

Riccardo Colella

List of Publications by Year in descending order

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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	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
2	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
3	Dielectric Resonators Antennas Potential Unleashed by 3D Printing Technology: A Practical Application in the IoT Framework. Electronics (Switzerland), 2022, 11, 64.	3.1	16
4	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
5	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
6	RFID-Based Indoor Positioning Using Edge Machine Learning. IEEE Journal of Radio Frequency Identification, 2022, 6, 573-582.	2.3	8
7	A Novel Design for Flexible and Conformable 3D-Printed Dielectric Resonator Antennas for WiFi and IoT Applications. , 2022, , .		1
8	On Increasing of Read Range of Miniaturized UHF Tags. , 2021, , .		1
9	Analysis of FDM and DLP 3D-Printing Technologies to Prototype Electromagnetic Devices for RFID Applications. Sensors, 2021, 21, 897.	3.8	19
10	Design of UHF RFID Sensor-Tags for the Biomechanical Analysis of Human Body Movements. IEEE Sensors Journal, 2021, 21, 14090-14098.	4.7	25
11	IoT-Ready Energy-Autonomous Parking Sensor Device. IEEE Internet of Things Journal, 2021, 8, 4830-4840.	8.7	20
12	Simulated versus physical bench tests. Medicine (United States), 2021, 100, e26198.	1.0	3
13	Laser-Fabricated Antennas for RFID Applications. , 2021, , .		6
14	The Promising Role of 3D-printed Dielectric Resonator Antennas in the IoT Framework. , 2021, , .		1
15	Exploiting RFID technology for Indoor Positioning. , 2021, , .		4
16	Recent Activities in Rfid Applications Empowered by 3D Printing at UniSalento. , 2021, , .		0
17	Fully 3D-printed UHF RFID Antennas: Technological Comparison to Realize Conductive Elements. , 2021, , .		2
18	Customized UHF RFID Sensor Tags to Feed Biomechanical Models. , 2021, , .		0

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19	An IoT-aware smart system to detect thermal comfort in industrial environments. , 2021, , .		6
20	2.4 GHz BLE-based Smart Sensing System for Remote Monitoring of Health, Safety and Comfort at Workplace. , 2021, , .		1
21	IoT-Aware Waste Management System Based on Cloud Services and Ultra-Low-Power RFID Sensor-Tags. IEEE Sensors Journal, 2020, 20, 14873-14881.	4.7	26
22	Considerations on Rigorous UHF RFID Tag Electromagnetic Performance Evaluation in Non-Anechoic Environments. , 2020, , .		1
23	Yagi-Uda Antenna with Fully 3D-Printed Bow-Tie Elements. , 2020, , .		4
24	A Curved 3-D Printed Microstrip Patch Antenna Layout for Bandwidth Enhancement and Size Reduction. IEEE Antennas and Wireless Propagation Letters, 2020, 19, 1118-1122.	4.0	39
25	Circularly-Polarized SIW Antenna for Novel Backscattering-based X-band Communication Systems. , 2020, , .		0
26	3D-Printed Barcodes as RFID Tags. , 2020, , .		5
27	Conformal Circularly-Polarized Shoe-Integrated Antenna based on Leather Substrate and Conductive Fabric for Bluetooth Low Energy Body-Centric Links. , 2020, , .		0
28	Circularly Polarized Antenna in 3D Printing Technology to Feed a Wearable Fully-Integrated WiFi-RFID Reader for Biomedical Applications. , 2020, , .		1
29	Customizing 3D-Printing for Electromagnetics to Design Enhanced RFID Antennas. IEEE Journal of Radio Frequency Identification, 2020, 4, 452-460.	2.3	13
30	Permittivity-Customizable Ceramic-Doped Silicone Substrates Shaped With 3-D-Printed Molds to Design Flexible and Conformal Antennas. IEEE Transactions on Antennas and Propagation, 2020, 68, 4967-4972.	5.1	30
31	3D-Printed Tunable UHF RFID PIFA Realized with BaTiO3 Enhanced PLA for Multipurpose Applications. , 2020, , .		0
32	Digital Light Processing as One of the Promising 3D-Printing Technologies in Electromagnetics: Application on RFID. , 2020, , .		1
33	IoT-oriented Waste Management System based on new RFID-Sensing Devices and Cloud Technologies. , 2019, , .		7
34	RFID Sensing System Based on UHF Platform-Tolerant Antenna for Harsh Industrial Environments. , 2019, , .		1
35	Fully 3D-Printed RFID Tags based on Printable Metallic Filament: Performance Comparison with other Fabrication Techniques. , 2019, , .		15
36	Adding RFID Capabilities to IoT Technologies: Proof-of-Concept on Microwave Doppler Sensors. , 2019, , .		2

