

# Yi-Yu Cai

## List of Publications by Year in descending order

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Version: 2024-02-01

63  
papers

958  
citations

361045

20  
h-index

500791

28  
g-index

69  
all docs

69  
docs citations

69  
times ranked

710  
citing authors

#	ARTICLE	IF	CITATIONS
1	Design and Development of a Virtual Dolphinarium for Children With Autism. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2013, 21, 208-217.	2.7	103
2	Parallel genetic algorithm based automatic path planning for crane lifting in complex environments. Automation in Construction, 2016, 62, 133-147.	4.8	73
3	Automatic re-planning of lifting paths for robotized tower cranes in dynamic BIM environments. Automation in Construction, 2020, 110, 102998.	4.8	44
4	Automatic Path Planning for Dual-Crane Lifting in Complex Environments Using a Prioritized Multiobjective PGA. IEEE Transactions on Industrial Informatics, 2018, 14, 829-845.	7.2	39
5	Learning through VR gaming with virtual pink dolphins for children with ASD. Interactive Learning Environments, 2018, 26, 718-729.	4.4	36
6	Mesh Denoising using Extended ROF Model with $1$ Fidelity. Computer Graphics Forum, 2015, 34, 35-45.	1.8	33
7	Real-Time Interactive Simulator for Percutaneous Coronary Revascularization Procedures. Computer Aided Surgery, 1998, 3, 211-227.	1.8	32
8	Virtual Reality Training In Interventional Radiology: The Johns Hopkins and Kent Ridge Digital Laboratory Experience. Seminars in Interventional Radiology, 2002, 19, 179-186.	0.3	32
9	Real-time interactive simulator for percutaneous coronary revascularization procedures. Computer Aided Surgery, 1998, 3, 211-227.	1.8	32
10	VR simulated training for less invasive vascular intervention. Computers and Graphics, 2003, 27, 215-221.	1.4	31
11	Bio-edutainment: Learning life science through X gaming. Computers and Graphics, 2006, 30, 3-9.	1.4	31
12	An automatic segmentation algorithm for 3D cell cluster splitting using volumetric confocal images. Journal of Microscopy, 2011, 243, 60-76.	0.8	31
13	Accurate and Efficient Approximation of Clothoids Using Bézier Curves for Path Planning. IEEE Transactions on Robotics, 2017, 33, 1242-1247.	7.3	30
14	Ultra-Low-Cost, Crosstalk-Free, Fast-Responding, Wide-Sensing-Range Tactile Fingertip Sensor for Smart Gloves. Advanced Materials Interfaces, 2022, 9, .	1.9	30
15	Tactile VR for hand-eye coordination in simulated PTCA. Computers in Biology and Medicine, 2006, 36, 167-180.	3.9	23
16	Immersive protein gaming for bio edutainment. Simulation and Gaming, 2006, 37, 466-475.	1.2	23
17	Adaptive correction technique for 3D reconstruction of fluorescence microscopy images. Microscopy Research and Technique, 2008, 71, 146-157.	1.2	23
18	Design and development of VR learning environments for children with ASD. Interactive Learning Environments, 2017, 25, 1098-1109.	4.4	23

#	ARTICLE	IF	CITATIONS
19	Constructive modeling of G1 bifurcation. <i>Computer Aided Geometric Design</i> , 2002, 19, 513-531.	0.5	22
20	Computer Environment for Interventional Neuroradiology Procedures. <i>Simulation and Gaming</i> , 2001, 32, 404-419.	1.2	21
21	A VR Simulator for Intracardiac Intervention. <i>IEEE Computer Graphics and Applications</i> , 2013, 33, 44-57.	1.0	20
22	BIM4D-based scheduling for assembling and lifting in precast-enabled construction. <i>Automation in Construction</i> , 2022, 133, 103999.	4.8	17
23	Constructive algorithms of vascular network modeling for training of minimally invasive catheterization procedure. <i>Advances in Engineering Software</i> , 2003, 34, 439-450.	1.8	13
24	Development of augmented reality serious games with a vibrotactile feedback jacket. <i>Virtual Reality &amp; Intelligent Hardware</i> , 2020, 2, 454-470.	1.8	13
25	Making Doo-Sabin surface interpolation always work over irregular meshes. <i>Visual Computer</i> , 2005, 21, 242-251.	2.5	12
26	BEACon: a boundary embedded attentional convolution network for point cloud instance segmentation. <i>Visual Computer</i> , 2022, 38, 2303-2313.	2.5	12
27	Multi-center evaluation of artificial intelligent imaging and clinical models for predicting neoadjuvant chemotherapy response in breast cancer. <i>Breast Cancer Research and Treatment</i> , 2022, 193, 121-138.	1.1	12
28	A geometric approach to the modeling of the catheter-heart interaction for VR simulation of intra-cardiac intervention. <i>Computers and Graphics</i> , 2011, 35, 1013-1022.	1.4	11
29	Reliable and Dynamic Appearance Modeling and Label Consistency Enforcing for Fast and Coherent Video Object Segmentation With the Bilateral Grid. <i>IEEE Transactions on Circuits and Systems for Video Technology</i> , 2020, 30, 4781-4795.	5.6	10
30	Kernel modeling for molecular surfaces using a uniform solution. <i>CAD Computer Aided Design</i> , 2010, 42, 267-278.	1.4	8
31	Real-Time and Realistic Simulation for Cardiac Intervention with GPU. , 2010, , .		8
32	Simulation-Enabled Vocational Training for Heavy Crane Operations. <i>Gaming Media and Social Effects</i> , 2017, , 47-59.	0.7	8
33	Interactive Virtual Reality Game for Online Learning of Science Subject in Primary Schools. , 2021, , .		8
34	ICT-Enabled Emotional Learning for Special Needs Education. <i>Gaming Media and Social Effects</i> , 2017, , 29-45.	0.7	7
35	Introduction to 3D Immersive and Interactive Learning. , 2013, , 1-16.		7
36	Generalized hierarchical NURBS for interactive shape modification. , 2008, , .		6

