Sotirios K Goudos

List of Publications by Year in Descending Order

158 papers	2,860 citations	23 h-index	50 g-index
196 ext. papers	3,686 ext. citations	2.6 avg, IF	5.85 L-index

#	Paper	IF	Citations
158	Drone-Base-Station for Next-Generation Internet-of-Things: A Comparison of Swarm Intelligence Approaches. *IEEE Open Journal of Antennas and Propagation*, **2022**, 3, 32-47	1.9	6
157	Artwork Style Recognition Using Vision Transformers and MLP Mixer. *Technologies*, **2022**, 10, 2	2.4	0
156	Machine Learning in Beyond 5G/6G Networks State-of-the-Art and Future Trends. *Electronics (Switzerland)*, **2021**, 10, 2786	2.6	8
155	From Spatial Urban Site Data to Path Loss Prediction: An Ensemble Learning Approach. *IEEE Transactions on Antennas and Propagation*, **2021**, 1-1	4.9	1
154	Towards Fairness-Aware Time-Sensitive Asynchronous Federated Learning for Critical Energy Infrastructure. *IEEE Transactions on Industrial Informatics*, **2021**, 1-1	11.9	2
153	State-of-the-Art Techniques in RF Energy Harvesting Circuits. *Telecom*, **2021**, 2, 369-389	1.8	3
152	Triple-Band Single-Layer Rectenna for Outdoor RF Energy Harvesting Applications. *Sensors*, **2021**, 21,	3.8	4
151	Designing Smart Electromagnetic Environments for Next-Generation Wireless Communications. *Telecom*, **2021**, 2, 213-221	1.8	10
150	Multiobjective Ant Lion Approaches Applied to Electromagnetic Device Optimization. *Technologies*, **2021**, 9, 35	2.4	1
149	Federated Intrusion Detection In NG-IoT Healthcare Systems: An Adversarial Approach **2021**,		4
148	Chaotic Jaya Approaches to Solving Electromagnetic Optimization Benchmark Problems. *Telecom*, **2021**, 2, 222-231	1.8	3
147	An Enhanced and Secure Cloud Infrastructure for e-Health Data Transmission. *Wireless Personal Communications*, **2021**, 117, 109-127	1.9	5
146	Application of Biogeography-Based Optimization to Antennas and Wireless Communications. *Advances in Information Quality and Management*, **2021**, 950-966	0.1	
145	. *IEEE Transactions on Industrial Informatics*, **2021**, 1-1	11.9	26
144	Modelling, Detecting and Mitigating Threats against Industrial Healthcare Systems: A combined SDN and Reinforcement Learning Approach. *IEEE Transactions on Industrial Informatics*, **2021**, 1-1	11.9	11
143	Application of the Whale Optimization Algorithm to Antenna Design for mm-Wave 5G Communications Systems. *Signals and Communication Technology*, **2021**, 251-267	0.5	
142	. *IEEE Open Journal of Antennas and Propagation*, **2021**, 2, 151-162	1.9	9

