Department of Physics, University of Jammu

Research Publications

2019

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
1	Facile growth of SnS and SnS0.40Se0.60 thin films as an absorber layer in the solar cell structure	Arun Banotra & **Naresh Padha**	Physics	Materials Today: Proceedings	2019	2214-7853	https://www.sciencedirect.com/journal/materials-today-proceedings	https://www.sciencedirect.com/science/article/pii/S2214785319338398	UGC Care list/Scopus/ Web of Science
2	Development of SnS nanocrystals and tuning of parameters for use as spectral selective photoabsorbers	Arun Banotra & **Naresh Padha**	Physics	Journal of Crystal Growth	2019	0022-0248	https://www.sciencedirect.com/journal/journal-of-crystal-growth	https://www.sciencedirect.com/science/article/pii/S002202481930675X	UGC Care list/Scopus/ Web of Science
3	SnTexSe1−x Alloy: An Effective Alternative to SnSe Nano-crystalline Thin Films	Anjali Devi, Arun Banotra, Shiv Kumar, Ashok K.	Physics	Journal of Electronic Materials	2019	0361-5235	https://www.springer.com/journal/11664	https://link.springer.com/article/10.1007/s11664-019-07202-w	UGC Care

	for Optoelectronic Applications	Kapoor & **Naresh Padha**							list/Scopus/ Web of Science
4	In-depth behavioral study of L-Prolinium Tricholroacetate single crystals: An efficient candidate for NLO properties	Kanika Thukral, N Vijayan, Anuj Krishna, Budhendra Singh, **RAJNI KANT**, V Jayaramakrishnan, MS Jayalakshmy, Milanpreet Kaur	**Physics**	**Arabian J Chem.**	2019	**1878-5352**	https://www.journals.elsevier.com	https://doi.org/10.1016/j.arabjc.2016.09.011	Yes-Scopus
5	Enantio- and Diastereoselective Two-Pot Synthesis of Isoquinuclidines from Glutaraldehyde and *N*-Aryl Imines with DFT Calculations	Panduga Ramaraju, Amol Prakash Pawar, Eldhose Iype, Nisar A Mir, Sachin Choudhary, Devinder Kumar Sharma, **RAJNI KANT**, Indresh Kumar	**Physics**	**ACS The Journal of Organic Chem.**	2019	**0022-3263**	https://pubs.acs.org	https://doi.org/10.1021/acs.joc.9b01865	Yes

6	Synthesis and crystallographic structure analysis of 4,4'-oxydianiline	G.Sharma, S.Anthal, D.V.Geetha, F.H.Al-Ostoot, M.Q.A.Al-Gunaid, S.A.Khanum, M.A.Sridhar, **RAJNI KANT***	**Physics**	**Rasayan Journal of Chemistry**	**2019**	0974-1496	http://rasayanjournal.co.in	http://dx.doi.org/10.31788/RJC.2019.1245305	Yes
7	1-(Cycloheptylidene)thiosemicarbazide	Mulveer Singh, Sumati Anthal, Sandeep S. Sankpal, Madhukar B. Deshmukh and **RAJNI KANT***	**Physics**	**IUCr Data**	2019	2414-3146	https://iucrdata.iucr.org	http://dx.doi.org/10.31788/RJC.2019.1245305	Yes-Scopus
8	Do Hydrogen Bonding and Noncovalent Interactions Stabilize Nicotinamide-Picric Acid Cocrystal Supramolecular Assembly?	U. Likhitha, B. K. Sarojini, Anupam G Lobo, Gopal Sharma, Surbhi Pathania, **RAJNI KANT,** B. Narayana	**Physics**	**Journal of Molecular Structure**	2019	**0022-2860**	https://www.journals.elsevier.com	https://doi.org/10.1016/j.molstruc.2019.06.037	Yes
9	Synthesis, structure and molecular docking analysis of an anticancer drug of	Gopal Sharma, Sumati Anthal, D. V.	**Physics**	**Molecular Crystals**	2019	**1563-5287**	https://www.tandfonline.com	https://doi.org/10.1080/15421406.2019.1624051	Yes

	N-(2-aminophenyl)-2-(2-isopropylphenoxy) acetamide	Geetha, Fares Hezam Al-Ostoot, Yasser Hussein Eissa Mohammed, Shaukath Ara Khanum,M. A. Sridhar and **RAJNI KANT***		**Liquid Crystals**					
10	Synthesis, spectroscopic and X-ray crystallographic analysis of N-(2-(2-(4-chlorophenoxy)acetamido) phenyl)-1H-indole-2-carboxamide($C_{23}H_{18}ClN_3O_3$)	Fares Hezam Al-Ostoot, Jigmat Stondus, Sumati Anthal, , D. V. Geetha, Yasser Hussein Eissa Mohd., M. A. Sridhar, S.A. Khanum and **RAJNI KANT***	**Physics**	**European Journal of Chemisty**	2019	2153-2249	www.eurjchem.com	https://doi.org/10.5155/eurjchem.10.3.234-238.1874	Yes
11	A simple route to tetracyclic oxazepine-fused pyrroles via metal-free [3+2] annulation	Sachin Choudhary, A. Singh, Jyothi Yadav, N. A. Mir, Sumati	**Physics**	**RSC New Journal of Chemistry**	2019	**1144-0546**	https://www.rsc.org	https://doi.org/10.1039/C8NJ04861D	Yes

