Electronic Supplementary Material (ESI) for Journal of Materials Chemistry A

Supporting Information

Core-Shell Structured MgAl-LDO@Al-MS Hexagonal Nanocomposite: An All Inorganic Acid-Base Bifunctional Nanoreactor for One-Pot Cascade Reactions

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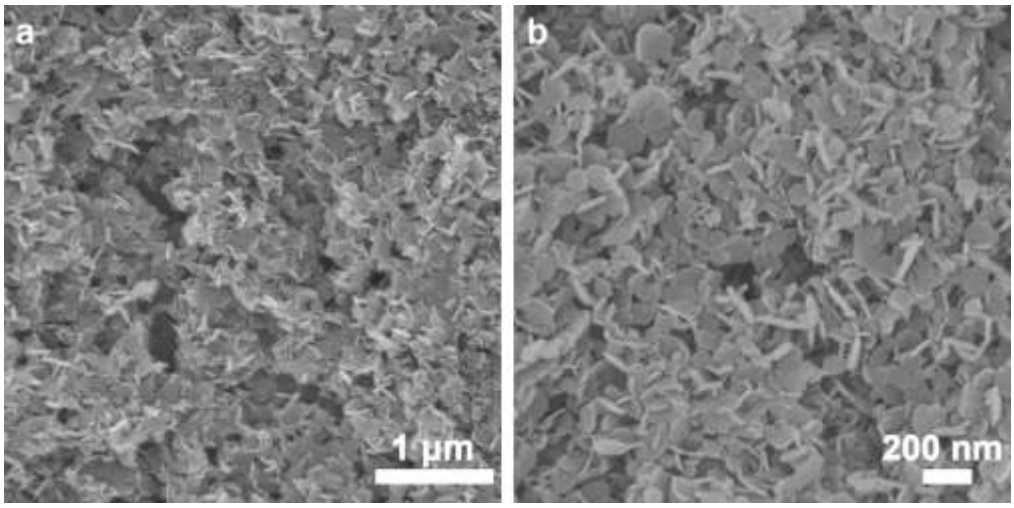

Figure S1. SEM images of MgAl-LDO@Al-MS nanocomposite with different magnifications.

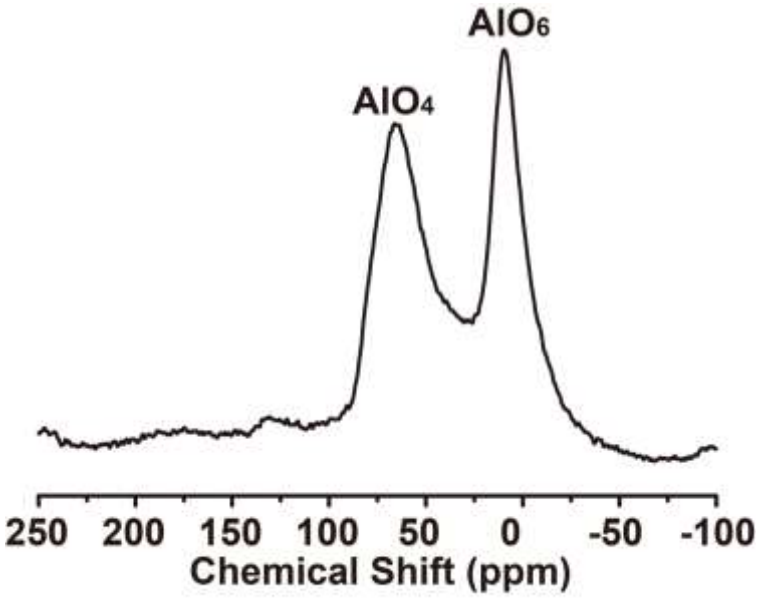

Figure S2. ^{27}Al MAS NMR spectrum of MgAl-LDO@Al-MS nanocomposite.

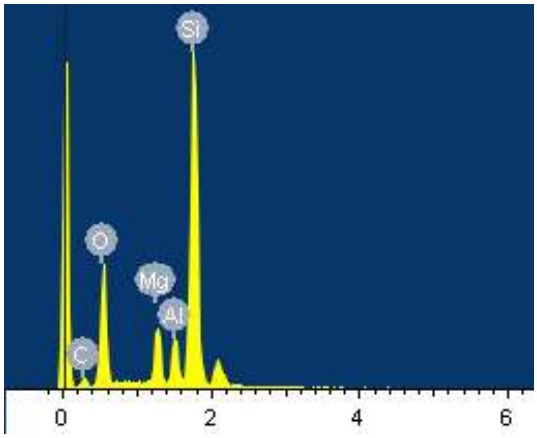

Figure S3. EDS spectrum of MgAl-LDO@Al-MS nanocomposite.

