Yang Gao

List of Publications by Year
in descending order

		361296	289141
79	1,902	20	40
papers	citations	h-index	g-index
86	86	86	1507
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Attention-Mechanism-Based Real-Time Gaze Tracking in Natural Scenes With Residual Blocks. IEEE Transactions on Cognitive and Developmental Systems, 2022, 14, 696-707.	2.6	9
2	Deep Meta-Learning Energy-Aware Path Planner for Unmanned Ground Vehicles in Unknown Terrains. IEEE Access, 2022, 10, 30055-30068.	2.6	3
3	Development of a multi-sample acquisition technique for efficient planetary subsurface exploration. Acta Astronautica, 2022, 198, 309-319.	1.7	4
4	DROD: A hybrid biomimetic undulatory and reciprocatory drill: Quantitative analysis and numerical study. Acta Astronautica, 2021, 182, 131-143.	1.7	12
5	Intelligent Spacecraft Visual GNC Architecture With the State-Of-the-Art AI Components for On-Orbit Manipulation. Frontiers in Robotics and AI, 2021, 8, 639327.	2.0	1
6	Conv1D Energy-Aware Path Planner for Mobile Robots in Unstructured Environments. , 2021, , .		8
7	Deep Learning Traversability Estimator for Mobile Robots in Unstructured Environments. Lecture Notes in Computer Science, 2021, , 203-213.	1.0	3
8	Equipment Detection Based Inspection Robot for Industrial Plants. Lecture Notes in Computer Science, 2021, , 419-429.	1.0	0
9	Development of the Third Generation of the Dual-Reciprocating Drill. Biomimetics, 2020, 5, 38.	1.5	13
10	Iris center localization using energy map synthesis based on gradient and isophote. Journal of Intelligent and Fuzzy Systems, 2020, 38, 4511-4523.	0.8	3
11	Iris Center Localization Using Energy Map With Image Inpaint Technology and Post-Processing Correction. IEEE Access, 2020, 8, 16965-16978.	2.6	10
12	Customizable and Optimized Drill Bits Bioâ€"inspired from Woodâ€"Wasp Ovipositor Morphology for Extraterrestrial Surfaces. , 2019, , .		3
13	Robotics and AI-Enabled On-Orbit Operations With Future Generation of Small Satellites. Proceedings of the IEEE, 2018, 106, 429-439.	16.4	37
14	Autonomous Nuclear Waste Management. IEEE Intelligent Systems, 2018, 33, 47-55.	4.0	23
15	Feedback slew algorithms for prolate spinners using Singleâ€"Thruster. Acta Astronautica, 2018, 144, 39-51.	1.7	2
16	Probabilistic RGB-D odometry based on points, lines and planes under depth uncertainty. Robotics and Autonomous Systems, 2018, 104, 25-39.	3.0	24
17	Fast Cylinder and Plane Extraction from Depth Cameras for Visual Odometry. , 2018, , .		14
18	Physical Properties of Icy Materials. , 2018, , 15-29.		0

