

# Power of Deep Learning for Channel Estimation and Sig

IEEE Wireless Communications Letters

7, 114-117

DOI: [10.1109/lwc.2017.2757490](https://doi.org/10.1109/lwc.2017.2757490)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Deep Learning-Based Channel Estimation for Beamspace mmWave Massive MIMO Systems. IEEE Wireless Communications Letters, 2018, 7, 852-855.	3.2	474
2	An Enhanced SCMA Detector Enabled by Deep Neural Network. , 2018, , .		17
3	Deep Learning for Interference Cancellation in Non-Orthogonal Signal Based Optical Communication Systems. , 2018, , .		25
4	Reliable Low Resolution OFDM Receivers via Deep Learning. , 2018, , .		4
5	Machine Learning Prediction Based CSI Acquisition for FDD Massive MIMO Downlink. , 2018, , .		36
6	Autoencoder-Based Optical Wireless Communications Systems. , 2018, , .		9
7	Indoor Smartphone Localization Based on LOS and NLOS Identification. Sensors, 2018, 18, 3987.	2.1	25
8	Deep-Learning-Based Signal Detection for Banded Linear Systems. , 2018, , .		3
9	A Model-Driven Deep Learning Network for MIMO Detection. , 2018, , .		179
10	Channel Agnostic End-to-End Learning Based Communication Systems with Conditional GAN. , 2018, , .		155
11	Neural Network-based Symbol Detection in High-speed OFDM Underwater Acoustic Communication. , 2018, , .		7
12	Detection and Channel Equalization with Deep Learning for Low Resolution MIMO Systems. , 2018, , .		20
13	Traffic Prediction in Telecom Systems Using Deep Learning. , 2018, , .		7
14	ComNet: Combination of Deep Learning and Expert Knowledge in OFDM Receivers. IEEE Communications Letters, 2018, 22, 2627-2630.	2.5	177
15	Physical Layer Authentication Enhancement Using a Gaussian Mixture Model. IEEE Access, 2018, 6, 53583-53592.	2.6	32
16	A Novel Pilot-Aided Channel Estimation Scheme Based on RNN for FDD-LTE systems. , 2018, , .		8
17	A ResNet-DNN based Channel Estimation and Equalization Scheme in FBMC/OQAM Systems. , 2018, , .		7
18	Exploiting Future Radio Resources With End-to-End Prediction by Deep Learning. IEEE Access, 2018, 6, 75729-75747.	2.6	14

#	ARTICLE	IF	CITATIONS
19	Distributed Deep Learning-based Offloading for Mobile Edge Computing Networks. Mobile Networks and Applications, 2022, 27, 1123-1130.	2.2	94
20	Deep Learning Based Reliable and Intelligent Chaotic OFDM Communications for Cognitive Radio System. , 2018, , .		1
21	Learning Assisted Estimation for Time-Varying Channels. , 2018, , .		30
22	Pilotless Channel Estimation Scheme using Clustering-based Unsupervised Learning. , 2018, , .		4
23	Backpropagating Through the Air: Deep Learning at Physical Layer Without Channel Models. IEEE Communications Letters, 2018, 22, 2278-2281.	2.5	84
24	OFDM-Autoencoder for End-to-End Learning of Communications Systems. , 2018, , .		172
25	Resource Allocation for Multi-Channel Underlay Cognitive Radio Network Based on Deep Neural Network. IEEE Communications Letters, 2018, 22, 1942-1945.	2.5	101
26	Partially Blind Joint Channel Estimation and Symbol Detection in Amplify-and-Forward Two-Way Relay Systems. IEEE Transactions on Communications, 2018, 66, 5966-5975.	4.9	1
27	Deep Learning for an Effective Nonorthogonal Multiple Access Scheme. IEEE Transactions on Vehicular Technology, 2018, 67, 8440-8450.	3.9	422
28	Transmit Power Control Using Deep Neural Network for Underlay Device-to-Device Communication. IEEE Wireless Communications Letters, 2019, 8, 141-144.	3.2	63
29	Deep Learning-Based Sphere Decoding. IEEE Transactions on Wireless Communications, 2019, 18, 4368-4378.	6.1	47
30	Channel Estimation and Equalization Based on Deep BLSTM for FBMC-OQAM Systems. , 2019, , .		5
31	Deep Learning-Based Downlink Channel Prediction for FDD Massive MIMO System. IEEE Communications Letters, 2019, 23, 1994-1998.	2.5	122
32	Molecular Communications: Model-Based and Data-Driven Receiver Design and Optimization. IEEE Access, 2019, 7, 53555-53565.	2.6	16
33	An Adaptive and Parameter-Free Recurrent Neural Structure for Wireless Channel Prediction. IEEE Transactions on Communications, 2019, 67, 8086-8096.	4.9	33
34	Secrecy Analysis and Learning-Based Optimization of Cooperative NOMA SWIPT Systems. , 2019, , .		20
35	A Novel Millimeter Wave Channel Estimation Algorithm Based on IC-ELM. , 2019, , .		4
36	A Real-Time Channel Prediction Model Based on Neural Networks for Dedicated Short-Range Communications. Sensors, 2019, 19, 3541.	2.1	17

#	ARTICLE	IF	CITATIONS
37	Deep Joint Source-Channel Coding for Wireless Image Transmission. IEEE Transactions on Cognitive Communications and Networking, 2019, 5, 567-579.	4.9	282
38	Sparse massive MIMO-OFDM channel estimation based on compressed sensing over frequency offset environment. Eurasip Journal on Advances in Signal Processing, 2019, 2019, .	1.0	5
39	A CNN-Based End-to-End Learning Framework Toward Intelligent Communication Systems. IEEE Access, 2019, 7, 110197-110204.	2.6	55
40	RoemNet: Robust Meta Learning Based Channel Estimation in OFDM Systems. , 2019, , .		32
41	A Deep Learning Based Channel Estimation Scheme for IEEE 802.11p Systems. , 2019, , .		24
42	Deep Learning for CSI Feedback Based on Superimposed Coding. IEEE Access, 2019, 7, 93723-93733.	2.6	39
43	Deep CNN-Based Channel Estimation for mmWave Massive MIMO Systems. IEEE Journal on Selected Topics in Signal Processing, 2019, 13, 989-1000.	7.3	215
44	Wireless Networks Design in the Era of Deep Learning: Model-Based, AI-Based, or Both?. IEEE Transactions on Communications, 2019, 67, 7331-7376.	4.9	383
45	CNN-Based Signal Detection for Banded Linear Systems. IEEE Transactions on Wireless Communications, 2019, 18, 4394-4407.	6.1	21
46	ChanEstNet: A Deep Learning Based Channel Estimation for High-Speed Scenarios. , 2019, , .		50
47	Power Allocation in Multi-User Cellular Networks with Deep Q Learning Approach. , 2019, , .		62
48	Machine Learning Inspired Codeword Selection For Dual Connectivity in 5G User-Centric Ultra-Dense Networks. IEEE Transactions on Vehicular Technology, 2019, 68, 8284-8288.	3.9	14
49	Hartley-Domain DD-FTN Algorithm for ACO-SCFDM in Optical-Wireless Communications. IEEE Photonics Journal, 2019, 11, 1-9.	1.0	1
50	A Novel Neural Network-Based Method for Decoding and Detecting of the DS8-PSK Scheme in an OCC System. Applied Sciences (Switzerland), 2019, 9, 2242.	1.3	12
51	Nemesyst: A hybrid parallelism deep learning-based framework applied for internet of things enabled food retailing refrigeration systems. Computers in Industry, 2019, 113, 103133.	5.7	18
52	Fast and Efficient Cross Band Channel Prediction Using Machine Learning. , 2019, , .		13
53	Minimum Euclidean distance evaluation using deep neural networks. AEU - International Journal of Electronics and Communications, 2019, 112, 152964.	1.7	2
54	DNN assisted Sphere Decoder. , 2019, , .		16

#	ARTICLE	IF	CITATIONS
55	Visualisation of Pareto Front Approximation: A Short Survey and Empirical Comparisons. , 2019, , .		10
56	Coarse Frequency Offset Estimation in MIMO Systems Using Neural Networks: A Solution With Higher Compatibility. IEEE Access, 2019, 7, 121565-121573.	2.6	8
57	Artificial Intelligence-Based Resource Allocation in Ultradense Networks: Applying Event-Triggered Q-Learning Algorithms. IEEE Vehicular Technology Magazine, 2019, 14, 56-63.	2.8	27
58	Decision Directed Channel Estimation Based on Deep Neural Network $\beta$ -Step Predictor for MIMO Communications in 5G. IEEE Journal on Selected Areas in Communications, 2019, 37, 2443-2456.	9.7	45
59	A new channel estimation method based on GPR and wavelet denosing. , 2019, , .		2
60	Accurate and instant frequency estimation from noisy sinusoidal waves by deep learning. Nano Convergence, 2019, 6, 27.	6.3	15
61	Neural Network-Based Dynamic Threshold Detection for Non-Volatile Memories. , 2019, , .		11
62	An Artificial Intelligence-based Error Correction for Optical Camera Communication. , 2019, , .		6
63	Deep MIMO Detection Scheme for High-Speed Railways with Wireless Big Data. , 2019, , .		1
64	Unsupervised Machine Intelligence for Automation of Multi-Dimensional Modulation. IEEE Communications Letters, 2019, 23, 1783-1786.	2.5	2
65	Channel Estimation and Pilot Design for Uplink Sparse Code Multiple Access System based on Complex-Valued Sparse Autoencoder. IEEE Access, 2019, , 1-1.	2.6	11
66	Experience-Centric Mobile Video Scheduling Through Machine Learning. IEEE Access, 2019, 7, 113017-113030.	2.6	4
67	Symbol Detection and Channel Estimation using Neural Networks in Optical Communication Systems. , 2019, , .		2
68	UL-CSI Data Driven Deep Learning for Predicting DL-CSI in Cellular FDD Systems. IEEE Access, 2019, 7, 96105-96112.	2.6	75
69	Data-Driven Beam Selection for mmWave Communications with Machine and Deep Learning: An Angle of Arrival-Based Approach. , 2019, , .		4
70	Deep Learning Based Channel Estimation for Massive MIMO With Mixed-Resolution ADCs. IEEE Communications Letters, 2019, 23, 1989-1993.	2.5	65
71	Deep Learning-Based Joint Symbol Detection for NOMA. , 2019, , .		6
72	Enabling Multi-Functional 5G and Beyond User Equipment: A Survey and Tutorial. IEEE Access, 2019, 7, 116975-117008.	2.6	82

#	ARTICLE	IF	CITATIONS
73	The Communication Relationship Discovery Based on the Spectrum Monitoring Data by Improved DBSCAN. IEEE Access, 2019, 7, 121793-121804.	2.6	15
74	Circular Convolutional Auto-Encoder for Channel Coding. , 2019, , .		20
75	The Extended SLM Combined Autoencoder of the PAPR Reduction Scheme in DCO-OFDM Systems. Applied Sciences (Switzerland), 2019, 9, 852.	1.3	14
76	Channel Estimation for WiFi Prototype Systems with Super-Resolution Image Recovery. , 2019, , .		8
77	Towards Hardware Implementation of Neural Network-based Communication Algorithms. , 2019, , .		8
78	A Novel Noise Suppression Channel Estimation Method Based on Adaptive Weighted Averaging for OFDM Systems. Symmetry, 2019, 11, 997.	1.1	13
79	Machine Learning in the Air. IEEE Journal on Selected Areas in Communications, 2019, 37, 2184-2199.	9.7	152
80	Oil-in-Water Two-Phase Flow Pattern Identification From Experimental Snapshots Using Convolutional Neural Network. IEEE Access, 2019, 7, 6219-6225.	2.6	36
81	Deep neural network-aided Gaussian message passing detection for ultra-reliable low-latency communications. Future Generation Computer Systems, 2019, 95, 629-638.	4.9	11
82	Harnessing machine learning for fiber-induced nonlinearity mitigation in long-haul coherent optical OFDM. Future Internet, 2019, 11, 2.	2.4	35
83	Learning and Data-Driven Beam Selection for mmWave Communications: An Angle of Arrival-Based Approach. IEEE Access, 2019, 7, 20404-20415.	2.6	45
84	A Model-Driven Deep Learning Method for LED Nonlinearity Mitigation in OFDM-Based Optical Communications. IEEE Access, 2019, 7, 71436-71446.	2.6	24
85	Machine Learning Tips and Tricks for Power Line Communications. IEEE Access, 2019, 7, 82434-82452.	2.6	24
86	Deep-Learning-Based Physical Layer Authentication for Industrial Wireless Sensor Networks. Sensors, 2019, 19, 2440.	2.1	60
87	A Deep Learning Approach for MIMO-NOMA Downlink Signal Detection. Sensors, 2019, 19, 2526.	2.1	79
88	Machine Learning-Based Field Data Analysis and Modeling for Drone Communications. IEEE Access, 2019, 7, 79127-79135.	2.6	26
89	Online Extreme Learning Machine-Based Channel Estimation and Equalization for OFDM Systems. IEEE Communications Letters, 2019, 23, 1276-1279.	2.5	74
90	Toward the Realization of Encoder and Decoder Using Deep Neural Networks. IEEE Communications Magazine, 2019, 57, 57-63.	4.9	8

#	ARTICLE	IF	CITATIONS
91	Model-Driven Deep Learning for Physical Layer Communications. IEEE Wireless Communications, 2019, 26, 77-83.	6.6	271
92	Machine learning for wireless communications in the Internet of Things: A comprehensive survey. Ad Hoc Networks, 2019, 93, 101913.	3.4	165
93	Artificial Intelligence-Aided Receiver for a CP-Free OFDM System: Design, Simulation, and Experimental Test. IEEE Access, 2019, 7, 58901-58914.	2.6	34
94	Deep Joint Source-channel Coding for Wireless Image Transmission. , 2019, , .		22
95	Modulation Classification of Underwater Communication with Deep Learning Network. Computational Intelligence and Neuroscience, 2019, 2019, 1-12.	1.1	22
96	Applications of Deep Reinforcement Learning in Communications and Networking: A Survey. IEEE Communications Surveys and Tutorials, 2019, 21, 3133-3174.	24.8	1,071
97	CNN-Based Precoder and Combiner Design in mmWave MIMO Systems. IEEE Communications Letters, 2019, 23, 1240-1243.	2.5	101
98	CNN and RNN-based Deep Learning Methods for Digital Signal Demodulation. , 2019, , .		19
99	A Learning Approach to Wireless Information and Power Transfer Signal and System Design. , 2019, , .		16
100	Deep Learning Based on Orthogonal Approximate Message Passing for CP-Free OFDM. , 2019, , .		19
101	Deep CNN for Wideband Mmwave Massive MIMO Channel Estimation Using Frequency Correlation. , 2019, , .		32
102	Deep Learning-Based Detector for OFDM-IM. IEEE Wireless Communications Letters, 2019, 8, 1159-1162.	3.2	79
103	Deep Learning Based Single Carrier Communications Over Time-Varying Underwater Acoustic Channel. IEEE Access, 2019, 7, 38420-38430.	2.6	39
104	Deep learning based underwater acoustic OFDM communications. Applied Acoustics, 2019, 154, 53-58.	1.7	60
105	Machine Learning for Wireless Communication Channel Modeling: An Overview. Wireless Personal Communications, 2019, 106, 41-70.	1.8	66
106	One-Bit OFDM Receivers via Deep Learning. IEEE Transactions on Communications, 2019, 67, 4326-4336.	4.9	79
107	Sensing Coverage-Based Cooperative Spectrum Detection in Cognitive Radio Networks. IEEE Sensors Journal, 2019, 19, 5325-5332.	2.4	38
108	Deep Reinforcement Learning Based Resource Allocation for V2V Communications. IEEE Transactions on Vehicular Technology, 2019, 68, 3163-3173.	3.9	486

#	ARTICLE	IF	CITATIONS
109	Deep Neural Networks for Channel Estimation in Underwater Acoustic OFDM Systems. IEEE Access, 2019, 7, 23579-23594.	2.6	79
110	Symbol Denoising in High Order M-QAM using Residual learning of Deep CNN. , 2019, , .		5
111	Deep Learning-Based Channel Estimation and Equalization Scheme for FBMC/OQAM Systems. IEEE Wireless Communications Letters, 2019, 8, 881-884.	3.2	42
112	Deep Learning in Physical Layer Communications. IEEE Wireless Communications, 2019, 26, 93-99.	6.6	399
113	Deep Learning in Mobile and Wireless Networking: A Survey. IEEE Communications Surveys and Tutorials, 2019, 21, 2224-2287.	24.8	1,010
114	Deep Learning in Downlink Coordinated Multipoint in New Radio Heterogeneous Networks. IEEE Wireless Communications Letters, 2019, 8, 1040-1043.	3.2	18
115	Deep Learning-Based Channel Estimation for Doubly Selective Fading Channels. IEEE Access, 2019, 7, 36579-36589.	2.6	173
116	Quantum Machine Learning for 6G Communication Networks: State-of-the-Art and Vision for the Future. IEEE Access, 2019, 7, 46317-46350.	2.6	351
117	Learning to Detect. IEEE Transactions on Signal Processing, 2019, 67, 2554-2564.	3.2	316
118	Deep Learning-Based Channel Prediction in Realistic Vehicular Communications. IEEE Access, 2019, 7, 27846-27858.	2.6	54
119	Deep Learning-Based Channel Estimation. IEEE Communications Letters, 2019, 23, 652-655.	2.5	348
120	A Deep Learning Based Transmission Algorithm for Mobile Device-to-Device Networks. Electronics (Switzerland), 2019, 8, 1361.	1.8	7
121	Channel Estimation in C-V2X using Deep Learning. , 2019, , .		7
122	Signal Detection in Uplink Pilot-Assisted Multi-User MIMO Systems with Deep Learning. , 2019, , .		10
123	Long-Short term Memory based Channel Prediction for SISO System. , 2019, , .		9
124	Deep Learning Based Preamble Detection and TOA Estimation. , 2019, , .		7
125	Neural Network-based Equalizer by Utilizing Coding Gain in Advance. , 2019, , .		7
126	Deep Kernel Learning-Based Channel Estimation in Ultra-Massive MIMO Communications at 0.06-10 THz. , 2019, , .		14



#	ARTICLE	IF	CITATIONS
127	Real-Time and Embedded Deep Learning on FPGA for RF Signal Classification. , 2019, , .		28
128	Machine Learning-based RSSI Prediction in Factory Environments. , 2019, , .		7
129	A Machine Learning Approach for SNR Prediction in 5G Systems. , 2019, , .		16
130	Deep Learning Aided Signal Detection in OFDM Systems with Time-Varying Channels. , 2019, , .		8
131	Counting Lattice Points in the Sphere using Deep Neural Networks. , 2019, , .		2
132	Deep Learning for RF Signal Classification in Unknown and Dynamic Spectrum Environments. , 2019, , .		61
133	Supervised Learning-Based Semi-Blind Detection for Generalized Space Shift Keying MIMO Systems. , 2019, , .		1
134	Modulation Pattern Recognition Based on Resnet50 Neural Network. , 2019, , .		35
135	Blind symbol packing ratio estimation for faster-than-Nyquist signalling based on deep learning. Electronics Letters, 2019, 55, 1155-1157.	0.5	5
136	Deep neural network-based underwater OFDM receiver. IET Communications, 2019, 13, 1998-2002.	1.5	31
137	A CNN Approach of Activity Recognition via Channel State Information (CSI). , 2019, , .		1
138	Learning-Driven Wireless Communications, towards 6G. , 2019, , .		39
139	An SNR Estimation Technique Based on Deep Learning. Electronics (Switzerland), 2019, 8, 1139.	1.8	12
140	Application Research of Artificial Intelligence in the Fifth Generation Mobile Communication Technology. , 2019, , .		0
141	Deep Learning Water-Filling for Single-User MIMO and MIMO-MAC Transmission. , 2019, , .		1
142	Performance of Deep Learning LDPC Coded Communications in Large Scale MIMO Channels. , 2019, , .		3
143	Noncoherent MIMO Codes Construction Using Autoencoders. , 2019, , .		2
144	Beamforming of simultaneous wireless Energy and Information Transmission System Based on Reinforcement Learning. , 2019, , .		0