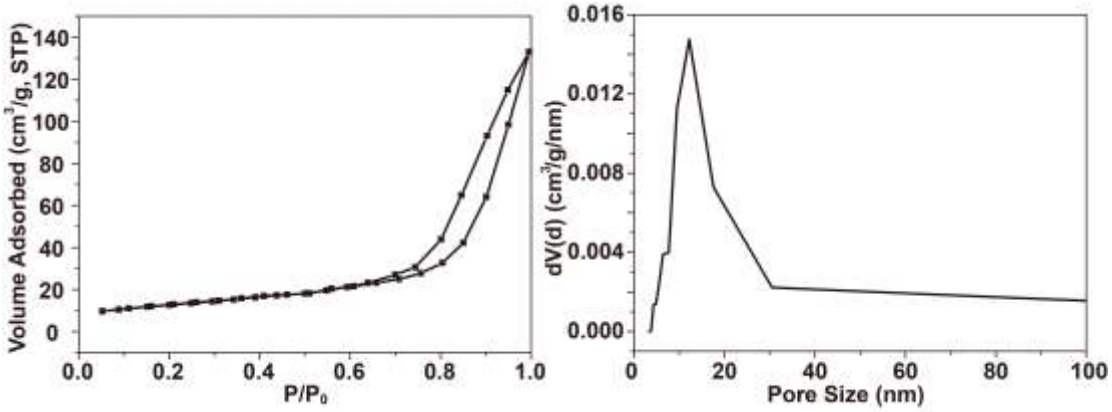

Figure S4. N_2 adsorption-desorption isotherm and the NLDFT pore size distribution curve of MgAl-LDH nanoplates.

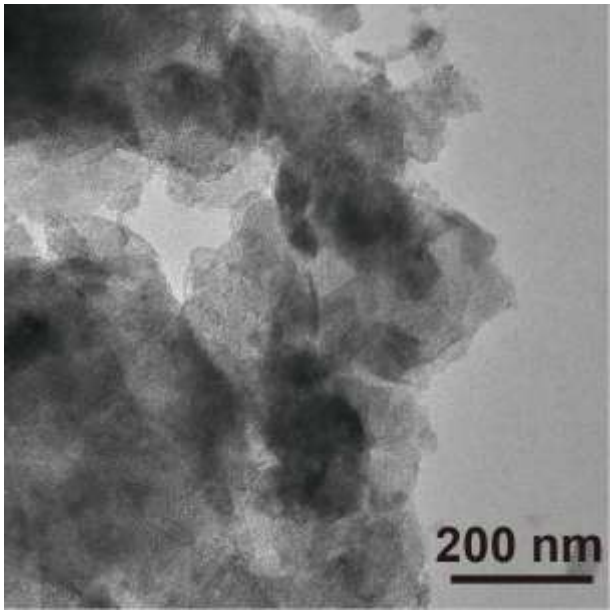

Figure S5. TEM image of MgAl-LDO nanoplates.

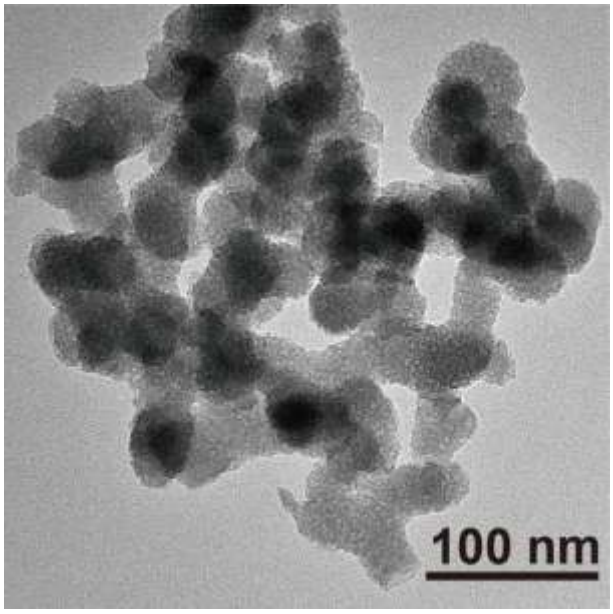

Figure S6. TEM image of Al-MS sample.

