

Supporting Information

Mg doping NiMn-LDH with three-dimensional porous morphology for efficient supercapacitor

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Notes

The authors declare no competing financial interest.

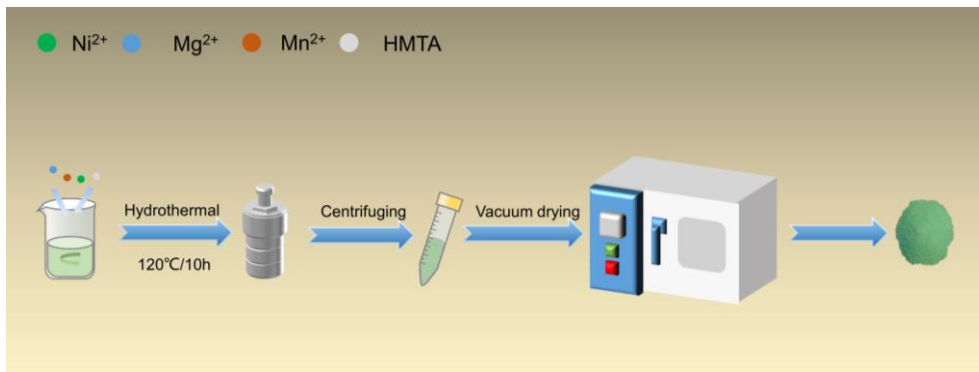


Figure S1. Schematic diagram of the synthesis of NiMnMg-LDH

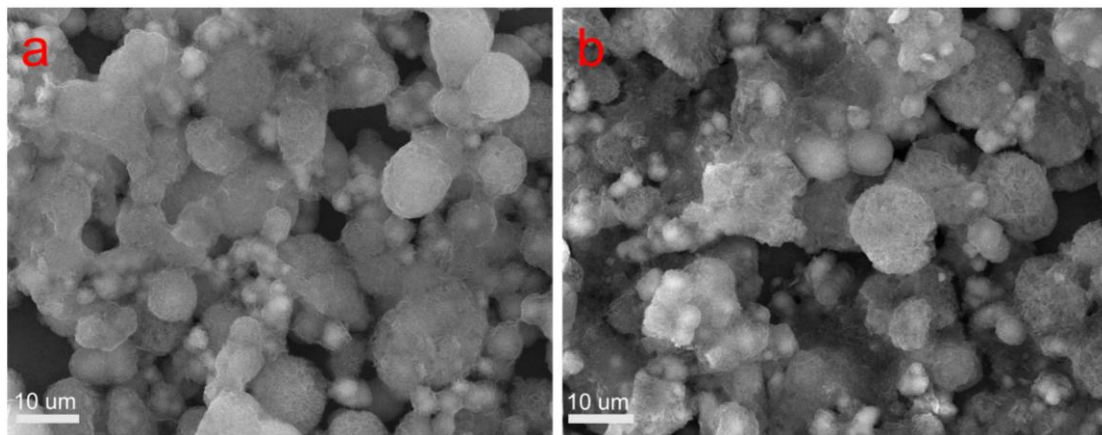


Figure S2. SEM images of NiMn-LDH (a), NiMnMg-LDH-7 (b)

