

## Structural characterization and magnetic properties determination of nanocrystalline $\text{Ba}_3\text{Fe}_2\text{WO}_9$ and $\text{Sr}_3\text{Fe}_2\text{WO}_9$ perovskites prepared by the modified aqueous sol-gel route

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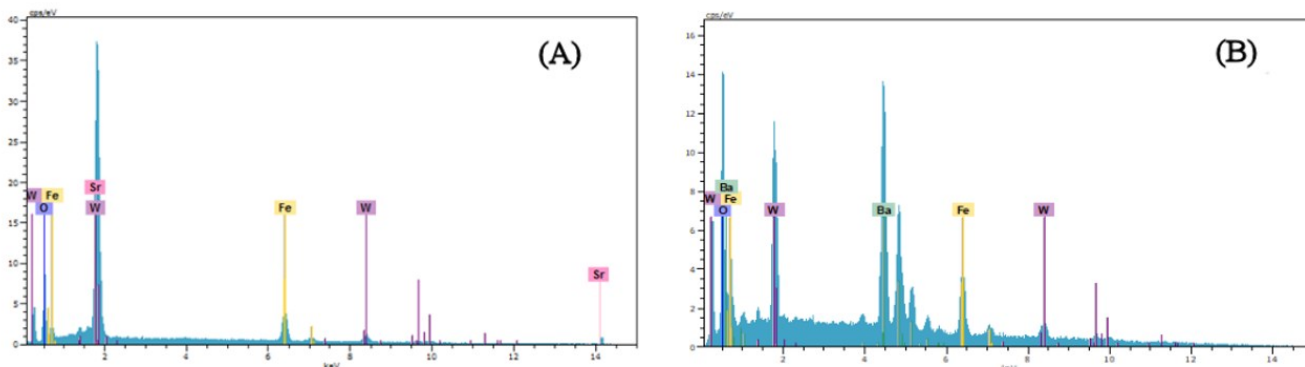


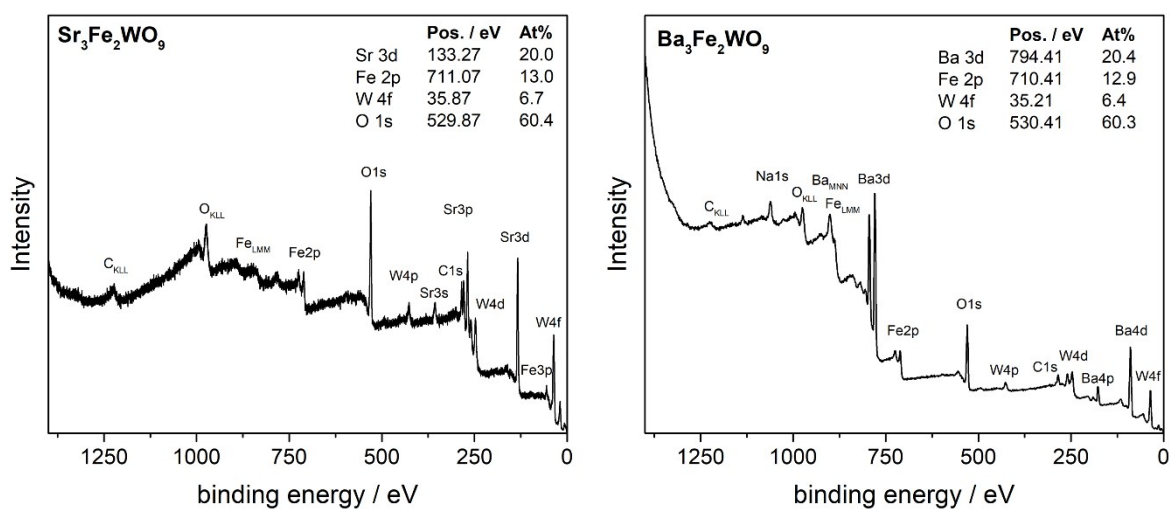
Figure S1. Typical EDX spectra for  $\text{Sr}_3\text{Fe}_2\text{WO}_9$  (a) and  $\text{Ba}_3\text{Fe}_2\text{WO}_9$  (b).

**Table S1.** EDX analysis data for  $\text{Sr}_3\text{Fe}_2\text{WO}_9$ .

ELEMENT	SERIES	Unnormalised concentration /wt. %	Normalised concentration /wt. %	Atomic concentration /at. %	Error (1 sigma) /wt. %
O	K	11.02	13.81	54.25	1.58
Fe	K	16.12	15.28	18.01	0.53
Sr	L	43.65	50.76	20.04	1.51
W	L	21.01	20.15	7.34	0.98

**Table S2.** EDX analysis data for  $\text{Ba}_3\text{Fe}_2\text{WO}_9$ .

ELEMENT	SERIES	Unnormalised concentration /wt. %	Normalised concentration /wt. %	Atomic concentration /at. %	Error (1 sigma) /wt. %
O	K	11.68	12.61	51.25	1.60
Fe	K	12.85	13.88	16.16	0.43
Ba	L	50.90	54.96	26.03	1.51
W	L	17.18	18.55	6.53	0.72



**Figure S2.** XPS spectra for  $\text{Sr}_3\text{Fe}_2\text{WO}_9$  (left) and  $\text{Ba}_3\text{Fe}_2\text{WO}_9$  (right). The samples were calibrated using the C 1s line of adventitious hydrocarbon.