Xiangjun Zou

List of Publications by Year
in descending order

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	Plant Disease Recognition Model Based on Improved YOLOv5. Agronomy, 2022, 12, 365.	3.0	124
2	YOLO-Banana: A Lightweight Neural Network for Rapid Detection of Banana Bunches and Stalks in the Natural Environment. Agronomy, 2022, 12, 391.	3.0	33
3	Fast detection of banana bunches and stalks in the natural environment based on deep learning. Computers and Electronics in Agriculture, 2022, 194, 106800.	7.7	24
4	Rachis detection and three-dimensional localization of cut off point for vision-based banana robot. Computers and Electronics in Agriculture, 2022, 198, 107079.	7.7	60
5	A Highly Accurate Forest Fire Prediction Model Based on an Improved Dynamic Convolutional Neural Network. Applied Sciences (Switzerland), 2022, 12, 6721.	2.5	9
6	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
7	Three-dimensional reconstruction of guava fruits and branches using instance segmentation and geometry analysis. Computers and Electronics in Agriculture, 2021, 184, 106107.	7.7	46
8	Collision-free motion planning for the litchi-picking robot. Computers and Electronics in Agriculture, 2021, 185, 106151.	7.7	33
9	3D global mapping of large-scale unstructured orchard integrating eye-in-hand stereo vision and SLAM. Computers and Electronics in Agriculture, 2021, 187, 106237.	7.7	91
10	Collision-free path planning for a guava-harvesting robot based on recurrent deep reinforcement learning. Computers and Electronics in Agriculture, 2021, 188, 106350.	7.7	74
11	A Multi-Objective Particle Swarm Optimization for Trajectory Planning of Fruit Picking Manipulator. Agronomy, 2021, 11, 2286.	3.0	29
12	Color-, depth-, and shape-based 3D fruit detection. Precision Agriculture, 2020, 21, 1-17.	6.0	99
13	Fruit detection in natural environment using partial shape matching and probabilistic Hough transform. Precision Agriculture, 2020, 21, 160-177.	6.0	92
14	Fast and Accurate Detection of Banana Fruits in Complex Background Orchards. IEEE Access, 2020, 8, 196835-196846.	4.2	40
15	Three-dimensional perception of orchard banana central stock enhanced by adaptive multi-vision technology. Computers and Electronics in Agriculture, 2020, 174, 105508.	7.7	77
16	Detection of Fruit-Bearing Branches and Localization of Litchi Clusters for Vision-Based Harvesting Robots. IEEE Access, 2020, 8, 117746-117758.	4.2	89
17	Recognition and Localization Methods for Vision-Based Fruit Picking Robots: A Review. Frontiers in Plant Science, 2020, 11, 510.	3.6	294
18	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

