S/n	Physics_Faculty	Title of Publication	Journal	Publisher	Author	Volume	Issue	Page	DOI	Impact Factor	Quartile(WOS)	Indexed In	Month of Publication	Year of Publication
1	**Sanjay Kumar Sinha**	Mechanical, structural, corrosion, and dielectric properties of hydroxyapatite doped with varying concentrations of Cu to be used as orthopedic implants	Journal of Materials Engineering and Performance	Springer US	Smit Anand, Sanjay Kumar Sinha	33	24	14368-14380	https://doi.org/10.1007/s11665-023-08970-7	2	Q3	SCI/SCIE	December	2024
2		Improvement in bioactivity, hardness and friction resistance of 3% manganese-doped hydroxyapatite coated on alumina using radio frequency magnetron sputtering	Surface & Coatings Technology	Elsevier	Ranbir Kumar, Deep Shikha, Sanjay Kumar Sinha	494		131481	https://doi.org/10.1016/j.surfcoat.2024.131481	6.1	Q1	SCI/SCIE	October	2024
3		Structural, mechanical, electrical, and biocompatibility investigation of nanostructured hydroxyapatite coating on alumina by radio frequency magnetron sputtering	Journal of Materials Science	Springer US	Ranbir Kumar, Deep Shikha, Sanjay Kumar Sinha	59	33	15764-15779	https://doi.org/10.1007/s10853-024-10132-6	3.9	Q2	SCI/SCIE	September	2024
4		DPPH radical scavenging assay: A tool for evaluating antioxidant activity in 3% cobalt–Doped hydroxyapatite for orthopaedic implants	Ceramics International	Elsevier	Ranbir Kumar, Deep Shikha, Sanjay Kumar Sinha	50	8	13967-13973	https://doi.org/10.1016/j.ceramint.2024.01.314	5.6	Q1	SCI/SCIE	April	2024
5		Antioxidant properties and thrombogenic evaluation of Copper-Manganese Alloy-Doped hydroxyapatite in comparison to un-doped hydroxyapatite	Inorganic Chemistry Communications		Sanjay Kumar Sinha Ranbir Kumar, Deep Shikha	165		112490	https://doi.org/10.1016/j.inoche.2024.112490	5.4	Q1	SCI/SCIE		
6	**Rajeev Kumar Sinha**	Synthesis, characterization and antibacterial activity of hexasubstituted Coumarin-based Schiff base derivative of cyclophosphazene	Journal of Macromolecular Science, Part A	Taylor & Francis	Ishanki Sharma, Rajeev Kumar Sinha, Tanisha Singh, Sunil Kumar Khare, NV Anil Kumar	61	12	986-992	https://doi.org/10.1080/10601325.2024.2420224	2.4	Q3	SCI/SCIE	December	2024

7		5, 10, 15, 20-Tetrakis (p-tolyl) porphyrin derived carbon dots as colorant in flexo and screen inks with multi-level covert features for security printing	Journal of Molecular Liquids	Elsevier	Namratha Ullal, Bibekananda Sahoo, Dhanya Sunil, Suresh D Kulkarni, Rajeev K Sinha, PJ Anand, Bhat K Udaya	413		126016	https://doi.org/10.1016/j.molliq.2024.126016	5.2	Q1	SCI/SCIE	November	2024
8		Corrosion mitigation of 6061 aluminium alloy hybrid metal matrix composite using a green inhibitor: experimental and theoretical investigations	Materials Research Express	IOP Publishing	M Lavanya, Bhavya Hegde, Santhosh L Gaonkar, Gowri Shankar, Rajeev K Sinha, P Preethi Kumari	11	7	76510	https://doi.org/10.1088/2053-1591/ad5e5f	2.2	Q3	SCI/SCIE	July	2024
9		A selective bis-thiophene chalcone-based spectrofluorimetric sensor for Fe3.	Luminescence		Priyanka Mahesha, Nitinkumar S Shetty, Suresh D Kulkarni, Rajeev K Sinha	39	7	e4823-e4823	https://doi.org/10.1002/bio.4823	3	Q2	SCI/SCIE	July	2024
10		New hydrogen-bonded liquid crystal supramolecular systems: role of (+ l)-alkoxy substituents in promoting molecular ordering	Journal of Thermal Analysis and Calorimetry	Springer International Publishing	MK Sonali, Rajeev K Sinha, Poornima Bhagavath	149	14	7225-7243	https://doi.org/10.1007/s10973-024-13254-w	3.1	Q2	SCI/SCIE	July	2024
11		The plinths of hydrogen-bonding in liquid crystals: Carboxylic acids as proton donors to emphasize on the hydrogen bonding in liquid crystals	Journal of Molecular Structure	Elsevier	MK Sonali, Rajeev K Sinha, Suresh D Kulkarni, Poornima Bhagavath	1301		137367	https://doi.org/10.1016/j.molstruc.2023.137367	4.7	Q2	SCI/SCIE	April	2024
12		Correction: Analyzing the impact of the size of fluoro and chloro substituents on induced mesomorphism in hydrogen bonded liquid crystals	RSC advances	Royal Society of Chemistry	MK Sonali, Rajeev K Sinha, et al.	14	31	22418-22419	https://doi.org/10.1039/d4ra90077d	4.6	Q2	SCI/SCIE		2024
13		Analyzing the impact of the size of fluoro and chloro substituents on induced mesomorphism in hydrogen bonded liquid crystals	RSC advances	Royal Society of Chemistry	MK Sonali, Rajeev K Sinha, et al.	14	28	20398-20409	https://doi.org/10.1039/d3ra08569d	4.6	Q2	SCI/SCIE		2024
14		Surface-Plasmon-Polaritons for Reversible Assembly of Gold Nanoparticles, In Situ Nanogap Tuning, and SERS	Small Methods		Cheviri Ghanashyam, Rajeev K Sinha, Aseefhali Bankapur	8	1	2301086	https://doi.org/10.1002/smtd.202301086	9.1	Q1	SCI/SCIE	January	2024

