

CURRICULUM VITAE

Dr. L.P. Purohit Professor & Head

Department of Physics, Faculty of Science **Director, Research & Development**

Gurukula Kangri University
(Deemed to be University, funded by
MoE/UGC, Govt. of India)
Haridwar-249 404, Uttarakhand, INDIA
Tel. No. (office): +91 7060247143
(HoD Physics)

M. +91 7300761217, 8433480902

Email: lppurohit@gmail.com; lppurohit@gkv.ac.in

Website: www.gkv.ac.in Scopus ID: 6503930767

0000-0002-6801-4885View this author's ORCID profile

ACADEMIC QUALIFICATIONS

-M.Sc. Physics (Specialization in Electronics), JRF (NET) & SRF (NET), CSIR, New Delhi;

-Ph.D. Physics (Condensed Matter Physics-Experimental)

COURSES TAUGHT

Electronic Devices and Circuits, Quantum Mechanics, Communication Electronics (Analog and Digital Communication), Thin Film and Nanostructures, Modern Physics, Optics.

ADMINISTRATIVE EXPERIENCE

Controller of Examination (Additional Charge Since Sep. 2024)

HoD Physics- 4 years

Dean, Faculty of Science-3 Years

Member, Planning and Monitoring Board-3 Years

Nodal Officer, AISHE, Govt. of India-10 Years

Director Admission-3 Years

Dean, Academic Audit-2 Years

Examination Superintendent- 5 Years

Director, Research and Development-2 Years

Controller of Examination-

NSS Programme Officer/Co-ordinator-3 Years

Chairman, NEP Implementation Committee-3 Years

Member, Proctorial Board-5 Years

Chairman, Board of Studies (B.O.S.) in Physics -3 Years

Convenor and Member, Research Degree Committee (R.D.C.)- 4 Years

Co-ordinator, Remedial Coaching (Sponsored by UGC)- 3 Years

EXPERIENCE

Teaching/Research Experience : 30 Years

RESEARCH CONTRIBUTIONS

No. of Research Publications ((In Refereed Journals) : 145

h-index and i-10 index : h-index-36, i-10 index -75

Citations : 3571

Ph.D. Thesis Supervision : Awarded-20, Undergoing-6

No. of Dissertation Guided at P.G. Level : 300

CONFERENCE PARTICIPATION/PRESENTATIONS & ORGANISATION

- ➤ Participated in more than 110 seminars/workshops/conferences/schools at national and international level and also delivered around 60 Invited Talks.
- > Organized 25 conferences/seminar/workshop as convener/organizing secretary etc.

VISIT ABROAD

• Visited **U.S.A**, **United Kingdom**, **China and Japan** as an invited speaker in International Conferences etc.

ASSOCIATION WITH PROFESSIONAL BODIES /SOCIETIES

- 1. Member Semiconductor Society (India)
- 2. Member Indian Association of Physics Teachers (IAPT)
- 3. Member Indian Science Congress Association (ISCA)
- 4. Member Magnetic Society of India (MSI)
- 5. Member Swadeshi Science Congress, Vigyan Bharti, New Delhi
- 6. Member, Editorial Board, J. of Nanoscience & Technology, Illinois, USA
- 7. Member, Editorial Board, Journal of Applied & Natural Science, India
- 8. Member, Editorial Board, Vedic Vag Jyoti, GKV, Haridwar, India
- 9. Member Executive Council, Haridwar Chapter-Indian Science Congress Association
- 10. Reviewer of Science Direct (Elsevier) Journals, Photonics Technology Letters (IEEE), Indian Journal of Engineering & Materials Sciences (IJEMS), etc.

ASSOCIATION WITH ACADEMIC BODIES

Member of Governing Body (UGC Nominee), CMR Engineering College, Hyderabad for the period of five years (2020-25).

Member, Academic Council, CCS University Meerut

Member, Board of Studies/Research Degree Committees of following Universities/Institutions:

HNBGU Central University Srinagar

CCS University Meerut

GRDU Dehradun

Kumaun University, Nainital,

IFTM, Moradabad

Graphic Era Hill University, Dehradun

Sridev Suman University (Uttarakhand State University), Rishikesh Campus

Uttaranchal University, Dehradun

Devbhoomi Uttaranchal University, Dehradun

PROJECT IMPLEMENTATION

❖ Acted as a member and Project and P.I. of FIST implementation committee, Dept. of Physics, GKV Haridwar. The Department of Physics received financial assistance with a total outlay of Rs. 81 Lakhs

in 2012 for five years under the **DST FIST programme** supported by the Department of Science and Technology (DST), Govt. of India.

- ❖ PI-UCOST Project under DST-1
- PI-USERC Project, Govt. of Uttrakhand-01
- ❖ Co-PI of UGC Projects-02 and Co-PI DRDO Project-1

RESEARCH ACTIVITIES

Main Area of Research:

- **Condensed Matter Physics/ Material Science:**
- ❖ We have developed oxygen and nitrogen gas sensors near room temperature by using Metal Oxide nanocomposites.
- ❖ We have developed Metal Oxide nanocomposite based Photocatalytics (water purifier) under visible light using Advance Oxidation Process (AOP).
- ❖ We have developed Graphene Oxide Metal Oxide nanocomposite based Photocatalytics for phenolic compounds
- ❖ We have synthesized stable p-type ZnO on plane glass substrate by various techniques for future generation of p-n junction using ZnO as base material.
- 1. Development and Characterization of p-ZnO nano-structures using sol-gel and sputtering method for Optoelectronic applications:
- 2. Synthesis and characterization of II-VI quantum dots
- 3. Synthesis and characterisation of Metal Oxide Nancomposites for gas sensing applications
- 4. Synthesis and characterisation of Metal Oxide Nancomposites for gas photocatalytic applications
- 5. Development and characterization of Amorphous Chalcogenide Materials
- 6. Development and characterization of Graphene Oxide Metal Oxide nanocomposite based Photocatalytics for phenolic compounds

Publications (2013-2025)

