

The effect of size and surface ligands of iron oxide nanoparticles on blood compatibility

Tao Liu^{ab,†}, Ru Bai^{a, †}, Huige Zhou^{a,*}, Rongqi Wang^c, Jing Liu^{ad}, Yuliang Zhao^{ab},
Chunying Chen^{ab,*}

^a CAS Key Laboratory for Biomedical Effects of Nanomaterials and Nanosafety & CAS Center for Excellence in Nanoscience, National Center for Nanoscience and Technology, Chinese Academy of science, No. 11 Beiyitiao, Zhongguancun, Beijing 100190, China. E-mail: chenchy@nanoctr.cn or zhouhg@nanoctr.cn; Fax: +86-10-62656765; Tel: +86 10 8254 5560

^b University of Chinese Academy of Sciences, Beijing 100049, P. R. China

^c Department of Clinical Laboratory, Beijing Haidian Hospital, Haidian section of Peking University Third Hospital, Beijing 100080, China.

^d Faculty of Life Sciences & Medicine, Northwest University (NWU), Xi'an 710069, China

† Tao Liu and Ru Bai contributed equally to this work.

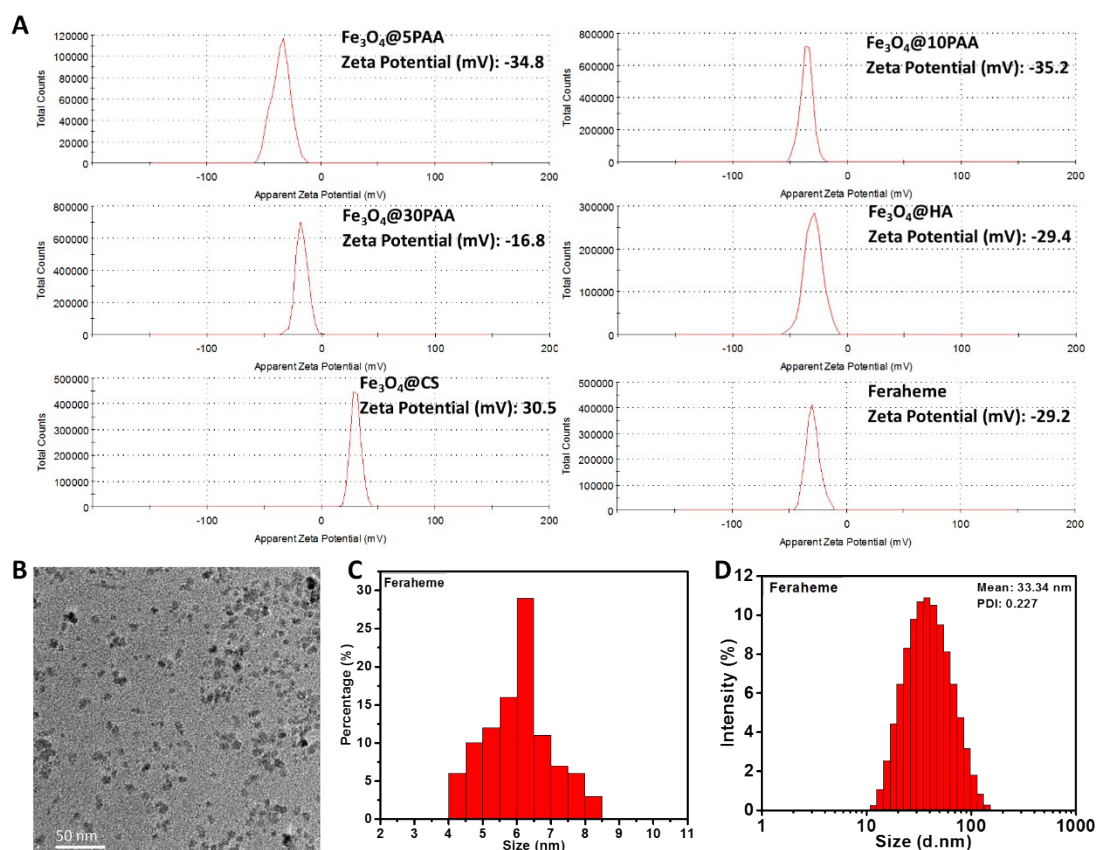


Figure S1. (A) The zeta potential distribution of SPIONs. The size characterization of Feraheme, (B) TEM image; (C) size distribution; (D) hydrodynamic size.

