

Kumar Vijay Mishra

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4974611/publications.pdf>

Version: 2024-02-01

78
papers

1,742
citations

430874

18
h-index

642732

23
g-index

80
all docs

80
docs citations

80
times ranked

1019
citing authors

#	ARTICLE	IF	CITATIONS
1	Toward Millimeter-Wave Joint Radar Communications: A Signal Processing Perspective. IEEE Signal Processing Magazine, 2019, 36, 100-114.	5.6	283
2	A mmWave Automotive Joint Radar-Communications System. IEEE Transactions on Aerospace and Electronic Systems, 2019, 55, 1241-1260.	4.7	197
3	Joint Antenna Selection and Hybrid Beamformer Design Using Unquantized and Quantized Deep Learning Networks. IEEE Transactions on Wireless Communications, 2020, 19, 1677-1688.	9.2	100
4	Spectrum Sharing Radar: Coexistence via Xampling. IEEE Transactions on Aerospace and Electronic Systems, 2018, 54, 1279-1296.	4.7	75
5	Cognitive radar antenna selection via deep learning. IET Radar, Sonar and Navigation, 2019, 13, 871-880.	1.8	70
6	Terahertz-Band Joint Ultra-Massive MIMO Radar-Communications: Model-Based and Model-Free Hybrid Beamforming. IEEE Journal on Selected Topics in Signal Processing, 2021, 15, 1468-1483.	10.8	67
7	Doppler-Resilient 802.11ad-Based Ultrashort Range Automotive Joint Radar-Communications System. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 4035-4048.	4.7	62
8	Spectral Super-Resolution With Prior Knowledge. IEEE Transactions on Signal Processing, 2015, 63, 5342-5357.	5.3	58
9	Intelligent Time-Varying Metasurface Transceiver for Index Modulation in 6G Wireless Networks. IEEE Antennas and Wireless Propagation Letters, 2020, 19, 1891-1895.	4.0	42
10	Beam Alignment and Tracking for Autonomous Vehicular Communication using IEEE 802.11ad-based Radar. , 2019, , .		33
11	Dictionary Learning for Adaptive GPR Landmine Classification. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 10036-10055.	6.3	31
12	Using the new dual-polarimetric capability of WSR-88D to eliminate anomalous propagation and wind turbine effects in radar-rainfall. Atmospheric Research, 2015, 153, 296-309.	4.1	29
13	Compressed sensing applied to weather radar. , 2014, , .		26
14	Deployment and Performance Analyses of High-Resolution Iowa XPOL Radar System during the NASA IFloodS Campaign. Journal of Hydrometeorology, 2016, 17, 455-479.	1.9	26
15	TenDSuR: Tensor-Based 4D Sub-Nyquist Radar. IEEE Signal Processing Letters, 2019, 26, 237-241.	3.6	25
16	Initial Results of a New Composite-Weighted Algorithm for Dual-Polarized X-Band Rainfall Estimation. Journal of Hydrometeorology, 2017, 18, 1081-1100.	1.9	24
17	Performance of time delay estimation in a cognitive radar. , 2017, , .		24
18	Spectrum Sharing Solution for Automotive Radar. , 2017, , .		24

#	ARTICLE	IF	CITATIONS
19	A Cognitive Sub-Nyquist MIMO Radar Prototype. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 937-955.	4.7	23
20	Multiple IRS-Assisted Wideband Dual-Function Radar-Communication. , 2022, , .		23
21	RF Metasurface Array Design Using Deep Convolutional Generative Adversarial Networks. , 2019, , .		22
22	Localization With One-Bit Passive Radars in Narrowband Internet-of-Things Using Multivariate Polynomial Optimization. IEEE Transactions on Signal Processing, 2021, 69, 2525-2540.	5.3	22
23	Sub-Nyquist channel estimation over IEEE 802.11ad link. , 2017, , .		21
24	Cognitive sub-Nyquist hardware prototype of a collocated MIMO radar. , 2016, , .		20
25	Discrete-Phase Sequence Design for Coexistence of MIMO Radar and MIMO Communications. , 2019, , .		20
26	Noncontact Vital Sign Detection With UAV-Borne Radars: An Overview of Recent Advances. IEEE Vehicular Technology Magazine, 2021, 16, 118-128.	3.4	18
27	Resource Allocation in Heterogeneously-Distributed Joint Radar-Communications Under Asynchronous Bayesian Tracking Framework. IEEE Journal on Selected Areas in Communications, 2022, 40, 2026-2042.	14.0	18
28	High spatial resolution radar using thinned arrays. , 2017, , .		17
29	Multi-Discriminator Distributed Generative Model for Multi-Layer RF Metasurface Discovery. , 2019, , .		17
30	Sparse Array Selection Across Arbitrary Sensor Geometries With Deep Transfer Learning. IEEE Transactions on Cognitive Communications and Networking, 2021, 7, 255-264.	7.9	17
31	Block Iterative Reweighted Algorithms for Super-Resolution of Spectrally Sparse Signals. IEEE Signal Processing Letters, 2015, 22, 2319-2313.	3.6	15
32	Robust Communications-Centric Coexistence for Turbo-Coded OFDM with Non-Traditional Radar Interference Models. , 2019, , .		15
33	A Family of Deep Learning Architectures for Channel Estimation and Hybrid Beamforming in Multi-Carrier mm-Wave Massive MIMO. IEEE Transactions on Cognitive Communications and Networking, 2022, 8, 642-656.	7.9	15
34	Target Estimation by Exploiting Low Rank Structure in Widely Separated MIMO Radar. , 2019, , .		14
35	Deep Learning Design for Joint Antenna Selection and Hybrid Beamforming in Massive MIMO. , 2019, , .		14
36	Joint Multi-Layer GAN-Based Design of Tensorial RF Metasurfaces. , 2019, , .		14

