

FACULTY PROFILE

1) Name of the Faculty: **Dr. Sarfraj H. Mujawar**

2) Contact Information:

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Phone Number: 9921110811,
Address: Department of Physics,
Rayat Sikshan Sanstha's,
Yashavantrao Chavan Institute of Science,
Karmaveer Bhaurao Patil University, Satara.

3) Personal Information:

Date of Birth: 22/07/1979

4) Professional Affiliation:

Current Position/Designation: Professor and Head
Yashavantrao Chavan Institute of Science,

Name of the Institute/Organization: Rayat Shikshan Sanstha's,
Yashavantrao Chavan Institute of Science,
Karmaveer Bhaurao Patil University,
Satara.

Department/Faculty: Department of Physics, Science and Technology

5) Academic Qualification (Undergraduate Onwards)

Sr. No	Degree	Year	Subject	University/Institution	% of marks
1	Bachlor of Science	2000	Physics	Shivaji University	67
2	Master of Science	2002	Physics	Shivaji University	60
3	Doctor of Philosophy	2008	Physics	Shivaji University	NIL

6) Work Experience (in chronological order)

Sr. No.	Positions held	Name of the Institute	From	To	Pay Scale
1	Assistant Professor	Rayat Shikshan Sanstha's Mahatma Phule Mahavidyalaya, Pimpri, Pune-411017	26/11/2010	June 2018	15600-AGP 7000
2	Associate Professor	Rayat Shikshan Sanstha's Yashwantrao Chavan Institute of Science Satara	11/06/2018	Till date	7 th Pay scale

7) Research Experience:

Sr. No.	Position held	Institution	From	To	Research Focus/Interests
1.	PhD	Shivaji University, Kolhapur	2002	2008	Electrochromic Display Devices
2.	Research Associate	NCL Pune	2008	2009	DSSC Solar Cells
3.	Postdoctoral Fellowship	Chonbuk National University, South Korea.	2009	2010	Polymer Solar Cells

8) Professional Recognition/ Awards/ Prizes/ Certificates/ Fellowships received

Sr.No.	Name of Award	Awarding Agency	Year
1	Excellence in PhD research Award	Shivaji University, Kolhapur	Oct 2006
2	Senior Research Fellow (SRF)	CSIR New Delhi	April 2007
3	Selected As Project Scientist	IIT Kanpur	Dec 2008
4	Project Associate	NCL Pune	Feb 2008
5	University Postdoctorate Fellow	Chonbuk National Univ., S.Korea	Aug 2009

1. International Research Publications:

Sr. No	Publication Details
1.	Designing compositionally driven Cu-NiFe ₂ O ₄ based electrodes for high-performance supercapacitors Journal of Energy Storage, 121563 (2026) Shivashankar Ganiger, LR Naik, SD Jituri, Jyothi S Doddamani, Geeta Chavan, SH Mujawar
2.	Achieving superior supercapacitor performance through synergistic integration of reduced graphene oxide and antimony-doped tin oxide nanostructures Journal of Power Sources, 239334 (2026) Umesh D Babar, Onkar C Pore, Bapuso M Babar, Priyanka P Chavan, Suhas H Sutar, Sarfraj H Mujawar, Ashok D Chougale, Ebrahim Alhajri, Nilesh R Chodankar, Pradip D Kambl
3.	The Advancement of the Electrochromic Supercapacitor Properties of Interface-Engineered Hybrid Polyaniline/Prussian Blue Thin-Film Electrodes Polymers, 583 (2026) Suhas H Sutar, Vinayak S Jadhav, Dhanaji S Dalavi, Supriya A Patil, Sejoon Lee, Sangeun Cho, Deepak R Patil, Nabeen K Shrestha, Sarfraj H Mujawar, Akbar I Inamdar
4.	Extrinsic Pseudocapacitive Ternary NiMoO ₄ -rGO@V ₂ O ₅ Nanocomposite for Hybrid Supercapacitor Batteries & Supercaps, e202500423 (2026). Digambar S Sawant, Shubham Patil, Mahesh Chougale, Abhishek Kulkarni, Niroshan Manoharan, Akash Fulari, Sarfraj Mujawar, Shrinivas B Kulkarni, Gaurav M Lohar
5.	Recent Progress of Vanadium Oxide and its Hybrid Composites-Based Electrochromic Supercapacitors: An Advanced Future Energy Storage Technology Small 21 (50), e09336 (2025). Akbar I Inamdar, Supriya A Patil, Sarfraj H Mujawar, Amol S Salunke, Suhas H Sutar, Nabeen K Shrestha, Sejoon Lee, Sangeun Cho.
6.	Temperature-dependent structural tuning of flower-like NiFe ₂ O ₄ nanostructures as simplistic electrocatalyst for oxygen evolution reaction toward alkaline water splitting. Journal of Physics and Chemistry of Solids 203, 112711(2025). Sushama M Nikam, Shubham D Jituri, Shamal R Shingte, Prashant B Patil, Shoyebmohamad F Shaikh, HM Pathan, Akbar I Inamdar, Sarfraj H Mujawar
7.	Capacity and colour tunability of the electrochromic-supercapacitor electrode based on highly dense rGO-NiO composite nanoflakes. Journal of Power Sources 644, 237089 (2025). Suhas H Sutar, Sushama M Nikam, Apparao A Mane, Akbar I Inamdar, Sarfraj H Mujawar
8.	Binder free vanadium pentoxide by ammonium metavanadate for supercapacitor application. Materials Science and Engineering: B 316, 118118(2025). PG Pawar, Bidhan Pandit, Abdullah M Al-Enizi, SH Sutar, HM Pathan, SH Mujawar, SJ Pawar