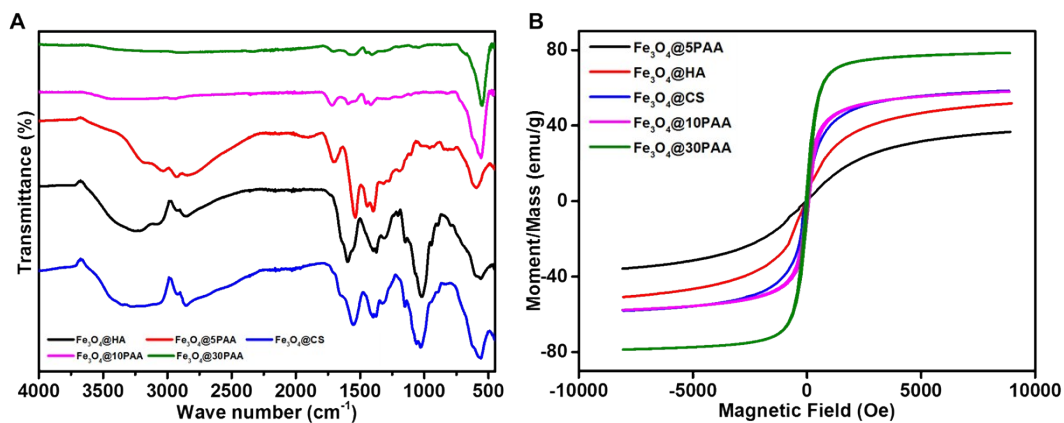
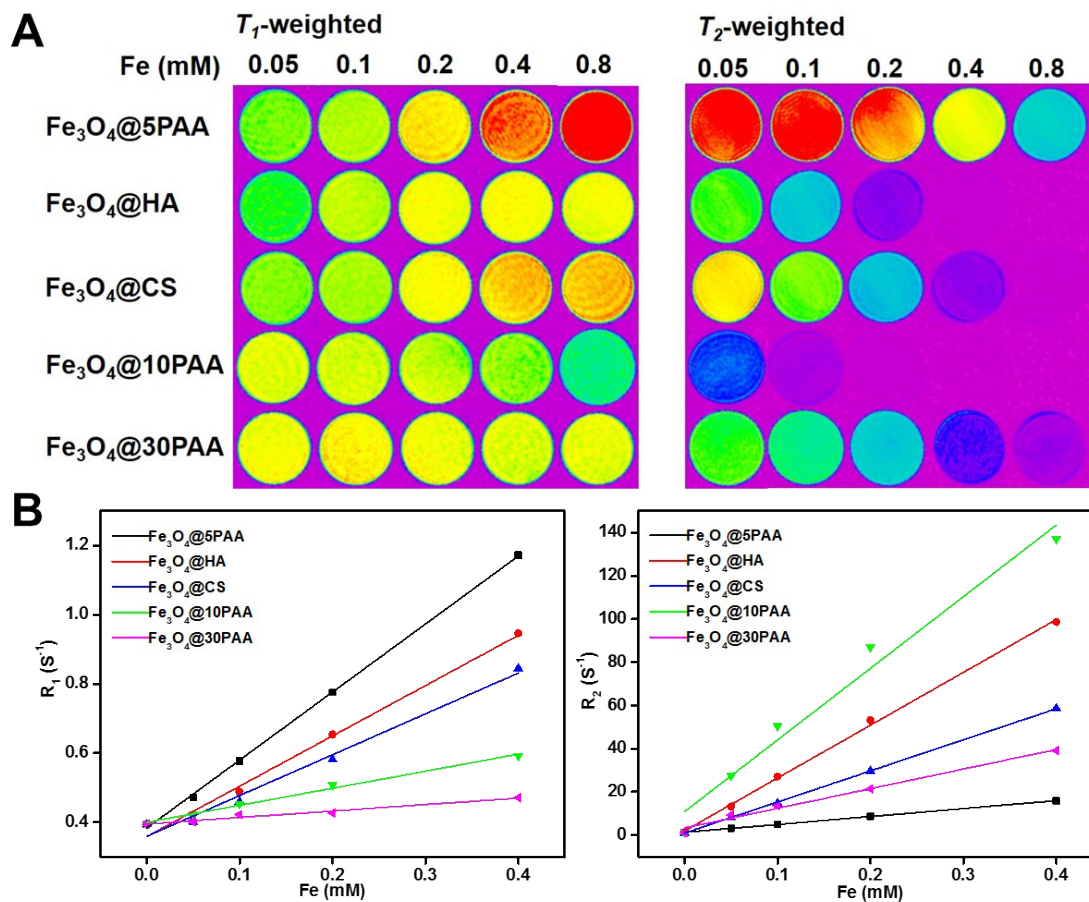


Figure S2. Characterizations of FTIR spectrum and magnetic property of Superparamagnetic iron oxide nanoparticles. (A) FTIR spectrum of SPIONs. (B) Field-dependent magnetization curve of SPIONs at room temperature.



