

An introduction and other Milestones of
PROF. PRAMOD S. PATIL



*A teacher is a brilliant light, illuminating the prism of life
revealing to the student a rainbow of possibilities!*

Curriculum Vitae

Prof. (Dr.) Pramod S. Patil

M.Sc., Ph.D., F.M.A.Sc., M.N.A.Sc., FinstP (UK)

**Pro-Vice Chancellor,
Shivaji University,
Kolhapur-416 004
Maharashtra State, India**

CURRICULUM VITAE



1. **Full Name** **Patil Pramod Shankararao**
2. **Date of Birth** 09-01-1965
3. **Address (R)** "Ashirwad", 584E/13, Sunita Vihar,
Rajendranagar, Kolhapur- 416 008
4. **Current Designation** Senior Professor and Pro-Vice Chancellor
5. **College** -----
6. **University Department** PHYSICS
7. **Educational Qualification:**

No.	Name of the Examinations	Class & Division	Percentage Marks	of Year Passing	of Name of the University
1.	B.Sc.	I st Class	67.46%	1984	Shivaji
2.	M.Sc.	I st Class	60.47%	1986	Shivaji
3.	Ph.D.	-----		1990	Shivaji
	Title of the thesis	Studies on ferric oxide semiconductor and its use in rechargeable liquid junction solar cells Research Guide: Prof. S. H. Pawar			
4.	Other	German Language Exam: G-I	-----	1996	Goethe Institute, Bremen, Germany
		German Language Exam: G-III	-----	1996	Goethe Institute, Bremen, Germany

8. Research work guidance:

- a. **Ph.D.** : 50 (46 Completed; 02 Submitted, 02 Working)
- b. **M. Phil.:** 06 (06 completed)
- c. **M.Sc.:** About 200> projects are completed

9. Positions Held:

Designation	From	To	Name of the Institution
Lecturer	11.8.1989	10.8.1990	The New College, Kolhapur
Lecturer	1.9.1990	31.8.1995	Shivaji University, Kolhapur
Lecturer Sr. Scale	1.9.1995	31.8.2000	Shivaji University, Kolhapur
Associate Professor	1.9.2000	31.8.2008	Shivaji University, Kolhapur
Professor	1.9.2008	till today	Shivaji University, Kolhapur
Coordinator	1.6.2008	31.5.2011	M.Tech. Energy Technology, Shivaji University, Kolhapur
Head,	1.6.2019	31.5.2022	Department of Physics, Shivaji University, Kolhapur
Co-ordinator	15-04-2011	30.9.2012	School of Nanoscience and Technology, Shivaji University, Kolhapur
Coordinator	17.1.2015-	16.1.2018	School of Nanoscience and technology, Shivaji University, Kolhapur
Coordinator	18.1.2018-	18.10.2019	School of Nanoscience and technology, Shivaji University, Kolhapur
I/c Director	19.10.2019-	17.1.2021	School of Nanoscience and technology, Shivaji University, Kolhapur
Faculty Coordinator	21.12.2015-	23.3.2017	Faculty of Science
I/c Dean	24.3.2017-	17.6.2020	Faculty of Science & Technology, Shivaji University, Kolhapur
Director, IQAC	1.6.2020	10.12.2020	Shivaji University, Kolhapur
Pro-Vice Chancellor	10.12.2020	Till date	Shivaji University, Kolhapur

10. No. of Research Publications: Total – 901

	International Journals	National Journals	Uni/State level Journals/ Seminar Proceedings	Total
a. Published	553	25	11	589
b. Conferences/seminar abstracts	110	193	--	303
c. Patents	01	05	--	06
d. Book/Chapters	06	---	---	06
Total	670	220	11	901

11. Particulars of Orientation / Refresher courses attended:

Year	Name of the academic staff college
1991	Summer School equivalent to Refresher course
1991	University of Poona
1992	Orientation Course, Goa University
2000	Shivaji University, Kolhapur
2003	Shivaji University, Kolhapur

13. Individual Research Projects:

Title of Project / Scheme	Funding Agency	Funds received	Date of starting	Date of ending	P.I./Co-P.I.
1. Preparation of molybdenum oxide thin films for electrochromic devices (Minor).	Shivaji University.	35,000/-	1-4-2000	31-3-2001	P.I.
2. Preparation of highly textured WS ₂ thin films by Van der Waals Rheotaxy process for PEC solar cells.	D.S.T.	8,09,000/-	1-3-2001	31-08-2004	P.I.
3. Preparation of Iridium oxide thin films by	U.G.C.	4,46,000/-	3-4-2001	31-3-2004	P.I.

spray pyrolysis technique for electrochromic displays.					
4. Photoelectro-chemical detoxification of water using semiconductor oxide photocatalysts	D.S.T.	19,57,585/-	22-12-2004	22-6-2008	P.I.
5. Development of polymer solar cells based on nanostructured TiO ₂	DAE-BRNS	34,01,375/-	9-9-2008	31-03-2012	P.I.
6. Layer-by-layer deposition of multicolored conducting polymer composites for electrochromic smart window application	UGC	11,79,320/-	01-05-2009 (3 years)	31-03-2012	P.I.
7. Investigation on NiO-GDC/GDC structures for the development of intermediate temperature SOFC.	DAE-BRNS	13,66,400/-	23-10-2009 (3 years)	2013	Co-PI
8. Development of Gas Sensors for Toxicants of Defence Interest	DRDO	17,28,000/-	July 2011	2015	P.I.
9. Development of superior supercapacitors based on eco-friendly 1D Copper oxide and functionalized ionic liquid	C.S.I.R.	25,17,000/-	July 2012	2015	P.I.
10. Fabrication of complementary WO ₃ /NiO ₂ thin films for electrochromic application based on solid state electrolyte	DAE-BRNS	24,99,000/-	Nov.2012	2015	Co-PI
11. Investigations on polyaniline/ graphene composite electrodes for electrochemical supercapacitors	WSO-A DST	16,98,000/-	Nov.2012	2015	Scientist Mentor

12. Ultrafast solar hydrogen production using gas phase photocatalysis based on core-shell semiconducting nanostructures	Indo-Japan	5,46,000/-	July 2013	2015	Participant
13. Studies on efficient tandem polymer solar cells based on graphene grafted polymers and nanostructured inorganic materials	DAE-BRNS	24,89,500/-	June 2014	2017	P.I.
14. Design and development of advanced quantum dot sensitized perovskite solar cells for superior light harvesting	WSO-A DST	24,09,000/-	April 2015	2018	Scientist Mentor
15. Deposition of $\text{Cu}_2\text{ZnSn}(\text{S}_x\text{Se}_{1-x})$ thin films by a novel Spray-CVD method and fabrication of efficient solar cells	UGC	15,20,000/-	June 2015	2018	P.I.
16. Development of Nexar polymer nanocoatings for antimicrobial and antiviral properties on various substrates	Consultancy Project, Kreton Polymers, LLC, TX, USA	USD 10,000 (Rs.7,55,800.00)	20 weeks From 1.6.2020	31.12.2020	P.I.
17. Centre for Nanofabrics	RUSA, MHRD	1,20,37,000/-	31.10.2018	31.10.2020	P.I.
18. Advances Research and Education	DBT Builder	5,00,00,000/-	01.01.2022	01.01.2027	P.I.
Total (Rs.)		8,73,93,980/-	Rs. 8 Crore 73 Lakhs 93 Thousand nine hundred eighty		

Departmental Projects: Prepared, Presented, Executed

Project	Amount (Rs.)	Duration
UGC-DRS-Phase-II	48,00,000/-	2004-2007
UGC-DRS-ASIST	72,00,000/-	2005-2010
UGC-DSA-Phase-I	95,25,000/-	2010-2015

DST-FIST-Phase-I	60,00,000/-	2003-2007
DST-FIST-Phase-II	2,84,00,000/-	2011-2015
DST-FIST	1,15,00,000/-	2019-2024
Total (Rs.)	6,74,25,000/-	(Rs. 6 Crores 74 Lakhs twenty five Thousand)

14. Membership of Academic Bodies:

- 1. Life Active member-** Society for advancement in electrochemical science and technology (SAEST), Karaikudi, India.
- 2. Life member-** Marathi Vidnyan Parishad, Mumbai, India.
- 3. Life Member-** National Semiconductor Society, India.
- 4. Life Member-** Indian Association for Physics Teachers (IAPT).
- 5. Life member-** Materials Research Society of India (MRSI).
- 6. Fellow Member-** Institute of Physics, UK, London, FinstP
- 7. Fellow Member-** Maharashtra Academy of Sciences, 2013
- 8. Life Member-** International solvothermal and hydrothermal association (ISHA) - 2010-11
- 9. Member of the Ad-hoc board in Technology** under the faculty of Engineering and Technology, Shivaji University, Kolhapur.
- 10. Life member: The Indian Science Congress, Association.**
[Membership No. A3359] – 2010-11
- 11. Member:** Local Advisory Board, Walchand College of Arts and Science, Solapur. 2010-11
- 12. Coordinator:** MOU between Shivaji University and Universities of Ontario, Canada.
- 13. Coordinator:** MOU between Shivaji University and National Dong Hua University, Taiwan
- 14. Coordinator:** Department of Energy Technology
- 15. Founder Coordinator:** School of Nanoscience and Technology
- 16. Member of NASI, Allahabad**
- 17. Committee member:** University Research Policy, 2014
- 18. Dean:** Science, Technology, Engineering, Faculty Shivaji University, Kolhapur, 2015
- 19. BOS Chairman** of Physics Subject in Shivaji University Kolhapur 2018
- 20. BOS member** of Sanjay Ghodawat University Atigre 2018
- 21. Academic council member** in Shivaji University Kolhapur
- 22. Management council member** in Shivaji University Kolhapur
- 23. Senate member** in Shivaji University Kolhapur
- 24. Academic council member,** DKTE, Ichalkaranji
- 25. Member** of Governing Council Walchand College of Engineering Sangali.
- 26. Member** Quarterly Franklin Membership of London Journal Press.
- 27. Member** of World Class QS Ranking Intelligent Unit
- 28. Reviewer** of Nomination President's Science Award (PSA), Singapore
- 29. Member** of Editorial Board in the Journal of Material Science and Technology Research
- 30. Reviewer** of academic promotion at University of Hail, Saudi Arabia

15. Honours/Prizes/Awards:

- 1) Junior Research Fellowship – 1986-1988
- 2) Senior Research Fellowship – 1988-1989
- 3) German Academic Exchange Award (DAAD) – 1996-1998
- 4) Best Poster Presentation Awards at International conferences = 03
- 5) Best Poster/Oral Presentation Awards at National conferences = 05
- 6) Brain Pool post doctoral fellowship award, South Korea – 2004-2005
- 7) First prize for best poster in pure science in “Avishkar-2008”.
- 8) Winner of the best microscopy image cover page award-2010;
Nanotoday, Impact Factor = 13.2, Feb 2010.
- 9) Winner of the best microscopy image cover page award-2011;
Nanotoday, Impact Factor = 13.2, July 2011.
- 10) Winner of the best microscopy image cover page award-2011;
Materials Today, Impact Factor = 11.45, 2011.
- 11) Invited Talks more than 100
- 12) Outstanding poster award-IUMRS-ICA-12, Taipei, Taiwan, 19-22 Sept, 2011.
- 13) Excellent poster award- IUMRS-ICA-2012, Taipei, Taiwan, 2011
- 14) **Editor**, Conference papers in Materials Science (CPMS), Hindawi Publishers, March 2012.
- 15) Brain Pool post doctoral fellowship award, South Korea (2012-13)
- 16) Visiting Professor, Chonnam National University, South Korea (2012-13)
- 17) Best poster presentation award at Indo-Singapore international conference (2014)
- 18) Review Editor, Frontiers in Materials, May 2014
- 19) **Best Teacher Award**- 2014, Shivaji University, Kolhapur.
- 20) One of his Ph.D. students received **Best Ph.D. thesis in the world**- award- 2014
- 21) One of the **TOP 10 knowledge producers in India** by Faculty Research Awards, Careers 360 Ranking in India, 2017-2018
- 22) **Outstanding Research faculty Award** by Careers 360 Ranking in India, 2017-2018
- 23) Total citations for the papers: **25,363**, **h-index = 82**, **i10-index= 452**
- 24) **Research Gate (RG) reads: 1,07,000 RG score: 47.60**
- 25) **Total research paper views by Mendeley : 4,61,555**
- 26) Brand Kolhapur award.



16. Convened International Conference:

International Conference on Nanomaterials and Applications, 9-11 December, 2008, Shivaji University, Kolhapur, INDIA

- ❖ 9 Invited Talks by Foreign Scientists
- ❖ 8 Invited Talks by Indian Scientists
- ❖ 400 participants

Sr. No.	Title of Workshop / Seminar / Conference	Month & Year	Place	Role assigned (to you) in organizing the event
1.	International Conference on Nanomaterials and Applications	9-11, Dec. 2008	Department of Physics and Chemistry, Shivaji University, Kolhapur	Co-Convener
2.	1 st International Conference on Physics of Materials and Materials Based Device Fabrication (ICPM-MDF-2014)	January 17-19, 2012	Department of Physics, Shivaji University, Kolhapur	Co-Chairman
3.	2 nd International Conference on Physics of Materials and Materials Based Device Fabrication (ICPM-MDF-2014)	January 13-15, 2014	Department of Physics, Shivaji University, Kolhapur	Conference Secretary
4.	3 rd International Conference on Materials Science and Ionizing Radiation Safety and Awareness (ICMSIRSA-2016)	28-30, January 2016	Department of Physics, Shivaji University, Kolhapur	Local Organizing Committee
5.	4 th International Conference on Physics of Materials & Materials Based Device Fabrication (ICPM-MDF-2019)	10-11, January, 2019	Department of Physics, Shivaji University, Kolhapur	Local Organizing Committee

6.	Global initiative for Academic Network (GIAN) program “An International course on Cancer and Neurological Nanotechnology: From Basic to Translational and Clinical Sciences”	14-18 November, 2016	School of Nanoscience and Technology	Course Coordinator
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17. National Collaboration:

- ❖ Bhabha Atomic Research Centre, BARC, Mumbai
- ❖ National Chemical Laboratory, N.C.L., Pune
- ❖ D.R.D.E., Gwalior
- ❖ Centre for Materials for Electronic Technology, Pune
- ❖ Central Electrochemical Research Institute, C.E.C.R.I., Karaikudi, T.N.
- ❖ Solapur University, Solapur, M.S.
- ❖ Pune University, Pune
- ❖ Indian Institute of Science, I. I. Sc., Bangalore
- ❖ Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore
- ❖ UGC-DAE Consortium for Scientific Research, Indore, M.P.
- ❖ Established School of Nanoscience and Technology department with 5 year BSc-MSc integrated program. Rs. 10 crores

18. Number of post doctoral and doctoral students working abroad

Post Doctorate Students: 15

Doctorate Students: 35

19 International Collaboration:

- ❖ National Dong Hwa University, Taiwan
- ❖ Dongguk University, Seoul, S. Korea
- ❖ Mie University, Mie, Japan
- ❖ Korea Electrotechnology Research Institute (KERI), Sungju-Dong, Changwon, South Korea
- ❖ Chonnam National University, Gwangju, South Korea
- ❖ University of Ljubljana, Ljubljana, Slovenia

- ❖ Florida Solar Energy Centre, F.S.E.C., U.S.A.
- ❖ National University of Singapore, N.U.S., Singapore
- ❖ National Institute of Materials Science, NIMS, Japan
- ❖ Hanyang University, ERICA campus, Ansan, South Korea
- ❖ KITECH, Gwangju, South Korea
- ❖ Kyoto University, Japan

20 Coordinator-International MoUs with Shivaji University, Kolhapur

- ❖ Universities of Ontario, Canada
- ❖ National Dong Hwa University, Taiwan
- ❖ Myongji University, South Korea
- ❖ National Chemical Laboratory (NCL) Pune

21 Referee:

- ❖ Solar Energy Materials and Solar Cells,
- ❖ Crystal Research Technology
- ❖ Journal of Crystal Growth,
- ❖ Journal of Materials Science,
- ❖ Journal of Applied Physics
- ❖ Solid State Ionics
- ❖ Journal of American Ceramic Society
- ❖ Electrochimica Acta
- ❖ Applied Surface Science
- ❖ Journal of Electroanalytical Chemistry
- ❖ Vacuum
- ❖ Journal of Physics D: Applied Physics
- ❖ Materials Science and Engineering B
- ❖ Acta Chimica Slovenica
- ❖ Applied Materials and Interfaces (American Chemical Society)
- ❖ Journal of Solid State Electrochemistry
- ❖ Materials Research Bulletin
- ❖ Thin Solid Films
- ❖ Nanotechnology
- ❖ Journal of Chemical Engineering of Japan
- ❖ Indian Journal of Pure and Applied Physics
- ❖ Indian Journal of Materials Science and Engineering, India and many more

22 ❖ Book Chapters:

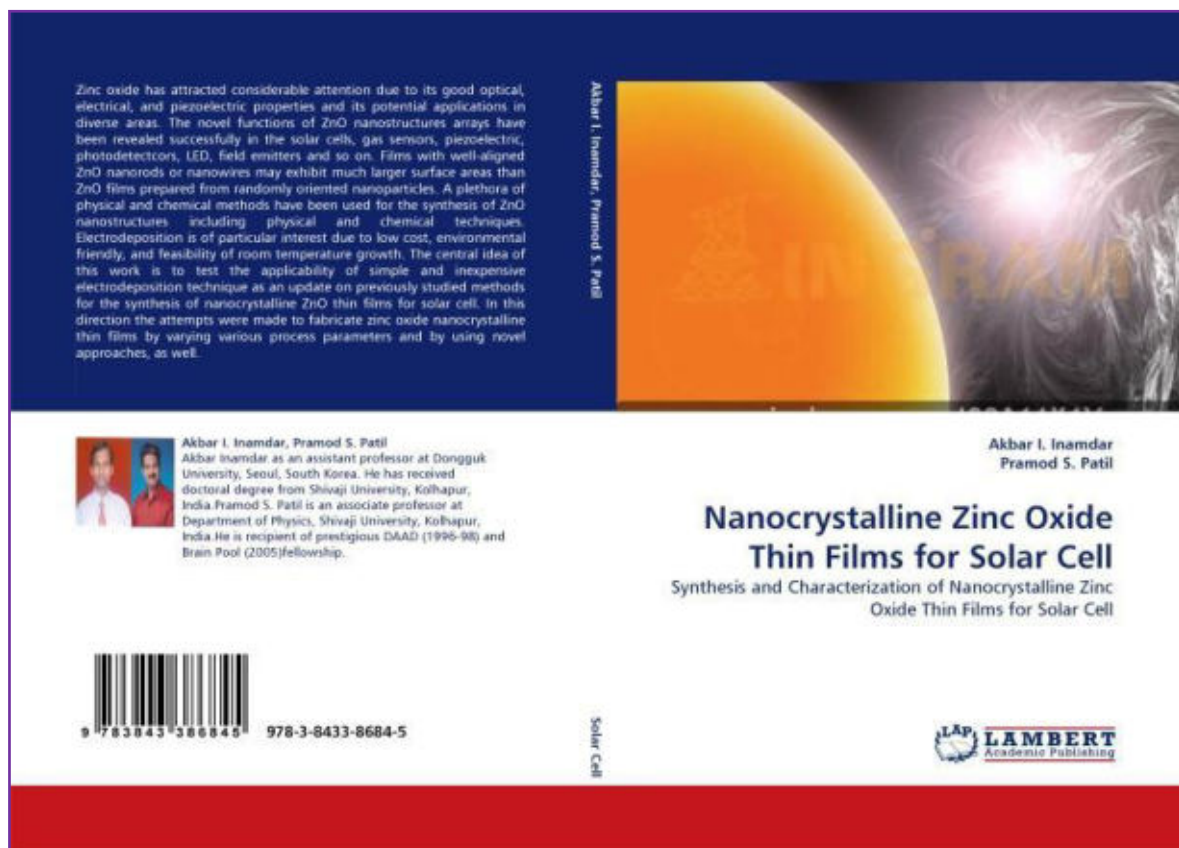
- 1 **P. S. Patil** and P.S. Chigare (2003): An electrochemical analysis of spray deposited tin

oxide thin films in aqueous solution and their electrochromism, *Advances in Energy Research*, Nova Science Publishers, New York, USA, Editor Frank Columbus.

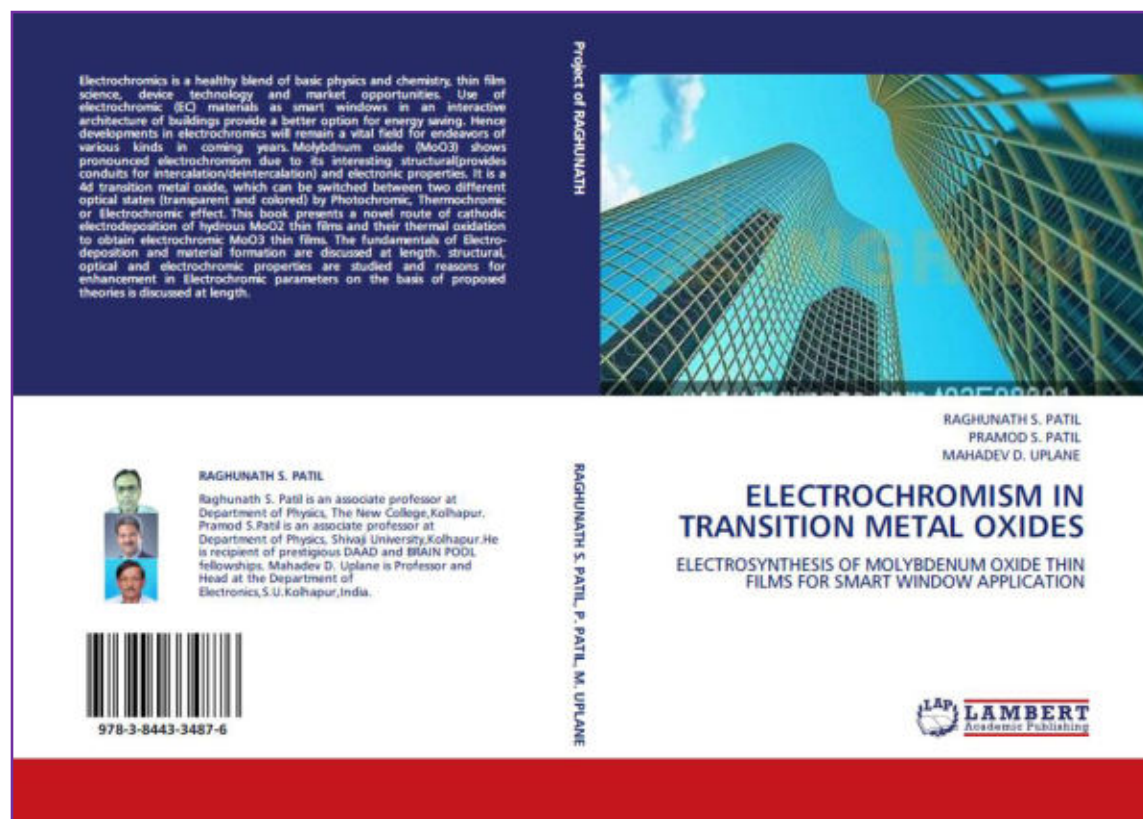
- 2 S.H. Mujawar and **P. S. Patil** (2007): Electrochromism in Niobia thin films: A status review, *Photo/electrochemistry and photobiology in the environment, energy and fuel*, Research Signpost publishers, Chief Editor, S. Kaneko, Japan, Associate Editors: B. Vishwanathan and Hideyuki Katsumata, Pages: 53-92.
- 3 S. A. Vanalakar, J. H. Kim, and **P. S. Patil(2015)**: Polymer assisted synthesis of CdS nanostructure for photoelectrochemical solar cell applications, *Advanced Polymeric Materials, From Macro- to Nano-Length Scales*, Edited by Sabu Thomas, Nandakumar Kalarikkal, Maciej Jaroszewski, and Josmine P. Jose, Apple Academic Press 2015, Pages 173–204, Print ISBN: 978-1-77188-096-1, eBook ISBN: 978-1-4987-1690-1, DOI: 10.1201/b18943-12
- 4 Arif D. Sheikh, Jyoti V. Patil, Pramod S. Patil One-Dimensional Nanostructured Metal Oxides for Hybrid Perovskite Solar Cells Applications ASP , American Scientific Publisher, Rupesh Devan Editor, 2018
5. Neha D. Desai , Kishorkumar Khot, Tukaram D. Dongale, Atul Khot , P. S. Patil .Popatrao N. Bhosale Environmentally Benign protocols for the synthesis of transition metal oxide: A brief outlook Composites for Environmental Engineering, Wiley, 2019

23 ❖ Book:

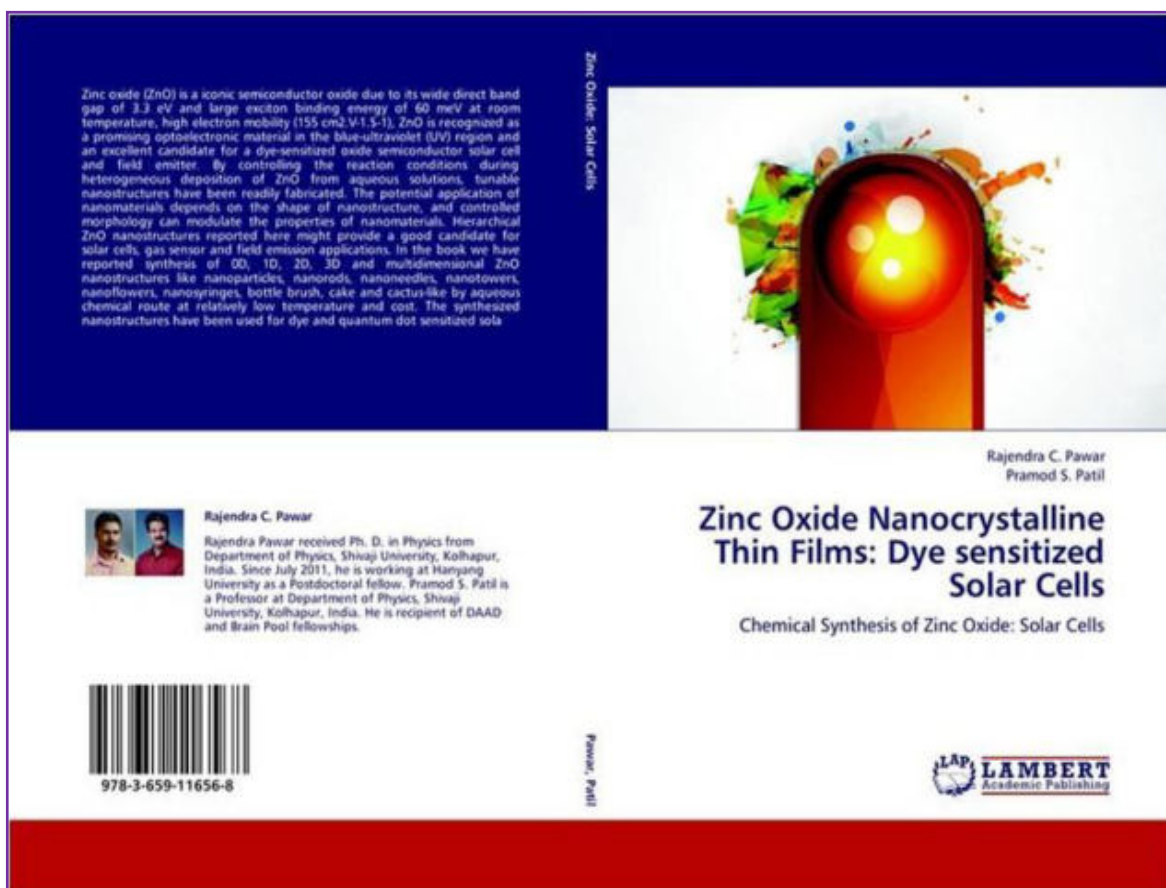
1. Nanocrystalline Zinc Oxide Thin Films for Solar Cells by Dr. **P. S. Patil** and Dr. A. I. Inamdar, Lambert Academic Publishing, Germany, ISBN 978-3-8433-8684-5.



2. Electrochromism in transition metal oxides: Electrosynthesis of molybdenum oxide thin films for smart window application by R. S. Patil, **P. S. Patil** and M. D. Uplane, Lambert Academic Publishing, Germany, ISBN 978-3-8443-3487-6



3. Zinc Oxide Nanocrystalline Thin Films:Dye Sensitized Solar Cells by Rajendra C. Pawar, **P. S. Patil**, Lambert Academic Publishing, Germany, ISBN 978-3-659-11656-8.



4. Polyaniline based Electrodes for Electrochemical Supercapacitor by Dipali S. Patil and Pramod S. Patil, Lambert Academic Publishing, Germany, ISBN 978-3-659-50718-2.



