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Personal details:

- ◆ Date of birth: 19 April 1976
- ◆ Citizenship: Indian

Education:

- ◆ **Ph.D.**, Feb. 2002, Major in Thin Film Physics, Shivaji University, Kolhapur, India
- ◆ **M.Sc.** Jun. 1998, Major in Physics - Applied Electronics, Shivaji University, Kolhapur, India

Professional Experience:

- ◆ **Professor** (April 2008 - till date), Savitribai Phule Pune University, Pune, India
- ◆ **NIMS research Fellow** (July 2007-April 2008) National Institute for Materials Science, Japan
“Fabrication and investigation of MIM structure for nanoelectronics applications”
- ◆ **Post-doctorate Fellow** (July 2004-July 2007) National Central University, Taiwan
“Growth of metal nanoclusters supported on oxide surface as a model catalyst”
- ◆ **Alexander von Humboldt Fellow** (July 2003-July 2004) Hahn-Meitner Institut, Germany
“Chemical and electrochemical processes for solar cell applications”
- ◆ **Research Project Fellow** (June 2000-July 2001) Shivaji University, Kolhapur, India
“Preparation and characterization of nanocrystalline group II-VI thin films”.

Administrative Responsibilities:

- Member of Board of Studies, Physics, Solapur University, Solapur & YCIS, Satara, India

Memberships:

- ◆ American Association for the Advancement of Science ◆ Member: Institute of Physics, London, UK.
- ◆ NIMS Alumni, Japan
- ◆ Life Member: Chemical Research Society of India
- ◆ Life Member: Indian Association of Physics Teachers
- ◆ Life Member: The Indian Science Congress Association
- ◆ Life Member: Indian Society for Surface Science and Technology
- ◆ Life Member: Indian Physics Association
- ◆ Life Member: Materials Research Society of India
- ◆ Life Member: Indian Society for Materials Chemistry

Honors and Awards:

- ◆ Fellow of Engineered Science Society, USA, 2022
- ◆ Fellow of Maharashtra Academy of Sciences (FMASc), 2021
- ◆ Fellow of the Indian Chemical Society (FICS), 2020
- ◆ Japan Society for Promotion of Science (JSPS) Fellow (2007)
- ◆ Selected and attended Noble Laureate Meeting, Lindau, Germany (2004)
- ◆ Alexander von Humboldt Fellow, Germany (2003)
- ◆ Guest Editor, Journal of Nanotechnology Volume 2012, 2012

Research interest: Thin Films Science, Surface and interface science, NanScience and technology

RESEARCH GUIDANCE

Post-Doc

Sr. No.	Name	Name of the Fellowship	Title of the work	Duration
1	Punam A. Jadhav	CSIR Senior research Fellow (SRF)	Chemically synthesized ferroelectric gas sensors	11/06/2009-13/08/2010
2	Dr. Avinash V. Rokade	Savitribai Phule Pune University SPPU- Postdoctoral Fellowship	Transition Metal-Chalcogenides Nanostructure Based Electrodes: Synthesis, Modification, and Device Fabrication for Hybrid Supercapacitor Application	18/10/2021-18/10/2023

Ph. D. Guidance

Sr. No.	Name of the Student (Role)	Title of the work	Status
1	Abu Saad Ansari (Guide)	Growth of metal nanoparticles on oxide thin film by spin-coating technique as a model catalyst	Awarded 28/01/2016
2	Sanjay B. Kokane (Guide) Co-guide: Dr. R. Sasikala	Development of Heterojunction Photocatalyst for Hydrogen Generation and Dye Degradation Applications	Awarded 30/12/2017
3	Shreelekha N. Khatavkar (Guide)	Synthesis, Characterization and Supercapacitive study of iron oxide and copper oxide thin films by Liquid Phase Deposition	Awarded 27/08/2019
4	Ravi Vinayak Ingle (Co-Guide) Guide: Dr. H. M. Pathan	Optical and Electronic properties of Colloidal solution of Cadmium Sulfide for its Solar Cell Application Prospective	Awarded 09/11/2020
5	Mangesh A. Desai (Guide)	Hybrid nanostructures for energy applications	Awarded 19/07/2021
6	Amol Suhas Vedpathak (Co-guide) Guide: Dr. Sunita Bhagwat	Transition metal oxide-based nanostructures: Green synthesis and energy storage applications	Awarded 25/04/2023
7	Imran Shaikh (Guide)	Growth of Silver Nanoparticles by Spin Coating and SILAR methods for SERS Application	Awarded 11/12/2023
8	Akshay N. Vyas (Guide)	SILAR grown metal (Ni, Pd and Au) nanoparticles for ethanol electrooxidation	Thesis submitted
9	Smita M. Yadav (Guide)	Synthesis and characterization of g-C ₃ N ₄ based Photocatalysts for Dye Degradation Application	Thesis submitted
10	Mohd. Abdul Haque Farooque Ah. (Guide)	Single Quantum Dot Blinking and Spectroscopy	Thesis submitted
11	Vishnu Mohan Gore (Guide)	Ion-exchange route for hybrid nanostructures for energy applications	Working
12	Reshma Dattatraya Jadhav (Guide)	Optical and electrical studies of nanostructures in conjunction with liquid crystals	Working
13	Tanuja Nagnath Shinde (Guide)	Development of oxide-based nanomaterials for efficient energy storage devices	Working
14	Nazmeen Akhtar Sayyed (Guide)	Investigation of Metal Nanomaterials for Electrocatalysis Applications	Working
15	Swapnali Vijay Waghmare (Guide)	Metal Phosphate Based Nanoarchitecture For Energy Applications	Working

M. Phil. Guidance

Sr. No.	Name of the Student	Title of the work	Status
1	Abu Saad A. Ansari	Studies on sputter deposited titanium dioxide thin films	Awarded (05/04/2010)
2	Ashwini Baburao Roham	Growth of nanoparticle by spin coating technique	Awarded (06/07/2012)
3	Akshay Nandkishor Vyas	Deposition of molybdenum disulphide thin films by successive ionic layer adsorption and reaction method	Awarded (28/03/2014)
4	Smita M. Yadav	Chemical synthesis of nanocrystalline ceria	Awarded (28/04/2014)
5	Mangesh Appasaheb Desai	Engineering surface morphology of modified SILAR grown ZnO nanostructures	Awarded (06/07/2015)
6	Somnath Raghunath Bhopale	Spin coated zirconia thin films for MOS device	Awarded (08/12/2015)
7	Swamini Ashok Zaware	Deposition and characterization of CdS thin film by spin-SILAR method	Awarded (10/05/2016)
8	Shaikh Imran Shaikh Mukhtar	Growth of Ag nanoparticles for SERS application	Awarded (01/03/2017)
9	Rohit Ramdas Shendkar	Understanding chemical deposition of semiconductor thin films	Awarded (29/12/2017)
10	Mohini Rajendra Nashikkar	Mechanochemical synthesis of CdZnS nanoparticles	Awarded (22/02/2018)
11	Anuja Abdule	Deposition and characterization of Silver sulfide thin films by spin-SILAR method	Awarded (19/10/2019)

