Athanasios G Kanatas

List of Publications by Year
in descending order

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156 papers	2,266 citations	279798 23 h-index	289244 40 g-index
156 all docs	156 docs citations	156 times ranked	1630 citing authors

#	Article	IF	Citations
1	Human fall detection using mmWave radars: a cluster-assisted experimental approach. Journal of Ambient Intelligence and Humanized Computing, 2023, 14, 11657-11669.	4.9	4
2	Analysis of Planar Random Arrays With Stochastic Geometry Tools. IEEE Transactions on Antennas and Propagation, 2022, 70, 1906-1918.	5.1	5
3	Finite Point Processes in a Truncated Octahedron-Based 3D UAV Network. IEEE Transactions on Vehicular Technology, 2022, 71, 7230-7243.	6.3	4
4	Coordinates Distributions in Finite Uniformly Random Networks. IEEE Access, 2022, 10, 49005-49014.	4.2	3
5	A reconfigurable MuPAR antenna system employing a hybrid beam-forming technique. , 2022, , .		0
6	Performance Comparison of Wireless Aerial 3D Cellular Network Models. IEEE Communications Letters, 2022, 26, 1779-1783.	4.1	4
7	Incorporating privacy by design in body sensor networks for medical applications: A privacy and data protection framework. Computer Science and Information Systems, 2021, 18, 323-347.	1.0	5
8	A Low-Complexity Reconfigurable Multi-Antenna Technique for Non-Terrestrial Networks. Frontiers in Communications and Networks, 2021, 2, .	3.0	7
9	Machine Learning-Assisted Man Overboard Detection Using Radars. Electronics (Switzerland), 2021, 10, 1345.	3.1	3
10	Outage probability analysis in multi-user FSO/RF and UAV-enabled MIMO communication networks. Physical Communication, 2021, 49, 101475.	2.1	11
11	Three-Dimensional Modeling of mmWave Doubly Massive MIMO Aerial Fading Channels. IEEE Transactions on Vehicular Technology, 2020, 69, 1190-1202.	6.3	49
12	AN INTEGRATED SHARK-FIN RECONFIGURABLE ANTENNA FOR V2X COMMUNICATIONS. Progress in Electromagnetics Research C, 2020, 100, 1-16.	0.9	6
13	Hybrid Multi-Antenna Techniques for V2X Communicationsâ€"Prototyping and Experimentation. Telecom, 2020, 1, 80-95.	2.6	5
14	Spherical Harmonic Theory Investigations for Spherical Antenna Arrays. , 2020, , .		0
15	Building entry loss and capacity evaluation of a UAVâ€toâ€indoor dualâ€polarised MIMO channel. IET Microwaves, Antennas and Propagation, 2020, 14, 335-341.	1.4	2
16	AI-Inspired Non-Terrestrial Networks for IIoT: Review on Enabling Technologies and Applications. IoT, 2020, 1, 21-48.	3.8	23
17	SIR Analysis in 3D UAV Networks: A Stochastic Geometry Approach. IEEE Access, 2020, 8, 204963-204973.	4.2	19
18	UAV-to-Ground Communications: Channel Modeling and UAV Selection. IEEE Transactions on Communications, 2020, 68, 5135-5144.	7.8	120

