Chun-Gang Zhu

List of Publications by Year
in descending order

73	631	759233 12	677142 22
papers	citations	h-index	g-index

74	74	74	270
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	h-Refinement method for toric parameterization of planar multi-sided computational domain in isogeometric analysis. Computer Aided Geometric Design, 2022, 93, 102065.	1.2	3
2	Improved algorithms for determining the injectivity of 2D and 3D rational BÃ©zier curves. Electronic Research Archive, 2022, 30, 1799-1812.	0.9	0
3	Penalty function-based volumetric parameterization method for isogeometric analysis. Computer Aided Geometric Design, 2022, 94, 102081.	1.2	8
4	Curvature-based <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e681" altimg="si4.svg"><mml:mi>R</mml:mi></mml:math>-Adaptive Planar NURBS Parameterization Method for Isogeometric Analysis Using Bi-Level Approach. CAD Computer Aided Design, 2022, 150, 103305.	2.7	6
5	Algorithms for computing the approximation of offsets of toric BÃ©zier curves. Computational and Applied Mathematics, 2022, 41, .	2.2	0
6	De Casteljau Algorithm and Degree Elevation of Toric Surface Patches. Journal of Systems Science and Complexity, 2021, 34, 21-46.	2.8	7
7	Geometric conditions for injectivity of 3D BÃ©zier volumes. AIMS Mathematics, 2021, 6, 11974-11988.	1.6	3
8	Generating bicubic B-spline surfaces by a sixth order PDE. AIMS Mathematics, 2021, 6, 1677-1694.	1.6	0
9	Conditions for injectivity of toric volumes with arbitrary positive weights. Computers and Graphics, 2021, 97, 88-98.	2.5	4
10	Constructing high-quality planar NURBS parameterization for isogeometric analysis by adjustment control points and weights. Journal of Computational and Applied Mathematics, 2021, 396, 113615.	2.0	17
11	3D grasp saliency analysis via deep shape correspondence. Computer Aided Geometric Design, 2020, 81, 101901.	1.2	0
12	Cubic B-spline quasi-interpolation and an application to numerical solution of generalized Burgers-Huxley equation. Advances in Mechanical Engineering, 2020, 12, 168781402097106.	1.6	4
13	Isogeometric analysis for trimmed CAD surfaces using multi-sided toric surface patches. Computer Aided Geometric Design, 2020, 79, 101847.	1.2	10
14	An improved algorithm for checking the injectivity of 2D toric surface patches. Computers and Mathematics With Applications, 2020, 79, 2973-2986.	2.7	10
15	Construction of triharmonic BÃ©zier surfaces from boundary conditions. Journal of Computational and Applied Mathematics, 2020, 377, 112906.	2.0	6
16	Designing Developable C-BÃ©zier Surface with Shape Parameters. Mathematics, 2020, 8, 402.	2.2	9
17	Curve and surface construction based on the generalized toric-Bernstein basis functions. Open Mathematics, 2020, 18, 36-56.	1.0	2
18	Construction of the spacelike constant angle surface family in Minkowski 3-space. AIMS Mathematics, 2020, 5, 6341-6354.	1.6	2

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19	Total positivity of a kind of generalized Toric-Bernstein basis. Linear Algebra and Its Applications, 2019, 579, 449-462.	0.9	5
20	B-Spline Solutions of General Euler-Lagrange Equations. Mathematics, 2019, 7, 365.	2.2	0
21	Numerical Solution of High-Dimensional Shockwave Equations by Bivariate Multi-Quadric Quasi-Interpolation. Mathematics, 2019, 7, 734.	2.2	4
22	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll"><mml:msup><mml:mrow><mml:mi>G</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mrow></m continuity of four pieces of developable surfaces with BÃ©zier boundaries. Journal of Computational and Applied Mathematics, 2018, 329, 164-172.	2.0	11
23	The maximum number and its distribution of singular points for parametric piecewise algebraic curves. Journal of Computational and Applied Mathematics, 2018, 329, 322-330.	2.0	2
24	Scattered data interpolation based upon bivariate recursive polynomials. Journal of Computational and Applied Mathematics, 2018, 329, 223-243.	2.0	3
25	The number of regular control surfaces of toric patch. Journal of Computational and Applied Mathematics, 2018, 329, 280-293.	2.0	3
26	Progressive iterative approximation for regularized least square bivariate B-spline surface fitting. Journal of Computational and Applied Mathematics, 2018, 327, 175-187.	2.0	24
27	q-Ferguson curves. Advances in Mechanical Engineering, 2018, 10, 168781401880929.	1.6	1
28	Curvature continuity conditions between adjacent toric surface patches. Computer Graphics Forum, 2018, 37, 469-477.	3.0	3
29	Degenerations of NURBS curves while all of weights approaching infinity. Japan Journal of Industrial and Applied Mathematics, 2018, 35, 787-816.	0.9	2
30	The Number of Regular Control Curves of NURBS Curve. , 2018, , .		0
31	Geometric conditions of non-self-intersecting NURBS surfaces. Applied Mathematics and Computation, 2017, 310, 89-96.	2.2	6
32	On the limits of non-uniform rational B-spline surfaces with varying weights. Advances in Mechanical Engineering, 2017, 9, 168781401770054.	1.6	3
33	The classification of bi-quintic parametric polynomial minimal surfaces. Applied Mathematics, 2017, 32, 14-26.	1.0	1
34	Degenerations of rational BÃ©zier surface with weights in the form of exponential function. Applied Mathematics, 2017, 32, 164-182.	1.0	0
35	Construction of B-spline surface from cubic B-spline asymptotic quadrilateral. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2017, 11, JAMDSM0044-JAMDSM0044.	0.7	1
36	Quasi-Interpolation Operators for Bivariate Quintic Spline Spaces and Their Applications. Mathematical and Computational Applications, 2017, 22, 10.	1.3	1

