



Department of Physics, University of Jammu

Research Publications

Period: January 2022 – Dec, 2023

S.No.	Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISSN number	Link to the recognition in UGC enlistment of the Journal		
							Link to website of the Journal	Link to article/paper /abstract of the article	Is it listed in UGC Care list/Scopus/ Web of Science /other, mention
YEAR: 2022									
1.	Measurement of prompt D^0 , Λ^+c , and $\Sigma^0, ++c(2455)$ production in pp collisions at $\sqrt{s}=13\text{TeV}$	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	Phys. Rev. Lett.	2022	0031-9007		https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.128.012001	yes

2.	Charm-quark fragmentation fractions and production cross section at midrapidity in pp collisions at the LHC	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Phys.Rev.D</i>	2022	1550-7998		https://journals.aps.org/prd/abstract/10.1103/PhysRevD.105.L011103pdf	yes
3.	Production of light (anti)nuclei in pp collisions at $\sqrt{s}=13\text{TeV}$	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al.,(ALICE Collaboration)	Physics	<i>JHEP</i>	2022	1029-8479		https://link.springer.com/article/10.1007/JHEP01(2022)106	yes
4.	Measurement of inclusive charged-particle b-jet production in pp and p-Pb collisions at $\sqrt{s_{NN}}=5.02\text{TeV}$	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>JHEP</i>	2022	1029-8479		https://inspirehep.net/files/6acd0aa80e2d0d1f8e840113031f0b97https://link.springer.com/article/10.1007/JHEP01(2022)178	yes
5.	Prompt D_0 , D^+ , and D^{*+} production in Pb-Pb collisions at $\sqrt{s_{NN}}=5.02\text{TeV}$	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>JHEP</i>	2022	1029-8479		https://link.springer.com/article/10.1007/JHEP01(2022)174	yes

6.	<p>Nuclear modification factor of light neutral-meson spectra up to high transverse momentum in p-Pb collisions at $\sqrt{s_{NN}} = 8.16$ TeV</p> <p>Anju Bhasin,</p> <p>Sanjeev S. Sambyal, Anik Gupta, Ramni Guptaet al., (ALICE Collaboration)</p> <p>Anju Bhasin,</p> <p>Sanjeev S. Sambyal, Anik Gupta, Ramni Guptaet al., (ALICE Collaboration)</p> <p>Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)</p>	<p>Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)</p>	Physics	<i>Phys.Lett.B</i>	2022	0370-2693.		<p>https://www.sciencedirect.com/science/article/pii/S0370269322000776?via%3Dihub</p>	yes
7.	<p>Measurement of prompt D+s-meson production and azimuthal anisotropy in Pb-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV</p>	<p>Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)</p>	Physics	<i>Phys.Lett.B</i>	2022	0370-2693.		<p>https://www.sciencedirect.com/science/article/pii/S0370269322001204?via%3Dihubhttps://arxiv.org/pdf/2110.10006.pdf</p>	yes

8.	Measurement of the groomed jet radius and momentum splitting fraction in pp and Pb-Pb collisions at $\sqrt{s_{NN}}=5.02\text{TeV}$	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	Phys. Rev. Lett.	2022	0031-9007		https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.128.102001	yes
9.	Production of Λ and K^0_S jets in p-Pb collisions at $\sqrt{s_{NN}}=5.02\text{TeV}$ and pp collisions at $\sqrt{s}=7\text{TeV}$	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Phys.Lett.B</i>	2022	0370-2693.		https://www.sciencedirect.com/science/article/pii/S0370269322001186?via%3Dihub	yes
10	Measurement of $K^*(892)$ production in inelastic pp collisions at the LHC	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Phys.Lett.B</i>	2022	0370-2693.		https://www.sciencedirect.com/science/article/pii/S0370269322001472?via%3Dihub	yes

11	Prompt and non-prompt J/ψ production cross sections at midrapidity in proton-proton collisions at $\sqrt{s} = 5.02$ and 13 TeV	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	Journal of High Energy Physics (JHEP)	2022	1029-8479		https://link.springer.com/article/10.1007/JHEP03(2022)190	yes
12	Production of light (anti)nuclei in pp collisions at $\sqrt{s} = 5.02$ TeV	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Eur.Phys.J.</i>	2022	1434-6052		https://link.springer.com/article/10.1140/epjc/s10052-022-10241-z	yes
13	Observation of a multiplicity dependence in the p_T -differential charm baryon-to-meson ratios in proton-proton collisions at $\sqrt{s} = 13$ TeV	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Phys.Lett.B</i>	2022	0370-2693.		https://www.sciencedirect.com/science/article/pii/S037026932200199X?via%3Dihub	yes
14	Investigating the role of strangeness in baryon-antibaryon annihilation at the LHC	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Phys.Lett.B</i>	2022	0370-2693.		https://www.sciencedirect.com/science/article/pii/S0370269322001940?via%3Dihub	yes

