

*Electronic Supplementary Information (ESI)*

**Nonlinear transmittance and optical power limiting in Magnesium ferrite**

**nanoparticles: effects of laser pulsewidth and particle size**

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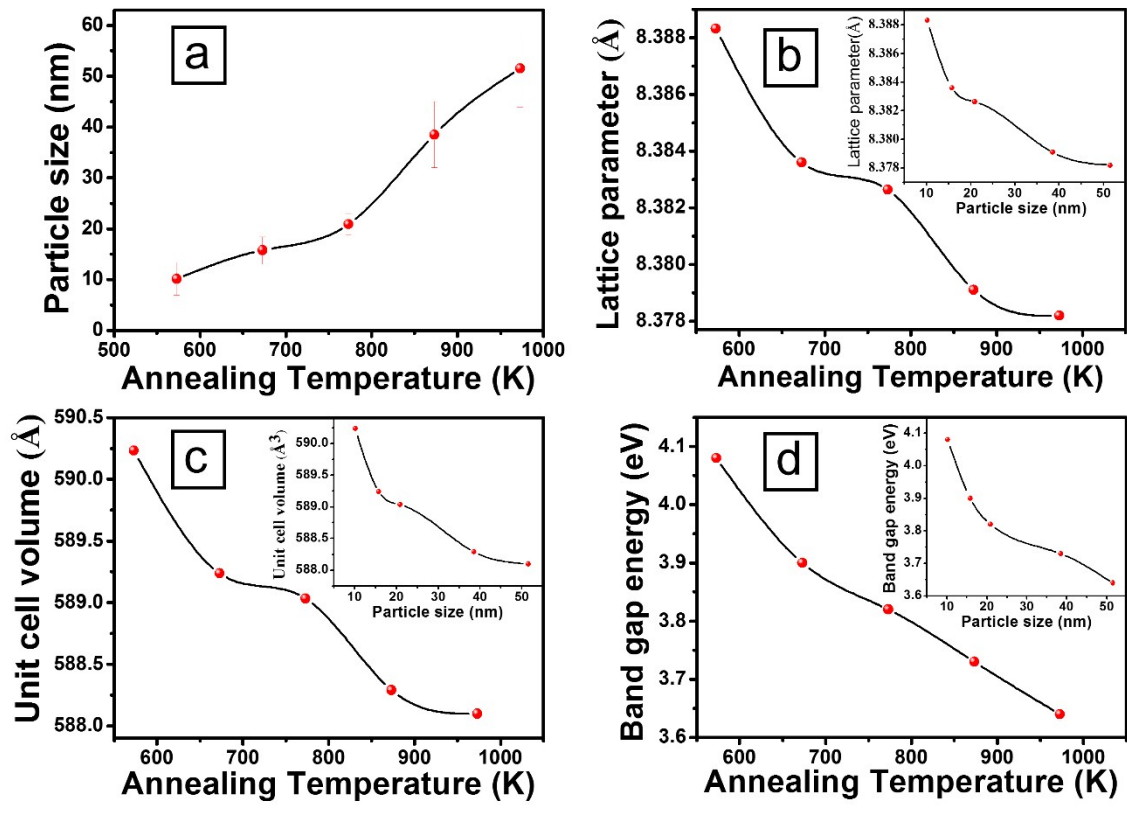
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**Fig. S1** (a) Plot showing the variation of average particle size (calculated from the dominant XRD peaks using Debye-Scherer equation) as a function of annealing temperature. (b) Plot showing the decrease in lattice size as a function of annealing temperature and particle size (inset). (c) Plot showing the decrease in unit cell volume as a function of annealing temperature and particle size (inset). (d) Plot showing the decrease in band gap energy (calculated using Tauc relation) as a function of annealing temperature and particle size (inset).