

DR. CHANDU V V MURALEE GOPI

Associate Editor (**Journal of Energy Storage, Elsevier**),
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AREA OF INTEREST

+ Energy Storage

- Fast Charging
- Supercapacitors
- Batteries
- Flexible Electronics
- Water Splitting

+ Energy Conversion

- Perovskite solar cells
- Quantum dot-sensitized solar cells
- Dye-sensitized solar cells

ASSOCIATE EDITOR

06/2020 to Present **Associate editor in the Journal of Energy Storage, Elsevier (Impact factor 8.9)**

<https://www.sciencedirect.com/journal/journal-of-energy-storage/about/editorial-board>

EXPERIENCE

09/2020 to Present **Assistant Professor**

University of Sharjah, Sharjah, P.O. Box 27272, UAE.

- Taking classes for Engineering Undergraduate Students
- Prepare syllabi, curricula, reading materials, tests, and quizzes.
- Create curricula in accordance with departmental standards.
- Deliver lectures and facilitate classroom discussions on analysis, rhetoric, critical theory, structure, and style.
- Regularly meet with students during office hours to address concerns and offer feedback.
- Participate in department events
- Grade exams and papers, giving detailed feedback.
- Keep thorough records of student scores and attendance.
- Provide extra assistance to students as needed.
- Publish papers in professional journals through extensive research.

Taught courses at the University of Sharjah:

- Circuit Analysis I

- Circuit Analysis II
- Circuit Analysis I Laboratory
- Random Signal theory
- Circuit Analysis Laboratory
- Fundamentals of Electronics Circuits
- Fundamentals of Electronics Circuits Laboratory
- Signals and Systems
- Applied Electronics SREE Laboratory
- Electronic Circuits Laboratory
- Senior Seminar in EE Eng.
- Telecommunication Systems1 Lab

These courses are all part of my regular teaching repertoire, and I've typically offered them once or twice a year.

12/2019 to 8/2020

Postdoctoral Fellow

King Abdullah University of Science and Technology (KAUST) –Thuwal, Saudi Arabia

- Research on Energy Storage and Energy Conversion Applications
- Co-Supervising Master and Ph.D. students
- Co-Supervising projects
- Publish papers in professional journals through extensive research.
- Chair panels at professional conferences and present academic papers.

03/2019 to 11/2019

Contract Professor

Pusan National University –Busan, South Korea

- Taking classes for Engineering Undergraduate Students
- Prepare syllabi, curricula, reading materials, tests, and quizzes.
- Create curricula in accordance with departmental standards.
- Deliver lectures and facilitate classroom discussions on analysis, rhetoric, critical theory, structure, and style.
- Regularly meet with students during office hours to address concerns and offer feedback.
- Participate in department events
- Grade exams and papers, giving detailed feedback.
- Keep thorough records of student scores and attendance.
- Provide extra assistance to students as needed. Research on Energy Storage and Energy Conversion applications.
- Co-Supervising Master and Ph.D. students
- Co-Supervising projects
- Publish papers in professional journals through extensive research.
- Chair panels at professional conferences and present academic papers.

- 03/2018 to 02/2019 **BK21 Postdoctoral Fellow**
Pusan National University –Busan, South Korea
- Research on Energy Storage and Energy Conversion applications
 - Co-Supervising Master and Ph.D. students
 - Co-Supervising projects
 - Publish papers in professional journals through extensive research.
 - Chair panels at professional conferences and present academic papers.
- 09/2015 to 12/2017 **Graduate Teaching Assistant**
Pusan National University –Busan, South Korea
- Taken Undergraduate classes
 - Co-Supervising Master students
 - Written and Co-Supervising Projects
- 03/2015 to 12/2017 **R&D Technical Adviser**
Laser and Sensor Application Lab, Pusan National University –Busan, South Korea
- Technically assisting the R&D team of the Laboratory Proposal
 - Writing for Energy Related R&D items for National business
 - Executing on-going R&D Projects i.e NRF and BRL
- 07/2016 to 07/2016 **Training and Internships (Training period two Weeks)**
Kyushu University – Fukuoka, Japan
- Training : Solar Cells
 - Data collection and working on Energy conversion applications
 - Investigating optimized solutions
 - Discussion on Funding projects
- 06/2015 to 06/2015 **Training and Internships (Training period two Weeks)**
Kyushu University – Fukuoka, Japan
- Training : Solar Cells
 - Data collection and working on Energy conversion applications
 - Investigating optimized solutions
- 07/2011 to 01/2013 **Assistant Professor**
Priyadarshini Institute of Technology & Science for Women's – Chintalapudi, Andhra Pradesh, India
- Taken classes for Engineering Undergraduate Students
 - Prepare syllabi, curricula, reading materials, tests, and quizzes.
 - Create curricula in accordance with departmental standards.
 - Deliver lectures and facilitate classroom discussions on analysis, rhetoric, critical theory, structure, and style.
 - Regularly meet with students during office hours to address concerns and offer

