

Ulrich G Hofmann

List of Publications by Year in descending order

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Version: 2024-02-01

137
papers

2,566
citations

257101

24
h-index

233125

45
g-index

154
all docs

154
docs citations

154
times ranked

3021
citing authors

#	ARTICLE	IF	CITATIONS
1	T-cell dysfunction in the glioblastoma microenvironment is mediated by myeloid cells releasing interleukin-10. <i>Nature Communications</i> , 2022, 13, 925.	5.8	104
2	Spatially resolved multi-omics deciphers bidirectional tumor-host interdependence in glioblastoma. <i>Cancer Cell</i> , 2022, 40, 639-655.e13.	7.7	166
3	Maghemite nanoparticles coated by methacrylamide-based polymer for magnetic particle imaging. <i>Journal of Nanoparticle Research</i> , 2021, 23, 1.	0.8	10
4	Long-term in vivo monitoring of gliotic sheathing of ultrathin entropic coated brain microprobes with fiber-based optical coherence tomography. <i>Journal of Neural Engineering</i> , 2021, 18, 045002.	1.8	0
5	Meclofenamate causes loss of cellular tethering and decoupling of functional networks in glioblastoma. <i>Neuro-Oncology</i> , 2021, 23, 1885-1897.	0.6	23
6	Inhibition of metabotropic glutamate receptor III facilitates sensitization to alkylating chemotherapeutics in glioblastoma. <i>Cell Death and Disease</i> , 2021, 12, 723.	2.7	14
7	Removal of ECG Artifacts Affects Respiratory Muscle Fatigue Detection—A Simulation Study. <i>Sensors</i> , 2021, 21, 5663.	2.1	2
8	Bilateral Intracranial Beta Activity During Forced and Spontaneous Movements in a 6-OHDA Hemi-PD Rat Model. <i>Frontiers in Neuroscience</i> , 2021, 15, 700672.	1.4	4
9	Transcriptional characterization of the glial response due to chronic neural implantation of flexible microprobes. <i>Biomaterials</i> , 2021, 279, 121230.	5.7	12
10	Learning and Tracking the 3D Body Shape of Freely Moving Infants from RGB-D sequences. <i>IEEE Transactions on Pattern Analysis and Machine Intelligence</i> , 2020, 42, 2540-2551.	9.7	39
11	New life for old wires: electrochemical sensor method for neural implants. <i>Journal of Neural Engineering</i> , 2020, 17, 016007.	1.8	15
12	A Newcomer's Guide to Functional Near Infrared Spectroscopy Experiments. <i>IEEE Reviews in Biomedical Engineering</i> , 2020, 13, 292-308.	13.1	33
13	Systematic Evaluation of DBS Parameters in the Hemi-Parkinsonian Rat Model. <i>Frontiers in Neuroscience</i> , 2020, 14, 561008.	1.4	6
14	Editorial: Bridging the Gap in Neuroelectronic Interfaces. <i>Frontiers in Neuroscience</i> , 2020, 14, 457.	1.4	0
15	Modular Current Stimulation System for Pre-clinical Studies. <i>Frontiers in Neuroscience</i> , 2020, 14, 408.	1.4	1
16	Neurophotonic Scanning System — Towards Automatic Infrared Neurostimulation. <i>Current Directions in Biomedical Engineering</i> , 2020, 6, 272-275.	0.2	0
17	Quantitative synchrotron X-ray tomography of the material-tissue interface in rat cortex implanted with neural probes. <i>Scientific Reports</i> , 2019, 9, 7646.	1.6	12
18	First Steps towards Localized Opening of the Blood-Brain-Barrier by IR Laser Illumination Through the Rodent Skull. <i>Current Directions in Biomedical Engineering</i> , 2019, 5, 211-214.	0.2	1