9.	Hydrothermally synthesized nickel cobalt layered double hydroxide for efficient oxygen evolution reaction and supercapacitor applications. Journal of Physics and Chemistry of Solids, 112860(2025). PS Yadav, NS Yadav, SD Jituri, KB Pisal, Prashant B Patil, Sawanta S Mali, Jyoti V Patil, Chang Kook Hong, Hyunsik Im, Akbar I Inamdar, SH Mujawar
10.	Dendrite like nanorod bundles of cobalt phosphate electrodes for efficient water splitting and energy storage applications. Journal of Physics and Chemistry of Solids, 112808(2025). Sushama M Nikam, Suhas H Sutar, Akbar I Inamdar, Sarfraj H Mujawar
11.	Annealing-mediated tuning of sol-gel synthesized CoFe ₂ O ₄ nanoparticles for supercapacitor. Nanomaterials and Energy 14 (1), 15-23(2025). Shamal Rajendra Shingte, Tukaram D Dongale, Chithra Manisseri, Subasa C Sahoo, Sachin J Pawar, Sarfraj H Mujawar, Ashok D Chougale, Prashant B Patil
12.	Development of binary rose-like CuCo ₂ O ₄ nanoarchitecture via novel chemical route for electrochemical supercapacitor application. Materials Science and Engineering: B 313, 117976(2025). VA Kadam, VL Patil, RP Bhosale, SH Mujawar, AP Torane, LD Kadam
13.	Antimony-modified tin oxide nanoparticles: hydrothermal synthesis for high-performance supercapacitor electrodes. Carbon Letters, 1-14(2025). Umesh D Babar, Bapuso M Babar, Onkar C Pore, Priyanka P Chavan, Suhas H Sutar, Sarfraj H Mujawar, Ashok D Chougale, Amar M Patil, Seong Chan Jun, Ebrahim Alhajri, Nilesh R Chodankar, Pradip D Kamble
14.	Porous cauliflower-like nanoarchitectures of NiMn-layered double hydroxide as a promising electrode for oxygen evolution reaction and supercapacitor applications. Electrochimica Acta 513, 145544(2025). SD Jituri, SM Nikam, TS Bane, Akbar I Inamdar, SH Mujawar.
15.	Recent advances of spinel CuCo ₂ O ₄ in different Structural dimensions (0D-3D) for an electrochemical supercapacitor device: A short research review. Journal of Alloys and Compounds 1010, 177581(2025). VA Kadam, VL Patil, Sarfraj H Mujawar, AP Torane, LD Kadam
16.	Supercapacitor performance of vanadium oxide nanostructures synthesized by spray pyrolysis technique. ES Energy & Environment 28, 1343(2024). PG Pawar, AV Ghorpade, SM Nikam, SH Mujawar, SJ Pawar
17.	Diffusion and capacitive controlled surfactant assisted vanadium-doped nickel hydroxide nanostructures for supercapacitor applications Ionics 30 (12), 8393-8401(2024). DB Mane, DV Rupnawar, KS Nikam, RD Ghatage, PR Shedage, SH Mujawar, LD Kadam, RV Dhekale, GM Lohar

