Arash Mohammadi

List of Publications by Year
in descending order

129 papers	2,843 citations	361045 20 h-index	264894 42 g-index
129 all docs	129 docs citations	129 times ranked	2389 citing authors

#	Article	IF	Citations
1	COVID-CAPS: A capsule network-based framework for identification of COVID-19 cases from X-ray images. Pattern Recognition Letters, 2020, 138, 638-643.	2.6	460
2	Brain Tumor Type Classification via Capsule Networks. , 2018, , .		294
3	From Handcrafted to Deep-Learning-Based Cancer Radiomics: Challenges and Opportunities. IEEE Signal Processing Magazine, 2019, 36, 132-160.	4.6	185
4	Capsule Networks for Brain Tumor Classification Based on MRI Images and Coarse Tumor Boundaries. , 2019, , .		172
5	A multimodal and hybrid deep neural network model for Remaining Useful Life estimation. Computers in Industry, 2019, 108, 186-196.	5.7	167
6	COVID-CT-MD, COVID-19 computed tomography scan dataset applicable in machine learning and deep learning. Scientific Data, 2021, 8, 121.	2.4	108
7	COVID-FACT: A Fully-Automated Capsule Network-Based Framework for Identification of COVID-19 Cases from Chest CT Scans. Frontiers in Artificial Intelligence, 2021, 4, 598932.	2.0	75
8	FS-HGR: Few-Shot Learning for Hand Gesture Recognition via Electromyography. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2021, 29, 1004-1015.	2.7	65
9	Distributed Consensus <formula formulatype="inline"><tex Notation="TeX">$+$</tex></formula> Innovation Particle Filtering for Bearing/Range Tracking With Communication Constraints. IEEE Transactions on Signal Processing, 2015, 63, 620-635.	3.2	59
10	Distributed-Graph-Based Statistical Approach for Intrusion Detection in Cyber-Physical Systems. IEEE Transactions on Signal and Information Processing Over Networks, 2018, 4, 137-147.	1.6	46
11	BayesCap: A Bayesian Approach to Brain Tumor Classification Using Capsule Networks. IEEE Signal Processing Letters, 2020, 27, 2024-2028.	2.1	46
12	Consensus-based distributed unscented particle filter. , 2011, , .		43
13	Event-Based Estimation With Information-Based Triggering and Adaptive Update. IEEE Transactions on Signal Processing, 2017, 65, 4924-4939.	3.2	43
14	Lung Cancer Radiomics: Highlights from the IEEE Video and Image Processing Cup 2018 Student Competition [SP Competitions]. IEEE Signal Processing Magazine, 2019, 36, 164-173.	4.6	42
15	3D-MCN: A 3D Multi-scale Capsule Network for Lung Nodule Malignancy Prediction. Scientific Reports, 2020, 10, 7948.	1.6	38
16	Bluetooth Low Energy-based Angle of Arrival Estimation via Switch Antenna Array for Indoor Localization. , 2020, , .		34
17	STUPEFY: Set-Valued Box Particle Filtering for Bluetooth Low Energy-Based Indoor Localization. IEEE Signal Processing Letters, 2019, 26, 1773-1777.	2.1	32
18	XceptionTime: Independent Time-Window Xceptiontime Architecture for Hand Gesture Classification. , 2020, , .		30

