

Riccardo Colella

List of Publications by Year in descending order

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Version: 2024-02-01

115
papers

1,648
citations

279798

23
h-index

345221

36
g-index

115
all docs

115
docs citations

115
times ranked

1547
citing authors

#	ARTICLE	IF	CITATIONS
1	Trial of Continuous or Interrupted Chest Compressions during CPR. <i>New England Journal of Medicine</i> , 2015, 373, 2203-2214.	27.0	239
2	A Cost-Effective SDR Platform for Performance Characterization of RFID Tags. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2012, 61, 903-911.	4.7	63
3	Variation in Survival After Out-of-Hospital Cardiac Arrest Between Emergency Medical Services Agencies. <i>JAMA Cardiology</i> , 2018, 3, 989.	6.1	60
4	Measurement Platform for Electromagnetic Characterization and Performance Evaluation of UHF RFID Tags. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2016, 65, 905-914.	4.7	53
5	Smart RFID Antenna System for Indoor Tracking and Behavior Analysis of Small Animals in Colony Cages. <i>IEEE Sensors Journal</i> , 2014, 14, 1198-1206.	4.7	52
6	Enhanced UHF RFID Sensor-Tag. <i>IEEE Microwave and Wireless Components Letters</i> , 2013, 23, 49-51.	3.2	51
7	SPARTACUS: Self-Powered Augmented RFID Tag for Autonomous Computing and Ubiquitous Sensing. <i>IEEE Transactions on Antennas and Propagation</i> , 2015, 63, 2272-2281.	5.1	48
8	A Cost-Effective UHF RFID Tag for Transmission of Generic Sensor Data in Wireless Sensor Networks. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2009, 57, 1291-1296.	4.6	45
9	SMART PROTOTYPING TECHNIQUES FOR UHF RFID TAGS: ELECTROMAGNETIC CHARACTERIZATION AND COMPARISON WITH TRADITIONAL APPROACHES. <i>Progress in Electromagnetics Research</i> , 2012, 132, 91-111.	4.4	42
10	A Curved 3-D Printed Microstrip Patch Antenna Layout for Bandwidth Enhancement and Size Reduction. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2020, 19, 1118-1122.	4.0	39
11	Microwave characterisation of polylactic acid for 3D-printed dielectrically controlled substrates. <i>IET Microwaves, Antennas and Propagation</i> , 2017, 11, 1970-1976.	1.4	34
12	Design Considerations on the Placement of a Wearable UHF-RFID PIFA on a Compact Ground Plane. <i>IEEE Transactions on Antennas and Propagation</i> , 2018, 66, 3142-3147.	5.1	34
13	RFID Sensor-Tags Feeding a Context-Aware Rule-Based Healthcare Monitoring System. <i>Journal of Medical Systems</i> , 2012, 36, 3435-3449.	3.6	32
14	Gen2 RFID as IoT Enabler: Characterization and Performance Improvement. <i>IEEE Wireless Communications</i> , 2017, 24, 33-39.	9.0	31
15	Wearable UHF RFID Sensor-Tag Based on Customized 3D-Printed Antenna Substrates. <i>IEEE Sensors Journal</i> , 2018, 18, 8789-8795.	4.7	30
16	Permittivity-Customizable Ceramic-Doped Silicone Substrates Shaped With 3-D-Printed Molds to Design Flexible and Conformal Antennas. <i>IEEE Transactions on Antennas and Propagation</i> , 2020, 68, 4967-4972.	5.1	30
17	A framework for context-aware home-health monitoring. <i>International Journal of Autonomous and Adaptive Communications Systems</i> , 2010, 3, 75.	0.3	29
18	A Cross-Layer Approach to Minimize the Energy Consumption in Wireless Sensor Networks. <i>International Journal of Distributed Sensor Networks</i> , 2014, 10, 268284.	2.2	29

