Christian F Baumgartner

List of Publications by Year
in descending order

72	2,696	394421 19	197818 49
papers	citations	h-index	g-index

78	78	78	2862
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Detection of Differences in Longitudinal Cartilage Thickness Loss Using a Deepâ€Learning Automated Segmentation Algorithm: Data From the Foundation for the National Institutes of Health Biomarkers Study of the Osteoarthritis Initiative. Arthritis Care and Research, 2022, 74, 929-936.	3.4	16
2	Ion Channel Modeling beyond State of the Art: A Comparison with a System Theory-Based Model of the Shaker-Related Voltage-Gated Potassium Channel Kv1.1. Cells, 2022, 11, 239.	4.1	5
3	Sampling Possible Reconstructions of Undersampled Acquisitions in MR Imaging With a Deep Learned Prior. IEEE Transactions on Medical Imaging, 2022, 41, 1885-1896.	8.9	3
4	Cannabis Use in Adults Who Screen Positive for Attention Deficit/Hyperactivity Disorder: CANreduce 2.0 Randomized Controlled Trial Subgroup Analysis. Journal of Medical Internet Research, 2022, 24, e30138.	4.3	3
5	Light Stimulation of Neurons on Organic Photocapacitors Induces Action Potentials with Millisecond Precision. Advanced Materials Technologies, 2022, 7, .	5.8	7
6	Comparing a mindfulness- and CBT-based guided self-help Internet- and mobile-based intervention against a waiting list control condition as treatment for adults with frequent cannabis use: a randomized controlled trial of CANreduce 3.0. BMC Psychiatry, 2022, 22, 215.	2.6	1
7	A Systematic Review of the Transthoracic Impedance during Cardiac Defibrillation. Sensors, 2022, 22, 2808.	3.8	9
8	Creating a Novel Mathematical Model of the Kv10.1 Ion Channel and Controlling Channel Activity with Nanoelectromechanical Systems. Applied Sciences (Switzerland), 2022, 12, 3836.	2.5	1
9	Semi-supervised task-driven data augmentation for medical image segmentation. Medical Image Analysis, 2021, 68, 101934.	11.6	62
10	Accuracy and longitudinal reproducibility of quantitative femorotibial cartilage measures derived from automated U-Net-based segmentation of two different MRI contrasts: data from the osteoarthritis initiative healthy reference cohort. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2021, 34, 337-354.	2.0	18
11	Deep learning in spatiotemporal cardiac imaging: A review of methodologies and clinical usability. Computers in Biology and Medicine, 2021, 130, 104200.	7.0	22
12	CANreduce 2.0 Adherence-Focused Guidance for Internet Self-Help Among Cannabis Users: Three-Arm Randomized Controlled Trial. Journal of Medical Internet Research, 2021, 23, e27463.	4.3	13
13	Human plasma proteomic profiles indicative of cardiorespiratory fitness. Nature Metabolism, 2021, 3, 786-797.	11.9	36
14	A549 in-silico 1.0: A first computational model to simulate cell cycle dependent ion current modulation in the human lung adenocarcinoma. PLoS Computational Biology, 2021, 17, e1009091.	3.2	4
15	The Effectiveness of a Web-Based Self-Help Program to Reduce Alcohol Use Among Adults With Drinking Patterns Considered Harmful, Hazardous, or Suggestive of Dependence in Four Low- and Middle-Income Countries: Randomized Controlled Trial. Journal of Medical Internet Research, 2021, 23, e21686.	4.3	11
16	â€œTake Care of Youâ€•â€“ Efficacy of integrated, minimal-guidance, internet-based self-help for reducing co-occurring alcohol misuse and depression symptoms in adults: Results of a three-arm randomized controlled trial. Drug and Alcohol Dependence, 2021, 225, 108806.	3.2	13
17	Notable Papers and New Directions in Sensors, Signals, and Imaging Informatics. Yearbook of Medical Informatics, 2021, 30, 150-158.	1.0	5
18	Efficacy of a minimally guided internet treatment for alcohol misuse and emotional problems in young adults: Results of a randomized controlled trial. Addictive Behaviors Reports, 2021, 14, 100390.	1.9	2