Scopus
Article
Comprehensive study of dual-doped TiO ₂ thin films: Phase transition, bandgap tuning, and microstructural characterization Prasad, A., Singh, F., Dhuliya, V., Purohit, L.P., Ramola, R.C. Next Materials, 2025, 7, 100632
Citations Show abstract View at PublisherOpens in a new tab. Related documents
2
Article Potentiality of 1-(4-nitrophenyl)-2-pyrrolidine methanol as an efficient photosensitizing material: A multi-solvent first principle DFT study Dhuliya, V., Purohit, L.P., Lakhera, S., Rana, M. Materials Science in Semiconductor Processing, 2025, 188, 109231
Citations Show abstract View at PublisherOpens in a new tab.
3
Article Z-scheme based photoactive ZnO:TiO₂:CdO:g-C₃N₄ nanocomposites for advance oxidation process Upadhyay, G.K., Purohit, L.P., Sharma, H., Jain, N., Sharma, S.K. Journal of Molecular Structure, 2025, 1319, 139366 10 Citations Show abstract View at PublisherOpens in a new tab.
4
Article Exceptional stability and reusability of Cu-doped ZnO:SnO ₂ nanocomposites for photocatalysis under visible light Butola, D., Purohit, L.P. Materials Chemistry and Physics, 2024, 328, 130021 0 Citations Show abstract View at PublisherOpens in a new tab. Related documents
5
Article • Open access Influence of Fluorine doping on electron transport characteristics of TiO ₂ for Perovskite solar cells: A combined Experimental and DFT analysis Sweta, Dhuliya, V., Purohit, L.P., Malik, H.K., Kumar, V. Hybrid Advances, 2024, 7, 100284 0 Citations Show abstract

	View at PublisherOpens in a new tab.
•	6
	Article • Open access Solar light driven enhanced in photocatalytic activity of novel Gd incorporated ZnO/SnO ₂ heterogeneous nanocomposites Panwar, S., Kumar, V., Purohit, L.P. Scientific Reports, 2024, 14(1), 21341 4
	Citations Show abstract View at PublisherOpens in a new tab.
•	7
	Article Enhanced nonlinear optical and optical limiting responses of 7-diethylamino-4-methyl coumarin functionalized with silver nanoparticles: A combined experimental and DFT study Lakhera, S., Rana, M., Dhuliya, V., Dhanusha, A., Sabari Girisun, T.C. Journal of Photochemistry and Photobiology A: Chemistry, 2024, 457, 115910
	Citations Show abstract View at PublisherOpens in a new tab.
•	8
	Article Solar light assisted enhanced photocatalytic activity of smart ternary ZnO:TiO ₂ :SnO ₂ nanocomposites Sharma, K., Purohit, L.P. Materials Science in Semiconductor Processing, 2024, 182, 108671
	Citations Show abstract View at PublisherOpens in a new tab.
)	9
	Article Ag-catalyzed strain engineering in ZnO for tailoring defects towards bacterial inactivation and removal of organic dyes for environmental sustainability Kumar, V., Kumar, D., Singh, V., Kaushik, N.K., Sharma, S.K. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2024, 698, 134460 12 Citations Show abstract View at Publisher Opens in a new tab.
•	10
	Article Nanocarbons decorated TiO ₂ as advanced nanocomposite fabric for photocatalytic degradation of methylene blue dye and ciprofloxacin Pal, V.K., Kumar, D., Gupta, A., Kaushik, A., Sharma, S.K. Diamond and Related Materials, 2024, 148, 111435 16 Citations Show abstract View at Publisher Opens in a new tab.
,	11

Article

Fabrication and Characterization of Perovskite Solar Cell with Fluorine Doped Electron Transport Layer

Sweta, Purohit, L.P., Sharma, N.K., Malik, H.K., Kumar, V. SSRG International Journal of Electrical and Electronics Engineering, 2024, 11(6), pp. 259–266 0 Citations Show abstract View at Publisher Opens in a new tab.

12

Article

Structural and optical characteristics of Cr-doped TiO₂ thin films synthesized by sol-gel method

Prasad, A., Singh, F., Dhuliya, V., Purohit, L.P., Ramola, R.C. *Optical Materials*, 2024, 151, 115411 5 Citations
Show abstract

II 13

Article

CuO/ZnO Type-II heterojunction modified by rGO nanosheets for improved photocatalytic mineralization of antibiotics

Shakya, D., Shukla, R.K., Kumar, S., Purohit, L.P. Journal of Industrial and Engineering Chemistry, 2024, 132, pp. 304–317 11 Citations Show abstract

View at PublisherOpens in a new tab.

View at Publisher Opens in a new tab.

· 14

Article

Exploration of annealing effect on physical properties of Indium oxide films for gas sensors

Kamlesh, Suthar, D., Sharma, R., ... Purohit, L.P., Dhaka, M.S. *Physica B: Condensed Matter*, 2024, 675, 415622 6 Citations
Show abstract

View at PublisherOpens in a new tab.

15

Article • Open access

Role of fluorine doping on the electron transport layer of F-doped TiO₂ (Titanium dioxide) for photovoltaic systems and its environmental impact

