

Table of Contents

Preface, Organizing Committee and Sponsors

Synthesis and Characterization of Nano Particles of Mn-Co Ferrites for Technological Applications

M. Anis-ur-Rehman, M. Zeb-un-Nisa, M. Ansari and A. Maqsood 1

Optical Properties of ZnO Nanowires Decorated with Au Nanoparticles

M. Sakurai, K.W. Liu, R. Ceolato and M. Aono 7

Fabrication and Piezoelectric Property of Textured Bismuth Layered Structure Ceramics by Hot Pressing Technique

H.B. Chen, J.B. Xu and J.W. Zhai 11

Novel Compact Interdigital Bandpass Filters with Multilayer Stepped Impedance Resonators/Folded Quarter-Wavelength Resonators

J.M. Wu, T. Bai, W.Z. Lu, F. Liang and B. Luo 19

Structural, Electrical and Magnetic Properties of Microwave Processed $\text{Ni}_{0.80}\text{Zn}_{0.20}\text{Fe}_2\text{O}_4$

R. Rani, S. Singh, K.K. Raina and C. Prakash 25

Aluminum-Induced Crystallization of p^+ Silicon Pinholes for the Formation of Rear Passivation Contact in Solar Cell

T. Fangsuwannarak, K. Amonsurintawong and S. Sopitpan 31

Structural, Dielectric and Electrical Studies of $\text{Ba}_4\text{CaRTi}_3\text{Nb}_7\text{O}_{30}$ (R = Eu, Dy) Ferroelectric System

P. Ganguly, A.M. Biradar and A.K. Jha 41

The Microwave Dielectric Materials of $(\text{Zn}_{1-x}\text{Mg}_x)\text{TiNb}_2\text{O}_8$ for Electroceramics Devices Applications

C.L. Huang, S.H. Huang and R.Z. Lee 49

Effect of Temperature of Synthesis on X-Ray, Infrared Spectroscopic Study and Magnetic Properties of Magnesium Zinc Ferrites

S.S. Khot, N.S. Shinde, B.P. Ladgaonkar, B.B. Kale and S.C. Watawe 57

Structural and Magnetic Characterizations of 200 MeV Ag^{15+} Irradiated $\text{Bi}_x\text{Co}_{2-x}\text{MnO}_4$ Thin Films

N.E. Rajeevan, R. Kumar, D.K. Shukla, P. Thakur and P.P. Pradyumnan 71

Structural Phase Transformation in SiC and PtC under Pressure

S. Singh, V. Abdul Shukoor and M. Faisal Shareef 79

Complex Impedance Spectroscopy of $\text{Ba}_{0.8}\text{Pb}_{0.2}\text{TiO}_3$ Synthesized by Mechano Chemical Activation

S. Singh, P. Kumar, C. Prakash and J.K. Juneja 83

Thermal Expansion and Specific Heat of Solid Oxide Fuel Cell Material $\text{Bi}_{1-x}\text{Sr}_x\text{MnO}_3$ in Orthorhombic Perovskite Phase

A. Srivastava and N.K. Gaur 91

Effect of Rare Earth Oxides on the Temperature Characteristics of BaTiO_3 -Based Ceramics

B. Tang, S.R. Zhang, J. Liang, Z. Liu and W.C. Hu 95

Influence of Zr/Sn Ratio Electric Properties of PLZST Ceramic

J.F. Wang, T.Q. Yang, K. Wei, G. Li and Y.X. Li 101

Thermal Expansion and Polarization Behavior in Lead Titanate/Zinc Oxide Nanocomposite Ceramics

R. Wongmaneeerung, A. Ngamjarrojana, R. Yimnirun and S. Ananta 107

The Charge-Discharge Properties of the Non-Linear Dielectric Capacitor

Y.X. Yan and Y.J. Feng 115

The High DC Electric Field Effects on the Dielectric Behavior of Barium Strontium Titanate Ceramics

Q.W. Zhang, J.W. Zhai and X. Yao 125

Production of BaTiO_2 Nanocrystalline Powders by High Energy Milling and Piezoelectric Properties of Corresponding Ceramics

K. Chandramani Singh and C. Jiten 133

Effect of Strain on Barium Titanate Epitaxial Films

L.H. Ong, A.M. Alrub and K.H. Chew 139

Boron Doping Effects on the Structural and Optical Properties of Sol-Gel Transparent ZnO Films	
S.T. Rattanachan, P. Krongarrom and T. Fangsuwannarak	145
Effect of Donor Dope Ions, Compaction Pressures and Sintering Temperatures on PTCR and Dielectric Properties of BaTiO₃	
S. Srilomsak and N. Meethong	153
Properties of Optical Quantum Transition of GaN and CdS In Electron Deformation Potential Phonon Interacting Qusi-Two Dimensional System under Two Circularly Oscillating Fields	
S.H. Lee, J.Y. Sug and J.H. Park	165
Structural and Magnetic Studies of Zn Doped LaRh_{1-2x}Cu_{2x}O₃	
L.A. Awin, B.J. Kennedy and M. Avdeev	173
Effect of Chemical Reaction Temperature on Magnetic Properties of Cu²⁺ Substituted NiZn Ferrites	
N.S. Shinde, S.S. Khot, R.M. More and S.C. Watawe	181