Alessandro Fanti

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/583322/publications.pdf

Version: 2024-02-01

116 papers	775 citations	15 h-index	713332 21 g-index
120	120	120	652
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	A Blockchain-Based Traceability System in Agri-Food SME: Case Study of a Traditional Bakery. IEEE Access, 2021, 9, 62899-62915.	2.6	62
2	A Wireless Sensors Network for Monitoring the Carasau Bread Manufacturing Process. Electronics (Switzerland), 2019, 8, 1541.	1.8	33
3	A Multiphysic Model for the Hyperthermia Treatment of Residual Osteosarcoma Cells in Upper Limbs Using Magnetic Scaffolds. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2019, 4, 337-347.	1.4	31
4	Control of electronic band profiles through depletion layer engineering in core–shell nanocrystals. Nature Communications, 2022, 13, 537.	5.8	27
5	Space Debris Detection in Low Earth Orbit with the Sardinia Radio Telescope. Electronics (Switzerland), 2017, 6, 59.	1.8	25
6	Numerical Investigation of Bone Tumor Hyperthermia Treatment Using Magnetic Scaffolds. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2018, 2, 294-301.	2.3	23
7	Enhancement of Cell Migration Rate Toward a Superparamagnetic Scaffold Using LF Magnetic Fields. IEEE Transactions on Magnetics, 2016, 52, 1-8.	1.2	22
8	A Low-Cost Dual-Band CPW-Fed Printed LPDA for Wireless Communications. IEEE Antennas and Wireless Propagation Letters, 2016, 15, 1333-1336.	2.4	21
9	Nonlinear Analysis of Soil Microwave Heating: Application to Agricultural Soils Disinfection. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2017, 2, 105-114.	1.4	18
10	Microwave Imaging for the Diagnosis of Cervical Diseases: A Feasibility Analysis. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2021, 5, 277-285.	2.3	18
11	On the Evaluation of the Shielding Effectiveness of Electrically Large Enclosure. Advanced Electromagnetics, 2012, 1, 84.	0.7	18
12	A physically based rain attenuation model for terrestrial links. Radio Science, 2017, 52, 972-980.	0.8	17
13	A Compact In-Line Waveguide-to-Microstrip Transition in the Q-Band for Radio Astronomy Applications. Electronics (Switzerland), 2018, 7, 24.	1.8	17
14	Evaluation of a microwave resonant cavity as a reactor for enzyme reactions. Journal of Electromagnetic Waves and Applications, 2015, 29, 2380-2392.	1.0	15
15	Design and optimization of a microwave irradiated and resonant continuous biochemical reactor. Radio Science, 2016, 51, 1199-1212.	0.8	15
16	Combined Use of MRI, fMRIand Cognitive Data for Alzheimer's Disease: Preliminary Results. Applied Sciences (Switzerland), 2019, 9, 3156.	1,3	15
17	Influence of Magnetic Scaffold Loading Patterns on Their Hyperthermic Potential Against Bone Tumors. IEEE Transactions on Biomedical Engineering, 2022, 69, 2029-2040.	2.5	15
18	A Space Debris-Dedicated Channel for the P-Band Receiver of the Sardinia Radio Telescope: A Detailed Description and Characterization. IEEE Antennas and Propagation Magazine, 2020, 62, 45-57.	1.2	13

