

# Faculty Achievements 2022-2023

## (a) Papers published in UGC listed journals

S. No	Level/type (national/international)	Papers published in UGC listed journals	Citations	h-index (based on Scopus/Web of science)	Impact factor range/Average Impact factor	Web-Link of publication (Doi)
1	International	M. Kria, Vijit V. Nautiyal, K. Lakaal1, J. El Hamdaoui1, L. M. Perez , Varsha, D. Laroze, V. Prasad, G. Long, E. Feddi	0	39	3.718	<a href="https://doi.org/10.3389/fphy.2022.942758">https://doi.org/10.3389/fphy.2022.942758</a>
2.	International	Varsha; Giri R.; Arora, M.; Prasad, V,	0	28	1.702	<a href="https://doi.org/10.31349/RevMexFis.68.050504">https://doi.org/10.31349/RevMexFis.68.050504</a>
3.	International	Seema Gupta, Ankur Anand, Neeru, Rachana Kumar. Rate Kinetics and isotherm study of step functionalised carbon nanotubes gas sensor for NO <sub>2</sub> adsorption. Materials Today Proceedings. Volume 67, part 5, pages 701-708,, ISSN 2214-7853 f		65		<a href="https://doi.org/10.1016/j.matpr.2022.06.544">https://doi.org/10.1016/j.matpr.2022.06.544</a>
4.	International	Bassi, M., & Baluja, K. L. (2022). Moments of probability density of Hydrogen atom in a cage. Indian Journal of Physics, 1-7.	none	34	1.947	<a href="https://doi.org/10.1007/s12648-022-02463-4">https://doi.org/10.1007/s12648-022-02463-4</a>

5.	International	Varsha, Lakaal, K., Kria, M., Hamdaoui, J. E., Prasad, V., Feddi, E., Laroze, D., & Mora Ramos, M. E. (2022). Lattice deformation and potential effects on linear and nonlinear optical properties of doped SiGe quantum dots encapsulated in the Si matrix. <i>The European Physical Journal Plus</i> , 137(12), 1-13,21905444	1	76	3.758	<a href="https://doi.org/10.1140/epjp/s1360-022-03530-9">https://doi.org/10.1140/epjp/s1360-022-03530-9</a>
6.	International	Kria, M., Nautiyal, V. V., Lakaal, K., El Hamdaoui, J., Pérez, L. M., Varsha, Laroze, D., Prasad, V., Long, G. & Feddi, E. (2022). Rashba effect on linear and nonlinear optical properties of a cylindrical core/shell heterojunction quantum dot. <i>Frontiers in Physics</i> , 10, 942758, 2296-424X	1	50	3.718	<a href="https://doi.org/10.3389/fphy.2022.942758">https://doi.org/10.3389/fphy.2022.942758</a>
7.	International	Varsha, Arora, M., Gambhir, M., & Prasad, V. (2023). Anomalous Stark effect and optical properties of exciton in a quantum dot with linear potential under ionized donor hydrogenic impurity. <i>Current Applied Physics</i> , 48, 17-28, 15671739	0	95	2.856	<a href="https://doi.org/10.1016/j.cap.2023.01.004">https://doi.org/10.1016/j.cap.2023.01.004</a>
8.	International	Arora, M., Giri, R., Varsha, Kumar, K., Yadav, C., Vidhani, B., Gambhir, M., & Prasad, V. (2023). Effect of electric and magnetic field on thermal property of two dimensional	0	83	4.565	<a href="https://doi.org/10.1016/j.rinp.2023.106225">https://doi.org/10.1016/j.rinp.2023.106225</a>

