

Dr. G. RAMALINGAM Assistant Professor

#### **Contact**

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## Academic Qualifications: M.Sc, M.Phil, B.Ed, Ph.D

Degree	Name of University/Institute	<b>Year of Passing</b>
M.Sc(Physics)	University of Madras/Loyola College	2006
B.Ed(Physical Science)	University of Madras	2007
M.Phil(Physics)	University of Madras/Loyola College	2009
Ph.D(Physics)	University of Madras	2012

## **Teaching Experience: 4 Years 6 Months**

Designation	Institute	Department	Duration
Assistant Professor	Alagappa University	Nanoscience &	11-02-2016
		Technology	to till date
Assistance	National Institute of Technology (NIT),	Physics	6-Months
Professor (Adhoc)	Calicut-Kerala		
Guest Faculty	Central University of Tamil Nadu,	Physics	1-year
	Thiruvarur.		
Assistance	Sathyabama University, Chennai	Physics	3-years
Professor			

## Research Experience: 12- Years Additional Responsibilities

- 1. Digital Education Cell & NPTEL, Local Chapter Coordinator
- 2. Virtual Lab(V-Lab) Nodal Center Coordinator

## **Areas of Research**

- 1. Quantum/Nanomaterials Research (QMR)
- 2. Semiconductor Nanomaterials for Solar cell, Quantum LEDs (Q-LEDS) and Other Energy harvesting application.
- 3. Graphane Quantum Dots for Industrial Application
- 4. Highly luminescence Nanomateials for Bio-imaging, Bio-Tagging and Nano Drug Delivery system for anti-cancer Treatment etc.,

## **Research Supervision / Guidance**

Progra	ım of Study	Completed	Ongoing
Research	Ph.D.	-	1
	M.Phil.	2	-
Project	PG	25	4
	UG / Others	-	-

## **Publications**

International		National		Others
Journals	Conferences	Journals	Conferences	Books / Chapters / Monographs / Manuals
65	20	10	30	03

## **Funded Research Projects**

## **Ongoing Projects**

S.	Agency	Period		Project Title	Budget	
No		From	To		(Rs. In lakhs)	
1	DST- SERB	2017-2020		Fabrication of One Dimensional (1-D) Nanomaterial with Quantum Dots (QDs) for Solar Cell Application	25.00	
2	<b>AURF</b> - Start up grant	2017-2019		Quantum Dots for Bio-Imaging Applications	1.00	
3.	MHRD- SPARC &UKIERI	2019-2022		2D-QDs (Two Dimensional QDs): Synthesis and Applications in Electroluminescent diodes, Sensors and Solar Cells	60+12=72	
4.	RUSA- TBRP	2019-2023		Advanced Nanomaterials for Energy and Environmental Application	10.00	
5.	DST- SERB	2022-2023		ICANEE-2023	1.50	

## **Distinctive Achievements / Awards**

- 1. Best Research paper award at iCAM-2022 @Sathayabama University-Chennai
- 2. **Promising Researcher award-2022** by Alagappa University
- 3. Alagappar Research Recognizing Award-2020 by Alagappa University
- 4. Award of **Young Scientist** Fellowship from Tamil Nadu State Science and Technology (Government of Tamil Nadu) **TNSCST-2019**.
- 5. Innovative Scientific Research Technologist & Dedicated Academician (Nanoscience & Tech.) award by global awards-Malaysia (2018)
- 6. Best Research paper award at IIT-Madras (ISRS 2010)
- 7. Award and prize of General Proficiency in Physics(B.Sc) –Voorhees College Vellore
- 8. Prize of Best Student award (B.Sc) Voorhees College Vellore

## **Events organized in leading roles**

- Indo UK International Virtual Conference on Advanced Nanomaterials for Energy and Environmental Applications (ICANEE-2020), 16-18<sup>th</sup> Sep 2020, Convener & Organizing Secretary
- **2.** Three Days International Virtual Seminar on The Role of Nanotechnology Against COVID-19, Date : 20 -22 May 2020, **Organizing Secretary**

- 3. International Conference Advanced Nanomaterials (ICAN-2018) Feb 2018- **Organizing Secretary**
- 4. National seminar on Nanomaterials for specialized application –(NMSA 2017)-Org.commite
- 5. National seminar on World Standards day(WSD-2016) Organizing Secretary
- 6. National Conference on Recent Advances in Materials and Technology (NCRAMAT-2012)- **Org.commite.**
- 7. Workshop on virtual lab and MOOCS, Organizing Secretary

## Resource persons in various capacities

Number of Invited / Special Lectures/FDP delivered: 15

- 1. "The Revolutionary Development of Nanotechnology and Vast Opportunity in the Field of Science", delivered St.Joseph College, Trichy
- 2. Sriram arts and college, Thiruvallur-Chennai
- 3. Mother Thresa Woman University. Kodikanoal-
- 4. St.Joseph college of arts and Science, Cuddalore
- 5. Govt.Arts Collge, Salem-7
- 6. The Seethalakshmi Achi College for women, karaikudi
- 7. Aditanar College of Arts and Science, Tiruchendur
- 8. Holy Cross women College-Trichy
- 9. SSN College of Engineering, Chennai
- 10. Kamaraj College of Arts and Science-Tuticorin
- 11. Adikavi Nannaya University, Rajahmundry, Andhra Pradesh
- 12. Elavenil-Bharathidasan University-Trichy
- 13. SSN-Engineering College -Chennai
- 14. Karpagam Academy of Higher Education -Coimbatore
- 15. PPG college of arts and science Coimbatore
- 16. Sacred Heart College (Autonomous) Tiruppattur, Vellore
- 17. St. xavier's college palayamkottai
- 18. Sun Arts and science college-Tiruvannamalai

## Country Visited (Official):02

- 1. University of Mara Technological University Malaysia
- 2. National University of Singapore (NUS)-Singapore

