Electronic Supplementary Material (ESI) for Dalton Transactions.

Supporting Information

Dual Emissions from MnS Clusters Confined in Sodalite Nanocage of Chalcogenide-Based Semiconductor Zeolite

Dandan Hu,[a] Yingying Zhang,[a] Jian Lin,[a] Yike Hou,[a] Dongsheng Li[b] and Tao Wu*[a]

[a] College of Chemistry, Chemical Engineering and Materials Science, Soochow University, Jiangsu 215123, China.

[b] College of Materials and Chemical Engineering, Hubei Provincial Collaborative Innovation Center for New Energy Microgrid, Key Laboratory of Inorganic Nonmetallic Crystalline and Energy Conversion Materials, China Three Gorges University, Yichang 443002, China.

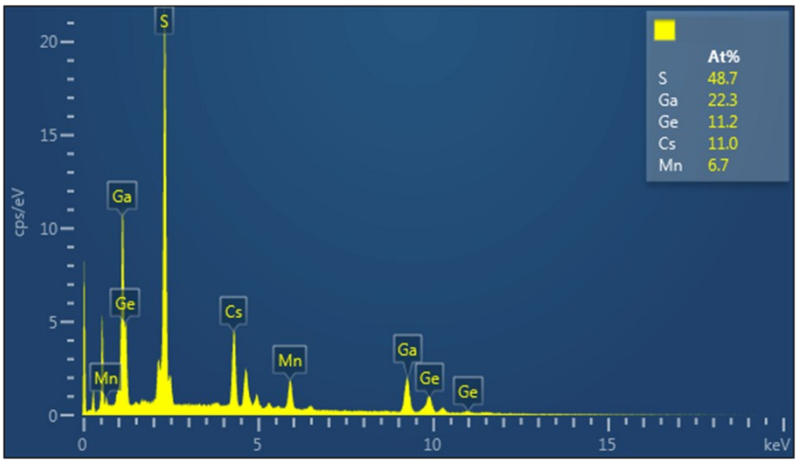

Fig. S1 EDS image and the corresponding element analysis of Mn^{2+}@ RWY.

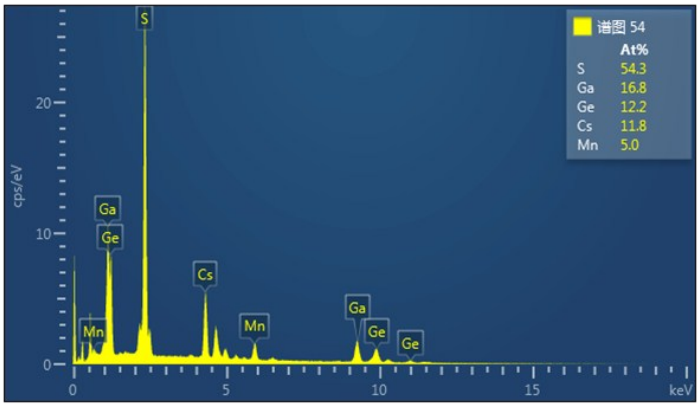

Fig. S2 EDS image and the corresponding element analysis of MnS@ RWY (0.01mol/L).

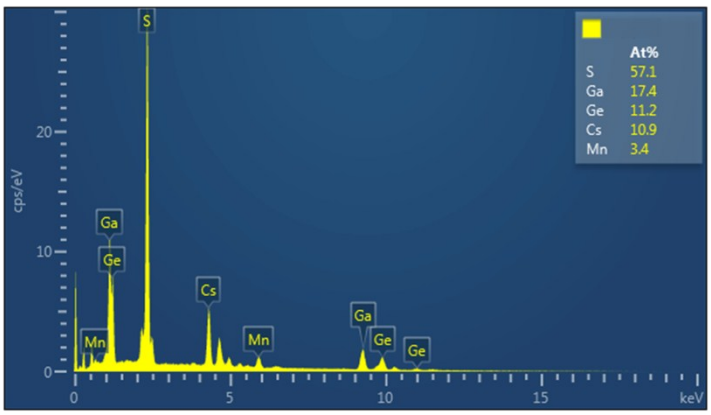

Fig. S3 EDS image and the corresponding element analysis of MnS@ RWY (0.1mol/L).