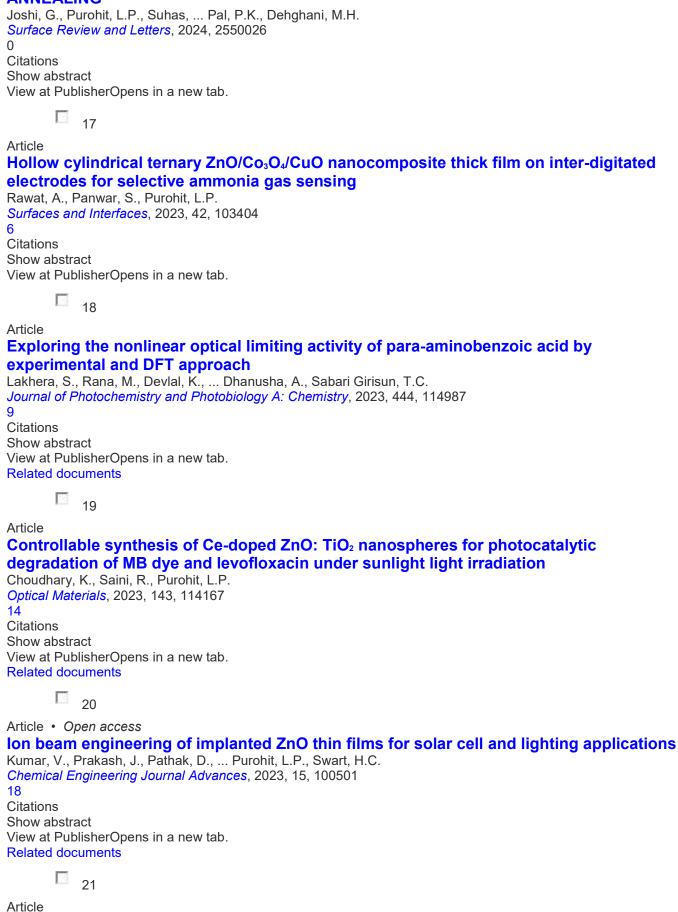
Sweta, Panwar, S., Kumar, V., Malik, H.K., Purohit, L.P. *Journal of Applied and Natural Science*, 2024, 16(3), pp. 1189–1195 0 Citations Show abstract

View at PublisherOpens in a new tab.

16

Article • Article in Press

DEVELOPING HIGH-PERFORMANCE LOW-TEMPERATURE CO₂GAS SENSORS BASED on NANOSTRUCTURED CO₃O₄ THIN FILMS: A SOL-GEL APPROACH and the ROLE of ANNEALING



Influence of Gd doping on gas sensing performance of Gd-(ZnO/TiO ₂) nanocomposites
Panwar, S., Kumar, V., Purohit, L.P. Optical Materials, 2023, 141, 113919
6 Citations
Show abstract
View at PublisherOpens in a new tab.
Related documents
22
Article RGO supported ZnO/SnO ₂ Z-scheme heterojunctions with enriched ROS production
towards enhanced photocatalytic mineralization of phenolic compounds and antibiotics
at low temperature
Kumar, S., Kaushik, R.D., Purohit, L.P.
Journal of Colloid and Interface Science, 2023, 632, pp. 196–215 42
Citations
Show abstract View at PublisherOpens in a new tab.
Related documents
23
Book Chapter
Oxide thin films grown using spin-coating methods Panwar, S., Kumar, V., Purohit, L.P.
Defect-Induced Magnetism in Oxide Semiconductors, 2023, pp. 109–134
Citations
Show abstract View at PublisherOpens in a new tab.
Related documents
24
Article
Performance of V ₂ O ₅ hole selective layer in CdS/CdTe heterostructure solar cell
Raj, R., Gupta, H., Purohit, L.P. Journal of Alloys and Compounds, 2022, 907, 164408
6 Citations
Show abstract
View at PublisherOpens in a new tab.
Related documents
25
Article
Sb incorporated SnO ₂ nanostructured thin films for CO ₂ gas sensing and humidity sensing applications
Panday, M., Upadhyay, G.K., Purohit, L.P.
Journal of Alloys and Compounds, 2022, 904, 164053 43
Citations
Show abstract
View at PublisherOpens in a new tab. Related documents
26
Article

Performance of RF sputtered V ₂ O₅ interface layer in p-type CdTe/Ag Schottky diode Raj, R., Gupta, H., Purohit, L.P.
Optical Materials, 2022, 126, 112176 10
Citations
Show abstract View at PublisherOpens in a new tab.
Related documents
27
Article
Effect of RF Power on Physical and Electrical Properties of Al-doped ZnO Thin Films Rana, V.S., Purohit, L.P., Sharma, G., Singh, S.P., Sharma, S.K. Indian Journal of Pure and Applied Physics, 2022, 60(3), pp. 246–253 11
Citations
Show abstract Related documents
28
Article
ZnO-CdO nanocomposites incorporated with graphene oxide nanosheets for efficient
photocatalytic degradation of bisphenol A, thymol blue and ciprofloxacin Kumar (S. Kumar), S., Kaushik, R.D., Purohit, L.P. Journal of Hazardous Materials, 2022, 424, 127332
101 Citations
Show abstract
View at PublisherOpens in a new tab. Related documents
29
Article Gd-doped ZnO:TiO ₂ heterogenous nanocomposites for advance oxidation process Panwar, S., Upadhyay, G.K., Purohit, L.P. Materials Research Bulletin, 2022, 145, 111534 33 Citations Show abstract
View at PublisherOpens in a new tab. Related documents
30
Article Interface analysis of SrWO₄:Er³+-Yb³+/Si thin films prepared by radio frequency magnetron
sputtering for upconversion emission Pandey, A., Kumar, V., Kumar, S., Kroon, R.E., Swart, H.C. Physica B: Condensed Matter, 2021, 623, 413349 3
Citations
Show abstract View at BublisherOpens in a new teh
View at PublisherOpens in a new tab. Related documents
31
Article
Hetro-nanostructured Se-ZnO sustained with RGO nanosheets for enhanced photocatalytic degradation of p-Chlorophenol, p-Nitrophenol and Methylene blue Kumar, S., Kaushik, R.D., Purohit, L.P.