#	Article	IF	CITATIONS
19	Improvement and Testing of Models for Field Level Evaluation in Urban Environment. IEEE Transactions on Antennas and Propagation, 2020, 68, 4038-4047.	3.1	13
20	Calibration and Use of Microwave Radiometers in Multiple-site EM Wave Propagation Experiments. , 2018, , .		13
21	Orbit Determination of Resident Space Objects Using the P-Band Mono-Beam Receiver of the Sardinia Radio Telescope. Applied Sciences (Switzerland), 2019, 9, 4092.	1.3	12
22	Towards the Robust and Effective Design of Hyperthermic Devices: Improvement of a Patch Antenna for the Case Study of Abdominal Rhabdomyosarcoma With 3D Perfusion. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2021, 5, 197-205.	2.3	12
23	Design and Characterization of Magnetic Scaffolds for Bone Tumor Hyperthermia. IEEE Access, 2022, 10, 19768-19779.	2.6	12
24	Ridge waveguide optimization with PSO algorithm. Journal of Electromagnetic Waves and Applications, 2015, 29, 199-209.	1.0	11
25	Preliminary Study and Numerical Investigation of an Electrostatic Unit for the Removal of Fluoride From Thermal Water of Ethiopian Rift Valley. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2020, 5, 72-82.	1.4	11
26	A Periodic Transmission Line Model for Body Channel Communication. IEEE Access, 2020, 8, 160099-160115.	2.6	11
27	The Ad Hoc Back-End of the BIRALET Radar to Measure Slant-Range and Doppler Shift of Resident Space Objects. Electronics (Switzerland), 2021, 10, 577.	1.8	11
28	Microwave Characterization and Modeling of the Carasau Bread Doughs During Leavening. IEEE Access, 2021, 9, 159833-159847.	2.6	11
29	Numerical Estimation of Agricultural Raised Bed Microwave Disinfection. Radio Science, 2018, 53, 1176-1186.	0.8	10
30	WSN Hardware for Automotive Applications: Preliminary Results for the Case of Public Transportation. Electronics (Switzerland), 2019, 8, 1483.	1.8	10
31	Recent Advances of the BIRALET System about Space Debris Detection. Aerospace, 2021, 8, 86.	1.1	10
32	Microwaves disinfection of farmland. Journal of Electromagnetic Waves and Applications, 2016, 30, 2165-2173.	1.0	9
33	Study and Design of a Wireless Sensors Network for the Optimization of Bread Manufacturing Process. , 2018, , .		9
34	Design of a Low-Cost Microstrip Directional Coupler with High Coupling for a Motion Detection Sensor. Electronics (Switzerland), 2018, 7, 25.	1.8	9
35	A Blood Perfusion Model of a RMS Tumor in a Local Hyperthermia Multi-Physic Scenario: A Preliminary Study. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2019, 3, 71-78.	2.3	9
36	An In-Line Coaxial-to-Waveguide Transition for Q-Band Single-Feed-Per-Beam Antenna Systems. Applied Sciences (Switzerland), 2021, 11, 2524.	1.3	9

#	Article	lF	CITATIONS
37	Microwave Imaging of the Neck by Means of Artificial Neural Networks for Tumor Detection. IEEE Open Journal of Antennas and Propagation, 2021, 2, 1044-1056.	2.5	9
38	Finite differences single grid evaluation of TE and TM modes in metallic waveguides., 2010,,.		8
39	Microwave resonant cavity as a reactor for the enzymatic hydrolysis of sucrose. , 2015, , .		8
40	Advantages of Using a C-band Phased Array Feed as a Receiver in the Sardinia Radio Telescope for Space Debris Monitoring. , 2019, , .		8
41	A Multiphysics Model for Bone Repair Using Magnetic Scaffolds for Targeted Drug Delivery. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2021, 6, 201-213.	1.4	8
42	COMPUTATION OF THE MODES OF ELLIPTIC WAVEGUIDES WITH A CURVILINEAR 2D FREQUENCY-DOMAIN FINITE-DIFFERENCE APPROACH. Progress in Electromagnetics Research M, 2012, 26, 69-84.	0.5	7
43	Design of Multilayer Dielectric Cover to Enhance Gain and Efficiency of Slot Arrays. International Journal of Antennas and Propagation, 2013, 2013, 1-6.	0.7	7
44	Optimized Design and Multiphysics Analysis of a Ka-Band Stacked Antenna for CubeSat Applications. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2021, 6, 143-157.	1.4	7
45	Measurements on the reflectivity of materials in a Reverberating Chamber. , $2011, \ldots$		6
46	A Numerical Estimation of a RFID Reader Field and SAR inside a Blood Bag at UHF. Electronics (Switzerland), 2016, 5, 77.	1.8	6
47	Empowering Traditional Carasau Bread Production Using Wireless Sensor Network. , 2021, , .		6
48	A polycarbonate RFID tag for blood chain tracking. , 2015, , .		5
49	The SEMONT's database support for quad-band monitoring of EMF exposure. Measurement: Journal of the International Measurement Confederation, 2017, 99, 78-89.	2.5	5
50	Application of MRI, fMRI and Cognitive Data for Alzheimer's Disease detection. , 2020, , .		5
51	Upgrading of the L-P Band Cryogenic Receiver of the Sardinia Radio Telescope: A Feasibility Study. Sensors, 2022, 22, 4261.	2.1	5
52	High Order FDFD computation of all waveguide modes using a single grid. , 2013, , .		4
53	On the dielectric/thermal characterization and calibration of solutions and materials for biomedical applications. , 2020, , .		4
54	Electromagnetic Field Levels in Built-up Areas with an Irregular Grid of Buildings: Modeling and Integrated Software. Electronics (Switzerland), 2020, 9, 765.	1.8	4

