

Konstanty Bialkowski

List of Publications by Year in descending order

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104
papers

1,282
citations

430843

18
h-index

434170

31
g-index

104
all docs

104
docs citations

104
times ranked

976
citing authors

#	ARTICLE	IF	CITATIONS
1	Microwave imaging for brain stroke detection using Born iterative method. IET Microwaves, Antennas and Propagation, 2013, 7, 909-915.	1.4	128
2	Wearable Electromagnetic Head Imaging System Using Flexible Wideband Antenna Array Based on Polymer Technology for Brain Stroke Diagnosis. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 124-134.	4.0	112
3	Design and Experimental Evaluation of a Non-Invasive Microwave Head Imaging System for Intracranial Haemorrhage Detection. PLoS ONE, 2016, 11, e0152351.	2.5	70
4	Near-Field Inductive-Coupling Link to Power a Three-Dimensional Millimeter-Size Antenna for Brain Implantable Medical Devices. IEEE Transactions on Biomedical Engineering, 2018, 65, 4-14.	4.2	55
5	Generalized canonical correlation for passive multistatic radar detection. , 2011, , .		54
6	Microwave System for the Early Stage Detection of Congestive Heart Failure. IEEE Access, 2014, 2, 921-929.	4.2	42
7	Portable Microwave Head Imaging System Using Software-Defined Radio and Switching Network. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2019, 3, 284-291.	3.4	40
8	Software-Defined Radar for Medical Imaging. IEEE Transactions on Microwave Theory and Techniques, 2016, , 1-10.	4.6	39
9	Wireless Power Link Based on Inductive Coupling for Brain Implantable Medical Devices. IEEE Antennas and Wireless Propagation Letters, 2018, 17, 160-163.	4.0	39
10	Flexible Meander-Line Antenna Array for Wearable Electromagnetic Head Imaging. IEEE Transactions on Antennas and Propagation, 2021, 69, 4206-4211.	5.1	33
11	Investigating the performance of MIMO systems from an electromagnetic perspective. Microwave and Optical Technology Letters, 2006, 48, 1233-1238.	1.4	31
12	Design of Compact Cross-Fed Three-Dimensional Slot-Loaded Antenna and Its Application in Wideband Head Imaging System. IEEE Antennas and Wireless Propagation Letters, 2016, 15, 1856-1860.	4.0	28
13	Boundary Estimation of Imaged Object in Microwave Medical Imaging Using Antenna Resonant Frequency Shift. IEEE Transactions on Antennas and Propagation, 2018, 66, 927-936.	5.1	23
14	Improved Communications in Underground Mines Using Reconfigurable Antennas. IEEE Transactions on Antennas and Propagation, 2018, 66, 7505-7510.	5.1	23
15	Flexible Electromagnetic Cap for Head Imaging. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 1097-1107.	4.0	23
16	Evaluations of MadWifi MAC layer rate control mechanisms. , 2010, , .		22
17	Fabrication and Characterization of Flexible Polymer Iron Oxide Composite Substrate for the Imaging Antennas of Wearable Head Imaging Systems. IEEE Antennas and Wireless Propagation Letters, 2018, 17, 1364-1368.	4.0	21
18	Tunable In-Phase Power Divider for 5G Cellular Networks. IEEE Microwave and Wireless Components Letters, 2017, 27, 551-553.	3.2	20

#	ARTICLE	IF	CITATIONS
19	Adaptive Clustering Distorted Born Iterative Method for Microwave Brain Tomography With Stroke Detection and Classification. IEEE Transactions on Biomedical Engineering, 2022, 69, 1512-1523.	4.2	20
20	Millimeter-Wave Substrate Integrated Waveguide Probe for Skin Cancer Detection. IEEE Transactions on Biomedical Engineering, 2020, 67, 2462-2472.	4.2	18
21	Compact Flexible Wideband Antenna for On-Body Electromagnetic Medical Diagnostic Systems. IEEE Transactions on Antennas and Propagation, 2020, 68, 8180-8185.	5.1	18
22	Performance of mac80211 rate control mechanisms. , 2011, , .		15
23	Radar-based time-domain head imaging using database of effective dielectric constant. Electronics Letters, 2015, 51, 1574-1576.	1.0	14
24	Unidirectional Slot-Loaded Loop Antenna With Wideband Performance and Compact Size for Congestive Heart Failure Detection. IEEE Transactions on Antennas and Propagation, 2015, 63, 4557-4562.	5.1	14
25	In-Road Microwave Sensor for Electronic Vehicle Identification and Tracking: Link Budget Analysis and Antenna Prototype. IEEE Transactions on Intelligent Transportation Systems, 2018, 19, 123-128.	8.0	14
26	Expedited Stroke Imaging With Electromagnetic Polar Sensitivity Encoding. IEEE Transactions on Antennas and Propagation, 2020, 68, 8072-8081.	5.1	14
27	Calibrated Frequency-Division Distorted Born Iterative Tomography for Real-Life Head Imaging. IEEE Transactions on Medical Imaging, 2022, 41, 1087-1103.	8.9	13
28	Effect of Line of Sight Propagation on Capacity of an Indoor MIMO System. , 0, , .		12
29	A signal strength based tag estimation technique for RFID systems. , 2010, , .		12
30	Passive radar signal processing in single frequency networks. , 2012, , .		12
31	Folding method for bandwidth and directivity enhancement of meandered loop ultra-high frequency antenna for heart failure detection system. IET Microwaves, Antennas and Propagation, 2014, 8, 1218-1227.	1.4	12
32	Unsupervised Algorithm for Brain Anomalies Localization in Electromagnetic Imaging. IEEE Transactions on Computational Imaging, 2020, 6, 1595-1606.	4.4	12
33	Design of testbed for wireless mesh networks. , 2010, , .		11
34	Investigation of noise effect on image quality in microwave head imaging systems. IET Microwaves, Antennas and Propagation, 2015, 9, 200-205.	1.4	11
35	Changes in epidermal dielectric properties due to skin cancer across the band 1 to 50 GHz. , 2018, , .		11
36	Three-Dimensional Electromagnetic Torso Scanner. Sensors, 2019, 19, 1015.	3.8	11

