Paschalis C Sofotasios

List of Publications by Year
in descending order

167 papers	3,163 citations	186265 28 h-index	214800 47 g-index
167 all docs	167 docs citations	167 times ranked	2016 citing authors

#	Article	IF	Citations
1	A Prospective Look: Key Enabling Technologies, Applications and Open Research Topics in 6G Networks. IEEE Access, 2020, 8, 174792-174820.	4.2	192
2	Energy Detection Based Spectrum Sensing Over $\kappa{-}\mu$ and $\kappa{-}\mu$ Extreme Fading Channels. IEEE Transactions on Vehicular Technology, 2013, 62, 1031-1040.	6.3	187
3	The Fisher–Snedecor $\mathcal{F}$ Distribution: A Simple and Accurate Composite Fading Model. IEEE Communications Letters, 2017, 21, 1661-1664.	4.1	165
4	On the Performance of Visible Light Communication Systems With Non-Orthogonal Multiple Access. IEEE Transactions on Wireless Communications, 2017, 16, 6350-6364.	9.2	129
5	Optical Non-Orthogonal Multiple Access for Visible Light Communication. IEEE Wireless Communications, 2018, 25, 82-88.	9.0	100
6	Multiple Access for Visible Light Communications: Research Challenges and Future Trends. IEEE Access, 2018, 6, 26167-26174.	4.2	67
7	Effects of RF Impairments in Communications Over Cascaded Fading Channels. IEEE Transactions on Vehicular Technology, 2016, 65, 8878-8894.	6.3	65
8	Intelligent Reflecting Surfaces Assisted UAV Communications for IoT Networks: Performance Analysis. IEEE Transactions on Green Communications and Networking, 2021, 5, 1029-1040.	5.5	62
9	Shadowed Fading in Indoor Off-Body Communication Channels: A Statistical Characterization Using the κ –μ /Gamma Composite Fading Model. IEEE Transactions on Wireless Communications, 2016, 15, 5231-5244.	9.2	60
10	On the Sum of Fisher–Snedecor <inline-formula> <tex-math notation="LaTeX">$\mathcal{F}$ </tex-math> </inline-formula> Variates and Its Application to Maximal-Ratio Combining. IEEE Wireless Communications Letters, 2018, 7, 966-969.	5.0	57
11	Opportunistic Ambient Backscatter Communication in RF-Powered Cognitive Radio Networks. IEEE Transactions on Cognitive Communications and Networking, 2019, 5, 413-426.	7.9	56
12	A Comprehensive Analysis of the Achievable Channel Capacity in $\mathcal{F}$ Composite Fading Channels. IEEE Access, 2019, 7, 34078-34094.	4.2	50
13	Efficient Energy Detection Methods for Spectrum Sensing Under Non-Flat Spectral Characteristics. IEEE Journal on Selected Areas in Communications, 2015, 33, 755-770.	14.0	47
14	Analytic Expressions and Bounds for Special Functions and Applications in Communication Theory. IEEE Transactions on Information Theory, 2014, 60, 7798-7823.	2.4	45
15	Multiple Access in Aerial Networks: From Orthogonal and Non-Orthogonal to Rate-Splitting. IEEE Open Journal of Vehicular Technology, 2020, 1, 372-392.	4.9	44
16	On Optimal Resource Allocation for Hybrid VLC/RF Networks With Common Backhaul. IEEE Transactions on Cognitive Communications and Networking, 2020, 6, 352-365.	7.9	42
17	Novel expressions for the Marcum and one dimensional Q-functions. , 2010, , .		40
18	Subband Energy Based Reduced Complexity Spectrum Sensing Under Noise Uncertainty and Frequency-Selective Spectral Characteristics. IEEE Transactions on Signal Processing, 2016, 64, 131-145.	5.3	38

