

Supplementary Information

Operating interfaces to synthesize $L1_0$ -FePt@Bi-rich nanoparticles by modifying the heating process

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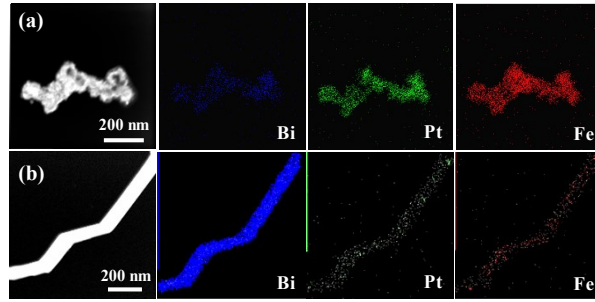


Fig. S1 Elemental mapping of $L1_0$ -FePtBi NPs synthesized at a heating rate of $2^\circ\text{C}/\text{min}$.

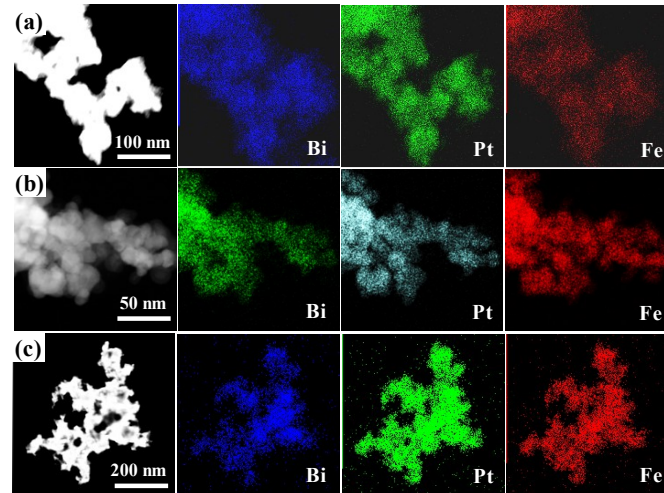


Fig. S2 Elemental mapping of $L1_0$ -FePtBi NPs synthesized at a heating rate of (a) $6^\circ\text{C}/\text{min}$, (b) $10^\circ\text{C}/\text{min}$, and (c) $10\&2^\circ\text{C}/\text{min}$.

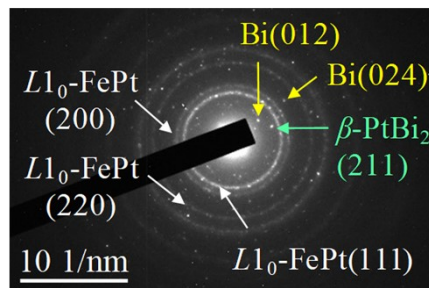


Fig. S3 SAED patterns of the synthesized FePtBi NPs at a heating rate of $10^\circ\text{C}/\text{min}$.

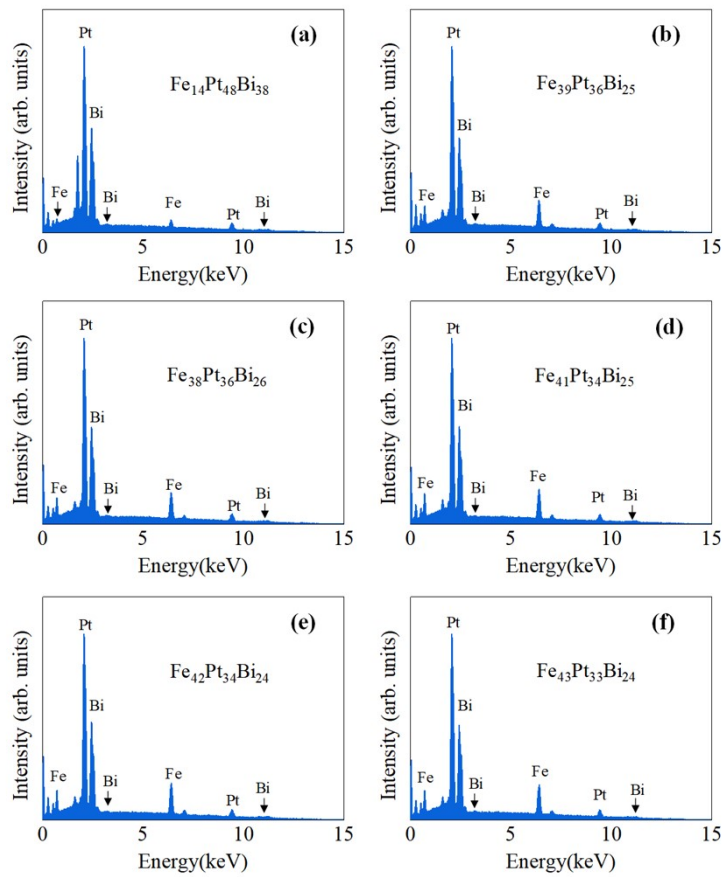


Fig. S4 EDS spectrums of the synthesized $L1_0$ -FePt/Bi-rich NPs at 160°C, 230°C, 310°C, and 360°C holding for 0 h, 1 h, and 3 h