Synthesis of $\text{SO}_4^{2-}\text{Fe}_3\text{O}_4/\text{FeS}$ coating catalyst on TC4 titanium alloy for enhanced Fenton-like degradation of phenol

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Fig. S1 XRD patterns of PEO coatings before S modification
Fig. S2 XRD patterns of PEO coatings prepared with different contents of Na$_2$S$_2$O$_3$·5H$_2$O. (Other condition: 15 g/L K$_3$[Fe(CN)$_6$])
Fig. S3 Degradation curves of phenol by PEO coatings prepared with different iron and sulfur sources: 15 g/L K$_3$[Fe(CN)$_6$], 15 g/L Na$_2$S$_2$O$_3$·5H$_2$O (a), 20 g/L K$_3$[Fe(CN)$_6$], 15 g/L Na$_2$S$_2$O$_3$·5H$_2$O (b), 15 g/L K$_3$[Fe(CN)$_6$], 20 g/L Na$_2$S$_2$O$_3$·5H$_2$O (c) and 20 g/L K$_3$[Fe(CN)$_6$], 20 g/L Na$_2$S$_2$O$_3$·5H$_2$O (d)
Fig. S4 Homogeneous Fenton degradation of phenol at different Fe$^{2+}$ concentrations. (Other conditions: pH 6.0, H$_2$O$_2$ 6 mmol/L, initial concentration of phenol 35 mg/L, reaction temperature 30°C)
Fig. S5 EPR spectrum of DMPO--OH in PEO coating/H₂O₂ system