18.	CoFe ₂ O ₄ nanoparticle embedded carbon nanofibers: A promising non-noble metal catalyst for oxygen evolution reaction International Journal of Hydrogen Energy 92 , 1099-1107(2024). TP Kamble, SR Shingte, VD Chavan, Deok-Kee Kim, SH Mujawar, TD Dongale, PB Patil
19.	Electrochemical and impedance analysis of nickel oxide nanoflakes-based electrodes for efficient chromo-supercapacitors Electrochimica Acta 498 , 144614(2024). Suhas H Sutar, Sushant B Patil, Love Bansal, Shivaji B Sadale, Rajesh Kumar, Sarfraj H Mujawar
20.	Heterostructured NiMo-sulfide micro-pillar arrays for advanced alkaline electrocatalytic clean hydrogen production via overall water splitting Applied Surface Science 661 (2024): 160081(2024). Sarfraj H. Mujawar, Amol S Salunke, Ramesh J Deokate, Shrikrishna T Salunke, Nabeen K Shrestha, Hyunsik Im, Akbar I Inamdar
21.	Iron-hydroxide controlled by cobalt and aluminium as an advanced electrocatalysts for overall water splitting and its temperature dependence Journal of Alloys and Compounds 989 (2024): 174334. Amol S Salunke, Ramesh J Deokate, Shrikrishna T Salunke, Sarfraj H Mujawar, Nabeen K Shrestha, Hyunsik Im, Akbar I Inamdar
22.	Electrochemical and Impedance Analysis of Nickel Oxide Nanoflakes-based Electrodes for Efficient Chromo Supercapacitors Electrochimica Acta (2024): 144614 Suhas H Sutar, Sushant B Patil, Love Bansal, Shivaji B Sadale, Rajesh Kumar, Sarfraj H Mujawar
23.	Carbon quantum dots decorated NiCo layered double hydroxide for electrochemical oxygen evolution reaction and supercapacitor application Journal of Materials Science: Materials in Electronics 35 , no. 15 (2024): 1037 D.A. Wadkar, KB Jadhav, SD Jituri, SH Mujawar.
24.	Enhanced Photodegradation of Methylene Blue Using Reusable Cobalt Ferrite Nanocomposites Science of Advanced Materials . 2024 May 1;16(5):589-95. Rupali Chavan, Sarfraj Mujawar, Vishal Dawkar, Vishalkumar More, Nilesh Pawar, Rahul Patil, Jyoti Jadhav, Jawed Mustafa, Basrat Jameel, Hasan MH Muhaisen, Ayeda YA Mohammed, Ashok Chougale
25.	Robust and durable Li-ion batteries fabricated by using lead-free crystalline M ₂ NiMnO ₆ (where M= Eu, Gd, Tb) double perovskites Cryst Eng Comm (2024). Kiran Shinde, Harish S Chavan, Sarfraj H Mujawar, Amol Shrikrishna Salunke, Abu Talha Aqueel Ahmed, Nabeen K Shrestha, Joon Sik Park, Hyunsik Im, A Inamdar
26.	Electrodeposited Tungsten Trioxide (WO ₃) Thin Films for Electrochromic Applications. Chemsci. Advances (2024) P. S. Chavan, P.S. Shedde, S.S. Deshmukh, R. R. Bhandalkar, S.H. Sutar, S. H. Mujawar
27.	Feasibility of nickel oxide as a smart electrochromic supercapacitor device: A review Journal of Energy Storage 73 , 109035 (2023). S.H. Sutar, B.M .Babar, K.B. Pisal, A.I. Inamdar, S.H. Mujawar.

