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Kinetics analysis of interfacial electron-transfer processes in goethite suspensions systems



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Highlights

- The photo-induced interfacial charge transfer of goethite was determined.
- Excitation of goethite generated conduction-band electron (e_{cb}^-) and hole (h^+)
- e_{cb}^- reacted with MV^{2+} with a rate constant of $2.6 \times 10^9 \text{ L mol}^{-1} \text{ s}^{-1}$.
- E_{fb} (goethite, pH = 7) = 0.24 V (vs NHE).

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