

# Hong-Kun Zhang

## List of Publications by Year in descending order

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Version: 2024-02-01

39  
papers

431  
citations

840776

11  
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752698

20  
g-index

41  
all docs

41  
docs citations

41  
times ranked

151  
citing authors

#	ARTICLE	IF	CITATIONS
1	Decay of correlations for unbounded observables. <i>Nonlinearity</i> , 2021, 34, 2402-2429.	1.4	1
2	Necessary and sufficient condition for $\hat{\alpha}_n$ -convergence to a Lévy process for billiards with cusps at flat points. <i>Stochastics and Dynamics</i> , 2021, 21, 2150024.	1.2	3
3	Convergence to $\alpha$ -stable Lévy motion for chaotic billiards with several cusps at flat points. <i>Nonlinearity</i> , 2020, 33, 807-839.	1.4	5
4	Local Limit Theorem for Randomly Deforming Billiards. <i>Communications in Mathematical Physics</i> , 2020, 375, 2281-2334.	2.2	12
5	Statistical properties of one-dimensional expanding maps with singularities of low regularity. <i>Discrete and Continuous Dynamical Systems</i> , 2019, 39, 4955-4977.	0.9	1
6	Stable Laws for Chaotic Billiards with Cusps at Flat Points. <i>Annales Henri Poincaré</i> , 2018, 19, 3815-3853.	1.7	6
7	Fluctuation of the Entropy Production for the Lorentz Gas Under Small External Forces. <i>Communications in Mathematical Physics</i> , 2018, 363, 699-740.	2.2	3
8	Surface modification of $\text{Li}_{1.20}\text{Mn}_{0.54}\text{Ni}_{0.13}\text{Co}_{0.13}\text{O}_2$ cathode materials with $\text{SmF}_3$ and the improved electrochemical properties. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 19207-19218.	2.2	6
9	Non-stationary Almost Sure Invariance Principle for Hyperbolic Systems with Singularities. <i>Journal of Statistical Physics</i> , 2018, 172, 1499-1524.	1.2	3
10	Stability of periodic orbits in no-slip billiards. <i>Nonlinearity</i> , 2018, 31, 4443-4471.	1.4	5
11	Central Limit Theorem for Billiards with Flat Points. <i>Springer Proceedings in Mathematics and Statistics</i> , 2018, , 127-140.	0.2	0
12	Compound Poisson Law for Hitting Times to Periodic Orbits in Two-Dimensional Hyperbolic Systems. <i>Journal of Statistical Physics</i> , 2017, 169, 804-823.	1.2	3
13	Ergodicity in Umbrella Billiards. <i>New Horizons in Mathematical Physics</i> , 2017, 1, .	0.1	1
14	Diffusivity in multiple scattering systems. <i>Transactions of the American Mathematical Society</i> , 2016, 368, 109-148.	0.9	6
15	The dynamics of precious metal markets VaR: A GARCH-EVT approach. <i>Journal of Commodity Markets</i> , 2016, 4, 14-27.	2.1	12
16	On Another Edge of Defocusing: Hyperbolicity of Asymmetric Lemon Billiards. <i>Communications in Mathematical Physics</i> , 2016, 341, 781-803.	2.2	13
17	Calendar Effects in AAPL Value-at-Risk. <i>Journal of Mathematics and System Science</i> , 2016, 6, .	0.1	0
18	Stability and ergodicity of moon billiards. <i>Chaos</i> , 2015, 25, 083110.	2.5	4

#	ARTICLE	IF	CITATIONS
19	Spectral analysis of hyperbolic systems with singularities. <i>Nonlinearity</i> , 2014, 27, 379-433.	1.4	20
20	Dispersing Billiards with Moving Scatterers. <i>Communications in Mathematical Physics</i> , 2013, 322, 909-955.	2.2	20
21	Multiple Scattering in Random Mechanical Systems and Diffusion Approximation. <i>Communications in Mathematical Physics</i> , 2013, 323, 713-745.	2.2	4
22	Electrical Current in Sinai Billiards Under General Small Forces. <i>Journal of Statistical Physics</i> , 2013, 153, 1065-1083.	1.2	6
23	A Functional Analytic Approach to Perturbations of the Lorentz Gas. <i>Communications in Mathematical Physics</i> , 2013, 324, 767-830.	2.2	32
24	Ergodicity of the generalized lemon billiards. <i>Chaos</i> , 2013, 23, 043137.	2.5	14
25	Spectral Gap for a Class of Random Billiards. <i>Communications in Mathematical Physics</i> , 2012, 313, 479-515.	2.2	10
26	Free path of billiards with flat points. <i>Discrete and Continuous Dynamical Systems</i> , 2012, 32, 4445-4466.	0.9	1
27	New approach to differential equations with countable impulses. <i>Acta Mathematicae Applicatae Sinica</i> , 2011, 27, 255-262.	0.7	0
28	Estimates for correlations in billiards with large arcs. <i>Acta Mathematicae Applicatae Sinica</i> , 2011, 27, 381-392.	0.7	0
29	Current in Periodic Lorentz Gases with Twists. <i>Communications in Mathematical Physics</i> , 2011, 306, 747-776.	2.2	10
30	Spectral analysis of the transfer operator for the Lorentz gas. <i>Journal of Modern Dynamics</i> , 2011, 5, 665-709.	0.5	36
31	The Spectrum of the Billiard Laplacian of a Family of Random Billiards. <i>Journal of Statistical Physics</i> , 2010, 141, 1039-1054.	1.2	10
32	Mixing Rate for Rectangular Billiards with Diamond Rectangles. <i>American Journal of Mathematical and Management Sciences</i> , 2010, 30, 53-65.	0.9	0
33	On Statistical Properties of Hyperbolic Systems with Singularities. <i>Journal of Statistical Physics</i> , 2009, 136, 615-642.	1.2	29
34	STABILITY OF T-PERIODIC SOLUTION ON THE EXTENDED SIMPLIFIED BRUSSELEATOR MODEL. <i>International Journal of Biomathematics</i> , 2008, 01, 19-27.	2.9	2
35	Stability of the $T$ -Periodic Solution on the ES-S Model. <i>Rocky Mountain Journal of Mathematics</i> , 2008, 38, .	0.4	0
36	Regularity of Bunimovich's stadia. <i>Regular and Chaotic Dynamics</i> , 2007, 12, 335-356.	0.8	4

#	ARTICLE	IF	CITATIONS
37	Improved Estimates for Correlations in Billiards. Communications in Mathematical Physics, 2007, 277, 305-321.	2.2	31
38	Billiards with polynomial mixing rates. Nonlinearity, 2005, 18, 1527-1553.	1.4	84
39	A FAMILY OF CHAOTIC BILLIARDS WITH VARIABLE MIXING RATES. Stochastics and Dynamics, 2005, 05, 535-553.	1.2	28