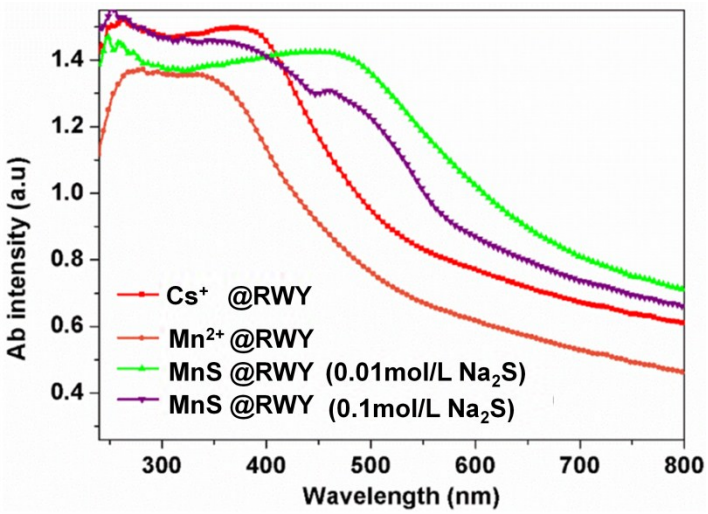

Fig. S4 Single-crystal UV-Vis absorption spectra of MnS@RWY with different loading level.

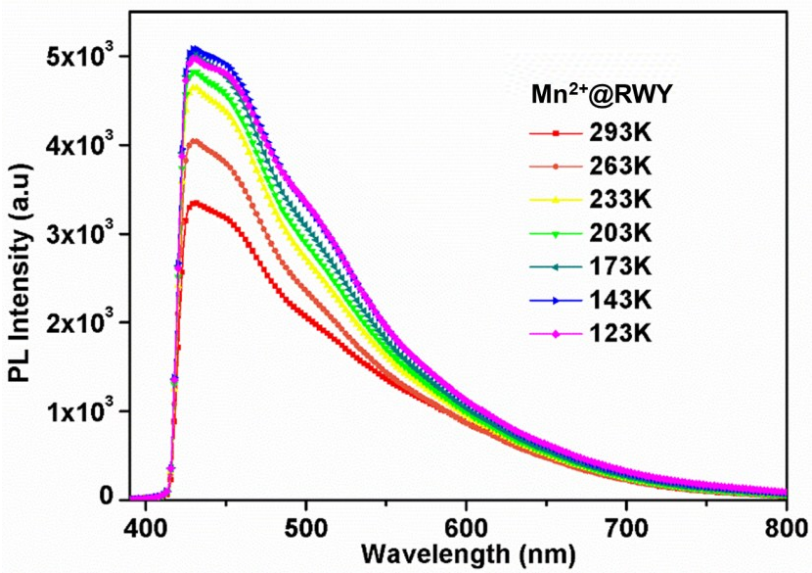

Fig. S5 Single-crystal PL spectra of Mn^{2+}@RWY measured at different temperature.

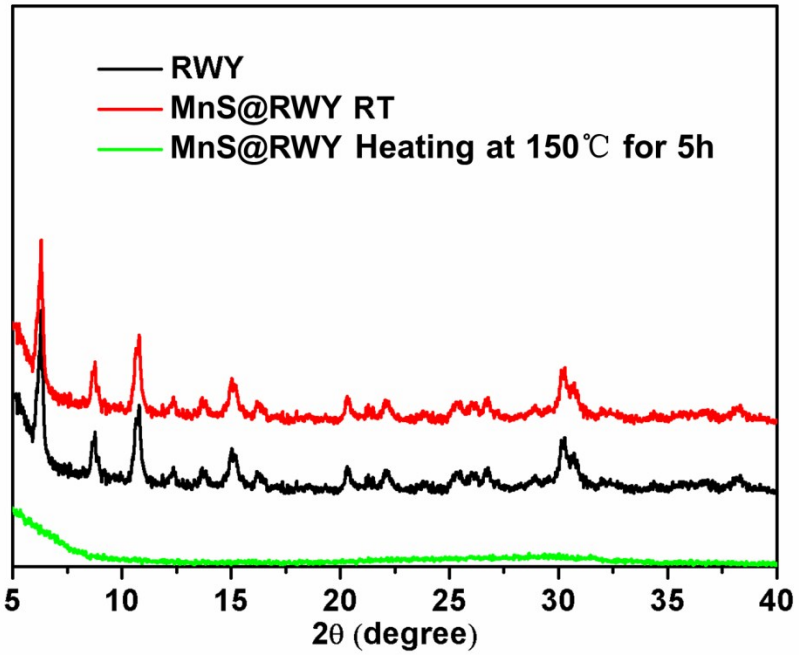

Fig. S6 Power X-ray diffraction (PXRD) patterns of Mn^{2+}@ RWY and MnS@ RWY measured at different temperature.

Table S1 EDS for Mn^{2+}-ion exchanged sample and reverse Cs^{+}-ion exchanged sample.

Sample	Element	**At%**	Sample	Element	At%
Mn^{2+}@ RWY (Mn^{2+}-ion exchange)	S	33.46	Mn^{2+}@ RWY (reverse Cs^{+}-ion exchange)	S	41.50
	Cs	5.08		Cs	13.48
	Mn	7.33		Mn	0.78
	Ga	28.79		Ga	24.81
	Ge	25.14		Ge	22.38