



Dr.M.SIVAKUMAR
ASSOCIATE PROFESSOR

Contact

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Alagappa University
Karaikudi – 630 003
Tamil Nadu, INDIA

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Academic Qualifications: M.A./M.Sc./M.Phil./Ph.D./Physics

M.Sc., M.Phil., Ph.D., (Physics), BLIS

Teaching Experience: 22 Years

Research Experience: 25 Years

Additional Responsibilities

1. Programme Coordinator, Week-end M.Phil. Programme in Department of Physics, since July 2016.
2. Member- Centre for Yoga Studies
3. Convener – 29th Convocation Committee for VIPs Guests Memento organizing

4. Convener – Teachers’ day celebration Gift and Memento committee
5. Department Doctoral Committee Member
6. Member – Board of Studies to Dept. of Physics, Alagappa University.
7. Member – in CDC Board of Studies for PG and M.Phil.
8. Course Advisor (PG program timetable, CIA tests schedule, project allotment, scholarships, etc.)
9. Faculty co-ordinator of Science Club of Department of Physics.
10. Ph.D and M.Phil. scholars Selection committee member.
11. Staff In-charge for Department Colloquium for PhD and MPhil scholars.
12. In-charge for Atomic Force Microscope in the Department of Physics.
13. Doctoral Committee member in Anna University of Tech., Madurai.
14. Question paper setter in Bharathiar, Madurai Kamaraj, Alagappa, Periyar, Manonmaniam Sundaranar Universities for PG programme.
15. Question paper setter in Anna University, Jamal Mohammed College, etc. for B.Tech., B.E. and B.Sc., courses.
16. ACT NEXT – 2015 Convener.
17. VPP coordinator (2008, 2013).
18. Tour In-Charge for the year 2008-09 for the PG students and MPhil scholars.
19. Department Library In-Charge during 2008-2010.
20. University Representative for DDE Examinations in various centres of Alagappa University.

Areas of Research

Solid State Ionics, Lithium Electrodes and Electrolytes, Sodium and Sulfur electrodes, Supercapacitors, Biodiesel, Crystal Growth.

Research Supervision / Guidance

Program of Study		Completed	Ongoing
Research	Ph.D.	8+1 (submitted)	6+3(coguiding)
	M.Phil.	39	1
Project	PG	54	-
	UG / Others	3	Xx

Publications

International		National		Others
Journals	Conferences	Journals	Conferences	Books / Chapters / Monographs / Manuals
117	113	Xx	117	03

Cumulative Impact Factor (as per JCR) : 183.549
h-index : 14
i10 index : 21
Total Citations : 1182

Funded Research Projects

Completed Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	DST-SERC major project	20.01.2010	19.01.2013	SYNTHESIS AND CHARACTERIZATION OF NANO CRYSTALLINE LiFePO₄ CATHODE MATERIALS FOR LITHIUM BATTERY FABRICATION BY POLYOL PROCESS	25.51
2	Alagappa University	Nov' 2009	Jan' 2011	STUDIES ON CONDUCTIVE ELEMENTS COATED LiCoO₂ AND LiFePO₄ CATHODE MATERIALS FOR LITHIUM BATTERIES	0.64
3	DST-NSC	01.04.2010	31.03.2013	SYNTHESIS AND CHARACTERIZATION OF VANADIUM BASED CATHODE MATERIALS FOR LITHIUM ION SECONDARY BATTERIES	~26.0 per side
4	UGC	01.07.2012	31.12.2015	STUDIES ON COMPOSITE POLYMER ELECTROLYTES BASED ON COPOLYMERS FOR SECONDARY LITHIUM BATTERIES	11.21

Ongoing Projects

S. No	Agency	Period		Project Title	Budget (Rs. In lakhs)
		From	To		
1	DST-SERB major project	24.10.2017	23.10.2020	A PURSUIT OF PROSPECTIVE LAYER / OLIVINE TYPE ELECTRODE MATERIALS FOR SODIUM BATTERIES	35.25
2	RUSA-2.0	18.09.2018	Till date	Theme: Advanced Nano Materials for Sustainable Energy and Sensors Applications	5.0

