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Scopus link : Scopus - Author search results
Vidwan link if available

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1. Personal Details

Date of Birth & Age	: 31/07/1981
Gender & Marital Status	: Male
Community	: BC
Nationality	: Indian
Place of Birth	: Sivaganga

2. Educational Qualifications

Academic

Degree/ Examination	Name of the Exam	University/ Institute	Year of Passing	Percentage/ Grade	Main Subject
Under Graduate	B.Sc.,	Madurai kamaraj University	2002	First	Chemistry
Post Graduate	MSc	Bharathidasan University	2004	First	Chemistry

Research

Thesis Title of the Thesis

Development of polymer nanocomposite membranes for polymer electrolyte fuel cell applications

3. Post-Doctoral / Research Associate / Industrial Experience

Name of the University / Institute / Industry	Period of Work	Nature of Work
Chonbuk National University, Jeonju, Republlic of Korea	2009-2010	Post-Docoral Research Fellow Professor

4. Professional Experience

No	Name of the University / Institution	Position Held	From (Date)	To (Date)
1	Department of Physical Chemistry, School of Chemistry, Madurai Kamaraj University, Madurai	Assistant Professor	18/03/2010	Till Date

5. Teaching

No	Year	Semester	Course Code	Course Title	Hours per Week
1	2022-23	I	CHE2211C	Physical Chemistry-I	2
2	2022-23	II	CHE2236C	Physical Chemistry Practicals	12
3		II	CHE2221C	Physical Chemistry-II	2
4	2022-23	II	CHE2225E	Green Energy Devices	3
5	2022-23	III	CHE2231C	Physical Chemistry - III	5
6	2022-23	III		Project Work	4
7	2022-23	IV	CHE2241C	Physical Chemistry - IV	5
8	2022-23	M.Phil	MCHE12C	Course Work	3
9	2022-23	IV		Project Work	6

6. Design/Development of New Curricula and Courses

No	Description	Organization for which itwas Developed	Level (PG/UG)
1	Chemistry	School of Chemistry, Madurai Kamaraj University, Madurai-625021	PG
2	Chemistry	Hajee Karutha Rowther Howdia College, Uthamapalayam, Theni-625533	UG
3	Chemistry	Sarah Tucker College (Autonomous), Tirunelveli- 627007	PG and UG
4	Chemistry	St. Xavier's College (Autonomous), Palayamkottai-627002	PG and UG
5	Chemistry	Lady Doak College, Madurai-625002	PG and UG

7. Creation of ICT Mediated Teaching-Learning Pedagogy: --

***SWAYAM / MOOCs* ---**

o	Description	Organization for which it was Developed	Level (PG/UG)

E-Contents : Nil

No	Description	Organization for which it was Developed	Level (PG/UG)

Development of other ICT Mediated Teaching-Learning Pedagogy : Nil

No	Description	Organization for which it was Developed	Level (PG/UG)

8. Research Specialization / Field of Research

- Electrochemistry
- Fuel Cells
- Batteries
- Nanodevices
- Electrochemical Sensors

9. Research Publications

Type	International	National
Papers Published in UGC-CARE Listed Journals	145	---
Papers in Refereed Journals (Not mentioned above)	-	--
Books Published	1	--
Books Edited	--	--
Contributions to Book Chapters	3	
Editor of Conference/Seminar Proceedings	-	
Papers Published in Conference/Seminar Proceedings	2	--
Papers Presented in Conferences/Seminars	74	68
Deposits in CCDC, PDB, etc.	-	

10. Citation Metrics

Cumulative Impact Factor (Recent Annual JCR)	-
Total Citations (Scopus/Web of Science)	5800
h-Index (Scopus/Web of Science)	49
g-Index (Scopus/Web of Science)	--
i10 Index (Scopus/Web of Science)	10 7

11. Details of Patents : 3

V. Perisamy, **G. Gnana kumar**, An electrochemical sensor for detecting and characterizing a biological material, WO 2021/194334 A1/30.09.2021.