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19	Modular Testbed for Spinning Spacecraft. Journal of Spacecraft and Rockets, 2017, 54, 90-100.	1.3	4
20	First implementation of burrowing motions in dual-reciprocating drilling using an integrated actuation mechanism. Advances in Space Research, 2017, 59, 1368-1380.	1.2	13
21	An experimental study of ultrasonic vibration and the penetration of granular material. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20160673.	1.0	11
22	Building large telescopes in orbit using small satellites. Acta Astronautica, 2017, 141, 183-195.	1.7	32
23	Review on space robotics: Toward top-level science through space exploration. Science Robotics, 2017, 2, .	9.9	150
24	Study of the formation of duricrusts on the martian surface and their effect on sampling equipment. Icarus, 2017, 281, 220-227.	1.1	6
25	Structure augmented monocular saliency for planetary rovers. Robotics and Autonomous Systems, 2017, 88, 1-10.	3.0	1
26	SPLODE: Semi-probabilistic point and line odometry with depth estimation from RGB-D camera motion. , 2017, , .		4
27	Probabilistic Combination of Noisy Points and Planes for RGB-D Odometry. Lecture Notes in Computer Science, 2017, , 340-350.	1.0	4
28	Towards Camera-LIDAR Fusion-Based Terrain Modelling for Planetary Surfaces: Review and Analysis. Sensors, 2016, 16, 1952.	2.1	19
29	Ontology-Based Self-Reconfiguring Guidance, Navigation, and Control for Planetary Rovers. Journal of Aerospace Computing, Information, and Communication, 2016, 13, 316-328.	0.8	10
30	Investigation of the properties of icy lunar polar regolith simulants. Advances in Space Research, 2016, 57, 1197-1208.	1.2	29
31	Lunar soil strength estimation based on Chang'E-3 images. Advances in Space Research, 2016, 58, 1893-1899.	1.2	15
32	Planetary Monocular Simultaneous Localization and Mapping. Journal of Field Robotics, 2016, 33, 229-242.	3.2	16
33	Multi-owner satellite operations: Concept, operations scheduling and recommendations. , 2016, , .		0
34	Slew Control of Prolate Spinners Using Single Magnetorquer. Journal of Guidance, Control, and Dynamics, 2016, 39, 719-727.	1.6	5
35	Visual classification of waste material for nuclear decommissioning. Robotics and Autonomous Systems, 2016, 75, 365-378.	3.0	27
36	Self-Reconfiguring Robotic Framework Using Fuzzy and Ontological Decision Making. Studies in Computational Intelligence, 2016, , 133-152.	0.7	1

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37	Power optimisation for an ultrasonic penetrator in granular materials. , 2015, , .		1
38	Peircing the Extraterrestrial Surface: Integrated Robotic Drill for Planetary Exploration. IEEE Robotics and Automation Magazine, 2015, 22, 45-53.	2.2	21
39	Self-reconfigurable robotics architecture utilising fuzzy and deliberative reasoning. , 2015, , .		3
40	Real-time visual sinkage detection for planetary rovers. Robotics and Autonomous Systems, 2015, 72, 307-317.	3.0	12
41	Analysis of drill head designs for dual-reciprocating drilling technique in planetary regoliths. Advances in Space Research, 2015, 56, 1765-1776.	1.2	29
42	Low-Cost, High-Performance Monocular Vision System for Air Bearing Table Attitude Determination. Journal of Spacecraft and Rockets, 2014, 51, 66-75.	1.3	11
43	Smartphone-Controlled Robot Snake for Urban Search and Rescue. Lecture Notes in Computer Science, 2014, , 352-363.	1.0	6
44	A survey on recent object detection techniques useful for monocular vision-based planetary terrain classification. Robotics and Autonomous Systems, 2014, 62, 151-167.	3.0	30
45	China's robotics successes abound. Science, 2014, 345, 523-523.	6.0	9
46	Reconfigurable Autonomy. KI - Kunstliche Intelligenz, 2014, 28, 199-207.	2.2	19
47	A novel study on high-powered ultrasonic penetrators in granular material. , 2014, , .		2
48	ExoMars Rover PanCam: Autonomous & Computational Intelligence [Application Notes]. IEEE Computational Intelligence Magazine, 2013, 8, 52-61.	3.4	9
49	Real-time vision based dynamic sinkage detection for exploration rovers. , 2013, , .		6
50	Computational Intelligence for Space Systems and Operations [Guest Editorial]. IEEE Computational Intelligence Magazine, 2013, 8, 10-63.	3.4	1
51	Single thruster attitude control software simulator for spinning spacecraft. , 2012, , .		3
52	Tradeoff Analysis of Attitude-Control Slew Algorithms for Prolate Spinner. Journal of Guidance, Control, and Dynamics, 2012, 35, 1143-1157.	1.6	5
53	Analysis of state-of-the-art single-thruster attitude control techniques for spinning penetrator. Acta Astronautica, 2012, 76, 60-78.	1.7	12
54	Special issue on â€œBio-inspired computing for autonomous vehiclesÂ". International Journal of Intelligent Computing and Cybernetics, 2012, 5, .	1.6	1