feedback.

- Participate in campus events
- Grade exams and papers, giving detailed feedback.
- Keep thorough records of student scores and attendance.
- Provide extra assistance to students as needed.

EDUCATION

- 03.2015-02.2018 **Ph.D.: Electrical and Computer Engineering**
Pusan National University - Busan, South Korea
CGPA : 3.88/4.5
Advisor : Prof. Hee-Je Kim
Thesis Title : Metal Chalcogenides and Carbon Composites as Advanced Electrode Materials for High-Performance Solar Cells and supercapacitors
- 03.2013-02.2015 **Master of Science: Interdisciplinary Program in Robotics**
Pusan National University - Busan, South Korea
CGPA: 4.42/4.5
Advisor : Prof. Hee-Je Kim
Thesis Title : A strategy to boost energy conversion efficiency and stability in QDSSCs: Mn-doped CdS quantum dots and Mn-doped CuS counter electrode
- 06.2007-04.2011 **Bachelor of Technology: Electronics and Communication Engineering**
Priyadarshini Institute of Technology & Science. - Chintalapudi, Andhra Pradesh, India
Percentage: 77.55%
Advisor : Prof. Shaik Sahir
Project Title : Design of the FIR filter based on improved DA algorithm and its FPGA implementation

SKILLS

- Familiar with techniques of Chemical bath deposition (CBD), Successive ionic layer adsorption and reaction (SILAR), Hydrothermal method, Spin coating technique, Sol-gel technique, Doctor blade method, Ball milling, Dip coating and Electrodeposition, etc.
- Surface analysis techniques: X-Ray diffraction (XRD), Field-emission Scanning Electron Microscopy (FE-SEM), Atomic Force Microscopy (AFM), Transmission electron microscopy (TEM), X-ray photon spectroscopy (XPS), Energy dispersive spectroscopy (EDS) and elemental mapping
- Experience with optical properties measurements and IPCE analysis.
- Basic electrochemistry tools used in diagnostics: like Current-voltage measurements, Cyclic voltammetry, Electrochemical impedance spectroscopy, Tafel polarization, Dark current analysis, Chronopotentiometry and Galvanostatic charge–discharge techniques
- Stability analysis in solar cells and supercapacitor.

PATENTS (4)

1. **US Patent No. US11183343B1**
Date of Publishing the Patent: 23rd Nov. 2021.
Title of the patent: “Composite Material for Supercapacitor Electrodes”.
Inventors: Ihab M. Obaidat, Hee-Je Kim, [Chandu V. V. Muralee Gopi](#), Sangaraju Sambasivam.
2. **US Patent No. US11152160B1**
Date of Publishing the Patent: 19th Oct. 2021.
Title of the patent: “High-rate Hybrid Supercapacitor”.
Inventors: Ihab M. Obaidat, Hee-Je Kim, [Chandu V. V. Muralee Gopi](#), Sangaraju Sambasivam.
3. **US Patent No. US10916380B1**
Date of Publishing the Patent: 09th Feb. 2020.
Title of the patent: “Quantum dot-sensitized solar cell and method of making the same”.
Inventors: Ihab M. Obaidat, Hee-Je Kim, [Chandu V. V. Muralee Gopi](#), Sangaraju Sambasivam.
4. **US Patent No. US10854395B1**
Date of Publishing the Patent: 1st Dec. 2020.
Title of the patent: “Asymmetric supercapacitor with hierarchical electrodes”.
Inventors: Ihab M. Obaidat, Hee-Je Kim, [Chandu V. V. Muralee Gopi](#), Sangaraju Sambasivam.

