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Sonocatalytic oxidation of EDTA in aqueous solutions over noble metal-free $\text{Co}_3\text{O}_4/\text{TiO}_2$ catalyst

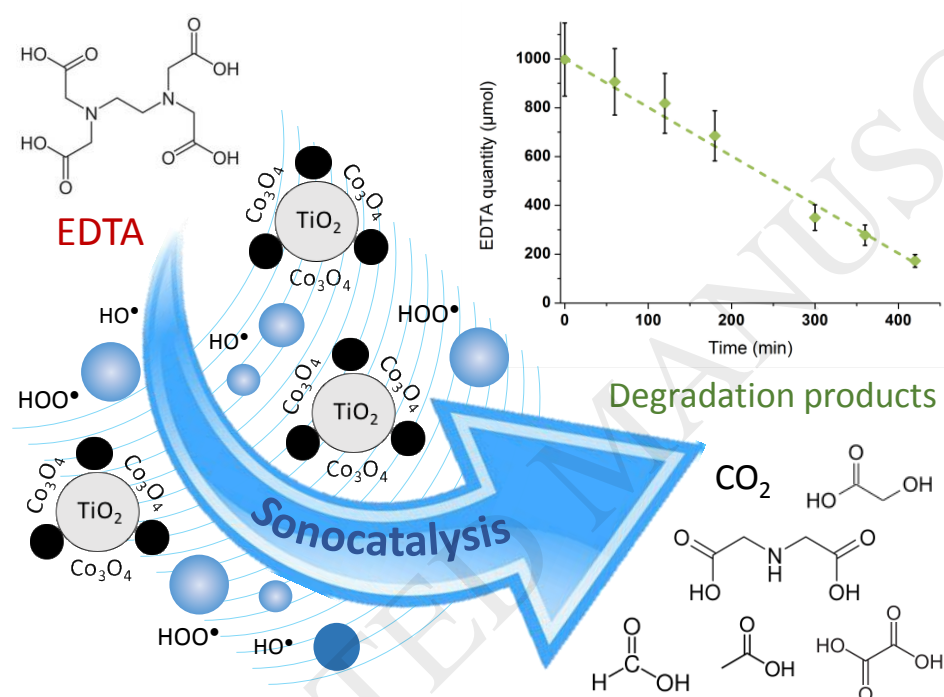
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GRAPHICAL ABSTRACT



Highlights

- Efficient sonocatalytic EDTA degradation in the presence of oxygen
- Coupling of $\text{Co}_3\text{O}_4/\text{TiO}_2$ catalyst with high-frequency ultrasound provides the best catalytic performance
- Noble metal-free $\text{Co}_3\text{O}_4/\text{TiO}_2$ catalyst is more effective than platinumized Pt/TiO_2 catalyst
- Suggested reaction mechanism involves oxidizing radicals produced by acoustic cavitation and $\text{Co(II)}-\text{Co(III)}$ redox process

Abstract

The sonocatalytic degradation of EDTA in aqueous solution was studied under ultrasound

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