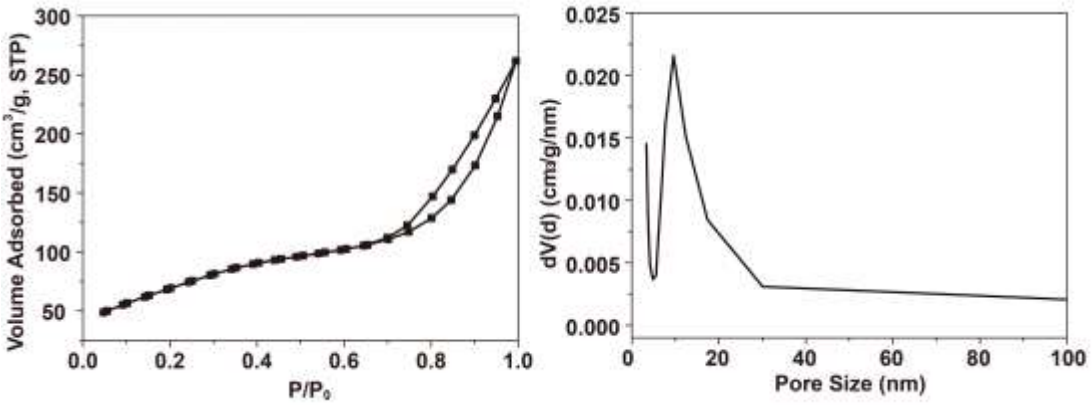

Figure S7. N_2 adsorption-desorption isotherm and the NLDFT pore size distribution curve of MgAl-LDO nanoplates.

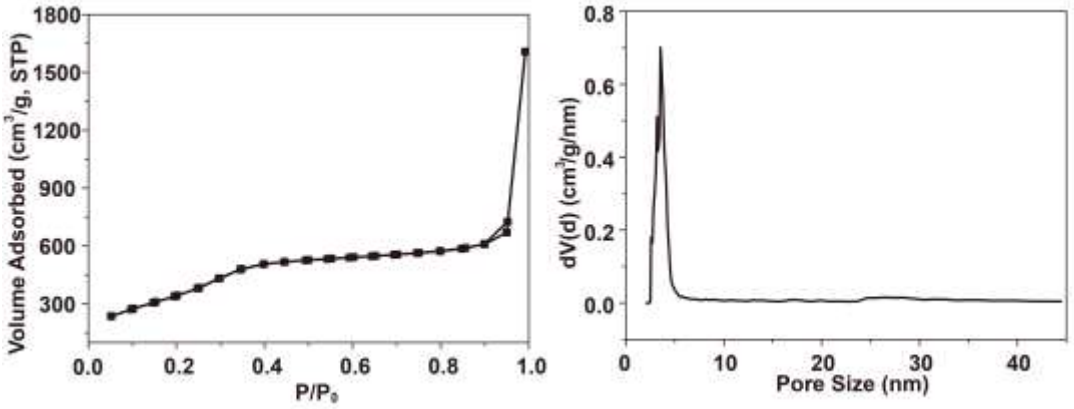

Figure S8. N_2 adsorption-desorption isotherm and the NLDFT pore size distribution curve of Al-MS sample.

Table S1. Physicochemical parameters of the control samples.

Sample	BET surface area (m^2/g)	Pore volume (cm^3/g)	NLDFT pore size (nm)
MgAl-LDH	45.7	0.21	12.2
MgAl-LDO	215.4	0.28	9.6
Al-MS	1378.7	1.06	2.9

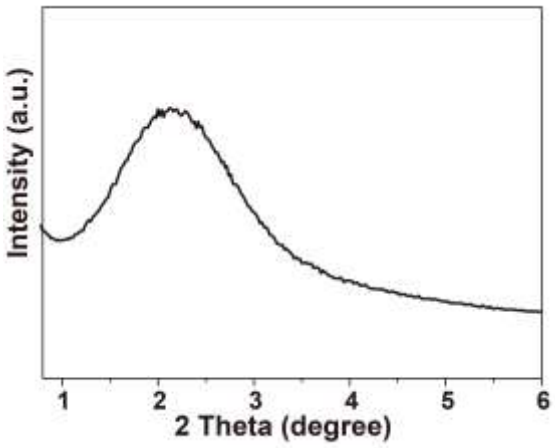

Figure S9. Small-angle XRD pattern of Al-MS sample.