15	**Sunita Keshri**	Magnetic, Optical, and Antibacterial Properties of Ag+ and Ti4+ Doped Cobalt Ferrite Nanocrystals	Physics of the Solid State	Pleiades Publishing	Krishna Kumar Keshri, Manoj Kumar Rout, Rajdeep Saha, Sunita Keshri	66	11	521-528	https://doi.org/10.1134/s1063783424601255	1.8	Q3	SCI/SCIE	November	2024
16		Elastic, Magnetocaloric, and Magneto-Dielectric Properties of Dy3+ and La3+ Doped Co0.7Zn0.3Fe2O4 Ferrite Nanoparticles for Multifunctional Devices	Journal of Physical Chemistry C	American Chemical Society	Manoj Kumar Rout, Sunita Keshri	128	41	17731-17746	https://doi.org/10.1021/acs.jpcc.4c05091	3.2	Q3	SCI/SCIE	October	2024
17		Single phase metamaterial behavior in Ag+ and Ti4+ doped cobalt ferrites	Materials Chemistry and Physics	Elsevier	Krishna Kumar Keshri, Manoj Kumar Rout, Sunita Keshri	320		129382	https://doi.org/10.1016/j.matchemphys.2024.129382	4.7	Q2	SCI/SCIE	July	2024
18	**R. K. Paul**	A study of cosmic microwave background using non-extensive statistics	Experimental Astronomy	Springer Netherlands	Somita Dhal, RK Paul	57	3	25	https://doi.org/10.1007/s10686-024-09943-x	2.2	Q2	SCI/SCIE	June	2024
19	**Sourabh Lahiri**	Two-dimensional ASEP model to study density profiles in CVD growth	Physica A: Statistical Mechanics and its Applications	North-Holland	Gagan Kumar, Annwesha Adhikari, Anupam Roy, Sourabh Lahiri	656		130206	https://doi.org/10.2139/ssrn.4732733	3.1	Q2	SCI/SCIE	December	2024
20		Thermodynamics of one-and two-qubit quantum refrigerators interacting with squeezed baths: a comparative study	Pramana	Springer India	Ashutosh Kumar, Sourabh Lahiri	98	3	80	https://doi.org/10.1007/s12043-024-02776-5	2.1	Q2	SCI/SCIE	June	2024
21		Stochastic heat engine using multiple interacting active particles	Physica A: Statistical Mechanics and its Applications	North-Holland	Aradhana Kumari, Md Samsuzzaman, Arnab Saha, Sourabh Lahiri	636		129575	https://doi.org/10.1016/j.physa.2024.129575	3.1	Q2	SCI/SCIE	February	2024
22		Efficiency of a microscopic heat engine subjected to stochastic resetting	Physical Review E		Sourabh Lahiri, Shamik Gupta	109	1	14129	https://doi.org/10.1103/physreve.109.014129	2.4	Q1	SCI/SCIE	January	2024
23	**Sanat Kumar Mukherjee**	Insight into the structural, electronic, optical, thermodynamic and thermoelectric properties of the cubic PbSiO3 Perovskite: A first-principles computation	Chinese Journal of Physics	Elsevier	Aparna Dixit, A Dahshan, et al.	92		1474-1491	https://doi.org/10.1016/j.cjph.2023.10.023	4.6	Q1	SCI/SCIE	December	2024
24		Synthesis of reduced graphene oxide and Nickel oxide/reduced graphene oxide composite materials for supercapacitor applications and their computational investigations	Journal of Molecular Structure	Elsevier	Suveksha Tamang, Sadhna Rai, et al.	1315		138865	https://doi.org/10.1016/j.molstruc.2024.138865	4.7	Q2	SCI/SCIE	November	2024

25		Insights into spray-coated p-type Li-doped ZnO thin films: An examination of structural, chemical, optical, and electrical characteristics	MRS Advances	Springer International Publishing	Mohamedi Mohamed Walid, Rajan Singh, et al.	9	10	770-776	https://doi.org/10.1557/s43580-024-00805-4			Scopus Indexed	July	2024
26		A DFT insight into the physical features of alkaline based perovskite compounds AInBr3 (A= K, Rb)	Solid State Ionics	Elsevier	Debidatta Behera, Dhan Raj Lawati, M Agouri, A Abbassi, S Taj, B Manaut, Sanat Kumar Mukherjee	409		116513	https://doi.org/10.1016/j.ssi.2024.116513	3.3	Q2	SCI/SCIE	June	2024
27		Insight into the structural, elastic, lattice dynamical, optical, and thermoelectric properties of novel Heusler alloy LiCaBi by first-principles approach	Chinese Journal of Physics	Elsevier	Jisha Annie Abraham, Debidatta Behera, Kshitij Srivastava, Anshuman Srivastava, Ramesh Sharma, Murefah mana Al-Anazy, E El Shiekh, Sanat Kumar Mukherjee	89		859-870	https://doi.org/10.1016/j.cjph.2023.10.021	4.6	Q1	SCI/SCIE	June	2024
28		First principle studies on structural, elastic, electronic, optical, and thermoelectric properties of new perovskite TlTaO3: For renewable energy applications	Journal of Computational Chemistry	John Wiley & Sons, Inc.	Sangeeta Lakra, Sanat Kumar Mukherjee	45	13	1008-1016	https://doi.org/10.1002/jcc.27308	4.8	Q2	SCI/SCIE	May	2024
29		Enhanced photocatalytic efficiency of sol-gel derived ZnS-rGO binary nanocomposite	Physica Scripta	IOP Publishing	Priyanka Kumari, Aashish Sharma, et al.	99	5	55918	https://doi.org/10.1088/1402-4896/ad3858	2.6	Q2	SCI/SCIE	May	2024
30		First-principle analysis of optical and thermoelectric properties in alkaline-based perovskite compounds AInCl3 (A = K, Rb)	European Physical Journal Plus	Springer Berlin Heidelberg	Debidatta Behera, Tesfaye Abebe Geleta, I Allaoui, Mohamed Khuili, Sanat Kumar Mukherjee, et al.	139	2	127	https://doi.org/10.1140/epjp/s13360-024-04921-w	2.9	Q2	SCI/SCIE	February	2024
31		Investigation on the electrocatalytic oxidation of alcohol using zinc oxide thin films deposited by pulsed electrodeposition on an indium tin oxide surface	REVISTA MEXICANA DE FISICA	Sociedad Mexicana de Física	M Lakhdari, K Hadj Larbi, A Nebatti Ech-chergui, F Habelhames, N Benaioun, J Michel Nunzi, S Kumar Mukherjee, M Adjdir	70	1		https://doi.org/10.31349/revmexfis.70.011005	1	Q3	SCI/SCIE	February	2024

