

Abolfazl Falahati

List of Publications by Year in descending order

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Version: 2024-02-01

130
papers

908
citations

623734

14
h-index

580821

25
g-index

132
all docs

132
docs citations

132
times ranked

653
citing authors

#	ARTICLE	IF	CITATIONS
1	Yield strength prediction in Ni-base alloy 718Plus based on thermo-kinetic precipitation simulation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 608, 114-122.	5.6	78
2	A model for precipitation strengthening in multi-particle systems. <i>Computational Materials Science</i> , 2014, 91, 173-186.	3.0	75
3	Adding liraglutide to oral antidiabetic drug therapy: onset of treatment effects over time. <i>International Journal of Clinical Practice</i> , 2010, 64, 267-276.	1.7	52
4	Bandwidth and Impedance-Matching Enhancement of Fractal Monopole Antennas Using Compact Grounded Coplanar Waveguide. <i>IEEE Transactions on Antennas and Propagation</i> , 2011, 59, 2480-2487.	5.1	47
5	A novel compact fractal UWB antenna with triple reconfigurable notch reject bands applications. <i>AEU - International Journal of Electronics and Communications</i> , 2019, 101, 1-8.	2.9	41
6	Underwater acoustic channel models for 4800 b/s QPSK signals. <i>IEEE Journal of Oceanic Engineering</i> , 1991, 16, 12-20.	3.8	37
7	Application of fractal binary tree slot to design and construct a dual band-notch CPW-ground-fed ultra-wide band antenna. <i>IET Microwaves, Antennas and Propagation</i> , 2011, 5, 1424.	1.4	36
8	Precipitate strengthening of non-spherical precipitates extended in $\sim 100^\circ$ or $\{100\}$ direction in fcc crystals. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 590, 262-266.	5.6	35
9	A secure variant of the Hill Cipher. , 2009, , .		29
10	Tomlinson's Harashima precoding with imperfect channel state information. <i>IET Communications</i> , 2008, 2, 151.	2.2	25
11	Dual Band-Notch CPW-Ground-Fed UWB Antenna by Fractal Binary Tree Slot. , 2009, , .		19
12	A secure cryptosystem based on affine transformation. <i>Security and Communication Networks</i> , 2011, 4, 207-215.	1.5	17
13	Wideband Fan-Beam Low-Sidelobe Array Antenna Using Grounded Reflector for DECT, 3G, and Ultra-Wideband Wireless Applications. <i>IEEE Transactions on Antennas and Propagation</i> , 2013, 61, 700-706.	5.1	17
14	A model for coherency strengthening of large precipitates. <i>Scripta Materialia</i> , 2014, 84-85, 47-50.	5.2	17
15	Improving Water-Filling Algorithm to Power Control Cognitive Radio System Based Upon Traffic Parameters and QoS. <i>Wireless Personal Communications</i> , 2013, 70, 1747-1759.	2.7	16
16	Interference alignment in space, time and frequency: achievable DoF analysis. <i>Electronics Letters</i> , 2016, 52, 204-206.	1.0	16
17	Improving code division multiple access security by applying encryption methods over the spreading codes. <i>IET Communications</i> , 2007, 1, 398.	2.2	15
18	Bandwidth enhancement and decreasing ultra-wideband pulse response distortion of Penta-Gasket Koch monopole antennas using compact-grounded co-planar wave guides. <i>IET Microwaves, Antennas and Propagation</i> , 2011, 5, 48.	1.4	12