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19	A New Shadowed Double-Scattering Model with Application to UAV-to-Ground Communications. , 2019, , .		8
20	A Pattern Reconfigurable Antenna System Integrated in a Truck Side Mirror. , 2019, , .		0
21	Optimal 3-D Aerial Relay Placement for Multi-User MIMO Communications. IEEE Transactions on Aerospace and Electronic Systems, 2019, 55, 3218-3229.	4.7	24
22	Novel Results for the Multivariate Ricean Distribution With Non-Identical Parameters. IEEE Transactions on Vehicular Technology, 2019, 68, 5129-5133.	6.3	2
23	Standardizing Security Evaluation Criteria for Connected Vehicles: A Modular Protection Profile. , 2019, , .		3
24	A Survey on Machine-Learning Techniques for UAV-Based Communications. Sensors, 2019, 19, 5170.	3.8	193
25	Exploiting Shadowing Stationarity for Antenna Selection in V2V Communications. IEEE Transactions on Vehicular Technology, 2019, 68, 1607-1615.	6.3	17
26	V2V Cooperative Relaying Communications Under Interference and Outdated CSI. IEEE Transactions on Vehicular Technology, 2018, 67, 3466-3480.	6.3	40
27	Performance Analysis of Multi-Antenna Multiuser Hybrid Satellite-Terrestrial Relay Systems for Mobile Services Delivery. IEEE Access, 2018, 6, 24729-24745.	4.2	60
28	Approximations to the Distribution of the Sum of Generalized Normal RVs Using the Moments Matching Method and its Applications in Performance Analysis of Equal Gain Diversity Receivers. IEEE Transactions on Vehicular Technology, 2018, 67, 7230-7241.	6.3	6
29	Pattern reconfigurable ESPAR antenna for vehicleâ€toâ€vehicle communications. IET Microwaves, Antennas and Propagation, 2018, 12, 280-286.	1.4	20
30	On the Double-Generalized Gamma Statistics and Their Application to the Performance Analysis of V2V Communications. IEEE Transactions on Communications, 2018, 66, 448-460.	7.8	49
31	Diversity in Direct Mobile-to-Mobile Communication Systems: An Experimental Approach. , 2018, , .		2
32	Shadowing-Based Antenna Selection for V2V Communications. , 2018, , .		3
33	Towards a Security Assurance Framework for Connected Vehicles. , 2018, , .		9
34	A Low Complexity Communication Technique for Mobile-to-Mobile Communication Systems. , 2018, , .		0
35	Multiple Scattering Modeling for Dual-Polarized MIMO Land Mobile Satellite Channels. IEEE Transactions on Antennas and Propagation, 2018, 66, 5657-5661.	5.1	3
36	Performance Analysis of Cognitive Relay Networks With RF Hardware Impairments and CEEs in the Presence of Primary Usersâ€™ Interference. IEEE Transactions on Cognitive Communications and Networking, 2018, 4, 406-421.	7.9	17

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37	Joint Impact of RF Hardware Impairments and Channel Estimation Errors in Spectrum Sharing Multiple-Relay Networks. IEEE Transactions on Communications, 2018, 66, 3809-3824.	7.8	29
38	Statistical characterization of an urban dualâ€polarized MIMO LMS channel. International Journal of Satellite Communications and Networking, 2018, 36, 474-488.	1.8	5
39	Joint effect of jamming and noise on the secrecy outage performance of wiretap channels with feedback delay and multiple antennas. Transactions on Emerging Telecommunications Technologies, 2017, 28, e3191.	3.9	6
40	A printed monopole ESPAR antenna for Truck-to-Truck communications. , 2017, , .		8
41	The pattern selection capability of a printed ESPAR antenna. , 2017, , .		6
42	Exact SNR and SIR analysis in Poisson wireless networks. Electronics Letters, 2017, 53, 356-358.	1.0	3
43	Dual-Polarized Narrowband MIMO LMS Channel Measurements in Urban Environments. IEEE Transactions on Antennas and Propagation, 2017, 65, 763-774.	5.1	26
44	Performance Analysis of Overlay Spectrum Sharing in Hybrid Satellite-Terrestrial Systems With Secondary Network Selection. IEEE Transactions on Wireless Communications, 2017, 16, 6586-6601.	9.2	122
45	Joint effect of jamming and noise in wiretap channels with multiple antennas. , 2017, , .		7
46	Hybrid satellite-terrestrial spectrum sharing system with opportunistic secondary network selection. , 2017, , .		8
47	Transmit antenna selection in vehicle-to-vehicle time-varying fading channels. , 2017, , .		6
48	Spatially separated single-polarized vs. collocated dual-polarized MIMO measurements. , 2017, , .		1
49	Stratospheric Channel Models. , 2017, , 299-338.		0
50	Mobile Satellite Channel Characterization. , 2017, , 69-104.		1
51	Cognitive Multi-Relay Networks with RF Hardware Impairments and Channel Estimation Errors. , 2017, , .		4
52	The Double-Generalized Gamma Distribution and Its Application to V2V Communications. , 2017, , .		2
53	MIMO Techniques for 5G Systems. , 2017, , 235-277.		0
54	ESPAR antenna positioning for Truck-to-Truck communication links. , 2016, , .		4