#	ARTICLE	IF	CITATIONS
145	Direct Equalization with Convolutional Neural Networks in OFDM based VLC Systems. , 2019, , .		10
146	Joint Estimation and Detection for MIMO-STBC System Based on Deep Neural Network. , 2019, , .		1
147	Signal Detection Scheme Based on Deep Learning in OFDM systems. , 2019, , .		0
148	Successive Refinement of Images with Deep Joint Source-Channel Coding. , 2019, , .		31
149	Intelligent Interference Prediction and Interference Avoidance in Drone Green Communications. , 2019, , .		0
150	Noise Suppression Chanel Estimation Method Using Deep Learning in IEEE 802.11p Standard. , 2019, , .		0
151	Towards Data-Driven Simulation of End-to-End Network Performance Indicators. , 2019, , .		4
152	Deep-Learning-Aided Cross-Layer Resource Allocation of OFDMA/NOMA Video Communication Systems. IEEE Access, 2019, 7, 157730-157740.	2.6	23
153	A Novel OFDM Equalizer for Large Doppler Shift Channel through Deep Learning. , 2019, , .		5
154	Learning the Wireless V2I Channels Using Deep Neural Networks. , 2019, , .		18
155	Improved ComNet Based on Expectation Propagation for CP-Free OFDM System. , 2019, , .		0
156	Deep learning based channel estimation in fog radio access networks. China Communications, 2019, 16, 16-28.	2.0	24
157	Design and Prototyping of Neural Network Compression for Non-Orthogonal IoT Signals. , 2019, , .		6
158	Power Control for Interference Management via Ensembling Deep Neural Networks. , 2019, , .		15
159	Deep Learning for Signal Detection in Non-Orthogonal Multiple Access Wireless Systems. , 2019, , .		31
160	Neural Networks for PAPR Reduction in Optical OFDM Signal Transmission. , 2019, , .		1
161	Deep Learning based Channel Code Recognition using TextCNN. , 2019, , .		13
162	Fiber Nonlinearity Equalizer using MLP-ANN for Coherent Optical OFDM. , 2019, , .		2

#	ARTICLE	IF	CITATIONS
163	Joint design of coalition formation and semi-blind channel estimation in fog radio access networks. China Communications, 2019, 16, 1-15.	2.0	19
164	Data-Driven Network Simulation for Performance Analysis of Anticipatory Vehicular Communication Systems. IEEE Access, 2019, 7, 172638-172653.	2.6	16
165	Robust Hybrid Beamforming With Quantized Deep Neural Networks. , 2019, , .		6
166	Artificial Intelligence-Based Security Authentication: Applications in Wireless Multimedia Networks. IEEE Access, 2019, 7, 172004-172011.	2.6	20
167	A Generative Adversarial Network Based Framework for Specific Emitter Characterization and Identification. , 2019, , .		17
168	An Overview on Application of Machine Learning Techniques in Optical Networks. IEEE Communications Surveys and Tutorials, 2019, 21, 1383-1408.	24.8	374
169	Design of PAM-DMT-Based Hybrid Optical OFDM for Visible Light Communications. IEEE Wireless Communications Letters, 2019, 8, 265-268.	3.2	28
170	Deep Learning for Launching and Mitigating Wireless Jamming Attacks. IEEE Transactions on Cognitive Communications and Networking, 2019, 5, 2-14.	4.9	137
171	Toward Intelligent Vehicular Networks: A Machine Learning Framework. IEEE Internet of Things Journal, 2019, 6, 124-135.	5.5	181
172	Deep Learning-Based CSI Feedback Approach for Time-Varying Massive MIMO Channels. IEEE Wireless Communications Letters, 2019, 8, 416-419.	3.2	227
173	Deep Learning Based Transmit Power Control in Underlaid Device-to-Device Communication. IEEE Systems Journal, 2019, 13, 2551-2554.	2.9	38
174	Beamforming Design for Large-Scale Antenna Arrays Using Deep Learning. IEEE Wireless Communications Letters, 2020, 9, 103-107.	3.2	132
175	Deep Reinforcement Learning for Online Computation Offloading in Wireless Powered Mobile-Edge Computing Networks. IEEE Transactions on Mobile Computing, 2020, 19, 2581-2593.	3.9	607
176	ST-DeLTA: A Novel Spatial-Temporal Value Network Aided Deep Learning Based Intelligent Network Traffic Control System. IEEE Transactions on Sustainable Computing, 2020, 5, 568-580.	2.2	20
177	Deep Learning for Physical-Layer 5G Wireless Techniques: Opportunities, Challenges and Solutions. IEEE Wireless Communications, 2020, 27, 214-222.	6.6	261
178	Hybrid Precoding for Multiuser Millimeter Wave Massive MIMO Systems: A Deep Learning Approach. IEEE Transactions on Vehicular Technology, 2020, 69, 552-563.	3.9	105
179	An efficient pilot-symbol-aided and decision-directed hybrid channel estimation technique in OFDM systems. Telecommunication Systems, 2020, 73, 531-544.	1.6	1
180	Deep Learning-Based Channel Estimation Algorithm Over Time Selective Fading Channels. IEEE Transactions on Cognitive Communications and Networking, 2020, 6, 125-134.	4.9	74

#	ARTICLE	IF	CITATIONS
181	Energy-Efficient Power Control in Wireless Networks With Spatial Deep Neural Networks. IEEE Transactions on Cognitive Communications and Networking, 2020, 6, 111-124.	4.9	21
182	Pilot-Assisted MIMO-V-OFDM Systems: Compressed Sensing and Deep Learning Approaches. IEEE Access, 2020, 8, 7142-7159.	2.6	11
183	Deep Residual Learning Meets OFDM Channel Estimation. IEEE Wireless Communications Letters, 2020, 9, 615-618.	3.2	66
184	Deep Learning Based Channel Estimation Algorithm for Fast Time-Varying MIMO-OFDM Systems. IEEE Communications Letters, 2020, 24, 572-576.	2.5	61
185	Joint Antenna Selection and Hybrid Beamformer Design Using Unquantized and Quantized Deep Learning Networks. IEEE Transactions on Wireless Communications, 2020, 19, 1677-1688.	6.1	100
186	20 Years of Evolution From Cognitive to Intelligent Communications. IEEE Transactions on Cognitive Communications and Networking, 2020, 6, 6-20.	4.9	73
187	Machine Learning for Resource Management in Cellular and IoT Networks: Potentials, Current Solutions, and Open Challenges. IEEE Communications Surveys and Tutorials, 2020, 22, 1251-1275.	24.8	191
188	A Deep Learning Framework for Optimization of MISO Downlink Beamforming. IEEE Transactions on Communications, 2020, 68, 1866-1880.	4.9	171
189	Massive MIMO Channel Estimation With an Untrained Deep Neural Network. IEEE Transactions on Wireless Communications, 2020, 19, 2079-2090.	6.1	103
190	Towards Optimal Power Control via Ensembling Deep Neural Networks. IEEE Transactions on Communications, 2020, 68, 1760-1776.	4.9	151
193	Robust BICM Design for the LDPC Coded DCO-OFDM: A Deep Learning Approach. IEEE Transactions on Communications, 2020, 68, 713-727.	4.9	14
194	Future Intelligent and Secure Vehicular Network Toward 6G: Machine-Learning Approaches. Proceedings of the IEEE, 2020, 108, 292-307.	16.4	404
195	Cybersecurity challenges in vehicular communications. Vehicular Communications, 2020, 23, 100214.	2.7	127
196	Survey on Unmanned Aerial Vehicle Networks: A Cyber Physical System Perspective. IEEE Communications Surveys and Tutorials, 2020, 22, 1027-1070.	24.8	119
197	Deep-Learning-Based Wireless Resource Allocation With Application to Vehicular Networks. Proceedings of the IEEE, 2020, 108, 341-356.	16.4	164
198	Hybrid Beamforming for 5G and Beyond Millimeter-Wave Systems: A Holistic View. IEEE Open Journal of the Communications Society, 2020, 1, 77-91.	4.4	84
199	Improving Massive MIMO Message Passing Detectors With Deep Neural Network. IEEE Transactions on Vehicular Technology, 2020, 69, 1267-1280.	3.9	36
200	Deep Learning-Based Autoencoder for m-User Wireless Interference Channel Physical Layer Design. IEEE Access, 2020, 8, 174679-174691.	2.6	25

#	ARTICLE	IF	CITATIONS
201	RecNet: Deep Learning-Based OFDM Receiver with Semi-Blind Channel Estimation. , 2020, , .		5
202	Low-Complexity Limited-Feedback Deep Hybrid Beamforming for Broadband Massive MIMO. , 2020, , .		2
203	Deep Transfer Learning-Based Downlink Channel Prediction for FDD Massive MIMO Systems. IEEE Transactions on Communications, 2020, 68, 7485-7497.	4.9	92
204	seq2vec: Analyzing sequential data using multi-rank embedding vectors. Electronic Commerce Research and Applications, 2020, 43, 101003.	2.5	10
205	A ResNet Based End-to-End Wireless Communication System under Rayleigh Fading and Bursty Noise Channels. , 2020, , .		2
206	Golay Layer: Limiting Peak-to-Average Power Ratio for OFDM-based Autoencoders. , 2020, , .		0
207	Towards artificial intelligence enabled 6G: State of the art, challenges, and opportunities. Computer Networks, 2020, 183, 107556.	3.2	76
208	Clipping Noise Estimation Based on Deep Complex Neural Network with Sparsity Constraint. , 2020, , .		0
209	6G and Beyond: The Future of Wireless Communications Systems. IEEE Access, 2020, 8, 133995-134030.	2.6	605
210	Outage-Capacity-Based Cross Layer Resource Management for Downlink NOMA-OFDMA Video Communications: Non-Deep Learning and Deep Learning Approaches. IEEE Access, 2020, 8, 140097-140107.	2.6	12
211	A Novel Signal Detection Scheme Based on Adaptive Ensemble Deep Learning Algorithm in SC-FDE Systems. IEEE Access, 2020, 8, 123514-123523.	2.6	11
212	Deep Learning Based Detection and Channel Tracking for MIMO Systems. , 2020, , .		2
213	Link quality prediction in wireless community networks using deep recurrent neural networks. AEJ - Alexandria Engineering Journal, 2020, 59, 3531-3543.	3.4	15
214	Framework on Deep Learning-Based Joint Hybrid Processing for mmWave Massive MIMO Systems. IEEE Access, 2020, 8, 106023-106035.	2.6	20
215	Noncoherent Energy-Modulated Massive SIMO in Multipath Channels: A Machine Learning Approach. IEEE Internet of Things Journal, 2020, 7, 8263-8270.	5.5	9
216	Explainable Artificial Intelligence for 6G: Improving Trust between Human and Machine. IEEE Communications Magazine, 2020, 58, 39-45.	4.9	131
217	Blind Channel Estimation for Massive MIMO: A Deep Learning Assisted Approach. , 2020, , .		7
218	Update-Based Machine Learning Classification of Hierarchical Symbols in a Slowly Varying Two-Way Relay Channel. Mathematics, 2020, 8, 2007.	1.1	0

#	ARTICLE	IF	CITATIONS
219	Learning to Communicate and Energize: Modulation, Coding, and Multiple Access Designs for Wireless Information-Power Transmission. IEEE Transactions on Communications, 2020, 68, 6822-6839.	4.9	13
220	A Nonlinear Distortion Removal Based on Deep Neural Network for Underwater Acoustic OFDM Communication with the Mitigation of Peak to Average Power Ratio. Applied Sciences (Switzerland), 2020, 10, 4986.	1.3	13
221	Deep learning-based channel estimation and tracking for millimeter-wave vehicular communications. Journal of Communications and Networks, 2020, 22, 177-184.	1.8	53
222	Deep Learning for Joint Channel Estimation and Signal Detection in OFDM Systems. IEEE Communications Letters, 2020, 24, 2780-2784.	2.5	50
223	Deep Learning and Compressive Sensing-Based CSI Feedback in FDD Massive MIMO Systems. IEEE Transactions on Vehicular Technology, 2020, 69, 9217-9222.	3.9	54
224	Improved Deep Learning in OFDM Systems With Imperfect Timing Synchronization. , 2020, , .		4
225	UAV intelligent optical communication based on conditional generation against network. IOP Conference Series: Materials Science and Engineering, 2020, 768, 072022.	0.3	0
226	Deep-Learning-Based Frame Format Detection for IEEE 802.11 Wireless Local Area Networks. Electronics (Switzerland), 2020, 9, 1170.	1.8	5
227	Neural Network Equalisation and Symbol Detection for 802.11p V2V Communication at 5.9GHz. , 2020, , .		2
228	Heart Coronary Artery Segmentation and Disease Risk Warning Based on a Deep Learning Algorithm. IEEE Access, 2020, 8, 140108-140121.	2.6	22
229	Model-Driven DNN Decoder for Turbo Codes: Design, Simulation, and Experimental Results. IEEE Transactions on Communications, 2020, 68, 6127-6140.	4.9	11
230	Recurrent Neural Network Assisted Equalization for FTN Signaling. , 2020, , .		1
231	Wireless Link Scheduling for D2D Communications with Graph Embedding Technique. , 2020, , .		3
232	A taxonomy of AI techniques for 6G communication networks. Computer Communications, 2020, 161, 279-303.	3.1	98
233	Deep Learning Based Trainable Approximate Message Passing for Massive MIMO Detection. , 2020, , .		4
234	Deep Learning Based Signal Detection for OFDM VLC Systems. , 2020, , .		6
235	Reservoir Computing Meets Wi-Fi in Software Radios: Neural Network-based Symbol Detection using Training Sequences and Pilots. , 2020, , .		7
236	End-to-End Learning-based Amplify-and-Forward Relay Networks using Autoencoders. , 2020, , .		4

#	ARTICLE	IF	CITATIONS
237	A Model-Driven Deep Learning Method for Normalized Min-Sum LDPC Decoding. , 2020, , .		26
238	AdaNN: Adaptive Neural Network-Based Equalizer via Online Semi-Supervised Learning. Journal of Lightwave Technology, 2020, 38, 4315-4324.	2.7	22
239	Signal Detection in Uplink Time-Varying OFDM Systems Using RNN With Bidirectional LSTM. IEEE Wireless Communications Letters, 2020, 9, 1947-1951.	3.2	16
240	Inter-Cell Interference Suppression for MIMO-OFDM Systems Based on Complex-Valued Neural Network. , 2020, , .		1
241	Wireless link adaptation with outdated CSI " a hybrid data-driven and model-based approach. , 2020, , .		4
242	Adversarial attack on DL-based massive MIMO CSI feedback. Journal of Communications and Networks, 2020, 22, 230-235.	1.8	26
243	Virtual Subcarrier Aided Channel Estimation Schemes for Tracking Rapid Time Variant Channels in IEEE 802.11p Systems. , 2020, , .		5
244	Deep Learning Based Diversity Combining for Generic Noise and Interference. , 2020, , .		1
245	Deep Receiver Design for Multi-carrier Waveforms Using CNNs. , 2020, , .		0
246	Learning to Modulate for Non-coherent MIMO. , 2020, , .		3
247	Adoption of hybrid time series neural network in the underwater acoustic signal modulation identification. Journal of the Franklin Institute, 2020, 357, 13906-13922.	1.9	14
248	Learning the Wireless Channel: A Deep Neural Network Approach. , 2020, , .		2
249	Index Modulation Multiple Access via Deep Learning based Detection. , 2020, , .		1
250	Recurrent Neural Network Channel Estimation Using Measured Massive MIMO Data. , 2020, , .		2
251	Deep-Learning-Aided Joint Channel Estimation and Data Detection for Spatial Modulation. IEEE Access, 2020, 8, 191910-191919.	2.6	20
252	Neural network promotes the transmission quality of remote health based on 5G technology. , 2020, , .		0
253	Learning-Based Signal Detection for OFDM Systems with I/Q Imbalance. , 2020, , .		1
254	SimNet: Simplified Deep Neural Networks for OFDM Channel Estimation. , 2020, , .		5

#	ARTICLE	IF	CITATIONS
255	A Short Survey: Applications of Artificial Intelligence in Massive MIMO. , 2020, , .		3
256	Pilot Pattern Design for Deep Learning-Based Channel Estimation in OFDM Systems. IEEE Wireless Communications Letters, 2020, 9, 2173-2176.	3.2	35
257	OPTCOMNET: Optimized Neural Networks for Low-Complexity Channel Estimation. , 2020, , .		5
258	Deep Learning-Based Precoder Design in MIMO Systems With Finite-Alphabet Inputs. IEEE Communications Letters, 2020, 24, 2518-2521.	2.5	5
259	A Deep Learning Framework for Hybrid Beamforming Without Instantaneous CSI Feedback. IEEE Transactions on Vehicular Technology, 2020, 69, 11743-11755.	3.9	25
260	Two-Dimensional New Communication Technology for Networked Ammunition. IEEE Access, 2020, 8, 133725-133733.	2.6	1
261	Deep Learning for Improving Performance of OOK Modulation Over FSO Turbulent Channels. IEEE Access, 2020, 8, 155275-155284.	2.6	25
262	Deep Learning Based Nonlinear Signal Detection in Millimeter-Wave Communications. IEEE Access, 2020, 8, 158883-158892.	2.6	10
263	Clipping Noise Compensation with Neural Networks in OFDM Systems. Signals, 2020, 1, 100-109.	1.2	5
264	Distributed Learning for Automatic Modulation Classification in Edge Devices. IEEE Wireless Communications Letters, 2020, 9, 2177-2181.	3.2	55
265	An optimized Radio Modulation Classifier Using Deep Neural Network. , 2020, , .		1
266	Learned Conjugate Gradient Descent Network for Massive MIMO Detection. , 2020, , .		7
267	Deep Neural Network for Estimation of Direction of Arrival With Antenna Array. IEEE Access, 2020, 8, 140688-140698.	2.6	44
268	Deep Learning for Wireless Communications: An Emerging Interdisciplinary Paradigm. IEEE Wireless Communications, 2020, 27, 133-139.	6.6	75
269	AnciNet: An Efficient Deep Learning Approach for Feedback Compression of Estimated CSI in Massive MIMO Systems. IEEE Wireless Communications Letters, 2020, 9, 2192-2196.	3.2	26
270	Learned Conjugate Gradient Descent Network for Massive MIMO Detection. IEEE Transactions on Signal Processing, 2020, 68, 6336-6349.	3.2	38
271	Location Aided Intelligent Deep Learning Channel Estimation for Millimeter Wave Communications. , 2020, , .		2
272	Model-Driven Deep Learning Scheme for Adaptive Transmission in MIMO-SCFDE System. IEEE Access, 2020, 8, 197654-197664.	2.6	2



#	ARTICLE	IF	CITATIONS
273	Machine Learning Meets Communication Networks: Current Trends and Future Challenges. IEEE Access, 2020, 8, 223418-223460.	2.6	58
274	A Survey about Deep Learning for Constellation Design in Communications. , 2020, , .		2
275	Deep Learning Based Power Allocation for Workload Driven Full-Duplex D2D-Aided Underlying Networks. IEEE Transactions on Vehicular Technology, 2020, 69, 15880-15892.	3.9	7
276	A Gentle Introduction to Reinforcement Learning and its Application in Different Fields. IEEE Access, 2020, 8, 209320-209344.	2.6	73
277	Deep Learning-Based Wireless Channel Estimation for MIMO Uncoded Space-Time Labeling Diversity. IEEE Access, 2020, 8, 224608-224620.	2.6	10
278	Targeted Learning for the Dynamic Selection of Channel Estimation Methodology. , 2020, , .		0
279	Deep Reinforcement Learning-Based Resource Allocation and Power Control in Small Cells With Limited Information Exchange. IEEE Transactions on Vehicular Technology, 2020, 69, 13768-13783.	3.9	19
280	Deep Learning-Based Timing Offset Estimation for Deep-Sea Vertical Underwater Acoustic Communications. Applied Sciences (Switzerland), 2020, 10, 8651.	1.3	3
281	Chameleons' Oblivion: Complex-Valued Deep Neural Networks for Protocol-Agnostic RF Device Fingerprinting. , 2020, , .		18
282	Deep Learning Methods in Communication Systems: A Review. Journal of Physics: Conference Series, 2020, 1617, 012024.	0.3	10
283	Optimizing Deep Learning Based Channel Estimation using Channel Response Arrangement. , 2020, , .		2
284	Throughput Maximization for Polar Coded IR-HARQ Using Deep Reinforcement Learning. , 2020, , .		5
285	Broad Echo State Network for Channel Prediction in MIMO-OFDM Systems. IEEE Transactions on Vehicular Technology, 2020, 69, 13383-13399.	3.9	5
286	Variational Channel Estimation with Tempering: An Artificial Intelligence Algorithm for Wireless Intelligent Networks. Sensors, 2020, 20, 5939.	2.1	0
287	Deep Soft Interference Cancellation for MIMO Detection. , 2020, , .		9
288	A Waveform Parameter Assignment Framework for 6G With the Role of Machine Learning. IEEE Open Journal of Vehicular Technology, 2020, 1, 156-172.	3.4	17
289	Notice of Violation of IEEE Publication Principles: Channel Decoding Based on Complex-valued Convolutional Neural Networks. , 2020, , .		0
290	Deep CNN and Equivalent Channel Based Hybrid Precoding for mmWave Massive MIMO Systems. IEEE Access, 2020, 8, 19327-19335.	2.6	28

