

Supporting Information

Zn-doped Ni-MOF material with a high supercapacitive performance

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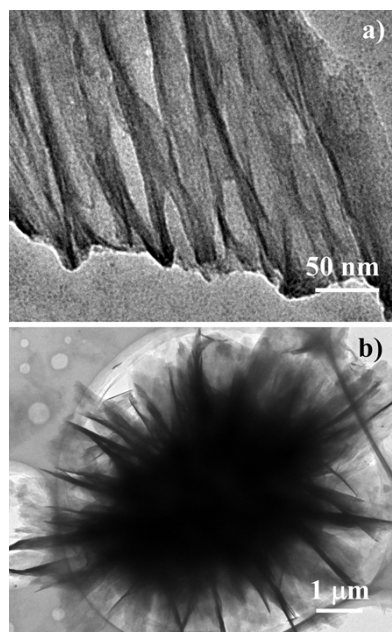


Fig. S1 TEM images of Zn-doped Ni-MOF materials: (a) MOF-0 and (b)MOF-2.

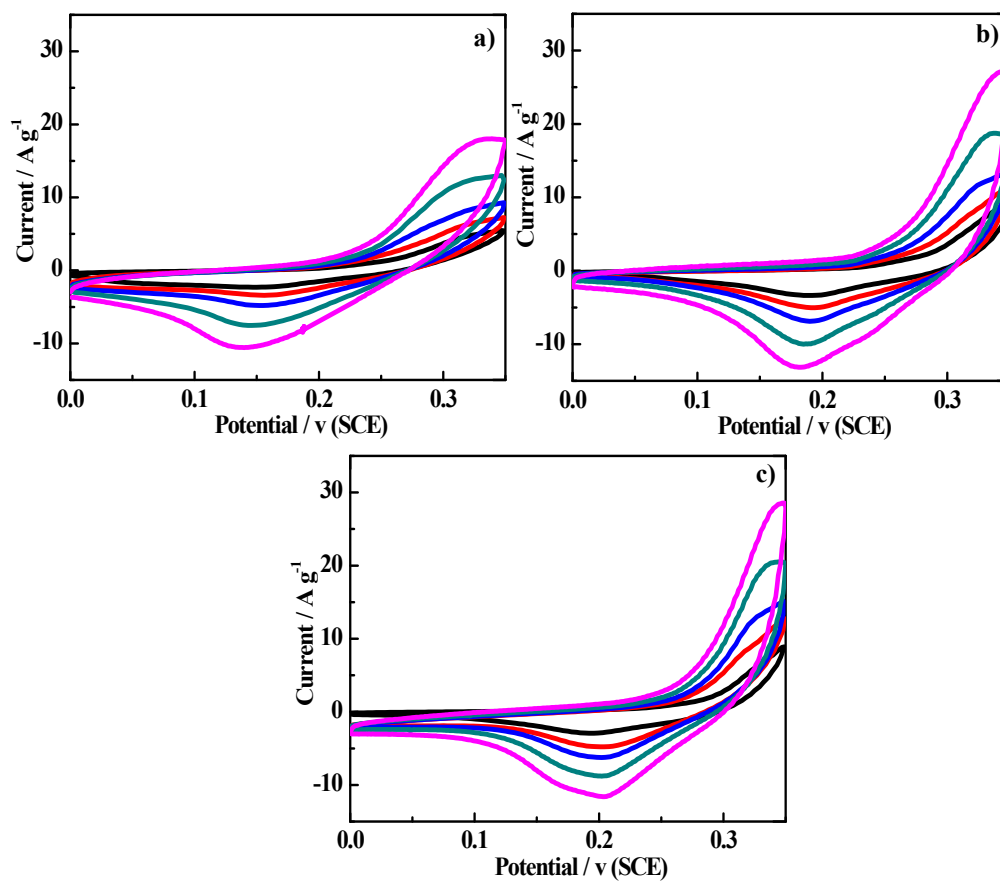


Fig.S2 CV curves of Zn-doped Ni-MOF materials: (a) MOF-0, (b) MOF-1 and (c) MOF-3.