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19	Improve Safety and Security of Intelligent Railway Transportation System Based on Balise Using Machine Learning Algorithm and Fuzzy System. International Journal of Intelligent Transportation Systems Research, 2022, 20, 117-131.	1.1	12
20	Forming a Two-Tier Heterogeneous Air-Network via Combination of High and Low Altitude Platforms. IEEE Transactions on Vehicular Technology, 2022, 71, 1989-2001.	6.3	12
21	Combination of turbo coding and cryptography in NONGEO satellite communication systems. , 2008, , .		11
22	Mutual implementation of predefined and random challenges over RFID distance bounding protocol. , 2012, , .		11
23	New handoff initiation algorithm (optimum combination of hysteresis & threshold based methods). , 0, , .		10
24	SSDF protection in cooperative spectrum sensing employing a computational trust evaluation algorithm. , 2010, , .		10
25	Application of distance bounding protocols with random challenges over RFID noisy communication systems. , 2012, , .		10
26	Accurate Variable-Order Approximations to the Sum of χ^2 Variates With Application to MIMO Systems. IEEE Transactions on Wireless Communications, 2021, 20, 1612-1623.	9.2	9
27	Tomlinson-Harashima Precoding with Imperfect Channel Side Information. International Conference on Advanced Communication Technology, 2007, , .	0.0	8
28	Mutual Distance Bounding Protocol with Its Implementability Over a Noisy Channel and Its Utilization for Key Agreement in Peer-to-Peer Wireless Networks. Wireless Personal Communications, 2014, 77, 127-149.	2.7	8
29	Power Loading by Minimizing the Average Symbol Error Rate on MIMO THP Systems. International Conference on Advanced Communication Technology, 2007, , .	0.0	7
30	Overcoming Overload in IMS by Employment of Multiserver Nodes and Priority Queues. , 2009, , .		7
31	Amplify-forward relaying for multiple-antenna multiple relay networks under individual power constraint at each relay. Eurasip Journal on Wireless Communications and Networking, 2012, 2012, .	2.4	7
32	All-or-nothing approach to protect a distance bounding protocol against terrorist fraud attack for low-cost devices. Electronic Commerce Research, 2015, 15, 75-95.	5.0	7
33	An RFID Search Protocol Secured Against Relay Attack Based on Distance Bounding Approach. Wireless Personal Communications, 2015, 85, 711-726.	2.7	7
34	Nested and interleaved direct sequence spread spectrum to enhance CDMA security and bit error rate performance. International Journal of Communication Systems, 2016, 29, 1907-1915.	2.5	7
35	Precoder design for decentralised estimation over MIMO-WSN based on stochastic models. IET Communications, 2018, 12, 736-742.	2.2	7
36	Achieving an appropriate security level for distance bounding protocols over a noisy channel. Telecommunication Systems, 2015, 58, 219-231.	2.5	6

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37	On the Cooperation and Power Allocation Schemes for Multiple-Antenna Multiple-Relay Networks. , 2009, , .		5
38	Spatial-DoF Improvement of MIMO Cognitive Network Through Interference Fusion in Conjunction with Alignment. Wireless Personal Communications, 2015, 82, 833-847.	2.7	5
39	An Interference Alignment Design with Higher Multiplexing Gain by the Reduced Channel Extension. IEEE Transactions on Vehicular Technology, 2024, , 1-1.	6.3	5
40	A Hidden OSTBC Scheme to Enhance Physical Layer Security by Employing a Pseudorandom Precoder. IEEE Transactions on Communications, 2020, 68, 363-375.	7.8	5
41	Cryptanalysis and Enhancement of a Secure Group Ownership Transfer Protocol for RFID Tags. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2012, , 186-193.	0.3	5
42	Reducing The Effect of Channel Time Variations in MIMO Broadcast Systems. , 2006, , .		4
43	An Improved Low-Complexity Resource Allocation Algorithm for OFDMA Systems with Proportional Data Rate Constraint. International Conference on Advanced Communication Technology, 2007, , .	0.0	4
44	On Total Call Setup Waiting Time Probability Distribution in IMS Signaling Network. , 2009, , .		4
45	Using Quantum Cryptography for Securing Wireless LAN Networks. , 2009, , .		4
46	Power allocation for Zero Forcing scheme in Multi-Antenna Multiple Relays Networks. , 2010, , .		4
47	On Feasibility Conditions for Linear Interference Alignment over Cognitive Interference Channel: A DoF Analysis with Diversity Tradeoff. IETE Journal of Research, 2016, 62, 278-287.	2.6	4
48	An analysis and improvement of error control performance of IS-LDPC codes with a large number of subsets. Physical Communication, 2018, 31, 79-86.	2.1	4
49	General precoder interference alignment design with achievable higher multiplexing gain and reduced channel extension cases. IET Communications, 2019, 13, 2876-2882.	2.2	4
50	High speed reed-solomon decoder with pipeline architecture. , 0, , .		3
51	User Selection and Signaling Over Time-Varying MIMO Broadcast Channels. , 0, , .		3
52	Joint channel estimation and spatial pre-equalisation in MIMO systems. Electronics Letters, 2007, 43, 1372.	1.0	3
53	An Improved ICI Reduction Method in OFDM Communication System in Presence of Phase Noise. , 2007, , .		3
54	Classic Miniature Fractal Monopole Antennae for UWB Applications; Modification of The Feeding Structures of Fractal Antenna for Improving Performances. , 2008, , .		3