32		First principle studies on structural, electronic, elastic, optical, and thermoelectric properties of XGeCl3 (X = Rb/Cs): Promising compounds for green energy ...	International Journal of Quantum Chemistry	John Wiley & Sons, Inc.	Debidatta Behera, M Boudjelal, M Batouche, T Seddik, Dj Hemidi, Sanat Kumar Mukherjee	124	1	e27342	https://doi.org/10.1002/qua.27342	2	Q2	SCI/SCIE	January	2024
33	**Madhu Priya**	Early time wetting kinetics in surface-directed spinodal decomposition for off-critical quenches: A molecular dynamics study	Journal of Chemical Physics	AIP Publishing	Syed Shuja Hasan Zaidi, Saumya Suvarna, Madhu Priya, Sanjay Puri, Prabhat K Jaiswal	161	15		https://doi.org/10.1063/5.0232743	3.1	Q2	SCI/SCIE	October	2025
34		Role of range of interaction potential on structure and dynamics of a one-component system of particles interacting via Mie potential	AIP Advances	AIP Publishing	Saumya Suvarna, Madhu Priya	14	4		https://doi.org/10.1063/5.0199631	1.4	Q4	SCI/SCIE	April	2024
35	**Rajyavardhan Ray**	Layer dependent topological phases and transitions in $TaRhTe_4$: From monolayer and bilayer to bulk	Physical Review Materials	American Physical Society	Xiao Zhang, Ning Mao, Oleg Janson, Jeroen van den Brink, Rajyavardhan Ray	8	9	94201	https://doi.org/10.1103/physrevmaterials.8.094201	3.4	Q2	SCI/SCIE	September	2024
36		Correlation between electronic polarization and shift current in cubic and hexagonal semiconductors LiZnX (X=P, As, Sb)	Physical Review Materials	American Physical Society	Urmimala Dey, Jeroen van den Brink, Rajyavardhan Ray	8	2	25001	https://doi.org/10.1103/physrevmaterials.8.025001	3.4	Q2	SCI/SCIE	February	2024
37	**Ela Rout**	Improved thermal stability and electrical conductivity of dysprosium doped barium zirconium cerate electrolyte	Materials Science and Engineering: B	Elsevier	Bibek Kumar Sonu, Gayatri Dash, Jai Prakash Sharma, Ela Rout	308		117611	https://doi.org/10.1016/j.mseb.2024.117611	4.6	Q2	SCI/SCIE	October	2024
38		Investigation of structural and optoelectronic integrity of Sm3+ doped CaWO4 for LED applications	Ceramics International	Elsevier	P Yadav, D Vignesh, M Patnaik, M Priyadarshani, E Rout	50	19	35203-35213	https://doi.org/10.1016/j.ceramint.2024.06.329	5.6	Q1	SCI/SCIE	October	2024
39		A comprehensive study on the structural, radioluminescence and thermoluminescence properties of scheelite and wolframite type tungstates	Radiation Physics and Chemistry	Pergamon	M Patnaik, P Yadav, E Rout, AK Yadav, SN Jha, M Tyagi	223		111957	https://doi.org/10.1016/j.radphyschem.2024.111957	3.3	Q1	SCI/SCIE	October	2024

