

11. International/National award/recognition for academics

None

S. No.	Name of award/recognition	Year of Award	Title of the innovation	National/International	Awarding Agency
1.					

12. Extension activity participation

None

S.No.	Name of activity	Year

If any award received-

S. No.	Name of activity	Name of award/recognition	Year of Award	National/International	Awarding Agency

13. Ph.D. supervised

S. No.	Name of the Ph.D. scholar	Title of the Thesis	Year of registration of the scholar	Year of award of Ph.D.
1.	Shalini Srivastava		2019	
2.	Shalini Singh		2019	
3.	Ajeet Kumar Singh		2021	

14. Research/Review Papers published

S. No.	Title of paper	Name of the author/s	Name of Journal	Year of publication	ISSN number	Link to the recognition in UGC enlistment of the Journal		
						Link to website of journal	Link to article/paper/abstract of the article	Is it listed in UGC Care list/Scopus/Web of Science/other, mention
1	Structural and optical characterization of CdS Nanoparticles prepared by chemical precipitation method	Vineet Singh, Pratima Chauhan	Journal of Physics and Chemistry of Solids 70 (2009) 1074-1079	1 July 2009	0022-3697	https://www.journals.elsevier.com/journal-of-physics-and-chemistry-of-solids	https://doi.org/10.1016/j.jpcs.2009.05.024	Yes

2	Surfactant mediated phase transformation of CdS nanoparticles	Vineet Singh, Prashant K Sharma, Pratima Chauhan	Materials Chemistry and Physics 121 (2010) 202-207	15 May 2010	0254-0584	https://www.journals.elsevier.com/materials-chemistry-and-physics	https://doi.org/10.1016/j.matchemphys.2010.01.019	Yes
3	Synthesis of CdS Nanoparticles with Enhanced Optical Properties	Vineet Singh, P.K. Sharma, Pratima Chauhan	Materials Characterization 62 (2011) 43-52	01 Jan 2011	1044-5803	https://www.journals.elsevier.com/materials-characterization	https://doi.org/10.1016/j.matchar.2010.10.009	Yes
4	Study of Pressure Induced Phase transformation in CTAB capped CdS nanoparticles	Vineet Kumar Singh, Pratima Chauhan, K.K. Pandey	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 92 (2012) 64-66	15 June 2012	1386-1425	https://www.sciencedirect.com/journal/spectrochimica-acta-part-a-molecular-and-biomolecular-spectroscopy	https://www.sciencedirect.com/science/article/abs/pii/S138614251200128X	Yes
5	Effect of Indium Doping and Annealing on Photoconducting Property of Wurtzite type CdS	Vineet Kumar Singh, Pratima Chauhan, Sheo Kumar Mishra, Rajneesh K. Srivastava	Electronic Materials Letters 8 (2012) 295-299	01 June 2012	1738-8090	https://www.springer.com/journal/13391	https://link.springer.com/article/10.1007/s13391-012-2011-4	Yes
6	Synthesis and Structural Properties of Wurtzite type CdS Nanoparticles	Vineet Singh, Pratima Chauhan	Chalcogenide Letters 6 (2009) 421-426	12 Sep 2009	1584-8663	https://chalcogen.ro/index.php/journals/chalcogenide-letters	https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1085.508&rep=rep1&type=pdf	Yes
7	Effect of Diffusion of Parameters on the Efficiency of c-Si Solar Cell	Vineet Kumar Singh, Jampana Nagaraju	Advanced Materials Letters 6 (2015) 600-606	01 June 2015	0976-3961	https://aml.iaamonline.org/	https://aml.iaamonline.org/article_14698.html	Yes
8	Radial junction silicon solar cells with micro-pillar array and planar electrode interface for improved photon management and carrier extraction	Vineet Kumar Singh, Jampana Nagaraju, Sushobhan Avasthi	Current Applied Physics 19 (2019) 341-346	27 Dec 2018	1567-1739	https://www.journals.elsevier.com/current-applied-physics	https://www.sciencedirect.com/science/article/abs/pii/S1567173918303390	Yes