15	Investigating charm production and fragmentation via azimuthal correlations of prompt D mesons with charged particles in pp collisions at $s\sqrt{=13\text{TeV}}$	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Eur.Phys.J</i>	2022	1434-6052		https://link.springer.com/article/10.1140/epjc/s10052-022-10267-3	yes
16	Polarization of Λ and $\bar{\Lambda}$ hyperons along the beam direction in Pb-Pb collisions at $s\sqrt{=5.02\text{TeV}}$	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Phys. Rev. Lett.</i>	2022	0031-9007		https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.128.172005 https://arxiv.org/pdf/2107.11183.pdf	yes
17	Measurements of the groomed and ungroomed jet angularities in pp collisions at $s\sqrt{=5.02\text{TeV}}$	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>JHEP</i>	2022	1029-8479		https://link.springer.com/article/10.1007/JHEP05(2022)061	yes

18	Direct observation of the dead-cone effect in quantum chromodynamics	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Nature</i>	2022	1548-7091.		https://www.nature.com/articles/s41586-022-04572-w	yes
19	Inclusive, prompt and non-prompt J/ψ production at midrapidity in p-Pb collisions at $\sqrt{s_{NN}}=5.02\text{TeV}$	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>JHEP</i>	2022	1029-8479		https://link.springer.com/article/10.1007/JHEP06(2022)011	yes
20	Forward rapidity J/ψ production as a function of charged-particle multiplicity in pp collisions at $\sqrt{s}=5.02$ and 13 TeV	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>JHEP</i>	2022	1029-8497		https://link.springer.com/article/10.1007/JHEP06(2022)015	yes

21	Multiplicity dependence of charged-particle jet production in pp collisions at $\sqrt{s}=13$ TeV	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Eur.Phys.J</i>	2022	1434-6052		https://link.springer.com/article/10.1140/epjc/s10052-022-10405-x	yes
22	Neutral to charged kaon yield fluctuations in Pb–Pb collisions at $\sqrt{s_{NN}}=2.76$ TeV	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Phys.Lett.B</i>	2022	0370-2693		https://www.sciencedirect.com/science/article/pii/S0370269322003768?via%3Dihub	yes
23	Hypertriton production in p-Pb collisions at $\sqrt{s_{NN}}=5.02$ TeV	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Phys. Rev. Lett.</i>	2022	0031-9007		https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.128.252003	yes
24	Exploring the $N\Lambda$ - $N\Sigma$ coupled system with high precision correlation techniques at the LHC	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Phys.Lett.B</i>	2022	0370-2693		https://www.sciencedirect.com/science/article/pii/S0370269322004063?via%3Dihub	yes

25	General balance functions of identified charged hadron pairs of (π, K, p) in Pb–Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Phys.Lett.B</i>	2022	0370-2693		https://www.sciencedirect.com/science/article/pii/S0370269322004725?via%3Dihub	yes
26	K _{0S} K _{0S} and K _{0S} K \pm femtoscopy in pp collisions at $\sqrt{s} = 5.02$ and 13 TeV	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Phys.Lett.B</i>	2022	0370-2693		https://www.sciencedirect.com/science/article/pii/S0370269322004695?via%3Dihub	yes
27	Study of very forward energy and its correlation with particle production at midrapidity in pp and p-Pb collisions at the LHC	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>JHEP</i>	2022	1029-8497		https://link.springer.com/article/10.1007/JHEP08(2022)086	yes

28	Characterizing the initial conditions of heavy-ion collisions at the LHC with mean transverse momentum and anisotropic flow correlations	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Phys.Lett.B</i>	2022	0370-2693		https://www.sciencedirect.com/science/article/pii/S0370269322005275?via%3Dihub	yes
29	Production of $K^*(892)0$ and $\phi(1020)$ in pp and Pb-Pb collisions at $\sqrt{s_{NN}}=5.02$ TeV	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Phys.Rev.C</i>	2022	24699985		https://journals.aps.org/prc/abstract/10.1103/PhysRevC.106.034907	yes
30	First study of the two-body scattering involving charm hadrons	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Phys.Rev.D</i>	2022	1550-7998		https://journals.aps.org/prd/abstract/10.1103/PhysRevD.106.052010	yes

31	Measurement of ^3He nuclei absorption in matter and impact on their propagation in the galaxy	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Nature Phys</i>	2022	1745-2473.		https://inspirehep.net/files/77629009d708894ddcd0ae29ccab5697	yes
32	Measurement of beauty production via non-prompt D_0 mesons in Pb-Pb collisions at $\sqrt{s_{NN}}= 5.02$ TeV	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>JHEP</i>	2022	1029-8497		https://link.springer.com/article/10.1007/JHEP12(2022)126	yes
33	Triaxial projected shell model study of γ -bands in even even $^{104-122}\text{Cd}$ nuclei	Manvi Rajput, Suram Singh, Preeti Verma, Veerta Rani, Arun Bharti , G.H. Bhat, J.A. Sheikh	Physics	<i>Nuclear Physics A</i>	2022	0375-9474		https://www.sciencedirect.com/science/article/abs/pii/S0375947422000021	yes

