

# Dr. Gaurav Mahadev Lohar

(M.Sc., Ph.D.)

Male. Born on January 24, 1988, Unmarried

Languages Known: English, Hindi, Marathi



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## CAREER OBJECTIVE

Present objective is to establish a group and alliances to work at the interface of material science and nanotechnology. To utilize knowledge, analytical skills, and experience to explore multidisciplinary research to create novel materials, advanced technologies, and provide technical support to groups with common interests.

## HIGHLIGHTS

Dedicated individual with excellent technical, analytical and communication skills demonstrated by over 7 years of experience. Good experience of working on academic research projects. Hands-on experiences with modern material characterization and analytical tools. Presently working on Solar Cells, Biosensors and graphene-based composites for flexible energy storage devices. Capable of independent research and also have experience of supervising master students' projects. Have excellent English language skills to compile scientific proposals and research papers. Sound knowledge of computer applications in research activities. In present research h-index is 16 and i-10 index is 20 with more than 50 scientific publications. A present citation index is 571 (times cited).

## RESEARCH AND ACADEMIC EXPERIENCE:

1. **June 2016-present**, Assistant Professor, Department of Physics, Lal Bahadur Shastri College, Satara (M.S.) India
2. **July 2011-2015**, Ph.D. Material Science, Photoelectrochemical Cell Performance of Electron Beam Irradiated Iron Doped Zinc Selenide Thin Films.
3. **2009-2011**, M.Sc. Optics.
4. **2006-2009**, B. Sc. Physics

## Research Performance

Paper Published : 52.

Citations index: 571.

h-index: 16 i10- index: 20

## AWARDS AND APPRECIATION:

1. Young Scientist Award 2019: The Indian Science Congress Association (ISCA).
2. InSc Young Achiever Award 2019: Institute of scholar
3. Early Career Research Award: (DST-SERB, Government of India)
4. UGC Meritorious Fellow: UGC New Delhi, 2012-13 and 2013-14.
5. Conducted M.Sc. (Modern optics) practical during 2012-2015 (3 years)
6. Contributed to developing the physics instrumentation facility center (PIFC) at Department of Physics, Shivaji University, Kolhapur (India)

## PATENT SUBMITTED:

Sr. No.	Patent Title	Name of Applicant(s)	CBR No.	CBR Date	Agency/ Country
1.	Effect of high energy electron irradiation on gold substitute electrochemically reduced graphene oxide: modified photoluminescence properties	<b>Dr. Gaurav Mahadev Lohar</b> Dr. Swati Tanaji Jadhav, Dr. Vijay Janardan Fulari	2072	30/01/2017	India

## COMPLETED PROJECTS:

Sr. No.	Project title	Status	Funding Agency	Amount INR
1.	Performance and evaluation of high energy electron irradiation on metal oxide reduced graphene oxide composite for supercapacitor and biosensor applications	PI	DST-SERB	2177550/-
2.	Performance and evaluation of copper oxide reduced graphene oxide composite for supercapacitor and biosensor applications	PI	Shivaji University	70000/-

## **OTHER INFORMATION**

### **a. Worked as Subject expert for selection of Assistant professor:**

- 1) Department of Physics, Kisanveer Mahavidyalaya, Wai.
- 2) Department of Physics, Yashwantrao Chavan Institute of Science, Satara.
- 3) Department of Nanoscience and technology, Yashwantrao Chavan Institute of Science, Satara

### **b. Resource Person:**

- 1) Lecture delivered on “Beginning and philosophy of Quantum Mechanics” at Yashwantrao Chavan Institute of Science, Satara.
- 2) Lecture delivered on Intellectual property rights (IPR): Amdar Shashikant Shinde Mahavidyalay, Medha
- 3) Lecture delivered on Intellectual property rights (IPR): Raja Shripatrao Bhagawantrao Mahavidyalaya, Aundh

