

D-S Delion

List of Publications by Year in descending order

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145
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145
times ranked

755
citing authors

#	ARTICLE	IF	CITATIONS
1	Two-proton emission systematics. Physical Review C, 2022, 105, .	2.9	12
2	Universal proton emission systematics. Physical Review C, 2021, 103, .	2.9	16
3	Semiclassical propagator approach for emission processes from deformed nuclei. Journal of Physics G: Nuclear and Particle Physics, 2021, 48, 105108.	3.6	4
4	Collectivity of the 21^+ state in $Z \geq 82$ even-even nuclei probed by a ratio involving dynamic and static electromagnetic E2 moments: Evolution of the quadrupole degrees of freedom and a new signature for shape coexistence. Physical Review C, 2020, 102, .	2.9	1
5	Realistic analytical approach for \hat{I}^\pm decay and clustering. Physical Review C, 2020, 102, .	2.9	13
6	Coupled-channels analysis of the $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:mi} \rangle \hat{I}^\pm \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ decay in strong electromagnetic fields. Physical Review C, 2020, 101, .	2.9	8
7	Bridging the quartet and pair pictures of isovector proton-neutron pairing. Physical Review C, 2020, 102, .	2.9	6
8	Unified description of pairing and quarteting correlations within the particle-hole-boson approach. Physical Review C, 2019, 99, .	2.9	4
9	\hat{I}^\pm -clustering in strong electromagnetic fields. AIP Conference Proceedings, 2019, , .	0.4	0
10	Effective axial-vector strength within proton-neutron deformed quasiparticle random-phase approximation. Physical Review C, 2019, 100, .	2.9	3
11	Disentangling the pair and quartet condensates. Physical Review C, 2019, 100, .	2.9	5
12	Analytical approach for the quartet condensation model. Physical Review C, 2019, 99, .	2.9	9
13	Coupled channels description of the $\langle i \rangle \hat{I}^\pm \langle i \rangle$ -decay fine structure. Journal of Physics G: Nuclear and Particle Physics, 2018, 45, 053001.	3.6	33
14	Alpha-like resonances in nuclei. Journal of Physics G: Nuclear and Particle Physics, 2018, 45, 035106.	3.6	3
15	Theoretical investigation of $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:mi} \rangle \hat{I}^\pm \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -like quasimolecules in heavy nuclei. Physical Review C, 2018, 97, .	2.9	9
16	Two-neutrino $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \hat{I}^2 \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle \hat{I}^2 \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ and low-lying Gamow-Teller $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:msup} \rangle \langle \text{mml:mi} \rangle \hat{I}^2 \langle \text{mml:mi} \rangle \langle \text{mml:mo} \rangle \hat{a}^\pm \langle \text{mml:mo} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:math} \rangle$ functions in the mass range $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle A \langle \text{mml:mi} \rangle \langle \text{mml:mo} \rangle = \langle \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 70 \langle \text{mml:math} \rangle$	2.9	13
17	Geiger-Nuttall Law for Nuclei in Strong Electromagnetic Fields. Physical Review Letters, 2017, 119, 202501.	7.8	34
18	Proton-neutron correlations above 100Sn. AIP Conference Proceedings, 2017, , .	0.4	2

