Profile

Name of the Faculty	Dr. B. Mamatha
Designation	Associate professor
Department	FE-Physics
Area of Interest	Material Science
Subjects Taught	Applied physics, Solid state physics, Engineering physics, Semiconductor devices
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Educational Qualifications:

S. No.	Degree	Specialization	University/College	Year
1	Ph. D.	Physics	JNTUH	2015
2	M. Sc.	Physics	Osmania University	2008
3	B. Sc.	M.P.Cs	Kakatiya University	2006

Publications Details:

1	Ceramics for energy harvesting, sensors, and actuator applications B Mamatha, P Raju Functional Materials Letters	2025
2	Low-temperature magnetic phase transition and dielectric relaxation mechanism in triclinic NiV2O6 Subrata Karmakar, B. Mamatha, G. Rajashekhar, Ravikiran Uppala, G.Anil Kumar,	2025

	G. Nataraju, Rajkumar Boddhula, K. Mukherjee, Materials Science and Engineering B 322 (2025) 118608.	
4	Impedance spectroscopy and conductivity studies of $Sr(Bi_{3.9-x}Nd_xLa_{0.1})(Ti_{3.975}Zr_{0.025})O_{15}$ (x = 0.00, 0.025, 0.05, 0.075 and 0.1) ceramics B Mamatha, K Ashok Ferroelectrics 618 (4), 1006-1018	2024
5	Structural and electrical properties of potassium and neodymium substituted $SrBi_4Ti_4O_{15}$ ceramics B Mamatha, K Ashok Ferroelectrics 603 (1), 169-175	2023
6	Dielectric and Piezoelectric Properties of $Sr_{1-2x}Na_xSm_xBi_4Ti_4O_{15}$ ($x = 0–0.4$) Ceramics B Mamatha, K Ashok Integrated Ferroelectrics 221 (1), 239-244	2021
7	Effect of neodymium and zirconium substitution on electrical properties of $SrBi_4Ti_4O_{15}$ B Mamatha, K Ashok, AR James, P Sarah Ferroelectrics 582 (1), 192-203	2021
8	Quenching effect of co-dopant Pr^{3+} on red emitting yttrium vanadate phosphor doped with Eu(III) GN Rani, J Shankar, P Raju, J Anjaiah, B Mamatha, NH Ayachit AIP Conference Proceedings 2269 (1), 030063	2020
9	Enhanced electrical properties of $Sr(Bi_{3.9}La_{0.1})$ $(Ti_{3.975}Zr_{0.025})O_{15}$ ceramic with the doping of Nd B Mamatha, K Ashok, GN Rani, AR James AIP Conference Proceedings 2269 (1), 030069	2020
10	Preparation and characterization of red emitting Yttrium Vanadate phosphor doped with Eu(III): $Y_{1-X}VO_4$: Eu_x GN Rani, J Shankar, J Anjaiah, B Mamatha, NH Ayachit AIP Conference Proceedings 2162 (1), 020117	2019
11	Enhanced electrical properties of $SrBi_4Ti_4O_{15}$ ceramic with addition of ZrO_2 B Mamatha, GN Rani, J Shankar AIP Conference Proceedings 1942 (1), 120007	2018
12	Synthesis and characterization of $PbTiO_3$ based glass ceramics J Shankar, GN Rani, B Mamatha, VK Deshpande AIP Conference Proceedings 1832 (1), 070016	2017

13	Synthesis, Characterization and Electrical Properties of La Modified $SrBi_4Ti_{3.975}Zr_{0.025}O_{15}$ B Mamatha, P Sarah Ferroelectrics 482 (1), 90-103	2015
14	Electrical properties of lead free Sr0. 8Na0. 1Sm0. 1Bi4Ti4O15 ceramics K Ashok, B Mamatha, P Sarah Procedia Materials Science 10, 542-547	2015
15	Effect of dysprosium substitution on electrical properties of SrBi4Ti4O15 B Mamatha, P Sarah Materials Chemistry and Physics 147 (3), 375-381	2014
16	Electrical properties of Li and Nd doped strontium bismuth titanate (SrBi4Ti4O15) ceramics K Ashok, B Mamatha, P Sarah Proceedings of the two-day national conference on nanomaterials and …	2013
17	Frequency and Temperature Dependence of Electrical Properties of Zirconium and Neodymium Substituted $SrBi_4Ti_4O_{15}$ Ceramics B Mamatha, MB Suresh, P Sarah Ferroelectrics 445 (1), 51-66	2013
18	DIELECTRIC, FERROELECTRIC, PIEZOELECTRIC AND IMPEDANCE STUDY OF LEAD-FREE CERAMIC: $SrBi_4Ti_{3.975}Zr_{0.025}O_{15}$ B Mamatha, P Sarah Journal of Advanced Dielectrics 2 (04), 1250023	2012
19	Effect of dysprosium substitution on the electrical properties of SrBi4Ti4O15 ceramics B Mamatha, K Ashok, AR James, P Sarah Physica Scripta 85 (6), 065705	2012
20	Synthesis and electrical properties of SrBi4Ti4O15 piezoelectric ceramics B Mamatha, MB Suresh, AR James, M Vithal, P Sarah Physica Scripta 84 (5), 055704	2011
21	Electrical and Piezoelectric Studies of $SrBi_{3.98}Dy_{0.02}Ti_4O_{15}$ P Sarah, B Mamatha Advanced Materials Research 214, 641-645	2011
22	Electromechanical Properties of A-Site (LiHo)-Modified Strontium Bismuth Titanate ($SrBi_4Ti_4O_{15}$) Piezoelectric Ceramics B Mamatha, AR James, P Sarah Ferroelectrics 413 (1), 115-122	2011

23	Dielectric and piezoelectric properties of SrBi4− xHoxTi4O15 (x= 0.00, 0.02, 0.04 and 0.06) ceramics B Mamatha, AR James, P Sarah Physica B: Condensed matter 405 (23), 4772-4775	2010

Experience:

Teaching	17 years
Industry	-Nil-
Research	5 years
Total Experience	17 years