

Electronic Supplementary Information for

**Highly Active Heterogeneous Fenton Catalyst Using Iron Oxide Nanoparticle
Immobilized in Aluminum Coated Mesoporous Silica**

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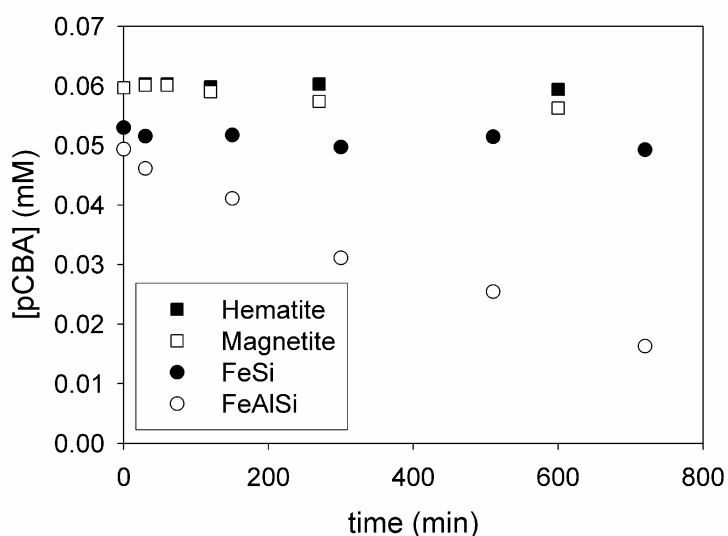


Fig. S1 Degradation of *p*CBA with (■) hematite, (□) magnetite, (●) FeSi, and (○) FeAlSi

The *p*CBA degradation experiments for Fig. S1 and S2 were conducted at 25 °C in the presence of 0.1 g/l of catalyst particles. The initial concentration of H₂O₂ was 5 mM. The solution pH was adjusted to 4.1 and kept within 0.2 pH units of this value with HClO₄ and NaOH during the experiments.

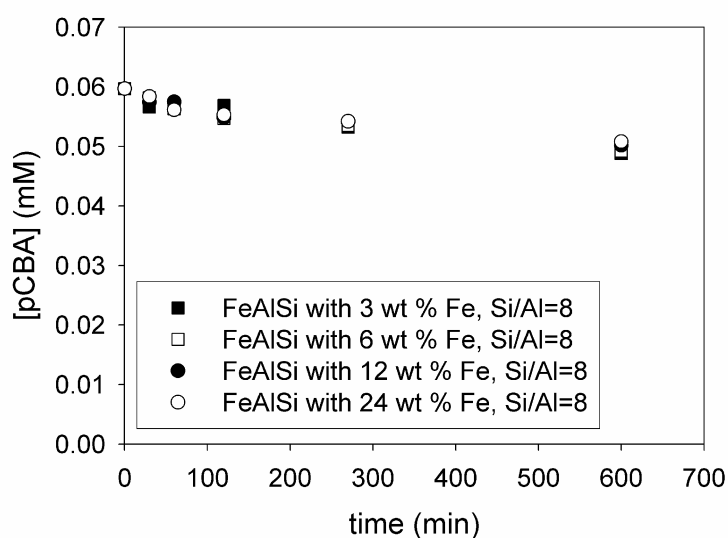


Fig. S2 Degradation of *p*CBA with FeAlSi (with varying Fe content from 3 to 24 wt %)

When the alumina content was low (Si/Al=8), the increasing Fe content from 3 to 24 wt % hardly affected the degradation rate for *p*CBA. Considering the H₂O₂ decomposition result in Table 1, this data seems to support the effect of the association of alumina with iron oxide.