

Dr. V. GUNASEKARAN

Assistant Professor & JSPS Fellow (Japan)

Department of Materials Science
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EDUCATIONAL QUALIFICATION

Degree	Specialization	College/University	CGPA / % of Marks
Ph.D.*	Materials Science & Nanotechnology	Jeju National University Republic of Korea	4.1/4.35
M.Sc.	Materials Science	PSG College of Technology, Bharathiar University, India	80.1 %
M.Phil.	Physics	Manonmanium Sundaranar University, Tirunelveli, India	60.1 %
B.Sc.	Physics	Madurai Kamaraj University, Madurai, India	84.54 %

* Recipient of *Best Ph.D. Thesis award*.

PROFESSIONAL CAREER: PAST EXPERIENCES

- **JSPS Post-Doctoral Research Fellow, Tohoku University, Sendai, Japan (2014-2016)**
- **INSA-Visiting Scientist** to visit Hungary for 3 months under bilateral scientist exchange programme. **(2019)**
- **Assistant Professor (AGP 8000)**, Department of Nano sciences and Technology, **Karunya University**, Coimbatore, Tamil Nadu, India **(from 20.07.2011 to 27.08.2016)**.
- **Senior Technical Staff**, Department of Materials Testing and Quality, SCM, M/s Lakshmi Machine Works Limited, Coimbatore, India. **(from 11.05.1998 to 15.05.2007) (9 years)**

REWARDS/AWARDS /FELLOWSHIPS/HONOURS

- **Best Teaching Faculty National Award (2023)**, Dr. Kalam Educational Trust, Chennai.
- **INSA-Visiting Scientist Award (2019)** to visit Hungary for 3 months under bilateral scientist exchange programme.
- **JSPS Post-Doctoral Fellowship Award, Tohoku University, Japan (2014-2016).**
- **Young Scientist Award (2018)** with worth of Rs. 40 Lakhs project sanctioned from DST-SERB, Government of India, New Delhi
- **Best Achievers' Award (2014)**, Dept of Nanotechnology, Karunya University, India.
- **Best Researcher Award (2013)**, Karunya University, India.
- **Best Teacher Award (2012)**, Karunya University, India.
- **Best Researcher Award (2012)**, Karunya University, India.
- **Best Research Paper Award (2012)**, Karunya University, India.
- **Best Ph.D. Thesis –The Honorable Mention Research Achievement Award (2011)** given by the President, Jeju National University for the best research performance during the doctoral degree programme.
- **Best Student Award (2011)**, Nanomaterials and System Lab, Jeju National University, Korea
- **Best Poster Award (2010)** in 10th APCPST and 23rd SPSM conference, Jeju, Korea
- **Best Poster Award (2020)**, **International Conference on Recent Advances in Materials Science (ICRAMS-2020)**, India
- **Brain Korea-21 (BK-21) Fellowship** – from Korean Research Foundation for doctoral research.
- **Best NCC cadet with “C” Certificate award (1997) in college unit.**

Researcher ID

Scopus Author ID: 55600099600

ORCID  orcid.org/0000-0003-0769-751X

Google Scholar: Registered Name: Dr. Gunasekaran Venugopal

https://scholar.google.com/citations?hl=en&user=xEEVIGMAAAAJ&view_op=list_works&sort_by=pubdate

Web of Science Researcher ID: HKV-8230-2023

PhD RESEARCH GUIDANCE:

**3 students completed their PhD and got awarded +
2 students are currently pursuing PhD work +
25+ Master students completed their final Project work.**

PUBLICATION AND CITATION INDEX

Total Number of Publications	: 77*	International conferences	: 50+
Book Chapters	: 7	i10 index	: 33
Total number of citations	: 2181	h index	: 20

(* publication list is attached herewith)

MAJOR RESEARCH INTERESTS

- 2D Nanomaterials as Nano-photo catalysts for waste-water treatment.
- Carbon Nanostructures for Electrocatalytic green energy Conversion.
- Supercapacitors for Energy Storage applications.
- Electron Transport Studies (MEMS/NEMS)