RESEARCH PROJECTS

Sr. No.	Title of the Project	Investigators	Funding Agency	Duration	Amount (Rs.)	Remark
1.	Studies on nanocrystalline ceria prepared by chemical method	PI: Dr. S. D. Sartale Co-PI: Dr. H. M. Pathan	BCUD, Univ. of Pune	Oct. 2009 to Sept. 2011	₹2,00,000	Completed
2.	Deposition of layered transition metal chalcogenides thin films by SILAR method for their tribological applications	PI: Dr. S. D. Sartale Co-PI: Dr. H. M. Pathan	ISRO-UoP Technology Cell, Univ. of Pune	2 Years	₹7,00,000	Completed
3.	Growth of metal nanoparticles on oxide thin film by spin-coating technique as a model catalyst	PI: Dr. S. D. Sartale Co-PI: Dr. H. M. Pathan Co-PI: Dr. V. L. Mathe	CSIR, India	4 Years June 2010 to June 2014	₹22,00,400	Completed

4.	Understanding the growth mechanism of cadmium zinc sulfide thin films deposited by novel chemical bath deposition method	PI: Dr. S. D. Sartale	UGC, India	3 years 24 August 2012 to 24 August 2015	₹12,99,800	Completed
5.	Nanocomposite photocatalysts for environmental cleaning application	Dr. S. D. Sartale (PI/Guide) Dr. R. Sasikala (Co-guide)	BRNS, India (University of Pune, BARC joint Ph.D. program)	5 years Oct. 2012 to Oct. 2017	₹15,62,000	Completed
6.	Studies on SILAR deposited metal nanoparticles thin films	PI: Dr. S. D. Sartale	BCUD, Univ of Pune	2 years April. 2014 to Mar. 2016	₹ 2, 70, 000	Completed
7.	Investigation of effect of size of ferrite nanoparticles synthesized by ball milling	PI: Dr. S. D. Sartale	DST (Fast track Young Scientist Scheme), India	4 Years 25 June 2013 to 25 June 2017	₹17,00,000	Completed
8.	Equipment and Books Donation to Alexander von Humboldt Fellow	--	Alexander von Humboldt Foundation, Germany	07 Oct. 2014	~ 10,000 €	--
9.	Investigation of Spin Coated Metal Nanoparticles by Total Reflection X-ray Fluorescence (TXRF) measurements	PI: Dr. S. D. Sartale Dr. M. K. Tiwari (RRCAT, Indore) Collaborator	UGC-DAE CSR	4 years 01 Aug. 2015 to July 2020	₹7,00,000	Completed
10.	Fabrication of CdS/PbS thin film solar cell by using Spin-SILAR deposition	PI: Dr. S. D. Sartale	BCUD, Savitribai Phule Pune University	2 Years April. 2016 to Mar. 2018	₹ 3,00,000	Completed
	technique					
11.	EXAFS studies to explore the internal structure of graded nanocrystals	PI: Dr. S. D. Sartale Dr. D. Bhattacharya (RRCAT, Indore) Collaborator	UGC-DAE CSR	5 years 01 Aug. 2021 to July 2026	₹7,00,000	In progress

LIST OF PUBLICATIONS

Book Chapters:

1. *Atoms, Molecules and Nanoparticles manipulation by scanning probe microscopy*
A. Tseng, **S. D. Sartale**, M. F. Luo, C. C. Kuo and Z. Li
Chapter 1 “Nanofabrication: Fundamentals and Application”, Editor A. A. Tseng,
World Scientific Publishing Company (June 2008) pp 1-32
2. *Plasmonic Metal Nanoparticles Decorated ZnO Nanostructures for Photoelectrochemical (PEC) Applications*
Mangesh A. Desai and **Shrikrishna D. Sartale**
Chapter 12 “chemically deposited nanocrystalline metal oxide thin films, synthesis, characterizations and their applications”, Editors- Fabian I. Ezema, Jose Rajan, Chandrakant D. Lokhande, Springer nature (2021) pp 293-328
3. *Liquid Phase Deposition of Nanostructured Materials for Supercapacitor Applications*
Shreelekha N. Khatavkar and **Shrikrishna D. Sartale**
Chapter 26 “chemically deposited nanocrystalline metal oxide thin films, synthesis, characterizations and their applications”, Editors- Fabian I. Ezema, Jose Rajan, Chandrakant D. Lokhande, Springer nature (2021) pp 725-764
4. *Chemically Deposited Iron Chalcogenide-Based Carbon Composites for Supercapacitor Applications*
Shreelekha N. Khatavkar and **Shrikrishna D. Sartale**
Chapter 3 “Chemically Deposited Metal Chalcogenide-based Carbon Composites for Versatile Applications” Editors- Fabian I. Ezema, Chandrakant D. Lokhande Abhishek C. Lokhande, Springer nature (2023) pp 83-121

Peer reviewed Articles:

114	<i>Facile Synthesis of KV₃O₈ Nanobelts for Solid-State Supercapacitors</i> Amol S. Vedpathak, Shubham S. Kalyane, Tanuja N. Shinde, Qian Wang, Ravindra N. Bulakhe, Ji Man Kim, and Shrikrishna D. Sartale* <u>Journal of Power Sources</u> (in press)
113	<i>Development of nickel oxide thin film by chemical route for supercapacitor application</i> Aarti D. Narang, Satish P. Gupta, Poonam P. Sanap, Suman S. Kahandal, Rameshwar S. Tupke, Hansol Kim, Qian Wang, Amol S. Vedpathak, Shrikrishna D. Sartale , Vikas K. Gade, Pradip B. Shelke, Anuradha C. Pawar, Ji Man Kim, and Ravindra N. Bulakhe <u>Journal of Materials Science: Materials in Electronics</u> 35 (2024) 1335
112	<i>Zn Alloying Strategy to Improve Photoluminescence of CuGaS₂/ZnS Core/Shell Quantum Dots</i> Mohammed Abdul Haque, Amruta Lohar, Yogesh Jadhav, Ravi Kumar, S.N. Jha, D. Bhattacharyya, Sandesh Jadkar, Shrikrishna Sartale and Shailaja Mahamuni <u>Journal of Materials Chemistry A</u> 12 (2024) 10726-10736