## **Research Collaborating Country**

- 3. Brunel University, **London**
- 4. INL International Iberian Nanotechnology Laboratory, **Portugal**
- 5. CSIR lab-Pretoria, South Africa
- 6. Ural Federal University, Russia
- 7. Delaware State University -USA
- 8. Copperbelt University (CBU)- Zambia
- 9. National Water & Energy Center, UAE University, UAE
- 10. Adolfo Ibanez University, CHILE

#### **Others**

1. Articles published in Newspapers / Magazines : Action Editor-in Chief Science Magazine in Tamil (Monthly)

#### Recent Publications(as on Sep 2020)

#### **Book Chapter**

- 1. Introduction of Nanoscience (Publisher: LAP Lambert Academic Publishing (14 August 2012) Language: English, ISBN-10: 3659176672, ISBN-13: 978-3659176678
- 2. Quantum Confinement Effect of 2D nanomaterials, (https://www.intechopen.com/online-first/quantum-confinement)
- 3. Photocatalytic oxygen evolution reaction for energy conversion and storage of functional nanomaterials, K.Kaviyarasu C. MariaMagdalane A.Raja N.Matinise N.Mayedwa N.Mongwaketsi DouglasLetsholathebe G.T.Mola NaifAbdullahAl-Dhabi Mariadhas ValanArasu **G.Ramalingam** S.B.Mohamed Abdulgalim B.Isaev K.Kanimozhi A.K.H.Bashir J.Kennedy M.Maaza, *Handbook of Functionalized Nanomaterials for Industrial Applications, Micro and Nano Technologies* (2020) <a href="https://doi.org/10.1016/B978-0-12-816787-8.00003-X">https://doi.org/10.1016/B978-0-12-816787-8.00003-X</a>, Pages 55-81

#### Research Articles

- 1. Fabrication of self-charging supercapacitor based on two dimensional bismuthenegraphitic carbon nitride nanocomposite powered by dye sensitized solar cells, G Maheshwaran, P Pandi, S Suganya, B Arjun Kumar, G Ramalingam, M Ramesh Prabhu, S Sudhahar, *Journal of Energy Storage*, vol.56, pp.105900, 2022, **IF**:6.583
- 2. Synthesis of MoS2/Mg (OH) 2/BiVO4 hybrid photocatalyst by ultrasonic homogenization assisted hydrothermal methods and its application as sunlight active photocatalyst for water, D Karthigaimuthu, Subramaniyan Ramasundaram, Parthiban

- Nisha, B Arjun Kumar, J Sriram, **G Ramalingam**, P Vijaibharathy, Tae Hwan Oh, T Elangovan, *Chemosphere*, vol. 308, pp. 136406, 2022. **IF :7.086**
- 3. Fabrication of highly efficient and cost-effective dye-sensitized solar cells using ZnO/MWCNT nanocomposite as photoanode, S Vijayanath, K Janaki, **Ramalingam Gopal**, C Ragupathi, Baskaran Rangasamy, Mohammed Mujahid Alam, *Journal of Solid State Electrochemistry*, pp.1-12, 2022, **IF:2.647**
- 4. Investigation of Lithium Iodide Intercalated 2D-nanosheets for DSSC Applications, **Ramalingam Gopal**, International *Journal of Renewable Energy Research* (*IJRER*),vol.12(3), pp.1662-1669, 2022.
- 5. Properties Evaluation of Electroless Ni-Coated Low-Carbon Steels, **G.Ramalingam** *Journal of Nanomaterials*, vol. 2022, 2022, **IF:2.986**
- 6. Structure, Morphological, Magnetic, and Antibacterial Studies of Undoped and Ce/Mg-Doped NiO Nanoparticle Semiconductors Synthesized by Microwave Method, VT Geetha, **G Ramalingam**, MP Pachamuthu, S Gopinath, C Ragupathi, TA Sukantha, *Journal of Superconductivity and Novel Magnetism*, pp,1-7, 2022, **IF:1.506**
- 7. Facile synthesis of polymer-based magnesium hydroxide nanocomposites for photocatalytic degradation for methylene blue dye and antibacterial application, Karthigaimuthu Dharamalingam, Subramaniyan Ramasundaram, Vinoth Kumar Ponnusamy, K Bhuvaneswari, **G Ramalingam**, Athinarayanan Balasankar, Sriram Jeyaram, T Pazhanivel, S Florence, Elangovan Thangavel, Tae Hwan Oh, *Biomass Conversion and Biorefinery*, pp1-14, 2022, **IF:4.103**
- 8. Computational studies and experimental fabrication of DSSC device assembly on 2D-layered TiO2 and MoS2@ TiO2 nanomaterials B Arjun Kumar, V Vetrivelan, G Ramalingam, A Manikandan, S Viswanathan, P Boomi, G Ravi, Physica B: Condensed Matter, vol.633,pp. 413770,2022, IF:2.436
- 9. Photocatalytic activity of hierarchical CTAB-assisted TiO<sub>2</sub> nanoparticles for polluted water treatment using solar light illumination, Y Nirmal Rajeev, C Maria Magdalane, **G.Ramalingam**, L Bhushan Kumar, Norah Alwadai, MS Al-Buriahi, *Applied Physics A*, Vol.128, pp1-9,(2022), **IF:2.584**
- 10. Computational studies and experimental fabrication of DSSC device assembly on 2D-layered TiO<sub>2</sub> and MoS<sub>2</sub>@ TiO<sub>2</sub> nanomaterials, B Arjun Kumar, V Vetrivelan, **G.Ramalingam**, A Manikandan, S Viswanathan, P Boomi, G Ravi, *Physica B: Condensed Matter*, PP 413770,(2022), **IF:2.436**
- 11. Eco-Friendly Synthesis of Multishaped Crystalline Silver Nanoparticles Using Hill Garlic Extract and Their Potential Application as an Antifungal Agent, V Nallal, M Razia, Ozlem Ates Duru, **G Ramalingam**, Sasikala Chinnappan, Murugesan Chandrasekaran, RM Gengan, Woo Jin Chung, Soon Woong Chang, Balasubramani Ravindran, Journal of Nanomaterials, VOL. 2022, https://doi.org/10.1155/2022/7613210, **IF:2.98**