	between dibenzo[b,f][1,4]oxazepines and aqueous succinaldehyde	Anthal, **RAJNI KANT** and Indresh Kumar							
12	Synthesis and Crystal Structure Analysis of 4-(2-(4-Chloro-phenyl)-4, 5-diphenyl-1H-imidazol-1-yl)-2, 3-dimethyl-1-phenyl-1, 2-dihydropyrzol-5-one	Gopal Sharma, Sumati Anthal, A. Jayashree, B. Narayana, B. K. Sarojiniand **RAJNI KANT***	**Physics**	**Rasayan Journal of Chemistry**	2019	0974-1496	http://rasayanjournal.co.in	http://dx.doi.org/10.31788/RJC.2019.1225157	Yes
13	2,4-dichloro-N-(2,5-dioxopyrrolidin-1-yl)benzamide	Jigmat Stondus, Sumati Anthal, S. Karanth, B. Narayana, B. K. Sarojini and **RAJNI KANT** *	**Physics**	**IUCr Data**	2019	2414-3146	https://iucrdata.iucr.org	https://doi.org/10.1107/S2414314618017406	Yes-Scopus
14	A combined experimental and computational studies of 3, 3, 6, 6-Tetramethyl-9-(4-Methoxyphenyl)3,4,6,7,9,10 hexahydroacridine-1, 8-dione"	Ujval Gupta, Anshul Uppal, **RAJNI KANT,** Yugal Khajuria	**Physics**	**Molecular Physics**	2019	**0026-8976**	https://www.tandfonline.com	https://doi.org/10.1080/00268976.2018.1540804	Yes

15	Investigation on the key aspects of L-arginine para nitrobenzoate monohydrate (LANB) single crystal: A Non-Linear Optical (NLO) material	Sonia Ahlawat, N. Vijayan, M. Vij, Kanika Thukral, N. Khan, D. Haranath, **RAJNI KANT**, M.S. Jayalakshmy	**Physics**	**Chinese Journal of Chemical Engineering**	2019	**1004-9541**	https://www.journals.elsevier.com	https://doi.org/10.1016/j.cjche.2018.06.029	Yes
16	**Relative particle yield fluctuations in Pb-Pb collisions at $\sqrt{s_{NN}}$ =2.76 TeV**	**Shreya Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……...et al.,(ALICE Collaboration)**	**Physics**	**Eur.Phys.J. C**	**2019**	**1434-6052**	**https://epjc.epj.org/**	**10.1140/epjc/s10052-019-6711-x**	
17	**Direct photon production at low transverse momentum in proton-proton collisions at $\sqrt{s_{NN}}$ = 2.76 and 8 TeV**	**Shreya Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……...et al.,(ALICE Collaboration)**	**Physics**	**PHYSICAL REVIEW C**	**2019**	**2469-9993**	**https://journals.aps.org/prc/**	**10.1103/PhysRevC.99.024912**	
18	**Charged-particle pseudorapidity density at mid-rapidity in p-Pb**	**Shreyasi Acharya,..... Prof. Anju**	**Physics**	***Eur.Phys.J.C* 79 (2019) 4,**	**2019**	**1434-6044**	**https://www.springer.com/journal/10052/**	**https://link.springer.com/article/10.1140%2Fepjc%2Fs10052-019-680**	**Yes**

	collisions at sNN\sqrt{s_{\rm{NN}}}sNN = 8.16 TeV	**Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……...et al.,(ALICE Collaboration)**		**307**				**1-9**	
19	**Real-time data processing in the ALICE High Level Trigger at the LHC**	**Shreyasi Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……...et al.,(ALICE Collaboration)**	**Physics**	***Comput.Phys.Commun.* 242 (2019) 25-48**	**2019**	**0010-4655**	**https://www.sciencedirect.com/journal/computer-physics-communications**	**https://www.sciencedirect.com/science/article/abs/pii/S0010465519301250?via%3Dihub**	**Yes**
20	**Event-shape and multiplicity dependence of freeze-out radii in pp collisions at s \sqrt{s} s = 7 TeV**	**Shreyasi Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……...et al.,(ALICE Collaboration)**	**Physics**	***JHEP* 09 (2019) 108**	**2019**	**1126-6708**	**https://www.springer.com/journal/13130**	**https://link.springer.com/article/10.1007%2FJHEP09%282019%2910 8**	**Yes**
21	**Measurement of D0{{\mathrm{D}}^0}D0 , D+{{\mathrm{D}}^+}D+ , D*+{{\mathrm{D}}^{*+}}D *+ and Ds+{{\mathrm{D}}^+_{\mathrm{s}}}Ds+ production in pp collisions at s = 5.02 TeV{\sqrt{{\textit{s}}}}~=~5.02~{\text {TeV}}}s = 5.02**	**Shreyasi Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……...et al.,(ALICE Collaboration)**	**Physics**	***Eur.Phys.J.C* 79 (2019) 5, 388**	**2019**	**1434-6044**	**https://www.springer.com/journal/10052**	**https://link.springer.com/article/10.1140%2Fepjc%2Fs10052-019-6873-6**	**Yes**

