

Curriculum Vitae



1. **Name:** Dr. K.Y. Rajpure

Date of Birth: 24/07/1971

Mailing Address: Professor,
Department of Physics,
Shivaji University,
Vidyanagar, Kolhapur- 416 004
(M.S.) India.
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rajpure@yahoo.com

2. Academic details:

Sr. No	Degree	Board/ University	Year	Subjects	% of marks
1	S.E.T.	UGC/ Pune University	2002	Physical Sciences	Qualified
2	Ph.D	Shivaji University	2000	Physics	Awarded
3	M.Sc.	Shivaji University	1994	Solid State Physics	65.85 [#]
4	B.Sc.	Shivaji University	1992	Physics	88.5 [#]
5	H.S.C.	Pune Divisional Board	1989	Physics, Chemistry, Maths, Electronics	81.15
6	S.S.C.	Pune Divisional Board	1987	Languages, Science, Maths, Social Science	79.85

First in Shivaji University, Kolhapur

3. **Research Specialization:** Thin Films, Solar Cells, Transparent conductive oxides, Photoelectrochemistry, Photo-electrocatalysis of water, Gas sensors, Multiferroics

4. Teaching Experience to P.G.:

Sr. No.	Post	Tenure	Duties
1.	Assistant Professor (Shivaji University)	04/08/1999 to 20/08/2014	Teaching & Research
2	Professor	21/08/2014 to till date	Teaching & Research
Subjects Taught and is being teaching: Classical Mechanics, Statistical Mechanics, Electrodynamics and plasma			

Physics, Atomic and Molecular Physics, Preparation & Properties of Thin Films, Physical properties of solids
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5. Research Guidance:

Work supervised to M.Sc. project students: **43**

M. Phil and Ph. D. Students

Degree Awarded

Sr. No.	Name	Year	Title of thesis
1	Mr. Deokate R.J. (Ph. D.)	2010	Studies on synthesis and characterization of spray deposited CdIn ₂ O ₄ thin films for gas sensor
2	Mr. Kamble R.C. (Ph. D.)	2011	Studies on development of magneto-electric composite materials for sensor applications
3	Mr. Sawant V.S. (M. Phil.)	2009	Studies on synthesis and characterization of spray deposited Cd ₂ SnO ₄ thin films
4	Mr. Shinde S.S. (Ph. D.)	2012	Studies on synthesis and characterization of transparent conductive oxide thin films
5	Mr. Babar A.R. (Ph.D)	2012	Studies on synthesis and characterization of spray deposited Sb:SnO ₂ thin films for sensor applications
6	Mr. Patil S.K (M.Phil.)	2014	Studies on synthesis and characterization of Ni and Co doped ZnO thin films

Working

Sr. No.	Name	Date of Registration	Title of synopsis
1.	Mrs. Patil S.D. (Ph.D)	June 2009	Studies on synthesis and characterization of Co, Zn substituted CuCr ₂ Se ₄ magnetic chalcogenides
2.	Mr. Yadav S.P. (Ph.D)	July 2010	Synthesis and characterization of (Co-Mn) ferrite and lead zirconate titanate (PZT) magneto-electric composites
3.	Mrs. Kadam A.A. (Ph.D)	July 2010	Development of multiferroic magnetoelectric composite materials for sensor applications
4.	Miss. Gafari R.S. (M.Phil.)	July 2009	Studies on dielectric and ferroelectric behavior of strontium doped barium titanate (Ba _{1-x} Sr _x TiO ₃) synthesized by chemical route
5.	Mr. Sawant V. S. (Ph.D)	July 2011	Synthesis and characterization of Co substituted Li ferrite for gas sensor application
6.	Mr. Ganbavle V. V. (Ph.D)	July 2011	Synthesis and characterization of sprayed WO ₃ thin films for gas sensor application
7.	Miss. Inamdar S. I. (Ph.D)	July 2011	Studies on spray deposited ZnO thin films for ultraviolet photodetectors
8.	Mr. Bagade A. A. (Ph.D)	July 2012	Synthesis and characterization of CoFe ₂ O ₄ thin films for gas sensor application

9.	Mr. Mohite S. V. (Ph.D)	July 2013	Studies on photoelectrocatalytic oxidation of organic pollutants using spray deposited WO ₃ based thin films
10.	Miss. Shaikh S. K. (Ph.D)	July 2013	Studies on chemically synthesized ZnO thin films for UV light detection
11.	Miss. Bhosale A. M. (M.Phil.)	July 2013	Synthesis of TiO ₂ thin films for ultraviolet photodetector