12. Research Guidance/Supervision

Degree / Programme	Completed	Submitted	Ongoing
PhD (Full-time)	11	--	8
PhD (Part-time)	--	--	1
M.Phil Research Project (Full-time)	11	--	--
MPhil Research Project (Part-time)	--	--	--
MSc Projects/Dissertation	38	--	3
MSc Internships/Summer or Winter Projects	12	--	--

13. Funded Research Projects

13.1. Ongoing

No.	Title of the Project	Funding Agency	Period / Duration	Total Grants Sanctioned (Rs)
1	Development of sugar powered fuel cells and their stacks for powering the flexible electronic devices (01(2997)/19/EMR-II)	CSIR	2019-2022	9.45 lakhs
2	Development of portable direct methanol fuel cell power generator with bi-functional catalysts-coated hydrocarbon membranes (DST/TMD/HFC/2K18/52)	DST	2019-2022	60.64 lakhs
3	Development of functional nanomaterilas for green energy and environment (002/RUSA/MKU/2020-2021)	RUSA	2020-2022	163.00 lakhs
4	Design and development of self powered urine tricity smart toilets with high performance direct urea fuel cells (TNSCST/STP/PS-02/2019-20/3678)	TNSCST	2020-2022	1.90 lakhs
5	Development of wearable and self-powered sensors for non-invasive sweat diagnosis (SCP/2022/000918)	SERB	2023-2026	46.5 lakhs

13.2 Completed

No	Title of the Project	Funding Agency	Duration and Month & Year of Completion	Total Grants Received (Rs)	No of Papers out of Project
1	Development of polymer composite electrodes and electrolyte membranes for the empowerment of biofuel cell electricity generation (SR/FT/CS-113/2010(G))	DST-FAST TRACK	2011-2014	22.28 lakhs	18
2	Polyvinylidene fluoride – co - hexaFluoro propylene composite electrospun nanofiber membranes for the application of dye sensitized solar cells (02(0060)/12/EM R-II)	CSIR-	2012-2015	19.90 lakhs	13
3	Synthesis, structural, thermal and electrochemical characterizations of chitosan polymer composites for fuel cell applications (MRP-MAJOR-CHEM-2013-36681)	UGC	2015-2018	12.70 lakhs	14
4	Graphene based ORR catalysts equipped waste water treatment microbial fuel cells for the enhanced bioelectricity generation and clean water and phosphate extraction (EMR/2015/000912)	SERB	2016-2019	31.18 lakhs	19
5	The design and development of graphene based oxygen reduction reaction catalysts-coated hydrocarbon membranes for enhanced power generation of high-temperature proton exchange membrane fuel cells (F 5-129 /2016 (IC)	UGC-Raman	2016-2017	25.13 lakhs	4

14. Reviewer in Journals

Name of the Journal	Publisher	No of Papers Reviewed
Advanced Energy Materials	Wiley	2
Energy & Environmental Science	RSC	3
Journal of Power Sources	Elsevier	10
Sensors and Actuators B: Chemical	Elsevier	18
Journal of Colloid and Interface Science	Elsevier	8
Spectrochimica Acta, Part A: Molecular and Biomolecular Spectroscopy	Elsevier	13
Biosensors and Bioelectronics	Elsevier	20
Electrochimica Acta	Elsevier	7
Analytica Chimica Acta	Elsevier	3
New Journal of Chemistry	RSC	17
RSC Advances	RSC	23
International Journal of Hydrogen Energy	Elsevier	21
Journal of Materials Chemistry A	RSC	15
ACS Sustainable Chemistry & Engineering	ACS	8
Journal of Materials Chemistry A	ACS	13
Journal of Fluorescence	Springer	10
Research on Chemical Intermediates	Springer	9
Chemistryselect	Wiley	4
ACS Applied Materials & Interfaces	ACS	5
Solid State Ionics	Elsevier	6

15. Research Collaborations

16. Countries Visited

Name of the Country	Period	Purpose
United States of America	2006-2007	Raman Fellow
Republic of Korea	2012, 2013, 2018	Visiting Researcher
Malaysia	2016, 2019	Visiting Researcher
Taiwan	2019	Visiting Researcher
Singapore	2007	Visiting Researcher

17. Honours / Awards / Recognitions

Name of the Honours / Awards / Recognition	Awarding Agency	International / National / State / Institute Level
Fellow- Academy of Sciences	Academy of Sciences, Chennai.	National
Young Scientist Award	St. Jospeph's College, Trichy, India.	National
Young Scientist Award	Academy of Sciences, Tamil Nadu, 2017.	National
American Chemical Society (ACS) Honorary Member	ACS	International
Best Paper Award - 2nd International Conference on Advanced Functional Materials (ICAFM-2017)	Los Angeles, CA- 90045, USA, 2017.	International
Albert Nelson Marquis Lifetime Achievement, Marquis Who's Who,	Berkeley Heights, NJ-07922, USA, 2017.	International
Raman-USA Post Doctoral Research Fellowship	University Grants Commission (UGC), New Delhi	National
Young Scientist Award Project	Department of Science and Technology (DST), India,	National
"Who's who in the world-2010", Marquis Who's Who	Berkeley Heights, NJ-07922, USA.	International

