Dr. M. Ramesh Prabhu

Assistant Professor

Contact

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Academic Qualifications

Degree	Institution	Year	Branch	Class
B.Sc.	Alagappa Govt. Arts College, (Madurai Kamaraj University)	2004	Physics	First
M.Sc.	Alagappa University	2006	Physics	First
Ph.D.	Alagappa University	2010	Synthesis and Characterization of solid polymer blend electrolytes based on PEMA	Highly Recommended

Teaching Experience

Total Teaching Experience : **UG**: 05 months

PG: 11 Years 9 months

Position	Institution	Duration
Assistant Professor	Chendhuran college of Engineering and Technology	Nov 2010 - May 2011
Assistant Professor (AL 10)	Alagappa University	May 2012 - May 2016
Assistant Professor (AL 11)	Alagappa University	May 2016 – May 2021
Assistant Professor (AL 12)	Alagappa University	May 2021 – Till Date

Research Experience

Total Research Experience : 18 Years

Position	Institution / University	Duration
Research Scholar	Alagappa University	2006-2010
Assistant Professor	Chendhuran college of Engineering and Technology	2010-2011
Assistant Professor	Alagappa University	2012-Till date

Academic and Additional Responsibilities

S.No	Position	University Bodies	Period	
			From	To
1.	Department Coordinator	UGC-SAP	2015	2020
2.	Department Coordinator	Ambience committee	2016	2022
3.	Department Coordinator	Discipline committee	2016	2022
4.	Department Coordinator	CSIR-NET/SET	2016	2022
5.	Department Coordinator	IQAC	2016	Till Date
6.	Department Coordinator	NAAC	2016	Till Date
7.	Treasurer	Alumni Association	2016	Till Date
8.	Department Coordinator	NIRF	2018	2023
9.	Class-In charge	Remedial Class-In charge	2018	2021

10.	Deputy Co-Ordinator	ATAL Ranking	2022	Till Date
11.	Member	NAAC Criterion VI- Sub Committee	2023	Till Date

Areas of Research

- **Fuel cells** - Nanofiller modified polymeric membrane with remarkable mechanical strength and proton conductivity for proton exchange membrane fuel cell
- **Battery** - Study on the physical and chemical properties of electrolyte and intercalation cathodes for high performance rechargeable magnesium batteries.
- **Supercapacitor** - Investigation on transition metal dichalcogenides based ternary nanocomposites for high performance supercapacitor application.

Research Supervision / Guidance

Program of Study		Completed	Ongoing
Research	PDF	Nil	Nil
	Ph. D.	09	05
	M. Phil	20	-
Project	PG	54	05
	UG / Others	-	-

Publications

International		**National**		**Others**
Journals	**Conferences**	**Journals**	**Conferences**	**Books / Chapters / Monographs / Manuals**
85	**34**	**5**	**25**	**1. Advanced Electronics and Physics Laboratory – III – Lab manual.** **2. Microprocessor and Electronic Instrumentation – Book.**

Cumulative Impact Factor (as per JCR)	:	278.628
h-index	:	24
i10 index	:	52
Total Citations	:	1649

Publications

Thesis Evaluated	:	09 (Internal)+02 (External)
Viva voce Examiner	:	09 (Internal)+02 (External)

Funded Research Projects

Completed Projects:

S.No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	UGC	2013	2017	Investigations on nanofiller incorporated PEMA composite electrolyte for lithium batteries	9.68
2	MHRD RUSA 2.0	2016	2019	Advanced Nanomaterials for Sustainable Energy and Sensor Applications	05
3	DST-SERB	2018	2021	Synthesis and characterization of SPEEK perovskite-based proton conducting polymer electrolyte membrane for HT-PEMFC	26.68
4	MHRD RUSA 2.0	2022	2023	Advanced Nanomaterials for Sustainable Energy and Sensor Applications	05

Distinctive Achievements / Awards

- RFSMS Fellow during 2008 to 2010
- Vallal Alagappar Research Recognition Award-2020
- Listed in the category of Scientists in India working on membrane for fuel cells, India Country Status Report on Hydrogen and Fuel Cells, Department of Science and Technology, Government of India.