40		Custom Hybrid Activation Function over Delocalization Error for Gap State Predictions of A2CeZrO6 (A = Ba2+, Sr2+, Ca2+, Mg2+) Proton Conductors: A First ...	Journal of Physical Chemistry C	American Chemical Society	D Vignesh, Ela Rout	128	39	16684-16700	https://doi.org/10.1021/acs.jpcc.4c03379.s001	3.2	Q3	SCI/SCIE	September	2024
41		Defect scattering and thermionic landscape of acceptor doped BaCeO3 polymorph for intermediate temperature fuel cell technology	Ceramics International	Elsevier	D Vignesh, Ela Rout	50	10	17323-17337	https://doi.org/10.1016/j.ceramint.2024.02.214	5.6	Q1	SCI/SCIE	May	2024
42		Investigation of structural, electrical and electrochemical properties of La0.8Sr0.2Mn1−xScxO3−δ as cathode on yttria-stabilized zirconia electrolyte for ...	Journal of Materials Science: Materials in Electronics	Springer US	Gayatri Dash, Ela Rout	35	7	491	https://doi.org/10.1007/s10854-024-12224-0	2.8	Q2	SCI/SCIE	March	2024
43		Proton-polaron and thermionic identity of BaCeO3 polymorph for intermediate temperature fuel cell technology: A first principles and molecular dynamics approach	International Journal of Hydrogen Energy	Pergamon	D Vignesh, Mayank Kumar Gupta, Ranjan Mittal, Ela Rout	57		394-407	https://doi.org/10.1016/j.ijhydene.2024.01.047	8.3	Q1	SCI/SCIE	February	2024
44		Machine learning advent and derivative discontinuity of DFT functionals over gap state predictions among ACeO3 (A= Ba2+, Sr2+, Ca2+, Mg2+) proton conductors	Computational Materials Science	Elsevier	D Vignesh, Ela Rout	231		112583	https://doi.org/10.1016/j.commatsci.2023.112583	3.3	Q2	SCI/SCIE	January	2024
45	**Anupam Roy**	Two-dimensional ASEP model to study density profiles in CVD growth	Physica A: Statistical Mechanics and its Applications	Science Direct (Elsevier)	Gagan Kumar, Annwesha Adhikari, Anupam Roy, Sourabh Lahiri	656		130206	https://doi.org/10.1016/j.physa.2024.130206	3.1	Q2	SCI/SCIE	December	2024
46		Low-Temperature Synthesis of WSe2 by the Selenization Process under Ultrahigh Vacuum for BEOL Compatible Reconfigurable Neurons	ACS Applied Materials & Interfaces	American Chemical Society	SS Teja Nibhanupudi, Anupam Roy, et al.	16	17	22326-22333	https://doi.org/10.1021/acsami.3c18446	8.2	Q1	SCI/SCIE	April	2024
47		Ultra-fast switching memristors based on two-dimensional materials	Nature Communications	Nature Publishing Group UK	S. S. Teja Nibhanupudi, Anupam Roy, Dmitry Veksler, Matthew Coupin, Kevin C. Matthews, Matthew Disiena, Ansh, Jatin V. Singh, Ioana R. Geerbs Pelcsan, Jamie	15	1	2334	https://doi.org/10.1038/s41467-024-46372-y	15.7	Q1	SCI/SCIE	March	2024

48	**Rishi Sharma**	Exposing graphene oxide's function in enhancing dye-sensitized solar cell efficiency	Petroleum Science and Technology	Taylor & Francis	Manu PriyaDarshani, Rishi Sharma	43	7	746–766	https://doi.org/10.1080/10916466.2024.2413875	1.4	Q2	SCI/SCIE	October	2024
49		Recent Advancements in Natural Polymers-Based Self-Healing Nano-Materials for Wound Dressing	Journal of Biomedical Materials Research Part B: Applied Biomaterials	John Wiley & Sons, Inc.	Kumar Anand, Rishi Sharma, Neelima Sharma	112	6	e35435	https://doi.org/10.1002/jbm.b.35435	3.4	Q2	SCI/SCIE	June	2024
50		Correlating the structural and magnetic properties of the non-cubic double perovskites with Ir5+ ions	Solid State Sciences	Elsevier	Sipun Mohanty, Sibasish Mandal, Rishi Sharma, Samrat Mukherjee	150		107480	https://doi.org/10.1016/j.solidstatesciences.2024.107480	3.3	Q1	SCI/SCIE	April	2024
51	**Dilip Kumar Singh**	Piezoresistive/Piezoelectric Pressure Sensor Based on CVD-Grown ZnO Nanowires on Polyethylene Terephthalate Substrate	ACS Applied Electronic Materials	American Chemical Society	Manisha Kumari, Rakesh K Prasad, Manish K Singh, Parameswar K Iyer, Dilip K Singh				https://doi.org/10.1021/acsaelm.4c00991	4.7	Q2	SCI/SCIE	August	2024
52	**Suman Ghosh**	Signature quasinormal modes of Ellis-Bronnikov wormhole embedded in warped braneworld background	Physical Review D	American Physical Society	Antariksha Mitra, Suman Ghosh	109	6	64005	https://doi.org/10.1103/physrevd.109.064005	5.3	Q1	SCI/SCIE	March	2024
53	**Pawan Kumar Tiwari**	Support Vector and Linear Regression Machine Learning Model on Amperometric Signals to Predict Glucose Concentration and Hematocrit Volume	Majlesi Journal of Electrical Engineering		Kirti Sharma, Pawan K Tiwari, Sanjay Kumar Sinha	18	1		https://doi.org/10.30486/mjee.2023.2004331.1339			Scopus Indexed	April	2024
54	**R. K. Dewanjee (CMS Collaboration)**	Measurement of boosted Higgs bosons produced via vector boson fusion or gluon fusion in the H→ b b decay mode using LHC proton-proton collision data at s= 13 TeV	Journal of High Energy Physics	Springer Science and Business Media LLC	Aram Hayrapetyan, et al.	2024	12		https://doi.org/10.1007/JHEP12(2024)035	5.5	Q1	SCI/SCIE	December	2024
55		Searches for Pair-Produced Multijet Resonances Using Data Scouting in Proton-Proton Collisions at $\sqrt{s}$ =13 TeV	Physics Review Letters	APS	Aram Hayrapetyan, et al.	133	20	201803	https://doi.org/10.1103/PhysRevLett.133.201803	9	Q1	SCI/SCIE	December	2024