		harmonic oscillator. Results in Physics, 45, 106225, 22113797				
9.	International	Varsha, Kria, M., Nautiyal, V. V., Lakaal, K., Laroze, D., Pérez, L. M., Prasad, V., & Feddi, E. (2023). Optical properties of donor impurity in Yukawa like potential: application to SiGe/Si and Si/SiGe. <i>Physica Scripta</i> , 98(5), 055914, 14024896	0	91	3.081	10.1088/1402-4896/acc7d5
10.	International	Varsha, Giri, R., Arora, M., & Prasad, V. (2022). Hydrogenic impurity effect on optical properties of Wannier-Mott exciton confined in a spherical quantum dot with Kratzer potential under magnetic field. <i>Revista Mexicana de Física</i> , 68(5), 050504-1, 0035001X	0	30	1.702	<a href="https://doi.org/10.31349/RevMexFis.68.050504">https://doi.org/10.31349/RevMexFis.68.050504</a>
11.	International	Seema Gupta, Ankur Anand, Neeru, Rachana Kumar, Analytical modeling of adsorption for pristine and functionalized carbon nanotubes as gas sensors, April, 2022,	65		0.678	<a href="https://doi.org/10.3515/ijmr-2021-8712">https://doi.org/10.3515/ijmr-2021-8712</a>
12.	International	Maya Verma, Amit Tanwar, Divya Haridas, Rashmi Menon, Sreenivas, "Conduction mechanism in excess Bismuth doped Strontium Bismuth Niobate ceramics", Journal of	2	148	3.49	<a href="https://doi.org/10.1016/j.jssc.2021.122825">https://doi.org/10.1016/j.jssc.2021.122825</a>

		Solid Chemistry (2022) 122825	State 307				
13.	International	Maya Verma, Divya Haridas, Amit Tanwar, Rashmi Menon, Rajni Jain, K. Sreenivas, "Effect of annealing temperature and thickness on the structural and optical properties of strontium bismuth niobate films", Thin Solid Films 776 (2023) 139885	nil	199	2.306	<a href="https://doi.org/10.1016/j.tsf.2023.139885">https://doi.org/10.1016/j.tsf.2023.139885</a>	
14.	National	Seema Gupta, The influx of sound dynamics: A perspective of music and Physics, Vageeshwar47, 0975-7872i, XXXVI, 39-				Print	
15.	International	Seema Gupta, Ankur Anand, Neeru, Rachana Kumar, Analytical modelling of adsorption isotherms of pristine and functionalized carbon nanotubes as gas sensors, International journal of material research, 114(7-8), ISSN 1862-5282			<1	10.1515/ijmr-2021-8712	
16.	International	Bassi, M., & Baluja, K. L. (2023). Moments of probability density of Hydrogen atom in a cage. Indian Journal of Physics, 97(3), 719-725.	0	34	1.93	<a href="https://doi.org/10.1007/s12648-022-02463-4">https://doi.org/10.1007/s12648-022-02463-4</a>	
17.	International	C.V. Ahmad, R. Gupta, K. Chakraborty, D.K. Swami, P. Verma	0	127	7.279	<a href="https://doi.org/10.1016/j.nimb.2022.08.010">https://doi.org/10.1016/j.nimb.2022.08.010</a>	

18.	International	Lamichhane S., Sharma S., Tomar M., Chowdhuri A. Effect of variation in glancing angle deposition on resistive switching property of WO <sub>3</sub> thin films for RRAM devices. Journal of Applied Physics, 132, 134102 (2022); <a href="https://doi.org/10.1063/5.0103236">https://doi.org/10.1063/5.0103236</a> . ISSN: 0021-8979	0	10	2.877	<a href="https://doi.org/10.1063/5.0103236">https://doi.org/10.1063/5.0103236</a>
19.	International	Lamichhane S., Sharma S., Tomar M., Chowdhuri A. (2022). Impact of laser energy on resistive switching properties of BiFeO <sub>3</sub> thin films. Materials Chemistry and Physics, 126824 In Press.126824 ISSN: 0254-0584	0	10	4.778	<a href="https://doi.org/10.1016/j.matchemphys.2022.126824">https://doi.org/10.1016/j.matchemphys.2022.126824</a>
20	International	Kumar R.,Gupta S., Anand A.(2023)Analytical modelling of adsorption isotherms for pristine and functionalized carbon nanotubes as gas sensors International Journal of Materials Research (IJMR)	0	0		<a href="https://doi.org/10.1515/ijmr-2021-8712">https://doi.org/10.1515/ijmr-2021-8712</a>

