## Christian F Baumgartner

List of Publications by Year in descending order

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72 papers

2,696 citations

394421 19 h-index 197818 49 g-index

78 all docs 78 docs citations

78 times ranked 2862 citing authors

#	Article	IF	CITATIONS
1	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
2	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
3	Unsupervised Domain Adaptation in Brain Lesion Segmentation with Adversarial Networks. Lecture Notes in Computer Science, 2017, , 597-609.	1.3	241
4	MR Image Reconstruction Using Deep Density Priors. IEEE Transactions on Medical Imaging, 2019, 38, 1633-1642.	8.9	114
5	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
6	PHiSeg: Capturing Uncertainty in Medical Image Segmentation. Lecture Notes in Computer Science, 2019, , 119-127.	1.3	75
7	Visual Feature Attribution Using Wasserstein GANs. , 2018, , .		72
8	Semi-supervised and Task-Driven Data Augmentation. Lecture Notes in Computer Science, 2019, , 29-41.	1.3	65
9	Semi-supervised task-driven data augmentation for medical image segmentation. Medical Image Analysis, 2021, 68, 101934.	11.6	62
10	A Lifelong Learning Approach to Brain MR Segmentation Across Scanners and Protocols. Lecture Notes in Computer Science, 2018, , 476-484.	1.3	60
11	A Partially Reversible U-Net for Memory-Efficient Volumetric Image Segmentation. Lecture Notes in Computer Science, 2019, , 429-437.	1.3	45
12	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
13	Learning to Segment Medical Images with Scribble-Supervision Alone. Lecture Notes in Computer Science, 2018, , 236-244.	1.3	39
14	Automated Detection of Motion Artefacts in MR Imaging Using Decision Forests. Journal of Medical Engineering, 2017, 2017, 1-9.	1.1	38
15	Human-level Performance On Automatic Head Biometrics In Fetal Ultrasound Using Fully Convolutional Neural Networks. , 2018, 2018, 714-717.		37
16	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
17	Human plasma proteomic profiles indicative of cardiorespiratory fitness. Nature Metabolism, 2021, 3, 786-797.	11.9	36
18	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

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19	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
20	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
21	Autoadaptive motion modelling for MR-based respiratory motion estimation. Medical Image Analysis, 2017, 35, 83-100.	11.6	25
22	Deep learning in spatiotemporal cardiac imaging: A review of methodologies and clinical usability. Computers in Biology and Medicine, 2021, 130, 104200.	7.0	22
23	Ultrasound as a Tool to Study Muscle–Tendon Functions during Locomotion: A Systematic Review of Applications. Sensors, 2019, 19, 4316.	3.8	19
24	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
25	High-Resolution Self-Gated Dynamic Abdominal MRI Using Manifold Alignment. IEEE Transactions on Medical Imaging, 2017, 36, 960-971.	8.9	17
26	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
27	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
28	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
29	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
30	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
31	"Take Care of You―– 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
32	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
33	Modeling and Classification of Kinetic Patterns of Dynamic Metabolic Biomarkers in Physical Activity. PLoS Computational Biology, 2015, 11, e1004454.	3.2	11
34	Self-Aligning Manifolds for Matching Disparate Medical Image Datasets. Lecture Notes in Computer Science, 2015, 24, 363-374.	1.3	11
35	Compositional neural-network modeling of complex analog circuits. , 2017, , .		11
36	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

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37	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
38	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
39	A Systematic Review of the Transthoracic Impedance during Cardiac Defibrillation. Sensors, 2022, 22, 2808.	3.8	9
40	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
41	A novel network-based approach for discovering dynamic metabolic biomarkers in cardiovascular disease. PLoS ONE, 2018, 13, e0208953.	2.5	7
42	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
43	Light Stimulation of Neurons on Organic Photocapacitors Induces Action Potentials with Millisecond Precision. Advanced Materials Technologies, 2022, 7, .	<b>5.</b> 8	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	Human Fascicle Strain Behavior During Twitch using Ultrafast Ultrasound., 2020,,.		5
47	Notable Papers and New Directions in Sensors, Signals, and Imaging Informatics. Yearbook of Medical Informatics, 2021, 30, 150-158.	1.0	5
48	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
49	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
50	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
51	UV/Ozone Surface Treatment for Bonding of Elastomeric COC-Based Microfluidic Devices. Proceedings (mdpi), 2018, 2, 943.	0.2	4
52	Advancing Artificial Intelligence in Sensors, Signals, and Imaging Informatics. Yearbook of Medical Informatics, 2019, 28, 115-117.	1.0	4
53	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
54	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

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55	Notable Papers and Trends from 2019 in Sensors, Signals, and Imaging Informatics. Yearbook of Medical Informatics, 2020, 29, 139-144.	1.0	3
56	Detection of Motor Endplates in Deep and Pennate Skeletal Muscles in-vivo using Ultrafast Ultrasound. , 2020, , .		3
57	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
58	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
59	A New, Adaptable, Optical High-Resolution 3-Axis Sensor. Sensors, 2017, 17, 254.	3.8	2
60	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
61	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
62	Simulation and evaluation of stimulation scenarios for targeted vestibular nerve excitation. Current Directions in Biomedical Engineering, 2016, 2, 139-143.	0.4	1
63	A New Input Device for Spastics Based on Strain Gauge. Sensors, 2017, 17, 880.	3.8	1
64	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
65	Deep Learning Techniques for Automatic MRI Cardiac Multi-Structures Segmentation and Diagnosis: Is the Problem Solved?., 0, .		1
66	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
67	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
68	Autoadaptive motion modelling. , 2014, , .		0
69	Medication process in Styrian hospitals. Current Directions in Biomedical Engineering, 2016, 2, 341-343.	0.4	O
70	Usability evaluation of a locomotor therapy device considering different strategies. Current Directions in Biomedical Engineering, 2016, 2, 67-69.	0.4	0
71	Ensemble Based Approach for Time Series Classification in Metabolomics. Studies in Health Technology and Informatics, 2019, 260, 89-96.	0.3	O
72	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