

[Supporting information]

Facile One-pot Transformation of Iron Oxides from Fe₂O₃ Nanoparticles to Nanostructured Fe₃O₄@C Core-Shell Composites via Combustion Waves

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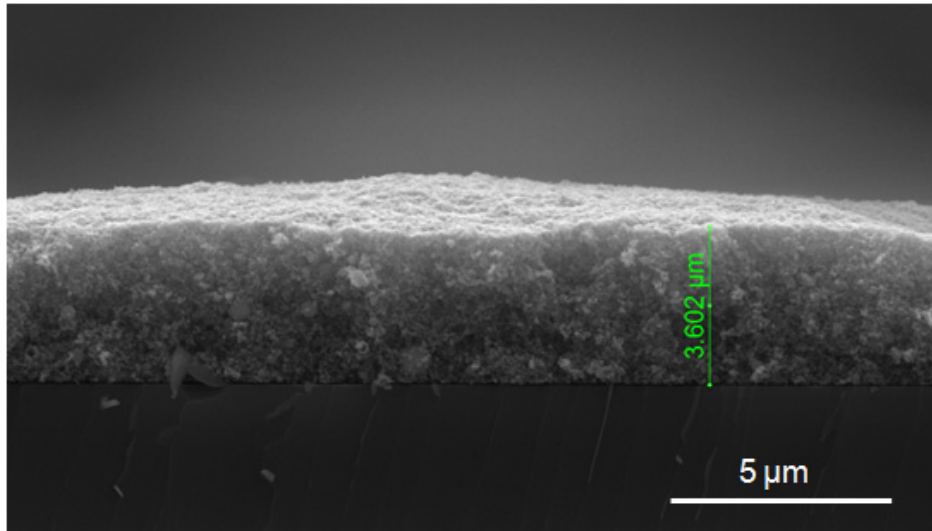


Figure S1. Cross-sectional SEM image of a Fe_2O_3 film.

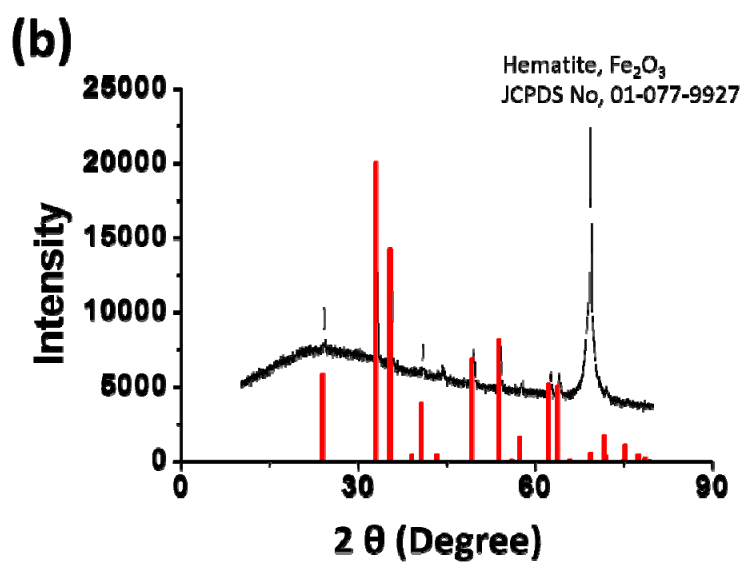
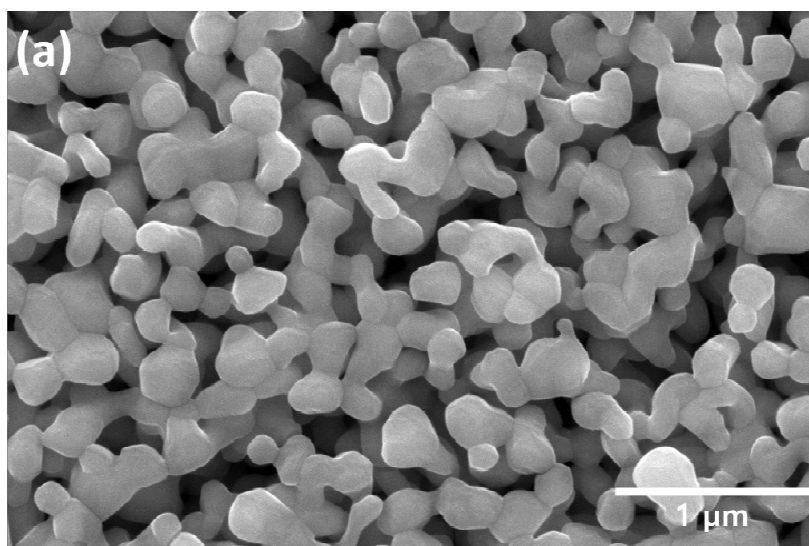