	TeV with ALICE								
22	**Calibration of the photon spectrometer PHOS of the ALICE experiment**	**Shreyasi Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……...et al.,(ALICE Collaboration)**	**Physics**	***JINST* 14 (2019) 05, P05025**	**2019**	**1748-0221**	**https://iopscience.iop.org/volume/1748-0221/14**	**https://iopscience.iop.org/article/10.1088/1748-0221/14/05/P05025**	**Yes**
23	**Multiplicity dependence of (anti-)deuteron production in pp collisions at s\sqrt{s}s = 7 TeV**	**Shreyasi Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……...et al.,(ALICE Collaboration)**	**Physics**	***Phys.Lett.B* 794 (2019) 50-63**	**2019**	**0370-2693**	**https://www.sciencedirect.com/journal/physics-letters-b**	**https://www.sciencedirect.com/science/article/pii/S0370269319303387?via%3Dihub**	**yes**
24	**Investigations of Anisotropic Flow Using Multiparticle Azimuthal Correlations in pp, p-Pb, Xe-Xe, and Pb-Pb Collisions at the LHC**	**Shreyasi Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……...et al.,(ALICE Collaboration)**	**Physics**	***Phys.Rev.Lett.* 123 (2019) 14, 142301**	**2019**	**0031-9007**	**https://journals.aps.org/prl/**	**https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.123.142301**	**yes**
25	**Measurement of strange baryon–antibaryon interactions with femtoscopic correlations**	**Shreyasi Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S.**	**Physics**	**: *Phys.Lett.B* 802 (2020)**	**2019**	**0370-2693**	**https://www.sciencedirect.com/journal/physics-letters-b**	**https://www.sciencedirect.com/science/article/pii/S0370269320300277?via%3Dihub**	**yes**

		Sambyal, Dr. Ramni Gupta……..et al.,(ALICE Collaboration)		**135223**					
26	**One-dimensional charged kaon femtoscopy in p-Pb collisions at sNN\sqrt{s_{\rm NN}}sNN = 5.02 TeV**	**Shreyasi Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……..et al.,(ALICE Collaboration)**	**Physics**	***Phys.Rev.C* 100 (2019) 2, 024002**	**2019**	**2469-9985**	**https://journals.aps.org/prc/**	**https://journals.aps.org/prc/abstract/10.1103/PhysRevC.100.024002**	**yes**
27	**Coherent J/ψ\psiψ photoproduction at forward rapidity in ultra-peripheral Pb-Pb collisions at sNN=5.02\sqrt{s_{\rm{NN}}}=5.02sNN=5.02 TeV**	**Shreyasi Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……..et al.,(ALICE Collaboration)**	**Physics**	***Phys.Lett.B* 798 (2019) 134926**	**2019**	**0370-2693**	**https://www.sciencedirect.com/journal/physics-letters-b**	**https://www.sciencedirect.com/science/article/pii/S0370269319306483?via%3Dihub**	**yes**
28	**First Observation of an Attractive Interaction between a Proton and a Cascade Baryon**	**Shreyasi Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……..et al.,(ALICE Collaboration)**	**Physics**	***Phys.Rev.Lett.* 123 (2019) 11, 112002**	**2019**	**0031-9007**	**https://journals.aps.org/prl/**	**https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.123.112002**	**yes**
29	**Measurement of jet radial**	**Shreyasi**	**Physics**	***Phys.Lett.B***	**2019**	**0370-2693**	**https://www.sciencedirect.**	**https://www.sciencedire**	**yes**

	profiles in Pb—–Pb collisions at sNN=\sqrt{s_{\rm NN}}=sNN= 2.76 TeV	**Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……...et al.,(ALICE Collaboration)**		**796 (2019) 204-219**			**com/journal/physics-letters-b**	**ct.com/science/article/pii/S0370269319304769?via%3Dihub**	
30	**Exploration of jet substructure using iterative declustering in pp and Pb–Pb collisions at LHC energies**	**Shreyasi Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……...et al.,(ALICE Collaboration)**	**Physics**	***Phys.Lett.B* 802 (2020) 135227**	**2019**	**0370-2693**	**https://www.sciencedirect.com/journal/physics-letters-b**	**https://www.sciencedirect.com/science/article/pii/S0370269320300319?via%3Dihub**	**yes**
31	**Measurement of charged jet cross section in pppppp collisions at s=5.02{\sqrt{s}=5.02}s=5.02 TeV**	**Shreyasi Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……...et al.,(ALICE Collaboration)**	**Physics**	***Phys.Rev.D* 100 (2019) 9, 092004**	**2019**	**2470-0010**	**https://journals.aps.org/prd/**	**https://journals.aps.org/prd/abstract/10.1103/PhysRevD.100.092004**	**yes**
32	**Measurement of the production of charm jets tagged with D0^{0}0 mesons in pp collisions at s=7 \sqrt{\mathrm{s}}=7 s=7 TeV**	**Shreyasi Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……...et**	**Physics**	***JHEP* 08 (2019) 133**	**2019**	**1126-6708**	**https://www.springer.com/journal/13130**	**https://link.springer.com/article/10.1007%2FJHEP08%282019%2913 3**	**yes**

