Johannes Wallner

List of Publications by Year
in descending order

55 papers	2,539 citations	257450 24 h-index	189892 50 g-index
56 all docs	56 docs citations	56 times ranked	928 citing authors

#	ARTICLE	IF	CITATIONS
1	Computational Line Geometry. Mathematics and Visualization, 2001, , .	0.6	356
2	Geometric modeling with conical meshes and developable surfaces. ACM Transactions on Graphics, 2006, 25, 681-689.	7.2	292
3	Integral invariants for robust geometry processing. Computer Aided Geometric Design, 2009, 26, 37-60.	1.2	161
4	Approximation algorithms for developable surfaces. Computer Aided Geometric Design, 1999, 16, 539-556.	1.2	128
5	Freeform surfaces from single curved panels. ACM Transactions on Graphics, 2008, 27, 1-10.	7.2	124
6	Architectural geometry. Computers and Graphics, 2015, 47, 145-164.	2.5	121
7	Geometry of multi-layer freeform structures for architecture. ACM Transactions on Graphics, 2007, 26, 65.	7.2	119
8	Convergence and analysis of subdivision schemes on manifolds by proximity. Computer Aided Geometric Design, 2005, 22, 593-622.	1.2	116
9	Design of self-supporting surfaces. ACM Transactions on Graphics, 2012, 31, 1-11.	7.2	114
10	Interactive Design of Developable Surfaces. ACM Transactions on Graphics, 2016, 35, 1-12.	7.2	93
11	Form-finding with polyhedral meshes made simple. ACM Transactions on Graphics, 2014, 33, 1-9.	7.2	88
12	A curvature theory for discrete surfaces based on mesh parallelity. Mathematische Annalen, 2010, 348, 1-24.	1.4	62
13	Principal curvatures from the integral invariant viewpoint. Computer Aided Geometric Design, 2007, 24, 428-442.	1.2	61
14	Designing Quadâ€dominant Meshes with Planar Faces. Computer Graphics Forum, 2010, 29, 1671-1679.	3.0	54
15	Geodesic patterns. ACM Transactions on Graphics, 2010, 29, 1-10.	7.2	52
16	The focal geometry of circular and conical meshes. Advances in Computational Mathematics, 2008, 29, 249-268.	1.6	48
17	Circular arc structures. ACM Transactions on Graphics, 2011, 30, 1-12.	7.2	46
18	Smoothness Analysis of Subdivision Schemes by Proximity. Constructive Approximation, 2006, 24, 289-318.	3.0	44

#	ARTICLE	IF	CITATIONS
19	Packing circles and spheres on surfaces. ACM Transactions on Graphics, 2009, 28, 1-8.	7.2	43
20	Interpolatory wavelets for manifold-valued data. Applied and Computational Harmonic Analysis, 2009, 27, 325-333.	2.2	37
21	Collision-free 3-axis milling and selection of cutting tools. CAD Computer Aided Design, 1999, 31, 225-232.	2.7	31
22	Intrinsic subdivision with smooth limits for graphics and animation. ACM Transactions on Graphics, 2006, 25, 356-374.	7.2	28
23	Convergence and smoothness analysis of subdivision rules in Riemannian and symmetric spaces. Advances in Computational Mathematics, 2011, 34, 201-218.	1.6	27
24	Quad-mesh based isometric mappings and developable surfaces. ACM Transactions on Graphics, 2020, 39, .	7.2	26
25	Cell packing structures. CAD Computer Aided Design, 2015, 60, 70-83.	2.7	25
26	Material-minimizing forms and structures. ACM Transactions on Graphics, 2017, 36, 1-12.	7.2	25
27	Freeform Honeycomb Structures. Computer Graphics Forum, 2014, 33, 185-194.	3.0	18
28	Geometric Computing for Freeform Architecture. Journal of Mathematics in Industry, 2011, 1, 4.	1.2	16
29	Semi-Discrete Isothermic Surfaces. Results in Mathematics, 2013, 63, 1395-1407.	0.8	16
30	Infinitesimally flexible meshes and discrete minimal surfaces. Monatshefte Fur Mathematik, 2008, 153, 347-365.	0.9	15
31	Oriented Mixed Area and Discrete Minimal Surfaces. Discrete and Computational Geometry, 2010, 43, 303-320.	0.6	15
32	Definability and stability of multiscale decompositions for manifold-valued data. Journal of the Franklin Institute, 2012, 349, 1648-1664.	3.4	13
33	Approximation order of interpolatory nonlinear subdivision schemes. Journal of Computational and Applied Mathematics, 2010, 233, 1697-1703.	2.0	11
34	On Convergent Interpolatory Subdivision Schemes in Riemannian Geometry. Constructive Approximation, 2014, 40, 473-486.	3.0	11
35	Existence of set-interpolating and energy-minimizing curves. Computer Aided Geometric Design, 2004, 21, 883-892.	1.2	10
36	On offsets and curvatures for discrete and semidiscrete surfaces. Beitrage Zur Algebra Und Geometrie, 2014, 55, 207-228.	0.5	10

#	Article	IF	Citations
37	On the semidiscrete differential geometry of A-surfaces and K-surfaces. Journal of Geometry, 2012, 103, 161-176.	0.4	9
38	Using isometries for computational design and fabrication. ACM Transactions on Graphics, 2021, 40, 1-12.	7.2	9
39	Fair webs. Visual Computer, 2006, 23, 83-94.	3.5	8
40	Visual smoothness of polyhedral surfaces. ACM Transactions on Graphics, 2019, 38, 1-11.	7.2	8
41	Tolerances in Geometric Constraint Problems. Reliable Computing, 2005, 11, 235-251.	0.8	7
42	Gliding spline motions and applications. Computer Aided Geometric Design, 2004, 21, 3-21.	1.2	6
43	Note on curve and surface energies. Computer Aided Geometric Design, 2007, 24, 494-498.	1.2	6
44	Convergence of subdivision schemes on Riemannian manifolds with nonpositive sectional curvature. Advances in Computational Mathematics, 2019, 45, 1689-1709.	1.6	4
45	Self-intersections and smoothness of general offset surfaces. Journal of Geometry, 2001, 70, 176-190.	0.4	3
46	Variational Interpolation of Subsets. Constructive Approximation, 2004, 20, 233-248.	3.0	3
47	Geometric Constructions with Discretized Random Variables. Reliable Computing, 2006, 12, 203-223.	0.8	3
48	Convergence analysis of subdivision processes on the sphere. IMA Journal of Numerical Analysis, 0, , .	2.9	3
49	Geometric Subdivision and Multiscale Transforms. , 2020, , 121-152.		3
50	Using isometries for computational design and fabrication. ACM Transactions on Graphics, 2021, 40, 1-12.	7.2	2
51	Configuration Space of Surface–Surface Contact. Geometriae Dedicata, 2000, 80, 173-185.	0.3	1
52	Vertex Normals and Face Curvatures ofÂTriangle Meshes. , 2016, , 267-286.		1
53	Freeform Architecture and Discrete Differential Geometry. Lecture Notes in Computer Science, 2017, , 3-8.	1.3	1
54	Freeform honeycomb structures and lobel frames. , 2015, , .		0

#	ARTICLE	IF	CITATIONS
55	Variational Laplacians for semidiscrete surfaces. Advances in Computational Mathematics, 2016, 42, 1491-1509.	1.6	0