

Bijaya K Sahoo

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/9287153/bijaya-k-sahoo-publications-by-year.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

224
papers

2,889
citations

27
h-index

39
g-index

245
ext. papers

3,348
ext. citations

2.5
avg, IF

5.78
L-index

#	Paper	IF	Citations
224	Estimation of ²³⁸ U and ²³² Th in soil and water of prominent fault region of Mizoram. <i>Environmental Engineering Research</i> , 2023 , 28, 210106-0	3.6	
223	²²² Rn measurements in drinking water and annual effective dose for the adult population around a coal-based and atomic power plant in Uttar Pradesh, India. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2022 , 331, 715	1.5	0
222	Precision measurement of the magnetic octupole moment in ⁴⁵ Sc as a test for state-of-the-art atomic- and nuclear-structure theory. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2022 , 827, 136930	4.2	1
221	Radon concentration measurement and effective dose assessment in drinking groundwater for the adult population in the surrounding area of a thermal power plant.. <i>Journal of Water and Health</i> , 2022 , 20, 551-559	2.2	1
220	Assessing the Precision of Quantum Simulation of Many-Body Effects in Atomic Systems Using the Variational Quantum Eigensolver Algorithm. <i>Quantum Reports</i> , 2022 , 4, 173-192	2.1	
219	Polarization effects, shape resonances and bound states in low energy positron elastic scattering by Zinc and Cadmium vapours. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2022 , 257, 147186	1.7	0
218	Study of pre-seismic thoron anomaly using empirical mode decomposition based Hilbert Huang transform at Indo-Burman subduction region. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2021 , 330, 1571	1.5	1
217	Benchmarking many-body approaches for the determination of isotope-shift constants: Application to the Li, Be+, and Ar ¹⁵⁺ isoelectronic systems. <i>Physical Review A</i> , 2021 , 103,	2.6	1
216	Relativistic Coupled-Cluster Calculations of Isotope Shifts for the Low-Lying States of Ca II in the Finite-Field Approach. <i>Atoms</i> , 2021 , 9, 26	2.1	0
215	Investigating properties of Cl ⁻ and Au ⁰ ions using relativistic many-body methods. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2021 , 54, 115001	1.3	
214	New physics constraints from atomic parity violation in Cs ¹³³ . <i>Physical Review D</i> , 2021 , 103,	4.9	2
213	Radon mapping in groundwater and indoor environs of Budgam, Jammu and Kashmir. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2021 , 329, 923-934	1.5	3
212	Tune-out and magic wavelengths, and electric quadrupole transition properties of the singly charged alkaline-earth metal ions. <i>Atomic Data and Nuclear Data Tables</i> , 2021 , 140, 101422	2	1
211	Dose estimation of radioactivity in groundwater of Srinagar City, Northwest Himalaya, employing fluorimetric and scintillation techniques. <i>Environmental Geochemistry and Health</i> , 2021 , 43, 837-854	4.7	11
210	Radiative transition properties of singly charged magnesium, calcium, strontium and barium ions. <i>Atomic Data and Nuclear Data Tables</i> , 2021 , 137, 101381	2	6
209	A novel method based on Rn (thoron) exhalation rate of indoor surfaces for robust estimates of Rn concentration and equilibrium factor to compute inhalation dose. <i>Chemosphere</i> , 2021 , 267, 128908	8.4	1
208	Study of HgOH to Assess Its Suitability for Electron Electric Dipole Moment Searches. <i>Atoms</i> , 2021 , 9, 7	2.1	2

207	CP violating effects in ^{210}Fr and prospects for new physics beyond the Standard Model. <i>Journal of High Energy Physics</i> , 2021 , 2021, 1	5.4	5
206	Quantum sensing of the electron electric dipole moment using ultracold entangled Fr atoms. <i>Quantum Science and Technology</i> , 2021 , 6, 044008	5.5	0
205	Electric dipole and quadrupole properties of the Cd atom for atomic-clock applications. <i>Physical Review A</i> , 2021 , 103,	2.6	2
204	Charge radii of exotic potassium isotopes challenge nuclear theory and the magic character of $N = 32$. <i>Nature Physics</i> , 2021 , 17, 439-443	16.2	20
203	Determination of the dipole polarizability of the alkali-metal negative ions. <i>Physical Review A</i> , 2020 , 102,	2.6	3
202	Significance of Non-Linear Terms in the Relativistic Coupled-Cluster Theory in the Determination of Molecular Properties. <i>Symmetry</i> , 2020 , 12, 811	2.7	0
201	Analysis of an Optical Lattice Methodology for Detection of Atomic Parity Nonconservation. <i>Symmetry</i> , 2020 , 12, 974	2.7	0
200	Analytic response relativistic coupled-cluster theory: the first application to indium isotope shifts. <i>New Journal of Physics</i> , 2020 , 22, 012001	2.9	9
199	Reappraisal of P, T-odd parameters from the improved calculation of electric dipole moment of ^{225}Ra atom. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2020 , 53, 195004	1.3	1
198	Ground-state g _J factors of the Cd ⁺ , Yb ⁺ , and Hg ⁺ ions. <i>Physical Review A</i> , 2020 , 102,	2.6	2
197	van der Waals coefficients of the multi-layered MoS ₂ with alkali metals. <i>Physica Scripta</i> , 2020 , 95, 095506.6	0.6	1
196	Accurate determination of energy levels, hyperfine structure constants, lifetimes and dipole polarizabilities of triply ionized tin isotopes. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2020 , 53, 065002	1.3	1
195	A study on natural radioactivity and potential of ^{222}Rn , ^{220}Rn exhalation from Deccan table land of Kolhapur district, Maharashtra, India. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2020 , 326, 1333-1341 ²	1.5	2
194	An innovative technique of harvesting soil gas as a highly efficient source of Rn for calibration applications in a walk-in type chamber: part-1. <i>Scientific Reports</i> , 2020 , 10, 16547	4.9	2
193	ASSESSMENT OF RADON AND THORON EXHALATION FROM SOILS AND DISSOLVED RADON IN GROUND WATER IN THE VICINITY OF ELEVATED GRANITIC HILL, CHIKKABALLAPUR DISTRICT, KARNATAKA, INDIA. <i>Radiation Protection Dosimetry</i> , 2020 , 190, 185-192	0.9	3
192	Magic Wavelengths for Optical-Lattice Based Cs and Rb Active Clocks. <i>Atoms</i> , 2020 , 8, 79	2.1	1
191	Laser spectroscopy of indium Rydberg atom bunches by electric field ionization. <i>Scientific Reports</i> , 2020 , 10, 12306	4.9	2
190	Measurements of ^{222}Rn , ^{220}Rn and their progeny concentrations indoors around a coal/gas-based power plant and estimation of annual inhalation dose to the public. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2020 , 326, 65-74	1.5	5

