

LIST OF FIGURES

- 1.1 Crystal structure of spinel ferrite
a) Tetrahedral A site, b) Octahedral B site
- 1.2 Temperature dependence of permeability
- 2.2 Flow chart of ferrite preparation
- 2.3 XRD charts for $\text{Ni}_{0.6-x}\text{Co}_x\text{Zn}_{0.4}\text{Fe}_2\text{O}_4$
to
2.6 compositions.
- 2.7 Variation of lattice parameter with content of Co^{2+}
- 3.1 Magnetization curve & Hysteresis loop
- 3.2 Variation of η_B with Co^{2+} content
- 3.3 Variation of $4\pi M_s$ with Co^{2+} content
- 3.4 Variation of χ_t / χ_{rt} with temperature of all the compositions
- 3.5 Variation of μ_i with temperature for all the compositions
to
3.6
- 3.7 Variation of μ_i with Co^{2+} content at room temperature
- 4.1 Microstructure photographs of $\text{Ni}_{0.6-x}\text{Co}_x\text{Zn}_{0.4}\text{Fe}_2\text{O}_4$
to
4.3 $x = 0$ to 0.02