

Syntheses, crystal structures and magnetic properties of three new silver manganese(II) or manganese(III) mixed metal iodates

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Supporting Information

Table S1. Calculated bond valence sum (BVS) for $\text{AgMn}(\text{IO}_3)_3$, $\text{AgMn}(\text{IO}_3)_4$ and $\text{Ag}_3\text{Mn}(\text{IO}_3)_6$.

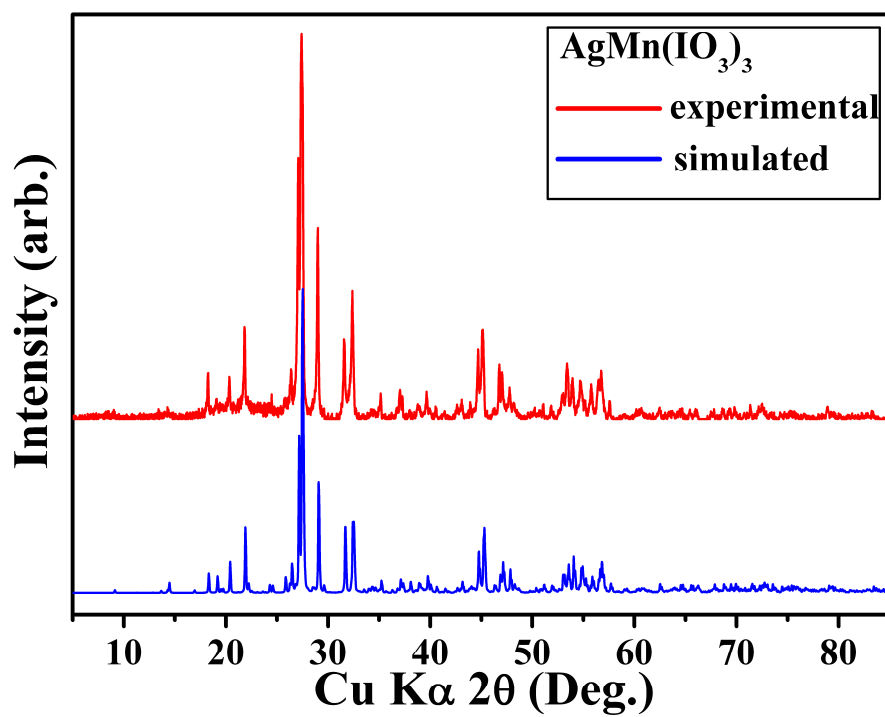
Figure S1. Experimental and simulated powder X-ray diffraction patterns for $\text{AgMn}(\text{IO}_3)_3$ (a) and $\text{AgMn}(\text{IO}_3)_4$ (b).

Figure S2. IR spectra for $\text{AgMn}(\text{IO}_3)_3$ (a) and $\text{AgMn}(\text{IO}_3)_4$ (b).

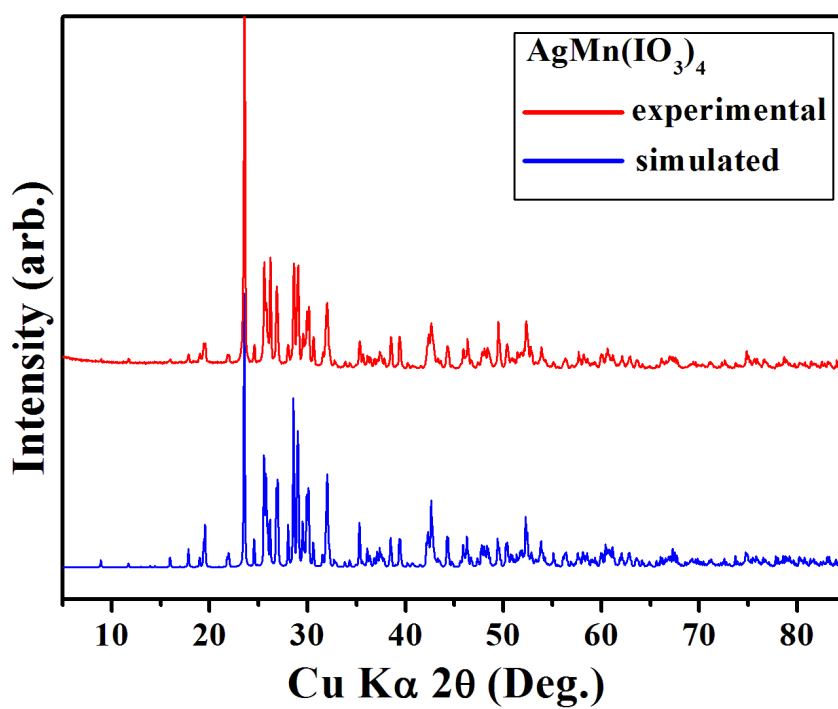
Figure S3. TGA and DSC curves for $\text{AgMn}(\text{IO}_3)_3$ (a) and $\text{AgMn}(\text{IO}_3)_4$ (b).

