

# Xiangjun Zou

## List of Publications by Year in descending order

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Version: 2024-02-01

83  
papers

3,279  
citations

147801

31  
h-index

155660

55  
g-index

92  
all docs

92  
docs citations

92  
times ranked

2582  
citing authors

#	ARTICLE	IF	CITATIONS
1	Whole-genome and whole-exome sequencing of bladder cancer identifies frequent alterations in genes involved in sister chromatid cohesion and segregation. <i>Nature Genetics</i> , 2013, 45, 1459-1463.	21.4	400
2	Recognition and Localization Methods for Vision-Based Fruit Picking Robots: A Review. <i>Frontiers in Plant Science</i> , 2020, 11, 510.	3.6	294
3	Real-time detection of surface deformation and strain in recycled aggregate concrete-filled steel tubular columns via four-ocular vision. <i>Robotics and Computer-Integrated Manufacturing</i> , 2019, 59, 36-46.	9.9	135
4	Plant Disease Recognition Model Based on Improved YOLOv5. <i>Agronomy</i> , 2022, 12, 365.	3.0	124
5	High-accuracy multi-camera reconstruction enhanced by adaptive point cloud correction algorithm. <i>Optics and Lasers in Engineering</i> , 2019, 122, 170-183.	3.8	111
6	RRT-based path planning for an intelligent litchi-picking manipulator. <i>Computers and Electronics in Agriculture</i> , 2019, 156, 105-118.	7.7	99
7	Color-, depth-, and shape-based 3D fruit detection. <i>Precision Agriculture</i> , 2020, 21, 1-17.	6.0	99
8	Guava Detection and Pose Estimation Using a Low-Cost RGB-D Sensor in the Field. <i>Sensors</i> , 2019, 19, 428.	3.8	98
9	A vision methodology for harvesting robot to detect cutting points on peduncles of double overlapping grape clusters in a vineyard. <i>Computers in Industry</i> , 2018, 99, 130-139.	9.9	93
10	Fruit detection in natural environment using partial shape matching and probabilistic Hough transform. <i>Precision Agriculture</i> , 2020, 21, 160-177.	6.0	92
11	Localisation of litchi in an unstructured environment using binocular stereo vision. <i>Biosystems Engineering</i> , 2016, 145, 39-51.	4.3	91
12	3D global mapping of large-scale unstructured orchard integrating eye-in-hand stereo vision and SLAM. <i>Computers and Electronics in Agriculture</i> , 2021, 187, 106237.	7.7	91
13	Detection of Fruit-Bearing Branches and Localization of Litchi Clusters for Vision-Based Harvesting Robots. <i>IEEE Access</i> , 2020, 8, 117746-117758.	4.2	89
14	Vision-based extraction of spatial information in grape clusters for harvesting robots. <i>Biosystems Engineering</i> , 2016, 151, 90-104.	4.3	85
15	Three-dimensional perception of orchard banana central stock enhanced by adaptive multi-vision technology. <i>Computers and Electronics in Agriculture</i> , 2020, 174, 105508.	7.7	77
16	Collision-free path planning for a guava-harvesting robot based on recurrent deep reinforcement learning. <i>Computers and Electronics in Agriculture</i> , 2021, 188, 106350.	7.7	74
17	Virtual manipulator-based binocular stereo vision positioning system and errors modelling. <i>Machine Vision and Applications</i> , 2012, 23, 43-63.	2.7	71
18	Robust Grape Cluster Detection in a Vineyard by Combining the AdaBoost Framework and Multiple Color Components. <i>Sensors</i> , 2016, 16, 2098.	3.8	70

