

Microwave Absorption of α -Fe₂O₃@diatomite Composites

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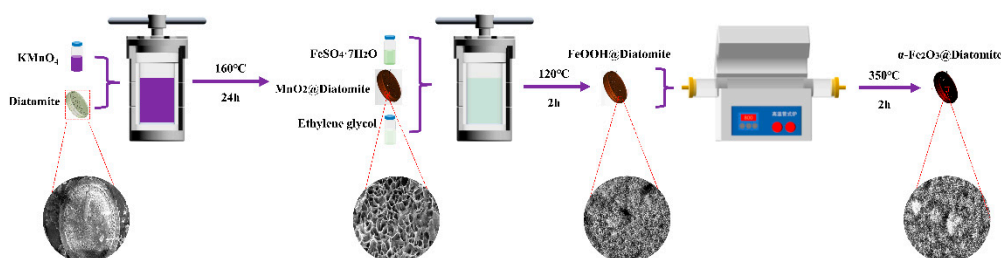


Figure. S1. Preparation flow chart of α -Fe₂O₃@D

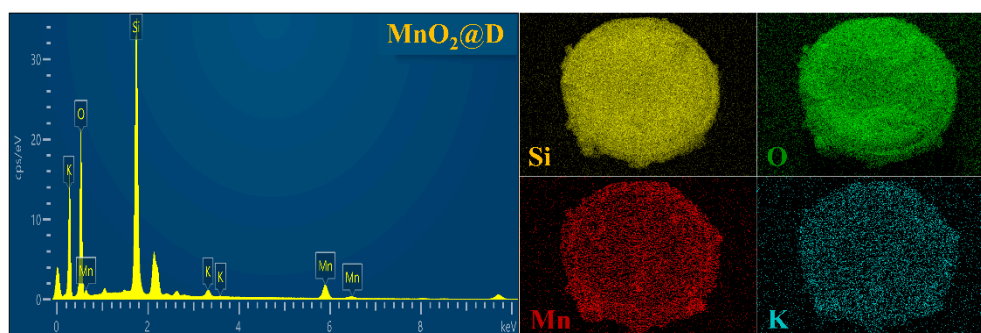


Figure. S2. The EDS images of MnO₂@D

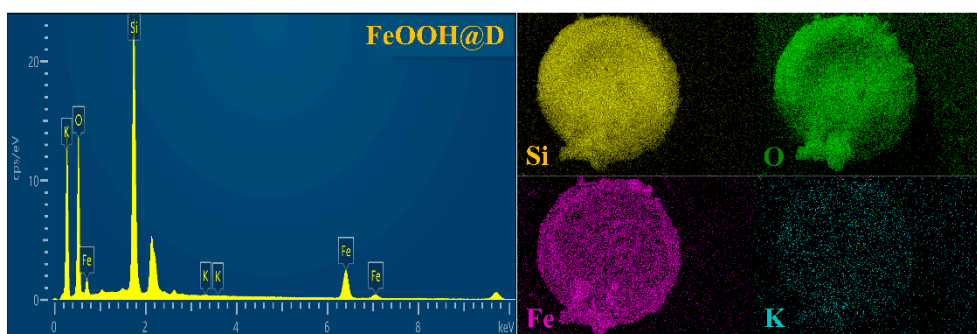


Figure. S3. The EDS images of FeOOH@D

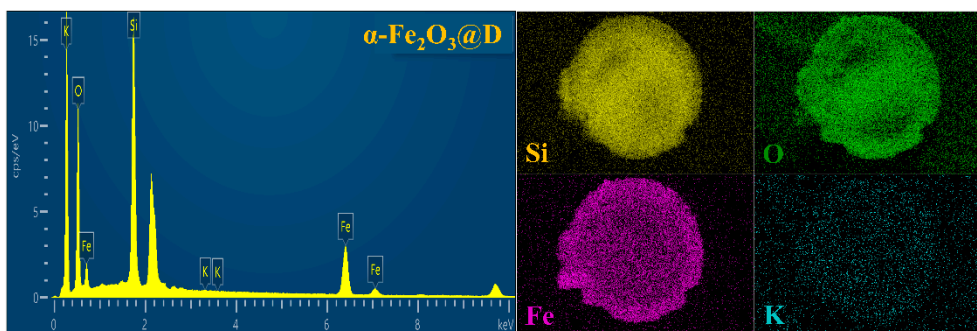
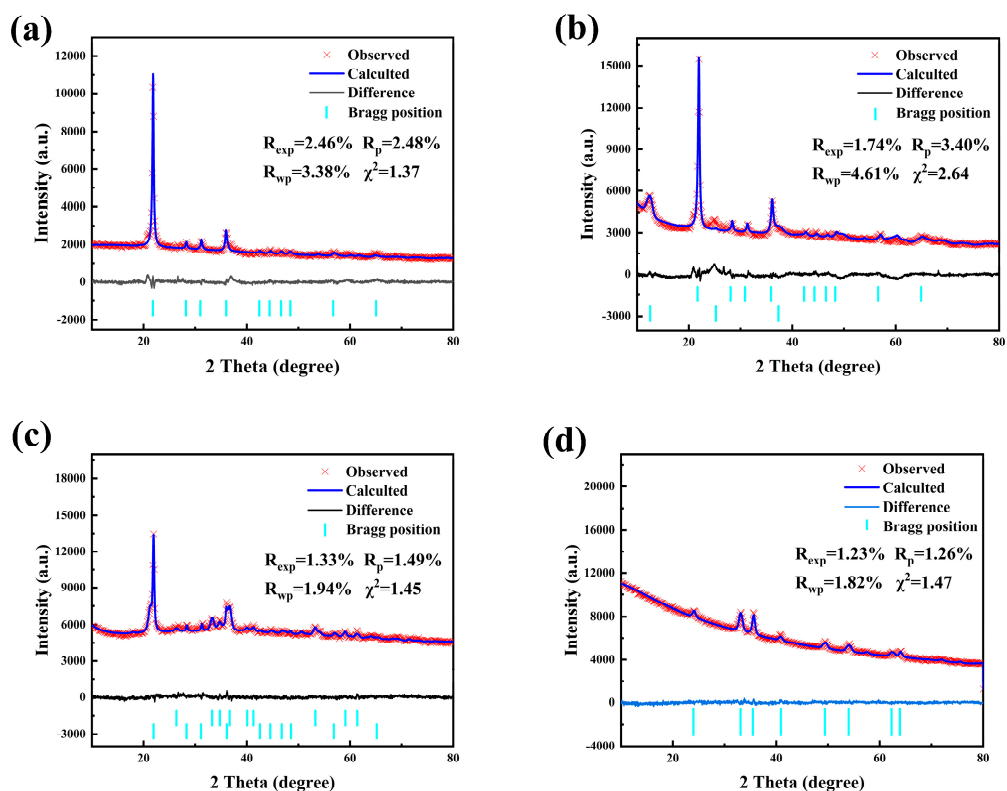


Figure. S4. The EDS images of α -Fe₂O₃@D



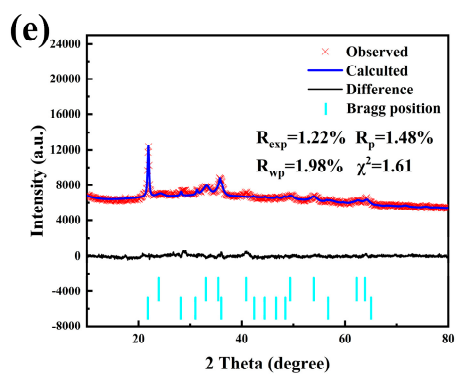


Figure. S5. The detailed Rietveld refinement images of De(a), MnO₂@D(b), FeOOH@D(c), α -Fe₂O₃(d), α -Fe₂O₃@D(e).

Table. S1. Cell parameters are shown in the following table.

Sample	a [Å]	b [Å]	c [Å]	α [°]	β [°]	γ [°]	Volume [Å ³]	R_{exp}	R_p	R_{wp}	χ^2
SiO ₂	4.98	4.98	6.99	90	90	90	173.99	2.46%	2.48%	3.38%	1.37
MnO ₂ @D	9.81	9.81	2.84	90	90	90	274.26	1.74%	3.40%	4.61%	2.64
FeOOH@D	9.95	3.02	4.61	90	90	90	139.04	1.33%	1.49%	1.94%	1.45
Fe ₂ O ₃	8.72	5.03	5.39	90	121.7	90	201.38	1.23%	1.26%	1.82%	1.47
Fe ₂ O ₃ @D	5.03	5.03	13.83	90	90	120	303.65	1.22%	1.48%	1.98%	1.61