- 12. **G. Ramalingam,** C. Ragupathi, B. Rangasamy, I. Colak, V. Vetrivelan, N. Poudineh, B. Ravindran, S.W. Chang, R.M. Gengan, Structural and Optical Properties of CdSe/CdTe Core-Shell Quantum Dots, J. Nanomater. 2022 (2022) 1–7. https://doi.org/10.1155/2022/6316716. **IF:2.986**
- 13. Dharamalingam, K., Kumar, B. A., **Ramalingam, G.**, Florence, S. S., Raju, K., Kumar, P. S., ..& Thangavel, E. (2022). The role of sodium dodecyl sulfate mediated hydrothermal synthesis of MoS2 nanosheets for photocatalytic dye degradation and dyesensitized solar cell application. *Chemosphere*, 133725, **IF:7.08**
- 14. **G Ramalingam**, C Maria Magdalane, B Arjun Kumar, R Yuvakkumar, G Ravi, A Irudaya Jothi, Naresh Kumar Rotte, G Murugadoss, Antony Ananth, Enhanced visible light-driven photocatalytic performance of CdSe nanorods, *Environmental Research*, Volume 203, January 2022, page:111855, https://doi.org/10.1016/j.envres.2021.111855, **IF:6.498**
- 15. Indumathi, K., Tamilselvan, S., Rajasekaran, L., David, A. D. J., Muhammad, G. S., Ramalingam, G., & Biruntha, M. (2022). Structural and optical properties of Eu3+ doped Sr3Gd [PO4] 3 phosphor white-LED application. Materials Letters, 309, 131371, IF.3.423
- 16. Narthana Kandhasamy, **Gopal Ramalingam**, Govindhasamy Murugadoss, Manavalan Rajesh Kumar, Gunasekaran Manibalan, Rajabathar Jothi Ramalingam, Hemraj M Yadav, Copper and zinc oxide anchored silica microsphere: A superior pseudocapacitive positive electrode for aqueous supercapacitor applications, *Journal of Alloys and Compounds*, Volume 888, 25 December 2021, pp.161489, https://doi.org/10.1016/j.jallcom.2021.161489, **IF:5.3**
- 17. Kumar, B. A., Kumar, P., Elangovan, T., **Ramalingam, G.**, Ravi, G., Mohanapriya, P., & Natarajan, T. S. (2021). Surface functionalization of core-shell QDs for solar photovoltaic and anti-cancer applications. *Applied Surface Science Advances*, vol.5, pp.100122. https://doi.org/10.1016/j.apsadv.2021.100122
- 18. K Indumathi, S Tamilselvan, L Rajasekaran, A Duke John David, G Shakil Muhammad, **G Ramalingam**, M Biruntha, Structural and optical properties of Eu3+ doped Sr3Gd [PO4]3 phosphor for white-LED application, *Materials Letters*, Volume 309, 15 February 2022, pp.131371, https://doi.org/10.1016/j.matlet.2021.131371, **IF.3.423**
- 19. Aishwary, P., Ilango, E., **Ramalingam, G**., & Vetrivelan, V. (2021). Growth and characterization of L-tyrosine magnesium chloride single crystal: A promising NLO crystal. *Materials Today:* Proceedingshttps://doi.org/10.1016/j.matpr.2021.05.551. **IF-0.97**
- 20. Kumar, B. A., **Ramalingam, G.**, Karthigaimuthu, D., Elangovan, T., & Vetrivelan, V. (2021). Fabrication of natural dye sensitized solar cell using tridax procumbens leaf and

- beetroot extract mixer as a sensitizer. *Materials Today*: Proceedings. https://doi.org/10.1016/j.matpr.2021.04.221, **IF-0.97**
- 21. Asaithambi, S., P. Sakthivel, M. Karuppaiah, R. Yuvakkumar, K. Balamurugan, Tansir Ahamad, MA Majeed Khan, **G. Ramalingam**, Mustafa KA Mohammed, and G. Ravi. (2021).Preparation of Fe-SnO2@ CeO2 nanocomposite electrode for asymmetric supercapacitor device performance analysis. *Journal of Energy Storage*, 36,102402. https://doi.org/10.1016/j.est.2021.102402 **I.F=6.583**
- 22. Baskaran Palanivel, Mathiazhagan Lallimathi, B Arjunkumar, Mohd Shkir, T Alshahrani, Khadijah S Al-Namshah, Mohamed S Hamdy, S Shanavas, Munusamy Venkatachalam, **G Ramalingam**, rGO supported g-C<sub>3</sub>N<sub>4</sub>/CoFe<sub>2</sub>O<sub>4</sub> heterojunction: Visible-light-active photocatalyst for effective utilization of H<sub>2</sub>O<sub>2</sub> to organic pollutant degradation and OH radicals production, *Journal of Environmental Chemical Engineering*, vol.9, 104698, 2021, **I.F= 5.909**
- 23. Joao Gaspar Joice Sophia Ponraj, Muniraj, Vignesh Narayanan, Ranjith Kumar Dharman, Valanarasu Santiyagu, Ramalingam Gopal, Recent Advances and Need of Green Synthesis in Two-Dimensional Materials for Energy Conversion and Storage Applications, *Current Nanoscience*, 10.2174/1573413716999210101122503, **I.F= 1.824**
- 24. Rajamanikandan, S., Biruntha, M., & Ramalingam, G. (2021). Blue Emissive Carbon Quantum Dots (CQDs) from Bio-waste Peels and Its Antioxidant Activity. *Journal of Cluster Science*, 1-9. https://doi.org/10.1007/s10876-021-02029-0 **I.F= 3.061**
- 25. **Ramalingam Gopal**, Maria Magdalane Chinnapan, Arjun Kumar Bojarajan, Naresh Kumar Rotte, Joice Sophia Ponraj, Ravi Ganesan, Ivanov Atanas, Manivannan Nadarajah, Rajesh Kumar Manavalan, Joao Gaspar, Facile synthesis and defect optimization of 2D-layered MoS 2 on TiO 2 heterostructure for industrial effluent, wastewater treatments, *Scientific Reports*, vol.10, pp 1-15, (2020), **I.F= 4.379**
- 26. Investigation of uni-directional nanorods composed microspheres and branched TiO2 nanorods towards solar cell application B.Arjunkumar **G.Ramalingam** M.Ramesh Joice SophiaPonraj K. Venkateswara Rao, *Materials Letters*, Volume 273, (2020),127900, **IF 3.019**
- 27. Electrical and chemical stability of CuS nanofluids for conductivity of water soluble based nanocomposites, **G.Ramalingam** R.Vignesh .Ragupathi C. MariaMagdalane K.Kaviyarasu J.Kennedy, *Surfaces and Interfaces*, Volume 19, (2020) 100475, **IF 4.837**
- 28. Investigations on solid-state parameters of third-order nonlinear optical Ni 1- x Zn x Fe2O4 nanoparticles synthesized by microwave-assisted combustion method, P Surendran, A Lakshmanan, S Sakthy Priya, K Balakrishnan, P Rameshkumar, Tejaswi