28.	V2O5-rGO based chemiresistive gas sensor for NO2 detection. Materials Science and Engineering: B 298, 116827 (2023). B.M. Babar, S.H. Sutar, S.H. Mujawar, S.S. Patil, U.D. Babar, U.T. Pawar, P.M. Kadam, P.S. Patil, L.D. Kadam
29.	Chemically synthesized ZnFe2O4 electrodes for electrochemical oxygen evolution reaction and supercapacitor applications. Journal of Materials Science: Materials in Electronics 34 (27), 1842 (2023). S.D. Jituri, R.P. Nikam, V.J. Mane, S.B. Shaikh, C.D. Lokhande, S.H. Mujawar
30.	Gel entrapped ZnO nanorods: An efficient and sustainable catalyst for the Claisen-Schmidt condensation reaction in aqueous hydrotropic media. Molecular Catalysis 542, 113120(2023). S.R. Attar, A.C. Sapkal, C.S. Bagade, S. H. Mujawar, S. B. Kamble
31.	Supercapacitor performance of vanadium-doped nickel hydroxide microflowers synthesized using the chemical route. Applied Physics A 129 (2), 158(2023). D.B. Mane, O.C. Pore, D.S. Sawant, D.V. Rupnavar, R.V. Shejwal, S.H. Mujawar, L.D. Kadam, R.V. Dhekale, G.M. Lohar
32.	MoS2 nanosheets as bifunctional electrode for oxygen evolution reaction and electrochemical supercapacitor. International Journal of Energy Research 46 (13), 18312-18327(2022). Komal B Pisal, Bapuso M Babar, Sarfraj H Mujawar, Sawanta S Mali, Chang Kook Hong, Shrikrishna D Sartale, Laxman D Kadam.
33.	Photoelectrochemical properties of nanoflake like cadmium sulfide sensitized Zn2SnO4 thin film electrodes prepared by chemical methods. International Journal of Energy Research 46 (12), 17706-17713 (2022). M.A. Patil, H.P. Deshmukh, P.S. Patil, S.H. Mujawar, H. Im, A.I. Inamdar
34.	Structural, morphological and optical attributes of ZnO thin films deposited via spray pyrolysis process: Impact of molarity variation. IOP Conference Series: Materials Science and Engineering 1258 (1), 012012 (2022). S.V. Nikam, B.T. Jadhav, S.M. Chivate, S.M. Nikam, S.H. Mujawar, A.P. Torane
35.	Effect of Pd sensitization on gas-sensing performance of vanadium pentoxide-reduced graphene oxide composite. Journal of Materials Science: Materials in Electronics 33 (25), 19884-19900 (2022). BM Babar, SH Mujawar, PV Mane, PM Kadam, PS Patil, L. D. Kadam.
36.	Effect of time and temperature on adsorption of persulphate ions for developing 2D nanosheets to 3D microflowers for development of γ nickel hydroxide and its supercapacitor Applications. Applied Physics A 128 (7), 611 (2022). D.B. Mane, O.C. Pore, R.K. Kamble, D.V. Rupnavar, S.H. Mujawar, L.D. Kadam, R.V. Dhekale, G.M. Lohar
37.	High stability Mn2O3/MnCO3 microcubes synthesized by hydrothermal method for supercapacitor application. Materials Science in Semiconductor Processing 143, 10655 (2022). O.C. Pore, A.V. Fulari, S.H. Mujawar, R.V. Shejwal, V.J. Fulari, G.M. Lohar

