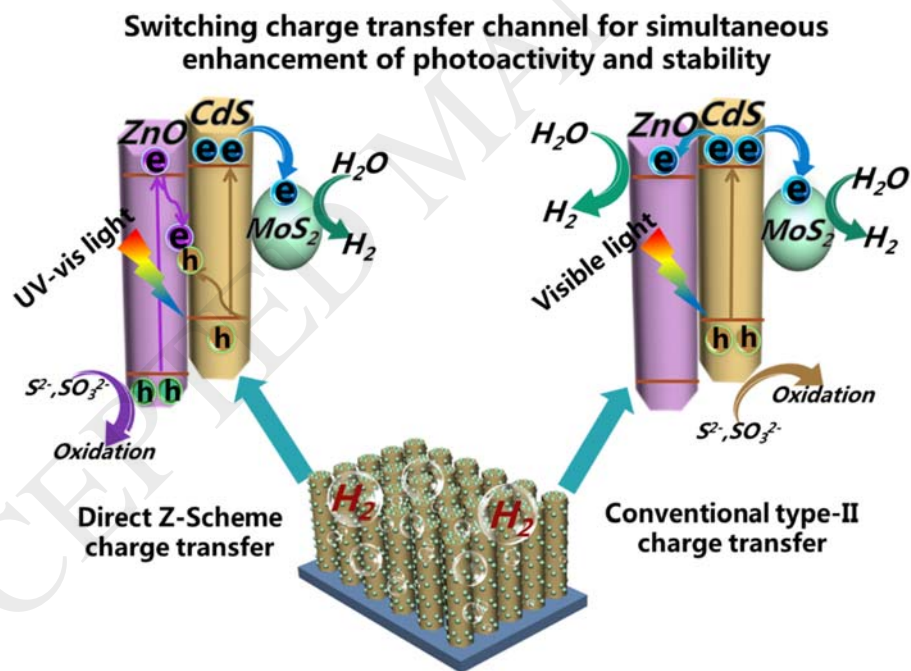
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## Graphical abstract



Tuning light irradiation from visible light to UV-vis light can switch the interfacial charge transfer heterojunction routes of ternary ZnO-CdS-MoS<sub>2</sub> (ZCM) catalyst from conventional type-II to direct Z-scheme, in which the Z-scheme system boosts more efficient charge separation and timely consumption of hole and electron for respective redox processes, thereby resulting in more distinct

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