Maria Chushnyakova

List of Publications by Year
in descending order

49 papers	342 citations	1040056 9 h-index	888059 17 g-index
49 all docs	49 docs citations	49 times ranked	67 citing authors

#	Article	IF	Citations
1	A C-code for the double folding interaction potential of two spherical nuclei. Computer Physics Communications, 2010, 181, 168-182.	7.5	52
2	Heavy ion fusion: Possible dynamical solution of the problem of the abnormally large diffuseness of the nucleus-nucleus potential. Physical Review C, 2013, 87, .	2.9	36
3	Disentangling effects of potential shape in the fission rate of heated nuclei. Physical Review C, 2010, 82, .	2.9	31
4	Dynamical calculations of the above-barrier heavy-ion fusion cross sections using Hartree-Fock nuclear densities with the SKX coefficient set. Physical Review C, 2014, 90, .	2.9	31
5	Quantitative analysis of precise heavy-ion fusion data at above-barrier energies using Skyrme-Hartree-Fock nuclear densities. Physical Review C, 2014, 89, .	2.9	27
6	Thermal decay rate of a metastable state with two degrees of freedom: Dynamical modelling versus approximate analytical formula. Pramana - Journal of Physics, 2017, 88, 1.	1.8	17
7	Thermal decay of a metastable state: Influence of rescattering on the quasistationary dynamical rate. Physical Review E, 2018, 97, 032107.	2.1	16
8	Memory versus fluctuations in heavy ion fusion. Journal of Physics G: Nuclear and Particle Physics, 2013, 40, 095108.	3.6	14
9	Detail study of application of the relativistic mean-field effective NN forces for heavy-ion fusion within a dynamical model. Journal of Physics G: Nuclear and Particle Physics, 2021, 48, 015101.	3.6	12
10	A C-code for the double folding interaction potential for reactions involving deformed target nuclei. Computer Physics Communications, 2013, 184, 172-182.	7.5	9
11	Describing the heavy-ion above-barrier fusion using the bare potentials resulting from Migdal and M3Y double-folding approaches. Journal of Physics G: Nuclear and Particle Physics, 2016, 43, 045111.	3.6	8
12	Comment on â€œTemperature dependence of nuclear fission time in heavy-ion fusion-fission reactionsâ€. Physical Review C, 2018, 98, .	2.9	8
13	Dimensionless Universal Parameters of the Kramers Problem. Journal of Physics: Conference Series, 2019, 1210, 012052.	0.4	7
14	Above-barrier heavy-ion fusion cross-sections using the relativistic mean-field approach: Case of spherical colliding nuclei. Nuclear Physics A, 2020, 994, 121657.	1.5	7
15	DFMSPH22: A C-code for the double folding interaction potential of two spherical nuclei. Computer Physics Communications, 2021, 259, 107690.	7.5	7
16	Systematic comparison of barriers for heavy-ion fusion calculated on the basis of the double-folding model by employing two versions of nucleonâ€"nucleon interaction. Physics of Atomic Nuclei, 2016, 79, 543-548.	0.4	6
17	Post-scission dissipative motion and fission-fragment kinetic energy. Bulletin of the Russian Academy of Sciences: Physics, 2016, 80, 938-941.	0.6	5
18	DFMSPH19: A C-code for the double folding interaction potential of two spherical nuclei. Computer Physics Communications, 2019, 242, 153-155.	7.5	5