141	Metaheuristic Optimization of LED Locations for Visible Light Positioning Network Planning. *IEEE Transactions on Broadcasting*, **2021**, 1-15	4.7	3
140	Fusing Diverse Input Modalities for Path Loss Prediction: A Deep Learning Approach. *IEEE Access*, **2021**, 9, 30441-30451	3.5	12
139	Enhancing Machine Learning Models for Path Loss Prediction Using Image Texture Techniques. *IEEE Antennas and Wireless Propagation Letters*, **2021**, 20, 1443-1447	3.8	3
138	High-Efficiency Triple-Band RF-to-DC Rectifier Primary Design for RF Energy-Harvesting Systems. *Telecom*, **2021**, 2, 271-284	1.8	1
137	Smart Irrigation System for Precision Agriculture□he ARETh0U5A IoT Platform. *IEEE Sensors Journal*, **2021**, 21, 17539-17547	4	25
136	Emerging Swarm Intelligence Algorithms and Their Applications in Antenna Design: The GWO, WOA, and SSA Optimizers. *Applied Sciences (Switzerland)*, **2021**, 11, 8330	2.6	5
135	Novel Design Framework for Dual-Band Frequency Selective Surfaces Using Multi-Variant Differential Evolution. *Mathematics*, **2021**, 9, 2381	2.3	0
134	Encoding Spectral-Spatial Features for Hyperspectral Image Classification in the Satellite Internet of Things System. *Remote Sensing*, **2021**, 13, 3561	5	0
133	A Novel Chaotic System with a Line Equilibrium: Analysis and Its Applications to Secure Communication and Random Bit Generation. *Telecom*, **2020**, 1, 283-296	1.8	1
132	Dual-Band Rectifier Design for Ambient RF Energy Harvesting **2020**,		1
131	Machine Learning Model Comparison for Leak Detection in Noisy Industrial Pipelines **2020**,		3
130	MIMO Antenna Design for 5G Communication Systems Using Salp Swarm Algorithm **2020**,		3
129	Deep learning for radio propagation: Using image-driven regression to estimate path loss in urban areas. *ICT Express*, **2020**, 6, 160-165	4.9	11
128	Modified Patch Antenna Design Using Moth Search Algorithm for RF Energy Harvesting Applications **2020**,		2
127	Internet of Things (IoT) and Agricultural Unmanned Aerial Vehicles (UAVs) in smart farming: A comprehensive review. *Internet of Things (Netherlands)*, **2020**, 100187	6.9	141
126	Teaching Electromagnetics to Next-Generation Engineers□he ELEDIA Recipe: The ELEDIA teaching style. *IEEE Antennas and Propagation Magazine*, **2020**, 62, 50-61	1.7	0
125	Big Data against Security Threats: The SPEAR Intrusion Detection System **2020**,		1
124	Dualband Patch Antenna Design Using Binary Grey Wolf Optimizer **2020**,		2

123	Cognitive Radio Engine Design for IoT Using Monarch Butterfly Optimization and Fuzzy Decision Making. *Internet of Things*, **2020**, 81-100	1.3	2
122	Faster R-CNN for multi-class fruit detection using a robotic vision system. *Computer Networks*, **2020**, 168, 107036	5.4	126
121	Wearable 5-Gigahertz Wi-Fi Antenna Design Using Whale Optimization Algorithm **2020**,		3
120	Differential Evolution in Waveform Design for Wireless Power Transfer. *Telecom*, **2020**, 1, 96-113	1.8	2
119	Dual-Band Single-Layered Modified E-shaped Patch Antenna for RF Energy Harvesting Systems **2020**,		2
118	Feature Importances: A Tool to Explain Radio Propagation and Reduce Model Complexity. *Telecom*, **2020**, 1, 114-125	1.8	5
117	Dual-Band RF-to-DC Rectifier with High Efficiency for RF Energy Harvesting Applications **2020**,		3
116	Modelling Ray Tracing Propagation Data Using Different Machine Learning Algorithms **2020**,		2
115	Combined Ray-Tracing/FDTD and Network Planner Methods for the Design of Massive MIMO Networks. *IEEE Access*, **2020**, 8, 206371-206387	3.5	2
114	3D Placement of Drone-Mounted Remote Radio Head for Minimum Transmission Power Under Connectivity Constraints. *IEEE Access*, **2020**, 8, 200338-200350	3.5	4
113	Neural Networks and Random Forests: A Comparison Regarding Prediction of Propagation Path Loss for NB-IoT Networks **2019**,		15
112	Multi-object tracking by mutual supervision of CNN and particle filter. *Personal and Ubiquitous Computing*, **2019**, 1	2.1	2
111	Joint power allocation and user association in non-orthogonal multiple access networks: An evolutionary approach. *Physical Communication*, **2019**, 37, 100841	2.2	7
110	An Energy Efficient Modulation Scheme for Body-Centric Terahertz (THz) Nanonetworks. *Technologies*, **2019**, 7, 14	2.4	3
109	Artificial Neural Network Optimal Modeling and Optimization of UAV Measurements for Mobile Communications Using the L-SHADE Algorithm. *IEEE Transactions on Antennas and Propagation*, **2019**, 67, 4022-4031	4.9	21
108	Fast design of multiband fractal antennas through a system-by-design approach for NB-IoT applications. *Eurasip Journal on Wireless Communications and Networking*, **2019**, 2019,	3.2	11
107	Patch Antenna Design for C2C Communication Systems Using Monarch Butterfly Optimization **2019**,		1
106	A Novel Design Approach for 5G Massive MIMO and NB-IoT Green Networks Using a Hybrid Jaya-Differential Evolution Algorithm. *IEEE Access*, **2019**, 7, 105687-105700	3.5	26