24 . **LIST OF Ph.D. STUDENTS (Awarded):** 48 (46 Awarded, 02 Submitted)

Sr.No	Name of student	Date of Registration	Year of award	Title of the thesis
1.	Mr. Patil P.R.	1-7-1996	2000	Studies on electrochromic properties of sprayed tungsten oxide thin films
2.	Mr. Kadam L.D.	1-1-1997	2001	Studies on spray pyrolysed cobalt oxide and nickel oxide thin films and their electrochromic properties
3.	Mr. Kawar R.K.	2-8-1998	2005	Synthesis of electrochromic Iridium oxide thin films deposited by spray pyrolysis technique
4.	Mr. Chigare P.S.	23-6-1999	2005	Preparation of tin oxide thin films by spray pyrolysis technique and their electrochromic properties
5.	Mr. Deshmukh H.P.	1-1-2001	2005	Investigations of titanium oxide thins films deposited by spray pyrolysis technique and their electrochromic properties

6.	Mr. Patil R.S.	1-7-1999	2006	Electrosynthesis of molybdenum oxide and its electrochromic characterization
7.	Mr. Sadale S.B.	1-1-2004	2006	Preparation of textured WS ₂ thin films by van Der Waals Rheotaxy Process and their characterization
8.	Mrs. Uplane M.M.	1-1-1999	2006	Studies on electrochromic properties of nickel and cobalt oxide thin films prepared by thermal oxidation of their electrodeposited chalcogenides
9.	Mrs. Bathe S.R.	1-7-2003	2006	Studies on spray deposited tungsten oxide thin films doped with titanium and niobium for electrochromic devices
10	Mr. Mujawar S.H.	1-1-2004	2007	Synthesis of pristine and doped niobium oxide thin film coatings and their electrochromism
11	Mrs. Mahajan S.S.	1-7-2003	2008	Investigations on electrochromic properties of pure and doped Molybdenum oxide thin films
12	Mr. Shinde P.S.	1-7-2004	2008	Photoelectrochemical detoxification of water using spray deposited oxide semiconductor thin films
13	Mr. Inamdar A.I.	1-1-2005	2008	Synthesis and characterization of Zinc oxide Nanocrystalline Thin films
14	Mr. Kadam P. M.	2004	2009	Intermittent spray pyrolytic deposition of tungsten oxide thin films and their characterization for smart window application
15	Mr. Dhale B. B.	1-7-2004	2009	Studies on vacuum evaporation of copper thin films and their thermal oxidation to copper oxide for EC Devices
16	Mr. Patil C. E.	2003	2009	Investigations on formation of vanadium oxide thin films and their electrochromic studies for smart windows
17	Mr. Bhosale A. K.	2004	2009	Spray deposition and characterization of cerium oxide, cerium oxide-silica and cerium oxide-zirconia thin films for optically passive counter electrode in electrochromic device
18	Mrs. Sonawane A. C.	1-7-2006	2010	Electrochromic properties of nickel oxide-conjugated polymers (PPy, PANI) thin films
19	Mr. Vhanalkar S. A.	1-1-2005	2011	Chemical synthesis of CdS, ZnO and CdS sensitized ZnO thin films and their characterization for

				photoelectrochemical solar cells
20	Ms. Shaikh J.S.	1-7-2007	2011	Deposition of Nanocrystalline CuO based thin films by spin coating technique and their characterization for supercapacitor application
21	Mr. Pawar R.C	1-7-2007	2011	Studies on dye sensitized solar cells based on nanostructured zinc oxide thin films by an aqueous chemical route
22	Mr. Tarwal N.L.	1-1-2007	2011	Preparation of ZnO and transition metal (Ni, Cu, Co, Ag, Au) doped ZnO thin films by spray pyrolysis technique and their characterization
23	Mrs. Kalagi S.S.	1-1-2008	2011	Studies on electrochromic tungsten Oxide and polymer thin films for Chromogenic devices
24	Mr. Dalavi D.S.	1-7-2008	2013	Synthesis and Characterization of Nanostructured NiO Thin Films and Their Electrochromic Properties
25	Mr. Mali S. S.	1-7-2008	2013	Development of polymer solar cells based on nanostructured titanium oxide
26	Ms. D. S. Patil	8-8-2011	2013	Studies on Chemosynthesized polyaniline based electrodes for Electrochemical Supercapacitor
27	Ms. A. S. Kamble	8-8-2011	2014	Studies on the chemical synthesis of nanostructured zinc oxide thin films and their application in solar cells
28	Ms. V. V. Shinde	8-8-2011	2014	Synthesis and characterization of inorganic nanomaterials (ZnO, Ag, ZnO-Ag) and their antimicrobial properties
29	Mr. S. A. Pawar	1-7-2010	2014	Investigations on hydrothermally grown TiO ₂ and chemosynthesized CdSe nanostructure architectures for solar cells.
30	Mr. P. R. Jadhav	8-8-2011	2015	Studies on Electrochemically deposited manganese oxide/Conducting Polymer composite electrodes for supercapacitor application
31	Mrs. Pisal Sunanda	22-6-2009	2015	Studies on Chemical routes for functionalization of Carbon nanotubes and their physico-chemical characterization.
32	Mr. N. S. Harale	1-7-2010	2017	Studies on Carbon Nanotube-conducting Polymer Nanocomposites for Gas Sensor Application

33	Mr. A. J. More	1-7-2011	2017	Electrodeposition of tungsten oxide thin films: Synthesis, Characterization and Electrochromic Properties.
34	Miss. Tejasvinee S. Bhat	1-7-2012	2017	Studies on Titanium dioxide based lead selenide and lead sulfide sensitized solar cells
35	Mr. Vishal V. Burungale	1-7-2012	2017	Studies on sensitized solar cells based on hydrothermally grown TiO ₂ nanostructures
36	Mr. S. S. Shendage	01-07-2012	2017	Studies on nanostructured tungsten oxide thin films for gas sensing application
37	Miss. Sarita M. Shinde	1-7-2012	2018	Hydrothermal growth of indium oxide (In ₂ O ₃) thin film for gas sensor applications
38	Miss. Jyoti V. Patil	05-11-2015	2018	Studies on sensitized solar cell based on titanium oxide electrospun
39	Miss. Shilpa A. Phaltane	1-7-2012	2018	Synthesis Of Copper Zinc Tin Sulfide (Cu ₂ ZnSnS ₄) By Hydrothermal Route For Photocatalysis Application
40	Mr. Krishna K. Pawar	18 -01-2016	2019	Synthesis of hollow indium oxide using kirkendall effect and its gas sensing application
41	Mr. G. J. Navathe	1-7-2012	2019	Studies on supercapacitive properties of copper oxide nanostructured thin films
42	Mr. Aviraj M.Teli	18 -01-2016	2019	Synthesis of manganese oxide thin film using chemical routes for supercapacitor application
43	Mr.Pradumnya P. Waifaikar	21-07-2017	2019	Studies on the synthesis of iron oxide nanoparticles by solvothermal method and their surface modification for targeted drug delivery
44	Mr. Arvind H. Patil	01-07-2017	2021	Studies on the synthesis of silver and zinc oxide nanoparticles and their incorporation into textile fabric by sonolysis for antimicrobial functionality
45	Miss. Sonali A. Beknalkar	01-07-2017	2021	Studies on the engineering of ordered manganese oxide nanocomposites and optimization of electrolytes for supercapacitor devices
46	Mr. Vithoba L. Patil	01-07-2018	2022	Studies on Group III-A Elements Doped ZnO Thin Films for the Development of Chemiresistive Gas Sensors

47	Mr. Sumit D. Korade	21-05-2014	2023	Synthesis of $\text{Cu}_2\text{ZnSn}(\text{S}_x\text{Se}_{1-x})_4$ thin films by Spray-CVD method and their characterization for solar cells
48	Miss. Sarika B. Dhavale	01-07-2018	2023	Preparation and Characterization of Nickel Cobaltite and Biomass Derived Carbon Composite for Supercapacitive Application
49	Mr. Satyajeet S. Patil	01-07-2019	2023	Studies on hydrothermal synthesis of metal pyrophosphate ($\text{M}_2\text{P}_2\text{O}_7$, M = Ni and Co) based electrodes for supercapacitors

LIST OF M. Phil. STUDENTS GUIDED: 06 Awarded

1.	Mr. Patil P.R.	1-1-1993	1995	Physico-chemical characterization of tungsten oxide semiconductor thin films
2.	Mr. Patil R.S.	1-8-1994	1996	Spray deposition of molybdenum oxide thin films and their physico-chemical characterization.
3.	Mr. Patil A.R.	19-4-2000	2001	Electrochromic properties of spray deposited niobium oxide thin films
4.	Mrs. Shaikh R.I.	18-7-2003	2005	Electrochromic properties of copper oxide thin films synthesized by spray pyrolysis technique
5.	Mr. U. T. Pawar	8-8-2011	2016	Synthesis and characterization of dye sensitized solar cells based on hierarchical nanostructured TiO_2 and ZnO
6.	Mr. B. M. Patil	1-7-2010	2019	Synthesis of $\text{Cu}_2\text{ZnSnS}_4$ (CZTS) thin films by SILAR and their characterization for solar cells

LIST OF Ph.D. STUDENTS WORKING UNDER MY GUIDANCE: 02

Sr No	Name of student	Date of Registration	Title of the thesis
1.	Miss. Shweta M. Pawar	01-07-2021	Studies on the Development of Multifunctional Nanotextiles Based on Copper Oxide and Calcium Oxide

25. INVITED TALKS: (More than 100)

Sr. No.	College	Subject	Year
1.	Karmavir Bhavurao Patil Mahavidyalaya, Phandharpur	Transparent oxide electronics and recent communication systems	2007
2.	Balbhim Arts, science and commerce college, Beed	Advanced Study in solid state physics and crystallography	2008
3.	Yashvantrao Chavan Institute of Science	New Horizons in Physics	2006
4.	Walchand college of Arts and science, Solapur	Recent trends in thin film Technology	2008
5.	Rajashri Shahu mahavidyalay, Latur	Photonic materials and Nanotechnology	2008
6.	Bhaurao kakatkar college, belgaun	Nanostructured Electronic smart Window coatings	2009
7.	School of Physical Sciences, Solapur university	Advanced materials: Synthesis Strategies and Applications	2010
8.	Arts, Commerce and Science college, Nashik		2010
9.	Vivekanand College, Kolhapur	Chief guest of Science association function	2010
10.	College of Engineering, Kolhapur	Synthetic strategies for producing energy harvesting nanomaterials : Panoramic view	2010
11.	SMT. Kashibai Navale college of Engineering	Stimulating the Knowledge of Engineering Sciences	2010
12.	College of Non-conventional courses for woman(SIBER)	Smart windows	2010
13.	Vivekanand College, Kolhapur	Non conventional Energy Resources	2010
14.	Walchand College of Engineering , Sangali	Nanotechnology	2010
15.	Karmaveer Bhaurao patil mahavidyalaya, Phandharpur	Nanostructured materials for Advanced Technology	2011
16.	Raje Ramrao Mahavidyalaya, Jath	Chief guest for inaugural function of nanotechnology course	2011
17.	Chh. Shahu Institute of Business Education And Research (SIBER)	Chief guest for Valedictory function of Work shop on research methodology for M phil students	2011
18.	Dattajirao Kadam Arts, Science and Commerce college, Ichalkaranji	Resource person for the Workshop	2011
19.	Tomato FM, Kolhapur	Edu Disha	2011
20.	Institute of civil and Rural	Harvesting of Non conventional	2011

	Engineering	energy resources: Research and industrial approach	
21.	Gopal krushna Gpkhale College, Kolhapur	Guest lecture on Science Day	2011
22.	Willingdon college, Sangali	Nanotechnology (R N joshi Vidnyan Manch)	2011
23.	Indian Woman scientist's Association, Kolhapur branch	Nanotechnnnology	2011
24.	Mahila melhava	Solar Energy : Need of time	2012
25.	Shikshanmaharshi Dr. Bapuji Salunkhe Mahavidyalaya, Miraj	Chief guest for Work shop on "Revised Syllabus of BSc III, Physics"	2012
26.	Defence Institute of Advanced Technology (DIAT), Pune	ICFMD-2012	2012
27.	National workshop on Polymer solar cells, IISER, Pune	Project writing and funding agencies	2012
28.	Malakapur Nagarpanchayat, Malakapur	Chief guest for Plantation program	2012
29.	Dept of Physics, Shivaji University	Job opportunities for MSc and PhD students (at the Workshop)	2012
30.	D. Y. Patil college of Engineering and Technology, Kolhapur	Nanotechnology (occasion of Engineer's Day)	2012
31.	National seminar on Nanomaterials and their Applications ,Raja Lakhmagauda Science Institute , Belgaum	Energy Harvesting Nanomaterials	2012
32.	Department Of Technology, Shivaji University	DST Inspire Science Camp	2012
33.	Changu Kana Thakur Arts, Science and commerce college, New Panvel	Nanotechnology: fundamentals and applications	2012
34.	Vivekanand College Kolhapur	Nano Science And Technology for better Living	2012
35.	Dhananjay mahadik group of Institutions, Kolhapur	Nanotechnology (On Science Day)	2012
36.	MIT college of Engineering, Pune	Invited talk at National Workshop NWNST 2012	2012
37.	Vivekananda College, Kolhapur	Invited talk at National Conference on Recent Trends in Nanotechnology	2013
38.	Department of Materials Engineering, Hanyang University, ERICA Campus, S. Korea	Solar cells: Past, present and future	2013

39.	Department of Chemistry, Shivaji University	Advances in Nanostructured Solar cells	2013
40.	Bharati Vidyapith, College of Pharmacy, Kolhapur.	Nanoscience and Technology	2013
41.	Padmavibhushan Dr. Vasantaodada Patil Mahavidyalaya, Tasgaon	Chief Guest in New Horizons- 2014	2014
42.	Dept. of Physics, Shivaji University, Kolhapur	Carrier opportunities for B.Sc. and M.Sc. Students; AMPS 2014	2014
43.	International Conference on Inovations in Energy, Polymer and Environmental Sciences; YCIS, Satara	Recent Trends in Nanostructured solar cells	2014
44.	CTCNS-2014; Dept. of chemistry, Shivaji University, Kolahpur	Solar Cells for the future	2014
45.	DST sponsored Inspire Science Camp, New College, Kolhapur.	As resource person	2014
46.	National Conference on Recent Trends and Issues in Renewable Energy; Rajarshi Chhatrapati Shahu College, Kolhapur	Renewable Energy Research and Deployment in India	2014
47.	Department of Chemical Technology, DOT, SUK	Lecture on Nanotechnology	2014
48.	Keio University, Japan	Promising Chemical Routs for Synthesizing Photovoltaic Nanomaterials	2014
49.	Rajaram College, Kolhapur	Inorganic-in-organic strategies for efficient solar cells	2014
50.	National Seminar on Recent Trends in Biophysics, Devchand College, Nipani.	Promising chemical routes for synthesizing photovoltaic nanomaterials	2014
51.	National Conference on Recent Trends in Physics	Polymer solar cell: Opportunities and stratergies	2014
52.	National conference on Materials for future technology- 2014, Rajaram college, Kolhapur	Introduction to nanotechnology	2014
53.	UGC sponcered One day national seminar-2014, Dr. Bapuji Salunkhe Mahavidhyalaya, Miraj	Aspects of Economical and practical applications of non- conventional energy resources in India	2014
54.	Nano materials and nano Material based Devices-2014, D.K.A.S.C.College, Ichalkaranji.	Nano materials for Solar cell	2014

55.	National Seminar on Callenges in the quest for clean energy-2015, S.S. Arts & T.P. Science Institute, Sankeshwar	Nano Structured Solar cells	2015
56.	Emerging Trends in Basic And Applied Sciences-2015, Karmaveer Hire Arts, Science, Commerce & Educational college, Gargoti	Emerging Trends in Photovoltaic.	2015
57.	National Level seminar, C. S. Bembalagi Arts, Sha M.R. Palaresha Science & G. L. Rathi commerce college, Ramdurg	Energy crises: Posible solutions through passive solar design techniques	2015
59	National conference on nanomaterial imperative in the millennium (NINM-2016), S.P.H.J. Science college, Neminagar, Chandwad, nashik	Nanomaterials for exotic applications	2016
60	Sharad institute of technology college of engineering, Ichalkaranji	Research opportunities	2016
61.	Departments of technology Shivaji university Kolhapur		2016
62.	Rashtiya swa sevak jankalyan samiti Kolhapur	Chief guest	12/01/2017
63.	Jyoti college, Belgaum	Chief guest	13/01/2017
64.	Rajashri Chatrapati college,Kolhapur	Chief guest/ Nanotechnology and smart window	19/01/2017
65.	LBS college,Satara	Chief Guest / Solar cell	23/01/2017
66.	Rajaram College, Kolhapur Two days Inter Collegiate Students Conference	Nano-Science and Technology	21/01/2017
67.	SGM college Karad	Nanoscience and Nanotechnology	11/02/2017
68.	Centre for Research and Technology Developments Sinhhgad institutes Solapur	Resource Person	20/02/2017
69.	First International Conference on emerging trends in engineering, technology and architecture (iCETETA-2017)	Member	11/03/2017
70	SGI college, Atigre	Solar Summit-2017	2017
71.	National conference on ‘ Recent trends in nanomaterials’ 2017 YCIS, Satara	National advisory committee	2017

72.	INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN ENGINEERING, TECHNOLOGY & ARCHITECTURE <i>IceTeta 2017</i> D. Y. PATIL COLLEGE OF ENGINEERING & TECHNOLOGY DR. D. Y. PATIL PRATISHTHAN'S KASABA BAWADA, KOLHAPUR	National advisory committee	2017
73.	International conference on advances in Chemical Sciences 2018 Department of Chemistry, SUK.	Patron Dean SUK	2018
74.	International conference on advances in functional materials 2018 KTHM College Nashik	International advisory committee	2018
75.	International conference on Materials and Environmental Science 2018 Shri Yashwantrao Patil college Solankur	Advisory committee	2018
76.	4th INTERNATIONAL CONFERENCE ON PHYSICS OF MATERIALS & MATERIALS BASED DEVICE FABRICATION (ICPM-MDF-2019) Department of Physics, SUK	LOCAL ORGANIZING COMMITTEE	2019
77.	Emerging trends in basic and applied sciences 2015 KH College, Gargoti	International advisory committee	2015
78.	3 rd international conference on innovative research in Science and Technology 2017,	Scientific advisory committee	2017

	Gopalkrishna Gokhale Collrge, Kolhapur		
79	International conference on advances in Chemical Sciences 2018 Department of Chemistry, SUK.	Patron, Dean Sciences SUK	2018
80.	2 nd international conference on advances in material Sciences 2017 Raje Ramrao Mahavidyalaya, Jath Post-Graduate Department of Physics	Scientific advisory committee	2017
81.	4 th international conference on advances in material Sciences 2019 Raje Ramrao Mahavidyalaya, Jath Post-Graduate Department of Physics	Scientific advisory committee	2019
82.	International Conference on Materials and Environmental Science [ICMES-2018] Shri Yashwantrao Patil Science College, Solankur	Advisory committee	2018
83.	International conference on materials Science and ionizing radiation safety and awareness Department of Physics, SUK.	Local Organizing Committee	2016
84.	3 rd international seminar on Physics of materials and material based device fabrication 2014 Department of Physics, SUK.	Local Organizing Committee	2014
85.	National Conference on Chemistry of Chalcogens DIAT Pune	Speaker	2015

26) Patents Granted: 06 (5 Published, 1 Submitted)

Sr. No.	Inventors	Title	Reference	Date of filing patent	Date of approval	National/ International
1	P. S. Patil and S.B.Sadale	An improved spray pyrolysis process for the preparation of good quality semiconducting thin film coatings and apparatus therefore	63/MUM/2003 Patent No. 214163	23/01/2004	05/02/2008	Indian
2	P. S. Patil and S.B Sadale	Rheotaxial process for the preparation of type-II textured WS ₂ thin films having polytype 3R stacking of rhombohedral crystallites using PbS interlayer	548/MUM/2005 Patent No. 206142	04/05/2005	18/04/2007	Indian
3	J. H. Kim, J. H. Moon, K. V. Gurav, P. S. Patil , S. W. Shin	Electrodeposition of Sn layer for CZTS thin Film solar cells	Application No. 10-2013-0112114 Patent No. 10-1500858 (Korean)	17/09/2013	03/03/2015	Korean
4	Vhanalkar S. A. Patil P. S.	Method of manufacturing multinary chalcogenide nanoparticles via nontoxic route for photo-voltaic and photo-degradation application	Application number 201821032302 A Patent number 201821032302 A	--	12/04/2019	Indian
5	Vhanalkar S. A. Patil P. S.	A green route to rapid dye degradation using Cu based	Submitted	--	--	Indian

		ternary metal chalcogenide				
6	S. S. Patil, A. S. Patil, M. M. Faras and P. S. Patil	A method of preparation of organic red amaranth stems derived activated carbon composite ammonium zinc phosphate electrode for supercapacitor application	Published	09/04/2023	-	Indian

27) Cover page Awards: 06

1) NanoToday cover page award (Impact Factor= 13.237): Volume 5, December 2010 By R. C. Pawar and P. S. Patil



2) Materials 2011 by R. and P. S.

News

Cover competition winners announced

06 December 2010

And the winners are...

During a packed MRS Fall meeting we announced the winners of this year's cover competition. Please join us in congratulating all our winners again. The successful images will each feature on a Materials Today cover in 2011. Please see below for a full list of the winners.

Sami Fakouri, University of Massachusetts
Rajendra Pawar, Shivaji University
Pijus Kanti Samanta, Ghatal Rabindra Satabarsik Mahavidyalaya
Julio M. D'Arcy, University of California
Niva Ran, University of Massachusetts
Benjamin Jones, Brunel University
Dhamodaran Santhanagopalan, Indian Institute of Technology Kanpur
David Muñoz-Rojas, University of Cambridge
Muhammad Arif Zeeshan, Swiss Federal Institute of Technology
Lina Eugène, University of Sherbrooke

Related Stories

Updates: People & Places
A comprehensive update of people and places

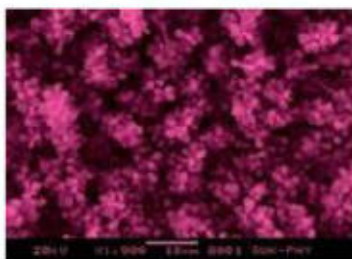
Materials Today 2010 Cover Competition
Materials Today Magazine invites you to nominate your best materials-related image to be considered for publication on the cover for one of ten 2011 issues.

Breakthrough Nanoscale Infrared Spectroscopy Technology.
Anasys Instruments wins R&D 100 Award

Today: C. Pawar Patil

3) NanoToday cover page award: 2011 by S. S. Mali and P. S. Patil , Volume 6, Issue 3, Pages 221-326 (June 2011).

Nano Today 2011 cover competition winners



Author: Sawanta S. Mali

Caption: Bronsted Acidic Ionic Liquid [BAIL] directed hydrothermal growth of TiO₂ flowers embracing bunch of aligned nanorods

[more](#)

4) Materials Today: 2012 by Namdev Harale and P. S. Patil

materialstoday

2012 Cover Competition
The Winners

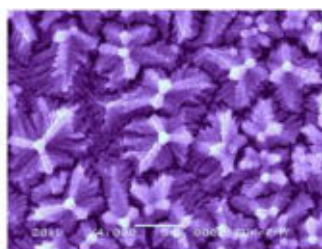
Sponsored by Carl Zeiss



We make it visible.

Submitted by: Namdev Harale

Tin oxide with an exotic fern-like morphology



5) Materials Today: 2012 by Nilesh Tarwal and P. S. Patil

materialstoday

2012 Cover Competition
The Winners

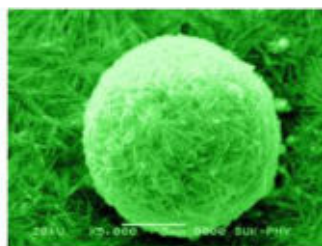
Sponsored by Carl Zeiss



We make it visible.

Submitted by: N. L. Tarwal

Sn-ZnO with a cabbage-like morphology



6) Nanotoday: 2013 by Sachin A. Pawar and P. S. Patil

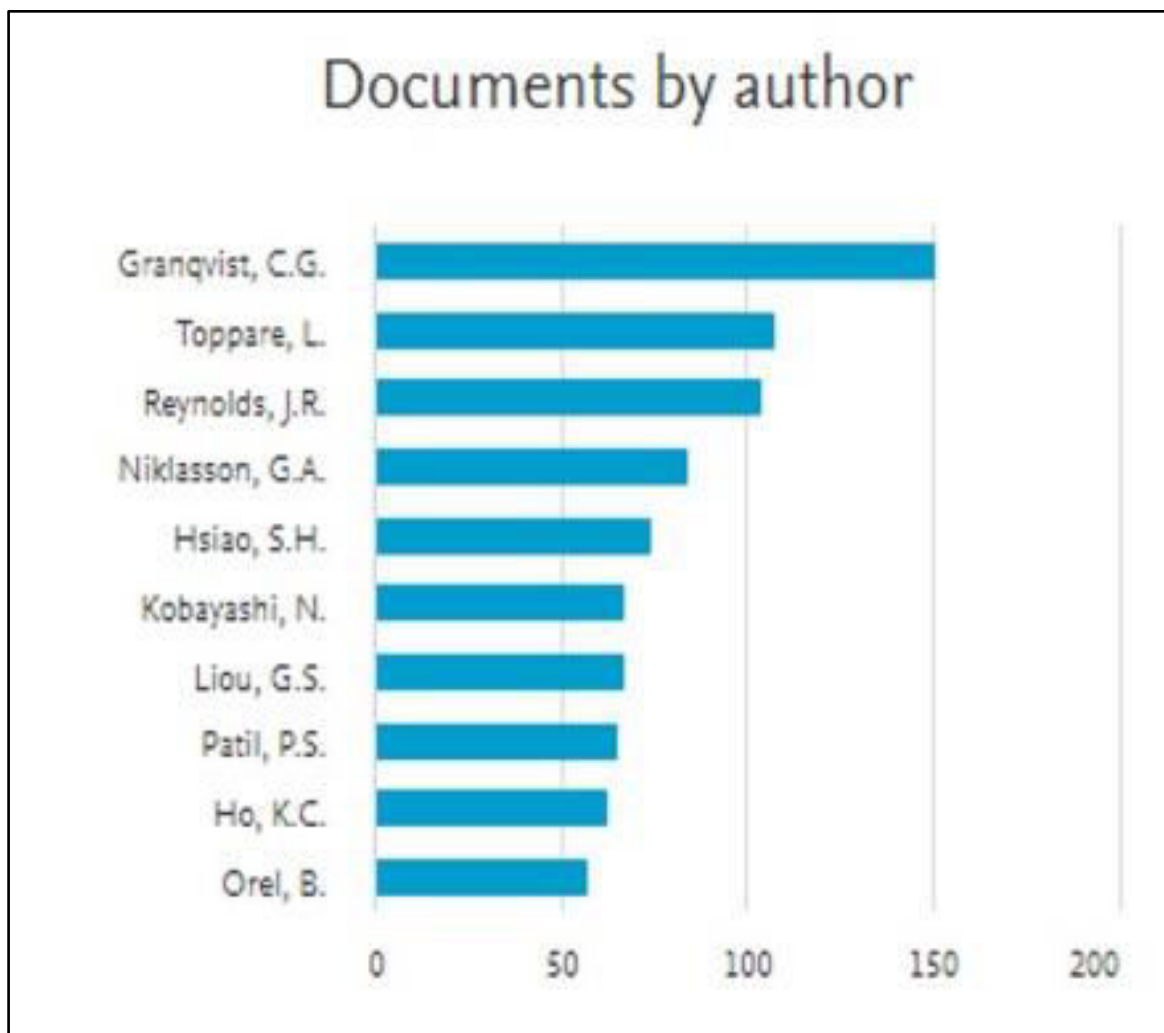
31. List of Journal Publications

Google Scholar: 23,654

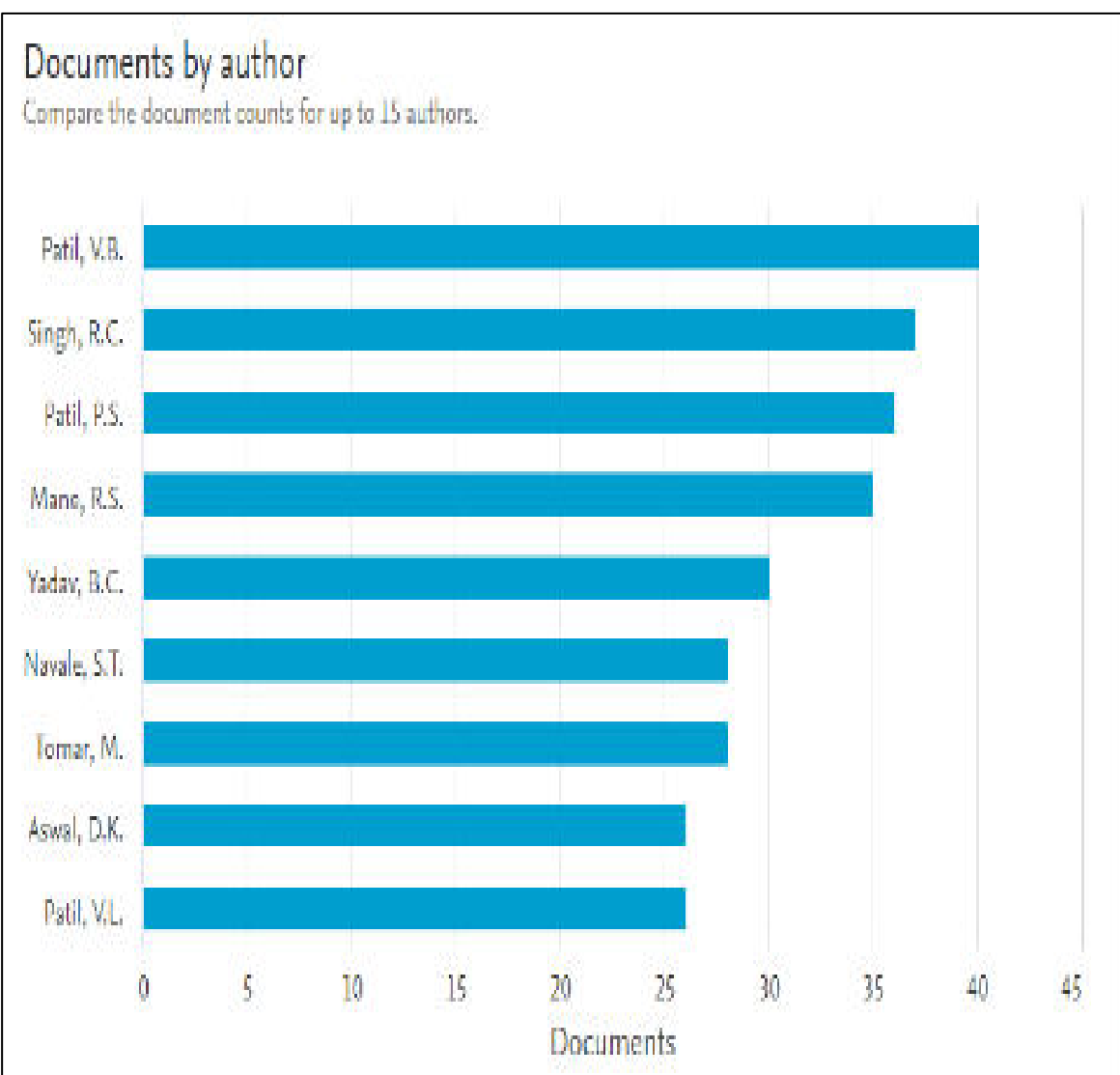
h-Index: 79

i-10 Index: 434

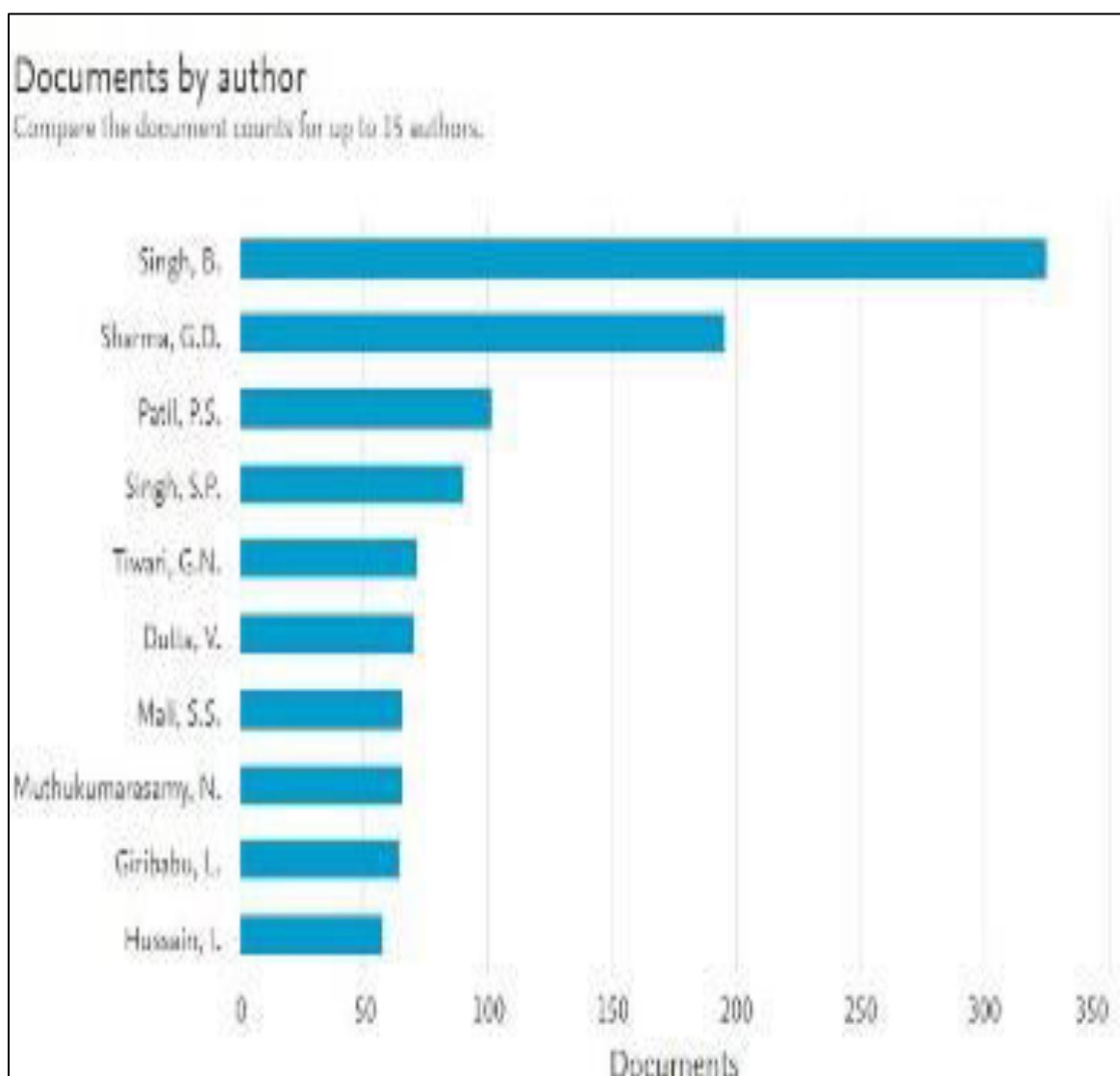
1) Electrochromism (8th In the World) (2000-2020)