49 Citations
Show abstract
View at PublisherOpens in a new tab.
Related documents
32
32
Article Ternary alloyed CdS _{1-x} Se _x quantum dots on TiO ₂ /ZnS electrodes for quantum dots-
sensitized solar cells
Tyagi, J., Gupta, H., Purohit, L.P.
Journal of Alloys and Compounds, 2021, 880, 160480
20
Citations Show abstract
View at PublisherOpens in a new tab.
Related documents
33
Article
Sustainable behavior of cauliflower like morphology of Y-doped ZnO:CdO
nanocomposite thin films for CO ₂ gas sensing application at low operating temperature Choudhary, K., Saini, R., Upadhyay, G.K., Purohit, L.P.
Journal of Alloys and Compounds, 2021, 879, 160479
33
Citations
Show abstract View at PublisherOpens in a new tab.
Related documents
34
Article
Article SnO ₂ -Co ₃ O ₄ pores composites for CO ₂ gas sensing at low operating temperature
Article SnO ₂ -Co ₃ O ₄ pores composites for CO ₂ gas sensing at low operating temperature Joshi, G., Rajput, J.K., Purohit, L.P.
Article SnO ₂ -Co ₃ O ₄ pores composites for CO ₂ gas sensing at low operating temperature
Article SnO ₂ -Co ₃ O ₄ pores composites for CO ₂ gas sensing at low operating temperature Joshi, G., Rajput, J.K., Purohit, L.P. <i>Microporous and Mesoporous Materials</i> , 2021, 326, 111343 14 Citations
Article SnO ₂ -Co ₃ O ₄ pores composites for CO ₂ gas sensing at low operating temperature Joshi, G., Rajput, J.K., Purohit, L.P. <i>Microporous and Mesoporous Materials</i> , 2021, 326, 111343 14 Citations Show abstract
Article SnO ₂ –Co ₃ O ₄ pores composites for CO ₂ gas sensing at low operating temperature Joshi, G., Rajput, J.K., Purohit, L.P. <i>Microporous and Mesoporous Materials</i> , 2021, 326, 111343 14 Citations Show abstract View at PublisherOpens in a new tab.
Article SnO ₂ -Co ₃ O ₄ pores composites for CO ₂ gas sensing at low operating temperature Joshi, G., Rajput, J.K., Purohit, L.P. <i>Microporous and Mesoporous Materials</i> , 2021, 326, 111343 14 Citations Show abstract View at PublisherOpens in a new tab. Related documents
Article SnO ₂ –Co ₃ O ₄ pores composites for CO ₂ gas sensing at low operating temperature Joshi, G., Rajput, J.K., Purohit, L.P. <i>Microporous and Mesoporous Materials</i> , 2021, 326, 111343 14 Citations Show abstract View at PublisherOpens in a new tab.
Article SnO ₂ -Co ₃ O ₄ pores composites for CO ₂ gas sensing at low operating temperature Joshi, G., Rajput, J.K., Purohit, L.P. <i>Microporous and Mesoporous Materials</i> , 2021, 326, 111343 14 Citations Show abstract View at PublisherOpens in a new tab. Related documents 35 Article
Article SnO ₂ —Co ₃ O ₄ pores composites for CO ₂ gas sensing at low operating temperature Joshi, G., Rajput, J.K., Purohit, L.P. <i>Microporous and Mesoporous Materials</i> , 2021, 326, 111343 14 Citations Show abstract View at PublisherOpens in a new tab. Related documents 35 Article Effect of Li doping on passivation of trap states and improvement in charge transport in
Article SnO ₂ -Co ₃ O ₄ pores composites for CO ₂ gas sensing at low operating temperature Joshi, G., Rajput, J.K., Purohit, L.P. <i>Microporous and Mesoporous Materials</i> , 2021, 326, 111343 14 Citations Show abstract View at PublisherOpens in a new tab. Related documents 35 Article Effect of Li doping on passivation of trap states and improvement in charge transport in TiO 2 thin films
Article SnO ₂ —Co ₃ O ₄ pores composites for CO ₂ gas sensing at low operating temperature Joshi, G., Rajput, J.K., Purohit, L.P. <i>Microporous and Mesoporous Materials</i> , 2021, 326, 111343 14 Citations Show abstract View at PublisherOpens in a new tab. Related documents 35 Article Effect of Li doping on passivation of trap states and improvement in charge transport in TiO ₂ thin films Panday, M., Upadhyay, G.K., Purohit, L.P.
Article SnO ₂ -Co ₃ O ₄ pores composites for CO ₂ gas sensing at low operating temperature Joshi, G., Rajput, J.K., Purohit, L.P. <i>Microporous and Mesoporous Materials</i> , 2021, 326, 111343 14 Citations Show abstract View at PublisherOpens in a new tab. Related documents 35 Article Effect of Li doping on passivation of trap states and improvement in charge transport in TiO 2 thin films
Article SnO ₂ —Co ₃ O ₄ pores composites for CO ₂ gas sensing at low operating temperature Joshi, G., Rajput, J.K., Purohit, L.P. <i>Microporous and Mesoporous Materials</i> , 2021, 326, 111343 14 Citations Show abstract View at PublisherOpens in a new tab. Related documents 35 Article Effect of Li doping on passivation of trap states and improvement in charge transport in TiO 2 thin films Panday, M., Upadhyay, G.K., Purohit, L.P. <i>Pramana - Journal of Physics</i> , 2021, 95(3), 132
Article SnO ₂ —Co ₃ O ₄ pores composites for CO ₂ gas sensing at low operating temperature Joshi, G., Rajput, J.K., Purohit, L.P. <i>Microporous and Mesoporous Materials</i> , 2021, 326, 111343 14 Citations Show abstract View at PublisherOpens in a new tab. Related documents
Article SnO ₂ —Co ₃ O ₄ pores composites for CO ₂ gas sensing at low operating temperature Joshi, G., Rajput, J.K., Purohit, L.P. <i>Microporous and Mesoporous Materials</i> , 2021, 326, 111343 14 Citations Show abstract View at PublisherOpens in a new tab. Related documents 35 Article Effect of Li doping on passivation of trap states and improvement in charge transport in TiO 2 thin films Panday, M., Upadhyay, G.K., Purohit, L.P. <i>Pramana - Journal of Physics</i> , 2021, 95(3), 132 3 Citations Show abstract View at PublisherOpens in a new tab.
Article SnO ₂ —Co ₃ O ₄ pores composites for CO ₂ gas sensing at low operating temperature Joshi, G., Rajput, J.K., Purohit, L.P. Microporous and Mesoporous Materials, 2021, 326, 111343 14 Citations Show abstract View at PublisherOpens in a new tab. Related documents 35 Article Effect of Li doping on passivation of trap states and improvement in charge transport in TiO 2 thin films Panday, M., Upadhyay, G.K., Purohit, L.P. Pramana - Journal of Physics, 2021, 95(3), 132 3 Citations Show abstract View at PublisherOpens in a new tab. Related documents
Article SnO ₂ —Co ₃ O ₄ pores composites for CO ₂ gas sensing at low operating temperature Joshi, G., Rajput, J.K., Purohit, L.P. <i>Microporous and Mesoporous Materials</i> , 2021, 326, 111343 14 Citations Show abstract View at PublisherOpens in a new tab. Related documents 35 Article Effect of Li doping on passivation of trap states and improvement in charge transport in TiO 2 thin films Panday, M., Upadhyay, G.K., Purohit, L.P. <i>Pramana - Journal of Physics</i> , 2021, 95(3), 132 3 Citations Show abstract View at PublisherOpens in a new tab.
Article Effect of Li doping on passivation of trap states and improvement in charge transport in TiO 2 thin films Panday, M., Upadhyay, G.K., Purohit, L.P. Pramana - Journal of Physics, 2021, 95(3), 132 3 Citations Show abstract Citations Citation
Article Effect of Li doping on passivation of trap states and improvement in charge transport in TiO 2 thin films Panday, M., Upadhyay, G.K., Purohit, L.P. Pramana - Journal of Physics, 2021, 95(3), 132 3 Citations Show abstract 36 Article Effect of Li doping on passivation of trap states and improvement in charge transport in TiO 2 thin films Panday, M., Upadhyay, G.K., Purohit, L.P. Pramana - Journal of Physics, 2021, 95(3), 132 3 Citations Show abstract View at PublisherOpens in a new tab. Related documents
Article Effect of Li doping on passivation of trap states and improvement in charge transport in TiO 2 thin films Panday, M., Upadhyay, G.K., Purohit, L.P. Pramana - Journal of Physics, 2021, 95(3), 132 3 Citations Show abstract 36 Article

