TABLE OF CONTENTS

Page

LIST OF TABLES

Table **Page**

LIST OF FIGURES

Figure **Page**

ABBREVIATIONS AND SYMBOLS

ASTM.	American society for testing materials
a.u.	arbitrary unit
BSE	back scattered electron
DSC	differential scanning calorimetry
DTA	differential thermal analysis
EDX	energy dispersive X-ray spectrometry
eV	electron volt
F/m	farad per meter
FWHM	the full width at half maximum
g	gram
g/cm^3	gram per cubic centimeter
h	hour
HT	heat treatment
JCPDS	Joint Committee for Powder Diffraction Standards
K	Kelvin
kHz	kilohertz
K/min	Kelvin per minute
kV	kilovolt
mA	milliampere
mg	milligram

MHz	megahertz
min	minute
mm	millimeter
mol%	percent molar
mW	milliwatt
NLO	nonlinear optical coefficients
nm	nanometer
OD	optical density
pm/V	picometer per volt
SEM	scanning electron microscopy
TEM	transmission electron microscopy
TGA	thermogravimetric analysis
T_c	the Curie temperature
T_{Cr}	crystallization temperature
T_F	fictive temperature
T_g	glass transition temperature
T_m	melting temperature
T_n	nucleation temperature
UV-Vis-NIR	ultraviolet-visible-near infrared spectrophotometry
V	volt
wt%	percent weight
XRD	X-ray Diffraction
Å	angstrom

°C	degree Celsius
°C/min	degree Celsius per minute
µm	micrometer
%	percent
θ	theta
3D	three dimensions