ADVISING AND MENTORING (Undergraduate Student Projects)

2020 - 2021 **Alanoud A. Alhammedi, Hind S. Alshamsi, Ayesha M. Muroushed**
Title: Line Follower Robot to Transport the Covid-19 Patient

Mariam M. Alghfeli, Aisha R. Alghfeli, Alya A. Almaazmi
Title: Smart Parking System Using IOT

Note: This project winning the first place in Senior Design Project 2 Competition with the theme of sustainability on behalf of the IEEE and the UOS Department of Electrical Engineering.

PUBLICATIONS (102)

Total Publications in International Journals (110); Total citations: 4398; h-Index: 40; i10-index: 91

1. [C. V. V. M. Gopi](#), R. Ramesh, R. Vinodh, S. Alzahmi, I. M. Obaidat, Facile Synthesis of Battery-Type CuMn₂O₄ Nanosheet Arrays on Ni Foam as an Efficient Binder-Free Electrode Material for High-Rate Supercapacitors, *NanoMaterials*, **2023**, 13, 1125 (I.F.: 5.3). DOI: <https://doi.org/10.3390/nano13061125> **(UOS affiliation)**.
2. M. Alagirisamy, B. Pattanaik, R. Redrouthu, [C. V. V. M. Gopi](#), Optimised dual hybrid energy storage systems for EV powertrain based on modified genetic algorithm, *International Journal of Engineering Systems Modelling and Simulation*, **2023**, 14, 3, (I.F.: 1.1). DOI: [10.1504/IJESMS.2023.131794](https://doi.org/10.1504/IJESMS.2023.131794) **(UOS affiliation)**.
3. H. M. Arbi, L. Vijayalakshmi, Y. A. Kumar, S. Alzahmi, [C. V. V. M. Gopi](#), A. Rusydi, I. M. Obaidat, A Facile Two-Step Hydrothermal Synthesis of Co(OH)₂@NiCo₂O₄ Nanosheet Nanocomposites for Supercapacitor Electrodes, *NanoMaterials*, **2023**, 13, 1981 (I.F.: 5.3). DOI: <https://doi.org/10.3390/nano13131981> **(UOS affiliation)**.
4. M. U. Ali, K. D. Kallu, H. Masood, U. Tahir, [C. V. V. M. Gopi](#), A. Zafar, S. W. Lee, A CNN-Based Chest Infection Diagnostic Model: A Multistage Multiclass Isolated and Developed Transfer Learning Framework, *International Journal of Intelligent Systems*, **2023**, 2023, 12 (I.F.: 7.0). DOI: <https://doi.org/10.1155/2023/6850772> **(UOS affiliation)**