111	<i>Modified successive ionic layer adsorption and reaction for interconnected bismuth vanadate nanograins: Highly active visible light harvesting photoanodes</i> Shirin P. Kulkarni, Vikas V. Magdum, Yogesh M. Chitare, Prashant D. Sawant, Shweta V. Talekar, Shraddha A. Pawar, Amol U. Pawar, Dhanaji B. Malavekar, Shrikrishna D. Sartale , Ayman A. Ghfar, Jayavant L. Gunjakar <u>Journal of Photochemistry and Photobiology A: Chemistry</u> , 454 (2024) 115737
110	<i>Enzymatic Synthesis of Biocompatible Polypyrrole with Enhanced Electrochemical Properties for Supercapacitors</i> Seema S. Bhoyar, Vijay B. Sangale, Mangesh A. Desai, Priyanka A. Khot, Satish K. Pardeshi, Shrikrishna D. Sartale and Kisan M. Kodam <u>Journal of Power Sources</u> 607 (2024) 234599
109	<i>Fabrication of ZnO Scaffolded CdS Nanostructured Photoanode with Enhanced Photoelectrochemical Water Splitting Activity under Visible Light</i> Avinash Rokade, Ganesh K. Rahane, Aleksandar Živković, Swati N. Rahane, Hemant S. Tarkas, K. Hareesh, Nora H. de Leeuw, Shrikrishna Dattatraya Sartale , Nelson Y. Dzade, Sandesh R. Jadkar, and Sachin R. Rondiya <u>Langmuir</u> 44 (2024) 6884-6897
108	<i>Wheat bran as an efficient agro-process waste for enhanced yellow laccase production by <i>Lentinus tigrinus</i> SSB_W2 and its application in anthraquinone dye degradation</i> S. S. Bhoyar, A. U. Chaudhari, M. A. Desai, R. V. Latpate, S. D. Sartale and K. M. Kodam <u>3 Biotech</u> 14 (2024) 33
107	Evolution of α -V ₂ O ₅ into electrochemically transformed NaV ₃ O ₈ structure: Structural changes and supercapacitor application Amol Vedpathak, Mangesh A. Desai, Balu R. Thombare, Ramchandra Kalubarme, Guoqing Guan, Sunita Bhagwat and Shrikrishna. D. Sartale* <u>Journal of Electroanalytical Chemistry</u> 958 (2024) 118150
106	<i>1D Layered LiVO₃ Nanorods Synthesized by Ultrasonic-Assisted Chemical Route for Supercapacitor Applications</i> Tanuja Nagnath Shinde, Amol Vedpathak, Balasaheb J. Nagare, Digambar M. Sapkal, Mangesh Desai, Pradeep Prabhakar Atre, and Shrikrishna D. Sartale* <u>Energy Technology</u> 12 (2023) 2301056
105	<i>Palladium nanoparticles grown by using successive ionic layer adsorption and reaction method and their ethanol electrooxidation application</i> Akshay Nandkishor Vyas, Jalindar Dnyandeo Ambekar, Bharat Bhanudas Kale and Shrikrishna Dattatraya Sartale* <u>Journal of the Electrochemical Society</u> 170 (2023) 084508
104	<i>Superoxide ($\bullet O_2^-$) radical species driven type II TiO₂/g-C₃N₄ heterojunction photocatalyst for RhB dye degradation</i> Smita M. Yadav, Mangesh A. Desai, Shrikrishna D. Sartale* <u>Journal of Materials Science: Materials in Electronics</u> 34 (2023) 1651
103	<i>The effect of surface treatment and polymer matrix on photoluminescence intermittency of strongly confined CsPbBr₃ quantum dots</i> Mohammed Abdul Haque, Amruta Lohar, Richa Gahlaut, Imran Shaikh, Shrikrishna Sartale , and Shailaja Mahamuni <u>Journal of Materials Science: Materials in Electronics</u> 34 (2023) 1642
102	<i>Simple chemical synthesis of CeO₂ nanoparticles for toxic NO₂ gas detection</i>

	Tanaji M. Nimbalkar, Yogesh M. Jadhav, Reshma N. Dhanawade, Nanaasaheb S. Pawar, Avinash C. Molane, Shivani S. Gavande, Ganesh T. Chavan, Chan-Wook Jeon, Shrikrishna D. Sartale , Vikas B. Patil <u>Journal of Alloys and Compounds</u> 966 (2023) 171461
101	<i>One-Dimensional Layered Sodium Vanadate Nanobelts: A Potential Aspirant for High-Performance Supercapacitor Applications</i> Amol S. Vedpathak, Tanuja Shinde, Mangesh A. Desai, Balu R. Thombare, Ranjit Hawaldar, Suyog Asaram Raut, Ram Kalubarme, Shrikrishna. D. Sartale* and Sunita Bhagwat <u>ACS Applied Energy Materials</u> 6 (2023) 4693-4703
100	<i>Spin coated Ag NPs SERS substrate: Trace detection study of methylene blue and melamine</i> Imran M. Shaikh and Shrikrishna Sartale* <u>Applied Physics A</u> 129 (2023) 1-12
99	<i>Intercalation of two-dimensional graphene oxide in WO₃ nanoflowers for NO₂ sensing</i> Gajanan M. Hingangavkar, Sujit A. Kadam, Yuan-Ron Ma, Shrikrishna D. Sartale , Ramesh N. Mulik, Vikas B. Patil <u>Nano-Structures & Nano-Objects</u> 34 (2023) 100964
98	<i>Synthesis, characterization, electrochemical and catalytic performance of NiO nanostructures and Ag-NiO nanocomposite</i> Chaitali V. Khedkar, Amol S. Vedpathak, Abhijeet V. Dhotre, Krishna D. Daware, Yesh D. Kolekar, Shrikrishna D. Sartale, Suresh W. Gosavi, Shankar I. Patil <u>Chemical Physics Impact</u> 6 (2023) 100153
97	<i>MoS₂ nanosheets as bifunctional electrode for oxygen evolution reaction and electrochemical supercapacitor</i> Komal B. Pisal, Bapuso M. Babar, Sarfraz H. Mujawar, Sawanta S. Mali, Chang Kook Hong, Shrikrishna D. Sartale , Laxman D. Kadam <u>International Journal of Energy Research</u> 46 (2022) 18312-18327
96	<i>Spin Coated Ag NPs SERS substrate: Role of electromagnetic and chemical enhancement in trace detection of methylene blue and congo red</i> Imran M. Shaikh, Mohammed Abdul Haque, Habib Pathan and Shrikrishna Sartale* <u>Plasmonics</u> 17 (2022) 1889-1900
95	<i>Investigations on the Magnetic Properties of Patterned Cobalt Grown on a Mechanically Scratched Copper Substrate</i> M. S. Gadwal, J. Kaur, S. F. Shaikh, P. E. Lokhande, V. L. Mathe, S. D. Sartale and H M Pathan <u>ES Materials & Manufacturing</u> 18 (2022) 1-9
94	<i>A green strategy for synthesis of K⁺ pre-inserted MnO₂/rGO and its electrochemical conversion to Na-MnO₂/rGO for high performance supercapacitor</i> Amol S. Vedpathak, Mangesh A. Desai, Sunita Bhagwat and Shrikrishna. D. Sartale* <u>Energy Fuels</u> 36 (2022) 4596-4608
93	<i>Role of oxidation states of iron on the super-capacitive behaviour of iron oxide films</i> Jayant Yadav, Akshay Vyas, Shrikrishna Sartale & Brajesh Pandey <u>Applied Physics A</u> 128 (2022) 290
92	<i>Mesoporous Nanohybrids of 2D Ni-Cr-Layered Double Hydroxide Nanosheets Pillared with Polyoxovanadate Anions for High-Performance Hybrid Supercapacitor</i>