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37	Implantable Sensor for Detecting Changes in the Loss Tangent of Cerebrospinal Fluid. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 452-462.	4.0	11
38	Stable and Lifelong Head Phantoms Using Polymer Composition Mimicking Materials to Test Electromagnetic Medical Imaging Systems. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2021, 5, 322-328.	3.4	11
39	A Wireless Sensor Node Architecture Using Remote Power Charging, for Interaction Applications. , 2007, , .		10
40	Closed-form equation to estimate the dielectric properties of biological tissues as a function of age. Bioelectromagnetics, 2017, 38, 474-481.	1.6	10
41	Size Reduction of Electromagnetic Devices Using Double Near-Zero Materials. IEEE Transactions on Antennas and Propagation, 2017, 65, 7102-7109.	5.1	10
42	Compact Implantable Antennas for Cerebrospinal Fluid Monitoring. IEEE Transactions on Antennas and Propagation, 2019, 67, 4955-4967.	5.1	10
43	Evaluating Adjacent Channel Interference in IEEE 802.11 Networks. , 2010, , .		9
44	Three-Dimensional Open-Ended Slot Antenna for Heart Failure Detection System Employing Differential Technique. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 1753-1756.	4.0	9
45	Using Dielectric Properties of Solid Fraction and Water Content to Characterize Tissues at Different Health and Age Conditions. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2020, 4, 69-77.	3.4	9
46	Dielectric properties of dog brain tissue measured in vitro across the 0.3-3GHz band. Bioelectromagnetics, 2016, 37, 549-556.	1.6	8
47	<i>In Situ</i> Near-Field Path Loss and Data Communication Link for Brain Implantable Medical Devices Using Software-Defined Radio. IEEE Transactions on Antennas and Propagation, 2020, 68, 6787-6799.	5.1	8
48	Pleural effusion detection system using wideband slot-loaded loop antenna. Electronics Letters, 2015, 51, 1144-1146.	1.0	7
49	Near-field tapered waveguide probe operating at millimeter waves for skin cancer detection. , 2017, , .		7
50	Case Report: Preliminary Images From an Electromagnetic Portable Brain Scanner for Diagnosis and Monitoring of Acute Stroke. Frontiers in Neurology, 2021, 12, 765412.	2.4	7
51	Compact meander tapered patch antenna for wireless biomedical telemetry. , 2016, , .		6
52	Portable Biomedical Microwave Imaging Using Software- Defined Radio. , 2018, , .		6
53	Microwave techniques as diagnostic tool for congestive heart failure. , 2014, , .		5
54	Uniqueness theorem and uniqueness of inverse problems for lossy anisotropic inhomogeneous structures with diagonal material tensors. Journal of Applied Physics, 2017, 121, .	2.5	5

