

# Xin Li

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2463868/publications.pdf>

Version: 2024-02-01

165  
papers

5,078  
citations

147801

31  
h-index

110387

64  
g-index

165  
all docs

165  
docs citations

165  
times ranked

2912  
citing authors

#	ARTICLE	IF	CITATIONS
1	New edge-directed interpolation. IEEE Transactions on Image Processing, 2001, 10, 1521-1527.	9.8	1,667
2	Polynomial splines over hierarchical T-meshes. Graphical Models, 2008, 70, 76-86.	2.4	244
3	On linear independence of T-spline blending functions. Computer Aided Geometric Design, 2012, 29, 63-76.	1.2	184
4	LO-Net: Deep Real-Time Lidar Odometry. , 2019, , .		114
5	Watertight trimmed NURBS. ACM Transactions on Graphics, 2008, 27, 1-8.	7.2	109
6	Hierarchical T-splines: Analysis-suitability, BÃ©zier extraction, and application as an adaptive basis for isogeometric analysis. Computer Methods in Applied Mechanics and Engineering, 2015, 284, 1-20.	6.6	98
7	Harmonic volumetric mapping for solid modeling applications. , 2007, , .		86
8	Digital anthropometry: a critical review. European Journal of Clinical Nutrition, 2018, 72, 680-687.	2.9	84
9	Analysis-suitable T-splines: Characterization, refineability, and approximation. Mathematical Models and Methods in Applied Sciences, 2014, 24, 1141-1164.	3.3	79
10	RF-Net: An End-To-End Image Matching Network Based on Receptive Field. , 2019, , .		67
11	Non-iterative structural topology optimization using deep learning. CAD Computer Aided Design, 2019, 115, 172-180.	2.7	66
12	Polycube splines. CAD Computer Aided Design, 2008, 40, 721-733.	2.7	65
13	Semantics-Enhanced Adversarial Nets for Text-to-Image Synthesis. , 2019, , .		56
14	Surface modeling with polynomial splines over hierarchical T-meshes. Visual Computer, 2007, 23, 1027-1033.	3.5	55
15	Polynomial splines over general T-meshes. Visual Computer, 2010, 26, 277-286.	3.5	53
16	Blended B-spline construction on unstructured quadrilateral and hexahedral meshes with optimal convergence rates in isogeometric analysis. Computer Methods in Applied Mechanics and Engineering, 2018, 341, 609-639.	6.6	49
17	On Computing Mapping of 3D Objects. ACM Computing Surveys, 2015, 47, 1-45.	23.0	48
18	Point2Node: Correlation Learning of Dynamic-Node for Point Cloud Feature Modeling. Proceedings of the AAAI Conference on Artificial Intelligence, 2020, 34, 10925-10932.	4.9	48