	Navnath S Padalkar, Shrikant V Sadavar, Rohini B Shinde, Akash S Patil, Umakant M Patil, Dattatray S Dhawale, Habib M Pathan, Shrikrishna D Sartale , Vinayak G Parale, Ajayan Vinu, Chandrakant D Lokhande, Jayavant L Gunjakar <u>Advanced Materials Interfaces</u> 9 (2022) 2101216
91	<i>Fabrication and evaluation of symmetric flexible solid state supercapacitor device based on $\alpha\text{-Fe}_2\text{O}_3$ thin films by LPD</i> S. N. Khatavkar and S. D. Sartale* <u>AIP Conference Proceeding</u> 2335 (2021) 040008
90	<i>Study of front panel electrode coatings for combined visible and short wavelength infrared photodetectors</i> M. Aleksandrova, G. Dobrikov, H. Pathan, S. D. Sartale and V. Videkov <u>Materials Today Proceedings</u> 54 (2022) 57-62
89	<i>An investigation of chemical and electrochemical conversion of SILAR grown Mn_3O_4 thin films into MnO_2</i> Mangesh A. Desai, Amol S. Vedpathak, Abhishek R. Bhapkar, Ganesh D. Saratale and Shrikrishna D. Sartale* <u>Journal of Environmental Management</u> 299 (2021) 113564 : 1-9
88	<i>Structural correlation with the electrochemical properties of carbon nano-spheres/polyaniline nanocomposite films</i> Rashmi S. Adoor, Narasimha.H. Ayachit, Sushant A. Haladkar, Srikrishna Saratale , Mangesh Desai & Kishor Upadhyaya <u>Polymer Bulletin</u> 79 (2022) 1669-1677
87	<i>SILAR Grown K^+ and Na^+ Ions Preinserted MnO_2 Nanostructures for Supercapacitor Applications: A Comparative Study</i> Mangesh A. Desai, Aditi Kulkarni, Girish Gund, and Shrikrishna D. Sartale* <u>Energy Fuels</u> 35 (2021) 4577-4586
86	<i>Photoelectrochemical performance of MWCNT–Ag–ZnO ternary hybrid: a study of Ag loading and MWCNT garnishing</i> Mangesh A. Desai, Vidhika Sharma, Mohit Prasad, Girish Gund, Sandesh R. Jadkar, and Shrikrishna D. Sartale* <u>Journal of Materials Science</u> 56 (2021) 8627-8642
85	<i>Superior Supercapacitive Performance of Grass-like CuO Thin Films Deposited by Liquid Phase Deposition Technique</i> Shreelekha N. Khatavkar and Shrikrishna D. Sartale* <u>New Journal of Chemistry</u> 44 (2020) 6778-6790
84	<i>Seed-Layer-Free Deposition of Well-Oriented ZnO Nanorods thin films by SILAR and Their Photoelectrochemical Studies</i> Mangesh A. Desai, Vidhika Sharma, Mohit Prasad, Sandesh R. Jadkar, Ganesh D. Saratale and Shrikrishna D. Sartale* <u>International Journal of Hydrogen Energy</u> 45 (2020) 5783-5792
83	<i>Recent Developments in nickel based electrocatalysts for ethanol electrooxidation</i> Akshay Nandkishor Vyas, Ganesh D. Saratale and Shrikrishna Dattatraya Sartale* <u>International Journal of Hydrogen Energy</u> 45 (2020) 5928-5947
82	<i>Nickel nanoparticles grown by successive ionic layer adsorption and reaction method for ethanol electrooxidation and electrochemical quartz crystal microbalance study</i> Akshay Nandkishor Vyas, Mangesh Appasaheb Desai, Deodatta Moreshwar Phase, Rijuta Ganesh Saratale, Jalindar Dnyandeo Ambekar, Bharat Bhanudas Kale, Habib Mohiddin Pathan and Shrikrishna Dattatraya Sartale*

	<u>New Journal of Chemistry</u> 43 (2019) 2955-2965
81	<i>An efficient fabrication of ZnO-Carbon Nanocomposites with enhanced photocatalytic activity and superior photostability</i> Santosh B. Babara, Nana L. Gavade, Dhanaji P. Bhopate, Abhijit. N. Kadam, Sanjay B. Kokane, Shrikrishna D. Sartale , Anna Gophane, Kalyanrao M. Garadkar and Vijaykumar M. Bhuse <u>Journal of Materials Science: Materials in Electronics</u> 33 (2019) 1133-1147
80	<i>α-Fe₂O₃ thin film on stainless steel mesh: A flexible electrode for supercapacitor</i> Shreelekha N. Khatavkar and Shrikrishna D. Sartale* <u>Materials Chemistry and Physics</u> 225 (2019) 284-291.
79	<i>Zinc oxide superstructures: Recent synthesis approaches and application for hydrogen production via photoelectrochemical water splitting</i> Mangesh A. Desai, Akshay N. Vyas, Ganesh D. Saratale and Shrikrishna D. Sartale* <u>International Journal of Hydrogen Energy</u> 44 (2019) 2091-2127
78	<i>Magnetic interactions and electrical properties of Tb³⁺ substituted NiCuZn ferrites</i> S. M. Kabbur, S. D. Waghmare, D. Y. Nadargi, S. D. Sartale , R. C. Kambale, U. R. Ghodake, S. S. Suryavanshi <u>Journal of Magnetism and Magnetic Materials</u> 473 (2019) 99-108
77	<i>Investigating functional groups in GO and r-GO through spectroscopic tools and effect on optical properties</i> Swapnil J. Rajoba, Shrikrishna D. Sartale , Lata D. Jadhav <u>Optik - International Journal for Light and Electron Optics</u> 175 (2018) 312–318
76	<i>SILAR grown Ag nanoparticles as an efficient large area SERS substrate</i> Imran M. Shaikh and S. D. Sartale <u>Journal of Raman Spectroscopy</u> 49 (2018) 1274-1287
75	<i>Assessment of Ecologically Prepared Carbon-Nano-Sphere for Fabrication of Flexible and Durable Supercell Device</i> Sushant Arun Haladkar, Mangesh A. Desai, Shrikrishna Dattatraya Sartale , Prashant S. Alegaonkar <u>Journal of Materials Chemistry A</u> 16 (2018) 7246-7256
74	<i>Cadmium Sulfide coated zinc oxide photoelectrode: Preparation and characterization</i> R. V. Ingale, A. T. Supekar, S. D. Sartale , P. K. Baviskar and H. M. Pathan <u>Optik - International Journal for Light and Electron Optics</u> 161 (2018) 166-171
73	<i>Magnetic, Electric and Optical Properties of Mg-Substituted Ni-Cu-Zn Ferrites</i> S.M. Kabbur, U.R. Ghodake, Rahul C. Kambale, S.D. Sartale , L.P. Chikhale, S.S. Suryavanshi, <u>Journal of Electronic Materials</u> , 46 (2017) 5693-5704
72	<i>α-Fe₂O₃ Thin Films by Liquid Phase Deposition: Low Cost Option for Supercapacitor</i> S. N. Khatavkar, S. D. Sartale* <u>Journal of Solid State Electrochemistry</u> 21 (2017) 2555-2566
71	<i>Photocatalytic degradation of methylene blue by hydrothermally synthesized CZTS nanoparticles</i> Shilpa A. Phaltane, S. A. Vanalakar, T. S. Bhat, P. S. Patil, S.D. Sartale , L. D. Kadam <u>Journal of Materials Science: Materials in Electronics</u> , 28 (2017) 8186-8191
70	<i>Architecture of 3D ZnCo₂O₄ marigold flowers: Influence of annealing on cold emission and photocatalytic behavior</i>