5. R. Ramesh, S. Periyasamy, [C. V. V. M. Gopi](#), P. Singh, T. Gupta, Power Engineering Method for Fuel Cell: An overview, *Journal of Survey in Fisheries Sciences*, **2023**, 10, 3343-3361 (I.F.: 0.93). DOI: <https://doi.org/10.17762/sfs.v10i2S.1528> (UOS affiliation)
6. [C. V. V. M. Gopi](#), R. Ramesh, H. J. Kim, Designing nanosheet manganese cobaltate@manganese cobaltate nanosheet arrays as a battery-type electrode material towards high-performance supercapacitors, *J. Energy Storage*, **2022**, 47, 103603 (I.F.: 6.58). DOI: <https://doi.org/10.1016/j.est.2021.103603> (UOS affiliation)
7. J. Y. Heo, R. Vinodh, H.J. Kim, R. S. Babu, K. K. Kumar, [C. V.V. M. Gopi](#), S. Kim, Template and binder free 1D cobalt nickel hydrogen phosphate electrode materials for supercapacitor application, *J. Industrial and Engineering Chem.*, **2022**, 106, 328-339. (I.F.: 6.06) DOI: <https://doi.org/10.1016/j.jiec.2021.11.010> (UOS affiliation)
8. V. Narayanaswamy, I. A. Al-Omari, A. S. Kamzin, [C. V. V. M. Gopi](#), A. Khaleel, S. Alaabed, B. Issa, I. M. Obaidat, Exchange bias, and coercivity investigations in hematite nanoparticles, *AIMS Materials Science*, **2022**, 9, 71-84. DOI: [10.3934/mat.2022005](https://doi.org/10.3934/mat.2022005) (UOS affiliation)
9. I. A. A. Omari, V. Narayanaswamy, S. Halder, H.H. Hamdeh, S. Alaabed, A. S. Kamzin, [C. V. V. M. Gopi](#), A. Khaleel, B. Issa, I. M. Obaidat, Mossbauer Investigations in Hematite Nanoparticles, *Biointerface Res. App. Chem.*, **2022**, 12, 4626-4636. DOI: [10.33263/BRIAC124.46264636](https://doi.org/10.33263/BRIAC124.46264636) (UOS affiliation)
10. I. Kim, R. Vinodh, [C. V. V. M. Gopi](#), H.J. Kim, R.S. Babu, C. Deviprasath, M. Devendiran, S. Kim, Novel porous carbon electrode derived from hypercross-linked polymer of poly(divinylbenzene-co-vinyl benzyl chloride) for supercapacitor applications, *J. Energy Storage*, **2021**, 43, 103287 (I.F.: 6.58). DOI: [10.1016/j.est.2021.103287](https://doi.org/10.1016/j.est.2021.103287) (UOS affiliation)
11. S. Sambasivam, [C. V. V. M. Gopi](#), H. M. Arbi, Y.A. Kumar, H.J Kim, S.L. Zahmi, I. M. Obaidat, Binder-free hierarchical core-shell-like CoMn₂O₄@MnS nanowire arrays on nickel foam as a battery-type electrode material for high-performance supercapacitors, *J. Energy Storage*, **2021**, 36, 102377 (I.F.: 6.58). DOI: [10.1016/j.est.2021.102377](https://doi.org/10.1016/j.est.2021.102377) (UOS affiliation)
12. S. Sambasivam, [C. V. V. M. Gopi](#), P. S. Maram, H. M. Arbi, V. Narayanaswamy, A.S. Kamzin, I. M. Obaidat, Investigation of optical and magnetic properties of Mn-doped tetragonal ZrO₂ nanocrystals, *J. Solid State Chem*, **2021**, 294, 121872 (I.F.: 2.179). DOI: [10.1016/j.jssc.2020.121872](https://doi.org/10.1016/j.jssc.2020.121872) (UOS affiliation)
13. S. Sambasivam, Y.A. Kumar, [C. V. V. M. Gopi](#), V. Narayanaswamy, I. M. Obaidat, Influence of temperature on the magnetic properties of Mn₃O₄ nanowires, *Current Chem. Lett.*, **2021**, 10, 203-208 (I.F.: 0.84). DOI: [10.5267/j.ccl.2021.1.004](https://doi.org/10.5267/j.ccl.2021.1.004) (UOS affiliation)
14. S. Sambasivam, K. V. G. Raghavendra, A. K. Yedluri, H. M. Arbi, V. Narayanaswamy, [C. V. V. M. Gopi](#), B.-C. Choi, H.-J. Kim, S. Alzahmi and I. M. Obaidat, Facile Fabrication of MnCo₂O₄/NiO Flower-Like Nanostructure Composites with Improved Energy Storage Capacity for High-Performance Supercapacitors, *NanoMaterials*, **2021**, 11, 1424 (I.F.: 4.3). DOI: [10.3390/nano11061424](https://doi.org/10.3390/nano11061424) (UOS affiliation)
15. [C. V. V. M. Gopi](#), T. K. Ng, B. S. Ooi, Harvesting Electricity by Harnessing Nature: Bioelectricity, Triboelectricity, and Method of Storage, *Encyclopedia of Applied Physics (Wiley)*, 14/12/2021. Page1-25. DOI: <http://dx.doi.org/10.1002/3527600434.eap958>
16. [C. V. V. M. Gopi](#), R. Vinodh, S. Sambasivam, I. M. Obaidat, S. Singh, H.J. Kim, Co₉S₈-Ni₃S₂/CuMn₂O₄-NiMn₂O₄ and MnFe₂O₄-ZnFe₂O₄/graphene as binder-free cathode and anode materials for high energy density supercapacitors. *Chem. Eng. J.*, **2020**, 381, 122640 (I.F.: 10.65). DOI: [10.1016/j.cej.2019.122640](https://doi.org/10.1016/j.cej.2019.122640)
17. [C. V. V. M. Gopi](#), S. Sambasivam, K. V. G. Raghavendra, R. Vinodh, I. M. Obaidat, H. J. Kim, Facile synthesis of hierarchical flower-like NiMoO₄-CoMoO₄ nanosheet arrays on nickel foam as an efficient electrode for high rate hybrid supercapacitors, *J. Energy Storage*, **2020**, 30, 101550 (I.F.: 3.762). DOI: [10.1016/j.est.2020.101550](https://doi.org/10.1016/j.est.2020.101550)
18. R. Alexpandi, [C. V. V. M. Gopi](#), R. Durgadevi, H.J. Kim, S.K. Pandian, A.V. Ravi, Metal sensing-carbon dots loaded TiO₂-nanocomposite for photocatalytic bacterial deactivation and application in aquaculture, *Sci. Rep.*, **2020**, 10, 12883 (I.F.: 3.998). DOI: <https://doi.org/10.1038/s41598-020-69888-x>
19. K.V.G.Raghavendra, R. Vinoth, K. Zeb, [C. V. V. M. Gopi](#), S. Sambasivam, M.R. Kummara, I.M. Obaidat, H.J. Kim, An intuitive review of supercapacitors with recent progress and novel device applications, *J. Energy Storage*, **2020**, 31, 101652 (I.F.: 3.762). DOI: <https://doi.org/10.1016/j.est.2020.101652>