**(b) Papers published in peer reviewed journals**

S. N o	Level/type (national / international)	Papers published in Peer Reviewed Journal	Citations	h-index (based on Scopus/ Web of science)	Impact factor range/Average Impact factor	Web-Link of publication (Doi)

				ce)			
1.	International	Shiva Lamichhane, Savita Sharma, Monika Tomar, Arijit Chowdhuri. Effect of variation in glancing angle deposition on resistive switching property of WO <sub>3</sub> thin films for RRAM devices. Journal of Applied Physics, 132, 134102 (2022); <a href="https://doi.org/10.1063/5.0103236">https://doi.org/10.1063/5.0103236</a> . ISSN: 0021-8979	0	10	2.877	<a href="https://doi.org/10.1063/5.0103236">https://doi.org/10.1063/5.0103236</a>	
2.	International	Shiva Lamichhane, Savita Sharma, Monika Tomar and Arijit Chowdhuri. (2022). Impact of laser energy on resistive switching properties of BiFeO <sub>3</sub> thin films. Materials Chemistry and Physics, 126824 In Press.126824 ISSN: 0254-0584	0	10	4.778	<a href="https://doi.org/10.1016/j.matchempphys.2022.126824">https://doi.org/10.1016/j.matchempphys.2022.126824</a>	
3.	National	Pushpa Bindal, Triranjita Srivastava, Shweta Tiwari, Yati Gupta, Vanshika Singh, Sakshi (2023), "A Study of Scientific Implementation of Python to Physics", Yearly academic journal Kalindi College, Vol. 22., pages 47-53, ISSN: 2348-9014. Kalindi College.	NA	NA	NA	NA	
4.	International	Gulati, S., Gokhale, S., & Luthra, V. (2023). Effects of Yb <sup>3+</sup> Doping on Structural, Morphological, and Temperature Dependent Magnetic Properties of MnFe <sub>2</sub> O <sub>4</sub> Nanoparticles. Journal of Superconductivity	11	2	1.7	<a href="https://doi.org/10.1007/s10948-023-06534-3">https://doi.org/10.1007/s10948-023-06534-3</a>	

		and Novel Magnetism, 36(3), 1033-1041. <a href="https://doi.org/10.1007/s10948-023-06534-3">https://doi.org/10.1007/s10948-023-06534-3</a>					
5.	International	Jain, R., & Gulati, S. (2023). Influence of Fe <sup>2+</sup> substitution on FTIR and Raman spectra of Mn ferrite nanoparticles. <i>Vibrational Spectroscopy</i> , 126, 103540.	11	2	2.382	<a href="https://doi.org/10.1016/j.vibspec.2023.103540">https://doi.org/10.1016/j.vibspec.2023.103540</a>	
6.	International	Sharma, S., Tomar, M., & Gulati, S. (2023). Impact of top metal electrodes on current conduction in WO <sub>3</sub> thin films. <i>International Journal of Materials Research</i> , (0).	11	2	0.678	<a href="https://doi.org/10.1515/ijmr-2021-8723">https://doi.org/10.1515/ijmr-2021-8723</a>	
7.	International	Gulati, S., & Jain, R. (2023). Structural, Morphological, and Magnetic Properties of Fe <sup>2+</sup> -Substituted Mn Ferrite Nanoparticles for Biomedical Applications. <i>Journal of Superconductivity and Novel Magnetism</i> , 1-11	11	2	1.675	<a href="https://doi.org/10.1007/s10948-023-06570-z">https://doi.org/10.1007/s10948-023-06570-z</a>	
8.	National	Gulati, S., and Kumar, R. K., Effect of Morality and Annealing on Structural and Magnetic Properties of MnFe <sub>2</sub> O <sub>4</sub> . Peer-Reviewed Yearly Academic journal 2022-23 (ISSN : 2348-9014), XXII, 75-82.	NA	NA	NA	NA	
9.	International	Gulati, S. (2023). Influence Of Dopants Fe <sup>2+</sup> And Yb <sup>3+</sup> On Structural And Optical Properties Of MnFe <sub>2</sub> O <sub>4</sub> Nanoparticles. <i>IOSR Journal of Applied Physics (IOSR-JAP)</i> , 15 (3) .01-09		NA	NA	10.9790/4861-1503010109	