- Promising Researcher Award - 2022
- Young Scientist Award (Saraswathy Srinivasn Prize) -The Academy of Science, Chennai-2022

Events organized in leading roles

Number of Seminars / Conferences / Workshops / Events organized:

Position	Programme	Duration	Institution
Organizing Secretary	National seminar on Advanced Materials Research	19 January2017	Alagappa University
Organizing Secretary	ACT NEXT 2017	18 March 2018	Alagappa University
Organizing Secretary	World Standards Day	15 October 2018	Alagappa University
Organizing Secretary	National Conference on Advanced Materials for SustainableEnergy and Sensors (NCAMSES-2019)	20-22 March 2019	Alagappa University
Organizing Secretary	International Conference on Advanced Materials for SustainableEnergy and Sensors (INCAMSES-2019)	16-17 September 2019	Alagappa University
Organizing Secretary	Launch of 5G Services	21 February 2023	Alagappa University
Event Coordinator	Alagappa University Talent Exhibit Show 2023	4^{th} to 6^{th} October 2023	Alagappa University
Organizing Secretary	ACT NEXT 2023	19 February 2024	Alagappa University
Organizing Secretary	National Space Day	23 August 2024	Alagappa University
Organizing Secretary	World Standards Day	14 October 2024	Alagappa University

Events Participated

Number of Conferences / Seminars / Workshops:

International

1. World Standards Day, Alagappa University, Karaikudi, 14 October 2020.
2. Two Days International Virtual Conference on Renewable Energy Science and Technology (ICREST-2020), Department of Energy Science, Alagappa University, Karaikudi, 28-29 September 2020.

3. International Virtual Conference on Recent Trends in Energy Materials (INCRTEM – 2020), Department of Physics, Alagappa University, Karaikudi, 9-11 September 2020.
4. 14th International Conference on Ecomaterials (ICEM14), CSIR-National Institute of Interdisciplinary Science and Technology (CSIR-NIIST), Thiruvananthapuram, India, 5-7February 2020.
5. 2nd International Conference on Mathematical modeling and Computational Methods in Science and Engineering (ICMMCMSE-2020), Alagappa University, Karaikudi, 22-24 January 2020.
6. Fifth International Conference on Polymer Processing and Characterization (ICPPC-2019), Mahatma Gandhi University, Kottayam, Kerala, 11-13 October 2019.
7. International Conference on Advanced Materials for Sustainable Energy and Sensors (INCAMSES-2019), Alagappa University, Karaikudi, 16-17 September 2019.
8. International Conference on Recent Advances in Applied Chemical Sciences (ICRAACS-2019), Sree Sevugan Annamalai College, Devakottai, 6 September 2019.
9. International Conference on "Emerging Paradigms in Diseases Management and Energy Technology" (ICDMET – 2019), Dr. Umayal Ramanathan College for Women, Karaikudi, 7-8 August 2019.
10. Indo-German Bilateral Workshop on Membranes for Water and Energy (IGWMWE), CSIR-Central Salt and Marine Chemicals Research Institute, Gujarat, 18-20 February 2019.
11. International Conference on Nanoscience and Nanotechnology (ICONN 2019), SRMUniversity, Chennai, 28-30 January 2019.
12. Twelfth International Symposium in Advances in Electrochemical Science and Technology (iSAEST-12), CSIR-CECRI, Chennai, 8-10 January 2019.
13. International Conference on Emerging Trends and Challenges (ICETC-2018), NPR artsand science college, Natham, Dindigul, 28 December 2018.
14. International Conference on Green Energy Technologies for Smart Cities (GETSC-2018),SRM University-AP, Amaravati, India, 19-21 December 2018.
15. International Conference on Momentous role on Nanomaterials in Renewable Energy devices (ICMNRE-2018), Alagappa University, Karaikudi, 1-2 March 2018
16. International symposium on crystallography and advanced materials (ISCAM) 2018, University of Madras, Chennai, 26- 27, March 2018
17. International Conference on Nanoscience and Nanotechnology (ICONN 2017), SRM university, Kattankulathur, 9-11 August 2017
18. Eleventh International Symposium on Advances in Electrochemical Science and Technololgy (iSAEST-11, 2016), Society for Advancement of Electrochemical Science and Technology (SAEST) with CSIR-CECRI, Chennai, 8-10 December 2016.
19. Asian Consortium on Computational Materials Science (ACCMS), SRM University, SRM Research Institute and Department of Physics and Nanotechnology, Chennai, 22-24September 2016.
20. International Seminar on Nanoscience and Technology (ISNST-2016), Department of Physics, Mother Teresa Women's University, Kodaikanal, 20 September 2016.