38.	Electrodeposited bimetallic microporous MnCu oxide electrode as a highly stable electrocatalyst for oxygen evolution reaction. <i>International Journal of Energy Research</i> 46 (4), 5269-5279 (2022). Ramesh J. Deokate, Harish S. Chavan, Suraj C. Bulakhe, Sachin B. Tanwade, Sarfraj H. Mujawar, Sawanta S. Mali, Chang Kook Hong, Hyunsik Im, Akbar I. Inamdar.
39.	Hydrothermally Prepared Vanadium Oxide Nanostructures for Photocatalytic Application. <i>ES Energy & Environment</i> 15, 82-91, (2022). Prakash M. Kadam and Pramod S. Patil Bapuso M. Babar, Komal B. Pisal, Suhas. H. Sutar, Sarfraj H. Mujawar, Laxman D. Kadam, Habib M. Pathan, Udayraj T. Pawar.
40.	Concentration modulated vanadium oxide nanostructures for NO ₂ gas sensing. <i>Sensors and Actuators B: Chemical</i> 351, 130947 (2022). B.M. Babar, K.B. Pisal, S.H. Mujawar, V.L. Patil, L.D. Kadam, U.T. Pawar, P.M. Kadam, P.S. Patil.
41.	Overview of molybdenum disulfide-based electrodes for supercapacitors: A short review. <i>Journal of Energy Storage</i> 43, 103297 (2021). KB Pisal, BM Babar, SH Mujawar, LD Kadam
42.	Effect of Annealing Temperature on Morphologies of Metal Organic Framework Derived NiFe ₂ O ₄ For Supercapacitor Application. <i>Journal of Energy Storage</i>, 40, 102821, 2021. P.D. Patil, S.R. Shingte, V.C. Karade, J.H. Kim, T.D. Dongale, S.H. Mujawar , A.M. Patil, P.B. Patil.
43.	Synthesis and Characterization of Hydrothermally Prepared Molybdenum Disulfide for Supercapacitor Application. <i>Materials Today: Proceedings</i>, 43, 2707-2710, 2021. K.B. Pisal, A.S. Thorat, S.S. Jagtap, P.K. Pagare, S.H. Mujawar, L.D. Kadam.
44.	Fast Response and Highly Selective Nitrogen Dioxide Gas Sensor Based on Zinc Stannate Thin Films. <i>Materials Science for Energy Technologies</i>, 3, 36-42, 2020. Sarfraj H. Mujawar , Mahendra A. Patil and Harish P. Deshmukh.
45.	Chalcogenide Nanocomposite Electrodes Grown by Chemical Etching of NiO Foam as Electrocatalyst for Efficient Oxygen Evolution Reaction. <i>International Journal of Energy Research</i>, 44 (2), 1233-1243, 2020. Ramesh J. Deokate, Sarfraj H. Mujawar , Harish S. Chavan, Sawanta S. Mali, Chang Kook Hong, Hyunsik Im, Akbar I. Inamdar.
46.	Pulse Laser Deposited COFeO ₄ Thin films as supercapacitor electrode. <i>RSC Advances</i> 10 (33), 19353-19359, 2020. S.M. Nikam, A. Sharma, M. Rahaman, A.M. Teli, S.H. Mujawar , D.R.T. Zahn, P.S. Patil, S.C. Sahoo, G. Salvan, P.B. Patil.
47.	Electrochromic Properties of Layered Nb ₂ O ₅ -WO ₃ Thin Films. <i>Materials Today: Proceedings</i>, 23, 430-436, 2020. S. H. Mujawar, B. B. Dhale, P. S. Patil.