#	Article	IF	Citations
55	5G Wideband Stacked Patch Antennas. , 2021, , .		4
56	Preliminary Study of Bone Tumors Hyperthermia at Microwaves Using Magnetic Implants. , 2022, , .		4
57	A finite difference polar-catesian grid approach for mode computation in rounded-end waveguides. , $2011, \ldots$		3
58	Optimization of rectangular ridge waveguides using PSO., 2013,,.		3
59	A wire antenna for broadband WLAN and Wi-Fi applications. , 2013, , .		3
60	The inductors with adjustable surface area for energy harvesting utilization. , 2016, , .		3
61	Investigation of the path reduction factor on terrestrial links for the development of a physically-based rain attenuation model. , 2016, , .		3
62	A Robust SVM Color-Based Food Segmentation Algorithm for the Production Process of a Traditional Carasau Bread. IEEE Access, 2022, 10, 15359-15377.	2.6	3
63	Preliminary Design of a Double Ridge Waveguide Device for Monitoring the Complex Permittivity of Carasau Bread Doughs. , 2022, , .		3
64	Improved analysis of high-performances planar waveguide slot arrays. Journal of Electromagnetic Waves and Applications, 2013, 27, 2155-2165.	1.0	2
65	Low cost elliptic filter for wireless application. , 2014, , .		2
66	Electromagnetic compatibility analysis of RFID and implantable medical devices. , 2014, , .		2
67	Challenging the lumped birdcage coil model for high-field MRI. , 2014, , .		2
68	Design of low-cost uniplanar AMC structures for UHF applications. , 2015, , .		2
69	Robustness of flexible 7T-MRI coil behaviour. , 2017, , .		2
70	Non-linear Multiphysic Numerical Study of Bone Tumor Hyperthermia Using Magnetic Biomaterials. , 2019, , .		2
71	Curvilinear vector finite difference approach to the computation of waveguide modes. Advanced Electromagnetics, 2012, 1, 29.	0.7	2
72	Exploitation of bi-static radar architectures for LEO Space Debris surveying and tracking: the BIRALES/BIRALET project., 2020, , .		2

