

RESEARCH ACTIVITIES

PAPER PUBLISHED BY STUDENTS

S.NO	NAME	YEAR	TITLE	PUBLICATIONS
1	G.V.Rohini	2018	Tunable growth of semiconductor nanostructures by Plasma Enhanced Chemical Vapor Deposition - Synthesis, morphological and Raman studies	Super lattices and Microstructures, 122, 510

PAPER PRESENTED BY STUDENTS

S.NO	YEAR	NAME	TITLE	TYPE OF CONFERENCE	INSTITUTION
2	2018	C. Anu	Impact of Nanotechnology on Health and Environment ICINHE	International (Oral)	Quaid-E-Millath Government College For Women (Autonomous)
3	2018	M. Dimple	Impact of Nanotechnology on Health and Environment ICINHE	International (Oral)	Quaid-E-Millath Government College For Women (Autonomous)
4	2018	S. Swetha	Impact of Nanotechnology on Health and Environment ICINHE	International (Oral)	Quaid-E-Millath Government College For Women (Autonomous)
5	2018	R. Jayashri	Impact of Nanotechnology on Health and Environment ICINHE	International (Oral)	Quaid-E-Millath Government College For Women (Autonomous)
6	2018	<i>U. Poomalai</i>	<i>Trends in Physics of Materials NCRTPM</i>	<i>National (Poster) – Best Paper award</i>	<i>Pachaiyappa's college</i>

PAPER PUBLISHED BY FACULTIES

S.NO	STAFF NAME	YEAR	TOPIC	SEMINAR / CONFERENCE /	INSTITUTION
1	S. Abirami	2018	Synthesis and Characterization of Zn Doped SnO ₂ Thin Films	International	Madras University
2	S. Abirami	2019	Effect of Strontium on Morphological, Structural and Optical Properties of SnO ₂ nanoparticles for Energy and Electronic Applications	National	SRM Institute of Science and Technology
3	J. Bhavani	2015	First Principle Study of the structural and electronic properties of Cu ₂ ZnSnSe ₄ quaternary semiconductor	National	CTTE college
4	J. Bhavani	2013	Underestimation of Band Gap by PDE and WC potential in GaAs	National	Jayaraj Annapacakiam College for Women, Periyakulam
5	J. Bhavani	2019	Structural and Electronic Properties of Cu ₂ -II-IV-VI ₄ Quaternary Semiconductors Using PBE-GGA and TB-mBJ Potentials	International	SSN college
6	S. Leela	2014	Emerging trends in Nanoscience research	National	Ethiraj College for Women
7	S. Leela	2015	Recent Advances in Nano Science and Technology	International	Sathyabama University
8	S. Leela	2018	Trends in Physics of Materials NCRTPM	National (Poster)	Pachaiyappa's college
9	S. Leela	2018	Recent Trends in Applied Science and Technology	International	Indian science and Technology association at Periyar University

10	S. Leela	2019	Hierarchically structured materials	National	SRM University
11	N. Aparnadevi	2017	Lowered Temperature Synthesis of $\text{Bi}_2\text{Fe}_4\text{O}_9$ Instigated by High Energy Ball Milling	International	Defense Metallurgical Research Laboratory
12	N. Aparnadevi	2016	Bi Augmented Magnetization in Gadolinium Iron Garnet, 61st DAE Solid State Physics Symposium	National	KIIT University, Bhubaneswar
13	N. Aparnadevi	2016	Microwave Assisted Synthesis and Study of Multiferroic GdMnO_3	National (Best Oral Presentation)	SRM University, Ramapuram
14	N. Aparnadevi	2015	Luminescence Materials Devices and Applications [Lmda-15]	National	IGCAR, Kalpakkam and Luminescence Society of India

PAPER PUBLISHED BY FACULTIES

PUBLISHED COUNTS – 22

S.NO	STAFF NAME	YEAR	TOPIC	PUBLICATIONS
1	J. Bhavani	2019	Band Gap Engineering of $\text{Cu}_2\text{-II-IV-VI}_4$ Quaternary Semiconductors Using PBE-GGA, TB-mBJ and mBJ+U Potentials	International Journal of Scientific Research in Physics and Applied Sciences ISSN 2348 – 3423
2	J. Bhavani	2019	Band Gap Engineering of $\text{Cu}_2\text{ZnSnX}_4$ (X = S, Se and Te) Quaternary Semiconductors Using PBE-GGA, TB-mBJ and mBJ+U Potentials	International Journal of Materials, Mechanics and Manufacturing ISSN: 1793 - 8198
3	Rajeswari Gangadharan	2014	Methyl 4-(4-bromo-anilino)-2',5-dioxo-5H-spiro[furan-2,3'-indoline]-3-carboxyl-	Acta Crystallographica Section E; E70, o210-o211, 2014

