

Bijaya K Sahoo

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224
papers

2,889
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h-index

39
g-index

245
ext. papers

3,348
ext. citations

2.5
avg, IF

5.78
L-index

| # | Paper | IF | Citations |
|-----|---|------|-----------|
| 224 | 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 |
| 223 | Atomic parity nonconservation in Ra+. <i>Physical Review A</i> , 2008 , 78, | 2.6 | 81 |
| 222 | Estimation of radon emanation factor in Indian building materials. <i>Radiation Measurements</i> , 2007 , 42, 1422-1425 | 1.5 | 78 |
| 221 | 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 |
| 220 | Intrinsic electric dipole moments of paramagnetic atoms: rubidium and cesium. <i>Physical Review Letters</i> , 2008 , 101, 033002 | 7.4 | 54 |
| 219 | Relativistic coupled-cluster theory of atomic parity nonconservation: application to $^{137}\text{Ba}^+$. <i>Physical Review Letters</i> , 2006 , 96, 163003 | 7.4 | 51 |
| 218 | 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 |
| 217 | 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 |
| 216 | 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 |
| 215 | Relativistic coupled-cluster studies of dipole polarizabilities in closed-shell atoms. <i>Physical Review A</i> , 2008 , 77, | 2.6 | 46 |
| 214 | Lifetimes of the metastable $D_{3/2,5/2}$ states in Ca+, Sr+, and Ba+. <i>Physical Review A</i> , 2006 , 74, | 2.6 | 45 |
| 213 | State-insensitive trapping of Rb atoms: Linearly versus circularly polarized light. <i>Physical Review A</i> , 2012 , 86, | 2.6 | 41 |
| 212 | 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 |
| 211 | Investigations of Ra+ properties to test possibilities for new optical-frequency standards. <i>Physical Review A</i> , 2007 , 76, | 2.6 | 41 |
| 210 | Rigorous limits on the hadronic and semileptonic CP-violating coupling constants from the electric dipole moment of Hg^{199} . <i>Physical Review A</i> , 2015 , 91, | 2.6 | 39 |
| 209 | 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 |
| 208 | Ab initiodetermination of the lifetime of the $6^2P_{3/2}$ 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 |

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| 207 | Multipolar blackbody radiation shifts for single-ion clocks. <i>Physical Review A</i> , 2012 , 85, | 2.6 | 35 |
| 206 | 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 |
| 205 | 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 |
| 204 | Correlation trends in the hyperfine structures of Fr210,212. <i>Physical Review A</i> , 2015 , 91, | 2.6 | 33 |
| 203 | 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 |
| 202 | Relativistic coupled-cluster studies of ionization potentials, lifetimes, and polarizabilities in singly ionized calcium. <i>Physical Review A</i> , 2009 , 79, | 2.6 | 33 |
| 201 | Laser spectroscopy of trapped short-lived Ra+ ions. <i>Physical Review A</i> , 2010 , 82, | 2.6 | 32 |
| 200 | Electric quadrupole moments of the D states of alkaline-earth-metal ions. <i>Physical Review Letters</i> , 2006 , 96, 193001 | 7.4 | 30 |
| 199 | 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 |
| 198 | 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 |
| 197 | Unexpectedly large difference of the electron density at the nucleus in the (4p, ² $\{P\}_{\{1\}/\{2\},\{3\}/\{2\}}$) fine-structure doublet of Ca(^+). <i>Applied Physics B: Lasers and Optics</i> , 2017 , 123, 1 | 1.9 | 27 |
| 196 | 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 |
| 195 | Relativistic equation-of-motion coupled-cluster method: Application to closed-shell atomic systems. <i>Physical Review A</i> , 2014 , 89, | 2.6 | 26 |
| 194 | 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 |
| 193 | Powder sandwich technique: A novel method for determining the thoron emanation potential of powders bearing high 224Ra content. <i>Radiation Measurements</i> , 2013 , 48, 82-87 | 1.5 | 24 |
| 192 | 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 |
| 191 | Nuclear quadrupole moment of C43a and hyperfine-structure studies of its singly charged ion. <i>Physical Review A</i> , 2009 , 80, | 2.6 | 24 |
| 190 | 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 |