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19	Enhanced UHF RFID Tags for Drug Tracing. <i>Journal of Medical Systems</i> , 2012, 36, 3451-3462.	3.6	28
20	Compact Switched-Beam Antennas Enabling Novel Power-Efficient Wireless Sensor Networks. <i>IEEE Sensors Journal</i> , 2014, 14, 3252-3259.	4.7	28
21	IoT-Aware Waste Management System Based on Cloud Services and Ultra-Low-Power RFID Sensor-Tags. <i>IEEE Sensors Journal</i> , 2020, 20, 14873-14881.	4.7	26
22	Design, development, and performance evaluation of a compact and long-range passive UHF RFID tag. <i>Microwave and Optical Technology Letters</i> , 2012, 54, 1335-1339.	1.4	25
23	Design of UHF RFID Sensor-Tags for the Biomechanical Analysis of Human Body Movements. <i>IEEE Sensors Journal</i> , 2021, 21, 14090-14098.	4.7	25
24	An animal tracking system for behavior analysis using radio frequency identification. <i>Lab Animal</i> , 2014, 43, 321-327.	0.4	24
25	Differential RCS and sensitivity calculation of RFID tags with Software-Defined Radio. , 2012, , .		23
26	Electromagnetic Performance Evaluation of UHF RFID Tags With Power Discretization Error Cancellation. <i>IEEE Transactions on Antennas and Propagation</i> , 2019, 67, 3545-3549.	5.1	22
27	Experimental Performance Evaluation of Passive UHF RFID Tags in Electromagnetically Critical Supply Chains. <i>Journal of Communications Software and Systems</i> , 2017, 7, 59.	0.8	22
28	Compact 3-D-Printed Circularly Polarized Antenna for Handheld UHF RFID Readers. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2018, 17, 2021-2025.	4.0	21
29	A novel low-cost multisensor-tag for RFID applications in healthcare. <i>Microwave and Optical Technology Letters</i> , 2008, 50, 2877-2880.	1.4	20
30	IoT-Ready Energy-Autonomous Parking Sensor Device. <i>IEEE Internet of Things Journal</i> , 2021, 8, 4830-4840.	8.7	20
31	Analysis of FDM and DLP 3D-Printing Technologies to Prototype Electromagnetic Devices for RFID Applications. <i>Sensors</i> , 2021, 21, 897.	3.8	19
32	Improving item-level tracing systems through Ad Hoc UHF RFID tags. , 2010, , .		18
33	Comparison of Fabrication Techniques for Flexible UHF RFID Tag Antennas [Wireless Corner]. <i>IEEE Antennas and Propagation Magazine</i> , 2017, 59, 159-168.	1.4	18
34	Near Field UHF RFID Antenna System Enabling the Tracking of Small Laboratory Animals. <i>International Journal of Antennas and Propagation</i> , 2013, 2013, 1-10.	1.2	16
35	A Framework for Context-Aware Home-Health Monitoring. <i>Lecture Notes in Computer Science</i> , 2008, , 119-130.	1.3	16
36	Dielectric Resonators Antennas Potential Unleashed by 3D Printing Technology: A Practical Application in the IoT Framework. <i>Electronics (Switzerland)</i> , 2022, 11, 64.	3.1	16

#	ARTICLE	IF	CITATIONS
37	Fully 3D-Printed RFID Tags based on Printable Metallic Filament: Performance Comparison with other Fabrication Techniques. , 2019, , .		15
38	Proof of Presence: Novel Vehicle Detection System. IEEE Wireless Communications, 2019, 26, 44-49.	9.0	15
39	An IoT-Aware Smart System Exploiting the Electromagnetic Behavior of UHF-RFID Tags to Improve Worker Safety in Outdoor Environments. Electronics (Switzerland), 2022, 11, 717.	3.1	14
40	Customizing 3D-Printing for Electromagnetics to Design Enhanced RFID Antennas. IEEE Journal of Radio Frequency Identification, 2020, 4, 452-460.	2.3	13
41	Sensor data transmission through passive RFID tags to feed wireless sensor networks. , 2010, , .		12
42	High-Sensitivity CMOS RF-DC Converter in HF RFID Band. IEEE Microwave and Wireless Components Letters, 2016, 26, 732-734.	3.2	11
43	Laser-Induced Graphene, Fused Filament Fabrication, and Aerosol Jet Printing for Realizing Conductive Elements of UHF RFID Antennas. IEEE Journal of Radio Frequency Identification, 2022, 6, 601-609.	2.3	11
44	Detection and evaluation of I/Q impairments in RF digital transmitters. IET Science, Measurement and Technology, 2004, 151, 39-45.	0.7	10
45	Sensor data transmission through passive RFID tags to feed wireless sensor networks. , 2010, , .		9
46	Fully-passive devices for RFID smart sensing. , 2013, , .		9
47	Pattern-Reconfigurable Antennas and Smart Wake-Up Circuits to Decrease Power Consumption in WSN Nodes. IEEE Sensors Journal, 2014, 14, 4323-4324.	4.7	9
48	Design of a 3D-printed circularly polarized antenna for portable UHF RFID readers. , 2017, , .		9
49	Wearable UHF RFID Sensor Tag in 3D-Printing Technology for Body Temperature Monitoring. , 2018, , .		9
50	Improved RFID tag characterization system: Use case in the IoT arena. , 2016, , .		8
51	Electromagnetic Analysis and Performance Comparison of Fully 3D-printed Antennas. , 2019, , .		8
52	RFID-Based Indoor Positioning Using Edge Machine Learning. IEEE Journal of Radio Frequency Identification, 2022, 6, 573-582.	2.3	8
53	IoT-oriented Waste Management System based on new RFID-Sensing Devices and Cloud Technologies. , 2019, , .		7
54	A novel and low-cost multisensor-integrated RFID tag for biomedical applications. , 2008, , .		6

