

## List of publications

### *Journals Published:*

#### 2018

107. *Universal conductance fluctuations and direct observation of crossover of symmetry classes in topological insulators*; Saurav Islam, Semonti Bhattacharyya, Hariharan Nhalil, **Suja Elizabeth** and Arindam Ghosh; **Phys Rev. B Rapid Commun** 97 (2018) 241412 (R)
106. *High temperature negative magnetization, spin reorientation and their suppression with magnetic field in  $ErFe_{0.55}Mn_{0.45}O_3$  single crystal*; Tirthankar Chakraborty, Tanushree Sarkar; Anil Kumar, P. S., **Suja Elizabeth**; **J. Alloys and Compounds** (2018) in press.
105. *Antiphase boundary in antiferromagnetic multiferroic  $LuMn_{0.5}Fe_{0.5}O_3$ : anomalous ferromagnetism, exchange bias effect and large vertical hysteretic shift*; Sarkar, Tanushree; Reddy, V; **Elizabeth, Suja**; Anil Kumar, P. S.; **J. Phys. Cond. Mat.** (2018) in press.
104. *Electron doping induced exchange bias and cluster glass magnetism in multiferroic  $Sc_{0.8}Zr_{0.2}MnO_3$* ; Sarkar, Tanushree; **Elizabeth, Suja**; Anil Kumar, P. S.; **J. Mag. Mag. Materials** 466 (2018) 225–233
103. *Two fold spin reorientation and field induced phase transition in  $Ho_{0.5}Dy_{0.5}FeO_3$  single crystal*; Tirthankar Chakraborty and **Suja Elizabeth**; **J. Mag. Mag. Materials** 462 (2018) 78–82
102. *Enhanced magnetization and reduced leakage current by Zr substitution in multiferroic  $ScMnO_3$* ; Tanushree Sarkar, **Suja Elizabeth**, and P. S. Anil Kumar; **J. Mag. Mag. Materials** 448 (2018) 266–273; <http://doi.org/10.1016/j.jmm/2017.05.040>

#### 2017

101. *Non-critically Phase-matched Second Harmonic Generation and Third Order Nonlinearity in Organic Crystal Glucuronic Acid  $\gamma$ -Lactone*; Ravi Kiran Saripalli, Naga Krishnakanth Katturi, S. Venugopal Rao, H.L. Bhat and **Suja Elizabeth**; **J. Appl. Phys.** 122 (2017) 223110; <https://doi.org/10.1063/1.5008322>.
100. *Diisopropylammonium Iodide: An organic salt displaying ferroelectricity with high spontaneous polarization*; Ravikiran Saripalli, Diptikanta Swain, Hariharan Nhalil, Tayur N Guru Row, H. L. Bhat and **Suja Elizabeth**; **J. Appl. Phys.** 121 (2017) 114101 (selected as Editors pick).

99. *Investigation of multiferroicity, spin-phonon coupling, and unusual magnetic ordering close to room temperature in  $\text{LuMn}_{0.5}\text{Fe}_{0.5}\text{O}_3$* ; Tanushree Sarkar, Kaustuv Manna, **Suja Elizabeth**, and P. S. Anil Kumar; **J. Appl. Phys.** 121 (8) 2017.
98. *Relaxation Dynamics and Thermodynamic Properties of Glassy  $\text{Tb}_{0.5}\text{Sr}_{0.5}\text{MnO}_3$  Single Crystal*; Hariharan Nhalil, **Suja Elizabeth**; **Solid State Commun.**, 253 (2017) 24.
97. *Magnetic and electric characterization of multiferroic organometallic compound  $[(\text{CH}_3)_2\text{NH}_2]\text{Mn}_{0.5}\text{Ni}_{0.5}(\text{HCOO})_3$* ; T. Chakraborty, **S Elizabeth**; **Solid State Communications** 261 (2017) 1–5.
96. *Structural phase transition and phase diagram of half doped organometallic compound  $[(\text{CH}_3)_2\text{NH}_2]\text{Mn}_{0.5}\text{Ni}_{0.5}(\text{HCOO})_3$* ; T Chakraborty, Diptikanta Swain, Ruchika Yadav, TN Guru Row, **Suja Elizabeth**; **Solid State Communications** 267 (2017) 53–56.
95. *Magnetocaloric properties of  $\text{R}_2\text{NiMnO}_6$  ( $\text{R} = \text{Pr}, \text{Nd}, \text{Tb}, \text{Ho}$  and  $\text{Y}$ ) double perovskite family*; Tirthankar Chakraborty, Hariharan Nhalil, Ruchika Yadav, Aditya A Wagh and **Suja Elizabeth**; **J. Mag. Mag. Materials** 428 (2017) 59–63.
94. *Kinetic arrest of first-order transition between charge-ordered and ferromagnetic phases in  $\text{Gd}_{0.5}\text{Sr}_{0.5}\text{MnO}_3$  single crystals: magnetization relaxation studies*; Aditya A Wagh, P S Anil Kumar and **Suja Elizabeth**; **Mater. Res. Exp.** 3 (2017) 106102. doi:10.1088/2053-1591/3/10/106102

