

Timo Seppäläinen

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7508215/publications.pdf>

Version: 2024-02-01

54
papers

1,348
citations

304743

22
h-index

361022

35
g-index

57
all docs

57
docs citations

57
times ranked

274
citing authors

#	ARTICLE	IF	CITATIONS
1	Scaling for a one-dimensional directed polymer with boundary conditions. <i>Annals of Probability</i> , 2012, 40, .	1.8	136
2	Tropical combinatorics and Whittaker functions. <i>Duke Mathematical Journal</i> , 2014, 163, .	1.5	78
3	Existence of Hydrodynamics for the Totally Asymmetric Simple K-Exclusion Process. <i>Annals of Probability</i> , 1999, 27, 361.	1.8	67
4	Cube Root Fluctuations for the Corner Growth Model Associated to the Exclusion Process. <i>Electronic Journal of Probability</i> , 2006, 11, .	1.0	67
5	An almost sure invariance principle for random walks in a space-time random environment. <i>Probability Theory and Related Fields</i> , 2005, 133, 299-314.	1.8	58
6	Geometric RSK correspondence, Whittaker functions and symmetrized random polymers. <i>Inventiones Mathematicae</i> , 2014, 197, 361-416.	2.5	52
7	Entropy, limit theorems, and variational principles for disordered lattice systems. <i>Communications in Mathematical Physics</i> , 1995, 171, 233-277.	2.2	49
8	Large deviations for increasing sequences on the plane. <i>Probability Theory and Related Fields</i> , 1998, 112, 221-244.	1.8	42
9	Quenched Free Energy and Large Deviations for Random Walks in Random Potentials. <i>Communications on Pure and Applied Mathematics</i> , 2013, 66, 202-244.	3.1	41
10	Exact limiting shape for a simplified model of first-passage percolation on the plane. <i>Annals of Probability</i> , 1998, 26, 1232.	1.8	39
11	The Strict-Weak Lattice Polymer. <i>Journal of Statistical Physics</i> , 2015, 160, 1027-1053.	1.2	39
12	A Microscopic Model for the Burgers Equation and Longest Increasing Subsequences. <i>Electronic Journal of Probability</i> , 1996, 1, 1.	1.0	37
13	Order of current variance and diffusivity in the asymmetric simple exclusion process. <i>Annals of Mathematics</i> , 2010, 171, 1237-1265.	4.2	34
14	Stationary cocycles and Busemann functions for the corner growth model. <i>Probability Theory and Related Fields</i> , 2017, 169, 177-222.	1.8	31
15	Quenched point-to-point free energy for random walks in random potentials. <i>Probability Theory and Related Fields</i> , 2014, 158, 711-750.	1.8	30
16	Geodesics and the competition interface for the corner growth model. <i>Probability Theory and Related Fields</i> , 2017, 169, 223-255.	1.8	27
17	Almost sure functional central limit theorem for ballistic random walk in random environment. <i>Annales De L'institut Henri Poincare (B) Probability and Statistics</i> , 2009, 45, .	1.1	25
18	Ratios of partition functions for the log-gamma polymer. <i>Annals of Probability</i> , 2015, 43, .	1.8	25