Note: Budget must be rounded to two decimal places

Patents

1. ---
2. ---

Distinctive Achievements / Awards

1. Post-Doctoral Fellowship – 15.11.2004 to 31.07.2006 –National Science Committee, Taiwan ROC.
2. Visiting Principal Scientist in DST-NSC Collaborative Research Project during 2011-14.
3. Outstanding Reviewing Contribution in *Electrochimica Acta*, Elsevier Publications.
4. Best Paper Award for our paper entitled “Effect of ZrO₂ filler on P(S-MMA) gel blend polymer electrolyte for Lithium polymer battery” -M.Ramachandran, R.Subadevi, M.Sivakumar Presented in the International Conference on Nanoscience and Nanotechnology for Energy Applications (EApp-2016) organized by Centre for Nanoscience and Nanotechnology and Centre of Excellence for Energy Research, Sathyabama University, Chennai-600 119. India during 27-29, June 2016.
5. International Seminar on Materials Science and Technology (ISMST-2017) organized by Department of Physics, Mother Teresa Women’s University, Kodaikanal, India on 4th Aug 2017.
6. **Best Poster Presentation** for our paper entitled “*Designing of stable layered cathode material for sodium ion batteries using post-transition metals*”
P.Arjunan , R.Subadevi, M.Sivakumar*
Presented in the International Conference on Momentous Role of Nanomaterials in Renewable Energy Devices -2018 (IC MNRE-2018) organized by the Department of Physics, Alagappa University, Karaikudi-630 003 during 1-2, March 2018.
7. **Best Oral Presentation** for our paper entitled “*Zn substituted layered P2-type cathode material with improved cell voltage profile for sodium ion battery*”
P.Arjunan, M.Kouthaman, K.Kannan, R.Subadevi, M.Sivakumar*
Presented in the National Conference on Advanced Materials for Sustainable Energy and Sensors (NCAMSES-2019) organized by the Department of Physics, Alagappa University, Karaikudi-600 003 during 20-22, March 2019.
8. Award for Outstanding Contribution in Reviewing in *Electrochimica Acta* – Elsevier Publications
9. Award for Contribution in Reviewing in *Materials Chemistry and Physics* – Elsevier Publications
10. Award for Contribution in Reviewing in *Energy* – Elsevier Publications
11. Award for Contribution in Reviewing in *Chemical Physics Letters* – Elsevier Publications

12. Award for Contribution in Reviewing in Thin Solid Films – Elsevier Publications

Events organized in leading roles

Number of Seminars / Conferences / Workshops / Events organized: 21

1. Organized a Two day National Conference on Advanced Materials for Sustainable Energy and Sensors (NCAMSES-2019) during 20-22, March 2019 by the Department of Physics, Alagappa University, Karaikudi-630 003 as an Organizing **Member**.
2. Organized an International Conference on Momentous Role of Nanomaterials in Renewable Energy Devices – 2018 (IC MNRE-2018) during 1-2, March 2018 by the Department of Physics, Alagappa University, Karaikudi-630 003 as **Convener**.
3. Organized a National Workshop on Business Oriented Analytical Research and Development 2018 (BOARD-2018) as a **Member**, organized by the Department of Physics, Alagappa University, Karaikudi-630 003 during 31st Jan' to 1st Feb' 2018.
4. Organized a National Theme Meet on University-Industry Interface 2017 (NTM U2I-2017) by Industry & Consultancy Cell in association with the Department of Physics, Alagappa University, Karaikudi India in Alagappa University, Karaikudi during 20-21, September 2017 as **Coordinator**.
5. Organized Alagappa University Celebrates Themed Nobel Excellence Talks – 2016 ACT NEXT-2016, as a **Member** on 28th April 2017.
6. Organized UGC sponsored “National Conference on Futuristic Materials (NCFM-2017)” as a **Member** in the Department of Physics, Alagappa University, Karaikudi, India held during 27-28, March 2017.
7. Organized “Business Oriented Hands-on Training on Analytical Instrumentation (HI-BOAT-2017)” as a **Member** in the Department of Physics, Alagappa University, Karaikudi, India held during 2-3, March 2017.
8. Organized “Alagappa University Inter Collegiate Yoga Competition 2016-17” as a **Member** of Centre for Yoga Education, Alagappa University, Karaikudi-630003 on 24th February 2017.
9. Organized “Workshop and Activity based Yoga (WAY-2017)” as a **Member** of Centre for Yoga Education, Alagappa University, Karaikudi-630003 on 8th February 2017.
10. Organized “National Seminar on Advanced Materials Research NSAMR-2017” as a **Member** in the Department of Physics, Alagappa University, Karaikudi-630003, Tamil Nadu, India on 19.01.2017.
11. Organized a “National Seminar on “Recent Advancements in Frontier Areas of Materials Science” as a **Co-convener** in the Department of Physics, Alagappa University, Karaikudi, India held on 23-24th March, 2016.