- Ashok Hegde, G Vinitha, **G Ramalingam**, A Antony Raj, *Applied Physics A* volume 126, Article number: 257 (2020), Volume 126, Issue4, Pages1-11, **IF 2.584**
- 29. Optical and nonlinear optical properties of Zn0.96Cu0.04Al2O4 nanocomposites prepared by combustion method, P.Surendran A.Lakshmanan S.Sakthy Priya K.Balakrishnan Tejaswi AshokHegde G.Vinitha **G.Ramalingam**, P.Rameshkumar K.Kaviyarasu, *Materials today: Proceedings* (2020) https://doi.org/10.1016/j.matpr.2020.02.722, **IF 0.97**
- 30. Superficial preparation of biocompatible carbon quantum dots for antimicrobial applications A.Lakshmanan P.Surendran N.Manivannan M.Sathish C.Balalakshmi N.Suganthy P.Rameshkumar K.Kaviyarasu **G.Ramalingam**, *Materials today: Proceedings* (2020) https://doi.org/10.1016/j.matpr.2020.02.694, **IF 0.97**
- 31. Unstable cell efficiency in CdS quantum dot sensitized solar cell using low cost lugols iodine aqueous electrolyte R.Vignesh B.Arjun kumar A.Muthuvinayagam T.Elangovan K.Kaviyarasu G.Theophil Anand **G.Ramalingam**, *Materials today: Proceedings* (2020) https://doi.org/10.1016/j.matpr.2020.02.674, **IF 0.97**
- 32. Investigations on structural, electrical, and third order nonlinear optical properties of benzimidazolium maleate single crystal S.Sakthy Priya K.Balakrishnan P.Surendran A.Lakshmanan S.Pushpalatha **G.Ramalingam** P.Rameshkumar K.Kaviyarasu TejaswiAshok Hegde G.Vinitha, *Materials today: Proceedings* (2020) https://doi.org/10.1016/j.matpr.2020.02.680, **IF 0.97**
- 33. Efficacy of dye degradation of contaminated soil microbial isolates M.Biruntha J.Archana K.Kavitha K.Vanimuthu B. KarunaiSelvi J. ArockiaJohn Paul R.M.Vithyavathy K.Kaviyarasu **G.Ramalingam**, *Materials today: Proceedings* (2020) https://doi.org/10.1016/j.matpr.2020.02.692, **IF 0.97**
- 34. Synthesis and characterization of CeO2 nanoparticles by hydrothermal method C.Maria Magdalane K.Kaviyarasu B.Siddhardha **G.Ramalingam**, *Materials today: Proceedings* (2020) https://doi.org/10.1016/j.matpr.2020.02.283, **IF 0.97**
- 35. Facile preparation of high fluorescent carbon quantum dots from orange waste peels for nonlinear optical applications, Pandiyan Surendran Arumugam Lakshmanan Gandhirajan Vinitha **Gopal Ramalingam** Pitchan Rameshkumar, *Luminescience- The Journal Of Biological And Chemical Luminescience*, (2019) <a href="https://doi.org/10.1002/bio.3713">https://doi.org/10.1002/bio.3713</a>, Volume 35, issue2, Pages 196-202., **IF 1.855**
- 36. Synthesis of titanium oxide nanoparticles using *Aloe barbadensis mill* and evaluation of its antibiofilm potential against *Pseudomonas aeruginosa* PAO1 J.Rajkumari C. MariaMagdalane B.Siddhardha J.Madhavan **G.Ramalingam** Naif AbdullahAl-Dhabi