		al.,(ALICE Collaboration)							
33	Inclusive J/ψ production at mid-rapidity in pp collisions at s \sqrt{s} s = 5.02 TeV	Shreyasi Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……...et al.,(ALICE Collaboration)	Physics	*JHEP* 10 (2019) 084	2019	1126-6708	https://www.springer.com/journal/13130	https://link.springer.com/article/10.1007%2FJHEP10%282019%2908 4	yes
34	Charged-particle production as a function of multiplicity and transverse spherocity in pp collisions at s=5.02\sqrt{s} =5.02s=5.02 and 13 TeV	Shreyasi Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……...et al.,(ALICE Collaboration)	Physics	*Eur.Phys.J.C* 79 (2019) 10, 857	2019	1434-6044	https://www.springer.com/journal/10052	https://link.springer.com/article/10.1140%2Fepjc%2Fs10052-019-7350-y	yes
35	Production of muons from heavy-flavour hadron decays in pp collisions at s \sqrt{s} s = 5.02 TeV	Shreyasi Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……...et al.,(ALICE Collaboration)	Physics	*JHEP* 09 (2019) 008	2019	1126-6708	https://www.springer.com/journal/13130	https://link.springer.com/article/10.1007%2FJHEP09%282019%2900 8	yes
36	Study of the Λ\LambdaΛ-Λ\LambdaΛ interaction with femtoscopy correlations in pp and p-Pb	Shreyasi Acharya,..... Prof. Anju Bhasin,	Physics	*Phys.Lett.B* 797 (2019)	2019	0370-2693	https://www.sciencedirect.com/journal/physics-letters-b	https://www.sciencedirect.com/science/article/pii/S0370269319305362?via%3Dihub	yes

	collisions at the LHC	**Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……...et al.,(ALICE Collaboration)**		**134822**					
37	**Scattering studies with low-energy kaon-proton femtoscopy in proton-proton collisions at the LHC**	**Shreyasi Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……...et al.,(ALICE Collaboration)**	**Physics**	***Phys.Rev.Lett.* 124 (2020) 9, 092301**	**2019**	**0031-9007**	**https://journals.aps.org/prl/**	**https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.124.092301**	**yes**
38	**Measurement of the inclusive isolated photon production cross section in pp collisions at $\sqrt{s}$ =7 TeV**	**Shreyasi Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……...et al.,(ALICE Collaboration)**	**Physics**	***Eur.Phys.J.C* 79 (2019) 11, 896**	**2019**	**1434-6044**	**https://www.springer.com/journal/10052**	**doi:10.1140/epjc/s10052-019-7389-9**	**yes**
39	**Measurement of prompt D^0, D^+, D^{*+} and D_s^+ production in p–Pb collisions at $\sqrt{s_{NN}}$ = 5.02 TeV**	**Shreyasi Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……...et al.,(ALICE Collaboration)**	**Physics**	***JHEP* 12 (2019) 092**	**2019**	**1126-6708**	**https://jhep.sissa.it/jhep/**	**doi:10.1007/JHEP12(2019)092**	**yes**

40	**Measurement of γ(1S) elliptic flow at forward rapidity in Pb-Pb collisions at $\sqrt{s_{NN}}$ =5.02 TeV**	**Shreyasi Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……...et al.,(ALICE Collaboration)**	**Physics**	***Phys.Rev.Lett.* 123 (2019) 19, 192301**	**2019**	**0031-9007**	**https://journals.aps.org/prl**	**doi:10.1103/PhysRevLett.123.192301**	**yes**
41	**$^{3}_{\Lambda}$H and $^{3}_{\bar{\Lambda}}\bar{H}$ lifetime measurement in Pb-Pb collisions at $\sqrt{s_{NN}}$ = 5.02 TeV via two-body decay**	**Shreyasi Acharya,..... Prof. Anju Bhasin, Prof . Sanjeev S. Sambyal, Dr. Ramni Gupta……...et al.,(ALICE Collaboration)**	**Physics**	***Phys.Lett.B* 797 (2019) 134905**	**2019**	**0370-2693**	**https://www.journals.elsevier.com/physics-letters-b**	**doi:10.1016/j.physletb.2019.134905**	**yes**
42	**Constraining the initial conditions and temperature dependent viscosity with three-particle correlations in Au+Au collisions**	**Leszek Adamczyk,.....Prof. Anju Bhasin….et al.,(STAR Collaboration)**	**Physics**	**Phys.Lett.B 790 (2019) 81-88**	**2019**	**0370-2693**	**https://www.journals.elsevier.com/physics-letters-b**	**10.1016/j.physletb.2018.10.075**	**yes**
43	**Longitudinal double-spin asymmetry for inclusive jet and dijet production in pp collisions at $\sqrt{s_{NN}}$ = 510 GeV**	**J. Adam,.....Prof. Anju Bhasin….et al.,(STAR Collaboration)**	**Physics**	**Phys.Rev.D 100 (2019) 5**	**2019**	**2470-0029**	**https://journals.aps.org/prd**	**10.1103/PhysRevD.100.052005**	**yes**
44	**Measurement of inclusive J/ψ suppression in Au+Au**	**Jaroslav Adam,.....Prof. Anju Bhasin….et al.,(STAR**	**Physics**	**Phys.Lett.B 797 (2019)**	**2019**	**0370-2693**	**https://www.sciencedirect.com/journal/physics-letters-b**	**10.1016/j.physletb.2019.134917**	**yes**