Research Grants Fetched as Main Principle Investigator

- Examining the Electronic Structure of Carbon Quantum Dots composited with Rare-earth materials using Synchrotron Radiation Toward Clean Green Energy Production- Funded by UGC-DAE-CSR, New Delhi, India. **(Project No. CRS/2022-23-981) (on-going). 2023-2026.**
- Development of Novel, Efficient and low-cost process for water treatment using Graphene-oxide nanoparticles with Real-time Zero-discharge effluent technique -Funded by DST-SERB, New Delhi, India (Project No: **ECR/2016/001798 dated 29th Dec.2016**). **Amount Sanctioned: Rs. 39.74 Lakhs (Completed).**
- Design and Development of a Novel Graphene-based Nano-hybrid photocatalyst for effective sonocatalytic degradation of industrial dye effluent pollutants. Funded by UGC-New Delhi, India (Project No: **F.30-396/2017(BSR) dated 06.10.2017**). **Amount Sanctioned: Rs. 10 Lakhs (Completed).**
- Design and development of cost-effective and novel process for efficient waste-water treatment using graphene-oxide nanoparticles -Funded by Department of Science and Technology (DST), New Delhi, India (Project No: **SB/FTP/PS-168/2013 dated 05.05.2014**). **Amount Sanctioned: INR 21.4 Lakhs. (Completed)**

Administrative Responsibilities

- (a) **NSS Coordinator** – Central University of Tamil Nadu, India (**from Jan 2021 to till date**)
- (b) **NSS Programme Officer** - Central University of Tamil Nadu (Dec 2017-Jan 2021)
- (c) **NSS Coordinator** – Karunya University, Coimbatore (**2011-2014**)
- (d) **IQAC Member** - Central University of Tamil Nadu (July 2017-2022)
- (e) **NAAC Coordinator**, Department of Materials Science, Central University of Tamil Nadu, India (since 2019).
- (f) **NAAC Coordinator**, Department of Nanotechnology, Karunya University, Coimbatore, India (2012-2014).
- (g) **Member, Board of Studies (BoS)** - Department of Materials Science, Central University of Tamil Nadu (Since July 2017)
- (h) **Member, Board of Studies (BoS)** - Department of Nanotechnology, Karunya University, Coimbatore, India (2012-2014)
- (i) **Member, Board of Studies (BoS)** - Department of Applied Science and Materials Science, PSG College of Technology, Coimbatore, Tamil Nadu (Since 2013)
- (j) **Member** - Department Purchase committee, Department of Materials Science, Central University of Tamil Nadu.
- (k) **External Expert for PhD Scholars** –Sona college of Technology, Anna University. NIT-Karaikal, VIT University, Chennai. Karunya University, Coimbatore.

Scientific Conferences organized

- (1) **Organizing Secretary** – National Science Day Exhibition and Competition (2022), organised by Dept. of Materials Science, Central University of Tamil Nadu, India, (07.03.2022)
- (2) **Convener** – National Science Day Exhibition and Competition (2020), organised by Central University of Tamil Nadu, India, 28.02.2020.
- (3) **Organizing Secretary** – International Conference on Recent Advances in Materials Science (**ICRAMS-2020**) organised by Dept. of Materials Science, Central University of Tamil Nadu, India, 25.02.2020.
- (4) **Organizing Secretary** –Workshop on Advanced Functional Materials (**WAFM-2019**)), organised by Dept. of Materials Science, Central University of Tamil Nadu, 29.03.2019.
- (5) **Organizing Secretary** –National Symposium on Advanced Functional Materials (**NSAFM-2018**)), organised by Dept. of Materials Science, Central University of Tamil Nadu, April 18, 2018.
- (6) **Organizing Secretary** – International Conference on Advanced Functional Materials (**ICAFM-2017**), Jointly organised by Anna University and Central University of Tamil Nadu, Jan 6-8, 2017.
- (7) **Organizing Secretary** – National Symposium on Nanoscience and Nanotechnology (**NSNN-2013**), Dept. of Nano Science, Karunya University, Coimbatore, Sep, 30- Oct,1 , 2013.