#	ARTICLE	IF	CITATIONS
19	Globally Optimal Surface Mapping for Surfaces with Arbitrary Topology. IEEE Transactions on Visualization and Computer Graphics, 2008, 14, 805-819.	4.4	47
20	Spatial Analysis of News Sources. IEEE Transactions on Visualization and Computer Graphics, 2006, 12, 765-772.	4.4	46
21	Meshless thin-shell simulation based on global conformal parameterization. IEEE Transactions on Visualization and Computer Graphics, 2006, 12, 375-385.	4.4	46
22	3D Multi-Object Tracking in Point Clouds Based on Prediction Confidence-Guided Data Association. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 5668-5677.	8.0	46
23	KT-GAN: Knowledge-Transfer Generative Adversarial Network for Text-to-Image Synthesis. IEEE Transactions on Image Processing, 2021, 30, 1275-1290.	9.8	43
24	Automated anthropometric phenotyping with novel Kinect-based three-dimensional imaging method: comparison with a reference laser imaging system. European Journal of Clinical Nutrition, 2016, 70, 475-481.	2.9	42
25	Clinically applicable optical imaging technology for body size and shape analysis: comparison of systems differing in design. European Journal of Clinical Nutrition, 2017, 71, 1329-1335.	2.9	42
26	A graph-based optimization algorithm for fragmented image reassembly. Graphical Models, 2014, 76, 484-495.	2.4	41
27	3D Fragment Reassembly Using Integrated Template Guidance and Fracture-Region Matching. , 2015, , .		41
28	Feature-aligned harmonic volumetric mapping using MFS. Computers and Graphics, 2010, 34, 242-251.	2.5	40
29	Surface Mesh to Volumetric Spline Conversion with Generalized Polycubes. IEEE Transactions on Visualization and Computer Graphics, 2013, 19, 1539-1551.	4.4	38
30	Symmetry and template guided completion of damaged skulls. Computers and Graphics, 2011, 35, 885-893.	2.5	37
31	Exact traveling wave solutions to higher order nonlinear equations. Journal of Ocean Engineering and Science, 2019, 4, 276-288.	4.3	37
32	Polycube splines. , 2007, , .		36
33	Surface Mapping Using Consistent Pants Decomposition. IEEE Transactions on Visualization and Computer Graphics, 2009, 15, 558-571.	4.4	35
34	Generalized PolyCube Trivariate Splines. , 2010, , .		35
35	Fragmented skull modeling using heat kernels. Graphical Models, 2012, 74, 140-151.	2.4	34
36	Optimizing polycube domain construction for hexahedral remeshing. CAD Computer Aided Design, 2014, 46, 58-68.	2.7	33

#	ARTICLE	IF	CITATIONS
37	Depth and thermal sensor fusion to enhance 3D thermographic reconstruction. Optics Express, 2018, 26, 8179.	3.4	33
38	DDGCN: A Dynamic Directed Graph Convolutional Network for Action Recognition. Lecture Notes in Computer Science, 2020, , 761-776.	1.3	33
39	Meshless Harmonic Volumetric Mapping Using Fundamental Solution Methods. IEEE Transactions on Automation Science and Engineering, 2009, 6, 409-422.	5.2	32
40	Restricted Trivariate Polycube Splines for Volumetric Data Modeling. IEEE Transactions on Visualization and Computer Graphics, 2012, 18, 703-716.	4.4	32
41	B-spline surface fitting with knot position optimization. Computers and Graphics, 2016, 58, 73-83.	2.5	32
42	Real-time water level monitoring using live cameras and computer vision techniques. Computers and Geosciences, 2021, 147, 104642.	4.2	32
43	Optimizing heat-absorption efficiency of phase change materials by mimicking leaf vein morphology. Applied Energy, 2020, 269, 114982.	10.1	32
44	Biharmonic Volumetric Mapping Using Fundamental Solutions. IEEE Transactions on Visualization and Computer Graphics, 2013, 19, 787-798.	4.4	31
45	On the instability in the dimension of splines spaces over T-meshes. Computer Aided Geometric Design, 2011, 28, 420-426.	1.2	29
46	Hybrid non-uniform recursive subdivision with improved convergence rates. Computer Methods in Applied Mechanics and Engineering, 2019, 352, 606-624.	6.6	29
47	New soliton solutions to the nonlinear complex fractional Schrödinger equation and the conformable time-fractional Klein-Gordon equation with quadratic and cubic nonlinearity. Physica Scripta, 2020, 95, 045224.	2.5	29
48	Local refinement for analysis-suitable++ T-splines. Computer Methods in Applied Mechanics and Engineering, 2018, 342, 32-45.	6.6	28
49	Tuned hybrid nonuniform subdivision surfaces with optimal convergence rates. International Journal for Numerical Methods in Engineering, 2021, 122, 2117-2144.	2.8	27
50	MHSA-Net: Multihead Self-Attention Network for Occluded Person Re-Identification. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 8210-8224.	11.3	27
51	A topology-preserving optimization algorithm for polycube mapping. Computers and Graphics, 2011, 35, 639-649.	2.5	25
52	LAG-Net: Multi-Granularity Network for Person Re-Identification via Local Attention System. IEEE Transactions on Multimedia, 2022, 24, 217-229.	7.2	25
53	Analysis-suitable unstructured T-splines: Multiple extraordinary points per face. Computer Methods in Applied Mechanics and Engineering, 2022, 391, 114494.	6.6	25
54	On Optimizing Autonomous Pipeline Inspection. IEEE Transactions on Robotics, 2012, 28, 223-233.	10.3	22