12. Journal Publications: 134 (list attached)

National: 07

International: 127

Total citations: 1674 (scopus), 2109 (Google scholar)

h-index: 27 (scopus), 28 (Google scholar)

13. Conference Attended:

National: 35

International: 20

14. Research Project Work:

Title of Project / Scheme	Funding Agency	Funds received	Date of starting	Date of ending	Status
Studies on synthesis and characterization of large area transparent conductive oxide thin films No.: ERIP/ ER/ 0503504/ M/ 01/ 1007	Defence Research and Development Organization (DRDO)	14.96 Lakhs	1 April 2008	31 March 2011	Completed
Development of cadmium sulphide / polyaniline heterojunction based room temperature LPG sensor. No.: SR/S2/CMP-82/2006	Department of Science and Technology (DST)	16.70 Lakhs	11 Feb. 2008	10 Feb. 2011	Completed
Photocatalytic degradation of waste water using sprayed tungsten trioxide (WO ₃) thin films No. 41-869/2012 (SR)	University Grants Commission (UGC)	13.01 Lakhs	1 July 2012	30 June 2015	Ongoing
Development of magnetoelectric multiferroic composite ceramics for electric power generation by cost effective chemical methods No. 03(1284)/13/EMR-II	Council of Scientific and Industrial Research (CSIR)	19.62 Lakhs	9 May 2013	8 May 2016	Ongoing
Photocatalytic Purification of Wastewater Using Fe ₂ O ₃ /TiO ₂ Nano-composite Thin Films	Department of Science and Technology (DST)	21.67 Lakhs	1 May 2014	30 April 2017	Ongoing

8. Membership:

- Member of Shivaji University Students' Council - 1992
- Life member: Marathi Vidnyan Parishad Kolhapur region
- Life member, Materials Research Society of India (MRSI)
- Life member, Semiconductor Society of India (SSI)
- Life member, Indian Physics Association (IPA)
- Life member, Indian Association of Physics Teachers (IAPT)

9. Honors/ Awards:

- Government Open Merit Scholarship at B. Sc. degree during 1989-1991.
- Dr. Jagdish S. Shirke Prize by Shivaji University, Kolhapur, for having stood first in the subject of Physics (Principal) at the B. Sc. Exam. held in April 1992.
- Shriman Ganpati Ramseth Warange Prize by Shivaji University, Kolhapur, for having stood first at the B.Sc. Exam. held in April 1992.
- Government Open Merit Scholarship at M. Sc. degree during 1992-1994.
- Smt. Gangubai Dattatraya Kulkarni (Jambhekar), Ichakaranji Prize by Shivaji University, Kolhapur, for having stood first in Physics at the M. Sc. Exam. held in May 1994.
- Qualified STATE ELIGIBILITY TEST (SET), MAHARASHTRA (Eligibility Test for Lecturership) in Feb., 2002 in the subject of Physical Sciences conducted by University of Pune as the State Agency accredited by UGC.
- Secretary of the Staff, Department of Physics, Shivaji University, Kolhapur.
- International recognition: One diffraction patterns included as new materials by ICDD in their powder diffraction files.

10. Fellowships:

- Project Fellow (UGC) – 17/10/1994 to 02/06/1996
- JRF (DST Project) – 03/06/1996 to 31/05/1998
- SRF (DST Project) – 01/06/1998 to 31/05/1999

11. Patents Filed (Indian)

Sr. No	Title of Patent	Patent number	Date
1	Photoelectrocatalytic behavior of Fe ₂ O ₃ , AlFe ₂ O ₃ and AlFe ₂ O ₃ /TiO ₂ nanoflakes	2181/MUM/2012	30-07-2012
2	Nanostructures of N/ZnO for photoelectrocatalysis of water impurities	2485/MUM/2012	27-08-2012

12. Review articles published

- **Kinetic analysis of heterogenous photocatalysis: Role of Hydroxyl Radicals,** Catalysis Reviews: Science and Engineering, 55 (2013) 1–51