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55	Spatial Modulation for V2V and V2I Communications in a Multiple Scattering Environment. , 2016, , .		0
56	A new reconfigurable antenna scheme and its application to vehicle-to-vehicle communications. , 2016, , .		2
57	A cooperative relay selection scheme in V2V communications under interference and outdated CSI. , 2016, , .		6
58	V2V Communication Systems under Correlated Double-Rayleigh Fading Channels. , 2016, , .		3
59	Intervehicular communication systems under co-channel interference and outdated channel estimates. , 2016, , .		3
60	Relay selection in V2V communications based on 3-D geometrical Channel modeling. , 2016, , .		0
61	Stratospheric Channel Models. , 2016, , 299-338.		0
62	Dual polarized MIMO LMS channel measurements and characterization in a pedestrian environment. , 2016, , .		8
63	The Bivariate Double Rayleigh Distribution for Multichannel Time-Varying Systems. IEEE Wireless Communications Letters, 2016, 5, 524-527.	5.0	9
64	Space Shift Keying Transmission for Intervehicular Communications. IEEE Transactions on Intelligent Transportation Systems, 2016, 17, 3635-3640.	8.0	11
65	Mobile-to-mobile communications via stratospheric relays: Relay selection and performance analysis. , 2015, , .		2
66	Full-duplex communications with the use of parasitic array radiators. , 2015, , .		1
67	SEP of rectangular QAM in composite fading channels. AEU - International Journal of Electronics and Communications, 2015, 69, 246-252.	2.9	11
68	A Single RF MIMO Loading Network for High-Order Modulation Schemes. International Journal of Antennas and Propagation, 2014, 2014, 1-10.	1.2	16
69	Beamforming Techniques for Wireless MIMO Relay Networks. International Journal of Antennas and Propagation, 2014, 2014, 1-2.	1.2	3
70	Performance Evaluation of Beamspace MIMO Systems with Channel Estimation in Realistic Environments. Journal of Cyber Security and Mobility, 2014, 2, 265-290.	0.7	2
71	Design and analysis of a 5-element ESPAR antenna with an active PIFA. , 2014, , .		1
72	Radio Propagation Channel Measurements for Multi-Antenna Satellite Communication Systems: A Survey. IEEE Antennas and Propagation Magazine, 2014, 56, 102-122.	1.4	25