12. Organized Alagappa University Celebrates Themed Nobel Excellence Talks – 2015 ACT NEXT-2015, as a **Convener** on 18th March 2016.
13. Organized an “International Workshop on Advanced Materials -2014 (IWAM-2014)” as a **Convener** in the School of Physics, Alagappa University, Karaikudi, India held during 20-21 March 2014.
14. Organized a National Workshop on Characterization Techniques (NWCT-2, 2013)” as a **member** of Organizing committee in the School of Physics, Alagappa University, Karaikudi held on 24 & 26, March 2013.
15. Organized a “National Workshop on Characterization Techniques(NWCT-1, 2012)” as a **member** of Organizing committee in the School of Physics, Alagappa University, Karaikudi on 24 & 26, March 2012.
16. Organized an “International Workshop on Advanced Energy Materials (IWAEM-2012)” as a **Convener** in the School of Physics, Alagappa University, Karaikudi, India during 9-10, February 2012.
17. Organized a “State Level Workshop on Structure solving by Powder X-ray diffraction (SLWSSP-XRD 2011) as a **member** of Organizing committee in the School of Physics, Alagappa University, Karaikudi during 26-27, July 2011.
18. Organized a “National Conference on Recent Trends in Advanced Energy Materials” as **Convener** held on 10th & 11th March, 2010 in the School of Physics, Alagappa University, Karaikudi.
19. Organized a National Workshop on “Theory and Practice of XRD Techniques” as a **member** of organizing committee in the School of Physics, Alagappa University during July 13-17, 2009.
20. Organized a National Workshop on “Crystal Growth and Characterization” as a **member** of organizing committee in the School of Physics, Alagappa University on March 16, 2009.
21. Organized a National Workshop on “Recent Advances in Materials Science” as a **member** of organizing committee in the School of Physics, Alagappa University, on March 07, 2008.

Events Participated (optional)

Conferences / Seminars / Workshops: 15

1. Participated in the 14th International Conference on Ecomaterials organized by CSIR-NIIST, Thiruvananthapuram, India, during 5-7, February 2020.
2. Presented in the 13th National Conference on Solid State Ionics organized by the Department of Physics, Indian Institute of Technology (IIT R), Roorkee, Uttaraghand, India, during 16-18, December 2019.
3. Participated in the International Conference on Nanoscience and Nanotechnology (ICONN-2019) organized by the Department of Physics and Nanotechnology, SRM

Institute of Science and Technology, Kattankulathur-603203, Tamil Nadu, India, during 28-30, January 2019.

4. Participated in National Workshop on Expansion and Enrichment of Distance Learning (EEDL-2012) organized by the Directorate of Distance Education, Alagappa University, Karaikudi, Tamil Nadu, during 27-28, March 2012.
5. Participated in the National Seminar on Recent Trends in Functional Materials (FUNMAT'12) organized by the Department of Physics, Ultra College of Engineering & Technology for Women, Madurai on 17th February 2012.
6. Attended International Workshop on Advances in Functional Nanomaterials organized by Center for Nanoscience and Nanotechnology, Anna University, Chennai Tamil Nadu, India during February 21-24, 2011.
7. Participated DAE-BRNS Theme Meeting on Covariance Error Matrix in Nuclear Data and its Applications in Reactor Fuel Cycle and Technology, organized by the Dept. Statistics, Manipal University, Manipal, Karnataka, India during 25-28, February 2008.
8. Participated International Conference on Stochastic Modelling (ICSM09) organized by the Department of Mathematics, Alagappa University, Karaikudi, Tamil Nadu, India during February 12-14, 2009.
9. Participated in the National Workshop on Bio-diesel, organized by School of Energy, Environment and Natural Resources, Madurai Kamaraj University, Madurai, Tamil Nadu during 2007.