- Mariadhas ValanArasu A.K.M.Ghilan V.Duraipandiayan K.Kaviyarasu, *Journal of Photochemistry and Photobiology B: Biology*, Volume 201, (2019) Pages 111667. **IF 6.252**
- 37. Investigation on antibacterial and photocatalytic degradation of Rhodamine-B dye under visible light irradiation by titanium molybdate nanoparticles prepared via microwave method, A.Mobeen C.Maria Magdalane S.K.Jasmine Shahina D.Lakshmi R.Sundaram G.Ramalingam A.Raja J.Madhavan DouglasLetsholathebe A.K.H.Bashir M.Maaza K.Kaviyarasu, *Surfaces and Interfaces*, Volume 17,(2019) Pages 100381, **IF 4.837**
- 38. Green synthesis of ZnO nanoparticle using *Prunus dulcis* (Almond Gum) for antimicrobial and supercapacitor applications, G.Theophil Anand D.RenukaaR.Ramesh L.Anandaraj S.John Sundaram **G.Ramalingam** C. MariaMagdalane A.K.H.Bashir M.Maaza K.Kaviyarasu, *Surfaces and Interfaces*, Volume 17, (2019) Pages 100376, **IF 4.837**
- 39. Structural and morphological properties of Co3O4 nanostructures: Investigation of low temperature oxidation for photocatalytic application for waste water treatment C. MariaMagdalane K.Kaviyarasu M.V.Arularasu K.Kanimozhi **G.Ramalingam**, *Surfaces and Interfaces*, Volume 17, (2019) Pages 100369, **IF 4.837**
- 40. Self-cleaning mechanism of synthesized SnO2/TiO2 nanostructure for photocatalytic activity application for waste water treatment, C. MariaMagdalane K.Kanimozhi M.V.Arularasu **G.Ramalingam** K.Kaviyarasu, *Surfaces and Interfaces*, Volume 17, (2019), Pages 100346, **IF 4.837**
- 41. Effect of fuel content on nonlinear optical and antibacterial activities of Zn/Cu/Al2O4 nanoparticles prepared by microwave-assisted combustion method A.Lakshmanan P.Surendran S.SakthyPriya K.Balakrishnan Tejaswi Ashok Hegde G.Vinitha **G.Ramalingam** B.Ravindran S.W.Chang M.S.Elshikh A.H.Mahmoud D.A.Al Farraj P.Rameshkumar, *Journal of King Saud University Science*, Volume 32, Issue 2,(2020) Pages 1382-1389, **IF 4.011**
- 42. Up-Scalable Synthesis of Size-Controlled White-Green Emitting Behavior of Core/Shell (CdSe/ZnS) Quantum Dots for LED Applications **Ramalingam**, **G** Ragupathi, C Kaviyarasu, K Letsholathebe, D Mohamed, S. B Magdalane, C. Maria Mola, G. T Isaev, Abdulgalim B Maaza, M, *Journal of Nanoscience and Nanotechnology*, Volume 19, (2019) Pages 4026-4032, **IF 1.354**
- 43. Preparation, Characterization and Structure Prediction of In2SnO3 and Spectroscopic (FTIR, FT-Raman, NMR and UV-Visible) Study Using Computational Approach Perumalsamy, R Kaviyarasu, K Nivetha, S Ayeshamariam, A Punithavelan, N

- Letsholathebe, Douglas **Ramalingam, G** Jayachandran, M, *Journal of Nanoscience and Nanotechnology*, Volume 19, (2019) Pages 3511-3518, **IF 1.354**
- 44. Simultaneous growth of rutile TiO2 nanorod on FTO plate by onestep hydrothermal process for CdS sensitized solar cell applications, Vignesh Ravi Arjun Kumar Bojarajan Vetrivelan Vaithiyanathan Ragupathi Chinnadurai Kaviyarasu Kasinathan **Ramalingam Gopal,** *International Journal of Chemistry and Materials Research* DOI: 10.18488/journal.64.(2019) Volume7 Pages 1-9
- 45. Mechanical and Thermal Properties of Fiber Reinforced Styrene-Ethylene-ButyleneStyrene (SEBS) Composite Doped with CuO, MgO and ZnO Nanoparticles S. RAVICHANDRAN1, S. MURUGESAN1, and G. RAMALINGAM, *Asian Journal Of Chemistry* https://doi.org/10.14233/ajchem.(2019). Volume 31 Pages 714-718, IF 0.31
- 46. Synthesis of water-soluble and bio-taggable CdSe@ZnS quantum dots, **G. Ramalingam**, K Venkata Saravanan, T Kayal Vizhi, M Rajkumar, Kathirvelu Baskar, *RSC Advances*, 8(16), 8516-8527, (2018). **IF 3.361**
- 47. Electrical Behaviour of Polyethylene Vinyl Acetate/ZnO Nanocomposite, A.J. Edakkara, J.J. Mathen, J. Sebastian, **G. Ramalingam**, G.P. Joseph, Proceedings of The International Conference Nanomaterials: Applications And Properties, Vol. 2, No 3, NCNN (3pp) (2013).
- 48. Investigation on mild condition preparation and structural, optical and thermal properties of PVP capped CdS nanoparticles, N.S. Nirmala Jothi. **G. Ramalingam**, A.R. Baby Suganthi, Gunaseelan. R and P. Sagayaraj, *Int. J. Semi & Tech*, 2 (2012) 1-17.
- 49. Investigation on the structural and morphological behaviour of CdSe nanoparticles by hydrothermal method. **G.Ramalingam** and J. Madhavan, *Archi. Appl.Sci Res* 3 (2011) 217-224.
- 50. Structural and Optical property studies of CdSe crystalline nanorods synthesized by a solvothermal method **G. Ramalingam**, N. Melikechi, P. Dennis Christy, S. Selvakumar and P. Sagayaraj, *J. Crys. Grow*, 311 (2009) 3138-3142. 17, **IF: 1.797**
- 51. Synthesis and Characterization of One Dimensional Semiconductor Nanorods And Nanobelts. **G.Ramalingam**, J.Madhavan, P.Sagayaraj, S.Selvakumar, R.Gunaseelan, R.Jerald Vijay, P.Sagayaraj, *Trans.Indi. Instit .Mat*, 64 (2011) 217-220.
- 52. Development of CdS nanorods of high aspect ratio under hydrothermal conditions with PEG template. N.S. Nirmala Jothi, P. Dennis Christy, A.R. Baby Suganthi, **G.Ramalingam** and P. Sagayaraj, *J. Cry. Growth*, Doi:10.1016/j.jcrysgro. 2010. 12. 055. **IF:1.797**