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19	Proton-neutron versus \hat{I}^{\pm} -like correlations above Sn100. Physical Review C, 2016, 94, .	2.9	9
20	A simple approach to \hat{I}^{\pm} -decay fine structure. Journal of Physics G: Nuclear and Particle Physics, 2016, 43, 095109.	3.6	8
21	Description of electromagnetic and favored $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:mi} \rangle \hat{I}^{\pm} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ transitions in heavy odd-mass nuclei. Physical Review C, 2016, 93, .	2.9	5
22	Even-odd staggering of the spectroscopic factor as new evidence for \hat{I}^{\pm} clustering. Physical Review C, 2016, 93, .	2.9	9
23	Sum-rules and Goldstone modes from extended random phase approximation theories in Fermi systems with spontaneously broken symmetries. European Physical Journal B, 2016, 89, 1.	1.5	7
24	Double- \hat{I}^2 decay within a consistent deformed approach. Physical Review C, 2015, 91, .	2.9	5
25	Systematics of \hat{I}^{\pm} -decay transitions to excited states. Physical Review C, 2015, 92, .	2.9	7
26	Exact estimate of the $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:mi} \rangle \hat{I}^{\pm} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -decay rate and semiclassical approach in deformed nuclei. Physical Review C, 2015, 92, .	2.9	30
27	Pairing versus quarteting coherence length. Physical Review C, 2015, 91, .	2.9	3
28	Systematics of the \hat{I}^{\pm} -decay fine structure in even-even nuclei. Atomic Data and Nuclear Data Tables, 2015, 101, 1-40.	2.4	43
29	Probing shape coexistence by $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:mi} \rangle \hat{I}^{\pm} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ decays to $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:msup} \rangle \langle \text{mml:mn} \rangle 0 \langle \text{mml:mn} \rangle \langle \text{mml:mo} \rangle + \langle \text{mml:mo} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ Physical Review C, 2014, 90, .	2.9	13
30	Effective axial-vector strength and $\langle i \rangle \hat{I}^2 \langle i \rangle$ -decay systematics. Europhysics Letters, 2014, 107, 52001.	2.0	15
31	Self-consistent random-phase approximation from a coupled-cluster wave function perspective. Physical Review C, 2013, 88, .	2.9	19
32	Shell-model representation to describe $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{display="inline"} \langle \text{mml:mi} \rangle \hat{I}^{\pm} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ emission. Physical Review C, 2013, 87, .	2.9	40
33	Unified description of electromagnetic and $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{display="inline"} \langle \text{mml:mi} \rangle \hat{I}^{\pm} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ transitions in even-even nuclei. Physical Review C, 2013, 87, .	2.9	10
34	Unified description of $2 \langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{display="inline"} \langle \text{mml:msubsup} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 1 \langle \text{mml:mn} \rangle \langle \text{mml:mo} \rangle + \langle \text{mml:mo} \rangle \langle \text{mml:msubsup} \rangle \langle \text{mml:math} \rangle$ states within the deformed quasiparticle random-phase approximation. Physical Review C, 2013, 87, .	2.9	9
35	Simple approach to two-proton emission. Physical Review C, 2013, 87, .	2.9	34
36	Clustering features in decay processes. Journal of Physics: Conference Series, 2013, 413, 012011.	0.4	1

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37	Two center shell model description of superheavy element synthesis, fission and cluster decay. Journal of Physics: Conference Series, 2013, 413, 012013.	0.4	0
38	Microscopic description of the alpha-decay of a superheavy element. Europhysics Letters, 2013, 101, 62001.	2.0	17
39	Effects of formation properties in one-proton radioactivity. Physical Review C, 2012, 85, .	2.9	65
40	Shell model plus cluster description of negative parity states in ^{212}Po . Physical Review C, 2012, 85, .	2.9	30
41	Shell-model versus clustering effects in heavy nuclei. Journal of Physics: Conference Series, 2012, 338, 012022.	0.4	0
42	^{238}Pu cluster decay in the macroscopic-microscopic approach. European Physical Journal A, 2012, 48, 1.	2.5	23
43	A novel manifestation of α -clustering in ^{212}Po : Pure α - ^{208}Pb states revealed by their enhanced E1 decays. Journal of Physics: Conference Series, 2011, 312, 092014.	0.4	0
44	PURE α - ^{208}Pb STATES IN ^{212}Po REVEALED BY THEIR ENHANCED E1 DECAYS: A NOVEL α -CLUSTERING. International Journal of Modern Physics E, 2011, 20, 785-788.	1.0	1
45	Coexistence of α + ^{208}Pb cluster structures and single-particle excitations in ^{212}Po . European Physical Journal A, 2010, 46, 165-185.	2.5	37
46	Description of the two-neutrino $\beta\beta$ decay of ^{100}Mo by pnMAVA. Journal of Physics G: Nuclear and Particle Physics, 2010, 37, 015101.	3.6	15
47	Investigations of proton-neutron correlations close to the drip line. Physical Review C, 2010, 82, .	2.9	19
48	Systematics of $21+$ states in semimagic nuclei. Physical Review C, 2010, 82, .	2.9	0
49	Microscopic cold fission yields of ^{252}Cf . Physical Review C, 2010, 81, .	2.9	30
50	Novel Manifestation of α -Clustering Structures: New α - ^{208}Pb States in ^{212}Po . Physical Review C, 2010, 82, .	2.9	30
51	Theory of Particle and Cluster Emission. Lecture Notes in Physics, 2010, , .	0.7	80
52	ENHANCED E1 DECAYS MEASURED IN ^{212}Po POPULATED BY α -TRANSFER: A NOVEL MANIFESTATION OF α -CLUSTERING. Modern Physics Letters A, 2010, 25, 1870-1873.	1.2	0
53	Semiclassical Approach. Lecture Notes in Physics, 2010, , 93-105.	0.7	0
54	Preformation Amplitude. Lecture Notes in Physics, 2010, , 183-221.	0.7	0

