

Dr. M. Ramesh Prabhu Assistant Professor

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Academic Qualifications : M.Sc., Ph.D.

Sl. No	Degree	University/Institution	Institution Year of Subject Class/ Grade Passing obtained		Class/ Grade obtained
1	B.Sc.	Alagappa Govt. Arts College, (Madurai Kamaraj University)	2004	Physics	First
2	M.Sc.	Alagappa University	2006	Physics	First
3	Ph.D.	Alagappa University	2010	Synthesis and Characterisation of solid polymer blend electrolytes based on PEMA.	Highly Commended

Teaching Experience : UG: 05 Months; PG: 10 Years 09 Months

Sl. No.	Institute	Position	Period		
			From	To	
1	Chendhuran College of Engineering and Technology	Assistant Professor	Nov. 2010	May 2011	
2	Alagappa University	Assistant Professor	May 2012	May 2016	
3	Alagappa University	Assistant Professor (Senior Grade)	May 2016	Till date	

Research Experience : 17 Years

Areas of Research : Fuel Cells, Batteries, Energy Materials and Nanocomposites

Research Supervision / Guidance

Program of Study		Completed	Under Process	Ongoing
Research	Ph.D.	09	-	05
	M.Phil.	19	-	01
Project	PG	47	-	-
	UG / Others	-	-	-

Publications

Journals		Conferences		Others	
International	National	International	National	Books / Chapters / Monograp hs / Manuals	
71	5	34	25	 Advanced Electronics and Physics Laboratory – III – Lab manual. Microprocessor and Electronic Instrumentation – Book. 	

Cumulative Impact Factor (as per JCR) : 228.285

h-index : 18 i10 index : 29

Total Citations : 1011

Funded Research Projects

Completed Project

S. No	Agency	Period		Duciost Title	Budget (Da. In
		From	To	Project Title	(Rs. In lakhs)
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	5
3	DST SERB	2018	2021	Synthesis and characterization of SPEEK perovskite based proton conducting polymer electrolyte membrane for HT-PEMFC	26.68

Events organized in leading roles

Events organized in leading roles

Number of Seminars / Conferences / Workshops / Events organized:

- 1. Organizing Secretary National seminar on Advanced Materials Research, 19 January 2017
- 2. Organizing Secretary ACT NEXT 2017, 18 March 2018
- 3. Organizing Secretary World Standards Day, 15 October 2018
- 4. Organizing Secretary National Conference on Advanced Materials for Sustainable Energy and Sensors (NCAMSES-2019), 20-22 March 2019
- 5. Organizing Secretary International Conference on Advanced Materials for Sustainable Energy and Sensors (INCAMSES-2019), 16-17 September 2019

Distinctive Achievements / Awards

- 1. RFSMS Fellow during 2008 to 2010
- 2. Vallal Alagappar Research Recognition Award-2020, Given by Alagappa University
- 3. 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.

4. Promising Researcher Award - 2022, Given by Alagappa University

Events Participated

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, 5-7 February 2020.
- 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.
- 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), SRM University, 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 arts and 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 Technology (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, 22-24 September 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. Interdepartmental Seminar on "Future of Energy Storage"-Jamal Mohamed College, Tiruchirappalli. 08 February 2023 Invited Talk
- 2. Department of Physics Association meeting of Ananda college, Devakottai. 19 November 2023 Invited Talk
- 3. One day seminar on Challenges and Opportunities of Fuel Cells "Emerging Trends in Fuel cells- Vidhyaa Giri college of Arts and Science, Puduvayal, 18 March 2021 Invited talk
- 4. National level webinar on "Emerging Trends in Physics", PG Department of Physics, Government Arts College for Women, Salem, 20 August 2020 Invited Talk.
- 5. National Workshop on Advanced Nanomaterials for Sustainable Energy and Sensor Applications (AN-SEA 2020), Alagappa University, Karaikudi, 4-6 March 2020.
- 6. National Conference on Advanced Materials for Sustainable Energy and Sensors (NCAMSES- 2019), Alagappa University, Karaikudi, 20-22 March 2019.
- 7. ACT Next 2017, Alagappa University, Karaikudi, 28 March 2018
- 8. Proceeding of the national conference on Futuristic materials (NCFM 2017) Department of Physics, Alagappa University, Karaikudi, 27-28 March, 2017.

