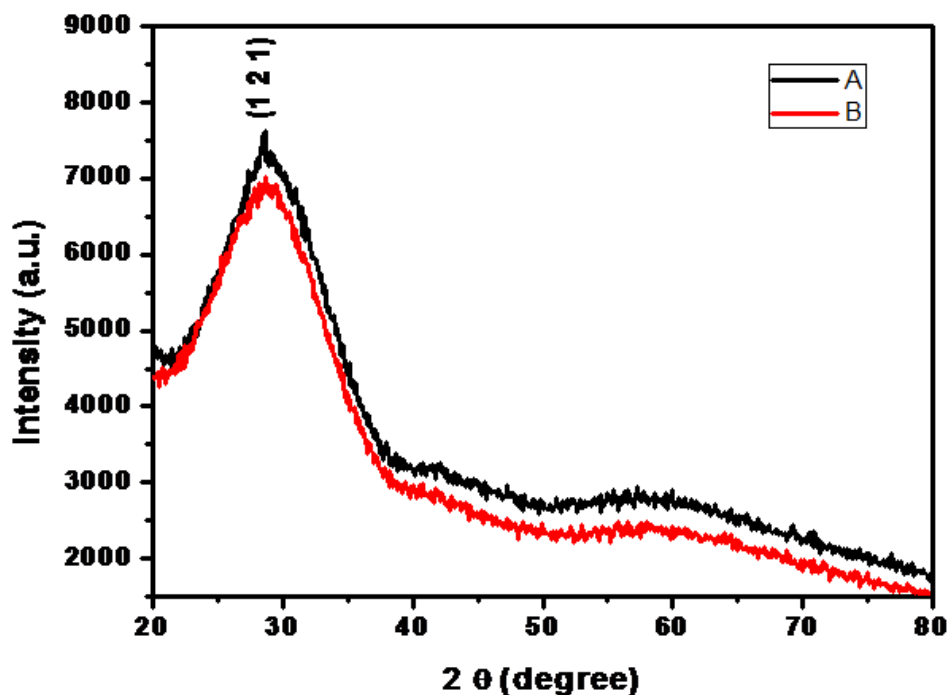


SI: XRD of (A) $\text{Bi}_{1.8}\text{Mn}_{0.2}\text{S}_3$ and (B) $\text{Bi}_{1.6}\text{Mn}_{0.4}\text{S}_3$ in glass matrix.