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93. *Signatures of correlation between magnetic and electrical properties of  $\text{Tb}_{0.5}\text{Sr}_{0.5}\text{MnO}_3$  single crystal*; Hariharan Nhalil and **Suja Elizabeth**; **Europhys. Lett.** 116 (2016) 57006.
92. *Glucuronic acid B;-Lactone: An organic nonlinear optical crystal with high laser induced damage threshold*; Ravi Kiran Saripalli, H. L. Bhat and **Suja Elizabeth**; **Optical Engineering** 56(1) (2016) 011025.
91. *Disordered ferromagnetism in  $\text{Ho}_2\text{NiMnO}_6$  double perovskite*; Chakraborty, Tirthankar; Nair, Harikrishnan; Nhalil, Hariharan; Kamadurai, Ramesh Kumar; Strydom, Andre; **Elizabeth Suja**; **J. Phys. Cond. Mat.** 29 (2016) 025804.
90. *Estimation of Joule heating and its role in nonlinear electrical response of  $\text{Tb}_{0.5}\text{Sr}_{0.5}\text{MnO}_3$  single crystal*; Hariharan Nhalil, **Suja Elizabeth**; **Solid State Commun.** 248 (2016) 6–10.
89. *The nonlinear optical properties of the monoclinic D-iso ascorbic acid Crystal*; K. Raghavendra Rao, Sanath Kumar, H.L.Bhat, **Suja Elizabeth**; **Applied Physics B** 122 (2016) 270.

88. *Magnetization reversal and glassy behavior in  $Tb_{0.7}Sr_{0.3}MnO_3$* ; Hariharan N. and **Suja Elizabeth**; *J. of Supercon. Nov. Mag.* 10948, (2016) 3674.
87. *Evolution of Jahn-Teller distortion, transport and dielectric properties with doping in perovskite  $NdFe_{1-x}Mn_xO_3$  ( $0 \leq x \leq 1$ ) compounds*; Tirthankar Chakraborty, Ruchika Yadav, **Suja Elizabeth**, and H.L. Bhat, *Physical Chemistry Chemical Physics* 18 (2016) 5316.
86. *A study of the piezoelectric resonance in organic single crystal: Glucuronic acid  $\beta$ -Lactone*; Ravi Kiran Saripalli, Tirthankar Chakraborty, H. L. Bhat and **Suja Elizabeth**, *Applied Physics A* 122 (4) (2016) 1–5.
85. *Anomalous re-entrant glassy magnetic phase in  $LaMn_{0.5}Co_{0.5}O_3$  single crystals*; Kaustuv Manna, **Suja Elizabeth**, and P. S. Anil Kumar; *J. Appl. Phys.* **119** (2016) 043906.
84. *Synthesis, Structural and dielectric properties of  $Ho_2MnFeO_6$* ; Tirthankar Chakraborty and **Suja Elizabeth**; *AIP Conference Proceedings* 1728, 020136 (2016).
83. *A study of the piezoelectric resonance in metal organic NLO single crystals: Sodium Disoascorbate monohydrate and Lithium L-ascorbate dehydrate*; Ravi Kiran Saripalli, Raghavendra Rao K., Sanath Kumar R., H. L. Bhat, and **Suja Elizabeth**; *AIP Conference Proceedings* 1728 (2016) 020157.
82. *Order-disorder phase transition and multiferroic behaviour in a Metal organic framework compound  $(CH_3)_2NH_2Co(HCOO)_3$* ; Ruchika Yadav, Diptikanta Swain, H.L. Bhat, and **Suja Elizabeth**; *J. Appl. Phys* **119** (2016) 064103.
81. *Critical Behavior of  $Y_2NiMnO_6$  Double Perovskite.*; Hariharan Nhalil, Harikrishnan S Nair and **Suja Elizabeth.**; *AIP conference proceedings*, 1728 (2016) 020184.
80. *Magnetic structures and magnetic phase transitions in the Mn-doped orthoferrite  $TbFeO_3$  studied by neutron powder diffraction*; Harikrishnan S. Nair, Tapan Chatterji, C. M. N. Kumar, Thomas Hansen, Hariharan Nhalil, **Suja Elizabeth**, and Andr\_e M. Strydom; *J. Appl. Phys* **119** (2016) 053901.
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78. *Bulk-induced  $1/f$  noise at the surface of three-dimensional topological insulators*; Bhattacharyya, Semonti; Banerjee, Mitali; N., Hariharan; Islam, Saurav; Dasgupta, Chandan; **Elizabeth, Suja**; Ghosh, Arindam; *ACS Nano* 9 (12) (2015) 12529.

