Ali Abdi

List of Publications by Year
in descending order

40 papers	726 citations	623734 14 h-index	580821 25 g-index
43 all docs	43 docs citations	43 times ranked	566 citing authors

#	Article	IF	Citations
1	Experimental Demonstration of Underwater Acoustic Communication by Vector Sensors. IEEE Journal of Oceanic Engineering, 2011, 36, 454-461.	3.8	72
2	Cyclostationarity-Based Modulation Classification of Linear Digital Modulations in Flat Fading Channels. Wireless Personal Communications, 2010, 54, 699-717.	2.7	70
3	Signal Correlation Modeling in Acoustic Vector Sensor Arrays. IEEE Transactions on Signal Processing, 2009, 57, 892-903.	5.3	61
4	MIMO ISI Channel Estimation Using Uncorrelated Golay Complementary Sets of Polyphase Sequences. IEEE Transactions on Vehicular Technology, 2007, 56, 3024-3039.	6.3	57
5	A new compact multichannel receiver for underwater wireless communication networks. IEEE Transactions on Wireless Communications, 2009, 8, 3326-3329.	9.2	57
6	Fault Diagnosis Engineering of Digital Circuits Can Identify Vulnerable Molecules in Complex Cellular Pathways. Science Signaling, 2008, 1, ra10.	3.6	56
7	A New Vector Sensor Receiver for Underwater Acoustic Communication. , 2007, , .		40
8	Time-Varying MIMO Channels: Parametric Statistical Modeling and Experimental Results. IEEE Transactions on Vehicular Technology, 2007, 56, 1949-1963.	6.3	26
9	Instantaneous Mutual Information and Eigen-Channels in MIMO Mobile Rayleigh Fading. IEEE Transactions on Information Theory, 2012, 58, 353-368.	2.4	26
10	Information processing in the NF-ÎºB pathway. Scientific Reports, 2017, 7, 15926.	3.3	25
11	A unified approach to the performance analysis of speed estimation techniques in mobile communication. IEEE Transactions on Communications, 2008, 56, 126-135.	7.8	23
12	Quantitative analysis of intracellular communication and signaling errors in signaling networks. BMC Systems Biology, 2014, 8, 89.	3.0	19
13	Time reversal receivers for underwater acoustic communication using vector sensors. , 2008, , .		18
14	Computation and measurement of cell decision making errors using single cell data. PLoS Computational Biology, 2017, 13, e1005436.	3.2	18
15	A Comparative Study of Two Shadow Fading Models in Ultrawideband and Other Wireless Systems. IEEE Transactions on Wireless Communications, 2011, 10, 1428-1434.	9.2	16
16	Bayesian coherent and incoherent matched-field localization and detection in the ocean. Journal of the Acoustical Society of America, 2019, 146, 4812-4820.	1.1	16
17	Cyclostationarity-based doppler spread estimation in mobile fading channels. IEEE Transactions on Communications, 2009, 57, 1061-1067.	7.8	14
18	Signal Transmission Using Underwater Acoustic Vector Transducers. IEEE Transactions on Signal Processing, 2013, 61, 3683-3698.	5.3	12

#	Article	IF	Citations
19	Fault Diagnosis Engineering in Molecular Signaling Networks: An Overview and Applications in Target Discovery. Chemistry and Biodiversity, 2010, 7, 1111-1123.	2.1	10
20	On the Utility of Laguerre Series for the Envelope PDF in Multipath Fading Channels. IEEE Transactions on Information Theory, 2009, 55, 5652-5660.	2.4	9
21	Nonparametric mobile speed estimation in fading channels: Performance analysis and experimental results. IEEE Transactions on Wireless Communications, 2009, 8, 1683-1692.	9.2	9
22	Advanced Fault Diagnosis Methods in Molecular Networks. PLoS ONE, 2014, 9, e108830.	2.5	9
23	Delay and Doppler spreads in underwater acoustic particle velocity channels. Journal of the Acoustical Society of America, 2011, 129, 2015-2025.	1.1	8
24	Stochastic Fading Channel Models With Multiple Dominant Specular Components. IEEE Transactions on Vehicular Technology, 2022, 71, 2229-2239.	6.3	8
25	On the average crossing rates in selection diversity. IEEE Transactions on Wireless Communications, 2007, 6, 448-451.	9.2	7
26	Modeling and measurement of signaling outcomes affecting decision making in noisy intracellular networks using machine learning methods. Integrative Biology (United Kingdom), 2020, 12, 122-138.	1.3	6
27	Communication Rate Increase in Drill Strings of Oil and Gas Wells Using Multiple Actuators. Sensors, 2019, 19, 1337.	3.8	5
28	Multiuser underwater communication with space-time block codes and acoustic vector sensors. , 2008, , .		4
29	On Multiple Wireless Channels in Oil Wells Drill Strings. IEEE Wireless Communications Letters, 2017, 6, 738-741.	5.0	4
30	A comparative study of multichannel and single channel accelerometer sensors for communication in oil wells. , 2017, , .		4
31	Computation capacities of a broad class of signaling networks are higher than their communication capacities. Physical Biology, 2019, 16, 064001.	1.8	4
32	Optimal Training Sequences For Efficient MIMO Frequency-Selective Fading Channel Estimation. , 2006, , .		3
33	CTH09-3: Statistical Characterization of Eigen-Channels in Time-Varying Rayleigh Flat Fading MIMO Systems. IEEE Global Telecommunications Conference (GLOBECOM), 2006, , .	0.0	3
34	Correlation Analysis of Instantaneous Mutual Information in 2 Õ2 MIMO Systems. , 2006, , .		3
35	Complex human disorders and molecular system engineering: Historical perspective and potential impacts. , 2009, 2009, 1083-5.		2
36	Application of the level crossing rate function to sea clutter. , 2012, , .		1

#	Article	IF	Citations
37	Experimental results on underwater communication using vector transducers. Proceedings of Meetings on Acoustics, 2015, , .	0.3	1
38	Underwater communication via frequency shift keying in particle velocity channels: Experimental results. , 2015, , .		0
39	Second-order statistics of the instantaneous mutual information in time-varying underwater particle velocity channels. Proceedings of Meetings on Acoustics, 2015, , .	0.3	0
40	Exploring extreme signaling failures in intracellular molecular networks. Computers in Biology and Medicine, 2022, 148, 105692.	7.0	0