### **c. Worked as Expert for project selection committee:**

1. Shri. Vijaysinha Yadav College, Peth Vadgaon
2. Yashwantrao Chavan Institute of Science, Satara.

### **d. Organization of Conference seminar:**

1. **Convener:** 1st International Conference on Recent Trends in Physical, Chemical, Biological Nanosciences (ICRT-PCBNano-2022).
2. **Organizing Secretary:** National conference on Recent Trends in Physical, Chemical and Nanoscience (NCRT-PCNano- 2017)
3. **Cordinator:** Science exhibition for college and school students

### **e. Editorial board member**

1. International Journal For Researches In Biosciences Agriculture & Technology

### **f. Life membership**

- Laser & Spectroscopy Society of India.
- Indian Science Congress.
- Institute of Scholar (InSc unit of SDPL)

### **g. E-content development**

- Quantum mechanics
- Solid state Physics
- Theory of radiation
- A. C. Circuits
- Magnetostatics
- Thermodynamics

### **h. College Cordinator, Avishkar Research project competition:**

(Total 7 district level prize and 3 selections for state level Avishkar competition)

### **i. Conducted and evaluated M. Sc. Chemistry projects.**

**j. Research Collaborators**

<b>International Collaborators</b>		
<b>Sr. No.</b>	<b>Name of Collaborator</b>	<b>Institute</b>
1.	Dr. V. G. Parale Prof. H. H. Park	Department of Materials Science and Engineering, Yonsei University, Seoul 03722, South Korea
2.	Dr. G. S. Ghodake D. Y. Kim	Department of Biological and Environmental Science, Dongguk University-Seoul, South Korea
3.	Dr. Ranjeet Patil Prof. Y. R. Ma	Department of Physics, National Dong Hwa University, Hualien 97401, Taiwan
4.	Dr. N. B. Velhal	Polymer Thin Film Material Laboratory, Department of Polymer Science, Kyungpook National University, Daegu, Republic of Korea
<b>National Collaborators</b>		
1.	Prof. V. J. Fulari	Department of Physics, Shivaji University, Kolhapur, M.H., India
2.	Dr. M. C. Rath	Bhabha Atomic Research Centre, Mumbai M.H., India
3.	Dr. S. H. Mujawar	Yashwantrao Chavan Institute of Science, Satara, M.H., India
4.	Dr. A. S. Patil	Rajarshi Chhatrapati Shahu College, Kolhapur, M.H., India
5.	Dr. S. B. Kulkarni	Institute of Science, Mumbai, M.H., India
6.	Dr. H. R. Kulkarni	Jayawantrao Sawant College of Science and Commerce, Hadapsar Pune, M.H., India
7.	Dr. R. K. Nimat	Department of Physics, Balasaheb Desai College, Patan, M.H. India







**k. Refresher course and induction programmes**

<b>Sr No.</b>	<b>Name</b>	<b>Place</b>	<b>Year</b>
1.	Induction program on various aspects of Teaching-learning such as pedagogical tools, Assessment & evaluation methods, ICT and at familiarizing them with the framework of higher education in India.	Indian institute of Science Education and Research, Pune	2018
2.	73 <sup>rd</sup> Refresher Course in Physics	UGC- Human Resource development Centre, Punjabi University, Patiyala	2019