34	Theoretical study of nuclear structure properties of positive parity states of odd mass 103–117Ag nuclei	Manvi Rajput, Suram Singh, Veerta Rani, Preeti Verma, Arun Bharti , G.H. Bhat, J.A. Sheikh	Physics	<i>The European Physical Journal A</i>	2022	1434-6001		https://link.springer.com/article/10.1140/epja/s10050-022-00802-x	yes
35	Structural evolution and shape transitions of even-even ¹⁴⁰⁻¹⁵⁰ Ba nuclei using triaxial projected shell model	Ridham Bakshi, Rajat Gupta, Amit Kumar, Suram Singh, Arun Bharti , G.H. Bhat, J.A. Sheikh	Physics	<i>The European Physical Journal A</i>	2022	1434-6001		https://link.springer.com/article/10.1140/epja/s10050-022-00902-8	yes
36	Microscopic insights into the nuclear structure of ⁹⁸⁻¹⁰⁶ Ru nuclei	Ridham Bakshi, Surbhi Gupta, Rajat Gupta, Amit Kumar, Suram Singh, Arun Bharti , G.H. Bhat, J.A. Sheikh	Physics	<i>The European Physical Journal A</i>	2022	1434-6001		https://link.springer.com/article/10.1140/epja/s10050-022-00734-6	yes

37	“Cu(II) complex based on lemfloxacin and N,N-donor ligand: Synthesis, crystal structure, DFT calculations, and in vitro antimicrobial evaluation “	Joshua Ayoola Obaleye, Misitura Lawal, Rajendrasinh N. Jadeja, Vivek K. Gupta , Ginikachukwu Grace Nnabuike, Mercy Oluwaseyi Bamigboye, Hetal Roy, Olaniyi Kamil Yusuff, Abdulrafiu T. Raji	Physics	Journal of Molecular Structure, 1249 (2022) 131542.	2022			ISSN 00 22-2860.	https://www.sciencedirect.com/science/article/abs/pii/S0022286021016707	yes
38	Synthesis, spectroscopic characterization, crystal structure, theoretical (DFT) studies and molecular docking analysis of biologically potent isopropyl 5-chloro-2-hydroxy-3-oxo-2,3-dihydrobenzofuran-2-carboxylate	Varun Sharma, Indrajit Karmakar, Goutam Brahmachari, Vivek K.Gupta	Physics	<i>Molecular Crystals and Liquid Crystals, (Published online, 07 Jan 2022)</i>	2022				DOI:10.1080/15421406.2021.2024041	yes

39	Synthesis, characterization and Hirshfeld surface analysis of 2-aminobenzothiazol with 4-fluorobenzoic acid co-crystal”	Bubun Banerjee, Varun Sharma, Aditi Sharma, Gurpreet Kaur, Vivek K. Gupta	Physics	<i>European Journal of Chemistry</i> , 13 (2) (2022) 206-213.	2022	ISSN: 2153-2257 Electronic		https://www.eurjchem.com/index.php/eurjchem/article/view/2234	yes
40	“X-ray crystal structure analysis of <i>N</i> -acetyl- <i>N</i> -phenyl-2-naphthohydrazide”	Varun Sharma, Indrajit Karmakar, Goutam Brahmachari, Vivek K. Gupta	Physics	<i>European Journal of Chemistry</i> , 13 (3) (2022) 253-258	2022	ISSN: 2153-2257 Electronic		https://www.eurjchem.com/index.php/eurjchem/article/view/2235/0	yes
41	A General Method for the Synthesis of 11H-Indeno[1,2-B]Quinoxalin- 11-Ones and 6H-Indeno[1,2-B]Pyrido[3,2-E]Pyrazin-6-One Derivatives Using Mandelic Acid as an Efficient Organo-catalyst at Room Temperature”	Aditi Sharma, Gurpreet Kaur, Diksha Singh, Vivek K. Gupta , Bubun Banerjee	Physics	<i>Current Organocatalysis</i> , 9 (2022) 53-61.	2022	ISSN: 2213-3380 (Online) ISSN: 2213-3372 (Print)		https://www.ingeniaconnect.com/content/ben/cocat/2022/00000009/0000001/art00009 https://doi.org/10.2174/2213337208666210825112301	yes

42	Synthesis, in vitro and theoretical studies on newly synthesized deep blue emitting 4-(p-methylphenylsulfonyl-5-aryl/alkyl)oxazole analogues for biological and optoelectronic applications	Pavankumar Prabhala, Suraj M. Sutar, M.R. Manjunatha, G. M. Pawashe, Vivek K. Gupta , Lohit Naik, Rajesh G. Kalkhambkar	Physics	<i>Journal of Molecular Liquids</i> , 360 (2022) 119520.	2022	ISSN 0167-7322.		https://www.sciencedirect.com/science/article/abs/pii/S0167732222010583	yes
43	Trisodium citrate dihydrate catalyzed one-pot pseudo four components synthesis of fully functionalized pyridine derivatives”	Aditi Sharma, Arvind Singh, Anu Priya, Manmeet Kaur, Vivek K. Gupta , Vikas Jaitak & Bubun Banerjee	Physics	<i>Synthetic Communications</i> (2022)	2022	ISSN 0039-7911		DOI:10.1080/00397911.2022.2101378	yes
44	Dereplication approach for the first time isolation of tatarinowin a and pentadecanoic acid from <i>Acorus calamus</i> L. by using GC-MS”	Chetan Kumar, Sabiyah Akhter, Naresh Kumar Satti, Vivek K. Gupta , Siya Ram Meena, Ram Vishwakarma, Qazi Parvaiz Hassan & Mahendra Kumar Verma	Physics	<i>Natural Product Research</i>	2022	ISSN 14786427, 14786419		DOI: 10.1080/14786419.2022.2061482 (2022)	yes

