

Achill SchÄ¼rmann

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8312912/publications.pdf>

Version: 2024-02-01

35
papers

367
citations

840776

11
h-index

839539

18
g-index

37
all docs

37
docs citations

37
times ranked

195
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Complexity and algorithms for computing Voronoi cells of lattices. <i>Mathematics of Computation</i> , 2009, 78, 1713-1731. | 2.1 | 42 |
| 2 | Experimental Study of Energy-Minimizing Point Configurations on Spheres. <i>Experimental Mathematics</i> , 2009, 18, 257-283. | 0.7 | 40 |
| 3 | Ehrhart Polynomials and Successive Minima. <i>Mathematika</i> , 2005, 52, 1-16. | 0.5 | 38 |
| 4 | Classification of eight-dimensional perfect forms. <i>Electronic Research Announcements in Mathematical Sciences</i> , 2007, 13, 21-32. | 0.7 | 27 |
| 5 | Exploiting polyhedral symmetries in social choice. <i>Social Choice and Welfare</i> , 2013, 40, 1097-1110. | 0.8 | 25 |
| 6 | Computational Approaches to Lattice Packing and Covering Problems. <i>Discrete and Computational Geometry</i> , 2006, 35, 73-116. | 0.6 | 23 |
| 7 | Polyhedral representation conversion up to symmetries. <i>CRM Proceedings & Lecture Notes</i> , 2009, , 45-71. | 0.1 | 23 |
| 8 | Computing symmetry groups of polyhedra. <i>LMS Journal of Computation and Mathematics</i> , 2014, 17, 565-581. | 0.9 | 21 |
| 9 | Energy Minimization, Periodic Sets and Spherical Designs. <i>International Mathematics Research Notices</i> , 2012, 2012, 829-848. | 1.0 | 20 |
| 10 | On the cohomology of linear groups over imaginary quadratic fields. <i>Journal of Pure and Applied Algebra</i> , 2016, 220, 2564-2589. | 0.6 | 16 |
| 11 | Bounds on generalized Frobenius numbers. <i>European Journal of Combinatorics</i> , 2011, 32, 361-368. | 0.8 | 11 |
| 12 | On the integral homology of $\mathrm{PSL}_4(\mathbb{Z})$. <i>Journal of Pure and Applied Algebra</i> , 2011, 131, 2368-2375. | 0.4 | 9 |
| 13 | BASES OF MINIMAL VECTORS IN LATTICES, III. <i>International Journal of Number Theory</i> , 2012, 08, 551-567. | 0.5 | 8 |
| 14 | Exploiting symmetry in integer convex optimization using core points. <i>Operations Research Letters</i> , 2013, 41, 298-304. | 0.7 | 8 |
| 15 | The complete classification of five-dimensional Dirichlet-Voronoi polyhedra of translational lattices. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2016, 72, 673-683. | 0.1 | 6 |
| 16 | Rational factorizations of completely positive matrices. <i>Linear Algebra and Its Applications</i> , 2017, 523, 46-51. | 0.9 | 6 |
| 17 | Exploiting Symmetries in Polyhedral Computations. <i>Fields Institute Communications</i> , 2013, , 265-278. | 1.3 | 6 |
| 18 | Point configurations that are asymmetric yet balanced. <i>Proceedings of the American Mathematical Society</i> , 2010, 138, 2863-2863. | 0.8 | 5 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Local covering optimality of lattices: Leech lattice versus root lattice E8. International Mathematics Research Notices, 2005, 2005, 1937. | 1.0 | 4 |
| 20 | The Contact Polytope of the Leech Lattice. Discrete and Computational Geometry, 2010, 44, 904-911. | 0.6 | 4 |
| 21 | On Lattice-Free Orbit Polytopes. Discrete and Computational Geometry, 2015, 53, 144-172. | 0.6 | 4 |
| 22 | Dense ellipsoid packings. Discrete Mathematics, 2002, 247, 243-249. | 0.7 | 3 |
| 23 | A simplex algorithm for rational cp-factorization. Mathematical Programming, 2021, 187, 25-45. | 2.4 | 3 |
| 24 | The impact of dependence among voters' preferences with partial indifference. Quality and Quantity, 2017, 51, 2793-2812. | 3.7 | 2 |
| 25 | On the topological computation of K_4 of the Gaussian and Eisenstein integers. Journal of Homotopy and Related Structures, 2019, 14, 281-291. | 0.7 | 2 |
| 26 | Local energy optimality of periodic sets. Communications in Number Theory and Physics, 2021, 15, 489-516. | 1.0 | 2 |
| 27 | Lattice Delone simplices with super-exponential volume. European Journal of Combinatorics, 2007, 28, 801-806. | 0.8 | 1 |
| 28 | Local formulas for Ehrhart coefficients from lattice tiles. Beitrage Zur Algebra Und Geometrie, 2020, 61, 157-185. | 0.5 | 1 |
| 29 | A criterion for finite lattice coverings. Periodica Mathematica Hungarica, 2002, 45, 131-134. | 0.9 | 0 |
| 30 | The spherical conjecture in Minkowski geometry. Archiv Der Mathematik, 2004, 83, 381-384. | 0.5 | 0 |
| 31 | Lattices of Optimal Finite Lattice Packings. Monatshefte Fur Mathematik, 2005, 144, 31-38. | 0.9 | 0 |
| 32 | Instability of discrete point sets] {Instability of discrete point sets. Periodica Mathematica Hungarica, 2006, 53, 257-264. | 0.9 | 0 |
| 33 | Neue Bücher aus Oberwolfach. Mitteilungen Der Deutschen Mathematiker-Vereinigung, 2012, 20, 135-135. | 0.0 | 0 |
| 34 | Equivalence of Lattice Orbit Polytopes. SIAM Journal on Applied Algebra and Geometry, 2018, 2, 259-280. | 1.4 | 0 |
| 35 | A Data Processing Framework for Polar Performance Diagrams. Applied Sciences (Switzerland), 2022, 12, 3085. | 2.5 | 0 |