Other Training Programs

1. Orientation Program conducted at the ASC, Madurai Kamaraj University, Madurai during 24.09.2008 to 21.10.2008.
2. Refresher Course entitled "Recent Trends in Physics" conducted at the ASC, Madurai Kamaraj University, Madurai, during 03.11.2009 to 23.11.2009.
3. UGC sponsored Refresher Course in Nanosciences (Inter Disciplinary) at the UGC-Human Resource Development Centre, Bharathidasan University, Khajamalai Campus, Tiruchirappalli, during 20.12.2017 to 09.01.2018.
4. Faculty Development (Enrichment) Programme, 6-12, January 2017 organized by IQAC, Alagappa University, Karaikudi.
5. AICTE-ISTE sponsored A Short Term Course on "Smart materials and structures", organized by the Department of Physics, Thiagarajar College of Engineering, Madurai during 03.12.2018 to 08.12.2018.
6. A Short Term Course in "Research Methodology" conducted in the UGC-Human Resource Development Centre, Bharathidasan University, Khajamalai Campus, Tiruchirappalli, during 15.02.2019 to 21.02.2019.

Overseas Exposure / Visits

1. Post Doctoral Fellow – National Taiwan University, Taipei, Taiwan from 15.11.2004 to 27.07.2006
2. Indian side Principal Visiting Scientist 2011-14

Membership in

Professional Bodies

1. Life Member : Indian Association of Physics Teachers (IAPT)
2. Life Active Member : Society for Advancement of Electrochemical Science and Technology (SAEST)
3. Life Member : Society for Polymer Science India – Tiruvananthapuram Chapter (SIPS)
4. Life Member – Indian Physics Association
5. Life Member - Indian Society for Electroanalytical Chemistry (ISEAC)
6. Fellow Member - Bose Science Society

Editorial Board

1. **Review Editor-** Energy Storage Specialization- in **Frontiers in Energy Research**.
2. **Editorial Member – Electronics Science Technology and Application**, Universe Scientific Publishing Pte Ltd.
3. **Edited the Abstracts & Souvenir** of the **NATIONAL CONFERENCE ON RECENT TRENDS IN ADVANCED ENERGY MATERIALS** held at the School of Physics, Alagappa University, Karaikudi, on 10th & 11th March, 2010. ISBN: 978-93-80400-14-3
4. **Edited the Proceedings** of the **NATIONAL CONFERENCE ON RECENT TRENDS IN ADVANCED ENERGY MATERIALS** held at the School of Physics, Alagappa University, Karaikudi, on 10th & 11th March, 2010. ISBN:978-93-80697-40-6.
5. **Co-edited the Proceedings** of the **National Conference on Futuristic Materials (NCFM-2017)** held at the Department of Physics, Alagappa University, Karaikudi-630 003 during 27-28, March 2017. **ISBN: 978-81-791229-2-1.**
6. **Edited the Abstracts & Souvenir of the International Conference on Momentous Role of Nanomaterials in Renewable Energy Devices (ICMRE-2018)** held at the Department of Physics, Alagappa University, Karaikudi, on 01-02, March, 2018. ISBN:978-81-934473-2-1.

Advisory Board

1. Lady Dock College – Special Invitee in Syllabus Framing
2. xxx

Academic Bodies (such as Board of Studies etc.,)

1. Chairman - PG Physics Board in Bharathidasan University, Tiruchirappalli from Apr'2017 to till date.
2. Chairman - MPhil Physics Board Bharathidasan University, Tiruchirappalli during Apr'2019 and Apr'2020.
3. Member BOS- PG Board Physics for Affiliated Colleges, Alagappa University, Karaikudi.
4. Member BOS- UG Board Physics for Affiliated Colleges, Alagappa University, Karaikudi.
5. Member BOS- PG Board Physics for University Department, Alagappa University, Karaikudi.

Others

1. SRF Assessment Committee Member in AcSIR, CECRI, Karaikudi
2. PhD Selection Committee Member - AcSIR, CECRI, Karaikudi for Aug'2020.

Resource persons in various capacities

Number of Invited / Special Lectures delivered: 24

1. 12.01.2008 – Dept. Physics, NPR Arts & Science College, Uluppakudi, Natham – Chief Guest and Invited Talk – Introduction Energy Storage Devices.
2. 21-22, August 2009 – **National Conference on Recent Advances in Materials Science-2009 (RAMS-09)**, Dept.Physics, Sri Sevugan Annamalai College, Devakkottai, Production and Fuel properties of Bio-diesel from Mahua oil
3. 13.09.2010 – Special Address on the occasion of Special program under Autonomous Fund – Dept. of Physics, V.V.Vanniapperumal College for Women, Virudhunagar, Introduction to Electrochemical storage devices and Bio fuels
4. 27.11.2009 – One day **National Workshop on “Recent Trends in Modern Analytical Techniques and Energy Storage Devices”** in Latha Mathavan Engg.