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55	First experimental investigation of dual-reciprocating drilling in planetary regoliths: Proposition of penetration mechanics. Planetary and Space Science, 2011, 59, 1529-1541.	0.9	30
56	Regolith simulant preparation methods for hardware testing. Planetary and Space Science, 2010, 58, 1977-1984.	0.9	26
57	Fast polygonal integration and its application in extending haar-like features to improve object detection. , 2010, , .		54
58	3D virtual reality simulator for planetary rover operation and testing. Virtual Environments, Human-Computer Interfaces and Measurements Systems, 2009 VECIMS '09 IEEE International Conference on, 2009, , .	0.0	8
59	Development of thermal sensors and drilling systems for lunar and planetary regoliths. Advances in Space Research, 2008, 42, 363-368.	1.2	15
60	Development of Thermal Sensors and Drilling Systems for Application on Lunar Lander Missions. Earth, Moon and Planets, 2008, 103, 119-141.	0.3	13
61	Lunar science with affordable small spacecraft technologies: MoonLITE and Moonraker. Planetary and Space Science, 2008, 56, 368-377.	0.9	27
62	UK Lunar Science Missions: Moonlite & Moonraker. , 2007, , .		4
63	Planetary Micro-Penetrator Concept Study with Biomimetric Drill and Sampler Design. IEEE Transactions on Aerospace and Electronic Systems, 2007, 43, 875-885.	2.6	52
64	Bioinspired Drill for Planetary Sampling: Literature Survey, Conceptual Design, and Feasibility Study. Journal of Spacecraft and Rockets, 2007, 44, 703-709.	1.3	35
65	NARMAX time series model prediction: feedforward and recurrent fuzzy neural network approaches. Fuzzy Sets and Systems, 2005, 150, 331-350.	1.6	201
66	A Novel Penetration System for in <i>situ</i> Astrobiological Studies. International Journal of Advanced Robotic Systems, 2005, 2, 29.	1.3	15
67	An Intelligent Adaptive Control Scheme for Postsurgical Blood Pressure Regulation. IEEE Transactions on Neural Networks, 2005, 16, 475-483.	4.8	51
68	Adaptive Modeling and Control of Drug Delivery Systems Using Generalized Fuzzy Neural Networks. , 2004, , 327-346.		0
69	Modelling, control, and stability analysis of non-linear systems using generalized fuzzy neural networks. International Journal of Systems Science, 2003, 34, 427-438.	3.7	11
70	Robust adaptive control of robot manipulators using generalized fuzzy neural networks. IEEE Transactions on Industrial Electronics, 2003, 50, 620-628.	5.2	104
71	Online adaptive fuzzy neural identification and control of a class of mimo nonlinear systems. IEEE Transactions on Fuzzy Systems, 2003, 11, 462-477.	6.5	172
72	Online Adaptive Fuzzy Neural Identification and Control of Nonlinear Dynamic Systems. Studies in Fuzziness and Soft Computing, 2003, , 373-402.	0.6	4

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73	ONLINE ADAPTIVE FUZZY NEURAL IDENTIFICATION AND CONTROL OF A CLASS OF MIMO NONLINEAR SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 301-306.	0.4	2
74	Adaptive control of robot manipulators using fuzzy neural networks. IEEE Transactions on Industrial Electronics, 2001, 48, 1274-1278.	5.2	30
75	A fast approach for automatic generation of fuzzy rules by generalized dynamic fuzzy neural networks. IEEE Transactions on Fuzzy Systems, 2001, 9, 578-594.	6.5	319
76	A high performance neural-networks-based speech recognition system. , 0, , .		4
77	Feature extraction using wavelet packets strategy. , 0, , .		9
78	Deployable Wood Wasp Drill for Planetary Subsurface Sampling. , 0, , .		5
79	Wood Wasp Inspired Planetary and Earth Drill. , 0, , .		6