FDP and Workshops organized:

- (1) **Organizing Secretary –Two-day Workshop on Materials Preparation and Characterization techniques**, organized by Department of Materials science, Central University of Tamil Nadu, India, **23.03.2023 and 24.03.2023**
- (2) **Organizing Member** – Faculty Development Programme (2021), organised by Central University of Tamil Nadu, India, **30.03.2021**
- (3) **Organizing Member** – National workshop on “Assessing Quality in Higher Education (2019), organised by IQAC, Central University of Tamil Nadu, India, **from 19.09.2019 to 20.09.2019**
- (4) **Organizing Member** – Faculty Development Programme (2018), organized by Central University of Tamil Nadu, India, **08.09.2018**.

INVITED TALKS

1. Delivered an invited lecture in ***International Conference on Chemistry and Materials Science” organized by Sir Theagaraya College, Chennai, from 03.05.2023 to 04.05.2023***
2. Delivered an invited lecture in ***Webinar on “Nanotechnology” conducted by The American College, Madurai, 10.02.2023***
3. Delivered an invited lecture in ***Webinar Series on Materials for Energy and Environment (WSMEE-2023) conducted by St. Joseph College, Trichy, 30.01.2023***
4. Delivered a Motivational and Guidance lecture to School Students at Devangar Hr. Sec, school, Aruppukottai, 26.12.2022
5. Delivered an invited lecture in ***National webinar on Nanoelectronics” conducted by Saveetha University, Chennai, 10.02.2022***
6. Delivered an invited lecture in ***International Conference On Materials Aspects in Chemistry (ICMAC-2022)” conducted by Sri Ramakrishna College of Arts and science, Nava India, Coimbatore, 21.01.2022***
7. Delivered an invited lecture in ***National Webinar on “Nanotechnology” conducted by MDT Hindu College, Tirunelveli, 07.09.2021.***
8. Delivered an invited lecture in ***International Workshop on “Emerging trends in the field of Science and Technology” conducted by Sathyabama University, Chennai , 18.08.2021.***
9. Delivered an invited lecture in ***International Seminar conducted by St. Joseph College, Trichy, 25.09.2020.***
10. Delivered an invited lecture in ***“International Webinar on Frontiers in Nanotechnology and Applications” conducted by St. Xavier’s College, Palayamkottai, Tirunelveli, 15.07.2020.***
11. Delivered an invited lecture on ***“Nanotechnology” at International Seminar on Advanced Functional Materials – Devanga Arts College, Aruppukottai, 30.8.2019.***
12. Delivered an invited talk at National Conference on Advanced Materials (NCAM-2017) conference, PSG College of Technology, Coimbatore, India (12-13, Dec. 2017).
13. Delivered an invited talk at National seminar on recent advances in Nanoscience and Technology NanoMeet-2017, Anna University, Chennai, India (29-30, Nov.2017).
14. Delivered an invited lecture on ***“Role of Nanotechnology in the development of Nanoelectronics” at KG College of Arts and Science, Coimbatore – June 21st, 2017 during inaugural function of Arduino club. (As a Chief Guest).***

15. Delivered an invited lecture on “*Essentials of Nanotechnology in the development of Science and Engineering*” at **Two-day Workshop on Advanced Functional Materials** – SSN College of Engineering, Chennai - February 3-4, 2017.
16. Delivered an invited lecture on “**Role of Scanning Photoelectron Nanospectroscopy in nanodevice analysis**” at Department of Mechanical Engineering, Jeju National University, Jeju, Korea, 29thApril- 4th May 2016.
17. Delivered an invited lecture on “**National Symposium on Advanced Research in BioSciences**” at Bharat College of Science and Management, Tanjore, Tamil Nadu, India, on 03-04, March, 2014.
18. Delivered an invited lecture on “**International Conference on Nanoelectronics and Nanodevices (ICNEND 2013)**” at Savitha University, Chennai, Tamil Nadu, India, on 21-22, January, 2013.
19. Served as **Resource person** in two-day seminar on “**National Seminar on Application of Nanotechnology and Advanced Biotechnology in Textile Effluent Treatment for Waste water Re-use in the Textile Technology**” held at Department of Textile Technology KSR College of Technology, Tiruchengode, Tamil Nadu, India on 13-14, August, 2012.

