Richard I Kitney

List of Publications by Year
in descending order

61 papers	2,888 citations	361296 20 h-index	197736 49 g-index
64 all docs	64 docs citations	64 times ranked	3984 citing authors

#	Article	IF	Citations
1	Comparison and Evaluation of Methods for Liver Segmentation From CT Datasets. IEEE Transactions on Medical Imaging, 2009, 28, 1251-1265.	5.4	848
2	Engineering modular and orthogonal genetic logic gates for robust digital-like synthetic biology. Nature Communications, 2011, 2, 508.	5.8	330
3	Interactive algorithms for the segmentation and quantitation of 3-D MRI brain scans. Computer Methods and Programs in Biomedicine, 1997, 53, 15-25.	2.6	253
4	Investigation of acoustic noise on 15 MRI scanners from 0.2 T to 3 T. Journal of Magnetic Resonance Imaging, 2001, 13, 288-293.	1.9	184
5	Engineering control of bacterial cellulose production using a genetic toolkit and a new cellulose-producing strain. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E3431-40.	3.3	173
6	Building a global alliance of biofoundries. Nature Communications, 2019, 10, 2040.	5.8	167
7	Neonatal heart rate variability and its relation to respiration. Journal of Theoretical Biology, 1985, 113, 759-780.	0.8	90
8	Computational design approaches and tools for synthetic biology. Integrative Biology (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462	0.6	74
9	Breath Amplitude Modulation of Heart Rate Variability in Normal Full Term Neonates. Pediatric Research, 1986, 20, 301-308.	1.1	73
10	Synthetic biology â€" the state of play. FEBS Letters, 2012, 586, 2029-2036.	1.3	68
11	3-D visualization of arterial structures using ultrasound and Voxel modelling. International Journal of Cardiovascular Imaging, 1989, 4, 135-143.	0.2	58
12	Single-Trial EEG Source Reconstruction for Brainâ€"Computer Interface. IEEE Transactions on Biomedical Engineering, 2008, 55, 1592-1601.	2.5	58
13	Developing synthetic biology for industrial biotechnology applications. Biochemical Society Transactions, 2020, 48, 113-122.	1.6	57
14	Automated techniques for visualization and mapping of articular cartilage in MR images of the osteoarthritic knee: a base technique for the assessment of microdamage and submicro damage. IEEE Transactions on Nanobioscience, 2002, 1, 42-51.	2.2	52
15	Layering genetic circuits to build a single cell, bacterial half adder. BMC Biology, 2015, 13, 40.	1.7	49
16	PARTNERSHIP AND INNOVATION IN THE LIFE SCIENCES. International Journal of Innovation Management, 2007, 11, 323-347.	0.7	47
17	A novel neural-inspired learning algorithm with application to clinical risk prediction. Journal of Biomedical Informatics, 2015, 54, 305-314.	2.5	27
18	Enabling the Advanced Bioeconomy through Public Policy Supporting Biofoundries and Engineering Biology. Trends in Biotechnology, 2019, 37, 917-920.	4.9	26

#	Article	IF	Citations
19	Build a Sustainable Vaccines Industry with Synthetic Biology. Trends in Biotechnology, 2021, 39, 866-874.	4.9	26
20	Toward the First Data Acquisition Standard in Synthetic Biology. ACS Synthetic Biology, 2016, 5, 817-826.	1.9	25
21	Online Multiresolution Volumetric Mass Spring Model for Real Time Soft Tissue Deformation. Lecture Notes in Computer Science, 2002, , 219-226.	1.0	23
22	The Foundry: the DNA synthesis and construction Foundry at Imperial College. Biochemical Society Transactions, 2016, 44, 687-688.	1.6	19
23	Miniaturisation of high-throughput plasmid DNA library preparation for next-generation sequencing using multifactorial optimisation. Synthetic and Systems Biotechnology, 2019, 4, 57-66.	1.8	15
24	Addressing the Future of Clinical Information Systemsâ€"Web-Based Multilayer Visualization. IEEE Transactions on Information Technology in Biomedicine, 2007, 11, 127-140.	3.6	14
25	Analogue micropowered log-domain tone controller for auditory prostheses. Electronics Letters, 1998, 34, 1051.	0.5	12
26	A Forward-Design Approach to Increase the Production of Poly-3-Hydroxybutyrate in Genetically Engineered Escherichia coli. PLoS ONE, 2015, 10, e0117202.	1.1	11
27	Constructing synthetic biology workflows in the cloud. Engineering Biology, 2017, 1, 61-65.	0.8	9
28	Monitoring interactions between spontaneous respiration and mechanical inflations in preterm neonates. Critical Care Medicine, 1997, 25, 545-553.	0.4	9
29	Virtual reality surgical training and assessment system. International Congress Series, 2001, 1230, 210-217.	0.2	7
30	A biological continuum based approach for efficient clinical classification. Journal of Biomedical Informatics, 2014, 47, 28-38.	2.5	7
31	Futureâ€proofing synthetic biology: educating the next generation. Engineering Biology, 2019, 3, 25-31.	0.8	7
32	Engineering a molecular predation oscillator. IET Synthetic Biology, 2007, 1, 68-70.	0.2	5
33	Addressing the postâ€COVID era through engineering biology. Engineering Biology, 2021, 5, 21-34.	0.8	5
34	Synthetic Biology â€" Engineering Biologically-based Devices and Systems. , 2007, , 1138-1139.		5
35	Real-time stent and balloon simulation for stenosis treatment. Visual Computer, 2014, 30, 341-349.	2.5	4
36	Integer-ratio entrainment in mutually-coupled non-linear oscillators. Journal of Theoretical Biology, 1983, 101, 599-617.	0.8	3