#	ARTICLE	IF	CITATIONS
291	Power Allocation in Cell-Free Massive MIMO: A Deep Learning Method. IEEE Access, 2020, 8, 87185-87200.	2.6	50
292	Deep Learning for Optical Vehicular Communication. IEEE Access, 2020, 8, 102691-102708.	2.6	20
293	Deep Energy Autoencoder for Noncoherent Multicarrier MU-SIMO Systems. IEEE Transactions on Wireless Communications, 2020, 19, 3952-3962.	6.1	23
294	A Model-Driven Deep Learning Method for Massive MIMO Detection. IEEE Communications Letters, 2020, 24, 1724-1728.	2.5	46
295	Beyond 5G: Leveraging Cell Free TDD Massive MIMO Using Cascaded Deep Learning. IEEE Wireless Communications Letters, 2020, 9, 1533-1537.	3.2	21
296	Deep Autoencoder Learning for Relay-Assisted Cooperative Communication Systems. IEEE Transactions on Communications, 2020, 68, 5471-5488.	4.9	19
297	Model-Driven Deep Learning for Massive MU-MIMO With Finite-Alphabet Precoding. IEEE Communications Letters, 2020, 24, 2216-2220.	2.5	13
298	Deep Convolutional Neural Network-Based Detector for Index Modulation. IEEE Wireless Communications Letters, 2020, 9, 1705-1709.	3.2	21
299	A Deep-Learning Method for Device Activity Detection in mMTC Under Imperfect CSI Based on Variational-Autoencoder. IEEE Transactions on Vehicular Technology, 2020, 69, 7981-7986.	3.9	21
300	A deep learning-aided temporal spectral ChannelNet for IEEE 802.11p-based channel estimation in vehicular communications. Eurasip Journal on Wireless Communications and Networking, 2020, 2020, .	1.5	7
301	Research on Moisture Content Detection of Wood Components Through Wi-Fi Channel State Information and Deep Extreme Learning Machine. IEEE Sensors Journal, 2020, 20, 9977-9988.	2.4	9
302	Deep Learning-Based Approach to Fast Power Allocation in SISO SWIPT Systems with a Power-Splitting Scheme. Applied Sciences (Switzerland), 2020, 10, 3634.	1.3	3
303	Pilot-Assisted Channel Estimation and Signal Detection in Uplink Multi-User MIMO Systems With Deep Learning. IEEE Access, 2020, 8, 44936-44946.	2.6	27
304	Deep Learning-Based mmWave Beam Selection for 5G NR/6G With Sub-6 GHz Channel Information: Algorithms and Prototype Validation. IEEE Access, 2020, 8, 51634-51646.	2.6	97
305	Unsupervised Specific Emitter Identification Method Using Radio-Frequency Fingerprint Embedded InfoGAN. IEEE Transactions on Information Forensics and Security, 2020, 15, 2898-2913.	4.5	80
306	ELM-Based Frame Synchronization in Burst-Mode Communication Systems With Nonlinear Distortion. IEEE Wireless Communications Letters, 2020, 9, 915-919.	3.2	16
307	A Cognitive Radio Spectrum Sensing Method for an OFDM Signal Based on Deep Learning and Cycle Spectrum. International Journal of Digital Multimedia Broadcasting, 2020, 2020, 1-10.	0.4	19
308	Learning for Detection: MIMO-OFDM Symbol Detection Through Downlink Pilots. IEEE Transactions on Wireless Communications, 2020, 19, 3712-3726.	6.1	32

#	ARTICLE	IF	CITATIONS
309	Convolutional-Neural-Network-Based Detection Algorithm for Uplink Multiuser Massive MIMO Systems. IEEE Access, 2020, 8, 64250-64265.	2.6	17
310	Artificial Intelligence for 5G Wireless Systems: Opportunities, Challenges, and Future Research Direction. , 2020, , .		17
311	UWB Receiver via Deep Learning in MUI and ISI Scenarios. IEEE Transactions on Vehicular Technology, 2020, 69, 3496-3499.	3.9	17
312	Harnessing the Adversarial Perturbation to Enhance Security in the Autoencoder-Based Communication System. Electronics (Switzerland), 2020, 9, 294.	1.8	0
313	Deep Learning for Selection Between RF and VLC Bands in Device-to-Device Communication. IEEE Wireless Communications Letters, 2020, 9, 1763-1767.	3.2	16
314	Deep Learning Based Fast Downlink Channel Reconstruction For FDD Massive MIMO Systems. , 2020, , .		1
315	Low-Complexity PAPR Reduction Method for OFDM Systems Based on Real-Valued Neural Networks. IEEE Wireless Communications Letters, 2020, 9, 1840-1844.	3.2	42
316	Attention-based deep convolutional neural network for spectral efficiency optimization in MIMO systems. Neural Computing and Applications, 2020, , 1.	3.2	5
317	Improving Medium Access Efficiency With Intelligent Spectrum Learning. IEEE Access, 2020, 8, 94484-94498.	2.6	6
318	Deep Learning Based Radio Resource Management in NOMA Networks: User Association, Subchannel and Power Allocation. IEEE Transactions on Network Science and Engineering, 2020, 7, 2406-2415.	4.1	69
319	Power Allocation in Multi-User Cellular Networks: Deep Reinforcement Learning Approaches. IEEE Transactions on Wireless Communications, 2020, 19, 6255-6267.	6.1	137
320	Exploring the road to 6G: ABC " foundation for intelligent mobile networks. China Communications, 2020, 17, 51-67.	2.0	34
321	Model-aided distributed shallow learning for OFDM receiver in IEEE 802.11 channel model. Wireless Networks, 2020, 26, 5427-5436.	2.0	4
322	Deep Learning-Based End-to-End Wireless Communication Systems With Conditional GANs as Unknown Channels. IEEE Transactions on Wireless Communications, 2020, 19, 3133-3143.	6.1	203
323	Intelligent Sharing for LTE and WiFi Systems in Unlicensed Bands: A Deep Reinforcement Learning Approach. IEEE Transactions on Communications, 2020, 68, 2793-2808.	4.9	38
324	Model-Driven Deep Learning for MIMO Detection. IEEE Transactions on Signal Processing, 2020, 68, 1702-1715.	3.2	204
325	Power Allocation for Multiple Transmitter-Receiver Pairs Under Frequency-Selective Fading Based on Convolutional Neural Network. IEEE Access, 2020, 8, 31018-31025.	2.6	2
326	Sparse Channel Estimation and Hybrid Precoding Using Deep Learning for Millimeter Wave Massive MIMO. IEEE Transactions on Communications, 2020, 68, 2838-2849.	4.9	134

#	ARTICLE	IF	CITATIONS
327	Deep Learning Aided Signal Detection for SPAD-Based Underwater Optical Wireless Communications. IEEE Access, 2020, 8, 20363-20374.	2.6	38
328	Data Augmentation for Deep Learning-Based Radio Modulation Classification. IEEE Access, 2020, 8, 1498-1506.	2.6	84
329	Thirty Years of Machine Learning: The Road to Pareto-Optimal Wireless Networks. IEEE Communications Surveys and Tutorials, 2020, 22, 1472-1514.	24.8	361
330	Intelligent Resource Allocation in Wireless Communications Systems. IEEE Communications Magazine, 2020, 58, 100-105.	4.9	25
331	Data-Rate Driven Transmission Strategies for Deep Learning-Based Communication Systems. IEEE Transactions on Communications, 2020, 68, 2129-2142.	4.9	15
332	Learning paradigms for communication and computing technologies in IoT systems. Computer Communications, 2020, 153, 11-25.	3.1	17
333	Machine Learning-Based Channel Prediction in Massive MIMO With Channel Aging. IEEE Transactions on Wireless Communications, 2020, 19, 2960-2973.	6.1	74
334	Deep Learning and Channel Estimation. , 2020, , .		8
335	Secrecy Outage Performance of Ground-to-Air Communications With Multiple Aerial Eavesdroppers and Its Deep Learning Evaluation. IEEE Wireless Communications Letters, 2020, 9, 1351-1355.	3.2	26
336	Wireless signal enhancement based on generative adversarial networks. Ad Hoc Networks, 2020, 103, 102151.	3.4	6
337	A Novel OFDM Autoencoder Featuring CNN-Based Channel Estimation for Internet of Vessels. IEEE Internet of Things Journal, 2020, 7, 7601-7611.	5.5	39
338	Deep Learning for Fading Channel Prediction. IEEE Open Journal of the Communications Society, 2020, 1, 320-332.	4.4	81
339	Learn to Compress CSI and Allocate Resources in Vehicular Networks. IEEE Transactions on Communications, 2020, 68, 3640-3653.	4.9	32
340	Data-Driven Deep Learning to Design Pilot and Channel Estimator for Massive MIMO. IEEE Transactions on Vehicular Technology, 2020, 69, 5677-5682.	3.9	85
341	Deep Learning-Aided Tabu Search Detection for Large MIMO Systems. IEEE Transactions on Wireless Communications, 2020, 19, 4262-4275.	6.1	40
342	Power Allocation Schemes Based on Deep Learning for Distributed Antenna Systems. IEEE Access, 2020, 8, 31245-31253.	2.6	23
343	Machine Learning for Networking. Lecture Notes in Computer Science, 2020, , .	1.0	4
344	Distributed Estimation Framework for Beyond 5G Intelligent Vehicular Networks. IEEE Open Journal of Vehicular Technology, 2020, 1, 190-214.	3.4	19

#	ARTICLE	IF	CITATIONS
345	Deep Learning Decoder for MIMO Communications with Impulsive Noise. , 2020, , .		3
346	A Hybrid Multiple Access Scheme via Deep Learning-Based Detection. IEEE Systems Journal, 2021, 15, 981-984.	2.9	12
348	Learning-Aided Physical Layer Attacks Against Multicarrier Communications in IoT. IEEE Transactions on Cognitive Communications and Networking, 2021, 7, 239-254.	4.9	8
349	Unsupervised Learning for Cellular Power Control. IEEE Communications Letters, 2021, 25, 682-686.	2.5	5
350	Channel Estimation Enhancement With Generative Adversarial Networks. IEEE Transactions on Cognitive Communications and Networking, 2021, 7, 145-156.	4.9	12
351	Artificial intelligence point-to-point signal communication network optimization based on ubiquitous clouds. International Journal of Communication Systems, 2021, 34, e4507.	1.6	2
352	Q-Learning-Based Adaptive Power Control in Wireless RF Energy Harvesting Heterogeneous Networks. IEEE Systems Journal, 2021, 15, 1861-1872.	2.9	15
353	Towards 6G wireless communication networks: vision, enabling technologies, and new paradigm shifts. Science China Information Sciences, 2021, 64, 1.	2.7	858
354	Binary Golay Spreading Sequences and Reed-Muller Codes for Uplink Grant-Free NOMA. IEEE Transactions on Communications, 2021, 69, 276-290.	4.9	18
355	Spectrum interference-based two-level data augmentation method in deep learning for automatic modulation classification. Neural Computing and Applications, 2021, 33, 7723-7745.	3.2	137
356	Channel and Carrier Frequency Offset Equalization for OFDM Based UAV Communications Using Deep Learning. IEEE Communications Letters, 2021, 25, 850-853.	2.5	14
357	Transfer Learning and Meta Learning-Based Fast Downlink Beamforming Adaptation. IEEE Transactions on Wireless Communications, 2021, 20, 1742-1755.	6.1	45
358	Deep Learning for Channel Estimation: Interpretation, Performance, and Comparison. IEEE Transactions on Wireless Communications, 2021, 20, 2398-2412.	6.1	73
359	High Dimensional Channel Estimation Using Deep Generative Networks. IEEE Journal on Selected Areas in Communications, 2021, 39, 18-30.	9.7	31
360	Deep Multimodal Learning: Merging Sensory Data for Massive MIMO Channel Prediction. IEEE Journal on Selected Areas in Communications, 2021, 39, 1885-1898.	9.7	22
361	Meta Learning-Based MIMO Detectors: Design, Simulation, and Experimental Test. IEEE Transactions on Wireless Communications, 2021, 20, 1122-1137.	6.1	30
362	DeepReceiver: A Deep Learning-Based Intelligent Receiver for Wireless Communications in the Physical Layer. IEEE Transactions on Cognitive Communications and Networking, 2021, 7, 5-20.	4.9	36
363	Adversarial Deep Learning for Over-the-Air Spectrum Poisoning Attacks. IEEE Transactions on Mobile Computing, 2021, 20, 306-319.	3.9	62

#	ARTICLE	IF	CITATIONS
364	ELM-Based Frame Synchronization in Nonlinear Distortion Scenario Using Superimposed Training. IEEE Access, 2021, 9, 53530-53539.	2.6	5
365	A Survey on Deep Learning for Ultra-Reliable and Low-Latency Communications Challenges on 6G Wireless Systems. IEEE Access, 2021, 9, 55098-55131.	2.6	44
366	Deep Learning in IoT. Advances in Computational Intelligence and Robotics Book Series, 2021, , 1-54.	0.4	1
367	Deep Learning Techniques for Advancing 6G Communications in the Physical Layer. IEEE Wireless Communications, 2021, 28, 141-147.	6.6	12
368	Deep Learning-Based Antenna Selection and CSI Extrapolation in Massive MIMO Systems. IEEE Transactions on Wireless Communications, 2021, 20, 7669-7681.	6.1	21
369	Mixed Numerology Interference Recognition Approach for 5G NR. IEEE Wireless Communications Letters, 2021, 10, 2135-2139.	3.2	5
370	Deep Learning-Based Packet Detection and Carrier Frequency Offset Estimation in IEEE 802.11ah. IEEE Access, 2021, 9, 99853-99865.	2.6	16
371	Deep Learning-Aided Signal Detection for Two-Stage Index Modulated Universal Filtered Multi-Carrier Systems. IEEE Transactions on Cognitive Communications and Networking, 2022, 8, 136-154.	4.9	9
372	Exploiting Deep Learning for Secure Transmission in an Underlay Cognitive Radio Network. IEEE Transactions on Vehicular Technology, 2021, 70, 726-741.	3.9	15
373	Two-Dimensional Convolutional Neural Network-Based Signal Detection for OTFS Systems. IEEE Wireless Communications Letters, 2021, 10, 2514-2518.	3.2	23
374	Distributed Learning Assisted Fronthaul Compression for Multi-Antenna C-RAN. IEEE Access, 2021, 9, 113997-114007.	2.6	1
375	Learning based MIMO communications with imperfect channel state information for Internet of Things. Multimedia Tools and Applications, 2021, 80, 31265-31276.	2.6	1
376	Machine Learning-Based Beamforming in K-User MISO Interference Channels. IEEE Access, 2021, 9, 28066-28075.	2.6	9
377	Online Deep Neural Networks for MmWave Massive MIMO Channel Estimation With Arbitrary Array Geometry. IEEE Transactions on Signal Processing, 2021, 69, 2010-2025.	3.2	21
378	The Internet of Bodies: A Systematic Survey on Propagation Characterization and Channel Modeling. IEEE Internet of Things Journal, 2022, 9, 321-345.	5.5	36
379	An Attention-Aided Deep Learning Framework for Massive MIMO Channel Estimation. IEEE Transactions on Wireless Communications, 2022, 21, 1823-1835.	6.1	28
380	OFDM Receiver Using Deep Learning: Redundancy Issues. , 2021, , .		1
381	Adaptive-Slope Squashing-Function-Based ANN for CSI Estimation and Symbol Detection in SFBC-OFDM System. Arabian Journal for Science and Engineering, 2021, 46, 9451-9464.	1.7	4

#	ARTICLE	IF	CITATIONS
382	Accelerating DNN Training in Wireless Federated Edge Learning Systems. IEEE Journal on Selected Areas in Communications, 2021, 39, 219-232.	9.7	105
383	Low Complexity Anti-Interference Equalization for Broadband Single-Carrier Systems with Transmit Diversity. IEEE Transactions on Vehicular Technology, 2021, , 1-1.	3.9	0
384	Generative-Adversarial-Network Enabled Signal Detection for Communication Systems With Unknown Channel Models. IEEE Journal on Selected Areas in Communications, 2021, 39, 47-60.	9.7	19
385	A Deep Learning Decoder for Long-Range Communication Systems. , 2021, , .		0
386	Model Refinement Learning and an Example on Channel Estimation With Universal Noise Model. IEEE Journal on Selected Areas in Communications, 2021, 39, 31-46.	9.7	8
387	Joint Blind Channel Estimation, Channel Equalization, and Data Detection for Underwater Visible Light Communication Systems. IEEE Wireless Communications Letters, 2021, 10, 2664-2668.	3.2	7
388	Compressive Learning in Communication Systems: A Neural Network Receiver for Detecting Compressed Signals in OFDM Systems. IEEE Access, 2021, 9, 122397-122411.	2.6	6
389	Artificial neural network based estimation of sparse multipath channels in OFDM systems. Telecommunication Systems, 2021, 77, 231-240.	1.6	5
390	A Survey of Driving Safety With Sensing, Vehicular Communications, and Artificial Intelligence-Based Collision Avoidance. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 6142-6163.	4.7	35
391	Blockchain- and Deep Learning-Empowered Resource Optimization in Future Cellular Networks, Edge Computing, and IoT: Open Challenges and Current Solutions. , 2021, , 441-474.		2
392	Deep Learning Empowered Semi-Blind Joint Detection in Cooperative NOMA. IEEE Access, 2021, 9, 61832-61852.	2.6	14
393	Survey on Machine Learning for Intelligent End-to-End Communication Toward 6G: From Network Access, Routing to Traffic Control and Streaming Adaption. IEEE Communications Surveys and Tutorials, 2021, 23, 1578-1598.	24.8	86
394	RF Impairments in Wireless Transceivers: Phase Noise, CFO, and IQ Imbalance – A Survey. IEEE Access, 2021, 9, 111718-111791.	2.6	46
395	Deep Learning-Based Bootstrap Detection Scheme for Digital Broadcasting System. IEEE Access, 2021, 9, 19562-19571.	2.6	2
396	End-to-End Learning for OFDM: From Neural Receivers to Pilotless Communication. IEEE Transactions on Wireless Communications, 2022, 21, 1049-1063.	6.1	25
398	A Low Complexity Learning-Based Channel Estimation for OFDM Systems With Online Training. IEEE Transactions on Communications, 2021, 69, 6722-6733.	4.9	18
399	Comparative Study of Artificial Neural Network Based Channel Equalization Methods for mmWave Communications. IEEE Access, 2021, 9, 41678-41687.	2.6	14
400	Channel Estimation and Hybrid Precoding for Millimeter Wave Communications: A Deep Learning-Based Approach. IEEE Access, 2021, 9, 120924-120939.	2.6	7

#	ARTICLE	IF	CITATIONS
401	Comprehensive Survey on Machine Learning in Vehicular Network: Technology, Applications and Challenges. IEEE Communications Surveys and Tutorials, 2021, 23, 2027-2057.	24.8	92
402	Deep Learning-Based Power Control Scheme With Partial Channel Information in Overlay Device-to-Device Communication Systems. IEEE Access, 2021, 9, 122125-122137.	2.6	10
403	Performance Enhancement of Massive MIMO Using Deep Learning-Based Channel Estimation. IOP Conference Series: Materials Science and Engineering, 2021, 1051, 012029.	0.3	8
404	Deep Reinforcement Learning Techniques in Diversified Domains: A Survey. Archives of Computational Methods in Engineering, 2021, 28, 4715-4754.	6.0	22
405	Deep Unfolded Extended Conjugate Gradient Method for Massive MIMO Processing with Application to Reciprocity Calibration. Journal of Signal Processing Systems, 2021, 93, 965-975.	1.4	0
406	DeepSIC: Deep Soft Interference Cancellation for Multiuser MIMO Detection. IEEE Transactions on Wireless Communications, 2021, 20, 1349-1362.	6.1	60
407	Comparing Adversary Defense Mechanisms in Cognitive Radio Networks. International Journal of Sensors, Wireless Communications and Control, 2022, 12, 178-183.	0.5	0
408	EVM Loss: A Loss Function for Training Neural Networks in Communication Systems. Sensors, 2021, 21, 1094.	2.1	3
409	Analysis Of Methods And Systems For Detecting And Countering Uavs. IOP Conference Series: Materials Science and Engineering, 2021, 1069, 012034.	0.3	1
410	Adversarial, yet Friendly Signal Design for Secured Wireless Communication. , 2021, , .		3
411	Model Aided Deep Learning Based MIMO OFDM Receiver With Nonlinear Power Amplifiers. , 2021, , .		7
412	Coordinated Beamforming for UAV-Aided Millimeter-Wave Communications Using GPML-Based Channel Estimation. IEEE Transactions on Cognitive Communications and Networking, 2021, 7, 100-109.	4.9	20
413	DeepWiPHY: Deep Learning-Based Receiver Design and Dataset for IEEE 802.11ax Systems. IEEE Transactions on Wireless Communications, 2021, 20, 1596-1611.	6.1	20
414	SVM-based online learning for interference-aware multi-cell mmWave vehicular communications. IET Communications, 2021, 15, 1015-1027.	1.5	2
415	Deep Learning Based Channel Estimation with Flexible Delay and Doppler Networks for 5G NR. , 2021, , .		3
416	Deep Transfer Learning for Signal Detection in Ambient Backscatter Communications. IEEE Transactions on Wireless Communications, 2021, 20, 1624-1638.	6.1	76
417	Performance of OFDM system receiver Based on Deep Learning. , 2021, , .		0
418	Deep Learning-Aided Multicarrier Systems. IEEE Transactions on Wireless Communications, 2021, 20, 2109-2119.	6.1	16



