

# Sakir Ayik

## List of Publications by Year in descending order

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57  
papers

2,243  
citations

279798

23  
h-index

214800

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g-index

59  
all docs

59  
docs citations

59  
times ranked

458  
citing authors

#	ARTICLE	IF	CITATIONS
1	diffusion description of isotope production via the multinucleon transfer mechanism in $\text{Ca} + \text{Ca}$ collisions. Physical Review C, 2019, 100, .	2.9	8
2	Quantal diffusion approach for multinucleon transfer processes in the $\text{Ni} + \text{Ni}$ collisions. Physical Review C, 2019, 100, .	2.9	22
3	Merging of transport theory with the time-dependent Hartree-Fock approach: Multinucleon transfer in $\text{U} + \text{U}$ collisions. Physical Review C, 2020, 102, .	2.9	6
4	Counting statistics in finite Fermi systems: Illustrations with the atomic nucleus. Physical Review C, 2020, 101, .	2.9	3
5	Kinetic-energy dissipation and fluctuations in strongly damped heavy-ion collisions within the stochastic mean-field approach. Physical Review C, 2020, 102, .	2.9	10
6	Quantal diffusion approach for multinucleon transfers in $\text{Xe} + \text{Pb}$ collisions. Physical Review C, 2019, 100, .	2.9	34
7	Heavy-isotope production in $\text{Xe}136 + \text{Pb}208$ collisions at $E_{\text{c.m.}} = 514$ MeV. Physical Review C, 2019, 100, .	2.9	18
8	Multinucleon transfer in $\text{Ni} + \text{Ni}$ collisions. Physical Review C, 2019, 100, .	2.9	17
9	Quantal diffusion description of multinucleon transfers in heavy-ion collisions. Physical Review C, 2018, 97, .	2.9	43
10	Microscopic Phase-Space Exploration Modeling of $\text{Fm} + \text{Fm}$ collisions. Physical Review C, 2018, 97, .	7.8	79
11	Spontaneous multinucleon transfer in $\text{U} + \text{U}$ collisions. Physical Review C, 2017, 96, .	2.9	38
12	Quantal nucleon diffusion: Central collisions of symmetric nuclei. Physical Review C, 2016, 94, .	2.9	17
13	A simplified BBGKY hierarchy for correlated fermions from a stochastic mean-field approach. European Physical Journal A, 2016, 52, 1.	2.5	10
14	Quantal description of nucleon exchange in a stochastic mean-field approach. Physical Review C, 2015, 91, .	2.9	20
15	Growth of spinodal instabilities in nuclear matter. II. Asymmetric matter. Physical Review C, 2015, 92, .	2.9	1
16	Multinucleon exchange in quasifission reactions. Physical Review C, 2015, 92, .	2.9	22
17	Growth of spinodal instabilities in nuclear matter. Physical Review C, 2015, 91, .	2.9	5
18	Nucleon exchange in heavy-ion collisions within a stochastic mean-field approach. Physical Review C, 2014, 90, .	2.9	22

