

## LIST OF TABLES

TABLE NO.	CONTENTS	PAGE NO.
2.1	Lattice parameter and crystal structure data for $\text{ZnFe}_2\text{O}_4$	44
2.2	Lattice parameter and crystal structure data for $\text{Mg}_{0.2}\text{Zn}_{0.8}\text{Fe}_2\text{O}_4$	45
2.3	Lattice parameter and crystal structure data for $\text{Mg}_{0.42}\text{Zn}_{0.6}\text{Fe}_2\text{O}_4$	46
2.4	Lattice parameter and crystal structure data for $\text{Mg}_{0.6}\text{Zn}_{0.4}\text{Fe}_2\text{O}_4$	47
2.5	Lattice parameter and crystal structure data for $\text{Mg}_{0.8}\text{Zn}_{0.2}\text{Fe}_2\text{O}_4$	48
2.6	Lattice parameter and crystal structure data for $\text{MgFe}_2\text{O}_4$	49
2.7	Physical and X-ray density data for samples sintered at $1100^\circ\text{C}$ for 15 hours	50
2.8	Physical and X-ray density data for samples sintered at $1100^\circ\text{C}$ for 30 hours	51
2.9	Average bond length data for sample sintered at $1100^\circ\text{C}$	56

3.1	Values of $E$ and Curie Temperatures for $Mg_xZn_{(1-x)}Fe_2O_4$ ferrites sintered 1100° C for 15 and 30 hours	86
4.1	Magnetization data for samples sintered at 1100° C for 15 hours	124
4.2	Magnetization data for samples sintered at 1100° C for 30 hours	125
4.3	IR absorption data for samples sintered at 1100° C for 30 hours	142