College, Alagar Kovil, Madurai – Keynote Address and Invited Talk on “Recent Trends in Electrochemical Energy Storage Devices”.

5. 26.10.2010 – PHYSKNIT-2K10, **State Level Inter Collegiate Meet** organized by Dept.Physics, Fatima College, Madurai, Renewable Energy.
6. March, 4, 2011. **National Seminar on Green Revolution-Energy Applied Technology (GREAT'11)**, organized by the Department of Chemistry, Ultra College of Engineering and Technology for Women, Madurai-625 104, Tamil Nadu – Valedictory Address and Invited Talk on “Electrochemical Energy Technology”.
7. October, 21-22, 2011. “Developments of Polymer Electrolytes” as an Invited Talk in the **National Seminar on Polymers Synthesis, Characterization and Applications (POLYCAP'2011)** organized by the Department of Physics, Mannar Thirumalai Naicker (MTN) College, Madurai-625 004.
8. 22nd January 2013. “Bio-Fuels And Energy Storage Devices” as an Invited Talk in the **National Seminar on Crystal Growth and Bio-fuels**, organized by the Department of Physics, Meenakshi College, Madurai.
9. 08.03.2014 “Lithium Electrodes - A Review” organized by the Department of Physics, Cousannel College, Muthupettai, Ramnad in the **National Level Seminar on Recent Advances in Nanomaterial Synthesis and Characterization (RANSSAC-2014)**.
10. 26.01.2014 “Introduction to Fuel Cells” organized by the Department of Physics, Sri Sevugan Annamalai College, Devakkottai in the “**International Seminar on Advanced Materials**”
11. 08.08.2014 “Energy Storage using Nano crystalline Materials for Lithium Batteries” organized by the Department of Physics, National College, Tiruchirappalli, in the **National Conference on Crystal Growth and Energy Storage**, during 7-9, August 2014.
12. 08.09.2014 “Functional Materials – A Review” organized by Department of Physics, Idhaya College for Women, Sarugani, Sivagangai District, Tamil Nadu, in An **One day National Seminar on Recent Advances in Functional Materials-2014** on 08.09.2014.
13. 19.12.2014 “AN ANODIC RECITAL OF OXYGEN DEFICIENT COPPER VANADATE FOR LITHIUM BATTERIES” organized by School of Chemical Sciences, Mahatma Gandhi University, Kottayam, India in **International Conference on Nanostructured Materials and Nanocomposites (ICNM-2014)** during 19-21, December 2014.

14. 03.03.2015 “Nano Electrodes for Energy Storage Devices – An Overview” organized by the Department of Electronics & Communication and Physics, Syed Hameedha Arts & Science College, Kilakarai, Ramanathapuram District, in **National Seminar on Nanotechnology and Nanosensors – NASON-15**.
15. 12.12.2015 “Development of carbonaceous materials coated positive electrodes for Li-ion batteries” organized by Hindustan College of Science and Technology, Farah, Mathura, UP., India in the 3rd **International Conference on Nanostructured Materials and Nanocomposites (ICNM-2015) during 12-14, December 2015**.
16. 10.08.2016 “Energy Materials” in TEQIP sponsored Faculty Development Programme organized by the Department of Physics, Alagappa Chettiar College of Engineering and Technology, Karaikudi-3.
17. Chaired a Technical Session in **National Seminar on Advanced Materials Research NSAMR-2017** held in the Department of Physics, Alagappa University, Karaikudi-630003, Tamil Nadu, India on 19.01.2017.
18. Chaired Technical Session in “**Business Oriented Hands-on Training on Analytical Instrumentation (HI-BOAT-2017)**” as a Member in the Department of Physics, Alagappa University, Karaikudi, India held during 2-3, March 2017.
19. Chaired Theme Lecture session in **ACTNEXT-2016** held in the Department of Physics, Alagappa University, Karaikudi-630 003, on 28.04.2017.
20. Chaired Technical Sessions in the **National Theme Meet on University-Industry Interface 2017 (NTM U2I-2017)** during 20-21, September 2017, organized by the Department of Physics, Alagappa University, Karaikudi-630 003.
21. Chaired Technical Session in the **National Workshop on Business Oriented Analytical Research and Development 2018 (BOARD-2018)** organized by the Department of Physics, Alagappa University, Karaikudi-630 003 during 31st Jan’ to 1st Feb’ 2018.
22. Chaired Technical Sessions in the **International Conference on Momentous Role of Nanomaterials in Renewable Energy Devices – 2018 (IC MNRE-2018)** during 1-2, March 2018 organized by the Department of Physics, Alagappa University, Karaikudi-630 003.
23. Chaired Technical Session in the **National Conference on Advanced Materials for Sustainable Energy and Sensors (NCAMSES-2019)** organized by the Department of Physics, Alagappa University, Karaikudi-600 003 during 20-22, March 2019.
24. 16.12.2019, Presented an Invited Talk in the **13th National Conference on Solid State Ionics (NCSSI 13)** entitled Alternative High Performance Electrodes: Role of