#	ARTICLE	IF	CITATIONS
19	Towards Safe Infrared Nerve Stimulation: A Systematic Experimental Approach. , 2019, 2019, 5909-5912.		1
20	Dual Layered Models of Light Scattering in the Near Infrared B: Experimental Results with a Phantom *. , 2019, 2019, 4775-4778.		0
21	Removal of ECG artifacts from EMG signals with different artifact magnitudes by template subtraction. Current Directions in Biomedical Engineering, 2019, 5, 357-359.	0.2	4
22	Computer Vision for Medical Infant Motion Analysis: State of the Art and RGB-D Data Set. Lecture Notes in Computer Science, 2019, , 32-49.	1.0	21
23	Tumor-associated reactive astrocytes aid the evolution of immunosuppressive environment in glioblastoma. Nature Communications, 2019, 10, 2541.	5.8	218
24	Dual Layered Models of Light Scattering in the Near Infrared A: Optical Measurements and Simulation *. , 2019, 2019, 4770-4774.		1
25	Chronically Implanted Microelectrodes Cause c-fos Expression Along Their Trajectory. Frontiers in Neuroscience, 2019, 13, 1367.	1.4	11
26	Human organotypic brain slice culture: a novel framework for environmental research in neuro-oncology. Life Science Alliance, 2019, 2, e201900305.	1.3	38
27	Experimental Setup for the Systematic Investigation of Infrared Neural Stimulation (INS). IFMBE Proceedings, 2019, , 77-81.	0.2	1
28	CMOS Neural Probe With 1600 Close-Packed Recording Sites and 32 Analog Output Channels. Journal of Microelectromechanical Systems, 2018, 27, 1023-1034.	1.7	29
29	Learning an Infant Body Model from RGB-D Data for Accurate Full Body Motion Analysis. Lecture Notes in Computer Science, 2018, , 792-800.	1.0	36
30	A Miniaturized, Programmable Deep-Brain Stimulator for Group-Housing and Water Maze Use. Frontiers in Neuroscience, 2018, 12, 231.	1.4	23
31	When the Ostrich-Algorithm Fails: Blanking Method Affects Spike Train Statistics. Frontiers in Neuroscience, 2018, 12, 293.	1.4	3
32	Markerless Motion Analysis for Early Detection of Infantile Movement Disorders. IFMBE Proceedings, 2018, , 197-200.	0.2	2
33	Setup of a white light selective plane microscope to investigate microprobe insertion in a brain model. IFMBE Proceedings, 2018, , 547-550.	0.2	0
34	Actively controlled release of Dexamethasone from neural microelectrodes in a chronic inÂvivo study. Biomaterials, 2017, 129, 176-187.	5.7	154
35	Body pose estimation in depth images for infant motion analysis. , 2017, 2017, 1909-1912.		19
36	Microfluidic drive for flexible brain implants. Current Directions in Biomedical Engineering, 2017, 3, 675-678.	0.2	3

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37	Qualitative and quantitative evaluation of in vivo SD-OCT measurement of rat brain. <i>Biomedical Optics Express</i> , 2017, 8, 593.	1.5	8
38	A Wireless EEG Recording Method for Rat Use inside the Water Maze. <i>PLoS ONE</i> , 2016, 11, e0147730.	1.1	10
39	Comparison of algorithms to quantify muscle fatigue in upper limb muscles based on sEMG signals. <i>Medical Engineering and Physics</i> , 2016, 38, 1260-1269.	0.8	41
40	Deep brain stimulation: increasing efficiency by alternative waveforms. <i>Current Directions in Biomedical Engineering</i> , 2016, 2, 145-148.	0.2	2
41	Versatile 3D-printed headstage implant for group housing of rodents. <i>Journal of Neuroscience Methods</i> , 2016, 257, 134-138.	1.3	12
42	Effects of sampling rate on automated fatigue recognition in surface EMG signals. <i>Current Directions in Biomedical Engineering</i> , 2015, 1, 80-84.	0.2	7
43	The Double-H Maze: A Robust Behavioral Test for Learning and Memory in Rodents. <i>Journal of Visualized Experiments</i> , 2015, , e52667.	0.2	6
44	Fabrication and implantation of hydrogel coated, flexible polyimide electrodes. , 2015, , .		5
45	Video tracking of swimming rodents on a reflective water surface. <i>Current Directions in Biomedical Engineering</i> , 2015, 1, 232-235.	0.2	1
46	The chronic challenge—new vistas on long-term multisite contacts to the central nervous system. <i>Frontiers in Neuroengineering</i> , 2015, 8, 3.	4.8	2
47	The influence of stimulation parameters on the relative phase clustering index. , 2015, , .		0
48	Multimodal 2D Brain Computer Interface. , 2015, 2015, 1067-70.		9
49	Electrical high frequency stimulation modulates GABAergic activity in the nucleus accumbens of freely moving rats. <i>Neurochemistry International</i> , 2015, 90, 255-260.	1.9	13
50	Novel near infrared sensors for hybrid BCI applications. <i>Proceedings of SPIE</i> , 2015, , .	0.8	0
51	Dynamically adjusted, scalable electrical stimulator for excitable tissue. , 2015, , .		5
52	Modulation of Extracellular Levels of 5-HT in the Caudate Putamen of Freely Moving Rats by High Frequency Stimulation of the Subthalamic Nucleus. <i>The Open Neuroscience Journal</i> , 2015, 8, 14-20.	0.8	3
53	In vivo monitoring of glial scar proliferation on chronically implanted neural electrodes by fiber optical coherence tomography. <i>Frontiers in Neuroengineering</i> , 2014, 7, 34.	4.8	42
54	In situ monitoring of brain tissue reaction of chronically implanted electrodes with an optical coherence tomography fiber system. , 2014, , .		1