105	Radio Environment Maps for 5G Cognitive Radio Network **2019**,		2
104	Application of New Hybrid Jaya Grey Wolf Optimizer to Antenna Design for 5G Communications Systems. *IEEE Access*, **2019**, 7, 71061-71071	3.5	16
103	Application of an Ensemble Method to UAV Power Modeling for Cellular Communications. *IEEE Antennas and Wireless Propagation Letters*, **2019**, 18, 2340-2344	3.8	15
102	Synchronization of a Chaotic System with Line Equilibrium using a Descriptor Observer for Secure Communication **2019**,		2
101	. *IEEE Antennas and Wireless Propagation Letters*, **2019**, 18, 2220-2224	3.8	3
100	Analysis of a Chaotic System with Line Equilibrium and Its Application to Secure Communications Using a Descriptor Observer. *Technologies*, **2019**, 7, 76	2.4	8
99	Biogeography-Based Optimization Applied to Wireless Communications Problems. *Advances in Computer and Electrical Engineering Book Series*, **2019**, 746-762	0.3	
98	Optimization of Antenna Arrays and Microwave Filters Using Differential Evolution Algorithms. *Advances in Computer and Electrical Engineering Book Series*, **2019**, 1281-1296	0.3	
97	Analysis, Synchronization and Microcontroller Implementation of a Generalized Hyperjerk System, with Application to Secure Communications Using a Descriptor Observer **2019**,		2
96	Multi-Objective Optimization of Massive MIMO 5G Wireless Networks towards Power Consumption, Uplink and Downlink Exposure. *Applied Sciences (Switzerland)*, **2019**, 9, 4974	2.6	14
95	Communication Protocols for the IoT-Based Smart Grid. *Power Systems*, **2019**, 55-83	0.4	5
94	An Evaluation of the Equivalent Inverter Modeling Approach. *Circuits, Systems, and Signal Processing* , **2018**, 37, 2665-2693	2.2	1
93	Multiobjective lightining search applied to Jiles-Atherton hysteresis model parameter estimation **2018**,		1
92	Evolutionary Algorithms Applied to Antennas and Propagation: Emerging Trends and Applications 2017. *International Journal of Antennas and Propagation*, **2018**, 2018, 1-2	1.2	0
91	LTE measurements for flying relays **2018**,		2
90	Spectrum allocation in cognitive radio networks using chaotic biogeography-based optimisation. *IET Networks*, **2018**, 7, 328-335	2.8	7
89	Users Association in Ultra Dense THz Networks **2018**,		16
88	Biogeography-Based Optimization Applied to Wireless Communications Problems **2018**, 5967-5980		

87	Optimization of Antenna Arrays and Microwave Filters Using Differential Evolution Algorithms **2018**, 6595-6608		0
86	Optimization of Antenna Design Problems Using Binary Differential Evolution. *Advances in Business Information Systems and Analytics Book Series*, **2018**, 614-636	0.4	1
85	Phased Antenna Array Design using Shuffled Frog-Leaping Algorithm **2018**,		1
84	Particle Swarm Optimization as Applied to Electromagnetic Design Problems. *International Journal of Swarm Intelligence Research*, **2018**, 9, 47-82	1.1	8
83	Realizing 5G vision through Cloud RAN: technologies, challenges, and trends. *Eurasip Journal on Wireless Communications and Networking*, **2018**, 2018,	3.2	22
82	Joint optimization towards power consumption and electromagnetic exposure for Massive MIMO 5G networks **2018**,		6
81	MIMO antenna selection using biogeography-based optimization with nonlinear migration models. *International Journal of Communication Systems*, **2018**, 31, e3813	1.7	1
80	Multi-Objective Optimization in 5G Wireless Networks With Massive MIMO. *IEEE Communications Letters*, **2018**, 22, 2346-2349	3.8	17
79	Spiral inductor design based on fireworks optimization combined with free search **2018**,		2
78	Antenna Design Using Binary Differential Evolution: Application to discrete-valued design problems.. *IEEE Antennas and Propagation Magazine*, **2017**, 59, 74-93	1.7	21
77	Optimization of Power Consumption in 4G LTE Networks Using a Novel Barebones Self-adaptive Differential Evolution Algorithm. *Telecommunication Systems*, **2017**, 66, 109-120	2.3	9
76	Hybrid teaching-learning optimization of wireless sensor networks. *Transactions on Emerging Telecommunications Technologies*, **2017**, 28, e3194	1.9	6
75	Antenna selection for MIMO systems using biogeography based optimization **2017**,		3
74	A preliminary coverage study in millimeter wave bands for 5G communication networks **2017**,		1
73	Evolutionary design of a dual band E-shaped patch antenna for 5G mobile communications **2017**,		15
72	Experimental Optimization of Exposure Index and Quality of Service in Wlan Networks. *Radiation Protection Dosimetry*, **2017**, 175, 394-405	0.9	2
71	Cognitive Radio Engine Design for IoT Using Real-Coded Biogeography-Based Optimization and Fuzzy Decision Making. *Wireless Personal Communications*, **2017**, 97, 1813-1833	1.9	13
70	A Survey of IoT Key Enabling and Future Technologies: 5G, Mobile IoT, Sematic Web and Applications. *Wireless Personal Communications*, **2017**, 97, 1645-1675	1.9	64

