Dr.G.RAMALINGAM
Assistant Professor

Contact

Address	:	Department of Nanoscience and Technology Alagappa University, Science Campus Karaikudi – 630 003 Tamil Nadu, INDIA
Employee Number	:	Employee No.35403
Date of Birth	:	27-05-1984
Contact Phone (Office)	:	+91 4565-225630 /373(Ext)
Contact Phone (Mobile)	:	+91 9445295572
Contact e-mail(s)	:	ramanloyola@gmail.com /alunanoram@gmail.com
Skype id	:	ramalingamg

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

Degree	Name of University/Institute	Year of Passing
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 & Technology	11-02-2016 to till date
Assistance Professor (Adhoc)	National Institute of Technology (NIT), Calicut-Kerala	Physics	6-Months
Guest Faculty	Central University of Tamil Nadu, Thiruvarur.	Physics	1-year
Assistance Professor	Sathyabama University, Chennai	Physics	3-years

Research Experience: 6 Years

Additional Responsibilities

1. NPTEL , Local Chapter Coordinator
2. Virtual Lab(V-Lab) Nodel Center Coordinator
3. Alagappa University Consumer Club –Assist. Coordinator
4. Alagappa University- Massive Open Online Courses (MOOCs) member
5. M.Sc-1st Year Nanonoscinece &Technology –Class in charge
6. Students online course (SWAYAM)
7. Department Anti-Ragging committee Co-ordinator.
8. M.Sc, & M.Phil, Ph.D Entrance exam Question paper set-up
9. ALUTES-2016, University Cultural club Event Co-ordinator
10. Department Cultural Club (2016) Co-ordinator.
11. Alagu –Aaram 2016 Event Co-ordinator.

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

Program of Study		Completed	Ongoing
Research	Ph.D.	-	-
	M.Phil.	-	1
Project	PG	1	1
	UG / Others	-	-

Publications

International		National		Others
Journals	Conferences	Journals	Conferences	Books / Chapters / Monographs / Manuals
6	08	2	25	01

Cumulative Impact Factor (as per JCR) : 4.6775
h-index : 03
i10 index : 03
Total Citations : 42

Funded Research Projects

Completed Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1				------NIL----	

Ongoing Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	**DST-SERB**	2017-2020		**Fabrication of One Dimensional (1-D) Nanomaterial with Quantum Dots (QDs) for Solar Cell Application**	**25.00**
2	**AURF-** Start up grant	2017-2019		**Quantum Dots for Bio-Imaging Applications**	**1.00**

Distinctive Achievements / Awards

1. Best Research paper award at IIT-Madras (**ISRS 2010**)
2. General Proficiency in Physics(B.Sc) –Voorhees College Vellore
3. Best Student award (B.Sc) -Voorhees College Vellore

Events organized in leading roles

1. National seminar on Nanomaterials for specialized application –(NMSA 2017)- **Org.commite**
2. National seminar on World Standards day(WSD-2016) –**Organizing Secretary**
3. National Conference on Recent Advances in Materials and Technology (NCRAMAT-2012)- **Org.commite**

Events Participated (37)

Conferences / Seminars / Workshops: 37

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

1. International lecture workshop on Advanced Materials Engineering (PiE-IV)
2. International workshop on "Molecular Physiology, Therapeuties and Experimental Medicine" **MPTEM 2016**.
3. Internal conference on Recent Trends in Microbiology, **RTM-2016**
4. Attented 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.
5. **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.
6. 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.**
7. 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.**
8. 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.**
9. 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**).
10. Growth and Structure Evolution of Tin dioxide for Gas Sensor Application, A. Muthuvinayagam, P. Dennis Christy, N.SNirmalaJothi, **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.

11. 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.
12. Activitely participated short term programme on "Nanostructured Materials Processing & Characterization" held at National Insistute of Technology Tiruchirappalli on 7 & 8 November, 2014.
13. 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. Frontier Areas in Chemical Technologies FACTS-2016.
2. National Conference on Preparation and Characterization of Crystalline Materials (NCPCCM-2016)
3. Activitelly participated short term programme on "Nanostructured Materials Processing & Characterization" held at National Institute of Technology Tiruchirappalli on 7 & 8 November, 2014.
4. 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.
5. 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.
6. 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.
7. Growth, Spectral and Thermal Studies of Organic NLO crystals of DSAS by SNM Technique, R. Gunaseelan, R. Jerald Vijay, **G. Ramalingam** and P. Sagayaraj, 55th DAE Solid State Physics Symposium (2010).
8. 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.
9. Third order nonlinear optical properties of 4-N, N-dimethylamino-4'-N'- methyl-stilbazolium 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.

