

Supplementary information:

Systematic study in Dy-M (M = Al, Ni, Cu) diffusion sources for enhancing coercivity and corrosion resistance of Nd-Fe-B magnets

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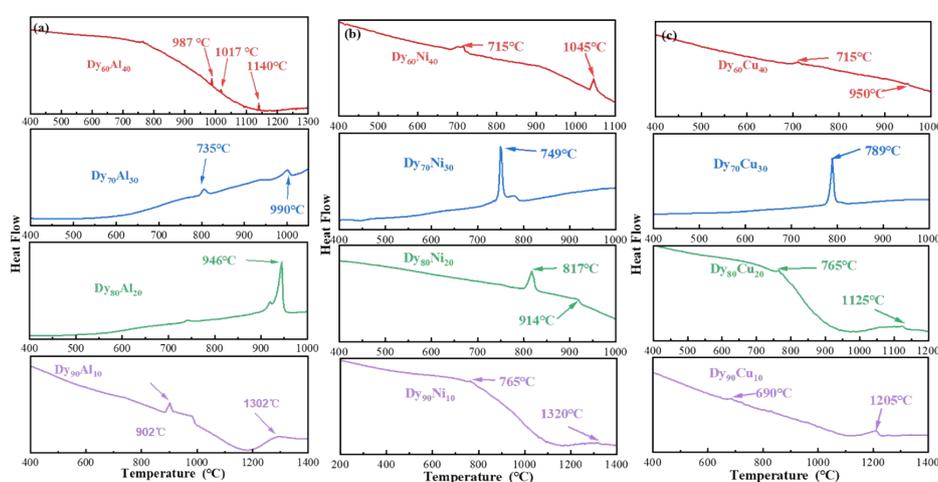
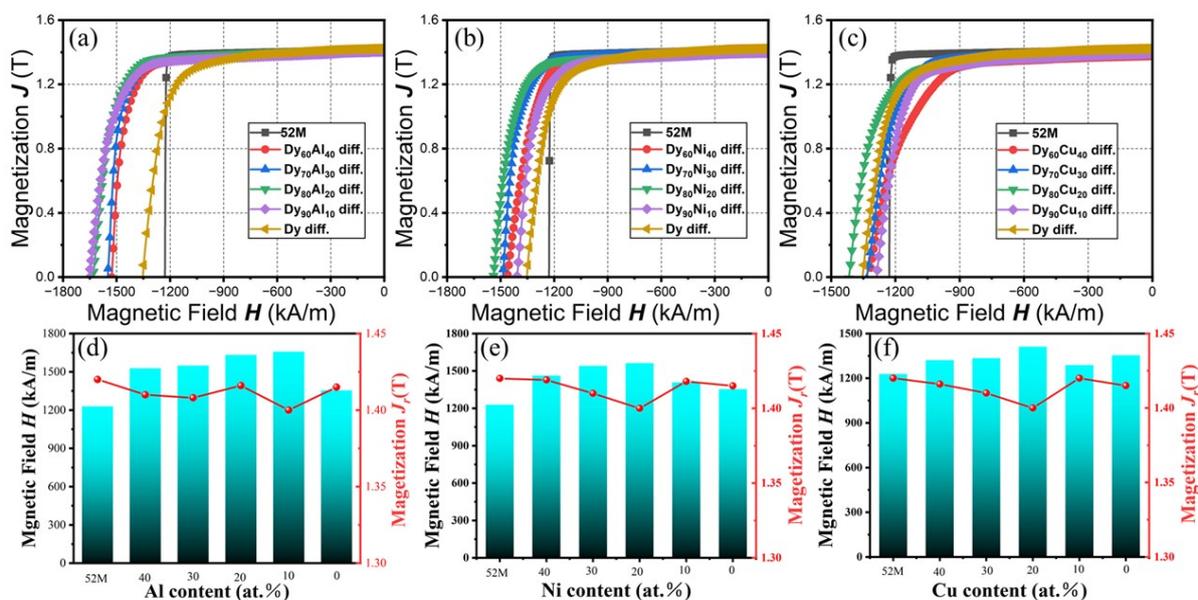


Fig. S1. DSC curves of different diffusion sources



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Fig. S2. 2nd quadrant room-temperature demagnetization curves (a, b, c) and magnetic properties variations (d, e, f) of the original magnet and the magnets diffused by various sources.

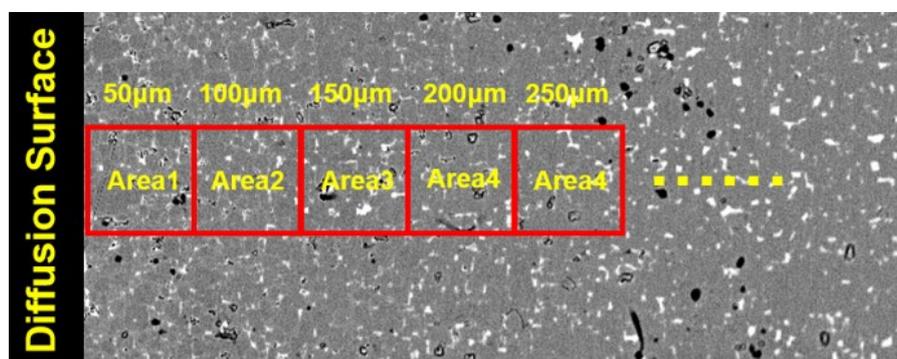


Fig.S3 Schematic diagram of the sampling location

Table.S1 Diffusion coefficient of Dy-M alloy diffusion magnets

	Concentration	D (10^{-7} mm ² /s)
Dy-Al	Dy ₆₀ Al ₄₀	1.70±0.70
	Dy ₇₀ Al ₃₀	1.51±0.42
	Dy ₈₀ Al ₂₀	1.46±0.53
	Dy ₉₀ Al ₁₀	2.50±0.64
Dy-Ni	Dy ₆₀ Ni ₄₀	2.17±0.59
	Dy ₇₀ Ni ₃₀	3.60±0.45
	Dy ₈₀ Ni ₂₀	6.50±0.52
	Dy ₉₀ Ni ₁₀	2.75±0.33
Dy-Cu	Dy ₆₀ Cu ₄₀	1.51±0.39
	Dy ₇₀ Cu ₃₀	1.79±0.45
	Dy ₈₀ Cu ₂₀	2.07±0.73
	Dy ₉₀ Cu ₁₀	1.37±0.68