#	ARTICLE	IF	CITATIONS
37	Optm3sec: Optimizing Multicast Irs-Aided Multiantenna Dfrc Secrecy Channel With Multiple Eavesdroppers. , 2022, , .		13
38	Joint Transmit and Reflective Beamformer Design for Secure Estimation in IRS-Aided WSNs. IEEE Signal Processing Letters, 2022, 29, 692-696.	3.6	12
39	Cognitive Interference Mitigation in Automotive Radars. , 2019, , .		11
40	Meeting the Lower Bound on Designing Set of Unimodular Sequences with Small Aperiodic/Periodic ISL. , 2019, , .		11
41	Micro-Doppler and Micro-Range Detection via Doppler-resilient 802.11ad-Based Vehicle-to-Pedestrian Radar. , 2019, , .		10
42	Multi-constraint Spectral Co-design for Colocated MIMO Radar and MIMO Communications. , 2020, , .		10
43	Toward Metacognitive Radars: Concept and Applications. , 2020, , .		10
44	Off-the-grid spectral compressed sensing with prior information. , 2014, , .		9
45	Hybrid Federated and Centralized Learning. , 2021, , .		9
46	Reconfigurable Metasurfaces for Radar and Communications Systems. , 2019, , .		8
47	Optimum Design for Sparse FDA-MIMO Automotive Radar. , 2019, , .		8
48	Multiple Moving Targets Heartbeat Estimation and Recovery using Multi-Frequency Radars. , 2021, , .		8
49	Evaluation of Orthogonal Chirp Division Multiplexing for Automotive Integrated Sensing and Communications. , 2022, , .		8
50	Information Theoretic Approach for Waveform Design in Coexisting MIMO Radar and MIMO Communications. , 2020, , .		7
51	Deep Rainrate Estimation from Highly Attenuated Downlink Signals of Ground-Based Communications Satellite Terminals. , 2020, , .		7
52	Robust Hybrid Beamforming With Quantized Deep Neural Networks. , 2019, , .		6
53	Online dictionary learning aided target recognition in cognitive GPR. , 2017, , .		5
54	Information Geometric Approach to Bayesian Lower Error Bounds. , 2018, , .		5

#	ARTICLE	IF	CITATIONS
55	Retrieval of lower-order moments of the drop size distribution using CSU-CHILL X-band polarimetric radar: a case study. Atmospheric Measurement Techniques, 2020, 13, 4727-4750.	3.1	5
56	Generalized Polarization-Space Modulation in Reconfigurable Intelligent Surfaces. , 2020, , .		5
57	Joint Radar-Communications Processing from A Dual-Blind Deconvolution Perspective. , 2022, , .		5
58	Radar Beampattern Design for a Drone Swarm. , 2019, , .		4
59	Localization Performance of 1-Bit Passive Radars in NB-IOT Applications. , 2019, , .		4
60	Power Allocation Games for Overlaid Radar and Communications. , 2019, , .		4
61	Retrieval of Polarizability Matrix for Metamaterials. , 2019, , .		3
62	Performance Bounds for Displaced Sensor Automotive Radar Imaging. , 2020, , .		3
63	Interference Mitigation Methods for Coexistence of Radar and Communication. , 2021, , .		3
64	Enhanced Automotive Target Detection through Radar and Communications Sensor Fusion. , 2021, , .		3
65	WaveMax: FrFT-Based Convex Phase Retrieval for Radar Waveform Design. , 2021, , .		3
66	Stochastic-Geometry-Based Interference Modeling in Automotive Radars Using MatÃ©rn Hard-Core Process. , 2020, , .		3
67	Non-Convex Recovery from Phaseless Low-Resolution Blind Deconvolution Measurements using Noisy Masked Patterns. , 2021, , .		3
68	Xampling-enabled coexistence in spectrally crowded environments. , 2017, , .		2
69	CNN-Based Cognitive Radar Array Selection. , 2019, , .		2
70	ReMCW: Reduced Bandwidth FMCW Radar for Autonomous Driving. , 2019, , .		2
71	Low-Complexity Limited-Feedback Deep Hybrid Beamforming for Broadband Massive MIMO. , 2020, , .		2
72	Performance Analysis of Spatial and Frequency Domain Index-Modulated Reconfigurable Intelligent Metasurfaces. , 2021, , .		2

#	ARTICLE	IF	CITATIONS
73	Difference Co-Chirps-Based Non-Uniform PRF Automotive FMCW Radar. , 2021, , .		2
74	Range-Doppler Decoupling and Interference Mitigation using Cognitive Random Sparse Stepped Frequency Radar. , 2020, , .		2
75	Federated Dropout Learning for Hybrid Beamforming with Spatial Path Index Modulation in Multi-User Mmwave-Mimo Systems. , 2021, , .		1
76	Underwater Deployment and Performance of Curved Spiral Antennas in Mussel Backpacks. , 2019, , .		0
77	Image Enhancement with Blind Deconvolution in Millimeter-Wave 3-D FLoSAR. , 2020, , .		0
78	STAP in Automotive MIMO Radar with Transmitter Scheduling. , 2020, , .		0