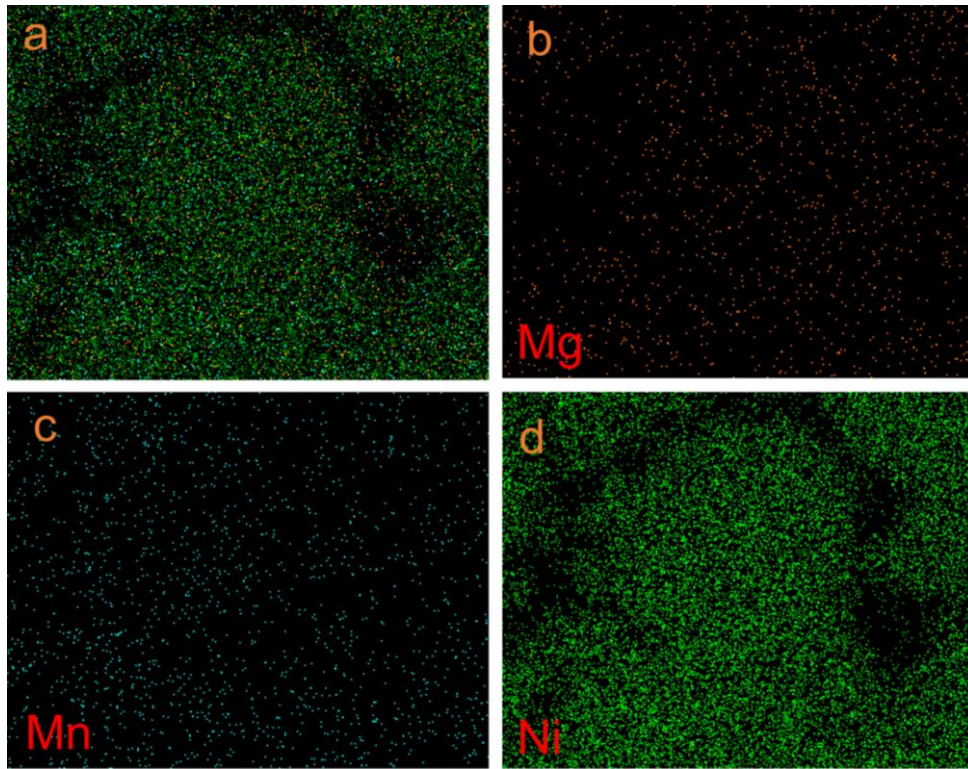


Figure S3. (a) EDS spectrum of NiMnMg-LDH-7, (b-d) corresponding EDS elemental maps

