Huaping Liu

List of Publications by Citations

120 papers	1,829 citations	20 h-index	40 g-index
129 ext. papers	2,397 ext. citations	4.7 avg, IF	5.67 L-index

#	Paper	IF	Citations
120	FoveaBox: Beyound Anchor-Based Object Detection. *IEEE Transactions on Image Processing*, **2020**, 29, 7389-7398	8.7	234
119	RON: Reverse Connection with Objectness Prior Networks for Object Detection **2017**,		210
118	Object Recognition Using Tactile Measurements: Kernel Sparse Coding Methods. *IEEE Transactions on Instrumentation and Measurement*, **2016**, 65, 656-665	5.2	142
117	Visual‐Tactile Fusion for Object Recognition. *IEEE Transactions on Automation Science and Engineering*, **2017**, 14, 996-1008	4.9	140
116	Deep Feature Pyramid Reconfiguration for Object Detection. *Lecture Notes in Computer Science*, **2018**, 172-188	0.9	69
115	Extreme Kernel Sparse Learning for Tactile Object Recognition. *IEEE Transactions on Cybernetics*, **2017**, 47, 4509-4520	10.2	64
114	Robotic Room-Level Localization Using Multiple Sets of Sonar Measurements. *IEEE Transactions on Instrumentation and Measurement*, **2017**, 66, 2-13	5.2	58
113	Fusion tracking in color and infrared images using joint sparse representation. *Science China Information Sciences*, **2012**, 55, 590-599	3.4	54
112	Weakly Paired Multimodal Fusion for Object Recognition. *IEEE Transactions on Automation Science and Engineering*, **2018**, 15, 784-795	4.9	50
111	Structured Output-Associated Dictionary Learning for Haptic Understanding. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, **2017**, 47, 1564-1574	7.3	40
110	Multimodal Measurements Fusion for Surface Material Categorization. *IEEE Transactions on Instrumentation and Measurement*, **2018**, 67, 246-256	5.2	35
109	Lifelong Learning for Scene Recognition in Remote Sensing Images. *IEEE Geoscience and Remote Sensing Letters*, **2019**, 16, 1472-1476	4.1	30
108	Barrier Lyapunov Functions-Based Adaptive Fault Tolerant Control for Flexible Hypersonic Flight Vehicles With Full State Constraints. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, **2020**, 50, 3391-3400	7.3	30
107	Multi-modal local receptive field extreme learning machine for object recognition. *Neurocomputing*, **2018**, 277, 4-11	5.4	27
106	Recent progress on tactile object recognition. *International Journal of Advanced Robotic Systems*, **2017**, 14, 172988141771705	1.4	24
105	Feature Pyramid Reconfiguration with Consistent Loss for Object Detection. *IEEE Transactions on Image Processing*, **2019**,	8.7	23
104	Active Object Detection With Multistep Action Prediction Using Deep Q-Network. *IEEE Transactions on Industrial Informatics*, **2019**, 15, 3723-3731	11.9	23

103	. *IEEE Transactions on Industrial Informatics*, **2014**, 10, 1736-1745	11.9	22
102	Robotic Material Perception Using Active Multimodal Fusion. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 9878-9886	8.9	22
101	Robotic grasping recognition using multi-modal deep extreme learning machine. *Multidimensional Systems and Signal Processing*, **2017**, 28, 817-833	1.8	21
100	Material Identification Using Tactile Perception: A Semantics-Regularized Dictionary Learning Method. *IEEE/ASME Transactions on Mechatronics*, **2018**, 23, 1050-1058	5.5	20
99	A Dual-Modal Vision-Based Tactile Sensor for Robotic Hand Grasping **2018**,		19
98	Active object recognition using hierarchical local-receptive-field-based extreme learning machine. *Memetic Computing*, **2018**, 10, 233-241	3.4	18
97	Extreme Trust Region Policy Optimization for Active Object Recognition. *IEEE Transactions on Neural Networks and Learning Systems*, **2018**, 29, 2253-2258	10.3	17
96	Design and Output Characteristics of Magnetostrictive Tactile Sensor for Detecting Force and Stiffness of Manipulated Objects. *IEEE Transactions on Industrial Informatics*, **2019**, 15, 1219-1225	11.9	17
95	Surface Material Retrieval Using Weakly Paired Cross-Modal Learning. *IEEE Transactions on Automation Science and Engineering*, **2019**, 16, 781-791	4.9	16
94	Kernel Regularized Nonlinear Dictionary Learning for Sparse Coding. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, **2019**, 49, 766-775	7.3	16
93	Cross-Modal Surface Material Retrieval Using Discriminant Adversarial Learning. *IEEE Transactions on Industrial Informatics*, **2019**, 15, 4978-4987	11.9	15
92	RGB-D action recognition using linear coding. *Neurocomputing*, **2015**, 149, 79-85	5.4	15
91	Deep Reinforcement Learning for Robotic Pushing and Picking in Cluttered Environment **2019**,		15
90	A Cognitively Inspired System Architecture for the Mengshi Cognitive Vehicle. *Cognitive Computation*, **2020**, 12, 140-149	4.4	14
89	Cross-Modal Zero-Shot-Learning for Tactile Object Recognition. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, **2020**, 50, 2466-2474	7.3	14
88	Denoising deep extreme learning machine for sparse representation. *Memetic Computing*, **2017**, 9, 199-212	3.4	13
87	Multitask Extreme Learning Machine for Visual Tracking. *Cognitive Computation*, **2014**, 6, 391-404	4.4	13
86	A fast RetinaNet fusion framework for multi-spectral pedestrian detection. *Infrared Physics and Technology*, **2020**, 105, 103178	2.7	13