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55	Dielectric Spectroscopy Based Determination of Sugar Content in Solution. , 2019, 3, 1-4.		5
56	Multiple open ended probe for spatio-temporal dielectric spectroscopy: Application to evaporative dewatering. Measurement: Journal of the International Measurement Confederation, 2021, 173, 108521.	5.0	5
57	Microwave Tomography Using Random Multiple-Inputâ€œMultiple-Output Contrast Source Inversion. IEEE Antennas and Wireless Propagation Letters, 2021, 20, 1369-1373.	4.0	5
58	Indoor Antenna Diversity Testbed. , 0, , .		4
59	Improving the time efficiency of QTA anti-collision algorithm. , 2010, , .		4
60	Compact bandpass filter with sharp passband and wide harmonic suppression using miniaturized coupled structure loaded with steppedâ€œimpedance stubs. Microwave and Optical Technology Letters, 2016, 58, 2505-2508.	1.4	4
61	Evaluation of Childrenâ€™s Exposure to Electromagnetic Fields of Mobile Phones Using Age-Specific Head Models With Age-Dependent Dielectric Properties. IEEE Access, 2017, 5, 27345-27353.	4.2	4
62	A Method to Improve Adaptability of the Minstrel MAC Rate Control Algorithm. Lecture Notes in Computer Science, 2010, , 504-518.	1.3	4
63	Assessing an FPGA Implemented MIMO Testbed with the Use of Channel Emulator. , 2006, , .		3
64	Low-cost wireless link capacity estimation. , 2010, , .		3
65	Successive User Scheduling Schemes for a Multiuser MIMO System Employing Generalized Channel Inversion. Wireless Personal Communications, 2013, 68, 401-416.	2.7	3
66	Design of a miniaturized circular implantable antenna. , 2016, , .		3
67	Half-sized cylindrical invisibility cloaks using double near zero slabs with realistic material size and properties. Optics Express, 2017, 25, 24486.	3.4	3
68	Computing the largest eigenvalue distribution for complex Wishart matrices. , 2017, , .		3
69	Flexible Quasi-Yagi antenna arrays for wearable electromagnetic head imaging based on polymer technology. , 2018, , .		3
70	Mathematical Model of Common-Mode Sources in Long-Cable-Fed Adjustable Speed Drives. IEEE Transactions on Industry Applications, 2022, 58, 2013-2028.	4.9	3
71	Understanding and analyzing the performance of MIMO systems from the microwave perspective. , 2005, , .		2
72	Modeling of wideband MIMO channel for indoor environments assuming ray clusters contributing to power delay profiles. , 2006, , .		2

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73	Semi-blind Channel Estimation Algorithm for an FPGA Based 2i;1/22 MIMO System. , 2007, , .		2
74	COTS embedded Internet platform and Blimp UAV for educational purposes. , 2013, , .		2
75	Computing multistatic passive radar CFAR thresholds from surveillance-only data. , 2015, , .		2
76	Skin tissue characterization of canine at microwave and millimeter-wave frequencies. , 2017, , .		2
77	Towards an Automated, Non-Destructive Method to Measure Sugar Content Using Dielectric Spectroscopy. , 2018, , .		2
78	Mutual Coupling Reduction in Wideband Electromagnetic Medical Imaging Antenna Array Using Compact Electromagnetic Band Gap. , 2019, , .		2
79	A simple electromagnetic model for understanding the operation of a MIMO system. , 0, , .		1
80	Design of Complementary UWB Printed Monopole Antennas using Simple Formulas. , 2006, , .		1
81	Analysis of RSS improved RFID estimation. , 2010, , .		1
82	Evaluation of commercial wireless mesh technologies in a public safety context: Methodology, analysis and experience. , 2010, , .		1
83	Investigation into the Impact of Mutual Coupling on the Performance of a Multiuser MIMO System Employing Generalized Channel Inversion Technique. International Journal of Antennas and Propagation, 2011, 2011, 1-9.	1.2	1
84	Estimating propagating velocity through steel fibre reinforced concrete. , 2014, , .		1
85	Effects of antenna characteristics on performance of microwave based system designed for early stage congestive heart failure detection. , 2014, , .		1
86	Distributed Open Source Software-Defined GPS. , 2015, , .		1
87	Differential microwave imaging of breast pair for tumor detection. , 2015, , .		1
88	Channel modeling of reconfigurable antennas for underground communications. , 2016, , .		1
89	Compressive sensing using approximated total variant transform to reduce the required number of antennas in radar-based medical imaging. , 2017, , .		1
90	Wearable Electromagnetic Head Imaging Using Magnetic-based Antenna Arrays. , 2019, , .		1

#	ARTICLE	IF	CITATIONS
91	Investigations into Diversity of a 2x2 MIMO System with the Use of an Indoor Testbed. , 0, , .		0
92	Investigations into the Effect of LOS Signal Blocking on Capacity of an Indoor MIMO System. , 2006, , .		0
93	Investigations of symbol synchronization implementation for 2x2 MIMO system using FPGA. , 2008, , .		0
94	On the capacity of MIMO system operating in multi-access scenario. , 2009, , .		0
95	Experimental analysis for signal strength (SS) based estimation method in RFID systems. , 2011, , .		0
96	Miniaturizing electromagnetic invisibility cloaks using double near zero slabs. , 2017, , .		0
97	Uniqueness theorem for lossy anisotropic inhomogeneous structures with diagonal material tensors. , 2017, , .		0
98	Concealment with near-zero materials and their sensitivity to non-zero material parameters. , 2017, , .		0
99	Ultra wideband Epsilon-Near-Zero metamaterial. , 2017, , .		0
100	On the uniqueness of inverse electromagnetic problems for invisibility cloaks. , 2017, , .		0
101	Interference analysis of multiple in-road readers. , 2018, , .		0
102	Computing the Largest Eigenvalue Distribution for Non-central Wishart Matrices. , 2019, , .		0
103	Open-Ended Coaxial Probe for Dielectric Property Measurements in Sugar Mills. , 2019, , .		0
104	Field Programmable Gate Array Based Testbed for Investigating Multiple Input Multiple Output Signal Transmission in Indoor Environments. , 2009, , 474-499.		0