#	Article	IF	Citations
19	Rate-Splitting Multiple Access: Unifying NOMA and SDMA in MISO VLC Channels. IEEE Open Journal of Vehicular Technology, 2020, 1, 393-413.	4.9	37
20	On the Downlink Performance of RSMA-Based UAV Communications. IEEE Transactions on Vehicular Technology, 2020, 69, 16258-16263.	6.3	37
21	Underlay cooperative cognitive networks with imperfect Nakagami-m fading channel information and strict transmit power constraint: Interference statistics and outage probability analysis. Journal of Communications and Networks, 2014, 16, 10-17.	2.6	35
22	Solutions to Integrals Involving the Marcum <formula formulatype="inline"><tex Notation="TeX">Q</tex></formula>-Function and Applications. IEEE Signal Processing Letters, 2015, 22, 1752-1756.	3.6	35
23	Cache-Aided Non-Orthogonal Multiple Access for 5G-Enabled Vehicular Networks. IEEE Transactions on Vehicular Technology, 2019, 68, 8359-8371.	6.3	35
24	Exact bitâ€errorâ€rate analysis of underlay decodeâ€andâ€forward multiâ€hop cognitive networks with estimation errors. IET Communications, 2013, 7, 2122-2132.	2.2	34
25	Entropy and Energy Detection-Based Spectrum Sensing Over $\mathcal{F}$ -Composite Fading Channels. IEEE Transactions on Communications, 2019, 67, 4641-4653.	7.8	34
26	Energy Detection of Unknown Signals Over Cascaded Fading Channels. IEEE Antennas and Wireless Propagation Letters, 2016, 15, 135-138.	4.0	33
27	The <i>Î·-Î¼</i> / Inverse Gamma and <i>Î·-Î¼</i> / Inverse Gamma Composite Fading Models: Fundamental Statistics and Empirical Validation. IEEE Transactions on Communications, 2021, 69, 5514-5530.	7.8	33
28	Bit error rate of underlay decode-and-forward cognitive networks with best relay selection. Journal of Communications and Networks, 2015, 17, 162-171.	2.6	31
29	Unified Analysis of Cooperative Spectrum Sensing Over Composite and Generalized Fading Channels. IEEE Transactions on Vehicular Technology, 2016, 65, 6949-6961.	6.3	30
30	Performance Analysis of Non-Orthogonal Multiple Access Under I/Q Imbalance. IEEE Access, 2018, 6, 18453-18468.	4.2	30
31	Mutual Information Analysis of OFDM Radio Link Under Phase Noise, IQ Imbalance and Frequency-Selective Fading Channel. IEEE Transactions on Wireless Communications, 2013, 12, 3048-3059.	9.2	29
32	Energy detection sensing of unknown signals over Weibull fading channels. , 2013, , .		27
33	Double Shadowing the Rician Fading Model. IEEE Wireless Communications Letters, 2019, 8, 344-347.	5.0	27
34	Large Intelligent Surface-Assisted Nonorthogonal Multiple Access for 6G Networks: Performance Analysis. IEEE Internet of Things Journal, 2021, 8, 5129-5140.	8.7	26
35	Error performance of NOMA VLC systems. , 2017, , .		24
36	Non-Orthogonal Multiple Access for Hybrid VLC-RF Networks With Imperfect Channel State Information. IEEE Transactions on Vehicular Technology, 2021, 70, 398-411.	6.3	24