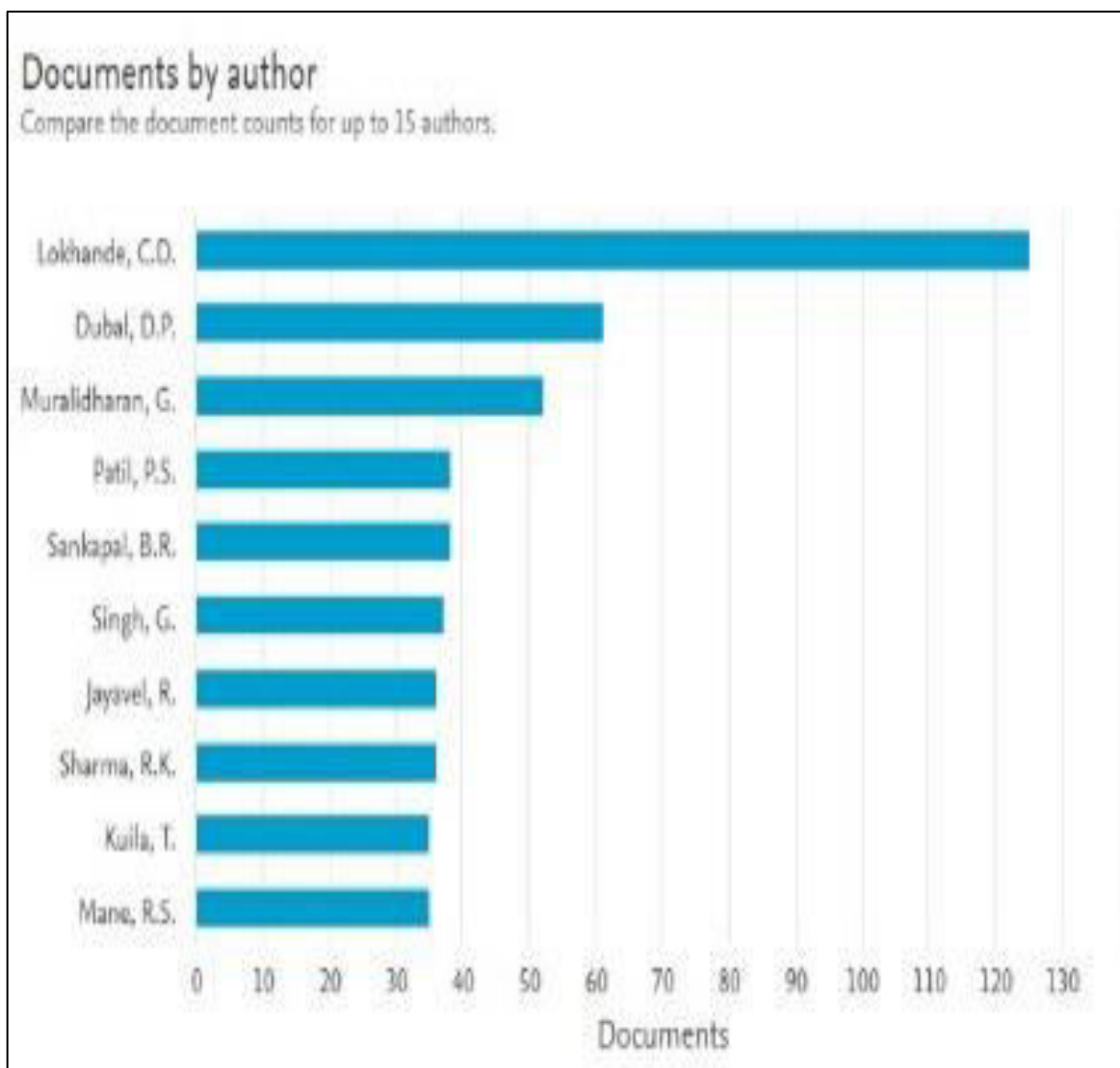
2) Gas sensor (3rd In India (2015-2020))



3) Solar Cells (3rd In India (2010-2020))



4) Supercapacitor (4th In India (2010-2020))



A) Published:

Sr. No.	Name of Author/s	Year of Publication	Title of the paper	Name of the Journal	Volume	Page Nos.	Impact factor
1.	P. S. Patil , C.D. Lokhande and S.H. Pawar	1989	Effect of temperature on photoelectron-chemical properties of n-Fe ₂ O ₃ KOH C cells	J. Phys. D: Appl. Phys.	22	550-554	2.721
2.	P. S. Patil , S.H. Pawar, R.D. Madhale and C.D. Lokhande	1989	Preparative parameters and dependent properties of Fe ₂ O ₃ films formed by spray pyrolysis technique	Ind. J. Pure and Applied Phys.	27	227-230	0.76
3.	P. S. Patil , S.H. Pawar and C.D. Lokhande	1989	Flat band potentials of sprayed Fe ₂ O ₃ /ferro-ferricyanide system.	Bull. of Electrochem .	5	226-228.	0.236
4.	P. S. Patil , C.D. Lokhande and S.H. Pawar	1989	Spray pyrolysed thin film n- Fe ₂ O ₃ photoelectrochemical cells	Bull. of Electrochem .	5	781-785	0.236
5.	P. S. Patil , C.D. Lokhande, V.S. Yermune and S.H. Pawar	1989	Photoelectrochemical behaviour of the cell formed with electrodeposited silver sulphide films as photoanodes.	Electrochem . Soc. of India	5	179-182	3.27
6.	P. S. Patil , C.D. Lokhande, V.S. Yermune and S.H. Pawar	1990	Electrodeposition of silver sulphide films from aqueous bath.	Bull. of Electrochem	6	842-844	0.236
7.	P. S. Patil and S.H. Pawar	1990	Photoelectrochemical redox storage cell employing	Bull. of Electrochem .	5	315-318	0.236

			sprayed Fe_2O_3 as a semiconductor septum.				
8.	S.H. Pawar, H.A. Mujawar, B.M. Todkar, M.H. Pendse and P. S. Patil	1990	Electrodeposition of Bi based alloyed films and their use in superconductor	Bull. of Electrochem .	6	315-317	0.236
9.	S.H. Pawar and P. S. Patil	1990	Energy storage with semiconductor septum cell	Bull. of Electrochem .	6	618-621.	0.236
10.	C.D. Lokhande, R.V. Dabhade, P. S. Patil and S.H. Pawar	1991	Electrodeposition of CdSe and Cd(Se,Te) films and their performance in ECPV cells	Bull. of Electrochem .	7	319-323	0.236
11.	P. S. Patil and P.R. Patil	1994	Photoelectrochemical characterization of sprayed tungsten oxide thin films	Solar Energy Mater. Solar cells	33	293-300	4.630
12.	P. S. Patil and P.R. Patil	1994	Structural, optical and electrical properties of sprayed tungsten oxide thin films	Tr. J. Phys.	18	1330-1335	---
13.	C.H. Bhosale, M.D. Uplane, P. S. Patil and C.D. Lokhande	1994	Preparation and properties of sprayed antimony trisulphide thin films	Thin Solid Films	248	137-139	1.867
14.	C.H. Bhosale, M.D. Uplane, P. S. Patil and C.D. Lokhande,	1994	Characterization of sprayed CdSb_2S_4 thin films by photoelectrochemical method.	Ind. J. of Pure and Appl. Phys.,	32	267-269	0.76
15.	P. S. Patil , P.R. Patil and C.D. Lokhande	1995	Spray pyrolysed WO_3 thin films.	Ind. J. of Phys. A	69	377-379	0.76
16.	M.M. Uplane, M.D. Uplane, P. S. Patil and C.D. Lokhande	1995	Solution growth NiS thin films.	Bull. of Electrochem .	11	569-572	0.236

17.	P. S. Patil and R.S. Patil	1995	Studies on spray pyrolysed molybdenum trioxide thin films	Bulletin of Mater. Science	18	911-916	1.017
18.	P. S. Patil and C.D. Lokhande,	1995	Studies on Sprayed ferric oxide films doped with Sn and Mg.	Tr. J. Phys.	19	1574-1579.	---
19.	M.D. Uplane, P. S. Patil , C.D. Lokhande, and C.H. Bhosale	1996	Effect of Indium doping on the properties of sprayed $\text{Cd}_{0.8}\text{Zn}_{0.2}\text{S}$ films	Tr. J. Phys.	20	1093-1097	--
20.	P. S. Patil , L.D. Kadam, and C.D. Lokhande	1996	Preparation and characterization of sprayed cobalt oxide thin films	Thin Solid Films	272	29-32	1.759
21.	P. S. Patil and R.S. Patil	1997	On the electrochromic characterization of spray pyrolyzed molybdenum trioxide thin films	Ind. J. of Pure and Appl. Phys.	35	394-396	0.76
22.	P. S. Patil and P.R. Patil	1997	Studies on the photoelectrochemical cell formed with WO_3 photoanode by using Gartner's Model	Bulletin of Materials Science.	19	651-656	0.24
23.	L.D. Kadam, C.H. Bhosale, and P. S. Patil	1997	On spray pyrolysed nickel oxide thin films;	Tr. J. of Phys.	21	1037-1042	--
24.	P. S. Patil and R.S. Patil	1997	Substrate temperature dependent properties of MoO_3 thin films.	Tr. J. of Phys.	21	897-903	--
25.	P. S. Patil , E.A. Ennaoui, C.D. Lokhande, M. Muller, M. Giersig, K. Diesner, and H. Tributsch	1997	Characterization of ultrasonic spray pyrolysed ruthenium oxide thin films	Thin Solid Films	310	57-62	1.867

26.	C.D. Lokhande, A.U. Ubale, and P. S. Patil	1997	Thickness dependent properties of chemically deposited Bi_2S_3 thin films	Thin Solid Films	302	1-4	1.867
27.	A.P. Torane, C.D. Lokhande, P. S. Patil and C.H. Bhosale	1998	Preparation and characterization of electrodeposited Bi_2Se_3 thin films	Materials Chemistry and Physics	51	51-54	2.129
28.	C.D. Lokhande, P. S. Patil , E.A Ennaoui, and H. Tributsch	1998	Chemical bath ZnSe thin films: deposition and characterization	Applied Surface Science	123/124	294-297	2.71
29.	P. S. Patil , L.D. Kadam, and C.D. Lokhande	1998	Studies on Electrochromism of sprayed pyrolysed cobalt oxide thin films	Solar Energy Materials and Solar Cells	55	229-234	4.630
30.	C.D. Lokhande, P. S. Patil , E.A. Ennaoui, M. Muller, M. Giersig, K. Diesner, and H. Tributsch	1998	Chemical bath deposited manganese sulphide thin films: preparation and characterization	Thin Solid Films	330	70-75	1.867
31.	C.D. Lokhande, P. S. Patil , E.A. Ennaoui, M. Muller, M. Giersig, K. Diesner, and H. Tributsch	1998	ZnSe thin films by chemical bath deposition method.	Solar Energy Materials and Solar Cells	55	379-393	4.630
32.	A.P. Torane, K.Y. Rajpure, P. S. Patil and C.H. Bhosale	1998	Preparation and characterization of electrodeposited Bi_2Se_3 thin films	Materials chemistry and Physics	55	51-54	2.129
33.	P. S. Patil , S.H. Pawar, R.D. Madhale and C.D. Lokhande	1998	Studies on Iron-Chromium redox storage systems	Bulletin of Materials Science	10	367-372	1.017
34.	P. S. Patil , L.D. Kadam, P.R. Patil, and S.H. Pawar	1999	Synthesis of some electrochromic oxide thin films obtained by solution thermolysis	Bull. of Electro-chemistry	15	307-311	0.236

35.	C.D. Lokhande, P. S. Patil , E.A. Ennaoui, M. Muller, M. Giersig and H. Tributsch	1999	Chemically deposition of indium sulphide thin films: Preparation and characterization	Thin Solid Films	340	18-23	1.867
36.	V.V. Killedar, K.Y. Rajpure, P. S. Patil and C.H. Bhosale,	1999	Transient photoconductivity measurements of spray deposited Sb_2S_3 and Bi_2S_3 thin films from non-aqueous medium.	Materials Chemistry and Physics.	59	237-341	2.129
37.	P. S. Patil	1999	Versatility of chemical spray pyrolysis technique: A review article	Materials Chemistry and Physics.	59	185-198	2.129
38.	P. S. Patil , P.R. Patil S.S.Kamble, and S.H. Pawar	2000	Thickness dependent electrochromic properties of solution thermolyzed tungsten oxide thin films	Solar Energy Materials and Solar Cells	60	143-153	4.630
39.	P. S. Patil and P.R. Patil	2000	Transient photoconductivity measurements of ultrasonic spray pyrolyzed tungsten oxide thin films	Materials Research Bulletin.	35	865-874	2.28
40.	P. S. Patil and P.R. Patil, and S.H. Pawar	2000	The electrochromic properties of tungsten oxide thin films deposited by solution thermolysis	Solid State Ionics	136/137	505-511	2.112
41.	P. S. Patil , P.R. Patil and E.A. Ennaoui	2000	Characterization of ultrasonic spray pyrolyzed tungsten oxide	Thin Solid Films	370	38-44	1.867

			thin films.				
42.	M.B. Dongre, R.N. Thokle and P. S. Patil	2000	Holographic Interferometry technique applied for comparative study of thin films	Asian Journal of Physics	9	458-462	--
43.	P. S. Patil , S.B. Nikam and L.D. Kadam	2000	Influence of substrate temperature on properties of sprayed tungsten oxide thin films.	Materials Chemistry and Physics	69	77-83	2.129
44.	B.J. Lokhande, P. S. Patil and M.D. Uplane	2001	Studies on structural, electrical and optical properties of boron doped zinc oxide films prepared by spray pyrolysis technique	Physica B	302-303	59-63	1.27
45.	P. S. Patil	2000	Gas-Chromism in ultrasonic spray pyrolyzed tungsten oxide thin films	Bulletin of Materials Science	23	309-312	0.87
46.	A.K. Sharma, T.P. Sharma and P. S. Patil	2000	Chemical bath deposited ZnO thin films	Bulletin of Electro-chemistry	16	367-369	0.24
47.	P. S. Patil	2000	Studies on tungsten oxide as a hydrogen gas sensor	Indian Journal of Engineering and Materials science	7	255-258	0.413
48.	P. S. Patil , M.M. Uplane and B.J. Lokhande	2000	Electrosynthesis of cobalt sulphide through non-aqueous medium and its characterization	Indian Journal of Engineering and Materials science	7	291-294	0.413
49.	P. S. Patil , S. Fiechter, and H. Tributsch	2001	On photoactivity of WS ₂ thin films grown by van der Waals Rheotaxy	Ind. J. of Pure and Appl. Phys.	41	369-373	0.766

			process				
50.	P.R. Patil and P. S. Patil	2001	Preparation of mixed-oxide $\text{MoO}_3\text{-WO}_3$ thin films by spray pyrolysis technique and their characterization	Thin Solid Films	382	13-22	1.759
51.	L.D. Kadam and P. S. Patil	2001	Thickness dependent properties of sprayed cobalt oxide thin films	Materials Chemistry and Physics	68	225-232	2.129
52.	L.D. Kadam and P. S. Patil	2001	Studies on ionic intercalation properties of cobalt oxide thin films prepared by spray pyrolysis technique	Materials Chemistry and Physics	68	280-282	2.129
53.	L.D. Kadam and P. S. Patil	2001	Step potential analysis of cobalt oxide based electrochromic devices.	Solar Energy Materials and Solar cells	70	15-23	4.6
54.	L.D. Kadam and P. S. Patil	2001	Studies on electrochromic properties of nickel oxide thin films prepared by spray pyrolysis technique	Solar Energy Materials and Solar cells	69	361-369	4.6
55.	R.N. Thokale, P. S. Patil and M.B. Dongre	2001	Measurement of amplitude of vibration of metal disc using holographic Interferometry	Journal of Optics	30	35-40	4.
56.	P. S. Patil and L.D. Kadam	2002	Preparation and characterization of NiO thin films	Applied Surface Science	199	211-221	2.711
57.	P. S. Patil	2002	Solution thermolyzed tungsten oxide based	J. of Solid State Electrochemistry	6	84-287	2.446

			electrochromic devices: Thickness dependent step potential analysis				
58.	R.N. Thokale, P. S. Patil and M.B. Dongre	2002	DEHI technique used for characterization of electrodeposited cobalt oxide thin films	Materials Chemistry and Physics	74	143-149	2.259
59.	B.J. Lokhande, P. S. Patil and M.D. Uplane	2002	Deposition of highly oriented ZnO films by spray pyrolysis and their structural, optical and electrical characterization	Materials Letters	57	573-579	2.28
60.	B.J. Lokhande, P. S. Patil and M.D. Uplane	2004	Studies on cadmium oxide sprayed thin films deposited through non aqueous medium	Materials Chemistry and Physics	84	238-242	2.259
61.	R. K. Kavar, P.S. Chigare and P. S. Patil	2003	Substrate temperature dependent structural, electrical and optical properties of spray deposited iridium oxide thin films	Applied Surface Science	206	90-101	2.711
62.	P.S. Chigare , R.K. Kavar, T. Seth, D.P. Amalnerkar and P. S. Patil	2003	Substrate temperature dependent structural, electrical and optical properties of Spray deposited tin oxide thin films	Ceramics International	29(7)	725-734	2.605
63.	P. S. Patil , P.S. Chigare, S.B. Sadale	2003	Thickness dependent	Materials Chemistry	80	667-675	2.259

	and R.K. Kavar		properties of sprayed iridium oxide thin films	and Physics			
64.	P. S. Patil, R.K. Kavar, S.B. Sadale and P.S. Chigare	2003	Properties of spray deposited tin oxide thin films derived from tri-n-butyltin acetate	Thin Solid Films	437	34-44	1.159
65.	P. S. Patil and S.B. Sadale	2004	Nucleation and growth of bismuth thin films onto fluorine doped tin oxide (FTO) coated conducting glass substrates from nitrate solutions	Solid State Ionics	167	273-283	2.12
66.	P. S. Patil and R.K. Kavar	2005	Electrochromism in spray deposited iridium oxide thin films	Electrochimica Acta	50(12)	2527-2532	4.504
67.	P. S. Patil and R.K. Kavar	2006	Effect of film thickness on EC activity of spray deposited iridium oxide thin films	Materials Chemistry and Physics	99	309-313	2.129
68.	P. S. Patil and R.K. Kavar	2005	Effect of substrate temperature on electrochromic properties of spray deposited Ir-Oxide thin films	Applied Surface Science	249/ 1-4	367-374	2.711
69.	P. S. Patil, A. R. Patil, S. H. Mujawar and S.B. Sadale	2005	Properties of spray deposited niobium oxide thin films	J. of Materials Science: Materials in Electronics	16	35-41	1.569
70.	P. S. Patil, S.H. Mujawar, A.I. Inamdar and S.B. Sadale	2005	Electrochromic properties of spray deposited TiO ₂ -doped WO ₃ thin films	Applied Surface Science	250	117-123	2.711
71.	P. S. Patil, S.H. Mujawar, A.I.	2005	Structural, electrical and	Applied Surface	252	1643-1650	2.711

	Inamdar, P.S. Shinde, H.P. Deshmukh and S.B. Sadale		optical properties of TiO ₂ doped WO ₃ thin films	Science			
72.	S.S. Kale, K.R. Jadhav, P. S. Patil , T.P. Gujar, C.D. Lokhande	2005	Characterizations of spray-deposited lanthanum oxide (La ₂ O ₃) thin films	Materials Letters	59	2007-2009	2.28
73.	P. S. Patil , R.K. Kawar, S.B. Sadale, A.I. Inamdar and S.S. Mahajan	2006	Promotion of Electrochromism in Spray Deposited Mixed Iridium Oxide-Molybdenum Oxide Thin Films	Solar Energy Materials and Solar Cells	90	1629-1639	4.630
74.	P. S. Patil , R.K. Kawar, S.B. Sadale and A.I. Inamdar	2006	Properties of Mixed Molybdenum Oxide-Iridium Oxide Thin Films Synthesised by Spray Pyrolysis	Applied Surface Science	252	8371-8379	2.711
75.	P. S. Patil , S.H. Mujawar, S.B. Sadale, H.P. Deshmukh and A.I. Inamdar	2006	Effect of film thickness on Electrochromic activity of Spray Deposited Iridium Oxide Thin Films	Materials Chemistry and Physics	99	309-313	2.129
76.	S.H. Mujawar, A.I. Inamdar, S.B. Patil and P. S. Patil	2006	Electrochromic properties of spray deposited Nb ₂ O ₅ thin films	Solid State Ionics	177	3333-3338	2.112
77.	S.B. Sadale and P. S. Patil	2006	Synthesis of type-I textured tungsten disulphide thin films on quartz substrate	Journal of crystal growth	286	481-486	1.698
78.	S.B. Sadale and P. S. Patil	2006	Synthesis and characterization of type-II textured tungsten disulphide thin films bi vdWR with Pb interfacial layer	Journal of crystal growth	290	363-368	1.698

			as a texture promoter				
79.	H.P. Deshmukh, P.S. Shinde and P. S. Patil	2006	Structural, Optical and Electrical Properties of Spray deposited TiO ₂ Thin Films	Materials Science & Engineering B	130	220	2.142
80.	R.S. Patil, M.D. Uplane and P. S. Patil	2006	Structural and optical properties of electrodeposited molybdenum oxide thin films	Applied Surface Science	252	8050	2.711
81.	S.B. Sadale and P. S. Patil	2007	Synthesis of type-II textured tungsten disulphide thin films with bismuth interfacial layer as a texture promoter	Thin Solid Films	515	2935–2942	1.867
82.	S.B. Sadale, S.R. Barman and P. S. Patil	2007	Formation of $\perp$ c texture of tungsten disulfide thin films with nickel	Applied Surface Science	253	3489–3495	2.711
83.	P.S. Shinde, H.P. Deshmukh, S.H. Mujawar, A.I. Inamdar and P. S. Patil	2007	Spray deposited titanium oxide thin films as passive counter electrodes	Electrochimica Acta	52	3114–3120	4.504
84.	S.H. Mujawar, A.I. Inamdar, C. A. Betty, V. Ganesan and P. S. Patil	2007	Effect of Post annealing treatment on Electrochromic Properties of Spray Deposited Niobium Oxide Thin Films	Electrochimica Acta	52(15)	4899–4906	4.504
85.	A.I. Inamdar, S.H. Mujawar, A.C. Sonavane, S.B. Sadale, M.B. Shelar, P.S. Shinde and P. S.	2007	Electrodeposited Zinc Oxide Thin Films: Nucleation and Growth Mechanism	Solar Energy Materials and Solar Cells	91(10)	864–870	4.630

	Patil						
86.	P. S. Patil , P.S. Chigare, S.B. Sadale, S.H. Mujawar and P.S. Shinde	2007	Electrochemical investigations on spray deposited tin oxide thin films	Solar Energy Materials and Solar Cells	<u>91(10)</u>	859-863	4.630
87.	S. R. Bathe and P. S. Patil	2007	Electrochromic characteristics of fibrous reticulated WO ₃ thin films prepared by Pulsed Spray Pyrolysis Technique	Solar Energy Materials and Solar Cells	91	1097-1101	4.630
88.	P. S. Patil , S.B. Sadale, S.H. Mujawar, P.S. Shinde and P.S. Chigare	2007	Synthesis of electrochromic tin oxide thin films with faster response by spray pyrolysis	Applied Surface Science	253	8560–8567	2.711
89.	M.M. Uplane, S.H. Mujawar, A.I. Inamdar, P.S. Shinde, A.C. Sonavane and P. S. Patil	2007	Structural, optical and electrochromic properties of nickel oxide thin films grown from electrodeposited nickel sulphide	Applied Surface Science	253	9365–9371	2.711
90.	R. S. Patil, M.D. Uplane and P. S. Patil	2008	Electrosynthesis of electrochromic molybdenum oxide thin films with rod like features	Int. J. Electrochem. Sci.,	3	259 – 265	1.5
91.	Suvarna R. Bathe and P. S. Patil	2008	Titanium doping effects in electrochromic pulsed spray pyrolysed WO ₃ thin films	Solid State Ionics	179	314–323	2.56
92.	P.S. Shinde, S.B. Sadale, P. S. Patil , P.N. Bhosale, A. Brüger, M. Neumann-Spallart and C.H. Bhosale	2008	Properties of spray deposited titanium dioxide thin films and their application in	Solar Energy Materials and Solar Cells	92	283–290	5.33

			photoelectrocatalysis				
93.	A.V. Moholkar, S. M. Pawar, K.Y. Rajpure, P. S. Patil and C.H. Bhosale	2007	Properties of highly oriented spray deposited fluorine doped tin oxide thin films on glass substrates of different thickness	Journal of Physics and Chemistry of Solids	68	1981-1988	1.853
94.	A. I. Inamdar, S. H. Mujawar and P. S. Patil	2007	The Influences of Complexing agents on Growth of Zinc Oxide Thin Films from Zinc Acetate Bath and Associated Kinetic Parameters	Int. J. Electrochem. Sci.	2	797 – 808	1.5
95.	Suvarna R. Bathe and P. S. Patil	2007	Influence of Nb doping on the electrochromic properties of WO ₃ films	J. of Physics D: Appl. Phys.	40	1-9	2.72
96.	P.S. Shinde, P. S. Patil , P.N. Bhosale and C.H. Bhosale	2008	Structural, optical and photoelectrochemical (PEC) properties of sprayed TiO ₂ thin films: Effect of precursor concentration	J. of American Ceramic Society	91	1266–1272	2.07
97.	S.S. Mahajan, S.H. Mujawar, P.S. Shinde, A.I. Inamdar and P. S. Patil	2008	Structural, optical and electrochromic properties of Nb-doped MoO ₃ thin Films	Applied Surface Science	254	5895	2.711
98.	S.S. Mahajan, S.H. Mujawar, P.S. Shinde, A.I. Inamdar and P. S. Patil	2008	Concentration Dependent Structural, Optical and Electrochromic Properties of	Int. J. Electrochem. Sci.	3	953-960	1.5