13. Books Published

- **Photocatalysis: Ferric Oxide Nanomaterials**, Lambert Academic Publishing, ISBN No. 978-3-659-16967-0, 2012, S. S. Shinde, C. H. Bhosale, K. Y. Rajpure
- **Photocatalysis: An Environmental Approach**, Lambert Academic Publishing, ISBN No. 978-3-8484-9651-8, 2012, S. S. Shinde, C. H. Bhosale, K. Y. Rajpure
- **Antimony Doped Tin Oxide (ATO): Transparent Conductor**, Lambert Academic Publishing, ISBN- 978-3-659-38375-5, 2013, A.R. Babar, K. Y. Rajpure
- **Transparent coatings (Transparent thin film coatings of various metal oxides)**, ISBN No. 978-3-659-46350-1, S.S. Shinde, V.G. Parale, C.H. Bhosale, K.Y. Rajpure
- **Metal oxide thin films Gas sensor: Spray deposited Cadmium indium oxide thin film for LPG gas sensing**
Scholars' Press (February 25, 2014) Publisher ISBN-10: 3639708687, ISBN-13: 978-3639708684, Ramesh Deokate, K. Y. Rajpure, C. D. Lokhande

14. Books Edited

Proceeding of conferences and Seminars: 6

Title of Conference	Organising Institute	Date
International Conference of Advanced Materials and Applications (ICAMA-2007)	Shivaji University Kolhapur	15-17 Nov. 2007
National Seminar on Advanced Materials (NSAM-2010)	Shivaji University Kolhapur	19-20 Mar. 2010
National Seminar on Physics of Materials and Materials Based Device Fabrication (NSPMMDF-2011)	Shivaji University Kolhapur	17-18 Feb. 2011
1 st International Conference on Physics of Materials and Materials Based Device Fabrication (ICPMMDF-2012)	Shivaji University Kolhapur	17-19 Jan. 2012
National seminar on physics of material and material based device fabrication (NSPMMDF-2013)	Shivaji University Kolhapur	3-4 Jan. 2013
2 nd International Conference on Physics of Materials and Materials Based Device Fabrication (ICPMMDF-2014)	Shivaji University Kolhapur	13-15 Jan. 2014

15. Books Chapters

Contributed **six** book chapters in **three** books.

- The Influence of Mn Substitution on the Structural, Electrical and Magnetic Properties of CoFe₂O₄ Ferrite, S.P. Yadav, S.S. Shinde, A.A. Kadam, **K.Y. Rajpure**, 323
- Optoelectronic Properties of Spray Deposited Ni-Doped Zinc Oxide Thin Films, S.K. Patil, S.S. Shinde, **K.Y. Rajpure**, 371,

Applications of Nano Materials: Electronics, Energy and Environment, Bloomsbury Publishing India Pvt. Ltd., 2012, ISBN 978-93-82563-35-8

- Effect of Dy Doping on Structural, Electrical and Magnetic Properties of Ni-Co Substitutional Spinel Ferrites, A.A. Kadam, **K.Y. Rajpure**, 156
- Physico-Chemical, Electrical and Dielectric Properties of the Spray Deposited WO₃ Films for Gas Sensor Application, V.V. Ganbavle, V.S. Sawant, **K.Y. Rajpure**, 306

Advanced Nano Materials for Industrial Applications, Bloomsbury Publishing India Pvt. Ltd., 2012, ISBN: 978-93-82563-34-1

- S.S. Kumbhar, M.A. Mahadik, V.S. Mohite, S.S. Shinde, V.L. Mathe, **K.Y. Rajpure**, C.H. Bhosale
Synthesis and Characterization of Ni-Zn Ferrite Thin Films Prepared by Spray Pyrolysis Technique, 49
- S.I. Inamdar, **K.Y. Rajpure**
Studies on the Synthesis and Characterization of Co-precipitated Nanocrystalline Zn-Pb-O Bulk System, 249

Nano Materials Synthesis and Characterisation, Bloomsbury Publishing India Pvt. Ltd., 2012, ISBN: 978-93-82563-36-5

16. In charge of various equipments

- Incharge of **X-ray Diffraction facility** at PIFC Department of Physics, Shivaji University Kolhapur
- Incharge of **LCR meter** at PIFC Department of Physics, Shivaji University Kolhapur

17. Referee of international journals

- Journal of Alloys and Compounds
- Sensors and Actuators-B
- Materials Science and Engineering-B
- Materials Letters
- Journal of Physical Chemistry-C
- Materials Research Bulletin
- Indian journal of Pure and Applied Physics
- Applied Surface Science

- Solar Energy Materials
- Materials Chemistry and Physics

18. Conference publications: 148 (list attached)

19. Conference Organised

- **Convener** of the “**National Seminar on Advanced Materials**” organized by Department of Physics, Shivaji University Kolhapur on 19-20 Mar. 2010
- **Secretary** of “**International Conference on Advanced Materials and Applications**” (ICAMA-2007), Organised by Department of Physics, Shivaji University, Kolhapur.