	Sanjay B. Kokane, Sachin B. Suryavanshi, R. Sasikala, Mahendra A. More and Shrikrishna. D. Sartale* , <u>Materials Chemistry Physics</u> 194 (2017) 55-64
69	<i>In₂S₃ nanoparticles on gC₃N₄ sheet heterojunction: photoinduced charge transfer and photoelectrochemical performance</i> Sanjay B. Kokane, D. M. Phase, R. Sasikala, and S. D. Sartale* , <u>Journal of Materials Science</u> 52 (2017) 7077-7090
68	<i>SILAR deposited porous polyaniline-titanium oxide composite thin film for supercapacitor application</i> P. R. Deshmukh, S. V. Patil, R. N. Bulakhe, S. D. Sartale and C. D. Lokhande, <u>Materials Today Communication</u> 8 (2016) 205-213
67	<i>Narrow size distributed Ag nanoparticles grown by spin coating and thermal reduction: effect of processing parameters</i> A. A. Ansari, S. D. Sartale* <u>Materials research Express</u> 3 (2016) 085023
66	<i>Synthesis of Zinc Ferrite Nanoparticles by Mechanochemical Method</i> Somnath R. Bhopale, S. D. Sartale* <u>Advanced Science Letters</u> 22 (2016) 839-842
65	<i>Zinc Oxide Thin Films: Nanoflakes to Spongy Balls via Seed Layer</i> Mangesh A. Desai, S. D. Sartale* <u>Advanced Science Letters</u> 22 (2016) 880-883
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Talks/Presentation at Conferences/Workshops:

1. Growth of metal nanoparticles: SERS and nanocatalysis applications, **S. D. Sartale**, Rani Chenamma University, Belgavi, India April 05, 2022 (**INVITED TALK**)
2. Enhancement in Raman Signal for trace detection of pollutant and food adulterants, **S. D. Sartale**, National Webinar on “Novel Molecules & Materials for current Societal Needs” (NMMCSN-2021), Indira Gandhi Institute of Technology, Sarang, Dhenkanal, Odisha, September 3-5, 2021 (**INVITED TALK**).
3. Nanomaterials as sensors for trace detection by using surface enhanced Raman spectroscopy, **S. D. Sartale**, AICTE - ISTE Sponsored One Week Online Refresher Program “Recent Development in Advanced Materials” G H Raisoni College of Engineering & Management, Pune, April 5-10, 2021 (**INVITED TALK**).
4. Nanomaterials for environment and energy applications, **S. D. Sartale**, One Day National Conference on 'Advances in Functional Materials-2021, MAEER's MIT College of Railway Engineering and Research, Barshi, March 16, 2021 (**INVITED TALK**)
5. Role of nanomaterials in SERS, **S. D. Sartale**, AICTE Sponsored One Week Short Term Training program on “Nanotechnology, Science and Applications” at Rajarshi Shahu College of Engineering, Kolhapur October 26-31, 2020 (**INVITED TALK**).
6. Surface enhanced Raman scattering, **S. D. Sartale**, International Web-seminar on Recent trends in nanostructured materials-based devices and their applications, D. P. Bhosale College, Koregaon, July 18, 2020 (**INVITED TALK**)
7. Surface Enhanced Raman Scattering Spectroscopy: Understanding and Application, **S. D. Sartale**, Two Day International Webinar on Advanced Materials for Functional and Substantial Application, S. M. Joshi College, Hadapsar, Pune, June 29-30, 2020 (**INVITED TALK**)
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10. Research Ethics, **S. D. Sartale**, IQAC sponsored State Level Workshop on “Intellectual Property Rights (IPR)”, D. P. Bhosale College, Koregaon, April 04, 2019 (**CHIEF GUEST & INVITED RESOURCE PERSON**)
11. Trace detection of adulterant and pollutant by surface enhanced Raman spectroscopy, **S. D. Sartale**, One-day national seminar on Advanced Nano-materials and Nanotechnology, Karmaveer Bhaurao Patil College, Vashi, Navi Mumbai, January 11, 2019 (**INVITED TALK**)
12. Post Graduate Physics Laboratory Experiments, **S. D. Sartale**, Two-Day State Level Workshop on “Laboratory Experiments in Physics”, Ahmednagar College, Ahmednagar, January 11-12, 2019 (**INVITED RESOURCE PERSON**)
13. Trace detection of food adulterant and industrial pollutant using Ag nanostructures SERS substrate, **S. D. Sartale**, 1st International Conference on Materials and Environmental Science [ICMES-2018], Shivaji University, Kolhapur, India, December 07-08, 2018, (**INVITED TALK**)
14. Trace detection of food adulterant and industrial pollutant using Ag nanostructures SERSsubstrate, **S. D. Sartale**, 1st International Conference on Materials and

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15. Raman Scattering, S. D. Sartale, Refresher Course in Science ‘Recent Innovative Trends of Nanomaterials in Chemical, Biological and Physical Sciences’, Modern College of Arts, Science & Commerce, Pune, October 11, 2018 (**INVITED RESOURCE PERSON**)
16. Scanning Probe Microscopy, S. D. Sartale, Refresher Course in Science ‘Recent Innovative Trends of Nanomaterials in Chemical, Biological and Physical Sciences’, Modern College of Arts, Science & Commerce, Pune, October 12, 2018 (**INVITED RESOURCE PERSON**)
17. Nanoscience Nanotechnology and Catalysis, **S. D. Sartale**, National Seminar on New Nano Materials, Devices, Technology & Applications in Physics and Electronics (NNMDTA – 2018), Shri Shivaji Mahavidyalaya, Barshi, January 24, 2018 (**INVITED TALK**)
18. Electrochemical Deposition, **S. D. Sartale**, Two Days State Level Workshop Two Days on “Functional Materials” (Hands on Training), Vidya Pratishthan’s Arts Science & Commerce College, Baramati, January 05-06, 2018 (**INVITED RESOURCE PERSON**)
19. Understanding and Developing Nanostructured Materials for Energy Applications, **S. D. Sartale**, National Level Seminar on Recent Trends in Synthesis and Applications of Nanomaterials (RTSAN-2017), Dada Patil College, Karjat, Ahmadnagar India, December 08, 2017 (**INVITED TALK**)
20. International Conference on Nanotechnology addressing the convergence of Materials Sciece, Biotechnology and Medical Science, D. Y. Patil Education Society (deemed to be University), Kolhapur, November 9-11, 2017 (**Chaired Oral Presentation Session**)
21. Applications of metal nanoparticles in Surface Enhanced Raman Scattering and Catalysis, **S. D. Sartale**, National Seminar on Nano Science and Nano Technology 2017, Sadguru Gadage Maharaj College, Karad, India, February 11, 2017 (**INVITED TALK**)
22. Nanoscience and Nanotechnology in Catalysis, NANOWORLD event, Yashvantrao Chavan Institute of Science, Satara, India, February 01, 2017 (**INVITED RESOURCE PERSON**).
23. SILAR: An effective method for deposition of nickel metal electrode, Akshay N. Vyas and **S. D. Sartale***, International Conference on Nanoscience and Technology, Indian Institute of Science, Education and Research, Pune, India, February 29 – March 02, 2016 (**POSTER PRESENTATION**)
24. Photocatalytic activity of Mechanochemical synthesized ZnS nanoparticles for Hydrogen production and Methylene blue degradation, Mohini Nashikkar, Sanjay B. Kokane, R.Sasikala, **S. D. Sartale***, International Conference on Nanoscience and Technology, Indian Institute of Science, Education and Research, Pune, India, February 29 – March 02, 2016 (**POSTER PRESENTATION**)
25. Coverage dependent SERS activity of R6G using SILAR grown silver nanoparticulate thin films, Imran M. Shaikh and **S. D. Sartale***, International Conference on Nanoscience and Technology, Indian Institute of Science, Education and Research, Pune, India, February 29 – March 02, 2016 (**POSTER PRESENTATION**)
26. Understanding and developing nanostructured materials for energy applications, **S. D. Sartale**, National Seminar on Non-conventional sources of Energy, D. P. Bhosale College, Koregaon, India February 13, 2016 (**INVITED TALK**)
27. Growth of monodispersed metal nanoparticles for fuel cells applications, **S. D. Sartale**, National Conference on Materials for Energy Conversion and Storage,