Figure S2. (a) SEM image, and (b) XRD pattern after annealing Fe₂O₃ at 740 °C

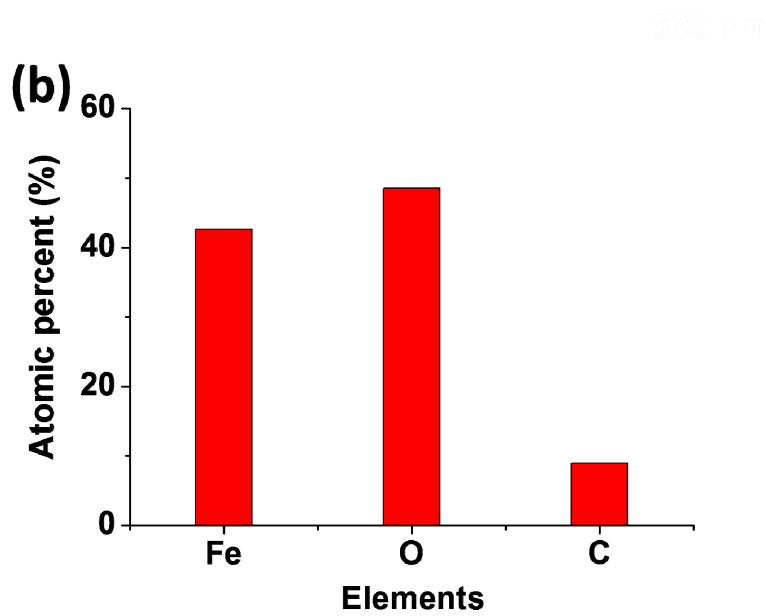
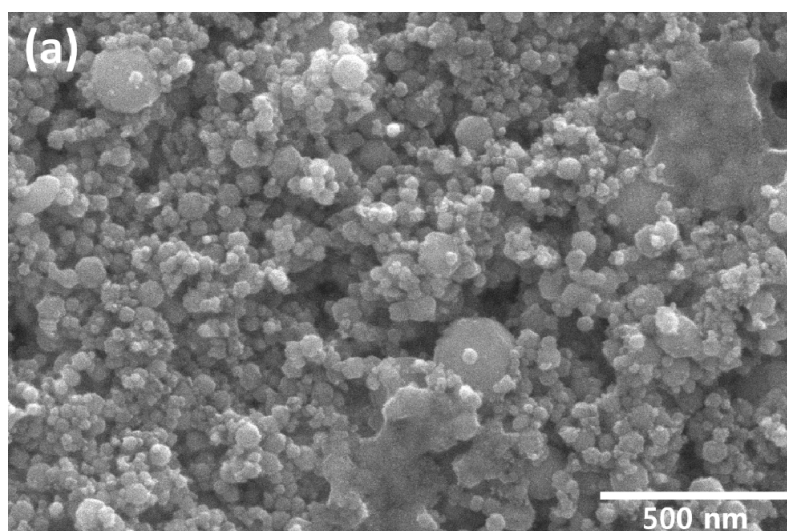


Figure S3. (a) SEM image and (b) Atomic percentages of Fe, O, and C from EDX analysis after combustion wave propagation on a dual layer of unmixed chemical fuel and Fe_2O_3 nanoparticles.

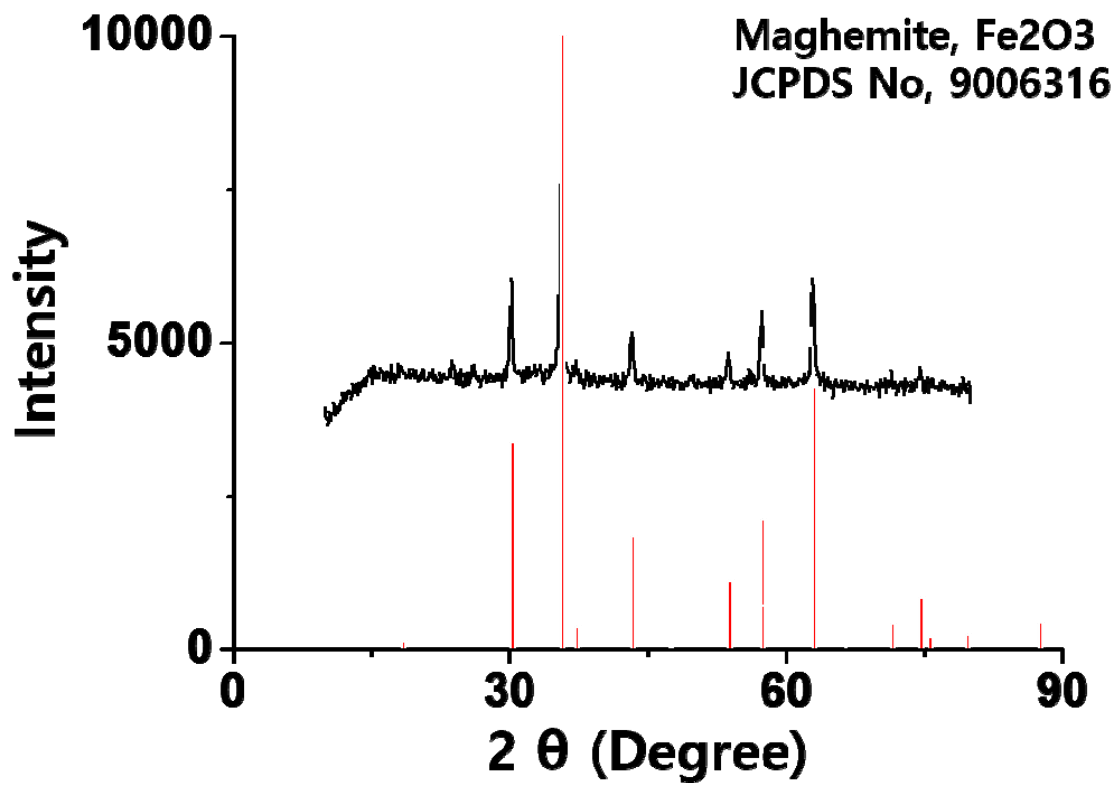


Figure S4. XRD pattern of Fe₂O₃ films before mixing with collodion.