20. R. Vinodh, C. Deviprasath, [C. V. V. M. Gopi](#), V.G.R. Kummara, R. Atchudan, T. Ahamad, H.J. Kim, M. Yi, Novel 13X Zeolite/PANI electrocatalyst for hydrogen and oxygen evolution reaction, *Int. J. Hydrog. Energy*, **2020**, Accepted (I.F.: 4.939). DOI: <https://doi.org/10.1016/j.ijhydene.2020.07.194>
21. R. Vinodh, [C. V. V. M. Gopi](#), V.G.R. Kummara, R. Atchudan, T. Ahamad, S. Sambasivam, M. Yi, I.M. Obaidat, H.J. Kim, A review on porous carbon electrode material derived from hyper-crosslinked polymers for supercapacitor applications, *J. Energy Storage*, **2020**, 32, 101831 (I.F.: 3.762). DOI: <https://doi.org/10.1016/j.est.2020.101831>
22. S. Sambasivam, P. S. Maram, [C. V. V. M. Gopi](#), I. M. Obaidat, Hydrothermal synthesis, crystal and electronic structure of a new hydrated borate $\text{CsKB}_4\text{O}_5(\text{OH})_4 \cdot 2\text{H}_2\text{O}$, *Mater. Express*, **2020**, 10, 543-550 (I.F.: 1.65). DOI: [10.1166/mex.2020.1669](https://doi.org/10.1166/mex.2020.1669).
23. H.J. Kim, T.N.V. Krishna, K. Zeb, R. Vinodh, [C. V. V. M. Gopi](#), S. Sambasivam, K.V.G.Raghavendra, I.M. Obaidat, A Comprehensive Review of Li-Ion Battery Materials and Their Recycling Techniques, *Electronics*, **2020**, 9, 1161 (I.F.: 2.22). Doi: [10.3390/electronics9071161](https://doi.org/10.3390/electronics9071161).
24. R. Vinodh, [C. V. V. M. Gopi](#), Z. M. Yang, C. Deviprasath, R. Atchudan, V. Raman, M. Yi, H. J. Kim, Novel electrode material derived from porous polymeric organic framework of phloroglucinol and terephthaldehyde for symmetric supercapacitors, *J. Energy Storage*, **2020**, 28, 101283 (I.F.: 3.762). DOI: [10.1016/j.est.2019.101283](https://doi.org/10.1016/j.est.2019.101283)
25. K. V. G. Raghavendra, R. Vinodh, [C. V. V. M. Gopi](#), M. R. Kummara, H. J. Kim, Facile synthesis of hierarchical agglomerated cauliflower-like $\text{ZnWO}_4@\text{NiO}$ nanostructures as an efficient electrode material for high-performance supercapacitor applications, *Mater. Lett.* 268 (2020) 127594 (I.F.: 3.201). DOI: [10.1016/j.matlet.2020.127594](https://doi.org/10.1016/j.matlet.2020.127594).
26. [C. V. V. M. Gopi](#),* R. Vinodh, S. Sambasivam, I.M. Obaidat, H.J. Kim, Recent progress of advanced energy storage materials for flexible and wearable supercapacitor: From design and development to applications, *J. Energy Storage*, **2020**, 27, 101035 (I.F.: 3.762). DOI: [10.1016/j.est.2019.101035](https://doi.org/10.1016/j.est.2019.101035)
27. H. W. Nam, [C. V. V. M. Gopi](#),* S. Sambasivam, R. Vinodh, K.V.G. Raghavendra, H.J. Kim, I.M. Obaidat, S. Kim, Binder-free honeycomb-like FeMoO_4 nanosheet arrays with dual properties of both battery-type and pseudocapacitive-type performances for supercapacitor applications, *J. Energy Storage*, **2020**, 27, 101055 (I.F.: 3.762). DOI: [10.1016/j.est.2019.101055](https://doi.org/10.1016/j.est.2019.101055)
28. R. Vinodh, R. S. Babu, [C. V. V. M. Gopi](#), C. Deviprasath, R. Atchudan, L. M. Samyn, A. L. F. de Barros, H. J. Kim, M. Yi, Influence of Annealing Temperature in Nitrogen Doped Porous Carbon Balls Derived from Hypercross-Linked Polymer of Anthracene for Supercapacitor Applications, *J. Energy Storage*, **2020**, 28, 101196 (I.F.: 3.762). DOI: [10.1016/j.est.2020.101196](https://doi.org/10.1016/j.est.2020.101196)
29. K. V. G. Raghavendra, [C. V. V. M. Gopi](#), R. Vinodh, S. S. Rao, I. M. Obaidat, H. J. Kim*, Facile synthesis of nanoparticles anchored on honeycomb-like MnCo_2S_4 nanostructures as a binder-free electroactive material for supercapacitors, *J. Energy Storage*, **2020**, 27, 101159 (I.F.: 3.762). DOI: [10.1016/j.est.2019.101159](https://doi.org/10.1016/j.est.2019.101159)
30. K. V. G. Raghavendra, [C. V. V. M. Gopi](#), R. Vinodh, I. K. Durga, H. J. Kim*, One-step facile synthesis of dense cloud-like tiny bundled nanoparticles of CuS nanostructures as an efficient electrode material for high-performance supercapacitors, *J. Energy Storage*, **2020**, 27, 101148 (I.F.: 3.762). DOI: [10.1016/j.est.2019.101148](https://doi.org/10.1016/j.est.2019.101148)
31. A. L. Prasanna, K. V. G. Raghavendra, P. Himasree, I. K. Durga, [C. V. V. M. Gopi](#), S. S. Rao, H. J. Kim, One-pot facile synthesis of nanorice-like structured $\text{CuS}@\text{WS}_2$ as an advanced electroactive material for high-performance supercapacitors, *SN Applied Sciences*, **2020**, 2, 409 (I.F.:). DOI: [10.1007/s42452-020-2213-6](https://doi.org/10.1007/s42452-020-2213-6)
32. S. H. Kim, R. Vinodh, [C. V. V. M. Gopi](#), K. V. G. Raghavendra, S. Sambasivam, I. M. Obaidat, H. J. Kim, Novel porous carbon material derived from hypercross-linked polymer of p-xylene for supercapacitors electrode, *Mater. Lett.*, **2019**, 263, 127222 (I.F.: 3.201). DOI: [10.1016/j.matlet.2019.127222](https://doi.org/10.1016/j.matlet.2019.127222)
33. [C. V. V. M. Gopi](#),* R. Vinodh, S. Sambasivam, I. M. Obaidat, R. M. N. Kalla, H. J. Kim, One-pot synthesis of copper oxide-cobalt oxide core-shell nanocactus-like heterostructures as binder-free electrode materials for high-rate hybrid supercapacitors. *Mater. Today Energy*, **2019**, 14, 100358 (I.F.: 5.604). DOI: [10.1016/j.mtener.2019.100358](https://doi.org/10.1016/j.mtener.2019.100358)
34. C. S. Song, [C. V. V. M. Gopi](#),* R. Vinodh, S. Sambasivam, R. M. N. Kalla, I. M. Obaidat, H.J. Kim, Morphology-dependent binder-free CuNiO_2 electrode material with excellent electrochemical performances for supercapacitors, *J. Energy Storage*, **2019**, 26, 101037 (I.F.: 3.762). DOI: [10.1016/j.est.2019.101037](https://doi.org/10.1016/j.est.2019.101037)

