Majid

List of Publications by Year
in descending order

75 papers	1,033 citations	471061 17 h-index	525886 27 g-index
78 all docs	78 docs citations	78 times ranked	1068 citing authors

#	Article	IF	Citations
1	Reducing the Energy Cost of Human Running Using an Unpowered Exoskeleton. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 2026-2032.	2.7	97
2	Equality bias impairs collective decision-making across cultures. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3835-3840.	3.3	74
3	Online learning of task-driven object-based visual attention control. Image and Vision Computing, 2010, 28, 1130-1145.	2.7	51
4	FPGA implementation of a biological neural network based on the Hodgkin-Huxley neuron model. Frontiers in Neuroscience, 2014, 8, 379.	1.4	45
5	Multi-representational learning for Offline Signature Verification using Multi-Loss Snapshot Ensemble of CNNs. Expert Systems With Applications, 2019, 133, 317-330.	4.4	40
6	Optimal Local Basis: A Reinforcement Learning Approach for Face Recognition. International Journal of Computer Vision, 2009, 81, 191-204.	10.9	36
7	Piecewise linear spine for speed–energy efficiency trade-off in quadruped robots. Robotics and Autonomous Systems, 2013, 61, 1350-1359.	3.0	36
8	Estimation of Depth and Length of Defects from Magnetic Flux Leakage Measurements: Verification with Simulations, Experiments, and Pigging data. IEEE Transactions on Magnetics, 2016, , 1-1.	1.2	34
9	Inverse Kinematics Based Human Mimicking System using Skeletal Tracking Technology. Journal of Intelligent and Robotic Systems: Theory and Applications, 2017, 85, 27-45.	2.0	34
10	Fuzzy Sarsa Learning and the proof of existence of its stationary points. Asian Journal of Control, 2008, 10, 535-549.	1.9	33
11	Wheel-Based Climbing Robot: Modeling and Control. Advanced Robotics, 2010, 24, 1313-1343.	1.1	31
12	Effect of flexible spine on stability of a passive quadruped robot: Experimental results. , 2011, , .		29
13	Temporal dynamics of visual category representation in the macaque inferior temporal cortex. Journal of Neurophysiology, 2016, 116, 587-601.	0.9	27
14	Adaptation in Variable Parallel Compliance: Towards Energy Efficiency in Cyclic Tasks. IEEE/ASME Transactions on Mechatronics, 2017, 22, 1059-1070.	3.7	27
15	Controllers for robust hopping with upright trunk based on the Virtual Pendulum concept. , 2012, , .		25
16	Metacognitive Deficiency in a Perceptual but Not a Memory Task in Methadone Maintenance Patients. Scientific Reports, 2017, 7, 7052.	1.6	22
17	Multisensory Perception of Contradictory Information in an Environment of Varying Reliability: Evidence for Conscious Perception and Optimal Causal Inference. Scientific Reports, 2017, 7, 3167.	1.6	22
18	Parallel Compliance Design for Increasing Robustness and Efficiency in Legged Locomotion—Proof of Concept. IEEE/ASME Transactions on Mechatronics, 2019, 24, 1541-1552.	3.7	22

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19	Adaptive Natural Oscillator to exploit natural dynamics for energy efficiency. Robotics and Autonomous Systems, 2017, 97, 51-60.	3.0	19
20	Natural dynamics modification for energy efficiency: A data-driven parallel compliance design method. , 2014, , .		18
21	Benefiting From Kinematic Redundancy Alongside Mono- and Biarticular Parallel Compliances for Energy Efficiency in Cyclic Tasks. IEEE Transactions on Robotics, 2017, 33, 1088-1102.	7.3	15
22	Manipulation by juggling of planar polygonal objects using two 3-DOF manipulators. , 2007, , .		14
23	Defect detection and width estimation in natural gas pipelines using MFL signals. , 2013, , .		14
24	A BIOLOGICALLY INSPIRED METHOD FOR CONCEPTUAL IMITATION USING REINFORCEMENT LEARNING. Applied Artificial Intelligence, 2007, 21, 155-183.	2.0	13
25	Attention control with reinforcement learning for face recognition under partial occlusion. Machine Vision and Applications, 2011, 22, 337-348.	1.7	13
26	Computational model of excitatory/inhibitory ratio imbalance role in attention deficit disorders. Journal of Computational Neuroscience, 2012, 33, 389-404.	0.6	12
27	Continuous reinforcement learning to robust fault tolerant control for a class of unknown nonlinear systems. Applied Soft Computing Journal, 2015, 37, 702-714.	4.1	12
28	Effects of methylphenidate on reinforcement learning depend on working memory capacity. Psychopharmacology, 2021, 238, 3569-3584.	1.5	12
29	Compliance and frequency optimization for energy efficiency in cyclic tasks. Robotica, 2017, 35, 2363-2380.	1.3	11
30	Bandit-based local feature subset selection. Neurocomputing, 2014, 138, 371-382.	3.5	10
31	Exploiting Generalization in the Subspaces for Faster Model-Based Reinforcement Learning. IEEE Transactions on Neural Networks and Learning Systems, 2019, 30, 1635-1650.	7.2	10
32	Simulation-based biomechanical assessment of unpowered exoskeletons for running. Scientific Reports, 2021, 11, 11846.	1.6	10
33	Path planning of the Nonholonomic Pole Climbing Robot UT-PCR. , 2006, , .		9
34	Swarm contours: A fast self-organization approach for snake initialization. Complexity, 2006, 12, 41-52.	0.9	9
35	Compliant hip function simplifies control for hopping and running. , 2013, , .		9
36	Reward Maximization Justifies the Transition from Sensory Selection at Childhood to Sensory Integration at Adulthood. PLoS ONE, 2014, 9, e103143.	1.1	9

