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One-step in situ hydrothermal fabrication of octahedral CdS/SnIn₄S₈ nano-heterojunction for highly efficient photocatalytic treatment of nitrophenol and real pharmaceutical wastewater

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Highlights

- Octahedral CdS/SnIn₄S₈ was fabricated by a one-step in situ hydrothermal method.
- (0.5:1)CdS/SnIn₄S₈ heterojunction shows the highest visible-light photocatalytic activity.
- CdS/SnIn₄S₈ shows high mineralization ability for real pharmaceutical wastewater
- CdS/SnIn₄S₈ heterojunction is stable and exhibits excellent reusability.
- Possible reason for the long-term stability of CdS/SnIn₄S₈ was explored.

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