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55	Estimating the spatial resolution of fNIRS sensors for BCI purposes. Proceedings of SPIE, 2014, , .	0.8	4
56	High-frequency electrical stimulation suppresses cholinergic accumbens interneurons in acute rat brain slices through GABA_B receptors. European Journal of Neuroscience, 2014, 40, 3653-3662.	1.2	22
57	N-Methyl-D-Aspartate Receptor Activation Interacts with Electrical High Frequency Stimulation in the Rat Caudate Nucleus in vitro and in vivo. Open Journal of Neuroscience, 2014, 4, 1.	1.2	3
58	Textile-based, contactless ECG monitoring for non-ICU clinical settings. Journal of Ambient Intelligence and Humanized Computing, 2013, 4, 791-800.	3.3	28
59	A unifying perspective on neuromodulatory effects on signal transmission and plasticity in D1-dominant MSN neurons. BMC Neuroscience, 2013, 14, .	0.8	0
60	Coronalin vivo forward-imaging of rat brain morphology with an ultra-small optical coherence tomography fiber probe. Physics in Medicine and Biology, 2013, 58, 555-568.	1.6	19
61	3D printers may reduce animal numbers to train neuroengineering procedures. , 2013, , .		8
62	Avatar navigation in Second Life using brain signals. , 2013, , .		11
63	Wireless brain signal recordings based on capacitive electrodes. , 2013, , .		7
64	Prescreening seizure-like events in a rat model of epilepsy A: A 2D video processing method. , 2013, , .		0
65	Prescreening seizure-like events in a rat model of epilepsy B: A 3D online video processing method. , 2013, , .		0
66	An Interactive Channel Model of the Basal Ganglia: Bifurcation Analysis Under Healthy and Parkinsonian Conditions. Journal of Mathematical Neuroscience, 2013, 3, 14.	2.4	14
67	A simple implantation method for flexible, multisite microelectrodes into rat brains. Frontiers in Neuroengineering, 2013, 6, 6.	4.8	47
68	An experimental setup for brain activity measurement based on near infrared spectroscopy. Biomedizinische Technik, 2012, 57, .	0.9	2
69	Reduction of periodic noise in Fourier domain optical coherence tomography images by frequency domain filtering. Biomedizinische Technik, 2012, 57, .	0.9	2
70	Automated image analysis of immunohistochemical stained brain slices of long term polyimide brain implants. Biomedizinische Technik, 2012, 57, .	0.9	0
71	Long term in vivo stability and frequency response of polyimide based flexible array probes. Biomedizinische Technik, 2012, 57, .	0.9	2
72	An implantation technique for polyimide based flexible array probes facilitating neuronavigation and chronic implantation. Biomedizinische Technik, 2012, 57, .	0.9	3