85	Extreme learning machine for time sequence classification. *Neurocomputing*, **2016**, 174, 322-330	5.4	12
84	Dynamic texture video classification using extreme learning machine. *Neurocomputing*, **2016**, 174, 278-285	5.4	12
83	Discriminative sparse subspace learning and its application to unsupervised feature selection. *ISA Transactions*, **2016**, 61, 104-118	5.5	12
82	Robotic teleoperation systems using a wearable multimodal fusion device. *International Journal of Advanced Robotic Systems*, **2017**, 14, 172988141771705	1.4	12
81	Bio-Inspired Magnetostrictive Tactile Sensor for Surface Material Recognition. *IEEE Transactions on Magnetics*, **2019**, 55, 1-7	2	9
80	Nonlinear sampled-data ESO-based active disturbance rejection control for networked control systems with actuator saturation. *Nonlinear Dynamics*, **2019**, 95, 1415-1434	5	9
79	Active Visual-Tactile Cross-Modal Matching. *IEEE Transactions on Cognitive and Developmental Systems*, **2019**, 11, 176-187	3	9
78	TrajectoryCNN: A New Spatio-Temporal Feature Learning Network for Human Motion Prediction. *IEEE Transactions on Circuits and Systems for Video Technology*, **2021**, 31, 2133-2146	6.4	9
77	Weakly paired multimodal fusion using multilayer extreme learning machine. *Soft Computing*, **2018**, 22, 3533-3544	3.5	8
76	An end-to-end learning method for industrial defect detection. *Assembly Automation*, **2019**, 40, 31-39	2.1	8
75	Near-Nash Equilibrium Control Strategy for Discrete-Time Nonlinear Systems With Round-Robin Protocol. *IEEE Transactions on Neural Networks and Learning Systems*, **2019**, 30, 2478-2492	10.3	8
74	Structural design and output characteristic analysis of magnetostrictive tactile sensor for robotic applications. *AIP Advances*, **2018**, 8, 056622	1.5	7
73	Multimodal Dynamics Analysis and Control for Amphibious Fly-Drive Vehicle. *IEEE/ASME Transactions on Mechatronics*, **2021**, 26, 621-632	5.5	7
72	Learning cross-modal visual-tactile representation using ensembled generative adversarial networks. *Cognitive Computation and Systems*, **2019**, 1, 40-44	1.2	7
71	Autonomous exploration for mobile robot using Q-learning **2017**,		6
70	Discovery of Topical Objects from Video: A Structured Dictionary Learning Approach. *Cognitive Computation*, **2016**, 8, 519-528	4.4	6
69	Surface Material Recognition Using Active Multi-modal Extreme Learning Machine. *Cognitive Computation*, **2018**, 10, 937-950	4.4	6
68	Local receptive field based extreme learning machine with three channels for histopathological image classification. *International Journal of Machine Learning and Cybernetics*, **2019**, 10, 1437-1447	3.8	6

