

Laurent BÃ©termin

List of Publications by Year in descending order

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Version: 2024-02-01

20
papers

227
citations

933447

10
h-index

996975

15
g-index

20
all docs

20
docs citations

20
times ranked

62
citing authors

#	ARTICLE	IF	CITATIONS
1	Renormalized Energy and Asymptotic Expansion of Optimal Logarithmic Energy on the Sphere. <i>Constructive Approximation</i> , 2018, 47, 39-74.	3.0	33
2	Two-Dimensional Theta Functions and Crystallization among Bravais Lattices. <i>SIAM Journal on Mathematical Analysis</i> , 2016, 48, 3236-3269.	1.9	28
3	Minimization of energy per particle among Bravais lattices in \mathbb{R}^2 : Lennard-Jones and Thomas-Fermi cases. <i>Communications in Contemporary Mathematics</i> , 2015, 17, 1450049.	1.2	21
4	Dimension reduction techniques for the minimization of theta functions on lattices. <i>Journal of Mathematical Physics</i> , 2017, 58, .	1.1	19
5	Local variational study of 2d lattice energies and application to Lennard-Jones type interactions. <i>Nonlinearity</i> , 2018, 31, 3973-4005.	1.4	18
6	Local optimality of cubic lattices for interaction energies. <i>Analysis and Mathematical Physics</i> , 2019, 9, 403-426.	1.3	18
7	Minimizing lattice structures for Morse potential energy in two and three dimensions. <i>Journal of Mathematical Physics</i> , 2019, 60, .	1.1	16
8	Optimal and non-optimal lattices for non-completely monotone interaction potentials. <i>Analysis and Mathematical Physics</i> , 2019, 9, 2033-2073.	1.3	14
9	On Born's Conjecture about Optimal Distribution of Charges for an Infinite Ionic Crystal. <i>Journal of Nonlinear Science</i> , 2018, 28, 1629-1656.	2.1	12
10	Optimal lattice configurations for interacting spatially extended particles. <i>Letters in Mathematical Physics</i> , 2018, 108, 2213-2228.	1.1	11
11	Crystallization to the Square Lattice for a Two-Body Potential. <i>Archive for Rational Mechanics and Analysis</i> , 2021, 240, 987-1053.	2.4	9
12	Note on Crystallization for Alternating Particle Chains. <i>Journal of Statistical Physics</i> , 2020, 181, 803-815.	1.2	5
13	On the optimality of the rock-salt structure among lattices with charge distributions. <i>Mathematical Models and Methods in Applied Sciences</i> , 2021, 31, 293-325.	3.3	5
14	Lattice ground states for embedded-atom models in 2D and 3D. <i>Letters in Mathematical Physics</i> , 2021, 111, 1.	1.1	5
15	Minimal Soft Lattice Theta Functions. <i>Constructive Approximation</i> , 2020, 52, 115-138.	3.0	4
16	Effect of Periodic Arrays of Defects on Lattice Energy Minimizers. <i>Annales Henri Poincaré</i> , 2021, 22, 2995-3023.	1.7	4
17	On energy ground states among crystal lattice structures with prescribed bonds. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2021, 54, 245202.	2.1	4
18	Theta Functions and Optimal Lattices for a Grid Cells Model. <i>SIAM Journal on Applied Mathematics</i> , 2021, 81, 1931-1953.	1.8	1

#	ARTICLE	IF	CITATIONS
19	ON A LATTICE GENERALISATION OF THE LOGARITHM AND A DEFORMATION OF THE DEDEKIND ETA FUNCTION. Bulletin of the Australian Mathematical Society, 2020, 102, 118-125.	0.5	0
20	Stability of Z_2 configurations in 3D. Nonlinearity, 2021, 34, 8392-8413.	1.4	0