**I. Participation in National/International conference: 17.**

<b>Sr No.</b>	<b>Name of Conference</b>	<b>Place</b>	<b>Year</b>
1.	International Conference on Multifunctional Materials (ICMM 2010)	Banaras Hindu University, Varanasi	2010
2.	National seminar on Physics of materials and Materials Based device fabrication (NSPM-MDF-2011)	Department of Physics, Shivaji University, Kolhapur	2011
3.	1 <sup>st</sup> international conference on Physics of Materials and Materials based device fabrication, (ICPM-MDF 2012)	Department of Physics, Shivaji University, Kolhapur	2012
4.	International Conference on Energy Efficient technologies for Sustainability	St. Xavier's Catholic College of Engineering Nagercoil, Tamilnadu	2013
5.	2 <sup>nd</sup> National seminar on Physics of materials and Materials Based device fabrication (NSPM-MDF-2013)	Department of Physics, Shivaji University, Kolhapur	2013
6.	2 <sup>nd</sup> international conference on Physics of Materials and Materials based device fabrication, (ICPM-MDF 2012)	Department of Physics, Shivaji University, Kolhapur	2014
7.	Recent trends and Issues in renewable Energy (NCRTIRE-2014)	Rajashi Chhatrapati Shahu College, Kolhapur	2014
8.	3 <sup>rd</sup> international conference on Physics of Materials and Materials based device fabrication, (ICPM-MDF 2014)	Department of Physics, Shivaji University, Kolhapur	2014
9.	National Conference on Environmental Radiation and functional Materials (NCERFM 2015)	Department of Physics, Osmania University, Hyderabad	2015
10.	Silver Jubilee Conference on Study of Matter Using Intense Radiation Sources and Under Extreme Conditions	UGC-DAE Consortium for Scientific research University campus, Khandwa Road, Indore (M. P.)	2016
11.	National conference on Recent trends in Physical, Chemical and Nanosciences- 2017 (NCRT-PCNano-2017)	Department of Physics, Lal Bahadur Shastri College of Arts, Science and Commerce, Satara	2017
12.	National Conference on Recent Advances in Materials science and spectroscopy (NCRAMSS-2017)	Department of Physics, Shri Mata Vaisno Devi University, Katra, J&K, India	2017
13.	Two-day National Conference on water conservation for agriculture Drought prone area	Department of Geography, Lal Bahadur Shastri College of Arts, Science and Commerce, Satara	2017
14.	National symposium on Multidisciplinary aspects of Spectroscopy	Department of Physics, Deen Dayal Upadhyaya Gorakhpur University, Gorakhpur	2017
15.	India International Science Festival 2019	Lucknow	2018
16.	106 <sup>th</sup> Indian Science Congress	Lovely Professinal University, Phagwara, Jalandhar.	2019
17.	India International Science Festival 2019 (Young Scientists' Conference)	Biswa Bangla Convention centre Kolkata.	2019

**m. Research group working in laboratory.**

Sr. No.	Name	Photograph	Working as	Title of work
1.	Mr. Onkar Chandrakant Pore		Senior Research Fellow (DST-SERB Project)	Development of NiCo <sub>2</sub> O <sub>4</sub> base nanostructures for hydrothermal method for supercapacitor application.
2.	Mr. Chetankumar Dattatraya Chavare		Research Scholar	Synthesis and Characterization of Nickel cobalt phosphate reduced graphene oxide Composite for Supercapacitor application.
3.	Mr. Abhijeet Shrimant Shelake		Research Scholar	Chemically synthesized M Co <sub>2</sub> O <sub>4</sub> /rGO (M= Mn, Zn, Ni) based nanostructures for supercapacitor application.
4.	Mr. Digambar Shivaji Sawant		Research Scholar	Synthesis and characterization of nickel molybdate reduced graphene oxide-based composites for supercapacitor applications.
5.	Miss. Dipika Bajrang Mane		Research Scholar	Chemically synthesized vanadium doped nickel hydroxide thin films for supercapacitor application.
6.	Miss. Heena Shabbir mulla		Research Scholar	Synthesis and Characterization of NiCo <sub>2</sub> S <sub>4</sub> /rGO Composite for Supercapacitor.