- 9. Synthesis and characterization and application of advanced materials (AMR-2017), Department of Physics, Alagappa University, Karaikudi, 19th January, 2017.
- 10. National Conference on Advanced Materials (NCAM-2016), Department of Physics, St. Joseph's College, Tiruchirappalli, 07 October 2016.
- 11. 2nd National conference on Nanophotonics (NCNP-2016), School of Physics, Bharathidasan University, Tiruchirappalli, 18 & 19 March 2016.
- 12. National Seminar on Frontier Areas in Chemical Technologies (FACTS-2015), Department of Industrial Chemistry, Alagappa University, Karaikudi, 06 & 07 March 2015.
- 13. National Conference on Advanced Materials (NCAM-2015), Department of Physics & Department of Electronics, St. Joseph's College, Tiruchirappalli, 06 February 2015.
- 14. 59th DAE Solid State Physics Symposium, VIT University, Vellore, 16-20 December 2014.
- 15. Department of Physics & Department of Electronics, St. Joseph's College, Tiruchirappalli, 24 February 2014.
- 16. 3rd National Seminar on Technologically Important Crystalline and Amorphous Solids (TICAS-2014), Department of Physics, Kalasalingam University, Krishnankoil, 28th February & 01st March, 2014.
- 17. 8th National conference on Solid State Ionics (8NCSSI), Department of Physics, Dr. Hari Singh Gour University, Sagar, Madhya Pradesh, 7-9 December 2009.
- 18. National Conference on Recent Advances in Textile and Electrochemical Sciences (RATES-2009), Department of Industrial Chemistry, Alagappa University, Karaikudi, 04&05 December 2009.
- 19. National conference on advanced materials (NCAM- 2009), PSN college of Engineering and Technology, Tirunelveli, 27- 29 August 2009.
- 20. 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.
- 21. National conference on Advances in Nanomaterials, Devices and Technologies, Department of Physics, S.V. Degree college, Kadapa, 11&12 July 2009.
- 22. National Conference on Nanomaterials for energy conversion and conservation-09, Department of Physics, Bishop Heber College, Tiruchirapalli, 26 March 2009.
- 23. National conference on emerging Materials, Devices and Technologies, Sri Venkateswara University, Tirupati, 24&25 February 2009.
- 24. National Conference on Advanced Materials, Devices and Technologies, Sri Venkateswara University, Tirupati, Andhrapradesh, 20- 22 February 2008.

- 25. National conference on Emerging materials and Technologies for India-2020, National Institute of Technology, Tiruchirappalli, 24 & 25 January 2008.
- 26. 7th National Conference on Solid State Ionics, APS University, Rewa, Madhyapradesh, 1-3 November 2007.
- 27. 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)

Membership in

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 (such as Board of Studies etc.,)

- 1. Board of Studies Member: B.Sc., Electronics Government Arts College, Paramakudi.
- 2. Board of Studies Member: Department of Physics, Alagappa University, Karaikudi.
- 3. Board of Studies Subject Expert: Department of Physics, Rathinam College of Arts and Science, Coimbatore.
- 4. Doctoral Research Committee Member St. Joseph College, Tiruchirapalli.
- 5. Doctoral Research Committee Member Periyar EVR College, Tiruchirapalli.

- 6. Doctoral Research Committee Member Council for Scientific and Industrial Central Electrochemical Research Institute CSIR-CECRI, Karaikudi
- 7. Question paper setter Alagappa University, Bharathidasan University, Bharathiar University, Periyar University, Thiruvalluar University, Gandhigram University and Periyar EVR College, Trichy, Government Arts College, Pudukkottai.

Others

- 1. ATAL Ranking- Deputy Co-ordinator, Alagappa University, Karaikudi. (March 2022-Till date),
- 2. Entrepreneurship, Innovation and Career Hub Department Coordinator Department of Physics, Alagappa University, Karaikudi. (2021 to Toll date)
- 3. NIRF-Department Coordinator Department of Physics, Alagappa University, Karaikudi. (2018 March 2023)
- 4. UGC-SAP-Department Coordinator Department of Physics, Alagappa University, Karaikudi.(2015-2020)
- 5. CSIR-NET/SET-Department Coordinator Department of Physics, Alagappa University, Karaikudi. (2016-Till Date)
- 6. Remedial Class-In charge Department of Physics, Alagappa University, Karaikudi. (2018 2021)
- 7. Ambience committee–Department Coordinator Department of Physics, Alagappa University, Karaikudi. (2016 Till date)

Others

- 1. Articles published in Newspapers / Magazines : --
- 2. Products developed: --
- 3. No. of PhD Thesis evaluated : 10 (Internal) + 01 (External)
- 4. No. of PhD Public Viva Voce Examination conducted: 10 + 01