10 | Page

Materials Research Bulletin, 2021, 141, 111342 17 Citations
Citations Show abstract
View at PublisherOpens in a new tab. Related documents
37
Article
ZTO transparent conducting thin films for optoelectronic applications Raj, R., Gupta, H., Purohit, L.P. Bulletin of Materials Science, 2021, 44(2), 165
7 Citations
Show abstract
View at PublisherOpens in a new tab.
Related documents
38
Article Chalcogen-doped zinc oxide nanoparticles for photocatalytic degradation of Rhodamine
B under the irradiation of ultraviolet light
Kumar, S., Sharma, S.K., Kaushik, R.D., Purohit, L.P.
Materials Today Chemistry, 2021, 20, 100464
69 Citations
Show abstract
View at PublisherOpens in a new tab.
Related documents
39
Article
Highly transparent and conducting Al-doped ZnO as a promising material for
optoelectronic applications Raj, R., Gupta, H., Purohit, L.P.
Pramana - Journal of Physics, 2021, 95(2), 87
11 Citations
Citations Show abstract
View at PublisherOpens in a new tab.
Related documents
40
Article Photocotolytic performance of uttrium doned CNT 7nO penoflowers cynthesized from
Photocatalytic performance of yttrium-doped CNT-ZnO nanoflowers synthesized from hydrothermal method
Sharma, S.K., Gupta, R., Sharma, G., Purohit, L.P., Singh, B.P.
Materials Today Chemistry, 2021, 20, 100452
56 Citations
Show abstract
View at PublisherOpens in a new tab.
Related documents
41
Article
Mesoporous ZnO/TiO₂ photoanodes for quantum dot sensitized solar cell Tyagi, J., Gupta, H., Purohit, L.P.
Optical Materials, 2021, 115, 111014

20 Citations Show abstract View at PublisherOpens in a new tab. Related documents
42
Article Impact of RF Sputtering Power on AZO Thin Films for Flexible Electro-Optical Applications
Rana, V.S., Rajput, J.K., Pathak, T.K., Pal, P.K., Purohit, L.P. Crystal Research and Technology, 2021, 56(4), 2000144 9 Citations
Show abstract View at PublisherOpens in a new tab. Related documents
43
Article Porous-shaped n-CdZnO/p-Si heterojunctions for UV photodetectors Rana, V.S., Rajput, J.K., Pathak, T.K., Purohit, L.P. Applied Physics A: Materials Science and Processing, 2021, 127(4), 215
Citations Show abstract View at PublisherOpens in a new tab.
Related documents 44
Article Novel ZnO tetrapod-reduced graphene oxide nanocomposites for enhanced photocatalytic degradation of phenolic compounds and MB dye Kumar, S., Kaushik, R.D., Purohit, L.P. Journal of Molecular Liquids, 2021, 327, 114814 94 Citations Show abstract View at PublisherOpens in a new tab. Related documents
45
Article rGO-ZnO nanocomposites as efficient photocatalyst for degradation of 4-BP and DEP using high temperature refluxing method in in-situ condition Kumar, S., Kaushik, R.D., Upadhyay, G.K., Purohit, L.P. <i>Journal of Hazardous Materials</i> , 2021, 406, 124300 60
Citations Show abstract View at PublisherOpens in a new tab. Related documents
46
Article Optimized CdO:TiO ₂ nanocomposites for heterojunction solar cell applications Upadhyay, G.K., Kumar, V., Purohit, L.P. Journal of Alloys and Compounds, 2021, 856, 157453

