

1. Large electrocaloric effect and energy storage performance of site-engineered lead-free Ba_{1-x} (Bi_{0.5}Li_{0.5}) x TiO₃ ferroelectric oxides
S Pal, PP Biswas, M Rath, MSR Rao, M Muralidhar, **P Murugavel**, M Murakami, ...
Journal of Physics D: Applied Physics(2020)
2. Linear bulk photovoltaic effect and phenomenological study in multi-phase co-existing ferroelectric system
S Pal, AB Swain, PP Biswas, **P Murugavel**
Journal of Physics: Condensed Matter 32 (48),(2020), 485701
3. Photoferroelectric phenomena in ferroelectric oxides and a Rayleigh analysis
S Pal, AB Swain, PP Biswas, **P Murugavel**
Physical Review Materials 4 (6), (2020), 064415
4. Polarization driven self-biased and enhanced UV–visible photodetector characteristics of ferroelectric thin film
PP Biswas, S Pal, V Subramanian, **P Murugavel**
Journal of Physics D: Applied Physics 53 (27), (2020), 275302
5. Electric field and mechanical stress driven structural inhomogeneity and compositionally induced relaxor phase transformation in modified BaTiO₃ based lead-free ...
S Pal, AB Swain, NV Sarath, **P Murugavel**
Journal of Physics: Condensed Matter, (2020)
6. Room-temperature magnetization reversal and magnetocaloric switching in Fe substituted
A Pal, M Mohan, A Venimadhav, **P Murugavel**
Physical Review Materials 4 (4), (2020), 044407
7. Engineering Resonance Modes for Enhanced Magnetoelectric Coupling in Bilayer Laminate Composites for Energy Harvesting Applications
AB Swain, SD Kumar, V Subramanian, **P Murugavel**
Physical Review Applied 13 (2), (2020), 024026
8. The composition and poling-dependent photovoltaic studies in ferroelectric (Bi_{1-x}Sr_x)(Fe_{1-x}Ti_x)O₃ thin films
PP Biswas, C Thirral, S Pal, M Miryala, M Murakami, **P Murugavel**
Journal of Materials Science: Materials in Electronics 31 (2), (2020), 1515-1523
9. Pressure induced phase transformations in diisopropylammonium bromide
S Sahoo, TR Ravindran, V Srihari, KK Pandey, S Chandra, **P Murugavel**, C Thirral, ...
Journal of Solid State Chemistry 274, (2019), 182-187
10. Influence of external electric field on the physical characteristics of lead free BZT-BCT piezoceramic
AB Swain, SD Kumar, V Subramanian, **P Murugavel**
Journal of Alloys and Compounds 787, (2019), 990-995
11. Enhanced bulk photovoltaic response in Sn doped BaTiO₃ through composition dependent structural transformation
L Kola, D Murali, S Pal, BRK Nanda, **P Murugavel**
Applied Physics Letters 114 (18), (2019), 183901

12. Large photovoltaic response in rare-earth doped BiFeO₃ polycrystalline thin films near morphotropic phase boundary composition
PP Biswas, S Pal, V Subramanian, **P Murugavel**
Applied Physics Letters 114 (17), (2019), 173901
13. Large magnetoelectric response in lead free BaTi_{1-x}Sn_xO₃/NiFe₂O₄ bilayer laminated composites
L Kola, AB Swain, V Subramanian, **P Murugavel**
Journal of Materials Science: Materials in Electronics 30 (7), (2019), 6725-6733
14. Large Bulk Photovoltaic Response by Symmetry-Breaking Structural Transformation in Ferroelectric $\text{Pb}(\text{Zr}_{0.5}\text{Ti}_{0.5})\text{O}_3$
AB Swain, D Murali, BRK Nanda, **P Murugavel**
Physical Review Applied 11 (4), (2019), 044007
15. Investigations on the effect of magnetic ordering on dielectric relaxation in polycrystalline GdMn_{1-x}Fe_xO₃
A Pal, **P Murugavel**
Physica B: Condensed Matter 555, (2019), 99-105
16. Polarization controlled photovoltaic and self-powered photodetector characteristics in Pb-free ferroelectric thin film
AB Swain, M Rath, PP Biswas, MSR Rao, **P Murugavel**
APL Materials 7 (1), (2019), 011106
17. Large magnetoelectric coupling in 0.5 Ba (Zr_{0.2}Ti_{0.8}) O₃-0.5 (Ba_{0.7}Ca_{0.3}) TiO₃ film on Ni foil
AB Swain, M Rath, SD Kumar, MSR Rao, V Subramanian, **P Murugavel**
Journal of Physics D: Applied Physics 52 (6), (2018), 065004
18. Self-polarization effect on large photovoltaic response in lead free ferroelectric 0.5Ba(Zr_{0.2}Ti_{0.8})O₃-0.5(Ba_{0.7}Ca_{0.3})TiO₃ epitaxial film
AB Swain, M Rath, S Pal, MS Ramachandra Rao, **P Murugavel**, V Subramanian, ...
Applied Physics Letters 113 (23), (2018), 233902
19. Impedance characteristics and PTCR effect in lead free BaTi_{1-x}Sn_xO₃ piezoceramics
L Kola, AB Swain, M Rath, MSR Rao, **P Murugavel**
Materials Research Bulletin 106, (2018), 371-378
20. Impact of cationic vacancies on the physical characteristics of multiferroic GdMnO₃
A Pal, **P Murugavel**
Journal of Applied Physics 123 (23), (2018), 234102
21. Giant photovoltaic response in band engineered ferroelectric perovskite
S Pal, AB Swain, PP Biswas, D Murali, A Pal, BRK Nanda, **P Murugavel**
Scientific reports 8 (1), (2018), 1-7
22. The role of precursors on piezoelectric and ferroelectric characteristics of 0.5 BCT-0.5 BZT ceramic
AB Swain, V Subramanian, **P Murugavel**
Ceramics International 44 (6), (2018), 6861-6865