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19	Hands-off: Feasibility and preliminary results of a two-armed randomized controlled trial of a web-based self-help tool to reduce problematic pornography use. Journal of Behavioral Addictions, 2021, 10, 1015-1035.	3.7	15
20	Clinical evaluation of fully automated thigh muscle and adipose tissue segmentation using a U-Net deep learning architecture in context of osteoarthritic knee pain. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2020, 33, 483-493.	2.0	33
21	Notable Papers and Trends from 2019 in Sensors, Signals, and Imaging Informatics. Yearbook of Medical Informatics, 2020, 29, 139-144.	1.0	3
22	Automated quantification of myocardial tissue characteristics from native T1 mapping using neural networks with uncertainty-based quality-control. Journal of Cardiovascular Magnetic Resonance, 2020, 22, 60.	3.3	28
23	Human Fascicle Strain Behavior During Twitch using Ultrafast Ultrasound. , 2020, , .		5
24	Hands-off: Study protocol of a two-armed randomized controlled trial of a web-based self-help tool to reduce problematic pornography use. Journal of Behavioral Addictions, 2020, 9, 433-445.	3.7	16
25	Detection of Motor Endplates in Deep and Pennate Skeletal Muscles in-vivo using Ultrafast Ultrasound. , 2020, , .		3
26	Improved Tracking of Muscle Tendon Junctions in Ultrasound Images Using Speckle Reduction. Studies in Health Technology and Informatics, 2020, 271, 1-8.	0.3	2
27	Modeling External Stimulation of Excitable Cells Using a Novel Light-Activated Organic Semiconductor Technology. Studies in Health Technology and Informatics, 2020, 271, 9-16.	0.3	0
28	Advancing Artificial Intelligence in Sensors, Signals, and Imaging Informatics. Yearbook of Medical Informatics, 2019, 28, 115-117.	1.0	4
29	Clinical validation of fully automated segmentation of thigh muscle and adipose tissue cross sectional areas using maching learning with a convolutional neural network. Osteoarthritis and Cartilage, 2019, 27, S383-S384.	1.3	1
30	Ultrasound as a Tool to Study Muscleâ€“Tendon Functions during Locomotion: A Systematic Review of Applications. Sensors, 2019, 19, 4316.	3.8	19
31	Semi-supervised and Task-Driven Data Augmentation. Lecture Notes in Computer Science, 2019, , 29-41.	1.3	65
32	Efficacy of a web-based self-help tool to reduce problem gambling in Switzerland: study protocol of a two-armed randomised controlled trial. BMJ Open, 2019, 9, e032110.	1.9	11
33	Analysis of regulatory requirements of medical devices and in-vitro diagnostics worldwide for the development of an efficient procedure of registration for manufacturers of medical products. Current Directions in Biomedical Engineering, 2019, 5, 609-612.	0.4	7
34	A novel hybrid modeling approach for the evaluation of integrated care and economic outcome in heart failure treatment. BMC Medical Informatics and Decision Making, 2019, 19, 229.	3.0	4
35	MR Image Reconstruction Using Deep Density Priors. IEEE Transactions on Medical Imaging, 2019, 38, 1633-1642.	8.9	114
36	PHiSeg: Capturing Uncertainty in Medical Image Segmentation. Lecture Notes in Computer Science, 2019, , 119-127.	1.3	75

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37	A Partially Reversible U-Net for Memory-Efficient Volumetric Image Segmentation. Lecture Notes in Computer Science, 2019, , 429-437.	1.3	45
38	Ensemble Based Approach for Time Series Classification in Metabolomics. Studies in Health Technology and Informatics, 2019, 260, 89-96.	0.3	0
39	Multi-Atlas Segmentation Using Partially Annotated Data: Methods and Annotation Strategies. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2018, 40, 1683-1696.	13.9	8
40	UV/Ozone Surface Treatment for Bonding of Elastomeric COC-Based Microfluidic Devices. Proceedings (mdpi), 2018, 2, 943.	0.2	4
41	Visual Feature Attribution Using Wasserstein GANs. , 2018, , .		72
42	Human-level Performance On Automatic Head Biometrics In Fetal Ultrasound Using Fully Convolutional Neural Networks. , 2018, 2018, 714-717.		37
43	A novel network-based approach for discovering dynamic metabolic biomarkers in cardiovascular disease. PLoS ONE, 2018, 13, e0208953.	2.5	7
44	Automatic Shadow Detection in 2D Ultrasound Images. Lecture Notes in Computer Science, 2018, , 66-75.	1.3	6
45	Combining Heterogeneously Labeled Datasets For Training Segmentation Networks. Lecture Notes in Computer Science, 2018, , 276-284.	1.3	5
46	Deep Learning Techniques for Automatic MRI Cardiac Multi-Structures Segmentation and Diagnosis: Is the Problem Solved?. IEEE Transactions on Medical Imaging, 2018, 37, 2514-2525.	8.9	926
47	An Exploration of 2D and 3D Deep Learning Techniques for Cardiac MR Image Segmentation. Lecture Notes in Computer Science, 2018, , 111-119.	1.3	91
48	Learning to Segment Medical Images with Scribble-Supervision Alone. Lecture Notes in Computer Science, 2018, , 236-244.	1.3	39
49	A Lifelong Learning Approach to Brain MR Segmentation Across Scanners and Protocols. Lecture Notes in Computer Science, 2018, , 476-484.	1.3	60
50	Efficacy of an Online Self-Help Treatment for Comorbid Alcohol Misuse and Emotional Problems in Young Adults: Protocol for a Randomized Controlled Trial. JMIR Research Protocols, 2018, 7, e11298.	1.0	10
51	The Effects of Social Presence on Adherence-Focused Guidance in Problematic Cannabis Users: Protocol for the CANreduce 2.0 Randomized Controlled Trial. JMIR Research Protocols, 2018, 7, e30.	1.0	16
52	High-Resolution Self-Gated Dynamic Abdominal MRI Using Manifold Alignment. IEEE Transactions on Medical Imaging, 2017, 36, 960-971.	8.9	17
53	SonoNet: Real-Time Detection and Localisation of Fetal Standard Scan Planes in Freehand Ultrasound. IEEE Transactions on Medical Imaging, 2017, 36, 2204-2215.	8.9	246
54	Compositional neural-network modeling of complex analog circuits. , 2017, , .		11