69	Passive UHF RFID Tags with Specific Printed Antennas for Dielectric and Metallic Objects Applications. *Radioengineering*, **2017**, 26, 735-745	0.8	2
68	Optimal power allocation in wireless sensor networks using emerging nature-inspired algorithms **2016**,		2
67	A comparative study of different biogeography based optimization migration models performance on antenna array thinning problems **2016**,		1
66	Optimization of power consumption in wireless access networks using Differential Evolution with eigenvector based crossover operator **2016**,		5
65	E-Government Implementation of Ontology-Based Public Domain Data Knowledge Representation **2016**, 778-790		
64	Application of Artificial Bee Colony Algorithms to Antenna Design Problems for RFID Applications. *Advances in Computational Intelligence and Robotics Book Series*, **2016**, 236-265	0.4	2
63	Design of Large Thinned Arrays Using Different Biogeography-Based Optimization Migration Models. *International Journal of Antennas and Propagation*, **2016**, 2016, 1-11	1.2	8
62	Evolutionary Algorithms Applied to Antennas and Propagation: Emerging Trends and Applications. *International Journal of Antennas and Propagation*, **2016**, 2016, 1-2	1.2	1
61	Evolutionary Algorithms Applied to Antennas and Propagation: A Review of State of the Art. *International Journal of Antennas and Propagation*, **2016**, 2016, 1-12	1.2	20
60	A novel generalized oppositional biogeography-based optimization algorithm: application to peak to average power ratio reduction in OFDM systems. *Open Mathematics*, **2016**, 14, 705-722	0.8	4
59	Application of opposition-based learning concepts in reducing the power consumption in wireless access networks **2016**,		2
58	Application of Gbest-guided artificial bee colony algorithm to passive UHF RFID tag design. *International Journal of Microwave and Wireless Technologies*, **2016**, 8, 537-545	0.8	5
57	Multi-objective network planning optimization algorithm: human exposure, power consumption, cost, and capacity. *Wireless Networks*, **2015**, 21, 841-857	2.5	20
56	A multi-objective approach to indoor wireless heterogeneous networks planning based on biogeography-based optimization. *Computer Networks*, **2015**, 91, 564-576	5.4	20
55	Design of load-ended spiral antennas for RFID UHF passive tags using improved artificial bee colony algorithm. *AEU - International Journal of Electronics and Communications*, **2015**, 69, 206-214	2.8	13
54	Shaped Beam Pattern Synthesis of Antenna Arrays Using Composite Differential Evolution with Eigenvector-Based Crossover Operator. *International Journal of Antennas and Propagation*, **2015**, 2015, 1-10	1.2	5
53	Self-Adaptive Differential Evolution Algorithms for Wireless Communications and the Antenna and Microwave Design Problems **2015**, 5754-5766		
52	Optimizing meandered spiral antennas for RFID tags using gbest-guided Artificial Bee Colony algorithm **2014**,		3