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73	Calibration of the motor-assisted robotic stereotaxy system: MARS. International Journal of Computer Assisted Radiology and Surgery, 2012, 7, 911-920.	1.7	11
74	Neuromodulation of STDP through short-term changes in firing causality. Cognitive Neurodynamics, 2012, 6, 353-366.	2.3	8
75	Modeling effect of GABAergic current in a basal ganglia computational model. Cognitive Neurodynamics, 2012, 6, 333-341.	2.3	8
76	Automated drill-stop by SVM classified audible signals. , 2012, 2012, 956-9.		10
77	Decoding finger movements from ECoG signals using Empirical Mode Decomposition. Biomedizinische Technik, 2012, 57, .	0.9	2
78	Biosignal analysis implemented on state of the art smartphone dual-core processors. Biomedizinische Technik, 2012, 57, .	0.9	0
79	A Remote Controlled Food Dispenser for Animal Research. Biomedizinische Technik, 2012, 57, .	0.9	0
80	A Study of Conditioned Flexible Electrodes In Vivo and In Vitro. Biomedizinische Technik, 2012, 57, .	0.9	0
81	Service based adhoc networking for patient's pain diary on mobile devices. Biomedizinische Technik, 2012, 57, .	0.9	1
82	Preliminary design of a tendon-based anthropomorphic robotic hand. Biomedizinische Technik, 2012, 57, .	0.9	0
83	Sleep, neuroengineering and dynamics. Cognitive Neurodynamics, 2012, 6, 211-214.	2.3	3
84	Web Service-based presentation of vital signs on mobile devices. Biomedizinische Technik, 2012, 57, .	0.9	0
85	Towards an automated, minimal invasive, precision craniotomy on small animals. , 2011, , .		12
86	MARS " Motor assisted robotic stereotaxy system. , 2011, , .		7
87	Finite element simulation of transcranial current stimulation in realistic rat head model. , 2011, , .		9
88	Cellular Modulation of Polymeric Device Surfaces: Promise of Adult Stem Cells for Neuro-Prosthetics. Frontiers in Neuroscience, 2011, 5, 114.	1.4	11
89	Non-contact, non-obtrusive electrocardiography in clinical environments. , 2011, , .		5
90	Comparing Realistic Subthalamic Nucleus Neuron Models. , 2011, , .		1

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91	Unconditioned and conditioned muscular responses in patients with chronic back pain and chronic tension-type headaches and in healthy controls. <i>Pain</i> , 2010, 150, 66-74.	2.0	42
92	Fiber spectral domain optical coherence tomography for in vivo rat brain imaging. <i>Proceedings of SPIE</i> , 2010, , .	0.8	6
93	A Simplified Production Method for Multimode Multisite Neuroprobes. , 2009, , .		4
94	Computer- and robot-assisted stereotaxy for high-precision small animal brain exploration / Computer- und robotergestützte Stereotaxie für hochpräzise Exploration des Kleintierhirns. <i>Biomedizinische Technik</i> , 2009, 54, 8-13.	0.9	6
95	Detecting Stripe Artifacts in Ultrasound Images. <i>Journal of Digital Imaging</i> , 2009, 22, 548-557.	1.6	10
96	Portable electrophysiologic monitoring based on the OMAP-family processor from a beginners' prospective. , 2009, , .		4
97	Active contours that grow and compete driven by local region descriptors. , 2009, , .		0
98	Online-Classification of Capnographic Curves Using Artificial Neural Networks. <i>IFMBE Proceedings</i> , 2009, , 1096-1099.	0.2	2
99	Towards a capacitively coupled electrocardiography system for car seat integration. <i>IFMBE Proceedings</i> , 2009, , 1217-1221.	0.2	17
100	A robotic assistant for stereotactic neurosurgery on small animals. <i>International Journal of Medical Robotics and Computer Assisted Surgery</i> , 2008, 4, 295-303.	1.2	14
101	Local Region Descriptors for Active Contours Evolution. <i>IEEE Transactions on Image Processing</i> , 2008, 17, 2275-2288.	6.0	60
102	Wavelet Analysis of Spatiotemporal Network Oscillations Evoked in the Incilaria Brain. <i>AIP Conference Proceedings</i> , 2007, , .	0.3	0
103	Automatic measuring of quality criteria for heart valves. , 2007, 6512, 931.		4
104	A Simple Microelectrode Bundle for Deep Brain Recordings. , 2007, , .		6
105	Spherical assistant for stereotactic surgery. , 2007, , .		8
106	In vivo implant mechanics of single-shaft microelectrodes in peripheral nervous tissue. , 2007, , .		4
107	Electrical high frequency stimulation of the caudate nucleus induces local GABA outflow in freely moving rats. <i>Journal of Neuroscience Methods</i> , 2007, 159, 286-290.	1.3	35
108	Towards Automated OCT-based Identification of White Brain Matter. , 2007, , 414-418.		2