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37	Sensors-based treatment system of the organic waste with RFID identification and on-cloud traceability. , 2019, , .		5
38	X-Band RFID System Exploiting Doppler-Based Microwave Motion Sensors. IEEE Transactions on Antennas and Propagation, 2019, 67, 6602-6611.	5.1	2
39	Electromagnetic Performance Evaluation of UHF RFID Tags With Power Discretization Error Cancellation. IEEE Transactions on Antennas and Propagation, 2019, 67, 3545-3549.	5.1	22
40	10.525 GHz Backscattering RFID System Based on Doppler Radar Technology for 5G Applications and Telemedicine. , 2019, , .		0
41	Electromagnetic Analysis and Performance Comparison of Fully 3D-printed Antennas. , 2019, , .		8
42	On the Use of Additive Manufacturing 3D-Printing Technology in RFID Antenna Design. , 2019, , .		5
43	A 3D-Printed Wideband Antenna for UHF RFID. , 2019, , .		2
44	Opportunity to Analyze Laboratory Mice Behavior by Tracking Systems based on UHF RFID Technology: pros and cons. , 2019, , .		2
45	Proof of Presence: Novel Vehicle Detection System. IEEE Wireless Communications, 2019, 26, 44-49.	9.0	15
46	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
47	Design Considerations on the Placement of a Wearable UHF-RFID PIFA on a Compact Ground Plane. IEEE Transactions on Antennas and Propagation, 2018, 66, 3142-3147.	5.1	34
48	Variation in Survival After Out-of-Hospital Cardiac Arrest Between Emergency Medical Services Agencies. JAMA Cardiology, 2018, 3, 989.	6.1	60
49	Wearable UHF RFID Sensor Tag in 3D-Printing Technology for Body Temperature Monitoring. , 2018, , .		9
50	Single-Chip Gen2-Compliant UHF RFID Sensor Tags Based on Novel Pseudo-BAP Mode. , 2018, , .		1
51	Wearable UHF RFID Sensor-Tag Based on Customized 3D-Printed Antenna Substrates. IEEE Sensors Journal, 2018, 18, 8789-8795.	4.7	30
52	3D printed wearable sensor tag based on UHF RFID ICs implementing a novel interrogation modality. , 2018, , .		1
53	Compact 3-D-Printed Circularly Polarized Antenna for Handheld UHF RFID Readers. IEEE Antennas and Wireless Propagation Letters, 2018, 17, 2021-2025.	4.0	21
54	Gen2 RFID as IoT Enabler: Characterization and Performance Improvement. IEEE Wireless Communications, 2017, 24, 33-39.	9.0	31

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55	Experimental assessment of a design criterion for RFID wearable antennas. , 2017, , .		1
56	Measurement system for over-the-air evaluation of UHF RFID tags quality. Wireless Power Transfer, 2017, 4, 33-41.	1.1	3
57	Experimental validation of a design criterion for UHF ungrounded wearable antennas for RFID applications. , 2017, , .		1
58	Comparison of Fabrication Techniques for Flexible UHF RFID Tag Antennas [Wireless Corner]. IEEE Antennas and Propagation Magazine, 2017, 59, 159-168.	1.4	18
59	Design of a 3D-printed circularly polarized antenna for portable UHF RFID readers. , 2017, , .		9
60	Exploiting 3D-printing in passive UHF RFID electromagnetic projects. , 2017, , .		0
61	Microwave characterisation of polylactic acid for 3D-printed dielectrically controlled substrates. IET Microwaves, Antennas and Propagation, 2017, 11, 1970-1976.	1.4	34
62	Experimental Performance Evaluation of Passive UHF RFID Tags in Electromagnetically Critical Supply Chains. Journal of Communications Software and Systems, 2017, 7, 59.	0.8	22
63	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
64	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
65	Electromagnetic Performance Estimation of UHF RFID Tags in Harsh Contexts. Journal of Communications Software and Systems, 2017, 13, 125.	0.8	1
66	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
67	High-Sensitivity CMOS RF-DC Converter in HF RFID Band. IEEE Microwave and Wireless Components Letters, 2016, 26, 732-734.	3.2	11
68	RF-DC converter for HF RFID sensing applications powered by a near-field loop antenna. Radio Science, 2016, 51, 942-950.	1.6	2
69	Improved RFID tag characterization system: Use case in the IoT arena. , 2016, , .		8
70	Evaluating the suitability of specific RFID tags for IoT applications through a new characterization platform. , 2016, , .		3
71	Passive RFID tag with sensing and reasoning capabilities for building automation. , 2016, , .		1
72	UHF front-end feeding RFID-based body sensor networks by exploiting the reader signal. Radio Science, 2016, 51, 481-489.	1.6	2