48.	Hydrothermal Synthesis of β -Ni(OH) ₂ and its Supercapacitor Properties <i>AIP Conference Proceedings</i> 1942 (1), 140059, 2018. Suraj S. Waghmare, Prashant B. Patil, Shiva K. Baruva, Madhuri S. Rajput, Ramesh J. Deokate, Sarfraj H. Mujawar .
49.	Enhanced NO ₂ Response of Hydrothermally Grown Ti doped WO ₃ Nanostructures <i>Journal of Materials Science: Materials in Electronics</i>, 28 (2), 1612-1619, 2017. V. B. Patil, N. L. Tarwal, S. H. Mujawar , I. S. Mulla, P. S. Walke, S. S. Suryavanshi.
50.	Electrochromic Properties of Copper Oxide (I) Thin Films <i>Energy and Environment Focus</i> 5 (3), 195-199, 2016. B.B. Dhale, S.H. Mujawar, H.P. Deshmukh, P.S. Patil.
51.	Synthesis and Characterization of Zinc Stannate Thin Films by Spray Pyrolysis Technique. <i>Journal of Materials Science: Materials in Electronics, Special Issue</i>, 1-6, 2016. Mahendra A. Patil, Sarfraj H. Mujawar , Vinayak V. Ganbavle, Kesu Y. Rajpure, Harish P. Deshmukh.
52.	The Preparation of Zinc Oxide Thin Films and Their Electrical and Optical Properties <i>Int. Journal of Emerging Research in Management & Technology</i>, 4, 207-212, 2015. B. B. Dhale, S. H. Mujawar , H. P. Deshmukh, P.S. Patil.
53.	Photoluminescence and Photo-electrochemical Properties of The Spray Deposited Copper Doped Zinc Oxide Thin Films. <i>Ceramics International</i>, 40, 7669-7677, 2014. N.L. Tarwal, K.V. Gurav, S.H. Mujawar , S.B. Sadale, K.W. Nam, W.R. Bae, A.V. Moholkar, J.H. Kim, P.S. Patil, J.H. Jang.
54.	Graphene Based Composites as a Counter Electrode for Dye-Sensitized Solar Cells <i>Current Applied Physics</i>, 12, 49- 53, 2012. T. Battumur, Sarfraj H. Mujawar , Swapnil B. Ambade, Wonjee Lee, Sung-Hwan Han, Soo-Hyoung Lee.
55.	The Influences of Complexing Agents on Growth of Zinc Oxide Thin Films from Zinc Acetate Bath and Associated Kinetic Parameters. <i>International Journal of Electrochemical Science</i>, 2, 797, 2007. A.I. Inamdar, S.H. Mujawar , P.S. Patil.
56.	Electropolymerization of Polyaniline on Titanium Oxide Nanotubes for Supercapacitor Application. <i>Electrochimica Acta</i> 56, 4462-4466, 2011. Sarfraj H. Mujawar , Swapnil B. Ambade, T Battumur, Rohan B. Ambade, Soo-Hyoung Lee.
57.	High Efficiency Polymer Solar Cells via Sequential Inkjet-Printing of PEDOT:PSS and P3HT:PCBM Inks with Additives. <i>Organic Electronics</i>, 11, 1516, 2010. Seung Hun Eom, Hanok Park, S.H. Mujawar , Sung Cheol Yoon, Seok-Soon Kim, Seok-In Na, Seok-Ju Kang, Dongyoon Khim, Dong-Yu Kim, Soo-Hyoung Lee.

58.	Electrochromism in Composite WO ₃ –Nb ₂ O ₅ Thin Films Synthesized by SprayPyrolysis Technique. <i>Journal of Applied Electrochemistry</i> 41 (4), 397-403. S.H. Mujawar, A.I. Inamdar, C.A.Betty, R.C. Korošec, P.S. Patil.
59.	Strong Photo-response in a Flip-Chip Nanowire p-Cu ₂ O/n-ZnO Junction <i>Nanoscale</i> 3 (11), 4706-4712 M. Deo, S. Mujawar, O. Game, A. Yengantiwar, A. Banpurkar, S. Kulkarni.
60.	Spray Deposited Titanium Oxide Thin Films as Passive Counter Electrodes. <i>Electrochimica Acta</i>, 52, 3114, 2007. P.S. Shinde, H.P. Deshmukh, S.H. Mujawar , A. I. Inamdar, P. S. Patil.
61.	Effect of Post Annealing Treatment on Electrochromic Properties of SprayDeposited Niobium Oxide Thin Films. <i>Electrochimica Acta</i> 52, 4899, 2007. S. H. Mujawar , A. I. Inamdar, C. A . Betty, V Ganesan, P. S. Patil.
62.	Electrodeposited Zinc Oxide Thin Films: Nucleation and Growth Mechanism <i>Solar Energy Materials and Solar Cells</i>, 91, 864, 2007. A. I. Inamdar, S. H. Mujawar , S. B. Sadale, A. C. Sonavane, M. B. Shelar, P. S. Shinde, P. S. Patil.
63.	Electrochemical Investigations on Spray Deposited Tin Oxide Thin Films. <i>Solar Energy Materials and Solar Cells</i>, 91, 256, 2007. P. S. Patil, P.S. Chigare, S.B. Sadale, S.H. Mujawar , P.S. Shinde.
64.	Synthesis of Electrochromic Tin Oxide Thin Films with Faster Response by SprayPyrolysis. <i>Applied Surface Science</i>, 253, 129, 2007. P.S. Patil, S.B. Sadale, S.H. Mujawar , PS Shinde, PS Chigare.
65.	Structural, Optical and Electrochromic Properties of Nickel Oxide Thin FilmsGrown from Electrodeposited Nickel Sulphide. <i>Applied Surface Science</i>, 253, 9365, 2007. M.M. Uplane, S. H. Mujawar , A. I. Inamdar, P. S. Shinde, A. C. Sonavane, P. S. Patil.
66.	Effect of Film Thickness on Electrochromic Activity of Spray Deposited IridiumOxide Thin Films. <i>Materials Chemistry and Physics</i>, 99, 101, 2006. P.S. Patil, S.H. Mujawar , S.B. Sadale, H.P Deshmukh, A.I Inamdar.
67.	Enhanced Conversion Efficiency in Dye-Sensitized Solar Cells Based onHydrothermally Synthesized TiO ₂ - MWCNT Nanocomposites. <i>ACS Applied Materials and Interfaces</i>, 1, 2030, 2009. Subas Muduli, Wonjoo Lee, Vivek Dhas, Sarfraj Mujawar , Megha Dubey, Vijayamohanan, Sung-Hwa Han, Satishchandra Ogale.