#	Article	IF	Citations
19	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
20	Identifying immature and mature pomelo fruits in trees by elliptical model fitting in the Cr–Cb color space. Precision Agriculture, 2019, 20, 138-156.	6.0	29
21	In-field citrus detection and localisation based on RGB-D image analysis. Biosystems Engineering, 2019, 186, 34-44.	4.3	61
22	Window Zooming–Based Localization Algorithm of Fruit and Vegetable for Harvesting Robot. IEEE Access, 2019, 7, 103639-103649.	4.2	29
23	Banana detection based on color and texture features in the natural environment. Computers and Electronics in Agriculture, 2019, 167, 105057.	7.7	45
24	Guava Detection and Pose Estimation Using a Low-Cost RGB-D Sensor in the Field. Sensors, 2019, 19, 428.	3.8	98
25	High-accuracy multi-camera reconstruction enhanced by adaptive point cloud correction algorithm. Optics and Lasers in Engineering, 2019, 122, 170-183.	3.8	111
26	Real-time detection of surface deformation and strain in recycled aggregate concrete-filled steel tubular columns via four-ocular vision. Robotics and Computer-Integrated Manufacturing, 2019, 59, 36-46.	9.9	135
27	A three-dimensional reconstruction algorithm for extracting parameters of the banana pseudo-stem. Optik, 2019, 185, 486-496.	2.9	10
28	Research on Intelligent Design of Gearbox Parts Based on Virtual Environment. , 2019, , .		0
29	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
30	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
31	RRT-based path planning for an intelligent litchi-picking manipulator. Computers and Electronics in Agriculture, 2019, 156, 105-118.	7.7	99
32	Poisson Surface Reconstruction Algorithm Based on Improved Normal Orientation. Laser and Optoelectronics Progress, 2019, 56, 141005.	0.6	0
33	Detection and counting of immature green citrus fruit based on the Local Binary Patterns (LBP) feature using illumination-normalized images. Precision Agriculture, 2018, 19, 1062-1083.	6.0	43
34	Detection of citrus fruit and tree trunks in natural environments using a multi-elliptical boundary model. Computers in Industry, 2018, 99, 9-16.	9.9	26
35	A vision methodology for harvesting robot to detect cutting points on peduncles of double overlapping grape clusters in a vineyard. Computers in Industry, 2018, 99, 130-139.	9.9	93
36	The recognition of litchi clusters and the calculation of picking point in a nocturnal natural environment. Biosystems Engineering, 2018, 166, 44-57.	4.3	56

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37	Simulation study on the effects of tine-shaking frequency and penetrating depth on fruit detachment for citrus canopy-shaker harvesting. Computers and Electronics in Agriculture, 2018, 148, 54-62.	7.7	30
38	â€œGovernment-Industry-University-Research- Promotionâ€•Collaborative Innovation Mechanism Construction to Promote the Development of Agricultural Machinery Technology. IFAC-PapersOnLine, 2018, 51, 552-559.	0.9	8
39	Citrus Segmentation for Automatic Harvester Combined with AdaBoost Classifier and Leung-Malik Filter Bank. IFAC-PapersOnLine, 2018, 51, 379-383.	0.9	10
40	Collision-Free Path-Planning for Six-DOF Serial Harvesting Robot Based on Energy Optimal and Artificial Potential Field. Complexity, 2018, 2018, 1-12.	1.6	19
41	Shaking Functionality Evaluation of Four Different Types of Citrus Canopy-Shaker Tines. Applied Engineering in Agriculture, 2018, 34, 809-817.	0.7	6
42	Visual positioning technology of picking robots for dynamic litchi clusters with disturbance. Computers and Electronics in Agriculture, 2018, 151, 226-237.	7.7	51
43	Binocular vision measurement and its application in full-field convex deformation of concrete-filled steel tubular columns. Measurement: Journal of the International Measurement Confederation, 2018, 130, 372-383.	5.0	54
44	Multi-Shaped Targets Recognition and Point Clouds Acquisition Algorithm in Complex Environment. Laser and Optoelectronics Progress, 2018, 55, 111505.	0.6	0
45	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
46	A method of green litchi recognition in natural environment based on improved LDA classifier. Computers and Electronics in Agriculture, 2017, 140, 159-167.	7.7	41
47	A robust fruit image segmentation algorithm against varying illumination for vision system of fruit harvesting robot. Optik, 2017, 131, 626-631.	2.9	66
48	Recognition and Matching of Clustered Mature Litchi Fruits Using Binocular Charge-Coupled Device (CCD) Color Cameras. Sensors, 2017, 17, 2564.	3.8	40
49	Experimental Study of Vibrational Acceleration Spread and Comparison Using Three Citrus Canopy Shaker Shaking Tines. Shock and Vibration, 2017, 2017, 1-9.	0.6	9
50	&lt;i&gt;Digital image processing algorithms for a litchi harvesting robot&lt;/i&gt;. , 2017, , .		0
51	Fault-Tolerant Design of a Limited Universal Fruit-Picking End-Effector Basedon Vision-Positioning Error. Applied Engineering in Agriculture, 2016, 32, 5-18.	0.7	29
52	Robust Grape Cluster Detection in a Vineyard by Combining the AdaBoost Framework and Multiple Color Components. Sensors, 2016, 16, 2098.	3.8	70
53	A target detection method to mitigate interference of non-uniform illumination. , 2016, , .		0
54	Target accurate positioning based on the point cloud created by stereo vision. , 2016, , .		4