9	Bulk and interface defects analysis of n-CdS/p-Si heterojunction solar cell	Shalini Srivastava, Shalini Singh, Vineet Kumar Singh,	Optical Materials 111 (2020) 110687	30 Nov 2020	0925-3467	https://www.journals.elsevier.com/optical-materials	https://www.sciencedirect.com/science/article/abs/pii/S0925346720310272	Yes
10	Numerical investigation of silicon heterojunction solar cell with zinc selenide as electron-selective and nickel oxide as hole-selective contacts	Shalini Srivastava, Rajan Walia, Madan Singh Chauhan, Ravi S. Singh, Vineet Kumar Singh	Optical Materials 127 (2022) 112328	05 April 2022	0925-3467	https://www.journals.elsevier.com/optical-materials	https://www.sciencedirect.com/science/article/abs/pii/S0925346722003627	Yes
11	Fabrication of n ⁺ -poly-Si/ p ⁺ -c-Si tunnel diode using low pressure chemical vapour deposition for photovoltaic applications	Vineet Kumar Singh	Advanced Materials Letters (Accepted, 2022)		0976-3961	https://aml.iaamonline.org/		Yes
12	Performance analysis of n-TiO ₂ /p-Cu ₂ O, n-TiO ₂ /p-WS ₂ , and n-TiO ₂ /p-WS ₂ /p-Cu ₂ O heterojunction solar cells through numerical modelling	Ajeet Kumar Singh, Rajan Walia, Madan Singh Chauhan, Ravi S Singh, Vineet Kumar Singh	Optical Materials (Under Review, April 2022)		0925-3467	https://www.journals.elsevier.com/optical-materials		Yes

15. Books and chapters in edited volumes/ books published

None

S.No	Title of the book	Title of the chapter	National /International	Year of Publication	ISBN number	Affiliating institute at the time of publication	Name of the publisher

16. Papers in national/international conference proceedings

S. No	Title of the Proceeding of the conference	Name of the conference	National /International	Year of Publication	ISBN/ISSN Number of the proceeding	Affiliating institute at the time of publication
1	23rd International Conference on High Pressure Science	International Conference on High Pressure Science	International	2011	1742-6596	University of Allahabad

Pressure Science and Technology (AIRAPT-23)	and Technology, BARC, 25Sep-30Sep-2011				
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17. Professional development Programmes, viz Orientation programme, Refresher course, Short term course, Faculty development Programmes

S.No.	Year	Title of the Professional Development Programme	Date and Duration (from- to)
1	2020	HRDC-UGC Sponsored Orientation Programme	January 04, 2022-January 24, 2020, at Human Resource Development Centre, DDU Gorakhpur University, Gorakhpur
2	2021	7 Days online workshop on Research Methodology for Multidisciplinary Perspectives of Physics	June 29, 2021 - July 05, 2021, at Department of Physics, DDU Gorakhpur University, Gorakhpur
3	2022	Online Inter-Disciplinary two-week refresher course on "Managing Online Classes & Co-creating MOOCS 11.0"	Feb 07, 2022-Feb 21, 2022, at Teaching Learning Centre, Ramanujan College, University of Delhi

18. Research project sponsored by government agencies

S.No.	Name of the Principal Investigator	Name of the research project	Name of funding agency	Amount/Fund provided	Year of sanction	Duration of project	Status (completed/ongoing)
1	Vineet Kumar Singh	Study of thermal stability of AZO thin film for Perovskite/Silicon Tandem Solar Cell Application	UGC	10 Lacs	2019	2 years (Extended one more year)	Ongoing

19. Research project sponsored non-government sources such as industry, corporate houses, international bodies

None

S.No.	Name of the Principal Investigator	Name of the research project	Name of funding agency	Amount/Fund provided	Year of sanction	Duration of project	Status (completed/ongoing)

20. Patents filed/granted

None

S.No.	Name of Patent filed/granted	Patent number	Year of filling/award/published of patent

21. Collaborative activities with other institutions/ research establishments/ industry for research and academic development

None

Title of the collaborative activity	Name of the Collaborating agency with contact	Year of collaboration	Duration	Nature of activity

	details			

22. Functional MoUs with institutions/industries in India and abroad for internship, on the job training, project work, student/faculty exchange and collaborative research None