20. Academic & Research Administration

Extension work

- Resource person
- Counsellor to graduate and post-graduate students
- Life member: Marathi Vidnyan Parishad Kolhapur region
- Staff secretary
- Placement officer
- In charge of M.Sc. Part I laboratory
- Guardian teacher of M.Sc. part I
- M.Sc. Admission committee member
- Departmental Ph.D. Scrutiny committee member
- Organized departmental cricket matches as sport activity
- Member of various Departmental organizing committees
- Coordinator of Parents meet (1 Oct. 2013)

Cocurricular Extra curricular

- Examiner of Shivaji, SRTM, Goa, Solapur and SGBA University
- Placement Officer, Guardian Teacher
- Secretary- DST-FIST,
- Secretary- Curriculum reforms & Profile development
- Organising committee Member of conferences
- Referee to reputed journals

21. Most downloaded articles

Photocatalytic degradation of toluene using sprayed N-ZnO thin films in aqueous suspension,

S. S. Shinde, C. H. Bhosale, **K. Y. Rajpure**,

Journal of Photochemistry and Photobiology B: Biology, 113 (2012), 70-77.

22. Papers amongst Science direct's top 25 Hottest articles

(<http://top25.sciencedirect.com>)

1 Solid State Science, October to December 2008

<http://top25.sciencedirect.com/subject/materials-science/15/journal/solid-state->

sciences/12932558/archive/20/

Shinde, S.S., Shinde, P.S., Pawar, S.M., Moholkar, A.V., Bhosale, C.H., Rajpure, K.Y.
Physical properties of transparent and conducting sprayed fluorine doped zinc oxide thin films

(2008) *Solid State Sciences*, 10 (9), pp. 1209-1214

- 2 **Journal of Photochemistry and Photobiology B: Biology April to June 2011**
<http://top25.sciencedirect.com/subject/chemistry/6/journal/journal-of-photochemistry-and-photobiology-b-biology/10111344/archive/33/>
Shinde, S.S., Bhosale, C.H., Rajpure, K.Y.
Photocatalytic activity of sea water using TiO₂ catalyst under solar light
(2011) *Journal of Photochemistry and Photobiology B: Biology*, 103 (2), pp. 111-117
- 3 **Solar Energy April to June 2011**
<http://top25.sciencedirect.com/subject/materials-science/15/journal/solar-energy/0038092X/archive/33/>
Moholkar, A.V., Shinde, S.S., Babar, A.R., Sim, K.-U., Kwon, Y.-B., Rajpure, K.Y., Patil, P.S., Bhosale, C.H., Kim, J.H.
Development of CZTS thin films solar cells by pulsed laser deposition: Influence of pulse repetition rate
(2011) *Solar Energy*, 85 (7), pp. 1354-1363
- 4 **Journal of Alloys and Compounds July to September 2011**
<http://top25.sciencedirect.com/subject/materials-science/15/journal/journal-of-alloys-and-compounds/09258388/archive/34/>
Moholkar, A.V., Shinde, S.S., Babar, A.R., Sim, K.-U., Lee, H.K., Rajpure, K.Y., Patil, P.S., Bhosale, C.H., Kim, J.H.
Synthesis and characterization of Cu₂ZnSnS₄ thin films grown by PLD: Solar cells
(2011) *Journal of Alloys and Compounds*, 509 (27), pp. 7439-7446
- 5 **Journal of Photochemistry and Photobiology B: Biology July to September 2011**
<http://top25.sciencedirect.com/subject/chemistry/6/journal/journal-of-photochemistry-and-photobiology-b-biology/10111344/archive/34/>
Shinde, S.S., Shinde, P.S., Bhosale, C.H., Rajpure, K.Y.
Zinc oxide mediated heterogeneous photocatalytic degradation of organic species under solar radiation
(2011) *Journal of Photochemistry and Photobiology B: Biology*, 104, 425-433
- 6 **Solar Energy CZTS PRR July to September 2011**
<http://top25.sciencedirect.com/subject/materials-science/15/journal/solar-energy/0038092X/archive/34/>
Moholkar, A.V., Shinde, S.S., Babar, A.R., Sim, K.-U., Kwon, Y.-B., Rajpure, K.Y., Patil, P.S., Bhosale, C.H., Kim, J.H.
Development of CZTS thin films solar cells by pulsed laser deposition: Influence of pulse repetition rate
(2011) *Solar Energy*, 85 (7), pp. 1354-1363
- 7 **Journal of Photochemistry and Photobiology B: Biology April to June 2012**
<http://top25.sciencedirect.com/subject/chemistry/6/journal/journal-of-photochemistry-and-photobiology-b-biology/10111344/archive/39/>