56		Search for Soft Unclustered Energy Patterns in Proton-Proton Collisions at 13 TeV	Physics Review Letters	APS	Aram Hayrapetyan, et al.	133	19	191902	https://doi.org/10.1103/PhysRevLett.133.191902	9	Q1	SCI/SCIE	November	2024
57		Measurement of differential ZZ + jets production cross sections in pp collisions at sqrt(s) = 13 TeV	Journal of High Energy Physics	Springer Science and Business Media LLC	Aram Hayrapetyan, et al.	2024	209		https://doi.org/10.1007/JHEP10(2024)209	5.5	Q1	SCI/SCIE	October	2024
58		Search for production of a single vectorlike quark decaying to tH or tZ in the all-hadronic final state in collisions at $\sqrt{s}$ =13 TeV pp	Physical Review D	APS	A. Hayrapetyan, et al.	110	7	72012	https://doi.org/10.1103/PhysRevD.110.072012	5.3	Q1	SCI/SCIE	October	2024
59		Observation of the Λ^{0}_{b}→ J/ψΞ^{-}K^{+} decay	European Physical Journal C	Springer	A. Hayrapetyan, et al.	84		1062	https://doi.org/10.1140/epjc/s10052-024-13114-9	4.8	Q2	SCI/SCIE	October	2024
60		Search for Higgs boson pair production with one associated vector boson in proton-proton collisions at sqrt(s) = 13 TeV	Journal of High Energy Physics	Springer Science and Business Media LLC	Aram Hayrapetyan, et al.	2024	10	61	https://doi.org/10.1007/JHEP10(2024)061	5.5	Q1	SCI/SCIE	October	2024
61		Observation of Enhanced Long-Range Elliptic Anisotropies Inside High-Multiplicity Jets in Collisions at $\sqrt{s}$ =13 TeV pp	Physics Review Letters	APS	Aram Hayrapetyan, et al.	133	14	142301	https://doi.org/10.1103/PhysRevLett.133.142301	9	Q1	SCI/SCIE	September	2024
62		Search for bottom-type vectorlike quark pair production in dileptonic and fully hadronic final states in proton-proton collisions at $\sqrt{s}$ =13 TeV	Physical Review D	APS	A. Hayrapetyan, et al.	110	5	052004	https://doi.org/10.1103/PhysRevD.110.052004	5.3	Q1	SCI/SCIE	September	2024
63		K^{0}_{S} and Λ(Λ-bar) two-particle femtoscopic correlations in PbPb collisions at sqrt(s_{NN}) = 5.02 TeV	Physics Letters B	North-Holland	A. Hayrapetyan, et al.	857		138936	https://doi.org/10.1016/j.physletb.2024.138936	4.5	Q1	SCI/SCIE	October	2024

64		Searches for violation of Lorentz invariance in top quark pair production using dilepton events in 13 TeV proton-proton collisions	Physics Letters B	North-Holland	A. Hayrapetyan, et al.	857		138979	https://doi.org/10.1016/j.physletb.2024.138979	4.5	Q1	SCI/SCIE	October	2024
65		Performance of the CMS electromagnetic calorimeter in pp collisions at $\sqrt{s}$ = 13 TeV	Journal of Instrumentation	IOP Science	A. Hayrapetyan, et al.	19	9	P09004	https://doi.org/10.1088/1748-0221/19/09/P09004	1.3	Q4	SCI/SCIE	September	2024
66		Performance of CMS muon reconstruction from proton-proton to heavy ion collisions	Journal of Instrumentation	IOP Science	A. Hayrapetyan, et al.	19	9	P09012	https://doi.org/10.1088/1748-0221/19/09/P09012	1.3	Q4	SCI/SCIE	September	2024
67		Measurement of the production cross section of a Higgs boson with large transverse momentum in its decays to a pair of τ leptons in proton-proton collisions at sqrt(s) = 13 TeV	Physics Letters B	North-Holland	A. Hayrapetyan, et al.	857		138964	https://doi.org/10.1016/j.physletb.2024.138964	4.5	Q1	SCI/SCIE	October	2024
68		Measurement of multijet azimuthal correlations and determination of the strong coupling in proton-proton collisions at sqrt(s) = 13 TeV	European Physical Journal C	Springer	A. Hayrapetyan, et al.	84		842	https://doi.org/10.1140/epjc/s10052-024-13116-7	4.8	Q2	SCI/SCIE	August	2024
69		Multiplicity and transverse momentum dependence of charge-balance functions in pPb and PbPb collisions at LHC energies	Journal of High Energy Physics	Springer Science and Business Media LLC	Aram Hayrapetyan, et al.	2024	08	148	https://doi.org/10.1007/JHEP08(2024)148	5.5	Q1	SCI/SCIE	August	2024
70		Measurement of Energy Correlators inside Jets and Determination of the Strong Coupling αS (mZ)	Physics Review Letters	APS	Aram Hayrapetyan, et al.	133	7	071903	https://doi.org/10.1103/PhysRevLett.133.071903	9	Q1	SCI/SCIE	August	2024
71		Search for long-lived particles decaying in the CMS muon detectors in proton-proton collisions at $\sqrt{s}$ =13 TeV	Physical Review D	APS	A. Hayrapetyan, et al.	110	3	032007	https://doi.org/10.1103/PhysRevD.110.032007	5.3	Q1	SCI/SCIE	August	2024