Name of the organisation/industry With whom MoU is signed	Year of signing MoU	Duration of MoU	Actual activities Under each MoU Year wise

23. E-content is developed

i - For e-PG- Pathshala, ii- For CEC (Under Graduate), iii- For SWAYAM, iv- For other MOOCs platform, v- For NPTEL/NMEICT/any other Government Initiatives

Name of the Module developed	Platform on which module is developed	Date of launching e content	Link to the relevant document and facility available in the institution	List of e-content development facility available	Provide link to videos of the mediacentre and recording facility
UG and PG Contents	e-Pathshala DDUGU				For UG: https://erp.ddugu.ac.in/epathshala_content.aspx For PG: https://erp.ddugu.ac.in/epathshala_content.aspx

24. Consultancy and corporate training-

Consultancy None

Name of consultancy project	Consulting/sponsoring agency with contact details	Year	Revenue generated (Rs.)

Corporate training None

Title of corporate training program	Agency seeking training with contact details	Year	Revenue generated (Rs.)	Number of trainees

25. Details of Conference/Seminar attended-

Year	Name of the Conference/workshop	International/National/State	Name of the professional body for which membership fee provided	Amount support (INR)

Sl. No.	Title of the Paper presented	Title of Conference/Seminar	Organized by	Whether international/national/state/regional/college or university level
1	Conversion Efficiency beyond 26.7% in Silicon-based Tandem Solar Cell (Invited Lecture)	International e-Conference on Advanced Functional Materials and Optoelectronic Devices	Centre for Renewable Energy, VBS Purvanchal University, Jaunpur,	International June 13-15, 2020
2.	Recent advances in Solar Energy in India (Invited Lecture)	Environment, Technology and Sustainable Development: Issues and Challenges	Department of Sociology, DDU Gorakhpur University, Gorakhpur,	National February 22-23, 2019
3.	About Silicon Solar Cell (Invited Lecture)	Biofisica-2K18	Department of Physics, Ewing Christian College, Allahabad University	National January 19-20, 2018
4.	Solar Energy (Invited Lecture)	National Symposium-cum-Workshop on Recent Trends in Physics (NSWRTP-2018)	Department of Physics, R.B. College, Lalit Narayan Mithila University, Darbhanga	National April 7 th , 2018
5.	Perovskite Solar Cell	One day e-Conference on Perovskite Solar Cell	Translational Perovskite Research Council, MIT, USA	International June 30, 2020
6.	Tunnel Diodes for Perovskite/Silicon Tandem Solar Cell	IUMRS-ICYRAM 2016,	IISc, Bangalore, India,	International December 11-15, 2016
7.	Bring the Nanoworld Together	BTNT-2016 Oxford Instruments Nanotechnology Workshop	IISc, Bangalore, India	International November 22-23, 2016
8.	Fabrication of Esaki tunnel Diode for Silicon/Perovskite Tandem Solar Cell	CEMAT-2016,	IISc, Bangalore, India	International July 18-19, 2016
9.	Effect of Doping Parameters on Si Solar Cell Efficiency	IUMRS ICA-2013,	IISc, Bangalore, India	International December 16-20, 2013
10.	Eighth ISSS International Conference on Smart Materials, Structure & Systems	ISSS-2017	IISc, Bangalore, India,	International July 5-7, 2017.
11.	Structural and electrical properties of CdO particles	4 th International Conference INDIAS 2010	Department of Physics, University of Allahabad, India	International September 19-21, 2010
12.	Thiophenol assisted phase transformation in CdS nanoparticles and their application in solar cells	11 th International Conference of the International Academy of Physical Sciences,	Institute of Interdisciplinary Studies, University of Allahabad, India	International February 20-22, 2010