			MoO ₃ Thin Films				
99.	A. I. Inamdar, S. H. Mujawar and P. S. Patil <i>Most downloaded paper</i>	2008	Surfactant Mediated Growth of Nanostructured Zinc Oxide Thin Films via Electrodeposition and their Photoelectrochemical Performance	Nanotechnology	19	325706-325713	3.82
100.	A. I. Inamdar, S. H. Mujawar, S. R. Barman, P. N. Bhosale and P. S. Patil	2008	Effect of Bath Temperature on the Electrodeposition of Zinc Oxide thin films via Acetate Medium	Semiconductor Science and Technology	23	085013-085018	2.19
101.	S.S. Mahajan, S.H. Mujawar, P.S. Shinde, A.I. Inamdar and P. S. Patil	2009	Structural, morphological, optical and electrochromic properties of Ti doped MoO ₃ thin films	Solar Energy Mat. and Solar Cells	93	183-187	5.33
102.	A.V. Moholkar, S.M. Pawar, K.Y. Rajpure, Saleh N. Almari P. S. Patil and C.H. Bhosale	2008	Solvent dependent growth of sprayed FTO thin films with mat like morphology	Solar Energy Mat. and Solar Cells	92	1439-1444	5.33
103.	C.E. Patil, N.L. Tarwal, P.S. Shinde, H.P. Deshmukh and P. S. Patil	2009	Synthesis of electrochromic vanadium oxide thin films by pulsed spray pyrolysis technique and their properties	Journal of Physics D: Applied Physics	42	025404-025411	2.72
104.	Suvarna R Bathe and P. S. Patil	2009	Electrochromic characteristics of pulsed spray pyrolyzed polycrystalline WO ₃ thin films	Smart Mater. Structures	18	025004-025011	2.502
105.	P.S. Shinde, P. S. Patil , P.N. Bhosale,	2009	UVA and solar light assisted	Applied Catalysis B:	89	288-294	7.43

	M. Neumann-Spallart and C.H. Bhosale		photoelectrocatalytic degradation of AO7 dye in water using spray deposited TiO ₂ thin films	Environmental			
106.	A.K.Bhosale, N.L.Tarwal, P.M. Kadam, R.S.Patil, P. S. Patil	2009	Effective utilization of spray pyrolyzed CeO ₂ as optically passive counter electrode for enhancing optical modulation of WO ₃ s Technique (SPT)	Solid State Ionics	180	1324-1331	2.56
107.	P M Kadam, H P Deshmukh, N L Tarwal, P. S. Patil	2009	From beads-to-wires-to-fibers of spray deposited WO ₃ : electrochromic response	Applied Physics A	97/2	323-330	1.69
108.	A V Moholkar, K. Y. Rajpure, P. S. Patil , J. H. Kim and C. H. Bhosale	2010	Temperature dependent properties of spray deposited ITO thin films	Journal of Thermal Spray Technology	19	531-540	1.34
109.	A.C. Sonavane, A.I. Inamdar, A.C. Kamble, H.P. Deshmukh, R.S. Patil, P. S. Patil	2010	Electrodeposited NiO Thin Films for Electrochromic Applications with Improved Performance	J. of Alloys and Compounds	489	667-673	2.99
110.	A. K. Bhosale, P. S. Shinde, P. M. Kadam, P. S. Patil	2010	Synthesis and characterization of highly stable optically passive CeO ₂ -ZrO ₂ counter electrode	Electrochimica Acta	55	1900-1906	4.504
111.	A C Sonawane, D S Dalavi, A I Inamdar, P. S. Patil	2010	Simple and Rapid Synthesis of NiO/PPy Thin Films with Improved	Electrochimica Acta	55	2344-2351	4.504

			Electrochromic Performance				
112.	A. K. Bhosale, P. S. Shinde, N. L. Tarwal, P.M. Kadam, S. S. Mali and P. S. Patil	2010	Synthesis and characterization of CeO ₂ -SiO ₂ thin films as passive counter electrodes	Solar Energy Materials and Solar Cells	94	781–787	5.33
113.	S. S. Kalagi, D S Dalavi, R C Pawar, N L Tarwal, S S Mali, P. S. Patil	2010	Polymer Assisted Deposition of electrochromic Tungsten Oxide thin films	J. of Alloys and Compounds	493	335-339	2.99
114.	A.I. Inamdar, A.C. Sonavane, Hyunsik Im and P. S. Patil	2010	Nanocrystalline zinc oxide thin films by novel double pulse singlestep electrodeposition	J. of Alloys and Compounds	495 (1)	76-81	2.99
115.	A.V. Moholkar, S.M. Pawar, K.Y. Rajpure, P. S. Patil and C.H. Bhosale, J.H. Kim	2010	Material properties of spray deposited In ₂ O ₃ and In ₂ O ₃ :Sn thin films	Journal of Renewable Energy	Revised submitted		--
116.	N L Tarwal and P. S. Patil	2010	Superhydrophobic and transparent ZnO thin films by spray pyrolysis	Applied Surface Science	256 (24)	7451–7456	2.711
117.	A. C. Sonawane, A. I. Inamdar, P. S. Patil	2010	Multicolored electrochromic thin films of NiO/PANI	J. Phys. D.: Applied Physics	43	315102-10	2.721
118.	Kharade, R.R., Mane, S.R., Mane, R.M., Patil, P.S. , Bhosale, P.N.	2010	Synthesis and characterization of chemically grown electrochromic tungsten oxide	J. of Sol-Gel Science and Technology	56	177–183	1.660
119.	R C Pawar, J S Shaikh, A.V. Moholkar, S.M. Pawar, J.H. Kim, J.Y. Patil, S.S. Suryavanshi, P. S. Patil	2010	Surfactant Assisted Low Temperature Synthesis of Nanocrystalline ZnO and Its Gas sensing properties	Sensors & Actuators: B. Chemical.	152	212-218	4.097

120.	A S Kamble, R C Pawar, P. S. Patil	2011	From Nanowires to Cubes of CdO: Ethanol Gas Response	J. of Alloys and Compounds	209	1035–1039	2.99
121.	R. C. Pawar, J. S. Shaikh, P. S. Patil	2011	Characterization of Zinc Oxide Nanoparticles synthesized by Polymer Assisted Deposition Method	J. of Alloys and Compounds	509	1716-1721	2.99
122.	P M Kadam, N L Tarwal, P S Shinde, S S Mali, A K Bhosale, P. S. Patil	2011	Enhanced optical modulation due to SPR in gold nanoparticles embedded WO ₃ thin films	J. of Alloys and Compounds	509	1729-1733	2.99
123.	D.S. Dalavi, M.J. Suryavanshi, D.S. Patil, S.S. Mali, A.V. Moholkar, S.S. Kalagi, S.A. Vanalkar, S.R. Kang, J.H. Kim, P. S. Patil	2011	Nanoporous nickel oxide thin films and its improved electrochromic performance: Effect of thickness	Applied Surface Science	257	2647-2656	2.711
124.	S.A. Vanalkar, S. S. Mali, M.P. Suryavanshi, P. S. Patil	2010	Quantum size effect in chemosynthesized nanostructured CdS thin films	Digest J. of Nanomaterials and Biostructures	5	805-810	0.945
125.	S.A. Vanalakar, R.C. Pawar, M.P. Suryavanshi, S.S. Mali, D.S. Dalavi, A.V. Moholkar, K.U. Sim, Y.B. Kown, J. H. Kim, P. S. Patil	2011	Low Temperature Aqueous Chemical Synthesis of CdS Sensitized ZnO Nanorods	Materials Letters	65	548-551	2.489
126.	J.S. Shaikh, R.C. Pawar, Salvi, S.S. Kolekar, R. S. Devan, Y. R. Ma, P. S. Patil	2011	Synthesis and characterization of Ru doped CuO thin films for supercapacitor	Electrochimica Acta	56	2127-2134	4.504

			based on Bronsted acidic ionic liquid				
127.	J.S.Shaikh, R.C. Pawar, Salvi, S.S. Kolekar, R. S. Devan, Y. R. Ma, P. S. Patil	2010	Effect of annealing on the supercapacitor performance of CuO-PAA/CNT films	Journal of Solid State Electrochem istry	16(1)	25-33	2.446
128.	S. H. Mujawar, A. I. Inamdar, C. A. Betty, R. Cerc Koros̃ec, P. S. Patil	2011	Electrochromism in composite WO ₃ -Nb ₂ O ₅ thin films synthesized by spray pyrolysis technique	J. Appl. Electro- chemistry	41	397-40	2.409
129.	R.M. Mane, R. R. Kharade, P. S. Patil , P. N. Bhosale	2010	Influence of Indium doping on the optostructural and morphological properties of chemically deposited MoBi ₂ Se ₃ mixed metal chalcogenide thin films	Digest Journal of Nanomateri als and Biostructure s	6(1)	55-65	0.945
130.	J. S. Shaikh, R. C. Pawar, A. V. Moholkar, J. H. Kim, P. S. Patil	2011	CuO-PAA hybrid films: chemical synthesis and supercapacitor behavior	Applied Surface Science	257	4389- 4397	2.711
131.	C E Patil, N L Tarwal, M.M. Karanjkar, P R Jadhav, P. S. Patil	2011	Electrochromic performance of mixed V ₂ O ₅ - MoO ₃ thin films synthesized by Pulsed Spray Pyrolysis Technique	Materials Chemistry and Physics	126	711- 716	2.259
132.	S.A. Vanalakar, S.S. Mali, R.C. Pawar, A.V. Moholkar, N.L. Tarwal, Jin A. Kim, Ye-bin Kwon, J.H.	2011	Synthesis of CdS spongy balls with nanoconduits for effective light harvesting	Electrochim ica Acta	56	2762- 2768	4.504

	Kim and P. S. Patil						
133.	N.L. Tarwal, P.R. Jadhav, S.A. Vanalkar, S.S. Kalagi, R.C. Pawar, J.S. Shaikh, S.S. Mali, P.S. Shinde and P. S. Patil	2011	Photoluminescence of zinc oxide nanopowder synthesized by a combustion method	Powder Technology	208	185-188	2.349
134.	R.C. Pawar, P. S. Patil	2010	Synthesis of ZnO cake	Nanotoday	5	Cover page	15.00
135.	R.C. Pawar, J S Shaikh, P. S. Patil	2011	ZnO cacti	Materials Today	14	447	14.107
136.	D. K. Pawar, S. M. Pawar, P. S. Patil , S. S. Kolekar	2011	Synthesis of nanocrystalline nickel-zinc ferrite ($\text{Ni}_{0.8}\text{Zn}_{0.2}\text{Fe}_2\text{O}_4$) thin films by chemical bath deposition method	J. of Alloys and Compounds	509	3587-3591	2.99
137.	D S Dalavi, S.S. Mali, D.S.Patil, P. S. Patil	2011	Efficient maximization of coloration by modification in morphology of electrodeposited NiO thin films prepared with different surfactants	J. of Solid State Electrochemistry	16	253-263	2.133
138.	S.S. Mali, C. A. Betty, P. N. Bhosale and P. S. Patil	2011	Bronsted Acidic Ionic Liquid [BAIL] directed hydrothermal growth of TiO_2 flowers embracing bunch of aligned nanorods	Nanotoday	6 (3)	221-326	15
139.	D S Patil, M. M. Karanjkar, J S Shaikh, and P. S. Patil	2011	A novel Mn doped polyaniline electrode for electrochemical supercapacitor	J. of the Electrochemical Society	158	A653-A657	3.266

140.	A. S. Kamble, R. C. Pawar, N. L. Tarwal, L. D. More, P. S. Patil	2011	Ethanol sensing properties of chemosynthesized CdO nanowires and nanowalls	Materials Letters	65	1488-1491	2.489
141.	R.C. Pawar, J.S. Shaikh, A.A. Babar, P.M. Dhere, P. S. Patil	2011	Aqueous Chemical Growth of ZnO disks, rods, spindles and flowers: pH dependency and Photoelectrochemical properties	Solar Energy	85	1119–1127	3.469
142.	R. S. Devan, Y.R.Ma, P. S. Patil	2011	Electrochromic properties of large area and high density arrays of transparent one dimensional β -Ta ₂ O ₅ nanorods on indium-tin-oxide thin films	Applied Physics Letters (IF- 3.554)	98	133117-119	3.302
143.	S.S. Kalagi, S. S. Mali, D. S. Dalavi, A. I. Inamdar, Hyunsik Im, P. S. Patil	2011	Limitations of dual and complementary inorganic-organic electrochromic device for smart window application and its colorimetric analysis	Synthetic Metals	161	1105-1112	2.252
144.	D S Patil, J S Shaikh, D S Dalavi, P. S. Patil 25TH IN LIST OF TOP 25 HOTTEST ARTICLES; MATERIALS SCIENCE> MATERIALS CHEMISTRY AND PHYSICS; JANUARY TO	2011	Chemical synthesis of highly stable PVA/PANI films for supercapacitor application	Materials Chemistry and Physics	128	449-455	2.259

	DECEMBER 2011						
145.	J S Shaikh, R C Pawar, D S Patil, N L Tarwal, P. S. Patil	2011	Supercapacitor behavior of CuO-PAA hybrid films: Effect of PAA concentration	Journal of Alloys and Compounds	509	7168-7174	2.99
146.	Shailesh Pawar, Manik Chougule, Sanjay Patil, Bharat Rautl, Dhanaji Dalavi, Pramod Patil , Shashwati Sen, Pradeep Joshi, Vikas Patil.	2011	Fabrication of Nanocrystalline TiO ₂ Thin Film Ammonia Vapor Sensor	Journal of Sensor Technology	1	9-16	1.211
147.	A V Moholkar, S S Shinde, A R Babar, K U Sim, Y B Kwon, K Y Rajpure, P. S. Patil , C H Bhosale, J H Kim	2011	Development of CZTS thin films solar cells by pulsed laser deposition: influence of pulse repetition rate	Solar Energy	85	1354-1363	3.469
148.	A V Moholkar, S S Shinde, A R Babar, K U Sim, Y B Kwon, K Y Rajpure, P. S. Patil , C H Bhosale, J H Kim	2011	Synthesis and characterization of Cu ₂ ZnSnS ₄ thin films grown by PLD: Solar cells	Journal of Alloys and Compounds	509	7439–7446	2.999
149.	R.C. Pawar, J.S. Shaikh, P.S. Shinde, P. S. Patil	2011	Dye sensitized solar cells based on zinc oxide bottle brush	Materials Letters	65	2235–2237	2.489
150.	R.C. Pawar, J.S. Shaikh, N L Tarwal, P. S. Patil	2012	Surfactant mediated growth of ZnO nanostructures and their dye sensitized solar cell properties	Journal of Materials Science: Materials in Electronics	23	349-355	1.48
151.	S. S. Mali, S. K. Desai, P. N. Bhosale, C. A. Betty, P. S. Patil [Top ten most accessed articles in	2011	CdS Sensitized TiO ₂ nanocorals: Hydro-thermal Synthesis, Characterization, Application	Photochemical and Photobiological Sciences (PPS)	10	1652-1658	2.939

	August-2011] [Top ten most accessed articles in September-2011] [Top ten most accessed articles in October-2011]						
152.	Deepak Tyagi, K. Scholz, S. Varma, K. Bhattacharya, S. Mali, P. S. Patil , S.R. Bharadwaj	2012	Development of Pt-Carbon catalysts using MCM-41 template for HI decomposition reaction in SeI thermochemical cycle	International Journal of Hydrogen Energy	37	3602-3611	3.313
153.	N L Tarwal, P. S. Patil	2011	Enhanced photoelectrochemical performance of Ag-ZnO thin films synthesized by spray pyrolysis technique	Electrochimica Acta	56	6510-6516	4.504
154.	Kiran Sanap, Salil Verma, Shymala Bhardwaj, D S Dalavi, P. S. Patil ,	2011	Variation in noble metal morphology and its impact on functioning of hydrogen mitigation catalyst	International Journal of Hydrogen Energy	36	10455-10467	3.313
155.	S S Mali, C A Betty, P S Shinde, P N Bhosale, P. S. Patil [Most read articles sept-2011] [Top 25 Hottest article July to September 2011] 6th Rank	2011	Nanocoral architecture of TiO ₂ by hydrothermal process: Synthesis and characterization	Applied Surface Science	257	9737-9746	2.711
156.	S. M. Patil, S. R. Mane, R. M. Mane, S. S. Mali, P. S.	2011	Synthesis, XPS and thermoelectric	Canadian Journal of Chemistry	89	1375-1381	1.061

	Patil , and P. N. Bhosale		study of ternary $\text{Bi}_2(\text{Te}_{0.5}\text{Se}_{0.5})_3$ mixed metal chalcogenide thin films by APT technique				
157.	A.I. Inamdar, A.C. Sonavane, S.M. Pawar, Young Sam Kim, J.H. Kim, P. S. Patil , Woong Jung, Hyunsik Im, Dae-Young Kim, Hyungsang Kim	2011	Electrochromic and electrochemical properties of amorphous porous nickel hydroxide thin films	Applied Surface Science	257 (22)	9606–9611	2.711
158.	N.L. Tarwal, V.V. Shinde, A.S. Kamble, P.R. Jadhav, D.S. Patil, V.B. Patil, P. S. Patil and P. S. Patil	2011	Photoluminescence and photoelectrochemical properties of nanocrystalline ZnO thin films synthesized by spray pyrolysis technique	Applied Surface Science	257	10789 – 10794	2.711
159.	S.G. Pawar, M.A. Chougule, D.S. Dalavi, P. S. Patil and V.B. Patil	2011	Effect of Annealing on Microstructural and Optoelectronic Properties of Nanocrystalline TiO_2 Thin Films	Journal of Experimental Nanoscience	iFirst	1–9	0.875
160.	Sawanta S. Mali, C. A. Betty, Popatrao N. Bhosale, and Pramod S. Patil	2011	Hydrothermal synthesis of Rutile TiO_2 with Hierarchical microspheres and their characterization	Crystal Engineering Communication	13	6349–6351	4.034
161.	Rohini Kharade, P. S. Patil , Rahul Mane, P. N. Bhosale	2011	Synthesis and electrochromic application of surfactants tailored WO_3 nanostructures	Optical Materials	34 (1)	322–326	1.98

162.	D. K. Pawar, J. S. Shaikh, B. S. Pawar, S. M. Pawar, P. S. Patil , S. S. Kolekar		Synthesis of hydrophilic nickel zinc ferrite thin films by chemical route for supercapacitor application	J.Porous Mater	19	649–655	1.108
163.	P. M. Kadam, N. L. Tarwal, S. S. Mali, H. P. Deshmukh, P. S. Patil	2011	Enhanced electrochromic performance of <i>f</i> -MWCNT-WO ₃ composite	Electrochimica Acta	58	556–561	4.504
164.	Mohite S. S., Kharade R. R., Mali S S., Kanase D. G., Patil P. S., Bhosale P. N.	2011	Low temperature synthesis of novel MoBiCuSe ₄ nanowire thin films by vacuum deposition method and their characterization	Research Journal of Chemistry and Environment	15 (2)	1-4	--
165.	Sawanta S. Mali, C. A. Betty, P. N. Bhosale, P. S. Patil	2011	Eosin-Y and N3 Dye Sensitized Solar Cells (DSSCs) Based on Novel Nanocoral TiO ₂ : A Comparative Study	Electrochimica Acta	59	113–120	4.504
166.	S B Pawar, J S Shaikh, R S Devan, Y R Ma, D Haranath, P N Bhosale, P. S. Patil ,	2011	Facile and low cost chemosynthesis of lead sulphide thin films with tunable optical properties.	Applied surface science	258	1869–1875	2.711
167.	K. Mageshwari, S.S. Mali, T. Hemalatha, R. Sathyamoorthy, P. S. Patil	2011	Low temperature growth of CuS nanoparticles by reflux condensation method	Progress in Solid State Chemistry	39	108-113	6.600
168.	N.L. Tarwal, V.M. Khot, N.S. Harale, S.A. Pawar, S.B. Pawar, V.B. Patil, P.	2011	Spray deposited superhydrophobic ZnO coatings via seed assisted	Surface & Coatings Technology	206	1336–1341	1.998

	S. Patil		growth				
169.	R C Pawar, J S Shaikh, S.S. Suryavanshi, P. S. Patil	2011	Growth of ZnO Nanodisk, nanospindles and nanoflowers for gas sensor: pH Dependency	Current applied Physics	12 (3)	778-783	2.212
170.	S. M. Patil, S. R. Mane, R. M. Mane, S. S. Mali, P. S. Patil, and P. N. Bhosale	2011	Synthesis and X-ray photoelectron spectroscopy (XPS) and thermoelectric studies of ternary Bi ₂ (Te _{0.5} Se _{0.5}) ₃ mixed-metal chalcogenide thin films by the arrested precipitation technique	Can.j.Chemistry	89	1375-1381	1.069
171.	Sawanta S. Mali, D. S. Dalavi, C. A. Betty, A. K. Chauhan, P. N. Bhosale, P. S. Patil	2012	Electro-Optical Properties of Copper Phthalocyanines (CuPc) Vacuum Deposited Thin Films	RSC Advances	2	2100–2104	3.84
172.	Katkar A.A, N.N. Shinde, Dr. P. S. Patil	2011	Performance & Evaluation of Industrial Solar Cell w.r.t. Temperature and Humidity	International Journal of Research in Mechanical Engineering and Technology	1 (1)	69-73	--
173.	Sawanta S. Mali, Pravin S. Shinde, C. A. Betty, P. N. Bhosale, Young Woo Oh, and Pramod S. Patil, [Most Downloaded Journal of Physics and Chemistry of	2012	Synthesis and characterization of Cu ₂ ZnSnS ₄ thin films by SILAR method,	Journal of Physics and Chemistry of Solids,	73	735–740	1.853

	Solids Article] –Feb-2012 [Most Downloaded Journal of Physics and Chemistry of Solids Article] – March-2012						
174.	Sawanta S. Mali, Chirayath A. Betty, Popatrao N. Bhosale, Rupesh S. Devan, Yuan-Ron Ma, S. S. Kolekar and Pramod S. Patil [Most Accessed article in Feb and March-2012]	2012	Hydrothermal synthesis of rutile TiO ₂ nanoflowers using Bronsted Acidic Ionic Liquid [BAIL]: Synthesis, characterization, growth mechanism	Crystal Engineering Communication	14	1920-1924	4.034
175.	Sawanta S. Mali, B. M. Patil, C. A. Betty, P. N. Bhosale, Young Woo Oh, S. R. Jadkar, R. S. Devan, Yuan-Ron R. Ma, and Pramod S. Patil [Most read articles sept-2011] [Top 25 Hottest article July to September 2011] 1st Rank	2012	Novel synthesis of kesterite Cu ₂ ZnSnS ₄ nanoflakes by successive ionic layer adsorption and reaction technique: Characterization and , Application	Electrochimica Acta	63	216–221	4.504
176.	S.B. Pawar, S.A. Pawar, R.R. Bandgar, P.N. Bhosale and P. S. Patil	2011	Chemosynthesize d Cabbage-like CdS Thin Films and Their Photoelectrochemical Activity	Invertis Journal of Renewable Energy	1(4)	169-173	--
177.	A.U. Chavan, L. D. Jadhav, A.P. Jamale, S. P. Patil, C. H. Bhosale, S. R. Bharadwaj, P. S. Patil	2011	Effect of Variaton of NiO on properties of NiO/GDC(gadolinium doped ceria) nano-composites	Ceramics International	38 (4)	3191–3196	2.605
178.	Rohini R. Kharade, K.R. Patil, P. S. Patil , P.N. Bhosale	2012	Novel microwave assisted sol-gel synthesis (MW-	Materials Research Bulletein	47	1787–1793	2.288

			SGS) and electrochromic performance of petal like h-WO ₃ thin films				
179.	Sawanta S. Mali, S. K. Desai, S. S. Kalagi, C. A. Betty, P. N. Bhosale, R. S. Devan, Y. R. Ma, P. S. Patil	2012	PbS quantum dot sensitized anatase TiO ₂ nanocorals for quantum dot-sensitized solar cell applications	Dalton Transactions	41	6130-6136	4.197
180.	N. L. Tarwal, P. S. Patil	2012	Spray deposited localized surface plasmonic Au-ZnO nanocomposites for solar cell application	Electrochimica Acta	72	32-39	4.504
181.	B.T. Raut, M.A. Chougule, S.R. Nalage, D.S. Dalavi, Sawanta Mali, P. S. Patil , V.B. Patil	2012	CSA doped Polyaniline/CdS organic-inorganic nanohybrid: Physical and gas sensing properties	Ceramics International	38	5501-5506	2.605
182.	Sawanta S. Mali, C. A. Betty, P. N. Bhosale, P. S. Patil	2012	Synthesis, Characterization of Hydrothermally Grown MWCNT-TiO ₂ photoelectrodes and their visible light absorption properties	ECS Journal of Solid State Science and Technology	1 (2)	M15-M23	0.917
183.	S. A. Vanalakar, S. S. Mali, R. C. Pawar, D. S. Dalavi, A. V. Mohalkar, H. P. Deshamukh, P. S. Patil	2012	Farming of ZnO nanorod-arrays via aqueous chemical route for photoelectrochemical solar cell application	Ceramic International	38	6461-6467	2.605
184.	Prabhu P.A., Shinde N.N., Patil P.S	2012	Review of Phase Change Materials For Thermal Energy Storage Applications	International Journal of Engineering Research and	2	871-875	1.69

				Applications (IJERA)			
185.	M.A. Chougule, D.S. Dalavi, Sawanta Mali, P. S. Patil , A.V. Moholkar, G.L. Agawane, J.H. Kim, Shashwati Sen, V.B. Patil	2012	Novel method for fabrication of room temperature polypyrrole-ZnO nanocomposite NO ₂ sensor	Measurement	45	1989–1996	1.484
186.	A. S. Kamble, N. S. Harale, B. B. Sinha, K.C.Chung, P.S.Pati	2012	CdO And CdO-ZnO Composite Nanowires: Synthesis, Characterization And Ethanol Gas Respons	IEEE	1st ISPTS-2012	286	6.810
187.	Nita B. Pawar, Sawanta S. Mali, Manauti M. Salunkhe, Rahul M. Mane, Pramod S. Patil and Popatrao N. Bhosale,	2012	Effect of Surfactant on Optical and Structural Properties of Chemically Deposited MoBi ₂ S ₅ Thin Films,	New J. Chem.	36	1807–1812	3.086
188.	R. Sathyamoorthy, K. Mageshwari, Sawanta S. Mali, S. Priyadharshini, Pramod S. Patil,	2012	Effect of organic capping agent on the photocatalytic activity of MgO nanoflakes obtained by thermal decomposition route	Ceramics International	39	323–330	2.605
189.	Sawanta S. Mali, C. A. Betty, R. S. Devan, Y. R. Ma and P. N. Bhosale and P. S. Patil ,	2012	Hierarchical nanostructured TiO ₂ for solar cells application,	J. Nanomedic Nanotechnol	3(1)	104	3.573
190.	S. M. Patil, S. N.Gavale, R.K. Mane, N. S. Patil, S. S. Mali, P. S. Patil	2012	XPS characterization and opto structural study of	Archives of Physics Research	3 (3)	245-257	--

	and P. N.Bhosale,		chemically deposited Sb (III) doped Bi ₂ (Te _{1-x} Se _x) ₃ thin films,				
191.	Dipali S. Patil, J. S. Shaikh, S. A. Pawar, R. S. Devan, Y. R. Ma, A. V. Moholkar, J. H. Kim, R. S. Kalubarme, C. J. Park, P. S. Patil 1ST IN LIST OF TOP 20 ARTICLES OF THE SAME TOPIC SINCE PUBLICATION OF THE SAME IN 2012 (From: Kery Ernst-BioMedLib)	2012	Investigations on silver/polyaniline electrodes for electrochemical supercapacitors	Phys. Chem. Chem. Phys.,	14,	11886 – 11895	4.493
192.	S. A. Vanalakar, S. S. Mali, R. C. Pawar, N. L. Tarwal, A. V. Moholkar, P. S. Patil	2012	Thickness dependent photoelectrochemical performance of chemosynthesized nanostructured CdS thin films,	Journal of Applied Physics	112	44302-44308	2.183
193.	M. M. Karanjkar, N.L. Tarwal A.S. Vaigankar, P. S. Patil	2012	Structural, Mössbauer and electrical properties of nickel cadmium ferrites	Ceramics International	39(2)	1757–1764	2.605
194.	S.S. Kalagi, S.S. Mali, D.S. Dalavi, A.I. Inamdar, H. Imc, P. S. Patil	2012	Transmission attenuation and chromic contrast characterization of R.F. sputtered WO ₃ thin films for electrochromic	Electrochimica Acta	85	501–508	4.504

			device applications				
195.	D. S. Dalavi, R.S.Devan, R.S.Patil P. S. Patil	2012	Electrochromic performance of sol-gel deposited NiO thin film	Materials letters	90	60–63	2.489
196.	Sawanta S. Mali, Pravin S. Shinde, C. A. Betty, Popatrao N. Bhosale, Won J.Lee, and Pramod S. Patil	2012	Multi Step Hydrothermal (MSH) Route for Nanocoral Architecture of anatase TiO ₂ : Synthesis, Characterization, Dye sensitized solar cell performance	Progress in Photovoltaics: Research and Applications	22	525-539	7.584
197.	M. P. Suryawanshi, G. L. Agawane, S. M. Bhosale, P. S. Patil , J.H. Kim, A. V. Moholkar	2012	The CZTS based Thin Film Solar Cells: A Status Review	Materials Technology: Advanced Performance Materials (Maney Publication)	28(1/2)	98-109	--
198.	Sarita Sutar, N. N. Shinde, P.S Patil	2012	Design and Development of Electro chromic Device using WO ₃ and Evaluation of its Optical and Thermal Properties	International Journal of Engineering Research and Development	3	38-42	4.14
199.	Sawanta S. Mali, Chirayath A. Betty, Popatrao N. Bhosale Pravin S. Shinde, M. R. Pramod, Sandesh R. Jadkar and Pramod S. Patil	2012	Efficient Dye-sensitized Solar Cells Based Hierarchical Rutile TiO ₂ Microspheres by Hydrothermal Process	CrystEnggComm	14(23)	8156-8161	4.034
200.	Manauti M. Salunkhe, Rohini R. Kharade, Suvarta D. Kharade,	2012	Synthesis of fibrous reticulatenanocrySTALLINE n-type	Materials Research Bulletin	47	3860–3867	2.288