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55	CONVOLUTIONAL CODES ACTING AS EMI VIRTUAL SHIELDS IN CURRENT INJECTION SYSTEMS. Progress in Electromagnetics Research, 2008, 88, 337-353.	4.4	3
56	A Proxy Signature Scheme Based on Coding Theory. Communications in Computer and Information Science, 2010, , 282-290.	0.5	3
57	Adaptive MIMO LS estimation technique via MSE criterion over a Markov channel model. , 2010, , .		3
58	A transmit preprocessing technique in fixed relay networks for practical multiuser transmission. , 2010, , .		3
59	Spectral efficient impulse radio-ultra-wideband transmission model in presence of pulse attenuation and timing jitter. IET Communications, 2012, 6, 1544.	2.2	3
60	Resource allocation scheme for cognitive radio system based on COFDM signaling considering secondary user's channel uncertainty. IETE Journal of Research, 2013, 59, 466.	2.6	3
61	Power allocation grouping scheme considering constraints in two separate stages for OFDM-based cognitive radio system. , 2014, , .		3
62	An efficient mutual distance bounding protocol over a binary symmetric noisy communication channel. International Journal of Ad Hoc and Ubiquitous Computing, 2015, 20, 1.	0.5	3
63	Analysis of false-reject probability in distance bounding protocols with mixed challenges over RFID noisy communication channel. Information Processing Letters, 2015, 115, 623-629.	0.6	3
64	Distance bounding-based RFID binding proof protocol to protect inpatient medication safety against relay attack. International Journal of Ad Hoc and Ubiquitous Computing, 2016, 22, 71.	0.5	3
65	PDF of the Maximum of Two Correlated Random Variables with Applications to Fading Channels. , 2018, , .		3
66	Spectral efficiency in non-terrestrial heterogeneous networks with spectrum underlay access. Physical Communication, 2021, 46, 101313.	2.1	3
67	An improved Merkle hash tree based secure scheme for bionic underwater acoustic communication. Frontiers of Information Technology and Electronic Engineering, 2021, 22, 1010-1019.	2.6	3
68	SWIPT-NOMA in Cell-Free Massive MIMO. , 2020, , .		3
69	Ergodic Capacity and Symbol Error Rate Analysis of a Wireless System with $\hat{\Gamma} \pm \hat{\Gamma}^{\frac{1}{4}}$ Composite Fading Channel. Wireless Personal Communications, 2022, 124, 103-118.	2.7	3
70	Notice of Violation of IEEE Publication Principles - Security Enhancement in CDMA with a Hidden Direct Sequence Spread Spectrum System. , 2006, , .		2
71	Modification of short length LT block coding technique by removing LT weaknesses with an equivalent matrix. , 2010, , .		2
72	Employing relay ordering in incremental amplify and forward Relaying technique to improve outage probability. , 2011, , .		2