67	Linear dynamic system method for tactile object classification. *Science China Information Sciences*, **2014**, 57, 1-11	3.4	6
66	Active Affordance Exploration for Robot Grasping. *Lecture Notes in Computer Science*, **2019**, 426-438	0.9	6
65	Cross-Modal Material Perception for Novel Objects: A Deep Adversarial Learning Method. *IEEE Transactions on Automation Science and Engineering*, **2020**, 17, 697-707	4.9	6
64	Haptic recognition using hierarchical extreme learning machine with local-receptive-field. *International Journal of Machine Learning and Cybernetics*, **2019**, 10, 541-547	3.8	6
63	Weakly-paired deep dictionary learning for cross-modal retrieval. *Pattern Recognition Letters*, **2020**, 130, 199-206	4.7	6
62	Lifelong Learning for Heterogeneous Multi-Modal Tasks **2019**,		5
61	A glove-based system for object recognition via visual-tactile fusion. *Science China Information Sciences*, **2019**, 62, 1	3.4	5
60	Bioinspired Embodiment for Intelligent Sensing and Dexterity in Fine Manipulation: A Survey. *IEEE Transactions on Industrial Informatics*, **2020**, 16, 4308-4321	11.9	5
59	Multi-Modal Local Receptive Field Extreme Learning Machine for object recognition **2016**,		5
58	An Interactive Perception Method for Warehouse Automation in Smart Cities. *IEEE Transactions on Industrial Informatics*, **2021**, 17, 830-838	11.9	5
57	Robotic Tactile Perception and Understanding **2018**,		4
56	Video key-frame extraction for smart phones. *Multimedia Tools and Applications*, **2016**, 75, 2031-2049	2.5	4
55	Towards Embodied Scene Description		4
54	Scene-Level Geographic Image Classification Based on a Covariance Descriptor Using Supervised Collaborative Kernel Coding. *Sensors*, **2016**, 16,	3.8	4
53	Lifelong Visual-Tactile Cross-Modal Learning for Robotic Material Perception. *IEEE Transactions on Neural Networks and Learning Systems*, **2021**, 32, 1192-1203	10.3	4
52	Tactile-based Fabric Defect Detection Using Convolutional Neural Network with Attention Mechanism. *IEEE Transactions on Instrumentation and Measurement*, **2022**, 1-1	5.2	4
51	Seeing by touching: Cross-modal matching for tactile and vision measurements **2017**,		3
50	Open-Environment Robotic Acoustic Perception for Object Recognition. *Frontiers in Neurorobotics*, **2019**, 13, 96	3.4	3

49	Near-Optimal Control for Time-Varying Linear Discrete Systems With Additive Nonlinearities and Random Gains. *IEEE Transactions on Automatic Control*, **2019**, 64, 2968-2975	5.9	3
48	Active Object Detection Using Double DQN and Prioritized Experience Replay **2018**,		3
47	Sound-Indicated Visual Object Detection for Robotic Exploration **2019**,		2
46	Guest Editorial Special Issue on Bioinspired Embodiment for Intelligent Sensing and Dexterity in Fine Manipulation. *IEEE Transactions on Industrial Informatics*, **2019**, 15, 1141-1143	11.9	2
45	Model Predictive Cooperative Control With ISM for Multiagent Systems Under Stochastic Communication Protocol. *IEEE Transactions on Cybernetics*, **2020**, PP,	10.2	2
44	Multi-agent Embodied Question Answering in Interactive Environments. *Lecture Notes in Computer Science*, **2020**, 663-678	0.9	2
43	Lifelong learning for tactile emotion recognition. *Interaction Studies*, **2019**, 20, 25-41	1.3	2
42	Wearable Technology for Robotic Manipulation and Learning **2020**,		2
41	Toward Image-to-Tactile Cross-Modal Perception for Visually Impaired People. *IEEE Transactions on Automation Science and Engineering*, **2021**, 18, 521-529	4.9	2
40	Visual□tactile Fusion Material Identification Using Dictionary Learning **2018**, 159-182		2
39	Interactive video summarization with human intentions. *Multimedia Tools and Applications*, **2019**, 78, 1737-1755	2.5	1
38	Room categorization using local receptive fields-based extreme learning machine **2017**,		1
37	A deep Q network for robotic planning from image **2017**,		1
36	Multi-Agent Embodied Visual Semantic Navigation With Scene Prior Knowledge. *IEEE Robotics and Automation Letters*, **2022**, 7, 3154-3161	4.2	1
35	OpenMPD: An Open Multimodal Perception Dataset for Autonomous Driving. *IEEE Transactions on Vehicular Technology*, **2022**, 1-1	6.8	1
34	Wearable Sensors **2020**, 33-63		1
33	Learning from Wearable-Based Teleoperation Demonstration **2020**, 127-144		1
32	A novel multimodal fusion network based on a joint-coding model for lane line segmentation. *Information Fusion*, **2022**, 80, 167-178	16.7	1