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37	A Comparative Study of Relaying Schemes with Decode and Forward over Nakagami- Fading Channels. Journal of Computer Networks and Communications, 2011, 2011, 1-14.	1.6	23
38	The &#x03B7;&#x2212;&#x03BC;/IG distribution: A novel physical multipath/shadowing fading model. , 2013, , .		23
39	The K â€" Î¼ / inverse gamma fading model. , 2015, , .		23
40	Relay Selection Based Full-Duplex Cooperative Systems Under Adaptive Transmission. IEEE Wireless Communications Letters, 2017, 6, 602-605.	5.0	23
41	Cooperative Energy Harvesting Cognitive Radio Networks With Spectrum Sharing and Security Constraints. IEEE Access, 2019, 7, 173329-173343.	4.2	23
42	Optical wireless cochlear implants. Biomedical Optics Express, 2019, 10, 707.	2.9	23
43	On the &#x03BA;-&#x03BC;/gamma composite distribution: A generalized multipath/shadowing fading model. , 2011, , .		22
44	Radio-Frequency Front-End Impairments: Performance Degradation in Nonorthogonal Multiple Access Communication Systems. IEEE Vehicular Technology Magazine, 2019, 14, 89-97.	3.4	21
45	Achievable Physical-Layer Security Over Composite Fading Channels. IEEE Access, 2020, 8, 195772-195787.	4.2	20
46	Physical Layer Security of a Dual-Hop Regenerative Mixed RF/UOW System. IEEE Transactions on Sustainable Computing, 2021, 6, 90-104.	3.1	20
47	A novel representation for the Nuttall Q-function. , 2010, , .		18
48	The Î· â€" Î¼ / inverse gamma composite fading model. , 2015, , .		18
49	Optical Adaptive Precoding for Visible Light Communications. IEEE Access, 2018, 6, 22121-22130.	4.2	18
50	On the Secrecy Capacity of Fisher-Snedecor F Fading Channels. , 2018, , .		18
51	Effects of Residual Hardware Impairments on Secure NOMA-Based Cooperative Systems. IEEE Access, 2020, 8, 2524-2536.	4.2	18
52	Level Crossing Rate and Average Fade Duration in $\mathcal{F}$ Composite Fading Channels. IEEE Wireless Communications Letters, 2020, 9, 281-284.	5.0	18
53	On Shadowing the Îº-Î¼ Fading Model. IEEE Access, 2020, 8, 120513-120536.	4.2	18
54	Performance Analysis of Intelligent Reflecting Surface Aided Wireless Networks With Wireless Power Transfer. IEEE Communications Letters, 2021, 25, 793-797.	4.1	18

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55	Toward Federated-Learning-Enabled Visible Light Communication in 6G Systems. IEEE Wireless Communications, 2022, 29, 48-56.	9.0	18
56	Airborne Radio Access Networks with Simultaneous Lightwave Information and Power Transfer (SLIPT). , 2018, , .		17
57	Effective Capacity Analysis Over Generalized Composite Fading Channels. IEEE Access, 2020, 8, 123756-123764.	4.2	17
58	Multi-user techniques in visible light communications: A survey. , 2016, , .		16
59	Censor-Based Cooperative Multi-Antenna Spectrum Sensing with Imperfect Reporting Channels. IEEE Transactions on Sustainable Computing, 2020, 5, 48-60.	3.1	16
60	Bit error rate of underlay multi-hop cognitive networks in the presence of multipath fading. , 2013, , .		15
61	The effects of RF impairments in vehicle-to-vehicle communications. , 2015, , .		15
62	Error Rate and Power Allocation Analysis of Regenerative Networks Over Generalized Fading Channels. IEEE Transactions on Communications, 2016, 64, 1751-1768.	7.8	15
63	Full-Duplex Regenerative Relaying and Energy-Efficiency Optimization Over Generalized Asymmetric Fading Channels. IEEE Transactions on Wireless Communications, 2017, 16, 3232-3251.	9.2	15
64	An Outlook on the Interplay of Artificial Intelligence and Software-Defined Metasurfaces: An Overview of Opportunities and Limitations. IEEE Vehicular Technology Magazine, 2020, 15, 62-73.	3.4	15
65	Capacity Analysis of NOMA-Enabled Underwater VLC Networks. IEEE Access, 2021, 9, 153305-153315.	4.2	15
66	The α-κ-μ Extreme distribution: Characterizing non-linear severe fading conditions. , 2011, , .		14
67	Multi-channel energy detection under phase noise: analysis and mitigation. Mobile Networks and Applications, 2014, 19, 473-486.	3.3	14
68	Modulation Schemes for Visible Light Communications. , 2019, , .		14
69	Security Improvement for Energy Harvesting Based Overlay Cognitive Networks With Jamming-Assisted Full-Duplex Destinations. IEEE Transactions on Vehicular Technology, 2021, 70, 12232-12237.	6.3	14
70	The α — κ — μ/gamma distribution: A generalized non-linear multipath/shadowing fading model. , 2011, , .		13
71	A Comprehensive Framework for Spectrum Sensing in Non-Linear and Generalized Fading Conditions. IEEE Transactions on Vehicular Technology, 2017, 66, 8615-8631.	6.3	13
72	Toward Efficient Integration of Information and Energy Reception. IEEE Transactions on Communications, 2019, 67, 6572-6585.	7.8	13