72		Constraints on anomalous Higgs boson couplings from its production and decay using the WW channel in proton–proton collisions at sqrt(s) = 13 TeV	European Physical Journal C	Springer	A. Hayrapetyan, et al.	84		779	https://doi.org/10.1140/epjc/s10052-024-12925-0	4.8	Q2	SCI/SCIE	August	2024
73		Search for Higgs boson pair production in the bbWW decay mode in proton-proton collisions at sqrt(s) = 13 TeV	Journal of High Energy Physics	Springer Science and Business Media LLC	Aram Hayrapetyan, et al.	2024	7	293	https://doi.org/10.1007/JHEP07(2024)293	5.5	Q1	SCI/SCIE	July	2024
74		Search for a scalar or pseudoscalar dilepton resonance produced in association with a massive vector boson or top quark-antiquark pair in multilepton events at $\sqrt{s}$ =13 TeV	Physical Review D	APS	A. Hayrapetyan, et al.	110	1	012013	https://doi.org/10.1103/PhysRevD.110.012013	5.3	Q1	SCI/SCIE	July	2024
75		Search for ZZ and ZH production in the 4b final state using proton-proton collisions at sqrt(s) = 13 TeV	European Physical Journal C	Springer	A. Hayrapetyan, et al.	84		712	https://doi.org/10.1140/epjc/s10052-024-13021-z	4.8	Q2	SCI/SCIE	July	2024
76		Search for high-mass exclusive diphoton production with tagged protons in proton-proton collisions at $\sqrt{s}$ =13 TeV	Physical Review D	APS	A. Hayrapetyan, et al.	110	1	012010	https://doi.org/10.1103/PhysRevD.110.012010	5.3	Q1	SCI/SCIE	July	2024
77		Observation of the Y(3S) Meson and Suppression of Y States in Pb-Pb Collisions at $\sqrt{s}$NN=5.02 TeV	Physics Review Letters	APS	Aram Hayrapetyan, et al.	133	2	022302	https://doi.org/10.1103/PhysRevLett.133.022302	9	Q1	SCI/SCIE	July	2024
78		Search for long-lived heavy neutral leptons decaying in the CMS muon detectors in proton-proton collisions at $\sqrt{s}$ =13 TeV	Physical Review D	APS	A. Hayrapetyan, et al.	110	1	012004	https://doi.org/10.1103/PhysRevD.110.012004	5.3	Q1	SCI/SCIE	July	2024

79		Observation of the $\Xi_b^- \to (2S)\Xi_b^-$ decay and studies of the $\Xi_b(5945)^0$ baryon in proton-proton collisions at $\sqrt{s}$ =13 TeV	Physical Review D	APS	A. Hayrapetyan, et al.	110	1	012002	https://doi.org/10.1103/PhysRevD.110.012002	5.3	Q1	SCI/SCIE	July	2024
80		Evidence for tWZ production in proton-proton collisions at sqrt(s) = 13 TeV in multilepton final states	Physics Letters B	North-Holland	A. Hayrapetyan, et al.	855		138815	https://doi.org/10.1016/j.physletb.2024.138815	4.5	Q1	SCI/SCIE	August	2024
81		Search for Narrow Trijet Resonances in Proton-Proton Collisions at √s = 13 TeV	Physics Review Letters	APS	Aram Hayrapetyan, et al.	133	1	011801	https://doi.org/10.1103/PhysRevLett.133.011801	9	Q1	SCI/SCIE	July	2024
82		Test of lepton flavor universality in B^{±}→K^{±}μ^{+}μ^{-} and B^{±}→K^{±}e^{+}e^{-} decays in proton-proton collisions at sqrt(s) = 13 TeV	Reports on Progress in Physics	IOP Publishing	Aram Hayrapetyan, et al.	87	7	077802	https://doi.org/10.1088/1361-6633/ad4e65	20.7	Q1	SCI/SCIE	July	2024
83		Extracting the speed of sound in quark–gluon plasma with ultrarelativistic lead–lead collisions at the LHC	Reports on Progress in Physics	IOP Publishing	Aram Hayrapetyan, et al.	87	7	077801	https://doi.org/10.1088/1361-6633/ad4b9b	20.7	Q1	SCI/SCIE	June	2024
84		Search for central exclusive production of top quark pairs in proton-proton collisions at sqrt(s) = 13 TeV with tagged protons	Journal of High Energy Physics	Springer Science and Business Media LLC	Aram Hayrapetyan, et al.	2024	06	187	https://doi.org/10.1007/JHEP06(2024)187	5.5	Q1	SCI/SCIE	June	2024
85		Combination of Measurements of the Top Quark Mass from Data Collected by the ATLAS and CMS Experiments at √s = 7 and 8 TeV	Physics Review Letters	APS	Aram Hayrapetyan, et al.	132	26	261902	https://doi.org/10.1103/PhysRevLett.132.261902	9	Q1	SCI/SCIE	June	2024
86		Search for heavy neutral leptons in final states with electrons, muons, and hadronically decaying tau leptons in proton-proton collisions at sqrt(s) = 13 TeV	Journal of High Energy Physics	Springer Science and Business Media LLC	Aram Hayrapetyan, et al.	2024	06	123	https://doi.org/10.1007/JHEP06(2024)123	5.5	Q1	SCI/SCIE	June	2024