Sulfur and Sodium Electrode Materials in Energy Storage Application organized by the Department of Physics, Indian Institute of Technology (IIT R), Roorkee, Uttrahand, India, during 16-18, December 2019.

Others

1. Articles published in Newspapers / Magazines : -
2. Products developed : xx
3. No. of PhD Thesis evaluated : 7
4. No. of PhD Public Viva Voce Examination conducted : 7
5. Sequences submitted in GenBank-

**Social Interests and Initiatives / Articles in News papers etc can also be included

Recent Publications

1. Authors, (Year), "Title of the Paper", Journal / Conference Name, Publisher, Country, Volume/ Issue, page numbers. (Impact Factor: xx).

1. Titanium deputized layered O3-type $\text{NaFe}_{9/20}\text{Cr}_{9/20}\text{Ti}_{1/10}\text{O}_2$ cathode material for Sodium-ion batteries

M.Kouthaman, P.Arjunan, K.Kannan, V.Kumaran, R.Subadevi*, M.Sivakumar*
Materials Letters, (Accepted for Publication) **IF:3.204**

2. Influence of nickel strike as adhesive layer on electrodeposited Zn-Co-Ni alloy and their performance in metal-finishing

Vaibhav Namdev Kalea , S. Kumaragurua , G. Saravananb , A. Syed Jalaluddeena , P. Rajkumarc , R. Subadevic , M. Sivakumarc , RM. Gnanamuthua, *
Materials Today: Proceedings (Accepted for Publication) **IF: -**

3. Physical and electrochemical chattels of phosphonium ionic liquid based solid and gel-polymer electrolyte for lithium secondary batteries

R.Muthupradeepa, M.Sivakumar*, R.Subadevi, V.Suryanarayanan, M.Ramachandran, P.Rajkumar, R.Yuvakkumar
J.Materials Science: Materials in Electronics (Proof read) **IF:2.220 DOI: 10.1007/s10854-020-04820-7**

4. Manganese and graphene oxide composite as highly effective sulfur host for enlightening electrochemical kinetics of lithium-sulfur batteries
G.Radhika, P.Rajkumar, R.Subadevi, M.Sivakumar*
International Journal of Energy Research (Accepted for Publication) IF:3.741
<https://doi.org/10.1002/er.6136>
5. Exploration on sulfur/acid treatment of sepiolite composite positive electrode material for lithium-sulfur battery
C.Kalaiselvi, K.Krishnaveni, V.Priyanka, P.Rajkumar, R.Subadevi*, M.Sivakumar*
Ceramics International 47 (2021) 692-699. **IF: 3.830**
<https://doi.org/10.1016/j.ceramint.2020.08.178>
6. Clout of carbon in Polyacrylonitrile/Sulfur composite cathode via solution processing technique for lithium-sulfur batteries
K.Krishnaveni, R.Subadevi, M.Sivakumar*
Journal of Porous Materials (Proof Read) **IF: 2.183** DOI: 10.1007/s10934-020-00963-4
7. Effect of TiO₂/carbon black in sulfur based composite cathode for lithium sulfur batteries
G.Radhika, P.Rajkumar, R.Subadevi, M.Sivakumar*
Ionics (Accepted for Publication) **IF:2.394** <https://doi.org/10.1007/s11581-020-03691-6>
8. An Emerging Electrochemically Active Maricite NaMnPO₄ as Cathode Material at Elevated Temperature for Sodium-Ion Batteries
V.Priyanka, G.Savithiri, R.Subadevi*, M.Sivakumar*
Applied Nanoscience, (Accepted). **IF:2.88** <https://doi.org/10.1007/s13204-020-01506-8>
9. Graphene Sheets Encased Silica/Sulfur Composite Cathode for Improved Cyclability of Lithium-Sulfur Batteries
P.Rajkumar, K.Diwakar, R.Subadevi*, RM.Gnanamuthu, Fu-Ming Wang, Wei-Ren Liu, M.Sivakumar*
Journal of Solid State Electrochemistry, (Accepted). **IF:2.646**
10. Tweaking the Electrochemical Activity of Maricite NaMnPO₄ in Sodium Batteries using Different Manganese Precursors via Polyol Method
V.Priyanka, G.Savithiri, P.Rajkumar, T.Meenatchi, R.Subadevi*, M.Sivakumar*
Journal of Solid State Chemistry, 290 (2020) 121551-57 (Proof read). **IF:2.726**
<https://doi.org/10.1016/j.jssc.2020.121551>
11. Novel Layered O₃-NaFe_{0.45}Co_{0.45}Ti_{0.1}O₂ cathode material for Sodium Batteries