Recent Publications

International

- [1] M. Raja Pugalenthi, Konlayutt Punyawudho, M. Anbu Arasi, A.A. Shah, **M. Ramesh Prabhu**, M. Kouthaman, K. Velsankar, R. Gayathri, Designing high performance electrospuned SPEEK nanofibers composite membrane for PEMFC application. *Material Letters* (2023) 134117, https://doi.org/10.1016/j.matlet.2023.134117 (IF 3.574)
- [2] G Maheshwaran, M Ramesh Prabhu, G Ravi, K Sankaranarayanan, S Sudhahar Probing the energy conversion and storage process in two dimensional layered bismuthenehexagonal boron nitride nanocomposite electrode and PVA-KOH-BaTiO₃ piezoelectrolyte nanogenerators. (2023)Nano Energy, 106, 108060, https://doi.org/10.1016/j.nanoen.2022.108060. (IF 19.069)
- [3] 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 (IF 8.907)
- [4] 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 (IF 5.532)
- [5] 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, (IF 6.901)
- [6] 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 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 (IF 3.111)
- [7] 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 (I.F 3.605)
- [8] 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
- [9] 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 (IF 4.672)
- [10] 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
- [11] 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 (I.F 3.574)
- [12] 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 (I.F 4.67)

- [13] Raja Pugalenthi M, Ramesh Prabhu Manimuthu, Synergistic Effect of Polydopamine-Modified CaZrO₃ Perovskite and Hydroxylated SPEEK on Acid—Base Cation Exchange Membrane Fuel Cells, (2021), *Energy & fuels* 16837-16849. (I.F 3.605)
- [14] M. Raja Pugalenthi and M. Ramesh Prabhu*, The Pore filled SPEEK nanofibers matrix combined with ethylene diamine 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 (I.F 5.477)
- [15] K. Selvakumar, M. Ramesh Prabhu*, Enhancing Proton Conduction of Poly(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 (I.F 2.127)
- Raja Pugalenthi M, Guozhong Cao, **Ramesh Prabhu Manimuthu***, Cross-linked SPEEK-PEG-APTEOS modified CaTiO₃ perovskites for efficient acid-base cation exchange membrane fuel cell, (2020), Energy & Fuels (ACS), DOI: 10.1021/acs.energyfuels.0c01933 (I.F 3.605)
- [17] R. Gayathri, M. Ramesh Prabhu*, Protonated state and synergistic role of Nd³⁺ doped barium cerate perovskite for the enhancement of ionic pathways in novel sulfonated polyethersulfone for H₂/O₂ fuel cells, (2020), Soft Matter (RSC), DOI: 10.1039/d0sm00427h (I.F 4.046)
- [18] Raja Pugalenthi Mariappan, Chaofeng Liu, Guozhong Cao, Ramesh Prabhu Manimuthu*, Tailoring SPEEK/SPVdF-co-HFP/La₂Zr₂O₇ Ternary Composite Membrane for Cation Exchange Membrane Fuel Cells, (2020), Industrial & Engineering Chemistry Research (ACS), https://doi.org/10.1021/acs.iecr.9b06922 (I.F 4.326)
- [19] 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 (I.F 2.961)
- [20] G. Sowmya, S. Gowrishankar, M. Ramesh Prabhu*,Influence of phosphotungstic acid in sulfonated poly (ether ether ketone) poly (amide imide) based proton conductive membranes and its impact on the electrochemical studies of microbial fuel cell application (2020), *Ionics*, https://doi.org/10.1007/s11581-019-03415-5 (I.F 2.961)
- Raja K, Raja Pugalenthi M and Ramesh Prabhu M*, The Effect of incorporation of ferrous titanate nanoparticles in sulfonated poly(ether ether ketone)/poly (amide imide) acid-base polymer for cations exchange membrane fuel cells (2019), *Journal of Solid State Electrochemistry*. https://doi.org/10.1007/s10008-019-04453-9 (I.F 2.747)
- [22] S. Ponmani, K. Selvakumar, **M.Ramesh Prabhu***, The Effect of the Geikeilite (MgTiO₃) nanofiller concentration in PVdF-HFP/ PVAc based polymer blend electrolytes for Magnesium ion battery (2020), *Ionics*. https://doi.org/10.1007/s11581-019-03341-6 (I.F 2.961)
- [23] J. B. Arul Joseph Helen Therese, R. Gayathri, K. Selvakumar, M. Ramesh Prabhu*, P. Sivakumar, Incorporation of sulfonated silica nano particles into polymer