#	ARTICLE	IF	CITATIONS
419	Machine Learning-Assisted Channel Estimation in Massive MIMO Receiver. , 2021, , .		5
420	Dynamic Doppler prediction in high-speed rail using long short-term memory neural network. Transactions on Emerging Telecommunications Technologies, 2021, 32, e4269.	2.6	2
421	A Neural Network Approach for Spectral and Energy Efficient Multiple Antenna Systems. , 2021, , .		0
422	Deep Learning at the Edge for Channel Estimation in Beyond-5G Massive MIMO. IEEE Wireless Communications, 2021, 28, 19-25.	6.6	29
423	Robust Computationally-Efficient Wireless Emitter Classification Using Autoencoders and Convolutional Neural Networks. Sensors, 2021, 21, 2414.	2.1	6
424	Spectral Efficient Beamforming for mmWave MISO Systems using Deep Learning Techniques. Arabian Journal for Science and Engineering, 2021, 46, 9783-9795.	1.7	5
425	Deep Learning Assisted Relay Matching in Multi-user Pair and Multi-relay Untrusted Networks. , 2021, , .		0
426	Generative adversarial network-based rogue device identification using differential constellation trace figure. Eurasip Journal on Wireless Communications and Networking, 2021, 2021, .	1.5	8
427	An iterative MPD-CNN structure for massive MIMO detection under correlated noise channels. IET Communications, 2021, 15, 1632.	1.5	1
428	Machine learning-based security-aware spatial modulation for heterogeneous radio-optical networks. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2021, 477, .	1.0	3
429	A Novel Intelligent SIC Detector for NOMA Systems Based on Deep Learning. , 2021, , .		4
430	Analysis on the Channel Prediction Accuracy of Deep Learning-based Approach. , 2021, , .		10
431	An improved helmet detection method for YOLOv3 on an unbalanced dataset. , 2021, , .		10
432	Deep Learning-Based Multi-Tone Interference Suppression for Short Polar Codes. , 2021, , .		1
433	Semi-Supervised Extreme Learning Machine Channel Estimator and Equalizer for Vehicle to Vehicle Communications. Electronics (Switzerland), 2021, 10, 968.	1.8	7
434	Graph Embedding-Based Wireless Link Scheduling With Few Training Samples. IEEE Transactions on Wireless Communications, 2021, 20, 2282-2294.	6.1	54
435	Deep Learning for MMSE Estimation of a Gaussian Source in the Presence of Bursty Impulsive Noise. IEEE Communications Letters, 2021, 25, 1211-1215.	2.5	5
436	Joint Demodulation and Decoding with Multi-Label Classification Using Deep Neural Networks. , 2021, , .		2

#	ARTICLE	IF	CITATIONS
437	Deep Learning Aided Robust Joint Channel Classification, Channel Estimation, and Signal Detection for Underwater Optical Communication. IEEE Transactions on Communications, 2021, 69, 2290-2303.	4.9	31
438	Performance of Deep Learning Methods in DF Based Cooperative Communication Systems. , 2021, , .		2
439	DeepMuD: Multi-User Detection for Uplink Grant-Free NOMA IoT Networks via Deep Learning. IEEE Wireless Communications Letters, 2021, 10, 1133-1137.	3.2	27
440	Comparative Analysis of OFDM MIMO and IDMA OFDM MIMO using Aqua Sim Simulator for Underwater Communication. Journal of Physics: Conference Series, 2021, 1921, 012036.	0.3	0
441	Channel Estimation Based on Machine Learning Paradigm for Spatial Modulation OFDM. , 2021, , .		4
442	Intelligent Cyclic Spectrum Features Based Modulation Recognition Design. , 2021, , .		1
443	A Novel Blind mmWave Channel Estimation Algorithm Based on ML-ELM. IEEE Communications Letters, 2021, 25, 1549-1553.	2.5	7
444	Machine-Learning Based Equalizers for Mitigating the Interference in Asynchronous MIMO OWC Systems. Journal of Lightwave Technology, 2021, 39, 2800-2808.	2.7	5
445	Deep Learning Based Robust Precoder Design for Massive MIMO Downlink. , 2021, , .		2
446	DeepRx MIMO: Convolutional MIMO Detection with Learned Multiplicative Transformations. , 2021, , .		9
447	Applications of Machine Learning for 5G Advanced Wireless Systems. , 2021, , .		1
448	Machine Learning Aided Demodulator in MISO Beamforming Systems. , 2021, , .		0
449	Analysis of Dynamic Interference Constraints in Cognitive Radio Cloud Networks. International Journal of Advanced Research in Science, Communication and Technology, 0, , 815-823.	0.0	4
450	Intra-symbol frequency-domain averaging for turbulence mitigation in optical orbital angular momentum multiplexing. Optics Express, 2021, 29, 21056.	1.7	1
451	Experimental investigation of 16.6 Gbps SDM-WDM visible light communication based on a neural network receiver and tricolor mini-LEDs. Optics Letters, 2021, 46, 2888.	1.7	15
452	Meta-learning-aided orthogonal frequency division multiplexing for underwater acoustic communications. Journal of the Acoustical Society of America, 2021, 149, 4596-4606.	0.5	13
453	Convolutional neural network based filter bank multicarrier system for underwater acoustic communications. Applied Acoustics, 2021, 177, 107920.	1.7	9
454	Implementation of a Machine Learning based OFDM detector using GNU Radio. , 2021, , .		0

#	ARTICLE	IF	CITATIONS
455	Deep Learning Assisted Channel Estimation Refinement in Uplink OFDM Systems Under Time-Varying Channels. , 2021, , .		5
456	Design of An End-to-End Autoencoder for Maritime Communication System towards Internet of Vessels. , 2021, , .		1
457	Deep learning based user scheduling for massive MIMO downlink system. Science China Information Sciences, 2021, 64, 1.	2.7	9
458	Learning to Continuously Optimize Wireless Resource in Episodically Dynamic Environment. , 2021, , .		12
459	Deep CNN with batch renormalization based channel estimation algorithms. , 2021, , .		0
460	Intelligent Communication: Application of Deep Learning at the Physical Layer of Communication. , 2021, , .		3
461	Semantic Communications for Speech Signals. , 2021, , .		24
462	Convolutional Neural Network for Asynchronous Packet Parameter Identification in Dense Wi-Fi. , 2021, , .		1
463	Deep Multi-Stage CSI Acquisition for Reconfigurable Intelligent Surface Aided MIMO Systems. IEEE Communications Letters, 2021, 25, 2024-2028.	2.5	27
464	RCNet: Incorporating Structural Information Into Deep RNN for Online MIMO-OFDM Symbol Detection With Limited Training. IEEE Transactions on Wireless Communications, 2021, 20, 3524-3537.	6.1	19
465	Deep Learning Noncoherent UWB Receiver Design. , 2021, 5, 1-4.		5
466	KABLOSUZ Ä°LETÄ°ÄžÄ°M SÄ°STEMLERÄ° Ä°ÄžÄ°N MAKÄ°NA Ä°ÄžRENÄ°MÄ° DESTEKLÄ° ALTERNATÄ°F SEZÄ°CÄ° TASARIMI. MÄ°4her Ve TasarÄ±m Dergisi, 2021, 9, 381-388.	0.1	0
467	CI-NN: A Model-Driven Deep Learning-Based Constructive Interference Precoding Scheme. IEEE Communications Letters, 2021, 25, 1896-1900.	2.5	6
468	Trimming the Fat from OFDM: Pilot- and CP-less Communication with End-to-end Learning. , 2021, , .		8
469	DeepRx: Fully Convolutional Deep Learning Receiver. IEEE Transactions on Wireless Communications, 2021, 20, 3925-3940.	6.1	54
470	Channel Estimation for Underwater Acoustic OFDM Communications: An Image Super-Resolution Approach. , 2021, , .		6
471	Complex Deep Neural Network Based Intelligent Signal Detection Methods for OFDM-IM Systems. , 2021, , .		7
472	FBMC Modulation Signal Detection Based on Gated Recurrent Unit. , 2021, , .		1

#	ARTICLE	IF	CITATIONS
473	An Improved Channel Estimation Algorithm Based on WD-DDA in OFDM System. <i>Mobile Information Systems</i> , 2021, 2021, 1-9.	0.4	4
474	Peak to average power ratio alleviation by utilizing swarm intelligence along with machine learning for multiple input multiple output orthogonal frequency division multiplexing based underwater acoustic communication system. <i>Transactions on Emerging Telecommunications Technologies</i> , 2021, 32, e4335.	2.6	2
475	Distributed DNN based Processing for Uplink Cloud-RAN. , 2021, , .		2
476	Pilot-Assisted SIMO-NOMA Signal Detection With Learnable Successive Interference Cancellation. <i>IEEE Communications Letters</i> , 2021, 25, 2385-2389.	2.5	16
477	Deep Transfer Learning for Site-Specific Channel Estimation in Low-Resolution mmWave MIMO. <i>IEEE Wireless Communications Letters</i> , 2021, 10, 1424-1428.	3.2	12
478	A Design of Extreme Learning Machine Based Receiver for 2 <sup>N</sup> -2 MIMO-OFDM System. , 2021, , .		3
480	Deep Learning-Based CSI Feedback for Beamforming in Single- and Multi-Cell Massive MIMO Systems. <i>IEEE Journal on Selected Areas in Communications</i> , 2021, 39, 1872-1884.	9.7	46
481	Deep learning based user grouping for FD-MIMO systems exploiting statistical channel state information. <i>China Communications</i> , 2021, 18, 183-196.	2.0	2
482	Bayesian Learning-Based Clustered-Sparse Channel Estimation for Time-Varying Underwater Acoustic OFDM Communication. <i>Sensors</i> , 2021, 21, 4889.	2.1	8
483	Data Handling Approach for Machine Learning in Wireless Communication: A Survey. <i>Advances in Intelligent Systems and Computing</i> , 2022, , 103-120.	0.5	0
484	Zero-Padding OFDM Receiver Using Machine Learning. , 2021, , .		0
485	Channel state information estimation for 5G wireless communication systems: recurrent neural networks approach. <i>PeerJ Computer Science</i> , 2021, 7, e682.	2.7	17
486	Neural network-based time-domain equalization without training signal in OFDM systems without CP. <i>IEICE Communications Express</i> , 2021, 10, 435-440.	0.2	1
487	Blind identification of convolutional codes based on deep learning. , 2021, 115, 103086.		7
488	Signal detection with co-channel interference using deep learning. <i>Physical Communication</i> , 2021, 47, 101343.	1.2	7
489	Semantic Communication Systems for Speech Transmission. <i>IEEE Journal on Selected Areas in Communications</i> , 2021, 39, 2434-2444.	9.7	158
490	Trajectory tracking analysis of airborne data link antenna. <i>Computer Communications</i> , 2021, 176, 182-189.	3.1	1
491	Machine Learning for MU-MIMO Receive Processing in OFDM Systems. <i>IEEE Journal on Selected Areas in Communications</i> , 2021, 39, 2318-2332.	9.7	16

#	ARTICLE	IF	CITATIONS
492	Data Driven Approach for mmWave Channel Characteristics Prediction Using Deep Neural Network. <i>Wireless Personal Communications</i> , 2021, 120, 2161-2177.	1.8	3
493	An Efficient Specific Emitter Identification Method Based on Complex-Valued Neural Networks and Network Compression. <i>IEEE Journal on Selected Areas in Communications</i> , 2021, 39, 2305-2317.	9.7	103
494	Deep-Waveform: A Learned OFDM Receiver Based on Deep Complex-Valued Convolutional Networks. <i>IEEE Journal on Selected Areas in Communications</i> , 2021, 39, 2407-2420.	9.7	29
495	A Lightweight Deep Network for Efficient CSI Feedback in Massive MIMO Systems. <i>IEEE Wireless Communications Letters</i> , 2021, 10, 1840-1844.	3.2	22
496	Deep Neural Network (DNN) for Efficient User Clustering and Power Allocation in Downlink Non-Orthogonal Multiple Access (NOMA) 5G Networks. <i>Symmetry</i> , 2021, 13, 1507.	1.1	7
497	Deep Learning-Based Joint Detection for OFDM-NOMA Scheme. <i>IEEE Communications Letters</i> , 2021, 25, 2609-2613.	2.5	23
498	Training deep neural networks for power control in Multiple input multiple output systems. , 2021, , .		0
499	Enhanced Security Authentication Based on Convolutional-LSTM Networks. <i>Sensors</i> , 2021, 21, 5379.	2.1	3
500	ShuffleNet-inspired lightweight neural network design for automatic modulation classification methods in ubiquitous IoT cyber-physical systems. <i>Computer Communications</i> , 2021, 176, 249-257.	3.1	11
501	Deep Learning Based Pilot Assisted Channel Estimation for Rician Fading Massive MIMO Uplink Communication System. , 2021, , .		7
502	A deep learning-based HARQ chase combining for FBMC-QAM systems. <i>International Journal of Communication Systems</i> , 2021, 34, e4957.	1.6	1
503	High security OFDM-PON based on an iterative cascading chaotic model and 4-D joint encryption. <i>Optics Communications</i> , 2021, 495, 127055.	1.0	6
504	Compressive Sampled CSI Feedback Method Based on Deep Learning for FDD Massive MIMO Systems. <i>IEEE Transactions on Communications</i> , 2021, 69, 5873-5885.	4.9	39
505	Deep cascading network architecture for robust automatic modulation classification. <i>Neurocomputing</i> , 2021, 455, 308-324.	3.5	43
506	End-to-End Learning for Uplink MU-SIMO Joint Transmitter and Non-Coherent Receiver Design in Fading Channels. <i>IEEE Transactions on Wireless Communications</i> , 2021, 20, 5531-5542.	6.1	8
507	ICINet: ICI-Aware Neural Network Based Channel Estimation for Rapidly Time-Varying OFDM Systems. <i>IEEE Communications Letters</i> , 2021, 25, 2973-2977.	2.5	9
508	Editorial Energy Efficiency of Machine-Learning-Based Designs for Future Wireless Systems and Networks. <i>IEEE Transactions on Green Communications and Networking</i> , 2021, 5, 1005-1010.	3.5	6
509	Deep Learning Based End-to-End Wireless Communication Systems Without Pilots. <i>IEEE Transactions on Cognitive Communications and Networking</i> , 2021, 7, 702-714.	4.9	45

#	ARTICLE	IF	CITATIONS
510	Doppler Spread Estimation Based on Machine Learning for an OFDM System. <i>Wireless Communications and Mobile Computing</i> , 2021, 2021, 1-15.	0.8	0
511	8.75â€‰Gbps visible light communication link using an artificial neural network equalizer and a single-pixel blue micro-LED. <i>Optics Letters</i> , 2021, 46, 4670.	1.7	11
512	No-Pain No-Gain: DRL Assisted Optimization in Energy-Constrained CR-NOMA Networks. <i>IEEE Transactions on Communications</i> , 2021, 69, 5917-5932.	4.9	30
513	Deep Neural Network Aided Low-Complexity MPA Receivers for Uplink SCMA Systems. <i>IEEE Transactions on Vehicular Technology</i> , 2021, 70, 9050-9062.	3.9	12
514	Dual CNN-Based Channel Estimation for MIMO-OFDM Systems. <i>IEEE Transactions on Communications</i> , 2021, 69, 5859-5872.	4.9	35
515	Multisegment Mapping Network for Massive MIMO Detection. <i>International Journal of Antennas and Propagation</i> , 2021, 2021, 1-7.	0.7	3
516	Impact of Machine Learning Algorithms on WDM High-Speed Optical Networks. <i>Advances in Intelligent Systems and Computing</i> , 2022, , 645-663.	0.5	3
517	Deep learning-based flexible joint channel estimation and signal detection of multi-user OFDM-NOMA. <i>Physical Communication</i> , 2021, 48, 101443.	1.2	22
518	Variational autoencoder based receiver for orthogonal time frequency space modulation. , 2021, 117, 103170.		5
519	Federated user activity analysis via network traffic and deep neural network in mobile wireless networks. <i>Physical Communication</i> , 2021, 48, 101438.	1.2	2
520	Impact of the learning rate and batch size on NOMA system using LSTM-based deep neural network. <i>Journal of Defense Modeling and Simulation</i> , 2023, 20, 259-268.	1.2	10
521	Variational-autoencoder signal detection for MIMO-OFDM-IM. , 2021, 118, 103230.		4
522	An Overview of Communication System Model Using Deep Learning Techniques. <i>Lecture Notes in Electrical Engineering</i> , 2021, , 299-309.	0.3	0
523	Deep Learning-Based Robust Precoding for Massive MIMO. <i>IEEE Transactions on Communications</i> , 2021, 69, 7429-7443.	4.9	22
524	Deep Learning-Based Phase Noise Compensation in Multicarrier Systems. <i>IEEE Wireless Communications Letters</i> , 2021, 10, 2110-2114.	3.2	14
525	AI-Aided Online Adaptive OFDM Receiver: Design and Experimental Results. <i>IEEE Transactions on Wireless Communications</i> , 2021, 20, 7655-7668.	6.1	22
526	FusionNet: Enhanced Beam Prediction for mmWave Communications Using Sub-6 GHz Channel and a Few Pilots. <i>IEEE Transactions on Communications</i> , 2021, 69, 8488-8500.	4.9	15
527	Efficient Machine Learning-Enhanced Channel Estimation for OFDM Systems. <i>IEEE Access</i> , 2021, 9, 100839-100850.	2.6	9

#	ARTICLE	IF	CITATIONS
528	Early results on deep unfolded conjugate gradient-based large-scale MIMO detection. IET Communications, 2021, 15, 435-444.	1.5	2
529	Intelligent Radio Signal Processing: A Survey. IEEE Access, 2021, 9, 83818-83850.	2.6	49
530	Machine Learning for Wireless Link Quality Estimation: A Survey. IEEE Communications Surveys and Tutorials, 2021, 23, 696-728.	24.8	34
531	Deep Learning Enabled Physical Layer Security to Combat Eavesdropping in Massive MIMO Networks. Lecture Notes on Data Engineering and Communications Technologies, 2020, , 643-650.	0.5	7
532	Deep learning-based pilot-assisted channel state estimator for OFDM systems. IET Communications, 2021, 15, 257-264.	1.5	14
533	ADMM-Net: A Deep Learning Approach for Parameter Estimation of Chirp Signals Under Sub-Nyquist Sampling. IEEE Access, 2020, 8, 75714-75727.	2.6	11
534	LEMO: Learn to Equalize for MIMO-OFDM Systems with Low-Resolution ADCs. , 2020, , .		1
535	Deep Learning-Based Sum Data Rate and Energy Efficiency Optimization for MIMO-NOMA Systems. IEEE Transactions on Wireless Communications, 2020, 19, 5373-5388.	6.1	51
536	A Novel Complex PCA-based Wireless MIMO Channel Modeling Methodology. , 2020, , .		4
537	Deep learning-driven wireless communication for edge-cloud computing: opportunities and challenges. Journal of Cloud Computing: Advances, Systems and Applications, 2020, 9, .	2.1	32
538	Two tributaries heterogeneous neural network based channel emulator for underwater visible light communication systems. Optics Express, 2019, 27, 22532.	1.7	42
539	Deep neural network-assisted high-accuracy microwave instantaneous frequency measurement with a photonic scanning receiver. Optics Letters, 2020, 45, 3038.	1.7	18
540	A Neuro-Fuzzy based detection approach for HARQ-CC in FBMC-OQAM systems. , 2020, , .		4
541	Speech Emotion Recognition Using Scalogram Based Deep Structure. International Journal of Engineering Transactions B: Applications, 2020, 33, .	0.6	2
542	Clustering-Based Blind Detection Aided by SC-LDGM Codes. IEEE Transactions on Vehicular Technology, 2021, 70, 12771-12781.	3.9	2
543	Generalized Regression Neural Network Based Fast Fading Channel Tracking Using Frequency-Domain CSI Smoothing. IEEE Access, 2021, 9, 142425-142436.	2.6	4
544	CNN Aided Weighted Interpolation for Channel Estimation in Vehicular Communications. IEEE Transactions on Vehicular Technology, 2021, 70, 12796-12811.	3.9	17
545	Deep Neural Network Based Channel Estimation for Massive MIMO-OFDM Systems With Imperfect Channel State Information. IEEE Systems Journal, 2022, 16, 4675-4685.	2.9	22