	Sawanta S. Mali, P.S. Patil , P.N. Bhosale		MoBi ₂ (Se _{1-x} Te _x) ₅ thin films: Thermocooling applications				
201.	N.L. Tarwal, P.S. Shinde, Y.W. Oh, Romana Cerc Korošec, P.S. Patil	2012	Nickel-induced microwheel-like surface morphological evolution of ZnO thin films by spray pyrolysis	Applied Physics-A Materials Science & Processing	109(3)	591- 599	1.704
202.	Sapkal, R.T., Shinde, S.S., Sapkal, D.M., Babar, A.R., Shinde, V.V., Jalkute, C.B., Moholkar, A.V., Rajpure, K.Y., Sonawane, K.D., Patil , P.S. , Bhosale, C.H.	2012	Photoelectrocatalytic activity of spray deposited ZnO thin films against E. coli Davis	Energy Materials: Materials Science and Engineering for Energy Systems	7(4)	417- 424	---
203.	S. S. Kalagi , D. S. Dalavi, S. S. Mali , A. I. Inamdar, R. S. Patil and P. S. Patil.	2012	Study of Novel WO ₃ - PEDOT:PSS Bilayered Thin Film for Electrochromic Applications	Nanoscience and Nanotechnology Letters	4	1-9	1.431
204.	S. A. Vanalakar, S. S. Mali, R. C. Pawar, N. L. Tarwal, A. V. Moholkar, J. H. Kim, and P. S. Patil	2012	Photoelectrochemical properties of CdS sensitized ZnO nanorod arrays: Effect of nanorod length	Journal of Applied Physics	112	04430 2	2.183
205.	Rohini R. Kharade , K.R. Patil , P.S. Patil , P.N. Bhosale	2012	Novel microwave assisted sol-gel synthesis (MW- SGS) and electrochromic performance of petal like h- WO ₃ thin films	Materials Research Bulletin	47	1787- 1793	2.38
206.	A.A. Kadam, S.S. Shinde, S.P. Yadav , P. S. Patil , K.Y.	2013	Structural, morphological, electrical and	Journal of Magnetism and	329	59-64	1.970

	Rajpure.		magnetic properties of Dy doped Ni-Co substituti onal spinel ferrite	Magnetic Materials			
207.	Dhanaji S. Dalavi, Rupesh S. Devan, Raghunath S. Patil, Yuan-Ron Ma, Myeong-Gil Kang, Jin-Hyeok Kim and Pramod S. Patil	2013	Electrochromic properties of dandelion flower like nickel oxide thin films	Journal of Materials Chemistry C	1	1035-1039	4.696
208.	G. L. Agawane , Seung Wook Shin, Min Sung Kim , M. P. Suryawanshi, K. V. Gurav, A. V. Moholkar, Jeong Yong Lee, Jae Ho Yun, P. S. Patil and Jin Hyeok Kim	2013	Green route fast synthesis and characterization of chemical bath deposited high-quality ZnS buffer layers	Current Applied Physics	13(6)	850-856	2.212
209.	Sawanta S. Mali Popatrao N. Bhosale,, Rupesh S. Devan, Yuan-Ron Ma, Chirayath A. Betty, Rajendra P. Panmand, Bharat B. Kale, Sandesh R. Jadkar, Pramod S. Patil , Jin-Hyeok Kim, Chang Kook Hong	2013	Effective light harvesting in CdS nanoparticles-sensitized rutile TiO ₂ microspheres	Electrochim ica Acta	90	666–672	4.505
210.	Ranjit A. Patil, Rupesh S. Devan, Jin-Han Lin, Yuan-Ron Ma, Pramod S. Patil , Yuong Liou	2013	Efficient electrochromic properties of high density and large area arrays of one dimensional NiO nanorods	Solar Energy Materials and Solar Cells	112	91	4.630
211.	Sachin A. Pawar , Rupesh S. Devan , Dipali S. Patil , Annasaheb V. Moholkar, Myeng	2013	Improved Solar Cell Performance Of Chemosynthesize d Cadmium	Electrochim ica Acta	98	244–254	4.504

	Gil Gang, Yuan-Ron Ma, Jin Hyeok Kim, Pramod S. Patil		Selenide Pebbles				
212.	Rohini R. Kharade Sawanta S. Mali Satish P. Patila Kashinath R. Patile Myong G. Gang, Pramod S. Patil , Jin H. Kim, Popatrao N. Bhosale	2013	Enhanced Electrochromic Coloration in Ag Nanoparticle Decorated WO ₃ Thin Films	Electrochimica Acta	102	358–368	4.504
213.	S.B. PAWAR, S.A. PAWAR, R.R. BANDGAR, P.N. BHOSALE and P.S. PATIL	2013	Chemosynthesized cabbage-like CdS Thin films and Their Photoelectrochemical activity	Invertis Journal of Renewable Energy	1(4)	169-173	--
214.	Dhanaji S. Dalavi, Rupesh S. Devan, Ranjit A. Patil, Raghunath S. Patil, Yuan-Ron. Mab, Shivaji B. Sadale, InYoung. Kime, Jin-Hyeok. Kime and Pramod S. Patil	2013	Efficient Electrochromic Performance of Nanoparticulate WO ₃ Thin Films	Journal of Materials Chemistry-C	1	3722-3728	4.696
215.	Dipali S. Patil, Sachin A. Pawar, Rupesh S. Devan, Myeng Gil Gang, Yuon-Ron Ma, Jin Hyeok Kim, Pramod S. Patil	2013	Electrochemical supercapacitor electrode material based on polyacrylic acid/polypyrrole/silver composite	Electrochimica Acta	105	569–577	4.504
216.	N L Tarwal, AI Inamdar, RS Devan, IY Kim, YR Ma, JH Kim, P.S. Patil	2013	Growth of multifunctional ZnO thin films by spray pyrolysis technique	Sensors and Actuators-A	199	67-73	1.903
217.	NL Tarwal, JH Jang, MG Gang, JH Kim, P.S. Patil	2013	Sn-ZnO with cabbage like morphology	Materials Today	16	403-404	14.107
218.	NS Harale, DK Rao, MG Gang, JH Kim, P.S. Patil	2013	Tin oxide with exotic fer like morphology	Materials Today	16	452-453	14.107

219.	S. S. Mali, H Kim, CS Shin, WR Bae, NL Tarwal, SB Sadale, P.S. Patil , JH Kim, CK Hong	2013	Single step synthesis of 3D NS TiO ₂ as a scattering layer for vertically aligned 1D nanorod array and their DSSC properties	CrystEngCommun	15	5660	4.304
220.	SS Mali, S Kim, P.S. Patil , JH Kim, CK Hong	2013	Synthesis and characterization of planar hybrid polymer solar cells based on CuPC and TiO ₂	Ceramic International	40(1)	643–649	2.605
221.	NL Tarwal, MS Khadekar, JY Patil SS SURYAVANSHI, MG Gang, JH Kim, P.S. Patil , JH Jang	2013	A selective ethanol gas sensor based on spray derived Ag-ZnO thin films	Sensors and Actuators-A	48	7274–7282	1.903
222.	SD Kharade, NB Pawar, VB Ghanawat, SS Mali, WR Bae, P.S. Patil , CK Hong, JH Kim, PN Bhosale	2013	Room temperature deposition of nanostructured Bi ₂ Se ₃ thin films for photoelectrochemical application: effect of chelating agents	New J of Chemistry	37	2821–2828	3.086
223.	SD Kharade, NB Pawar, VB Ghanawat, SS Mali, WR Bae, P.S. Patil , CK Hong, JH Kim, PN Bhosale	2013	Effect of Cu content on the optostructural properties of MoBiCuSe ₄ thin films	J. of Materials Science	48(20)	7300	2.371
224.	SW Shin, IY Kim, KV Gurav, CH Jeoung, JH Yun, P.S. Patil , JY Lee, JH Kim	2013	Band gap tunable and improved microstructure characteristics of Cu ₂ ZnSn(S _{1-x} Se _x) ₄ thin films by annealing under atmosphere containing S and	Current Applied Physics	13	1837–1843	2.212

			Se				
225.	SW Shin, IY Kim, KS Jeon, JY Heo, GS Heo, P.S. Patil , JH Kim, JY Lee	2013	Wide band gap characteristics of quaternary and flexible Mg and Ga co-doped ZnO TCO	J. of Asian Ceramic Society	1	262–266	--
226.	KV Gurav, UM Patil, SW Shin, GL Agwane, MP Suryavanshi, SM Pawar, P.S. Patil , CD Lokhande, JH Kim	2013	RT chemical synthesis of Cu(OH) ₂ thin films for supercapacitor application	J. of Alloys and Compounds	573	27-31	2.999
227.	KV Gurav, SM Pawar, SW Shin, MP Suryavanshi, GL Agawane, P.S. Patil , JH Moon, JH Kim STAND FOURTH IN LIST OF TOP 25 HOTTEST ARTICLES; PHYSICS AND ASTRONOMY> APPLIED SURFACE SCIENCE; JULY TO SEPTEMBER 2013	2013	Electrosynthesis of CZTS thin films by sulfurization of CZT precursor: Effect of soft annealing temp	Applied Surface Science	283	74-80	2.711
228.	KV Gurav, SW Shin, P.S. Patil , MP Suryavanshi, JH Kim	2013	Pulsed electro-deposition of CZTS thin films: Effect of duty cycles	Materials Letters	108	316-319	2.489
229.	GL Agawane, SW Shin, MP Suryavanshi, KV Gurav, AV Moholkar, JY Lee, P.S. Patil , JH Yun, JH Kim	2013	Preparation and characterization of chemically bath deposited NC ZnSe thin films using Na citrate and HH: A comparative study	Materials Letters	106	186-189	2.489

230.	GL Agawane, SW Shin, MP Suryavanshi, KV Gurav, AV Moholkar, JY Lee, P.S. Patil , JH Yun, JH Kim	2013	Novel reduced toxic route synthesis and characterization of CBD ZnSe thin films	Ceramics International	1(A)	367-374	2.605
231.	SS Mali, H Kim, WY Jang, HS Park, PS Patil, CK Hong	2013	Novel synthesis and characterization of mesoporous ZnO nanofibers by electrospinning technique	ACS Sustainable chemistry and Engineering	1	1207-1213	4.642
232.	V.V. Shinde, J. H. Kim, P. S. Patil	2013	One-step synthesis and characterization of anisotropic silver nanoparticles: Application for enhanced antibacterial activity of natural fabric	Journal of Materials Science-Springer	48	8393-8401	2.371
233.	KV Gurav, SW Shin, UM Patil, GL Agawane, PS Patil, JH Moon, JH Kim	2013	CZTS Based room temperature gas sensor	Sensors and Actuator-B	190	408-413	4.097
234.	KV Gurav, MG Gang, SW Shin, UM Patil, PR Deshmukh, GL Agawane, PS Patil, JH Kim	2013	Gas sensing properties of hydrothermally grown ZnO nanorods with different aspect ratios	Sensors and Actuator-B	190	439-445	4.097
235.	S V Patil, R M Mane, N B Pawar, S D Kharade, S S Mali, P S Patil, JH Kim and P N Bhosale	2013	Optostructural and electrical properties of chemically grown Ga doped MoBi ₂ Se ₅ thin films	J of Materials Science: Materials in Electronics	24	4669-4676	1.486
236.	SS Mali, H Kim, PS Patil, CK Hong	2013	Chemically grown vertically	Dalton transactions	42(48)	16961-16967	4.197

			aligned 1D ZnO nanorods with CdS coating for efficient QDSSC: A controlled synthesis route				
237.	SW Shin, IY Kim, KV Gurav, YY Yoo, YB Kim, JY Heo, PS Patil, JH Kim, JY Lee	2013	Development of flexible Mg and Ga co-doped ZnO films with wide band gap energy and transparent conductive characteristics	J. of Alloys and Compounds	585	608-613	2.999
238.	SS Mali, P S Patil, J H Kim, CK Hong	2013	Surfactant free most probable TiO ₂ nanostructures via hydrothermal and its dye sensitized solar cell properties	Nature Scientific Reports	3	1-8	5.578
239.	Sawanta S. Mali, Hyungjin Kim, Chang Su Shim, Pramod S. Patil , and Chang Kook Hong	2013	Polyvinylpyrrolidone (PVP) assisted single-step synthesis of kesterite Cu ₂ ZnSnS ₄ nanoparticles by solvothermal process	Physica Status Solidi: Rapid Research Letters	7(12)	1050-1054	2.142
240.	Sachin A. Pawar, R. S. Devan, D. S. Patil, V. V. Burungale, T. S. Bhat, S. S. Mali, S. W. Shin, Jo Eun Ae, C. K. Hong, Y. R. Ma, J. H. Kim, P. S. Patil	2013	Hydrothermal growth of photoelectrochemically active titanium dioxide cauliflower-like nanostructures	Electrochimica Acta	117	470-479	4.504
241.	Dipali S. Patil, Sachin A. Pawar, Rupesh S. Devan, Yuon R. Ma, Woo R. Bae, Jin H. Kim, Pramod S. Patil	2013	Improved Electrochemical Performance of Activated Carbon/ Polyaniline Composite	Materials Letter	117	248-251	2.489

			Electrode				
242.	Manisha R. Kandgaonkar, N.N.Shinde, P.S.Patil	2013	Development of a MPPT-based Single Phase PWM Solar String Inverter for AC output for off grid applications	International Journal of Engineering Research and Development	9(4)	25-29	--
243.	N.L. Tarwal, K.V. Gurav, T. Prem kumar, Y.K. Jeong, H.S. Shim, I.Y. Kim, J.H. Kim, J.H. Jang, P.S. Patil	2013	Structure, X-ray photoelectron spectroscopy and photoluminescence investigations of the spray deposited cobalt doped ZnO thin films	Journal of Analytical and Applied Pyrolysis	106	26-32	3.564
244.	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	2013	Photoluminescence and photoelectrochemical properties of the spray deposited copper doped zinc oxide thin films	Ceramics International	40(6)	7669–7677	2.605
245.	C. E. Patil, N. L. Tarwal, P. R. Jadhav, P. S. Shinde, H. P. Deshmukh, M. M. Karanjkar, A. V. Moholkar, M. G. Gang, J. H. Kim and P. S. Patil	2013	Electrochromic performance of the mixed V ₂ O ₅ -WO ₃ thin films synthesized by pulsed spray pyrolysis technique	Current Applied Physics	14	389–395	2.212
246.	D. M. Jundale, S. T. Navale, G. D. Khuspe, D. S. Dalavi, P. S. Patil , V. B. Patil	2013	Polyaniline–CuO hybrid nanocomposites: synthesis, structural, morphological, optical and electrical transport studies	J Mater Sci: Mater Electron	24	3526–3535	1.486
247.	K. Mageshwari, Sawanta S. Mali, R. Sathyamoorthy, Pramod S. Patil	2013	Template-free synthesis of MgO nanoparticles for effective	Powder Technology	249	456-462	2.825

			photocatalytic applications				
248.	Sawanta S. Mali , Hyungjin Kim , Jin Hyeok Kim , Pramod S. Patil, Chang Kook Hong	2013	Synthesis and characterization of planar heterojunction hybrid polymer solar cells based on copper pthalocyanine (CuPc) and titanium dioxide	CERAMICS INTERNATIONAL	40	643-649	2.758
249.	Mageshwari, K., Mali, S.S., Sathyamoorthy, R., Patil, P.S	2013	Template-free synthesis of MgO nanoparticles for effective photocatalytic applications	Powder Technology	249	456-462	2.349
250.	N.B. Pawar, S.S. Mali , S.D. Kharade , M.G. Gang , P.S. Patil , J.H. Kim , C.K. Hong , P.N. Bhosale	2014	Influence of vacuum annealing on the structural and photoelectrochemical properties of nanocrystalline MoBi ₂ S ₅ thin films	Current Applied Physics	14	508-515	2.212
251.	Sawanta S. Mali, Pramod S. Patil , and Chang Kook Hong	2014	Low-Cost Electrospun Highly Crystalline Kesterite Cu ₂ ZnSnS ₄ Nanofiber Counter Electrodes for Efficient Dye-Sensitized Solar Cells,	ACS Appl. Mater. Interfaces	6	1688-1696	6.723
252.	Seung Wook Shina, K.V. Guravb, Myeong-Gil	2014	Correlation between soft annealing	Journal of Crystal Growth	394	49-54	1.689

	Kang,M.P. Suryawanshi, P.S. Patil ,G.L. Agawane,Chae Hwan Jeoung, Jeong Yong Lee ,Jin yeok Kim		conditions and structural, microstructural, morphological, and optical properties of CuInS ₂ thin films prepared by sulfurization of stacked precursor				
253.	N.L. Tarwal, A.R. Patil, N.S. Harale, A.V. Rajgure, S.S. Suryavanshi,W.R. Bae, P.S. Patil , J.H. Kim, J.H. Jang	2014	Gas sensing performance of the spray deposited Cd-ZnO thin films	Journal of Alloys and Compounds	598	282-288	2.999
254.	Mahesh Suryawanshi, Seung Wook Shin, Woo Ri Bae, Kishor Gurav, Myun Gil Kang, Ganesh Agawane, Pramod Patil , Jeong Yong Lee, Annasaheb Moholkar, Jin Hyeok Kim	2014	Kesterite CZTS nanocrystals: pH dependent synthesis	Physica Status Solidi A: Applications and Materials Science	211(7)	1531-1534	1.61
255.	P.P. Waifalkar, P.S. Patil , P.B. Patil	2014	Micromagnetic simulations of semielliptical permalloy elements	Physica B: Condensed Matter	448	253-255	1.319
256.	Mr. Atul A. Sagade, Prof. N.N. Shinde , Prof. Dr. P.S. Patil	2014	Effect of receiver temperature on performance evaluation of silver coated selective surface compound parabolic reflector with top glass cover	Energy Procedia	48	212 – 222	0.786
257.	Vidula V. Shinde, Dhanaji S. Dalavi,	2014	Surfactant free microwave	Applied Surface	307	495–502	2.711

	Sawanta S. Mali, Chang K. Hong, Jin H. Kim, Pramod S. Patil		assisted synthesis of ZnO microspheres: Study of their Antibacterial Activity	Science			
258.	Dipali S. Patil, S.A. Pawar, R.S. Devan, S.S. Mali, M.G. Gang, Y.R. Ma, C.K. Hong, J.H. Kim, P.S. Patil	2014	Polyaniline Based Electrodes for Electrochemical Supercapacitor: Synergistic Effect of Silver, Activated Carbon and Polyaniline	journal of Electroanalytical chemistry	724	21-28	2.729
259.	Sawanta S. Mali, Promod S. Patil , Popatrao N. Bhosale, Chang Kook Hong	2014	Novel hybrid solar cells based on α -copper phthalocyanine–cadmium sulfide planar heterojunction	Journal of Materials Science	49(14)	5100-5111	2.731
260.	Sawanta S. Mali, J. V. Patil, P. M. Kadam, H. P. Deshamukh, Chang Su Shim, Pramod S. Patil & Chang Kook Hong	2014	Hydrothermal synthesis of rutile TiO ₂ bottle brush for efficient dye-sensitized solar cells	Journal of Nanoparticle Research	16	2406	2.278
261.	Suvarna R. Bathe and P. S. Patil	2014	Electrochemical Behavior of TiO ₂ Nanoparticle Doped WO ₃ Thin Films	Journal of Materials	Volume 2014 (2014), Article ID 642069	1-5	2.371
262.	Deepali More, N. N. Shinde, P. S. Patil	2014	Evaluation of Feasibility of Solar Photovoltaic for Electrical Vehicle	Current Trends in Technology and Science	3(3)	161-163	0.565
263.	Sharadrao A. Vanalakar, Sawanta S. Mali, Mahesh P. Suryawanshi, Nilesh L. Tarwal, Ganesh L. Agawane,	2014	Thickness dependent photoelectrochemical performance of chemo-synthesized	Zeitschrift für Physikalische Chemie Journal	228(8)	817-827	1.356

	Kishor V. Gurav, Seung W. Shin, Annasaheb V. Moholkar, Jin H. Kim, and Pramod S. Patil		nanostructured CdS thin films				
264.	Uma Ghorpade, Mahesh Suryawanshi, Seung Wook Shin, Kishor Gurav, Pramod Patil , Sambhaji Pawar, Chang Woo Hong, Jin Hyeok Kim, Sanjay Kolekar	2014	Towards environmentally benign approaches for the synthesis of CZTSSe Nanocrystals by hot injection method: a status review	Chem.Com m.	50(77)	11258-11273	6.834
265.	Sawanta S. Mali, Chirayath A. Betty, Popatrao N. Bhosale, Pramod S. Patil & Chang Kook Hong	2014	From nanocorals to nanorods to nanoflowers nanoarchitecture for efficient dye-sensitized solar cells at relatively low film thickness: All Hydrothermal Process	Nature Scientific Reports	4	1-8	5.578
266.	Suryawanshi, M.P., Patil P.S. , Shin, S.W., Gurav, K.V., Agawane, G.L., Gang, M.G., Kim, J.H., Moholkar A.V.	2014	The synergistic influence of anionic bath immersion time on the photoelectrochemical performance of CZTS thin films prepared by a modified SILAR sequence	RSC advances	4(36)	18537-18540	3.84
267.	D. K. Bandgar, S. T. Navale, S. A. Vanalkar J. H. Kim, N. S. Harale, P. S. Patil and V.B. Pati	2014	Synthesis, structural, morphological, compositional and electrical transport properties of Polyaniline/ α -	Synthetic Metal	195	350-358	2.252

			Fe ₂ O ₃ hybrid nanocomposites				
268.	N.B. Pawar , S.D. Kharade, S.S. Mali, R.M. Mane, C.K. Hong, P.S. Patil , P.N. Bhosale	2014	Effect of indium (III) content on photoelectrochemical performance of MoBi(2x)In _x S ₅ thin films	Solid State Sciences	35	10-17	1.839
269.	S.A. Vanalakar, S.W. Shin, G.L. Agawane, M.P. Suryawanshi, K.V. Gurav, P.S. Patil , J.H. Kim	2014	Effect of post annealing atmosphere on the grainsize and surface morphological properties of pulsed laser deposited CZTS thin films	Ceramics International	40(9)	15097-15103	2.605
270.	A. J. More, R. S. Patil, D. S. Dalavi, S. S. Mali, C. K. Hong, M. G. Gang, J. H. Kim, P. S. Patil	2014	Electrodeposition of nano-grannular tungsten oxide thin films for smart window application	Materials Letters	134	298-301	2.489
271.	Khot K.V., Mali, S.S., Pawar, N.B, Mane R.M., Kondalkar V.V., Ghanwat V.B., Patil P.S. , Hong C.K, Kim J.H., Heo J. , Bhosale P.N.	2014	Novel synthesis of interconnected nanocubic PbS thin films by facile aqueous chemical route	Journal of Materials Science: Materials in Electronics	25	3762–3770	1.569
272.	Kim, I.Y, Shin, S.W, Gang, M.G., Lee, S.Ha, Gurav K.Va, Patil P.S. Yun, J.H., Lee, J.Y., Kim J.H.	2014	Comparative study of quaternary Mg and Group III element co-doped ZnO thin films with transparent conductive characteristics	Thin Solid Films	570	321-325	1.759
273.	Kondalkar, V.V., Kharade, R.R., Mali, S.S., Mane,	2014	Nanobrick-like WO ₃ thin films: Hydrothermal synthesis and	Superlattices and Microstructures	73	290-295	2.097

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274.	Manouti Salunkhe, P.S. Patil , P.N. Bhosale	2014	Effect of Annealing Temperature on Photoelectrochemi cal Properties of Nanocrystalline MoBi ₂ (Se _{0.5} Te _{0.5}) ₅ thin films	Philosophic al Magazine	94(28)	3195- 3205	1.825
275.	T. S. Bhat, R S Devan S S Mal, A S Kamble, S A Pawar, I Y Kim, Y R Ma, C K Hong, J H Kim, P. S. Patil	2014	Photoelectrochem ically active surfactant free single step hydrothermal mediated titanium dioxide nanorods	Journal of Materials Science: Materials in Electronics	25	4501– 4511	1.569
276.	V.V. Kondalkar , S.S. Mali, N.B. Pawar, R.M. Mane, S. Choudhury,C.K. Hongd, P.S. Patil , S.R. Patil, P.N. Bhosale, J.H. Kim	2014	Microwave- assisted rapid synthesis of highly porous TiO ₂ thin films with nanocrystalline framework for efficient photoelectrochem ical conversion	Electrochim ica Acta	143	89-97	4.504
277.	Rohini R. Kharade,S. S. Mali,S. S. Mohite,] V. V. Kondalkar, P. S. Patil ,and P. N. Bhosale	2014	Hybrid Physicochemical Synthesis and Electrochromic Performance of WO ₃ /MoO ₃ Thin Films	Electroanaly sis	26	2388- 2397	2.138
278.	S.A. Vanalakar, S.S. Mali, E.A. Jo, J.Y. Kim, J.H. Kim, P.S. Patil	2014	Triton-X mediated interconnected nanowalls network of cadmium sulfide thin films via chemical bath deposition and	Solid State Sciences	36	41-46	1.839

			their photoelectrochemical performance				
279.	S.A. Vanalakar, G.L. Agawane, S.W. Shina, M.P. Suryawanshi, K.V. Gurav, K.S. Jeon, P.S. Patil , C.W. Jeong, J.Y. Kim, J.H. Kim	2014	A review on pulsed laser deposited CZTS thin films for solar cell applications	Journal of Alloys and Compounds	619	109-121	2.999
280.	M.P. Suryawanshi; S.W. Shin; U.V. Ghorpade; K.V. Gurav; G.L. Agawane; Chang Woo Hong; Jae Ho Yun; P.S. Patil ; Jin Hyeok Kim; A.V. Moholkar	2014	A chemical approach for synthesis of photoelectrochemically active Cu ₂ ZnSnS ₄ (CZTS) thin films	Solar Energy	110	221-230	3.469
281.	S.A. Vanalakar, M.P. Suryawanshi, S.S. Mali, A.V. Moholkar, J.Y. Kim, P.S. Patil , J.H. Kim	2014	Simplistic surface active agents mediated morphological tweaking of CdS thin films for photoelectrochemical solar cell performance	Current Applied Physics	14(12)	1669–1676	2.212
282.	Pallavi B. Patil, Sawanta S. Mali, Vijay V. Kondalkar, Nita B. Pawar, Kishorkumar V. Khot, Chang K. Hong, Pramod S. Patil and Popatrao N. Bhosale	2014	Single step hydrothermal synthesis of hierarchical TiO ₂ microflowers with radially assembled nanorods for enhanced photovoltaic performance	RSC Advances	4	47278	3.84
283.	Sachin A. Pawar Dipali S. Patil,	2014	Thiocyanate functionalized	Electrochimica Acta	148	310-316	4.504

	Sandip K. Patil, Deepak V. Awale, Rupesh S. Devan, Yuan-Ron Ma, Sanjay S. Kolekar, Jin-Hyeok Kim , Pramod S. Patil		ionic liquid electrolytes for photoelectrochem ical study of cadmium selenide pebbles				
284.	Sharadrao A. Vanalakar, Soo J. Yeo, Pramod S. Patil , Jin Y. Kim, and Jin H. Kim	2014	Structural, optical, surface morphological and electrical properties of Cu ₂ ZnSnS ₄ thin film synthesized by drop casting technique	Zeitschrift für Physikalisch e Chemie	228(9)	917- 926	1.36
285.	Archana. S. Kamble , Bhavesh. B. Sinha , Kookchae Chung, Myeng G Gil,Vishal Burungale, Chan-Jin Park, Jin H. Kim Pramod S. Patil	2014	Effect of hydroxide anion generating agents on growth and properties of ZnO nanorod arrays	Electrochim ica Acta	149	386- 393	4.504
286.	M.P. Suryawanshi, S.W. Shin, U.V. Ghorpade, K.V. Gurav, C.W. Hong, G.L. Agawane, S.A. Vanalakar, J.H. Moon, Jae Ho Yun, P.S. Patil , Jin Hyeok Kim, A.V. Moholkar	2014	Improved photoelectrochem ical performance of Cu ₂ ZnSnS ₄ (CZTS) thin films prepared using modified successive ionic layer adsorption and reaction (SILAR) sequence	Electrochim ica Acta	150	136- 145	4.504
287.	Archana Kamble, B. B. Sinha, K.C. Chung, A. More, C. Hong, S. Vhanalkar, J. H. Kim, P. S. Patil.	2014	Facile linker free growth of CdS nanoshell on 1-D ZnO: solar cell application	Electronic Materials Letters	11(2)	171- 179	1.980
288.	V.B. Patil, P.V. Adhyapak, P.S. Patil, S.S. Suryavanshi, I.S. Mulla	2014	Hydrothermally synthesized tungsten trioxide nanorods as NO ₂ gas sensors	Ceramics International	41(3)	3845- 3852	2.605