23. Spin-flop and magnetodielectric reversal in Yb substituted GdMnO₃
A Pal, W Prellier, **P Murugavel**
Journal of Physics: Condensed Matter 30 (12), (2018), 125801
24. Magnetocaloric effect in (La_{0.7}Sr_{0.3}MnO₃)_{1-x}–(BaTiO₃)_x solid solution spin-glass system
C Nayek, MK Ray, A Pal, IM Obaidat, **P Murugavel**
Journal of Materials Science 53 (4), (2018), 2405-2412
25. Dipole pinning effect on photovoltaic characteristics of ferroelectric BiFeO₃ films
PP Biswas, C Thirimal, S Pal, **P Murugavel**
Journal of Applied Physics 123 (2), (2018), 024101
26. Investigations on the defect dipole induced pyroelectric current in multiferroic GdMnO₃ system
A Pal, C Dhana Sekhar, A Venimadhav, W Prellier, **P Murugavel**
Journal of Applied Physics 123 (1), (2018), 014102
27. Magnetic Field Induced Spin-flop and Magnetodielectric Reversal in Yb Substituted GdMnO₃ Ceramics
A Pal, W Prellier, **P Murugavel**
APS 2018, G60. 144
28. Effect of Rare-Earth Doping on the Structural and Electrical Properties of BiFeO₃ Submicron Particles
C Nayek, IM Obaidat, **P Murugavel**
Science of Advanced Materials 10 (1), (2018), 24-30
29. Vibrational spectroscopic and computational studies on diisopropylammonium bromide
S Sahoo, TR Ravindran, S Chandra, RM Sarguna, **P Murugavel**, BK Das, TN Sairam, ...
Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 184, (2017), 211-219
30. Tailoring of magnetic orderings in Fe substituted GdMnO₃ bulk samples towards room temperature
A Pal, CD Sekhar, A Venimadhav, **P Murugavel**
Journal of Physics: Condensed Matter 29 (40), (2017), 405803
31. Investigating size-and temperature-dependent coercivity and saturation magnetization in PEG coated Fe₃O₄ nanoparticles
C Nayek, K Manna, G Bhattacharjee, **P Murugavel**, I Obaidat
Magnetochemistry 3 (2), (2017), 19
32. Photovoltaic and photo-capacitance effects in ferroelectric BiFeO₃ thin film
PP Biswas, T Chinthakuntla, D Duraisamy, **P Murugavel**, G Nambi Venkatesan, ...
Applied Physics Letters 110 (19), (2017), 192906
33. Interface Control of Ferroelectricity in an SrRuO₃/BaTiO₃/SrRuO₃ Capacitor and its Critical Thickness
YJ Shin, Y Kim, SJ Kang, HH Nahm, **P Murugavel**, JR Kim, MR Cho, ...
Advanced Materials 29 (19), (2017), 1602795
34. Study of ferroelectric characteristics of diisopropylammonium bromide films
C Thirimal, PP Biswas, YJ Shin, TW Noh, NV Giridharan, **P Murugavel**, A Venimadhav, ...
Journal of Applied Physics 120 (12), (2016), 124107

35. Non-Isothermal Crystallization Kinetics and Nanomechanical Properties of Poly (vinylidene fluoride)-La_{0.7}Sr_{0.3}MnO₃ Nanocomposite Films

C Thirumal, P Panda, R Ramaseshan, **P Murugavel**

Advanced Science, Engineering and Medicine 8 (6), (2016), 483-489

36. Spin-glass state in nanoparticulate (La_{0.7}Sr_{0.3}MnO₃)_{1-x}(BaTiO₃)_x solid solutions: Experimental and density-functional studies

C Nayek, S Samanta, K Manna, A Pokle, BRK Nanda, **P Murugavel**

Physical Review B 93 (9), (2016), 094401