Session Chair in Conferences:

1. National One-week Faculty Development Programme on Carbon Capture and Storage, by Department of Chemistry, Central University of Tamil nadu (in Feb-2022).
2. International Conference in Nanotechnology (ICN-2018), MG Univ, Kottayam
3. Saveetha School of Engineering, Saveetha University 2019.

MEMBERSHIP IN ACADEMIC BODIES

- Associate Member of the Institute of Nanotechnology.
- Life Member in Material Research Society (MRS) of India
- An affiliate member in Institute of Physics (IOP), London,
- Member of Korean Physical Society (KPS), Korea

RECOGNIZED REVIEWER OF THE FOLLOWING JOURNALS:

1. Nature (Materials) [IF 36.425]
2. Nature (Scientific Reports) (IF 5.578)
3. Carbon [IF 6.16]
4. ACS Applied Materials and Interfaces [IF 5.9]
5. Materials Chemistry and Physics - Elsevier [IF 2.05]
6. Materials Science in Semiconductor Processing – Elsevier [IF 1.7]

PUBLICATION LIST [*-Corresponding author]

2023

77. Nithya Selvaraju, S. Yuvaraj, **V. Gunasekaran***, “Enhanced Green H₂ generation using biomass-derived nitrogen-doped carbon dots incorporated with rare earth metal hydroxide (Gd(OH)₃) nanorods”, *International Journal of Hydrogen Energy*, *Accepted (Article in Press)* **IF: 7.1** **ISSN: 0360-3199**, <https://doi.org/10.1016/j.ijhydene.2023.03.319>
76. Nithya Selvaraju, Jaganathan Murugan, Senthilnathan Selvaraj, Neeraj Singhal, **Gunasekaran Venugopal***, “Electrocatalytic Performance of green synthesized nitrogen-doped carbon dots toward clean energy H₂ generation”, *Materials Letters*, *341*, 134255 (2023) **IF: 3.423** **ISSN: 0167-577X**, <https://doi.org/10.1016/j.matlet.2023.134255>
75. Nithya Selvaraju, Kennedy Ravichandran, **V. Gunasekaran***, “A short review of kinetic parameters of carbon quantum dots for electrocatalytic Hydrogen evolution reaction,”, *International Journal of Hydrogen Energy*, *48*, 3807-3823 (2023) **IF: 7.1** **ISSN: 0360-3199**, <https://doi.org/10.1016/j.ijhydene.2022.10.203>
74. M.Vigneshwaran, M. Gobinath, K. Ramji, V.J. Surya, **V. Gunasekaran***, S. Yuvaraj, "Highly selective toluene adsorption studies of holey graphene oxide thin film using scanning Kelvin Probe", *Materials Letters*, *340*, 134124 (2023) **IF: 3.09** **ISSN: 0167-577X**, <https://doi.org/10.1016/j.matlet.2023.134124>

2022

73. Nithya Selvaraju, Pitchaipillai Sankar Ganesh, Veeramurali Palrasu, **Gunasekaran Venugopal***, Vanitha Mariappan, “Evaluation of antimicrobial and antibiofilm activity of Citrus medica Fruit juice based Carbon dots against Pseudomonas aeruginosa”, *ACS Omega*, *7(41)*, 36227 (2022). **IF: 4.1** **ISSN: 2470-1343**, <https://doi.org/10.1021/acsomega.2c03465>
72. Nithya Selvaraju, S. Senthilnathan, S. Neeraj, M.Vigneshwaran, S. Yuvaraj, R. Kaushik, **V. Gunasekaran***, “Electron Transfer behavior of green synthesized carbon quantum dot sensor towards VOC and heavy metal ion sensing,”, *Materials Science & Engineering B*, *282*, 115792 (2022). **IF: 3.4** **ISSN : 0921-5107**, <https://doi.org/10.1016/j.mseb.2022.115792>
71. S. Neeraj, S. Senthilnathan, S. Yuvaraj, **V. Gunasekaran***, “Study of Photocatalytic Degradation Efficiency of rGO/ZnO Nano-Photocatalyst and their Performance Analysis”, *Journal of Environmental Chemical Engineering*, *10*, 107293 (2022). **IF: 7.9** **ISSN: 2213-3437**, <https://doi.org/10.1016/j.jece.2022.107293>
70. S.Rajasekaran, Haitham Hadidi, Mohammed Tharwan, Ali Alnujaie, Jabril A. Khamaj, **V. Gunasekaran***, “Raman Spectroscopy assisted characterisation of nanoform MoS₂ Thin film Transistor”, *Scanning*, *10*, 3255615 (2022). **IF: 1.9** **ISSN: 1932-8745**, <https://doi.org/10.1155/2022/3255615>