18. Conferences / Seminars / Workshops Organized

Level	Conference Title	Date(s)	Role Played	Place	Funding
National	Online Summer Training Program in Chemistry -2021 for M.Sc Chemistry Tamil Nadu Students (STPIC-2021)	July 20 - August 7, 2021	Director	School of Chemistry, Madurai Kamaraj University, Madurai -625021	-
International	International Conference on "Sensors"	August 5, 2021	Convener	School of Chemistry, Madurai Kamaraj University, Madurai -625021	-

National	Refresher Course on "Advanced Functional Materials" for University and College Lecturers	December 9-22, 2020	Coordinator	School of Chemistry, Madurai Kamaraj University, Madurai -625021	-
National	Online Summer Training Program in Chemistry -2020 for M.Sc Chemistry Tamil Nadu Students (STPIC-2020)	July 15-28, 2020	Director	School of Chemistry, Madurai Kamaraj University, Madurai -625021	-
International	International Seminar on "Advanced Materials"	September 23, 2019	Convener	School of Chemistry, Madurai Kamaraj University, Madurai -625021	-
National	Workshop on "Curriculum development in Nanoscience and Nanotechnology"	October 7, 2016	Convener	School of Chemistry, Madurai Kamaraj University, Madurai -625021	-
National	National symposium on "Recent developments in Chemistry"	June 4, 2016	Convener	School of Chemistry, Madurai Kamaraj University, Madurai -625021	-
International	International Conference on "Nanomaterials for Energy, Environment, Catalysis and Sensors".	December 11-12, 2015	Convener	School of Chemistry, Madurai Kamaraj University, Madurai -625021	-
National	Lecture Workshop on "Solar Energy Conversion"	September 29, 2014.	Convener	School of Chemistry, Madurai Kamaraj University, Madurai -625021	-

National	National Level Seminar on ”Emerging trends in electrochemical engineering, science and technology”,	July 23-24, 2014	Convener	School of Chemistry, Madurai Kamaraj University, Madurai -625021	-
National	National Seminar on “Nanostructured Materials and applications	March 4-5, 2011	Treasurer	School of Chemistry, Madurai Kamaraj University, Madurai -625021	-

19. Invited Lectures / Resource Person

No	Institute / Organizer	Name of the Conference / Seminar / Workshop	International / National / State / Institute Level	Date(s)
1	St. Xavier’s College, Palyamkottai, Tirunelveli, Tamil Nadu.	“Renewable Fuel Cells : State-of-the Art Technology, Research and Development, Challenges and Future Trends” in “International Conference on Advanced Functional Materials for Energy and Environmental Applications”	International	21-04-2022
2	Department of Chemistry, Annamalai University, Chidambaram, March 13, 2020.	“Development of 3D hierarchical nanoarchitectures equipped electrochemical energy conversion and storage devices”, AUM to NET lecture series (Nobel Erudite Themes) Explosives to Nobel - Exploring Nobel to Society (ENS 20),	National l	13-03-2020
3	The Academy of Sciences, Chennai and School of Chemistry, University of Madras, Chennai	“Our journey in the development of high performance electrochemical energy conversion and storage devices”, Lecture on the Nobel Prize in Chemistry.	National l	24-02-2020

4	V.V.Vanniaperumal College for Women, Virudhunagar,	"Travelling with 3D electrodes for the development of high performance fuel cells".	International	27-01-202
5	UCSI University, Malaysia	"Development of high performance and durable fuel cells with 3D carbonaceous electrodes".	International	17-01-2020
6	University of Malaya, Malaysia	"Our Journey in the design and development of 3D electrodes for high performance fuel cells" Institute of Ocean and Earth Sciences (IOES),	International l	16-01-2020
7	National Cheng Kung University, Tainan, Taiwan	"Development of high performance and durable fuel cells with three dimensional catalytic nanoarchitectures", MRS-T 2019 Conference,	International	16-11-2020
8	Madura College, Madurai, 21.01.2019	"Three Dimensional Nanostructured Materials for Device Applications".	International	21-01-2019
9	Fatima college, Madurai	. Science and technology for sustainable future", National science day,	National	28-02-2018
10	University of Malaya, Malaysia	"Three dimensional nanoarchitectures for sustainable green energy generation from biofuel cells", Institute of Ocean and Earth Sciences (IOES),	International	10-10-2018
11	Department of Physics, University of Malaya, Malaysia	"Our journey with the design and development of highly active and durable active carbon supported catalysts applicable for biofuel cells",	International	20-05-2016
12	IOES, University of Malaya, Malaysia,	"Design and development of electrochemically active catalysts for the applications of high performance biofuel cells",	International	17-05-2016