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73	Analysis of precipitation kinetics in Al-Ge and Al-Ge-Si alloys by dilatometry. <i>Metallic Materials</i> , 2011, 49, 101-106.	0.3	2
74	Antenna Power Cutback Manipulation to Optimize Relay Power Allocation over MAMR Networks Employing Zero Forcing Scheme. <i>Wireless Personal Communications</i> , 2013, 73, 1215-1225.	2.7	2
75	An energy-detection based cooperative spectrum sensing algorithm for faded and low-power primary user signal over cognitive radio networks. , 2014, , .		2
76	Performance of orthogonal space-time-frequency block codes over highly frequency selective fading channel for 2×1 and 2×2 MIMO-OFDM systems. , 2014, , .		2
77	RFID light weight server-less search protocol based on NLFSRs. , 2016, , .		2
78	Joint Interference Alignment and Power Allocation in Clustered Small Cells. , 2018, , .		2
79	Weighted Sum Rate Maximization Under the Given PAPR Constraints for a Multi-user OFDM System. <i>Wireless Personal Communications</i> , 2019, 109, 127-137.	2.7	2
80	Interference alignment and scheduling in clustered partially connected small cell networks. <i>International Journal of Communication Systems</i> , 2020, 33, e4576.	2.5	2
81	Improving symbol error rate of heterogeneous network by clustering, IA, and interference detection. <i>Electronics Letters</i> , 2020, 56, 408-410.	1.0	2
82	On the channel tracking under uncertain state model for multiuser massive MIMO in high-rate Internet-of-Things. <i>Physical Communication</i> , 2021, 48, 101434.	2.1	2
83	Channel tracking of uncoordinated access under uncertain evolution for massive connectivity with massive MIMO. <i>AEU - International Journal of Electronics and Communications</i> , 2021, 141, 153961.	2.9	2
84	CBTC Systems Safety Enhancement by Employing an IoT-Based Spread Spectrum Technique. , 2021, , .		2
85	Spirit-like Multiuser Symbol Detection with Multiple Receive Antenna. , 0, , .		1
86	Number of Antenna Considerations and Power Allocation in MIMO Broadcast Channels. <i>International Conference on Advanced Communication Technology</i> , 2007, , .	0.0	1
87	Dynamic Tree Pruning Method for Fast ACELP Search. , 2008, , .		1
88	Achievable Rates and Power Loading in MIMO-THP Systems. , 2008, , .		1
89	MIMO Precoding with ESPRIT-Like Blind Channel Estimation. , 2008, , .		1
90	New EO-STBC with more feedback bits in inaccurate channel feedback. , 2009, , .		1

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91	MIMO relaying for multi-user transmission using a two stage transmit and relay pre-processing technique. , 2010, , .		1
92	AF relaying for Multiple Antenna Multiple Relay Networks under individual power constraint at each relay. , 2010, , .		1
93	Alternative approach of constructing a digital underwater communication system with negative SNR as well as higher security. , 2011, , .		1
94	Spectrally efficient ultra wideband transmission over wireless sensor networks. , 2012, , .		1
95	Security enhanced user authentication scheme for wireless sensor network. International Journal of Electronic Security and Digital Forensics, 2012, 4, 215.	0.2	1
96	Joint IR-UWB Power Spectral Lines and Interference Suppression Based on Coded Auxiliary Independent Signaling in Presence of Pulse Attenuation and Timing Jitter. Wireless Personal Communications, 2013, 69, 1241-1260.	2.7	1
97	Robust Relaying Schemes for Multiple-Antenna Multi-Relay Networks. Wireless Personal Communications, 2013, 68, 1611-1631.	2.7	1
98	Tracking Performance of an Adaptive MIMO-OFDM LS Estimator via MSE Criterion Over a Wireless Time Correlated Fading Channel. Wireless Personal Communications, 2013, 68, 517-533.	2.7	1
99	Localized ageing in the heat affected zone of welded X5CrNiCuNb16-4 and X4CrNiSiTi14-7 sheets. IOP Conference Series: Materials Science and Engineering, 2014, 60, 012071.	0.6	1
100	Analysis of unilateral distance bounding protocol with mixed predefined and bidirectional challenges over a noisy communication channel. , 2014, , .		1
101	An iterative resource allocation algorithm for multi-user OFDM-CR system with low complexity. , 2014, , .		1
102	Removal of the OFDM Segment without Affecting Signalling BER to Provide Higher Data Rate as well as a Cost Efficient Time Processing or a MIMO-OFDM Relay Network. IETE Journal of Research, 2016, 62, 339-346.	2.6	1
103	Lattice-Based Coding to Enhance Error Performance of the Hidden Direct Sequence Spread Spectrum. IETE Journal of Research, 2021, 67, 754-766.	2.6	1
104	On Necessary and Sufficient Conditions of Interference Alignment Feasibility in a MIMO Interference Channel. Wireless Personal Communications, 2020, 111, 1219-1234.	2.7	1
105	Interference Alignment in a Frequency Selective X Channel with Blind Transmitters, Relay and Limited Channel Extensions. , 2020, , .		1
106	Implementation of adaptive 5400 bit/s modem over frequency selective HF radio links. Electronics Letters, 1992, 28, 1238.	1.0	0
107	Modification of maximum power handoff with timer (MPHT) algorithm in cellular mobile communication systems. , 0, , .		0
108	Providing traffic engineering capabilities in data networks. , 0, , .		0

