



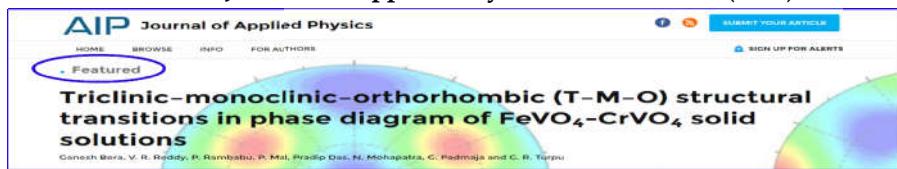
# Goverdhan Reddy Turpu, PhD

Department of Pure and Applied Physics  
Guru Ghasidas University (A Central University)  
Koni, Bilaspur 495009-Chhattisgarh, India

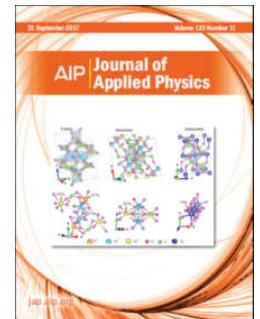
dr.tgreddy@gmail.com  
Phone: +91-8963901321, Office: + 91-7752-260477  
Website: [www.ggu.ac.in](http://www.ggu.ac.in)

## Publication Highlights

- Featured article in Journal of Applied Physics: Bera et.al, 122 (2017)115101.



- Cover page of Journal of Applied Physics: Issue 11, Vol. 122 (2017)



## Academic Credentials

2000 -2005	Ph.D. Physics, <b>Osmania University</b> , India Topic: <i>Study on spin and lattice plaron dynamics in CMR manganites</i> Mentor: Prof K Rama Reddy
1997 -1999	M.Sc., Physics (First Class), <b>Osmania University</b> , Hyderabad, India
1994 -1997	B.Sc., Maths, Physics, Chemistry (First Class), <b>Osmania University</b> , Hyderabad, India

## Research Experience

Jul 2011 - present	<b>Assistant Professor</b> , Guru Ghasidas University, Bilaspur, India
Nov 2010 - Jun 2011	<b>Research Professor</b> , Sejong University, Seoul, South Korea Mentor: Prof Jonghwa Eom
Feb 2010 - Oct 2010	<b>Postdoctoral Fellow</b> , Instituto Internacional de Física, Natal, Brazil Mentor: Prof S K Malik
Apr 2007 - May 2009	<b>Postdoctoral Fellow</b> , Indiana University Bloomington, United States Mentor: Prof Chen Yu Liu
Jun 2006 - Mar 2007	<b>Research Associate</b> , UGC-DAE CSR, Indore, India Mentor: Prof Ajay Gupta

## Awards & Grants

Jan 2017	Grant: "Neutron diffraction studies into structural changes and magnetic interactions in Fe1-xMxVO <sub>4</sub> (M = Cr, In and Al) solid solutions". UGC DAE CSR, Mumbai
Jul 2015	Grant: "Fabrication and Characterization Reduced Graphene Oxide Field Effect Transistors for Sensor Applications" UGC – MRP
Sep 2014	Grant: Study of Lattice Dynamics in Fe doped VO <sub>2</sub> through Mossbauer Spectroscopy UGC DAE CSR, Indore
Jun 2006	Scholarship: Research Associateship, CSIR, India
Apr 2003	Scholarship: Senior Research Fellowship, CSIR, India
Dec 1999	Scholarship: Junior Research Fellowship, DST Project, Osmania University, Hyderabad