Sapkal R.T., Shinde S.S., Waghmode T.R., Govindwar S.P., Rajpure K.Y., Bhosale C.H.
Photo-corrosion inhibition and photoactivity enhancement with tailored zinc oxide thin films

(2012) *Journal of Photochemistry and Photobiology B: Biology*, 110, 15-21

8 **Journal of Photochemistry and Photobiology B: Biology July to September 2012**

<http://top25.sciencedirect.com/subject/materials-science/15/journal/journal-of-photochemistry-and-photobiology-b-biology/10111344/archive/40/>

Sapkal R.T., Shinde S.S., Mahadik M.A., Mohite V.S., Waghmode T.R., Govindwar S.P., K.Y. Rajpure, C.H. Bhosale

Photoelectrocatalytic decolorization and degradation of textile effluent using ZnO thin films

(2012) *Journal of Photochemistry and Photobiology B: Biology*, 114, 102–107

9 **Journal Alloys and compounds October to December 2012**

<http://top25.sciencedirect.com/subject/materials-science/15/journal/journal-of-alloys-and-compounds/09258388/archive/41/>

Moholkar, A.V., Shinde, S.S., Agawane G.L., Jo S.H., Rajpure, K.Y., Patil, P.S., Bhosale, C.H., Kim, J.H.

Studies of compositional dependent CZTS thin film solar cells by pulsed laser deposition technique: An attempt to improve the efficiency

(2012) *Journal of Alloys and Compounds*, 544, 145-151

10 **Journal Alloys and compounds January to March 2013**

<http://top25.sciencedirect.com/subject/materials-science/15/journal/journal-of-alloys-and-compounds/09258388/archive/41/>

Moholkar, A.V., Shinde, S.S., Agawane G.L., Jo S.H., Rajpure, K.Y., Patil, P.S., Bhosale, C.H., Kim, J.H.

Studies of compositional dependent CZTS thin film solar cells by pulsed laser deposition technique: An attempt to improve the efficiency

(2012) *Journal of Alloys and Compounds*, 544, 145-151

23. Research achievements

- New technique for optimization of preparative parameters
- Estimation of semiconductor parameters
- Efficient TCOs having factor of merit $\sim 10^{-2} \square/\Omega$
- The cheaper ZnO photocatalysts for photocatalysis
- Fast response ZnO UV photoconductive detector
- High sensitivity LPG gas sensor based on metal oxides

24. Facility/ Resource generated

- StellarNet Inc., USA make **Spectroscopic Reflectometer** worth Rs. **9,43,006/-**
- Marine India Ltd., New Delhi make **PE Loop Tracer** worth Rs. **6,00,000/-**

List of publications as on 1 July, 2014 (Journal publications)

