Department of Physics

Faculty Achievements

Research Publications:

Sl. No	Name of faculty	Title of Paper	Name of the Journal and Publisher	Vol, Page No, Issue
2019				
1	Dr. K.I. Maddani	Structural and Optical Properties of (110) Plane Textured SnO2:Zn Thin Films	International Journal of Self-Propagating High-Temperature Synthesis	28 (1), 34-38
2	Dr. K.I. Maddani	Improved nonlinear absorption mechanism of tin oxide thin films: Role of strontium doping	Optical Materials- Elsevier	94, 294-298
3	Dr. P.V. Raghavendra	Electrical Characteristics of Spray Deposited n-ZnO:Sr/p-Si Heterojunction	Springer Proceedings in Physics	215, 1117 2019
4	Dr. P.V. Raghavendra	Surface wettability studies of spray deposited ZnO:Sr thin films	AIP Conference Proceedings	2087, 020014, 2019
5	Dr. P.V. Raghavendra	Effect of strontium doping on characteristics of spray deposited SnO2 thin films	AIP Conference Proceedings	2087, 020013, 2019
2018				
1	Dr. K.I. Maddani	Tailoring the nonlinear optical susceptibility χ(3), photoluminescence and optical band gap of nanostructured SnO2 thin films by Zn doping for photonic device applications	Physica E: Low-dimensional Systems and Nanostructures - Elsevier	103, 348-353 2018
2	Dr. K.I. Maddani	Role of Ba in engineering band gap, photoluminescence and nonlinear optical properties of SnO2 nanostructures for photovoltaic and photocatalytic applications	Superlattices and Microstructures- Elsevier	122, 156-164, 2018
3	Dr. P.V. Raghavendra	Visible Light Sensitive Cupric Oxide Metal-Semiconductor-Metal Photodetectors	Superlattices and Microstructures- Elsevier	113, 754-760, 2018
4	Dr. B.K. Murgunde	Biologically active nanocomposite of DNA-PbS nanoparticles: A new	Applied Surface Science	427, 344-353, 2018

		material for non-volatile memory devices		
2017				
1	Dr. K.I. Maddani	Improvement in Electrochemical Performance of Spray Deposited V2O5 Thin Film Electrode by Anodization	Materials Today: Proceedings- Elsevier	4, 3549-3556, 2017
2	Dr. P.V. Raghavendra	Enhancement of Photoluminescence in Sr doped ZnO thin films prepared by Spray Pyrolysis	Materials Science in Semiconductor Processing-Elsevier	68, 262–269, 2017
3	Dr. P.V. Raghavendra	Optical properties of strontium doped zinc oxide thin films	AIP Conference Proceedings-American Institute of Physics	1832, 080067, 2017
4	Dr. B.K. Murgunde	Solution processed bilayer junction of silk fibroin and semiconductor quantum dots as multilevel memristor devices	Organic Electronics-Elsevier	48, 276-284, 2017
2015				
1	Dr. K.I. Maddani	Synthesis, Characterization and Electrochemical Properties of SILAR Deposited V_2O_5 Thin Film	International Journal of Research Studies in Science, Engineering and Technology	2, 47-52, 2015
Earlier to 2015				
1	Dr. K.I. Maddani	Electron beam radiation effects on electrical and optical properties of pure and aluminum doped tin oxide films	Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms- Elsevier	258, 369-374,
2	Dr. K.I. Maddani	Influence of Zn doping on electrical and optical properties of multilayered tin oxide thin films	Bulletin of Materials Science-Springer	29, 331-337, 2006

Presentations in Conferences/Seminars/Workshops

Sl. No	Name of faculty	Title of Paper	Name of the Conference/Seminar/ Workshop and Date	Organizer
2019				
1	Dr. P.V. Raghavendra	Characteristics of Spray deposited Mg co-doped ZnO:Al thin films	International Conference on Advanced Functional Materials for Energy, Environment and Health Care (AFMEEHC), during March 18-20, 2019.	University of Mysore
2	Dr. P.V. Raghavendra	Surface wettability studies of spray deposited ZnO:Sr thin films Paper entitled	International conference on Inventive Research in Material Science and Technology January 30-31, 2019.	RVS Technical campus, Coimbatore
3	Dr. P.V. Raghavendra	Effect of strontium doping on characteristics of spray deposited SnO2 thin films	International conference on Inventive Research in Material Science and Technology January 30-31, 2019.	RVS Technical campus, Coimbatore
4	Mr. Manjappa C.K.	Synthesis of near infrared PbS nanoparticles	NCRDNN-2019 at 29th - 31st January 2019	Jadhavpur University, Kolkata
2018				
1	Dr. P.V. Raghavendra	Spray Deposited ZnO:Sr Thin Films for Self Cleaning Applications	International conference on Recent Advances in Materials Science and Biophysics (RAMSB), January 23-25, 2018.	Mangalore University, Mangalore
2017				
1	Dr. P.V. Raghavendra	Electrical Characteristics of Spray Deposited n-ZnO:Sr/p-Si Heterojunction	XIX International Workshop on the Physics of Semiconductor Devices (IWPSD 2017), December 11-15, 2017	Indian Institute of Technology Delhi
2016				
1	Dr. P.V. Raghavendra	Optical Properties of Strontium Doped Zinc Oxide Thin Films	61st Department of Atomic Energy Solid State Physics Symposium (DAE-SSPS), December 26-30, 2016	KIIT University, Bhubaneswar, and BARC, DAE, Govt. of India
2	Dr. P.V. Raghavendra	Post Deposition Annealing Effects on Characteristics	International Conference on Materials Science and	Shivaji University,

		of Electron Beam Evaporated Copper Oxide Thin Films	Ionizing Radiation Safety and Awareness (ICMSIRSA-2016), January 28-30, 2016	Kolhapur
3	Dr. B.K. Murgunde	DNA Based Nanocomposites for Electrical Memory Applications	DAE-BRNS 6th Interdisciplinary Symposium on Material Chemistry (ISMC-2016), 6^{th}-10^{th} December, 2016	BARC, Mumbai, India.
4	Dr. B.K. Murgunde	Biologically Active Composites for Memory Switching Applications.	ICFNN, 26-28th Feb. 2016	SASTRA University Thanjavur, Tamil Nadu, India.
2015				
1	Dr. P.V. Raghavendra	Characteristics of Strontium doped Zinc oxide thin films	18th International Workshop on Physics of Semiconductor Devices (IWPSD-2015), December 7th -10th, 2015	IISc, Bangalore
Earlier to 2015				
1	Dr. P.V. Raghavendra	Band gap Variation in $Mg_xAl_{0.04}Zn_{0.96-x}O$ Spray deposited thin films	3rd national seminar on "Physics of Materials and Material Based Device Fabrication (NSPM MDF 2014)", December 19-20, 2014.	Shivaji University, Kolhapur
2	Dr. P.V. Raghavendra	Characteristics of CuO thin films grown by Physical Vapour Deposition	2nd International Conference on Physics of Materials and Materials Based Device Fabrication, (ICPM-MDF-2014), January 13-15, 2014.	Shivaji University, Kolhapur
3	Dr. P.V. Raghavendra	Structural and Optical Properties of CuO thin films Deposited by Thermal Evaporation	International Union of Materials Research Society – International Conference in Asia – 2013 (IUMRS-ICA-2013), December 16-20, 2013	Institute of Science, Bangalore,

Guest lectures:

The faculty members of the department are actively taking part in the guest lectures under "Unnat Bharat Abhaiyan".