- 53. Synthesis Of CdSe@ZnS Quantum Dots Via Non-TOPO Hydrothermal Techniques, **G. Ramalingam**, J. Madhavan, R. Jerald Vijay, M. Vimalan, P. Sagayaraj, *Ameri. Inst. Phy-* Conference Proceedings, 1349, (2010) 379-380. **IF:0.40**
- 54. Growth, Spectral and Thermal Studies of Organic NLO Crystals of DSAS by SNM Technique, *Ameri. Inst. Phy-* Conference Proceedings, 1349,(2010)206-207.
- 55. Synthesis and characterization of CdSe/ZnSe nanorods, G. Ramalingam, S. Shri Prasad and J. Madhavan, *Ameri. Inst. Phy-* Conference Proceedings, 1447(2011) 325- 326. **IF:0.40**

## Membership in

#### **Professional Bodies**

- 1. Membership in IEEE
- 2. Member of Physics today- USA
- 3. Member International Nanoscience community
- 4. Member of Science and Engineering Institute
- 5. Life member of Material Research Society India(MRSI)
- 6. Life Member of Indian Science Congress Association (INSCA)

#### **Editorial Board**

- 1. Journal of Nanoscience and Technology
- 2. Preparation and Characterization of Crystalline Materials (ISBN: 978-81-931566-1-2)
- 3. International journal of Nano Dimension
- 4. Current Nanomaterial -Bentham Science Publishers
- 5. MATERIAL TODAY PROCEEDINGS
- 6. PHYSICS CHEMISTRY LETTERS

### **Advisory Board**

- 1. National Conference on Preparation and Characterization of Crystalline Materials (NCPCCM-2016)
- 2. National Conference on Recent Advances of Materials And Technology -(NCRAMAT -2012)

#### **Developing e-content:**

- 1. Sol-gel synthesis of nanopartilees 1,36,016 Views at slider share
- **2.** Hydrothermal/Solvothermal synthesis of Nanopartilces, **11051** Views at slider share.
- 3. Introduction to Nanoscience -1512 Views at slider share

## **Events Participated (46)**

## **Conferences / Seminars / Workshops: 37**

# List of papers presented in International Conferences/Seminar/Workshop Participated

- Attended and presented paper at 5th International conference on Nanoscience and Technology (ICONN 2019) entitled "Design synthesis and physical of (core/shell) Quantum dots" at SRM institute of science and technology kattankulathur during 28th - 30th Jan 2019
- **2.** Presented a paper at **India Uk** second international conference on "Advance nanomaterial for energy environment and healthcare application (ANEH 2019)" organized by Bishop Heber College India and Swansea University UNITED KINGDOM from **4th to 6th Feb 2019**
- **3.** Participated in International Conference on Advance Semiconductor Material and Devices (ICASMD- 2018) organized by C Met Hyderabad during 8-10 March 2018.
- **4.** International Conference on sustainable Energy Technology (I-SET 2018) organized by school of physics and school of Chemistry Bharathidasan University Tiruchirappalli on June 27 & 282018
- **5.** International lecture workshop on Advanced Materials Engineering (PiE-IV)
- **6.** International workshop on "Molecular Physiology, Therapeuties and Experimental Medicine" **MPTEM 2016**.
- 7. Internal conference on Recent Trends in Microbiology, RTM-2016
- **8.** Attended and presented papers at **INDIA –UK** joint networking international scientific seminar on "Nanomaterials and Devices for Energy and Environment" held at Loyola College, Chennai on 16-18 December 2013. International Symposium on Nanotechnology- Present and Future Trends (**INSYN2010**), Center for Nano technology Research, VIT University, Vellore, Tamilnadu, 25 to 26 August 2010.
- **9. INDO-ITALIAN** advanced level workshop on semiconductor nanostructures, ultra thin films and applications, organized by Anna University Chennai and Embassy of Italy, on Sep-8-10, 2010.
- **10.** Synthesis, Structural and Optical properties of CdSe nanrods for nano photonics applications, **G. Ramalingam**, P. Dennis Christy, N.SNirmalaJothi, T. Rajesh Kumar, S. Selvakumar and P. Sagayaraj, International Conference on Fiber Optics and Photonics, **IIT Delhi**, 13 -17 December 2008, **ISBN: 978-81-309-1203-5.**
- **11.**Synthesis and characterization of one-dimensional CdSe nanobelts by Hydrothermal method **G.Ramalingam**, P.Dennis Christry, N.S.Nirmala Jothi and P. Sagayaraj, International Conference on Nanoscience and Nanotechnology(**ICONN-2010**) SRM University, Kattankulathur-Chennai 603203, 24 Feb 2010. **ISBN: 978-8424-578-3**.