35. C. H. Mun, [C. V. V. M. Gopi,*](#) R. Vinodh, S. Sambasivam, I. M. Obaidat, H.J. Kim, Microflower-like nickel sulfide-lead sulfide hierarchical composites as binder-free electrodes for high-performance supercapacitors. *J. Energy Storage*, **2019**, 26, 100925 (I.F.: 3.762). DOI: [10.1016/j.est.2019.100925](#)
36. H. H. Joo, [C. V. V. M. Gopi,*](#) R. Vinodh, H. J. Kim, S. Sambasivam, I. M. Obaidat, Facile synthesis of flexible and binder-free dandelion flower-like CuNiO₂ nanostructures as advanced electrode material for high-performance supercapacitors. *J. Energy Storage*, **2019**, 26, 100914 (I.F.: 3.762). DOI: [10.1016/j.est.2019.100914](#)
37. T. Y. Park, [C. V. V. M. Gopi,*](#) R. Vinodh, H. J. Kim, Facile synthesis of highly efficient V₂O₅@NiCo₂O₄ as battery-type electrode material for high-performance electrochemical supercapacitors. *J. Mater. Sci.: Materials in Electronics*, **2019**, 30, 13519–13524 (I.F.: 2.22). DOI: [10.1007/s10854-019-01719-w](#)
38. [C. V. V. M. Gopi,*](#) P. J. S. Rana, R. Vinodh, R. Padma, H. J. Kim,* Selective integration of hierarchical nanostructured energy materials: An effective approach to boost energy storage performance of flexible hybrid supercapacitor, *J. Mater. Chem. A*, **2019**, 7, 6374-6386 (I.F.: 10.733). DOI: [10.1039/C8TA12508B](#)
39. I. M. Obaidat, V. Narayanaswamy, S. Alaabed, S. Sambasivam, [C. V. V. M. Gopi](#), Principles of Magnetic Hyperthermia: A Focus on Using Multifunctional Hybrid Magnetic Nanoparticles, *Magnetochemistry*, **2019**, 5, 67. DOI: [10.3390/magnetochemistry5040067](#)
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Note: Total Publications are 110. Regarding publications, Please visit Google scholar:
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CONFERENCES