21. International Conference on Functional Materials (ICFM-2016) Center for Scientific and Applied Research, PSN College of Enginneering and Technology, Tirunelveli, 07-10 September 2016.
22. International conference on materials for sustainable future (ICMSF-2016), Department of Chemistry, Sastra University, Thanjavur, 14&15 July 2016.
23. International conference on Frontier Areas in Chemical Technologies (FACTs-2016), Department of Industrial Chemistry, Bioelectronics & Biosensors, Nanoscience and Technology, Alagappa University, Karaikudi, 06 & 07 March 2016.
24. International Conference on Frontiers in Nanoscience and Nanotechnonology, Sastra University, Thanjavur, 26-28 February 2016.
25. 60th DAE Solid State Physics Symposium, Amity University, Noida, Uttar Pradesh, 21-25 December 2015.
26. International conference on Recent Advances in Materials and Chemical Sciences (ICRAMCS-2015), Department of Chemistry, Gandhigram Rural Institute - Deemed University, Gandhigram, 14-15 December 2015.
27. International Conference on Condensed Matter & Applied Physics (ICC-2015), Government Engineering College, Bikaner, Rajasthan, 30&31 October 2015.
28. International conference on Recent Advances in Materials (ICRAM-2015), Jamal Mohamed College (Autonomous), Tiruchirapalli, 16 & 17 October 2015.
29. International Conference on Recent Advances in Nano Science and Technology (RAINSAT-2015), Sathyabama University, Chennai, 8-10 July 2015.
30. 2nd International conference on advanced functional materials (ICAFM 2014), CSIR-National Institute for Interdisciplinary Science & Technology, Thiruvananthapuram, 19- 21 February 2014.
31. 5th ESIS TC4 conference, Les Diablerets, Switzerland, 7-11 September 2008.
32. Junior EUROMAT, Lausanne, Switzerland, 14-18 July 2008.
33. International conference on Nano science and Technology, IGCAR, Kalpakkam, 27-29 February 2008.
34. International conference on Advancement of nanoscience and nanotechnology (ICOANN-10), Department of Nano Science and Technology, Alagappa University, Karaikudi, 1-3 March 2010

National

1. 25th National Seminar on Crystal Growth and Applications (XXV NSCGA-2023), Department of Physics, Alagappa University, Karaikudi, 21st-23rd June 2023.
2. Special Lecture on “Future of Energy Storage”, Jamal Mohamed College (Autonomous), Tiruchirappalli, 08.02.2023 -Invited Talk.
3. Act Next 2021, Alagappa University, Karaikudi, 17th March 2022.
4. One day seminar on Challenges and Oppurtunities of Fuel Cells "Emerging Trends in

Fuel cells- Vidhyaa Giri college of Arts and Science, Puduvayal, 18 March 2021 - Invitedtalk