Table S1. Calculated bond valence sum (BVS) for $\text{AgMn}(\text{IO}_3)_3$, $\text{AgMn}(\text{IO}_3)_4$ and $\text{Ag}_3\text{Mn}(\text{IO}_3)_6$

Atom	BVS	Atom	BVS
$\text{AgMn}(\text{IO}_3)_3$			
Ag(1)	1.01	Ag(2)	1.03
Mn(1)	2.10	Mn(2)	2.10
I(1)	4.94	I(2)	4.89
I(3)	4.88	I(4)	4.94
I(5)	4.99	I(6)	5.09
$\text{AgMn}(\text{IO}_3)_4$			
Ag(1)	0.93	Mn(1)	3.19
I(1)	4.95	I(2)	4.87
I(3)	4.86	I(4)	4.95
$\text{Ag}_3\text{Mn}(\text{IO}_3)_6$			
Ag(1)	0.99	Ag(2)	0.88
Mn(1)	3.12	I(1)	4.95
I(2)	4.77	I(3)	4.79

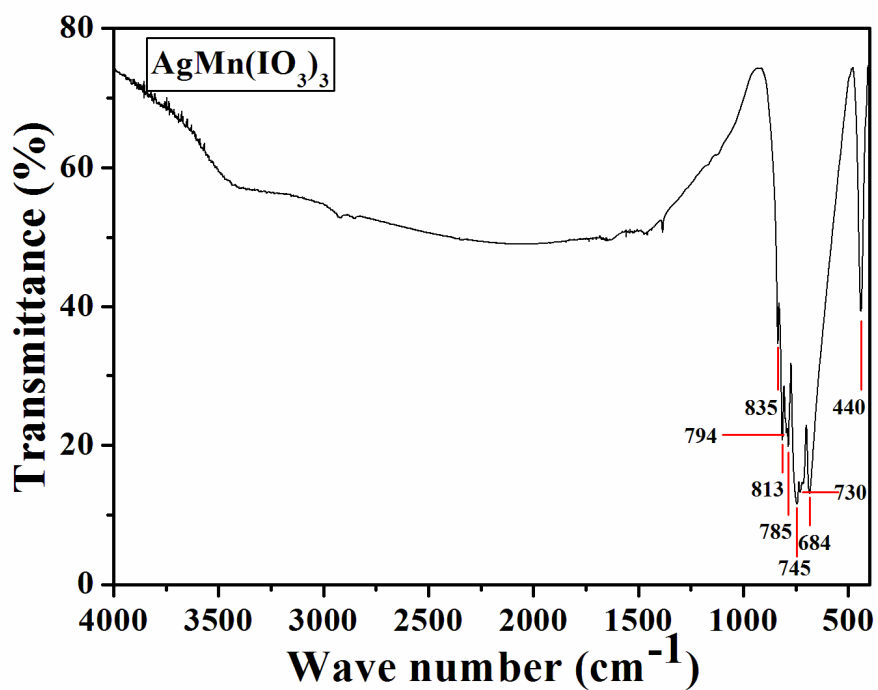


(a)

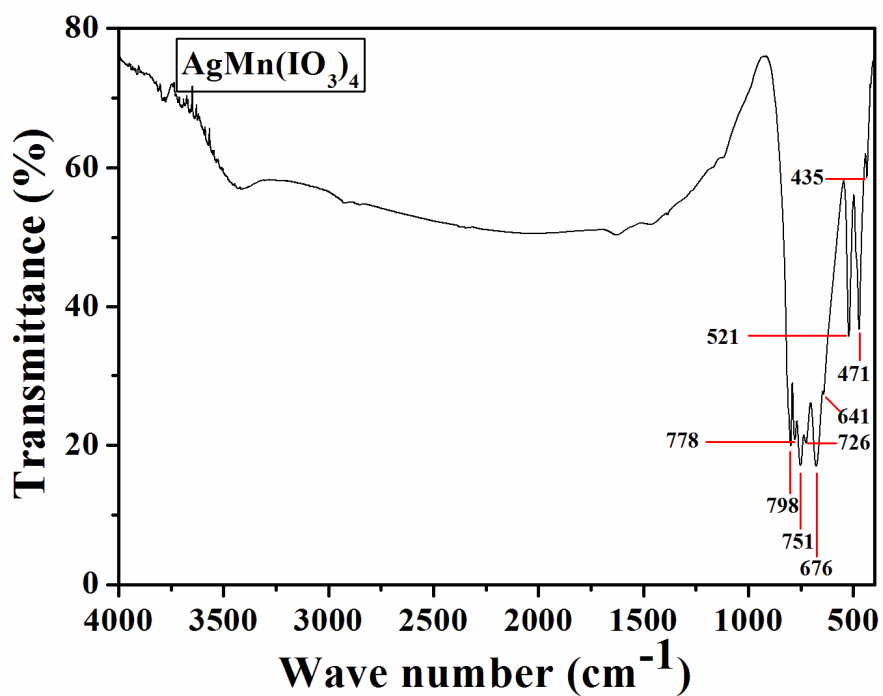


(b)

Figure S1. Experimental and simulated powder X-ray diffraction patterns for $\text{AgMn}(\text{IO}_3)_3$ (a) and $\text{AgMn}(\text{IO}_3)_4$ (b).