69. T. Sakthivel, Parthiban Pazhamalai, Vigneswaran Mohan, Durairaj, K. Karthikeyan, Yuvaraj Sivalingam, Sang-Jae Kim, **V. Gunasekaran***, “Ferroelectric Semiconductor BaTiO₃-Ag₂O nanohybrid as an effective photocatalytic material”, *Chemosphere*, **292**, 133398 (2022). **IF: 7.083** ISSN: 0045-6535, <https://doi.org/10.1016/j.chemosphere.2021.133398>
68. M. Vigneshwaran, M. Gobinath, C. David, R. Kumaresan, V.J. Surya, **V. Gunasekaran**, S. Yuvaraj, "Photo-enhanced Acetone Adsorption on δ-MnO₂ Nanoparticles: A Step towards Non-invasive Detection of Diabetes Mellitus", *Materials Letters*, **306**, 130944 (2022) **IF: 3.09** ISSN: 0167-577X, <https://doi.org/10.1016/j.matlet.2021.130944>

2021

67. S. Senthilnathan, S. Neeraj, S. Nithya, S. Yuvaraj, **V. Gunasekaran***, “Visible-light Driven Enhanced Photocatalytic Properties of rGO/Mn₃O₄/MoO₃ Ternary Hybrid Nanocomposite” *ECS Journal of Solid State Science and Technology*, **10**, 091010 (2021) **IF: 2.1** **ISSN:**, <https://doi.org/10.1149/2162-8777/ac22e2>
66. N. Gouthami, A.J. Samuel, **V. Gunasekaran***, “Role of electrolytes in Electrochemical Properties of La₂SrV₂O₉-rGO Composite as electrode materials” *ECS Journal of Solid State Science and Technology*, **10**, 101011 (2021) **IF: 2.1** **ISSN:**, <https://doi.org/10.1149/2162-8777/ac2d01>
65. R. Nivea, S. Yuvaraj, **V. Gunasekaran***, “Graphene Oxide as a Dye Effluent Adsorbent: Adsorbed Graphene Oxide as an Efficient Supercapacitor Electrode Material” *ECS Journal of Solid State Science and Technology*, **10**, 081004 (2021) **IF: 2.1** **ISSN:**, <https://doi.org/10.1149/2162-8777/ac19c0>
64. Y.A. Fageehi, S. Rajasekaran, **V. Gunasekaran**, J. Valder, H. Kumar, K.S. Ravishankar, ”Effect of thermal and surface chemical treatment on the cyclic oxidation behavior of 7039 aluminum alloy used in aerospace armor applications’, *Materials Today: Proceedings*, **42**, 343-349 (2021) **IF: 0.97** ISSN : 2214-7853, <https://doi.org/10.1016/j.matpr.2020.09.547>
63. S. Rajasekaran, Yahya Ali Fageehi, **V. Gunasekaran**, “Topological responses of defense grade 7075 Al/TiO₂ Composite in red sea environment”, *Materials Today: Proceedings*, **46**, 2445-2449 (2021). **IF: 0.97** ISSN: 2214-7853, <https://doi.org/10.1016/j.matpr.2021.01.358>

2020

62. **Gunasekaran Venugopal***, Yuvaraj Sivalingam, S. Sridharan, M. K. Devaraju, S.J. Kim, Konya Zoltan, “Temperature dependent electrical transport properties of single walled carbon nanotube thin films prepared by electro-hydrodynamic atomization technique”, *Physica Status Solidi: A: Applications and Materials Science*, (2020), **IF: 1.981** **ISSN:**, <https://doi.org/10.1002/pssa.202000029>
61. **V. Gunasekaran***, T. Sakthivel, V. Vinesh, Konya Zoltan, “Efficient visible-light piezo-phototronic activity of ZnO-Ag_sS hybrid for degradation of organic dye molecule”, *Journal of*