#	ARTICLE	IF	CITATIONS
55	A survey on the local refinable splines. Science China Mathematics, 2016, 59, 617-644.	1.7	22
56	Toward More Precise Radiotherapy Treatment of Lung Tumors. Computer, 2012, 45, 59-65.	1.1	21
57	Dimensions of biquadratic and bicubic spline spaces over hierarchical T-meshes. Journal of Computational and Applied Mathematics, 2015, 287, 162-178.	2.0	20
58	JigsawNet: Shredded Image Reassembly Using Convolutional Neural Network and Loop-Based Composition. IEEE Transactions on Image Processing, 2019, 28, 4000-4015.	9.8	20
59	On the Linear Independence and Partition of Unity of Arbitrary Degree Analysis-Suitable T-splines. Communications in Mathematics and Statistics, 2015, 3, 353-364.	1.5	19
60	AS++ T-splines: Linear independence and approximation. Computer Methods in Applied Mechanics and Engineering, 2018, 333, 462-474.	6.6	19
61	S-splines: A simple surface solution for IGA and CAD. Computer Methods in Applied Mechanics and Engineering, 2019, 350, 664-678.	6.6	19
62	Fast and accurate single image super-resolution via an energy-aware improved deep residual network. Signal Processing, 2019, 162, 115-125.	3.7	18
63	Cross-Modal Semantic Matching Generative Adversarial Networks for Text-to-Image Synthesis. IEEE Transactions on Multimedia, 2022, 24, 832-845.	7.2	18
64	Skull Assembly and Completion Using Template-Based Surface Matching. , 2011, , .		15
65	Vehicle global 6-DoF pose estimation under traffic surveillance camera. ISPRS Journal of Photogrammetry and Remote Sensing, 2020, 159, 114-128.	11.1	15
66	An automatic assembly and completion framework for fragmented skulls. , 2011, , .		14
67	Palate Shape and Depth: A Shape-Matching and Machine Learning Method for Estimating Ancestry from Human Skeletal Remains. Journal of Forensic Sciences, 2015, 60, 1129-1134.	1.6	14
68	Surface reconstruction using bivariate simplex splines on Delaunay configurations. Computers and Graphics, 2009, 33, 341-350.	2.5	13
69	Spatio-Temporal 3-D Residual Networks for Simultaneous Detection and Depth Estimation of CFRP Subsurface Defects in Lock-In Thermography. IEEE Transactions on Industrial Informatics, 2022, 18, 2571-2581.	11.3	13
70	Some Properties for Analysis-Suitable T-Splines. Journal of Computational Mathematics, 2015, 33, 428-442.	0.4	13
71	Surface matching using consistent pants decomposition. , 2008, , .		12
72	A Geometric Approach for Multi-Degree Spline. Journal of Computer Science and Technology, 2012, 27, 841-850.	1.5	12