#	ARTICLE	IF	CITATIONS
546	Index Modulation Based on Four-dimensional Spherical Code and its DNN-based Receiver Design. IEEE Transactions on Vehicular Technology, 2021, , 1-1.	3.9	2
547	AI-based Inter-Tower Communication Networks: Challenges and Benefits. , 2021, , .		5
548	Multi-Task Learning Based Underwater Acoustic OFDM Communications. , 2021, , .		9
549	Deep reinforcement learning based multicast mode selection for SFN. , 2021, , .		0
550	Transfer Learning Based Detection for Intelligent Reflecting Surface Aided Communications. , 2021, , .		2
551	Deep Learning-based Signal Detection for Uplink in LoRa-like Networks. , 2021, , .		6
552	ConvNet-Based Multi-antenna Precoder Design for Green Communication. Lecture Notes in Networks and Systems, 2022, , 357-365.	0.5	1
553	Study of the Performance of Deep Learning-Based Channel Equalization for Indoor Visible Light Communication Systems. Photonics, 2021, 8, 453.	0.9	12
554	Trends in Intelligent Communication Systems: Review of Standards, Major Research Projects, and Identification of Research Gaps. Journal of Sensor and Actuator Networks, 2021, 10, 60.	2.3	12
555	Toward intelligent wireless communications: Deep learning - based physical layer technologies. Digital Communications and Networks, 2021, 7, 589-597.	2.7	12
556	Deep learning for free space optics in a data center environment. , 2018, , .		3
557	Deep Learning Based Optical Camera Communications. , 2019, , .		3
558	Higher-order Modulation Signal Detection Scheme Using Sequential Clustering. The Journal of Korean Institute of Information Technology, 2019, 17, 87-93.	0.1	2
559	Deep Learning-Based V2V Channel Estimations Using VNETs. Lecture Notes in Electrical Engineering, 2020, , 184-192.	0.3	0
560	Channel Estimation Scheme for High-Order Modulation Using Sequential K-means Clustering. The Journal of Korean Institute of Information Technology, 2019, 17, 95-102.	0.1	2
561	Veni Vidi Dixi. , 2019, , .		3
562	Channel Parameters Extraction Based on Back Propagation Neural Network. Lecture Notes in Computer Science, 2020, , 503-515.	1.0	0
564	A Stacked-Autoencoder Based End-to-End Learning Framework for Decode-and-Forward Relay Networks. , 2020, , .		4



#	ARTICLE	IF	CITATIONS
565	Implementation of Deep Learning Based Method for Optimizing Spatial Diversity MIMO Communication. Indonesian Journal of Electrical Engineering and Informatics, 2020, 8, .	0.3	0
566	Structure of Deep Neural Networks with a Priori Information in Wireless Tasks. , 2020, , .		7
567	An End-to-End Quantization Framework for Fixed Point Fast Fourier Transform Hardware Implementation via Deep Neural Network. , 2020, , .		0
568	BLDnet: Robust Learning-Based Detection for High-Order QAM With Nonlinear Distortion. , 2020, , .		3
569	Neural Network Based Joint Carrier Frequency Offset and Sampling frequency Offset Estimation and Compensation in MIMO OFDM-OQAM Systems. , 2020, , .		4
570	Deep learning-based energy-efficient relay precoder design in MIMO-CRNs. Physical Communication, 2022, 50, 101486.	1.2	3
571	Multiple symbol detection for convolutional coded O-QPSK signals in smart metering utility networks without channel state information. Physical Communication, 2021, , 101490.	1.2	2
572	Deep Learning Techniques for OFDM Systems. IETE Journal of Research, 2023, 69, 5883-5897.	1.8	6
573	Analysis on the Number of Linear Regions of Piecewise Linear Neural Networks. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 644-653.	7.2	9
574	Random Forests Based Path Loss Prediction in Mobile Communication Systems. , 2020, , .		14
575	Design of Energy Modulation Massive SIMO Transceivers via Machine Learning. , 2020, , .		1
576	Ensemble Extreme Learning Machine Based Equalizers for OFDM Systems. , 2020, , .		3
577	A Deep Learning Method Based Receiver Design. , 2020, , .		1
578	Low-Complexity Neural Networks for Baseband Signal Processing. , 2020, , .		1
579	Deep Learning Detection for superimposed control signal in LEO-MIMO. , 2020, , .		2
580	Self-learning Constellation Mapping Method Based on Neural Networks. , 2020, , .		0
581	Combining Deep Learning and Linear Processing for Modulation Classification and Symbol Decoding. , 2020, , .		6
582	Advanced Learning Architectures and Spatial Statistics for Beam Selection with Multi-Path. , 2020, , .		1

#	ARTICLE	IF	CITATIONS
583	Expansive networks: Exploiting spectrum sharing for capacity boost and 6G vision. Journal of Communications and Networks, 2020, 22, 444-454.	1.8	24
584	HPNet: A Compressed Neural Network for Robust Hybrid Precoding in Multi-User Massive MIMO Systems. , 2020, , .		6
585	Low-complexity detection for uplink massive MIMO SCMA systems. IET Communications, 2021, 15, 51-59.	1.5	7
586	6G Wireless Communications Networks: A Comprehensive Survey. IEEE Access, 2021, 9, 148191-148243.	2.6	157
587	Joint Model and Data-Driven Receiver Design for Data-Dependent Superimposed Training Scheme With Imperfect Hardware. IEEE Transactions on Wireless Communications, 2022, 21, 3779-3791.	6.1	7
588	Convolutional Neural Network Auto Encoder Channel Estimation Algorithm in MIMO-OFDM System. Computer Systems Science and Engineering, 2022, 41, 171-185.	1.9	10
589	Receiver Design for Faster-Than-Nyquist Signaling: Deep-Learning-Based Architectures. IEEE Access, 2020, 8, 68866-68873.	2.6	11
590	Deep Learning Channel Estimation Based on Edge Intelligence for NR-V2I. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 13306-13315.	4.7	4
591	On Multi-User Deep-Learning-Based Non-Coherent DPSK Multiple-Symbol Differential Detection in Massive MIMO Systems. IEEE Access, 2021, 9, 148339-148352.	2.6	2
592	Enhanced ELM Based Channel Estimation for RIS-Assisted OFDM Systems With Insufficient CP and Imperfect Hardware. IEEE Communications Letters, 2022, 26, 153-157.	2.5	10
593	Deep Learning-Aided Off-Grid Channel Estimation for Millimeter Wave Cellular Systems. IEEE Transactions on Wireless Communications, 2022, 21, 3333-3348.	6.1	20
594	Application and Implementation of Deep Learning in Wireless Transmission Physical Layer. Hans Journal of Wireless Communications, 2020, 10, 1-12.	0.0	0
595	Emergence of deep learning as a potential solution for detection, recovery and de-noising of signals in communication systems. International Journal of Intelligent Networks, 2020, 1, 119-127.	5.8	0
596	An Adaptive Deep Learning Algorithm Based Autoencoder for Interference Channels. Lecture Notes in Computer Science, 2020, , 342-354.	1.0	2
597	Toward Holistic Integration of Computing and Wireless Networking. IFIP Advances in Information and Communication Technology, 2020, , 219-234.	0.5	1
598	Deep Learning Based Single-Channel Blind Separation of Co-frequency Modulated Signals. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2020, , 607-618.	0.2	2
599	On Performance of Deep Learning for Harmonic Spur Cancellation in OFDM Systems. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2020, E103.A, 576-579.	0.2	0
600	Channel Estimation with an Interpolation Trained Deep Neural Network. Journal of Computer and Communications, 2021, 09, 123-131.	0.6	1

#	ARTICLE	IF	CITATIONS
601	Doubling the Spectral Efficiency with EVM as the Objective Function for Training Neural Networks in Non-Orthogonal Visible Light Communications Systems. , 2021, , .		1
602	HaberleÄŸme Sistemlerinde Derin Ä–ÄŸrenme. European Journal of Science and Technology, 0, , 1012-1025.	0.5	2
603	Wiener Filter versus Recurrent Neural Network-based 2D-Channel Estimation for V2X Communications. , 2021, , .		5
604	Joint Compensation of CFO and IQ Imbalance in OFDM Receiver: A Deep Learning Based Approach. , 2021, , .		5
605	Deep Learning based Antenna Selection and CSI Extrapolation in Massive MIMO Systems. , 2021, , .		1
606	Research on Modulation Recognition of OFDM Signal Based on Hierarchical Iterative Support Vector Machine. , 2020, , .		2
607	Application of Convolutional Neural Network in multi-channel Scenario D2D Communication Transmitting Power Control. , 2020, , .		5
608	Adaptive modulation and coding in underwater acoustic communications: a machine learning perspective. Eurasip Journal on Wireless Communications and Networking, 2020, 2020, .	1.5	12
609	Joint beamforming and power allocation using deep learning for D2D communication in heterogeneous networks. IET Communications, 2020, 14, 3095-3101.	1.5	2
610	Convolutional neural network based blind automatic modulation classification robust to phase and frequency offsets. IET Communications, 2020, 14, 3578-3584.	1.5	1
611	Detection through deep neural networks. , 2020, , .		3
612	Channel Estimation Based on Complex-Valued Neural Networks in IM/DD FBMC/OQAM Transmission System. Journal of Lightwave Technology, 2022, 40, 1055-1063.	2.7	8
613	Deep Learning-Aided Optical IM/DD OFDM Approaches the Throughput of RF-OFDM. IEEE Journal on Selected Areas in Communications, 2022, 40, 212-226.	9.7	9
614	Deep learning aided OFDM receiver for underwater acoustic communications. Applied Acoustics, 2022, 187, 108515.	1.7	24
615	Deep learning-based guided wave method for semi-grouting sleeve detection. Journal of Building Engineering, 2022, 46, 103739.	1.6	5
616	Performance analysis of AI aided embedded OFDM receiver based on RK3399 platform. , 2021, , .		0
617	A Study of Neural Network Receivers in OFDM Systems Subject to Memoryless Impulse Noise. , 2021, , .		1
618	A Novel Online Subcarrier-Wise Extreme Learning Machine Receiver for OFDM Systems. , 2021, , .		0

#	ARTICLE	IF	CITATIONS
619	Channel Estimation using Conventional Methods and Deep Learning. , 2021, , .		1
620	Deep learning for X-ray communication channel estimation in OFDM-PWM systems. , 2021, , .		0
621	Deep Learning-Aided Receiver Against Nonlinear Distortion of HPA in OFDM Systems. , 2021, , .		1
622	A Novel Iterative Receiver for PAM-DMT Based Hybrid Optical OFDM. , 2021, , .		0
623	Denosing Deep Sparse Learning Based Channel Estimation for MU-MIMO Systems. , 2021, , .		0
624	Implementation of KDML-Based Channel Estimator on GNU Radio Platform. , 2021, , .		0
625	Machine learning-based adaptive CSI feedback interval. ICT Express, 2022, 8, 544-548.	3.3	3
626	Deep Learning-Based Cyclic Shift Keying Spread Spectrum Underwater Acoustic Communication. Journal of Marine Science and Engineering, 2021, 9, 1252.	1.2	2
627	Deep Reinforcement Learning Online Offloading for SWIPT Multiple Access Edge Computing Network. , 2021, , .		2
628	A survey of applied machine learning techniques for optical orthogonal frequency division multiplexing based networks. Transactions on Emerging Telecommunications Technologies, 2022, 33, e4400.	2.6	4
629	Digital Self-interference cancellation in the era of machine learning: A comprehensive review. Physical Communication, 2022, 50, 101526.	1.2	8
630	Block-Structured Deep Learning-Based OFDM Channel Equalization. IEEE Communications Letters, 2022, 26, 321-324.	2.5	4
632	Deep Learning-Based Implicit CSI Feedback in Massive MIMO. IEEE Transactions on Communications, 2022, 70, 935-950.	4.9	21
633	Federated Learning for Channel Estimation in Conventional and RIS-Assisted Massive MIMO. IEEE Transactions on Wireless Communications, 2022, 21, 4255-4268.	6.1	49
634	Robust Deep Learning-Based End-to-End Receiver for OFDM System With Non-Linear Distortion. IEEE Communications Letters, 2022, 26, 340-344.	2.5	6
635	Offset Learning Based Channel Estimation for Intelligent Reflecting Surface-Assisted Indoor Communication. IEEE Journal on Selected Topics in Signal Processing, 2022, 16, 41-55.	7.3	13
636	An Efficient Deep Neural Networks-Based Channel Estimation and Signal Detection in OFDM Systems. Lecture Notes in Networks and Systems, 2022, , 603-613.	0.5	2
638	Reservoir Computing Meets Extreme Learning Machine in Real-Time MIMO-OFDM Receive Processing. IEEE Transactions on Communications, 2022, 70, 3126-3140.	4.9	8

#	ARTICLE	IF	CITATIONS
639	Machine-Learning-Aided Optical OFDM for Intensity Modulated Direct Detection. Journal of Lightwave Technology, 2022, 40, 2357-2369.	2.7	5
640	Experimental demonstration of an OFDM-LWOC system using a direct decoding FC-DNN-based receiver. Optics Communications, 2022, 508, 127785.	1.0	6
641	Reduced-state maximum-likelihood detection for OFDM systems with insufficient cyclic prefix. Physical Communication, 2022, 51, 101560.	1.2	0
642	A Real-Time Deep Learning OFDM Receiver. ACM Transactions on Reconfigurable Technology and Systems, 2022, 15, 1-25.	1.9	2
643	Deep Learning Based Prediction of Signal-to-Noise Ratio (SNR) for LTE and 5G Systems. , 2020, , .		8
644	Deep-Learning Based Ship-Radiated Noise Suppression for Underwater Acoustic OFDM Systems. , 2020, , .		2
645	Deep Learning Enabled Parameters Estimation Using Time-Frequency Analysis of Chirp Signals. , 2020, , .		0
646	Blind Non-Data-Aided Signal-to-Noise Ratio Estimation with Convolutional Neural Networks. , 2020, , .		0
647	Time-Domain Equalization Using Neural Network with Arbitrary Decision Delay. , 2020, , .		1
648	Spatial-Time MIMO Autoencoder for Physical Layer. , 2020, , .		0
649	Model-Driven Channel Estimation for OFDM Systems Based on Image Super-Resolution Network. , 2020, , .		6
650	Deep Learning for Channel Estimation and Tracking in Vehicular to Infrastructure Communications. , 2020, , .		1
651	Channel Estimation Method Based on Transformer in High Dynamic Environment. , 2020, , .		6
652	Deep Learning-Based Channel Quality Estimation in Adaptive Shortwave Communication Systems. , 2020, , .		1
653	Deep Learning Based Channel Estimation for Intelligent Reflecting Surface Aided MISO-OFDM Systems. , 2020, , .		9
654	An Intelligent Signal Detection Method Based on DNN for MBM System. , 2020, , .		0
655	Preamble-Based Packet Detection in Wi-Fi: A Deep Learning Approach. , 2020, , .		7
656	An Antenna Diversity-Aided Channel Network for Wireless Channel Estimation. , 2020, , .		0

#	ARTICLE	IF	CITATIONS
657	Detection Algorithm Based on Deep Learning for the Multi-user MIMO-NOMA System. , 2020, , .		0
658	A Damped GAMP Detection Algorithm for OTFS System based on Deep Learning. , 2020, , .		10
659	Deep Learning for Massive MIMO Uplink Detectors. IEEE Communications Surveys and Tutorials, 2022, 24, 741-766.	24.8	32
660	Waveform Level Intelligent Multi-Task Receiver With BiLSTM. IEEE Communications Letters, 2022, 26, 597-601.	2.5	1
661	Deep Learning-Based Frequency-Selective Channel Estimation for Hybrid mmWave MIMO Systems. IEEE Transactions on Wireless Communications, 2022, 21, 3804-3821.	6.1	23
662	Online machine learning algorithms to optimize performances of complex wireless communication systems. Mathematical Biosciences and Engineering, 2021, 19, 2056-2094.	1.0	2
663	Deep Learning-Based Channel Estimation for Massive MIMO With Hybrid Transceivers. IEEE Transactions on Wireless Communications, 2022, 21, 5162-5174.	6.1	12
664	Deep Learning based Nonlinear Equalization for DCO-OFDM Systems. , 2021, , .		1
665	A Deep Learning-Based Detector for IM-MIMO-OFDM. , 2021, , .		4
666	HybridDeepRx: Deep Learning Receiver for High-EVM Signals. , 2021, , .		9
667	Deep Bidirectional LSTM Network Learning-Aided OFDMA Downlink and SC-FDMA Uplink. , 2021, , .		1
668	Deep Reinforcement Learning based Congestion Control for V2X Communication. , 2021, , .		8
669	A Signal Detection Scheme Based on Deep Learning in OFDM Systems. , 2021, , .		2
670	A DNN-based OTFS Transceiver with Delay-Doppler Channel Training and IQI Compensation. , 2021, , .		11
671	Deep Reinforcement Learning-Based Beam Training for Spatially Consistent Millimeter Wave Channels. , 2021, , .		5
672	Deep Learning-Based Estimator for Fast HARQ Feedback in URLLC. , 2021, , .		5
673	End-to-End Deep Learning IRS-assisted Communications Systems. , 2021, , .		6
674	Stochastic Channel Modeling for Deep Neural Network-aided Sparse Code Multiple Access Communications. , 2021, , .		1

#	ARTICLE	IF	CITATIONS
675	CNN-Based Underwater Acoustic OFDM Communications over Doubly-Selective Channels. , 2021, , .		8
676	Generative Adversarial Network-based Channel Estimation in High-Speed Mobile Scenarios. , 2021, , .		4
677	A Deep Reinforcement Learning: Location-based Resource Allocation for Congested C-V2X Scenario. , 2021, , .		1
678	Signal Detection Method at the OFDM Receiver Based on Conditional GAN. , 2021, , .		0
679	Deep Learning-based Secure Transmission for SWIPT System with Power-Splitting Scheme. , 2021, , .		2
680	A Deep Learning-Based Intelligent Receiver for OFDM. , 2021, , .		2
681	DFECsiNet: Exploiting Diverse Channel Features for Massive MIMO CSI Feedback. , 2021, , .		5
682	Frequency Domain Analysis and Convolutional Neural Network Based Modulation Signal Classification Method in OFDM System. , 2021, , .		4
683	An Attention-Aided Deep Neural Network Design for Channel Estimation in Massive MIMO Systems. , 2021, , .		2
684	Semantic Communications for Speech Recognition. , 2021, , .		21
685	Experimental performance of deep learning channel estimation for an X-ray communication-based OFDM-PWM system. Optics Letters, 2022, 47, 461.	1.7	2
686	Learning to Continuously Optimize Wireless Resource in a Dynamic Environment: A Bilevel Optimization Perspective. IEEE Transactions on Signal Processing, 2022, 70, 1900-1917.	3.2	11
687	Artificial intelligence technology in the Internet of things. , 2022, , 245-297.		1
688	Machine Learning-Aided Energy Efficiency Strategy for Multiuser Cooperative Networks. Wireless Communications and Mobile Computing, 2022, 2022, 1-8.	0.8	0
689	Practical Optimization and Game Theory for 6G Ultra-Dense Networks: Overview and Research Challenges. IEEE Access, 2022, 10, 13311-13328.	2.6	13
690	Downlink Power Allocation in Massive MIMO via Deep Learning: Adversarial Attacks and Training. IEEE Transactions on Cognitive Communications and Networking, 2022, 8, 707-719.	4.9	6
691	Deep Learning for B5G Open Radio Access Network: Evolution, Survey, Case Studies, and Challenges. IEEE Open Journal of the Communications Society, 2022, 3, 228-250.	4.4	45
692	Two-Timescale End-to-End Learning for Channel Acquisition and Hybrid Precoding. IEEE Journal on Selected Areas in Communications, 2022, 40, 163-181.	9.7	13