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|-----|---|------|----|
| 189 | 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 |
| 188 | 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 |
| 187 | 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 |
| 186 | Conforming the measured lifetimes of the $5d2D_{3/2,5/2}$ states in Cs with theory. <i>Physical Review A</i> , 2016 , 93, | 2.6 | 21 |
| 185 | Parity nonconservation in ytterbium ion. <i>Physical Review A</i> , 2011 , 84, | 2.6 | 21 |
| 184 | Reappraisal of the electric dipole moment enhancement factor for thallium. <i>Physical Review Letters</i> , 2011 , 106, 200403 | 7.4 | 21 |
| 183 | Charge radii of radium isotopes. <i>Physical Review C</i> , 2012 , 86, | 2.7 | 21 |
| 182 | $\{C_{3}\}$ 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 |
| 181 | Light shifts and electric dipole matrix elements in Ba^+ and Ra^+ . <i>Physical Review A</i> , 2009 , 79, | 2.6 | 20 |
| 180 | Parity nonconservation in odd isotopes of single trapped atomic ions. <i>Physical Review A</i> , 2011 , 83, | 2.6 | 20 |
| 179 | Theoretical studies of the $6sS_{1/2}$ - $6dD_{3/2}$ parity-nonconserving transition amplitude in Ba^+ and associated properties. <i>Physical Review A</i> , 2007 , 75, | 2.6 | 20 |
| 178 | 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 |
| 177 | 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 |
| 176 | Magic wavelengths for trapping the alkali-metal atoms with circularly polarized light. <i>Physical Review A</i> , 2013 , 87, | 2.6 | 19 |
| 175 | Thoron (^{220}Rn) in the indoor environment and work places. <i>Indian Journal of Physics</i> , 2009 , 83, 1079-1098 | 4 | 19 |
| 174 | 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 |
| 173 | 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 |
| 172 | Effect of piezoelectric polarization on phonon group velocity in nitride wurtzites. <i>Journal of Materials Science</i> , 2012 , 47, 2624-2629 | 4.3 | 18 |

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|-----|---|-----|----|
| 171 | Magic wavelengths in the alkaline-earth-metal ions. <i>Physical Review A</i> , 2015 , 92, | 2.6 | 18 |
| 170 | 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 |
| 169 | Ab initio relativistic many-body calculation of hyperfine splittings of C113d+. <i>Physical Review A</i> , 2008 , 77, | 2.6 | 18 |
| 168 | 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 |
| 167 | Electric dipole moment of Ra225 due to P- and T-violating weak interactions. <i>Physical Review A</i> , 2015 , 92, | 2.6 | 17 |
| 166 | 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 |
| 165 | Transition properties of a potassium atom. <i>Physical Review A</i> , 2012 , 86, | 2.6 | 17 |
| 164 | The macroscopic polarization effect on thermal conductivity of binary nitrides. <i>Journal of Applied Physics</i> , 2013 , 114, 163501 | 2.5 | 17 |
| 163 | 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 |
| 162 | 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 |
| 161 | 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 |
| 160 | Accurate determination of black-body radiation shift, magic and tune-out wavelengths for the $6S_{1/2} \rightarrow 5D_{3/2}$ transition in Yb+. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2017 , 50, 205201 | 1.3 | 15 |
| 159 | Quadrupole shifts for the Yb+171 ion clocks: Experiments versus theories. <i>Physical Review A</i> , 2014 , 90, | 2.6 | 15 |
| 158 | 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 |
| 157 | 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 |
| 156 | Electric dipole transition amplitudes for $^{207}\text{Pb}^+$. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2006 , 39, 355-363 | 1.3 | 15 |
| 155 | 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 |
| 154 | Scrutinizing Al-like V10+51, Cr11+53, Mn12+55, Fe13+57, Co14+59, Ni15+61, and Cu16+63 ions for atomic clocks with uncertainties below the 10^{-9} level. <i>Physical Review A</i> , 2016 , 94, | 2.6 | 15 |