- 1 Rajpure, K.Y.**, Lokhande, C.D., Bhosale, C.H.
A comparative study of concentration effect of complexing agent on the properties of spray deposited Sb_2S_3 thin films and precipitated powders
(1997) *Materials Chemistry and Physics*, 51 (3), pp. 252-257. Cited 11 times.
- 2 Rajpure, K.Y.**, Lokhande, C.D., Bhosale, C.H.
Effect of the substrate temperature on the properties of spray deposited Sb-Se thin films from non-aqueous medium
(1997) *Thin Solid Films*, 311 (1-2), pp. 114-118. Cited 47 times.
- 3 Rajpure, K.Y.**, Dhebe, A.L., Lokhande, C.D., Bhosale, C.H.
Effect of relative amount of complexing agents on the properties of Sb_2S_3 precipitated powders
(1998) *Materials Chemistry and Physics*, 56 (2), pp. 177-183. Cited 7 times.
- 4 Rajpure, K.Y.**, Bhosale, C.H.
Solution concentration dependent properties of spray deposited Sb_2S_3 thin films
(1998) *Proceedings of SPIE - The International Society for Optical Engineering*, 3316 (2), pp. 1233-1236.
- 5 Rajpure, K.Y.**, Anarase, P.A., Lokhande, C.D., Bhosale, C.H.
Photoelectrochemical studies on electrodeposited Cd-Fe-Se thin films
(1999) *Physica Status Solidi (A) Applied Research*, 172 (2), pp. 415-423. Cited 12 times.
- 6 Rajpure, K.Y.**, Bamane, S.M., Lokhande, C.D., Bhosale, C.H.
Structural, optical and (photo)electrochemical properties of electrodeposited Cd-Zn-Se thin films
(1999) *Indian Journal of Pure and Applied Physics*, 37 (5), pp. 413-420. Cited 12 times.
- 7 Rajpure, K.Y.**, Lokhande, C.D., Bhosale, C.H.
A comparative study of the properties of spray-deposited Sb_2Se_3 thin films prepared from aqueous and nonaqueous media
(1999) *Materials Research Bulletin*, 34 (7), pp. 1079-1087. Cited 31 times.
- 8 Killedar, V.V.**, **Rajpure, K.Y.**, Patil, P.S., Bhosale, C.H.
Transient photoconductivity measurements of spray deposited Sb_2S_3 and Bi_2S_3 thin films from non-aqueous medium
(1999) *Materials Chemistry and Physics*, 59 (3), pp. 237-241. Cited 6 times.
- 9 Rajpure, K.Y.**, Mathe, V.L., Bhosale, C.H.
Photoelectrochemical investigation on spray deposited n- CdIn_2S_4 thin films

- (1999) *Bulletin of Materials Science*, 22 (5), pp. 927-931. Cited 12 times.
- 10 Torane, A.P., **Rajpure, K.Y.**, Bhosale, C.H.
Preparation and characterization of electrodeposited Sb_2Se_3 thin films
(1999) *Materials Chemistry and Physics*, 61 (3), pp. 219-222. Cited 17 times.
 - 11 Patil, A.M., **Rajpure, K.Y.**, Bhosale, C.H.
Preparation and characterization spray deposited CdIn_2S_4 thin films
(1999) *Rayat Shikshan Sanstha's Research Journal*, 7, pp. 70-83 Cited 14 times
 - 12 **Rajpure, K.Y.**, Bhosale, C.H.
Preparation and characterization of photoactive spray deposited Sb_2S_3 and Sb_2S_3 thin films prepared from aqueous and non-aqueous media
(2000) *Proceedings of SPIE - The International Society for Optical Engineering*, 3975, pp. I/.
 - 13 **Rajpure, K.Y.**, Bhosale, C.H.
Effect of Se source on properties of spray deposited Sb_2Se_3 thin films
(2000) *Materials Chemistry and Physics*, 62 (2), pp. 169-174. Cited 14 times.
 - 14 **Rajpure, K.Y.**, Bhosale, C.H.
(Photo)electrochemical investigations on spray deposited n- Sb_2S_3 thin film/polyiodide/C photoelectrochemical solar cells
(2000) *Materials Chemistry and Physics*, 63 (3), pp. 263-269. Cited 19 times.
 - 15 **Rajpure, K.Y.**, Bhosale, C.H.
Study of substrate variation effects on the properties of n- Sb_2S_3 thin film/polyiodide/C photoelectrochemical solar cells
(2000) *Materials Chemistry and Physics*, 64 (1), pp. 14-19. Cited 18 times.
 - 16 **Rajpure, K.Y.**, Bhosale, C.H.
 Sb_2S_3 semiconductor-septum rechargeable storage cell
(2000) *Materials Chemistry and Physics*, 64 (1), pp. 70-74. Cited 44 times.
 - 17 **Rajpure, K.Y.**, Bhosale, C.H.
Effect of composition on the structural, optical and electrical properties of sprayed Sb_2S_3 thin films prepared from non-aqueous medium
(2000) *Journal of Physics and Chemistry of Solids*, 61 (4), pp. 561-568. Cited 22 times.
 - 18 **Rajpure, K.Y.**, Mathe, V.L., Bhosale, C.H.
Properties of photoelectrochemical cell formed with sprayed CdIn_2S_4 thin films
(2000) *Transactions of the SAEST (Society for Advancement of Electrochemical Science and Technology)*, 35 (2), pp. 64-68. Cited 1 time.