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37	Feedback From Mono-Articular Muscles is Sufficient for Exoskeleton Torque Adaptation. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 2097-2106.	2.7	9
38	Conceptual Imitation Learning Based on Perceptual and Functional Characteristics of Action. IEEE Transactions on Autonomous Mental Development, 2013, 5, 311-325.	2.3	8
39	Profile Design of Parallel Rotary Compliance for Energy Efficiency in Cyclic Tasks. IEEE/ASME Transactions on Mechatronics, 2020, 25, 142-151.	3.7	8
40	Design and modeling of a compact rotational nonlinear spring. , 2016, , .		7
41	Multimodal Simon Effect: A Multimodal Extension of the Diffusion Model for Conflict Tasks. Frontiers in Human Neuroscience, 2018, 12, 507.	1.0	7
42	Directed Random Subspace Method for Face Recognition. , 2010, , .		6
43	RLSP: a signal prediction algorithm for energy conservation in wireless sensor networks. Wireless Networks, 2017, 23, 919-933.	2.0	6
44	How does transient signaling input affect the spike timing of postsynaptic neuron near the threshold regime: an analytical study. Journal of Computational Neuroscience, 2018, 44, 147-171.	0.6	6
45	Adaptation in a variable parallel elastic actuator for rotary mechanisms towards energy efficiency. Robotics and Autonomous Systems, 2021, 143, 103815.	3.0	6
46	Analogy between Juggling and Hopping: Active Object Manipulation Approach. Advanced Robotics, 2011, 25, 1793-1816.	1.1	5
47	Context Transfer in Reinforcement Learning Using Action-Value Functions. Computational Intelligence and Neuroscience, 2014, 2014, 1-10.	1.1	5
48	Attention control learning in the decision space using state estimation. International Journal of Systems Science, 2016, 47, 1659-1674.	3.7	5
49	Concurrent design of controller and passive elements for robots with impulsive actuation systems. Control Engineering Practice, 2019, 86, 166-174.	3.2	5
50	A Bayesian approach to conceptualization using reinforcement learning. , 2007, , .		4
51	Concurrent learning of task and attention control in the decision space. , 2009, , .		4
52	A Computational Approach towards Visual Object Recognition at Taxonomic Levels of Concepts. Computational Intelligence and Neuroscience, 2015, 2015, 1-10.	1.1	4
53	An adaptable cat-inspired leg design with frequency-amplitude coupling. , 2016, , .		4
54	Automatic calibration of an air hockey robot. , 2013, , .		3

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55	Object Manipulation Using Unlimited Rolling Contacts: 2-D Kinematic Modeling and Motion Planning. IEEE Transactions on Robotics, 2015, 31, 790-797.	7.3	3
56	Human-in-the-Loop Weight Compensation in Upper Limb Wearable Robots Towards Total Musclesâ€™ Effort Minimization. IEEE Robotics and Automation Letters, 2022, 7, 3273-3278.	3.3	3
57	Learning Distributed Object Pushing: Individual Learning and Distributed Cooperation Protocol. , 2006, , .		2
58	Toward a Society Oriented Approach for Fault Handling in Multi-Agent Systems. , 2007, , .		2
59	A hybrid model for face recognition using facial components. , 2007, , .		2
60	Near optimal machine learning based random test generation. , 2010, , .		2
61	Clustering subspace generalization to obtain faster reinforcement learning. Evolving Systems, 2020, 11, 89-103.	2.4	2
62	Attention Cueing and Activity Equally Reduce False Alarm Rate in Visual-Auditory Associative Learning through Improving Memory. PLoS ONE, 2016, 11, e0157680.	1.1	2
63	Learning Individual Skills and Team Behaviors for Distributed Object Pushing. , 2006, , .		1
64	Learning cooperative object pushing with variable contact point. , 2007, , .		1
65	Increasing the robustness of Acrobot walking control using compliant mechanisms. , 2011, , .		1
66	Fast saliency map extraction from video: A hardware approach. , 2013, , .		1
67	Realization of Nonlinear Adaptive Compliance: Towards Energy Efficiency in Cyclic Tasks. , 2019, , .		1
68	Effects of a Bio-mimicked Flapping Path on Propulsion Efficiency of Two-segmental Fish Robots. , 2019, , .		1
69	Improving operational space control of heavy manipulators via open-loop compensation. , 2011, , .		1
70	ANALYSIS, SIMULATION AND IMPLEMENTATION OF A HUMAN INSPIRED POLE CLIMBING ROBOT. , 2008, , .		0
71	State prediction approach for master-slave agents in presence of communication delay. , 2013, , .		0
72	A Simulator for Investigating the Effects of Morphological Variations on the Behavior of Compliant Quadruped Robots. , 2017, , .		0

#	Article	IF	Citations
73	An Efficient Bio-Inspired Strategy for Motion Control of a Fish Robot to Swim in Different Forward Velocities. , 2019, , .		0
74	Unidirectional Compliance to Improve Natural Dynamics Modification for Energy Efficiency. IEEE/ASME Transactions on Mechatronics, 2022, 27, 2401-2411.	3.7	0
75	Learning to Integrate an Artificial Sensory Device: How Bayesian Integration May Lead to Non-Optimal Perception. IEEE Transactions on Cognitive and Developmental Systems, 2022, , 1-1.	2.6	0