**n. Book Chapters: 01**

Recent Development in Chalcogenides for Supercapacitor Applications

Book Name: Nanostructured Materials for Supercapacitors

Publisher: Springer, Cham

**o. Research Publications:**

- [1] O. C. Pore, A. V. Fulari, S. H. Mujawar, R. V. Shejwal, V. J. Fulari, G. M. Lohar, High stability Mn<sub>2</sub>O<sub>3</sub>/MnCO<sub>3</sub> microcubes synthesized by hydrothermal method for supercapacitor application. *Materials Science in Semiconductor Processing* 143 (2022) 106550. **DOI:** <https://doi.org/10.1016/J.MSSP.2022.106550>
- [2] O. C. Pore, A. V. Fulari, N. B. Velhal, V. G. Parale, H. H. Park, R. V. Shejwal, V. J. Fulari, G. M. Lohar, hydrothermally synthesized urchinlike NiO nanostructures for supercapacitor and nonenzymatic glucose biosensing application, *Materials Science in Semiconductor Processing* 134 (2021) 105980. **DOI:** <https://doi.org/10.1016/j.mssp.2021.105980>
- [3] O. C. Pore, A. V. Fulari, R. V. Shejwal, V. J. Fulari, G. M. Lohar, Review on Recent progress in hydrothermally synthesized MCo<sub>2</sub>O<sub>4</sub>/rGO composite for energy storage devices, *Chemical engineering Journal*, 426 (2021) 131544 **DOI:** <https://doi.org/10.1016/j.cej.2021.131544>
- [4] O. C. Pore, A. V. Fulari, R. K. Kamble, A. S. Shelake, N. B. Velhal, V. J. Fulari, G. M. Lohar, hydrothermally synthesized Co<sub>3</sub>O<sub>4</sub> microflakes for supercapacitor and non-enzymatic glucose sensor, *Journal of Materials Science: Materials in Electronics* (2021) 1-13. **DOI:** <https://doi.org/10.1007/s10854-021-06586-y>
- [5] G. M. Lohar, O. C. Pore, A. V. Fulari, Electrochemical behavior of CuO/rGO nanopellets for flexible supercapacitor, non-enzymatic glucose, and H<sub>2</sub>O<sub>2</sub> sensing application, *Ceramics International* 47 (2021) 16674-16687. **DOI:** <https://doi.org/10.1016/j.ceramint.2021.02.238>
- [6] A. S. Patil, R. T. Patil, G. M. Lohar, V. J. Fulari, Chemically synthesized CuO nanostructures for non-enzymatic glucose sensor: effect of deposition time, *Journal of Materials Science: Materials in Electronics* 32 (2021) 8819-8828. **DOI:** <https://doi.org/10.1007/s10854-021-05554-w>
- [7] A. S. Patil, R. T. Patil, G. M. Lohar, V. J. Fulari, Facile synthesis of CuO nanostructures for non-enzymatic glucose sensor by modified SILAR method, *Applied Physics A* 127 (2021) 1-10. **DOI:** <https://doi.org/10.1007/s00339-020-04258-y>
- [8] G. M. Lohar, D. V. Rupnawar, R. V. Shejawal & A. V. Fulari, Preparation of natural dyes from salvia and spathodea for TiO<sub>2</sub>-based dye-sensitized solar cells (DSSCs) and their electrochemical impedance spectroscopic study under light and dark conditions, *Bulletin of Materials Science* 43 (2020) 1-8. **DOI:** <https://doi.org/10.1007/s12034-020-02180-w>