10. 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.
11. Synthesis of CdSe@ZnS Quantum Dots via Non-TOPO Hydrothermal Techniques, **G.Ramalingam**, J.Madhavan, R.Jerald Vijay, M.Vimalan,55th DAE Solid State Physics Symposium, Manipal University, December 26 – 30, 2010.
12. Growth, spectral and thermal studies of organic NLO crystal of DSAS by SNM technique, R. Gunaseelan, **G. Ramalingam**, R. Jerald Vijay and P. Sagayaraj, 55th DAE Solid State Physics Symposium, Manipal University, December 26 – 30, 2010
13. 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.
14. 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.
15. 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.
16. 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.
17. UGC sponsored workshop on "Recent Trends in Crystal Growth" Organized by crystal growth centre, Anna university Chennai on 30th march 2010.
18. National conference on "Advances in Nanomaterials in Catalysis" Organized by department of chemistry, Loyola College, Chennai on Dec 18-19, 2010.
19. 13th National Seminar on Crystal Growth 27-29 Jan 2009, by centre for crystal growth, SSN College of Engineering

Membership in

Professional Bodies

1. Membership in IEEE
2. Member of Physics today- USA
3. Member of Indian science congress association
4. Member International Nanoscience community
5. Member of Science and Engineering Institute

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

Advisory Board

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

Others

Developing e-content:

1. Sol-gel synthesis of nanopartilces **42,562** Views at slider share
2. Hydrothermal/Solvothermal synthesis of Nanopartilces, 1**819** Views at slider share.
3. Introduction to Nanoscience -1**012** Views at slider share

Resource persons in various capacities

Number of Invited / Special Lectures delivered: **01**

"The Revolutionary Development of Nanotechnology and Vast Opportunity in the Field of Science", delivered **St.Joseph College, Trichy**

Others

1. Articles published in Newspapers / Magazines : ஆர்நுல் Editor-in Chief Science Magazine in Tamil (Monthly)
2. Products developed : -
3. No. of PhD Thesis evaluated : -
4. No. of PhD Public Viva Voce Examination conducted :
5. Sequences submitted in GenBank:--NA---

Recent Publications

1. White–Green Emitting Behaviour of Core/ Shell (CdSe/ZnS) QDs for LED Applications, **G. Ramalingam**, P. Kathirgamanathan, K.Gurunathan, American Scientific Publishers -*Advanced Science, Engineering and Medicine* (article submitted on 18-6-2016).

2. Photoluminescence and Photoactivation CdSe Nanorods, **G. Ramalingam**, M.Vimalan, K. Kaviyarasu, *J. Mat.sci: Materials in Electronics*, (article submitted of 2-4-2016) JMSE-D-16-00557.

3. Preparation and Physicochemical Characterization of Ag Nanorods Phytosynthesis by the Petroselinum crispum Plant Extract, C. Ragupathi, R. Azhagu Raj, **G. Ramalingam**, K. Arun Kumar, and N. Mohamed Basith, Advanced *Science, Engineering and Medicine*, Vol. 8, page 1–6, 2016

4. Bio-Encapsulated CdSe/ZnSe Composite Nanorods, **G. Ramalingam**, *J. Nanosci & Tech*, 2 (2016) 130–133.

5. Synthesis, optical and morphological studies of Sol-Gel derived ZnO/PVP one dimensional Nanocomposite. S. Ravichandran, **G.Ramalingam**, *J. Nanosci & Nanotech,* 1 (2013) 39-43.

6. 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).

7. 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.

8. 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.

9. 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

10. 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.

11. 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.

12. 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.

13. Growth, Spectral and Thermal Studies of Organic NLO Crystals of DSAS by SNM Technique, *Ameri. Inst. Phy*- Conference Proceedings, 1349,(2010)206-207.

14. Synthesis and characterization of CdSe/ZnSe nanorods, **G. Ramalingam**, S. Shri Prasad and J. Madhavan, *Ameri. Inst. Phy*- Conference Proceedings, 1447(2011) 325-326.

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