1. (Speaker Invitation)- [C. V. V. M. Gopi](#), *Fe₂O₃@LiCoO₂ Composite as Excellent Electrode Material for Supercapacitor Applications*, Global Conference on **Carbon Nanotubes and Graphene Technologies-2019**, Starhotels Business Palace Via Privata Pietro Gaggia, 3, 20139 Milano MI, **Italy**.
2. (ORAL)- [C. V. V. M. Gopi](#), *Flexible CNT/metal-sulfide composite electrode for energy conversion and energy storage applications*, **GCR-2017**, Hampton Inn Tropicana and Event Center 4975 Dean Martin Drive, Las Vegas-NV 89118, **USA**.
3. (ORAL)- [C. V. V. M. Gopi](#), *Facile synthesis of flower-like ZnO@MnCo₂O₄ nanosheets for electrochemical supercapacitors*, **ICSEE-2017- SE1003-A**, Functions and Seminars of University of Western Australia, Perth, **Australia**.
4. (ORAL)- [C. V. V. M. Gopi](#), *Low-temperature easy-processed carbon nanotube contact for high-performance metal- and hole-transporting layer-free perovskite solar cells*, **NEW-2017**, UPES, Dehradun, **India**.
5. (ORAL)- [C. V. V. M. Gopi](#), M. V. Haritha, S. S. Rao, I. K. Durga, H. J. Kim*, *Improved performance and stability of perovskite solar cells in ambient air by cost-effective low-temperature processed carbon nanotube counter electrode*, **ICEEE-2016-191**, Coimbatore Institute of Technology, **India**.