Physics and Chemistry of Solids, 143, 109473 (2020) IF: 3.995 ISSN: 0022-3697,
<https://doi.org/10.1016/j.jpcs.2020.109473>

60. K. Guruprasad, G. Marappan, S. Elangovan, S.V. Jayaraman, K.Kamala Bharathi, **V. Gunasekaran**, C.D. Natale, Y. Sivalingam, “Electrical Transport properties and impedance analysis of Au/ZnO nanorods/ITO heterojunction device”, *Nano Express*, 1, 030020 (2020) ISSN: 2632-959X, <https://doi.org/10.1088/2632-959X/abc6f8>

2019

59. **V. Gunasekaran***, G. Kamada, M. Kotsugi, T. Ohkochi, M. Suemitsu, H. Fukidome, “Element- and site-specific many body interactions in few layer MoS₂ during X-ray absorption processes”, *Physica Status Solidi A: Application and Materials Science*, 216, 1800539 (2019) IF: 1.981 ISSN: 1862-6300, <https://doi.org/10.1002/pssa.201800539>
58. K. Govindan, A.K. Suresh, T. Sakthivel, M. Kalpana, M. Raja, **V. Gunasekaran**, Am Jang, “Effect of peroxomonosulfate, peroxodisulfate and hydrogen peroxide on graphene-oxide photocatalytic performances in methyl-orange dye degradation”, *Chemosphere*, 237, 124479 (2019) IF: 7.083 ISSN: 0045-6535, <https://doi.org/10.1016/j.chemosphere.2019.124479>
57. T. Sakthivel, **V. Gunasekaran***, A. Durairaj, S. Vasanthkumar, Xiaoyong Huang, “Utilization of the internal electric field in semiconductor photocatalysis: A short review”, *J. Indus. Engg. Chem.* 72, 18-30 (2019) IF: 5.278 ISSN: 1226-086X, <https://doi.org/10.1016/j.jiec.2018.12.034>
56. K. Kiran preethi, T. Sakthivel, N. Gouthami, V. Vinesh, R. Priya Arul Selvi, Ashwini Kumar, **V. Gunasekaran***, “Enhanced Photocatalytic degradation activity of 2-D graphitic carbon nitride-SnO₂ nanohybrids”, *J. Nanosci. Nanotechnol.* 19, 3576-3582 (2019) IF: 1.354 ISSN: 1533-4880, <https://doi.org/10.1166/jnn.2019.16033>

2018

55. **V. Gunasekaran***, S. Yuvaraj, K. Karthikeyan, V. J. Y. Surya, M.K. Devaraj, Sang-Jae Kim, “Observation of anomalous transport characteristics in graphene-oxide thinfilm”, *Materials Chemistry and Physics*, 213, 89-94 (2018) IF: 4.094 ISSN: 0254-0584, <https://doi.org/10.1016/j.matchemphys.2018.03.082>
54. R. Nivea, T. Sakthivel, S. Yuvaraj, **V. Gunasekaran***, “Investigation of photocatalytic performances of sulfur based reduced graphene-oxide-TiO₂ nanohybrids”, *Applied Surface Science*, 449, 712-718 (2018) IF: 6.7 ISSN: 0169-4332, <https://doi.org/10.1016/j.apsusc.2018.01.043>
53. Aleena Rose, K. Guru Prasad, T. Sakthivel, **V. Gunasekaran**, T. Maiyalagan, T. Vijayakumar, “Electrochemical analysis of graphene-oxide/Polyaniline/Polyvinyl alcohol composite nanofibers for supercapacitor applications, *Applied Surface Science*, 449, 551-557 (2018) IF: 6.7 ISSN: 0169-4332, <https://doi.org/10.1016/j.apsusc.2018.02.224>