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55	Localisation of litchi in an unstructured environment using binocular stereo vision. Biosystems Engineering, 2016, 145, 39-51.	4.3	91
56	Vision-based extraction of spatial information in grape clusters for harvesting robots. Biosystems Engineering, 2016, 151, 90-104.	4.3	85
57	Rates of Nursing Errors and Handoffs-Related Errors in a Medical Unit Following Implementation of a Standardized Nursing Handoff Form. Journal of Nursing Care Quality, 2016, 31, 61-67.	0.9	17
58	Optimized Preparation of Directional Modified Attapulgite 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
59	Quantitation of rare circulating tumor cells by folate receptor α ligand-targeted PCR in bladder transitional cell carcinoma and its potential diagnostic significance. Tumor Biology, 2014, 35, 7217-7223.	1.8	25
60	Recognition of Mature Citrus in Natural Scene under the Occlusion Condition. Journal of Information and Computational Science, 2014, 11, 1947-1958.	0.1	1
61	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
62	Whole-genome and whole-exome sequencing of bladder cancer identifies frequent alterations in genes involved in sister chromatid cohesion and segregation. Nature Genetics, 2013, 45, 1459-1463.	21.4	400
63	Virtual manipulator-based binocular stereo vision positioning system and errors modelling. Machine Vision and Applications, 2012, 23, 43-63.	2.7	71
64	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
65	Dynamic Simulation of Litchi Fruit Flexible Manipulator in Picking Process. , 2011, , .		1
66	Extraction of Litchi Stem Based on Computer Vision under Natural Scene. , 2011, , .		6
67	The Virtual Prototype Design and Simulation of Litchi Fruit Flexible Picking Manipulator. , 2011, , .		2
68	Intelligent Design and Kinematics Analysis of Picking Robot Manipulator. , 2010, , .		1
69	Design and simulation of virtual prototype for picking manipulator's end-effector. , 2010, , .		4
70	Three-dimensional Date Reconstruction and Navigation of Complex Scene in Virtual Environment. , 2010, , .		0
71	A Test System of Binocular Vision of Picking Robot. , 2010, , .		1
72	Image Processing and Modeling of Virtual Scenes Based on Nonlinear ICA. , 2010, , .		2

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73	Research on Service-Oriented and HLA-Based Simulation Model of Juice Production Line. , 2010, , .		10
74	Research of positioning system for virtual manipulator based on visual error compensation. , 2009, , .		0
75	Virtual Actor and Its Behavior Simulation Based on Exploratory Analysis. , 2009, , .		1
76	A Study on User Experience of Online Games. , 2009, , .		0
77	Real-Time Simulation System of Virtual Picking Manipulator Based on Parametric Design. Lecture Notes in Computer Science, 2009, , 1205-1210.	1.3	1
78	Study on a Location Method for Bio-objects in Virtual Environment Based on Neural Network and Fuzzy Reasoning. Lecture Notes in Computer Science, 2009, , 1004-1012.	1.3	11
79	Study on behavior simulation for picking manipulator in virtual environment based on binocular stereo vision. , 2008, , .		12
80	The Virtual Simulation System of Numerical Control Machining. , 2008, , .		6
81	R&D task programming of electromechanical product in networked manufacturing environment. International Journal of Industrial and Systems Engineering, 2008, 3, 3.	0.2	4
82	Extracting Behavior Knowledge and Modeling Based on Virtual Agricultural Mobile Robot. Lecture Notes in Computer Science, 2006, , 28-37.	1.3	6
83	Grand Challenges of Machine-Vision Technology in Civil Structural Health Monitoring. Artificial Intelligence Evolution, 0, , 8-16.	0.0	7