	collisions at $\sqrt{s_{NN}}$ = 200 GeV through the dimuon channel at STAR	**Collaboration)**							
45	**Measurements of the transverse-momentum-dependent cross sections of J/ψ production at mid-rapidity in proton+proton collisions at $\sqrt{s_{NN}}$ =510 and 500 GeV with the STAR detector**	**Jaroslav Adam,.....Prof. Anju Bhasin….et al.,(STAR Collaboration)**	**Physics**	***Phys.Rev.D* 100 (2019) 5**	**2019**	**2470-0010**	**https://journals.aps.org/prd**	**https://doi.org/10.1103/PhysRevD.100.052009**	**yes**
46	**The Proton-Ω correlation function in Au+Au collisions at $\sqrt{s_{NN}}$ = 200 GeV**	**Jaroslav Adam,.....Prof. Anju Bhasin….et al.,(STAR Collaboration)**	**Physics**	***Physics Letters B 790 (2019)***	**2019**	**0370-2693**	**https://www.sciencedirect.com/journal/physics-letters-b**	**https://doi.org/10.1016/j.physletb.2019.01.055**	**yes**
47	**Measurement of the longitudinal spin asymmetries for weak boson production in proton-proton collisions at √s=510 GeV**	**Jaroslav Adam,.....Prof. Anju Bhasin….et al.,(STAR Collaboration)**	**Physics**	**Phys.Rev.D 99 (2019) 5**	**2019**	**2470-0010**	**https://journals.aps.org/prd**	**https://doi.org/10.1103/PhysRevD.99.051102**	**yes**

48	**Observation of Excess of J/ψ Yield at Very Low Transverse Moment at $\sqrt{s_{NN}}$ = 200 GeV and U + U Collisions at $\sqrt{s_{NN}}$ =193 GeV**	**J. Adam,..... Prof. Anju Bhasin….et al.,(STAR Collaboration)**	**Physics**	***Phys.Rev.Lett.* 123 (2019) 13**	**2019**	**0031-9007**	**https://journals.aps.org/prl**	**https://doi.org/10.1103/PhysRevLett.123.132302**	**yes**
49	**Measurement of inclusive J/ψ suppression in Au+Au collisions at $\sqrt{s_{NN}}$ = 200 GeV through the dimuon channel at STAR**	**Jaroslav Adam,.....Prof. Anju Bhasin….et al.,(STAR Collaboration)**	**Physics**	**Physics Letters B 797 (2019)**	**2019**	**0370-2693**	**https://www.sciencedirect.com/journal/physics-letters-b**	**https://doi.org/10.1016/j.physletb.2019.134917**	**yes**
50	**Polarization of Λ (Λ^-) hyperons along the beam direction in Au+Au collisions at $\sqrt{s_{NN}}$ = 200 GeV**	**Jaroslav Adam,.....Prof. Anju Bhasin….et al.,(STAR Collaboration)**	**Physics**	**Phys. Rev. Lett. 123 (2019)**	**2019**	**1079-7114**	**https://journals.aps.org/prl**	**https://doi.org/10.1103/PhysRevLett.123.132301**	**yes**
51	**First Observation of the Directed Flow of D^0 and $\bar{D}^0$ in Au+Au Collisions at $\sqrt{s_{NN}}$ = 200 GeV**	**Jaroslav Adam,.....Prof. Anju Bhasin….et al.,(STAR Collaboration)**	**Physics**	**Phys.Rev.Lett. 123 (2019) 16**	**2019**	**1079-7114**	**https://journals.aps.org/prl**	**https://doi.org/10.1103/PhysRevLett.123.162301**	**yes**
52	**Beam energy dependence of (anti-)deuteron production**	**Jaroslav Adam,.....Prof.**	**Physics**	**Phys.Rev.C 99 (2019) 6**	**2019**	**2469-9993**	**https://journals.aps.org/prc**	**https://doi.org/10.1103/PhysRevC.99.064905**	**yesγ**