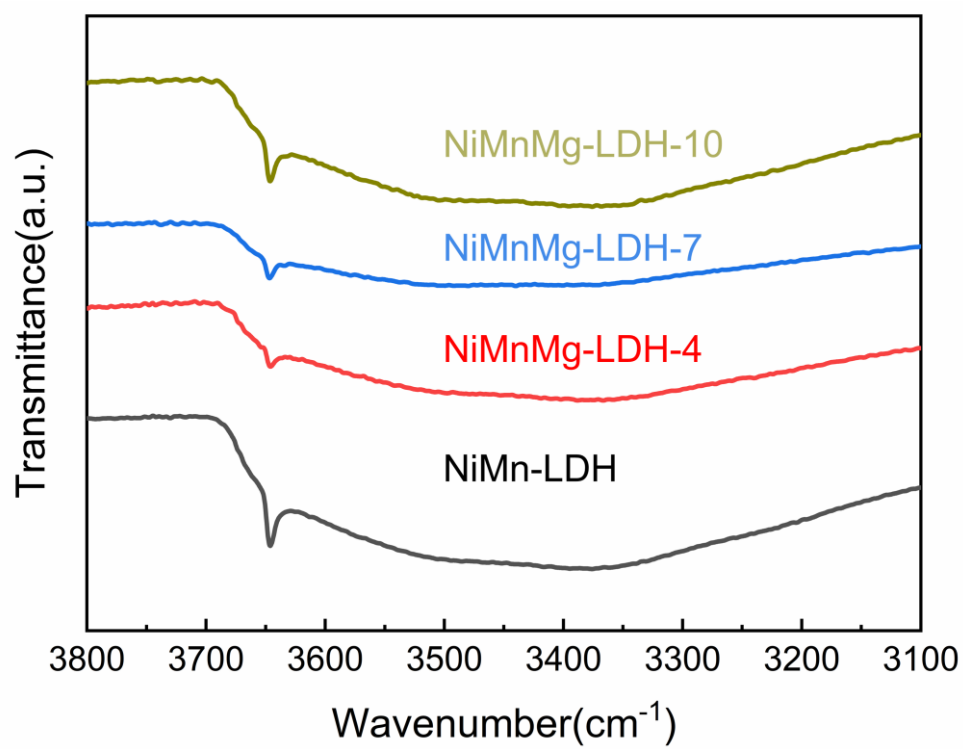


Figure S4. FTIR spectrum of the synthesized materials

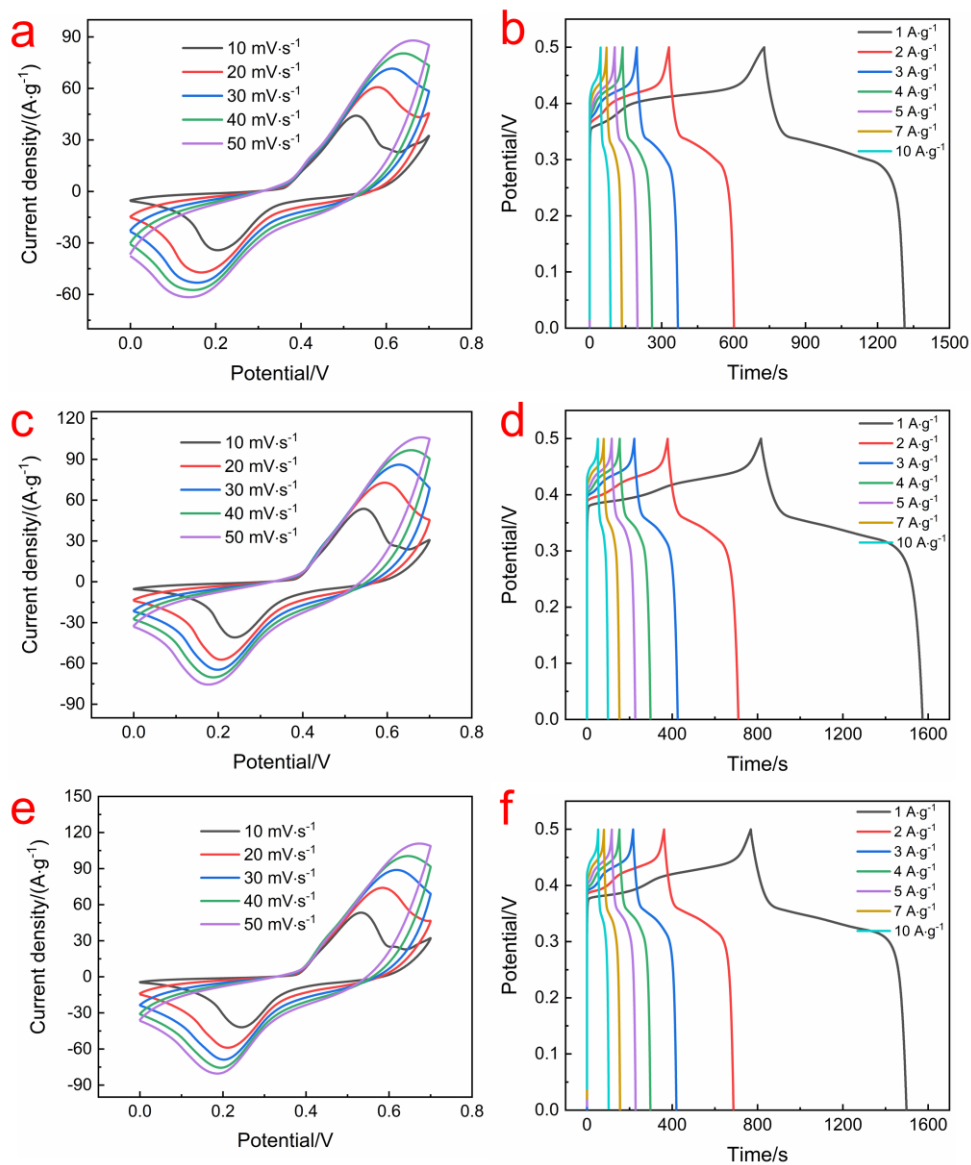


Figure S5. CV curves of NiMn-LDH (a), NiMnMg-LDH-4 (c) and NiMnMg-LDH-10 (e); GCD curves of NiMn-LDH (b), NiMnMg-LDH-4(d) and NiMnMg-LDH-10(f)