#	ARTICLE	IF	CITATIONS
73	Distributed poly-square mapping for large-scale semi-structured quad mesh generation. CAD Computer Aided Design, 2017, 90, 5-17.	2.7	12
74	Robust procedural model fitting with a new geometric similarity estimator. Pattern Recognition, 2019, 85, 120-131.	8.1	12
75	Spherical DCB-Spline Surfaces with Hierarchical and Adaptive Knot Insertion. IEEE Transactions on Visualization and Computer Graphics, 2012, 18, 1290-1303.	4.4	11
76	An alternative method for constructing interpolatory subdivision from approximating subdivision. Computer Aided Geometric Design, 2012, 29, 474-484.	1.2	11
77	A multi-frame graph matching algorithm for low-bandwidth RGB-D SLAM. CAD Computer Aided Design, 2016, 78, 107-117.	2.7	11
78	<i>G</i> <sup>1</sup> non-uniform Catmull-Clark surfaces. ACM Transactions on Graphics, 2016, 35, 1-8.	7.2	11
79	On the dimension of spline spaces over T-meshes with smoothing cofactor-conformality method. Computer Aided Geometric Design, 2016, 41, 76-86.	1.2	11
80	Non-uniform interpolatory subdivision surface. Applied Mathematics and Computation, 2018, 324, 239-253.	2.2	11
81	Sparse3D: A new global model for matching sparse RGB-D dataset with small inter-frame overlap. CAD Computer Aided Design, 2018, 102, 33-43.	2.7	10
82	Geometry-aware domain decomposition for T-spline-based manifold modeling. Computers and Graphics, 2009, 33, 359-368.	2.5	9
83	Geometry-aware partitioning of complex domains for parallel quad meshing. CAD Computer Aided Design, 2017, 85, 20-33.	2.7	9
84	Efficient Spherical Parametrization Using Progressive Optimization. Lecture Notes in Computer Science, 2012, , 170-177.	1.3	9
85	Computing 3D Shape Guarding and Star Decomposition. Computer Graphics Forum, 2011, 30, 2087-2096.	3.0	8
86	An efficient spherical mapping algorithm and its application on spherical harmonics. Science China Information Sciences, 2013, 56, 1-10.	4.3	8
87	Automatic craniofacial registration based on radial curves. Computers and Graphics, 2019, 82, 264-274.	2.5	8
88	ESKN: Enhanced selective kernel network for single image super-resolution. Signal Processing, 2021, 189, 108274.	3.7	8
89	Recent algorithms on automatic hexahedral mesh generation. , 2015, , .		7
90	A Geometry-aware Data Partitioning Algorithm for Parallel Quad Mesh Generation on Large-scale 2D Regions. Procedia Engineering, 2015, 124, 44-56.	1.2	7

#	ARTICLE	IF	CITATIONS
91	Segmenting a surface mesh into pants using Morse theory. <i>Graphical Models</i> , 2016, 88, 12-21.	2.4	7
92	Co-Presence in a Shared Virtual Environment (SVE): A Case Study of Highway Work Zone Construction. , 2019, , .		7
93	An optimized JPEG-Xt-based algorithm for the lossy and lossless compression of 16-bit depth medical image. <i>Biomedical Signal Processing and Control</i> , 2021, 64, 102306.	5.7	7
94	A Symmetric 4D Registration Algorithm for Respiratory Motion Modeling. <i>Lecture Notes in Computer Science</i> , 2013, , 149-156.	1.3	7
95	Conformal Spherical Parametrization for High Genus Surfaces. <i>Communications in Information and Systems</i> , 2007, 7, 273-286.	0.5	7
96	Preventing Future Oil Spills with Software-Based Event Detection. <i>Computer</i> , 2010, 43, 95-97.	1.1	6
97	Reassembling 3D thin shells using integrated template guidance and fracture region matching. , 2015, , .		6
98	Truncated Hierarchical Loop Subdivision Surfaces and application in isogeometric analysis. <i>Computers and Mathematics With Applications</i> , 2016, 72, 2041-2055.	2.7	6
99	Real-Time Avatar Pose Transfer and Motion Generation Using Locally Encoded Laplacian Offsets. <i>Journal of Computer Science and Technology</i> , 2019, 34, 256-271.	1.5	6
100	Reassembling Shredded Document Stripes Using Word-Path Metric and Greedy Composition Optimal Matching Solver. <i>IEEE Transactions on Multimedia</i> , 2020, 22, 1168-1181.	7.2	6
101	WaterNet: An adaptive matching pipeline for segmenting water with volatile appearance. <i>Computational Visual Media</i> , 2020, 6, 65-78.	17.5	6
102	Some Properties for Analysis-Suitable T-Splines. <i>Journal of Computational Mathematics</i> , 2015, 33, 428-442.	0.4	6
103	On degree elevation of T-splines. <i>Computer Aided Geometric Design</i> , 2016, 46, 16-29.	1.2	5
104	Hierarchical fragmented image reassembly using a bundle-of-superpixel representation. <i>Computer Aided Geometric Design</i> , 2019, 71, 220-230.	1.2	5
105	Multi-sensor spatial augmented reality for visualizing the invisible thermal information of 3D objects. <i>Optics and Lasers in Engineering</i> , 2021, 145, 106634.	3.8	5
106	A FAST METHOD FOR MEASURING THE SIMILARITY BETWEEN 3D MODEL AND 3D POINT CLOUD. <i>International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives</i> , 0, XLI-B1, 725-728.	0.2	5
107	LiDAR-based localization using universal encoding and memory-aware regression. <i>Pattern Recognition</i> , 2022, 128, 108685.	8.1	5
108	Curves-on-Surface: A General Shape Comparison Framework. , 0, , .		4