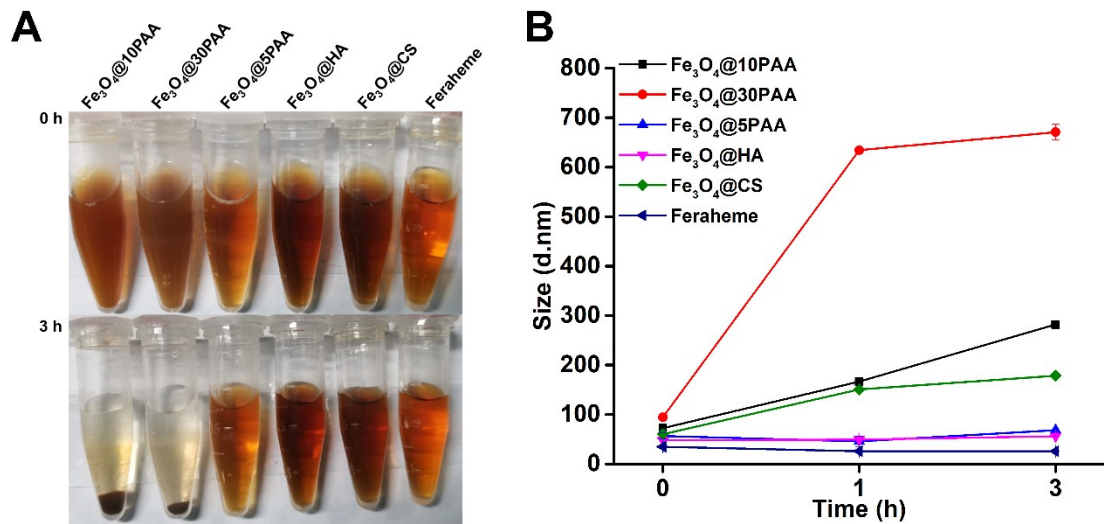


Figure S4. (A) The picture of SPIONs in PBS solution at 0 and 3 h. (B) The hydrodynamic size of SPIONs in PBS solution at 0, 1 and 3h (n = 3).

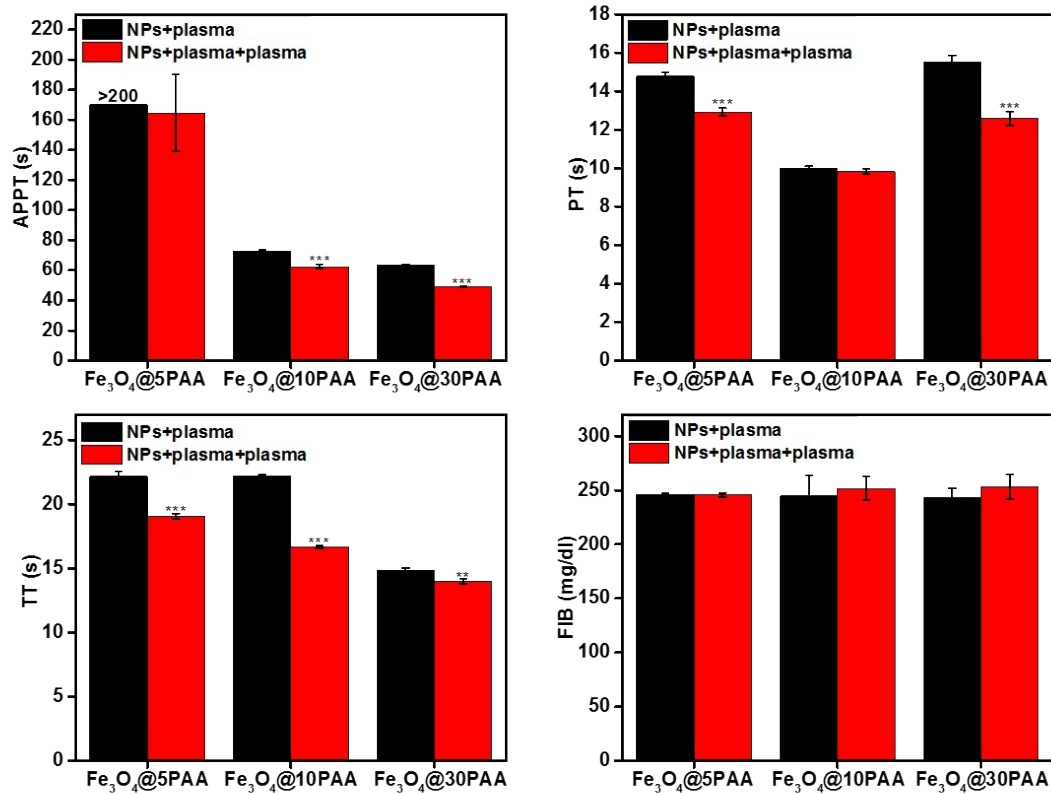


Figure S5. The results of four coagulation tests after addition of healthy plasma into the abnormal plasma treated by Fe₃O₄@5PAA at the concentration of 5 mg/mL. ** $P < 0.01$ and *** $P < 0.001$.