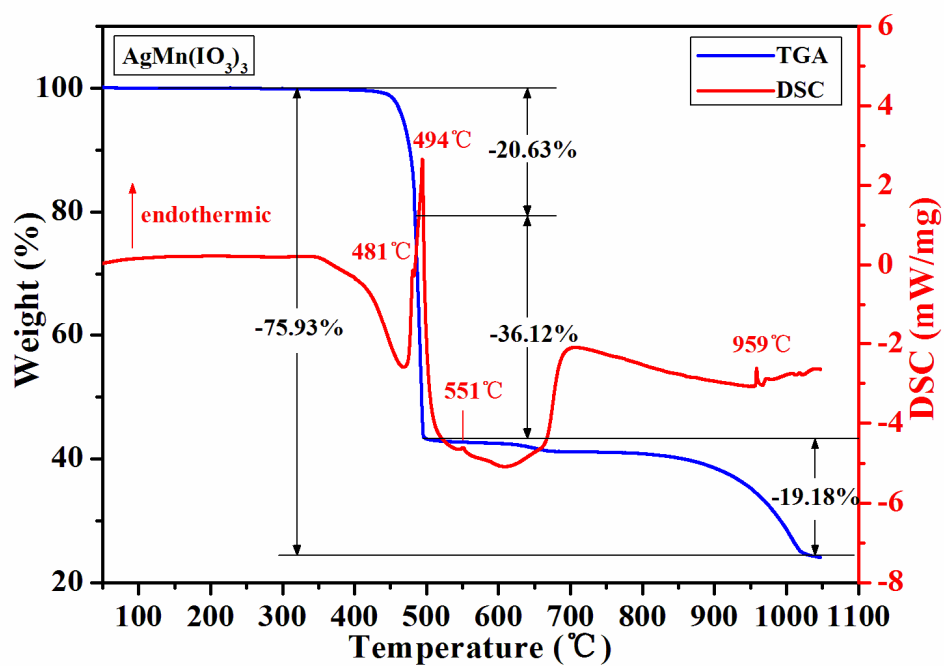


(a)

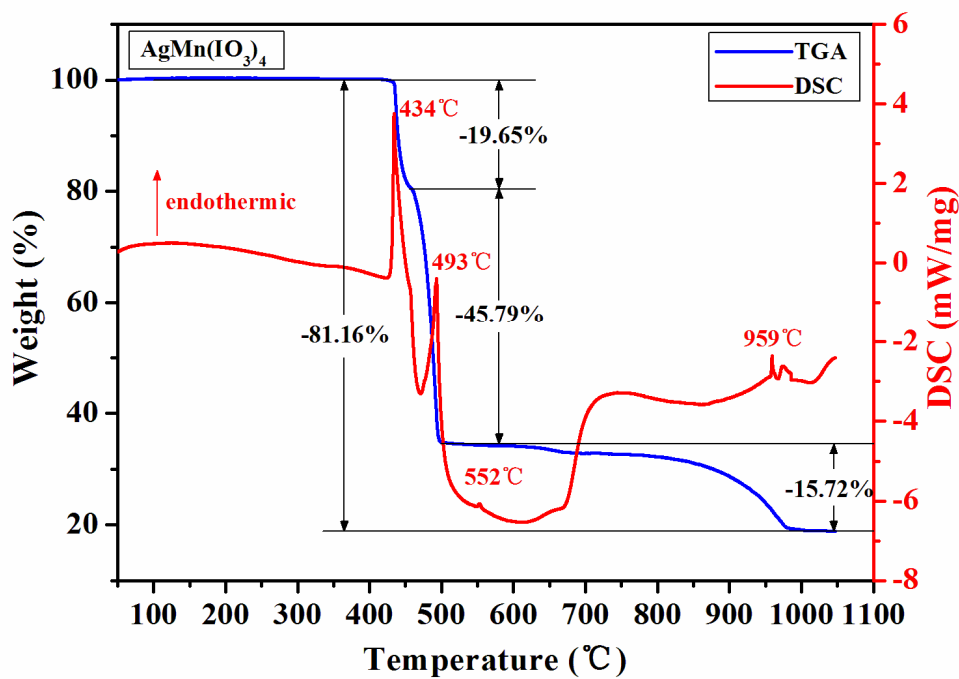


(b)

Figure S2. IR spectra for $\text{AgMn}(\text{IO}_3)_3$ (a) and $\text{AgMn}(\text{IO}_3)_4$ (b).



(a)



(b)

Figure S3. TGA and DSC curves for $\text{AgMn}(\text{IO}_3)_3$ (a) and $\text{AgMn}(\text{IO}_3)_4$ (b).