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55	QRPA Description of the \hat{I}_{\pm} -Decay to Excited States. Lecture Notes in Physics, 2010, , 241-257.	0.7	0
56	Binary Emission Processes. Lecture Notes in Physics, 2010, , 11-49.	0.7	0
57	Core-Angular Harmonics. Lecture Notes in Physics, 2010, , 51-60.	0.7	0
58	Fine Structure of Emission Processes. Lecture Notes in Physics, 2010, , 107-141.	0.7	0
59	Ternary Emission Processes. Lecture Notes in Physics, 2010, , 143-157.	0.7	0
60	Microscopic Emission Theories. Lecture Notes in Physics, 2010, , 163-181.	0.7	0
61	Selfconsistent Emission Theory. Lecture Notes in Physics, 2010, , 223-240.	0.7	0
62	Heavy Cluster Decays. Lecture Notes in Physics, 2010, , 259-268.	0.7	0
63	Coupled Channels Methods. Lecture Notes in Physics, 2010, , 61-91.	0.7	0
64	Universal decay rule for reduced widths. Physical Review C, 2009, 80, .	2.9	100
65	Two-neutrino double-beta decay of ^{76}Ge in an anharmonic vibrator approach. Journal of Physics G: Nuclear and Particle Physics, 2009, 36, 045106.	3.6	11
66	Cold valleys for fission/fusion superheavy elements beyond $Z = 118$. Europhysics Letters, 2009, 85, 12001.	2.0	15
67	ALPHA-DECAY VERSUS ALPHA-CLUSTERING. International Journal of Modern Physics E, 2008, 17, 2283-2289.	1.0	3
68	Probing Nuclear Structure by Cold Emission Processes. AIP Conference Proceedings, 2008, , .	0.4	0
69	\hat{I}_{\pm} -decay spectroscopy of deformed nuclei reexamined. Physical Review C, 2008, 78, .	2.9	77
70	Decay rules in proton emission. AIP Conference Proceedings, 2007, , .	0.4	0
71	Folding description of the fine structure of \hat{I}_{\pm} decay to $2+$ vibrational and transitional states. Physical Review C, 2007, 75, .	2.9	48
72	\hat{I}_{\pm} decay of high-spin isomers in superheavy nuclei. Physical Review C, 2007, 76, .	2.9	52

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73	Microscopic anharmonic vibrator approach for beta decays. Nuclear Physics A, 2007, 781, 88-103.	1.5	8
74	NEW SPECTROSCOPY WITH COLD FISSION. , 2007, , .		0
75	Study of low-lying collective states using a Microscopic Anharmonic Vibrator Approach. European Physical Journal D, 2006, 56, 473-480.	0.4	1
76	Theories of proton emission. Physics Reports, 2006, 424, 113-174.	25.6	88
77	Study of the low-lying collective states in $94\text{--}100\text{Mo}$ isotopes using the MAVA. Nuclear Physics A, 2006, 765, 354-369.	1.5	9
78	Systematics of the \hat{I}_{\pm} -decay to rotational states. Physical Review C, 2006, 73, .	2.9	123
79	Systematics of Proton Emission. Physical Review Letters, 2006, 96, 072501.	7.8	92
80	SYSTEMATICS OF PROTON EMISSION. , 2006, , .		0
81	Systematics of the \hat{I}_{\pm} decay to vibrational ²⁺ states. Physical Review C, 2005, 71, .	2.9	18
82	Self-consistent random phase approximation and the restoration of symmetries within the three-level Lipkin model. Physical Review C, 2005, 72, .	2.9	21
83	Proton emission from triaxial nuclei. Physical Review C, 2004, 70, .	2.9	8
84	Evidence for \hat{I}_{\pm} clustering in heavy and superheavy nuclei. Physical Review C, 2004, 69, .	2.9	81
85	MICROSCOPIC ANALYSIS OF THE \hat{I}_{\pm} -DECAY IN HEAVY AND SUPERHEAVY NUCLEI. , 2004, , .		0
86	Anisotropic \hat{I}_{\pm} Decay. , 2004, , 487-494.		0
87	SYSTEMATICS OF THE ALPHA-DECAY TO VIBRATIONAL 2 ⁺ STATES. , 2004, , .		0
88	Angular Distribution in Ternary Cold Fission. Acta Physica Hungarica A Heavy Ion Physics, 2003, 18, 403-408.	0.4	1
89	Microscopic description of low-lying two-phonon states: Electromagnetic transitions. Physical Review C, 2003, 67, .	2.9	25
90	Microscopic calculation of the electric decay properties of low-energy vibrational states in even $110\text{--}120\text{Cd}$ isotopes. Physical Review C, 2003, 68, .	2.9	13