13	SVN college, Nagamalipudhukottai, Madurai	"Our journey with the nanometric catalysts applicable for microbial fuel cells", National Seminar	National	19-02-2016
14	Fatima College, Madurai,	Electrocatalysts with nanomaterials: Our journey with novel catalysts toward microbial fuel cell and electrochemical sensor applications", Workshop,	International	15-12-2015
15	St. Xavier's College, Palyamkottai, Tirunelveli, Tamil Nadu	"Current status, key challenges and its solutions in the constructive development of fuel cells", Workshop.	National	11-09-2015
16	St. Xavier's College, Palyamkottai, Tirunelveli, Tamil Nadu	"The development of electrochemical devices by using graphene and its derivatives", Workshop,	National	11-09-2015
17	St. Xavier's College, Palyamkottai, Tirunelveli, Tamil Nadu	"Design and development of electrode architecture & its modification for the applications of microbial fuel cells and electrochemical sensors"	National	12-09-2015
18	Cheran College of Engineering, Cheran Nagar, Karur, Tamil Nadu,	"Design and development of environment benign energy device for the emission free environment".	National	14-08-2015
19	G.Venkataswamy Naidu College, Kovilpatti,	"Design and development of nanostructured materials for the extended green energy generation of microbial fuel cells", National Seminar,	National	06-08-2015
20	Arul Anandar College, Karumathur, Madurai, Tamil Nadu,	National Science Mela 2015 & Awareness Film Festival 2015	District level	20-02-2015
21	SVN college, Nagamalipudhukottai, Madurai, Tamil Nadu	"Recent advancements in the electrode architecture and its modifications for the extended power generation of microbial fuel cells", National Seminar.	National	18-02-2015

22	Bharathidasan University, Trichy, Tamil Nadu	Refresher Course in Chemistry, State Level,	State	02-022015
23	Velammal College of Engineering and Technology, Madurai, Tamil Nadu	. “Renewable energy towards greener environment”	National	21-08-2013
24	St. Xavier’s college, Palayamkottai , Tamil Nadu	National seminar on green management – prospects and challenges “Green production strategies”, National Seminar,	National	22-02-2013
25	St. Xavier’s College, Palayamkottai , Tamil Nadu	National seminar on frontiers in chemistry “The influence of nanoscience on green energy generation of fuel cells”	National	01-02-2013
26	Bharathidasan University, Trichy, Tamil Nadu	Refresher course in chemistry “Nanostructred materials and biofuel cells”	State	23-11-2012
27	Madurai Kamaraj University, Madurai, Tamil Nadu	Refresher course in chemistry “Current trends in chemistry”, State level refresher course in chemistry.	State	1-08-2012
28	Arul Anandar College, Karumathur, Madurai, Tamil Nadu,	National science mela-2012, National level.	National	16-03-2012-18-03-2012
29	Government Kallar Reclamation High School, Kovilangulam , Tamil Nadu	National Science Mela-2012, National level,	National	16-03-2012-18-03-2012

30	Mother Teresa Women's University, Kodaikanal, Tamil Nadu	International conference on nanomaterials and applications "Development of polymer nano composite electrolytes and electrodes for empowerment of green energy"	National	28-02-2012-29-02-2012
31	Madurai Kamaraj University, Madurai, Tamil Nadu	64th Orientation programme for college/university teachers, State level,	State	28-02-2012
32	Madurai Kamaraj University, Madurai,	"Development of polymer electrolyte membranes for the empowerment of green energy technology" Indo-Norwegion Satellite meeting on advances in solar cell materials and technologies (SMASMT-2011),	International	Dec-2011
33	Bharathidasan University, Trichy, Tamil Nadu	Refresher Course in Chemistry	State level	07-12-2011
34	Kalasalingam University, Srivilliputttur, Tamil Nadu	Advanced functional polymer electrolyte membranes for the applications of fuel cells,	National	16-12-2011-17-12-2011
35	Arul Anandar College, Karumathur, Madurai, Tamil Nadu	"Chemistry in daily life", Workshop on recent trends in science for science teachers of schools In chellampatti educational union, National Seminar,	National	01-12-2011-02-12-2011
36	Arul Anandar College, Karumathur, Madurai, Tamil Nadu	State level seminar on expanding frontiers in chemistry (EFC-11)	State	15-02-2011
37	St. Xaviers college Palayamkottai , Tamil Nadu,	National seminar on chemistry for changing times. "Green energy technology", National Seminar.	National	04-02-2011