289.	S. A. Vanalakar, G.L. Agawane, S. W. Shin, H.S. Yang, P.S. Patil , J. Y. Kim, J. H. Kim	2014	Non-vacuum mechanochemical route to synthesis Cu ₂ SnS ₃ nano-ink for solar cell applications	Acta Materialia	85(15)	314-321	4.465
290.	N.B. Pawar , S.S. Mali , S.D. Kharade , M.G. Gang , P.S. Patil , J.H. Kim , C.K. Hong, P.N. Bhosale	2014	Influence of vacuum annealing on the structural and photoelectrochemical properties of nanocrystalline MoBi ₂ S ₅ thin film	Current Applied Physics	14	508-515	2.13
291.	Vijay V. Kondalkar, Sawanta S. Mali, Rahul M. Mane, P. B. Dandge, Sipra Choudhury, Chang K. Hong, Pramod S. Patil, Shivajirao R. Patil, Jin H. Kim, and Popatrao N. Bhosale	2014	Photoelectrocatalysis of Cefotaxime Using Nanostructured TiO ₂ Photoanode: Identification of the Degradation Products and Determination of the Toxicity Level	Industrial & Engineering Chemistry Research	53	18152-18162	2.587
292.	Sachin A Pawar; Dipali S Patil; U T Pawar; R S Devan; M M Karanjkar; Y R Ma; S W Shin; J H Kim; Pramod S Patil	2015	Photoelectrochemical solar cell based on surfactant mediated rutile TiO ₂ nanorods	Journal of Materials Science: Materials in Electronics	26(4)	2595-2604	1.569
293.	Suhas Mohite; Sawanta S Mali, Rohini Kharade; C. K Hong; D. G. Kanase; P S. Patil ; P. Bhosale	2015	Single source precursor for vacuum evaporation of MoBi ₂ Se ₅ photoactive thin films	Journal of Materials Science: Materials in Electronics	26(5)	2879-2886	1.569
294.	Sawanta S. Mali, Chang Su Shim, Hui Kyung Park, Jaeyeong Heo, Pramod S. Patil , Chang Kook Hong	2015	Ultrathin atomic layer deposited TiO ₂ for surface passivation of hydrothermally grown 1D TiO ₂ nanorod	Chemistry of materials	27	1541-1551	8.354

			arrays for efficient solid state perovskite solar cells				
295.	T. D. Dongale, P.R. Jadhav, G.J. Navathe, J.H. Kim , M.M. Karanjkar, P.S. Patil.	2015	Development of nano fiber MnO ₂ thin film electrode and cyclic voltammetry behavior modeling using artificial neural network for supercapacitor application	Materials science and semiconductor processing	36	43-48	1.955
296.	T. D. Dongale, S. V. Mohite, A. A. Bagade, P. K. Gaikwad, P. S. Patil , R. K. Kamat, and K. Y. Rajpure	2015	Development of Ag/WO ₃ /ITO Thin Film Memristor Using Spray Pyrolysis Method	Electron. Mater. Lett.,	6	944-948	1.980
297.	Archana Kamble, Bhavesh Sinha, Kookchae Chung, Anup More, Sharad Vanalakar, Chang Woo Hong, Jin Hyeok Kim, and Pramod Patil	2015	Facile Linker Free Growth of CdS Nanoshell on 1-D ZnO: Solar Cell Application	Electron. Mater. Lett.,	2	171-179	1.980
298.	S.A. Vanalakar, G.L. Agawane, A.S. Kamble, C.W. Hong, P.S. Patil , J.H. Kim,	2015	Fabrication of Cu ₂ SnS ₃ thin film solar cells using pulsed laser deposition technique	Solar Energy Materials & Solar Cells	138	1-8	5.337
299.	Sawanta S. Mali, Chang Su Shim, Hyung jin Kim, Jyoti V. Patil, Dong Hee Ahn, Pramod S. Patil , Chang Kook Hong	2015	Evaluation of various diameters of titanium oxide nanofibers for efficient dye sensitized solar cells synthesized by electrospinning	Electrochimica Acta	166	356-366	4.504

			technique: A systematic study and their application				
300.	S. A. Vanalakar , G. L. Agwane , M. G. Gangl , P. S. Patil , J. H. Kim, and J. Y. Kim	2015	A mild hydrothermal route to synthesis of CZTS nanoparticle inks for solar cell applications	physica status solidi (C)	12(6)	500-503	--
301.	Sawanta S. Mali, Chang Su Shim Pramod S. Patil and Chang Kook Hong	2015	Once again, organometallic tri-halide perovskites Efficient light harvester for solid state perovskite solar cells	Materials Today	18(3)	172-173	14.107
302.	A. S. Kamble, B. B. Sinha, K. C. Chung, S. S. Mali, S. A. Vanalakar, I. Y. Kim, C. K. Hong, J. Y. Kim, J. H. Kim, P. S. Patil	2015	Boosting the performance of ZnO/CdS core/shell nanorod arrays based solar cells by ZnS surface treatment	Israel journal of chemistry	55(9)	1011-1016	2.22
303.	M. M. Vadiyar, S. C. Bhise, S. K. Patil, S. A. Patil, D. K. Pawar, A. V. Ghule, P. S. Patil And S. S Kolekar	2015	Mechanochemical Growth of Porous ZnFe ₂ O ₄ Nano-flakes Thin Film as Electrode for Supercapacitor Application	RSC Advances	5	45935-45942	3.84
304.	Chaitali Bagade, Sawanta S. Mali, Vishvanath B. Ghanwat, Kishorkumar V. Khot, Pallavi B. Patil, Suvarta D. Kharade, Rahul M. Mane, Neha D. Desai, Chang K. Hong, Pramod S.	2015	A facile and low cost strategy to synthesize Cd _{1-x} Zn _x Se thin films for photoelectrochemical performance: Effect of zinc content	RSC Advances	5	55658-55668	3.84

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305.	Kishorkumar V. Khot, Sawanta S. Mali, Nita B. Pawar, Rohini R. Kharade, Rahul M. Mane, Pallavi B. Patil, Pramod S. Patil , Chang Kook Hong, Jin Hyeok Kim, Jaeyeong Heo and Popatrao N. Bhosale,	2015	Simplistic construction of cadmium sulfoselenide thin films via a hybrid chemical process for enhanced photoelectrochemical performance	RSC Advances	5	40283-40296	3.84
306.	KV Gurav, YK Kim, SW Shin, MP Suryawanshi, NL Tarwal, UV Ghorpade, SM Pawar, SA Vanalakar, IY Kim, JH Yun, PS Patil , JH Kim	2015	Pulsed electrodeposition of Cu ₂ ZnSnS ₄ thin films: Effect of pulse potentials	Applied Surface Science	334	192-196	2.71
307.	Dipali S. Patil, S.A. Pawar, S.K. Patil, P.P. Salavi, S.S. Kolekar, R.S. Devan, Y.R. Ma, J.H. Kim, J.C. Shin, P.S. Patil	2015	Electrochemical performance of potentiodynamically deposited polyaniline electrodes in Ionic liquid	Journal of Alloys and Compounds	646	1089-1095	2.99
308.	S. A. Vanalakar, V. L. Patil, P. S. Patil and J. H. Kim	2015	Controllable synthesis of stoichiometric Cu ₂ ZnSnS ₄ nanoparticles by solvothermal method and its properties	AIP Proceeding	1665	050061	--
309.	Sharad A. Vanalakar, Sagar A. Vhanalakar, Vithoba L. Patil, Namdev S. Harale, Bharat B. Kale, Pramod S. Patil , Jin	2015	Synthesis and Characterization of Chemically Deposited ZnO Nanorods for NO ₂ Gas Sensing	IEEE	http://www.researchgate.net/publication/283214227		--

	H. Kim		Applications				
310.	V.V. Burungale, V.V. Satale, A.M. Teli, A.S. Kamble, J.H. Kim, P.S. Patil	2015	Surfactant free single step synthesis of TiO ₂ 3-D microflowers by hydrothermal route and its photoelectrochem ical characterizations	Journal of Alloys and Compounds	656	491- 499	2.99
311.	D.V. Awale , S.C. Bhise , S.K. Patil , M.M. Vadiyar , P.R. Jadhav , G.J. Navathe , J.H. Kim , P.S. Patil , S.S. Kolekar	2015	Nanopetals assembled copper oxide electrode for supercapacitor using novel 1-(10 -methyl-20 -oxo- propyl)-2,3- dimethylimidazoli um chloride ionic liquid as an electrolyte	Ceramics International	42(2- A)	2699- 2705	2.605
312.	Y. M. Hunge, M. A. Mahadik, V. S. Mohite, S. S. Kumbhar, N. G. Deshpande, K. Y. Rajpure, A. V. Moholkar, P. S. Patil C. H. Bhosale	2015	Photoelectrocatal ytic degradation of methyl blue using sprayed WO ₃ thin films	Journal of materials science materials in electronics	27	1629- 1635	1.569
313.	Sawanta S. Mali, Chang Su Shim, Hyung jin Kim, Min Cheul Lee, Sangram D. Patil, Pramod S. Patil , Chang Kook Hong	2015	Hierarchical SnO ₂ microspheres prepared by hydrothermal process for efficient improvement of dye sensitized solar cell properties	Journal of Nanoparticl e Research	17	1-13	2.184

314.	S.A. Vanalakar , A.S. Kamble , S.W. Shin, S.S. Mali, G.L. Agawane, V.L. Patil , J.Y. Kim , P.S. Patil , J.H. Kim	2015	Simplistic toxic to non-toxic hydrothermal route to synthesize Cu ₂ ZnSnS ₄ nanoparticles for solar cell applications	Solar Energy	122	1146-1153	3.469
315.	Vished Kumar, Vithoba Patil, Amey Anant Apte, Namdev Harale, PS Patil , and Sulabha K. Kulkarni	2015	Ultrasensitive gold nanostar-polyaniline composite for ammonia gas sensing	Langmuir	31(48)	13247-13256	4.457
316.	S. S. Jadhav, S. S. Mali, C. K. Hong, P. S. Patil , P. N. Bhosale, G. N. Mulik	2015	Novel synthesis of efficient counter electrode by facile arrested precipitation technique (APT)	Journal of materials science materials in electronics	27	3812-3820	1.569
317.	P. Jadhav M. Suryawanshi D. Dalavi D. Patil E. Jo S. Kolekar A. Wali M. Karanjkar J. Kim P. Patil ,	2015	Design and electro-synthesis of 3-D nanofibers of MnO ₂ thin films and their application in high performance supercapacitor	Electrochimica Acta	DOI: 10.1016/j.electacta.2015.07.002		4.504
318.	Vishal V. Burungale, Rupesh S. Devan, Sachin A. Pawar, Namdev S. Harale, Vithoba L. Patil, V. K. Rao, Yuan-Ron Ma, Jo Eun Ae, Jin H. Kim, Pramod S. Patil	2015	Chemically synthesized nanoparticulate PbS thin films as a k NO ₂ gas sensor	Material Science Poland	DOI: 10.1515/msp-2016-0001		0.507
319.	Manauti M. Salunkhe, Nita B. Pawar, Kishorkumar V. Khot, Pramod S. Patil Tejshree M. Bhavé Popatrao N. Bhosale	2015	Effect of indium(III) doping on chemosynthesized MoBi ₂ Te ₅ thin films and it's photoresponse	J Mater Sci: Mater Electron DOI 10.1007/s10854-015-2778-9			1.79

			property				
320.	G.J. Navathe , D.S. Patil , P.R. Jadhav , D.V. Awale , A.M. Teli , S.C. Bhise , S.S. Kolekar, M.M. Karanjkar , J.H. Kim , P.S. Patil	2015	Rapid synthesis of nanostructured copper oxide for electrochemical supercapacitor based on novel [HPMIM][Cl] ionic liquid	Journal of Electroanalytical Chemistry	738	170-175	2.80
321.	Sharadrao A. Vanalakar ,Vithoba L. Patil , Namdev S. Harale, Sagar A. Vhanalakar Myeng Gil Gang , Jin Young Kim, Pramod S. Patil, Jin Hyeok Kim	2015	Controlled growth of ZnO nanorod arrays via wet chemical route for NO ₂ gas sensor applications	Sensors and Actuators B: Chemical	221	1195-1201	4.785
322.	Kishorkumar V. Khot Sawanta S. Mali Rahul M. Mane Pramod S. Patil Chang Kook Hong Jin Hyeok Kim , Jaeyeong Heo Popatrao N. Bhosale	2015	Synthesis, characterization and photoelectrochemical properties of PbS sensitized vertically aligned ZnO nanorods: modified aqueous route	J Mater Sci: Mater Electron DOI 10.1007/s10854-015-3307-6			1.79
323.	Pallavi B. Patil, Sawanta S. Mali, Vijay V. Kondalkar, Rahul M. Mane, P.S. Patil, Chang K. Hong, Popatrao N. Bhosale	2015	Morphologically controlled electrodeposition of fern shaped Bi ₂ Te ₃ thin films for photoelectrochemical performance	Journal of Electroanalytical Chemistry doi:10.1016/j.jelechem.2015.09.019			2.822

324.	Pallavi B. Patil, Sawanta S. Mali, Vijay V. Kondalkar, Rahul M. Mane, Pramod S. Patil, Chang K. Hong, Popatrao N. Bhosale	2015	Bismuth telluride quantum dot assisted titanium oxide microflowers for efficient photoelectrochem- ical performance	Materials Letters DOI: http://dx.doi.org/10.1016/j.matlet.2015.06.083			2.43
325.	M. P. Suryawanshi, S. W. Shin, G. L. Agawane, K. V. Gurav, U. V. Ghorpade, C. W. Hong, M. A. Gaikwad, P. S. Patil, Jin Hyeok Kim, and A. V. Moholkar	2015	A Promising Modified SILAR Sequence for the Synthesis of Photoelectrochem- ically Active Cu ₂ ZnSnS ₄ (CZTS) Thin Films	Israel Journal of Chemistry DOI : 10.1002/ijch. 201400203			
326.	Archana Kamble, Bhavesha Sinha, Kookchae Chung, Anup More, Sharad Vanalakar, Chang Woo Hong, Jin Hyeok Kim, 1, and Pramod Patil	2015	Facile Linker Free Growth of CdS Nanoshell on 1-D ZnO: Solar Cell Application	Electronic Materials Letters DOI: 10.1007/s13391-014- 4236-x	2	171- 179	2.05
327.	Sawanta S. Mali, Chang Su Shim, Hyungjin Kim, Pramod S. Patil and Chang Kook Hong	2016	In situ processed gold nanoparticle- embedded TiO ₂ nanofibers enabling plasmonic perovskite solar cells to exceed 14% conversion efficiency	Nanoscale	8	266 4- 267 7	7.394
328.	T. S. Bhat, S. A. Vanalakar, R. S. Devan, S. S. Mali, S. A. Pawar, Y. R. Ma, C. K. Hong, J. H. Kim, P. S. Patil	2016	Compact nanoarchitectures of lead selenide via successive ionic layer adsorption and reaction towards	Journal of Materials Science: Materials in Electronics	27	4996– 5005	1.569

			optoelectronic devices				
329.	Udayraj T. Pawar, Sachin A. Pawar, Jin-Hyeok Kim, Pramod S. Patil	2016	Dye sensitized solar cells based on hydrothermally grown TiO ₂ nanostars over nanorods	Ceramic International	42(7)	803-8043	2.605
330.	Sachin A. Pawar, Dipali S. Patil, Mahesh P. Suryawanshi, Uma V. Ghorpade, Abhishek C. Lokhande, Ju Young Park, R.B.V. Chalapathy, Jae Cheol Shin, Pramod S. Patil , Jin Hyeok Kim	2016	Effect of different annealing environments on the solar cell performance of CdSe pebbles	Acta Materialia	108	152-160	4.465
331.	M.P. Suryawanshi, Seung Wook Shin, U.V. Ghorpade, K.V. Gurav, C.W. Hong, P.S.Patil , A.V. Moholkar, Jin Hyeok Kim	2016	Improved solar cell performance of Cu ₂ ZnSnS ₄ (CZTS) thin films prepared by sulfurizing stacked precursor thin films via SILAR method	Journal of alloys and compounds	671	509-516	2.99
332.	Vishal V. Burungale · V.V. Satale · A.J. More · K.K.K. Sharma · A.S. Kamble · J.H. Kim · P.S. Patil	2016	Studies on effect of temperature on synthesis of hierarchical TiO ₂ nanostructures by surfactant free single step hydrothermal route and its photoelectrochemical	Journal of colloid and interface science	470	108-116	3.368

			characterizations				
333.	S. D. Kharade, N. B. Pawar, K. V. Khot, P. Patil, S. S. Mali, P. S. Patil, C. K. Hong and P. N. Bhosale,	2016	Enhanced photoelectrochemical performance of novel p-type MoBiCuSe ₄ thin films deposited by a simple surfactant mediated solution route	RSC Advances	6	24985-24994	3.84
334.	In Young Kim, K. V. Gurav, Seung Wook Shin, Ki Seok Jeon, P. S. Patil , Jong Ha Moon, Dong Seon Lee, Jin Hyeok Kim	2016	Characteristics of Quaternary Flexible Mg and Ga Co-Doped ZnO Thin Films Fabricated Using RF Magnetron Sputtering	SCIENCE OF ADVANCED MATERIALS	8(3)	610-617	2.60
335.	Archana Kamble, Bhavesh Sinha, Sharad Vanalakar, Ganesh Agawane, Myeng Gil Gang, Jin Young Kim, Pramod Patil , Jin Hyeok Kim.	2016	Monodispersed wurtzite Cu ₂ SnS ₃ nanocrystals by phosphine and oleylamine free facile heat-up technique	Crystal Engineering Communication	DOI: 10.1039/C6CE00296J.		4.034
336.	Sachin A. Pawar, Dipali S. Patil, Hyo Rim Jung, Ju Young Park, Sawanta S. Mali, Chang K. Hong, Jae-Cheol Shin, Pramod S. Patil, Jin-Hyeok Kim	2016	Quantum dot sensitized solar cell based on TiO ₂ /CdS/CdSe/ZnS heterostructure	Electrochimica Acta	203	74–83	4.504
337.	Mahesh P. Suryawanshi, Uma V. Ghorpade, Seung Wook Shin, Sachin Apparao Pawar, In young Kim, Chang	2016	A Simple Aqueous Precursor Solution Processing of Earth-	ACS Applied Materials & Interfaces	DOI: 10.1021/acami.6b02167		6.723

	woo Hong, Minhao Wu, Pramod S Patil , Annasaheb V. Moholkar, and Jin Hyeok Kim		abundant Cu ₂ SnS ₃ Absorbers for Thin-film Solar Cells				
338.	Sachin A. Pawar , Dipali S. Patil , Abhishek C. Lokhande, Myeng Gil Gang, Jae Cheol Shin , Pramod S. Patil , Jin Hyeok Kim	2016	Chemical synthesis of CdS onto TiO ₂ nanorods for quantum dot sensitized solar cells	Optical Materials	58	46-50	1.981
339.	Sharadrao A. Vanalakar , Sawanta S. Mali , Ganesh L. Agwane , Archana Kamble, In Y. Kim , Pramod S. Patil , Jin Y. Kim , Jin H. Kim	2016	Influence of laser repetition rate on the Cu ₂ ZnSn(SSe) ₄ thin films synthesized via pulsed laser deposition technique	Solar Energy Materials and Solar Cells	157	331-336	5.337
340.	N.S. Harale, A.S. Kamble, N.L.Tarwal, I.S. Mulla, V.K. Rao, J.H. Kim, P.S. Patil	2016	Hydrothermally grown ZnO nanorods arrays for selective NO ₂ gas sensing: Effect of anion generating agents	Ceramics International			2.758
341.	V.B. Patil, N.L. Tarwal , I.S. Mulla , N.S. Harale , P.S. Patil, S.S. Suryavanshi	2016	Effect of annealing on the properties of CTAB assisted lead tungstate	Materials Letters			2.437
342.	Sarita P. Patil, Vithoba L. Patil, Sambhaji S. Shendage, Namdev S. Harale, Sharadrao A. Vanalakar, Jin Hyeok Kim, Pramod S. Patil	2016	Spray pyrolyzed indium oxide thick films as NO ₂ gas sensor	Ceramics International			2.758

343.	P.P. Waifalkar, S.B. Parit, A.D. Chougale, Subasa C. Sahoo, P.S. Patil, P.B. Patil	2016	Immobilization of invertase on chitosan coated γ -Fe ₂ O ₃ magnetic nanoparticles to facilitate magnetic separation	Journal of Colloid and Interface Science	482	159	3.368
344.	Dipali S. Patil, Sachin A. Pawar, Jin Hyeok Kim, Pramod S. Patil, Jae Cheol Shina.	2016	Facile Preparation and Enhanced Capacitance of the Ag PEDOT:PSS/Poly aniline Nanofiber Network for Supercapacitors	Electrochimica Acta	213	680	4.504
345.	Dipali S. Patil Sachin A. Pawar Ji young Hwang Jin Hyeok Kim Pramod S. Patil Jae Cheol Shin	2016	Silver incorporated PEDOT: PSS for enhanced electrochemical performance	Journal of Industrial and Engineering Chemistry			4.17
346.	Vithoba L. Patil · Sharadrao A. Vanalakar · Pramod S. Patil · Jin H. Kim	2016	Fabrication of nanostructured ZnO thin films based NO ₂ gas sensor via SILAR technique	Sensors and Actuators B Chemical	239	1185-1193	4.758
347.	Smita S. Kalagi · Pramod S. Patil	2016	Secondary electrochemical doping level effects on polaron and bipolaron bands evolution and interband transition energy from absorbance spectra of PEDOT: PSS thin films	Synthetic Metals	220	661-666	2.12

348.	T. S. Bhat, S. S. Mali, S. D. Korade, J. S. Shaikh, M. M. Karanjkar, C. K. Hong, J. H. Kim, P. S. Patil	2016	Mesoporous architecture of TiO ₂ microspheres via controlled template assisted route and their photoelectrochemical properties	J Mater Sci: Mater Electron DOI 10.1007/s10854-016-5525-y			1.79
349.	S.S.Shendage, V.L.Patil, S.A.Vanalakar, S.P.Patil, N.S.Harale, J.L.Bhosale, J.H.Kim, P.S.Patil	2016	Sensitive and selective NO ₂ gas sensor based on WO ₃ nanoplates	Sensors and Actuators B Chemical	240	426-433	4.758
350.	V. L. Patil, S. A. Vanalakar, A. S. Kamble, S.S.Shendage, J. H. Kim, and P. S. Patil	2016	Farming of zinc oxide maize corn via modified SILAR technique for a selective and sensitive nitrogen dioxide gas sensor	RSC Advances	6	90916	3.28
351.	T. D. Dongale, S. V. Mohite, A. A. Bagade, P. K. Gaikwad, P. S. Patil, R. K. Kamat, K. Y. Rajpure	2016	Development of Ag/WO ₃ /ITO Thin Film Memristor Using Spray Pyrolysis Method	Electronic Materials Letters DOI:10.1007/s13391-015-4180-4	11	944	2.05
352.	S. A. VANALAKAR, J. H. KIM, And P. S. PATIL	2016	POLYMER ASSISTED SYNTHESIS OF CDS NANOSTRUCTURE FOR PHOTOELECTROCHEMICAL SOLAR CELL APPLICATIONS	Advanced Polymeric Materials: From Macro- to Nano-Length Scales	Chapt. 11	175	

353.	Sagar M Kande, Wagh MM, Ghane SG, Shinde NN and Patil PS	2016	Experimental Analysis of Effect of Vegetation under PV Solar Panel on Performance of Polycrystalline Solar Panel	Journal of Fundamenta ls of Renewable Energy and Applications	6	1	0.31
354.	S.S.Kalagi, P.S.Patil	2017	Studies on electrochemical activity of CNT/PANI composite thin film coating on ITO coated glass surfaces: effect of concentration on fractal dimension	Electrochem ica Acta			4.803
355.	Shilpa A. Phaltane S. A. Vanalakar ,T. S. Bhat ,P. S. Patil , S. D. Sartale ,L. D. Kadam	2017	Photocatalytic degradation of methylene blue by hydrothermally synthesized CZTS nanoparticles	J Mater Sci: Mater Electron	DOI 10.100 7/s108 54- 017- 6527-0		1.7
356.	Vijay V. Kondalkar, Sang Sik Yang, P.S. Patil, Sipra Choudhury, P.N. Bhosale,KeeKeun Lee	2017	Langmuir- Blodgett Assembly of Nanometric WO ₃ Thin Film for Electrochro-mic Performance: A New Way	Materila Letters	DOI: org/10. 1016/j. matlet. 2017.0 2.030		
357.	Dipali S. Patil, Sachin A. Pawar ,Pramod S. Patil , Jae Cheol Shin	2017	Improved electrochemical performance of sandwich-like silver nanowires/graphe ne oxide nanostructure	J Appl Electrochem	DOI 10.100 7/s108 00- 017- 1053-		

358.	A.M. Teli, G. J. Navathe, D. S. Patil, P. R. Jadhava, S. B. Patil, T. D. Dongale, M. M. Karanjkar, Jae Cheol Shin, P.S. Patil,	2017	TOPO mediated rapid hydrothermal Synthesis and Study of Electrochemical performance of Nano-structured Copper oxide thin films	Sustainable Energy & Fuels	DOI: 10.1039/C6SE00016A		
359.	Sachin A. Pawar, Dipali S. Patil, Jin Hyeok Kim, Pramod S. Patil, Jae Cheol Shin	2017	Quantum dot sensitized solar cell based on TiO ₂ /CdS/Ag ₂ S heterostructure	Optical materials	66	644-650	2.18
360.	Y. N. Rane, D. A. Shende, M. G. Raghuwanshi, A. V. Ghule, V. L. Patil, P. S. Patil , S. R. Gosavi, N. G. Deshpande	2017	Synthesis of flower shaped ZnO thin films for resistive sensing of NO ₂ gas	Microchimica Acta	Doi: 10.1007/s00604-017-2271-7		4.831
361.	S. S. Shendage, V. L. Patil, S. P. Patil, S. A. Vanalakar, J. L. Bhosale, J. H. Kim, P. S. Patil	2017	NO ₂ sensing properties of porous fibrous reticulated WO ₃ thin films	Journal of analytical and applied pyrolysis	DOI- doi.org/10.1016/j.jaap.2017.05.006		3.912
362.	A.S. Kamble, V.L.Patil, B. B. Sinha, S.A.Vanalakar, S.L.Dhere, S. S. Kale, P. S. Patil, J. H. Kim	2017	Influence of surfactants on electrochemical growth of CdSe nanostructures and their photo-electrochemical performance	Journal of solid state electrochemistry			2.37

363.	P. B. Patil, V. C. Karade, P.P. Waifalkar , Subasa C. Sahoo , P. Kollu , M.S. Nibalkar, A. D. Chougale , P. S. Patil	2017	Functionalization of magnetic hollow spheres with 3-Aminopropyl)triethoxysilane (APTES) for controlled drug release	IEEE Transactions on Magnetics - Conferences			
364.	Sawanta S. Mali , Chang Su Shim , Hyungjin Kim , Chirayath A. Betty , Pramod S. Patil , Chang Kook Hong	2017	Secondary hydrothermally processed engineered TiO ₂ nanostructures for efficient perovskite solar cells	Energy Technology	doi.org /10.1002/ente.201700030		2.55
365.	Sawanta S. Mali , C. A. Betty, P. S. Patil, and Chang Kook Hong	2017	Nanostructured rutile TiO ₂ electron transporting layer via etching process for efficient perovskite solar cells: Impact of TiO ₂ structural and crystalline properties	Journal of Material chemistry A	DOI: 10.1039/C7TA02822A		8.2
366.	Sawanta S. Mali , T.S.Bhat, Chang Kook Hong, J.H.Kim, P. S. Patil	2017	*****	Accepted Book chapter	DOI- 10.1016/j.jallcom.2017.05.315		3.1

367.	R. Sankar Ganesh, E. Durgadevi, M. Navaneethan, V.L. Patil, S. Ponnusamy, C. Muthamizhchelvan, S. Kawasaki, P.S. Patil, Y. Hayakawa	2017	Low temperature ammonia gas sensor based on Mn- doped ZnO nanoparticledecorated microspheres	JALCOM			
368.	Jyoti V.Patil, Sawanta S. Mali Archana S.Kamble, Chang Kook Hong, J.H.Kim, P. S. Patil	2017	Electrospinning: A versatile technique for making of 1D growth of nanostructured nanofibers and its applications: an experimental approach	Applied surface science	DOI: http://dx.doi.org/doi:10.1016/j.apsusc.2017.06.116		3.3
369.	R. Sankar Ganesh, M. Navaneethan, V.L. Patil, S. Ponnusamy, C. Muthamizhchelvan, S. Kawasaki, P.S. Patil, Y. Hayakawa	2017	Sensitivity enhancement of ammonia gas sensor based on Ag/ZnO flower and nanoellipsoids at low temperature	Sensors and Actuators B: Chemical	DOI: 10.1016/j.snb.2017.08.015		5.4
370.	Y.M. Hunge, M.A. Mahadik, V.L. Patil, A.R. Pawar, S.R. Gadakh, A.V. Moholkar, P.S. Patil, C.H. Bhosale	2017	Visible light assisted photoelectrocatalytic degradation of sugarcane factorywastewater by sprayed CZTS thinfilms	Journal of Physics and Chemistry of Solids	111	176–181	2.04

371.	T. D. Dongale, K. V. Khot, S. V. Mohite, N. D. Desai, S. S. Shinde, V. L. Patil, S. A. Vanalkar, A. V. Moholkar, K. Y. Rajpure, P. N. Bhosale, P. S. Patil, P. K. Gaikwad, R. K. Kamat	2017	Effect of write voltage and frequency on the reliability aspects of memristor-based RRAM	International Nano letters	DOI 10.1007/s40089-017-0217-z		
372.	Jyoti V. Patil, Sawanta S. Mali, Chang K. Hong, Jin H. Kim, Pramod S. Patil	2017	Structural, morphological, and wettability study of electrochemically anodized 1D TiO ₂ nanotube arrays	Applied Physics A	123	10	1.42
373.	Dilip L. Kamble, Namdev S. Harale, Vithoba L. Patil, Pramod S. Patil, Laxman D. Kadam.	2017	Characterization and NO ₂ gas sensing properties of spray pyrolyzed SnO ₂ thin films	Journal of analytical and applied pyrolysis			3.5
374.	V.C. Karade, P.P. Waifalkar, T. D. Dongle, Subasa C. Sahoo, P. Kollu, P.S. Patil, and P.B. Patil	2017	Greener synthesis of magnetite nanoparticles using green tea extract and their magnetic properties	Materials Research Express	4	9	1.06
375.	Jasmin S. Shaikh, Navajsharif S. Shaikh, Arif Shaikh, Sawanta S. Mali, Abhijeet J. Kale, P.	2017	Perovskite solar cells: In pursuit of efficiency and	Materials and design	DOI: doi: 10.1016/j.matdes.2017.09.0		4.2

	Kanjanaboosb, Chang Kook Hong, J.H. Kim, Pramod S. Patil		stability		37		
376.	S. S. Mali, C. S. Shim, H. J. Kim, C. A. Betty, P. S. Patil, C. K. Hong	2017	Secondary Hydrothermally Processed Engineered Titanium Dioxide Nanostructures for Efficient Perovskite Solar Cells	Energy technology	Cover page		2.557
377.	R. Sankar Ganesh, E. Durgadevi, M. Navaneethan, V.L. Patil, S. Ponnusamy, C. Muthamizhchelvan, S. Kawasaki, P.S. Patil, Y. Hayakawa	2017	Controlled synthesis of Ni- doped ZnO hexagonal microdiscs and their gas sensing properties at low temperature	Chemical Physics letters	DOI: https://doi.org/10.1016/j.cplett.2017.09.057		1.81
378.	Dongale T. D; Pawar P. S; Tikke R. S; Mullani N. B; Patil V. B; Teli A. M; Khot K. V; Mohite S. V; Bagade A. A; Kumbhar V. S; Rajpure K. Y; Bhosale P. N; Kamat R. K; Patil P. S	2017	Mimicking the Synaptic Weights and Human Forgetting Curve Using Hydrothermally Grown Nanostructured CuO Memristor Device	Journal of Nanoscience and Nanotechnol ogy,	18	02	1.42
379.	TS Bhat, SS Mali, AD Sheikh, SD Korade, KK Pawar, CK Hong, JH Kim, PS Patil	2017	TiO ₂ /PbS/ZnS heterostructure for panchromatic quantum dot sensitized solar cells synthesized	Optical Materials	73	781- 792	2.23

			by wet chemical route				
380.	SR Gawali, VL Patil, VG Deonikar, SS Patil, DR Patil, PS Patil, J Pant	2017	Ce doped NiO nanoparticles as selective NO ₂ gas sensor	Journal of physics and chemistry in solids	doi.org/10.1016/j.jpss.2017.11.005		2.05
381.	S. A. Vanalakar , G. L. Agawane,A. S. Kamble, P. S. Patil, J. H. Kim	2017	The green hydrothermal synthesis of nanostructured Cu ₂ ZnSnSe ₄ as solar cell material and its structural, optical and morphological properties	Applied physics A	123:782		1.45
382.	R. Sankar Ganesh, E. Durgadevi, M. Navaneethan, V.L. Patil, S. Ponnusamy, C. Muthamizhchelvan, S. Kawasaki, P.S. Patil, Y. Hayakawa	2017	Tuning the selectivity of NH ₃ gas sensing response using Cu-doped ZnO nanostructures	Sensors and actuators A: Physical	Doi.org/10.1016/j.sna.2017.11.042		2.499
383.	T. S. Bhat, A. V. Shinde, R. S. Devan,A. M. Teli · Y. R. Ma, J. H. Kim, P. S. Patil	2017	Structural and electrochemical analysis of chemically synthesized micro-cubic architected lead selenide thin films	Applied physics A	124	34	1.45