189	Monitoring geothermal springs and groundwater of Pir Panjal, Jammu and Kashmir, for radon contamination. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2020 , 326, 1915-1923	1.5	7
188	A periodic pumping technique of soil gas for Rn stabilization in large calibration chambers: part 2-theoretical formulation and experimental validation. <i>Scientific Reports</i> , 2020 , 10, 16548	4.9	
187	Quantification of radon/thoron exhalation rates of soil samples collected from district Faridabad of Southern Haryana, India. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2020 , 326, 831-843	1.5	9
186	Relativistic many-body theory of the electric dipole moment of Xe ¹²⁹ and its implications for probing new physics beyond the standard model. <i>Physical Review A</i> , 2019 , 100,	2.6	4
185	High-precision determination of Lorentz-symmetry-violating parameters in Ca ⁺ . <i>Physical Review A</i> , 2019 , 99,	2.6	3
184	A study of seasonal variations of radon, thoron and their progeny levels in different types of dwellings in Faridabad district, Southern Haryana, India. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2019 , 320, 841-857	1.5	16
183	Investigating ground-state fine-structure properties to explore suitability of boronlike S ¹¹⁺ and galliumlike Nb ¹⁰⁺ ions as possible atomic clocks. <i>Physical Review A</i> , 2019 , 99,	2.6	9
182	A study on the anomalous behaviour of Radon in different depths of soil at a tectonic fault and its comparison with time-series data at a distant continuous monitoring station. <i>SN Applied Sciences</i> , 2019 , 1, 1	1.8	3
181	Comparison of results from indoor radon measurements using active and passive methods with those from mathematical modeling. <i>Radiation and Environmental Biophysics</i> , 2019 , 58, 345-352	2	1
180	Application of relativistic coupled cluster theory to elastic scattering of electrons from confined Ca atoms. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2019 , 52, 185003	1.3	3
179	Graphene in Bioelectronics 2019 , 253-262		
178	Roles of electron correlation effects for the accurate determination of g _J factors of low-lying states of Cd ⁺¹¹³ and their applications to atomic clocks. <i>Physical Review A</i> , 2019 , 100,	2.6	3
177	A WALK-IN TYPE CALIBRATION CHAMBER FACILITY FOR ²²² Rn MEASURING DEVICES AND INTER-COMPARISON EXERCISES. <i>Radiation Protection Dosimetry</i> , 2019 , 187, 466-481	0.9	4
176	Optical-lattice-based method for precise measurements of atomic parity violation. <i>Physical Review A</i> , 2019 , 100,	2.6	3
175	A MODEL TO PREDICT ²³⁸ U IN AQUIFER ROCK BASED ON ²²² Rn AND ²²⁶ Ra MEASUREMENT IN GROUNDWATER SAMPLES: A CASE STUDY AT SOUTH BENGALURU CITY, KARNATAKA, INDIA. <i>Radiation Protection Dosimetry</i> , 2019 , 185, 58-66	0.9	
174	Measurements of radon (²²² Rn) and thoron (²²⁰ Rn) exhalations and their decay product concentrations at Indian Stations in Antarctica. <i>Environmental Earth Sciences</i> , 2019 , 78, 1	2.9	10
173	Measurement of uranium and radon concentration in drinking water samples and assessment of ingestion dose to local population in Jalandhar district of Punjab, India. <i>Indoor and Built Environment</i> , 2019 , 28, 611-618	1.8	17
172	Relativistic coupled-cluster-theory analysis of energies, hyperfine-structure constants, and dipole polarizabilities of Cd ⁺ . <i>Physical Review A</i> , 2018 , 97,	2.6	8