#	ARTICLE	IF	CITATIONS
693	Performance Analysis of Channel Estimation for Massive MIMO Communication Using DL-Based Fully Connected Neural Network (DL-FCNN) Architecture. Journal of Applied Security Research, 2023, 18, 533-545.	0.8	0
694	Deep Unsupervised Learning for Joint Antenna Selection and Hybrid Beamforming. IEEE Transactions on Communications, 2022, 70, 1697-1710.	4.9	19
695	Deep Neural Network for Beam and Blockage Prediction in 3GPP-Based Indoor Hotspot Environments. Wireless Personal Communications, 2022, 124, 3287-3306.	1.8	3
696	Perspectives on 6G wireless communications. ICT Express, 2023, 9, 82-91.	3.3	19
697	Design of a SIMO Deep Learning-Based Chaos Shift Keying (DLCSK) Communication System. Sensors, 2022, 22, 333.	2.1	6
698	Deep Learning LMMSE Joint Channel, PN, and IQ Imbalance Estimator for Multicarrier MIMO Full-Duplex Systems. IEEE Wireless Communications Letters, 2022, 11, 111-115.	3.2	11
699	A Variational Bayesian Inference-Inspired Unrolled Deep Network for MIMO Detection. IEEE Transactions on Signal Processing, 2022, 70, 423-437.	3.2	11
700	Deep Learning-Based Resource Allocation for Device-to-Device Communication. IEEE Transactions on Wireless Communications, 2022, 21, 5235-5250.	6.1	11
701	Federated Meta-Learning Enhanced Acoustic Radio Cooperative Framework for Ocean of Things. IEEE Journal on Selected Topics in Signal Processing, 2022, 16, 474-486.	7.3	8
702	AÄŸaÄŸÄ± ve YukarÄ± YÄŸnlÄ¼ NOMA HaberleÄŸme Sistemleri iÄŸin CNN YardÄ±mlÄ± Alternatif Sezici TasarÄ±mÄ±, Deu Muhendislik Fakultesi Fen Ve Muhendislik, 2022, 24, 341-349.	0.1	1
703	Deep Learning and Improved HMM Training Algorithm and Its Analysis in Facial Expression Recognition of Sports Athletes. Computational Intelligence and Neuroscience, 2022, 2022, 1-12.	1.1	7
704	Beamforming design with fully connected analog beamformer using deep learning. International Journal of Communication Systems, 2022, 35, .	1.6	2
705	Deep learning driven physical layer security for a simultaneously wireless information and power transfer network. AEJ - Alexandria Engineering Journal, 2022, 61, 7429-7439.	3.4	5
706	End-to-End Deep Learning for Long-haul Fiber Transmission Using Differentiable Surrogate Channel. Journal of Lightwave Technology, 2022, 40, 2807-2822.	2.7	15
707	Learning Indoor Environment for Effective LiFi Communications: Signal Detection and Resource Allocation. IEEE Access, 2022, 10, 17400-17416.	2.6	3
708	Multi-Agent Feedback Enabled Neural Networks for Intelligent Communications. IEEE Transactions on Wireless Communications, 2022, 21, 6167-6179.	6.1	0
709	Research on Anti-Jamming Algorithm of Massive MIMO Communication System Based on Multi-User Game Theory. Mobile Networks and Applications, 0, , 1.	2.2	0
710	Dataâ€driven approach to design energyâ€efficient joint precoders at source and relay using deep learning in MIMOâ€CRNs. Transactions on Emerging Telecommunications Technologies, 2022, 33, .	2.6	5



#	ARTICLE	IF	CITATIONS
711	Code-Aided Blind Iterative Channel Estimation for OFDM Systems. , 2021, , .		1
712	Deep Neural Network: An Alternative to Traditional Channel Estimators in Massive MIMO Systems. IEEE Transactions on Cognitive Communications and Networking, 2022, 8, 657-671.	4.9	7
713	Deep Learning Based Detection for Communications Systems With Radar Interference. IEEE Transactions on Vehicular Technology, 2022, 71, 6245-6254.	3.9	2
714	A Secure-Transmission Maximization Scheme for SWIPT Systems Assisted by an Intelligent Reflecting Surface and Deep Learning. IEEE Access, 2022, 10, 31851-31867.	2.6	16
715	Defeating Super-Reactive Jammers With Deception Strategy: Modeling, Signal Detection, and Performance Analysis. IEEE Transactions on Wireless Communications, 2022, 21, 7374-7390.	6.1	4
716	Deep Channel Prediction: A DNN Framework for Receiver Design in Time-Varying Fading Channels. IEEE Transactions on Vehicular Technology, 2022, 71, 6439-6453.	3.9	7
717	Deep Generative Models for Downlink Channel Estimation in FDD Massive MIMO Systems. IEEE Transactions on Signal Processing, 2022, 70, 2000-2014.	3.2	3
718	Tiny Machine Learning (Tiny-ML) for Efficient Channel Estimation and Signal Detection. IEEE Transactions on Vehicular Technology, 2022, 71, 6795-6800.	3.9	17
720	Artificial intelligence based learning for wireless application – A survey. AIP Conference Proceedings, 2022, , .	0.3	1
721	A Deep Learning-Based Intelligent Receiver for Improving the Reliability of the MIMO Wireless Communication System. IEEE Transactions on Reliability, 2022, 71, 1104-1115.	3.5	10
722	Waveform Learning for Next-Generation Wireless Communication Systems. IEEE Transactions on Communications, 2022, 70, 3804-3817.	4.9	9
723	Unity-Rate Coding Improves the Iterative Detection Convergence of Autoencoder-Aided Communication Systems. IEEE Transactions on Vehicular Technology, 2022, 71, 5037-5047.	3.9	2
724	OFDM-Guided Deep Joint Source Channel Coding for Wireless Multipath Fading Channels. IEEE Transactions on Cognitive Communications and Networking, 2022, 8, 584-599.	4.9	29
725	$\hat{\mu}$ -Fairness-Maximizing User Association in Energy-Constrained Small Cell Networks. IEEE Transactions on Wireless Communications, 2022, 21, 7443-7459.	6.1	2
726	Learning-Based Channel Estimation and Phase Noise Compensation in Doubly-Selective Channels. IEEE Communications Letters, 2022, 26, 1052-1056.	2.5	10
727	Hybrid-Layers Neural Network Architectures for Modeling the Self-Interference in Full-Duplex Systems. IEEE Transactions on Vehicular Technology, 2022, 71, 6291-6307.	3.9	6
728	RC-Struct: A Structure-Based Neural Network Approach for MIMO-OFDM Detection. IEEE Transactions on Wireless Communications, 2022, 21, 7181-7193.	6.1	6
729	Developing A New Scheduling Algorithm for Wi-Fi 6 Technology Based on Machine Learning. Uluslararası Mühendislik Arastirma Ve Gelistirme Dergisi, 2022, 14, 322-337.	0.1	0

#	ARTICLE	IF	CITATIONS
731	6G Wireless Communications and Networks Systems. , 2022, , 307-339.		1
732	Residual Learning and Multi-Path Feature Fusion-Based Channel Estimation for Millimeter-Wave Massive MIMO System. Entropy, 2022, 24, 292.	1.1	1
733	Channel Estimation and Equalization Using FIM for MIMO-OFDM on Doubly Selective Faded Noisy Channels. ECTI Transactions on Electrical Engineering, Electronics, and Communications, 2022, 20, 74-82.	0.6	1
734	Neural Network-Based Transceiver Design for VLC System over ISI Channel. Photonics, 2022, 9, 190.	0.9	3
735	Unconditional Authentication Based on Physical Layer Offered Chain Key in Wireless Communication. Entropy, 2022, 24, 488.	1.1	0
736	Hardware-friendly User-specific Machine Learning for Edge Devices. Transactions on Embedded Computing Systems, 2022, 21, 1-29.	2.1	2
737	Unequal error protection transmission for federated learning. IET Communications, 2022, 16, 1106-1118.	1.5	1
738	Fine Geological Modeling of Complex Fault Block Reservoir Based on Deep Learning. Wireless Communications and Mobile Computing, 2022, 2022, 1-16.	0.8	3
739	Knowledge-defined networking: Applications, challenges and future work. Array, 2022, 14, 100136.	2.5	7
740	Deep learning-based M-ary spread spectrum communication system in shallow water acoustic channel. Applied Acoustics, 2022, 192, 108742.	1.7	4
741	5G cascaded channel estimation using convolutional neural networks. , 2022, 126, 103483.		7
742	Deep Learning Based OFDM Physical-Layer Receiver for Extreme Mobility. , 2021, , .		2
743	Data-Driven Receiver for OTFS System with Deep Learning. , 2021, , .		6
744	Wireless Channel Scenario Recognition Based on Neural Networks. , 2021, , .		1
745	Comparative Performance Investigation of MIMO-OTFS and MIMO-OFDM using Deep Neural Network Modeling. , 2021, , .		3
746	Ä±Ä±z Aktar Ä°Ä°birlikli Ä±Ä±itlemeli Ä±ok RÄ±leli Sistemlerde Derin Ä±Ä±renme YardÄ±mlÄ± En Ä°yi RÄ±le SeÄ±imi Ve GÄ±Ä± Optimizasyonu. El-Cezeri Journal of Science and Engineering, 0, , .	0.1	0
747	The Application of Deep Learning in Wireless Communications of Maglev System. , 2021, , .		1
748	Application of Reinforcement Learning and Deep Learning in Multiple-Input and Multiple-Output (MIMO) Systems. Sensors, 2022, 22, 309.	2.1	22

#	ARTICLE	IF	CITATIONS
749	A Deep Learning Framework for Distributed Channel Selection in a Congested Uncooperative Spectrum. , 2021, , .		0
750	Classification of Modulation Error Rate Measurement using Convolutional Neural Networks in ISDB-T. , 2021, , .		0
751	MTCNet: Multi-Task Complex Network for Concurrent Channel Estimation and Equalization. , 2021, , .		0
752	Deep Learning Based OFDM Channel Estimation Using Frequency-Time Division and Attention Mechanism. , 2021, , .		6
753	LWCNet: Lightweight Complex Neural Network for Real-Time Channel Estimation. , 2021, , .		0
754	Adaptive Channel Estimation Based on Model-Driven Deep Learning for Wideband mmWave Systems. , 2021, , .		11
755	RC-Struct: Reservoir Computing Meets Knowledge of Structure in MIMO-OFDM. , 2021, , .		1
756	A Two-Stage CNN Based Channel Estimation for OFDM System. , 2021, , .		4
757	Deep Learning for Radar Signal Detection in the 3.5 GHz CBRS Band. , 2021, , .		3
758	Successive Interference Cancellation using LSTM in MIMO. Smart Moves Journal Ijoscience, 0, , 46-52.	0.0	0
759	Domain Knowledge aided Neural Network for Wireless Channel Estimation. , 2021, , .		1
760	A deep learning-based low complexity approach for joint transceiver beamforming. IET Communications, 2022, 16, 14-28.	1.5	2
761	CNN-Based Signal Detector for IM-OFDMA. , 2021, , .		7
762	Turbo Detection Aided Autoencoder for Multicarrier Wireless Systems: Integrating Deep Learning Into Channel Coded Systems. IEEE Transactions on Cognitive Communications and Networking, 2022, 8, 600-614.	4.9	7
763	Harnessing Tensor Structures for Multi-Mode Reservoir Computing and Its Application in Massive MIMO. IEEE Transactions on Wireless Communications, 2022, 21, 8120-8133.	6.1	4
764	Efficient Channel Prediction Technique Using AMC and Deep Learning Algorithm for 5G (NR) mMTC Devices. IEEE Access, 2022, 10, 45053-45060.	2.6	5
765	Machine Learning-based pilot symbol assisted channel prediction. IET Communications, 2022, 16, 866-877.	1.5	2
766	Equalization Network-Aided SCMA Codec Scheme with Deep Learning. Wireless Communications and Mobile Computing, 2022, 2022, 1-11.	0.8	0

#	ARTICLE	IF	CITATIONS
767	Deep Learning for OFDM Channel Estimation in Impulsive Noise Environments. <i>Wireless Personal Communications</i> , 2022, 125, 2947-2964.	1.8	6
768	CAQoE: A Novel No-Reference Context-aware Speech Quality Prediction Metric. <i>ACM Transactions on Multimedia Computing, Communications and Applications</i> , 2023, 19, 1-23.	3.0	1
769	Deep Reinforcement Learning Based Blind mmWave MIMO Beam Alignment. <i>IEEE Transactions on Wireless Communications</i> , 2022, 21, 8772-8785.	6.1	9
770	Digital-Twin-Enabled City-Model-Aware Deep Learning for Dynamic Channel Estimation in Urban Vehicular Environments. <i>IEEE Transactions on Green Communications and Networking</i> , 2022, 6, 1604-1612.	3.5	9
772	Deep Hybrid Neural Network-Based Channel Equalization in Visible Light Communication. <i>IEEE Communications Letters</i> , 2022, 26, 1593-1597.	2.5	10
773	An Effective Generative Model Based Channel Estimation Method With Reduced Overhead. <i>IEEE Transactions on Vehicular Technology</i> , 2022, 71, 8414-8423.	3.9	3
774	IQ Symbols Processing Schemes With LSTMs in OFDM System. <i>IEEE Access</i> , 2022, 10, 70737-70745.	2.6	8
775	Machine Learning for Underwater Acoustic Communications. <i>IEEE Wireless Communications</i> , 2022, 29, 102-108.	6.6	6
776	English Speech Recognition System Model Based on Computer-Aided Function and Neural Network Algorithm. <i>Computational Intelligence and Neuroscience</i> , 2022, 2022, 1-11.	1.1	1
777	A Low-Complexity Channel Estimation Based on a Least-Squares Algorithm in OFDM Systems. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 4258.	1.3	2
778	A Deep Learning-Based User Selection Scheme for Cooperative NOMA System with Imperfect CSI. <i>Wireless Communications and Mobile Computing</i> , 2022, 2022, 1-13.	0.8	4
779	Investigating the Combination of Deep Learning for Channel Estimation and Power Optimization in a Non-Orthogonal Multiple Access System. <i>Sensors</i> , 2022, 22, 3666.	2.1	10
780	Deep Joint Source-Channel Coding for Wireless Image Transmission with Adaptive Rate Control. , 2022, , .		19
781	A Review of Fundamental Optimization Approaches and the Role of AI Enabling Technologies in Physical Layer Security. <i>Sensors</i> , 2022, 22, 3589.	2.1	5
782	Undermining Deep Learning Based Channel Estimation via Adversarial Wireless Signal Fabrication. , 2022, , .		4
783	Distributed Machine Learning Based Downlink Channel Estimation for RIS Assisted Wireless Communications. <i>IEEE Transactions on Communications</i> , 2022, 70, 4900-4909.	4.9	9
784	Transfer Learning Based Joint Resource Allocation for Underlay D2D Communications. , 2022, , .		3
785	Data-Driven Signal Detection for Underwater Acoustic Filter Bank Multicarrier Communications. <i>Wireless Communications and Mobile Computing</i> , 2022, 2022, 1-9.	0.8	2

#	ARTICLE	IF	CITATIONS
786	End-to-End PSK Signals Demodulation Using Convolutional Neural Network. IEEE Access, 2022, 10, 58302-58310.	2.6	7
787	Channel Estimation for OFDM Systems Using MMSE and LS Algorithms. , 2022, , .		3
788	Machine/deep learning based estimation and detection in OFDM communication systems with various channel imperfections. Wireless Networks, 2022, 28, 2637-2650.	2.0	8
789	Research on Mine OFDM Intelligent Receiver Based on Deep Learning. Journal of Physics: Conference Series, 2022, 2221, 012057.	0.3	0
790	End-to-end waveform level receiver with deep learning. IET Communications, 0, , .	1.5	0
791	A Model-driven Deep Learning Signal Processing Scheme for OFDM System. , 2022, , .		0
792	Transfer learning-based channel estimation in orthogonal frequency division multiplexing systems using data-nulling superimposed pilots. PLoS ONE, 2022, 17, e0268952.	1.1	3
793	High-Efficiency Mitigation of Nonlinear Distortion in Microwave Photonics Link Assisted by Artificial Neural Network. Wireless Communications and Mobile Computing, 2022, 2022, 1-8.	0.8	0
794	Deep Learning Based Analog Beamforming Design for Millimetre Wave Massive MIMO System. Wireless Personal Communications, 2022, 126, 701-717.	1.8	2
795	Optimal Control of Wireless Powered Edge Computing System for Balance Between Computation Rate and Energy Harvested. IEEE Transactions on Automation Science and Engineering, 2023, 20, 1108-1124.	3.4	2
796	Changeable Rate and Novel Quantization for CSI Feedback Based on Deep Learning. IEEE Transactions on Wireless Communications, 2022, 21, 10100-10114.	6.1	7
797	Mobility Support for Millimeter Wave Communications: Opportunities and Challenges. IEEE Communications Surveys and Tutorials, 2022, 24, 1816-1842.	24.8	18
798	Modulation Recognition Using Signal Enhancement and Multistage Attention Mechanism. IEEE Transactions on Wireless Communications, 2022, 21, 9921-9935.	6.1	5
799	Interference Suppression Using Deep Learning: Current Approaches and Open Challenges. IEEE Access, 2022, 10, 66238-66266.	2.6	4
800	Environment Knowledge-Aided Massive MIMO Feedback Codebook Enhancement Using Artificial Intelligence. IEEE Transactions on Communications, 2022, 70, 4527-4542.	4.9	7
801	A Neural Network-Prepended GLRT Framework for Signal Detection Under Nonlinear Distortions. IEEE Communications Letters, 2022, 26, 2161-2165.	2.5	1
802	Dynamic Neural Network for MIMO Detection. IEEE Journal on Selected Areas in Communications, 2022, 40, 2254-2266.	9.7	3
803	Deep Source-Channel Coding for Sentence Semantic Transmission With HARQ. IEEE Transactions on Communications, 2022, 70, 5225-5240.	4.9	37

#	ARTICLE	IF	CITATIONS
804	Time-Varying Channel Estimation Based on Air-Ground Channel Modelling and Modulated Learning Networks. Chinese Journal of Electronics, 2022, 31, 430-441.	0.7	0
805	A Systematic Review on Channel Estimation Methods with Optimal Pilot Design in mmWave MIMO for 5G Applications. , 2022, , .		0
806	Deep-Learning-Based Channel Estimation for Multi-wavelength Visible Light Communication System. , 2022, , .		0
807	Real-time Machine Learning for Symbol Detection in MIMO-OFDM Systems. , 2022, , .		4
808	Performance Analysis of OFDM-IM Using DLD. Lecture Notes in Networks and Systems, 2023, , 145-153.	0.5	1
809	Deep learning-based resource allocation for secure transmission in a non-orthogonal multiple access network. International Journal of Distributed Sensor Networks, 2022, 18, 155013292211043.	1.3	1
810	Deep-Learning Based DOA Estimation in the Presence of Multiplicative Noise. Wireless Personal Communications, 0, , .	1.8	1
811	Low-complexity signal detection networks based on Gauss-Seidel iterative method for massive MIMO systems. Eurasip Journal on Advances in Signal Processing, 2022, 2022, , .	1.0	1
812	Model-Driven Deep Learning-Based MIMO-OFDM Detector: Design, Simulation, and Experimental Results. IEEE Transactions on Communications, 2022, 70, 5193-5207.	4.9	4
813	CNN Based Hybrid Precoding for MmWave MIMO Systems With Adaptive Switching Module and Phase Modulation Array. IEEE Transactions on Wireless Communications, 2022, 21, 10489-10501.	6.1	5
814	Deep Learning Based Channel Estimation for OFDM Systems With Doubly Selective Channel. IEEE Communications Letters, 2022, 26, 2067-2071.	2.5	5
815	Deep Learning Gated Recurrent Neural Network-Based Channel State Estimator for OFDM Wireless Communication Systems. IEEE Access, 2022, 10, 69312-69322.	2.6	8
816	Training Deep Filters for Physical-Layer Frame Synchronization. IEEE Open Journal of the Communications Society, 2022, 3, 1063-1075.	4.4	1
817	Machine Learning-Based Channel State Estimators for 5G Wireless Communication Systems. CMES - Computer Modeling in Engineering and Sciences, 2022, , .	0.8	0
818	Mixed-Timescale Deep-Unfolding for Joint Channel Estimation and Hybrid Beamforming. IEEE Journal on Selected Areas in Communications, 2022, 40, 2510-2528.	9.7	6
819	A Survey on Deep Learning Based Channel Estimation in Doubly Dispersive Environments. IEEE Access, 2022, 10, 70595-70619.	2.6	17
820	Performance Enhancement of mmWave MIMO Systems Using Machine Learning. IEEE Access, 2022, 10, 73068-73078.	2.6	4
822	Engineering Edge-Cloud Offloading of Big Data for Channel Modelling in THz-range Communications. , 2022, , .		0