#	ARTICLE	IF	CITATIONS
19	Systematic application of the M3Y <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="italic">NN</mml:mi></mml:mrow></mml:math> forces for describing the capture process in heavy-ion collisions involving deformed target nuclei. Physical Review C, 2022, 105, .	2.9	5
20	DFMDEF18: A C-code for the double folding interaction potential of a spherical nucleus with deformed nucleus. Computer Physics Communications, 2018, 222, 414-417.	7.5	4
21	The Kramers problem in the energy diffusion regime: transient times. Journal of Physics: Conference Series, 2018, 1050, 012018.	0.4	4
22	Precision Numerical Modeling of the Decay of a Metastable State at High Temperatures. Brazilian Journal of Physics, 2019, 49, 587-593.	1.4	4
23	Thermal escape from a trap over the parabolic barrier: Langevin type approach to energy diffusion regime. Journal of Physics: Conference Series, 2019, 1260, 092002.	0.4	4
24	Approximating the spin distributions in capture reactions between spherical nuclei. Nuclear Physics A, 2015, 941, 255-264.	1.5	3
25	Oscillations of the fusion cross-sections in the 16O+16O reaction. Pramana - Journal of Physics, 2015, 85, 653-665.	1.8	3
26	DFMSPH14: A C-code for the double folding interaction potential of two spherical nuclei. Computer Physics Communications, 2016, 206, 97-102.	7.5	3
27	Modification of the Effective Yukawa-Type Nucleonâ€“Nucleon Interaction for Accelerating Calculations of the Real Part of the Optical Potential. Moscow University Physics Bulletin (English) Tj ETQq1 1 0.784314 rgBT /Overlock	0.3	3
28	New dissipative non-Markovian model treatment of capture: the need for precise above-barrier cross sections. EPJ Web of Conferences, 2013, 63, 02008.	0.3	2
29	Testing the energy diffusion approximation for the escape of a Brownian particle from a potential pocket. Chinese Journal of Physics, 2020, 67, 388-397.	3.9	2
30	Two ways for numerical solution of the Kramers problem for spatial diffusion over an edge-shaped barrier. Journal of Physics: Conference Series, 2020, 1441, 012135.	0.4	2
31	Retarding friction versus white noise in the description of heavy ion fusion. EPJ Web of Conferences, 2014, 66, 03018.	0.3	1
32	Dynamical modeling of fission process: Impact of the collective potential. , 2016, , .		1
33	Two ways for finding the thermal decay rate at weak friction. Journal of Physics: Conference Series, 2019, 1260, 092001.	0.4	1
34	Accuracy of the analytical escape rate for a cusp barrier in the overdamping regime. Journal of Physics: Conference Series, 2020, 1441, 012181.	0.4	1
35	A New Algorithm for Calculating Proton, Neutron, and Charge Densities in Nuclei: Comparisons to Experimental Data. Bulletin of the Russian Academy of Sciences: Physics, 2021, 85, 508-516.	0.6	1
36	The effect of difference between neutron and proton density distributions on the nuclei fusion barrier in a double folding model. Bulletin of the Russian Academy of Sciences: Physics, 2009, 73, 185-186.	0.6	0

#	Article	IF	Citations
37	Modeling a two-dimensional distorted stochastic harmonic oscillator. , 2017, , .		0
38	Applicability of Kramers rate formulas in the energy diffusion regime. Journal of Physics: Conference Series, 2018, 1050, 012029.	0.4	0
39	Thermal Decay of a Metastable State: the Quasistationary Rate and the Mean Lifetime. Journal of Physics: Conference Series, 2019, 1210, 012051.	0.4	0
40	Computer simulating of nanoprocesses: Thermal jumps over a low barrier in the overdamped regime. Journal of Physics: Conference Series, 2020, 1546, 012115.	0.4	0
41	Thermal decay rates for an asymmetric cusped barrier at strong friction. Journal of Physics: Conference Series, 2020, 1546, 012122.	0.4	0
42	Average lifetimes of a metastable state at low barrier in the overdamped regime. Journal of Physics: Conference Series, 2021, 1791, 012113.	0.4	0
43	Two algorithms for numerical modeling of thermal decay of a metastable state. Journal of Physics: Conference Series, 2021, 1791, 012114.	0.4	0
44	Activated decay of a metastable state: transient times for small and large dissipation. Indian Journal of Physics, 0, , 1.	1.8	0
45	Relativistic Mean-Field Effective Nucleonâ€"Nucleon Forces in the Dynamic Modeling of Heavy Ion Fusion. Bulletin of the Russian Academy of Sciences: Physics, 2021, 85, 490-495.	0.6	0
46	Reply to Comment on â€˜Detail study of application of the relativistic mean-field effective NN forces for heavy-ion fusion within a dynamical modelâ€™. Journal of Physics G: Nuclear and Particle Physics, 2021, 48, 088002.	3.6	0
47	A Simple Method for Evaluating the Nucleon Densities of Atomic Nuclei Based on Microscopic Charge Densities. Moscow University Physics Bulletin (English Translation of Vestnik Moskovskogo) Tj ETQq1 1 0.784314 rg BT /Overlock 10 Tf	0.4	0
48	Fission rate of excited nuclei at variable friction in the energy diffusion regime. Journal of Physics: Conference Series, 2020, 1643, 012077.	0.4	0
49	Numerical modeling of the Brownian motion in a bistable potential at medium friction. Journal of Physics: Conference Series, 2022, 2182, 012090.	0.4	0