

**School****Department: Pure & Applied Physics****Phone: 8296020436****Email: kumar.mrc.iisc@gmail.com****Personal Webpage Link****Qualifications:**

*Ph.D in Physics, awarded on 19<sup>th</sup> Jun 2013, Department of Physics, Osmania University, Hyderabad, Telangana, India.*

*Postdoctoral fellow (11<sup>th</sup> Sep 2013 to 10<sup>th</sup> Sep 2016), School of Physics, University of Hyderabad, Hyderabad, Telangana, India.*

*Postdoctoral Fellow (11<sup>th</sup> Sep 2016 to 27<sup>th</sup> Nov 2019), Materials Research Centre, Indian Institute of Sciences-Bangalore, Bangalore, Karnataka, India.*

*Assistant Professor (currently working), Department of Pure & Applied Physics since 28<sup>th</sup> Nov 2019 to till date.*

**Area of Interest/Specialization:** *Materials Science*

**Experience:** *15 years*

**Awards and Honors:**

- *Dr. D. S. Kothari Postdoctoral fellowship Award*
- *UGC Postdoctoral fellowship Award*
- *Rajiv Gandhi National Fellowship Award*

**Research Projects:** *UGC Startup Grant, New Delhi, India*

**International Collaboration/Consultancy:****Best Peer Reviewed Publication (up-to 10)**

1. Optical absorption and IR studies on  $25\text{Bi}_2\text{O}_3-(75-x)\text{B}_2\text{O}_3-x\text{BaO}$  ( $0 \leq x \leq 25$ ) glasses  
*Journal of Alloys and Compounds, Volume 490, Issues 1–2, 4 February 2010, Pages 1-4.*  
R. Vijaya Kumar, Shashidhar Bale, Ch Srinivasu, M.A. Samee, K. Siva Kumar, Syed Rahman
2. Mixed cation effect in  $x\text{R}_2\text{O}-(40-x)\text{Na}_2\text{O}-50\text{B}_2\text{O}_3-10\text{Bi}_2\text{O}_3$  (R = Li, K) glasses  
*Materials Research Bulletin, Volume 45, Issue 10, October 2010, Pages 1533-1536.*  
Syed Rahman, Shashidhar Bale, R. Vijaya Kumar, N. Srinivasa Rao
3. MDSC, electrical conductivity and optical absorption studies of  $40\text{B}_2\text{O}_3-20\text{CdO}-(40-x)\text{Bi}_2\text{O}_3-x\text{Li}_2\text{O}$  glasses  
*Solid State Sciences, Volume 13, Issue 2, February 2011, Pages 379-383.*

- R. Vijaya Kumar, Ch. Srinivasu, K. Siva Kumar
4. AC impedance studies on  $\text{LiFe}_{5-x}\text{Mn}_x\text{O}_8$  ferrites  
*Journal of Alloys and Compounds*, Volume 513, 5 February 2012, Pages 289-293.  
B. Ramesh, S. Ramesh, R. Vijaya Kumar, M. Lakshmipathi Rao
  5. Structural studies of  $40\text{B}_2\text{O}_3-20\text{CdO} (40-x)\text{Bi}_2\text{O}_3-x\text{Li}_2\text{O}$  glasses  
*Optical Materials*, Volume 35, Issue 12, October 2013, Pages 2267-2274.  
R. Vijaya Kumar, P. Gayathri Pavani, B. Ramesh, Md. Shareefuddin, K. Siva Kumar
  6. Effect of alkaline earth oxides on spectroscopic investigations of copper ion doped lithium borate glasses  
*Journal of Non-crystalline Solids*, Volume 426, 15 October 2015, Pages 47-54.  
Ashok Bhogi, R. Vijaya Kumar and P. Kistaiah
  7. Characterization of ZnO based Boro Tellurite glass system  
P. Gayathri Pavani, R. Vijaya kumar and V. Chandra Mouli  
*Physics and Chemistry of Glasses: April 2016*, 57 (2), 104–110  
European Journal of Glass Science and Technology Part B
  8. Magnetic and dielectric properties of Co doped nano crystalline Li ferrites by auto combustion method  
*Journal of Magnetism and Magnetic Materials*, Volume 406, 2016, Pages 110-117.  
G. Aravind, M. Ragasudha, D. Ravinder, R. Vijaya Kumar
  9. Correlated vibrations of the tetrahedral and octahedral complexes and splitting of the absorption bands in FTIR spectra of Li-Zn ferrites  
*Vibrational Spectroscopy*, Volume 92, 2017, Pages 67–272.  
V. Rathod, Anupama A.V., R. Vijaya Kumar, V.M. Jali, B. Sahoo
  10. Electrical properties of  $\text{NdCr}_{1-x}\text{Fe}_x\text{O}_3$  perovskite ceramic nanoparticles-An impedance spectroscopy studies  
Jada Shanker, B. Vittal Prasad, M. Buchi Suresh, R. Vijaya Kumar, D. Suresh Babu  
*Materials Research Bulletin*, Volume 94, October 2017, Pages 385-398
  11. Influence of Fe substitution on structural and electrical properties of Gd orthochromite ceramics  
*Journal of Alloys and Compounds*, Volume 732, 25 January 2018, Pages 314-327  
Jada Shanker, K. Venkataramana, B. Vittal Prasad, R. Vijaya Kumar, D. Suresh Babu
  12. Cation distributions and magnetism of Al-substituted  $\text{CoFe}_2\text{O}_4$  -  $\text{NiFe}_2\text{O}_4$  solid solutions synthesized by sol-gel auto-combustion method.  
*Ceramics International*, Volume 44, Issue 17-2018, Pages 20708-20715.  
R. VijayaKumar, A.V. Anupama, R. Kumar, H.K. Choudhary, G. Aravind, B. Sahoo
  - 13 Magnetic reversal in  $\text{NdCr}_{1-x}\text{Fe}_x\text{O}_3$  perovskite nanoparticles  
*Materials of Chemistry and Physics*, Vol 251 (2020) 12398.

Jada Shankar, R. Vijaya Kumar, G. Narsing Rao, D. Suresh Babu  
14. Impact of Fe substitution on electrical properties of ErCrO<sub>3</sub> semiconductor perovskite  
ceramic nanoparticles  
*Journal of Alloys and Compounds*, Volume 841, 15 November 2020, 155730  
Jada Shankar<sup>a</sup>, R. Vijaya Kumar, M. Buchi Suresh. D. Suresh Babu

**Recent Books/Book Chapters/Monographs etc.**

**Research Supervision:**

**Administrative Responsibilities:**

**Additional Information**