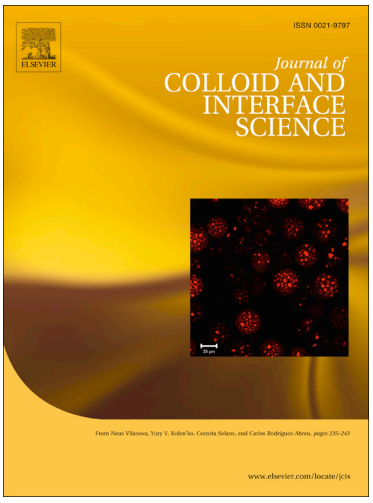

Regular Article

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Construction of fiber-shaped silver oxide/tantalum nitride *p-n* heterojunctions as highly efficient visible-light-driven photocatalysts

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Abstract:

Constructing novel and efficient *p-n* heterojunction photocatalysts has stimulated great interest. Herein, we report the design and synthesis of fiber-shaped Ag_2O/Ta_3N_5 *p-n* heterojunctions as a kind of efficient photocatalysts. Ta_3N_5 nanofibers were prepared by an electrospinning-calcination-nitridation method, and then the *in-situ* anchoring of Ag_2O on their surfaces was realized by a facile deposition method. The resulting Ag_2O/Ta_3N_5 heterojunctions were comprised of porous Ta_3N_5 nanofibers (diameter: ~150 nm) and Ag_2O