	in Au + Au collisions at the BNL Relativistic Heavy Ion Collider	**Anju Bhasin….et al.,(STAR Collaboration)**							
53	**Collision-energy dependence of second-order off-diagonal and diagonal cumulants of net-charge, net-proton, and net-kaon multiplicity distributions in Au+ Au collisions**	**Jaroslav Adam,.....Prof. Anju Bhasin….et al.,(STAR Collaboration)**	**Physics**	**Phys.Rev.C 100 (2019) 1**	**2019**	**2469-9993**	**https://journals.aps.org/prc**	**https://doi.org/10.1103/PhysRevC.100.014902**	**yes**
54	**Azimuthal Harmonics in Small and Large Collision Systems at RHIC Top Energies**	**Jaroslav Adam,.....Prof. Anju Bhasin….et al.,(STAR Collaboration)**	**Physics**	**Phys.Rev.Lett. 122 (2019) 17**	**2019**	**1079-7114**	**https://journals.aps.org/prl/**	**https://doi.org/10.1103/PhysRevLett.122.172301**	**yes**
55	**Collision-energy dependence of pT correlations in Au + Au collisions at energies available at the BNL Relativistic Heavy Ion Collider**	**Jaroslav Adam,.....Prof. Anju Bhasin….et al.,(STAR Collaboration)**	**Physics**	***Phys.Rev.C* 99 (2019) 4**	**2019**	**2469-9993**	**https://journals.aps.org/prc**	**https://doi.org/10.1103/PhysRevC.99.044918**	**yes**

56	Isolation, structural modification of macrophin from endophytic fungus Phoma macrostoma and their cytotoxic potential	Yedukondalu Nalli, Palak Arora, Sameer Khan, Fayaz Malik, Syed Riyaz-UlHassan, **Vivek K. Gupta**& Asif Ali	Post-Graduate Department of Physics, University of Jammu	**Med Chem Res**	**2019**	1054-2523	https://www.springer.com/journal/44	https://link.springer.com/article/10.1007/s00044-018-2281-y	**yes**
57	New pyrazolyl-dibenzo[*b,e*][1,4]diazepinones: room temperature one-pot synthesis and biological evaluation	G. C. Brahmbhatt,T. R. Sutariya, H. D. Atara, N. J. Parmar, **Vivek K. Gupta,** I. Lagunes, J. M. Padrón, P. R. Murumkar, M. R. Yadav	Post-Graduate Department of Physics, University of Jammu	**Mol Divers**	**2019**	1381-1991	https://www.springer.com/journal/11030	https://link.springer.com/article/10.1007/s11030-019-09958-z	**Yes**
58	Carbon-based nanocatalyst: An efcient and recyclable heterogeneous catalyst for one-pot synthesis of gem-bisamides, hexahydroacridine-1,8-diones and 1,8-dioxo-octahydroxanthene	Jaspreet Kour, Monika Gupta, Bushra Chowhan, **Vivek K. Gupta**	Post-Graduate Department of Physics, University of Jammu	**Journal of the Iranian Chemical Society**	**2019**	17352428	https://link.springer.com/journal/13738/volumes-and-issues	https://link.springer.com/article/10.1007/s13738-019-01723-1	**Yes**

59	Naturally Occurring Organic Acid-catalyzed Facile Diastereoselective Synthesis of Biologically Active (E)-3-(arylimino)indolin-2-one Derivatives in Water at Room Temperature	Gurpreet Kaur, Arvind Singh, Kiran Bala, Mamta Devi, Anjana Kumari, Sapna Devi, Rekha Devi, **Vivek K. Gupta**, Bubun Banerjee	Post-Graduate Department of Physics, University of Jammu	**Current Organic Chemistry**	**2019**	1385-2728	https://benthamscience.com/journals/current-organic-chemistry/contents-and-abstracts/	https://www.ingentaconnect.com/content/ben/coc/2019/00000023/00000016/art00006	**Yes**
60	Crystal Structure of 5-Butoxy-4-((3-butoxyphenyl)diazenyl)-3-methyl-1-phenyl-1H-pyrazole	K. J. Nakum, J. R. Patel, V. K. Gupta, and R. N. Jadeja	Post-Graduate Department of Physics, University of Jammu	**Crystallography Reports**	**2019**	1063-7745	https://link.springer.com	https://link.springer.com/article/10.1134/S1063774519070137	**Yes**