Citations Show abstract View at PublisherOpens in a new tab. Related documents
47
Book Chapter Cyanogen: Risk assessment, environmental, and health hazard Purohit, L.P., Kumar, S. Hazardous Gases: Risk Assessment on the Environment and Human Health, 2021, pp. 115–125
Citations Show abstract View at PublisherOpens in a new tab. Related documents
48
Article Heterogeneous Ternary Metal Oxide Nanocomposites for Improved Advanced Oxidation Process under Visible Light Upadhyay, G.K., Pathak, T.K., Purohit, L.P. Crystal Research and Technology, 2020, 55(11), 2000099 17
Citations Show abstract View at PublisherOpens in a new tab. Related documents
49
Article Photoactive CdO:TiO ₂ nanocomposites for dyes degradation under visible light Upadhyay, G.K., Rajput, J.K., Pathak, T.K., Swart, H.C., Purohit, L.P. Materials Chemistry and Physics, 2020, 253, 123191 25 Citations Show abstract View at PublisherOpens in a new tab. Related documents
50
Article Improved stability of gas sensor by inclusion of Sb in nanostructured SnO ₂ thin films grown on sodalime Joshi, G., Rajput, J.K., Purohit, L.P. Journal of Alloys and Compounds, 2020, 830, 154659 26 Citations Show abstract View at PublisherOpens in a new tab. Related documents
51
Article Tailoring and optimization of hybrid ZnO:TiO₂:CdO nanomaterials for advance oxidation process under visible light Upadhyay, G.K., Rajput, J.K., Pathak, T.K., Pal, P.K., Purohit, L.P. Applied Surface Science, 2020, 509, 145326 56 Citations

Show abstract View at PublisherOpens in a new tab. Related documents
52
Article Cascade Structured ZnO/TiO ₂ /CdS quantum dot sensitized solar cell Tyagi, J., Gupta, H., Purohit, L.P. Solid State Sciences, 2020, 102, 106176 40 Citations Show abstract View at PublisherOpens in a new tab. Related documents
53
Article Influence of N₂ flow rate on UV photodetection properties of sputtered p-ZnO/n–Si heterojuctions Rana, V.S., Rajput, J.K., Pathak, T.K., Purohit, L.P. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 586, 124103 19 Citations Show abstract View at PublisherOpens in a new tab. Related documents
54
Article Effect of annealing temperature on the spectroscopic and photoluminescence properties of CdO-ZnO nanocomposites Rajput, J.K., Pathak, T.K., Kumar, D., Swart, H.C., Purohit, L.P. Journal of Modern Optics, 2020, 67(17), pp. 1410–1415 0 Citations Show abstract View at PublisherOpens in a new tab. Related documents
55
Article Realizing enhanced downconversion photoluminescence and high color purity in Dy³+ doped MgTiO₃ phosphor in presence of Li⁺ ion Yadav, R.S., Monika, Rai, E., Purohit, L.P., Rai, S.B. Journal of Luminescence, 2020, 217, 116810 47 Citations Show abstract View at PublisherOpens in a new tab. Related documents
56
Book Chapter Highly luminescent ZnO based upconversion thin films grown by sol-gel spin coating Pathak, T.K., Kroon, R.E., Purohit, L.P., Swart, H.C. <i>Spectroscopy of Lanthanide Doped Oxide Materials</i> , 2019, pp. 327–343
Citations Show abstract

View at PublisherOpens in a new tab. Related documents
57
Article Impact of Sputtering Power on Properties of CdO:ZnO Thin Films Synthesized by Composite Method for Oxygen Gas Sensing Application Rajput, J.K., Pathak, T.K., Purohit, L.P. Journal of Electronic Materials, 2019, 48(10), pp. 6640–6646 13 Citations
Show abstract View at PublisherOpens in a new tab. Related documents
58
Article Synthesis of CdO Nanoflowers by Sol-Gel Method on Different Substrates with Photodetection Application Rajput, J.K., Pathak, T.K., Swart, H.C., Purohit, L.P. Physica Status Solidi (A) Applications and Materials Science, 2019, 216(20), 1900093
Citations Show abstract View at PublisherOpens in a new tab. Related documents
59
Article Cu sputtered Cu/ZnO Schottky diodes on fluorine doped tin oxide substrate for optoelectronic applications Rana, V.S., Rajput, J.K., Pathak, T.K., Purohit, L.P. Thin Solid Films, 2019, 679, pp. 79–85 34 Citations Show abstract View at PublisherOpens in a new tab. Related documents
60
Article • Open access Enhanced electromagnetic absorption in ferrite and tantalum pentoxide based polypyrrole nanocomposite Gairola, P., Purohit, L.P., Gairola, S.P., Bhardwaj, P., Kaushik, S. Progress in Natural Science: Materials International, 2019, 29(2), pp. 170–176 38 Citations Show abstract View at PublisherOpens in a new tab. Related documents
61
Article Synthesis of ZnO:TiO ₂ nanocomposites for photocatalyst application in visible light Upadhyay, G.K., Rajput, J.K., Pathak, T.K., Kumar, V., Purohit, L.P. Vacuum, 2019, 160, pp. 154–163 180 Citations Show abstract

View at PublisherOpens in a new tab. Related documents
62
Article • Open access Controlled sol-gel synthesis of oxygen sensing CdO: ZnO hexagonal particles for different annealing temperatures Rajput, J.K., Pathak, T.K., Kumar, V., Swart, H.C., Purohit, L.P. RSC Advances, 2019, 9(54), pp. 31316–31324 14
Citations Show abstract View at PublisherOpens in a new tab. Related documents
63
Conference Paper Study of zinc doped tellurite glasses using XRD, UV-Vis and FTIR Gangwar, H., Singh, V., Tewari, B.S., Gupta, H., Purohit, L.P. Materials Today: Proceedings, 2019, 17, pp. 329–337 11
Citations Show abstract View at PublisherOpens in a new tab. Related documents
64
Article Multilayer MgZnO/ZnO thin films for UV photodetectors Rana, V.S., Rajput, J.K., Pathak, T.K., Purohit, L.P. Journal of Alloys and Compounds, 2018, 764, pp. 724–729 95
Citations Show abstract View at PublisherOpens in a new tab. Related documents
65
Article Solf assembled Cu deped CdS panestructures on flexible collulose acetate substrates
Self-assembled Cu doped CdS nanostructures on flexible cellulose acetate substrates using low cost sol–gel route Kumar, N., Pathak, T.K., Purohit, L.P., Swart, H.C., Goswami, Y.C. Nano-Structures and Nano-Objects, 2018, 16, pp. 1–8 26 Citations Show abstract View at PublisherOpens in a new tab. Related documents
66
Article Tailoring and optimization of optical properties of CdO thin films for gas sensing applications Rajput, J.K., Pathak, T.K., Kumar, V., Swart, H.C., Purohit, L.P.
Physica B: Condensed Matter, 2018, 535, pp. 314–318 39
Citations Show abstract
View at PublisherOpens in a new tab.

