LIST OF TABLES

Table	No. Table Caption	Page No.
1.1	Lanthanides and their luminescence colors.	10
3.1	Summary of lattice parameters obtained through ICDD card and Rietveld	
	refinement.	40
3.2	The crystallite size of Sr ₂ YNbO ₆ phosphors calculated using D-S and W-H	[
	methods.	43
3.3	PL intensities of various excitation and emission peaks of 1 mol% Eu ³⁺ do	ped
	Sr ₂ YNbO ₆ phosphor.	48
3.4	PL intensities of various excitation and emission peaks of 2 mol% Eu ³⁺ do	ped
	Sr ₂ YNbO ₆ phosphor.	50
3.5	PL intensities of various excitation and emission peaks of 3 mol% Eu ³⁺ do	ped
	Sr ₂ YNbO ₆ phosphor.	50
3.6	PL intensities of various excitation and emission peaks of 4 mol% Eu ³⁺ do	ped
	Sr ₂ YNbO ₆ phosphor.	50
3.7	PL intensities of various excitation and emission peaks of 5 mol% Eu ³⁺ do	ped
	Sr ₂ YNbO ₆ phosphor.	51
3.8	CIE color coordinates determined parameters.	61
3.9	TL peak temperature and their respective TL intensity counts after 10 Gy b	eta
	irradiation.	65
3.10	Summary of TL kinetic parameters calculated by PSM.	70
3.11	Summary of TL kinetic parameters calculated by GCD method.	71
4.1	Summary of lattice parameters obtained through Rietveld refinement.	81
4.2	The crystallite size of Sr ₂ YVO ₆ phosphors calculated using D-S and W-H	
	methods.	84
4.3	PL intensities of various excitation and emission peaks of 1 mol% $\mathrm{Eu^{3+}}$ do	ped
	Sr ₂ YVO ₆ phosphor.	90
4.4	PL intensities of various excitation and emission peaks of 2 mol% Eu^{3+} do	ped
	Sr ₂ YVO ₆ phosphor.	92
4.5	PL intensities of various excitation and emission peaks of 3 mol% Eu ³⁺ do	ped
	Sr ₂ YVO ₆ phosphor.	92

4.6	PL intensities of various excitation and emission peaks of 4 mol% Eu ³⁺ doped		
	Sr ₂ YVO ₆ phosphor.	93	
4.7	PL intensities of various excitation and emission peaks of 5 mol% Eu ³⁺ doped		
	Sr ₂ YVO ₆ phosphor.	93	
4.8	CIE color coordinates determined parameters.	100	
4.9	Summary of TL kinetic parameters calculated by PSM.	107	
4.10	Summary of TL kinetic parameters calculated by GCD method.	108	
4.11	Summary of TL kinetic parameters of Sr ₂ YVO ₆ phosphors irradiated by		
	UV-radiation for 40 min calculated by PSM.	113	
5.1	Refined parameters of undoped Ca ₃ WO ₆ .	123	
5.2	Estimated crystallite size of the studied samples using two different methods.	125	
5.3	Summary of CIE color coordinates and color purity of Ca ₃ WO ₆ :Tb ³⁺ phosphors.	133	
5.4	Summary of trapping parameters calculated using Chen's peak shape method.	139	
5.5	Summary of TL kinetic parameters calculated by GCD method.	139	
5.6	Estimated crystallite size of the studied samples using two different methods.	142	
5.7	CIE color coordinates determined parameters.	155	
5.8	Summary of TL kinetic parameters calculated by PSM.	163	
5.9	Summary of TL kinetic parameters calculated by GCD.	163	