- [9] Q. Li, Y. Li, A. V. Fulari, G. S. Ghodake, D.-Y. Kim, and G. M. Lohar, Performance of chemically synthesized  $\text{Mn}_3\text{O}_4/\text{rGO}$  nanocomposite for electrochemical supercapacitor: a cost-effective high-performance electrode, *Nanotechnology* 31 (2020) 415403. **DOI:** <https://doi.org/10.1088/1361-6528/ab9f77>
- [10] B. P. Relekar, A. V. Fulari, M. C. Rath, V. J. Fulari & G. M. Lohar, Modification in porous  $\text{MnO}_2/\text{PANI}$  composite using high-energy electron irradiation for electrochemical supercapacitor, *Journal of Materials Science: Materials in Electronics* 31 (2020)11741–11747. **DOI:** <https://doi.org/10.1007/s10854-020-03725-9>
- [11] R. V. Shejwal G. M. Lohar, A. S. Shelke, O. C. Pore, D. V. Rupnavar, C. P. Mane, Synthesis and characterization of nanoporous nio nanoflakes synthesized using chemical bath deposition, *international journal for researches in biosciences agriculture & technology*, 2 (2019) 27-30
- [12] R.V. Shejwal G. M. Lohar, A. S. Shelke, O. C. Pore, D. V. Rupnavar, C. P. Mane, Investigation of electrochemical properties of chemically synthesized nickel doped zinc oxide nanorods, *international journal for researches in biosciences agriculture & technology*, 2 (2019) 31-35.
- [13] J. Geng, J. Ma, S. Ma, F. Li, L. Zhang, X. Ning, G.M. Lohar, Energy band investigation and role of Fe content in  $\text{Zn}_{1-x}\text{Fe}_x\text{Se}$  based nanomaterials for photoelectrochemical cell application, *Ceramics International* 45 (2019) 14457-14463, **DOI:** <https://doi.org/10.1016/j.ceramint.2019.04.167>
- [14] B. P. Relekar, A. V. Fulari, G. M. Lohar, V. J. Fulari, Development of Porous Manganese Oxide/Polyaniline Composite Using Electrochemical Route for Electrochemical Supercapacitor, *Journal of Electronic Materials* 24 (2019) 2449-2455, **DOI:** <https://doi.org/10.1007/s11664-019-07039-3>.
- [15] B. P. Relekar, S. A. Mahadik, S. T. Jadhav, A. S. Patil, R. R. Koli, G. M. Lohar, V. J. Fulari, Effect of Electrodeposition Potential on Surface Free Energy and Supercapacitance of  $\text{MnO}_2$  Thin Films, *Journal of Electronic Materials* 47 (2018) 2731-2738, **DOI:** <https://doi.org/10.1007/s11664-018-6109-9>.
- [16] G. M. Lohar, S. T. Jadhav, B. P. Relekar, R. A. Patil, Y. Ma, V. J. Fulari, Electrochemically synthesized 1D and 3D hybrid  $\text{Fe}^{3+}$  doped  $\text{ZnSe}$  dandelions for photoelectrochemical cell application, *Optik* 158 (2018) 53-63, **DOI:** <https://doi.org/10.1016/j.ijleo.2017.12.017>.
- [17] A. V. Fulari, M. V. Ramana Reddy, S. T. Jadhav, G. S. Ghodake, Dae-Young Kim, G. M. Lohar,  $\text{TiO}_2/\text{reduced}$  graphene oxide composite based nano-petals for supercapacitor application: effect of substrate, *Journal of Materials Science: Materials in Electronics* 29 (2018) 10814–10824, **DOI:** <https://doi.org/10.1007/s10854-018-9146-5>.