- 19 **Rajpure, K.Y.**, Kusumade, M.N., Neumann-Spallart, M.N., Bhosale, C.H.
Effect of Sb doping on properties of conductive spray deposited SnO₂ thin films
(2000) *Materials Chemistry and Physics*, 64 (3), pp. 184-188. Cited 59 times.
- 20 **Rajpure, K.Y.**, Bhosale, C.H.
Preparation and characterization of spray deposited photoactive Sb₂S₃ and Sb₂Se₃ thin films using aqueous and non-aqueous media
(2002) *Materials Chemistry and Physics*, 73 (1), pp. 6-12. Cited 22 times.
- 21 Nikale, V.M., Gaikwad, N.S., **Rajpure, K.Y.**, Bhosale, C.H.
Structural and optical properties of spray-deposited CdIn₂Se₄ thin films
(2003) *Materials Chemistry and Physics*, 78 (2), pp. 363-366. Cited 22 times.
- 22 Bhosale, C.H., Kambale, A.V., Kokate, A.V., **Rajpure, K.Y.**
Structural, optical and electrical properties of chemically sprayed CdO thin films
(2005) *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, 122 (1), pp. 67-71. Cited 49 times.
- 23 Pawar, S.M., Moholkar, A.V., **Rajpure, K.Y.**, Bhosale, C.H.
Electrosynthesis and characterization of CdSe thin films: Optimization of preparative parameters by photoelectrochemical technique
(2006) *Journal of Physics and Chemistry of Solids*, 67 (11), pp. 2386-2391. Cited 16 times.
- 24 Pawar, S.M., Moholkar, A.V., Suryavanshi, U.B., **Rajpure, K.Y.**, Bhosale, C.H.
Electrosynthesis and characterization of iron selenide thin films
(2007) *Solar Energy Materials and Solar Cells*, 91 (7), pp. 560-565. Cited 17 times.
- 25 Sawant, R.R., **Rajpure, K.Y.**, Bhosale, C.H.
Determination of CdIn₂S₄ semiconductor parameters by (photo)electrochemical technique
(2007) *Physica B: Condensed Matter*, 393 (1-2), pp. 249-254. Cited 13 times.
- 26 Moholkar, A.V., Pawar, S.M., **Rajpure, K.Y.**, Bhosale, C.H.
Effect of solvent ratio on the properties of highly oriented sprayed fluorine-doped tin oxide thin films
(2007) *Materials Letters*, 61 (14-15), pp. 3030-3036. Cited 35 times.
- 27 Pawar, S.M., Moholkar, A.V., **Rajpure, K.Y.**, Bhosale, C.H.
Electrosynthesis and characterization of Fe doped CdSe thin films from ethylene glycol bath
(2007) *Applied Surface Science*, 253 (17), pp. 7313-7317. Cited 11 times.
- 28 Moholkar, A.V., Pawar, S.M., **Rajpure, K.Y.**, Patil, P.S., Bhosale, C.H.
Properties of highly oriented spray-deposited fluorine-doped tin oxide thin films on glass substrates of different thickness

- (2007) *Journal of Physics and Chemistry of Solids*, 68 (10), pp. 1981-1988. Cited 16 times.
- 29** Pawar, S.M., Moholkar, A.V., **Rajpure, K.Y.**, Bhosale, C.H.
Photoelectrochemical investigations on electrochemically deposited CdSe and Fe-doped CdSe thin films
(2008) *Solar Energy Materials and Solar Cells*, 92 (1), pp. 45-49. Cited 14 times.
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2. A. Venkateswara Rao , D. Haranath , P.B.Wagh, **K.Y.Rajpure**
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3. P.B.Wagh , D. Haranath , A.Venkateswara Rao, **K.Y.Rajpure**
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4. **K.Y. Rajpure**, C.H. Bhosale
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Solar light aided photoelectrocatalytic degradation of Salicylic acid in water using sprayed TiO_2 electrodes
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D.Y. Patil University, Kolhapur
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Effect of solution concentration on physicochemical properties of sprayed antimony doped tin oxide