171	Selected highly charged ions as prospective candidates for optical clocks with quality factors larger than 1015. <i>Physical Review A</i> , 2018 , 97,	2.6	12
170	Unexpectedly Large Difference of the Electron Density at the Nucleus in the 4p2P1/2,3/2 Fine-Structure Doublet of Ca+ 2018 , 1-19		
169	Parity-Nonconserving Interaction-Induced Light Shifts in the $(\mathbf{7S}_{1/2}) \rightarrow (\mathbf{6D}_{3/2})$ Transition of the Ultracold (^{210}Fr) Atoms to Probe New Physics Beyond the Standard Model 2018 , 509-527		
168	CONTRIBUTION OF THORON AND PROGENY TOWARDS INHALATION DOSE IN A THORIUM ABUNDANT BEACH ENVIRONMENT. <i>Radiation Protection Dosimetry</i> , 2018 , 178, 405-413	0.9	5
167	Application of relativistic coupled-cluster theory to electron impact excitation of Mg+ in the plasma environment. <i>European Physical Journal D</i> , 2018 , 72, 1	1.3	13
166	Diverse trends of electron correlation effects for properties with different radial and angular factors in an atomic system: a case study in Ca+. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2018 , 51, 055101	1.3	8
165	ASSESSMENT OF RADON IN SOIL AND WATER IN DIFFERENT REGIONS OF KOLHAPUR DISTRICT, MAHARASHTRA, INDIA. <i>Radiation Protection Dosimetry</i> , 2018 , 181, 382-387	0.9	5
164	Estimation of indoor radon, thoron and their decay products concentrations along with annual inhalation dose in dwellings of Punjab, India. <i>Indoor and Built Environment</i> , 2018 , 27, 380-389	1.8	10
163	Radiological variation of indoor radon and thoron levels by pinhole dosimeter in different seasons. <i>Indoor and Built Environment</i> , 2018 , 27, 1001-1014	1.8	3
162	Dipole polarizability calculation of the Cd atom: Inconsistency with experiment. <i>Physical Review A</i> , 2018 , 98,	2.6	6
161	Higher-component quadrupole polarizabilities: Estimations for the clock states of the alkaline-earth-metal ions. <i>Physical Review A</i> , 2018 , 98,	2.6	2
160	A comprehensive study of radon levels and associated radiation doses in Himalayan groundwater. <i>Acta Geophysica</i> , 2018 , 66, 1223-1231	2.2	11
159	The role of relativistic many-body theory in probing new physics beyond the standard model via the electric dipole moments of diamagnetic atoms. <i>Journal of Physics: Conference Series</i> , 2018 , 1041, 012014 ^{0.3}		5
158	High-Precision Multiphoton Ionization of Accelerated Laser-Ablated Species. <i>Physical Review X</i> , 2018 , 8,	9.1	10
157	Dynamics of resonant energy transfer in one-dimensional chain of Rydberg atoms. <i>European Physical Journal D</i> , 2018 , 72, 1	1.3	0
156	Relativistic Normal Coupled-Cluster Theory for Accurate Determination of Electric Dipole Moments of Atoms: First Application to the ^{199}Hg Atom. <i>Physical Review Letters</i> , 2018 , 120, 203001	7.4	22
155	Electric dipole polarizability of Xe ¹²⁹ using the relativistic coupled-cluster and the normal coupled-cluster methods. <i>Physical Review A</i> , 2018 , 97,	2.6	4
154	Improved limits on the hadronic and semihadronic CP violating parameters and role of a dark force carrier in the electric dipole moment of Hg ¹⁹⁹ . <i>Physical Review D</i> , 2017 , 95,	4.9	21