M.Kouthaman, K.Kannan, P.Arjunan, T.Meenatchi, R.Subadevi*, M.Sivakumar*

Materials Letters, 276 (2020) 128181. **IF:3.204**

DOI: 10.1016/j.matlet.2020.128181

12. An Imprint of Sulfur/SiO₂ in N-doped Graphene as Positive Electrode for Lithium-Sulfur Rechargeable Batteries

P.Rajkumar, K.Diwakar, K.Krishnaveni, G.Radhika, R.Subadevi*, RM.Gnanamuthu, Fu-Ming Wang, M.Sivakumar*

Applied Physics A, 126 (2020) 516, **IF:1.81 DOI:**10.1007/s00339-020-03617-z

13. Titanium based Layered O₃-NaTi_{7/10}Ni_{3/20}Mg_{3/20}O₂ anode material for Sodium ion batteries

K.Kannan, M.Kouthaman, P.Arjunan, R.Subadevi*, M.Sivakumar*

Materials Letters, 273 (2020) 127950. **IF:3.204 DOI:**10.1016/j.matlet.2020.127950

14. Nitrogen doped Graphene Sheets Encapsulated Sulfur Binary Composite as Cathode for Lithium-Sulfur Battery Applications

P.Rajkumar, K.Diwakar, K.Krishnaveni, G.Radhika, R.Subadevi*, RM.Gnanamuthu, Fu-Ming Wang, M.Sivakumar*

Journal of Materials Engineering and Performance, 29 (2020) 2865–2870. **IF: 1.652 DOI:**10.1007/s11665-020-04825-7

15. Stable Prismatic Layer Structured Cathode Material via Cation Mixing for Sodium Ion Battery

P.Arjunan, M.Kouthaman, K.Kannan, K.Diwakar, R.Subadevi*, S. Raghu, M.Sivakumar*

Ionics (2020). **IF:2.394 DOI:**10.1007/s11581-020-03592-8

16. Cobalt doped layered Lithium nickel oxide as a 3 in 1 electrode for Lithium-ion, Sodium-ion and supercapacitor applications

K.Diwakar, P.Rajkumar, P.Arjunan, R.Subadevi*, M.Sivakumar*

International Journal of Energy Research, 44 (2020) 7591-7602. **IF:3.741 DOI:**10.1002/er.5492

17. Sepiolite Enfolded Sulfur/ ZnO Binary Composite Cathode Material for Li-S Battery

C.Kalaiselvi, R.Subadevi*, Fu-Ming Wang, M.Sivakumar*

Frontiers in Materials, 7 (2020) 109. **IF: 2.705 DOI:**10.3389/fmats.2020.00109

18. Enhanced Electrochemical Performance of MWCNT-intercalated Silica/Sulfur Composite Cathode for Rechargeable Lithium-Sulfur Batteries

P Rajkumar, K Diwakar, R Subadevi*, R Gnanamuthu, Mozaffar Abdollahifar, Fu-Ming Wang, M Sivakumar*

Journal of Minerals, Metals & Materials Society -(JOM), 72 (2020) 2260-2268. **IF: 2.029** DOI: 10.1007/s11837-020-04165-w

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