M Balasubramaniam

List of Publications by Year
in descending order

64	1,480	331670 21	315739 38
papers	citations	h-index	g-index

65	65	65	371
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Optimum orientations of deformed nuclei for cold synthesis of superheavy elements and the role of higher multipole deformations. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, 631-644.	3.6	237
2	Cluster decay of hot56Ni*formed in the32S+24Mgreaction. Physical Review C, 2003, 68, .	2.9	91
3	Emission of intermediate mass fragments from hot116Ba* formed in low-energy58Ni +58Ni reaction. Journal of Physics G: Nuclear and Particle Physics, 2003, 29, 2703-2719.	3.6	84
4	Dynamical cluster-decay model for hot and rotating light-mass nuclear systems applied to the low-energyS32+Mg24â†'Ni56âˆ—reaction. Physical Review C, 2005, 71, .	2.9	77
5	Proton andÎ±-radioactivity of spherical proton emitters. Physical Review C, 2005, 71, .	2.9	72
6	Decay of excited 116Ba* formed in the 58Ni+58Ni reaction via the emission of intermediate mass fragments. Physical Review C, 2002, 65, .	2.9	65
7	New semiempirical formula for exotic cluster decay. Physical Review C, 2004, 70, .	2.9	60
8	The formation and decay of superheavy nuclei produced in48Ca-induced reactions. Journal of Physics G: Nuclear and Particle Physics, 2003, 29, 625-639.	3.6	51
9	All possible ternary fragmentations of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi mathvariant="normal">Cf</mml:mi><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>252</mml:mn></mml:mrow></mml:mmultiscripts></mml:math>in collinear configuration. Physical Review C, 2011, 83, .	2.9	49
10	The clusterâ€“core model for the halo structure of light nuclei at the drip lines. Journal of Physics G: Nuclear and Particle Physics, 2002, 28, 699-712.	3.6	44
11	The dynamical cluster-decay model of preformed clusters for a hot and rotating116Ba* nucleus produced in the low-energy58Ni +58Ni reaction. Journal of Physics G: Nuclear and Particle Physics, 2006, 32, 345-361.	3.6	42
12	Three-cluster model for the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Î±</mml:mi></mml:mrow></mml:math>-accompanied fission of californium nuclei. Physical Review C, 2009, 79, .	2.9	41
13	Ternary fission fragmentation of 252Cf for all possible third fragments. European Physical Journal A, 2010, 45, 293-300.	2.5	39
14	Heavy-ion emission in spontaneous decays of249,252Cfnuclei. Physical Review C, 1999, 60, .	2.9	38
15	Collective clusterization effects in light heavy ion reactions. Nuclear Physics A, 2004, 738, 479-482.	1.5	38
16	Kinetic energies of cluster fragments in ternary fission of 252 Cf. European Physical Journal A, 2012, 48, 1.	2.5	35
17	Magic numbers in exotic light nuclei near drip lines. Journal of Physics G: Nuclear and Particle Physics, 2006, 32, 565-571.	3.6	34
18	An empirical formula for the half-lives of exotic two-proton emission. European Physical Journal A, 2019, 55, 1.	2.5	32

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19	The halo structure of neutron-drip line nuclei: (neutron) cluster-core model. Journal of Physics G: Nuclear and Particle Physics, 2000, 26, L23-L32.	3.6	30
20	Deformation and orientation effects in the ternary fragmentation potential of the4He- and10Be-accompanied fission of the252Cf nucleus. Journal of Physics G: Nuclear and Particle Physics, 2010, 37, 045104.	3.6	29
21	Collinear versus triangular geometry: A ternary fission study. Physical Review C, 2014, 90, .	2.9	27
22	True ternary fission. Physical Review C, 2015, 91, .	2.9	22
23	Structure effects in the region of superheavy elements via the Â-decay chain of293118. Journal of Physics G: Nuclear and Particle Physics, 2002, 28, 2875-2884.	3.6	19
24	Ternary-fission mass distribution of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi mathvariant="normal">Cf</mml:mi><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>252</mml:mn></mml:mrow></mml:mmultiscripts></mml:math>: A level-density approach. Physical Review C, 2014, 90, .	2.9	17
25	Closed-shell effects from the stability and instability of nuclei against cluster decays in the mass regions 130â€“158 and 180â€“198. Physical Review C, 2003, 68, .	2.9	15
26	Ternary fission of superheavy elements. Physical Review C, 2016, 93, .	2.9	15
27	Scission point model for the mass distribution of ternary fission. European Physical Journal A, 2019, 55, 1.	2.5	15
28	Cold86Kr valley in superheavyZ= 104-120 nuclei. Journal of Physics G: Nuclear and Particle Physics, 2001, 27, 867-881.	3.6	14
29	Temperature-dependent binding energies in a dynamical cluster-decay model applied to the decay of hot and rotating<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:mn>56</mml:mn></mml:msup></mml:math>Ni<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:mo>^</mml:mo></mml:msup></mml:math>. Physical Review C, 2012, 86, .	2.9	13
30	An empirical relation for cluster decay preformation probability. International Journal of Modern Physics E, 2014, 23, 1450018.	1.0	13
31	An empirical formula for the half-lives of ground state and isomeric state one proton emission. European Physical Journal A, 2018, 54, 1.	2.5	12
32	Nuclear surface energy coefficients in Î±-decay. Journal of Physics G: Nuclear and Particle Physics, 2013, 40, 035104.	3.6	10
33	Cold fission versus exotic cluster decay in234,236,238U nuclei. Journal of Physics G: Nuclear and Particle Physics, 2000, 26, 1373-1388.	3.6	9
34	Exotic decay modes of odd-Z (105â€“119) superheavy nuclei. European Physical Journal A, 2014, 50, 1.	2.5	9
35	Charge distribution in the ternary fragmentation of 252Cf. European Physical Journal A, 2017, 53, 1.	2.5	9
36	Cluster pre-existence probability. European Physical Journal A, 2011, 47, 1.	2.5	7