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55	A context-aware smart infrastructure based on RFID sensor-tags and its application to the health-care domain. , 2009, , .		6
56	Integration of RFID and sensors for remote healthcare. , 2010, , .		6
57	Prototyping flexible UHF RFID tags through rapid and effective unconventional techniques: Validation on label-type sensor-tag. , 2012, , .		6
58	Laser-Fabricated Antennas for RFID Applications. , 2021, , .		6
59	An IoT-aware smart system to detect thermal comfort in industrial environments. , 2021, , .		6
60	An RFID tracking system supporting the behavior analysis of colonial laboratory animals. International Journal of RF Technologies: Research and Applications, 2013, 5, 63-80.	0.7	5
61	Sensors-based treatment system of the organic waste with RFID identification and on-cloud traceability. , 2019, , .		5
62	On the Use of Additive Manufacturing 3D-Printing Technology in RFID Antenna Design. , 2019, , .		5
63	3D-Printed Barcodes as RFID Tags. , 2020, , .		5
64	Health Technology Assessment for In Silico Medicine: Social, Ethical and Legal Aspects. International Journal of Environmental Research and Public Health, 2022, 19, 1510.	2.6	5
65	Switched-Beam Antenna for WSN Nodes Enabling Hardware-driven Power Saving. , 0, , .		4
66	Improved Battery-Less Augmented RFID Tag: Application on Ambient Sensing and Control. IEEE Sensors Journal, 2016, 16, 3484-3485.	4.7	4
67	Yagi-Uda Antenna with Fully 3D-Printed Bow-Tie Elements. , 2020, , .		4
68	Exploiting RFID technology for Indoor Positioning. , 2021, , .		4
69	Smart IoT system empowered by customized energy-aware wireless sensors integrated in graphene-based tissues to improve workers thermal comfort. Journal of Cleaner Production, 2022, 360, 132132.	9.3	4
70	Optimized antennas for enhanced RFID sensor tags. , 2011, , .		3
71	Advances in the design of smart, multi-function, RFID-enabled devices. , 2014, , .		3
72	Programming UHF RFID Systems for the Internet of Things [EM Programmer's Notebook]. IEEE Antennas and Propagation Magazine, 2016, 58, 109-119.	1.4	3

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73	Evaluating the suitability of specific RFID tags for IoT applications through a new characterization platform. , 2016, , .		3
74	Measurement system for over-the-air evaluation of UHF RFID tags quality. Wireless Power Transfer, 2017, 4, 33-41.	1.1	3
75	Electromagnetic Design of UHF RFID Tags Enabling a Novel Method to Retrieve Sensor Data. IEEE Journal of Radio Frequency Identification, 2018, 2, 23-30.	2.3	3
76	Simulated versus physical bench tests. Medicine (United States), 2021, 100, e26198.	1.0	3
77	Mössbauer diffraction experiments with LiF: A new technique for calibration. Nuclear Instruments & Methods, 1979, 164, 125-127.	1.2	2
78	On the use of passive UHF RFID tags in the pharmaceutical supply chain: a novel enhanced tag versus high-performance commercial tags. International Journal of Radio Frequency Identification Technology and Applications, 2013, 4, 122.	0.5	2
79	A UHF-RFID power management circuit for body sensor networks. , 2015, , .		2
80	Cost-effective electromagnetic characterization system for radiation pattern and sensitivity estimation of UHF RFID tags. , 2015, , .		2
81	RF-DC converter for HF RFID sensing applications powered by a near-field loop antenna. Radio Science, 2016, 51, 942-950.	1.6	2
82	UHF front-end feeding RFID-based body sensor networks by exploiting the reader signal. Radio Science, 2016, 51, 481-489.	1.6	2
83	Adding RFID Capabilities to IoT Technologies: Proof-of-Concept on Microwave Doppler Sensors. , 2019, , .		2
84	X-Band RFID System Exploiting Doppler-Based Microwave Motion Sensors. IEEE Transactions on Antennas and Propagation, 2019, 67, 6602-6611.	5.1	2
85	A 3D-Printed Wideband Antenna for UHF RFID. , 2019, , .		2
86	Opportunity to Analyze Laboratory Mice Behavior by Tracking Systems based on UHF RFID Technology: pros and cons. , 2019, , .		2
87	Design of Passive RFID Sensor Tags Enhanced by a Novel Logical Communication Procedure over LLRP. Journal of Communications Software and Systems, 2017, 13, 120.	0.8	2
88	Fully 3D-printed UHF RFID Antennas: Technological Comparison to Realize Conductive Elements. , 2021, , .		2
89	Characterization system for radiation pattern and sensitivity estimation of UHF RFID tags. , 2015, , .		1
90	EM design of a passive RFID-based device with sensing and reasoning capabilities. , 2015, , .		1