#	ARTICLE	IF	CITATIONS
109	Curvature of singular Bézier curves and surfaces. <i>Computer Aided Geometric Design</i> , 2011, 28, 233-244.	1.2	4
110	Color and contour based reconstruction of fragmented image. , 2013, , .		4
111	An economical representation of PDE solution by using compressive sensing approach. <i>CAD Computer Aided Design</i> , 2019, 115, 78-86.	2.7	4
112	Non-Uniform Subdivision Surfaces with Sharp Features. <i>Computer Graphics Forum</i> , 2020, 39, 232-242.	3.0	4
113	Non-Uniform Doo-Sabin Subdivision Surface via Eigen Polygon. <i>Journal of Systems Science and Complexity</i> , 2021, 34, 3-20.	2.8	4
114	Brain Image Analysis Using Spherical Splines. <i>Lecture Notes in Computer Science</i> , 2005, , 633-644.	1.3	4
115	Searching geometry-aware pants decomposition in different isotopy classes. <i>Geometry Imaging and Computing</i> , 2014, 1, 367-393.	0.8	4
116	Isogeometric analysis based on modified Loop subdivision surface with improved convergence rates. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2022, 398, 115258.	6.6	4
117	Spherical harmonic decomposition for surfaces of arbitrary topology. , 2010, , .		3
118	Efficient 3D region guarding for multimedia data processing. , 2011, , .		3
119	Interproximate curve subdivision. <i>Journal of Computational and Applied Mathematics</i> , 2013, 244, 36-48.	2.0	3
120	Surface- and volume-based techniques for shape modeling and analysis. , 2013, , .		3
121	Consistent feature-aligned 4D image registration for respiratory motion modeling. , 2013, , .		3
122	An LCS-based 2D Fragmented Image Reassembly Algorithm. , 2018, , .		3
123	de Boor-like evaluation algorithm for Analysis-suitable T-splines. <i>Graphical Models</i> , 2019, 106, 101042.	2.4	3
124	Explicit Gaussian Quadrature Rules for $C^1$ Cubic Splines with Non-uniform Knot Sequences. <i>Communications in Mathematics and Statistics</i> , 2021, 9, 331-345.	1.5	3
125	A Hardware-adaptive Deep Feature Matching Pipeline for Real-time 3D Reconstruction. <i>CAD Computer Aided Design</i> , 2021, 132, 102984.	2.7	3
126	Curve Space: Classifying Curves On Surfaces. <i>Communications in Information and Systems</i> , 2007, 7, 207-226.	0.5	3