38	Arul Anandar College, Karumathur, Madurai, Tamil Nadu	Orientation cum workshop for rural school science teachers in madurai (OWRSST-2010)	District	03-12-2010

20. Professional Development Programs / Faculty Development Programs Organized: -

Name of the Program	Role	Place	Date(s)	Funds in Rs & Sponsor
Refresher Course in Chemistry on "Advanced Functional Materials"	Coordinator	UGC-Human Resource Development Centre, Madurai Kamaraj University, Madurai-625021	09.12.2020 - 22.12.2020	-

21. Professional Development Programs / Faculty Development Programs Attended

Name of the Program	Place	Date(s)	Sponsor
Induction Programme	Madurai Kamaraj University, Madurai-21	23-04-2010-29-04-2010	University Grants Commission (UGC), New Delhi
Orientation Course	Academic Staff College, Madurai Kamaraj University, Madurai-21	01.02.2012–28.02.2012	University Grants Commission (UGC), New Delhi
Refresher Course in Chemistry	School of Chemistry, Madurai Kamaraj University, Madurai-21	12.07.2012–01.08.2012	University Grants Commission (UGC), New Delhi
Refresher Course in Basic Sciences on the theme "Progresses in Basic Sciences through Interdisciplinary Approach"	Human Resource Development Centre, Madurai Kamaraj University, Madurai-625 021	09.03.2018 – 29.03.2018	University Grants Commission (UGC), New Delhi
Refresher Course in Chemistry on the theme "Frontiers in Chemistry"	School of Chemistry, Madurai Kamaraj University, Madurai-625021	10.11.2021 – 23.11.2021	University Grants Commission (UGC), New Delhi

22. Administrative Experiences

Role Played	Responsibilities	Period (from … to)
Additional Coordinator in RUSA-II	Research and Development programs	till now
Head In-charge	Administrative Works in the Department of Physical Chemistry and School of Chemistry, Madurai Kamaraj University, Madurai-21	15.08.2016 - 09.01.2023
Head	Administrative Works in the Department of Physical Chemistry and School of Chemistry, Madurai Kamaraj University, Madurai-21	10.01.2023 – till today

23. Membership in Academic Bodies

24. Membership in Recognised Professional Bodies

Name of the Professional Body	International / National	Type of Membership
Chemical Research Society (CRSI)	National	Life Member
Academy of Sciences, Chennai	National	Life Member
American Chemical Society	International	Honorary Member

25. Languages Known

Languages	Read	Write	Speak
Tamil	Yes	Yes	Yes
English	Yes	Yes	Yes

26. Competence in Computer Applications :

27. Involvement in Extension Activities other than Academic Works :

28. Any Other Relevant Information :

Future Plans :

(i) Teaching:

I am highly envisioned to engage the students rationally energetic in learning with the use of different teaching approaches and strategies. It has been planned to construct the learning process not only to pass examinations, but also to develop technically literate scholars, who will make significant and precise decisions. It will revolve around the experimental work, using different pictorial material, context-based approaches, and multimedia environment. Thus, the students can correlate the theoretical aspects of chemistry with the experimental techniques, which will be useful to actualize the scale-up concepts in chemistry.

(ii) Research:

Despite the extensive research activities on fuel cells, a gap exists between the research-generated knowledge and utilization of above knowledge in real-world applicability demoralizes the interest on fuel cells. It will be effectively materialized with the rational development of electrochemically active and robust catalysts coated ionogel membranes. Accordingly, the perceived practicality and ease-of-use of our research activities will ensure the easy handling, portable, reliable, and affordable portable power pack system, which can easily translate evidence into practice. The novel materials involved in the development of new products with improved characteristics, lower costs and reduced environmental impact will have a positive influence on the quality of life.