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73	Physical-Layer Security of SIMO Communication Systems over Multipath Fading Conditions. IEEE Transactions on Sustainable Computing, 2021, 6, 105-118.	3.1	13
74	The κ-μ Extreme/Gamma Distribution: A Physical Composite Fading Model. , 2011, , .		12
75	Product and Ratio of Product of Fisher-Snedecor â„± Variates and Their Applications to Performance Evaluations of Wireless Communication Systems. IEEE Access, 2020, 8, 215267-215286.	4.2	12
76	SWIPT-Enabled Cooperative NOMA With mth Best Relay Selection. IEEE Open Journal of the Communications Society, 2020, 1, 1798-1807.	6.9	12
77	Non-Orthogonal Multiple Access with Wireless Caching for 5G-Enabled Vehicular Networks. IEEE Network, 2020, 34, 127-133.	6.9	12
78	The η-μ/gamma composite fading model. , 2010, , .		11
79	Analytic performance evaluation of underlay relay cognitive networks with channel estimation errors. , 2013, , .		11
80	Maximum - Minimum Energy Based Spectrum Sensing under Frequency Selectivity for Cognitive Radios. , 2014, , .		11
81	Analytic Solutions to a Marcum Qâˆ'Function-Based Integral and Application in Energy Detection of Unknown Signals over Multipath Fading Channels. , 2014, , .		11
82	Non-Orthogonal Multiple Access-Based Underwater VLC Systems in the Presence of Turbulence. IEEE Photonics Journal, 2022, 14, 1-7.	2.0	11
83	Novel expressions for the one and two dimensional Gaussian Q-functions. , 2010, , .		10
84	The kappa-#181;/lg Composite Statistical Distribution in RF and FSO Wireless Channels. , 2013, , .		10
85	Outage behaviour of cooperative underlay cognitive networks with inaccurate channel estimation. , 2013, , .		10
86	Outage probability analysis of dual-hop full-duplex decode-and-forward relaying over generalized multipath fading conditions. , 2015, , .		10
87	Entropy and Channel Capacity under Optimum Power and Rate Adaptation over Generalized Fading Conditions. IEEE Signal Processing Letters, 2015, 22, 2162-2166.	3.6	10
88	Sparse Frequency Domain Spectrum Sensing and Sharing based on Cyclic Prefix Autocorrelation. IEEE Journal on Selected Areas in Communications, 2016, , 1-1.	14.0	10
89	The Nâˆ'—Fisher-Snedecor F Cascaded Fading Model. , 2018, , .		10
90	Capacity analysis under generalized composite fading conditions. , 2018, , .		10

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91	Error analysis of wireless transmission over generalized multipath/shadowing channels. , 2018, , .		10
92	Space-Time Block Coded Spatial Modulation for Indoor Visible Light Communications. IEEE Photonics Journal, 2022, 14, 1-11.	2.0	10
93	Analysis of Asymmetric Dual-Hop Energy Harvesting-Based Wireless Communication Systems in Mixed Fading Environments. IEEE Transactions on Green Communications and Networking, 2021, 5, 261-277.	5.5	9
94	Simple and Accurate Approximations for the Two Dimensional Gaussian Q-Function. , 2011, , .		8
95	The area under a receiver operating characteristic curve over enriched multipath fading conditions. , 2014, , .		8
96	Analytic performance evaluation of M-QAM based decode-and-forward relay networks over enriched multipath fading channels. , 2014, , .		8
97	The effects of I/Q imbalance on wireless communications: A survey. , 2016, , .		8
98	Energy detection based spectrum sensing over enriched multipath fading channels. , 2016, , .		8
99	Exact Error Analysis and Energy Efficiency Optimization of Regenerative Relay Systems Under Spatial Correlation. IEEE Transactions on Vehicular Technology, 2016, 65, 4973-4992.	6.3	8
100	Ergodic Capacity Analysis of Wireless Transmission over Generalized Multipath/Shadowing Channels. , 2018, , .		8
101	Sensing-Throughput Tradeoff for Superior Selective Reporting-Based Spectrum Sensing in Energy Harvesting HCRNs. IEEE Transactions on Cognitive Communications and Networking, 2019, 5, 330-341.	7.9	8
102	Non-Orthogonal Multiple Access in the Presence of Additive Generalized Gaussian Noise. IEEE Communications Letters, 2020, 24, 2137-2141.	4.1	8
103	Performance Analysis of Coherent and Noncoherent Modulation Under I/Q Imbalance Effects. IEEE Access, 2021, 9, 36125-36139.	4.2	8
104	Upper and lower bounds for the Rice Ie-function. , 2011, , .		7
105	Symbol Error Probability of DF Relay Selection over Arbitrary Nakagami-mFading Channels. Journal of Engineering (United States), 2013, 2013, 1-6.	1.0	7
106	New analytic results for the incomplete Toronto function and incomplete Lipschitz-Hankel Integrals. , 2011, , .		6
107	On the &#x03B7;-&#x00B5;/gamma and the &#x03BB;-&#x00B5;/gamma multipath/shadowing distributions. , 2011, , .		6
108	Analytic results for efficient computation of the Nuttall-Q and incomplete Toronto functions. , 2013, , .		6