#	ARTICLE	IF	CITATIONS
127	On-the-fly extrinsic calibration of multimodal sensing system for fast 3D thermographic scanning. Applied Optics, 2019, 58, 3238.	1.8	3
128	An interactive system for heterogeneous 3D volumetric data visualization. , 2010, , .		2
129	A VR scene modelling platform for PTSD treatment. , 2017, , .		2
130	Image-based Human Character Modeling and Reconstruction for Virtual Reality Exposure Therapy. , 2018, , .		2
131	FeatFlow: Learning geometric features for 3D motion estimation. Pattern Recognition, 2021, 111, 107574.	8.1	2
132	OPTIMIZING PYRAMID VISIBILITY COVERAGE FOR AUTONOMOUS ROBOTS IN 3D ENVIRONMENT. Control and Intelligent Systems, 2014, 42, .	0.3	2
133	BLNet: Bidirectional learning network for point clouds. Computational Visual Media, 2022, 8, 585-596.	17.5	2
134	Exact and approximate representations of trimmed surfaces with NURBS and B&#x00E9;zier surfaces. , 2009, , .		1
135	C&lt;sup&gt;1&lt;/sup&gt; bicubic splines over general T-meshes. , 2009, , .		1
136	Gait planning in 3D robot simulation using ZMP theory. , 2009, , .		1
137	A non-rigid registration algorithm for compatible skeletonization. , 2010, , .		1
138	A survey of topology denoise technologies. , 2011, , .		1
139	Optimizing pyramid visibiliy coverage for autonomous robots in 3D environment. , 2013, , .		1
140	Effective Volumetric Feature Modeling and Coarse Correspondence via Improved 3DSIFT and Spectral Matching. Mathematical Problems in Engineering, 2014, 2014, 1-10.	1.1	1
141	An introduction to Ricci flow and volumetric approximation with applications to shape modeling. , 2014, , .		1
142	A New Method to Design Cubic Pythagorean-Hodograph Spline Curves with Control Polygon. Communications in Mathematics and Statistics, 2019, 7, 363-381.	1.5	1
143	A Discriminative Multiâ€Channel Facial Shape (MCFS) Representation and Feature Extraction for 3D Human Faces. Computer Graphics Forum, 2020, 39, 66-81.	3.0	1
144	AS++ T-splines: arbitrary degree, nestedness and approximation. Numerische Mathematik, 2021, 148, 795-816.	1.9	1

#	ARTICLE	IF	CITATIONS
145	Volumetric texture synthesis using fundamental solution methods. , 2009, , .		0
146	Hole filling using dynamic programming for archaeological data completion. , 2010, , .		0
147	3D surface stadiography using geometry images. , 2011, , .		0
148	Dynamic harmonic texture mapping using methods of fundamental solutions. , 2011, , .		0
149	An efficient PILP algorithm for 3D region guarding and star decomposition. , 2011, , .		0
150	An efficient volumetric matching algorithm based on MSVs and 3DSURF. , 2013, , .		0
151	On developing data integration and mining platform for classical Chinese literature study. , 2014, , .		0
152	Revised spectral matching algorithm for scenes with mutually inconsistent local transformations. IET Image Processing, 2015, 9, 916-922.	2.5	0
153	A depth-incorporated 2D descriptor for robust and efficient 3D environment reconstruction. , 2015, , .		0
154	Efficient dense 3D reconstruction using image pairs. , 2015, , .		0
155	2D quad mesh generation using divide and conquer poly-square maps. , 2017, , .		0
156	Automatic quad meshing by simulating NaCl crystallization. Procedia Engineering, 2017, 203, 284-296.	1.2	0
157	3D Human Body Inpainting using Intrinsic Statistical Shape Models. , 2019, , .		0
158	SPM 2020 Editorial. CAD Computer Aided Design, 2020, 127, 102909.	2.7	0
159	A Crossâ€Dimension Annotations Method for 3D Structural Facial Landmark Extraction. Computer Graphics Forum, 2020, 39, 623-636.	3.0	0
160	Multi-destination Map Layout Generation Based on Rigid Deformation. Jisuanji Fuzhu Sheji Yu Tuxingxue Xuebao/Journal of Computer-Aided Design and Computer Graphics, 2019, 31, 622.	0.2	0
161	DEEP LIDAR ODOMETRY. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-2/W13, 1681-1686.	0.2	0
162	Computational feasibility of simulating changes in blood flow through whole-organ vascular networks from radiation injury. Biomedical Physics and Engineering Express, 2020, 6, 055027.	1.2	0

#	ARTICLE	IF	CITATIONS
163	Patching Non-Uniform Extraordinary Points with Sharp Features. , 2021, , .		0
164	Isogeometric Topology Optimization Based on Deep Learning. Communications in Mathematics and Statistics, 0, , .	1.5	0
165	Improved non-uniform subdivision scheme with modified Eigen-polyhedron. Visual Computing for Industry, Biomedicine, and Art, 2022, 5, .	3.7	0