#	ARTICLE	IF	CITATIONS
19	Stochastic quantum dynamics beyond mean field. <i>European Physical Journal A</i> , 2014, 50, 1.	2.5	79
20	Investigations of spinodal dynamics in asymmetric nuclear matter within a stochastic relativistic model. <i>European Physical Journal A</i> , 2013, 49, 1.	2.5	5
21	Quantal corrections to mean-field dynamics including pairing. <i>Physical Review C</i> , 2013, 87, .	2.9	22
22	Symmetry breaking and fluctuations within stochastic mean-field dynamics: Importance of initial quantum fluctuations. <i>Physical Review C</i> , 2012, 85, .	2.9	25
23	Quantal description of instabilities in nuclear matter in a stochastic relativistic model. <i>European Physical Journal A</i> , 2011, 47, 1.	2.5	6
24	Investigations of instabilities in nuclear matter in stochastic relativistic models. <i>Nuclear Physics A</i> , 2011, 859, 73-86.	1.5	7
25	Nucleon exchange mechanism in heavy-ion collisions at near-barrier energies. <i>Physical Review C</i> , 2011, 83, .	2.9	35
26	Stochastic semi-classical description of fusion at near-barrier energies. <i>Physical Review C</i> , 2010, 81, .	2.9	37
27	Fluctuation and dissipation dynamics in fusion reactions from a stochastic mean-field approach. <i>Physical Review C</i> , 2009, 79, .	2.9	70
28	Spinodal instabilities in nuclear matter in a stochastic relativistic mean-field approach. <i>Physical Review C</i> , 2009, 80, .	2.9	11
29	Mass dispersion in transfer reactions with a stochastic mean-field theory. <i>Physical Review C</i> , 2009, 80, .	2.9	60
30	One-body energy dissipation in fusion reactions from mean-field theory. <i>Physical Review C</i> , 2009, 79, .	2.9	73
31	Quantal effects on spinodal instabilities in charge asymmetric nuclear matter. <i>Nuclear Physics A</i> , 2008, 812, 44-57.	1.5	14
32	A stochastic mean-field approach for nuclear dynamics. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2008, 658, 174-179.	4.1	104
33	Stochastic Mean-Field Dynamics For Nuclear Collisions. , 2008, , .		0
34	Quantum diffusion approach to the formation of a heavy compound nucleus by heavy-ion fusion reactions. <i>AIP Conference Proceedings</i> , 2007, , .	0.4	0
35	Quantum effects in the diffusion process to form a heavy nucleus in heavy-ion fusion reactions. <i>AIP Conference Proceedings</i> , 2006, , .	0.4	1
36	Quantum statistical effects on fusion dynamics of heavy ions. <i>Physical Review C</i> , 2005, 71, .	2.9	35

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37	Quantum effect in the diffusion along a potential barrier: Comments on the synthesis of superheavy elements. <i>Physical Review C</i> , 2004, 69, .	2.9	34
38	Nuclear collective vibrations in extended mean-field theory. <i>Progress in Particle and Nuclear Physics</i> , 2004, 52, 497-563.	14.4	73
39	Mechanical and Chemical Spinodal Instabilities in Finite Quantum Systems. <i>Physical Review Letters</i> , 2002, 88, 122701.	7.8	54
40	Collisional damping of giant monopole and quadrupole resonances. <i>European Physical Journal A</i> , 2001, 10, 289-294.	2.5	1
41	Stochastic one-body transport and coupling to mean-field fluctuations. <i>Physical Review C</i> , 2001, 64, .	2.9	6
42	Collective response of nuclei: Comparison between experiments and extended mean-field calculations. <i>Physical Review C</i> , 2001, 63, .	2.9	21
43	Extended TDHF with a coherent collision term. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2000, 493, 47-53.	4.1	5
44	Collisional damping of nuclear collective vibrations in a non-Markovian transport approach. <i>Physical Review C</i> , 1998, 58, 1594-1603.	2.9	20
45	RPA instabilities in finite nuclei at low density. <i>Nuclear Physics A</i> , 1997, 617, 356-367.	1.5	13
46	Analysis of Boltzmann-Langevin dynamics in nuclear matter. <i>Zeitschrift für Physik A</i> , 1996, 355, 407-413.	0.9	5
47	Analysis of Boltzmann-Langevin dynamics in nuclear matter. <i>Zeitschrift für Physik A</i> , 1996, 355, 407-413.	0.9	1
48	On stochastic approaches of nuclear dynamics. <i>Physics Reports</i> , 1996, 275, 49-196.	25.6	403
49	Fluid dynamical approach to spinodal instabilities in finite nuclear systems. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1996, 383, 247-251.	4.1	24
50	Medium-modified interaction induced by fluctuations. <i>Nuclear Physics A</i> , 1995, 593, 233-246.	1.5	7
51	Quantal effects on growth of instabilities in nuclear matter. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1995, 353, 417-421.	4.1	52
52	Long-range correlations in Boltzmann-Langevin model. <i>Zeitschrift für Physik A</i> , 1994, 350, 45-49.	0.9	19
53	Transport theory of fluctuation phenomena in nuclear collisions. <i>Nuclear Physics A</i> , 1990, 513, 187-204.	1.5	149
54	Fluctuations of single-particle density in nuclear collisions. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 1988, 212, 269-272.	4.1	160

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55	Nuclear response function in the Mori formalism. Physical Review Letters, 1986, 56, 38-41.	7.8	15
56	Mean-field theory and statistical treatment of residual interactions. Zeitschrift für Physik A, 1980, 298, 83-90.	1.4	84
57	Microscopic transport theory of heavy-ion collisions. Zeitschrift für Physik A, 1976, 277, 299-310.	1.4	132