

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 | 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 |
| 2 | Joint Transmit and Reflective Beamformer Design for Secure Estimation in IRS-Aided WSNs. IEEE Signal Processing Letters, 2022, 29, 692-696. | 3.6 | 12 |
| 3 | 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 |
| 4 | Multiple IRS-Assisted Wideband Dual-Function Radar-Communication. , 2022, , . | | 23 |
| 5 | Joint Radar-Communications Processing from A Dual-Blind Deconvolution Perspective. , 2022, , . | | 5 |
| 6 | Optm3sec: Optimizing Multicast Irs-Aided Multiantenna Dfrc Secrecy Channel With Multiple Eavesdroppers. , 2022, , . | | 13 |
| 7 | Evaluation of Orthogonal Chirp Division Multiplexing for Automotive Integrated Sensing and Communications. , 2022, , . | | 8 |
| 8 | 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 |
| 9 | 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 |
| 10 | Interference Mitigation Methods for Coexistence of Radar and Communication. , 2021, , . | | 3 |
| 11 | Multiple Moving Targets Heartbeat Estimation and Recovery using Multi-Frequency Radars. , 2021, , . | | 8 |
| 12 | Performance Analysis of Spatial and Frequency Domain Index-Modulated Reconfigurable Intelligent Metasurfaces. , 2021, , . | | 2 |
| 13 | Federated Dropout Learning for Hybrid Beamforming with Spatial Path Index Modulation in Multi-User Mmwave-Mimo Systems. , 2021, , . | | 1 |
| 14 | Enhanced Automotive Target Detection through Radar and Communications Sensor Fusion. , 2021, , . | | 3 |
| 15 | WaveMax: FrFT-Based Convex Phase Retrieval for Radar Waveform Design. , 2021, , . | | 3 |
| 16 | Noncontact Vital Sign Detection With UAV-Borne Radars: An Overview of Recent Advances. IEEE Vehicular Technology Magazine, 2021, 16, 118-128. | 3.4 | 18 |
| 17 | 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 |
| 18 | Difference Co-Chirps-Based Non-Uniform PRF Automotive FMCW Radar. , 2021, , . | | 2 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Hybrid Federated and Centralized Learning. , 2021, , . | | 9 |
| 20 | Non-Convex Recovery from Phaseless Low-Resolution Blind Deconvolution Measurements using Noisy Masked Patterns. , 2021, , . | | 3 |
| 21 | A Cognitive Sub-Nyquist MIMO Radar Prototype. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 937-955. | 4.7 | 23 |
| 22 | 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 |
| 23 | Low-Complexity Limited-Feedback Deep Hybrid Beamforming for Broadband Massive MIMO. , 2020, , . | | 2 |
| 24 | 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 |
| 25 | Multi-constraint Spectral Co-design for Colocated MIMO Radar and MIMO Communications. , 2020, , . | | 10 |
| 26 | 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 |
| 27 | Image Enhancement with Blind Deconvolution in Millimeter-Wave 3-D FLoSAR. , 2020, , . | | 0 |
| 28 | Toward Metacognitive Radars: Concept and Applications. , 2020, , . | | 10 |
| 29 | Information Theoretic Approach for Waveform Design in Coexisting MIMO Radar and MIMO Communications. , 2020, , . | | 7 |
| 30 | Deep Rainrate Estimation from Highly Attenuated Downlink Signals of Ground-Based Communications Satellite Terminals. , 2020, , . | | 7 |
| 31 | Performance Bounds for Displaced Sensor Automotive Radar Imaging. , 2020, , . | | 3 |
| 32 | 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 |
| 33 | STAP in Automotive MIMO Radar with Transmitter Scheduling. , 2020, , . | | 0 |
| 34 | Range-Doppler Decoupling and Interference Mitigation using Cognitive Random Sparse Stepped Frequency Radar. , 2020, , . | | 2 |
| 35 | Stochastic-Geometry-Based Interference Modeling in Automotive Radars Using MatÅ©rn Hard-Core Process. , 2020, , . | | 3 |
| 36 | Generalized Polarization-Space Modulation in Reconfigurable Intelligent Surfaces. , 2020, , . | | 5 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Micro-Doppler and Micro-Range Detection via Doppler-resilient 802.11ad-Based Vehicle-to-Pedestrian Radar. , 2019, , . | | 10 |
| 38 | Robust Communications-Centric Coexistence for Turbo-Coded OFDM with Non-Traditional Radar Interference Models. , 2019, , . | | 15 |