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37	Evolution of subharmonics in a modified Ginzburg-Landau equation. Physics Letters, Section A: General, Atomic and Solid State Physics, 1988, 132, 93-97.	0.9	3
38	An evolutionary data-conscious artificial immune recognition system. , 2013, , .		3
39	Data model for biopart datasheets. Engineering Biology, 2018, 2, 7-18.	0.8	3
40	PASIV: A Pooled Approach-Based Workflow to Overcome Toxicity-Induced Design of Experiments Failures and Inefficiencies. ACS Synthetic Biology, 2022, 11, 1272-1291.	1.9	3
41	Computer model of the metabolism of phenylalanine in normal subjects and in patients with phenylketonuria. Computer Programs in Biomedicine, 1984, 18, 21-31.	0.8	2
42	Cooperative dynamics of a coupled-oscillator system and the forced free shear layer. Physics Letters, Section A: General, Atomic and Solid State Physics, 1988, 134, 108-114.	0.9	2
43	Catheter-Mounted Ultrasound Probe For 3-D Arterial Reconstruction. , 1989, , .		2
44	<title>Fast fuzzy segmentation of magnetic resonance images: a prerequisite for real-time rendering</title>. , 1997, , .		2
45	MR-compatible endoscopy and tracking for image-guided surgery. International Congress Series, 2001, 1230, 1076-1082.	0.2	2
46	Web-Based Multilayer Viewing Interface for Knee Cartilage. IEEE Transactions on Information Technology in Biomedicine, 2009, 13, 546-553.	3.6	2
47	Engineering biology: a key driver of the bioâ€economy. Engineering Biology, 2017, 1, 3-6.	0.8	2
48	Investigation of acoustic noise on 15 MRI scanners from 0.2 T to 3 T. Journal of Magnetic Resonance Imaging, 2001, 13, 288-293.	1.9	2
49	Debugging experiment machinery through timeâ€course event sequence analysis. Engineering Biology, 2017, 1, 51-54.	0.8	1
50	Comprehensive webâ€based broker for bioâ€technology design and manufacturing. Engineering Biology, 2017, 1, 100-102.	0.8	1
51	3-D visualization of arterial structures: tissue differentiation techniques. , 1990, , .		1
52	Removing the Bottleneck: Introducing cMatch - A Lightweight Tool for Construct-Matching in Synthetic Biology. Frontiers in Bioengineering and Biotechnology, 2021, 9, 785131.	2.0	1
53	Building the UK's industrial base in engineering biology. Engineering Biology, 2021, 5, 98-106.	0.8	1
54	Influence of dropouts on flow velocity measurements with an LDV frequency tracking system. Journal of Physics E: Scientific Instruments, 1987, 20, 1404-1411.	0.7	0

#	Article	IF	Citations
55	Angioplasty under ultrasound?. , 1990, , .		0
56	3-D blood flow visualization. , 1990, , .		0
57	Strategic Health Authorities - the SHAviours of IT?. British Journal of Health Care Management, 2002, 8, 331-333.	0.1	0
58	Editorial: BioPart Datasheets. Engineering Biology, 2018, 2, 1-1.	0.8	0
59	PARTNERSHIP AND INNOVATION IN THE LIFE SCIENCES. , 2007, , 109-133.		0
60	Automatic identification of brain contours in magnetic resonance images of the head. Lecture Notes in Computer Science, 1995, , 241-246.	1.0	0
61	Multi-layer Biological Visualization of Cartilage Wear. , 2007, , 214-217.		0