#	ARTICLE	IF	CITATIONS
19	Variational Formulas and Cocycle solutions for Directed Polymer and Percolation Models. Communications in Mathematical Physics, 2016, 346, 741-779.	2.2	24
20	Hydrodynamic Profiles for the Totally Asymmetric Exclusion Process with a Slow Bond. Journal of Statistical Physics, 2001, 102, 69-96.	1.2	23
21	The Random Average Process and Random Walk in a Space-Time Random Environment in One Dimension. Communications in Mathematical Physics, 2006, 266, 499-545.	2.2	23
22	Increasing sequences of independent points on the planar lattice. Annals of Applied Probability, 1997, 7, .	1.3	23
23	Microscopic concavity and fluctuation bounds in a class of deposition processes. Annales De L'institut Henri Poincare (B) Probability and Statistics, 2012, 48, .	1.1	20
24	Large Deviations from the Almost Everywhere Central Limit Theorem. Journal of Theoretical Probability, 1997, 10, 935-965.	0.8	19
25	Large deviation rate functions for the partition function in a log-gamma distributed random potential. Annals of Probability, 2013, 41, .	1.8	18
26	Process-level quenched large deviations for random walk in random environment. Annales De L'institut Henri Poincare (B) Probability and Statistics, 2011, 47, .	1.1	17
27	Large deviation principles for Euclidean functionals and other nearly additive processes. Probability Theory and Related Fields, 2001, 120, 309-345.	1.8	16
28	Variational formulas and disorder regimes of random walks in random potentials. Bernoulli, 2017, 23, .	1.3	15
29	Non-existence of bi-infinite geodesics in the exponential corner growth model. Forum of Mathematics, Sigma, 2020, 8, .	0.7	15
30	Second-order fluctuations and current across characteristic for a one-dimensional growth model of independent random walks. Annals of Probability, 2005, 33, 759.	1.8	14
31	Exact Connections between Current Fluctuations and the Second Class Particle in a Class of Deposition Models. Journal of Statistical Physics, 2007, 127, 431-455.	1.2	13
32	Second class particles as microscopic characteristics in totally asymmetric nearest-neighbor \mathbb{Z}^d -exclusion processes. Transactions of the American Mathematical Society, 2001, 353, 4801-4829.	0.9	12
33	Local stationarity in exponential last-passage percolation. Probability Theory and Related Fields, 2021, 180, 113-162.	1.8	12
34	Quenched invariance principle for multidimensional ballistic random walk in a random environment with a forbidden direction. Annals of Probability, 2007, 35, .	1.8	11
35	Coalescence estimates for the corner growth model with exponential weights. Electronic Journal of Probability, 2020, 25, .	1.0	11
36	A microscopic mechanism for the porous medium equation. Stochastic Processes and Their Applications, 1997, 66, 147-182.	0.9	10

#	ARTICLE	IF	CITATIONS
37	Bounds for parametric sequence comparison. Discrete Applied Mathematics, 2002, 118, 181-198.	0.9	10
38	An almost sure invariance principle for additive functionals of Markov chains. Statistics and Probability Letters, 2008, 78, 854-860.	0.7	10
39	Parametric multiple sequence alignment and phylogeny construction. Journal of Discrete Algorithms, 2004, 2, 271-287.	0.7	9
40	Entropy for translation-invariant random-cluster measures. Annals of Probability, 1998, 26, 1139.	1.8	8
41	Diffusive Fluctuations for One-Dimensional Totally Asymmetric Interacting Random Dynamics. Communications in Mathematical Physics, 2002, 229, 141-182.	2.2	8
42	Transience of second-class particles and diffusive bounds for additive functionals in one-dimensional asymmetric and exclusion processes. Annals of Probability, 2003, 31, 148.	1.8	8
43	Existence, uniqueness and coalescence of directed planar geodesics: Proof via the increment-stationary growth process. Annales De L'institut Henri Poincare (B) Probability and Statistics, 2020, 56, .	1.1	8
44	Averaged vs. Quenched large deviations and entropy for random walk in a dynamic random environment. Electronic Journal of Probability, 2017, 22, .	1.0	7
45	Joint distribution of Busemann functions in the exactly solvable corner growth model. Probability and Mathematical Physics, 2020, 1, 55-100.	1.5	7
46	A class of stochastic evolutions that scale to the porous medium equation. Journal of Statistical Physics, 1996, 85, 513-517.	1.2	5
47	Behavior dominated by slow particles in a disordered asymmetric exclusion process. Annals of Applied Probability, 2004, 14, 1577.	1.3	5
48	Correction added in proof. Probability Theory and Related Fields, 1993, 97, 103-112.	1.8	4
49	Properties of the limit shape for some last-passage growth models in random environments. Stochastic Processes and Their Applications, 2012, 122, 498-521.	0.9	3
50	Bounds for Least Relative Vacancy in a Simple Mosaic Process. SIAM Journal on Applied Mathematics, 1994, 54, 548-558.	1.8	2
51	Fluctuation Bounds in the Exponential Bricklayers Process. Journal of Statistical Physics, 2012, 147, 35-62.	1.2	2
52	Flats, spikes and crevices: the evolving shape of the inhomogeneous corner growth model. Electronic Journal of Probability, 2021, 26, .	1.0	2
53	Hammersley's harness process: Invariant distributions and height fluctuations. Annales De L'institut Henri Poincare (B) Probability and Statistics, 2017, 53, .	1.1	1
54	Independent Particles in a Dynamical Random Environment. Springer Proceedings in Mathematics and Statistics, 2019, , 75-121.	0.2	0