5. National level webinar on "Emerging Trends in Physics", PG Department of Physics, Government Arts College for Women, Salem, 20 August 2020 – Invited Talk.
6. National Workshop on Advanced Nanomaterials for Sustainable Energy and Sensor Applications (AN-SEA 2020), Alagappa University, Karaikudi, 4-6 March 2020.
7. National Conference on Advanced Materials for Sustainable Energy and Sensors (NCAMSES- 2019), Alagappa University, Karaikudi, 20-22 March 2019.
8. ACT Next 2017, Alagappa University, Karaikudi, 28 March 2018
9. Proceeding of the national conference on Futuristic materials (NCFM – 2017) Department of Physics, Alagappa University, Karaikudi, 27-28 March, 2017.
10. Synthesis and characterization and application of advanced materials (AMR-2017), Department of Physics, Alagappa University, Karaikudi, 19th January, 2017.
11. National Conference on Advanced Materials (NCAM-2016), Department of Physics, St. Joseph's College, Tiruchirappalli, 07 October 2016.
12. 2nd National conference on Nanophotonics (NCNP-2016), School of Physics, Bharathidasan University, Tiruchirappalli, 18 & 19 March 2016.
13. National Seminar on Frontier Areas in Chemical Technologies (FACTS-2015), Department of Industrial Chemistry, Alagappa University, Karaikudi, 06 & 07 March 2015.
14. National Conference on Advanced Materials (NCAM-2015), Department of Physics & Department of Electronics, St. Joseph's College, Tiruchirappalli, 06 Februauy 2015.
15. 59th DAE Solid State Physics Symposium, VIT University, Vellore, 16-20 December 2014.
16. Department of Physics & Department of Electronics, St. Joseph's College, Tiruchirappalli, 24 February 2014.
17. 3rd National Seminar on Technologically Important Crystalline and Amorphous Solids (TICAS-2014), Department of Physics, Kalasalingam University, Krishnankoil, 28th February & 01st March, 2014.
18. 8th National conference on Solid State Ionics (8NCSSI), Department of Physics, Dr. Hari Singh Gour University, Sagar, Madhya Pradesh, 7-9 December 2009.
19. National Conference on Recent Advances in Textile and Electrochemical Sciences (RATES-2009), Department of Industrial Chemistry, Alagappa University, Karaikudi, 04&05 December 2009.
20. National conference on advanced materials (NCAM- 2009), PSN college of Engineering and Technology, Tirunelveli, 27- 29 August 2009.
21. National conference on Recent Trends in Crystal Growth, Thin Films and Nano-Structured, Materials Department of Physics, Aditanar College of Arts & Science, Tiruchendur, India, 5&6 August 2009.
22. National conference on Advances in Nanomaterials, Devices and Technologies, Department of Physics, S.V. Degree college, Kadapa, 11&12 July 2009.
23. National Conference on Nanomaterials for energy conversion and conservation-09,

Department of Physics, Bishop Heber College, Tiruchirapalli, 26 March 2009.

24. National conference on emerging Materials, Devices and Technologies, Sri VenkateswaraUniversity, Tirupati, 24&25 February 2009.
25. National Conference on Advanced Materials, Devices and Technologies, Sri Venkateswara University, Tirupati, Andhrapradesh, 20- 22 February 2008.
26. National conference on Emerging materials and Technologies for India-2020, National Institute of Technology, Tiruchirappalli, 24 & 25 January 2008.
27. 7th National Conference on Solid State Ionics, APS University, Rewa, Madhyapradesh, 1-3 November 2007.
28. National conference on Emerging Trends in Physics, Jayaraj Annapackiam College for Women, Periyakulam, Theni, 30 & 31 August 2007.

