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Novel chalcogenide based magnetic adsorbent KMS-1/L-Cystein/Fe₃O₄ for the facile removal of ciprofloxacin from aqueous solution

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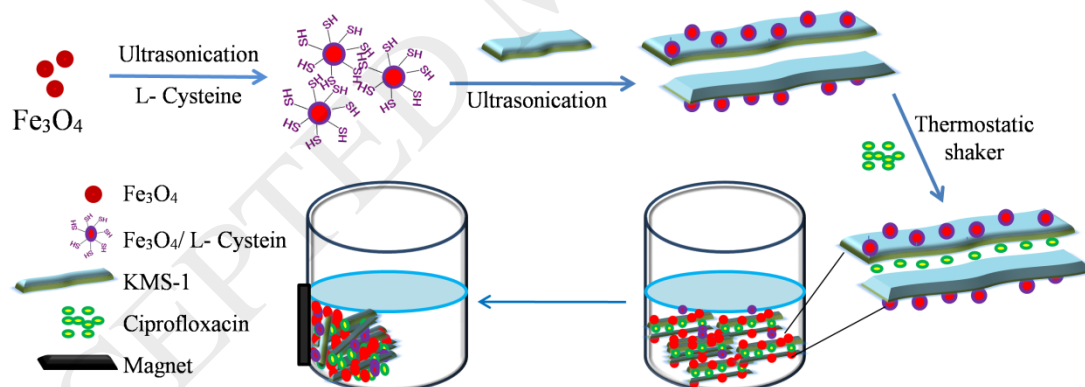
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Graphical abstract



A novel easily separated magnetic chalcogenide composite, KMS-1/L-Cystein/Fe₃O₄ (KCF), was successfully synthesized by use of bifunctional linker (L-Cysteine) to connect KMS-1 and Fe₃O₄ nanoparticles, and was evaluated to remove ciprofloxacin from aqueous solution thoroughly.

Abstract: A novel easily separated magnetic chalcogenide composite, KMS-1/L-Cystein/Fe₃O₄ (KCF), was successfully synthesized using bifunctional linker (L-Cysteine) to connect KMS-1 and Fe₃O₄ nanoparticles, and was examined to remove ciprofloxacin (CIP) from aqueous solution. The composite was thoroughly characterized by XRD, SEM, EDX, FTIR and magnetization

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