13	PL Enhancement in CdS nanoparticles	IRNANO-2009	Department of Physics, University of Delhi, India,	International Nov 24-26, 2009
14	International Conference on Transport and Optical Properties of Nanomaterials	ICTOPON 2009	Department of Physics, University of Allahabad, India	International January 5-8, 2009
15	Band gap studies of Nano crystalline CdS	ICONSAT- 2008	Chennai, India,	International February 27-29, 2008
16	Synthesis of CdS nanoparticles to study the structural and optical Properties	MMISLIBS-2010	Department of Physics, University of Allahabad	International Dec 21-23, 2010
17	International Symposium on Clusters, Cluster Assemblies and Nano-scale Materials	International Symposium on Clusters, Cluster Assemblies and Nano-scale Materials	Harish-Chandra Research Institute, Allahabad, India	International February 9-11, 2009
18	Indo-Polish Workshop on Liquid Crystals: Synthesis, Characterization and Molecular Engineering	Indo-Polish Workshop on Liquid Crystals: Synthesis, Characterization and Molecular Engineering	Department of Physics, University of Allahabad, India	International December 12 th 2007
19	International Virtual School on Ion Beams in Materials Science	International Virtual School on Ion Beams in Materials Science,	IUAC, New Delhi	International December 1-5, 2020
20	Seven Day International Webinar	Seven Day International Webinar on Survival Strategies for Post Covid-19 Era	ECC, Allahabad University, Allahabad	International May 20-26, 2020
21	Materials Science: Synthesis and Characterization	e-faculty development program on Materials Science: Synthesis and Characterization	Shri Vaishnav Vidyapeeth Vishwavidyalaya	National May 11-15, 2020
22	BARC Outreach Programme	BARC Outreach Programme,	DSW and Department of Physics, DDU Gorakhpur University	National January 16, 2019
23	Clean electricity from silicon solar cell	National Symposium on Advanced Materials Science	Department of Physics, DDU Gorakhpur University Gorakhpur	National December 7-8, 2018
24	Synthesis of CdS nanoparticles by chemical precipitation method	National Conference on Emerging Trends in Laser and Spectroscopy and Application (MMSETLSA-2009),	Department of Physics, University of Allahabad, India	National March 23-25, 2009

25	Surfactant Mediated Phase Transformation of CdS nanoparticles	NSALSN-2011	Department of Physics, Nehru Gram Bharti University, Allahabad, India	National March 5-7, 2011
26	Different Capping Reagent effect on Nucleation and Growth Mechanism Of CdS Nanoparticles	National Seminar on Contemporary Research in Material Science and Chemical Biology	Department of Chemistry, University of Allahabad, Allahabad	National Jan 31-2 nd Feb, 2010
27	Synthesis and Characterization of CdS Nanoparticles	National conference on Nanomaterials and Nanotechnology,	Department of Physics, University of Lucknow, Lucknow, India,	National December 8-10, 2007
28	National Symposium on Nano Science & Technology	NSNST-2017	CeNSE, IISc, Bangalore, India	National July 2-4, 2017
29	National Workshop on Characterization and properties of Exotic Materials	National Workshop on Characterization and properties of Exotic Materials	Department of Physics, University of Allahabad, India	National January 10-12, 2011
30	School on Optical Characterizations	School on Optical Characterizations	Inter University Accelerator Center, New Delhi, India	National June 30 th - July 2 nd , 2008
31	Numerical simulation of TiO ₂ /WS ₂ /Cu ₂ O heterojunction solar cells using Cu ₂ O as hole transport layer and TiO ₂ as electron transport layer	INTERNATIONAL CONFERENCE On RENEWABLE ENERGY	CENTRE FOR NON-CONVENTIONAL ENERGY RESOURCES (CNCER), UNIVERSITY OF RAJASTHAN, JAIPUR, INDIA	International February 25-27, 2022
32	Deposition of AZO thin film for photovoltaic applications	INTERNATIONAL CONFERENCE On RENEWABLE ENERGY	CENTRE FOR NON-CONVENTIONAL ENERGY RESOURCES (CNCER), UNIVERSITY OF RAJASTHAN, JAIPUR, INDIA	International February 25-27, 2022

26. Any other information:

- 1) **Life Time Member of society**– Materials Research Society of India
- 2) **Referees of Journals**- Journal of Physics and Chemistry of Solids, Springer
- 3) ADSW – (2019-2020)