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55	Autoadaptive motion modelling for MR-based respiratory motion estimation. Medical Image Analysis, 2017, 35, 83-100.	11.6	25
56	A New Input Device for Spastics Based on Strain Gauge. Sensors, 2017, 17, 880.	3.8	1
57	Automated Detection of Motion Artefacts in MR Imaging Using Decision Forests. Journal of Medical Engineering, 2017, 2017, 1-9.	1.1	38
58	A New, Adaptable, Optical High-Resolution 3-Axis Sensor. Sensors, 2017, 17, 254.	3.8	2
59	Fully Convolutional Networks in Medical Imaging: Applications to Image Enhancement and Recognition. Advances in Computer Vision and Pattern Recognition, 2017, , 159-179.	1.3	5
60	Unsupervised Domain Adaptation in Brain Lesion Segmentation with Adversarial Networks. Lecture Notes in Computer Science, 2017, , 597-609.	1.3	241
61	Medication process in Styrian hospitals. Current Directions in Biomedical Engineering, 2016, 2, 341-343.	0.4	0
62	Usability evaluation of a locomotor therapy device considering different strategies. Current Directions in Biomedical Engineering, 2016, 2, 67-69.	0.4	0
63	Impact of errors in paper-based and computerized diabetes management with decision support for hospitalized patients with type 2 diabetes. A post-hoc analysis of a before and after study. International Journal of Medical Informatics, 2016, 90, 58-67.	3.3	27
64	Simulation and evaluation of stimulation scenarios for targeted vestibular nerve excitation. Current Directions in Biomedical Engineering, 2016, 2, 139-143.	0.4	1
65	MUMAL2: Improving sensitivity in shotgun proteomics using cost sensitive artificial neural networks and a threshold selector algorithm. BMC Bioinformatics, 2016, 17, 472.	2.6	4
66	Real-Time Standard Scan Plane Detection and Localisation in Fetal Ultrasound Using Fully Convolutional Neural Networks. Lecture Notes in Computer Science, 2016, , 203-211.	1.3	41
67	Modeling and Classification of Kinetic Patterns of Dynamic Metabolic Biomarkers in Physical Activity. PLoS Computational Biology, 2015, 11, e1004454.	3.2	11
68	Self-Aligning Manifolds for Matching Disparate Medical Image Datasets. Lecture Notes in Computer Science, 2015, 24, 363-374.	1.3	11
69	Autoadaptive motion modelling. , 2014, , .		0
70	High-resolution dynamic MR imaging of the thorax for respiratory motion correction of PET using groupwise manifold alignment. Medical Image Analysis, 2014, 18, 939-952.	11.6	36
71	Groupwise Simultaneous Manifold Alignment for High-Resolution Dynamic MR Imaging of Respiratory Motion. Lecture Notes in Computer Science, 2013, 23, 232-243.	1.3	13
72	Deep Learning Techniques for Automatic MRI Cardiac Multi-Structures Segmentation and Diagnosis: Is the Problem Solved?. , 0, .		1