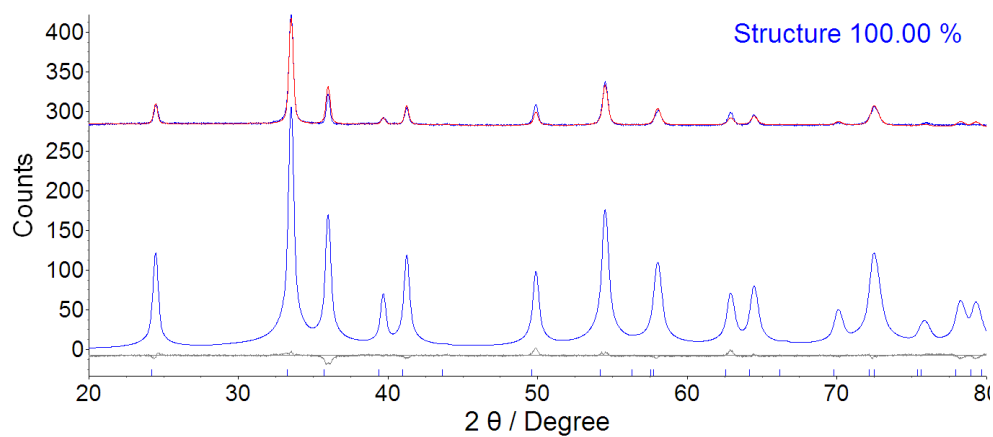


Electronic Supporting Information (ESI)

Al³⁺-Controlled Synthesis and Magnetic Property of α -Fe₂O₃

Nanoplates

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R-3c: $a = 5.025 \text{ \AA}$, $c = 13.717 \text{ \AA}$.

$R_{wp} = 1.089\%$, $R_{exp} = 0.347\%$, $R_p = 0.646\%$.

Figure S1 Rietveld XRD pattern of the prepared uniform α -Fe₂O₃ Nanoplates.

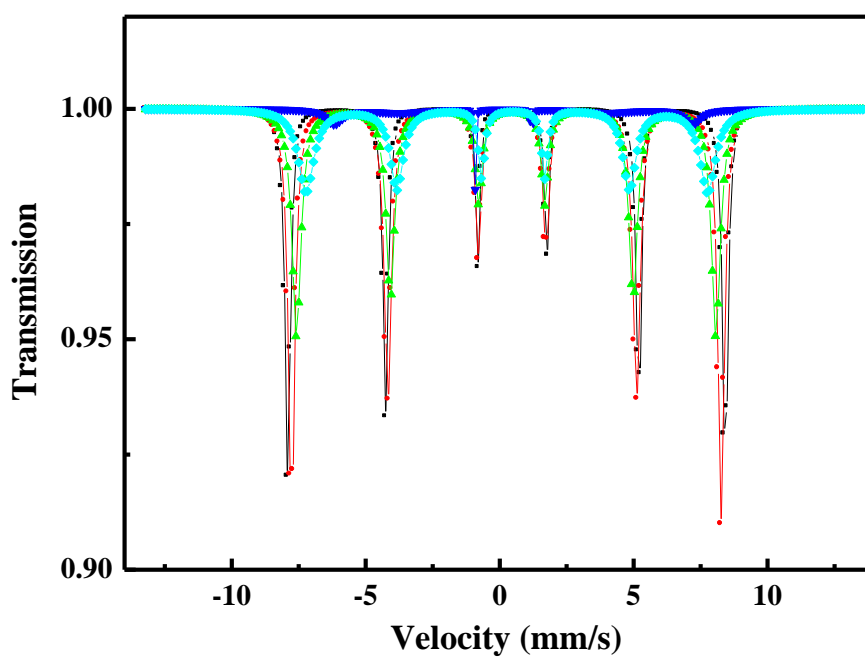


Figure S2 ^{57}Fe Mössbauer sub-spectra recorded at 298 K for the obtained $\alpha\text{-Fe}_2\text{O}_3$ nanoplates

Table S1 ^{57}Fe Mössbauer parameters recorded at 298 K for the obtained $\alpha\text{-Fe}_2\text{O}_3$ nanoplates.

Compound	Δ (mm/s)	Δ (mm/s)	H (kOe)	Area (%)
$\alpha\text{-Fe}_2\text{O}_3$	0.36	-0.21	507.9	24.2
	0.36	-0.22	498.7	32.0
	0.35	-0.21	486.9	24.9
	0.33	0.38	416.1	3.0
	0.39	-0.23	466.3	15.9