Other Training Programs

1. Orientation Programme (Nov 2014 to Dec 2014)
2. Refresher Course (Feb 2016 to Mar 2016)
3. One week online FDP on "Higher Education During COVID Times and After: Challenges and Opportunities, The Internal Quality Assurance Cell, Bishop Moore College, Mavelikara, Kerala (23-29 May 2020).
4. Two-Week Online Capacity Building Programme for Faculty Members and Research Scholars, Alagappa University, Karaikudi, under the sponsorship of UGC STRIDE Component-I Scheme (12-23 June 2020).
5. Online Refresher Course in Material Sciences: Recombinant Memetics, Organised by Osmania University, Hyderabad, Telengana. (01.02.2021 -13.02.2021)
6. UGC- Sponsored Online Refresher Course in Physical Science (Interdisciplinary) Organized by HRDC Bharathidasan University, Tiruchirappalli. (27.07.2023 – 09.08.2023)

Membership

Professional Bodies

1. Life Member: Association of IPA of India
2. Life Member: Society of MRSI, India
3. Life Member: SAEST, CECRI, Karaikudi
4. Life Member: Indian Society of Atomic and Molecular Physics
5. Life Member: Indian Science and Technology Association-Elavenil
6. Life Member: Bose Science Society, India

Academic Bodies in Other Institutes/ Universities

Year / Period	Name of the BoS / Administrative Committee / Academic Committee	Role
2022	Board of Studies- Electronics Government Arts College, Paramakudi	Member
2019	Doctoral Research Committee- Council for Scientific and Industrial - Central Electrochemical Research Institute CSIR-CECRI, Karaikudi	Member
2018-2019	Board of Studies-: Department of Physics, Rathinam College of Arts andScience, Coimbatore.	Subject Expert
2018	Doctoral Research Committee- Periyar EVR College, Tiruchirapalli.	Member
2017	Doctoral Research Committee- St. Joseph College, Tiruchirapalli.	Member
2016-Till date	Question paper setter – Bharathidasan University, Bharathiar University, Periyar University, Thiruvalluar University, Gandhigram University and Periyar EVR College, Trichy, Government Arts College, Pudukkottai, Madras University.	Question paper Setter

Ph.D. Thesis Guided

1. No. of PhD Thesis evaluated : 09 (Internal) + 02 (External)

2. No. of PhD Public Viva Voce Examination conducted : 09 (Internal) + 02 (External)

S. No	Name of the Scholar	Title of the Thesis	Year of Completion
1.	P. Pradeepa (Reg. No. 0735)	Investigations on PEO/PVDF-HFP based blend polymer electrolytes for lithium rechargeable batteries.	2016
2.	J. Kalaiselvimary (Reg. No. 1047)	Development and characterization of single chamber microbial fuel cells for sustainable energy production.	2018
3.	K. Selvakumar (Reg. No. 0799)	Development and characterization of non-fluorinated polymer membranes for fuel cell application.	2019

4.	S. Ponmani (Reg. No. 1432)	Synthesis and characterization of PVDF-HFP/PVAc based polymer blend electrolytes for magnesium ion batteries.	2020
5.	G. Sowmya (Reg. No. 0983)	Synthesis and characterization of polymer electrolyte membranes for microbial fuel cell application.	2020
6.	K. Raja (Reg. No. 1249)	Study on polymer blend membranes for high temperature proton exchange membrane fuel cell (HTPEM) Application.	2020
7.	P. Martina (Reg. No. 1135)	Preparation and characterization of nanocomposite membranes based on SPEEK-PVDF co HFP for PEMFC application.	2020
8.	M. Raja Pugalenthi (Reg. No. 1964)	Facile enhancement in proton conductivity of SPEEK using functionalized perovskites-synthesis, characterization and application towards proton exchange membrane fuel cells.	2021
9.	R. Gayathri (Reg. No. 1948)	Optimization of sulfonated poly ether sulfone-based nanocomposite membrane by various experimental techniques for proton exchange membrane fuel cell application.	2022
10	E. Mahendiravarman (External)	Synthesis and modification of improved anti biofouling anion exchange membrane for microbial fuel cell applications.	2017
11.	M.J. Uma (External)	Synthesis and characterization of pure and doped barium titanium oxide nanoparticles.	2024