- [18] A. S. Patil, M. D. Patil, G. M. Lohar, S. T. Jadhav, V. J. Fulari, Supercapacitive properties of CuO thin films using modified SILAR method, *Ionics* 23 (2017) 1259-1266, **DOI:** <https://doi.org/10.1007/s11581-016-1921-9>.
- [19] B. P. Relekar, G. M. Lohar, P. S. Indapure, S. T. Punde, S. T. Jadhav, H. D. Dhaygude, V. J. Fulari, Galvanostatically Deposited MnO<sub>2</sub> Thin Film and Their Electrochemical Properties, *Materials Focus* 5 (2016) 577-579, **DOI:** <https://doi.org/10.1166/mat.2016.1347>.
- [20] G. M. Lohar, R. K. Kamble, S. T. Punde, S. T. Jadhav, A. S. Patil, H. D. Dhaygude, B. P. Relekar, V. J. Fulari, Electrochemical Synthesis of Ni Doped ZnSe Thin Film for Photoelectrochemical Cell Application, *Materials Focus* 5 (2016) 481-484, **DOI:** <https://doi.org/10.1166/mat.2016.1349>.
- [21] A. S. Patil, G. M. Lohar, V. J. Fulari, Structural, morphological, optical and photoelectrochemical cell properties of copper oxide using modified SILAR method, *Journal of Materials Science: Materials in Electronics* 27 (2016) 9550-9557, **DOI:** <https://doi.org/10.1007/s10854-016-5007-2>.
- [22] G. M. Lohar, H. D. Dhaygude, B. P. Relekar, M. C. Rath, V. J. Fulari, Effect of 10 MeV energy of electron irradiation on Fe<sup>2+</sup> doped ZnSe nanorods and their modified properties, *Ionics* 22 (2016) 1451-1460, **DOI:** <https://doi.org/10.1007/s11581-016-1650-0>.
- [23] B. P. Relekar, G. M. Lohar, R. K. Kamble, A. B. Bansode, H. D. Dhaygude, V. J. Fulari, Potentiostatically Deposited MnO<sub>2</sub> Thin Film for Supercapacitor Application, *Materials Focus* 5 (2016) 258-260, **DOI:** <https://doi.org/10.1166/mat.2016.1321>.
- [24] H. D. Dhaygude, S. K. Shinde, M. V. Takale, G. M. Lohar, M. C. Rath, V. J. Fulari, Effect of electron irradiation on structural, morphological and photoluminescence properties of ZnS thin films, *Ceramics International* 42 (2016) 10159-10164. **DOI:** <https://doi.org/10.1016/j.ceramint.2016.03.129>
- [25] S. A. Mahadik, F. D. Pedraza, B. P. Relekar, V. G. Parale, G. M. Lohar, S. S. Thorat, Synthesis and characterization of superhydrophobic–superoleophilic surface, *Journal of Sol-Gel Science and Technology* 78 (2016) 475-481, **DOI:** <https://doi.org/10.1007/s10971-016-3974-7>.
- [26] H. D. Dhaygude, S. K. Shinde, M. V. Takale, D. P. Dubal, G. M. Lohar, V. J. Fulari, Electrodeposited nanosphere like Cd<sub>x</sub>Zn<sub>1-x</sub>S electrodes for photoelectrochemical cell, *Journal of Materials Science: Materials in Electronics* 27 (2016) 5145-5152, **DOI:** <https://doi.org/10.1007/s10854-016-4406-8>.
- [27] H. D. Dhaygude, S. K. Shinde, N. B. Velhal, G. M. Lohar, V. J. Fulari, Synthesis and characterization of ZnO thin film by low cost modified SILAR technique, *AIMS Materials Science* 3 (2018) 349-356, **DOI:** 10.3934/mat.2016.2.349.
- [28] G. M. Lohar, S. T. Jadhav, H. D. Dhaygude, M. V. Takale, R. A. Patil, Y. R. Ma, M. C. Rath, V. J. Fulari, Studies of properties of Fe<sup>3+</sup> doped ZnSe nanoparticles and hollow spheres for photoelectrochemical cell application, *Journal of Alloys and Compounds* 653 (2015) 22-31, **DOI:** <https://doi.org/10.1016/j.jallcom.2015.08.208>.