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| 153 | Enhanced spin-dependent parity-nonconservation effect in the $7s\ 5/2 \rightarrow 6d\ 5/2$ transition in Fr: A possibility for unambiguous detection of the nuclear anapole moment. <i>Physical Review A</i> , 2016 , 93, | 2.6 | 14 |
| 152 | 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 |
| 151 | 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 |
| 150 | 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 |
| 149 | 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 |
| 148 | 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 |
| 147 | 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 |
| 146 | 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 Bole de Physique , les Houches, France, 30 May \square June, 2010.. <i>Canadian Journal of Physics</i> , 2011 , 89, 65-68 | 1.1 | 13 |
| 145 | Relativistic calculations of the lifetimes and hyperfine structure constants in $^{67}\text{Zn}^+$. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2008 , 41, 025001 | 1.3 | 13 |
| 144 | Atomic electric-dipole moments from Higgs-boson-mediated interactions. <i>Physical Review A</i> , 2008 , 78, | 2.6 | 13 |
| 143 | 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 |
| 142 | Selected highly charged ions as prospective candidates for optical clocks with quality factors larger than 10 ¹⁵ . <i>Physical Review A</i> , 2018 , 97, | 2.6 | 12 |
| 141 | Accurate estimate of β -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 |
| 140 | Ab initio calculations of forbidden transition amplitudes and lifetimes of the low-lying states in $\text{V}4^+$. <i>Physical Review A</i> , 2007 , 76, | 2.6 | 12 |
| 139 | RELATIVISTIC AND CORRELATION EFFECTS IN ATOMS. <i>Journal of Theoretical and Computational Chemistry</i> , 2005 , 04, 1-20 | 1.8 | 12 |
| 138 | Relativistic coupled-cluster analysis of parity nonconserving amplitudes and related properties of the $6s^2\ 5/2 \rightarrow 6d^2\ 3/2; 5/2$ transitions in ^{133}Cs . <i>Molecular Physics</i> , 2017 , 115, 2765-2774 | 1.7 | 11 |
| 137 | Combined experimental and theoretical probe of the lifetime of the $3d^2\ 5/2$ state in $^{40}\text{Ca}^+$. <i>Physical Review A</i> , 2015 , 91, | 2.6 | 11 |
| 136 | A comprehensive study of radon levels and associated radiation doses in Himalayan groundwater. <i>Acta Geophysica</i> , 2018 , 66, 1223-1231 | 2.2 | 11 |

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| 135 | 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 |
| 134 | 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 |
| 133 | Macroscopic Polarization Effect on Bowing Constant of Thermal Parameters of In x Ga _{1-x} N. <i>Journal of Electronic Materials</i> , 2015 , 44, 1035-1043 | 1.9 | 10 |
| 132 | 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 |
| 131 | An optimized ion trap geometry to measure quadrupole shifts of 171 Yb + clocks. <i>Chinese Physics B</i> , 2016 , 25, 113703 | 1.2 | 10 |
| 130 | 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 |
| 129 | Magnetic-sublevel-independent magic wavelengths: Application to Rb and Cs atoms. <i>Physical Review A</i> , 2016 , 93, | 2.6 | 10 |
| 128 | Spectral properties of a few F-like ions. <i>Astronomy and Astrophysics</i> , 2014 , 563, A25 | 5.1 | 10 |
| 127 | Experimental determination of the nuclear magnetic octupole moment of 137Ba ⁺ ion. <i>Physical Review A</i> , 2013 , 88, | 2.6 | 10 |
| 126 | Transition properties of low-lying states in atomic indium. <i>Physical Review A</i> , 2011 , 84, | 2.6 | 10 |
| 125 | Relativistic unitary coupled cluster theory and applications. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2008 , 41, 065001 | 1.3 | 10 |
| 124 | III-V nitrides and performance of graphene on copper plasmonic biosensor. <i>Superlattices and Microstructures</i> , 2016 , 93, 226-233 | 2.8 | 10 |
| 123 | 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 |
| 122 | High-Precision Multiphoton Ionization of Accelerated Laser-Ablated Species. <i>Physical Review X</i> , 2018 , 8, | 9.1 | 10 |
| 121 | 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 |
| 120 | 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 |
| 119 | van der Waals coefficients for alkali-metal atoms in material media. <i>Physical Review A</i> , 2014 , 89, | 2.6 | 9 |
| 118 | Reexamination of nuclear quadrupole moments in ³⁹ K isotopes. <i>Physical Review A</i> , 2012 , 86, | 2.6 | 9 |