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37	3D boundary extraction of confocal cellular images using higher order statistics. Journal of Microscopy, 2009, 235, 209-220.	0.8	6
38	Laser Scanned Real Environment for Intelligent Virtualization of Crane Lifting. Virtual Reality & Intelligent Hardware, 2020, 2, 87-103.	1.8	6
39	A Gaze Tracking System for Children with Autism Spectrum Disorders. Gaming Media and Social Effects, 2017, , 137-145.	0.7	5
40	An adaptive deviation-feedback approach for simulating multiple devices interaction in virtual interventional radiology. CAD Computer Aided Design, 2019, 117, 102738.	1.4	5
41	Fast 3D Modeling of Prosthetic Robotic Hands Based on a Multi-Layer Deformable Design. International Journal of Bioprinting, 2021, 8, 406.	1.7	5
42	DYNAMIC LINEAR LEVEL OCTREE-BASED VOLUME RENDERING METHODS FOR INTERACTIVE MICROSURGICAL SIMULATION. International Journal of Image and Graphics, 2006, 06, 155-171.	1.2	4
43	Virtual reality enhanced pink dolphin game for children with ASD. , 2016, , .		4
44	Modeling of the Human Orbit from MR Images. Lecture Notes in Computer Science, 2002, , 339-347.	1.0	4
45	MODELING AND MOTION CONTROL OF ROBOTIC HAND FOR TELEMANIPULATION APPLICATION. International Journal of Software Engineering and Knowledge Engineering, 2005, 15, 147-152.	0.6	3
46	Freeform-based form feature modeling using a hierarchical & multi-resolution NURBS method. , 2010, , .		3
47	Adaptive weighted cubic B-spline using lookup tables for fast and efficient axial resampling of 3D confocal microscopy images. Microscopy Research and Technique, 2012, 75, 20-27.	1.2	3
48	Variational reconstruction using subdivision surfaces with continuous sharpness control. Computational Visual Media, 2017, 3, 217-228.	10.8	3
49	Point Cloud Based Path Planning for Tower Crane Lifting. , 2018, , .		3
50	Hardware-accelerated collision detection for 3D virtual reality gaming. Simulation and Gaming, 2006, 37, 476-490.	1.2	2
51	Interactive & Immersive VR Image Processing and Visualization. , 2006, , .		2
52	Madam Snake White: A Case Study on Virtual Reality Continuum Applications for Singaporean Culture and Heritage at Haw Par Villa. Presence: Teleoperators and Virtual Environments, 2017, 26, 378-388.	0.3	2
53	Supermarket Route-Planning Game: A Serious Game for the Rehabilitation of Planning Executive Function of Children with ASD. Gaming Media and Social Effects, 2019, , 111-119.	0.7	2
54	Virtual Pink Dolphins and Lagoon. Gaming Media and Social Effects, 2021, , 77-95.	0.7	2

#	ARTICLE	IF	CITATIONS
55	The Virtual Pink Dolphins Project: An International Effort for Children with ASD in Special Needs Education. <i>Gaming Media and Social Effects</i> , 2017, , 1-11.	0.7	2
56	Monge mapping using hierarchical NURBS. <i>Visual Computer</i> , 2010, 26, 779-789.	2.5	1
57	Augmented Reality Simulation of Cardiac Circulation Using APPLearn (Heart). , 2018, , .		1
58	Design of a Virtual Home for Special Needs Children to Learn Life Skills. <i>Gaming Media and Social Effects</i> , 2021, , 31-61.	0.7	1
59	VIRTUAL & AUGMENTED REALITY TECHNOLOGY HELP LEARNING OF BIOLOGY IN SECONDARY SCHOOLS. <i>EDULEARN Proceedings</i> , 2021, , .	0.0	1
60	An architecture of a VR simulation system for cardiac intervention. , 2008, , .		0
61	Learning Life Skills Through Gaming for Children with Autism Spectrum Disorder. <i>Gaming Media and Social Effects</i> , 2021, , 61-80.	0.7	0
62	Evaluation of Serious Games for Special Needs Education. <i>Gaming Media and Social Effects</i> , 2021, , 113-127.	0.7	0
63	Spatial Knowledge Acquisition in Virtual and Physical Reality: A Comparative Evaluation. , 2021, , .		0