45	Synthesis, characterization, Hirshfeld surface analysis and molecular docking studies of 3-(cyclohexylthio)-4-hydroxy-6-methyl-2H-chromen-2-one	Varun Sharma, A. Bhowmick, Indrajit Karmakar, G.Brahmachari, Vivek K. Gupta	Physics	<i>Molecular Crystals and Liquid Crystals (2022)</i>	2022	ISSN 15421406, 15635287		https://www.tandfonline.com/doi/abs/10.1080/15421406.2022.2132031 https://doi.org/10.1080/15421406.2022.2132031	yes
46	Synthesis, Crystal structure, Hirshfeld surface, Nonlinear optical properties and Computational studies of Schiff based (<i>E</i>)- <i>N'</i> -(2,4-dimethoxybenzylidene) benzohydrazide single crystals for optoelectronic applications	V. Saraswathi, S. Agilan, N. Muthukumarasamy, Vivek K. Gupta, M. Suresh, P. Peulakumari, DhayalanVelauthapillai	Physics	Optical and Quantum Electronics (2022) (Accepted)	2022	Electronic ISSN 1572-817X Print ISSN 0306-8919		https://link.springer.com/article/10.1007/s11082-022-04105-9	yes
47	"Mandelic acid catalyzed one-pot pseudo three-component synthesis of various trisubstituted methane derivatives at room temperature"	Bubun Banerjee, Arvind Singh, Aditi Sharma, Anu Priya, Manmeet Kaur, Gurpreet Kaur, Vivek Kumar Gupta and Vikas Jaitak	Physics	Arkivoc 2022, part ix, 100-118	2022	ISSN: 1551-7012 (online ed.), ISSN: 1551-7004		doi.org/10.24820/ark.5550190.p011.895	yes

48	Synthesis, crystal feature and spectral characterization of paeonol derived Schiff base ligands and their Cu(II) complexes with antimicrobial activity”	J.H. Pandya, Maitrey Travadi, R.N. Jadeja, R.N. Patel, Vivek K. Gupta	Physics	<i>Journal of the Indian Chemical Society</i> , 99 (2022) 100403.	2022	Online ISSN: 2667-2847		https://www.sciencedirect.com/science/article/abs/pii/S0019452222000656?dgcid=rss_sd_all	yes
49	Blue fluorescent Zinc(II) complexes bearing schiff base ligand for solution-processed Organic light-emitting diodes with CIE _y ≤ 0.09	Jaydip D.Solanki, Iram Siddiqui, PrkalpGautam, Vivek K.Gupta , Jwo-HueiJou, K.R.Surati	Physics	<i>Optical Materials</i> 134(B) (2022) 113222.	2022	Online ISSN: 1873-1252 Print ISSN: 0925-3467		https://www.sciencedirect.com/science/article/abs/pii/S0925346722012617	yes
50	Sodium Dodecyl Sulphate Catalyzed One-Pot Three-Component Synthesis of Structurally Diverse 2-Amino-3cyano Substituted Tetrahydrobenzo[b]pyrans and Spiropyran s in Water at Room Temperature	Babun Banerjee, Anu Priya, Manmeet Kaur, Aditi Sharma, Arvind Singh, Vivek Kumar Gupta , Vikas Jaitak	Physics	Catalysis Letters, 16 Jan, 2022	2022			https://doi.org/10.1007/s10562-022-04256-0	yes

51	Glycine Catalyzed One-Pot Three-Component Synthesis of Structurally Diverse 2-Amino Substituted Pyran Annulated Heterocycles in Aqueous Ethanol under Refluxed Conditions	Babun Banerjee, Anu Priya, Manmeet Kaur, Aditi Sharma, Arvind Singh, Vivek Kumar Gupta , Vikas Jaitak	Physics	Current Gree Chemistry, 2022 9, 162-173	2022	ISSN (Print): 2213-3461 1 ISSN (Online): 2213-347X		http://dx.doi.org/10.2174/22133461106662212152202	yes
52	Synthesis, crystal structure, molecular docking, lattice energy and Hirshfeld surface analysis of an antituberculosis drug of (E)-2-methoxy-5-(((6-methoxypyridin-3yl)imino)methyl)phenol	Gopal Sharma, Sumati Anthal, P. Akhileshwari, H. M. Vinusha, S. Bindya, M. A. Sridhar, Muneera Begum, Ravikumar Chandrasekaran, Saminathan Murugavel and RAJNI KANT *	Physics	Molecular Crystal Liquid Crystal 737 (1) (2022) 65-80	2022	Print ISSN: 1542-1406 Online ISSN: 1563-5287		https://www.tandfonline.com/doi/full/10.1080/15421406.2021.2005749	yes
53	Synthesis, crystal structure, Hirshfeld surface, crystal voids, energy frameworks, DFT and molecular docking analysis of (2,6-dimethoxyphenyl)acetic acid	Ruchika Sharma, Mulveer Singh, Kamal, Nitin G. Ghatpande, Mahidansha M. Shaikh, Jagannath S. Jadhav, Saminathan Murugavel and RAJNI KANT *	Physics	Advanced Journal of Chemistry Section B 4(1) (2022) 1-16	2022	Online ISSN: 2716-9634		https://www.ajchem-b.com/article_145346.html	yes

