

D-S Delion

List of Publications by Year in descending order

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142
papers

2,800
citations

172457

29
h-index

206112

48
g-index

145
all docs

145
docs citations

145
times ranked

755
citing authors

#	ARTICLE	IF	CITATIONS
1	Microscopic theory of cluster radioactivity. Physics Reports, 1998, 294, 265-362.	25.6	344
2	Systematics of the \hat{I}_{\pm} -decay to rotational states. Physical Review C, 2006, 73, .	2.9	123
3	Universal decay rule for reduced widths. Physical Review C, 2009, 80, .	2.9	100
4	Systematics of Proton Emission. Physical Review Letters, 2006, 96, 072501.	7.8	92
5	Theories of proton emission. Physics Reports, 2006, 424, 113-174.	25.6	88
6	Novel Manifestation of \hat{I}_{\pm} -Clustering Structures: New α -States in ^{208}Pb and ^{282}Po	2.9	82
7	Evidence for \hat{I}_{\pm} clustering in heavy and superheavy nuclei. Physical Review C, 2004, 69, .	2.9	81
8	Theory of Particle and Cluster Emission. Lecture Notes in Physics, 2010, , .	0.7	80
9	\hat{I}_{\pm} -decay spectroscopy of deformed nuclei reexamined. Physical Review C, 2008, 78, .	2.9	77
10	Effects of formation properties in one-proton radioactivity. Physical Review C, 2012, 85, .	2.9	65
11	Alpha widths in deformed nuclei: Microscopic approach. Physical Review C, 1992, 46, 1346-1354.	2.9	59
12	\hat{I}_{\pm} decay of high-spin isomers in superheavy nuclei. Physical Review C, 2007, 76, .	2.9	52
13	Anisotropy in alpha decay of odd-mass deformed nuclei. Physical Review C, 1992, 46, 884-888.	2.9	51
14	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
15	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
16	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
17	Shell-model representation to describe \hat{I}_{\pm} emission. Physical Review C, 2013, 87, .	2.9	40
18	New single particle basis for microscopic description of decay processes. Physical Review C, 1996, 54, 292-301.	2.9	39

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19	Unified description of the $2^{1/2}2^{1/2}$ decay in spherical and deformed nuclei. Nuclear Physics A, 1993, 564, 185-203.	1.5	38
20	Microscopic description of \hat{I}_{\pm} -like resonances. Physical Review C, 2000, 61, .	2.9	37
21	Coexistence of $\alpha + 208\text{Pb}$ cluster structures and single-particle excitations in 212Po . European Physical Journal A, 2010, 46, 165-185.	2.5	37
22	Microscopic description of the anisotropy in alpha decay. Physical Review C, 1994, 49, 3024-3028.	2.9	35
23	Simple approach to two-proton emission. Physical Review C, 2013, 87, .	2.9	34
24	Geiger-Nuttall Law for Nuclei in Strong Electromagnetic Fields. Physical Review Letters, 2017, 119, 202501.	7.8	34
25	Coupled channels description of the \hat{I}_{\pm} -decay fine structure. Journal of Physics G: Nuclear and Particle Physics, 2018, 45, 053001.	3.6	33
26	Microscopic description of alpha decay of deformed nuclei. Physical Review C, 1991, 44, 545-547.	2.9	31
27	Microscopic cold fission yields of $\text{Cf}252$. Physical Review C, 2010, 81, .	2.9	30
28	Shell model plus cluster description of negative parity states in ^{212}Po . Physical Review C, 2012, 85, .	2.9	30
29	Exact estimate of the \hat{I}_{\pm} -decay rate and semiclassical approach in deformed nuclei. Physical Review C, 2015, 92, .	2.9	30
30	Deformation properties of the scissors mode in the generalized coherent state model. Physical Review C, 1994, 50, 127-137.	2.9	29
31	Self-consistent random phase approximation within the $O(5)$ model and Fermi transitions. Nuclear Physics A, 1998, 637, 295-324.	1.5	29
32	Restoration of the Ikeda sum rule in self-consistent quasiparticle random-phase approximation. Physical Review C, 1997, 55, 2340-2344.	2.9	25
33	Microscopic description of low-lying two-phonon states: Electromagnetic transitions. Physical Review C, 2003, 67, .	2.9	25
34	Low-lying collective states in ^{98}Ru isotopes studied using a microscopic anharmonic vibrator approach. Physical Review C, 2003, 68, .	2.9	24
35	^{238}Pu cluster decay in the macroscopic-microscopic approach. European Physical Journal A, 2012, 48, 1.	2.5	23
36	\hat{I}_{\pm} decay as a probe for phase transitions in nuclei. Physical Review C, 1996, 54, 1169-1176.	2.9	21