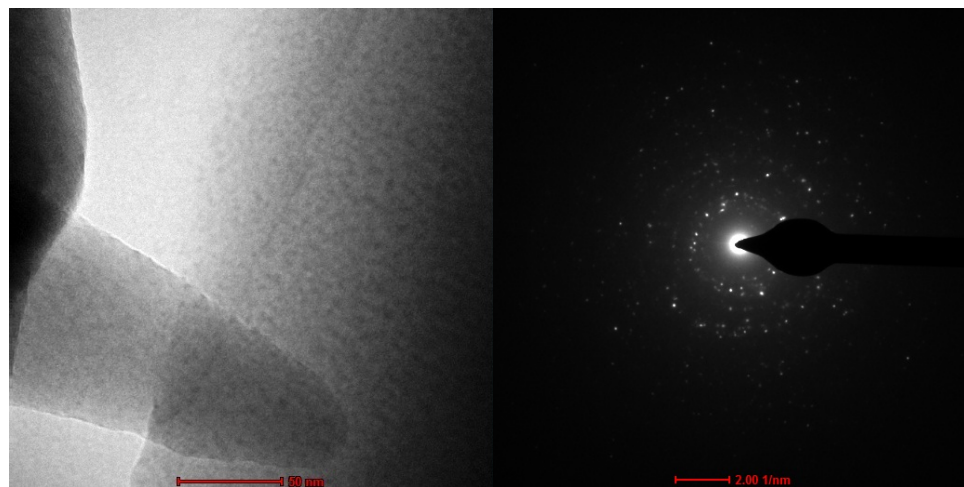


SII: d value calculations from Electron Diffraction (ED) pattern

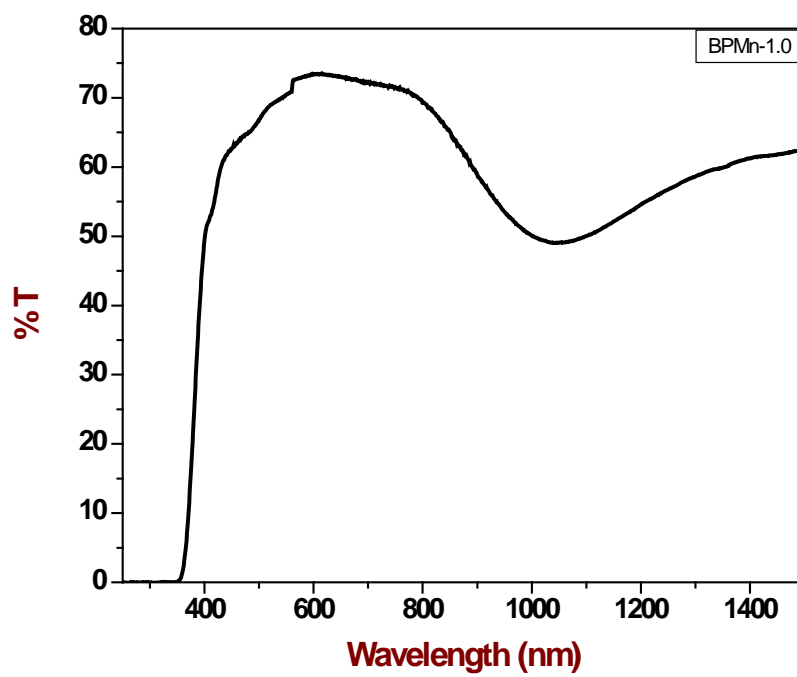
A: Bi_2S_3 quantum dots

Ring No.	d (Exp.) (\AA)	d from JCPDS data 84-0279 (\AA)	Δd	Corresponding (h k l) indices
1	3.697	3.749	0.052	1 1 0
2	3.195	3.255	0.060	1 0 3
3	2.232	3.238	0.006	0 4 3
4	1.912	1.919	0.007	0 5 3
5	1.836	1.838	0.002	1 5 2
6	1.445	1.445	0.000	1 6 4
7	1.294	1.295	0.001	1 2 8
8	1.074	1.094	0.020	3 3 8

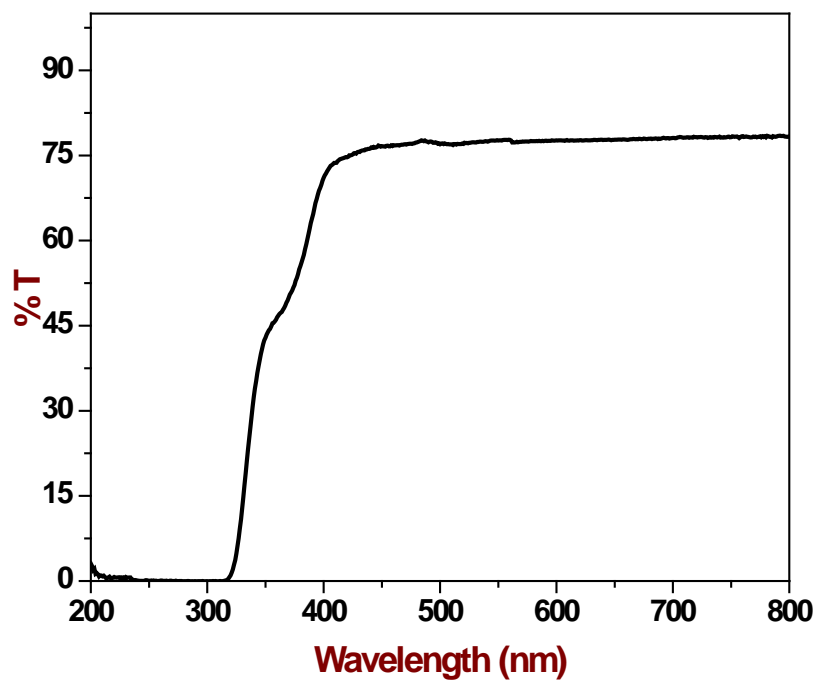
SIII: TEM of $\text{Bi}_{1.6}\text{Mn}_{0.4}\text{S}_3$ heat treated at 530°C for 4 hr