384.	N. S. Harale, D. S. Dalavi, Sawanta S. Mali, N. L. Tarwal, S. A. Vanalakar, V. K. Rao, Chang Kook Hong, J. H. Kim, and P. S. Patil	2017	Single Step hydrothermally grown nanosheets assembled Tungsten oxide thin films for sensitive and selective NO ₂ gas detection	Journal of Materials Science			1.7
385.	S.A. Vanalakar, Sagar Vhanalakar, V.L. Patil, Satish Patil, Pramod Patil	2017	Simplistic eco-friendly preparation of nanostructured Cu ₂ FeSnS ₄ powder for solar photocatalytic degradation	Materials science and engineering B			2.5
386.	Mahesh P. Suryawanshi, Uma V. Ghorpade, Umesh P. Suryawanshi, Mingrui He, Jihun Kim, Myeng Gil Ganga, Pramod S. Patil, Annasaheb V. Moholkar, Jae Ho Yund, Jin Hyeok Kim	2017	Aqueous-Solution-Processed Cu ₂ ZnSn(S,Se) ₄ Thin-Film Solar Cells via an Improved Successive-Ion-Layer-Adsorption-Reaction Sequence	Acs Omega			
387.	Swapnil J. Rajoba, Lata D. Jadhav, Ramchandra S. Kalubarme, Pramod S. Patil, S. Varma, B.N. Wani	2018	Electrochemical performance of LiFePO ₄ /GO composite for Li-ion batteries	Ceramics International	44	6886–6893	2.9
388.	Sharad Vanalakar, Vithoba Laxman Patil, P. S. Patil, Jin Hyeok Kim	2018	Rapid synthesis of CdS nanowire mesh via simplistic wet chemical route and their NO ₂ gas sensing properties	New journal of chemistry	DOI-10.1039/C7NJ04593J		3.2

389.	Jasmin Shamshoddin Shaikh, Navaj Shamshoddin Shaikh, Sawanta S Mali, Jyoti V Patil, K. K. Pawar, Pongsakorn Kanjanaboos, Chang Kook Hong, Jin Hyeok Kim and Pramod Patil	2018	Nanoarchitectures in dye sensitized solar cells: Metal oxides, Oxide Perovskite and Carbon based Materials	Nanoscale	DOI-10.1039/C7NR08350E		7.367
390.	Shivajee S.Jadhav,Sawanta S.Mali, Chang Kook Hong, Pramod S.Patil, Popatrao N.Bhosale, Ganpatrao N.Mulik	2018	Arrested precipitation assembly of nanosheets Cu ₂ ZnCd (S, Se) ₃ thin film for solar cell performance: Novel skilful synthesis	Materials Letters	217	215-218	2.57
391.	Sharadrao A. Vanalakar, Pramod S. Patil, Jin H. Kim	2018	Recent advances in synthesis of Cu ₂ FeSnS ₄ materials for solar cell applications: A review	Solar Energy Materials and Solar Cells	182	204-219	4.78
392.	P.B. Patil, S.B. Parit, P.P. Waifalkar, S.P. Patil, T.D. Dongale, Subasa C. Sahoo, P. Kollu, M.S. Nimbalkar, P.S. Patil, A.D. Chougale	2018	pH triggered curcumin release and antioxidant activity of curcumin loaded γ -Fe ₂ O ₃ magnetic nanoparticles	Material letters	doi.org/10.1016/j.matlet.2018.04.008		2.57
393.	S.D. Jagadale , A.M. Teli , S.V. Kalake , A.D. Sawant , A.A. Yadav , P.S. Patil	2018	Functionalized crown ether assisted morphological tuning of CuO nanosheets for electrochemical supercapacitors	Journal of electroanalytical chemistry	816	99-106	2.82

394.	P.P.Waifalkar, A.D.Chougale, P.Kollu, P.S.Patil, P.B.Patil	2018	Magnetic nanoparticle decorated graphene based electrochemical nanobiosensor for H ₂ O ₂ sensing using HRP	Colloids and Surfaces B: Biointerfaces	167	425-431	3.9
395.	Satish M Patil, Sharadrao A Vanalakar, Ananta G Dhodamani, Shamkumar P Deshmukh, Vithoba L Patil, Pramod S Patil, Sagar D. Delekar	2018	NH ₃ gas sensing performance of ternary TiO ₂ /SnO ₂ /WO ₃ hybrid nanostructures prepared by ultrasonic-assisted sol-gel method	Journal of materials and electronics			2.06
396.	Jasmin S. Shaikh, Navajsharif S Shaikh; Rohini Kharade; Mahesh P Suryawanshi; Sonali A Beknalkar; Jyoti Patil; Pongsakorn Kanjanaboos; Chang K Hong; J. H Kim; Pramod S Patil	2018	Symmetric supercapacitor: Sulphurized graphene and ionic liquid	Journal of colloidal interface science	95	1849–1857	4.2
397.	P. O. Offor, B. A. Okorie, C. D. Lokhande, P. S. Patil, F. I. Ezema, A. D. Omah, V. S. Aigbodion, B. A. Ezekoye, I. C. Ezema	2018	The properties of spray-deposited zinc sulfide thin films using trisodium citrate complexant	The International Journal of Advanced Manufacturing Technology			2.20
398.	S. S. Patil, N. L. Tarwal, H. M. Yadav, S. D. Korade, T. S. Bhat, A. M. Teli, M. M. Karanjkar, J. H. Kim, P. S. Patil	2018	Photoelectrochemical performance of dye and semiconductor sensitization on 1-D hollow hexagonal ZnO rods: A	Journal of Solid State Electrochemistry			2.3

			comparative study				
399.	V.C. Karade , T.D. Dongale , Subasa C. Sahoo , P. Kollu , A.D. Chougale , P.S. Patil, P.B. Patil	2018	Effect of reaction time on structural and magnetic properties of green-synthesized magnetic nanoparticles	Journal of Physics and Chemistry of Solids	120	161-166	2.06
400.	Neelam Yadav; Latika Chaudhary; Pratiksha Sakhare; Tukaram Dongale; Pramod Patil; Arif Shaikh	2018	Impact of Collected Sunlight on ZnFe ₂ O ₄ Nanoparticles for Photocatalytic Application	Journal of colloidal and interface science			4.2
401.	Rushikesh P DhavalePradyumna P Waifalkar, Apoorva Sharma; Rakesh P Dhavale; Subasa C Sahoo; Pratap Kollu; Ashok D Chougale; Georgeta Salvan; Dietrich Zahn; Pramod S Patil	2018	Monolayer grafting of aminosilane on magnetic nanoparticles: an efficient approach for targeted drug delivery system	Journal of colloidal and interface science			4.2
402.	T.S. Bhat, S.S. Mali, A.D. Sheikh, N.L. Tarwal, S.D. Korade, C.K. Hong, J.H. Kim, P.S. Patil	2018	ZnS passivated PbSe sensitized TiO ₂ nanorod arrays to suppress photocorrosion in photoelectrochemical solar cells	Materials today communications	DOI: https://doi.org/10.1016/j.mtcomm.2018.06.008		1.86
403.	Dhavale, Rushikesh; Parit, Santosh; Sahoo, Subasa; Kollu, Pratap; Patil, P; Patil, Prashant;	2018	α -amylase immobilized on magnetic nanoparticles: reusable robust	Materials Research Express			1.151

	Chougale, Ashok		nano-biocatalyst for starch hydrolysis				
404.	Krishna Pawar; Vithoba Patil; Nilesh Tarwal; Namdev Harale; Jin Kim; Pramod Patil	2018	Facile green synthesis of In_2O_3 bricks and its NO_2 gas sensing properties	Journal of Materials Science: Materials in Electronics			2.346
405.	V. L. Patil, S. S. Kumbhar, S. A. Vanalakar, N. L. Tarwal, S. S. Mali, J. H. Kim, P. S. Patil	2018	Gas Sensing Properties of 3D Mesoporous Nanostructured ZnO Thin Films	New Journal of chemistry			3.227
406.	Girish U. Kamble, Nitin P. Shetake, Suhas D. Yadav, Aviraj M. Teli, Dipali S. Patil, Sachin A. Pawar, Milind M. Karanjkar, Pramod S. Patil, Jae C. Shin, Marius K. Orłowski, Rajanish K. Kamat, Tukaram D. Dongale	2018	Coexistence of filamentary and homogeneous resistive switching with memristive and meminductive memory effects in Al/MnO ₂ /SS thin film metal-insulator-metal device	International Nano Letters	https://doi.org/10.1007/s40089-018-0249-z		
407.	C.S. Patil, D.B. Gunjal, V.M. Naik, N. S. Harale, S.D. Jagadale, A.N. Kadam, P.S. Patil, G. B. Kolekar, A. H. Gore	2018	Waste tea residue as a low cost adsorbent for removal of hydrazine hydrochloride pharmaceutical pollutant from aqueous media: An environmental remediation	Journal of Cleaner Production			5.67
408.	S. T. Gurme, T. D. Dongale, S. N. Surwase, S. D. Kumbhar, G. M. More, V. L. Patil, P. S. Patil, R. K.	2018	An Organic Bipolar Resistive Switching Memory Device Based On Natural	Physica Status Solidi A: Applications and Material			1.674

	Kamat e, J. P. Jadhav		Melanin Synthesized From Aeromonas sp. SNS	Science			
409.	S. A. Vanalakar, M. G. Gang, V. L. Patil, T.D. Dongale, P. S. Patil, J. H. Kim	2018	Enhanced Gas sensing response of zinc oxide nanorods synthesized via hydrothermal route for nitrogen dioxide gas	Journal of Electronic materials science			1.5
410.	M.S. PATIL, V.L. PATIL, N.L. TARWAL, D.D. MORE, V.V. ALMAN, L.D. KADAM, P.S. PATIL, and J.H. KIM	2018	Gas Sensing Properties Of Hydrothermally Synthesized Button Rose Like $W\text{O}_3$ Thin Films	Journal of Electronic materials science			1.5
411.	Swati S. Mehta, Digambar Y. Nadargi, Mohaseen S. Tamboli, Latika S. Chaudhary, Pramod S. Patil, Imtiaz S. Mulla, and Sharad S. Suryavanshi	2018	Ru loaded mesoporous $W\text{O}_3$ microflowers for dual applications: enhanced H_2S sensing, and sunlight driven photocatalysis	Dalton Transaction			4.099
412.	JYOTI V. PATIL, SAWANTA S. MALI, JASMIN S. SHAIKH, CHANG KOOK HONG, and PRAMOD S. PATIL	2018	Electrochemically anodized ultra-long TiO_2 nanotubes for supercapacitor	Journal of Electronic materials science			1.5
413.	V. L. Patil, S. A. Vanalakar, S. A. Vhanalakar, A. S. Kamble, T. D. Dongale, D. N. Kurhe, P. P. Kamble, S. P. Patil, S. S. Shendage, P. S. Patil, J. H. Kim	2018	Chemically synthesized hierarchical flower like ZnO microstructures	Zeitschrift für Physikalische Chemie			1.13

414.	Pawar, Krishna; Desai, Dhanashri ; Bodake, Shraddha ; Patil, Harshada ; More, Suraj ; Nimbalkar, Ajay; Mali, Dr. Sawanta S.; Hong, C; Kim, Sungjun; Patil, Pramod; Dongale, Tukaram	2019	Highly reliable multi-level resistive switching in nanoparticulated In ₂ O ₃ thin film memristive device	Journal of Physics D: Applied Physics			2.5
415.	Sanjana S. Bhosale, Sonali S. Rohiwal, LatikaS. Chaudhary, Kiran D. Pawar, Pramod S. Patil, Arpita P. Tiwari	2019	Photocatalytic decolorization of methyl violet dye using Rhamnolipid biosurfactant modified iron oxide nanoparticles for wastewater treatment	Journal of Materials Science: Materials in Electronics	doi.org /10.1007/s10854-019-00751-0		2.4
416.	V. L. Patil, S. A. Vanalakar, S. S. Shendage, S. P. Patil , A. S. Kamble, N. L. Tarwal, K. K. Sharma, J. H. Kim, P. S. Patil	2019	Fabrication of nanogranular TiO ₂ thin films by SILAR technique: Application for NO ₂ gas sensor	Inorganic and Nano-Metal Chemistry			0.9
417.	S.A. Jadhav, H.B. Garud, A.H. Patil, G. D. Patil, C. R. Patil, T.D. Dongale, P.S. Patil	2019	Recent advancements in silica nanoparticles based technologies for removal of dyes from water	Colloid and Interface Science Communications			
418.	Arif Sheikh, Akhilesh P. Patil, Sawanta S. Mali, Chang K. Hong, Pramod S. Patil	2019	New Insights into Active Area Dependent Performance of Hybrid Perovskite Solar Cells	Journal of Materials Science			

419.	Jyoti Patil, Akhilesh P. Patil, Sawanta S. Mali, Chang K. Hong, Jasmin Shaikh, Pramod S. Patil	2019	Efficient mixed halide perovskite solar cells via solvent engineering process	Dyes and Pigments			
420.	Vijay Karade, Abhishek Lokhande, Pravin Babar, Myeng Gil Gang, Mahesh Suryawanshi, Pramod Patil, Jin Hyeok Kim	2019	Insights into kesterite's back contact interface: A status review	Solar Energy Materials and Solar Cells			
421.	Sushilkumar A. Jadhav, Sarika B. Dhavale, Aravind H. Patil, Pramod S. Patil	2019	Brief overview of electrospun polyacrylonitrile carbon nanofibers: Preparation process with applications and recent trends	Material Design Processing Communication	83		
422.	Sawanta S. Mali, Jyoti V. Patil, Hyungjin Kim, Pramod S. Patil and Chang Kook Hong	2019	Electrolyte for dye-sensitized, quantum dots, and perovskite solar cells	Elsevier			
423.	Amruta B. Nagare, Namdev S. Harale, Sawanta S. Mali, Sarita S. Nikam, Pramod S. Patil, · Chang Kook Hong, Annasaheb V. Moholkar	2019	Chemiresistive ammonia gas sensor based on branched nanofibrous polyaniline thin films	Journal of Materials Science: Materials in Electronics	doi.org /10.1007/s10854-019-01514-7		2.7

424.	V.D. Chavan, V.P. Kothavale, S.C. Sahoo, P. Kollu, T.D. Dongale, P.S. Patil, P.B. Patil	2019	Adsorption and kinetic behavior of Cu(II) ions from aqueous solution on DMSA functionalized magnetic nanoparticles	Physics B.			1.87
425.	kothavale, vijay; Chavan, Vijay ; Sahoo, Subasa; Kollu, Pratap; Dongale, Tukaram; Patil, Pramod; Patil, Prashant	2019	Removal of Cu(II) from aqueous solution using APTES-GA modified magnetic Iron Oxide nanoparticles: kinetic and isotherm study	Materials Research Express			1.44
426.	Krishna K. Pawar, Jasmin S. Shaikh , Sawanta S. Mali , Yuvraj H. Navale , Vikas B. Patil , Chang K. Hong, Pramod S. Patil	2019	Hollow In ₂ O ₃ microcubes for sensitive and selective detection of NO ₂ gas	Journal of alloys and compounds	doi.org /10.1016/j.jallcom.2019.07.248		4.1
427.	Vishal Vhanalakar, Amarja Katware, KRISHNA PAWAR, P.S. Patil, Arif Sheikh	2019	Two-step Anti-Solvent Precipitated MAPbI ₃ Pellet Based Robust Room Temperature Ammonia Sensor	Advanced Materials Technologies			3.5

428.	Jasmin Shamshoddin shaikh Navajsharif Shaikh Sawanta Mali Jyoti V. Patil Sonali Beknalkar Akhilesh P. Patil N. L. Tarwal Pongsakorn Kanjanoos Chang K. Hong Pramod S Patil	2019	Quantum dot based solar cells: Role of nanoarchitectures, perovskite quantum dots and charge transporting layers	Chemsusche m			7.80
429.	Jyoti V.Patil, Sawanta S.Mali, Jasmin S.Shaikh, Akhilesh P.Patil, Pramod S.Patil, Chang KookHong	2019	Influence of reduced graphene oxide-TiO ₂ composite nanofibers in organic indoline DN350 based dye sensitized solar cells	Synthetic metal			
430.	Gajanan D Patil; Aravind H Patil; Sushilkumar Jadhav; Chetan R Patil; Pramod S Patil	2019	A new method to prepare superhydrophobic cotton fabrics by post-coating surface modification of ZnO nanoparticles	Materials Letters			3.01
431.	R. Sankar Ganesh , V.L. Patil , E. Durgadevi , M. Navaneethan , S. Ponnusamy , C. Muthamizhchelvan , S. Kawasaki , P.S.	2019	Growth of Fe doped ZnO nanoellipsoids for selective NO ₂ gas sensing application	Chemical Physics Letters			1.90

	Patil , Y. Hayakawa						
432.	Tejasvinee S. Bhat, Archana S. Kalekar, Dhanaji S. Dalavi, Chetan C. Revadekar, Atul C. Khot, Tukaram D. Dongale	2019	Hydrothermal synthesis of nanoporous lead selenide thin films Photoelectrochem ical and resistive switching memory applications	Journal of materials science: Materials in electronics			2.1
433.	V.L.Patil, S.A.Vanalakar, N.L.Tarwal, A.P.Patil, T.D.Dongale, J.H.Kim, P.S.Patil	2019	Construction of Cu Doped ZnO Nanorods by Chemical Method for Low Temperature Detection of NO ₂ gas	Sensors and Actuators A:Physical			2.7
434.	S. S. Shendage, V. L. Patil, S. A. Vanalakar, S. A. Vhanalakar, A. S. Kamble, T. D. Dongale, D. N. Kurhe, P. P. Kamble, S. P. Patil, P. S. Patil, and J. H. Kim	2019	Characterization and Gas Sensing Properties of Spin Coated WO ₃ Thin Films	ZPC			1.3

435.	V.L.Patil, Aditya A.Patil, S.V.Patil, N.A.Khairnar, N.L.Tarwal, S.A.Vanalakar, R.N.Bulakhe, InsikInd P.S.Patil, T.D.Dongale	2019	Bipolar resistive switching, synaptic plasticity and non-volatile memory effects in the solution-processed zinc oxide thin film	Material science and semiconducting process			2.7
436.	Krishna K Pawar, Latika S Chaudhary, Sawanta S Mali, Tejasvinee S Bhat, Arif D Sheikh, Chang K Hong, Pramod S Patil	2020	In ₂ O ₃ nanocapsules for rapid photodegradation of crystal violet dye under sunlight	Journal of colloid and interface science	561	287-297	6.3
437.	Shivaji Tayade, Kiran Patil, Geeta Sharma, Pramod Patil, Rahul M. Mane, Pramod Mahulikar, Kiran Kumar K. Sharma	2019	Electrochemical investigations of thymine and thymidine in 1-butyl-3-methylimidazolium tetrafluoroborate ionic liquids at room temperature				
438.	AH Patil, SA Jadhav, KD Gurav, SR Waghmare, GD Patil, VD Jadhav, Shirishkumar H Vhanbatte, Pradyumna V Kadole, Kailas D Sonawane, Pramod S Patil	2019	Single step green process for the preparation of antimicrobial nanotextiles by wet chemical and sonochemical methods	The Journal of The Textile Institute		1-9	1.063
439.	Jyoti V.Patil, Sawanta S.Mali, Akhilesh P.Patil, Pramod S.Patil, Chang KookHong	2019	Highly efficient mixed-halide mixed-cation perovskite solar cells based on	Energy	189	116396	2.7

			rGO-TiO ₂ composite nanofibers				
440.	Namdev S. Harale Amruta B. Nagare Sawanta S. Mali Mahesh P. Suryawan shi Kiran Kumar K. Sharma Vepa K. Rao Chang Kook Hong Jin H. Kim Pramod S. Patil	2020	Facile Synthesis of Nanofibrous Polyaniline Thin Films for Ammonia Gas Detection	Journal of Electronic Materials	49	1338-1347	1.8
441.	A.M. Teli, S.A. Beganalkar, D.S. Patil, S.A. Pawar, T.D. Dongale, J.C. Shin, H.J. Kim, P.S. Patil	2020	Effect of thermal annealing on physiochemical properties of spray-deposited β -MnO ₂ thin films for electrochemical supercapacitor	Journal of Electroanalytical Chemistry	856	113483	2.4
442.	Aviraj M.Teli, Sonali A.Beknalkar, Dipali S.Patil, Sachin A.Patil, Deepak D.Dubal, Vishranti Y.Burute, Tukaram D.Dongale, Jae C.Shin, Pramod S.Patil	2020	Effect of annealing temperature on charge storage kinetics of an electrospun deposited manganese oxide supercapacitor	Applied Surface Science		145466	5.2
443.	Mahesh S.Bhadane, K.H.Gavhane, Preeti P.Kulkarni, S.S.Dahiawale, V.N.Bhoraskar, M.A.More, P.S.Patil, S.D.Dhole	2020	Particle size dependent TL response of CaF ₂ :Dy phosphor for gamma dosimetry	Journal of Luminescence	223	117168	2.91

444.	Priyadarshani S Sadalage; Mansingraj S Nimbalkar; Kiran Kumar K Sharma; Pramod S Pati, Kiran D. Pawar	2020	Sustainable approach to almond skin mediated synthesis of tunable selenium microstructures for coating cotton fabric to impart specific antibacterial activity	Journal of colloid and interface science			6.3
445.	SA Beknalkar, VL Patil, NS Harale, MP Suryawanshi, AP Patil, VB Patil, JH Kim, PS Patil	2020	2-D to 3-D conversion of WO ₃ nanostructures using structure directing agent for enhanced NO ₂ gas sensing performance	Sensors and Actuators A: Physical	304	111882	2.1
446.	PA Sakhare, SS Pawar, TS Bhat, SD Yadav, GR Patil, PS Patil, AD Sheikh	2020	Magnetically Recoverable BiVO ₄ /NiFe ₂ O ₄ Nanocomposite Photocatalyst For Efficient Detoxification of Polluted Water Under Collected Sunlight	Materials Research Bulletin		110908	3.35
447.	Bapuso M Babar, Aniruddh A Mohite, Vithoba L Patil, Udayraj T Pawar, Laxman D Kadam, Prakash M Kadam, Pramod S Patil	2020	Sol-gel prepared vanadium oxide for photocatalytic degradation of Methylene Blue dye	Materials Today: Proceedings			
448.	Tejasvinee S Bhat, Sawanta S Mali, Jyoti V Patil, Shirish T Killedar, Trishala R Desai, Ashwinee N Patil, Chang Kook Hong, Tukaram D Dongale, Pramod S	2020	Nanogranular Cadmium Sulfoselenide Thin Films Grown by Successive Ionic Layer Adsorption and Reaction	Physica Status Solidi A- Applications And Materials Science			1.606

	Patil		Method for Optoelectronic Applications				
449.	Sambhaji Khot, Satish Phalake, Shivraj Mahadik, Mahendra Baragale, Sandhya Jagadale, Vishal Burungale, Yuvraj Navale, Vikas Patil, Vithoba Patil, Pramod Patil, Sarita Patil	2020	Synthesis of CuO thin film sensors by spray pyrolysis method for NO ₂ gas detection	Materials Today: Proceedings			
450.	Suvarna R Bathe, PS Patil	2020	WO ₃ thin films doped with Ru by facile chemical method with enhanced electrochromic properties for electrochromic window application	Materials Science and Engineering : B	257	114542	3.507
451.	Akhilesh P Patil, Kiran A Nirmal, Sawanta S Mali, Chang Kook Hong, Tae Geun Kim, Pramod S Patil, Tukaram D Dongale	2020	Tuning the analog and digital resistive switching properties of TiO ₂ by nanocompositing Al-doped ZnO	Materials Science in Semiconductor Processing	115		3.507
452.	SM Nikam, A Sharma, M Rahaman, AM Teli, SH Mujawar, DRT Zahn, PS Patil, SC Sahoo, G Salvan, PB Patil	2020	Pulsed laser deposited CoFe ₂ O ₄ thin films as supercapacitor electrodes	RSC Advances	10	19353-19359	3.049
453.	Sarfraj Mujawar, Bhushan Dhale, Pramod S Patil	2020	Electrochromic Properties of Layered Nb ₂ O ₅ -WO ₃ Thin Films	Materials Today: Proceedings	23	430-436	

454.	Sarita Patil, Namdev Harale, Snehal Kadam, Vithoba Patil, Sambhaji Shendage, Sandhya Jagadale, Jin Kim, Pramod Patil	2020	Sarita Patil, Namdev Harale, Snehal Kadam, Vithoba Patil, Sambhaji Shendage, Sandhya Jagadale, Jin Kim, Pramod Patil	Materials Today: Proceedings	23	147-153	
455.	AR Patil, MS Nimbalkar, PS Patil, AD Chougale, PB Patil	2020	Controlled release of poorly water soluble anticancerous drug camptothecin from magnetic nanoparticles	Materials Today: Proceedings	23	437-443	
456.	VV Burungale, Hyojung Bae, AS Kamble, J-H Kim, PS Patil, J-S Ha	2020	Surfactant-free pH-assisted facile engineering of hierarchical rutile TiO ₂ nanostructures by a single step hydrothermal method for water splitting application	CrystEngComm	22	2462-2471	3.382
457.	Aviraj M.Teli, Sonali A.Beknalkar, Dipali S.Patil, Sachin A.Pawar, Deepak P.Dubal, Vishranti Y.Burute, Tukaram D.Dongale, Jae Cheol Shin, Pramod S.Patil	2020	Effect of annealing temperature on charge storage kinetics of an electrospun deposited manganese oxide supercapacitor	Applied Surface science	511	145466	6.1
458.	Mahesh S.Bhadane, K.H.Gavhane, Preeti P.Kulkarni, S.S.Dahiwal, V.N.Bhoraskar, M.A.More, P.S.Patil, S.D.Dhole	2020	Particle size dependent TL response of CaF ₂ :Dy phosphor for gamma dosimetry	Journal of Luminescence	223	117168	3.28

459.	Tejasvinee S. Bhat, Chetan C. Revadekar, Satyajeet S. Patil, Tukaram D. Dongale, Deok-kee Kim Pramod S. Patil	2020	Photo-induced resistive switching in CdS- sensitized TiO ₂ nanorod array memristive device	Journal of Materials Science: Materials in Electronics	31	10919– 10929	2.20
460.	Vishranti Burute Aviraj Teli Sonali Beknalkar Swapnali Rajmane Aappasaheb Bhosale Pramod Patil	2020	Electrospun Deposited Manganese Oxide Nanofibers Thin Film Electrode for Supercapacitor Application: Effect of Mn Concentration	Macromolec ular Symposia	392	2000	
461.	V. V. Burungale, Hyojung Bae, bA. S. Kamble, J.-H. Kim, P. S. Patil and J.-S. Ha	2020	Studies on interstitial carbon doping from a Ti precursor in a hierarchical TiO ₂ nanostructur ed photoanode by a single step hydrothermal route	RSC Advances	10	28492- 28500	3.1
462.	Aravind H. Patil, Shushilkumar A. Jadhav ORCID Icon, Kuldip D. Gurav, Shailesh R. Waghmare, Gajanan D. Patil, Varsha D. Jadhav, Shirishkumar H. Vhanbatte, Pradyumn a V. Kadole, Kailas D. Sonawane & Pramod S. Patil	2020	Single step green process for the preparation of antimicrobial nanotextiles by wet chemical and sonochemical methods	Journal of the Textile Institute	111	1380- 1388	

463.	Raykar, V.S., Patil, S.B., Patil, P.S.	2020	Porous TiN/Red Phosphorus Nanocomposite for Photocatalytic Hydrogen Evolution	Macromolecular Symposia	393	2000	
464.	Sambhaji S. Shendage, Vithoba L. Patil, Sharadrao A. Vanalakar, Sarita P. Patil, Jalindar L. Bhosale, Jin. H. Kim and Pramod. S. Patil	2020	Characterization and Gas Sensing Properties of Spin Coated WO ₃ Thin Films	Z.Phys. Chem.	234	1819-1834	
465.	Sushilkumar A. Jadhav, Vinay S. Patil, Preeti S. Shinde, Saurabh S. Thoravat & Pramod S. Patil	2020	A short review on recent progress in mesoporous silicas for the removal of metal ions from water	Chemical papers	20		1.680
466.	MS Bhadane, KH Gavhane, VS Ghemud, SS Dahiwal, PS Patil, Anjali Kshirsagar, SD Dhole	2020	A post annealing effect on SrF ₂ nano particles: Structural, morphological, functional and dosimetric properties	Journal of alloys and compounds		156343	4.6
467.	Rushikesh P.Dhavale, R.P.Dhavale, S.C.Sahoo, P.Kollu, S.U.Jadhav P.S.Patil, T.D.Dongale, A.D.Chougale, P.B.Patil	2020	Chitosan coated magnetic nanoparticles as carriers of anticancer drug Telmisartan: pH-responsive controlled drug release and cytotoxicity studies	Journal of Physics and Chemistry of Solids			3.44
468.	Sushilkumar A. Jadhav, Harshada B. Garud, Saurabh S. Thoravat, Vinay S. Patil, Preeti S. Shinde, Shivaji H.	2020	Synthesis and Testing of Functional Mesoporous Silica Nanoparticles for	Biointerface Research in Applied Chemistry	11		0.89