List of Research Articles / Recent Publications

S. No	Authors/Title of the paper/Journal	Impact Factor
1.	Thirbika S, Kaveevivitchai W , Ramesh Prabhu M, An ultrafast, stable and highly reversible nickel magnesium vanadate cathode for magnesium ion batteries, Journal of Alloys and Compounds, 1008, 176518	5.8
2.	J Jothisha, Anitha Rexalin Devaraj, A Saranya, M Shandhiya, B Janarthanan, M Ramesh Prabhu, Z Mohamed Riyas, S Sharmila, Biomass nanoarchitectonics using an agro waste extract for biological performance of samarium doped zinc oxide nanoparticles, Applied Physics A (2024), 130 (5), 287	2.5
3.	JB Arul Joseph Helen Theresa, K Selvakumar, A Ariharan, **M Ramesh Prabhu**, P Sivakumar, Custom-made SPEEK polymer composite membranes using perovskite structured SrCeO3 for DMFC applications, Journal of Solid State Electrochemistry (2024), 28, 3133–3145	2.6
4.	Shandhiya Murugan, Deepika Balraj, Saranya Amirtharajan, **Ramesh P Manimuthu**, Rama R N Venkata, Janarthanan Balasundaram, Mohamed R Ziaudeen, Sharmila Saminathan, Evaluation of magnetic and electrochemical performance of copper oxide nanoparticles using Myristica fragrans (mace) extract, Zeitschrift für Physikalische Chemie (2024),	3
5.	Z Mohamed Riyas, C Priya, S Ponmani, **M Ramesh Prabhu**, Exploration of La2O3-CuO nanocomposite as an effective electrode material for asymmetric supercapacitor applications, Journal of Alloys and Compounds (2023), 965, 171350	6.2
6.	S Suganya, M Mujahid Alam, F Kousi, G Ramalingam, **M Ramesh Prabhu,** S Sudhahar, Facile one-pot synthesis of ternary Ni-Mn-Zn oxide nanocomposites for high-performance hybrid supercapacitors, Journal of Energy Storage (2023), 71, 108176	9.4
7.	Z Mohamed Riyas, **M Ramesh Prabhu**, K Sankaranarayanan, Hydrothermal synthesis of La2O3–ZnO nanocomposites as electrode material for asymmetric supercapacitor applications, Journal of Materials Science: Materials in Electronics (2023), 34,22, 1612	2.8
8.	M Raja Pugalenthi, Konlayutt Punyawudho, M Anbu Arasi, AA Shah, **M Ramesh Prabhu**, M Kouthaman, K Velsankar, R Gayathri, Designing high performance electrospuned SPEEK nanofibers composite membrane for PEMFC application, Materials Letters (2023), 339, 134117	3.0
9.	G Maheshwaran, **M Ramesh Prabhu**, G Ravi, K Sankaranarayanan, S Sudhahar, Probing the energy conversion and storage process in two dimensional layered bismuthene-hexagonal boron nitride nanocomposite electrode and PVA-KOH-BaTiO3 piezoelectrolyte nanogenerators, Nano Energy (2023),106, 108060	17.6
10.	S Suganya, G Maheshwaran, **M Ramesh Prabhu**, P Devendran, M Krishna Kumar, S Sudhahar, Enhanced electrochemical activity of	9.4