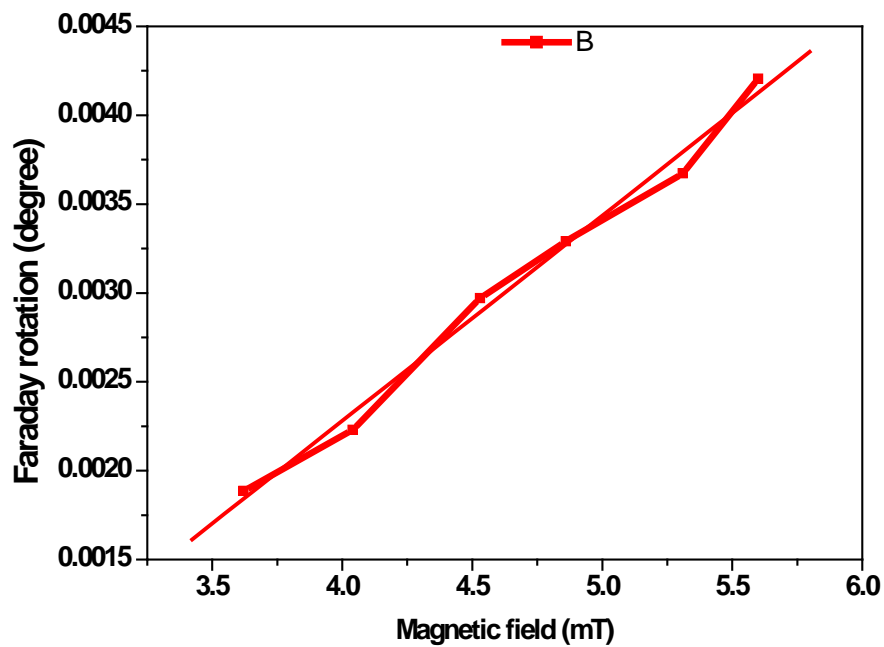
SIV: Transmission spectrum of 2 mole % Mn in glass matrix.



SV: Transmission spectrum of Host glass



SVI: Magneto optical Faraday rotation in 2 mole % Mn in glass matrix.



SVII: Faraday rotation measurement of host glass

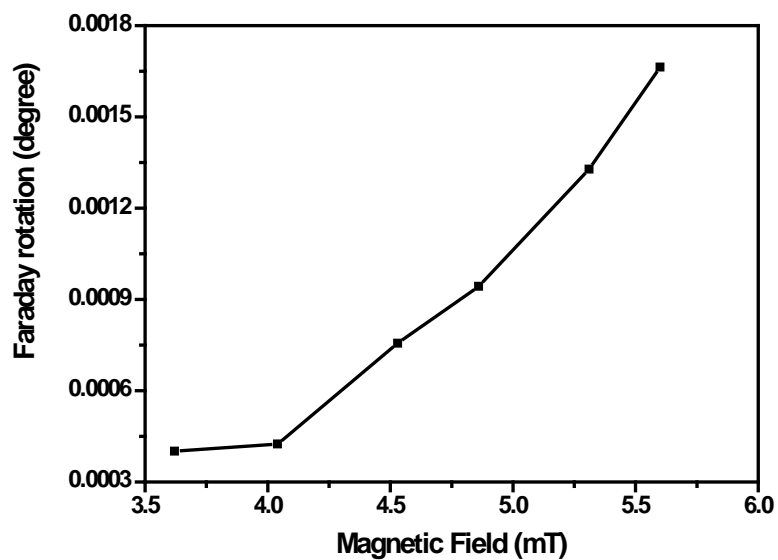


Table SI. Faraday rotations in host glass and Mn doped glass.

Glass	Verdet constant (Degree/T-cm)
Host	1.10
Mn doped glass	5.51