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73	Genetic algorithm applied to beamspaceâ€multipleâ€input and multipleâ€output singleâ€radio frequency frontâ€end reconfigurable transceivers. IET Microwaves, Antennas and Propagation, 2014, 8, 679-687.	1.4	2
74	Radio Planning of Single-Frequency Networks for Broadcasting Digital TV in Mixed-Terrain Regions. IEEE Antennas and Propagation Magazine, 2014, 56, 123-141.	1.4	4
75	Wideband HAP-MIMO Channels: A 3-D Modeling and Simulation Approach. Wireless Personal Communications, 2014, 74, 639-664.	2.7	7
76	Complex Envelope Second-Order Statistics in High-Altitude Platforms Communication Channels. Wireless Personal Communications, 2014, 77, 2517-2535.	2.7	3
77	Elaborate analysis and design of filter-bank-based sensing for wideband cognitive radios. Eurasip Journal on Advances in Signal Processing, 2014, 2014, .	1.7	9
78	Parasitic Antenna Arrays for Wireless MIMO Systems. , 2014, , .		85
79	Beamspace MIMO and Degrees of Freedom. , 2014, , 45-84.		1
80	A 3-D wideband MIMO channel model for mobile-to-mobile relay-based communications. , 2013, , .		0
81	Channel estimation and link level evaluation of adaptive beamspace MIMO systems. , 2013, , .		3
82	Reconfigurable Orthonormal Basis Patterns Using ESPAR Antennas. IEEE Antennas and Wireless Propagation Letters, 2013, 12, 448-451.	4.0	24
83	Three-Dimensional Modeling and Simulation of MIMO Mobile-to-Mobile via Stratospheric Relay Fading Channels. IEEE Transactions on Vehicular Technology, 2013, 62, 2014-2030.	6.3	27
84	Adaptive Basis Patterns Computation for Electronically Steerable Passive Array Radiator Antennas. , 2013, , .		5
85	Interference versus filtering distortion tradeâ€offs in OFDMâ€based cognitive radios. Transactions on Emerging Telecommunications Technologies, 2013, 24, 692-708.	3.9	3
86	V-BLAST reception for beamspace MIMO systems with limited feedback. , 2013, , .		3
87	Performance Analysis of a Two-Hop MIMO Mobile-to-Mobile via Stratospheric-Relay Link Employing Hierarchical Modulation. International Journal of Antennas and Propagation, 2013, 2013, 1-10.	1.2	0
88	60 GHZ WIRELESS LINKS FOR HDTV: CHANNEL CHARACTERIZATION AND ERROR PERFORMANCE EVALUATION. Progress in Electromagnetics Research C, 2013, 36, 195-205.	0.9	0
89	On the capacity and simulation of 3-D MIMO mobile-to-mobile relay fading channels. , 2012, , .		0
90	A 3-D model for MIMO mobile-to-mobile amplify-and-forward relay fading channels. , 2012, , .		5

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91	A 3-D model for mimo mobile-to-mobile via stratospheric-relay fading channels. , 2012, , .		0
92	Reconfigurable parasitic antennas for compact mobile terminals in multiuser wireless systems. Eurasip Journal on Wireless Communications and Networking, 2012, 2012, .	2.4	8
93	Statistical Simulation Modeling of 3-D HAP-MIMO Channels. Wireless Personal Communications, 2012, 65, 833-841.	2.7	11
94	AERIAL DEGREES OF FREEDOM OF PARASITIC ARRAYS FOR SINGLE RF FRONT-END MIMO TRANSCEIVERS. Progress in Electromagnetics Research B, 2011, 35, 287-306.	1.0	24
95	A single hop architecture exploiting cooperative beamforming for wireless sensor networks. Physical Communication, 2011, 4, 237-243.	2.1	6
96	The Land Mobile Earth-Space Channel. IEEE Vehicular Technology Magazine, 2011, 6, 44-53.	3.4	36
97	Beamspace-Domain Analysis of Single-RF Front-End MIMO Systems. IEEE Transactions on Vehicular Technology, 2011, 60, 1195-1199.	6.3	46
98	Modeling and Simulation of 3-D Wideband HAP-MIMO Channels. , 2011, , .		0
99	Single RF MIMO Systems: Exploiting the Capabilities of Parasitic Antennas. , 2011, , .		5
100	Three-Dimensional HAP-MIMO Channels: Modeling and Analysis of Space-Time Correlation. IEEE Transactions on Vehicular Technology, 2010, 59, 2232-2242.	6.3	71
101	CHANNEL MEASUREMENTS AND MODELLING IN A MILITARY CARGO AIRPLANE. Progress in Electromagnetics Research B, 2010, 26, 69-100.	1.0	5
102	Correction to â€œPath-Loss and Time-Dispersion Parameters of UWB Signals in a Military Airplaneâ€•[2009 790-793]. IEEE Antennas and Wireless Propagation Letters, 2010, 9, 1285-1285.	4.0	0
103	A co-operative beamforming solution for eliminating multi-hop communications in wireless sensor networks. IEEE Journal on Selected Areas in Communications, 2010, 28, 1055-1062.	14.0	16
104	Pattern diversity for single RF user terminals in multiuser environments. IEEE Communications Letters, 2010, 14, 151-153.	4.1	8
105	On the Capacity of 3-D Space-Time Correlated HAP-MIMO Channels. , 2010, , .		3
106	Cooperative Beam Forming in Smart Dust: Getting Rid of Multihop Communications. IEEE Pervasive Computing, 2010, 9, 47-53.	1.3	5
107	A Complete MIMO System Built on a Single RF Communication Ends. Progress in Electromagnetics Research Symposium: [proceedings] Progress in Electromagnetics Research Symposium, 2010, 6, 559-563.	0.4	2
108	Path-Loss and Time-Dispersion Parameters of UWB Signals in a Military Airplane. IEEE Antennas and Wireless Propagation Letters, 2009, 8, 790-793.	4.0	13