Details of Publications

1. Books Published : 1
2. Books Edited : Nil
3. Contribution to Book Chapters
4. Editor of Conference/Seminar Proceedings : Nil
5. Research Publications
UGC-CARE Listed Journals
Total Number of Publications : 145

Selected Publications

1. A. Vignesh, P. Vajeeston, M. Pannipara, A.Sehemi, Y. Xia, **G. Gnana kumar**, ***Chemical Engineering Journal***, 2021, **430(4)**, 133157 (1-12). **(Impact Factor: 16.69)**
2. G. Ahmed, Z. H. Awan, F. H. Bhutt, F. Raza, S. Hashmi, F. Butt, **G. Gnana kumar**, M. Christy, ***Journal of Power Sources***, 2022, **538**, 231379(1-16). **(Impact Factor : 9.719)**
3. T. R. Madhura, G. Gnana kumar, R. Ramaraj, ***Fuel,*** **2022,** 312, 122937 (1-10). **(Impact Factor: 8.035)**
4. C-H. Thong, N. Priyanga, F-L. Ng, M. Pappathi, V. Periasamy, S-M. Phang, G. Gnana kumar, ***Catalysis Today***, 2022, **397-399,** 419-427. **(Impact Factor: 6.562)**
5. F-L. Ng, S-M. Phang, M. Iwamoto, T. Manaka, C-H. Thong, K. Shimosawa,

V. Periasamy, **G. Gnana kumar**, K. Yunus, Adrian C. Fisher, ***ACS Sustainable Chemistry & Engineering***, 2020, **8 (28),** 10511–10520. (**Impact Factor : 9.224)**

6. S. Divya Rani, R. Ramachandran, S. Sheet, M. Aziz, Y.S. Lee, A.G. Al-Sehemi, M. Pannipara, Y. Xia, S-Y. Tsai, F-L. Ng, S-M. Phang, **G. Gnana kumar**, ***Sensors and Actuators B : Chemical***, 2020, **312**, 127886-127898. **(Impact Factor: 9.221)**
7. C. J. Kirubaharan, G. Gnana kumar, C. Sha, D. Zhou, H. Yang, K. S. Nahm, B. Raj, Y. Zhang, Y. Yong, ***Electrochimica Acta***, 2019, **328**, 1351362-1351369. **(Impact Factor: 6.78)**
8. T. Rajkumar,G. Gnana kumar, A. Manthiram, ***Advanced Energy Materials***, 2019, **9**, 1803238 (1-12). **(Impact Factor : 29.69)**
9. V. Archana, Y. Xia, R. Fang, G. Gnana kumar, ***ACS Sustainable Chemistry & Engineering***, 2019, **7(7)**, 6707–6719. **(Impact Factor : 9.224)**
10. N. Senthilkumar, G. Gnana kumar, A. Manthiram, ***Advanced Energy Materials***, 2018, **8**, 1702207(1-11). **(Impact Factor : 29.69)**
11. M. Ranjani, N. Senthilkumar, G. Gnana kumar, ***Journal of Materials Chemistry A***, 2018, **6**, 23019-23027.**(Impact Factor : 14.51)**
12. G. Siva, M. A. Aziz, G. Gnana kumar, ***ACS Sustainable Chemistry & Engineering***, 2018, 6(5), 5929-5939.**(Impact Factor: 9.224)**
13. M. Ranjani, D. J. Yoo, G. Gnana kumar, ***Journal of Membrane Science***, 2018, **555(1)**, 497-506. **(Impact Factor: 10.53)**
14. **G. Gnana kumar**, Sheng-Heng Chung, T. Raj kumar, A. Manthiram, ***ACS Applied Materials & Interfaces,*** 2018, **10 (24)**, 20627–20634. (**Impact Factor: 10.38)**
15. F-L. Ng, S-M. Phang, M. Iwamoto, T. Manaka, C-H. Thong, K. Shimosawa, V. Periasamy, G. Gnana kumar, K. Yunus, A. C. Fisher, ***ACS Sustainable Chemistry & Engineering***, 2020, **8(28)**, 10511–10520. **(Impact Factor: 9.224)**
16. K. Justice Babu, T. Rajkumar, Dong Jin Yoo, Phang Siew-Moi, G. Gnana kumar, ***ACS Sustainable Chemistry and Engineering,*** 2018, **6 (12)**, 16982–16989. **(Impact Factor: 9.224)**
17. S. S. John Xavier, G. Siva, J. Annaraj, A. R. Kim, D. J. Yoo, **G. Gnana kumar**, ***Sensors and Actuators B : Chemical***, 2018, **259**, 1133-1143. **(Impact Factor: 9.221)**
18. K. J. Babu, S. Sheet, Y. S. Lee, **G. Gnana kumar**, ***ACS Sustainable Chemistry and Engineering***, 2018, **6**, 1909-1918. **(Impact Factor: 8.198)**
19. G. Gnana kumar, A. Manthiram, ***Journal of Material Chemistry A***, 2017, **5**, 20497-20504. **(Impact Factor: 14.51)**