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91	Low-lying collective states in ^{98}Ru isotopes studied using a microscopic anharmonic vibrator approach. <i>Physical Review C</i> , 2003, 68, .	2.9	24
92	Probing mean field of neutron rich nuclei by cold fission. <i>Physical Review C</i> , 2003, 68, .	2.9	6
93	High-spin proton emitters in odd-odd nuclei and shape changes. <i>Physical Review C</i> , 2003, 68, .	2.9	8
94	Anisotropic $\hat{I}\pm$ decay in Am, Es, and Fm isotopes. <i>Physical Review C</i> , 2003, 67, .	2.9	17
95	THEORY OF BINARY AND TERNARY COLD FISSION. , 2003, , .		0
96	Anisotropy in the ternary cold fission. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2003, 29, 317-335.	3.6	7
97	Self-consistent description of the ternary cold fission: tri-rotor mode. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2002, 28, 2921-2938.	3.6	8
98	Double fine structure in binary cold fission. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2002, 28, 289-306.	3.6	11
99	Anisotropic $\hat{I}\pm$ decay. <i>Physics of Atomic Nuclei</i> , 2002, 65, 653-657.	0.4	0
100	Influence of a continuum on cluster-decay processes. <i>Physics of Atomic Nuclei</i> , 2002, 65, 621-627.	0.4	0
101	Quasimolecular resonances in the binary cold fission of ^{252}Cf . <i>Physical Review C</i> , 2001, 64, .	2.9	6
102	Microscopic description of the cold $\hat{I}\pm$ and ^{10}B ternary fission yields of ^{252}Cf in spheroidal coordinates. <i>Physical Review C</i> , 2001, 63, .	2.9	12
103	Microscopic description of the $\hat{I}\pm$ -decay fine structure in spherical nuclei. <i>Physical Review C</i> , 2001, 64, .	2.9	16
104	Microscopic description of $^{1\pm}+^{40}\text{Ca}$ quasimolecular resonances. <i>Physical Review C</i> , 2001, 63, .	2.9	2
105	Proton-neutron self-consistent quasiparticle random phase approximation within the $O(5)$ model. <i>Physical Review C</i> , 2000, 62, .	2.9	13
106	Preformation probabilities for light ternary particles in the cold (neutronless) fission of ^{252}Cf . <i>Physical Review C</i> , 2000, 61, .	2.9	17
107	Microscopic description of $\hat{I}\pm$ -like resonances. <i>Physical Review C</i> , 2000, 61, .	2.9	37
108	Alpha and exotic cluster decay with a new single particle basis. <i>Nuclear Physics A</i> , 1999, 654, 673c-676c.	1.5	6