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109	A Fast Level-Set Method for Accurate Tracking of Articulated Objects with an Edge-Based Binary Speed Term. , 2007, , 828-839.		2
110	Semichronic, Collocated Deep Brain Stimulation and Multisite Recording in Rats. , 2006, , .		1
111	Atrial Near-Field and Ventricular Far-Field Analysis by Automated Signal Processing at Rest and During Exercise. Annals of Noninvasive Electrocardiology, 2006, 11, 118-126.	0.5	1
112	In-vivo implant mechanics of flexible, silicon-based ACREO microelectrode arrays in rat cerebral cortex. IEEE Transactions on Biomedical Engineering, 2006, 53, 934-940.	2.5	100
113	A Novel High Channel-Count System for Acute Multisite Neuronal Recordings. IEEE Transactions on Biomedical Engineering, 2006, 53, 1672-1677.	2.5	18
114	Multisite Microelectrodes for Use in Human Deep Brain Stimulation. , 2006, , .		4
115	Unsupervised spike sorting with ICA and its evaluation using GENESIS simulations. Neurocomputing, 2005, 65-66, 275-282.	3.5	19
116	A neural probe process enabling variable electrode configurations. Sensors and Actuators B: Chemical, 2004, 102, 51-58.	4.0	42
117	Online 32-channel signal processing and integrated database improve navigation during cranial stereotactic surgeries. International Congress Series, 2004, 1268, 443-448.	0.2	2
118	Realtime bioelectrical data acquisition and processing from 128 channels utilizing the wavelet-transformation. Neurocomputing, 2003, 52-54, 247-254.	3.5	28
119	Quantifying olfactory perception: mapping olfactory perception space by using multidimensional scaling and self-organizing maps. Neurocomputing, 2003, 52-54, 591-597.	3.5	49
120	A 64(128)-CHANNEL MULTISITE NEURONAL RECORDING SYSTEM. Biomedizinische Technik, 2002, 47, 194-197.	0.9	10
121	A 32-site neural recording probe fabricated by DRIE of SOI substrates. Journal of Micromechanics and Microengineering, 2002, 12, 414-419.	1.5	160
122	Associative Interactions Within the Superficial Layers of the Entorhinal Cortex of the Guinea Pig. Journal of Neurophysiology, 2002, 88, 1159-1165.	0.9	24
123	Stimulus representation in rat primary visual cortex: multi-electrode recordings with micro-machined silicon probes and estimation theory. Neurocomputing, 2002, 44-46, 407-416.	3.5	4
124	Test of spike-sorting algorithms on the basis of simulated network data. Neurocomputing, 2002, 44-46, 1119-1126.	3.5	16
125	Influence of Substrate Properties on the Topochemical Polymerization of Diacetylene Monolayers. Langmuir, 2001, 17, 3757-3765.	1.6	47
126	Color Transitions in Monolayers of a Polymerizable Single-Chain Diacetylenic Lipid. Langmuir, 2001, 17, 1518-1524.	1.6	16

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127	Handling large files of multisite microelectrode recordings for the European VSAMUEL consortium. <i>Neurocomputing</i> , 2001, 38-40, 1725-1734.	3.5	3
128	Relationship between field potentials and spike activity in rat S1: Multi-site cortical recordings and analysis. <i>Neurocomputing</i> , 2000, 32-33, 591-596.	3.5	4
129	Ultrathin fluorescent layers for monitoring the axial resolution in confocal and two-photon fluorescence microscopy. <i>Journal of Microscopy</i> , 1998, 191, 135-140.	0.8	43
130	Diacetylene Chelator Lipids as Support for Immobilization and Imaging of Proteins by Atomic Force Microscopy. <i>Langmuir</i> , 1998, 14, 4836-4842.	1.6	15
131	Investigating the Cytoskeleton of Chicken Cardiocytes with the Atomic Force Microscope. <i>Journal of Structural Biology</i> , 1997, 119, 84-91.	1.3	186
132	Anomalous pH dependence of the coexistence pressure of the polymerizable two-chain N-lipid methyl-bis(pentacosadiinoyl-oxyethyl)-amine. <i>European Biophysics Journal</i> , 1997, 26, 271-275.	1.2	1
133	Lateral resolution of light-addressable potentiometric sensors: an experimental and theoretical investigation. <i>Sensors and Actuators A: Physical</i> , 1997, 63, 47-57.	2.0	70
134	Molecular films from the polymerizable lipid ethyl morpholine pentacosadiynoic amide. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1994, 12, 2975-2980.	0.9	3
135	AFM-Investigation of the molecular structure of films from a polymerizable two-chain lipid. <i>Chemistry and Physics of Lipids</i> , 1994, 73, 81-89.	1.5	13
136	On-demand neural probes. , 0, , .		1
137	Synchronous stereo-video and biosignal recording ? a basic setup for Human-Computer-Interface applications. , 0, , .		3