6. **(BEST POSTER AWARD)- C. V. V. M. Gopi**, H. Seo, M. Shiratani, M.Y. Kim, Hee-Je Kim*, *High performance green quantum dot sensitized solar cell with charge recombination control based on CuInS₂/ZnS/SiO₂ architecture*, **ICMAP 2016- WP-11 160065**, Dream Center, Gyeongju, **South Korea**.
7. **(ORAL)- C. V. V. M. Gopi**, *Highly Efficient and Stable Combination of Solar Powered Supercapacitor for Energy Conversion and Storage*, **ITEC 2016- ss4-IF0037**, BEXCO, Busan, **South Korea**.
8. **(POSTER)- Chandu V.V.M. Gopi**, S. S. Rao, D. Punnoose, A. D. Savariraj, H. J. Kim, *Nickel Sulfide as Highly Efficient Counter Electrode in Dye-Sensitized and Quantum-dot Sensitized Solar Cells*, **IUMRS-ICA 2014**, Fukuoka University, Fukuoka, **Japan**.

TEAM MEMBER IN PROJECTS

2016 NRF project : “Boosting performance and stability of CuInSexS_{2-x} based green quantum dot-sensitized solar cells by efficient recombination control ” at Pusan National University, South Korea (NRF-2016K2A9A2A08003717)

2015 BRL Project : “Basic research laboratory of optimal control and maintenance of energy storage system, at Pusan National University”, South Korea (NRF-2015R1A4A1041584).

2014 NRF Project : "Development of p-i-n heterojunction thin film perovskite solar cells made by CH₃NH₃PbBr₃/P-CsSnI₃", at Pusan National University, South Korea (NRF-2014005051)

REVIEWER

Advanced Energy Materials (SCI, IF: 24.884); Nano Energy (SCI, IF: 15.094); Journal of Materials Chemistry A (SCI, IF: 10.733); (ACS Applied Materials & Interfaces (SCI, IF: 8.456); Journal of Cleaner Production (SCI, IF: 6.395); Solar Energy Materials and Solar Cells (SCI, IF: 6.019); Electrochimica Acta (SCI, IF: 5.383); Journal of Energy Chemistry (SCI, IF: 5.162); Applied Surface Science (SCI, IF: 5.155); Dalton Transactions (SCI, IF: 4.052); Journal of Energy Storage (SCI, IF: 3.517); New Journal of Chemistry (SCI, IF: 3.069); Synthetic Metals (SCI, IF: 2.870); Materials Science in Semiconductor Processing (SCI, IF: 2.722); ACS Omega (SCIE, IF: 2.584); International Journal of Photoenergy (SCI, 2.026); Green Processing and Synthesis (SCI, IF: 1.128); Engineered Science (SCIE, IF: Pending)

AWARDS & SCHOLARSHIPS

1. Obtained 2017 Pusan National University **BEST STUDENT AWARD** for novel research and publishing more SCI articles in the International Journals.
2. Received prestigious BK-21 Fellowship and NRF Fellowship from Korean Research Foundation (KRF).
3. Received Fellowship from Basic Research Laboratory through the NRF of Korea funded by the Ministry of Science, ICT and Future Planning.
4. 2014 and 2015 **BEST STUDENT AWARD** for securing highest impact factor in my Department of Electrical and Computer Engineering at Pusan National University, South Korea.
5. Obtained **BEST POSTER AWARD** in 6th international conference on “Microelectronics and Plasma technology”-South Korea

6. Total Publications in International Journals (102); Total citations: 2754; h-Index: 31; i10-index: 80

REFERENCES

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DECLARATION

I hereby declare that the information given above is true to the best of my knowledge.

Date: 2nd Sep. 2024

Signature: 