87		Search for Baryon Number Violation in Top Quark Production and Decay Using Proton-Proton Collisions at √s = 13 TeV	Physics Review Letters	APS	Aram Hayrapetyan, et al.	132	24	241802	https://doi.org/10.1103/PhysRevLett.132.241802	9	Q1	SCI/SCIE	June	2024
88		Nonresonant central exclusive production of charged-hadron pairs in proton-proton collisions at √s =13 TeV	Physical Review D	APS	A. Hayrapetyan, et al.	109	11	112013	https://doi.org/10.1103/PhysRevD.109.112013	5.3	Q1	SCI/SCIE	June	2024
89		Combined search for electroweak production of winos, binos, higgsinos, and sleptons in proton-proton collisions at √s =13 TeV	Physical Review D	APS	A. Hayrapetyan, et al.	109	11	112001	https://doi.org/10.1103/PhysRevD.109.112001	5.3	Q1	SCI/SCIE	June	2024
90		Search for stealth supersymmetry in final states with two photons, jets, and low missing transverse momentum in proton-proton collisions at √s =13 TeV	Physical Review D	APS	A. Hayrapetyan, et al.	109	11	112009	https://doi.org/10.1103/PhysRevD.109.112009	5.3	Q1	SCI/SCIE	June	2024
91		Search for long-lived particles using displaced vertices and missing transverse momentum in proton-proton collisions at √s =13 TeV	Physical Review D	APS	A. Hayrapetyan, et al.	109	11	112005	https://doi.org/10.1103/PhysRevD.109.112005	5.3	Q1	SCI/SCIE	June	2024
92		Search for pair production of scalar and vector leptoquarks decaying to muons and bottom quarks in proton-proton collisions at √s =13 TeV	Physical Review D	APS	A. Hayrapetyan, et al.	109	11	112003	https://doi.org/10.1103/PhysRevD.109.112003	5.3	Q1	SCI/SCIE	June	2024
93		Measurement of simplified template cross sections of the Higgs boson produced in association with W or Z bosons in the H→bb_bar decay channel in proton-proton collisions at √s = 13 TeV	Physical Review D	APS	A. Tumasyan, et al.	109	11	92011	https://doi.org/10.1103/PhysRevD.109.092011	5.3	Q1	SCI/SCIE	May	2024

94		Search for a new resonance decaying into two spin-0 bosons in a final state with two photons and two bottom quarks in proton-proton collisions at sqrt(s) = 13 TeV	Journal of High Energy Physics	Springer Science and Business Media LLC	A. Tumasyan, et al.	2024	05	316	https://doi.org/10.1007/JHEP05(2024)316	5.5	Q1	SCI/SCIE	May	2024
95		Search for a third-generation leptoquark coupled to a τ lepton and a b quark through single, pair, and nonresonant production in proton-proton collisions at sqrt(s) = 13 TeV	Journal of High Energy Physics	Springer Science and Business Media LLC	A. Hayrapetyan, et al.	2024	05	311	https://doi.org/10.1007/JHEP05(2024)311	5.5	Q1	SCI/SCIE	May	2024
96		Search for exotic decays of the Higgs boson to a pair of pseudoscalars in the μμbb and ττbb final states	European Physical Journal C	Springer	A. Hayrapetyan, et al.	84		493	https://doi.org/10.1140/epjc/s10052-024-12727-4	4.8	Q2	SCI/SCIE	May	2024
97		Measurement of the primary Lund jet plane density in proton-proton collisions at sqrt(s) = 13 TeV	Journal of High Energy Physics	Springer Science and Business Media LLC	Aram Hayrapetyan, et al.	2024	05	116	https://doi.org/10.1007/JHEP05(2024)116	5.5	Q1	SCI/SCIE	May	2024
98		Inclusive and differential cross section measurements of tt^(bar)bb^(bar) production in the lepton+jets channel at sqrt(s) = 13 TeV	Journal of High Energy Physics	Springer Science and Business Media LLC	Aram Hayrapetyan, et al.	2024	05	042	https://doi.org/10.1007/JHEP05(2024)042	5.5	Q1	SCI/SCIE	May	2024
99		Search for long-lived particles decaying to final states with a pair of muons in proton-proton collisions at sqrt(s) = 13.6 TeV	Journal of High Energy Physics	Springer Science and Business Media LLC	Aram Hayrapetyan, et al.	2024	05	047	https://doi.org/10.1007/JHEP05(2024)047	5.5	Q1	SCI/SCIE	May	2024
100		Search for W' bosons decaying to a top and a bottom quark in leptonic final states in proton-proton collisions at sqrt(s) = 13 TeV	Journal of High Energy Physics	Springer Science and Business Media LLC	Aram Hayrapetyan, et al.	2024	05	046	https://doi.org/10.1007/JHEP05(2024)046	5.5	Q1	SCI/SCIE	May	2024

101		Development of the CMS detector for the CERN LHC Run 3	Journal of Instrumentation	IOP Science	A. Hayrapetyan, et al.	19	05	P05064	https://doi.org/10.1088/1748-0221/19/05/P05064	1.3	Q4	SCI/SCIE	May	2024
102		Search for supersymmetry in final states with disappearing tracks in proton-proton collisions at √s =13 TeV	Physical Review D	APS	A. Hayrapetyan, et al.	109	7	072007	https://doi.org/10.1103/PhysRevD.109.072007	5.3	Q1	SCI/SCIE	April	2024
103		Search for the lepton flavor violating τ →3μ decay in proton-proton collisions at sqrt(s) = 13 TeV	Physics Letters B	North-Holland	A. Hayrapetyan, et al.	853		138633	https://doi.org/10.1016/j.physletb.2024.138633	4.5	Q1	SCI/SCIE	June	2024
104		Search for flavor changing neutral current interactions of the top quark in final states with a photon and additional jets in proton-proton collisions at √s =13 TeV	Physical Review D	APS	A. Hayrapetyan, et al.	109	7	072004	https://doi.org/10.1103/PhysRevD.109.072004	5.3	Q1	SCI/SCIE	April	2024
105		Search for an exotic decay of the Higgs boson into a Z boson and a pseudoscalar particle in proton-proton collisions at sqrt(s) = 13 TeV	Physics Letters B	North-Holland	A. Hayrapetyan, et al.	852		138582	https://doi.org/10.1016/j.physletb.2024.138582	4.5	Q1	SCI/SCIE	May	2024
106		Search for dark matter particles in W+W− events with transverse momentum imbalance in proton-proton collisions at sqrt(s) = 13 TeV	Journal of High Energy Physics	Springer Science and Business Media LLC	Aram Hayrapetyan, et al.	2024	03	134	https://doi.org/10.1007/JHEP03(2024)134	5.5	Q1	SCI/SCIE	March	2024
107		Observation of WWγ Production and Search for Hγ Production in Proton-Proton Collisions at √s = 13 TeV	Physics Review Letters	APS	Aram Hayrapetyan, et al.	132	12	121901	https://doi.org/10.1103/PhysRevLett.132.121901	9	Q1	SCI/SCIE	March	2024
108		New Structures in the J/Ψ J/Ψ Mass Spectrum in Proton-Proton Collisions at √s =13 TeV	Physics Review Letters	APS	Aram Hayrapetyan, et al.	132	11	111901	https://doi.org/10.1103/PhysRevLett.132.111901	9	Q1	SCI/SCIE	March	2024