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109	Self-consistent random phase approximation within the O(5) model and Fermi transitions. Nuclear Physics A, 1998, 637, 295-324.	1.5	29
110	Microscopic theory of cluster radioactivity. Physics Reports, 1998, 294, 265-362.	25.6	344
111	Probing monopole double giant resonances by dilepton(E_0)emission. Physical Review C, 1998, 57, 986-989.	2.9	3
112	Microscopic description of $f_{7/2}^{\pm}$ decay from superdeformed nuclei. Physical Review C, 1998, 58, 2073-2080.	2.9	10
113	Role of Pairing Correlations in Cluster Decay Processes. , 1998, , 265-293.		0
114	Restoration of the Ikeda sum rule in self-consistent quasiparticle random-phase approximation. Physical Review C, 1997, 55, 2340-2344.	2.9	25
115	Pairing Correlation and Quadrupole Deformation Effects on the ^{14}C Decay. Physical Review Letters, 1997, 78, 4549-4552.	7.8	12
116	Nuclear deformation in $f_{7/2}^{\pm}$ decay. Physical Review C, 1997, 56, 1782-1787.	2.9	13
117	The nuclear deformation versus the spin-flip like excitations and the suppression of the $2\hat{1}/2\hat{1}^2$ decay amplitude. Nuclear Physics A, 1997, 617, 176-194.	1.5	15
118	New single particle basis for microscopic description of decay processes. Physical Review C, 1996, 54, 292-301.	2.9	39
119	$f_{7/2}^{\pm}$ decay as a probe for phase transitions in nuclei. Physical Review C, 1996, 54, 1169-1176.	2.9	21
120	Regular and irregular features of classical motion described by a quadrupole boson Hamiltonian. Physical Review E, 1996, 54, 3264-3273.	2.1	2
121	Semiclassical treatment of quadrupole boson hamiltonians: new results for small and large amplitude regimes. Nuclear Physics A, 1995, 588, 431-462.	1.5	10
122	Finite-size effects in the gap equation for Paris interaction. Nuclear Physics A, 1995, 593, 151-161.	1.5	14
123	Description of the $2\hat{1}/2\hat{1}^2$ transition rate within the Moszkowski model. Physical Review C, 1995, 51, 3008-3016.	2.9	15
124	Microscopic Description of Alpha Decay to Intruder 0_2^+ States in Pb, Po, Hg, and Pt Isotopes. Physical Review Letters, 1995, 74, 3939-3942.	7.8	46
125	Microscopic description of cluster decay. Journal of Physics G: Nuclear and Particle Physics, 1994, 20, 1483-1498.	3.6	20
126	Deformation properties of the scissors mode in the generalized coherent state model. Physical Review C, 1994, 50, 127-137.	2.9	29

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127	Microscopic description of the anisotropy in alpha decay. Physical Review C, 1994, 49, 3024-3028.	2.9	35
128	From \hat{I}^\pm - Decay to Cluster Radioactivity: A Microscopic Approach. NATO ASI Series Series B: Physics, 1994, , 165-181.	0.2	0
129	A projected single-particle basis for deformed nuclei. Nuclear Physics A, 1993, 551, 93-108.	1.5	15
130	Unified description of the $2\hat{I}^\pm_2\hat{I}^\pm_2$ decay in spherical and deformed nuclei. Nuclear Physics A, 1993, 564, 185-203.	1.5	38
131	New decay modes: is a microscopic approach feasible?. Journal of Physics G: Nuclear and Particle Physics, 1993, 19, L189-L192.	3.6	12
132	Alpha widths in deformed nuclei: Microscopic approach. Physical Review C, 1992, 46, 1346-1354.	2.9	59
133	Propagation and stability of nonlinear surface waves. Physical Review A, 1992, 46, 4449-4452.	2.5	4
134	Anisotropy in alpha decay of odd-mass deformed nuclei. Physical Review C, 1992, 46, 884-888.	2.9	51
135	Photon-neutron correlations and microscopic description of alpha decay. Nuclear Physics A, 1992, 549, 407-419.	1.5	12
136	Microscopic description of alpha decay of deformed nuclei. Physical Review C, 1991, 44, 545-547.	2.9	31
137	Semiclassical description of alpha clustering in heavy nuclei. Physical Review C, 1991, 44, 1929-1943.	2.9	4
138	The description of the collective M1 properties of the even-odd nuclei. Nuclear Physics A, 1990, 513, 11-28.	1.5	20
139	Description of magnetic properties of the proton-neutron asymmetric states within the generalized coherent states model. Nuclear Physics A, 1989, 491, 24-44.	1.5	15
140	Simultaneous GCSM description of the M1 state and the major collective bands. Nuclear Physics A, 1987, 475, 439-467.	1.5	19
141	Elastic scattering of heavy ions and a modified liquid drop model. Zeitschrift für Physik A, 1980, 297, 115-121.	1.4	3
142	The non-linear Schrodinger equation and anomalous backward scattering. Journal of Physics G: Nuclear Physics, 1978, 4, 125-132.	0.8	9