61	Binary and Ternary Zinc(II) Complexes of Acyl Pyrazolones: Synthesis, Spectroscopic Analysis, Crystal Structure and Antimalarial Activity	I.U.Shaikh, R.K.Patel, V.A. Mevada,**Vivek K. Gupta**., R.N.Jadeja	Post-Graduate Department of Physics, University of Jammu	**Chemistry Select**	**2019**	2365-6549	https://chemistry-europe.onlinelibrary.wiley.com/journal/23656549	https://chemistry-europe.onlinelibrary.wiley.com/doi/abs/10.1002/slct.201901058	**Yes**
62	Model investigations for vanadium-protein interactions: Synthesis, characterization and antidiabetic properties	N.Patel, A.K. Prajapati, R.N.Jadeja, R.N.Patel, S.K.Patel, **Vivek K. Gupta,** I.P. Tripathi, N.Dwivedi.	Post-Graduate Department of Physics, University of Jammu	**Inorganica Chimica Acta**	**2019**	0020-1693	https://www.journals.elsevier.com/inorganica-chimica-acta	https://www.sciencedirect.com/science/article/abs/pii/S0020169319304426	**Yes**
63	Sulfoacetate Modified Silica Supported Indium(III) Triflate [SiSAIn$(OTf)_2$]: A Novel Solid Acid Nano-Catalyst And Investigation of Its Catalytic Potential for One-Pot Synthesis of	R.Vaid, M.Gupta, G.Kour,**Vivek K. Gupta**	Post-Graduate Department of Physics, Univer	**Chemistry Select**	**2019**	2365-6549	https://chemistry-europe.onlinelibrary.wiley.com/journal/23656549	https://chemistry-europe.onlinelibrary.wiley.com/doi/10.1002/slct.201902012	**Yes**

	1,2,4,5-Tetrasubstituted Imidazole Derivatives		sity of Jammu						
64	Crystal Structure of 3-[1-(4-Methylphenyl)-9,10-Dihydro-4-Azaphenanthren-3-yl]Benzo[f]Coumarin	Deepak Sharma, Naresh Sharma , D. I. Brahmbhatt , and **Vivek K. Gupta**	Post-Graduate Department of Physics, University of Jammu	**Crystallography Reports**	**2019**	1063-7745	https://link.springer.com	https://link.springer.com/article/10.1134/S1063774519070198	**Yes**
65	Carbon-based nanocatalyst: An efcient and recyclable heterogeneous catalyst for one-pot synthesis of gem-bisamides, hexahydroacridine-1,8-diones and 1,8-dioxo-octahydroxanthene	Jaspreet Kour, Monika Gupta, Bushra Chowhan,**Vivek K. Gupta**	Post-Graduate Department of Physics, University of Jammu	***Journal of the Iranian Chemical Society***	**2019**	17352428	https://www.springer.com/journal/13738	https://link.springer.com/article/10.1007/s13738-019-01723-1	**Yes**

66	Crystal Structure of 5-Butoxy-4-((3-butoxyphenyl)diazenyl)-3-methyl-1-phenyl-1H-pyrazole	K. J. Nakum, J. R. Patel, Vivek K. Gupta, R. N. Jadeja	Post-Graduate Department of Physics, University of Jammu	***Crystallography Reports***	**2019**	1063-7745	https://link.springer.com	https://link.springer.com/article/10.1134/S1063774519070137	**Yes**
67	Crystal Structure of 3-[1-(4-Methylphenyl)-9,10-dihydro-4-azaphenanthren-3-yl]benzo[f]coumarin	Deepak Sharma, Naresh Sharma, D. I. Brahmbhatt, Vivek K. Gupta	Post-Graduate Department of Physics, University of Jammu	*Crystallography Reports*	**2019**	1063-7745	https://link.springer.com	https://link.springer.com/article/10.1134%2FS1063774519070198	**Yes**
68	Microscopic insight into the quasi-particle structure of odd-mass terbium isotopes	Suram Singh ., Surbhi Gupta ., Arun Gupta ., Amit Kumar ., Arun Bharti ., G.H. Bhat ., J.A. Sheikh	Physics	Chinese Journal of Physics	2019	0577-9073	https://www.journals.elsevier.com/chinese-journal-of-physics	https://www.sciencedirect.com/science/article/abs/pii/S0577907319308937	Yes

69	Microscopic insight into the nuclear structure properties of odd-mass $^{101-109}$ Cd isotopes	Verma, Preeti;Singh, Suram;Bharti, Arun;Khosa, S. K.;Bhat, G. H.;Sheikh, J. A.	Physics	Nuclear Physics A	2019	0375-9474	https://www.sciencedirect.com/journal/nuclear-physics-a	https://www.sciencedirect.com/science/article/abs/pii/S037594741930065X	Yes
70	Systematic study of two-quasiparticle structure of the neutron-rich odd-odd rubidium nuclei	Gupta, Surbhi;Singh, Suram;Kumar, Amit;Gupta, Anuradha;Bharti, Arun;Bhat, G. H.;Sheikh, J. A.	Physics	Chinese Journal of Physics	2019	0577-9073	https://www.journals.elsevier.com/chinese-journal-of-physics	https://www.sciencedirect.com/science/article/abs/pii/S0577907318310396	Yes
71	Microscopic insight into low level systematics and negative-parity yrast bands in odd-mass $^{111-127}$Cd	PreetiVerma ., Suram Singh ., Arun Bharti ., S. K. Khosa .,	Physics	European Physical Journal Plus	2019	2190-5444	https://www.springer.com/journal/13360	https://epjplus.epj.org/articles/epjplus/abs/2019/10/13360_2019_Article_12857/13360_2019_Article_12857.html	Yes
72	Preparation, Structural, Spectroscopic, Thermal, Linear and Nonlinear Optical Characteristics of Semi-Organic Material:	Goldy Slathia, Deepa Singh, K. K. Bamzai	Department of Physics	Zeitschrift fur Naturforschu-ng a	2019	1865-7109	https://www.degruyter.com/journal/key/zna/html?lang=en	10.1515/zna-2018-0417	Yes