- blend membrane for PEM fuel cell applications (2019), *Materials Research Express*, DOI: 10.1088/2053-1591/ab4a3b. (I.F 1.94)
- [24] Raja K, Raja Pugalenthi M and Ramesh Prabhu*, Investigation on SPEEK/PAI/SrTiO₃-based nanocomposite membrane for high-temperature proton exchange membrane fuel cells, (2019), *Ionics*, DOI: 10.1007/s11581-019-03100-7.(I.F 2.961)
- [25] J.B Arul Joseph Helen Therese, K Selvakumar, R Gayathri, **M Ramesh Prabhu*** and P Sivakumar, In situ polymerization of poly aniline—SPEEKPMA-based proton exchange membrane for DMFC application (2019), *Journal of Thermoplastic Composite Materials*, DOI: 10.1177/0892705719835293 (I.F 3.33)
- [26] R. Sasikumar, K. Selvakumar, MR. Prabhu, Sethuraman, V, Studies on proton conducting polymer electrolytes based on poly(ethylene oxide)/poly(vinyl pyrrolidone) with NH4SCN, (2019), *Journal of the Indian Chemical Society*ISSN: 0019-4522. 113-117 (IF 0.284)
- [27] G. Sowmya, **M.Ramesh Prabhu***, Fabrication of blend polymer electrolyte membrane with poly (amide imide)-sulfonated poly (ether ether ketone) for microbial fuel cell (2018), *Materials Research express*, Doi.org/10.1088/2053-1591/aaf2b9 (I.F 1.941)
- [28] S. Ponmani, M.Ramesh Prabhu*, Sulfonate based ionic liquid incorporated polymer electrolytes for Magnesium secondary battery (2018), *Journal of Polymer plastics-technology and engineering*, Doi.org/10.1080/03602559.2018.1520259(I.F 3.267)
- [29] S. Ponmani, M. Ramesh Prabhu*, Development and study of solid polymer electrolytes based on PVdFHFP/PVAc: Mg (ClO₄)₂ for Mg ion batteries (2018), *Journal of Materials Science: Materials in Electronics*, Doi.org/10.1007/s10854-018-9649-0 (I.F 2.779)
- [30] S. Ponmani, J. Kalaiselvimary, M.Ramesh Prabhu*, Structural, electrical, and electrochemical properties of poly(vinylidenefluoride-co-hexaflouropropylene)/poly(vinyl acetate)-based polymer blend electrolytes for rechargeable magnesium ion batteries (2018), *Journal of Solid State Electrochemistry* Doi.org/10.1007/s10008-018-3971-6 (I.F 2.747)
- [31] J.Kalaiselvimary, M.R.Prabhu*, Influence of Sulfonated GO/Sulfonated bio polymer as polymer electrolyte membrane for Fuel cell application (2018), *Journal of material science : Materials in Electronics* 29(7),5525/5535 (I.F 2.779)
- [32] K. Selvakumar, M. Ramesh Prabhu*, Investigation on meta-polybenzimidazole blend with sulfonated PVdF-HFP proton conducting polymer electrolytes for HT-PEM fuel cell application (2018), *Journal of Materials Science: Materials in Electronics* DOI:10.1007/s10854-018-9658-z (I.F 2.779)
- [33] K. Selvakumar, S. Rajendran, **M.Ramesh Prabhu***, Influence of barium zirconate on SPEEK-based polymer electrolytes for PEM fuel cell applications (2018), *Ionics* Doi.org/10.1007/s11581-018-2613-4 (I.F 2.961)
- [34] J. Kalaiselvimary, N.Sundararajan, M.Ramesh Prabhu*, Preparation and characterization of Chitosan based nano composite hybrid polymer electrolyte

- membranes for fuel cell applications (2018), *Ionics* (24) 3555–3571 https://doi.org/10.1007/s11581-018-2485-7 (I.F 2.961)
- [35] Kalaiselvimary Jesuraj, Ramesh Prabhu Manimuthu*, Preparation and Characterization of Hybrid Chitosan/PEO–Silica Membrane Doped with Phosphotungstic Acid for PEM Fuel Cell Application (2018), *Polymer-plastics technology and engineering* Doi.org/10.1080/03602559.2018.1455862 (I.F 3.267)
- [36] J.Kalaiselvimary, M. Ramesh Prabhu*, Fabrications and investigation of physicochemical and electrochemical properties of heteropoly acid-doped sulfonated Chitosan-based polymer electrolyte membranes for fuel cell applications (2018), *Polymer Bulletin* Doi:10.1007-s00289-018-2445-4 (I.F 2.87)
- [37] M.Ramesh Prabhu et. al, Preparation and characterization of pseudobrookite (Fe₂TiO₅) Nano composite for fuel cell applications (2018), *International journal of Advance Engineering and Research Development* (I.F 5.71)
- [38] M.Ramesh Prabhu et. al, Synthesis and characterization of sulfonated chitosan / PEO based polymer electrolyte membranes for fuel cell applications (2018), *International journal of Advance Engineering and Research Development* (I.F 5.71)
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