153	Relativistic coupled-cluster analysis of parity nonconserving amplitudes and related properties of the $6s^2 S_{1/2} \text{ } \bar{D}_{3/2}; 5/2$ transitions in ^{133}Cs . <i>Molecular Physics</i> , 2017 , 115, 2765-2774	1.7	11
152	Parity-nonconserving interaction-induced light shifts in the $(\text{ } ^{210}\text{Fr}) \text{ } \bar{D}_{3/2}$ transition of the ultracold $(\text{ } ^{210}\text{Fr})$ atoms to probe new physics beyond the standard model. <i>Applied Physics B: Lasers and Optics</i> , 2017 , 123, 1	1.9	7
151	Probing exotic phenomena at the interface of nuclear and particle physics with the electric dipole moments of diamagnetic atoms: A unique window to hadronic and semi-leptonic CP violation. <i>European Physical Journal A</i> , 2017 , 53, 1	2.5	111
150	Unexpectedly large difference of the electron density at the nucleus in the $(4p, ^2\text{ } ^{P}_{1/2,3/2})$ fine-structure doublet of Ca^+ . <i>Applied Physics B: Lasers and Optics</i> , 2017 , 123, 1	1.9	27
149	Annexing magic and tune-out wavelengths to the clock transitions of the alkaline-earth-metal ions. <i>Physical Review A</i> , 2017 , 95,	2.6	5
148	Quantum phases of constrained dipolar bosons in coupled one-dimensional optical lattices. <i>Physical Review A</i> , 2017 , 96,	2.6	8
147	Comparison of thoron (^{220}Rn) content and gamma radiation level in high background radiation area of Kollam district in Kerala, India. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2017 , 314, 177-185	1.5	1
146	A study on seasonal variability of ^{222}Rn / ^{220}Rn parameters in dwellings around a thermal power plant, India. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2017 , 314, 39-48	1.5	2
145	Accurate determination of black-body radiation shift, magic and tune-out wavelengths for the $6S_{1/2} \rightarrow 5D_{3/2}$ clock transition in Yb^+ . <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2017 , 50, 205201	1.3	15
144	Relativistic coupled-cluster-theory analysis of unusually large correlation effects in the determination of g_j factors in Ca^+ . <i>Physical Review A</i> , 2017 , 96,	2.6	7
143	Estimation of the blackbody-radiation shift due to the Stark effect for the microwave $\text{Cd}+^{113}$ ion clock. <i>Physical Review A</i> , 2017 , 96,	2.6	5
142	Significance of distinct electron-correlation effects in determining the (P,T)-odd electric dipole moment of Yb^{171} . <i>Physical Review A</i> , 2017 , 95,	2.6	5
141	Relativistic Calculations of Atomic Clock 2017 , 611-655		1
140	Polarizability and magic wavelength of Yb^+ clock transition $2S_{1/2} \rightarrow \bar{D}_{3/2}$ 2017 ,		1
139	Comparing magic wavelengths for the $6s^2 \text{ } ^2S_{1/2} \rightarrow 6p \text{ } ^2P_{1/2,3/2}$ transitions of Cs using circularly and linearly polarized light. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2016 , 49, 145005	1.3	6
138	An optimized ion trap geometry to measure quadrupole shifts of $^{171}\text{Yb}^+$ clocks. <i>Chinese Physics B</i> , 2016 , 25, 113703	1.2	10
137	Dispersion coefficients for the interaction of Cs atom with different material media. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2016 , 380, 3366-3372	2.3	1
136	Highly charged W^{13+} , Ir^{16+} , and Pt^{17+} ions as promising optical clock candidates for probing variations of the fine-structure constant. <i>Physical Review A</i> , 2016 , 94,	2.6	10

135	Enhanced spin-dependent parity-nonconservation effect in the 7s S _{1/2} - to D _{5/2} transition in Fr: A possibility for unambiguous detection of the nuclear anapole moment. <i>Physical Review A</i> , 2016 , 93,	2.6	14
134	Plasma screening effects on the electronic structure of multiply charged Al ions using Debye and ion-sphere models. <i>Physical Review A</i> , 2016 , 93,	2.6	39
133	Magnetic-sublevel-independent magic wavelengths: Application to Rb and Cs atoms. <i>Physical Review A</i> , 2016 , 93,	2.6	10
132	Conforming the measured lifetimes of the 5d ² D _{3/2,5/2} states in Cs with theory. <i>Physical Review A</i> , 2016 , 93,	2.6	21
131	Determination of magic wavelengths for the 7s S _{1/2} - to P _{3/2,1} /2 ₂ transitions in Fr. <i>Physical Review A</i> , 2016 , 94,	2.6	8
130	Theoretical study of built-in-polarization effect on relaxation time and mean free path of phonons in Al _x Ga _{1-x} N alloy. <i>Bulletin of Materials Science</i> , 2016 , 39, 1835-1841	1.7	
129	Plasma-screening effects in the astrophysically relevant He-like and Li-like Mg and Fe ions*. <i>European Physical Journal D</i> , 2016 , 70, 1	1.3	13
128	Effect of built-in-polarization field on relaxation time and mean free path of phonons in In _x Ga _{1-x} N/GaN quantum well. <i>Indian Journal of Physics</i> , 2016 , 90, 991-997	1.4	8
127	STUDY OF RADON, THORON EXHALATION AND NATURAL RADIOACTIVITY IN COAL AND FLY ASH SAMPLES OF KOTA SUPER THERMAL POWER PLANT, RAJASTHAN, INDIA. <i>Radiation Protection Dosimetry</i> , 2016 , 171, 196-199	0.9	8
126	STUDY OF RADON FLUX FROM SOIL IN BUDHAKEDAR REGION USING SRM. <i>Radiation Protection Dosimetry</i> , 2016 , 171, 267-270	0.9	5
125	EMISSION OF SOIL GAS RADON CONCENTRATION AROUND MAIN CENTRAL THRUST IN UKHIMATH (RUDRAPRAYAG) REGION OF GARHWAL HIMALAYA. <i>Radiation Protection Dosimetry</i> , 2016 , 171, 243-247	0.9	5
124	Study of variation of ²²² Rn/ ²²⁰ Rn and their progeny concentration in dwellings using single entry pin hole-based diffusion chambers. <i>Indoor and Built Environment</i> , 2016 , 25, 390-396	1.8	1
123	A follow-up study on indoor ²²² Rn, ²²⁰ Rn their decay product concentrations in a mineralised zone of Himachal Pradesh, India. <i>Radiation Protection Dosimetry</i> , 2016 , 168, 553-60	0.9	14
122	Scrutinizing Al-like V ¹⁰⁺⁵¹ , Cr ¹¹⁺⁵³ , Mn ¹²⁺⁵⁵ , Fe ¹³⁺⁵⁷ , Co ¹⁴⁺⁵⁹ , Ni ¹⁵⁺⁶¹ , and Cu ¹⁶⁺⁶³ ions for atomic clocks with uncertainties below the 10 ⁻⁹ level. <i>Physical Review A</i> , 2016 , 94,	2.6	15
121	A study of thoron exhalation from monazite-rich beach sands of High Background Radiation Areas of Kerala and Odisha, India. <i>Environmental Earth Sciences</i> , 2016 , 75, 1	2.9	7
120	Built-in-polarization effect on relaxation time and mean free path of phonons in Al _x Ga _{1-x} N/GaN heterostructure. <i>Modern Physics Letters B</i> , 2016 , 30, 1650097	1.6	2
119	III-V nitrides and performance of graphene on copper plasmonic biosensor. <i>Superlattices and Microstructures</i> , 2016 , 93, 226-233	2.8	10
118	MEASUREMENT OF RADON CONCENTRATION IN DWELLINGS IN THE REGION OF HIGHEST LUNG CANCER INCIDENCE IN INDIA. <i>Radiation Protection Dosimetry</i> , 2016 , 171, 192-195	0.9	4