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19	MIXCAPS: A capsule network-based mixture of experts for lung nodule malignancy prediction. Pattern Recognition, 2021, 116, 107942.	5.1	28
20	$$ext {DRTOP}$$: deep learning-based radiomics for the time-to-event outcome prediction in lung cancer. Scientific Reports, 2020, 10, 12366.	1.6	27
21	Multi-Sensor Fusion with Interaction Multiple Model and Chi-Square Test Tolerant Filter. Sensors, 2016, 16, 1835.	2.1	25
22	Sampled-Data Dynamic Event-Triggering Control for Networked Systems Subject to DoS Attacks. IEEE Transactions on Network Science and Engineering, 2021, 8, 1978-1990.	4.1	24
23	A performance guaranteed sampled-data event-triggered consensus approach for linear multi-agent systems. Information Sciences, 2019, 484, 338-349.	4.0	23
24	Distributed Widely Linear Multiple-Model Adaptive Estimation. IEEE Transactions on Signal and Information Processing Over Networks, 2015, 1, 164-179.	1.6	22
25	Improper Complex-Valued Bhattacharyya Distance. IEEE Transactions on Neural Networks and Learning Systems, 2016, 27, 1049-1064.	7.2	22
26	Semg-Based Hand Gesture Recognition Via Dilated Convolutional Neural Networks. , 2019, , .		22
27	Complex-Valued Gaussian Sum Filter for Nonlinear Filtering of Non-Gaussian/Non-Circular Noise. IEEE Signal Processing Letters, 2015, 22, 440-444.	2.1	21
28	PHTNet: Characterization and Deep Mining of Involuntary Pathological Hand Tremor using Recurrent Neural Network Models. Scientific Reports, 2020, 10, 2195.	1.6	21
29	WAKE: Wavelet decomposition coupled with adaptive Kalman filtering for pathological tremor extraction. Biomedical Signal Processing and Control, 2019, 48, 179-188.	3.5	19
30	Improper Complex-Valued Multiple-Model Adaptive Estimation. IEEE Transactions on Signal Processing, 2015, 63, 1528-1542.	3.2	18
31	Hybrid Deep Neural Network Model for Remaining Useful Life Estimation. , 2019, , .		18
32	A Unified Optimization for Resilient Dynamic Event-Triggering Consensus Under Denial of Service. IEEE Transactions on Cybernetics, 2022, 52, 2872-2884.	6.2	18
33	Bayesian Optimized Spectral Filters Coupled With Ternary ECOC for Single-Trial EEG Classification. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 2249-2259.	2.7	17
34	Capsule Networks' Interpretability for Brain Tumor Classification Via Radiomics Analyses. , 2019, , .		17
35	Surface EMG-Based Hand Gesture Recognition via Hybrid and Dilated Deep Neural Network Architectures for Neurorobotic Prostheses. Journal of Medical Robotics Research, 2020, 05, 2041001.	1.0	17
36	Deep Reinforcement Learning for Trustworthy and Time-Varying Connection Scheduling in a Coupled UAV-Based Femtocaching Architecture. IEEE Access, 2021, 9, 32263-32281.	2.6	17

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37	COVID-rate: an automated framework for segmentation of COVID-19 lesions from chest CT images. Scientific Reports, 2022, 12, 3212.	1.6	16
38	A consensus/fusion based distributed implementation of the particle filter. , 2011, , .		15
39	CEASE: A Collaborative Event-Triggered Average-Consensus Sampled-Data Framework With Performance Guarantees for Multi-Agent Systems. IEEE Transactions on Signal Processing, 2018, 66, 6096-6109.	3.2	15
40	Mobility-Aware Femtocaching Algorithm in D2D Networks Based on Handover. IEEE Transactions on Vehicular Technology, 2020, 69, 10188-10201.	3.9	15
41	A deep explainable artificial intelligent framework for neurological disorders discrimination. Scientific Reports, 2021, 11, 9630.	1.6	15
42	Ct-Caps: Feature Extraction-Based Automated Framework for Covid-19 Disease Identification From Chest Ct Scans Using Capsule Networks. , 2021, , .		15
43	Diagnosis/Prognosis of COVID-19 Chest Images via Machine Learning and Hypersignal Processing: Challenges, opportunities, and applications. IEEE Signal Processing Magazine, 2021, 38, 37-66.	4.6	15
44	Belief Condensation Filtering for RSSI-Based State Estimation in Indoor Localization. , 2019, , .		14
45	Few-Shot Learning for Decoding Surface Electromyography for Hand Gesture Recognition. , 2021, , .		14
46	Bluetooth Low Energy and CNN-Based Angle of Arrival Localization in Presence of Rayleigh Fading. , 2021, , .		14
47	Distributed particle filtering for large scale dynamical systems. , 2009, , .		13
48	DQLEL: Deep Q-Learning for Energy-Optimized LoS/NLoS UWB Node Selection. IEEE Transactions on Signal Processing, 2022, 70, 2532-2547.	3.2	13
49	BoostCaps: A Boosted Capsule Network for Brain Tumor Classification. , 2020, 2020, 1075-1079.		12
50	Siamese Neural Networks for EEG-based Brain-computer Interfaces. , 2020, 2020, 442-446.		12
51	Joint Transmission Scheme and Coded Content Placement in Cluster-Centric UAV-Aided Cellular Networks. IEEE Internet of Things Journal, 2022, 9, 11098-11114.	5.5	12
52	Human-level COVID-19 diagnosis from low-dose CT scans using a two-stage time-distributed capsule network. Scientific Reports, 2022, 12, 4827.	1.6	12
53	Hand Gesture Recognition Using Temporal Convolutions and Attention Mechanism. , 2022, , .		12
54	Distributed state estimation for large-scale nonlinear systems: A reduced order particle filter implementation. , 2012, , .		11