Mahatama Phule Mahavidyalaya, Pimpri, India, February 12-13, 2016 (**INVITED TALK**)

28. Mechanochemical synthesis of zinc ferrite nanoparticles with help of H_2O_2 , Somnath R. Bhopale, **S. D. Sartale***, Raman Memorial Conference, Department of Physics, Savitribai Phule Pune University, Pune (**ORAL PRESENTATION**)
29. Supercapacitive performance of a α -Fe₂O₃ thin films deposited by liquid phase deposition, Shreelekha N. Khatavkar, **S. D. Sartale***, Raman Memorial Conference, Department of Physics, Savitribai Phule Pune University, Pune (**ORAL PRESENTATION**)
30. Enhanced photocatalytic activity of gC₃N₄/In₂S₃ nanocomposite for Rhodamine B dye degradation, Sanjay B. Kokane, R. Sasikala, **S. D. Sartale***, Raman Memorial Conference, Department of Physics, Savitribai Phule Pune University, Pune (**ORAL PRESENTATION**)
31. Synthesis of nanocrystalline cadmium sulfide by chemical route and their optical properties, R. V. Ingale, **S. D. Sartale**, H. M. Pathan*, Raman Memorial Conference, Department of Physics, Savitribai Phule Pune University, Pune (**ORAL PRESENTATION**)
32. Deposition and characterization of CdS thin films by spin-SILAR method, Swamini A. Zaware, **S. D. Sartale***, Raman Memorial Conference, Department of Physics, Savitribai Phule Pune University, Pune (**POSTER PRESENTATION**)
33. Mechanochemical synthesis of ZnS nanoparticles and photocatalytic activity for dye degradation under UV light irradiation, Mohini Nashikkar, **S. D. Sartale***, Raman Memorial Conference, Department of Physics, Savitribai Phule Pune University, Pune (**POSTER PRESENTATION**)
34. Enhanced supercapacitive performance of metal oxide decorated of ZnO nanostructures , Mangesh A. Desai, **S. D. Sartale***, International Conference on Materials Science and Ionizing Radiation Safety & Awareness, Shivaji University, Kolhapur, January 28-30, 2016 (**POSTER PRESENTATION**)
35. Understanding of the growth of Cadmium Zinc Sulfide Thin Films by Chemical Bath Deposition Method, Mangesh A. Desai, **S. D. Sartale***, International Conference on Materials Science and Ionizing Radiation Safety & Awareness, Shivaji University, Kolhapur, January 28-30, 2016 (**POSTER PRESENTATION**)
36. Nanostructured materials for environmental applications, **S. D. Sartale**, Humboldt Kolleg on Sustainable development: Mega Trends of the 21st Century, Goa, Nov. 19-21, 2015 (**ORAL PRESENTATION**)
37. Studies on SILAR deposited metal nanoparticles thin films, **S. D. Sartale**, Regional Research Conference INNOVATION – 2015 for Savitribai Phule Pune University Department Teachers in the subject Physics, Savitribai Phule Pune University, Pune, India August 13, 2015 (**ORAL PRESENTATION**).
38. Studies on Spin Coating of Metal Nanoparticles on Flat Support for Catalytic Applications, A. A. Ansari, **S. D. Sartale***, International Photovoltaic Solar Energy Conference (Solar Asia - 2015), July 30 – August 01, 2015, Savitribai Phule Pune University, Pune, India (**THESIS ORAL PRESENTATION**)
39. Use of ultrasonication to tune the size of SILAR grown silver nanoparticles for Surface Enhanced Raman Scattering (SERS) studies, Imran M. Shaikh, Akshay N. Vyas and **S. D. Sartale***, International Photovoltaic Solar Energy Conference (Solar Asia - 2015), July 30 – August 01, 2015, Savitribai Phule Pune University, Pune, India (**POSTER PRESENTATION**)
40. Deposition of cadmium sulfide (CdS) thin films using novel CBD for photovoltaic applications: effect of cadmium salts, Mangesh A. Desai, **S. D. Sartale***, International

Photovoltaic Solar Energy Conference (Solar Asia - 2015), July 30 – August 01, 2015, Savitribai Phule Pune University, Pune, India (**POSTER PRESENTATION**)