20. M. V. Kannan, G. Gnana kumar, ***Biosensors and Bioelectronics***, 2016, 77, 1208-1220. **(Impact Factor: 12.545)**
21. J. Salamon, Y. Sathishkumar, K. Ramachandran, K. J. Babu, Y. S. Lee, D. J. Yoo, A. R. Kim, **G. Gnana kumar**, ***Biosensors and Bioelectronics***, 2015, **64**, 269-276. **(Impact Factor: 12.545)**
22. **G. Gnana kumar**, Z. Awan, K. S. Nahm, S. Xavier, ***Biosensors and Bioelectronics***. 2014, **53**, 528-534. (**Impact Factor: 12.545)**

Other Refereed Journals : Nil

Recent International Conferences

1. N. Priyanga, A. Sahaya Raja and **G. Gnana kumar,** Hierarchical MnS@MoS_2 Microboxes Constructed by Nanosheets with Enhanced Non-Enzymatic sensing Ability of Hydrogen Peroxide, International Conference On Frontiers in Chemical and Material Sciences (ICFMS2020), 24th, & 25th February 2020.
2. N. Priyanga, A. Sahaya Raja and **G. Gnana kumar,** Highly Selective Enzyme-Free Glucose Oxidation on $CoMoO_4$ Nanoflakes Architectures Over a Disposable Pencil Graphite Electrode, International Workshop-cum-Conference on Smart Materials and their Applications in Recent Technologies (SMART -2020), 4th & 5th March 2020.
3. M. Pappathi, A. Sahaya Raja and **G. Gnana kumar,** Hierarchical Porous Architectured Nitrogen Doped Nickel Nanostructures for High Performance Non-Enzymatic Electrochemical Glucose Sensors, International Workshop-cum-Conference on Smart Materials and their Applications in Recent Technologies (SMART -2020), 4th & 5th March 2020.
4. **A. Vignesh, G. Gnana kumar, Bimetallic Metal-Organic Framework Derived 3D Hierarchical NiO/Co_3O_4/C Hollow Microspheres on Biodegradable Garbage Bag for Sensitive, Selective, and Flexible Enzyme-Free Electrochemical Glucose Detection,** International E-Conference on Sustainable and Futuristic Materials (SFM-2021), 29th & 30th September 2021.
5. **G. Siva, S. Sutharsun, G. Gnana kumar, Nitrogen Enriched Carbon Aerogel with CNTs Assembled Hollow Ball in-Ball Microspheres as Bifunctional Catalytic Electrodes for High Performance Glucose Fuel Cells,** International Virtual Conference on Advanced Materials for Sustainable Energy and Environment (ICAMSEE-2022), 16-18 February 2022.

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8. M. Pappathi, A. Sahaya Raja, A. Therasa Alphonsa, B. Karthikeyan, and **G. Gnana kumar, N doped Carbon Interlaced Ni/Cu Nanostructures for High Performance Electrochemical Nonenzymatic Glucose Sensors,** International Virtual Conference on Advanced Materials for Sustainable Energy and Environment (ICAMSEE-2022), 16-18 February 2022.
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10. **P. Ilaiyaraja, J. Saravanan, S. Suryaprakash and G. Gnana kumar, 3D Nickel Iron Phosphide Architectures on Cellulose Wipe as a Free - Standing Flexible Electrode for High Performance Direct Urea Fuel Cells,** International Virtual Conference on Advanced Materials for Sustainable Energy and Environment (ICAMSEE-2022), 16-18 February 2022.

5. Any Other Publications Not Mentioned Above : Nil

6. Conferences / Seminars / Workshops / Webinars Attended : Nil

7. Details of Deposits in CCDC, PDB, etc. : Nil