117	Radiative properties of few F- and Cl- like alkali and alkaline-earth metal ions. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015 , 452, 2546-2552	4.3	3
116	Electric dipole moment of Ra225 due to P- and T-violating weak interactions. <i>Physical Review A</i> , 2015 , 92,	2.6	17
115	A relativistic equation-of-motion coupled-cluster investigation of the trends of single and double ionization potentials in the He and Be isoelectronic systems. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2015 , 48, 115009	1.3	5
114	Correlation trends in the hyperfine structures of Fr210,212. <i>Physical Review A</i> , 2015 , 91,	2.6	33
113	Combined experimental and theoretical probe of the lifetime of the 3d2D5/2 state in 40Ca+. <i>Physical Review A</i> , 2015 , 91,	2.6	11
112	Forbidden transition properties in the ground-state configurations of singly ionized noble gas atoms for stellar and interstellar media. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015 , 450, 1012-1016	4.3	2
111	Macroscopic Polarization Effect on Bowing Constant of Thermal Parameters of In x Ga1-x N. <i>Journal of Electronic Materials</i> , 2015 , 44, 1035-1043	1.9	10
110	A study of indoor radon, thoron and their progeny measurement in Tosham region Haryana, IndiaPeer review under responsibility of The Egyptian Society of Radiation Sciences and Applications.View all notes. <i>Journal of Radiation Research and Applied Sciences</i> , 2015 , 8, 226-233	1.5	46
109	Rigorous limits on the hadronic and semileptonic CP-violating coupling constants from the electric dipole moment of Hg199. <i>Physical Review A</i> , 2015 , 91,	2.6	39
108	Built-in-polarization field effect on intrinsic and extrinsic thermal conductivities of AlN/GaN/AlN quantum well. <i>International Journal of Modern Physics B</i> , 2015 , 29, 1550149	1.1	2
107	Macroscopic polarization and bowing constant of AlxGa1-xN. <i>Physica B: Condensed Matter</i> , 2015 , 456, 66-71	2.8	4
106	Magic wavelengths in the alkaline-earth-metal ions. <i>Physical Review A</i> , 2015 , 92,	2.6	18
105	Dispersion coefficients for the interactions of the alkali-metal and alkaline-earth-metal ions and inert-gas atoms with a graphene layer. <i>Physical Review A</i> , 2015 , 92,	2.6	5
104	Appraising nuclear-octupole-moment contributions to the hyperfine structures in Fr211. <i>Physical Review A</i> , 2015 , 92,	2.6	5
103	Theoretical studies of the long lifetimes of the 6dD3/2,5/22 states in Fr: Implications for parity-nonconservation measurements. <i>Physical Review A</i> , 2015 , 92,	2.6	17
102	Effect of built-in-polarization field on intrinsic and extrinsic thermal conductivity of InN. <i>Indian Journal of Physics</i> , 2015 , 89, 1123-1131	1.4	
101	A study on uranium and radon levels in drinking water sources of a mineralized zone of Himachal Pradesh, India. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2015 , 309, 541	1.5	11
100	Relativistic calculations of radiative properties and fine structure constant varying sensitivity coefficients in the astrophysically relevant Zn ii, Si iv and Ti iv ions. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015 , 447, 3812-3823	4.3	7