109		Two-particle Bose-Einstein correlations and their Lévy parameters in PbPb collisions at √sNN=5.02 TeV	Physics Review C	APS	A.Tumasyan, et al.	109	2	024914	https://doi.org/10.1103/PhysRevC.109.024914	3.4	Q2	SCI/SCIE	February	2024
110		Study of azimuthal anisotropy of Y(1S) mesons in pPb collisions at = 8.16 TeV	Physics Letters B	North-Holland	A.Tumasyan, et al.	850		138518	https://doi.org/10.1016/j.physletb.2024.138518	4.5	Q1	SCI/SCIE	March	2024
111		Higher-order moments of the elliptic flow distribution in PbPb collisions at sqrt(s) = 5.02 TeV	Journal of High Energy Physics	Springer Science and Business Media LLC	A.Tumasyan, et al.	2024	02	106	https://doi.org/10.1007/JHEP02(2024)106	5.5	Q1	SCI/SCIE	February	2024
112		Measurements of azimuthal anisotropy of nonprompt D^{0 } mesons in PbPb collisions at sqrt(s_{NN}) = 5.02 TeV	Physics Letters B	North-Holland	A.Tumasyan, et al.	850		138389	https://doi.org/10.1016/j.physletb.2023.138389	4.5	Q1	SCI/SCIE	March	2024
113		Search for new Higgs bosons via same-sign top quark pair production in association with a jet in proton-proton collisions at sqrt(s) = 13 TeV	Physics Letters B	North-Holland	A. Hayrapetyan, et al.	850		138478	https://doi.org/10.1016/j.physletb.2024.138478	4.5	Q1	SCI/SCIE	March	2024
114		Search for Scalar Leptoquarks Produced via τ-Lepton–Quark Scattering in pp Collisions at √s =13 TeV	Physics Review Letters	APS	Aram Hayrapetyan, et al.	132	06	061801	https://doi.org/10.1103/PhysRevLett.132.061801	9	Q1	SCI/SCIE	February	2024
115		Muon identification using multivariate techniques in the CMS experiment in proton-proton collisions at sqrt(s) = 13 TeV	Journal of Instrumentation	IOP Science	A. Hayrapetyan, et al.	19	02	P02031	https://doi.org/10.1088/1748-0221/19/02/P02031	1.3	Q4	SCI/SCIE	February	2024
116		Search for Inelastic Dark Matter in Events with Two Displaced Muons and Missing Transverse Momentum in Proton-Proton Collisions at √s = 13 TeV	Physics Review Letters	APS	Aram Hayrapetyan, et al.	132	04	041802	https://doi.org/10.1103/PhysRevLett.132.041802	9	Q1	SCI/SCIE	January	2024
117		Measurement of the τ lepton polarization in Z boson decays in proton-proton collisions at sqrt(s) = 13 TeV	Journal of High Energy Physics	Springer Science and Business Media LLC	A. Hayrapetyan, et al.	2024	01	101	https://doi.org/10.1007/JHEP01(2024)101	5.5	Q1	SCI/SCIE	January	2024

118		Evidence for the Higgs Boson Decay to a Z Boson and a Photon at the LHC	Physics Review Letters	APS	A. Hayrapetyan, et al.	132	2	021803	https://doi.org/10.1103/PhysRevLett.132.021803	9	Q1	SCI/SCIE	January	2024
119		Measurement of the production cross section for a W boson in association with a charm quark in proton–proton collisions at sqrt(s) = 13 TeV	European Physical Journal C	Springer	A. Hayrapetyan, et al.	84		27	https://doi.org/10.1140/epjc/s10052-023-12258-4	4.8	Q2	SCI/SCIE	January	2024
120		Luminosity determination using Z boson production at the CMS experiment	European Physical Journal C	Springer	A. Hayrapetyan, et al.	84		26	https://doi.org/10.1140/epjc/s10052-023-12268-2	4.8	Q2	SCI/SCIE	January	2024
121		Study of charm hadronization with prompt Λ^{+}_{c} baryons in proton-proton and lead-lead collisions at sqrt(s_{NN}) = 5.02 TeV	Journal of High Energy Physics	Springer Science and Business Media LLC	A. Hayrapetyan, et al.	2024	01	128	https://doi.org/10.1007/JHEP01(2024)128	5.5	Q1	SCI/SCIE	January	2024
122		Portable Acceleration of CMS Computing Workflows with Coprocessors as a Service	Computing and Software for Big Science	Springer	A. Hayrapetyan, et al.	8		17	https://doi.org/10.1007/s41781-024-00124-1	3.45	Q1	SCI/SCIE	September	2024
123		Review of top quark mass measurements in CMS	Physics Reports	North-Holland	A. Hayrapetyan, et al.	1115		116-218	https://doi.org/10.1016/J.PHYSREP.2024.12.002	29.5	Q1	SCI/SCIE	December	2024