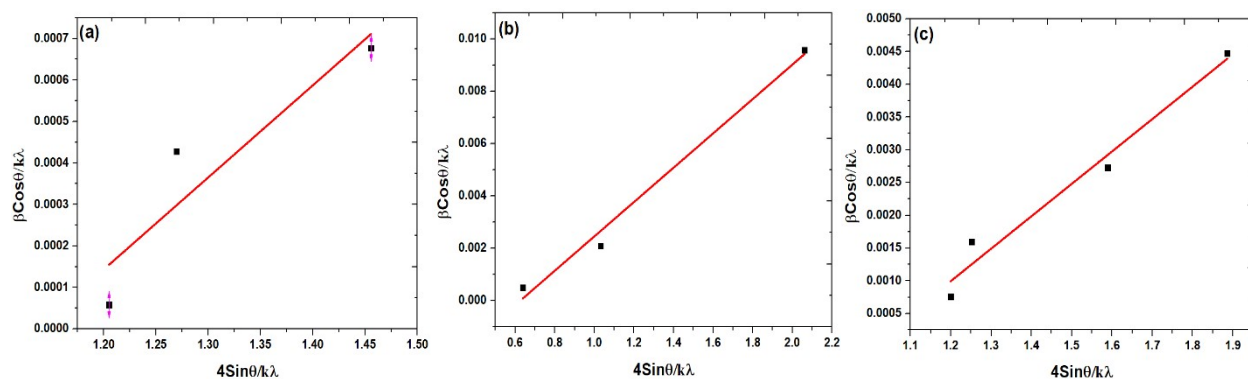
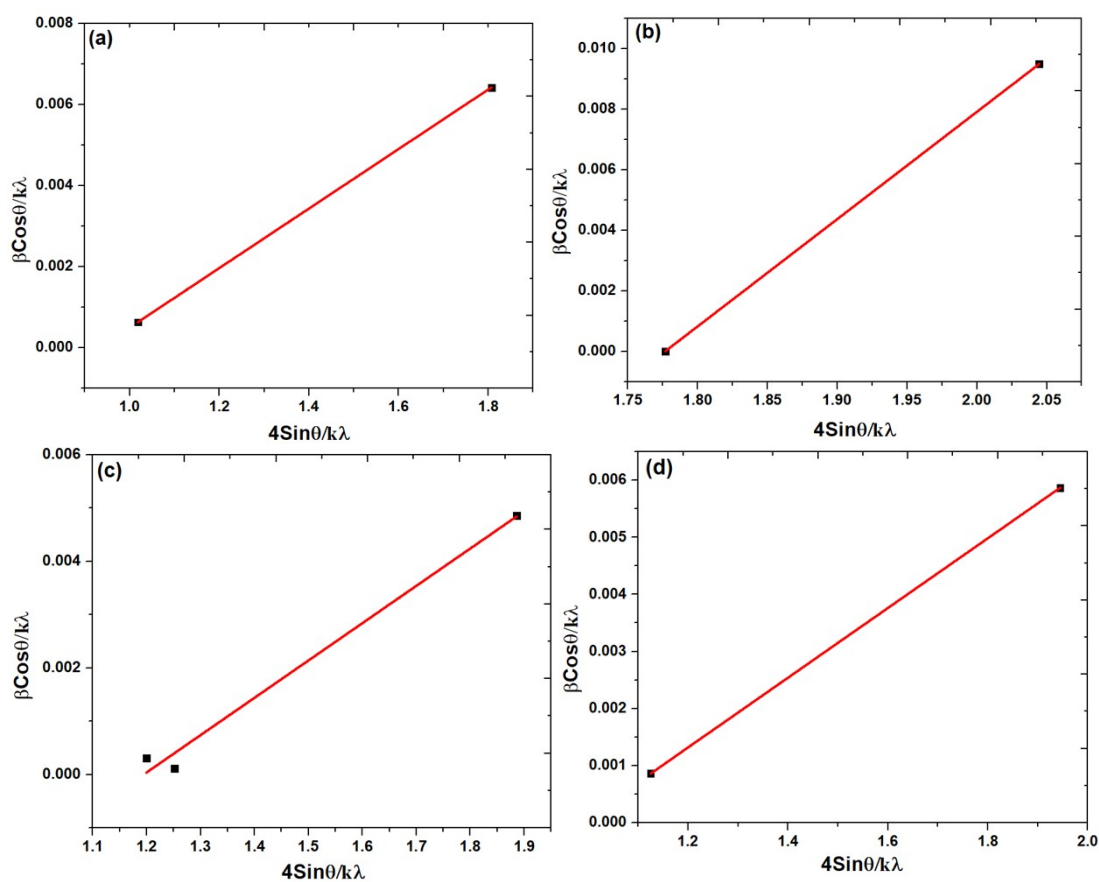


Supplementary data



S1: W-H plots of ZSF counterparts Fe_3O_4 (a), SnO_2 (b) and ZnO (c)



S2: W-H plots of ZSF counterparts Fe_3O_4 (a), SnO_2 (b), ZnO (c) and GO (d)

S3:

Samples	Counterparts	crystalline size (nm)	Microstrain(ϵ) (10^{-3})	dislocation density (ρ) (nm^{-2})
ZSF	Fe_3O_4	57.93	2.2	0.000298
	SnO_2	35.33	6.6	0.000802
	ZnO	29.56	4.9	0.001145
rGO-ZSF	GO	24.10	6.11	0.001722
	Fe_3O_4	21.15	7.35	0.0002237
	SnO_2	15.25	35.42	0.004303
	ZnO	17.31	7.0	0.003341

Crystallite size, Microstrain and dislocation density of the ZSF and rGO-ZSF