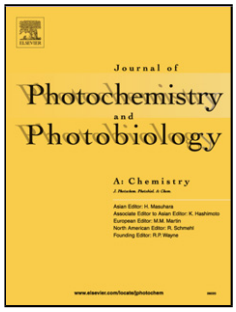

Title: FeO_x,SiO_2,TiO_2/Ti composites prepared using plasma electrolytic oxidation as photo-Fenton-like catalysts for phenol degradation

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FeO_x,SiO_2,TiO_2/Ti composites prepared using plasma electrolytic oxidation as photo-Fenton-like catalysts for phenol degradation

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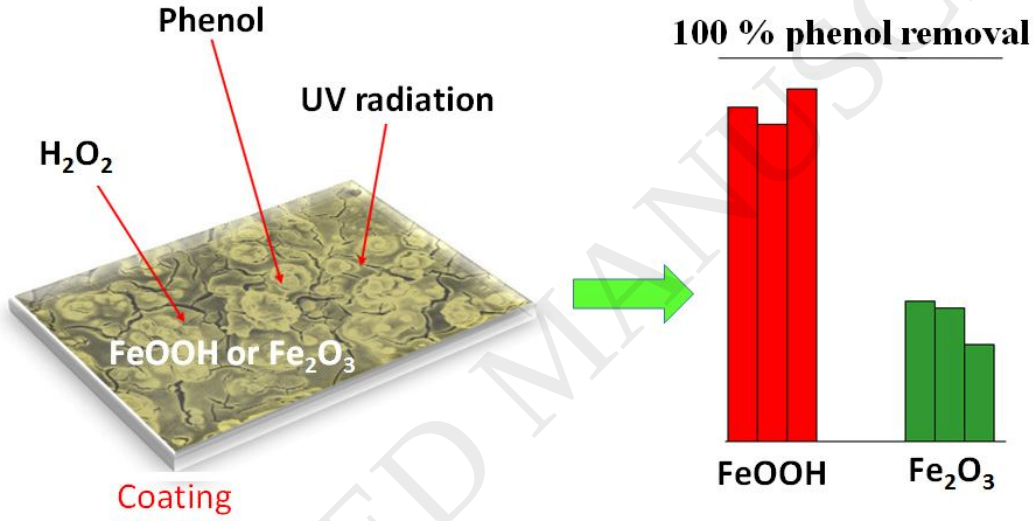
Graphical Abstract:



Highlights

- FeO_x,SiO_2,TiO_2/Ti photo-Fenton like catalysts were formed by PEO and impregnation.
- FeOOH-containing layers are more active than those containing Fe_2O_3.
- In the presence of coatings containing FeOOH the phenol removal reaches 98%.
- The mechanism of phenol degradation is discussed.