	Samarium Chloride-Thiourea-L-Tartaric acid								
73	Effect of glycine on structural, optical and dielectric properties of solution grown samarium chloride coordinated with salicylic acid	Harjinder Singh, K. K. Bamzai	Department of Physics	Journal of Materials Science: Materials in Electronics	2019	0957-4522	https://www.springer.com/journal/10854	10.1007/s10854-019-00667-9	Yes
74	Morphological and Electrical Properties of Samarium Chloride Coordinated with Glycine and Salicylic Acid	Harjinder Singh, Bindu Raina, K. K. Bamzai	Department of Physics	Integrated Ferroelectrics	2019	1058-4587	https://www.tandfonline.com/toc/ginf20/current	10.1080/10584587.2019.1674956	Yes
75	Microscopic study of evolution of shape change across even-even mass chain of tellurium isotopes using relativistic Hartree-Bogoliubov model	Shivali Sharma, **Rani Devi** and S.K. Khosa	Physics	Nuclear Physics A	2019	ISSN: 0375-9474	https://www.sciencedirect.com/journal/nuclear-physics-a	https://doi.org/10.1016/j.nuclphysa.2019.05.008	Yes
76	Microscopic study of electromagnetic properties and band spectra of neutron deficient ^{133,135,137}Sm	Rakesh K. Pandit, R.K. Bhat, **Rani Devi**, S.K. Khosa, G.H. Bhat and J.A. Sheikh	Physics	Chinese Physics C	2019	Online ISSN: 2058-6132	https://iopscience.iop.org/journal/1674-1137	https://doi.org/10.1088/1674-1137/43/12/124108	Yes

						Print ISSN: 1674-1137			
77	Green Synthesis of Silver Nanoparticles Using Aqueous Extract of Rosa brunonii Lindl and Their Morphological, Biological and Photocatalytic Characterizations	Madhulika Bhagat, Rythem Anand, Ram Datt, Vinay Gupta, **Sandeep Arya**	Physics	Journal of Inorganic and Organometallic Polymers and Materials	2019	1574-1443	https://www.springer.com/journal/10904	https://link.springer.com/article/10.1007/s10904-018-0994-5	Yes
78	Potential Substitutes for Replacement of Lead in Perovskite Solar Cells: A Review	R Kour, **S Arya**, S Verma, J Gupta, P Bandhoria, V Bharti, R Datt, Gupta V	Physics	Global Challenges	2019	2056-6646	https://onlinelibrary.wiley.com/journal/20566646	https://onlinelibrary.wiley.com/doi/full/10.1002/gch2.201900050	Yes
79	Dual-functional cathode buffer layer for power conversion efficiency enhancement of bulk-heterojunction solar cells	R Datt, S Bishnoi, R Gupta, D Haranath, S. N Sharma, G Gupta, **S Arya**, S Kumare, V Gupta	Physics	Synthetic Metals	2019	0379-6779	https://www.journals.elsevier.com/synthetic-metals	https://www.sciencedirect.com/science/article/abs/pii/S0379677919302243	Yes
80	Performance of template-assisted electrodeposited Copper/Cobalt bilayered	Jyoti Gupta, **Sandeep Arya**, Sonali Verma, Anoop Singh, Asha Sharma,	Physics	Materials Chemistry and Physics	2019	0254-0584	https://www.journals.elsevier.com/materials-chemistry-and-physics	https://www.sciencedirect.com/science/article/abs/pii/S0254058419307680	Yes

	nanowires as an efficient glucose and Uric acid senor	Bikram Singh, Prerna, Rakesh Sharma							
81	Economical and Efficient Electrochemical Sensing of Folic Acid using a Platinum Electrode Modified with Hydrothermally Synthesized Pd and Ag Co-Doped SnO2 Nanoparticles	Asha Sharma, **Sandeep Arya**	Physics	Journal of The Electrochemical Society	2019	0013-4651	https://iopscience.iop.org/journal/1945-7111	https://iopscience.iop.org/article/10.1149/2.0261913jes	Yes
82	Comparative study of CuO, CuO@Ag and CuO@Ag:La nanoparticles for their photosensing properties	**Sandeep Arya**, Prerna Mahajan, Anoop Singh, Ravinder Kour	Physics	Materials Research Express	2019	2053-1591	https://iopscience.iop.org/journal/2053-1591	https://iopscience.iop.org/article/10.1088/2053-1591/ab49ab	Yes