41. Mechanochemical synthesis of ZnS nanoparticles and photocatalytic activity for H₂ production by water splitting, Mohini Nashikkar, Sanjay B. Kokane, R. Sasikala, **S. D. Sartale***, International Photovoltaic Solar Energy Conference (Solar Asia - 2015), July 30 – August 01, 2015, Savitribai Phule Pune University, Pune, India (**POSTER PRESENTATION**)
42. Improved photocurrent efficiency of In₂S₃ nanoparticles coupled with C₃N₄ sheet, Sanjay B. Kokane, R. Sasikala and **S. D. Sartale***, International Photovoltaic Solar Energy Conference (Solar Asia - 2015), July 30 – August 01, 2015, Savitribai Phule Pune University, Pune, India (**ORAL PRESENTATION**)
43. α -Fe₂O₃ Thin Films by LPD: A Good Option for Supercapacitor, Shreelekha N. Khatavkar, **S. D. Sartale***, International Photovoltaic Solar Energy Conference (Solar Asia - 2015), July 30 – August 01, 2015, Savitribai Phule Pune University, Pune, India (**POSTER PRESENTATION**)
44. Fabrication of CdS/PbS thin film solar cell by spin-SILAR method, Swamini A. Zaware and **S. D. Sartale***, International Photovoltaic Solar Energy Conference (Solar Asia - 2015), July 30 – August 01, 2015, Savitribai Phule Pune University, Pune, India (**POSTER PRESENTATION**)
45. Model Catalytic systems, **S. D. Sartale**, Refresher Course (July 02-22, 2015) with the theme Experimental Physics, Department of Physics, Savitribai Phule Pune University, July 10, 2015 (**INVITED TALK**).
46. Scanning Probe Microscopy, **S. D. Sartale**, Summer School, Department of Physics, Savitribai Phule Pune University, June 03, 2015 (**RESOURCE PERSON**)
47. Investigation of electronic properties of TiO₂ thin films, A. A. Ansari and **S. D. Sartale***, 3rd International Conference NANOCON 2014 Smart Materials, Composites, Applications and New Inventions, Bharati Vidyapeeth, Pune, India, October 14-15, 2014 (**Oral Presentation**). Synthesis of zinc ferrite nanoparticles by mechanochemical method, S. R. Bhopale and **S. D. Sartale***, 3rd International Conference NANOCON 2014 Smart Materials, Composites, Applications and New Inventions, Bharati Vidyapeeth, Pune, India, October 14-15, 2014 (**Oral Presentation**).
48. Zinc oxide thin films: nanoflakes to spongy balls via seed layer, M. A. Desai and **S. D. Sartale***, 3rd International Conference NANOCON 2014 Smart Materials, Composites, Applications and New Inventions, Bharati Vidyapeeth, Pune, India, October 14-15, 2014 (Oral Presentation).
49. Titania based nanocomposites for efficient photoctalytic hydrogen production, S. B. Kokane, R. Sasikal and **S. D. Sartale***, 3rd International Conference NANOCON 2014 Smart Materials, Composites, Applications and New Inventions, Bharati Vidyapeeth, Pune, India, October 14-15, 2014 (Oral Presentation).
50. Facile way for deposition of CdS nanoflakes , Mangesh A. Desai, **S. D. Sartale***, National Conference on Materials for Future Technolgy, Rajaram College, Kolhapur, India, September 26-27, 2014 (Poster Presentation).
51. A Novel way to grow monodispersed Metal Nanoparticles on flat support, A. A. Ansari, **S. D. Sartale***, National Conference on Materials for Future Technology, Rajaram College, Kolhapur, India, September 26-27, 2014 (**POSTER PRESENTATION**).
52. Synthesis of zinc ferrite nanoparticles by ball milling method, Somnath R. Bhopale, **S. D. Sartale***, National Conference on Materials for Future Technology, Rajaram College, Kolhapur, India, September 26-27, 2014 (**POSTER PRESENTATION**).

53. Modified chemical method for the deposition of nanocrystalline nickel thin films, Akshay N. Vyas and **S. D. Sartale***, National Conference on Recent Trends in Physics, Yashvantrao Chavan Institute of Science, Satara, India, October 10-11, 2014 (**POSTER PRESENTATION**).
54. Quartz crystal microbalance study of Cadmium Sulfide nanoflakes, Mangesh A. Desai and **S. D. Sartale***, National Conference on Recent Trends in Physics, Yashvantrao Chavan Institute of Science, Satara, India, October 10-11, 2014 (**ORAL PRESENTATION**).
55. Improved photocatalytic activity of Pd-TiO₂-CdO nanocomposite by extending the lifetime of photoexcited charge carriers, Sanjay B. Kokane, **S. D. Sartale***, R. Sasikal, National Conference on Recent Trends in Physics, Yashvantrao Chavan Institute of Science, Satara, India, October 10-11, 2014 (**POSTER PRESENTATION**).
56. Mechanochemical synthesis of zinc ferrite nanoparticles, Somnath R. Bhopale, **S. D. Sartale***, National Conference on Recent Trends in Physics, Yashvantrao Chavan Institute of Science, Satara, India, October 10-11, 2014 (**POSTER PRESENTATION**).
57. Mahamrutunjay Mantra: useful for synthesis of silver nanoparticles, National Conference on Ancient Science and Technology: Retrospection and Aspirations, Fergusson College, Pune, India, January 10-11, 2015 (**POSTER PRESENTATION**).
58. Growth of Metal Nano particles of different size by low cost process, **S. D. Sartale**, National Seminar on Challenges in the Quest for clean energies, S. S. Arts College & T. P. Science Institute Sankeshwar, Karnataka, India February 27-28, 2015 (**INVITED TALK**).
59. Cost effective processes to metal chalcogenide nanostructures, **S. D. Sartale**, National Conference on Chemistry of Chalcogenes and Related Topics, Defence Institute of Advanced Technology (DU), Pune, India, January 12-13, 2015 (**INVITED TALK**).
60. "Growth of supported Pd nanoparticles", A. A. Ansari, **S. D. Sartale**, 1st National Conference on Energy and Environment, University of Pune, Pune, India February 20-22, 2014 (**POSTER PRESENTATIONS**).
61. "Effect of low temperature TiCl₄ treatment of ZnO photoanode for dye sensitized solar cells" **S. S. Khadtare**, A. A. Ansari, **S. D. Sartale**, S. R. Jadkar, H. M. Pathan, 1st National Conference on Energy and Environment, University of Pune, Pune, India February 20-22, 2014 (**POSTER PRESENTATIONS**).
62. "Deposition of hematite thin films useful for photo-conversion" **S. N. Khatavkar**, **S. D. Sartale**, 1st National Conference on Energy and Environment, University of Pune, Pune, India February 20-22, 2014 (**POSTER PRESENTATIONS**).
63. "Room temperature synthesis of deposition of CdS nanoflakes" **M. A. Desai**, N. Saykar, **S. D. Sartale**, 1st National Conference on Energy and Environment, University of Pune, Pune, India February 20-22, 2014 (**POSTER PRESENTATIONS**).
64. "Efficient hydrogen production from SrIn₂O₄-TiO₂ composite under visible light" **S. B. Kokane**, B. T. Padekar, **S. D. Sartale**, R. Sasikala, 1st National Conference on Energy and Environment, University of Pune, Pune, India February 20-22, 2014 (**POSTER PRESENTATIONS**).
65. "Metal Nanoparticle grown on flat support as model catalyst" **S. D. Sartale**, 5th Humboldt Kolleg On "Surface Science and Engineered Surfaces", Convention Centre Lavasa, Pune, February 14-15, 2014 (**INVITED SPEAKER**).
66. "Growth of monodispersed metal nanoparticles for fuel cells" **S. D. Sartale**, National Conference on Recent Trends and Issues in Renewable Energy, Rajarshi Chhatrapati Shahu College, Kolhapur, India, January 27-28, 2014 (**INVITED TALK**).