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37	Approximation of minimal toric BÃ©zier patch. Advances in Mechanical Engineering, 2016, 8, 168781401665466.	1.6	0
38	Injectivity of NURBS curves. Journal of Computational and Applied Mathematics, 2016, 302, 129-138.	2.0	13
39	Spacelike developable surfaces through a common line of curvature in Minkowski 3-space. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2015, 9, JAMDSM0050-JAMDSM0050.	0.7	1
40	A family of bivariate rational Bernstein operators. Applied Mathematics and Computation, 2015, 258, 162-171.	2.2	0
41	Injectivity conditions of rational BÃ©zier surfaces. Computers and Graphics, 2015, 51, 17-25.	2.5	11
42	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msup><mml:mrow><mml:mi>G</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mml:msup></mrow></m continuity between toric surface patches. Computer Aided Geometric Design, 2015, 35-36, 255-267.	1.2	7
43	Self-intersections of rational BÃ©zier curves. Graphical Models, 2014, 76, 312-320.	2.4	17
44	Multivariate spline approximation of the signed distance function. Journal of Computational and Applied Mathematics, 2014, 265, 276-289.	2.0	3
45	On spline quasi-interpolation in cubic spline space <italic>S</italic>₃<sup>1,2</sup&am Scientia Sinica Mathematica, 2014, 44, 769-778.	0.8	3
46	A numerical method for solving KdV equation with multilevel B-spline quasi-interpolation. Applicable Analysis, 2013, 92, 1682-1690.	1.3	11
47	A generalization of surface family with common line of curvature. Applied Mathematics and Computation, 2013, 219, 9500-9507.	2.2	4
48	Designing approximation minimal parametric surfaces with geodesics. Applied Mathematical Modelling, 2013, 37, 6415-6424.	4.2	15
49	An approach for designing a developable surface through a given line of curvature. CAD Computer Aided Design, 2013, 45, 621-627.	2.7	56
50	Algebra-geometry of piecewise algebraic varieties. Acta Mathematica Sinica, English Series, 2012, 28, 1973-1980.	0.6	1
51	Degenerations of toric ideals and toric varieties. Journal of Mathematical Analysis and Applications, 2012, 386, 613-618.	1.0	5
52	Injectivity of 2D Toric Bézier Patches. , 2011, , .		9
53	Design and G1 connection of developable surfaces through BÃ©zier geodesics. Applied Mathematics and Computation, 2011, 218, 3199-3208.	2.2	23
54	The correspondence between multivariate spline ideals and piecewise algebraic varieties. Journal of Computational and Applied Mathematics, 2011, 236, 793-800.	2.0	1

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55	Multivariate splines and hyperplane arrangements. Journal of Computational and Applied Mathematics, 2011, 236, 775-781.	2.0	1
56	A note on multi-step difference schemes. Journal of Computational and Applied Mathematics, 2011, 236, 647-652.	2.0	0
57	Parametric representation of a surface pencil with a common line of curvature. CAD Computer Aided Design, 2011, 43, 1110-1117.	2.7	67
58	High accuracy multiquadric quasi-interpolation. Applied Mathematical Modelling, 2011, 35, 2185-2195.	4.2	17
59	Toric degenerations of BÃ©zier patches. ACM Transactions on Graphics, 2011, 30, 1-10.	7.2	8
60	Fitting C¹ Surfaces to Scattered Data with S¹₂(â^†⁽²⁾_{m,n}). Journal of Computational Mathematics, 2011, 29, 396-414.	0.4	0
61	A multilevel univariate cubic spline quasi-interpolation and application to numerical integration. Mathematical Methods in the Applied Sciences, 2010, 33, 1578-1586.	2.3	7
62	Numerical solution of Burgersâ€“Fisher equation by cubic B-spline quasi-interpolation. Applied Mathematics and Computation, 2010, 216, 2679-2686.	2.2	57
63	Geometric interpolants with different degrees of smoothness. International Journal of Computer Mathematics, 2010, 87, 1907-1917.	1.8	0
64	NÃ¶ther-type theorem of piecewise algebraic curves on quasi-cross-cut partition. Science in China Series A: Mathematics, 2009, 52, 701-708.	0.5	6
65	Numerical solution of Burgersâ€™ equation by cubic B-spline quasi-interpolation. Applied Mathematics and Computation, 2009, 208, 260-272.	2.2	60
66	Functional splines with different degrees of smoothness and their applications. CAD Computer Aided Design, 2008, 40, 616-624.	2.7	12
67	Least Squares Fitting of Piecewise Algebraic Curves. Mathematical Problems in Engineering, 2007, 2007, 1-11.	1.1	6
68	NÃ¶ther-type theorem of piecewise algebraic curves on triangulation. Science in China Series A: Mathematics, 2007, 50, 1227-1232.	0.5	3
69	Lagrange interpolation by bivariate splines on cross-cut partitions. Journal of Computational and Applied Mathematics, 2006, 195, 326-340.	2.0	13
70	Cayleyâ€“Bacharach theorem of piecewise algebraic curves. Journal of Computational and Applied Mathematics, 2004, 163, 269-276.	2.0	11
71	Piecewise algebraic varieties*. Progress in Natural Science: Materials International, 2004, 14, 568-572.	4.4	8
72	NÃ¶ther-type theorem of piecewise algebraic curves*. Progress in Natural Science: Materials International, 2004, 14, 309-313.	4.4	14

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73	High accuracy B-spline quasi-interpolants and applications in numerical analysis. Applicable Analysis, 0, , 1-20.	1.3	0