#	ARTICLE	IF	CITATIONS
823	Exploring the Performance of Receiver Algorithm in OTFS Based on CNN. , 2022, , .		3
824	Deep-Learning Based Signal Detection for MIMO-OTFS Systems. , 2022, , .		4
825	Research on mQAM-OFDM Wireless Optical Communication System with Adaptive Underwater Channel Characteristics Based on Meta-Learning. , 2022, , .		1
826	DWDM Sistemlerinde FEC Parametresine En Āçok Etki Eden Girdilerin CanlĀ± AĀĀ DeĀĀerlerinin Makine ĀĀrenimi AlgoritmasĀ± Tahmini ve KarĀĀlaĀtĀrĀlmasĀ±. Journal of Polytechnic, 0, , .	0.4	0
827	Machine Learning and Optimization Algorithms in Applied Problems of Wireless Cellular Communications. Moscow University Computational Mathematics and Cybernetics, 2022, 46, 61-71.	0.1	0
828	Comparative Analysis of Major Machine-Learning-Based Path Loss Models for Enclosed Indoor Channels. Sensors, 2022, 22, 4967.	2.1	14
829	AI-Based Wireless Communication. Advances in Wireless Technologies and Telecommunication Book Series, 2022, , 42-60.	0.3	0
830	ML/AI Empowered 5G and beyond Networks. , 2022, , .		2
831	Performance improvement of a CAP VLC system employing a deep learning-based post equalizer. Optics Communications, 2022, 524, 128741.	1.0	1
832	The Time-of-Arrival Offset Estimation in Neural Network Atomic Denoising in Wireless Location. Sensors, 2022, 22, 5364.	2.1	3
833	Channel phase calibration based on Savitzky-Golay filter in time-domain for OFDM systems. , 2022, , .		1
834	A deep learning driven hybrid beamforming method for millimeter wave MIMO system. Digital Communications and Networks, 2023, 9, 1291-1300.	2.7	3
835	Underwater Accoustic OFDM Systems Using Deep Neural Network. , 2022, , .		0
836	Channel Estimation for Massive MU-MIMO Systems with Real Image Denoising Network. , 2022, , .		0
837	Multi-source Transfer Learning for Signal Detection over a Fading Channel with Co-channel Interference. , 2022, , .		1
838	Improved Spectral Efficiency of RIS-aided 6G Communication using Deep Learning. , 2022, , .		3
839	Communication Knowledge Aided Neural Network for OFDM Receiver in Terahertz Band. , 2022, , .		2
840	Turbo Autoencoder with a Trainable Interleaver. , 2022, , .		4

#	ARTICLE	IF	CITATIONS
841	Real-Time Symbol Detection For Massive MIMO Systems With Multi-Mode Reservoir Computing. , 2022, , .		1
842	Machine Learning With Gaussian Process Regression For Time-Varying Channel Estimation. , 2022, , .		0
843	Blind Channel Estimation for MIMO Systems via Variational Inference. , 2022, , .		2
844	A DNN-Based Channel Estimation Scheme for PMCH in LTE-Based 5G Terrestrial Broadcast System. , 2022, , .		0
845	Improving 5G NR Uplink Channel Estimation with Artificial Neural Networks: A Practical Study on NR PUSCH Receiver. , 2022, , .		2
846	Online Compressive Channel Learning Using Untrained Deep Generative Model. , 2022, , .		0
847	Detection of Impaired OFDM Waveforms Using Deep Learning Receiver. , 2022, , .		0
848	Deep-Learning Based Channel Estimation for OFDM Wireless Communications. , 2022, , .		1
849	Deep Learning and Power Allocation Analysis in NOMA System. , 2022, , .		5
850	Machine Learning for Intelligent-Reflecting-Surface-Based Wireless Communication towards 6G: A Review. Sensors, 2022, 22, 5405.	2.1	37
851	Mitigating 5G security challenges for next-gen industry using quantum computing. Journal of King Saud University - Computer and Information Sciences, 2023, 35, 101334.	2.7	6
852	Adaptive Neural Network-based OFDM Receivers. , 2022, , .		4
853	An Improved Data-Driven Decision Feedback Receiver via Deep Unfolding. Mathematical Problems in Engineering, 2022, 2022, 1-16.	0.6	0
854	A novel channel estimation model for broadband wireless communication system using hybrid heuristic-based invariable step-size zero-attracting NLMS algorithm. International Journal of Intelligent Robotics and Applications, 0, , .	1.6	0
855	Deep Learning-Based Automatic Safety Helmet Detection System for Construction Safety. Applied Sciences (Switzerland), 2022, 12, 8268.	1.3	28
856	Perceptron for channel estimation and signal detection in OFDM systems. Journal of Optics (India), 0, , .	0.8	0
857	Artificial Intelligence Applications and Self-Learning 6G Networks for Smart Cities Digital Ecosystems: Taxonomy, Challenges, and Future Directions. Sensors, 2022, 22, 5750.	2.1	16
858	Two-stage deep learning-based hybrid precoder design for very large scale massive MIMO systems. Physical Communication, 2022, 54, 101835.	1.2	1



#	ARTICLE	IF	CITATIONS
859	High-speed PAM4 transmission using directly modulated laser and artificial neural network nonlinear equaliser. Optics and Laser Technology, 2023, 157, 108642.	2.2	2
860	CSI Feedback Based on Complex Neural Network for Massive MIMO Systems. IEEE Access, 2022, 10, 78414-78422.	2.6	2
861	Y-Shaped Net-Based Signal Detection for OFDM-IM Systems. IEEE Communications Letters, 2022, 26, 2661-2664.	2.5	4
862	Joint Channel Estimation and Mixed-ADCs Allocation for Massive MIMO via Deep Learning. IEEE Transactions on Wireless Communications, 2023, 22, 1029-1043.	6.1	3
863	Deep Learning-Based Joint NOMA Signal Detection and Power Allocation in Cognitive Radio Networks. IEEE Transactions on Cognitive Communications and Networking, 2022, 8, 1743-1752.	4.9	8
864	Time-Reversal CNN-Based S-NOFDM Scheme for Underwater Acoustic Communication. IEEE Systems Journal, 2022, , 1-12.	2.9	0
865	Deep Expectation-Maximization for Joint MIMO Channel Estimation and Signal Detection. IEEE Transactions on Signal Processing, 2022, 70, 4483-4497.	3.2	7
866	DDPG-Driven Deep-Unfolding With Adaptive Depth for Channel Estimation With Sparse Bayesian Learning. IEEE Transactions on Signal Processing, 2022, 70, 4665-4680.	3.2	4
867	Transfer Learning for Signal Detection in Wireless Networks. IEEE Wireless Communications Letters, 2022, 11, 2325-2329.	3.2	4
868	Few-Shot Specific Emitter Identification via Deep Metric Ensemble Learning. IEEE Internet of Things Journal, 2022, 9, 24980-24994.	5.5	40
869	Multiuser Adversarial Attack on Deep Learning for OFDM Detection. IEEE Wireless Communications Letters, 2022, 11, 2527-2531.	3.2	4
870	Beamspace Channel Estimation for Wideband Millimeter-Wave MIMO: A Model-Driven Unsupervised Learning Approach. IEEE Transactions on Wireless Communications, 2023, 22, 1808-1822.	6.1	11
871	Variational Autoencoders for Precoding Matrices with High Spectral Efficiency. Communications in Computer and Information Science, 2022, , 315-326.	0.4	3
872	A Multi-Resolution Channel Structure Learning Estimation Method of Geometry-Based Stochastic Model With Multi-Scene. IEEE Transactions on Vehicular Technology, 2023, 72, 1414-1428.	3.9	2
873	A Deep Learning-Based Framework for Low Complexity Multiuser MIMO Precoding Design. IEEE Transactions on Wireless Communications, 2022, 21, 11193-11206.	6.1	6
874	A Unified Framework for Pushing in Two-Tier Heterogeneous Networks With mmWave Hotspots. IEEE Transactions on Wireless Communications, 2023, 22, 19-31.	6.1	8
875	Deep Learning-Aided TR-UWB MIMO System. IEEE Transactions on Communications, 2022, 70, 6579-6588.	4.9	1
876	Deep Learning-Aided 6G Wireless Networks: A Comprehensive Survey of Revolutionary PHY Architectures. IEEE Open Journal of the Communications Society, 2022, 3, 1749-1809.	4.4	28

#	ARTICLE	IF	CITATIONS
877	Intelligent Massive MIMO Systems for Beyond 5G Networks: An Overview and Future Trends. IEEE Access, 2022, 10, 102532-102563.	2.6	12
878	Physical Layer Authentication Using Ensemble Learning Technique in Wireless Communications. Computers, Materials and Continua, 2022, 73, 4489-4499.	1.5	0
879	Pre-Trained Models Based Receiver Design With Natural Redundancy for Chinese Characters. IEEE Communications Letters, 2022, 26, 2350-2354.	2.5	4
880	DemodNet: Learning Soft Demodulation from Hard Information Using Convolutional Neural Network. , 2022, , .		3
881	SNR Estimation in Communication Systems Using Cognitive Radio. , 2022, , .		1
882	A machine learning enhanced approximate message passing massive MIMO accelerator. , 2022, , .		0
883	DNN-based Signal Detection for Underwater OTFS Systems. , 2022, , .		5
884	5G NOMA Defense Application Environment and Stacked LSTM Network Architectures. Journal of Mobile Multimedia, 0, , .	0.9	1
885	Channel Estimation Based on Deep Learning for OCDM Communications. , 2022, , .		1
886	BER Performance Evaluation Using Deep Learning Algorithm for Joint Source Channel Coding in Wireless Networks. Advances in Science, Technology and Engineering Systems, 2022, 7, 127-139.	0.4	0
887	Artificial Intelligence for Metaverse: A Framework. , 2022, 1, 54-67.		10
888	A Novel Approach Based on Generative Adversarial Network for Signal Enhancement in Wireless Communications. Wireless Communications and Mobile Computing, 2022, 2022, 1-8.	0.8	0
889	Single-Frequency Network Terrestrial Broadcasting with 5G NR Numerology Using Recurrent Neural Network. Electronics (Switzerland), 2022, 11, 3130.	1.8	0
890	Neural-network-based direct waveform to symbol conversion for joint ISI and ICI cancellation in non-orthogonal multi-band CAP based UD-WDM fiber-mmWave integration. Optics Express, 2022, 30, 35684.	1.7	5
891	5G Sistemleri için DL Tabanlı Kanal Tahmini. Bilgisayar Bilimleri, 0, , .	0.0	0
892	Estimation of Rayleigh flat channel coefficients using deep learning. Transactions on Emerging Telecommunications Technologies, 2023, 34, .	2.6	2
893	Mine Intelligent Receiver: MIMO-OFDM Intelligent Receiver for Mine Information Recovery. Energies, 2022, 15, 6550.	1.6	1
894	6G-Enabled Smart Agriculture: A Review and Prospect. Electronics (Switzerland), 2022, 11, 2845.	1.8	15

#	ARTICLE	IF	CITATIONS
895	Lightweight Channel Estimation Networks for OFDM Systems. IEEE Wireless Communications Letters, 2022, 11, 2066-2070.	3.2	2
896	Intelligent MIMO Detection Using Meta Learning. IEEE Wireless Communications Letters, 2022, 11, 2205-2209.	3.2	5
897	Shift to 6G: Exploration on trends, vision, requirements, technologies, research, and standardization efforts. Sustainable Energy Technologies and Assessments, 2022, 54, 102666.	1.7	12
898	Automated deep learning-based wide-band receiver. Computer Networks, 2022, 218, 109367.	3.2	5
899	Improving Wireless Devices Identification Using Deep Learning Algorithm. Lecture Notes in Electrical Engineering, 2022, , 1021-1025.	0.3	0
900	5G Mobile Communications: Fundamentals, Key Enabling Technologies, Challenges, Opportunities, Future Trends. Synthesis Lectures on Engineering Science and Technology, 2022, , 143-164.	0.2	0
901	Role of Deep Learning in Wireless Communications. IEEE BITS the Information Theory Magazine, 2022, 2, 56-72.	1.0	10
902	Efficient OFDM Channel Estimation with RRDBNet. , 2022, , .		1
903	Channel Estimation for Cell-Free Massive MIMO Using Conditional GAN. , 2022, , .		1
904	Deep Learning For Channel Estimation And Signal Detection. , 2022, , .		1
905	Non-intrusive speech quality assessment using context-aware neural networks. International Journal of Speech Technology, 0, , .	1.4	1
906	CNN direct equalization in OFDM-VLC systems: evaluations in a numerical model based on experimental characterizations. Photonic Network Communications, 2023, 45, 1-11.	1.4	1
907	Deep Learning Channel Estimation for OFDM 5G Systems with Different Channel Models. Wireless Personal Communications, 2023, 128, 2891-2912.	1.8	8
908	Channel synchronization based on deep learning. Transactions on Emerging Telecommunications Technologies, 0, , .	2.6	0
909	Universal Beamforming: A Deep RFML Approach. , 2022, , .		2
910	Autoencoder-based deep learning for massive multiple-input multiple-output uplink under high-power amplifier non-linearities. IET Communications, 2023, 17, 162-170.	1.5	2
911	Symbol detection using extreme learning machine network for MU-MIMO systems. IET Communications, 2023, 17, 183-196.	1.5	0
912	Signal detection based on deep learning in MIMO-OFDM systems. , 2022, , .		0

#	ARTICLE	IF	CITATIONS
913	Multiple-symbol noncoherent learning detection of coded QAM signals in IEEE 802.15.3 Wireless Multi-media Networks. <i>Physical Communication</i> , 2022, 55, 101922.	1.2	1
914	Deep bidirectional LSTM for the signal detection of universal filtered multicarrier systems. <i>Machine Learning With Applications</i> , 2022, 10, 100425.	3.0	2
915	Deep Learning Aided Low Complex Sphere Decoding for MIMO Detection. <i>IEEE Transactions on Communications</i> , 2022, 70, 8046-8059.	4.9	2
916	Maritime Communications: A Survey on Enabling Technologies, Opportunities, and Challenges. <i>IEEE Internet of Things Journal</i> , 2023, 10, 3525-3547.	5.5	29
917	Neural Network-Based Fixed-Complexity Precoder Selection for Multiple Antenna Systems. <i>IEEE Access</i> , 2022, 10, 120343-120351.	2.6	1
918	Overview of Deep Learning-Based CSI Feedback in Massive MIMO Systems. <i>IEEE Transactions on Communications</i> , 2022, 70, 8017-8045.	4.9	34
919	Sparse Dense Neural Network Architecture for Turbo Decoding. , 2021, , .		0
920	Neural Network-Based OFDM Receiver for Resource Constrained IoT Devices. <i>IEEE Internet of Things Magazine</i> , 2022, 5, 158-164.	2.0	4
921	Deep Learning based Channel Prediction for OFDM Systems under Double-Selective Fading Channels. , 2022, , .		0
922	Evaluation of a Gaussian Mixture Model-based Channel Estimator using Measurement Data. , 2022, , .		0
923	Deep reinforcement learning-based beam training with energy and spectral efficiency maximisation for millimetre-wave channels. <i>Eurasip Journal on Wireless Communications and Networking</i> , 2022, 2022, .	1.5	3
924	Volterra-Aided Neural Network Equalization for Channel Impairment Compensation in Visible Light Communication System. <i>Photonics</i> , 2022, 9, 845.	0.9	4
925	Adaptive Semantic Video Conferencing for OFDM Systems. , 2022, , .		0
926	Semantic Communications for Future Internet: Fundamentals, Applications, and Challenges. <i>IEEE Communications Surveys and Tutorials</i> , 2023, 25, 213-250.	24.8	43
927	Model-Driven Based Deep Unfolding Equalizer for Underwater Acoustic OFDM Communications. <i>IEEE Transactions on Vehicular Technology</i> , 2023, 72, 6056-6067.	3.9	1
928	Cooperative Beamforming With Nonlinear Power Amplifiers: A Deep Learning Approach for Distributed Networks. <i>IEEE Transactions on Vehicular Technology</i> , 2023, 72, 5973-5988.	3.9	1
929	Innovative Variational AutoEncoder for an End-to-End Communication System. <i>IEEE Access</i> , 2023, 11, 86834-86847.	2.6	3
930	Learn to Adapt to New Environments From Past Experience and Few Pilot Blocks. <i>IEEE Transactions on Cognitive Communications and Networking</i> , 2023, 9, 373-385.	4.9	2

#	ARTICLE	IF	CITATIONS
931	On Assessing Vulnerabilities of the 5G Networks to Adversarial Examples. IEEE Access, 2022, 10, 126285-126303.	2.6	1
932	Sensing Integrated DFT-Spread OFDM Waveform and Deep Learning-Powered Receiver Design for Terahertz Integrated Sensing and Communication Systems. IEEE Transactions on Communications, 2023, 71, 595-610.	4.9	13
933	MIMO Detector Selection With Federated Learning. IEEE Transactions on Wireless Communications, 2023, 22, 4654-4667.	6.1	1
934	Meta-Learning for Beam Prediction in a Dual-Band Communication System. IEEE Transactions on Communications, 2023, 71, 145-157.	4.9	5
935	Wireless Semantic Communications for Video Conferencing. IEEE Journal on Selected Areas in Communications, 2023, 41, 230-244.	9.7	32
936	LAMANet: A Real-Time, Machine Learning-Enhanced Approximate Message Passing Detector for Massive MIMO. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2023, 31, 382-395.	2.1	0
937	Line Spectral Estimation Inspired by Quasi-Neural Network. IEEE Transactions on Signal Processing, 2022, 70, 5822-5832.	3.2	1
938	Deep Learning for Waveform Level Receiver Design With Natural Redundancy. IEEE Transactions on Cognitive Communications and Networking, 2023, 9, 317-331.	4.9	1
939	Hardware Impairment Estimation in NB-IoT: A Parallel Multitask Learning Method. IEEE Internet of Things Journal, 2023, 10, 6859-6869.	5.5	1
940	Deep Transfer Learning for Model-Driven Signal Detection in Downlink MIMO-NOMA Systems. , 2022, , .		0
941	An RNN based DD Channel Estimator for OTFS with Embedded Pilots. , 2022, , .		1
942	Deep Learning based Underwater Acoustic OFDM Receiver with Joint Channel Estimation and Signal Detection. , 2022, , .		4
943	Underwater Acoustic OFDM Receiver Using a Regression-based Deep Neural Network. , 2022, , .		1
944	Channel estimation of 5G OFDM system based on ConvLSTM network. , 2022, , .		2
945	Channel Estimation in the Interplanetary Internet Using Deep Learning and Federated Learning. , 0, , .		0
946	Deep Learning-Based Channel Estimation for HPO-MIMO Systems in IoV Scenario. , 2022, , .		0
947	A low-complexity AMP detection algorithm with deep neural network for massive mimo systems. Digital Communications and Networks, 2022, , .	2.7	1
948	Modelling of Wireless OFDM System with Deep Learning-based Modulation Detection. , 2022, , .		0

#	ARTICLE	IF	CITATIONS
949	Adaptive Modulation and Coding for Underwater Acoustic Communications Based on Data-Driven Learning Algorithm. <i>Remote Sensing</i> , 2022, 14, 5959.	1.8	4
950	Deep Neural Network-Based Detector for Single-Carrier Index Modulation NOMA. , 2022, , .		2
951	Artificial intelligence for channel estimation in multicarrier systems for B5G/6G communications: a survey. <i>Eurasip Journal on Wireless Communications and Networking</i> , 2022, 2022, .	1.5	7
952	A Deep Learning Framework for Predicting Signals in OFDM-NOMA with various Algorithms. , 2022, , .		0
954	Transfer Learning Strategy in Neural Network Application for Underwater Visible Light Communication System. <i>Sensors</i> , 2022, 22, 9969.	2.1	0
955	Machine learning-based methods for joint detection-channel estimation in <scp>OFDM</scp> systems. <i>Internet Technology Letters</i> , 2023, 6, .	1.4	1
956	Deep Learning-Based Signal Detection for Underwater Acoustic OTFS Communication. <i>Journal of Marine Science and Engineering</i> , 2022, 10, 1920.	1.2	5
957	DNNs Based Computation Offloading for LEO Satellite Edge Computing. <i>Electronics (Switzerland)</i> , 2022, 11, 4108.	1.8	5
958	Deep learning-based scalable and robust channel estimator for wireless cellular networks. <i>ETRI Journal</i> , 2022, 44, 915-924.	1.2	2
959	Photonic parallel channel estimation of MIMO-OFDM wireless communication systems. <i>Optics Express</i> , 2023, 31, 1394.	1.7	2
960	Deep Learning Algorithm for Maximizing the Spectral Efficiency of Wireless Systems. <i>Pattern Recognition and Image Analysis</i> , 2022, 32, 763-771.	0.6	0
961	High-speed visible light communication based on micro-LED: A technology with wide applications in next generation communication. , 2022, 1, 220020-220020.		14
962	End-to-End Underwater Acoustic Communication Based on Autoencoder with Dense Convolution. <i>Electronics (Switzerland)</i> , 2023, 12, 253.	1.8	3
963	Implementation of Deep-Learning-Based CSI Feedback Reporting on 5G NR-Compliant Link-Level Simulator. <i>Sensors</i> , 2023, 23, 910.	2.1	4
964	Deep Learning-Based Improved Cascaded Channel Estimation and Signal Detection for Reconfigurable Intelligent Surfaces-Assisted MU-MISO Systems. <i>IEEE Transactions on Green Communications and Networking</i> , 2023, 7, 1515-1527.	3.5	7
965	GMSK Demodulation Combining 1D-CNN and Bi-LSTM Network Over Strong Solar Wind Turbulence Channel. <i>Radio Science</i> , 2023, 58, .	0.8	2
966	Two-Stage Channel Estimation for mmWave Massive MIMO Systems Based on ResNet-UNet. <i>IEEE Systems Journal</i> , 2023, 17, 4291-4300.	2.9	15
967	Enhanced Performance of a Cascaded Receiver Consisting of a DNN-Based Waveform-to-Symbol Converter and Modified NN-Based DD-LMS in CAP Underwater VLC System. <i>Photonics</i> , 2023, 10, 79.	0.9	3