99	Properties of alkali-metal atoms and alkaline-earth-metal ions for an accurate estimate of their long-range interactions. <i>Physical Review A</i> , 2015 , 91,	2.6	24
98	Relativistic Calculations of Atomic Clock 2015 , 1-44		
97	Thoron interference in radon exhalation rate measured by solid state nuclear track detector based can technique. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2014 , 302, 1417-1420	1.5	28
96	Correlation trends in the polarizabilities of atoms and ions in the boron, carbon, and zinc homologous sequences of elements. <i>Physical Review A</i> , 2014 , 90,	2.6	19
95	Role of the multipolar black-body radiation shifts in the atomic clocks at the 10^{-8} uncertainty level 2014 , 83, 255-263		2
94	Relativistic spectroscopy of plasma-embedded Li-like systems with screening effects in two-body Debye potentials. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2014 , 47, 175701	1.3	13
93	Relativistic equation-of-motion coupled-cluster method for the double-ionization potentials of closed-shell atoms. <i>Physical Review A</i> , 2014 , 90,	2.6	14
92	Relativistic equation-of-motion coupled-cluster method: Application to closed-shell atomic systems. <i>Physical Review A</i> , 2014 , 89,	2.6	26
91	Relativistic many-body analysis of the electric dipole moment of Rn223. <i>Physical Review A</i> , 2014 , 90,	2.6	7
90	Quadrupole shifts for the Yb+171 ion clocks: Experiments versus theories. <i>Physical Review A</i> , 2014 , 90,	2.6	15
89	$\{C_{3}\}$ coefficients for the alkali atoms interacting with a graphene layer and carbon nanotube. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2014 , 47, 155002	1.3	20
88	Implementation and application of the relativistic equation-of-motion coupled-cluster method for the excited states of closed-shell atomic systems. <i>Physical Review A</i> , 2014 , 89,	2.6	13
87	Ab initio determination of the P- and T-violating coupling constants in atomic Xe by the relativistic-coupled-cluster method. <i>Physical Review A</i> , 2014 , 89,	2.6	18
86	van der Waals coefficients for alkali-metal atoms in material media. <i>Physical Review A</i> , 2014 , 89,	2.6	9
85	Emending thermal dispersion interactions of Li, Na, K, and Rb alkali-metal atoms with graphene in the Dirac model. <i>Physical Review B</i> , 2014 , 90,	3.3	28
84	Spectral properties of a few F-like ions. <i>Astronomy and Astrophysics</i> , 2014 , 563, A25	5.1	10
83	Powder sandwich technique: A novel method for determining the thoron emanation potential of powders bearing high ²²⁴ Ra content. <i>Radiation Measurements</i> , 2013 , 48, 82-87	1.5	24
82	Correlation trends in the ground-state static electric dipole polarizabilities of closed-shell atoms and ions. <i>Physical Review A</i> , 2013 , 88,	2.6	33

81	Spectroscopy on a single trapped $^{137}\text{Ba}^+$ ion for nuclear magnetic octupole moment determination: erratum. <i>Optics Express</i> , 2013 , 21, 7131	3.3	2
80	Reliability test for the experimental results of electric-quadrupole hyperfine-structure constants and assessment of nuclear quadrupole moments in ^{135}Ba and ^{137}Ba . <i>Physical Review A</i> , 2013 , 87,	2.6	4
79	Magic wavelengths for trapping the alkali-metal atoms with circularly polarized light. <i>Physical Review A</i> , 2013 , 87,	2.6	19
78	Development of a relativistic coupled-cluster method for one-electron detachment theory: Application to Mn ix, Fe x, Co xi, and Ni xii ions. <i>Physical Review A</i> , 2013 , 88,	2.6	23
77	The macroscopic polarization effect on thermal conductivity of binary nitrides. <i>Journal of Applied Physics</i> , 2013 , 114, 163501	2.5	17
76	Experimental determination of the nuclear magnetic octupole moment of $^{137}\text{Ba}^+$ ion. <i>Physical Review A</i> , 2013 , 88,	2.6	10
75	Effect of piezoelectric polarization on phonon group velocity in nitride wurtzites. <i>Journal of Materials Science</i> , 2012 , 47, 2624-2629	4.3	18
74	Theoretical study of phase diagram of electron-doped cuprates. <i>Solid State Communications</i> , 2012 , 152, 2151-2155	1.6	1
73	Reexamination of nuclear quadrupole moments in ^{139}La isotopes. <i>Physical Review A</i> , 2012 , 86,	2.6	9
72	Transition properties of a potassium atom. <i>Physical Review A</i> , 2012 , 86,	2.6	17
71	State-insensitive trapping of Rb atoms: Linearly versus circularly polarized light. <i>Physical Review A</i> , 2012 , 86,	2.6	41
70	Spectroscopy on a single trapped $^{137}\text{Ba}^+$ ion for nuclear magnetic octupole moment determination. <i>Optics Express</i> , 2012 , 20, 21379-84	3.3	16
69	Charge radii of radium isotopes. <i>Physical Review C</i> , 2012 , 86,	2.7	21
68	Ba^+ quadrupole polarizabilities: Theory versus experiment. <i>Physical Review A</i> , 2012 , 86,	2.6	9
67	Multipolar blackbody radiation shifts for single-ion clocks. <i>Physical Review A</i> , 2012 , 85,	2.6	35
66	Indoor radon and thoron levels in Neendakara and Chavara regions of southern coastal Kerala, India. <i>Radiation Protection Dosimetry</i> , 2012 , 150, 385-90	0.9	15
65	Inhalation and external doses in coastal villages of high background radiation area in Kollam, India. <i>Radiation Protection Dosimetry</i> , 2012 , 152, 154-8	0.9	5
64	A model to predict radon exhalation from walls to indoor air based on the exhalation from building material samples. <i>Science of the Total Environment</i> , 2011 , 409, 2635-41	10.2	59