	Related documents
•	67
	Conference Paper Liquid petroleum gas sensing application of ZnO/CdO:ZnO nanocomposites at low temperature Rajput, J.K., Pathak, T.K., Kumar, V., Swart, H.C., Purohit, L.P. AIP Conference Proceedings, 2018, 1942, 080035 3 Citations
	Show abstract View at PublisherOpens in a new tab. Related documents
•	68
	Article CdO:ZnO nanocomposite thin films for oxygen gas sensing at low temperature Rajput, J.K., Pathak, T.K., Kumar, V., Swart, H.C., Purohit, L.P. Materials Science and Engineering: B, 2018, 228, pp. 241–248 44 Citations Show abstract View at PublisherOpens in a new tab. Related documents
,	69
	Article Carbon material-nanoferrite composite for radiation shielding in microwave frequency Gairola, P., Gairola, S.P., Dhawan, S.K., Purohit, L.P., Sharma, S. Integrated Ferroelectrics, 2018, 186(1), pp. 40–48 5
	Citations Show abstract View at PublisherOpens in a new tab. Related documents
•	70
	Article Synthesis and electromagnetic shielding behaviour of poly(o-toluidine)/red mud composite Gairola, S.P., Pande, A., Gairola, P., Purohit, L.P., Dhawan, S.K. Polymers for Advanced Technologies, 2018, 29(1), pp. 560–564 14 Citations Show abstract View at PublisherOpens in a new tab. Related documents
,	71
	Article Encapsulation of Barium Ferrite and Reduced Graphene Oxide in poly(o-toluidine) as a Barrier for Electromagnetic Radiations Gairola, P., Ohlan, A., Gairola, S.P., Dhawan, S.K., Purohit, L.P. Crystal Research and Technology, 2017, 52(11), 1700117 1 Citations Show abstract View at PublisherOpens in a new tab. Related documents

•	72
	Article Influence of sol concentration on CdO nanostructure with gas sensing application Rajput, J.K., Pathak, T.K., Kumar, V., Purohit, L.P. Applied Surface Science, 2017, 409, pp. 8–16 80 Citations Show abstract View at PublisherOpens in a new tab. Related documents
•	73
	Article Annealing temperature dependent investigations on nano-cauliflower like structure of CdO thin film grown by sol-gel method Rajput, J.K., Pathak, T.K., Kumar, V., Kumar, M., Purohit, L.P. Surfaces and Interfaces, 2017, 6, pp. 11–17 52 Citations Show abstract View at PublisherOpens in a new tab. Related documents
•	74
	Article Transparent conducting ZnO-CdO mixed oxide thin films grown by the sol-gel method Pathak, T.K., Rajput, J.K., Kumar, V., Swart, H.C., Kroon, R.E. Journal of Colloid and Interface Science, 2017, 487, pp. 378–387 57 Citations Show abstract View at PublisherOpens in a new tab. Related documents
•	75
	Article Photocatalytic properties of Mn-doped NiO spherical nanoparticles synthesized from solgel method Sankar, S., Sharma, S.K., An, N., Raji, P., Purohit, L.P. Optik, 2016, 127(22), pp. 10727–10734 116 Citations Show abstract View at PublisherOpens in a new tab. Related documents
•	76
	Article Substrate dependent structural, optical and electrical properties of ZnS thin films grown by RF sputtering Pathak, T.K., Kumar, V., Purohit, L.P., Swart, H.C., Kroon, R.E. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 84, pp. 530–536 Citations Show abstract View at PublisherOpens in a new tab. Related documents
•	11

Article

Article

Comparison of Y₂O₃:Bi³⁺ phosphor thin films fabricated by the spin coating and radio frequency magnetron techniques

Jafer, R.M., Yousif, A., Kumar, V., ... Swart, H.C., Coetsee, E. Physica B: Condensed Matter, 2016, 497, pp. 39-44 15 Citations Show abstract View at PublisherOpens in a new tab. Related documents 78 Article Spin coating of ZnS nanostructures on filter paper and their characterization Kumar, N., Purohit, L.P., Goswami, Y.C. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 83, pp. 333-338 Citations Show abstract View at PublisherOpens in a new tab. Related documents 79 Article Fabrication and characterization of nitrogen doped p-ZnO on n-Si heterojunctions Pathak, T.K., Kumar, V., Prakash, J., ... Swart, H.C., Kroon, R.E. Sensors and Actuators, A: Physical, 2016, 247, pp. 475-481 32 Citations Show abstract View at PublisherOpens in a new tab. Related documents 80 Conference Paper Improved conductivity of carbon-nano-fiber (CNF)/polytetrafluoroethylene (PTFE) composite Chandra, S., Kalra, G.S., Pushkar, V.K., ... Pathak, T.K., Purohit, L.P. AIP Conference Proceedings, 2016, 1731, 060006 Citations Show abstract View at PublisherOpens in a new tab. Related documents Article Electrical and optical properties of p-type codoped ZnO thin films prepared by spin coating technique Pathak, T.K., Kumar, V., Swart, H.C., Purohit, L.P. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 77, pp. 1-6 35 Citations Show abstract View at PublisherOpens in a new tab. Related documents 82