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69.	Concentration Dependent Structural, Optical and Electrochromic Properties of MoO ₃ Thin Films. <i>International Journal of electrochemical science. 3, 512, 2008.</i> S.S. Mahajan, S.H. Mujawar , P.S. Shinde, A.I. Inamdar, P.S. Patil.
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73.	Electrochromic Properties of Spray-Deposited Niobium Oxide Thin Films. <i>Solid State Ionics, 177, 3333, 2006.</i> S. H. Mujawar , A.I. Inamdar, S.B. Patil, P.S. Patil.
74.	Properties of Spray Deposited Niobium Oxide Thin Films. <i>Journal of Materials Science Materials in Electronics. 16, 35, 2005.</i> P.S. Patil, A.R. Patil, S.H. Mujawar , S.B. Sadale.
75.	Electrochromic Properties of Spray Deposited TiO ₂ - Doped WO ₃ Thin Films. <i>Applied Surface Science, 250, 117, 2005.</i> P.S. Patil, S.H. Mujawar , A. I. Inamdar, S. B. Sadale.
76.	Structural, Electrical and Optical Properties of TiO ₂ Doped WO ₃ Thin Films. <i>Applied Surface Science 252, 1643, 2005.</i> P. S. Patil, S.H. Mujawar , A. I. Inamdar, P. S. Shinde, H. P. Deshmukh, S. B. Sadale.

2. Details of Patents:

Sr. No.	Title of the Invention and Inventor /s	Patent No	Status
1	Automated Fingerprint Taking Kit Mr. Shambhuraj Salunkhe, Mr. Pratik Bartakke, Mr. Shubham Jituri, Mr. Vikram Hankare, Dr. Sarfraj Mujawar, Mr. Gaurav Varade, Dr. Anita Mali	401078-001	Granted (2024)
2	Modified Mixer Vessel Lid for Efficient Grinding Miss. Divya Wadkar, Mr. Shubham Jituri, Dr. Sarfraj Mujawar, Dr. Appasaheb Torane, Dr. Bharat Jadhav	401085-001	Granted (2024)
3	Forest Animals Panic Sound Detector Dr. Sharadkumar Mallikarjun Nimbale, Dr. Bharat Tayappa Jadhav, Mr. Satish Ankush Doke, Mr. Shubham Dwarkesh Jituri, Dr. Sarfraj Hisamuddin Mujawar	409602-001	Granted (2025)
4	Automatic Dispenser Om Dipak Kadam, Shubham Jituri , Sarfraj Mujawar	419436-001	Granted (2024)
5	Wildlife Trace Scanner Vishwatej Bhimrao Gade, Gaurav Ashok Varade, Dhananjay Nanaji Gaikwad, Sharadkumar Mallikarjun Nimbale, Shubham Dwarkesh Jituri, Dr. Sarfraj Mujawar	419392-001	Granted (2024)
6	Lpg Gas Sensor Mr. Arif Dastagir Shaikh, Dr. Aniruddh Arun Mohite, Mr. Shubham Dwarkesh Jituri, Dr. Pavan Karbhari Pagare, Dr. Sarfraj Hisamuddin Mujawar, Mr. Kiran Vinayak Madhale.	421317-001	Granted (2024)
7	Highly Efficient Dye-Sensitized Solar Cells Using Tio₂-Multiwalled Carbon Nanotube (MWCNTs) Nanocomposite Subas Kumar Muduli, Vivek Vishnu Dhas, Sarfraj Hisamuddin Mujawar , Satishchandra Ogale	US 2012/0012177 A1	Published (2012)