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55	HMFP-DBRNN: Real-Time Hand Motion Filtering and Prediction via Deep Bidirectional RNN. IEEE Robotics and Automation Letters, 2019, 4, 1061-1068.	3.3	11
56	Secure Sampled-Data Observer-Based Control for Wind Turbine Oscillation Under Cyber Attacks. IEEE Transactions on Smart Grid, 2022, 13, 3188-3202.	6.2	11
57	Noncircular Attacks on Phasor Measurement Units for State Estimation in Smart Grid. IEEE Journal on Selected Topics in Signal Processing, 2018, 12, 777-789.	7.3	10
58	COVID19-HPSMP: COVID-19 adopted Hybrid and Parallel deep information fusion framework for stock price movement prediction. Expert Systems With Applications, 2022, 187, 115879.	4.4	10
59	Bluetooth Low Energy-based Angle of Arrival Estimation in Presence of Rayleigh Fading. , 2020, , .		10
60	Distributed posterior Cram&#x00E9;r-Rao lower bound for nonlinear sequential Bayesian estimation. , 2012, , .		9
61	Decentralized Conditional Posterior Cramér–Rao Lower Bound for Nonlinear Distributed Estimation. IEEE Signal Processing Letters, 2013, 20, 165-168.	2.1	9
62	Analyzing the Effect of Bluetooth Low Energy (BLE) with Randomized MAC Addresses in IoT Applications. , 2018, , .		9
63	Orientation-Matched Multiple Modeling for RSSI-based Indoor Localization via BLE Sensors. , 2021, , .		9
64	MM-KTD: Multiple Model Kalman Temporal Differences for Reinforcement Learning. IEEE Access, 2020, 8, 128716-128729.	2.6	8
65	On Future Development of Autonomous Systems: A Report of the Plenary Panel at IEEE ICAS'21. , 2021, , .		8
66	Structure-Induced Complex Kalman Filter for Decentralized Sequential Bayesian Estimation. IEEE Signal Processing Letters, 2015, 22, 1419-1423.	2.1	7
67	Ternary ECOC classifiers coupled with optimized spatio-spectral patterns for multiclass motor imagery classification. , 2017, , .		7
68	A Bayesian Framework to Optimize Double Band Spectra Spatial Filters for Motor Imagery Classification. , 2018, , .		7
69	RQ-CEASE: A Resilient Quantized Collaborative Event-Triggered Average-Consensus Sampled-Data Framework Under Denial of Service Attack. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 7027-7039.	5.9	7
70	IoT-TD: IoT Dataset for Multiple Model BLE-based Indoor Localization/Tracking. , 2021, , .		7
71	Event-based consensus for a class of heterogeneous multi-agent systems: An LMI approach. , 2017, , .		6
72	Ternary-Event-Based State Estimation With Joint Point, Quantized, and Set-Valued Measurements. IEEE Signal Processing Letters, 2018, 25, 665-669.	2.1	6