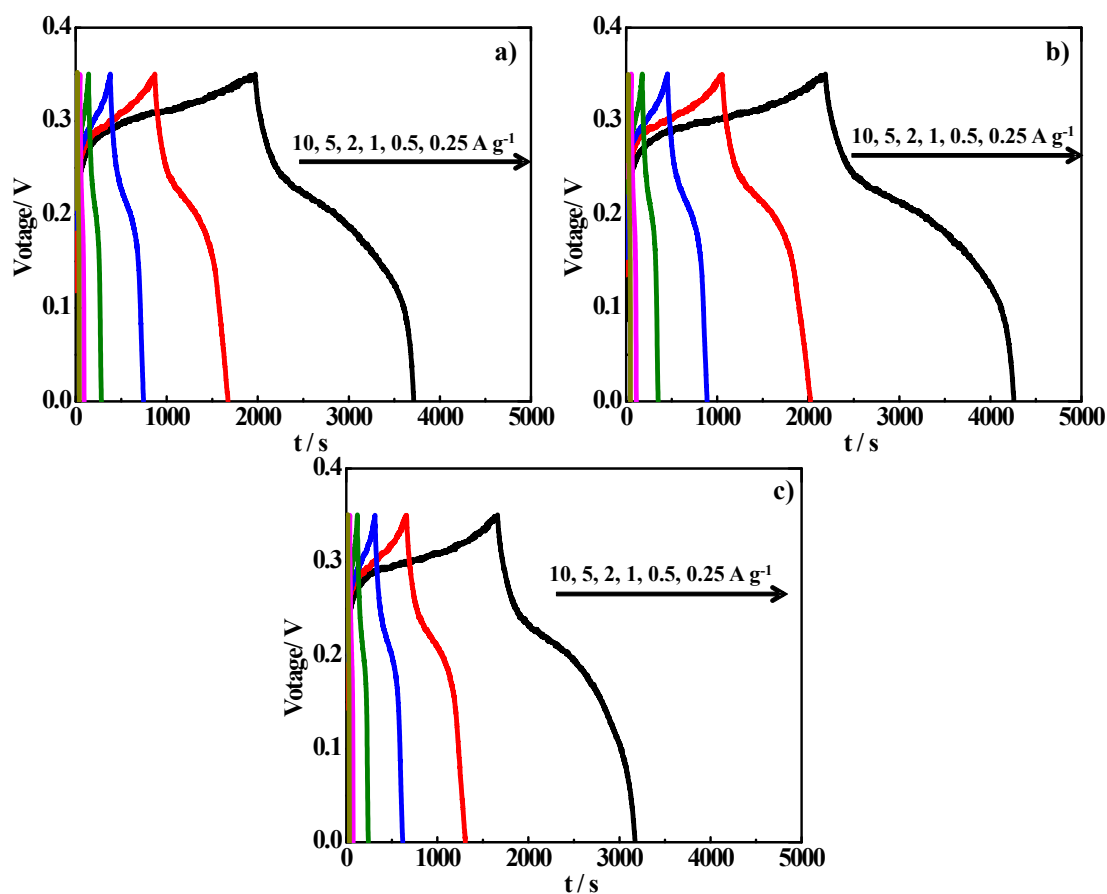


Fig. S3 Charge-discharge profiles of Zn-doped Ni-MOF materials: (a) MOF-0, (b) MOF-1 and (c) MOF-3.

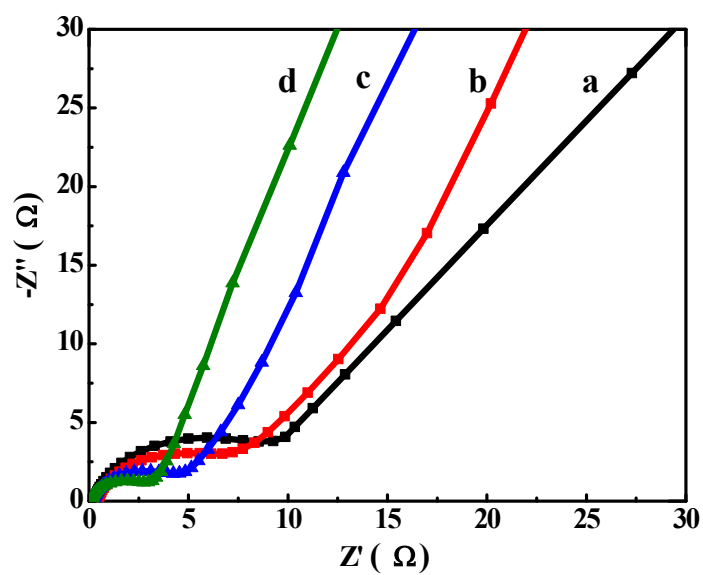


Fig.S4 EIS plots of Zn-doped Ni-MOF materials: (a) MOF-0, (b) MOF-1, (c) MOF-2 and (d) MOF-3.