#	Article	IF	Citations
73	Improvement of a WSN for Quality Monitoring in Carasau Bread Industry: Hardware and Software Testing. , 2020, , .		2
74	Design and Characterization of Modified Comb Patch Antennas. IEEE Access, 2022, 10, 36220-36232.	2.6	2
75	Designing a Microwave Moisture Content Sensor for Carasau Bread: A Feasibility Study. , 2022, , .		2
76	Finite differences variable grid evaluation of TE modes in metallic ridge waveguides. , 2010, , .		1
77	A cylindrical resonant cavity for biological experiments and chemical catalysis. , 2011, , .		1
78	Dosimetry and biological effect evaluation On electromagnetic model of head., 2013,,.		1
79	Analysis of superparamagnetic scaffolds: For bone tissue engineering in static magnetic and dynamic fields. , 2016, , .		1
80	A feasibility study for disinfection of farmland using microwaves. , 2016, , .		1
81	The planar inductor with adjustable surface for energy harvesting applications. , 2017, , .		1
82	A Dual Polarized Stacked Antenna for 5G Mobile Devices. , 2019, , .		1
83	Multi-physic Numerical Study of Microwave Hyperthermia Treatment. , 2019, , .		1
84	Optimum Design of Superficial Microwave Hyperthermia Treatment. , 2019, , .		1
85	Microwave Imaging of Cervical Myelopathy: A Preliminary Feasibility Assessment. , 2020, , .		1
86	Improved COST 231-WI Model for Irregular Built-Up Areas. , 2020, , .		1
87	A Wideband Patch Antenna for 5G. , 2020, , .		1
88	Evaluation of a Smectite Adsorption-Based Electrostatic System to Decontaminate Fâ ⁻ ' Rich Thermal Waters. Water (Switzerland), 2022, 14, 167.	1.2	1
89	Vector Finite Difference approach to the computation of TM waveguide modes. , $2011, , .$		0
90	VFD approach to the computation TE and TM modes in circular waveguide on TM grid. , 2012, , .		0

#	Article	IF	CITATIONS
91	A wire antenna for broadband WLAN applications. , 2013, , .		O
92	A multi-band antenna for WLAN applications. , 2013, , .		0
93	A triple-band WLAN antenna. , 2013, , .		0
94	A multi-band WLAN antenna. , 2013, , .		0
95	A wide band wire antenna for WLAN and Wi-Fi applications. , 2013, , .		0
96	EBG substrate synthesis for dual frequency applications using genetic programming. , 2014, , .		0
97	FDFD on Ridged Elliptical Waveguides. , 2014, , .		0
98	Wereable rectangular patch antenna for ICT application: Dosimetry evaluation. , 2014, , .		0
99	EM level evaluation in indoor environment. , 2014, , .		0
100	Design of a microwave antenna for breast cancer radiometric detection. , 2014, , .		0
101	Evaluation of the effects of UHF electromagnetic fields on a blood bag. , 2015, , .		0
102	The boundary exposure assessment for continuous monitoring of the low-frequency EMF., 2015,,.		0
103	A simple model for SE evaluation of MWCNT composite. , 2015, , .		0
104	Development of a rain attenuation model for terrestrial links using a physically-based approach. , 2016, , .		0
105	A robust antenna for on-body clinical applications. , 2017, , .		0
106	Robustness of 7T-MRI Flexible Array Coil Behaviour., 2017,,.		0
107	Design of wideband antenna for breast cancer detection. , 2018, , .		0
108	Method-of-Moment Analysis of Slender Elliptic Slots. , 2019, , .		0

#	Article	lF	CITATIONS
109	Biomedical Applications of Biomaterials Functionalized with Magnetic Nanoparticles. , 2020, , .		0
110	A Microwave Imaging Technique for Neck Diseases Monitoring., 2021,,.		0
111	Development and Validation of a Finite Periodic Transmission Line Model for Body Channel Communication., 2021,,.		0
112	Multiphysics Modeling of Magnetic Scaffolds for Biomedical Applications., 2021,,.		0
113	FMECA Modelling and Analysis in Blood Transfusion Chain. International Journal of Privacy and Health Information Management, 2017, 5, 23-39.	0.2	0
114	Two Co-Linear Transitions for Q-Band Horn Waveguide Dense Cluster. , 2022, , .		0
115	A Microwave Imaging Technique Based on Artificial Neural Networks for Neck Tumors Detection. , 2022, , .		0
116	Microwaves as Diagnostic Tool for Pituitary Tumors: Preliminary Investigations. Electronics (Switzerland), 2022, 11, 1608.	1.8	0