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73	Measurement Platform for Electromagnetic Characterization and Performance Evaluation of UHF RFID Tags. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 905-914.	4.7	53
74	Improved Battery-Less Augmented RFID Tag: Application on Ambient Sensing and Control. IEEE Sensors Journal, 2016, 16, 3484-3485.	4.7	4
75	A UHF-RFID power management circuit for body sensor networks. , 2015, , .		2
76	Cost-effective electromagnetic characterization system for radiation pattern and sensitivity estimation of UHF RFID tags. , 2015, , .		2
77	Characterization system for radiation pattern and sensitivity estimation of UHF RFID tags. , 2015, , .		1
78	EM design of a passive RFID-based device with sensing and reasoning capabilities. , 2015, , .		1
79	A \sim 19dBm sensitivity integrated RF-DC converter with regulated output voltage for powering UHF wireless sensors. , 2015, , .		1
80	A HF-RFID, -19 dBm sensitivity fully integrated RF-DC voltage multiplier. , 2015, , .		0
81	SPARTACUS: Self-Powered Augmented RFID Tag for Autonomous Computing and Ubiquitous Sensing. IEEE Transactions on Antennas and Propagation, 2015, 63, 2272-2281.	5.1	48
82	Trial of Continuous or Interrupted Chest Compressions during CPR. New England Journal of Medicine, 2015, 373, 2203-2214.	27.0	239
83	Novel fully-passive multifunction RFID-enabled devices. , 2014, , .		0
84	A Cross-Layer Approach to Minimize the Energy Consumption in Wireless Sensor Networks. International Journal of Distributed Sensor Networks, 2014, 10, 268284.	2.2	29
85	Smart RFID Antenna System for Indoor Tracking and Behavior Analysis of Small Animals in Colony Cages. IEEE Sensors Journal, 2014, 14, 1198-1206.	4.7	52
86	Advances in the design of smart, multi-function, RFID-enabled devices. , 2014, , .		3
87	Compact Switched-Beam Antennas Enabling Novel Power-Efficient Wireless Sensor Networks. IEEE Sensors Journal, 2014, 14, 3252-3259.	4.7	28
88	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
89	An animal tracking system for behavior analysis using radio frequency identification. Lab Animal, 2014, 43, 321-327.	0.4	24
90	Enhanced UHF RFID Sensor-Tag. IEEE Microwave and Wireless Components Letters, 2013, 23, 49-51.	3.2	51

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91	Fully-passive devices for RFID smart sensing. , 2013, , .		9
92	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
93	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
94	Near Field UHF RFID Antenna System Enabling the Tracking of Small Laboratory Animals. International Journal of Antennas and Propagation, 2013, 2013, 1-10.	1.2	16
95	Differential RCS and sensitivity calculation of RFID tags with Software-Defined Radio. , 2012, , .		23
96	Enhanced UHF RFID Tags for Drug Tracing. Journal of Medical Systems, 2012, 36, 3451-3462.	3.6	28
97	RFID Sensor-Tags Feeding a Context-Aware Rule-Based Healthcare Monitoring System. Journal of Medical Systems, 2012, 36, 3435-3449.	3.6	32
98	Prototyping flexible UHF RFID tags through rapid and effective unconventional techniques: Validation on label-type sensor-tag. , 2012, , .		6
99	SMART PROTOTYPING TECHNIQUES FOR UHF RFID TAGS: ELECTROMAGNETIC CHARACTERIZATION AND COMPARISON WITH TRADITIONAL APPROACHES. Progress in Electromagnetics Research, 2012, 132, 91-111.	4.4	42
100	Design, development, and performance evaluation of a compact and long-range passive UHF RFID tag. Microwave and Optical Technology Letters, 2012, 54, 1335-1339.	1.4	25
101	A Cost-Effective SDR Platform for Performance Characterization of RFID Tags. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 903-911.	4.7	63
102	Optimized antennas for enhanced RFID sensor tags. , 2011, , .		3
103	A framework for context-aware home-health monitoring. International Journal of Autonomous and Adaptive Communications Systems, 2010, 3, 75.	0.3	29
104	Integration of RFID and sensors for remote healthcare. , 2010, , .		6
105	Sensor data transmission through passive RFID tags to feed wireless sensor networks. , 2010, , .		9
106	Sensor data transmission through passive RFID tags to feed wireless sensor networks. , 2010, , .		12
107	Improving item-level tracing systems through Ad Hoc UHF RFID tags. , 2010, , .		18
108	A context-aware smart infrastructure based on RFID sensor-tags and its application to the health-care domain. , 2009, , .		6

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109	A Cost-Effective UHF RFID Tag for Transmission of Generic Sensor Data in Wireless Sensor Networks. IEEE Transactions on Microwave Theory and Techniques, 2009, 57, 1291-1296.	4.6	45
110	A novel low-cost multisensor-tag for RFID applications in healthcare. Microwave and Optical Technology Letters, 2008, 50, 2877-2880.	1.4	20
111	A novel and low-cost multisensor-integrated RFID tag for biomedical applications. , 2008, , .		6
112	A Framework for Context-Aware Home-Health Monitoring. Lecture Notes in Computer Science, 2008, , 119-130.	1.3	16
113	Detection and evaluation of I/Q impairments in RF digital transmitters. IET Science, Measurement and Technology, 2004, 151, 39-45.	0.7	10
114	Mössbauer diffraction experiments with LiF: A new technique for calibration. Nuclear Instruments & Methods, 1979, 164, 125-127.	1.2	2
115	Switched-Beam Antenna for WSN Nodes Enabling Hardware-driven Power Saving. , 0, , .		4