**Total Publications (UGC – CARE LIST (Scopus Listed) : 32**

**Invited Talks / Paper Presentation in Conferences/Seminar/Workshops: 20**

**Important Research Publications (Last 5 Years)**

1. Ganesh Bera, P.Mal, V.R.Reddy, U Deshpande, Pradip Das, G. Padmaja, **G. R. Turpu**, *Vibrational spectra and optical properties of Fe<sub>1-x</sub>Cr<sub>x</sub>VO<sub>4</sub> solid solutions: With a group theory analysis* *Spectrochimica Acta Part A*, ([doi.org/10.1016/j.saa.2019.117668](https://doi.org/10.1016/j.saa.2019.117668)) **(I.F.2.93)**
2. G.Bera, A.Surampally, A.Mishra, P.Mal, V.R.Reddy, A. Banerjee, A.Sagdeo, P. Das, **G. R. Turpu**, *Magnetolattice coupling, magnetic frustration, and magnetoelectric effect in the Cr-doped FeVO<sub>4</sub> multiferroic material and their correlation with structural phase transitions* *Phy. Rev. B* **100,014436 (2019)** **(I.F.3.736)**
3. Priyanath Mal, G. Bera, G. R.Turpu, S. K. Srivastava, A. Gangan, B. Chakraborty, Bipul Das and Pradip Das, *Vibrational Spectra of Pb<sub>2</sub>Bi<sub>2</sub>Te<sub>3</sub>, PbBi<sub>2</sub>Te<sub>4</sub> and PbBi<sub>4</sub>Te<sub>7</sub> Topological Insulators: Temperature Dependent Raman and Theoretical Insight from DFT Simulations* *Phy. Chem. Chem. Phy.* **21,15030 (2019)** **(I.F.3.567)**
4. A.Mishra, G.Bera, P.Mal, P.Sen, B.Chakraborty, P.Das, G.Padmaja and **G.R.Turpu**, *Comparative electrochemical analysis of rGO-FeVO<sub>4</sub> nanocomposite and FeVO<sub>4</sub> for supercapacitor applications*, *App. Surf. Sci.* **488, 221(2019)** **(I.F.5.155)**
5. P.Mal, B.Das, A.Lakhani, G.Bera, **G.R.Turpu**, J.C.Wu, C.V.Tomy, Pradip Das, *Unusual Conductance Fluctuations and Quantum Oscillation in Mesoscopic Topological Insulator PbBi<sub>4</sub>Te<sub>7</sub>*, *Scientific Reports* **9, 7018 (2019)** **(I.F.4.01)**
6. G. Bera, A. Mishra, P.Mal, A. Sankarakumar, P. Sen, A. Gangan, B. Chakraborty, P.Das and **G.R.Turpu**, *Multifunctionality of Partially Reduced Graphene Oxide –CrVO<sub>4</sub> Nano-Composite: Electrochemical and Photocatalytic Studies with Theoretical Insight from Density Functional Theory*, *J. Phy. Chem C.* **122,21140 (2018)** **(I.F.4.309)**
7. Ganesh Bera, V.R.Reddy, P. Rambabu, P. Mal, Pradip Das, N. Mohapatra, G. Padmaja, **G. R. Turpu**, *Triclinic – monoclinic – orthorhombic (T–M–O) structural transitions in phasediagram of FeVO<sub>4</sub> -CrVO<sub>4</sub> solid solutions.* *Journal of Applied Physics* **122(11):115101. (2017)** **(I.F. 2.328)**
8. Priyanath Mal, G Bera, P Rambabu, **G R Turpu**, Brahmananda Chakraborty, Lavanya M Ramaniah, R PSingh, PintuSen, Pradip Das: *Electronic, magnetic and spectroscopic properties of doped Mn(1-x)AxWO<sub>4</sub>(A = Co, Cu, Ni and Fe) multiferroic: an experimental and DFT study.* *Journal of Physics Condensed Matter*, **29, 075901(2017)** **(I.F.2.711)**
9. M. Shaikh, M. Sahu, P. K. Gavel, G. R. Turpu, S. Khilari, D. Pradhan, K.V.S. Ranganath: *Mg-NHC complex on the surface of nano magnesium oxide for catalytic application.* *Catalysis Communications* **06, 84 (2016)** **(I.F.3.674)**
10. Y. J. Kim, C Y Liu, S. K. Lamoreaux, G. Visser, B. Kunkler, A. V. Matlashov, **T.G. Reddy**: *New Experimental Limit on the Electric Dipole Moment of the Electron in a Paramagnetic Insulator.* *Physical Review D* **91,102004 (2015)** **(I.F.4.5)**
11. N. Raju, D. R.Sree, S. S. K. Reddy, Ch. G.Reddy, P. Yadagiri Reddy, K. R. Reddy, V. R.Reddy, **G.R. Turpu**: *Nanosize effects on the magnetic field induced transitions in La<sub>0.67-x</sub>EuxCa<sub>0.33</sub>MnO<sub>3</sub> perovskite manganite.* *J of Mag. and Mag. Materials*,**368,308 (2014)** **(I.F. 2.683)**