31	Research on Recognition of Multi-user Haptic Gestures. *Proceedings in Adaptation, Learning and Optimization*, **2020**, 134-143	0.2	1
30	A Magnetostrictive Tactile Sensing Unit and the Integration of Sensor Array for Intelligent Manipulator. *IEEE Access*, **2020**, 8, 187848-187857	3.5	1
29	Online weakly paired similarity learning for surface material retrieval. *Industrial Robot*, **2019**, 46, 396-403	1.4	1
28	Cross-modal learning for material perception using deep extreme learning machine. *International Journal of Machine Learning and Cybernetics*, **2020**, 11, 813-823	3.8	1
27	Road-Network-Based Fast Geolocalization. *IEEE Transactions on Geoscience and Remote Sensing*, **2021**, 59, 6065-6076	8.1	1
26	Wood material recognition for industrial applications. *Systems Science and Control Engineering*, **2018**, 6, 346-358	2	1
25	Estimating 6D Object Poses with Temporal Motion Reasoning for Robot Grasping in Cluttered Scenes. *IEEE Robotics and Automation Letters*, **2022**, 1-1	4.2	0
24	REVE-CE: Remote Embodied Visual Referring Expression in Continuous Environment. *IEEE Robotics and Automation Letters*, **2022**, 7, 1494-1501	4.2	0
23	Embodied scene description. *Autonomous Robots*,1	3	0
22	Multi-modal broad learning for material recognition. *Cognitive Computation and Systems*, **2021**, 3, 123-130	1.2	0
21	Deep learning for diplomatic video analysis. *Multimedia Tools and Applications*, **2020**, 79, 4811-4830	2.5	0
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19	Active Object Discovery and Localization Using Sound-Induced Attention. *IEEE Transactions on Industrial Informatics*, **2021**, 17, 2021-2029	11.9	0
18	Visual‐Tactile Fusion Object Recognition Using Joint Sparse Coding **2018**, 135-158		0
17	Energy-based Periodicity Mining with Deep Features for Action Repetition Counting in Unconstrained Videos. *IEEE Transactions on Circuits and Systems for Video Technology*, **2021**, 1-1	6.4	0
16	Visual Affordance Guided Tactile Material Recognition for Waste Recycling. *IEEE Transactions on Automation Science and Engineering*, **2021**, 1-9	4.9	0
15	Remote sensing image classification using extreme learning machine-guided collaborative coding. *Multidimensional Systems and Signal Processing*, **2017**, 28, 835-850	1.8	
14	Guest Editorial Special Issue on Active Perception for Industrial Intelligence. *IEEE Transactions on Automation Science and Engineering*, **2019**, 16, 1498-1499	4.9	

13 Tactile Object Recognition Using Supervised Dictionary Learning **2018**, 71-95

12 Visual–Tactile Cross-Modal Matching Using Common Dictionary Learning **2018**, 183-202

11 Representation of Tactile and Visual Modalities **2018**, 33-44

10 Tactile Adjective Understanding Using Structured Output-Associated Dictionary Learning **2018**, 97-116

9 A dynamic extremum seeking scheme for three-player attack-defense with unknown gradient. *Journal of the Franklin Institute*, **2022**, 359, 1457-1482 4

8 Wearable Design and Computing **2020**, 65-87

7 Learning from Visual-Based Teleoperation Demonstration **2020**, 145-172

6 Learning from Wearable-Based Indirect Demonstration **2020**, 173-203

5 Tactile Material Identification Using Semantics-Regularized Dictionary Learning **2018**, 117-132

4 Tactile Object Recognition Using Joint Sparse Coding **2018**, 47-69

3 Applications of Developed Wearable Devices **2020**, 89-123

2 Research on visual-tactile cross-modality based on generative adversarial network. *Cognitive Computation and Systems*, **2021**, 3, 131-141 1.2

1 Multimodal Continual Learning Using Online Dictionary Updating. *IEEE Transactions on Cognitive and Developmental Systems*, **2021**, 13, 171-178 3