| 39 | CNN-Based Cognitive Radar Array Selection. , 2019, , . | | 2 |
| 40 | Cognitive Interference Mitigation in Automotive Radars. , 2019, , . | | 11 |
| 41 | Target Estimation by Exploiting Low Rank Structure in Widely Separated MIMO Radar. , 2019, , . | | 14 |
| 42 | Deep Learning Design for Joint Antenna Selection and Hybrid Beamforming in Massive MIMO. , 2019, , . | | 14 |
| 43 | Dictionary Learning for Adaptive GPR Landmine Classification. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 10036-10055. | 6.3 | 31 |
| 44 | Reconfigurable Metasurfaces for Radar and Communications Systems. , 2019, , . | | 8 |
| 45 | Toward Millimeter-Wave Joint Radar Communications: A Signal Processing Perspective. IEEE Signal Processing Magazine, 2019, 36, 100-114. | 5.6 | 283 |
| 46 | Discrete-Phase Sequence Design for Coexistence of MIMO Radar and MIMO Communications. , 2019, , . | | 20 |
| 47 | Cognitive radar antenna selection via deep learning. IET Radar, Sonar and Navigation, 2019, 13, 871-880. | 1.8 | 70 |
| 48 | A mmWave Automotive Joint Radar-Communications System. IEEE Transactions on Aerospace and Electronic Systems, 2019, 55, 1241-1260. | 4.7 | 197 |
| 49 | Retrieval of Polarizability Matrix for Metamaterials. , 2019, , . | | 3 |
| 50 | Meeting the Lower Bound on Designing Set of Unimodular Sequences with Small Aperiodic/Periodic ISL. , 2019, , . | | 11 |
| 51 | Optimum Design for Sparse FDA-MIMO Automotive Radar. , 2019, , . | | 8 |
| 52 | RF Metasurface Array Design Using Deep Convolutional Generative Adversarial Networks. , 2019, , . | | 22 |
| 53 | Radar Beampattern Design for a Drone Swarm. , 2019, , . | | 4 |
| 54 | ReMCW: Reduced Bandwidth FMCW Radar for Autonomous Driving. , 2019, , . | | 2 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | Multi-Discriminator Distributed Generative Model for Multi-Layer RF Metasurface Discovery. , 2019, , . | | 17 |
| 56 | Underwater Deployment and Performance of Curved Spiral Antennas in Mussel Backpacks. , 2019, , . | | 0 |
| 57 | Localization Performance of 1-Bit Passive Radars in NB-IOT Applications. , 2019, , . | | 4 |
| 58 | Beam Alignment and Tracking for Autonomous Vehicular Communication using IEEE 802.11ad-based Radar. , 2019, , . | | 33 |
| 59 | Power Allocation Games for Overlaid Radar and Communications. , 2019, , . | | 4 |
| 60 | Joint Multi-Layer GAN-Based Design of Tensorial RF Metasurfaces. , 2019, , . | | 14 |
| 61 | Robust Hybrid Beamforming With Quantized Deep Neural Networks. , 2019, , . | | 6 |
| 62 | TenDSuR: Tensor-Based 4D Sub-Nyquist Radar. IEEE Signal Processing Letters, 2019, 26, 237-241. | 3.6 | 25 |
| 63 | Spectrum Sharing Radar: Coexistence via Xampling. IEEE Transactions on Aerospace and Electronic Systems, 2018, 54, 1279-1296. | 4.7 | 75 |
| 64 | Information Geometric Approach to Bayesian Lower Error Bounds. , 2018, , . | | 5 |
| 65 | 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 |
| 66 | High spatial resolution radar using thinned arrays. , 2017, , . | | 17 |
| 67 | Performance of time delay estimation in a cognitive radar. , 2017, , . | | 24 |
| 68 | Xampling-enabled coexistence in spectrally crowded environments. , 2017, , . | | 2 |
| 69 | Spectrum Sharing Solution for Automotive Radar. , 2017, , . | | 24 |
| 70 | Sub-Nyquist channel estimation over IEEE 802.11ad link. , 2017, , . | | 21 |
| 71 | Online dictionary learning aided target recognition in cognitive GPR. , 2017, , . | | 5 |
| 72 | 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 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | Cognitive sub-Nyquist hardware prototype of a collocated MIMO radar. , 2016, , . | | 20 |
| 74 | Block Iterative Reweighted Algorithms for Super-Resolution of Spectrally Sparse Signals. IEEE Signal Processing Letters, 2015, 22, 2319-2313. | 3.6 | 15 |
| 75 | Spectral Super-Resolution With Prior Knowledge. IEEE Transactions on Signal Processing, 2015, 63, 5342-5357. | 5.3 | 58 |
| 76 | 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 |
| 77 | Compressed sensing applied to weather radar. , 2014, , . | | 26 |
| 78 | Off-the-grid spectral compressed sensing with prior information. , 2014, , . | | 9 |