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109	Spectrum sensing in generalized multipath fading conditions using square-law combining. , 2015, , .		6
110	On derivatives of hypergeometric functions and classical polynomials with respect to parameters. Integral Transforms and Special Functions, 2018, 29, 852-865.	1.2	6
111	Optical Asymmetric Modulation for VLC Systems - Invited Paper. , 2018, , .		6
112	A Robust and Energy Efficient NOMA-Enabled Hybrid VLC/RF Wireless Network. , 2019, , .		6
113	Error Analysis of NOMA-Based User Cooperation with SWIPT. , 2019, , .		6
114	Error Probability Analysis of Non-Orthogonal Multiple Access for Relaying Networks with Residual Hardware Impairments. , 2019, , .		6
115	Energy Efficiency Analysis of Collaborative Compressive Sensing Scheme in Cognitive Radio Networks. IEEE Transactions on Cognitive Communications and Networking, 2020, 6, 1056-1068.	7.9	6
116	Generalization of Space-Time Block Coded-Spatial Modulation for High Data Rate VLC Systems (Invited) Tj ETQq0 0 0 rgBT /Overlock 10		6
117	The Inverse Gamma Distribution: A New Shadowing Model. , 2019, , .		6
118	An Effective Spatial Modulation Based Scheme for Indoor VLC Systems. IEEE Photonics Journal, 2022, 14, 1-11.	2.0	6
119	Analytic expressions for the Rice Ie-function and the incomplete Lipschitz-Hankel Integrals. , 2011, , .		5
120	Area under ROC curve of energy detection over generalized fading channels. , 2015, , .		5
121	Unified analysis of cooperative spectrum sensing over generalized multipath fading channels. , 2015, , .		5
122	Deployment of wireless sensor network in dispersed renewable energy sources for increasing efficiency of power distribution networks. Journal of Modern Power Systems and Clean Energy, 2015, 3, 610-618.	5.4	5
123	Performance of differential modulation under rf impairments. , 2017, , .		5
124	Performance Analysis of Single Carrier Coherent and Noncoherent Modulation under I/Q Imbalance. , 2018, , .		5
125	Rate-Splitting Multiple Access for Indoor Visible Light Communication Networks. , 2021, , .		5
126	Outage Probability Analysis of Full-Duplex Regenerative Relaying over Generalized Asymmetric Fading Channels. , 2015, , .		4