- **12.** One step synthesis of spherical Gold Nanoparticles via wet chemical reduction method, Belina Xavier, P. Dennis Christy, **G. Ramalingam**, A. Ramanand, and P. Sagayaraj, International Conference on Nanoscience and Nanotechnology (**ICONN-2010**), SRM University, Kattankulathur- 603203 Chennai, 24 Feb 2010. **ISBN: 978-8424-578-3.**
- **13.** Preparation and characterization of cadmium sulfidenanocrystals, N.S Nirmala Jothi, P. Dennis Christy, **G. Ramalingam**, A. Muthuvinayagam and P. Sagayaraj, 3rd International symposium for research scholars on metallurgy, materials science and Engineering(**ISRS 2010**), **IIT Madras**, Chennai, 10 12 December 2008 (**Best Paper awarded**).
- **14.** Growth and Structure Evolution of Tin dioxide for Gas Sensor Application, A. Muthuvinayagam, P. Dennis Christy, N.S.Nirmala Jothi, **G. Ramalingam** and P. Sagayaraj, International Conference on "Recent trends in sensor- Development for the assessment and management of the environment", Loyola College, Chennai, 8-10 January 2009.
- **15.** Synthesis And Characterization Of One Dimensional Semiconductor Nanorods And Nanobelts, **G.Ramalingam**, J.Madhavan, S.Selvakumar, R.Gunaseelan, R.Jerald Vijay, P.Sagayaraj, International Symposium for Research Scholars (**ISRS 2010**) Organized by Department of Metallurgical and Materials Engineering, IIT Madras, December 20 22, 2010.
- **16.** Activitely participated short term programme on "Nanostructured Materials Processing & Characterization" held at National Insistute of Technology Tiruchirappalli on 7 & 8 November, 2014.
- **17.** International Seminar and Workshop on **Medical and Pharmaceutical Nanotechnology**, Anna University, Tiruchippalli, Tamil Nadu on Nov 25-27, 2009.

## **Other Training Programs**

#### List of National Conference/Seminar/Workshop Participated

- 1. RUSA sponsored one day workshop on " Technical and Scholarly Writing" on  $14^{\rm th}$  Feb 2019
- 2. 1st Two days National workshop on "Indigenous Cow management and their value added products" (ICMVAP 2018) held on 18th 19th Dec 2018 organized by the Department of Animal Health and Management Alagappa University Karaikudi
- **3.** One day workshop on "Design and development of MOOCs for the faculty members of Alagappa University and Affiliated Colleges held on 8th Nov 2018.
- **4.** Participated in UGC Sponsored  $102^{nd}$  Orientation Programme from 18.05.2018 to 14.06.2018 and obtained the grade **A**
- **5.** Participated lecture workshop on "topology and Quantum Mechanics held at P.B Siddhartha college of arts and science Vijayawada A.P on 9th to 10th Feb 2018.

- **6.** Participated in the NPTEL workshop clonducted on July 15 2017 by IIT at Central Lecture Theare (CLT) IITM.
- 7. Participated and presented the "National Conference On Enhancing Entrepreneurship and Innovation in Biotechnology for sustainable Development" organized by TNSRO Pudukottai held on 28 and 29 July 2017 at H.H Thr Rajahs college Pudukotta. Paper title "Coreshell Preparation of cdse/zns Quantum Dots for Bio Imaging Application.
- **8.** Participated in the World Animal day celebration organized by the department of Animal Health and Management Alagappa University Karaikudi held on 4<sup>th</sup> Oct 2017.
- **9.** Participated in a one week short term training programme on research Publication and anti Plagiarism organized by the Department of English and Foreign Languages and Centre for Technical and Academic Writing Alagappa University karaikudi on 9 15 Oct 2017.
- **10.** Participated in the Kalam Young Researchers Conference (KYRC) 01 held on 16<sup>th</sup> October 2017 at CSIR CECRI karaikudi
- **11.** Frontier Areas in Chemical Technologies FACTS-2016.
- **12.** National Conference on Preparation and Characterization of Crystalline Materials (NCPCCM-2016)
- **13.** Activitelly participated short term programme on "Nanostructured Materials Processing & Characterization" held at National Institute of Technology Tiruchirappalli on 7 & 8 November, 2014.
- **14.** Synthesis, structural, optical and morphological studies of CdSe/CdTe core shell nanocrystals, **G.Ramalingam**, J.Madhavan, Recent advances in materials and technology, Sathayabama University, Chennai, 6-7 Jan, 2012.
- **15.** CdSe/ZnSe composite nanorods synthesis and its structural, optical and morphological studies S.Shri Prasad, **G.Ramalingam**, J.Madhavan, national conference on nanoscience and nanotechnology (NCNN-2011), organized by university of madras, Chennai, August 25-27, 2011.
- **16.** Synthesis and characterization of colloidal CdSe NRs,NBs and CdSe/ZnS QDs, **G.Ramalingam**, J.Madhavan, 98th Indian science congress, SRM university, Chennai, January 3-7, 2011.
- **17.** Growth, Spectral and Thermal Studies of Organic NLO crystals of DSAS by SNM Technique, R. Gunaseelan, R. Jerald Vijay, **G. Ramalingam** and P. Sagayaraj, 55<sup>th</sup> DAE Solid State Physics Symposium (2010).
- **18.** Growth, structural, linear and nonlinear optical and thermal studies of SR method grown LPM crystal, R. Gunaseelan, P. Ramesh Kumar, S. Selvakumar, G. Ramalingam and P. Sagayaraj, 15th National Seminar on Crystal Growth, PSN College of Engineering, Thiruneleveli, Tamil Nadu, March, 24-26, 2011.
- **19.** Third order nonlinear optical properties of 4-N, N-dimethylamino-4'-N'- methylstilbazolium iodide (DMSI) single crystal, R. Gunaseelan, A. Antony Raj