	ternary Co-Mn-Zn oxide for the fabrication of hybrid supercapacitor applications, Journal of Energy Storage (2022),56, 106057	
11.	G Maheshwaran, P Pandi, S Suganya, B Arjun Kumar, G Ramalingam, **M Ramesh Prabhu**, S Sudhahar, Fabrication of self charging supercapacitor based on two dimensional bismuthene-graphitic carbon nitride nanocomposite powered by dye sensitized solar cells, Journal of Energy Storage(2022), 105900	9.4
12.	Maheshwaran Girirajan, Nivedhitha Bharathi Alagarsamy, Kaliammal Ramachandran, **Ramesh Prabhu Manimuthu**, Devendran Pazhanivel, Krishna Kumar Muthusamy, Sudhahar Sakkarapani,Two dimensional layered bismuthene nanosheets with ultra-fast charge transfer kinetics as a superior electrode material for high performance asymmetric supercapacitor, Electrochimica Acta,426, 140838,2022	6.6
13.	Maheshwaran Girirajan, Venkatesan Arumugam, Suganya Subramaniyan, **Ramesh Prabhu Manimuthu**, Sudhahar Sakkarapani, Two-Dimensional Layered Bismuthene/Antimonene Nanocomposite as a Potential Electrode Material for the Fabrication of High-Energy Density Hybrid Supercapacitors, Energy & Fuels,36,19, 12299-12309,2022	5.3
14.	Z. Mohamed Riyas, C. Priya, R. Premila, G. Maheshwaran, S. Sudhahar, **M. Ramesh Prabhu*,** Synergistic effect of La2o3 - Nio nanocomposite based electrode for electrochemical high-performance asymmetric supercapacitor applications, (2022), Journal of Energy Storage 53,104988, DOI:10.1016/j.est.2022.104988	8.907
15.	Z. Mohamed Riyas, R. Gayathri, **M. Ramesh Prabhu*,** K. Velshankar, S. Sudhahar, Green synthesis and biomedical behavior of Mg-doped ZnO nanoparticle using leaf extract of *Ficus regiliosa*, (2022), Ceramics International, DOI: 10.1016/j.ceramint.2022.05.107	5.532
16.	Maheshwaran G, Nivedhitha Bharathi A, Kaliammal R, **Ramesh Prabhu M**, Devendran Pazhanivel, Krishna Kumar M, Sudhahar S*, Two dimensional layered bismuthene nanosheets with ultra-fast charge transfer kinetics as a superior electrode material for high performance asymmetric supercapacitor, Electrochimica Acta 426 (2022) 140838. https://doi.org/10.1016/j.electacta.2022.140838	6.901
17.	S. M. Fathima Khyrun, Z. Mohamed Riyas, Vaishnavi Raja, Sulthana Sabura Sarbudeen, K. Velsankar, S. Sudhahar, M. Ramesh Prabhu, Mydhili Govindarasu, Muthu Thiruvengadam, Basker Venkidasamy, Chandran Janani, Thevasundari Selvaraj, Environmental and biomedical applications in the synthesis and structural, optical, elemental	3.111

