Michael Beyeler

List of Publications by Citations

29 papers	741 citations	14 h-index	27 g-index
40 ext. papers	988 ext. citations	5.3 avg, IF	4.09 L-index

#	Paper	IF	Citations
29	Neoadjuvant chemotherapy and extrapleural pneumonectomy of malignant pleural mesothelioma with or without hemithoracic radiotherapy (SAKK 17/04): a randomised, international, multicentre phase 2 trial. *Lancet Oncology, The*, **2015**, 16, 1651-8	21.7	140
28	Label-free detection of tobramycin in serum by transmission-localized surface plasmon resonance. *Analytical Chemistry*, **2015**, 87, 5278-85	7.8	95
27	Categorization and decision-making in a neurobiologically plausible spiking network using a STDP-like learning rule. *Neural Networks*, **2013**, 48, 109-24	9.1	70
26	The murine Fgfrl1 receptor is essential for the development of the metanephric kidney. *Developmental Biology*, **2009**, 335, 106-19	3.1	54
25	The FGFRL1 receptor is shed from cell membranes, binds fibroblast growth factors (FGFs), and antagonizes FGF signaling in Xenopus embryos. *Journal of Biological Chemistry*, **2010**, 285, 2193-202	5.4	54
24	Learning to see again: biological constraints on cortical plasticity and the implications for sight restoration technologies. *Journal of Neural Engineering*, **2017**, 14, 051003	5	48
23	A model of ganglion axon pathways accounts for percepts elicited by retinal implants. *Scientific Reports*, **2019**, 9, 9199	4.9	39
22	CARLsim 4: An Open Source Library for Large Scale, Biologically Detailed Spiking Neural Network Simulation using Heterogeneous Clusters **2018**,		37
21	Identification of a fibronectin interaction site in the extracellular matrix protein ameloblastin. *Experimental Cell Research*, **2010**, 316, 1202-12	4.2	35
20	Neural correlates of sparse coding and dimensionality reduction. *PLoS Computational Biology*, **2019**, 15, e1006908	5	29
19	CARLsim 3: A user-friendly and highly optimized library for the creation of neurobiologically detailed spiking neural networks **2015**,		29
18	A GPU-accelerated cortical neural network model for visually guided robot navigation. *Neural Networks*, **2015**, 72, 75-87	9.1	22
17	Vision-based robust road lane detection in urban environments **2014**,		22
16	Efficient spiking neural network model of pattern motion selectivity in visual cortex. *Neuroinformatics*, **2014**, 12, 435-54	3.2	14
15	pulse2percept: A Python-based simulation framework for bionic vision **2017**,		12
14	Data-driven models in human neuroscience and neuroengineering. *Current Opinion in Neurobiology*, **2019**, 58, 21-29	7.6	10
13	3D Visual Response Properties of MSTd Emerge from an Efficient, Sparse Population Code. *Journal of Neuroscience*, **2016**, 36, 8399-415	6.6	9

List of Publications

12	Exploring olfactory sensory networks: Simulations and hardware emulation **2010**,		6
11	Biophysical model of axonal stimulation in epiretinal visual prostheses **2019**,		3
10	GPGPU accelerated simulation and parameter tuning for neuromorphic applications **2014**,		3
9	pulse2percept: A Python-based simulation framework for bionic vision		3
8	Modeling the perceptual experience of retinal prosthesis patients. *Journal of Vision*, **2017**, 17, 573	0.4	2
7	Sparse coding and dimensionality reduction in cortex		2
6	Model-Based Recommendations for Optimal Surgical Placement of Epiretinal Implants.. *Lecture Notes in Computer Science*, **2019**, 11768, 394-402	0.9	1
5	Explainable AI for Retinal Prostheses: Predicting Electrode Deactivation from Routine Clinical Measures **2021**,		1
4	Deep LearningBased Scene Simplification for Bionic Vision **2021**,		1
3	Commentary: Detailed Visual Cortical Responses Generated by Retinal Sheet Transplants in Rats With Severe Retinal Degeneration. *Frontiers in Neuroscience*, **2019**, 13, 471	5.1	0
2	A Computational Model of Phosphene Appearance for Epiretinal Prostheses. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2021**, 2021, 4477-4481	0.9	0
1	Learning to see again: Perceptual learning of simulated abnormal on- off-cell population responses in sighted individuals.. *Journal of Vision*, **2021**, 21, 10	0.4	