- [29] G. M. Lohar, S. T. Jadhav, M. V. Takale, R. A. Patil, Yuan-Ron Ma, M. C. Rath, V. J. Fulari, Photoelectrochemical cell studies of Fe<sup>2+</sup> doped ZnSe nanorods using the potentiostatic mode of electrodeposition, *Journal of colloid and interface science* 458 (2015) 136-146, **DOI:** <https://doi.org/10.1016/j.jcis.2015.07.046>.
- [30] G. M. Lohar, H. D. Dhaygude, R. A. Patil, Y. Ma, V. J. Fulari, Studies of properties of Fe<sup>2+</sup> doped ZnSe nano-needles for photoelectrochemical cell application, *Journal of Materials Science: Materials in Electronics* 26 (2015) 8904-8914, **DOI:** <https://doi.org/10.1007/s10854-015-3572-4>.
- [31] H. D. Dhaygude, S. K. Shinde, D. P. Dubal, G. M. Lohar, V. J. Fulari, Electrosynthesis of nanoflower like-ZnS thin films and its characterizations, *Journal of Materials Science: Materials in Electronics* 26 (2015) 8563-8567, **DOI:** <https://doi.org/10.1007/s10854-015-3529-7>.
- [32] S. R. Nikam, K. Shinde, D. P. Dubal, G. S. Ghodake, H. D. Dhaygude, B. P. Relekar, G. M. Lohar, V. J. Fulari, Effect of Mn:(CuO/Cu(OH)<sub>2</sub>) Electrodes for Supercapacitors Application, *Advanced Science Letters* 21 (2015) 2590-2593, **DOI:** <https://doi.org/10.1166/193666115816678998>.
- [33] S. K. Shinde, D. P. Dubal, G. S. Ghodake, H. D. Dhaygude, G. M. Lohar, B. P. Relekar, V. J. Fulari, Temperature Dependence of Cationic and Anionic Precursor on Morphological Improvement of CuO Electrodes and Its Consequent Effect on Electrochemical Supercapacitive Properties, *Advanced Science Letters* 21 (2015) 2653-2656, **DOI:** <https://doi.org/10.1166/asl.2015.6400>.
- [34] S. S. Mali, S. K. Shinde, J. R. Mane, A. A. Mane, S. A. Swami, H. D. Dhaygude, G. M. Lohar, B. P. Relekar, V. J. Fulari, Surfactant-Assisted Morphological Modification of Hierarchical CuO Thin Films for Electrochemical Supercapacitors, *Advanced Science Letters* 21 (2015) 2594-2597, **DOI:** <https://doi.org/10.1166/asl.2015.6402>.
- [35] H. D. Dhaygude, B. P. Relekar, S. K. Shinde, G. M. Lohar, U. M. Chougale, V. J. Fulari, Electrochemical Synthesis of Nanorods-Like CdS Electrode for Solar Cell Application, *Advanced Science Letters* 21 (2015) 2641-2644, **DOI:** <https://doi.org/10.1166/asl.2015.6399>.
- [36] J. V. Thombare, G. M. Lohar, S. K. Shinde, S. S. Dhasade, M. C. Rath, V. J. Fulari, Synthesis, characterization and surface wettability study of polypyrrole films: Effect of applied constant current density, *Electronic Materials Letters* 11 (2015) 266-270, **DOI:** <https://doi.org/10.1007/s13391-014-4082-x>.
- [37] G. M. Lohar, J. V. Thombare, S. K. Shinde, B. P. Relekar, H. D. Dhaygude, V. J. Fulari, Hydrophilic semiconducting micro-chip like Cu doped ZnS thin films grown at room temperature, *material science an Indian journal* 12 (2015) 057-062.
- [38] G. M. Lohar, Photoelectrochemical Cell Performance of Electron Beam Irradiated Iron Doped Zinc Selenide Thin Films, *Journal of Shivaji University (Science & Technology)* 41 (2015) 1-3.