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37	Self-consistent random phase approximation and the restoration of symmetries within the three-level Lipkin model. <i>Physical Review C</i> , 2005, 72, .	2.9	21
38	The description of the collective M1 properties of the even-odd nuclei. <i>Nuclear Physics A</i> , 1990, 513, 11-28.	1.5	20
39	Microscopic description of cluster decay. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 1994, 20, 1483-1498.	3.6	20
40	Simultaneous GCSM description of the M1 state and the major collective bands. <i>Nuclear Physics A</i> , 1987, 475, 439-467.	1.5	19
41	Investigations of proton-neutron correlations close to the drip line. <i>Physical Review C</i> , 2010, 82, .	2.9	19
42	Self-consistent random-phase approximation from a coupled-cluster wave function perspective. <i>Physical Review C</i> , 2013, 88, .	2.9	19
43	Systematics of the \hat{I}_{\pm} decay to vibrational 2^{+} states. <i>Physical Review C</i> , 2005, 71, .	2.9	18
44	Preformation probabilities for light ternary particles in the cold (neutronless) fission of ^{252}Cf . <i>Physical Review C</i> , 2000, 61, .	2.9	17
45	Anisotropic \hat{I}_{\pm} decay in Am, Es, and Fm isotopes. <i>Physical Review C</i> , 2003, 67, .	2.9	17
46	Microscopic description of the alpha-decay of a superheavy element. <i>Europhysics Letters</i> , 2013, 101, 62001.	2.0	17
47	Microscopic description of the \hat{I}_{\pm} -decay fine structure in spherical nuclei. <i>Physical Review C</i> , 2001, 64, .	2.9	16
48	Universal proton emission systematics. <i>Physical Review C</i> , 2021, 103, .	2.9	16
49	Description of magnetic properties of the proton-neutron asymmetric states within the generalized coherent states model. <i>Nuclear Physics A</i> , 1989, 491, 24-44.	1.5	15
50	A projected single-particle basis for deformed nuclei. <i>Nuclear Physics A</i> , 1993, 551, 93-108.	1.5	15
51	Description of the $2\hat{I}_{1/2}\hat{I}_{2}^{2}$ transition rate within the Moszkowski model. <i>Physical Review C</i> , 1995, 51, 3008-3016.	2.9	15
52	The nuclear deformation versus the spin-flip like excitations and the suppression of the $2\hat{I}_{1/2}\hat{I}_{2}^{2}$ decay amplitude. <i>Nuclear Physics A</i> , 1997, 617, 176-194.	1.5	15
53	Cold valleys for fission/fusion superheavy elements beyond $Z = 118$. <i>Europhysics Letters</i> , 2009, 85, 12001.	2.0	15
54	Description of the two-neutrino \hat{I}_{2}^{2} decay of ^{100}Mo by pnMAVA. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2010, 37, 015101.	3.6	15

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91	Probing mean field of neutron rich nuclei by cold fission. Physical Review C, 2003, 68, .	2.9	6
92	Bridging the quartet and pair pictures of isovector proton-neutron pairing. Physical Review C, 2020, 102, .	2.9	6
93	Double- \hat{I}^2 decay within a consistent deformed approach. Physical Review C, 2015, 91, .	2.9	5
94	Description of electromagnetic and favored $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:mi} \rangle \hat{I} \pm \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ transitions in heavy odd-mass nuclei. Physical Review C, 2016, 93, .	2.9	5
95	Disentangling the pair and quartet condensates. Physical Review C, 2019, 100, .	2.9	5
96	Semiclassical description of alpha clustering in heavy nuclei. Physical Review C, 1991, 44, 1929-1943.	2.9	4
97	Propagation and stability of nonlinear surface waves. Physical Review A, 1992, 46, 4449-4452.	2.5	4
98	Unified description of pairing and quarteting correlations within the particle-hole-boson approach. Physical Review C, 2019, 99, .	2.9	4
99	Semiclassical propagator approach for emission processes from deformed nuclei. Journal of Physics G: Nuclear and Particle Physics, 2021, 48, 105108.	3.6	4
100	Elastic scattering of heavy ions and a modified liquid drop model. Zeitschrift für Physik A, 1980, 297, 115-121.	1.4	3
101	Probing monopole double giant resonances by dilepton($E0$)emission. Physical Review C, 1998, 57, 986-989.	2.9	3
102	ALPHA-DECAY VERSUS ALPHA-CLUSTERING. International Journal of Modern Physics E, 2008, 17, 2283-2289.	1.0	3
103	Pairing versus quarteting coherence length. Physical Review C, 2015, 91, .	2.9	3
104	Alpha-like resonances in nuclei. Journal of Physics G: Nuclear and Particle Physics, 2018, 45, 035106.	3.6	3
105	Effective axial-vector strength within proton-neutron deformed quasiparticle random-phase approximation. Physical Review C, 2019, 100, .	2.9	3
106	Regular and irregular features of classical motion described by a quadrupole boson Hamiltonian. Physical Review E, 1996, 54, 3264-3273.	2.1	2
107	Microscopic description of $f_{\pm}^{+40}\text{Ca}$ quasimolecular resonances. Physical Review C, 2001, 63, .	2.9	2
108	Proton-neutron correlations above 100Sn . AIP Conference Proceedings, 2017, , .	0.4	2