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| 117 | 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 |
| 116 | Sc III spectral properties of astrophysical interest. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2011 , 44, 225701 | 1.3 | 9 |
| 115 | Ba ⁺ quadrupole polarizabilities: Theory versus experiment. <i>Physical Review A</i> , 2012 , 86, | 2.6 | 9 |
| 114 | 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 |
| 113 | Quantum phases of constrained dipolar bosons in coupled one-dimensional optical lattices. <i>Physical Review A</i> , 2017 , 96, | 2.6 | 8 |
| 112 | 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 |
| 111 | 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 |
| 110 | Determination of magic wavelengths for the 7s S _{1/2} –p P _{3/2,1/2} transitions in Fr. <i>Physical Review A</i> , 2016 , 94, | 2.6 | 8 |
| 109 | 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 |
| 108 | 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 |
| 107 | Atomic parity violation in a single trapped radium ion. <i>Hyperfine Interactions</i> , 2011 , 199, 9-19 | 0.8 | 8 |
| 106 | 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 |
| 105 | Determination of the nuclear quadrupole moment of Sr ⁸⁷ . <i>Physical Review A</i> , 2006 , 73, | 2.6 | 8 |
| 104 | Parity-nonconserving interaction-induced light shifts in the (7S _{1/2})(6D _{3/2}) transition of the ultracold (²¹⁰ Fr) atoms to probe new physics beyond the standard model. <i>Applied Physics B: Lasers and Optics</i> , 2017 , 123, 1 | 1.9 | 7 |
| 103 | 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 |
| 102 | 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 |
| 101 | Relativistic many-body analysis of the electric dipole moment of Rn ²²³ . <i>Physical Review A</i> , 2014 , 90, | 2.6 | 7 |
| 100 | Search for a permanent electric-dipole moment using atomic indium. <i>Physical Review A</i> , 2011 , 84, | 2.6 | 7 |

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| 99 | 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 |
| 98 | 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 |
| 97 | Comparing magic wavelengths for the $6s^2S_{1/2}-6p^2P_{1/2}$ 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 |
| 96 | Dipole polarizability calculation of the Cd atom: Inconsistency with experiment. <i>Physical Review A</i> , 2018 , 98, | 2.6 | 6 |
| 95 | Phase-separated charge-density-wave phase in the two-species extended Bose-Hubbard model. <i>Physical Review A</i> , 2008 , 78, | 2.6 | 6 |
| 94 | 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 |
| 93 | 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 |
| 92 | 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 |
| 91 | 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 |
| 90 | 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 |
| 89 | STUDY OF RADON FLUX FROM SOIL IN BUDHAKEDAR REGION USING SRM. <i>Radiation Protection Dosimetry</i> , 2016 , 171, 267-270 | 0.9 | 5 |
| 88 | 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 |
| 87 | Estimation of the blackbody-radiation shift due to the Stark effect for the microwave Cd+113 ion clock. <i>Physical Review A</i> , 2017 , 96, | 2.6 | 5 |
| 86 | Significance of distinct electron-correlation effects in determining the (P,T)-odd electric dipole moment of Yb171. <i>Physical Review A</i> , 2017 , 95, | 2.6 | 5 |
| 85 | 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 |
| 84 | Appraising nuclear-octupole-moment contributions to the hyperfine structures in Fr211. <i>Physical Review A</i> , 2015 , 92, | 2.6 | 5 |
| 83 | 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 |
| 82 | 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 |

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|----|---|-----|---|
| 81 | 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 |
| 80 | 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 |
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