51	Novel Spiral Antenna Design Using Artificial Bee Colony Optimization for UHF RFID Applications. *IEEE Antennas and Wireless Propagation Letters*, **2014**, 13, 528-531	3.8	25
50	An analytical model for the CMOS inverter **2014**,		3
49	A Multi-Objective Approach to Subarrayed Linear Antenna Arrays Design Based on Memetic Differential Evolution. *IEEE Transactions on Antennas and Propagation*, **2013**, 61, 3042-3052	4.9	62
48	Modeling by optimal Artificial Neural Networks the prediction of propagation path loss in urban environments **2013**,		9
47	Application of a Composite Differential Evolution Algorithm in Optimal Neural Network Design for Propagation Path-Loss Prediction in Mobile Communication Systems. *IEEE Antennas and Wireless Propagation Letters*, **2013**, 12, 364-367	3.8	45
46	Reducing the number of elements in linear arrays using biogeography-based optimization **2012**,		11
45	Application of Multi-Objective Evolutionary Algorithms to Antenna and Microwave Design Problems **2012**, 75-101		
44	Distance learning technology and service support in Greece: The case study of the Aristotle University over the last decade. *Education and Information Technologies*, **2011**, 16, 25-39	3.6	3
43	Design of optimum gain pyramidal horn using self-adaptive differential evolution algorithms. *International Journal of RF and Microwave Computer-Aided Engineering*, **2011**, 21, 59-66	1.5	1
42	Self-Adaptive Differential Evolution Applied to Real-Valued Antenna and Microwave Design Problems. *IEEE Transactions on Antennas and Propagation*, **2011**, 59, 1286-1298	4.9	84
41	APPLICATION OF BOOLEAN PSO WITH ADAPTIVE VELOCITY MUTATION TO THE DESIGN OF OPTIMAL LINEAR ANTENNA ARRAYS EXCITED BY UNIFORMAMPLITUDE CURRENT DISTRIBUTION. *Journal of Electromagnetic Waves and Applications*, **2011**, 25, 1422-1436	1.3	11
40	A comparative study of common and self-adaptive differential evolution strategies on numerical benchmark problems. *Procedia Computer Science*, **2011**, 3, 83-88	1.6	17
39	Sparse Linear Array Synthesis With Multiple Constraints Using Differential Evolution With Strategy Adaptation. *IEEE Antennas and Wireless Propagation Letters*, **2011**, 10, 670-673	3.8	60
38	Solving Semantic Interoperability Conflicts in Cross-Border E-Government Services **2011**, 1-47		3
37	PARETO OPTIMAL YAGI-UDA ANTENNA DESIGN USING MULTI-OBJECTIVE DIFFERENTIAL EVOLUTION. *Progress in Electromagnetics Research*, **2010**, 105, 231-251	3.8	32
36	APPLICATION OF A DIFFERENTIAL EVOLUTION ALGORITHM WITH STRATEGY ADAPTATION TO THE DESIGN OF MULTI-BAND MICROWAVE FILTERS FOR WIRELESS COMMUNICATIONS. *Progress in Electromagnetics Research*, **2010**, 109, 123-137	3.8	22
35	APPLICATION OF TAGUCHI'S OPTIMIZATION METHOD AND SELF-ADAPTIVE DIFFERENTIAL EVOLUTION TO THE SYNTHESIS OF LINEAR ANTENNA ARRAYS. *Progress in Electromagnetics Research*, **2010**, 102, 159-180	3.8	60
34	Pareto Optimal Microwave Filter Design Using Multiobjective Differential Evolution. *IEEE Transactions on Antennas and Propagation*, **2010**, 58, 132-144	4.9	54