	Burungale, Pramod S. Patil		Removal of Cr(VI) Ions From Water				
469.	R S Kanase, V C Karade, P Kollu, Subasa C Sahoo, P S Patil, S H Kang, J H Kim, M S Nimbalkar and P B Patil	2020	Evolution of structural and magnetic properties in iron oxide nanoparticles synthesized using Azadirachta indica leaf extract	Nanoexpress	1		1.9
470.	T.S. Bhat	2020	Synthesis and characterization of hexagonal zinc oxide nanorods for Eosin-Y dye sensitized solar cell	Materials Today: Proceedings			
471.	T.S. Bhat	2020	Hydrothermal Synthesis of One - Dimensional, Rutile TiO ₂ Nanograin Arrays for Photoelectrochemical Solar Cell	Materials Today: Proceedings			
472.	M. N. Padvi, N. S. Harale, P. S. Patil, S. D. Dhas & A. V. Moholkar	2020	Hydrothermal synthesis of NO ₂ gas-sensitive and hydrophobic zinc oxide thin films	Journal of Materials Science: Materials in Electronics	28		2.2
473.	Krishna K.Pawar, Sawanta S.Mali, Yuvraj H.Navale, Vikas B.Patil, Kiran K.Sharma, Chang K.Hong, Pramod S.Patil	2021	Fabrication of enhanced sensitive and selective porous indium oxide nanocube sensor for NO ₂ detection	Ceramics International	47	2430-2440	3.8

474.	Sarika B.Dhavale, Vithoba L.Patil, Sonali A.Beknalkar, Aviraj M.Teli, Aravind H.Patil, Akhilesh P.Patil, Jae Cheol Shin, Pramod S.Patila	2021	Study of solvent variation on controlled synthesis of different nanostructured NiCo ₂ O ₄ thin films for supercapacitive application	Journal of Colloid and Interface Science	588	589- 601	7.4
475.	S.A. Beknalkar, A.M.Teli, N.S. Harale, D.S. Patil, S.A. Pawar, J.C. Shin, P.S. Patil	2021	Fabrication of high energy density supercapacitor device based on hollow iridium oxide nanofibers by single nozzle electrospinning	Applied Surface Science	546	149102	6.1
476.	AI Biradar, PD Sarvarkar, SB Teli, CA Pawar, PS Patil, NR Prasad	2021	Photocatalytic degradation of dyes using one- step synthesized silica nanoparticles	Materials Today: Proceedings			
477.	Komal T Patil, Kiran A Nirmal, Sushilkumar A Jadhav, Swapnil R Patil, Tukaram D Dongale, Deok-kee Kim, Pramod S Patil	2021	Bipolar resistive switching and non-volatile memory properties of MnO ₂ - polyaniline (PANI) nanocomposite	Materialia		101026	
478.	Deepshikha Chatterjee, Uday A Jadhav, Bharathkumar H Javaregowda, Tukaram D Dongale, Pramod S Patil, Prakash P Wadgaonkar	2021	Partially Bio- Based Triarylamine- Containing Polyimides: Synthesis, Characterization and Evaluation in Non-Volatile Memory Device Applications	European Polymer Journal		110327	3.862

479.	Gopal K Kulkarni, Sushilkumar A Jadhav, Komal T Patil, Pramod S Patil, Vijaya R Puri	2021	α -MnO ₂ nanorods-polyaniline (PANI) nanocomposites synthesized by polymer coating and grafting approaches for screening EMI pollution	Ceramics International			3.8
480.	VC Karade, A Sharma, RP Dhavale, SR Shingte, PS Patil, JH Kim, DRT Zahn, AD Chougale, G Salvan, PB Patil	2021	APTES monolayer coverage on self-assembled magnetic nanospheres for controlled release of anticancer drug Nintedanib	Scientific reports	11	1-12	4.39
481.	SA Beknalkar, AM Teli, NS Harale, DS Patil, SA Pawar, JC Shin, PS Patil	2021	Fabrication of high energy density supercapacitor device based on hollow iridium oxide nanofibers by single nozzle electrospinning	Applied Surface Science	546	149102	6.70
482.	Madhuri S Patil, Narasimharao Kitchamsetti, Sameena R Mulani, Sachin R Rondiya, Nishad G Deshpande, Ranjit A Patil, Russell W Cross, Nelson Y Dzade, Kirankumar K Sharma, Pramod S Patil, Yuan-Ron Ma, Hyung Koun Cho, Rupesh S Devan	2021	Photocatalytic behavior of Ba (Sb/Ta) ₂ O ₆ perovskite for reduction of organic pollutants: Experimental and DFT correlation	Journal of the Taiwan Institute of Chemical Engineers	122	201-209	5.87

483.	Sushilkumar A Jadhav, Suprimkumar D Dhas, Komal T Patil, Annasaheb V Moholkar, Pramod S Patil	2021	Polyaniline (PANI)-Manganese dioxide (MnO ₂) nanocomposites as efficient electrode materials for supercapacitors	Chemical Physics Letters	778	138764	2.02
484.	SA Becnalkar, AM Teli, NS Harale, KK Pawar, DS Patil, JC Shin, PS Patil	2021	Hierarchical ITO nanofibers coated Mn ₃ O ₄ nanoplates core-shell nanocomposites for high performance all-solid-state symmetric supercapacitor device	Ceramics International			4.52
485.	SA Becnalkar, AM Teli, NS Harale, DS Patil, JR Sutar, JC Shin, PS Patil	2021	Supercapacitive Performance of SILAR Grown Mn ₃ O ₄ Nanoclusters: Effect of Cationic Precursor Concentration	Chinese Journal of Physics	72	145-158	3.2
486.	Sudip D Karande, Sushilkumar A Jadhav, Harshada B Garud, Vilas A Kalantre, Shivaji H Burungale, Pramod S Patil	2021	Green and sustainable synthesis of silica nanoparticles	Nanotechnology for Environmental Engineering	6	1-14	2.45
487.	NL Tarwal, VL Patil, JR Rani, KV Gurav, JS Shaikh, MS Khandekar, NS Harale, PS Patil, JH Jang	2021	Plasmonic DSSC performance of spray deposited Ag-ZnO and Au-ZnO films	Chinese Journal of Physics			3.2

488.	Prashant D Sarvalkar, Rutuja R Mandavkar, Mansingraj S Nimbalkar, Kiran K Sharma, Pramod S Patil, Ganesh S Kamble, Neeraj R Prasad	2021	Bio-mimetic synthesis of catalytically active nano-silver using Bos taurus (A-2) urine	Scientific reports	11	1-17	4.39
489.	Mangesh D Patekari, Krishna K Pawar, Gayatri B Salunkhe, Pavan M Kodam, Mukesh N Padvi, PP Waifalkar, Kiran K Sharma, Pramod S Patil	2021	Synthesis of Maghemite nanoparticles for highly sensitive and selective NO ₂ sensing	Materials Science and Engineering : B	272	115339	4.05
490.	MM Gomaa, MH Sayed, VL Patil, M Boshta, PS Patil	2021	Gas sensing performance of sprayed NiO thin films toward NO ₂ gas	Journal of Alloys and Compounds	885	160908	5.31
491.	SA Beknalkar, AM Teli, NS Harale, JC Shin, PS Patil	2021	Construction of IrO ₂ @ Mn ₃ O ₄ core-shell heterostructured nanocomposites for high performance symmetric supercapacitor device	Journal of Alloys and Compounds	887	161328	5.31
492.	Aviraj Mahadev Teli; Sonali Beknalkar; Vijay Karade; Sagar Mane; Jiseong Go; Pramod Patil; JaeCheol Shin	2021	Electrospun deposited Mn ₂ O ₃ /GO nanofiber composite electrode for hybrid coin cell supercapacitor devices	Journal of Materials Science: Materials in Electronics			2.47
493.	Pawar K.K., Mali S.S., Navale Y.H., Patil V.B., Sharma K.K., Hong C.K., Patil P.S.	2021	Fabrication of enhanced sensitive and selective porous indium oxide nanocube sensor	Ceramics International	47	2430-2440	4.5

			for NO ₂ detection				
494.	Padvi M.N., Harale N.S., Patil P.S., Dhas S.D., Moholkar A.V.	2021	Hydrothermal synthesis of NO ₂ gas-sensitive and hydrophobic zinc oxide thin films	Journal of Materials Science: Materials in Electronics	32	3140-3154	2.4
495.	Patil A.H., Jadhav S.A., More V.B., Sonawane K.D., Vhanbatte S.H., Kadole P.V., Patil P.S.	2021	A new method for single step sonosynthesis and incorporation of ZnO nanoparticles in cotton fabrics for imparting antimicrobial property	Chemical Papers	75	1247-1257	2
496.	Patil K.T., Nirmal K.A., Jadhav S.A., Patil S.R., Dongale T.D., Kim D.-K., Patil P.S.	2021	Bipolar resistive switching and non-volatile memory properties of MnO ₂ -polyaniline (PANI) nanocomposite	Materialia	15		2.5
497.	Chatterjee D., Jadhav U.A., Javaregowda B.H., Dongale T.D., Patil P.S., Wadgaonkar P.P.	2021	Partially bio-based triarylamine-containing polyimides: Synthesis, characterization and evaluation in non-volatile memory device applications	European Polymer Journal	147		4.5
498.	Jadhav S.A., Garud H.B., Thoravat S.S., Patil V.S., Shinde P.S., Burungale S.H., Patil P.S.	2021	Synthesis and testing of functional mesoporous silica nanoparticles for removal of Cr(VI)	Biointerface Research in Applied Chemistry	11	8599-8607	1.9

			ions from water				
499.	Dhavale S.B., Patil V.L., Beknalkar S.A., Teli A.M., Patil A.H., Patil A.P., Shin J.C., Patil P.S.	2021	Study of solvent variation on controlled synthesis of different nanostructured NiCo ₂ O ₄ thin films for supercapacitive application	Journal of Colloid and Interface Science	588	589-601	8.1
500.	Beknalkar S.A., Teli A.M., Harale N.S., Patil D.S., Pawar S.A., Shin J.C., Patil P.S.	2021	Fabrication of high energy density supercapacitor device based on hollow iridium oxide nanofibers by single nozzle electrospinning	Applied Surface Science	546		6.7
501.	Patil M.S., Kitchamsetti N., Mulani S.R., Rondiya S.R., Deshpande N.G., Patil R.A., Cross R.W., Dzade N.Y., Sharma K.K., Patil P.S., Ma Y.-R., Cho H.K., Devan R.S.	2021	Photocatalytic behavior of Ba(Sb/Ta) ₂ O ₆ perovskite for reduction of organic pollutants: Experimental and DFT correlation	Journal of the Taiwan Institute of Chemical Engineers	122	201-209	5.8
502.	Kulkarni G.K., Jadhav S.A., Patil K.T., Patil P.S., Puri V.R.	2021	α -MnO ₂ nanorods-polyaniline (PANI) nanocomposites synthesized by polymer coating and grafting approaches for screening EMI pollution	Ceramics International	47	15044-15051	4.5

503.	Jadhav S.A., Patil A.H., Thoravat S.S., Patil V.S., Patil P.S.	2021	A Brief Overview of Antimicrobial Nanotextiles Prepared by In Situ Synthesis and Deposition of Silver Nanoparticles on Cotton	Nanobiotechnology Reports	16	543-550	
504.	Beknalkar S.A., Teli A.M., Harale N.S., Patil D.S., Sutar J.R., Shin J.C., Patil P.S.	2021	Supercapacitive Performance of SILAR Grown Mn ₃ O ₄ Nanoclusters: Effect of Cationic Precursor Concentration	Chinese Journal of Physics	72	145-158	3.2
505.	Karande S.D., Jadhav S.A., Garud H.B., Kalantre V.A., Burungale S.H., Patil P.S.	2021	Green and sustainable synthesis of silica nanoparticles	Nanotechnology for Environmental Engineering	6		2.45
506.	Jadhav S.A., Dhas S.D., Patil K.T., Moholkar A.V., Patil P.S.	2021	Polyaniline (PANI)-manganese dioxide (MnO ₂) nanocomposites as efficient electrode materials for supercapacitors	Chemical Physics Letters	778		2.3
507.	Patekari M.D., Pawar K.K., Salunkhe G.B., Kodam P.M., Padvi M.N., Waifalkar P.P., Sharma K.K., Patil P.S.	2021	Synthesis of Maghemite nanoparticles for highly sensitive and selective NO ₂ sensing	Materials Science and Engineering B: Solid-State Materials for Advanced Technology	272		3.92
508.	Tarwal N.L., Patil V.L., Rani J.R., Gurav K.V., Shaikh J.S., Khandekar M.S., Harale N.S., Patil P.S., Jang J.H.	2021	Plasmonic DSSC performance of spray deposited Ag-ZnO and Au-ZnO films	Chinese Journal of Physics	73	581-588	3.2

509.	Beknalkar S.A., Teli A.M., Harale N.S., Pawar K.K., Patil D.S., Shin J.C., Patil P.S.	2021	Hierarchical ITO nanofibers coated Mn ₃ O ₄ nanoplates core-shell nanocomposites for high performance all-solid-state symmetric supercapacitor device	Ceramics International	47	29771-29785	4.5
510.	Patil D.B., Patil V.L., Patil S.S., Dongale T.D., Desai N.D., Patil P.R., Mane R.M., Bhosale P.N., Patil P.S., Kadam P.M., Khot K.V.	2021	Facile synthesis of MoO ₃ nanoplates based NO ₂ gas sensor: Ultra-selective and sensitive	Chemical Physics Letters	782		2.3
511.	Karade V.C., Sharma A., Dhavale R.P., Dhavale R.P., Shingte S.R., Patil P.S., Kim J.H., Zahn D.R.T., Chougale A.D., Salvan G., Patil P.B.	2021	APTES monolayer coverage on self-assembled magnetic nanospheres for controlled release of anticancer drug Nintedanib	Scientific Reports	11		4.3
512.	Sarvalkar P.D., Mandavkar R.R., Nimbalkar M.S., Sharma K.K., Patil P.S., Kamble G.S., Prasad N.R.	2021	Bio-mimetic synthesis of catalytically active nano-silver using Bos taurus (A-2) urine	Scientific Reports	11		4.3
513.	More S.M., Pawar K.K., Salokhe B.S., Bobhate P.A., Gonugade M.D., Dhawale R.D., Sharma K.K.K., Patil P.S., Gurav K.V.	2021	Size Dependent Chemical Synthesis of Defective In ₂ O ₃ Microcubes as NO ₂ Sensor	Macromolecular Symposia	400		0.85
514.	Gomaa M.M., Sayed M.H., Patil V.L., Boshta M., Patil P.S.	2021	Gas sensing performance of sprayed NiO thin films toward NO ₂ gas	Journal of Alloys and Compounds	885		5.3

515.	Dhage S.B., Patil V.L., Patil P.S., Ryu J., Patil D.R., Malghe Y.S.	2021	Synthesis and characterization of CuO-SnO ₂ nanocomposite for CO gas sensing application	Materials Letters	305		3.4
516.	Beknalkar S.A., Teli A.M., Harale N.S., Shin J.C., Patil P.S.	2021	Construction of IrO ₂ @Mn ₃ O ₄ core-shell heterostructured nanocomposites for high performance symmetric supercapacitor device	Journal of Alloys and Compounds	887		5.3
517.	Bhat T.S., Shinde A.V., Alat A.A., Patil P.S.	2022	Nanoarchitectonics of hierarchical PbS material for all-solid-state asymmetric supercapacitor	Journal of Materials Science: Materials in Electronics			2.4
518.	Babar B.M., Pisal K.B., Mujawar S.H., Patil V.L., Kadam L.D., Pawar U.T., Kadam P.M., Patil P.S.	2022	Concentration modulated vanadium oxide nanostructures for NO ₂ gas sensing	Sensors and Actuators B: Chemical	351		7.34
519.	Dalavi D.S., Desai R.S., Patil P.S.	2022	Nanostructured materials for electrochromic energy storage systems	Journal of Materials Chemistry A	10	1179-1226	12.73
520.	Bhat T.S., Patil P.S., Rakhi R.B.	2022	Recent trends in electrolytes for supercapacitors	Journal of Energy Storage	50		6.5
521.	Redekar, R.S., Avatare, A.T., Chouhan, J.L., Patil, K.V., Pawar, O.Y., Patil, S.L., Bhoite, A.A., Patil, V.L., Patil, P.S. and	2022	Review on Recent Advancements in Chemically Synthesized Manganese Cobalt Oxide (MnCo ₂ O ₄) and	Chemical Engineering Journal		137425	16.744

	Tarwal, N.L.		Its Composites for Energy Storage Application.				
522.	Patil, V.L., Dalavi, D.S., Dhavale, S.B., Tarwal, N.L., Vanalakar, S.A., Kalekar, A.S., Kim, J.H. and Patil, P.S.	2022	NO ₂ gas sensing properties of chemically grown Al doped ZnO nanorods.	Sensors and Actuators A: Physical	340	113546	4.291
523.	Navathe, G.J., Prasad, S.R., Mane, A.M., Barge, S.M., Dongale, T.D., Shaikh, V., Karanjkar, M.M., Teli, S.B., Patil, P.S. and Prasad, N.R.	2022	A Critical Review on Design and Development of New Generation Energy Storage Devices.	ES Energy & Environment.			
524.	Vanalakar, S.A., Patil, V.L., Patil, S.M., Deshmukh, S.P., Patil, P.S. and Kim, J.H.	2022	Chemical and gas sensing property tuning of cadmium sulfide thin films	Materials Science and Engineering : B	282	115787	3.407
525.	Kulkarni, A.A., Savekar, V.A., Bhat, T.S. and Patil, P.S.	2022	Recent advances in metal pyrophosphates for electrochemical supercapacitors: A review	Journal of Energy Storage	52	104986	8.907
526.	Patil Satyajeet S., Jae C. Shin, and Patil Pramod S.	2022	Binder free hydrothermally synthesized nickel phosphate hydrate microplates on nickel foam for supercapacitors	Ceramics International			5.532
527.	VL Patil, DS Dalavi, SB Dhavale, SA Vanalakar, NL Tarwal, AS Kalekar, JH Kim, PS Patil	2022	Indium doped ZnO nanorods for chemiresistive NO ₂ gas sensors	New Journal of Chemistry	46	7588	3.5

528.	SP Patil, VL Patil, SA Vanalakar, SS Shendage, SA Pawar, JH Kim, Jungho Ryu, Deepak R Patil, PS Patil	2022	Porous In ₂ O ₃ thick films as a low temperature NO ₂ gas detector	Materials Letters	306	130916	3.4
529.	Bapuso M Babar, Komal B Pisal, Suhas H Sutar, Sarfraj H Mujawar, Laxman D Kadam, Habib M Pathan, Udayraj T Pawar, Prakash M Kadam, Pramod S Patil	2022	Hydrothermally Prepared Vanadium Oxide Nanostructures for Photocatalytic Application	ES Energy & Environment.	15	82	
530.	Sarita Patil, Vithoba Patil, Sambhaji Shendage, Jin Kim, Deepak Patil, Pramod Patil	2022	Effect of Non-stoichiometry and oxygen deficiency in In ₂ O ₃ thin films on gas sensing performance	Materials Letters	307	131091	3.4
531.	Sharadrao Vanalakar, VL Patil, SM Patil, SB Dhavale, TD Dongale, PS Patil	2022	Recent progress in Nanostructured Metal Oxides based NO ₂ gas sensing in India	Journal of Materials NanoScience	9	13	7.8
532.	TS Bhat, SA Jadhav, SA Beknalkar, SS Patil, PS Patil	2022	MnO ₂ core-shell type materials for high-performance supercapacitors: A short review	Inorganic Chemistry Communications		109493	3.4
533.	Tejasvinee Bhat, Aviraj Teli, Sonali Beknalkar, Sagar Mane, Prajakta Tibile, PS Patil, HJ Kim, Jae Cheol Shin	2022	Activated Carbon Mediated Hydrothermally Synthesized CuO Thin Films for Electrochemical Supercapacitors	ECS Journal of Solid State Science and Technology			2.07
534.	Sawanta S Mali, Jyoti V Patil, Sachin R Rondiya, Nelson Y Dzade, Julian A Steele, Mohammad Khaja Nazeeruddin, Pramod S Patil,	2022	Terbium-doped and dual passivated γ -CsPb(I ₁ -xBr _x) ₃ inorganic perovskite solar cells with	Advanced Materials		2203204	32.09

	Chang Kook Hong		improved air-thermal stability and high efficiency				
535.	SA Beknalkar, AM Teli, TS Bhat, KK Pawar, SS Patil, NS Harale, JC Shin, PS Patil	2022	Mn ₃ O ₄ based materials for electrochemical supercapacitors: Basic principles, charge storage mechanism, progress, and perspectives	Journal of Materials Science & Technology			10.31
536.	Mahendra A Patil, Harish P Deshmukh, Pramod S Patil, Sarfraj H Mujawar, Hyunsik Im, Akbar I Inamdar	2022	Photoelectrochemical properties of nanoflake-like cadmium sulfide-sensitized Zn ₂ SnO ₄ thin film electrodes prepared by chemical methods	International Journal of Energy Research			5.16
537.	SA Vanalakar, VL Patil, SM Patil, SP Deshmukh, PS Patil, JH Kim	2022	Chemical and gas sensing property tuning of cadmium sulfide thin films	Materials Science and Engineering : B	282	115787	4.05
538.	BM Babar, SH Mujawar, PV Mane, PM Kadam, PS Patil, LD Kadam	2022	Effect of Pd sensitization on gas-sensing performance of vanadium pentoxide-reduced graphene oxide composite	Journal of Materials Science: Materials in Electronics		1	2.47
539.	Abhishek A Kulkarni, Vaishnavi A Savekar, Tejasvinee S Bhat, Pramod S Patil	2022	Recent advances in metal pyrophosphates for electrochemical supercapacitors: A review	Journal of Energy Storage	52	104986	6.58

540.	Shamali S Rendale, Tejasvinee S Bhat, Pramod S Patil	2022	MnCo ₂ O ₄ Nanomaterials Based Electrodes for Supercapacitors	Inorganic Chemistry Communications		109945	3.42
541.	BM Babar, SH Mujawar, PV Mane, PM Kadam, PS Patil, LD Kadam	2022	Effect of Pd sensitization on gas-sensing performance of vanadium pentoxide-reduced graphene oxide composite	Journal of Materials Science: Materials in Electronics	33	19884-19900	2.4
542.	Satyajeet S Patil, Jae C Shin, Pramod S Patil	2022	Binder free hydrothermally synthesized nickel phosphate hydrate microplates on nickel foam for supercapacitors	Ceramics International	48 (19)	29484-29492	5.53
543.	Aravind H Patil, Sushilkumar A Jadhav, Sahil S Magdum, Kailas D Sonawane, Pramod S Patil	2022	ZnO nanorods-grafted durable antibacterial and hydrophobic cotton fabrics by a new grafting protocol	Inorganic Chemistry Communications	144	109947	3.42
544.	Amruta B Nagare, Namdev S Harale, Suprimkumar D Dhas, Umesh V Shembade, Suhas R Ghatage, Pramod S Patil, Annasaheb V Moholkar	2022	Facile synthesis of nanogranular PPy thin films for sensitive and selective detection of toxic NO ₂	Inorganic Chemistry Communications		110067	3.42
545.	Mahendra A Patil, Harish P Deshmukh, Pramod S Patil, Sarfraj H Mujawar, Hyunsik Im, Akbar I Inamdar	2022	Photoelectrochemical properties of nanoflake-like cadmium sulfide-sensitized Zn ₂ SnO ₄ thin film electrodes prepared by chemical methods	International Journal of Energy Research			4.67

546.	Priyadarshani S Sadalage, Mudasir A Dar, Renuka D Bhor, Bharat M Bhalerao, Pravin N Kamble, Ana C Paiva-Santos, Mansingraj S Nimbalkar, Kailas D Sonawane, Kalpana Pai, Pramod S Patil, Kiran D Pawar	2022	Optimization of biogenic synthesis of biocompatible platinum nanoparticles with catalytic, enzyme mimetic and antioxidant activities	Food Bioscience	50	102024	5.31
547.	Amruta B Nagare, Namdev S Harale, Suprimkumar D Dhas, Umesh V Shembade, Suhas R Ghatage, Pramod S Patil, Annasaheb V Moholkar	2022	Facile synthesis of nanogranular PPy thin films for sensitive and selective detection of toxic NO ₂ gas	Inorganic Chemistry Communications	146	110067	3.42
548.	Shailesh Dugam, Sopan Nangare, Anil Gore, Sarika Wairkar, Pramod Patil, Latika Choudary, Namdeo Jadhav	2022	Crystallinity modulated silk fibroin electrospun nanofibers based floating scaffold as a candidate for controlled release of felodipine	International Journal of Polymeric Materials and Polymeric Biomaterials	18	1393-1406	3.22
549.	Dhanashri Sabale, Namdev Harale, Rajat Srivastava, Pramod S Patil, Kiran Kumar K Sharma	2022	Synthesis and evaluation of 3D MoO ₃ nanobelts for selective detection of NO ₂ gas	Journal of Materials Research	37	4284-4295	2.9
550.	NL Tarwal, DP Mali, KV Patil, SL Patil, VL Patil, VB Patil, CC Revadekar, TD Dongale, PS Patil, PM Shirage, JH Jang	2022	Spray deposition of the nanostructured ZnO thin films for non-volatile resistive switching memory applications	Applied Physics A	129	1-12	2.9

551.	Sarika B Dhavale, Vithoba L Patil, Satyajeet S Patil, Dipali S Patil, Rushikesh P Dhavale, Hyung-Ho Park, Pramod S Patil	2023	Porous carbon derived from Terminalia catappa leaves for energy storage application	Sustainable Energy & Fuels			6.813
552.	Megha P Desai, Ana C Paiva-Santos, Mansingraj S Nimbalkar, Kailas D Sonawane, Pramod S Patil, Kiran D Pawar	2023	Iron tolerant Bacillus badius mediated bimetallic magnetic iron oxide and gold nanoparticles as Doxorubicin carrier and for hyperthermia treatment	Journal of Drug Delivery Science and Technology		104214	5.062
553.	Ishika U Shah, Sushilkumar A Jadhav, Vedika M Belekar, Pramod S Patil	2023	Smart polymer grafted silica based drug delivery systems	Polymers for Advanced Technologies			3.34
554.	BM Patil, VL Patil, SR Bhosale, PD Kamble, PS Patil, SA Vanalakar	2023	Photo- electrochemical performance of Cu ₂ ZnSnS ₄ thin films prepared via successive ionic layer adsorption and reaction method	Chemical Physics Letters		140131	2.71
555.	Vinay S Patil, Saurabh S Thoravat, Somnath S Kundale, Tukaram D Dongale, Pramod S Patil, Sushilkumar A Jadhav	2023	Synthesis and testing of polyaniline grafted functional magnetite (Fe ₃ O ₄) nanoparticles and rGO based nanocomposites for supercapacitor application	Chemical Physics Letters		140334	2.71

556.	Harshada B Garud, Sushilkumar A Jadhav, Sayali P Jadhav, Pradnya S Suryawanshi, Vilas A Kalantre, Shivaji H Burungale, Sagar D Delekar, Pramod S Patil	2023	Surface Modified Silicon Dioxide Based Functional Adsorbents Derived From Waste Sand for the Removal of Toxic Pollutants From Water	Silicon			3.4
557.	Prashant D Sarvalkar, Apurva S Vadanagekar, Omkar S Karvekar, Pramod D Kumbhar, Santosh S Terdale, Avinash Singh Thounaojam, Sanjay S Kolekar, Rajiv S Vhatkar, Pramod S Patil, Kiran Kumar K Sharma	2023	Thermodynamics of Azo Dye Adsorption on a Newly Synthesized Titania-Doped Silica Aerogel by Cogelation: A Comparative Investigation with Silica Aerogels and Activated Charcoal	ACS omega	8 (14)	13285-13299	4.1
558.	Saurabh S Thoravat, Vinay S Patil, Somnath S Kundale, Tukaram D Dongale, Pramod S Patil, Sushilkumar A Jadhav	2023	In situ Fe ₃ O ₄ loaded sonochemically functionalized multi-walled CNTs and RGO based composites as electrode materials for supercapacitors	Synthetic Metals	294	117312	4.4
559.	Harshada B Garud, Sushilkumar A Jadhav, Sayali P Jadhav, Vilas A Kalantre, Pramod S Patil, Shivaji H Burungale	2023	Synthesis and testing of polyacrylamide-grafted waste sand derived composite adsorbent for water purification	Polymers for Advanced Technologies	34 (5)	1757-1768	3.4
560.	Satyajeet S Patil, Pramod S Patil	2023	3D Bode analysis of nickel pyrophosphate electrode: A key to understanding the charge storage	Electrochimica Acta	451	142278	6.6

			dynamics				
561.	VL Patil, SR Bhosale, RR Bhosale, NL Tarwal, SA Vanalakar, RP Dhavale, KK Sharma, PS Patil	2023	Low temperature chemiresistive gas sensing performance towards oxidising gas based on chemically prepared Ga doped ZnO nanorods	Inorganic Chemistry Communications	152	110691	3.8
562.	Sarjerao C Patil, Rushikesh P Dhavale, Vithoba L Patil, Mansingraj S Nimbalkar, Kailas D Sonawane, Pramod S Patil, Milind M Karanjkar, Kiran D Pawar	2023	Calcination temperatures influence the chemo-resistive gas sensing properties of biogenic zinc oxide nanoparticles with antibacterial activity	Inorganic Chemistry Communications	153	110847	3.8
563.	AA Bhoite, KV Patil, RS Redekar, PS Patil, VA Sawant, NL Tarwal	2023	Solvothermal synthesis of binder free Ni-MOF thin films for supercapacitor electrodes	Journal of Solid State Chemistry		124192	3.3
564.	SP Patil, VL Patil, JH Kim, SH Park, U Chalapathi, Deepak R Patil, PS Patil	2023	Gold Sensitized In ₂ O ₃ nanocubes for ppb level NO ₂ gas sensing	Ceramics International			5.2
565.	Abhishek A Kulkarni, Neha K Gaikwad, Ankita P Salunkhe, Rushikesh M Dahotre, Tejasvinee S Bhat, Pramod S Patil	2023	An ensemble of progress and future status of piezo-supercapacitors	Journal of Energy Storage	65	107362	9.4
566.	Satyajeet S Patil, Pramod S Patil	2023	Exploring the potential of binder-free synthesized cobalt-based phosphate hydrate	Journal of Energy Storage	71	108155	9.4

			and pyrophosphate electrodes for supercapacitors				
567.	Abhishek A Kulkarni, Neha K Gaikwad, Ankita P Salunkhe, Rushikesh M Dahotre, Tejasvinee S Bhat, Pramod S Patil	2023	2D MXene integrated strategies: A bright future for supercapacitors	Journal of Energy Storage	71	107975	9.4