- [39] V. J. Fulari G. M. Lohar, TEMPERATURE DEPENDANT PHOTOLUMINESCENCE OF GALVANOSTATICALLY ELECTROSYNTHESIZED ZnSe THIN FILMS, International Journal of Engineering Research 3 (2015) 171-175.
- [40] G. M. Lohar, J. V. Thombare, S. K. Shinde, U. M. Chougale, V. J. Fulari, Preparation and Characterization Iron doped Zinc Selenide Thin Film by Electrodeposition, Journal of Shivaji University (Science and Technology) 41 (2015) 1-3.
- [41] G. M. Lohar, S. K. Shinde, V. J. Fulari, Structural, morphological, optical and photoluminescent properties of spray-deposited ZnSe thin film, Journal of Semiconductors 35 (2014) 113001.
- [42] S. K. Shinde, D. P. Dubal, G. S. Ghodake, D. S. Lee, G. M. Lohar, M. C. Rath, V. J. Fulari, Baking impact of Fe composition on CdSe films for solar cell application, Materials Letters 132 (2014) 243-246, **DOI:** <https://doi.org/10.1016/j.matlet.2014.06.099>.
- [43] G. M. Lohar, S. K. Shinde, M. C. Rath, V. J. Fulari, Structural, optical, photoluminescence, electrochemical, and photoelectrochemical properties of Fe doped ZnSe hexagonal nanorods, Materials Science in Semiconductor Processing 26 (2014) 548-554, **DOI:** <https://doi.org/10.1016/j.mssp.2014.05.047>.
- [44] S. K. Shinde, G. S. Ghodake, D. P. Dubal, G. M. Lohar, D. S. Lee, V. J. Fulari, Structural, optical, and photo-electrochemical properties of marygold-like CdSe<sub>0.6</sub>Te<sub>0.4</sub> synthesized by electrochemical route, Ceramics International 40 (2014) 11519-11524, **DOI:** <https://doi.org/10.1016/j.ceramint.2014.03.063>.
- [45] J. V. Thombare, S. K. Shinde, G. M. Lohar, U. M. Chougale, S. S. Dhasade, H. D. Dhaygude, B. P. Relekar, V. J. Fulari, Optical properties of electrochemically synthesized polypyrrole thin films: the electrolyte effect, Journal of Semiconductors 35 (2014) 063001. **DOI:** <https://doi.org/10.1088/1674-4926/35/6/063001>
- [46] V. J. Fulari G. M. Lohar, J. V. Thombare, S. K. Shinde, B. P. Relekar, M. C. Rath, Optical properties of galvanostatically synthesized hydrophilic Fe doped ZnSe thin films, ASIAN JOURNAL OF PHYSICS 23 (2014) 909-913.
- [47] V. J. Fulari, U. M. Chougale, A. S. Powar, S. V. Tikone, S. K. Shinde, G. M. Lohar, J. V. Thombare, Synthesis and Characterization of Copper doped Cadmium Sulphide Thin Films by Electrodeposition Method, Journal of Shivaji University (Science & Technology) 41 (2014).
- [48] V. J. Fulari. G. M. Lohar, J. V. Thombare, S. K. Shinde, S. H. Han, Structural, photoluminescence and photoelectrochemical properties of electrosynthesized ZnSe spheres, Journal of Materials Science: Materials in Electronics 25 (2014) 1597–1604, **DOI:** <https://doi.org/10.1007/s10854-014-1750-4>.
- [49] S. K. Shinde, J. V. Thombare, G. M. Lohar, D. J. Barad, V. J. Fulari, S. S. Shinde, Galvanostatically deposited Cd<sub>0.7</sub>Fe<sub>0.3</sub>Se electrode for solar cell application, Energy Efficient Technologies for Sustainability (ICEETS), 2013 (2013) 420 – 423, **DOI:** 10.1109/ICEETS.2013.6533419.

- [50] J. V. Thombare, G. M. Lohar, S. K. Shinde, U. M. Chougale, V. J. Fulari, A. B. Kadam, S. S. Dhasade, M. C. Rath, S. H. Han, Studies on electrochemically synthesized polypyrrole (Ppy) thin films for supercapacitor application, Energy Efficient Technologies for Sustainability (ICEETS), 2013 (2013) 1064 – 1067, **DOI:** 10.1109/ICEETS.2013.6533534.
- [51] G. M. Lohar, J. V. Thombare, S. K. Shinde, S. S. Fulari, V.J. More, Photoelectrochemical cell performance of electrodeposited iron doped zinc selenide thin film, Energy Efficient Technologies for Sustainability (ICEETS), 2013 (2013) 411-413, **DOI:** 10.1109/ICEETS.2013.6533417.
- [52] S. K. Shinde, J. V. Thombare, G. M. Lohar, U. M. Chougale, V. J. Fulari, Preparation and characterization of CdSe 0.6 Te 0.4 thin films by electrodeposition method, (2012) 408.
- [53] J. V. Thombare, V. T. Kambale, V. K. Bansode, G. M. Lohar, S. H. Han, V. J. Fulari, Chemical Synthesis of Polypyrrole Thin Films using Ferric nitrate as an Oxidant, Journal of Shivaji University (Science & Technology) 41 2014-2015.

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