54	Indium(III) and organotin(IV) 2(methoxycarbonyl)benzene thiolates: Synthesis, structure and properties	Krishna Kumar, Priyanka Tiwaria, Srikanta Moharana, RAJNI KANT , Subrato Bhattacharya	Physics	Journal of Molecular Structure 1260 (2022) 132801	2022	Online ISSN: 1872-8014 Print ISSN: 0022-2860		https://doi.org/10.1016/j.molstruc.2022.132801	yes
55	Optimized structure, in silico interaction and molecular docking analysis of two benzimidazole-2-thione Derivatives	Mulveer Singh, Saminathan Murugavel, Ravikumar Chandrasekaran and RAJNI KANT *	Physics	Mat. Sci. Res. Ind. 19(1) (2022) 1-16	2022	Print: 0973-3469 , Online: 2394-0565		http://dx.doi.org/10.13005/msri/190101	yes
56	Synthesis, X-ray crystal structure, DFT, Hirshfeld surfaces, energy frameworks and molecular docking analysis of a bicyclic ortho-aminocarbonitrile derivative	Ruchika Sharma, S. A. Sankpal, Pradeep J. Patil, S. Murugavel, Sonachalam Sundramoorthy, RAJNI KANT *	Physics	European Journal of Chemistry 13 (2) (2022) 135-144	2022	ISSN: 215 3-2249 Print ISSN: 215 3-2257 Electronic		https://doi.org/10.5155/eurjchem.13.2.135-144.2225	yes
57	Quantum, Hirshfeld surface, crystal voids, energy framework and molecular docking analysis of two halogen containing benzimidazole-2-thione structures	Mulveer Singh, Saminathan Murugavel, Ravikumar Chandrasekaran and RAJNI KANT *	Physics	Molecular Crystal Liquid Crystal 739 (1) (2022) 127-141	2022	ISSN: 1058-725X		https://doi.org/10.1080/15421406.2022.2031449	yes

58	Novel supramolecular co-crystal of 3-aminobenzoic acid with 4-acetyl-pyridine: Synthesis, X-ray structure, DFT and Hirshfeld surface analysis	Mulveer Singh, Sumati Anthal P. J. Srijana, , B. Narayana, B. K. Sarojini, U. Likhitha, Kamal, <u>RAJNI KANT</u> *	Physics	Journal of Molecular Structure 1262 (2022) 133061	2022	Online ISSN: 1872-8014 Print ISSN: 0022-2860		https://doi.org/10.1016/j.molstruc.2022.133061	yes
59	Cambridge Structure Database analysis of molecular interactions energies in bromine-substituted coumarin structures	Jigmat Stondus and <u>RAJNI KANT</u> *	Physics	Rasayan J Chem 15 (2) (2022) 991-1008	2022	ISSN: 0974-1496 (Print) ISSN: 0976-0083 (Online)		http://doi.org/10.31788/RJC.2022.1526853	yes
60	DFT, Lattice Energy and Hirshfeld Surface Analysis of Some 6-Chloro-Coumarin Structures	Jigmat Stondus and <u>RAJNI KANT</u> *	Physics	Molecular Crystal Liquid Crystal 746(1) 93-109 (2022) 93-109	2022	<u>ISSN: 1058-725 X</u>		https://doi.org/10.1080/15421406.2022.2078569	

61	Crystallographic, DFT, Lattice Energy and Hirshfeld Surface Analysis of Some CSD-Based 6-Chloropurines	Jigmat Stodus and RAJNI KANT *	Physics	Chemical and Pharamaceu tical Research 4(2) (2022) 1-14	2022	ISSN 2689-1050		DOI: 10.33425/2689-1050.1039	yes
62	Synthesis and structural characterization of Cd(II) complexes based on acetylene dicarboxylate: A 1-D polymer as a precursor to CdO nanoparticles	Neha Sareena, Krishna Kumar, RAJNI KANT , Somenath Garai, Subrato Bhattacharya	Physics	Journal of Molecular Structure 1267 (2022) 133653	2022	Online ISSN: 1872-8014 Print ISSN: 0022-2860		https://doi.org/10.1016/j.molstruc.2022.133653	yes
63	Co-crystallisation of 4-amino pyridine with succinic acid (1:1): spectroscopic, thermal, crystal structure, DFT/HF calculation and Hirshfeld surface analysis	P. J. Srijana, Mulveer Singh, B. Narayana, B. K. Sarojini, U. Likhitha, RAJNI KANT *	Physics	Molecular Physics (2022) VOL. 120, NO. 14, e2096143	2022	0026-8976 ISSN(online): 1362-3028		https://doi.org/10.1080/00268976.2022.2096143	yes
64	Expeditious synthesis of isolated steroids-fluorine prodrugs, their single crystal X-ray crystallography, DF studies and mathematical modeling	Arun Sethi, Amandeep, R.P Singh, Rachana Pathak, Rohit Prakash, Sonia Sharma, RAJNI KANT	Physics	Ind. J Chem. Sec B 61 (2022) 831-841	2022	ISSN: 0975-0983 (Online) ISSN: 0376-4699 (Print)		DOI: 10.56042/ijc.v61i8.65025	