- **G. Ramalingam**, R. Jerald Vijay and P. Sagayaraj, National Seminor on "Recent trends in nonlinear optical materials and characterization", Post Graduate Dept.of.Physics, Sacred Heart College, March 10-11, 2011, Chalakudy, Kerala.
- 20. Unidirectional growth, rocking curve, linear and nonlinear optical properties of LPHCl single crystals, P. Ramesh Kumar,R.Gunaseelan, S. Kumararaman G. Ramalingam and P. Sagayaraj, RASH'11, National Conference on recent advancements in Science and Humanities, 18-19 march 2011 UIT, Coimbatore-641020.
- **21.** Synthesis of CdSe@ZnS Quantum Dots via Non-TOPO Hydrothermal Techniques, **G.Ramalingam**, J.Madhavan, R.Jerald Vijay, M.Vimalan,55<sup>th</sup> DAE Solid State Physics Symposium, Manipal University, December 26 30, 2010.
- **22.** Growth, spectral and thermal studies of organic NLO crystal of DSAS by SNM technique, R. Gunaseelan, **G. Ramalingam**, R. Jerald Vijay and P. Sagayaraj, 55<sup>th</sup> DAE Solid State Physics Symposium, Manipal University, December 26 30, 2010
- **23.**UGC sponsored workshop on "Recent Trends in Crystal Growth" Organized by crystal growth centre, Anna university Chennai on 30<sup>th</sup> march 2010.
- **24.** National conference on "Advances in Nanomaterials in Catalysis" Organized by department of chemistry, Loyola College, Chennai on Dec 18-19, 2010.
- **25.** Selective synthesis of CdSe nanoparticles through a novel Solvothermal route, A.R. Baby Sunganthi, N.S. NirmalaJothi, **G. Ramalingam**, P. Dennis Christy, P. Sagayaraj, DAE Solid State Physics Symposium 2009 (DAE-SSPS-2009), Maharaja Sayajirao University of Baroda was held during December 14-18, 2009 at the Maharaja Sayajirao University of Baroda, Vadodara.
- **26.**Low temperature hydrothermal synthesis of CdS sub micro and micro sphere self assembled from nanoparticles, N. S. NirmalaJothi, P. Dennis Christy, **G. Ramalingam**, A. Muthuvinayagam and P. Sagayaraj, Eighth DAE-BRNS National Laser Symposium, LASTEC, Delhi, January 7-10, 2009.
- **27.** Investigation on low temperature growth and structural properties of highly crystalline titania nanoparticles, P. Dennis Christy, N. S NirmalaJothi, **G. Ramalingam,** A. R Baby Suganthi and P. Sagayaraj, 13th National Seminar on Crystal Growth, SSN College of Engineering, Kalavakkam, Tamil Nadu, January 27 29, 2009.
- **28.** Preparation of highly crystalline titania nanoparticles using solvothermal method, P. Dennis Christy, **G. Ramalingam** and P. Sagayaraj, National Seminar on Recent Advances in Physics, Department of Physics, St. Xavier's College (Autonomous), Palayamkottai, Tamil Nadu, February 26-27, 2009.
- **29.** 13<sup>th</sup> National Seminar on Crystal Growth 27-29 Jan 2009, by centre for crystal growth, SSN College of Engineering

# Training courses and conferences / Seminars / Workshop attended

Event	Organizer / Place	Period / Duration
Refresher Courses /	102 nd orientation programme, Bharathidasan	18-05-2018 TO
Training programmes	University, Trichy	14-06-2018
Methodology workshop	Teaching and learning of fabrication of thin	3-07-2018
	film & optoelectronic devices through hands on	TO 8-07-2018
	experience, NIT Warangal,	
	NPTEL- structural analysis of nanomaterials	Aug 2018-Sep 2018,
Teaching-learning-		
evaluation programme	, Alagappa University	
	Accreditation quality enhancement , Alagappa	6 <sup>th</sup> -12 <sup>th</sup> Jan 2017
	University	
Soft skill development	Traning programme on research publication and	9-15 <sup>th</sup> Oct.2017
	anti-plagiarism, Alagappa University	

# **Academic Activates**

S. No	Positions held	Name of the Institutions	Duration	
			From	То
1.	Department NAAC & IQAC coordinator	Alagappa University	2016	2019
2.	University Dy.Coordinator SWAYAM	Alagappa University	9-02-2018	Till date
3.	NEHEJRF to NFHESRF Expert committee	Periyar EVR college, Trichy	23-03-2018	Till date
4.	Stock verification officer	Alagappa University	30-07-2018	Till date
5.	SPDF/PDF Scrutiny committee	Alagappa University	6-07-2019	Till date
6.	Co-coordinator of Entrepreneurship, Innovation and Career Hub	Alagappa University	30-09-2019	Till date
7	Doctoral committee member	VIT, Vellore	14-10-2019	Till date
8	Doctoral committee member	Bharathidasan University	09-02-2018	Till date
9	Curriculum Development cell  —Dept. coordinator	Alagappa University	27-11-2019	Till date
10	Village Extension Programme(VEP) coordinator	Alagappa University	3-10-2018	Till date

## **Academic Identity**

- 1. https://orcid.org/0000-0001-6337-0437
- 2. <a href="https://www.scopus.com/authid/detail.uri?authorId=57206136779">https://www.scopus.com/authid/detail.uri?authorId=57206136779</a>
- 3. <a href="https://scholar.google.co.in/citations?user=https://scholar.google.com/citations?user=https://scholar.google.com/citations?user=l9TsAbIAAAAI</a> <a href="mailto:ser=19TsAbIAAAAI">ser=19TsAbIAAAAI</a> <a href="mailto:ser=19TsAbIAAAAI">ser=19TsAbIAAAAI</a>
- 4. <a href="https://academic.microsoft.com/profile/eh02g234-g45h-4390-f987-g73gj471ej41/G.RAMALINGAM/publication/search?q=RAMALINGAM%20G0PAL&qe=%2540%2540%2540USER.PUBLICATIONS%253Dad02c234-c45d-4390-b987-c73cf471af41&f=&orderBv=0</a>
- 5. <a href="https://www.researchgate.net/profile/Ramalingam-Gopal">https://www.researchgate.net/profile/Ramalingam-Gopal</a>
- 6. <a href="https://vidwan.inflibnet.ac.in/profile/68065?fbclid=IwAR0pqMwrbN3pgTNVnfLwhyj\_5mUiabz4G0iGsDWnTYWxZEyr60jjZaDpGhQ">https://vidwan.inflibnet.ac.in/profile/68065?fbclid=IwAR0pqMwrbN3pgTNVnfLwhyj\_5mUiabz4G0iGsDWnTYWxZEyr60jjZaDpGhQ</a>