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127	Analytic symbol error rate evaluation of M-PSK based regenerative cooperative networks over generalized fading channels. , 2015, , .		4
128	A New Approach to Sign-Bit-Based Parameter Estimation in OFDM Receivers. Circuits, Systems, and Signal Processing, 2015, 34, 3631-3660.	2.0	4
129	AUC study of energy detection based spectrum sensing over Î·-Î¼ and Î±-Î¼ fading channels. , 2015, , .		4
130	Outage probability of multi-carrier NOMA systems under joint I/Q imbalance. , 2018, , .		4
131	Pairwise Error Probability of Non-Orthogonal Multiple Access with I/Q Imbalance. , 2019, , .		4
132	Space Shift Keying Modulation in Non-Orthogonal Multiple Access Hybrid Visible Light Communication Systems (Invited Paper). , 2020, , .		4
133	Energy-optimized cooperative relay network over Nakagami-m fading channels. , 2013, , .		3
134	Analysis of cognitive cooperative networks with best relay selection and diversity reception. , 2015, , .		3
135	Advances in Statistical Channel Modeling for Wireless Communications. International Journal of Antennas and Propagation, 2015, 2015, 1-2.	1.2	3
136	Characterizing fading in wearable communications channels using composite models. , 2015, , .		3
137	Energy-efficiency analysis of regenerative cooperative systems under spatial correlation. , 2015, , .		3
138	Performance analysis of energy detection over mixture gamma based fading channels with diversity reception. , 2015, , .		3
139	Distributed Differential Modulation Over Asymmetric Fading Channels. IEEE Signal Processing Letters, 2016, 23, 1712-1716.	3.6	3
140	Novel Frequency Domain Cyclic Prefix Autocorrelation Based Compressive Spectrum Sensing for Cognitive Radio. , 2016, , .		3
141	Outage probability of single carrier NOMA systems under I/Q imbalance. , 2018, , .		3
142	Physical-Layer Security over Generalized SIMO Multipath Fading Channels. , 2019, , .		3
143	DBmmWave: Chance-Constrained Joint AP Deployment and Beam Steering in mmWave Networks With Coverage Probability Constraints. IEEE Networking Letters, 2019, 1, 151-155.	1.9	3
144	On the Secrecy Analysis of Dual-Hop Underlay Multi-Source CRNs with Multi-Eavesdroppers and a Multi-Antenna Destination. , 2019, , .		3

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145	A Double-Shadowed Rician Fading Model: A Useful Characterization. , 2019, , .		3
146	Error analysis of differentially modulated cooperative systems under generalized fading. , 2016, , .		2
147	Outage probability under I/Q imbalance and cascaded fading effects. , 2016, , .		2
148	Energy Efficiency Analysis of Collaborative Compressive Sensing for Cognitive Radio Networks. , 2018, , .		2
149	Effective Rate over F Composite Fading Channels. , 2019, , .		2
150	Censor-Based Multi-Antenna Cooperative Spectrum Sensing over Erroneous Feedback Channels. , 2019, , .		2
151	Coordinated Beamforming Design for Multi-User Multi-Cell MIMO VLC Networks. IEEE Photonics Journal, 2022, 14, 1-10.	2.0	2
152	Efficient Wireless Microphone sensing: Subband energy detector principle and measured performance. , 2015, , .		1
153	Modeling and estimation of massive MIMO channel non-reciprocity: Sparsity-aided approach. , 2017, , .		1
154	Energy Detection-Based Spectrum Sensing over Fisher-Snedecor F Fading Channels. , 2018, , .		1
155	Superior Selective Reporting-Based Spectrum Sensing in Energy Harvesting-Aided HCRNs. , 2019, , .		1
156	Achievable Fixed Rate Capacity in Emerging Wireless Systems (Invited Paper). , 2019, , .		1
157	On the Physical Layer Security of a Regenerative Relay-Based mixed RF/UOWC. , 2019, , .		1
158	Residual Hardware Impairments on Secure NOMA-Based Relay Systems. , 2019, , .		1
159	Analysis of differentially modulated cooperative communications over asymmetric fading channels. , 2018, , .		1
160	Battery Recharging Time-Based Routing for Power Constrained IoT Networks. , 2021, , .		1
161	Effect of Generalized Multipath/Shadowing Channels on Fixed Rate Wireless Systems. , 2021, , .		1
162	Interference Management Strategies for Multiuser Multicell MIMO VLC Systems. IEEE Transactions on Communications, 2022, 70, 6002-6019.	7.8	1

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163	The &#x043A;-&#x03BC;/gamma composite fading model. , 2010, , .		0
164	Outage Probability Analysis of Full-Duplex Regenerative Relaying over Generalized Asymmetric Fading Channels. , 2014, , .		0
165	Analysis of Noise Uncertainty and Frequency Selectivity Effects in Wideband Multimode Spectrum Sensing. , 2014, , .		0
166	SER of M-QAM decode-and-forward multi-relay systems under generalized fading conditions. , 2016, , .		0
167	Achievable Ergodic Capacity Under F Composite Fading Conditions. , 2019, , .		0