65	Synthesis, structure, Hirshfeld surface, crystal voids, energy framework and DFT analysis of 1H-Benzo[d]imidazole-2(3H)-thione”	M Singh, S Anthal, Kamal, M B Deshmukh, RAJNI KANT *	Physics	Ind J Chem. Sec B 61 (2022) 528-536	2022	ISSN: 0975-0983 (Online) ISSN: 0376-4699 (Print)			
66	Supramolecular co-crystal of 4-dimethyl aminopyridine with Picric acid (4DMAP:PA): Synthesis, single crystal investigation, HF/DFT inspection, Hirshfeld surface and antifungal activity	Ruchika Sharma, P.J.Srijana, M.Singh, Kamal, B.Narayana, B.K.Sarojini, U.Lalitha, S.Murugavel, J. Mohanraj, RAJNI KANT *	Physics	Journal of Molecular Structure 1270 (2022) 133921	20200	Online ISSN: 1872-8014 Print ISSN: 0022-2860		https://doi.org/10.1016/j.molstruc.2022.133921	
67	Synthesis of a Few Novel Cu(I) Methylthiosalicylate Complexes and their Application for the Synthesis of Vinyl Sulfide via Thiol-Yne Click Reaction	Krishna Kumar, Priyanka Tiwari, RAJNI KANT and S. Bhattacharya	Physics	New J Chem. 46 (2022) 1785-1864	2022	ISSN: 1144-0546 (print); 1369-9261 (web)		https://doi.org/10.1039/D2NJ02722D	

68	Structure, Quantum Chemical and In Silico Molecular Docking Analysis of some Di-Ortho-Substituted Halogenated Biphenyls	Neha Kumari, R. Sharma, M.Singh, J. Mohan Raj, S.Murugavel, S. Sundramoorthy, RAJNIKANT *	Physics	Chemical and Pharmaceutical Research Vol 4 (3) (2022) 1-9	2022	ISSN 2689-1050		DOI: 10.33425/2689-1050.1043	
69	Structural, morphological, optical and electrical properties of yttrium-doped calcium strontium titanate prepared by solid-state reaction technique	Kumari Kanika Bhadwal, Bindu Raina, Sonali Thakur, K. K. Bamzai	Department of Physics, University of Jammu	Indian Journal of Physics	June 2022	Online:0974-9845 Print:0973-1458	https://www.springer.com/journal/12648	https://link.springer.com/article/10.1007/s12648-022-02383-3	Yes
70	Investigations on structural, spectroscopic and magnetic properties of yttrium barium orthoferrite and nickel doped strontium hexaferrite composites	Sonali Thakur, Bindu Raina, K. K. Bamzai	Department of Physics, University of Jammu	Applied Physics A	March 2022	Online:1432-0630 Print:0947-8396	https://www.springer.com/journal/339	https://link.springer.com/article/10.1007/s00339-022-05399-y	Yes

71	Magnesium and yttrium doped superparamagnetic manganese ferrite nanoparticles for magnetic and microwave applications	<ul style="list-style-type: none"> Yaseen Ahmad, Bindu Raina, Sonali Thakur, K. K. Bamzai 	Department of Physics, University of Jammu	Journal of Magnetism and Magnetic Materials	February 2022	Online: 1873-4766 Print: 0304-8853	https://www.sciencedirect.com/journal/journal-of-magnetism-and-magnetic-materials	https://www.sciencedirect.com/science/article/abs/pii/S0304885322001421	Yes
72	Organic coordinated SnS and SnS _{1-x} Sex crystals: synthesis, characteristics and optical behaviour for photonic applications	Arun Banotra, Naresh Padha	Department of Physics, University of Jammu	Optical and Quantum Electronics	April 2022	ISSN 0306-8919		https://doi.org/10.1007/s11082-022-03739-z	Yes
73	Growth Dynamics of SnSe Thin Films on Annealing of Precursor Layers Stacked by Multisource Sequential Elemental Layer Deposition	Arun Banotra & Naresh Padha	Department of Physics, University of Jammu	Integrated Ferroelectrics	June 2022	ISSN 1607-8489		https://doi.org/10.1080/10584587.2022.2102805	Yes

74	Sequentially evaporated layer deposition stack of CuxS thin films for photonics applications	Padma Dolma, Arun Banotra, Naresh Padha , Ajit Khosla	Department of Physics, University of Jammu	journal of materials research and technology	August 2022	ISSN 2214-0697		https://doi.org/10.1016/j.jmrt.2022.08.097	Yes
75	Impact of annealing on the growth dynamics of indium sulphide buffer layers	Shafiq Ahmed, Naresh Padha , Arun Banotra, Ajit Khosla	Department of Physics, University of Jammu	journal of materials research and technology	Sept. 2022	ISSN 2214-0697		https://doi.org/10.1016/j.jmrt.2022.09.094	Yes
76	Effect of substrate and annealing temperature on the physical properties of the thin films of SnSe ₂ -SnSe alloy	Shammi Kumar Arun Banotra, Naresh Padha , Shafiq Ahmed a	Department of Physics, University of Jammu	Optical Materials	Sept. 2022	ISSN 0925-3467		https://doi.org/10.1016/j.optmat.2022.113078	Yes