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73	Noisy parallel hybrid model of NBGRU and NCNN architectures for remaining useful life estimation. Quality Engineering, 2020, 32, 371-387.	0.7	6
74	Dynamic Event-triggered Formation Control for Multi-agent Systems: A Co-design Optimization Approach. , 2020, , .		6
75	Hybrid Deep Learning Model For Diagnosis Of Covid-19 Using Ct Scans And Clinical/Demographic Data. , 2021, , .		6
76	Fault-Tolerant Periodic Event-Triggered Consensus Under Communication Delay and Multiple Attacks. IEEE Systems Journal, 2022, 16, 6338-6349.	2.9	6
77	A late adaptive graph-based edge-aware filtering with iterative weight updating process. , 2017, , .		5
78	CARISI: Convolutional Autoencoder-Based Inter-Slice Interpolation of Brain Tumor Volumetric Images. , 2018, , .		5
79	Attack Detection/Isolation via a Secure Multisensor Fusion Framework for Cyberphysical Systems. Complexity, 2018, 2018, 1-8.	0.9	5
80	Signal Processing for Neurorehabilitation and Assistive Technologies [From the Guest Editors]. IEEE Signal Processing Magazine, 2021, 38, 5-7.	4.6	5
81	Trustworthy Adaptation with Few-Shot Learning for Hand Gesture Recognition. , 2021, , .		5
82	An Ensemble Learning Framework For Multi-Class Covid-19 Lesion Segmentation From Chest Ct Images. , 2021, , .		5
83	Theoretical performance bounds for reduced-order linear and nonlinear distributed estimation. , 2012, , .		4
84	Full order nonlinear distributed estimation in intermittently connected networks. , 2013, , .		4
85	Error correction output codding coupled with the CSP for motor imagery BCI systems. , 2017, , .		4
86	Multipath Parallel Hybrid Deep Neural Networks Framework for Remaining Useful Life Estimation. , 2020, , .		4
87	Multi-Agent Reinforcement Learning via Adaptive Kalman Temporal Difference and Successor Representation. Sensors, 2022, 22, 1393.	2.1	4
88	Gaussian Mixture-based Indoor Localization via Bluetooth Low Energy Sensors. , 2019, , .		3
89	ND-SMPF: A Noisy Deep Neural Network Fusion Framework for Stock Price Movement Prediction. , 2020, , .		3
90	Improving performance of indoor localization using compressive sensing and normal hedge algorithm. Turkish Journal of Electrical Engineering and Computer Sciences, 2020, 28, 2143-2157.	0.9	3

#	Article	IF	Citations
91	Makf-Sr: Multi-Agent Adaptive Kalman Filtering-Based Successor Representations. , 2021, , .		3
92	AKF-SR: Adaptive Kalman filtering-based successor representation. Neurocomputing, 2022, 467, 476-490.	3.5	3
93	`<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e1466" altimg="si149.svg"><mml:mtext>BP-Net</mml:mtext></mml:math>`: Cuff-less and non-invasive blood pressure estimation via a generic deep convolutional architecture. Biomedical Signal Processing and Control, 2022, 78, 103850.	3.5	3
94	Decentralized Bayesian Estimation with Quantized Observations: Theoretical Performance Bounds. , 2013, , .		2
95	Secure estimation against complex-valued attacks. , 2016, , .		2
96	Real-time and event-triggered object detection, recognition, and tracking. , 2017, , .		2
97	A multi-rate and auto-adjustable wavelet decomposition framework for pathological hand tremor extraction. , 2017, , .		2
98	Interactive Gaussian-sum filtering for estimating systematic risk in financial econometrics. , 2017, , .		2
99	WAKE-BPAT: Wavelet-Based Adaptive Kalman Filtering for Blood Pressure Estimation Via Fusion of Pulse Arrival Times. , 2018, , .		2
100	An Event-Triggered Average Consensus Algorithm with Performance Guarantees for Distributed Sensor Networks. , 2018, , .		2
101	Quantized Event-triggered Sampled-data Average Consensus with Guaranteed Rate of Convergence. , 2019, , .		2
102	Resilient Event-triggered Average Consensus Under Denial of Service Attack and Uncertain Network. , 2019, , .		2
103	Non-Gaussian BLE-Based Indoor Localization Via Gaussian Sum Filtering Coupled with Wasserstein Distance. , 2020, , .		2
104	Online Dynamic Window (ODW) Assisted Two-Stage LSTM Frameworks For Indoor Localization. Journal of Signal Processing Systems, 2022, 94, 773-786.	1.4	2
105	Decentralized computation of the conditional posterior Cram&#x00E9;r-Rao lower bound: Application to adaptive sensor selection. , 2013, , .		1
106	Data-driven image stylization using graph-based filtering. , 2017, , .		1
107	A guaranteed cost LMI-based approach for event-triggered average consensus in multi-agent networks. , 2017, , .		1
108	Designing Optimal Thresholds for Ternary Event-based State Estimation via Multi Objective Particle Swarm Optimizer. , 2018, , .		1