67. "Facile synthesis of nanomaterials for energy applications" **S. D. Sartale**, International Conference on "Innovations in Energy, Polymer and Environmental Science", Yashvantrao Chavan Institute of Science, Satara, India January 10-12, 2014 **(INVITED TALK)**.
68. "Crack free alumina thin films by spin coating" **S. R. Bhopale, S. D. Sartale**, International Conference on "Innovations in Energy, Polymer and Environmental Science", Yashvantrao Chavan Institute of Science, Satara, India January 10-12, 2014 **(POSTER PRESENTATION)**.
69. "Enhanced photocatalytic hydrogen production of SrIn₂O₄-TiO₂ composite" **S. B. Kokane, S. D. Sartale**, International Conference on "Innovations in Energy, Polymer and Environmental Science", Yashvantrao Chavan Institute of Science, Satara, India January 10-12, 2014 **(POSTER PRESENTATION)**.
70. "Gold nanoparticles incorporated ZnO photoanode for dye sensitized solar cells", **S. S. Khadtare, A. A. Ansari, S. R. Jadkar, S. D. Sartale, H. M. Pathan**, International Conference on "Innovations in Energy, Polymer and Environmental Science", Yashvantrao Chavan Institute of Science, Satara, India January 10-12, 2014 **(POSTER PRESENTATION)**.
71. "Growth of Monodispersed Metal Nanoparticles by Spin Coating" **S. D. Sartale**, National Conference on Physics and Chemistry of Advanced Materials, C. B. Khedgi's Basaveshwar Science, Raja Vijaysinh Commerce & Raja Jaysinh Arts College, Akkalkot, Solapur, India, December 18-19, 2013 **(INVITED TALK)**
72. "Low cost methods to develop model systems for understanding catalysis" **S. D. Sartale**, National Conference on "Emerging Trends & Techniques in Chemistry", Yashvantrao Chavan Institute of Science, Satara, India, October 10-12, 2013 **(INVITED TALK)**.
73. Novel chemical method for deposition of CdS nanoflakes at room temperature, M. A. Desai, **S. D. Sartale**, International Workshop on Nanotechnology & Advanced Functional Materials, National Chemical Laboratory, Pune, India, July 24-25, 2013 **(POSTER PRESENTATION)**.
74. A facile method to grow supported Ag nanoparticles, A. A. Ansari, **S. D. Sartale**, International Workshop on Nanotechnology & Advanced Functional Materials, National Chemical Laboratory, Pune, India, July 24-25, 2013 **(POSTER PRESENTATION)**.
75. Synthesis and characterization of CdO/TiO₂ nanocomposite photocatalysts and its photocatalytic activity, S. B. Kokane, **S. D. Sartale, R. Sasikala**, International Workshop on Nanotechnology & Advanced Functional Materials, National Chemical Laboratory, Pune, India, July 24-25, 2013 **(POSTER PRESENTATION)**.
76. Deposition of MoS₂ thin films using layer by layer deposition method, A. N. Vyas, **S. D. Sartale**, International Workshop on Nanotechnology & Advanced Functional Materials, National Chemical Laboratory, Pune, India, July 24-25, 2013 **(POSTER PRESENTATION)**.
77. Formation of iron oxide films via liquid phase deposition method, S. Khatavkar, **S. D. Sartale**, International Workshop on Nanotechnology & Advanced Functional Materials, National Chemical Laboratory, Pune, India, July 24-25, 2013 **(POSTER PRESENTATION)**.
78. "Scanning Probe Microscopy: a versatile tool in nanotechnology" **S. D. Sartale**, National Seminar on "Advances in Nano-structured Materials and their Applications", C. H. C. Arts, S. G. P. Commerce and B. B. J. P. Science College, Taloda, Nadurbar, India Januray 22-23, 2013 **(INVITED TALK)**
79. "Growth of Ag nanoparticles by spin coating", **S.D. Sartale**, A. A. Ansari, Nannocon 012, 2nd International Conference on Nanotechnology-Innovative Materials, Processes,

Products and Applications, Bharati Vidyapeeth, Pune, October 18-19, 2012 (**ORAL PRESENTATION**)

80. "Cost effective methods useful for catalytic investigations" **S. D. Sartale**, National Conference on Recent Trends in Nanotechnology, Vivekanand College, Kolhapur, India, December 14-15, 2012 (**INVITED TALK**).
81. "Chemical synthesis of nanocrystalline ceria thin films and powders", **S. D. Sartale**, INNOVATION – 2012 Regional Research Conference, May 21, 2012, Department of Physics, University of Pune (**ORAL PRESENTATION**).
82. Quantum dots SnO₂ films: deposition using spin coating, optimization and their physical properties, K. R. Gbashi, F. M. D. Attar, A. A. Ansari, **S. D. Sartale**, H. M. Pathan. 1st International Conference on Functional Materials for Defence, May 18- 20, 2012, Defence Institute of Advanced Technology (DIAT), Pune, India (**POSTER PRESENTATION**).
83. "How to prepare NET/SET examination in Physics" **S. D. Sartale**, One Day Workshop on "NET/SET Examination Guidance", March 12, 2012, Yashvantrao Chavan Institute of Science, Satara, India (**INVITED RESOURCE PERSON**).
84. "Control over Crack Formation by Spin Coating", A. A. Ansari, **S. D. Sartale** 1st International Symposium on Physics and Technology of Sensors, March 8-10, 2012, YASHADA Auditorium, Pune, India (**POSTER PRESENTATION**).
85. "Opportunities in Nanoscience and Nanotechnology" **S. D. Sartale**, Department Activity on Recent Trends in Science and Technology, March 6, 2012, Mahatama Phule Mahavidyalaya, Pimpri, Pune, India (**INVITED RESOURCE PERSON**).
86. "TiO₂ thin film formation by spin coating: Effect of acceleration", A. A. Ansari, **S. D. Sartale**, Raman Memorial Conference, March 2-3, 2012, Department of Physics, University of Pune, Pune, India (**ORAL PRESENTATION**).
87. "Nanotechnology in Catalysis", **S. D. Sartale**, National workshop on nanoscience and nanotechnology (MWNST), January 6-7, 2012, MIT College of Engineering, Pune (**INVITED TALK**).
88. "Nanotechnology" **S. D. Sartale**, Rotary Club of Pune Riverside morning meeting, December 13, 2011, (**INVITED TALK**).
89. "Effect of Ultrasonication on Properties of Sequential Layer Deposited Nanocrystalline Silver Thin Films", Ashwini B. Rohom, **S. D. Sartale**, 56th DAE SSPS 2011, December 19-13, 2011 SRM University, Tamilnadu, India (**POSTER PRESENTATION**).
90. "Effect of oxidizing agents in CeO₂ Film formation", S. M. Yadav, **S. D. Sartale**, 56th DAE SSPS 2011, December 19-13, 2011 SRM University, Tamilnadu, India (**POSTER PRESENTATION**).
91. "Model catalyst from UHV to ambient" **S. D. Sartale**, Humboldt Kolleg on Science Globalization and Human Development, November 11-13, 2011, Bagmola Beach Resort, Goa, India (**ORGANIZING COMMITTEE MEMBER AND ORAL PRESENTATION**).
92. "Studies on spin coated TiO₂ thin films", A. A. Ansari, **S. D. Sartale**, Seminar on synthesis and applications of functional materials (SAFM), September 23, 2011, National Defense Academy, Pune, India (**ORAL PRESENTATION**).
93. "Chemical deposition of CeO₂ Films: effect of oxidizing agent", S. M. Yadav, **S. D. Sartale**, Seminar on synthesis and applications of functional materials (SAFM), September 23, 2011, National Defense Academy, Pune, India (**ORAL PRESENTATION**).
94. "Effect of deposition parameters on SILAR deposited silver thin films", A. B. Rohom, **S. D. Sartale**, Seminar on synthesis and applications of functional materials (SAFM),

September 23, 2011, National Defense Academy, Pune, India (**ORAL PRESENTATION**).