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109	Angular Distribution in Ternary Cold Fission. Acta Physica Hungarica A Heavy Ion Physics, 2003, 18, 403-408.	0.4	1
110	Study of low-lying collective states using a Microscopic Anharmonic Vibrator Approach. European Physical Journal D, 2006, 56, 473-480.	0.4	1
111	PURE $\hat{1}\pm$ -208Pb STATES IN ^{212}Po REVEALED BY THEIR ENHANCED E1 DECAYS: A NOVEL $\hat{1}\pm$ CLUSTERING. International Journal of Modern Physics E, 2011, 20, 785-788.	1.0	1
112	Clustering features in decay processes. Journal of Physics: Conference Series, 2013, 413, 012011.	0.4	1
113	Collectivity of the $21+$ state in $Z\approx 82$ 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
114	Anisotropic $\hat{1}\pm$ decay. Physics of Atomic Nuclei, 2002, 65, 653-657.	0.4	0
115	Influence of a continuum on cluster-decay processes. Physics of Atomic Nuclei, 2002, 65, 621-627.	0.4	0
116	THEORY OF BINARY AND TERNARY COLD FISSION. , 2003, , .		0
117	MICROSCOPIC ANALYSIS OF THE $\hat{1}\pm$ -DECAY IN HEAVY AND SUPERHEAVY NUCLEI. , 2004, , .		0
118	Decay rules in proton emission. AIP Conference Proceedings, 2007, , .	0.4	0
119	Probing Nuclear Structure by Cold Emission Processes. AIP Conference Proceedings, 2008, , .	0.4	0
120	Systematics of $21+$ states in semimagic nuclei. Physical Review C, 2010, 82, .	2.9	0
121	ENHANCED E1 DECAYS MEASURED IN ^{212}Po POPULATED BY $\hat{1}\pm$ TRANSFER: A NOVEL MANIFESTATION OF $\hat{1}\pm$ CLUSTERING. Modern Physics Letters A, 2010, 25, 1870-1873.	1.2	0
122	Semiclassical Approach. Lecture Notes in Physics, 2010, , 93-105.	0.7	0
123	A novel manifestation of $\hat{1}\pm$ clustering in ^{212}Po : Pure $\hat{1}\pm$ -208Pb states revealed by their enhanced E1 decays. Journal of Physics: Conference Series, 2011, 312, 092014.	0.4	0
124	Shell-model versus clustering effects in heavy nuclei. Journal of Physics: Conference Series, 2012, 338, 012022.	0.4	0
125	Two center shell model description of superheavy element synthesis, fission and cluster decay. Journal of Physics: Conference Series, 2013, 413, 012013.	0.4	0
126	$\hat{1}\pm$ -clustering in strong electromagnetic fields. AIP Conference Proceedings, 2019, , .	0.4	0

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127	Anisotropic \hat{I}_{\pm} Decay. , 2004, , 487-494.		0
128	SYSTEMATICS OF THE ALPHA-DECAY TO VIBRATIONAL 2^{+} STATES. , 2004, , .		0
129	SYSTEMATICS OF PROTON EMISSION. , 2006, , .		0
130	NEW SPECTROSCOPY WITH COLD FISSION. , 2007, , .		0
131	Preformation Amplitude. Lecture Notes in Physics, 2010, , 183-221.	0.7	0
132	QRPA Description of the \hat{I}_{\pm} -Decay to Excited States. Lecture Notes in Physics, 2010, , 241-257.	0.7	0
133	Binary Emission Processes. Lecture Notes in Physics, 2010, , 11-49.	0.7	0
134	Core-Angular Harmonics. Lecture Notes in Physics, 2010, , 51-60.	0.7	0
135	Fine Structure of Emission Processes. Lecture Notes in Physics, 2010, , 107-141.	0.7	0
136	Ternary Emission Processes. Lecture Notes in Physics, 2010, , 143-157.	0.7	0
137	Microscopic Emission Theories. Lecture Notes in Physics, 2010, , 163-181.	0.7	0
138	Selfconsistent Emission Theory. Lecture Notes in Physics, 2010, , 223-240.	0.7	0
139	Heavy Cluster Decays. Lecture Notes in Physics, 2010, , 259-268.	0.7	0
140	Coupled Channels Methods. Lecture Notes in Physics, 2010, , 61-91.	0.7	0
141	From \hat{I}_{\pm} - Decay to Cluster Radioactivity: A Microscopic Approach. NATO ASI Series Series B: Physics, 1994, , 165-181.	0.2	0
142	Role of Pairing Correlations in Cluster Decay Processes. , 1998, , 265-293.		0