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91	A \sim 19dBm sensitivity integrated RF-DC converter with regulated output voltage for powering UHF wireless sensors. , 2015, , .		1
92	Passive RFID tag with sensing and reasoning capabilities for building automation. , 2016, , .		1
93	Experimental assessment of a design criterion for RFID wearable antennas. , 2017, , .		1
94	Experimental validation of a design criterion for UHF ungrounded wearable antennas for RFID applications. , 2017, , .		1
95	Single-Chip Gen2-Compliant UHF RFID Sensor Tags Based on Novel Pseudo-BAP Mode. , 2018, , .		1
96	3D printed wearable sensor tag based on UHF RFID ICs implementing a novel interrogation modality. , 2018, , .		1
97	RFID Sensing System Based on UHF Platform-Tolerant Antenna for Harsh Industrial Environments. , 2019, , .		1
98	Considerations on Rigorous UHF RFID Tag Electromagnetic Performance Evaluation in Non-Anechoic Environments. , 2020, , .		1
99	Circularly Polarized Antenna in 3D Printing Technology to Feed a Wearable Fully-Integrated WiFi-RFID Reader for Biomedical Applications. , 2020, , .		1
100	On Increasing of Read Range of Miniaturized UHF Tags. , 2021, , .		1
101	The Promising Role of 3D-printed Dielectric Resonator Antennas in the IoT Framework. , 2021, , .		1
102	Electromagnetic Performance Estimation of UHF RFID Tags in Harsh Contexts. Journal of Communications Software and Systems, 2017, 13, 125.	0.8	1
103	Digital Light Processing as One of the Promising 3D-Printing Technologies in Electromagnetics: Application on RFID. , 2020, , .		1
104	2.4 GHz BLE-based Smart Sensing System for Remote Monitoring of Health, Safety and Comfort at Workplace. , 2021, , .		1
105	A Novel Design for Flexible and Conformable 3D-Printed Dielectric Resonator Antennas for WiFi and IoT Applications. , 2022, , .		1
106	Novel fully-passive multifunction RFID-enabled devices. , 2014, , .		0
107	A HF-RFID, -19 dBm sensitivity fully integrated RF-DC voltage multiplier. , 2015, , .		0
108	Exploiting 3D-printing in passive UHF RFID electromagnetic projects. , 2017, , .		0

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109	10.525 GHz Backscattering RFID System Based on Doppler Radar Technology for 5G Applications and Telemedicine. , 2019, , .		0
110	Circularly-Polarized SIW Antenna for Novel Backscattering-based X-band Communication Systems. , 2020, , .		0
111	Conformal Circularly-Polarized Shoe-Integrated Antenna based on Leather Substrate and Conductive Fabric for Bluetooth Low Energy Body-Centric Links. , 2020, , .		0
112	Using Battery-Less RFID Tags with Augmented Capabilities in the Internet of Things. Journal of Communications Software and Systems, 2017, 12, 16.	0.8	0
113	3D-Printed Tunable UHF RFID PIFA Realized with BaTiO3 Enhanced PLA for Multipurpose Applications. , 2020, , .		0
114	Recent Activities in Rfid Applications Empowered by 3D Printing at UniSalento. , 2021, , .		0
115	Customized UHF RFID Sensor Tags to Feed Biomechanical Models. , 2021, , .		0