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109	UWB channel parameters in a C130 airplane. , 2009, , .		0
110	A Genetic Algorithm Applied for Optimization of Antenna Arrays Used in Mobile Radio Channel Characterization Devices. IEEE Transactions on Instrumentation and Measurement, 2009, 58, 2475-2487.	4.7	13
111	Integrating power control with routing to satisfy energy and delay constraints in sensor networks. European Transactions on Telecommunications, 2009, 20, 233-245.	1.2	6
112	Capacity optimized line-of-sight HAP-MIMO channels for Fixed Wireless Access. , 2009, , .		7
113	Closed-Loop Beamspace MIMO Systems with Low Hardware Complexity. , 2009, , .		4
114	A Stochastic Beamforming Algorithm for ESPAR Antennas. IEEE Antennas and Wireless Propagation Letters, 2008, 7, 745-748.	4.0	36
115	A Novel Approach to MIMO Transmission Using a Single RF Front End. IEEE Journal on Selected Areas in Communications, 2008, 26, 972-980.	14.0	158
116	A limited feedback technique for beamspace MIMO systems with single RF front-end. , 2008, , .		10
117	A Stochastic Algorithm for Beamforming Using ESPAR Antennas. , 2008, , .		0
118	Spatial multiplexing by decomposing the far-field of a compact ESPAR antenna. , 2008, , .		26
119	Performance of generalized selection combining receivers in K fading channels. IEEE Communications Letters, 2008, 12, 816-818.	4.1	24
120	A three dimensional model for land mobile-HAP-MIMO fading channels. , 2008, , .		5
121	Spatially Correlated 3-D HAP-MIMO Fading Channels. , 2008, , .		8
122	Energy efficiency evaluation of alternative MIMO — based sensor networks. , 2008, , .		0
123	Maximising capacity of MIMO systems with receive antenna subarray formation. Electronics Letters, 2008, 44, 1204.	1.0	3
124	Energy Efficiency Comparison of MIMO-Based and Multihop Sensor Networks. Eurasip Journal on Wireless Communications and Networking, 2007, 2008, 1.	2.4	14
125	Receive Antenna Subarray Formation for MIMO Systems in Correlated Channels. , 2007, , .		0
126	Energy efficiency of MIMO-based Sensor Networks with a Cooperative Node Selection Algorithm. , 2007, , .		15

