

## Supporting Information for

# Mn<sup>2+</sup> Mediated Electrodeposition of FeCoNi Films with Enhanced Magnetic Properties

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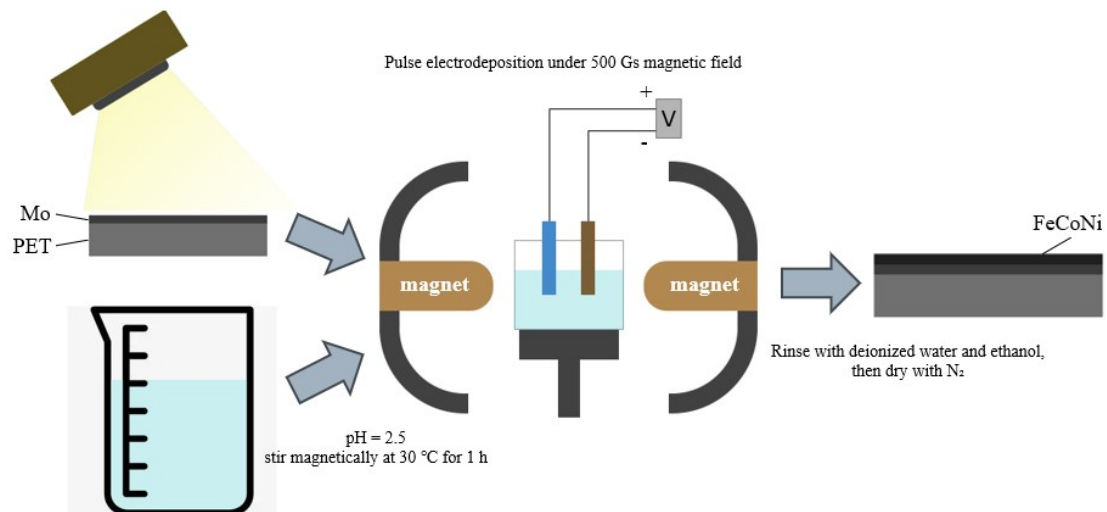


Fig. S1 Schematic illustration of the preparation process of FeCoNi soft magnetic films by pulse electrodeposition under a 500 Gs magnetic field, including electrolyte preparation, substrate assembly, deposition, and post-treatment.

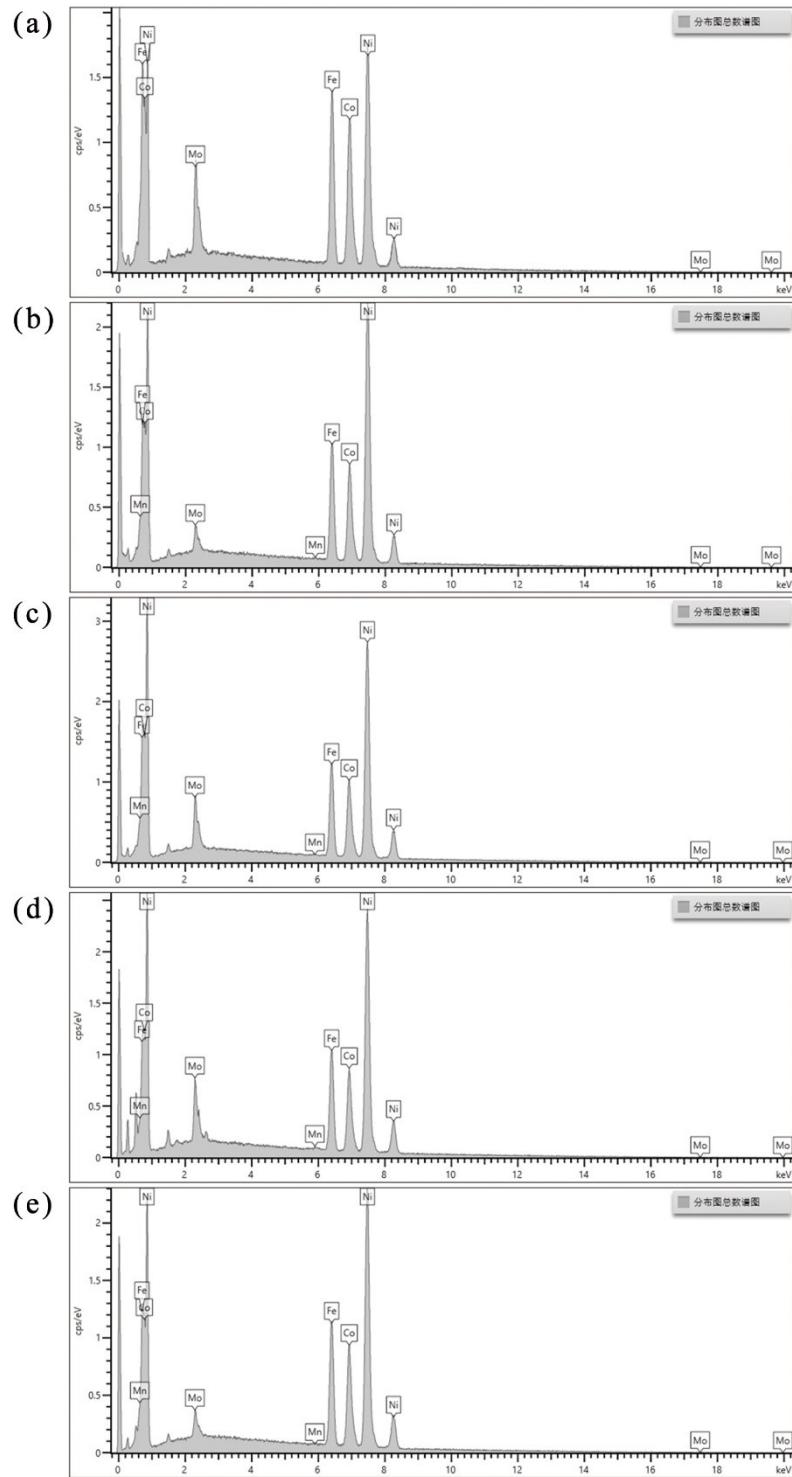


Fig. S2 EDS spectra of FeCoNi films electrodeposited with different Mn<sup>2+</sup> concentrations: (a) Mn0, (b) Mn2, (c) Mn4, (d) Mn6, and (e) Mn8.