Effect of doping concentration on the conductivity and optical properties of p-type ZnO thin films Pathak, T.K., Kumar, V., Swart, H.C., Purohit, L.P. Physica B: Condensed Matter, 2016, 480, pp. 31–35 Citations Show abstract View at PublisherOpens in a new tab. Related documents 83 Article Sputtered Al-N codoped p-type transparent ZnO thin films suitable for optoelectronic devices Pathak, T.K., Kumar, V., Purohit, L.P. Optik, 2016, 127(2), pp. 603-607 28 Citations Show abstract View at PublisherOpens in a new tab. Related documents 84 P-type conductivity in doped and codoped ZnO thin films synthesized by RF magnetron sputtering Pathak, T.K., Kumar, V., Swart, H.C., Purohit, L.P. Journal of Modern Optics, 2015, 62(17), pp. 1368-1373 27 Citations Show abstract View at PublisherOpens in a new tab. Related documents Conference Paper Synthesis of Cu doped ZnS nanostructures on flexible substrate using low cost chemical Kumar, N., Purohit, L.P., Goswami, Y.C. AIP Conference Proceedings, 2015, 1675, 020030 Citations Show abstract View at PublisherOpens in a new tab. Related documents 86 Article High quality nitrogen-doped zinc oxide thin films grown on ITO by sol-gel method Pathak, T.K., Kumar, V., Purohit, L.P. Physica E: Low-Dimensional Systems and Nanostructures, 2015, 74, pp. 551-555 20 Citations Show abstract View at PublisherOpens in a new tab. Related documents

87

Article

Spin coating of highly luminescent cu doped cds nanorods and their optical structural characterizations Kumar, N., Purohit, L.P., Goswami, Y.C. Chalcogenide Letters, 2015, 12(6), pp. 333–338 17 Citations
Show abstract Related documents
88
Conference Paper Synthesis, structural and optical characterization of undoped, N-doped ZnO and codoped ZnO thin films Pathak, T.K., Kumar, R., Purohit, L.P. AIP Conference Proceedings, 2015, 1661, 100009
O Citations Show abstract View at PublisherOpens in a new tab. Related documents
89
Conference Paper Growth of green and blue luminescent Cu doped CdS nanorods and their optical structural characterization Kumar, N., Kumar, V., Purohit, L.P., Goswami, Y.C. Springer Proceedings in Physics, 2015, 166, pp. 347–352 1 Citations Show abstract View at PublisherOpens in a new tab. Related documents
90
Article Preparation and optical properties of undoped and nitrogen doped zno thin films by Risputtering Pathak, T.K., Kumar, R., Purohit, L.P. International Journal of ChemTech Research, 2015, 7(2), pp. 987–993 10 Citations Show abstract Related documents
91
Article Role of swift heavy ions irradiation on the emission of boron doped ZnO thin films for near white light application Kumar, V., Kumar, V., Som, S., Ntwaeaborwa, O.M., Swart, H.C. Journal of Alloys and Compounds, 2014, 594, pp. 32–38 36 Citations Show abstract View at PublisherOpens in a new tab. Related documents

92

Article

Optical dispersion parameters of amorphous Se ₇₀ Te _{30-x} Pb _x films		
Kumar Pal, P., Gupta, H., Purohit, L.P., Kumar, R., Mehra, R.M. Journal of Ovonic Research, 2014, 10(4), pp. 127–139		
4		
Citations		
Show abstract Related documents		
93		
Article		
Doped zinc oxide window layers for dye sensitized solar cells Kumar, V., Singh, N., Kumar, V., Ntwaeaborwa, O.M., Swart, H.C. Journal of Applied Physics, 2013, 114(13), 134506		
76 Citations		
Show abstract		
View at PublisherOpens in a new tab.		
Related documents		
94		
Article		
Role of film thickness on the properties of ZnO thin films grown by sol-gel method Kumar, V., Singh, N., Mehra, R.M., Purohit, L.P., Swart, H.C. <i>Thin Solid Films</i> , 2013, 539, pp. 161–165		
174 Citations		
Show abstract		
View at PublisherOpens in a new tab. Related documents		
95		
Article • Open access		
Effect of swift heavy ion on structural and optical properties of undoped and doped		
nanocrystalline zinc oxide films		
Kumar, V., Singh, R.G., Purohit, L.P., Singh, F.		
Advanced Materials Letters, 2013, 4(6), pp. 423–427		
Citations		
Show abstract		
View at PublisherOpens in a new tab. Related documents		
96		
Article		
Study of photoluminescence behaviour of porous silicon samples prepared at 20mA		
current density		
Gill, F.S., Gupta, H., Purohit, L.P., Kumar, R., Mehra, R.M.		
Journal of Nano- and Electronic Physics, 2013, 5(1), 01019		
2 Citations		
Show abstract		
Related documents		
97		
Article		
Optical dispersion in annealed thin films of S-doped a-Si: H alloys		
Purohit, L.P., Gupta, H., Pal, P.K., Kumar, R., Mehra, R.M.		
Journal of Nano- and Electronic Physics, 2013, 5(1), 01020		

Citations
Show abstract
Related documents

98

Article

Electron beam emission and interaction in 0.3-THz gyrotron for second harmonic, CW operation

Singh, U., Kumar, N., Kumar, A., ... Purohit, L.P., Sinha, A.K. IEEE Transactions on Plasma Science, 2013, 41(4), pp. 929–934, 6488867 Citations Show abstract

View at PublisherOpens in a new tab.

Related documents

99

Conference Paper

MN rule in a-Si:H alloys

Gupta, H., Purohit, L.P., Gill, F.S., Kumar, R. AIP Conference Proceedings, 2013, 1512, pp. 576–577 Citations Show abstract View at PublisherOpens in a new tab. Related documents

100

Synthesis and characterization of aluminum-boron co-doped ZnO nanostructures

Kumar, V., Singh, R.G., Singh, N., ... Mehra, R.M., Purohit, L.P. Materials Research Bulletin, 2013, 48(2), pp. 362-366 39

Citations Show abstract

View at PublisherOpens in a new tab.

Related documents