77. *Spin Re-orientation and Weak Ferromagnetism in Antiferromagnetic  $TbMn_{0.5}Fe_{0.5}O_3$* ; Hariharan Nhalil, Harikrishnan S. Sanathkumar R., Andre M. Strydom and **Suja Elizabeth**, *J. Appl. Phys.* **117** (2015) 173904.
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72. *Interplay of structure, magnetism, and superconductivity in Se substituted iron telluride with excess Fe*; Dona Cherian, S. Rößler, S Wirth, and **Suja Elizabeth**; *J. Phys Cond Matt.* **27** (2015) 205702.
71. *Low temperature giant magnetocaloric effect in multiferroic  $GdMnO_3$  single crystals*, Aditya A. Wagh, K. G. Suresh, P. S. Anil Kumar, and **Suja Elizabeth**; *J. Phys D. Appl. Phys.* **48** (2015) 135001.
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69. *Investigation of dielectric relaxation, Jahn-Teller distortion, and magnetic ordering in Y substituted  $Pr_{1-x}Y_xMnO_3$  ( $0.1 \leq x \leq 0.4$ )*; Ruchika Yadav, Harikrishnan S. Nair, Amit Kumar, Shilpa Adiga, H. L. Bhat, S. M. Yusuf, and **Suja Elizabeth**; *J. Appl. Phys.*, **117** (2015) 093903.
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63. *Correspondence between neutron depolarization and higher order magnetic susceptibility to investigate ferromagnetic clusters in phase separated systems*; K. Manna, D. Samal, A.K. Bera, S. Elizabeth, S.M. Yusuf and P.S. Anil Kumar; **J. Phys. Condens. Matter.** 26 (2014) 016002.
62. *Magnetism and superconductivity in Sb-doped binary and ternary iron chalcogenide single crystals*; Dona Cherian; Nagendra G. M.; Suja Elizabeth; **J. Cryst. Growth** 401 (2014) 338–342.
61. *Electronic structure of Nd<sub>1-x</sub>Y<sub>x</sub>MnO<sub>3</sub> from Mn K edge absorption spectroscopy and DFT methods*; Padmanabhan B., Harikrishnan. S. Nair, Ruchika Yadav, H.M. Tsai, S. Bhattacharjee, Y. Joly, M. T. Liu, J. F. Lee, **Suja Elizabeth** B. R. Sekhar, C. W. Pao, and W. F. Pong; **Solid State Commun** 81 (2014) 50–53.
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59. *Glassy dielectric response in Tb<sub>2</sub>NiMnO<sub>6</sub> double perovskite with similarities to a Griffith's phase*; Hariharan N., Harikrishnan S. Nair, H. L. Bhat, and Suja Elizabeth; **Europhysics Letters (EPL)** 104 (2013) 67002.
58. *Crystal growth and nonlinear optical properties of sodium D-Isoascorbate monohydrate*; Raghavendra Rao, H.L. Bhat, **Suja Elizabeth**; **Cryst Eng Comm** 15 (2013) 6594–6601.
57. *Interplay of structural distortions, dielectric effects and magnetic order in multiferroic GdMnO<sub>3</sub>*; M Doerr, M. Loewenhaupt, A.A. Wagh, P.S. Anil Kumar, **S. Elizabeth**, S. Roessler, M. Rotter, S. Wirth, **J. Korean Physical Society**, 62 (2013) 1449.

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