#	ARTICLE	IF	CITATIONS
19	A robust fruit image segmentation algorithm against varying illumination for vision system of fruit harvesting robot. <i>Optik</i> , 2017, 131, 626-631.	2.9	66
20	In-field citrus detection and localisation based on RGB-D image analysis. <i>Biosystems Engineering</i> , 2019, 186, 34-44.	4.3	61
21	Rachis detection and three-dimensional localization of cut off point for vision-based banana robot. <i>Computers and Electronics in Agriculture</i> , 2022, 198, 107079.	7.7	60
22	The recognition of litchi clusters and the calculation of picking point in a nocturnal natural environment. <i>Biosystems Engineering</i> , 2018, 166, 44-57.	4.3	56
23	Binocular vision measurement and its application in full-field convex deformation of concrete-filled steel tubular columns. <i>Measurement: Journal of the International Measurement Confederation</i> , 2018, 130, 372-383.	5.0	54
24	Visual positioning technology of picking robots for dynamic litchi clusters with disturbance. <i>Computers and Electronics in Agriculture</i> , 2018, 151, 226-237.	7.7	51
25	Three-dimensional reconstruction of guava fruits and branches using instance segmentation and geometry analysis. <i>Computers and Electronics in Agriculture</i> , 2021, 184, 106107.	7.7	46
26	Banana detection based on color and texture features in the natural environment. <i>Computers and Electronics in Agriculture</i> , 2019, 167, 105057.	7.7	45
27	Detection and counting of immature green citrus fruit based on the Local Binary Patterns (LBP) feature using illumination-normalized images. <i>Precision Agriculture</i> , 2018, 19, 1062-1083.	6.0	43
28	A method of green litchi recognition in natural environment based on improved LDA classifier. <i>Computers and Electronics in Agriculture</i> , 2017, 140, 159-167.	7.7	41
29	Recognition and Matching of Clustered Mature Litchi Fruits Using Binocular Charge-Coupled Device (CCD) Color Cameras. <i>Sensors</i> , 2017, 17, 2564.	3.8	40
30	Fast and Accurate Detection of Banana Fruits in Complex Background Orchards. <i>IEEE Access</i> , 2020, 8, 196835-196846.	4.2	40
31	Collision-free motion planning for the litchi-picking robot. <i>Computers and Electronics in Agriculture</i> , 2021, 185, 106151.	7.7	33
32	YOLO-Banana: A Lightweight Neural Network for Rapid Detection of Banana Bunches and Stalks in the Natural Environment. <i>Agronomy</i> , 2022, 12, 391.	3.0	33
33	Simulation study on the effects of tine-shaking frequency and penetrating depth on fruit detachment for citrus canopy-shaker harvesting. <i>Computers and Electronics in Agriculture</i> , 2018, 148, 54-62.	7.7	30
34	Fault-Tolerant Design of a Limited Universal Fruit-Picking End-Effector Based on Vision-Positioning Error. <i>Applied Engineering in Agriculture</i> , 2016, 32, 5-18.	0.7	29
35	Identifying immature and mature pomelo fruits in trees by elliptical model fitting in the Crâ€“Cb color space. <i>Precision Agriculture</i> , 2019, 20, 138-156.	6.0	29
36	Window Zoomingâ€“Based Localization Algorithm of Fruit and Vegetable for Harvesting Robot. <i>IEEE Access</i> , 2019, 7, 103639-103649.	4.2	29

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37	A Multi-Objective Particle Swarm Optimization for Trajectory Planning of Fruit Picking Manipulator. <i>Agronomy</i> , 2021, 11, 2286.	3.0	29
38	Detection of citrus fruit and tree trunks in natural environments using a multi-elliptical boundary model. <i>Computers in Industry</i> , 2018, 99, 9-16.	9.9	26
39	Quantitation of rare circulating tumor cells by folate receptor $\beta$ ligand-targeted PCR in bladder transitional cell carcinoma and its potential diagnostic significance. <i>Tumor Biology</i> , 2014, 35, 7217-7223.	1.8	25
40	Fast detection of banana bunches and stalks in the natural environment based on deep learning. <i>Computers and Electronics in Agriculture</i> , 2022, 194, 106800.	7.7	24
41	Collision-Free Path-Planning for Six-DOF Serial Harvesting Robot Based on Energy Optimal and Artificial Potential Field. <i>Complexity</i> , 2018, 2018, 1-12.	1.6	19
42	Rates of Nursing Errors and Handoffs-Related Errors in a Medical Unit Following Implementation of a Standardized Nursing Handoff Form. <i>Journal of Nursing Care Quality</i> , 2016, 31, 61-67.	0.9	17
43	Study on behavior simulation for picking manipulator in virtual environment based on binocular stereo vision. , 2008, , .		12
44	Study on a Location Method for Bio-objects in Virtual Environment Based on Neural Network and Fuzzy Reasoning. <i>Lecture Notes in Computer Science</i> , 2009, , 1004-1012.	1.3	11
45	Research on Service-Oriented and HLA-Based Simulation Model of Juice Production Line. , 2010, , .		10
46	Citrus Segmentation for Automatic Harvester Combined with AdaBoost Classifier and Leung-Malik Filter Bank. <i>IFAC-PapersOnLine</i> , 2018, 51, 379-383.	0.9	10
47	A three-dimensional reconstruction algorithm for extracting parameters of the banana pseudo-stem. <i>Optik</i> , 2019, 185, 486-496.	2.9	10
48	Experimental Study of Vibrational Acceleration Spread and Comparison Using Three Citrus Canopy Shaker Shaking Tines. <i>Shock and Vibration</i> , 2017, 2017, 1-9.	0.6	9
49	A Highly Accurate Forest Fire Prediction Model Based on an Improved Dynamic Convolutional Neural Network. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 6721.	2.5	9
50	“Government-Industry-University-Research- Promotion” Collaborative Innovation Mechanism Construction to Promote the Development of Agricultural Machinery Technology. <i>IFAC-PapersOnLine</i> , 2018, 51, 552-559.	0.9	8
51	Grand Challenges of Machine-Vision Technology in Civil Structural Health Monitoring. <i>Artificial Intelligence Evolution</i> , 0, , 8-16.	0.0	7
52	The Virtual Simulation System of Numerical Control Machining. , 2008, , .		6
53	Extraction of Litchi Stem Based on Computer Vision under Natural Scene. , 2011, , .		6
54	Shaking Functionality Evaluation of Four Different Types of Citrus Canopy-Shaker Tines. <i>Applied Engineering in Agriculture</i> , 2018, 34, 809-817.	0.7	6