63	Atomic parity violation in a single trapped radium ion. <i>Hyperfine Interactions</i> , 2011 , 199, 9-19	0.8	8
62	Effect of hybridization and dispersion of quasiparticles on the coexistent state of superconductivity and antiferromagnetism in RNi ₂ B ₂ C 2011 , 77, 715-726		2
61	Atomic parity violation in a single trapped radium ion This paper was presented at the International Conference on Precision Physics of Simple Atomic Systems, held at École de Physique, les Houches, France, 30 May – 4 June, 2010.. <i>Canadian Journal of Physics</i> , 2011 , 89, 65-68	1.1	13
60	Transition properties of low-lying states in atomic indium. <i>Physical Review A</i> , 2011 , 84,	2.6	10
59	Sc III spectral properties of astrophysical interest. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2011 , 44, 225701	1.3	9
58	Search for a permanent electric-dipole moment using atomic indium. <i>Physical Review A</i> , 2011 , 84,	2.6	7
57	Parity nonconservation in ytterbium ion. <i>Physical Review A</i> , 2011 , 84,	2.6	21
56	Relativistic general-order coupled-cluster method for high-precision calculations: Application to the Al ⁺ atomic clock. <i>Physical Review A</i> , 2011 , 83,	2.6	34
55	Parity nonconservation in odd isotopes of single trapped atomic ions. <i>Physical Review A</i> , 2011 , 83,	2.6	20
54	Precision spectroscopy of trapped radioactive radium ions This paper was presented at the International Conference on Precision Physics of Simple Atomic Systems, held at École de Physique, les Houches, France, 30 May – 4 June, 2010.. <i>Canadian Journal of Physics</i> , 2011 , 89, 69-72	1.1	4
53	Reappraisal of the electric dipole moment enhancement factor for thallium. <i>Physical Review Letters</i> , 2011 , 106, 200403	7.4	21
52	Atomic parity violation in a single trapped radium ion 2011 , 9-19		
51	Ab initio studies of electron correlation effects in the atomic parity violating amplitudes in Cs and Fr. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2010 , 43, 085005	1.3	9
50	Two dimensional diffusion theory of trace gas emission into soil chambers for flux measurements. <i>Agricultural and Forest Meteorology</i> , 2010 , 150, 1211-1224	5.8	41
49	Accurate estimate of hyperfine variation and isotope shift parameters in Na and Mg ⁺ . <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2010 , 43, 231001	1.3	12
48	Laser spectroscopy of trapped short-lived Ra ⁺ ions. <i>Physical Review A</i> , 2010 , 82,	2.6	32
47	An overview of some experimental and theoretical aspects of fundamental symmetry violations in atoms 2010 , 75, 1041-1056		
46	Comparative studies of dipole polarizabilities in Sr ⁺ , Ba ⁺ , and Ra ⁺ and their applications to optical clocks. <i>Physical Review A</i> , 2009 , 80,	2.6	34

45	Relativistic coupled-cluster studies of ionization potentials, lifetimes, and polarizabilities in singly ionized calcium. <i>Physical Review A</i> , 2009 , 79,	2.6	33
44	Light shifts and electric dipole matrix elements in Ba ⁺ and Ra ⁺ . <i>Physical Review A</i> , 2009 , 79,	2.6	20
43	Relativistic ab initio spectroscopy study of forbidden lines of singly ionized zinc. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2009 , 42, 165702	1.3	2
42	Thoron (²²⁰ Rn) in the indoor environment and work places. <i>Indian Journal of Physics</i> , 2009 , 83, 1079-1098.	4	19
41	Relativistic coupled cluster (RCC) computation of the electric dipole moment enhancement factor of francium due to the violation of time reversal symmetry. <i>Journal of Physical Chemistry A</i> , 2009 , 113, 12549-57	2.8	47
40	Nuclear quadrupole moment of C ⁴³ a and hyperfine-structure studies of its singly charged ion. <i>Physical Review A</i> , 2009 , 80,	2.6	24
39	Atomic parity nonconservation in Ra ⁺ . <i>Physical Review A</i> , 2008 , 78,	2.6	81
38	Theoretical spectroscopic studies of the atomic transitions and lifetimes of low-lying states in Ti IV. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2008 , 41, 055701	1.3	4
37	Theoretical estimation of lifetimes of the lowest metastable states in Sc III and Y III. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2008 , 41, 055702	1.3	8
36	Relativistic unitary coupled cluster theory and applications. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2008 , 41, 065001	1.3	10
35	Relativistic calculations of the lifetimes and hyperfine structure constants in ⁶⁷ Zn ⁺ . <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2008 , 41, 025001	1.3	13
34	Relativistic coupled-cluster studies of dipole polarizabilities in closed-shell atoms. <i>Physical Review A</i> , 2008 , 77,	2.6	46
33	Ab initio relativistic many-body calculation of hyperfine splittings of C ¹³ d ⁺ . <i>Physical Review A</i> , 2008 , 77,	2.6	18
32	Ab initio determination of polarizabilities and van der Waals coefficients of Li atoms using the relativistic coupled-cluster method. <i>Physical Review A</i> , 2008 , 78,	2.6	15
31	Atomic electric-dipole moments from Higgs-boson-mediated interactions. <i>Physical Review A</i> , 2008 , 78,	2.6	13
30	Phase-separated charge-density-wave phase in the two-species extended Bose-Hubbard model. <i>Physical Review A</i> , 2008 , 78,	2.6	6
29	Intrinsic electric dipole moments of paramagnetic atoms: rubidium and cesium. <i>Physical Review Letters</i> , 2008 , 101, 033002	7.4	54
28	Theoretical studies of the 6s ¹ 2- δ D ³ 2 parity-nonconserving transition amplitude in Ba ⁺ and associated properties. <i>Physical Review A</i> , 2007 , 75,	2.6	20