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127	Robustness of Receive Antenna Subarray Formation to Hardware and Signal Non-Idealities. IEEE Vehicular Technology Conference, 2007, , .	0.4	4
128	A Receive Antenna Subarray Formation Algorithm for MIMO Systems. IEEE Communications Letters, 2007, 11, 396-398.	4.1	13
129	An ESPAR Antenna for Beamspace-MIMO Systems Using PSK Modulation Schemes. , 2007, , .		35
130	Capacity Performance of Adaptive Receive Antenna Subarray Formation for MIMO Systems. Eurasip Journal on Wireless Communications and Networking, 2007, 2007, .	2.4	15
131	Experimental multipath component characteristics for short range urban propagation environments. European Transactions on Telecommunications, 2007, 18, 595-603.	1.2	3
132	Reduced Hardware Complexity Receive Antenna Subarray Formation for MIMO Systems Based on Frobenius Norm Criterion. , 2006, , .		3
133	Adaptive Antenna Subarray Formation for MIMO Systems. IEEE Transactions on Wireless Communications, 2006, 5, 2977-2982.	9.2	44
134	MIMO Channel Characterization for Short Range Fixed Wireless Propagation Environments. Wireless Personal Communications, 2006, 36, 339-361.	2.7	5
135	Frobenius norm based receive Antenna Subarray Formation for MIMO systems. , 2006, , .		9
136	Wireless sensor networks: an energy-aware adaptive modulation scheme. , 2004, 5611, 133.		1
137	Selecting Array Configurations for MIMO Systems: An Evolutionary Computation Approach. IEEE Transactions on Wireless Communications, 2004, 3, 1994-1998.	9.2	36
138	Performance evaluation of OFDM transmission over a challenging urban propagation environment. IEEE Transactions on Broadcasting, 2003, 49, 87-96.	3.2	11
139	Measurements and channel characterization at 1.89 GHz in modern office buildings. European Transactions on Telecommunications, 2003, 14, 177-192.	1.2	4
140	Measurements and channel characterization at 1.89 GHz in modern office buildings. European Transactions on Telecommunications, 2003, 14, 177-192.	1.2	4
141	A narrowband land mobile satellite channel software simulator for urban environments. International Journal of Satellite Communications and Networking, 2000, 18, 17-45.	0.6	7
142	A propagation prediction tool for urban mobile radio systems. IEEE Transactions on Vehicular Technology, 2000, 49, 1348-1355.	6.3	13
143	City center high-elevation angle propagation measurements at L band for land mobile satellite systems. IEEE Transactions on Vehicular Technology, 1998, 47, 1002-1011.	6.3	16
144	Microcellular propagation measurements and simulation at 1.8 GHz in urban radio environment. IEEE Transactions on Vehicular Technology, 1998, 47, 1012-1026.	6.3	20

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145	An empirical model for high elevation angle land-mobile satellite channels at urban environment. IEEE Communications Letters, 1998, 2, 92-93.	4.1	4
146	A UTD propagation model in urban microcellular environments. IEEE Transactions on Vehicular Technology, 1997, 46, 185-193.	6.3	107
147	Narrowband characterisation of the land mobile satellite channel: A comparison of empirical models. European Transactions on Telecommunications, 1996, 7, 315-321.	1.2	7
148	Microcellular propagation measurements and modelling at 1.8 GHz. , 0, , .		2
149	Indoor mobile radio channel measurements and characterization for DECT picocells. , 0, , .		6
150	Neural networks applications for the prediction of propagation path loss in urban environments. , 0, , .		15
151	Delay spread measurements and characterization in a special propagation environment for PCS microcells. , 0, , .		13
152	Applications of generalized RBF-NN for path loss prediction. , 0, , .		16
153	SIR-based uplink terrestrial call admission control scheme with handoff for mixed traffic W-CDMA networks. , 0, , .		4
154	MIMO channel characterization results from short range rooftop to rooftop wideband measurements. , 0, , .		3
155	Multipath Parameter Results for Short Range Urban Propagation Environments. , 0, , .		2
156	Radio Wave Propagation and Channel Modeling for Earthâ€“Space Systems. , 0, , .		8