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1	Inclusive quarkonium production in pp collisions at $\sqrt{s}=5.02$ TeV	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Eur.Phys.J</i>	2023	1434-6052		https://link.springer.com/article/10.1140/epjc/s10052-022-10896-8	yes
2	Constraining the $K^{\bar{K}}$ coupled channel dynamics using femtoscopic correlations at the LHC	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Eur.Phys.J</i>	2023	1434-6052		https://link.springer.com/article/10.1140/epjc/s10052-023-11476-0	yes
3	$\Sigma(1385)_{\pm}$ resonance production in Pb-Pb collisions at $\sqrt{s_{NN}}=5.02$ TeV	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Eur.Phys.J</i>	2023	1434-6052		https://link.springer.com/article/10.1140/epjc/s10052-023-11475-1	yes

4	Investigation of $K^+ K^-$ interactions via femtoscopy in Pb–Pb collisions at $\sqrt{s_{NN}}=2.76$ TeV at the LHC	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Phys.Rev.C</i>	2023	2469998 5		https://journals.aps.org/prc/abstract/10.1103/PhysRevC.107.054904	yes
5	W^\pm -boson production in p–Pb collisions at $\sqrt{s_{NN}}=8.16$ TeV and PbPb collisions at $\sqrt{s_{NN}}=5.02$ TeV	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>JHEP</i>	2023	1029-849 7		https://link.springer.com/article/10.1007/JHEP05(2023)036	yes
6	$K^*(892)^0$ and $\phi(1020)$ production in p-Pb collisions at $\sqrt{s_{NN}}=8.16$ TeV	Anju Bhasin, Sanjeev S. Sambyal, Anik Gupta, Ramni Gupta, R.N. Patraet al., (ALICE Collaboration)	Physics	<i>Phys.Rev.C</i>	2023	2469998 5		https://journals.aps.org/prc/abstract/10.1103/PhysRevC.107.055201	yes

7	DFT stimulation and experimental insights of chiral Cu(II)–salen scaffold within the pocket of MWW-zeolite and its catalytic study”	Pratikkumar Lakhani, Darshil Chodvadiya, Prafulla K. Jha, Vivek K. Gupta , Damian Trzybin’ski, Krzysztof Wozniak, Krzysztof Kurzydłowski, U. K. Goutam, Himanshu Srivastavag and Chetan K. Modi	Physics	<i>Phys. Chem. Chem. Phys.</i> , 25 (2023) 14374.	2023	ISSN 1463-9076 (Print)			yes
8	Structural Engineering and Electronic Properties of Halide-Specific Supramolecular Architectures: Effective for Stabilizing H ₂ O ₂ + and Fabricating Semiconducting Photoresponsive Diodes	Santanu Majumdar, Arka Dey, Arkamita Bandyopadhyay, Gerald Lepcha, Ranjan Kumar Mondal, Vivek K. Gupta , Partha Pratim Ray, and Biswajit Dey	Physics	J. Phys. Chem. C 2023, 127, 3417–3431	2023	ISSN 1932-7455 (Online)			yes
9	Synthesis, characterization, quantum chemical calculation, Hirshfeld surface analysis and antibacterial activity of a co-crystal of 4-aminopyridine: p-hydroxybenzoic acid with a water molecule	Ruchika Sharma; Mulveer Singh; Palthad Jayarama Srijana; Kamal ;Badiadka Narayana; Balladka Kunhanna Sarojini; Ullal Likhitha; Saminathan Murugavel; Jayakumar Mohan Raj, RAJNIKANT *	Physics	Journal of Molecular Structure 1284 (2023) 135309	2023	Online ISSN: 1872-8014 Print ISSN: 0022-2860		https://doi.org/10.1016/j.molstruc.2023.135309	yes

10	Synthesis, XRD, DFT/HF and Molecular docking investigations of 4-(tert-butyl)-4-methoxy-1,1-biphenyl	Neha Kumari, R. Sharma, A.A. Yadav S.A. Sankpal, J. Mohan Raj, S. Murugavel, RAJNI KANT *	Physics	Rasayan J Chem 16(2) 2023	2023	ISSN: 0974-1496 (Print) ISSN: 0976-0083 (Online)			yes
11	Synthesis, crystal structure, DFT/HF, Hirshfeld surface and molecular docking analysis of 4-(tert-butyl)-4-nitro-1,1-biphenyl (4TBNB).	Neha Kumari, R. Sharma, A.A. Yadav S.A. Sankpal, J. Mohan Raj, S. Murugavel, RAJNI KANT *	Physics	European J Chem (2023)	2023	ISSN: 215 3-2249 Print ISSN: 215 3-2257 Electronic		DOI: 10.5155/eurjchem.14.1.90-98.2386	yes
12	Synthesis, characterization, Hirshfeld surface analysis and molecular docking studies of 3-(cyclohexylthio)-4-hydroxy-6-methyl-2H-chromen-2-one	Varun Sharma, Anindita Bhowmick, Indrajit Karmakar, Goutam Brahmachari & Vivek Kumar Gupta	Physics	<i>Molecular Crystals and Liquid Crystals</i> Vol. 757, pp. 62-67	2023			https://doi.org/10.1080/15421406.2022.2132031	