33	Application of a Comprehensive Learning Particle Swarm Optimizer to Unequally Spaced Linear Array Synthesis With Sidelobe Level Suppression and Null Control. *IEEE Antennas and Wireless Propagation Letters*, **2010**, 9, 125-129	3.8	95
32	Cell-to-switch assignment in cellular networks using barebones particle swarm optimization. *IEICE Electronics Express*, **2010**, 7, 254-260	0.5	7
31	Solving Semantic Interoperability Conflicts in Cross-Border E-Government Services. *International Journal on Semantic Web and Information Systems*, **2009**, 5, 1-47	1.4	902
30	Thinned Planar Array Design Using Boolean PSO With Velocity Mutation. *IEEE Transactions on Magnetics*, **2009**, 45, 1490-1493	2	51
29	Pareto Optimal Design of Dual-Band Base Station Antenna Arrays Using Multi-Objective Particle Swarm Optimization With Fitness Sharing. *IEEE Transactions on Magnetics*, **2009**, 45, 1522-1525	2	30
28	Model-driven eGovernment interoperability: A review of the state of the art. *Computer Standards and Interfaces*, **2009**, 31, 613-628	3.5	38
27	Design of microwave broadband absorbers using a self-adaptive differential evolution algorithm. *International Journal of RF and Microwave Computer-Aided Engineering*, **2009**, 19, 364-372	1.5	31
26	A comparative study of Particle Swarm Optimization and Differential Evolution on Radar Absorbing Materials design for EMC applications **2009**,		6
25	Level change detection in time series using higher order statistics **2009**,		2
24	Telecommunications Network Planning and Operations Management in an Academic Environment. *Advances in E-Business Research Series*, **2009**, 615-633	0.4	
23	EMI Reduction and ICs Optimal Arrangement Inside High-Speed Networking Equipment Using Particle Swarm Optimization. *IEEE Transactions on Electromagnetic Compatibility*, **2008**, 50, 586-596	2	8
22	A conceptual analysis of semantic conflicts in pan-European e-government services. *Journal of Information Science*, **2008**, 34, 877-891	2	13
21	Facilitating the Semantic Discovery of eGovernment Services: The SemanticGov Portal **2007**,		5
20	On the Orthogonal Nonuniform Synthesis From a Set of Uniform Linear Arrays. *IEEE Antennas and Wireless Propagation Letters*, **2007**, 6, 313-315	3.8	7
19	Dielectric filter optimal design suitable for microwave communications by using multiobjective evolutionary algorithms. *Microwave and Optical Technology Letters*, **2007**, 49, 2324-2329	1.2	11
18	Optimization of integrated circuits placement for electric field reduction inside telecommunications equipment using Monte Carlo simulation and parallel recombinative simulated annealing. *Microwave and Optical Technology Letters*, **2007**, 49, 3049-3055	1.2	1
17	A versatile software tool for microwave planar radar absorbing materials design using global optimization algorithms. *Materials & Design*, **2007**, 28, 2585-2595		24
16	A public administration domain ontology for semantic discovery of eGovernment services **2007**,		4

15	Public Administration Domain Ontology for a Semantic Web Services EGovernment Framework **2007**,		15
14	WSMO-PA: Formal Specification of Public Administration Service Model on Semantic Web Service Ontology **2007**,		20
13	Seasonal decomposition and forecasting of telecommunication data: A comparative case study. *Technological Forecasting and Social Change*, **2006**, 73, 495-509	9.5	21
12	Web based laboratory in electromagnetic compatibility using a Java applet. *Computer Applications in Engineering Education*, **2006**, 14, 269-280	1.6	2
11	Microwave absorber optimal design using multi-objective particle swarm optimization. *Microwave and Optical Technology Letters*, **2006**, 48, 1553-1558	1.2	48
10	On the base stations antenna system design for mobile communications. *Electrical Engineering*, **2006**, 88, 157-163	1.5	
9	On mobile communications smart base-station system design. *IEEE Antennas and Propagation Magazine*, **2005**, 47, 139-144	1.7	4
8	A test lab for the performance analysis of TCP over ethernet LAN on windows operating system. *IEEE Transactions on Education*, **2005**, 48, 318-328	2.1	8
7	On the design of switched-beam wideband base stations. *IEEE Antennas and Propagation Magazine*, **2004**, 46, 158-167	1.7	28
6	Monte Carlo simulation for the prediction of the emission level from multiple sources inside shielded enclosures. *IEEE Transactions on Electromagnetic Compatibility*, **2002**, 44, 291-308	2	9
5	Direct solution and Monte Carlo simulation of the inverse problem in two-layered half-space. *Electrical Engineering*, **2002**, 84, 51-60	1.5	1
4	. *IEEE Antennas and Propagation Magazine*, **2002**, 44, 62-74	1.7	1
3	On the quantized excitation and the geometry synthesis of a linear array by the orthogonal method. *IEEE Transactions on Antennas and Propagation*, **2001**, 49, 298-303	4.9	5
2	Particle Swarm Optimization Algorithms Applied to Antenna and Microwave Design Problems100-126		
1	Application of Semantic Web Technology in E-Business983-994		