	characterizations of Mg doped ZnO nanoparticles using Coleus aromaticus leaf extract, South African Journal of Botony, https://doi.org/10.1016/j.sajb.2022.02.031	
18.	Gayathri Ravi Kumar, Raja Pugalenthi M, Guozhong Cao, and **Ramesh Prabhu Manimuthu*,** Reinforced Hydroxylated Boron Nitride on Porous Sulfonated Poly(ether sulfone) with Excellent Electrolyte Properties for H2/O2 Fuel Cells, (2022), *Energy & Fuels* (ACS), DOI: 10.1021/acs.energyfuels.2c00604	3.605
19.	S.Thirbika, H.Karthi, R.Premila, M.Ramesh Prabhu*, Investigations on biosynthesized nickel oxide nanoparticles using Cymbopogon citratus leaf extract for antibacterial activity, (2022), Materials Today Proceedings, DOI: 10.1016/j.matpr.2022.05.168	
20.	Gayathri Ravi Kumar, Cao Guozhong, Ramesh Prabhu Manimuthu, Sandwich assembly of sulfonated poly (ether sulfone) with sulfonated multiwalled carbon nanotubes as an efficient architecture for enhanced electrolyte performance in H2/O2 fuel cells. Int J Energy Res. 2021;1–18. (2021) DOI: 10.1002/er.7329	4.672
21.	Kanakaraj Selvakumar, AeRhanKim, Manimuthu Ramesh Prabhu, Dong Jin Yoo, Structural and Thermal Analysis and Membrane Characteristics of Phosphoric Acid- doped Polybenzimidazole/Strontium Titanate Composite Membranes for HT-PEMFC Applications, Composites Research, 2021, vol.34, no.6, pp. 373-379. DOI : 10.7234/composres.2021.34.6.373	
22.	G.Maheshwaran, C.Selvi, R.kaliammal, M.Ramesh Prabhu, M.Krishna kumar, S.Sudharar, Exploration of chromium nickel oxide nano composite superior electrode materials for super capacitor Application, Material Letters (2021), DOI: ORG\10.1016\j.mater.letter	3.574
23.	Karuppusamy Raja, Mariappan Raja Pugalenthi and **Manimuthu Ramesh Prabhu*,** Investigation on the sulfonated poly(ether ether ketone)/poly(amide-imide)/barium cerate-based nanocomposite membrane for proton exchange membrane fuel cells, (2021), *International Journal* of *Energy Research*, DOI: 10.1002/er.6393	4.67
24.	Raja Pugalenthi M, **Ramesh Prabhu Manimuthu,** Synergistic Effect of Polydopamine-Modified $CaZrO_3$ Perovskite and Hydroxylated SPEEK on Acid–Base Cation Exchange Membrane Fuel Cells, (2021), *Energy & fuels* 16837-16849	3.605
25.	M. Raja Pugalenthi and **M. Ramesh Prabhu*,** The Pore filled SPEEK nanofibers matrix combined with ethylene diamine	5.477

	modified SrFeO3 nanoneedles for the cation exchange membrane fuel cells, (2021), Journal of the Taiwan Institute of Chemical Engineers, DOI: 10.1016/j.jtice.2021.04.054	
26.	K. Selvakumar, **M. Ramesh Prabhu***, Enhancing Proton Conduction ofPoly(Benzimidazole) with Sulfonated Titania Nano Composite Membrane for PEM Fuel Cell Applications, (2021), Macromolecular Research, DOI: 10.10071/s/132-021-90147 I.m 2.34	2.127
27.	Raja Pugalenthi M, Guozhong Cao, **Ramesh Prabhu Manimuthu***, Cross-linked SPEEK-PEG-APTEOS modified $CaTiO_3$ perovskites for efficient acid-base cation exchange membrane fuel cell, (2020), Energy & Fuels (ACS), DOI: 10.1021/acs.energyfuels.0c01933	3.605
28.	R. Gayathri, **M. Ramesh Prabhu***, Protonated state and synergistic role of Nd^{3+} doped barium cerate perovskite for the enhancement of ionic pathways in novel sulfonated polyethersulfone for H_2/O_2 fuel cells, (2020), Soft Matter (RSC), DOI: 10.1039/d0sm00427h	4.046
29.	Raja Pugalenthi Mariappan, Chaofeng Liu, Guozhong Cao, **Ramesh Prabhu Manimuthu*,** Tailoring SPEEK/SPVdF-co-HFP/$La_2Zr_2O_7$ Ternary Composite Membrane for Cation Exchange Membrane Fuel Cells, (2020), Industrial & Engineering Chemistry Research (ACS), https://doi.org/10.1021/acs.iecr.9b06922	4.326
30.	P. Martina, R. Gayathri, M. Raja Pugalenthi, Guozhong Cao, Chaofeng Liu, **M. Ramesh Prabhu***, Nano-sulfonated silica incorporated SPEEK / S-PVdF-HFP polymer blend membrane for PEM fuel cell application, (2020), *Ionics*, https://doi.org/10.1007/s11581-020-03478-9	2.961
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Resource persons in various capacities

National Conferences	:	09
International Conferences	:	06
Invited Lectures	:	05

Date : 03.01.2025

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