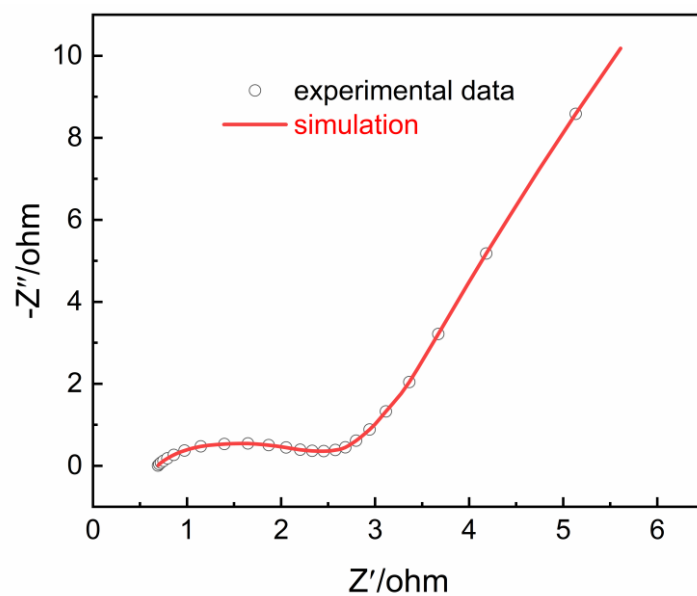


Figure S6. EIS fitting curve of NiMnMg-LDH-7

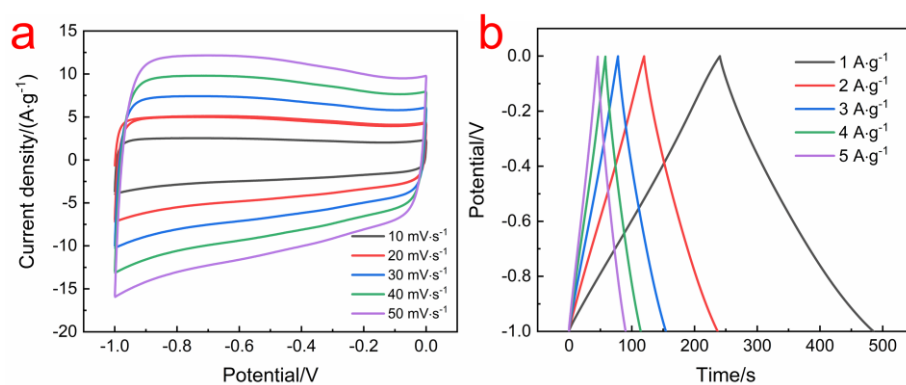


Figure S7. Electrochemical properties of negative activated carbon (AC): (a) CV curves; (b) GCD curves

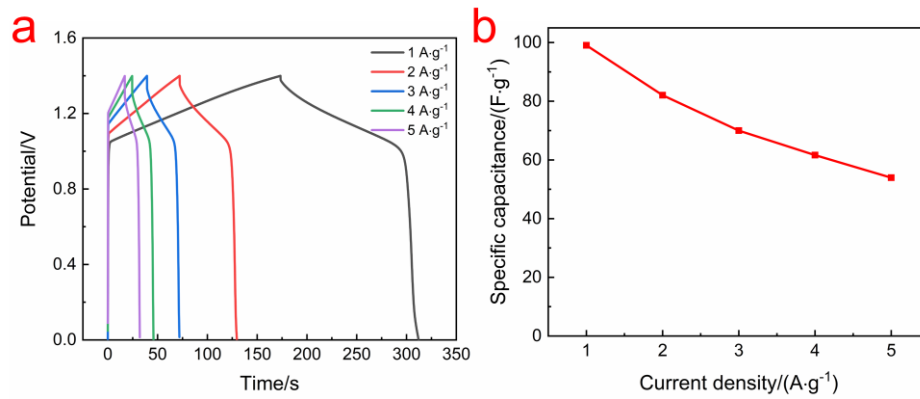


Figure S8. (a) GCD curves of ASC devices at different current densities; (b) the attenuation curve of specific capacity of ASC with the current densities

Table S1 Specific surface area of different materials

Materials	NiMn-LDH	NiMnMg-LDH-4	NiMnMg-LDH-7	NiMnMg-LDH-10
Specific surface area/m ² ·g ⁻¹	51	73	87	68

Table S2 Fitted parameters based on the equivalent circuit by the ZView simulation

	R _{ct}	R _s
NiMn-LDH	2.16	0.77
NiMnMg-LDH-4	2.00	0.62
NiMnMg-LDH-7	1.41	0.67
NiMnMg-LDH-10	1.80	0.61