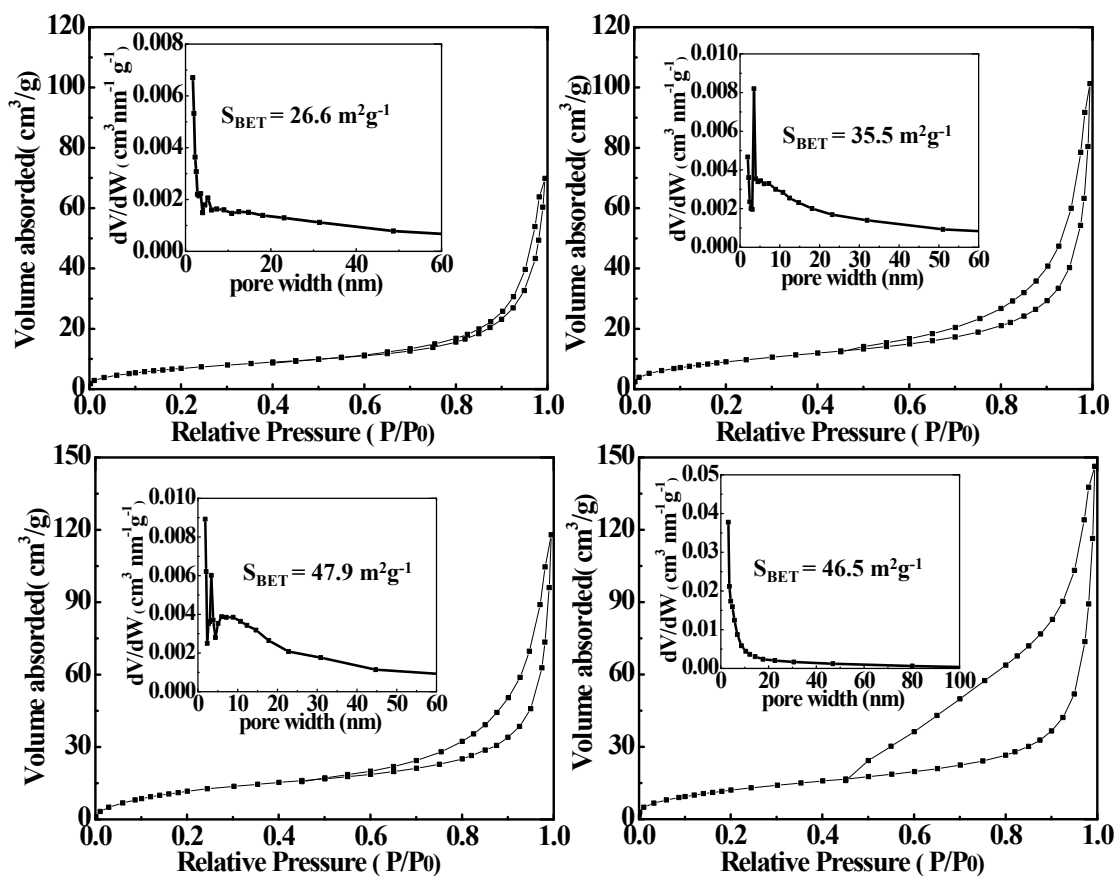


Fig. S5 N₂ adsorption-desorption isotherms and the pore size distribution curves for Zn-doped Ni-MOF materials : (a) MOF-0, (b) MOF-1, (c) MOF-2 and (d) MOF-3.

Table S1 The interplanar spacing variation for different Zn-doped Ni-MOF materials.

spacing	MOF-0	MOF-1	MOF-2	MOF-3
$d_{(100)} / \text{nm}$	0.953	1.027	1.037	1.040
$d_{(2-10)} / \text{nm}$	0.482	0.555	0.576	0.581

Table S2 The wavenumber variation for different Zn-doped Ni-MOF materials.

wavenubmer	MOF-0	MOF-1	MOF-2	MOF-3
$\nu_{as}(\text{COO}^-) / \text{cm}^{-1}$	1572	1574	1578	1583
$\nu_s(\text{COO}^-) / \text{cm}^{-1}$	1383	1381	1378	1372
$\Delta_\nu / \text{cm}^{-1}$	189	193	200	211