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- 69 S. B. Kumbhar, A. T. Valkunde, A. R. Babar, C. H. Bhosale, **K. Y. Rajpure**
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- 93** A. P. Korade, S. S. Shinde, **K. Y. Rajpure**
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- 94** R.T. Sapkal, **K. Y. Rajpure**, S. S. Shinde, M. R. Sapkal, A. R. Babar, D. M. Sapkal, P. S. Patil, K. D. Sonawane, C. H. Bhosale
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- 95** D. M. Sapkal, V. M. Nikale, S. S. Shinde, **K. Y. Rajpure**, C. H. Bhosale
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- 96** R. C. Kambale, **K. R. Rajpure**
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- 100** M.A. Mahadik, V. Mohite, S.S. Shinde, A.V. Moholkar, **K.Y. Rajpure**, C.H. Bhosale
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- 101** R.T. Sapkal, S.S. Shinde, M. R. Sapkal, A.R. Babar, D.M. Sapkal, **K.Y. Rajpure**, P.S. Patil, C.H. Bhosale
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- 104** S. K. Patil, S. S. Shinde, **K. Y. Rajpure**
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- 106** R. T. Sapkal, S. S. Shinde, A. R. Babar, **K. Y. Rajpure**, C. H. Bhosale
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- 107** V. S. Mohite, S. S. Shinde, R. T. Sapkal, **K. Y. Rajpure**, C. H. Bhosale
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- 108** M. A. Mahadik, S. S. Shinde, **K. Y. Rajpure**, H. M. Pathan, C. H. Bhosale
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- 109** A. A. Kadam, S. S. Shinde, S. P. Yadav, P. S. Patil, **K. Y. Rajpure**
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- 110** A. V. Moholkar, G. L. Agawane, S. S. Shinde, M. P. Suryawanshi, S. M. Bhosale, S. P. Desai, L. D. Naikaware, **K. Y. Rajpure**, P. S. Patil, C. H. Bhosale, J. H. Kim

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- 111** R. C. Kambale, **K. Y. Rajpure**, C. H. Bhosale
Magneto-electric coupled properties of (0.25) $\text{Co}_{1.2-x}\text{Mn}_y\text{Fe}_{1.8}\text{O}_4$, and (0.75) Ba $\text{Zr}_{0.08}\text{Ti}_{0.92}\text{O}_3$ particulate ME composite,

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- 113** V. V. Ganbavle, V. S. Sawant, **K. Y. Rajpure**
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- 114** S. I. Inamdar, **K. Y. Rajpure**
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- 115** A. A. Kadam, **K. Y. Rajpure**
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- 116** S. K. Patil, **K. Y. Rajpure**
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- 123** S.V. Mohite, **K.Y. Rajpure**
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- 126** V. V. Ganbavle, **K. Y. Rajpure**
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- 127** S. K. Patil, V. V. Ganbavle, **K. Y. Rajpure**
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- 131** Y.M. Hunge, M.A. Mahadik, S.S. Kumbhar, V.S.Mohite, **K.Y. Rajpure**, A.V.Moholkar, C. H. Bhosale
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- 132** A. A. Bagade, **K. Y. Rajpure**
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- 133 S.I. Inamdar, **K.Y. Rajpure**
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- 134 S. V. Mohite, **K. Y. Rajpure**
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- 136 M. A. Mahadik, V.S. Mohite, S.S. Kumbhar, Y.M. Hunge, H. M. Pathan, **K.Y. Rajpure**, A. V. Moholkar, C. H. Bhosale
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- 137 A.M. Mukadam, S.V. Mohite, R.K. Nimat, **K.Y. Rajpure**
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- 139 V. S. Mohite, M. A. Mahadik, S. S. Kumbhar, , **K. Y. Rajpure** , A. V. Moholkar, C. H. Bhosale
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- 141 S.D. Dhas, A. A. Deshpande, V.S. Bandichode, R.S. Sutar, P.M. Raste, **K. Y. Rajpure**, A. V. Moholkar, C. H. Bhosale
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- 143 A.A. Bagade, **K.Y. Rajpure**
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- 144 S.I. Inamdar , **K. Y. Rajpure**
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- 145 V.V. Ganbavle, **K.Y. Rajpure**

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- 146** A. A. Bagade, **K. Y. Rajpure**
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- 147** S.I. Inamdar, S.K. Shaikh, **K.Y. Rajpure**
Chemically synthesized ZnO thin films for visible blind ultraviolet photodetector
- 148** V.V. Ganbavle, S.V. Mohite, **K.Y. Rajpure**
Structural, morphological and gas sensing properties for spray deposited Ni:ZnO films

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