#	Article	IF	Citations
109	Event-Triggered Particle Filtering Via Diffusion Strategies for Distributed Estimation in Autonomous Systems. , 2018, , .		1
110	Feature Space Reduction for Single Trial EEG Classification based on Wavelet Decomposition. , 2019, 2019, 7161-7164.		1
111	Training of Deep Bidirectional Rnns for Hand Motion Filtering Via Multimodal Data Fusion. , 2019, , .		1
112	Adaptive Subject-Specific Bayesian Spectral Filtering for Single Trial Eeg Classification. , 2019, , .		1
113	Study on Novel Designs with Reduced Fatigue for Steady State Motion Visual Evoked Potentials. , 2019, , .		1
114	Event-Triggered Monitoring/Communication of Inertial Measurement Unit for IoT Applications. , 2019, , .		1
115	MDR-SURV: A Multi-Scale Deep Learning-Based Radiomics for Survival Prediction in Pulmonary Malignancies. , 2020, , .		1
116	Online Dynamic Window (ODW) Assisted 2-Stage LSTM Indoor Localization for Smart Phones. , 2021, , .		1
117	Wso-Caps: Diagnosis Of Lung Infection From Low And Ultra-Lowdose CT Scans Using Capsule Networks And Windowsetting Optimization. , 2021, , .		1
118	Co‑designed Incentives for an Aimed Renewable Energy Contribution and Volunteer Load Shedding. IET Renewable Power Generation, 2020, 14, 2287-2295.	1.7	1
119	FDIA Detection through an Adaptive Multi-Level Features Classification in Smart Grids. , 2020, , .		1
120	Distributed Hybrid Kalman Temporal Differences for Reinforcement Learning. , 2020, , .		1
121	DF-SSmVEP: Dual Frequency Aggregated Steady-State Motion Visual Evoked Potential Design with Bifold Canonical Correlation Analysis. Sensors, 2022, 22, 2568.	2.1	1
122	Data Shapley Value for Handling Noisy Labels: An Application in Screening Covid-19 Pneumonia from Chest CT Scans. , 2022, , .		1
123	Widely-linear Gaussian sum filter. , 2016, , .		0
124	Multi-sensor and Information-Based Event Triggered Distributed Estimation. , 2017, , .		0
125	Multiple-Model and Reduced-Order Kalman Filtering for Pathological Hand Tremor Extraction. , 2018, , .		0
126	A Robust Event-Triggered Consensus Strategy for Linear Multi-Agent Systems with Uncertain Network Topology. , 2018, , .		0

#	ARTICLE	IF	CITATIONS
127	Fast Machine Learning-Based Signal Classification in Energy Constrained CRN: FPGA Design and Implementation. , 2021, , .		0
128	Advances in Autonomous Systems: A Summary of the AutoDefence Summer School at IEEE ICASâ€™21. , 2021, , .		0
129	Streaming Compression Multimedia Data over WMSNs based on Fairness Cluster-based Routing Protocol*. , 2021, , .		0