<b>1 0.</b>	National	Kumar R., Gupta S., Anand A.(2022). Impact of Tin Oxide step functionalization on Recovery Time of Carbon nanotube gas sensors. Vol. IX, No. 5: 2022 ISSN: 2277-7067 Pp 334-348	NA	NA	NA	NA
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**(c) Monographs, Books, Chapters in National/International books with ISBN number.**

S.N o	Level/type (national/international)	Monographs, Books, Chapters in books Published with ISBN	Citatio ns	h-index (based on Scopus / Web of science )	Impact factor range/Average Impact factor	Web-Link publication (Doi) of
1	International	Sharma, S., Paliwal, A., Kumar, P., Saxena, N. (2023). II-VI Semiconductor-Based Optical Gas Sensors. In: Korotcenkov, G. (eds) Handbook of II-VI Semiconductor-Based Sensors and Radiation Detectors. Springer, Cham. pp. 307-333, ISBN: 978-3-031-23999-1 <a href="https://doi.org/10.1007/978-3-031-24000-3_12">https://doi.org/10.1007/978-3-031-24000-3_12</a>	NIL	NIL	NIL	<a href="https://doi.org/10.1007/978-3-031-24000-3_12">https://doi.org/10.1007/978-3-031-24000-3_12</a>
2	International	Meena, R. K., Fageria, P., Sharma, A., Gaur, A., Gulati, S., and Kumari Rupa, Achiral Polymer Supported Polymer Catalyst, CRC press, USA, ISBN:9780367484422; 9781003039785	NIL	NIL	NIL	NA

3	International	Jain, R., and Gulati, S., Chapter "An overview of hysteresis motor in book Special Electrical Machines, Wiley-Scrivener imprint.	NIL	NIL	NIL	NA
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**(d) Details of teachers invited as resource persons for Refresher courses, Orientation courses, Seminars, Workshops, Conferences at state, national and international levels.**

Name of Faculty	Resource Person for (Refresher courses, Orientation courses, Seminars, Workshops, Conferences)	Levels
Prof Rachana Kumar	Resource person in national Student's Seminar , organised by Physithon, Department of Physics, Kalindi College held on 19-20 April, 2023 at Kalindi College	National
Prof. Pushpa Bindal	Resource Person in National Students' Seminar "Physithon-The Physics Society", held on 19-20th April 2023 organised by the Department of Physics in Kalindi College.	National
	Resource person for evaluation of reports on experiments in the prelims round for NAEST, organized by NANI and IAPT during October 2022.	National
	Resource person for evaluation of reports on experiments in the prelims round for NAEST, organized by NANI and IAPT during October 2022	National
Dr. Sudha Gulati	Invited as Resource person in national seminar on "national students' seminar" Organised by physithon society department of physics, kalinda college held on 19th-20th april, 2023, at Kalindi College	National
Dr. Seema Gupta	National students seminar organized by department of Physics, Kalindi college, 19.4.23	National
Prof. Monika Bassi	Invited as Resource Person in a two-day National Seminar on "Dr. B. R. Ambedkar: A symbol of knowledge" held on 28th – 29th September 2022, organized by Dr. B. R. Ambedkar Center, Kalindi College.	National
	Invited as a Resource Person in Two-day National Students' Seminar on "Recent advances in Physics: Exploring the possibilities" held on 19-20 April 2023, organized by Physithon Society, Department of Physics, Kalindi College.	National
Dr. Rashmi Menon	Seminar, Invited as Resource person and Judged the Session-II in National Student Seminar on "RECENT ADVANCES IN PHYSICS: Exploring the Possibilities". Organised by Department of Physics, Kalindi College held on 19th-20th April, 2023, at Kalindi College, University of Delhi.	National
Ms. Varsha	Seminar, Invited as Resource person and Judged the Session-II in National Student Seminar on "RECENT ADVANCES IN PHYSICS: Exploring the Possibilities". Organised by Department of Physics, Kalindi College held on	National

	19th-20th April, 2023, at Kalindi College, University of Delhi.	
Dr. Savita Sharma	Invited as a Resource Person in Two-day National Students' Seminar on "Recent advances in Physics: Exploring the possibilities" held on 19-20 April 2023, organized by Physithon Society, Department of Physics, Kalindi College.	National
	Resource person for evaluation of reports on experiments in the prelims round for NAEST, organized by NANI and IAPT during October 2022.	National