27	A coupled-cluster approach to polarizabilities: Computational aspects. <i>Journal of Computational Methods in Sciences and Engineering</i> , 2007 , 7, 57-74	0.3	5
26	An ab initio relativistic coupled-cluster theory of dipole and quadrupole polarizabilities: Applications to a few alkali atoms and alkaline earth ions. <i>Chemical Physics Letters</i> , 2007 , 448, 144-149	2.5	22
25	Estimation of radon emanation factor in Indian building materials. <i>Radiation Measurements</i> , 2007 , 42, 1422-1425	1.5	78
24	Many-body effects in hyperfine interactions in 205Pb+. <i>European Physical Journal D</i> , 2007 , 41, 441-445	1.3	2
23	Theoretical studies of the atomic transitions in boron-like ions: Mg VIII, Si X and S XII. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2007 , 40, 3153-3162	1.3	13
22	Investigations of Ra+ properties to test possibilities for new optical-frequency standards. <i>Physical Review A</i> , 2007 , 76,	2.6	41
21	Enhanced role of electron correlation in the hyperfine interactions in D5/2 states in alkaline-earth-metal ions. <i>Physical Review A</i> , 2007 , 75,	2.6	25
20	Ab initio calculations of forbidden transition amplitudes and lifetimes of the low-lying states in V4+. <i>Physical Review A</i> , 2007 , 76,	2.6	12
19	Accurate Estimates of Circumstellar and Interstellar Lines of Quadruply Ionized Vanadium Using the Coupled Cluster Approach. <i>Astrophysical Journal, Supplement Series</i> , 2007 , 172, 645-648	8	2
18	The electron electric dipole moment enhancement factors of Rubidium and Caesium atoms. <i>Journal of Physics: Conference Series</i> , 2007 , 80, 012050	0.3	1
17	Electric dipole transition amplitudes for 207Pb+. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2006 , 39, 355-363	1.3	15
16	Relativistic coupled-cluster theory of atomic parity nonconservation: application to 137Ba+. <i>Physical Review Letters</i> , 2006 , 96, 163003	7.4	51
15	Electric quadrupole moments of the D states of alkaline-earth-metal ions. <i>Physical Review Letters</i> , 2006 , 96, 193001	7.4	30
14	Determination of the nuclear quadrupole moment of Sr87. <i>Physical Review A</i> , 2006 , 73,	2.6	8
13	Relativistic coupled-cluster theory of quadrupole moments and hyperfine structure constants of 5d states in Ba+. <i>Physical Review A</i> , 2006 , 74,	2.6	27
12	Lifetimes of the metastable D3/2, 5/2 states in Ca+, Sr+, and Ba+. <i>Physical Review A</i> , 2006 , 74,	2.6	45
11	Application of relativistic coupled-cluster theory to atomic parity non-conservation. <i>Computational and Theoretical Chemistry</i> , 2006 , 768, 141-150		2
10	Comparative studies of the magnetic dipole and electric quadrupole hyperfine constants for the ground and low lying excited states of 25Mg+. <i>European Physical Journal D</i> , 2005 , 32, 25-31	1.3	18

9	Electron correlation effects in hyperfine interactions in ^{45}Sc and ^{89}Y . <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2005 , 38, 4379-4387	1.3	3
8	Application of relativistic coupled-cluster theory to heavy atomic systems with strongly interacting configurations: Hyperfine interactions in Pb^{+207} . <i>Physical Review A</i> , 2005 , 72,	2.6	15
7	RELATIVISTIC AND CORRELATION EFFECTS IN ATOMS. <i>Journal of Theoretical and Computational Chemistry</i> , 2005 , 04, 1-20	1.8	12
6	Ab initio determination of the lifetime of the $62\text{P}_{3/2}$ state for $^{207}\text{Pb}^{+}$ by relativistic many-body theory. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2004 , 37, 3409-3418	1.3	38
5	Influence of correlation effects on the magnetic dipole hyperfine interaction in the low-lying states of Ca^{+} . <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2003 , 36, 1899-1906	1.3	19
4	Magnetic dipole hyperfine interactions in $^{137}\text{Ba}^{+}$ and the accuracies of the neutral weak interaction matrix elements. <i>Physical Review A</i> , 2003 , 68,	2.6	50
3	Relativistic coupled cluster calculations of the energies for rubidium and cesium atoms. <i>Journal of Chemical Physics</i> , 2003 , 119, 10633-10637	3.9	19
2	A Computational Fluid Dynamics code for aerosol and decay-product studies in indoor environments. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 1	1.5	0
1	Inhalation dose from exposure to radon, thoron and their progeny in indoors around a nuclear power generation facility in Uttar Pradesh, India. <i>Indoor and Built Environment</i> , 1420326X2199082	1.8	