8	A method of preparation of lanthenum strontium manganite doped ammonium zinc phosphate-based electrode for supercapacitor application Minaj M. Faras, Namrata J. Kamble, A. A. Mohite, Dr. S. H. Mujawar, Prof. Dr. A. P. Torane, Dr. B. T. Jadhav.	202221069654	Published
9	Metal oxide composite comprising Lanthanum Strontium Tungsten Nanoparticles by solution combustion synthesis method for NO₂ gas sensing application Mr. A. A. Mohite, Mr. K. V. Madhale, Dr. S. H. Mujawar, Prof. Dr. A. P. Torane, Prof. Dr. B.T. Jadhav	202221070834	Published
10	Metal Organic Framework Derived Cobalt Phosphate Synthesized by SILAR for Oxygen Evolution Reaction Application Miss. Sushama M. Nikam, Mr. Shubham D. Jituri, Mr. Suhas H. Sutar, Dr. Sarfraj H. Mujawar	202321090212	Published
11	A Method for Synthesis of Carbon Quantum Dot Decorated Nickel Cobalt Layered Double Hydroxide Electrocatalyst for Oxygen Evolution Reaction. Mr. Shubham D. Jituri, Miss. Miss Divya A. Wadkar, Miss. Sushama M. Nikam, , Mr. Suhas H. Sutar, Dr. Sarfraj H. Mujawar	202421002826	Granted
12	A Method for Synthesis of Reduced Graphene Oxide- Nickel Oxide Nanoflakes Composite Electrode for Electrochromic Supercapacitor Application Mr. Suhas H. Sutar, Mr. Shubham D. Jituri, Miss. Sushama M. Nikam, Dr. Sarfraj H. Mujawar	202421013237	Published

3. Books/Reports/Chapters/General articles etc.

S. No	Title	Publisher	Year
1	Electrochromism in Niobiathin films: A status Review for the Photo/Electrochemistry& Photobiology in the Environment Energy and Fuel Dr. S. H. Mujawar and Dr. P. S. Patil	Research Signpost, T.C.37/661(2), Fort Post Office, Trivandrum695023, Kerala, India	2007
2	Electrochromism in Pristine andDoped Niobium Oxide Thin Films. Dr. S. H. Mujawar and Dr. P.S. Patil	LAP LambertAcademic Publishing (UK)	2016
3	Recent Trends in Materials for Advanced Technologies Dr. S. H. Mujawar	Aavishkar Publications, Pune	2022

4. Research Projects Completed:

Sr. No.	Title of Project	Duration	Amount Sanctioned (in Lakhs)	Agency	Status (Ongoing/ Completed)
Major Research Project					
1	Synthesis and Characterization of Functional Nanomaterials for Solar Cells	2015-18 3 Years	14.50 Lakhs	UGC, New Delhi	Completed
Minor Research Project					
2	Electrochemical Approach Towards Fabrication of One-Dimensional Architecture for Photo-electrochemical Solar Cells	2011-13 2 Years	3.00 Lakhs	BCUD Pune University	Completed
3	Nano Tube/Graphene Based Transparent and Conducting Thin Films By Spray Pyrolysis Technique	2017-19 2 Years	2.00 Lakhs	BCUD Pune University	Completed
5	Synthesis and Characterization Thin Films for Solar Cells Application.	2018-2019	50,000/-	YCIS Satara	Completed

6	Green Synthesized Noble Metal Nanoparticles for Antifungal, antimicrobial and Agricultural application	2021-2022	2.00 Lakhs	YCIS Satara	Completed
7	IOT Platform for Strawberry Farming	2022-2024	50,000/-	YCIS Satara	Completed

(Dr. Sarfraj H. Mujawar)