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37	Decay studies of59Cu*formed in the35Cl +24Mg reaction using the dynamical cluster-decay model. Physical Review C, 2013, 87, .	2.9	7
38	Dynamical model calculation to reconcile the nuclear fission lifetime from different measurement techniques. Physical Review C, 2018, 98, .	2.9	7
39	CLUSTER RADIOACTIVITY IN TRANS-TIN REGION USING SEMIEMPIRICAL FORMULA. International Journal of Modern Physics E, 2009, 18, 1509-1520.	1.0	6
40	ALPHA ACCOMPANIED TERNARY FISSION OF SUPERHEAVY NUCLEI. International Journal of Modern Physics E, 2013, 22, 1350014.	1.0	6
41	Relative fragmentation in ternary systems within the temperature-dependent relativistic mean-field approach. Physical Review C, 2017, 95, .	2.9	6
42	Photoluminescence properties of ZnSe1â^'x Te x thin films on GaAs/ITO substrates by electron beam evaporation technique. Science China Technological Sciences, 2011, 54, 52-57.	4.0	5
43	Relative mass distributions of neutron-rich thermally fissile nuclei within a statistical model. Physical Review C, 2017, 96, .	2.9	5
44	Ternary fission. Pramana - Journal of Physics, 2015, 85, 423-430.	1.8	4
45	Nuclear surface energy coefficients in cluster decay. European Physical Journal A, 2018, 54, 1.	2.5	4
46	Equatorial, collinear trajectories in the ternary fission of ²⁵²Cf for various third fragments. Journal of Physics G: Nuclear and Particle Physics, 2019, 46, 025103.	3.6	4
47	Role of neck-length parameter in dynamical cluster-decay model for the decay of $^{56}{m N}{{{m i}}^{*}}$. Journal of Physics G: Nuclear and Particle Physics, 2014, 41, 095101.	3.6	2
48	Preformation probability of two-proton emitters. International Journal of Modern Physics E, 2018, 27, 1850032.	1.0	2
49	Pre-existence probability for the ternary fission of Cf isotopes. Journal of Physics G: Nuclear and Particle Physics, 2021, 48, 025102.	3.6	2
50	Publisherâ€™s Note: Cluster decay of hot56Niâ‹†formed in the32S+24Mgreaction [Phys. Rev. C 68, 014610 (2003)]. Physical Review C, 2003, 68, .	2.9	1
51	Dynamics of collinear ternary fission in the fragmentation of252Cf. EPJ Web of Conferences, 2014, 66, 03092.	0.3	1
52	A study of measured neutron elastic differential neutron cross sections for 23Na. Journal of Radioanalytical and Nuclear Chemistry, 2014, 302, 1043-1047.	1.5	1
53	Role of channel temperature and mass window in the binary breakup of U*236. Physical Review C, 2019, 100, .	2.9	1
54	Effect of channel temperature and mass window in the fission decay of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Re</mml:mi><mml:none /><mml:mo>*</mml:mo><mml:mprescripts /><mml:none /><mml:mn>181</mml:mn></mml:mmultiscripts></mml:math>. Physical Review C, 2020, 101, .	2.9	1

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55	Appearance / Disappearance of Magic Number in Light Nuclei. Journal of Nuclear Physics Material Sciences Radiation and Applications, 2021, 9, 109-115.	0.2	1
56	De-excitation studies of [sup 59]Cuâˆ— formed in different entrance channel reactions. , 2013, , .		0
57	Forward versus inverse planning in oropharyngeal cancer: A comparative study using physical and biological indices. Journal of Cancer Research and Therapeutics, 2013, 9, 422.	0.9	0
58	Mirror nuclei of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>1</mml:mn><mml:mi>n</mml:mi><mml:mo></mml:mo> halo systems as <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>1</mml:mn><mml:mi>p</mml:mi><mml:mo></mml:mo> emitters. Physical Review C, 2019, 100, .	2.9	0
59	A generalized empirical formula for half-lives of alpha-decay fine structure. International Journal of Modern Physics E, 2019, 28, 1950067.	1.0	0
60	In memory: Prof. Raj K. Gupta (1938â€“2019). International Journal of Modern Physics E, 2019, 28, 1977001.	1.0	0
61	T-dependent RMF Model Applied to Ternary Fission Studies. Journal of Nuclear Physics Material Sciences Radiation and Applications, 2021, 9, 95-101.	0.2	0
62	Signature of magic numbers in light exotic nuclei. International Journal of Modern Physics E, 0, , .	1.0	0
63	Fission Timescale of Superheavy Element Z = 120 from the Langevin Dynamical Model. , 2019, , .		0
64	Scission point model applied to $$^{181} hbox {Re}^{*}$$ formed in $$^{12}{} mathbf{C}+^{169}$$Tm reaction. European Physical Journal A, 2020, 56, 1.	2.5	0