#	ARTICLE	IF	CITATIONS
109	A High Bandwidth Efficiency Adaptive Turbo Trellis Coded OFDM over A Wideband Fading Channel. , 0, , .		0
110	A New Fast Density Evolution Method for LDPC Codes Using Higher Order Statistics. , 2006, , .		0
111	A New MAP-based Algorithm to Reduce the Complexity of Turbo Decoder. International Conference on Advanced Communication Technology, 2007, , .	0.0	0
112	Modified Blackman Window for Generating Long Complex Gaussian Sequences. , 2007, , .		0
113	Maximum Likelihood-Based Space-Time Transmit Diversity Receiver Scheme for WCDMA. International Conference on Advanced Communication Technology, 2007, , .	0.0	0
114	An Improved ICI Reduction Method in OFDM Communication System in Presence of Phase Noise. , 2007, , .		0
115	New Analytical Method to Investigate the Effect of Normalized Doppler rate on the Capacity of MIMO channels Using Karhunen-Loeve Expansion. , 2007, , .		0
116	New Channel Orthogonalization Using STBC-OFDM with Low Partial Feedback. , 2007, , .		0
117	Blind Detection in CDMA Systems Using Nonparametric Likelihood Ratio Criterion. International Conference on Advanced Communication Technology, 2007, , .	0.0	0
118	A new distinguish attack against ABC stream cipher. International Conference on Advanced Communication Technology, 2007, , .	0.0	0
119	New fast density evolution method for low density parity-check codes using higher-order statistic. IET Communications, 2008, 2, 144.	2.2	0
120	Probability-Based Rake Receiver in Ultra-Wideband Multiple Access Systems. , 2008, , .		0
121	Exploiting Error-Control Coding in Blind Channel Estimation. , 2008, , .		0
122	New space and time coding with high performance and very low peak to average power ratio. , 2009, , .		0
123	An Improved Multi-path Key Establishment under REM Attacks in Wireless Sensor Networks. , 2010, , .		0
124	Optimum Hardware-Architecture for Modular Divider in GF(2 ^m) with Chaos as Arbitrary Source Based on ECC. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2012, , 245-252.	0.3	0
125	Resource allocation schemes with subcarriers grouping approach over an orthogonal frequency division multiplexing-based cognitive radio system considering the channel uncertainty. Journal of Communications Technology and Electronics, 2014, 59, 1369-1377.	0.5	0
126	Design and Implementation of a Visible Light Communication and Coding System Based on IEEE802.15.7 Standard. , 2019, , .		0

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127	Employing a Pseudo-Random Sequence to Secure a Lattice Coding Scheme. , 2019, , .		0
128	Partially Key Distribution with Public Key Cryptosystem Based on Error Control Codes. Communications in Computer and Information Science, 2010, , 291-299.	0.5	0
129	Employing Power Allocation to Enhance Zero Forcing Scheme Advantages over Multi-Antenna Multiple Relay Networks. International Journal of Communications, Network and System Sciences, 2012, 05, 736-742.	0.6	0
130	Interference alignment in two-hop multiple-input multiple-output interference channel under various CSI and antenna correlation. IET Communications, 2020, 14, 3599-3606.	2.2	0