			ate	
4	Rajeswari Gangadharan	2014	Crystal structure of (<i>E</i>)-2-[(4-chloro-2 <i>H</i> -chromen-3-yl)methylidene]- <i>N</i> -cyclohexylhydrazinecarbothioamide	Acta Crystallographica E70, o1039-o1040
5	Rajeswari Gangadharan	2015	Crystal structures of two hydrazinecarbothioamide derivatives: (<i>E</i>)- <i>N</i> -ethyl-2-[(4-oxo-4 <i>H</i> -chromen-3-yl)methylidene]hydrazinecarbothioamide hemihydrate and (<i>E</i>)-2-[(4-chloro-2 <i>H</i> -chromen-3-yl)methylidene]- <i>N</i> -phenylhydrazinecarbothioamide	Acta Crystallographica Section E; E71, 305-308, 2015
6	Rajeswari Gangadharan	2016	Crystal structure of 3-[(<i>E</i>)-(2-hydroxy-3-methoxybenzylidene)amino]-1-methyl-1-phenylthiourea	Acta Crystallographica E72, 608-611
7	Rajeswari Gangadharan	2016	Crystal structures of three carbazole derivatives: 12-ethyl-7-phenylsulfonyl-7 <i>H</i> -benzofuro[2,3- <i>b</i>]carbazole, (1), 2-(4,5-dimethoxy-2-nitrophenyl)-4-hydroxy-9-phenylsulfonyl-9 <i>H</i> -carbazole-3-carbaldehyde, (2), and 12-phenyl-7-phenylsulfonyl-7 <i>H</i> -benzofuro[2,3- <i>b</i>]carbazole,	Acta Crystallographica E72, 1744-1750
8	S. Leela	2015	Structural and optical studies on Nd doped	Superlattices and Microstructures 77, Pages 325-332”

			ZnO thin films	
9	S. Leela	2015	Structural and optical properties of Nd ³⁺ doped zinc oxide thin films deposited by spray pyrolysis”	Optik – International Journal for Light and Electron Optics 127, Issue 1, Pages 72-75
10	S. Leela	2017	Studies on growth and characterization of nonlinear optical material 4-chloro-4’methoxy benzyli deneaniline: A Schiff base organic material	Arabian Journal of Chemistry Pages s3974-s3981
11	S. Leela	2018	Tunable growth of semiconductor nanostructures by Plasma Enhanced Chemical Vapor Deposition - Synthesis, morphological and Raman studies	Super lattices and Microstructures 122, 510
12	S. Leela	2016	Studies of Silicon Nanowires with Different Parameters — By PECVD	International Journal of Nanoscience
13	S. Leela	2019	Investigation of Structural and Optical properties of Al:ZnO(AZO)Thin Films by sol-gel spin coating method	AIP Conference Proceedings 2117 020019
14	S. Leela	2019	Novel Substituted Azomethine – Metal Complexes: Spectral, Structural and Optical Properties	AIP Conference Proceedings 2117 020002
14	N. Aparnadevi	2019	Structural Properties, Optical, electrical and magnetic behavior of bismuth doped Gd ₃ Fe ₅ O ₁₂ prototype garnet	Journal of Materials Science, Materials in Electronics
16	N. Aparnadevi	2018	Fabrication of eco-friendly PNP transistor	AIP Conference Proceedings 1953, 050061

			using RF magnetron sputtering	
17	N. Aparnadevi	2017	Bi augmented magnetization in gadolinium iron garnet	AIP Conference Proceedings 1832, 140032
18	N. Aparnadevi	2017	Magneto-dielectric and Magneto-resistive in the mixed spinel – MgFe ₂ O ₄	AIP Conference Proceedings 1832, 130027
19	N. Aparnadevi	2016	Room temperature dual ferroicbehaviour of ball mill synthesized NdFeO ₃ orthoferrite	Journal of Applied Physics 120, 034101
20	N. Aparnadevi	2015	Phase Stabilization of Fe Substituted SmMn ₂ O ₅ : SmFeMnO ₅	Transactions of the Indian Institute of Metals, 1-6
21	N. Aparnadevi	2015	Multiferroicity in polar phase LiNbO ₃ at room temperature	Journal of Magnetism and Magnetic Materials, 391, 156–160
22	N. Aparnadevi	2015	Hopkinson effect and temperature dependent dielectric properties of single domain SrFe ₁₂ O ₁₉ particles	Phys. Status Solidi A, 1–7

Research projects

Department : Physics |Self Supporting
Name : Hema Malini C | S. Abhirami (Supervisor-Staff)
Title : Synthesis of FeMnO₄Ti Perovskite and its Structural Properties
Duration : 5 months
Amount : Rs 12000/-
Funding Agency : Ethiraj College for Women
Status : Completed

Number of Full time or Part time Candidates Completed - M.Phil. – Full time

YEAR	COUNTS
2014-2015	4
2015-2016	6
2016-2017	3
2017-2018	2
2019-2019	1
2019-2020	1