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55	Extracting Behavior Knowledge and Modeling Based on Virtual Agricultural Mobile Robot. Lecture Notes in Computer Science, 2006, , 28-37.	1.3	6
56	R&D task programming of electromechanical product in networked manufacturing environment. International Journal of Industrial and Systems Engineering, 2008, 3, 3.	0.2	4
57	Design and simulation of virtual prototype for picking manipulator's end-effector. , 2010, , .		4
58	Target accurate positioning based on the point cloud created by stereo vision. , 2016, , .		4
59	Optimized Preparation of Directional Modified Attapulgitite and its Application to Adsorbance of Humic Acid in Polluted Raw Water Effluent. Journal of Residuals Science and Technology, 2016, 13, 9-14.	0.6	3
60	Application of SimulationX and Hardware-in-the-loop in Design and Research of Servo Precision Press. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2012, 48, 51.	0.5	3
61	APF-DPPO: An Automatic Driving Policy Learning Method Based on the Artificial Potential Field Method to Optimize the Reward Function. Machines, 2022, 10, 533.	2.2	3
62	Image Processing and Modeling of Virtual Scenes Based on Nonlinear ICA. , 2010, , .		2
63	The Virtual Prototype Design and Simulation of Litchi Fruit Flexible Picking Manipulator. , 2011, , .		2
64	Computation Model on Image Segmentation Threshold of Litchi Cluster Based on Exploratory Analysis. Journal of Fiber Bioengineering and Informatics, 2014, 7, 441-452.	0.2	2
65	Point Cloud Registration Algorithm Combined Gaussian Mixture Model and Point-to-Plane Metric. Jisuanji Fuzhu Sheji Yu Tuxingxue Xuebao/Journal of Computer-Aided Design and Computer Graphics, 2018, 30, 642.	0.2	2
66	Virtual Actor and Its Behavior Simulation Based on Exploratory Analysis. , 2009, , .		1
67	Intelligent Design and Kinematics Analysis of Picking Robot Manipulator. , 2010, , .		1
68	A Test System of Binocular Vision of Picking Robot. , 2010, , .		1
69	Dynamic Simulation of Litchi Fruit Flexible Manipulator in Picking Process. , 2011, , .		1
70	Functional Structure Modeling and Assembly Practice of Ditching Fertilizer Based on Standardized Module Design. IOP Conference Series: Materials Science and Engineering, 2019, 573, 012113.	0.6	1
71	Recognition of Mature Citrus in Natural Scene under the Occlusion Condition. Journal of Information and Computational Science, 2014, 11, 1947-1958.	0.1	1
72	Real-Time Simulation System of Virtual Picking Manipulator Based on Parametric Design. Lecture Notes in Computer Science, 2009, , 1205-1210.	1.3	1

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73	Three-Dimensional Reconstruction and Monitoring of Large-Scale Structures via Real-Time Multi-vision System. Communications in Computer and Information Science, 2020, , 442-457.	0.5	1
74	Research of positioning system for virtual manipulator based on visual error compensation. , 2009, , .		0
75	A Study on User Experience of Online Games. , 2009, , .		0
76	Three-dimensional Data Reconstruction and Navigation of Complex Scene in Virtual Environment. , 2010, , .		0
77	A target detection method to mitigate interference of non-uniform illumination. , 2016, , .		0
78	&lt;i&gt;Digital image processing algorithms for a litchi harvesting robot&lt;/i&gt;. , 2017, , .		0
79	Research on Intelligent Design of Gearbox Parts Based on Virtual Environment. , 2019, , .		0
80	Design of ditching fertilization structure of rubber tree particles fertilizer based on visual surveillance elements. IOP Conference Series: Earth and Environmental Science, 2019, 358, 022087.	0.3	0
81	Multi-Shaped Targets Recognition and Point Clouds Acquisition Algorithm in Complex Environment. Laser and Optoelectronics Progress, 2018, 55, 111505.	0.6	0
82	Poisson Surface Reconstruction Algorithm Based on Improved Normal Orientation. Laser and Optoelectronics Progress, 2019, 56, 141005.	0.6	0
83	Real-time detection of asymmetric surface deformation and field stress in concrete-filled circular steel tubes via multi-vision method. Lecture Notes in Civil Engineering, 2020, , 1173-1178.	0.4	0