13	Crystallographic structure, quantum and in silico interaction analysis of 3-(benzylthio)-4-hydroxy-2Hchromen-2-one	Varun Sharma, Anindita Bhowmick, Indrajit Karmakar, Goutam Brahmachari, and Vivek Kumar Gupta		<i>Molecular Crystals and Liquid Crystals, Vol. 759, pp. 1-18</i>	2023			https://doi.org/10.1080/15421406.2022.2159118	yes
14	Camphor sulfonic acid catalyzed one-pot pseudo three-component synthesis of a series of 1,8-dioxo-octahydroxanthenes and comparative crystal structures investigations and Hirshfeld surface analysis of five such derivatives	Bubun Banerjee, Manmeet Kaur, Varun Sharma, and Vivek Kumar Gupta		<i>Research on Chemical Intermediates, 49, 4639-4670</i>	2023			https://doi.org/10.1007/s11164-023-05064-w	yes

15	Synthesis, Structural Elucidation, Physico-chemical Quantum Properties and In Silico Interaction Analysis of 2-methyl-3-((4-nitrobenzyl)oxy)quinoxaline	Sheena Mahajan, Varun Sharma, Rajneesh Paul Sharma, Yeshwinder Saini, Vivek Kumar Gupta, Kamal K. Kapoor		<i>Journal of Molecular Structure</i> , Vol. 1295 pp 136654	2023			https://doi.org/10.1016/j.molstruc.2023.136654	yes
16	Synthesis, Crystal Structures Investigations and Hirshfeld Surface Analysis of Novel Molecule 2, 5-Dihydro [2]Benzopyrano [3,4-c] Pyrazole-water (1/4)	Varun Sharma and Vivek Kumar Gupta		<i>Medicinal and Analytical Chemistry International Journal</i> , Vol. 7 Issue 2 pp 1-6	2023			DOI: 10.23880/macij-16000180	yes
17	A simple and efficient method for the synthesis of benzo[3,4-a]phenazin-5-ols and benzo[f]pyrido[b]quino	Bubun Banerjee*, Arvind Singh, Aditi Sharma, Anu Priya, Manmeet Kaur		<i>Polycycl. Aromat. Compd.</i> , 2023, in press. https://doi.org/10.108	2023		ISSN: 1563-53		yes

	xalin-5-ol derivatives using trisodium citrate dihydrate as an efficient organo-catalyst at room temperature	and Vivek Kumar Gupta		0/1040663 8.2023.223 8869		33, IF 2.195			
18	Sonochemical synthesis of benzylidene derivatives of enolizable carbonyls and their analogues in aqueous ethanol	Palak J. Patel, Hiren R. Chaudhary, Vivek K. Gupta, Divyang M. Patel		Research on Chemical Intermediates	2023			https://doi.org/10.1007/s11164-023-05168-3	yes
19	Theoretical analysis of shape transition and axial symmetry in even-even Yb isotopes	Arun Gupta, Surbhi Gupta, Ridham Bakshi, Suram Singh, Arun Bharti , G.H.Bhat and J.A.Sheikh	Physics	Eur. Phys. J.Plus Vol.138 (2023) 785	2023			https://doi.org/10.1140/epjp/s13360-023-04404-4	Yes

20	Theoretical perspectives of nuclear structure in 82-88Ge and 66-74Se isotopes	Simi Gupta, Ridham Bakshi, Surbhi Gupta, Suram Singh, Arun Bharti , G.H.Bhat and J.A.Sheikh	Physics	Eur. Phys. J.A Vol.59 (2023) 258	2023			https://doi.org/10.1140/epja/s10050-023-01166-6	Yes
21	A Two-step Method to Grow ZnSe Thin Films and To Study their Characteristics	Zakir Hussain, Naresh Padha , Shafiq Ahmad & Padma Dolma	Physics	Indian Journal of Pure & Applied Physics	August 2023	ISSN 0975-1041		https://doi.org/10.56042/ijpap.v61i9.3209	Yes
22	Processing of nanocrystalline thin films of selenium and formation of FTO/p-Se/n-CdS/In heterojunctions for photovoltaic response	Rajesh Niranjana , Naresh Padha	Physics	Results in Optics	Sept 2023	ISSN 2666-9501		https://doi.org/10.1016/j.rio.2023.100533	Yes
23	Growth of nano-polycrystalline CuIn _{1-x} Al _x Se ₂ thin films and its photovoltaic cell formation	Rajesh Niranjana , Naresh Padha	Physics	Results in Surfaces and Interfaces	January 2024	ISSN 2666-8459		https://doi.org/10.1016/j.rsurfi.2024.100186	Yes