52. N. Gouthami, T. Sakthivel, K. Kiranpreethi, V. Vinesh, S. Yuvaraj, **V. Gunasekaran***, “Study of structural and electrochemical properties of $\text{La}_2\text{SrV}_2\text{O}_9$ perovskites prepared using ball-milling”, *Applied Surface Science*, 449, 468-473 (2018). ISSN: 0169-4332 **IF: 6.7**, <https://doi.org/10.1016/j.apsusc.2017.12.187>
51. R. Priya Arul Selvi, T. Sakthivel, N. Gouthami, K. Kiranpreethi, V. Vinesh, R. Kennedy, **V. Gunasekaran***, “A novel MoS_2 Structures for electrochemical detection of 4-aminophenol”, *J. Material Science: Materials in Electronics*, 29(7) 5696-5701(2018) **IF: 2.478** ISSN: 0957-4522, <https://doi.org/10.1007/s10854-018-8539-9>
50. G. Thilagavathi, R. Arunkumar, **V. Gunasekaran**, “Influence of L-threonine on the growth, structural, optical, mechanical, and non-linear optical properties of tartaric acid single crystal”, *Material Science-Poland*, 36(4), 630-637 (2018) **IF: 0.95** ISSN: 2083-134X, <https://doi.org/10.2478/msp-2018-0094>
49. V. Vinesh, T. Sakthivel, N. Gouthmai, K. Kiranpreethi, R. Priya Arulselvi, **V. Gunasekaran***, “Enhanced photocatalytic properties of nanostructured WO_3 semiconductor photocatalyst prepared via hydrothermal method”, *J. Nanosci. Nanotechnol*, 18 (5) 3320-3328 (2018). **IF: 1.354** ISSN: 1533-4880, <https://doi.org/10.1166/jnn.2018.14853>

2017

48. R. Nivea, T. Sakthivel, **V. Gunasekaran***, “A short review on preparation of graphene from waste and bioprecursors”, *Applied Materials Today*, 7, 246-254 (2017) **IF: 10.041** ISSN: 2352-9407, <https://doi.org/10.1016/j.apmt.2017.04.005>
47. **V. Gunasekaran***, M. K. Devaraju, S. Yuvaraj, V. J. Y. Surya, Varu singh, K. Karthikeyan, S. J. Kim, “Electrical Transport properties of two-dimensional MoS_2 nanosheets synthesized by novel method”, *Materials Science in Semiconductor Processing*, 66, 81-86 (2017) **IF: 3.927** ISSN: 1369-8001, <https://doi.org/10.1016/j.mssp.2017.04.011>
46. **V. Gunasekaran***, G.H. Park, M. Suemitsu, H. Fukidome, “Fabrication of multi-layer Bi_2Se_3 devices and observation of anomalous transport behaviours”, *Materials Science in Semiconductor Processing*, 68, 128-132 (2017) **IF: 3.927** ISSN: 1369-8001, <https://doi.org/10.1016/j.mssp.2017.06.010>
45. T. Sakthivel, T. Srinivas, R. Nivea, A. Raja, **V. Gunasekaran***, “Efficient visible-light photocatalytic and enhanced photocorrosion inhibition of Ag_2WO_4 decorated MoS_2 nanosheets”, *Journal of Physics and Chemistry of Solids*, 110, 266-273 (2017) **IF: 3.995** ISSN: 0022-3697, <https://doi.org/10.1016/j.jpics.2017.06.005>

2016

44. **Gunasekaran Venugopal***, C.V. Jipsa, Nivea Raghavan, Varu Singh, Ashwini Kumar, Azhagurajan Mukkannan, “Nano-dynamic mechanical and thermal responses of single walled carbon-nanotubes reinforced polymer nanocomposite thinfilms”, *J. Alloys and Compounds*, 688, 454-459 (2016) **IF: 5.316** ISSN: 0925-8388, <https://doi.org/10.1016/j.jallcom.2016.07.209>

43. Ryota Suto, **Gunasekaran Venugopal**, Keiichiro Tashima, Naoka Nagamura, Koji Horiba, Maki Suemitsu, Masaharu Oshima, Hirokazu Fukidome, “Observation of nanoscopic charge transfer region at metal/MoS₂ interface”, *Materials Research Express* (IOP), 3, 075004 (2016) **IF**:1.618 **ISSN**: 2053-1591, <https://doi.org/10.1088/2053-1591/3/7/075004>
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