#	ARTICLE	IF	CITATIONS
968	Spectrum Sensing Using Optimized Deep Learning Techniques in Reconfigurable Embedded Systems. Intelligent Automation and Soft Computing, 2023, 36, 2041-2054.	1.6	0
969	End-to-End Deep Learning for Multipair Two-Way Massive MIMO with PA Impairments. IEEE Systems Journal, 2023, 17, 3150-3159.	2.9	2
970	Multi-Strategy Enhanced Harris Hawks Optimization for Global Optimization and Deep Learning-Based Channel Estimation Problems. Mathematics, 2023, 11, 390.	1.1	1
971	Deep Learning OFDM Receivers for Improved Power Efficiency and Coverage. IEEE Transactions on Wireless Communications, 2023, 22, 5518-5535.	6.1	2
972	Pilot based channel estimation of OFDM systems using deep learning techniques. International Journal of Information Technology (Singapore), 2023, 15, 819-831.	1.8	4
973	A deep neural networks based demodulator for PD-SCMA-VLC. Optics Communications, 2023, 532, 129256.	1.0	2
974	Developing novel channel estimation and hybrid precoding in millimeter-wave communication system using heuristic-based deep learning. Energy, 2023, 268, 126600.	4.5	8
975	A Deep Learning-Based Channel Aware Single Step Signal Detection in Downlink Multi-User NOMA. , 2022, , .		0
976	A Review: Deep Learning Aided Channel Estimation Techniques for Wireless Communication System. , 2022, , .		1
977	Multi-Task Learning with Convolutional Neural Network Approach for Packet Collision Avoidance in 802.11 WLAN. , 2022, , .		0
978	CNN-based Algorithm for Joint Channel and Phase Noise Estimation in OFDM Relay Systems. , 2022, , .		0
979	Signal Detection in NOMA Systems using DNN with Bidirectional LSTM. , 2022, , .		1
980	Investigation of Vehicular S-LSTM NOMA Over Time Selective Nakagami-m Fading with Imperfect CSI. Journal of Telecommunications and Information Technology, 2022, 4, 47-60.	0.3	0
981	On Attacking Future 5G Networks with Adversarial Examples: Survey. Network, 2023, 3, 39-90.	1.5	2
982	HIENet: A Hardware Impairment Estimation Network for OFDM Systems. , 2022, , .		1
983	SigT: An Efficient End-to-End MIMO-OFDM Receiver Framework Based on Transformer. , 2022, , .		0
984	Deep Learning based Wireless Channel Prediction: 5G Scenario. Procedia Computer Science, 2023, 218, 2626-2635.	1.2	0
985	Deep Learning-Based Beamforming for Millimeter-Wave Systems Using Parametric ReLU Activation Function. Wireless Personal Communications, 2023, 129, 825-836.	1.8	3

#	ARTICLE	IF	CITATIONS
986	Deep Learning-Based Soft Iterative-Detection of Channel-Coded Compressed Sensing-Aided Multi-Dimensional Index Modulation. IEEE Transactions on Vehicular Technology, 2023, 72, 7530-7544.	3.9	1
987	A Self-Supervised Learning-Based Channel Estimation for IRS-Aided Communication Without Ground Truth. IEEE Transactions on Wireless Communications, 2023, 22, 5446-5460.	6.1	2
988	Deep learning for joint channel estimation and feedback in massive MIMO systems. Digital Communications and Networks, 2024, 10, 83-93.	2.7	2
989	When Virtual Reality Meets Rate Splitting Multiple Access: A Joint Communication and Computation Approach. IEEE Journal on Selected Areas in Communications, 2023, 41, 1536-1548.	9.7	3
990	Designing Learning-Based Adversarial Attacks to (MIMO-)OFDM Systems With Adaptive Modulation. IEEE Transactions on Wireless Communications, 2023, 22, 6241-6251.	6.1	0
991	Channel Estimation based on Gaussian Mixture Models with Structured Covariances. , 2022, , .		3
992	Deep Learning Aided Channel Estimation in OFDM Systems. , 2022, , .		1
993	Deep Learning-Based Hybrid System for Multiuser MIMO Systems. , 2022, , .		1
994	Distributed Intelligence in Wireless Networks. IEEE Open Journal of the Communications Society, 2023, , 1-1.	4.4	3
995	A Reliable and Intelligent Deep Learning Based Demodulator for M-Ary Code Shifted Differential Chaos Shift Keying System With Power Allocation. IEEE Transactions on Vehicular Technology, 2023, , 1-13.	3.9	0
996	Hybrid Beamforming for Secure Transmission of Massive MIMO UAV Communication Networks. IEEE Systems Journal, 2023, 17, 4200-4211.	2.9	1
997	Deep Learning-Assisted OFDM Channel Estimation and Signal Detection Technology. IEEE Communications Letters, 2023, 27, 1347-1351.	2.5	4
998	Bit Error Rate Prediction Analysis on modified dyadic wavelet transform based Channel Estimation in comparison with Traditional wavelets for MIMO OFDM system. , 2023, , .		0
999	On the Road to 6G: Visions, Requirements, Key Technologies, and Testbeds. IEEE Communications Surveys and Tutorials, 2023, 25, 905-974.	24.8	151
1000	A Deep Learning-Based Approach for Channel Estimation and Equalization for Cognitive Radio Systems. Lecture Notes in Mechanical Engineering, 2023, , 465-480.	0.3	1
1001	A Signal processing method of OFDM communication receiver based on CNN. Physical Communication, 2023, 59, 102055.	1.2	0
1002	Underwater optical wireless communication system performance improvement using convolutional neural networks. AIP Advances, 2023, 13, .	0.6	7
1003	Deep learning and expert knowledge based underwater acoustic OFDM receiver. Physical Communication, 2023, 58, 102041.	1.2	4



#	ARTICLE	IF	CITATIONS
1004	Performance of a Neural Network Receiver under Mismatch of Channel Training Samples. , 2022, , .		0
1005	Normalized Min-Sum Neural Network for LDPC Decoding. IEEE Transactions on Cognitive Communications and Networking, 2023, 9, 70-81.	4.9	4
1006	Deep learning based physical layer security for terrestrial communications in 5G and beyond networks: A survey. Physical Communication, 2023, 57, 102002.	1.2	6
1007	QoE-Oriented Open Radio Access Networks for Virtual Reality Applications. , 2022, , .		2
1008	Deep Learning Approach for Optimal Angle-of-Arrival Estimation Using a mm-Wave Sensor. , 2022, , .		2
1009	Comprehensive review on ML-based RIS-enhanced IoT systems: basics, research progress and future challenges. Computer Networks, 2023, 224, 109581.	3.2	22
1010	Hardware-Based Architecture for DNN Wireless Communication Models. Sensors, 2023, 23, 1302.	2.1	2
1011	Autoencoder-based OFDM for Agricultural Image Transmission. , 2022, , .		0
1012	Deep-Learning-Based Carrier Frequency Offset Estimation and Its Cross-Evaluation in Multiple-Channel Models. Information (Switzerland), 2023, 14, 98.	1.7	2
1013	LSTM based Receiver Design for Baseband Signal Demodulation. , 2022, , .		0
1014	HBRO-AlexNet: Honey Badger Remora Optimization Integrated AlexNet for Cooperative Spectrum Sensing in Cognitive Radio Network. Cybernetics and Systems, 0, , 1-24.	1.6	0
1015	Design of Secure Pilot Spectrum for 5G Oriented Massive MIMO System. , 2022, , .		0
1016	Deep Regularized Waveform Learning for Beam Prediction With Limited Samples in Non-Cooperative mmWave Systems. IEEE Transactions on Vehicular Technology, 2023, 72, 9614-9619.	3.9	12
1017	Pushing AI to wireless network edge: an overview on integrated sensing, communication, and computation towards 6G. Science China Information Sciences, 2023, 66, .	2.7	18
1018	CNN-Based Auto Fully-Digital Compensation Method for User Equipment with IQ Imbalance. , 2022, , .		0
1019	Deep Reinforcement Learning-Assisted Optimization for Resource Allocation in Downlink OFDMA Cooperative Systems. Entropy, 2023, 25, 413.	1.1	4
1020	A review on principles, performance and complexity of linear estimation and detection techniques for MIMO systems. Frontiers in Communications and Networks, 0, 4, .	1.9	3
1021	Ensemble-transfer-learning-based channel parameter prediction in asymmetric massive MIMO systems. Frontiers of Information Technology and Electronic Engineering, 2023, 24, 275-288.	1.5	0

#	ARTICLE	IF	CITATIONS
1022	PEACH: Proactive and Environment-Aware Channel State Information Prediction with Depth Images. Proceedings of the ACM on Measurement and Analysis of Computing Systems, 2023, 7, 1-27.	1.4	1
1023	5G and 6G Wireless Communication. Advances in Wireless Technologies and Telecommunication Book Series, 2023, , 284-310.	0.3	0
1024	Variational Autoencoder Leveraged MMSE Channel Estimation. , 2022, , .		4
1025	A Novel Method for Predicting Smart Grid Stability Via DNN and Hybrid Ensemble Strategy. , 2022, , .		0
1026	Convolutional fuzzy neural network based symbol detection in MIMO NOMA systems. Journal of Electrical Engineering, 2023, 74, 70-74.	0.4	0
1027	A Survey of Deep Learning Based NOMA: State of the Art, Key Aspects, Open Challenges and Future Trends. Sensors, 2023, 23, 2946.	2.1	21
1028	Investigation of Effectiveness of Deep Learning on OFDM and NOMA Systems. Lecture Notes in Electrical Engineering, 2023, , 585-595.	0.3	0
1029	Denoising Generalization Performance of Channel Estimation in Multipath Time-Varying OFDM Systems. Sensors, 2023, 23, 3102.	2.1	2
1030	Deep Learning-Based Channel Estimation for Wideband Hybrid MmWave Massive MIMO. IEEE Transactions on Communications, 2023, 71, 3679-3693.	4.9	1
1031	A BBL-Net based OFDM Signal Detection in the Presence of RF Impairments. , 2023, , .		1
1032	Learning a Gaussian Mixture Model from Imperfect Training Data for Robust Channel Estimation. IEEE Wireless Communications Letters, 2023, , 1-1.	3.2	0
1033	Performance Study of Model-Driven Based Neural Network for VLC Channel Impairments Compensation. , 2022, , .		0
1034	Research on End-to-End Wireless Communication System Based on Two Dimensional Convolution. , 2022, , .		0
1035	DPD and Compensation under RF Impairments in the Hardware by BiLSTM. , 2022, , .		0
1036	Joint Channel Estimation and Signal Detection using Latent Space Representations in VAE. , 2022, , .		0
1037	Integration of A-I in implementation of Wire-less Webbing: A detailed Review. , 2023, , .		0
1038	Maximizing Energy-Efficiency in Wireless Communication Systems Based on Deep Learning. Lecture Notes in Electrical Engineering, 2023, , 349-357.	0.3	0
1039	Deep-learning-based multi-user framework for end-to-end fiber-MMW communications. Optics Express, 2023, 31, 15239.	1.7	3

#	ARTICLE	IF	CITATIONS
1040	A Deep Neural Network with Residual Skip Connections for Channel Estimation. , 2022, , .		1
1041	Classification-Oriented Distributed Semantic Communication for Multivariate Time Series. IEEE Signal Processing Letters, 2023, 30, 369-373.	2.1	1
1042	Channel Estimation for High-Speed Railway Wireless Communications: A Generative Adversarial Network Approach. Electronics (Switzerland), 2023, 12, 1752.	1.8	1
1043	Deep <scp>SCMA</scp> receiver: A lowâ€complexity joint decoder and channel estimator for <scp>SCMA</scp> over timeâ€varying channels using <scp>RNNs</scp>. Transactions on Emerging Telecommunications Technologies, 2023, 34, .	2.6	0
1047	DEC-aided SM-OFDM: A Spatial Modulation System with Deep Learning based Error Correction. , 2022, , .		0
1050	Variational Inference Aided Estimation of Time Varying Channels. , 2023, , .		0
1060	PESTnet - Pre-IFFT PAPR Estimation using Neural Networks for Improved OFDM Systems. , 2023, , .		0
1070	Deep Learning Framework for Spectral Efficient Intelligent Hybrid Beamforming. , 2023, , .		0
1074	Deep Learning for 5G and Beyond. Synthesis Lectures on Engineering Science and Technology, 2023, , 151-169.	0.2	0
1075	Deep Learning-aided Channel Estimation For Universal Filtered Multi-carrier Systems. , 2023, , .		0
1076	A Literature Review on Antenna Data Analysis in MIMO System. , 2023, , .		0
1080	A Deep Neural Network Approach to Max-Min Fair Precoder for Multiple Antenna Systems. , 2022, , .		0
1083	Beam Management Technique For 5G Wireless Communication: A Deep Learning Approach. , 2022, , .		0
1086	Deep Neural Network Based Anomaly Detection For Smart Surveillance System. , 2022, , .		0
1088	A Deep Learning Based Receiver for Wireless Communications Systems With Unknown Channel Models. , 2023, , .		0
1094	Hyperparameter Optimized DNN for OFDM Signal Detection in the Presence of CFO and PO. , 2023, , .		1
1097	Super Resolution-Based Channel Estimation. Lecture Notes in Networks and Systems, 2023, , 277-284.	0.5	0
1101	Neural-Network-Based OFDM-SNM Detection: Emerging Technique of Future Data Communication. Communications in Computer and Information Science, 2023, , 194-204.	0.4	0

#	ARTICLE	IF	CITATIONS
1105	Evaluation on User Equipment Chip for Deep Learning based Channel Estimation in 5G Advanced System. , 2023, , .		0
1107	MLOps meets Edge Computing: an Edge Platform with Embedded Intelligence towards 6G Systems. , 2023, , .		0
1108	CASE: Channel Allocation for optimized Spectral Efficiency using deep neural network in underlay cognitive radios. , 2023, , .		0
1112	Streaming Convolutional Neural Network FPGA Architecture for RFSoc Data Converters. , 2023, , .		0
1113	One-shot Learning for Channel Estimation in Massive MIMO Systems. , 2023, , .		0
1116	Hold on to your Complex Phase Estimation Algorithms for Reconfigurable Intelligent Surfaces. , 2022, , .		0
1117	Search for Efficient Wireless Network Structures. , 2023, , .		0
1119	DSC-FeedNet Based CSI Feedback in Massive MIMO OTFS Systems. , 2022, , .		0
1120	High-speed Machine Learning-enhanced Receiver for Millimeter-Wave Systems. , 2023, , .		0
1121	Wireless Signal Denoising Using Conditional Generative Adversarial Networks. , 2023, , .		0
1130	Reservoir Computing for Symbol Detection of Optical Wireless Scattering Communications. , 2023, , .		0
1131	Symbol Detection for Polarization Shift Keying Based on Quaternion Neural Networks. , 2023, , .		0
1134	Residual Channel Attention Network-Based Channel Interpolation Using Noise2Noise for Massive MIMO-OFDM Systems. , 2023, , .		0
1135	Robust Machine Learning for Channel Estimation with Varying Delay and Doppler Shift Conditions. , 2023, , .		0
1138	FastNet for Symbol Detection in Massive MIMO Systems. , 2023, , .		0
1139	A DenseNet-Based Learning Framework Toward Maritime End-to-End Autoencoder Communication Systems. , 2023, , .		0
1141	CS-LSTM: a hybrid channel estimation scheme in IDFT-VFDM system. , 2023, , .		0
1142	Data Transmission Based on RNN Compensation over Mobile Voice Channel. , 2023, , .		0

#	ARTICLE	IF	CITATIONS
1143	BiLSTM-Based Frame Synchronization for Overlapped S-AIS Signals: A Learning-Empowered Approach. , 2023, , .		0
1144	Meta-Learning Based Semi-blind Data Detection for Cell-Free Systems. , 2023, , .		0
1145	Channel Estimation Based on An Improved Conditional GAN for MIMO-OFDM Systems. , 2023, , .		0
1149	Doppler Shift Compensation Using an LSTM-based Deep Neural Network in Underwater Acoustic Communication Systems. , 2023, , .		0
1150	Channel Replay Aided Neural Network Equalizer for Underwater Acoustic Communications. , 2023, , .		0
1156	Artificial Intelligence-Aid OTFS Receiver: Design and Performance Evaluation. , 2023, , .		0
1158	The Role of Machine Learning in the Advancement of 6G Technology: Opportunities and Challenges. , 2023, , 309-331.		0
1159	Characterizing the DNN Impact on Multiuser PD-NOMA System Based Channel Estimation and Power Allocation. Studies in Systems, Decision and Control, 2024, , 943-966.	0.8	0
1162	Development of a Mathematical Model for Performing the Haar Wavelet Transform in Parallel Modular Codes. , 2023, , .		0
1166	Bi-LSTM-Based Signal Detection Method for Underwater Acoustic OTFS Communication System. , 2023, , .		0
1169	Narrowband Interference Detection via Deep Learning. , 2023, , .		0
1170	A Multi-user Deep Semantic Communication System based on Federated Learning with Dynamic Model Aggregation. , 2023, , .		1
1171	Integrated CSI Feedback and Localization Using Deep Learning. , 2023, , .		0
1172	Finding the Best Reference Signal Pattern for Different Channel Models in 5G. , 2023, , .		0
1173	Machine Learning-Based Multi-stratum Channel Coordinator for Resilient Internet of Space Things. IFIP Advances in Information and Communication Technology, 2024, , 48-61.	0.5	0
1176	Deep Learning-Based Approaches for Prediction of Binary Star Parameters. , 2023, , .		0
1180	DNN Based Channel Estimation for Indoor MIMO Multipath Visible Light Communication System. , 2023, , .		0
1184	Artificial intelligence use in cellular communications up to the sixth generation; A review. AIP Conference Proceedings, 2023, , .	0.3	0

#	ARTICLE	IF	CITATIONS
1186	AI-Native Air Interface. Signals and Communication Technology, 2024, , 143-163.	0.4	0
1189	Channel Estimation Algorithm Based on Deep Learning for OFDM System. , 2023, , .		0
1191	Unified Deep Neural Demodulation Network Design for QAM Signal Recovery. , 2023, , .		0
1192	CNN Architecture Design Impact in DL-Based Channel Estimation Algorithms. , 2023, , .		0
1193	Research on timing synchronization algorithm for OFDM systems in Rician channel. , 2023, , .		0
1194	Overview on Deep learning aided channel Equalizer Techniques. , 2023, , .		0
1196	Channel Estimation of OFDM System Based on BR-SRGAN Network. , 2023, , .		0
1197	Deep Learning for MIMO Communications. , 0, , .		0
1198	Joint Channel Estimation and Signal Detection in MIMO-NOMA Wireless Systems Using Deep Learning. , 2023, , .		0
1199	Channel Aware Adversarial Attacks are Not Robust. , 2023, , .		0
1200	On the Computational Complexities of Complex-Valued Neural Networks. , 2023, , .		0
1202	Clipping Noise Mitigation for Coherent OFDM Systems Using Decision-Aided Reconstruction Combined with Neural Networks. , 2023, , .		0
1205	Pilot-Aided Deep Learning Based Phase Estimation for OFDM Systems with Wiener Phase Noise. , 2023, , .		0
1206	High-Resolution Image Synthesis Based Channel Estimation. , 2023, , .		0
1207	A Comparative Study of Artificial Intelligence-Based Algorithms for Bitwise Decoding of Error Correction Codes. , 2023, , .		0
1210	Deep Learning Based Channel Estimation for 5G. , 2023, , .		0
1211	Millimeter-Wave Channel State Information Acquisition on PXI-Based Testbed. , 2023, , .		0
1212	DMCNET: Data-Driven Multi-Pilot Convolution Neural Network for Mimo-Ofdm Receiver. , 2023, , .		0

#	ARTICLE	IF	CITATIONS
1214	Intelligent Receiver Design for Underwater Acoustic OFDM Communication Based on LSTM Networks*. , 2023, , .		0
1215	A Transformer-Based OFDM Receiver for Underwater Acoustic Communication. , 2023, , .		0
1216	Performance Evaluation of AI/ML Model to Enhance Beam Management in 5G-Advanced System. , 2023, , .		0
1217	Almost Pilotless Channel Estimation Using Dimension Reduction by PCA. , 2023, , .		0
1221	Joint Beamforming for RIS-Assisted MU-MISO Systems Based on Model-Driven Deep Learning. , 2023, , .		0
1222	Channel Estimation in Wideband OFDM Systems with Large Array of Intelligent Reflectible Surfaces. , 2023, , .		0
1223	Channel Estimation by Tensor-Train Deep Neural Networks for OCDM Communications over Time-varying Channels. , 2023, , .		0
1224	Research on OTDOA Positioning Method for 5G in Multipath Channel. , 2023, , .		0
1229	Robust Deep Learning Approaches for Wireless Communication Systems. , 2023, , .		0