

Luke E Hallum

List of Publications by Year in descending order

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Version: 2024-02-01

27
papers

521
citations

687363

13
h-index

888059

17
g-index

31
all docs

31
docs citations

31
times ranked

430
citing authors

#	ARTICLE	IF	CITATIONS
1	Retinal Neurostimulator for a Multifocal Vision Prosthesis. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2007, 15, 425-434.	4.9	75
2	Visual acuity measurement of prosthetic vision: a virtual-reality simulation study. Journal of Neural Engineering, 2005, 2, S135-S145.	3.5	58
3	Population representation of visual information in areas V1 and V2 of amblyopic macaques. Vision Research, 2015, 114, 56-67.	1.4	53
4	Asymmetric Dichoptic Masking in Visual Cortex of Amblyopic Macaque Monkeys. Journal of Neuroscience, 2017, 37, 8734-8741.	3.6	38
5	Simulated prosthetic visual fixation, saccade, and smooth pursuit. Vision Research, 2005, 45, 775-788.	1.4	34
6	Human primary visual cortex (V1) is selective for second-order spatial frequency. Journal of Neurophysiology, 2011, 105, 2121-2131.	1.8	31
7	Altered Balance of Receptive Field Excitation and Suppression in Visual Cortex of Amblyopic Macaque Monkeys. Journal of Neuroscience, 2017, 37, 8216-8226.	3.6	31
8	A quantitative analysis of head movement behaviour during visual acuity assessment under prosthetic vision simulation. Journal of Neural Engineering, 2007, 4, S108-S123.	3.5	30
9	Surround suppression supports second-order feature encoding by macaque V1 and V2 neurons. Vision Research, 2014, 104, 24-35.	1.4	25
10	Learning prosthetic vision: a virtual-reality study. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2005, 13, 249-255.	4.9	21
11	Biological "Machine Systems Integration: Engineering the Neural Interface. Proceedings of the IEEE, 2010, 98, 418-431.	21.3	20
12	Simulating auditory and visual sensorineural prostheses: a comparative review. Journal of Neural Engineering, 2007, 4, S58-S71.	3.5	19
13	Contribution to the Theory of Prosthetic Vision. ASAIO Journal, 2004, 50, 392-396.	1.6	18
14	Laminar Differences in Responses to Naturalistic Texture in Macaque V1 and V2. Journal of Neuroscience, 2019, 39, 9748-9756.	3.6	17
15	Advances in Retinal Neuroprosthetics. , 0, , 337-356.		14
16	Retinal Implantation of Electronic Vision Prostheses to Treat Retinitis Pigmentosa: A Systematic Review. Translational Vision Science and Technology, 2021, 10, 8.	2.2	10
17	Liquid-Crystal Display (LCD) of achromatic, mean-modulated flicker in clinical assessment and experimental studies of visual systems. PLoS ONE, 2021, 16, e0248180.	2.5	6
18	Psychophysics of Prosthetic Vision: III. Stochastic Rendering, the Phosphene Image, and Perception. , 2006, 2006, 1169-72.		4

#	ARTICLE	IF	CITATIONS
19	Optical Imaging of Electrically Evoked Visual Signals in Cats: II. ICA "Harmonic Filtering" Noise Reduction. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 3380-3.	0.5	4
20	Towards the Classification of Error-Related Potentials using Riemannian Geometry. , 2021, 2021, 5905-5908.		4
21	Optical Imaging of Electrically Evoked Visual Signals in Cats: I. Responses to Corneal and Intravitreal Electrical Stimulation. , 2007, 2007, 1635-8.		3
22	Practical Considerations in Retinal Neuroprosthesis Design. , 0, , 401-418.		1
23	Retinal Image and Phosphene Image: An Analogy. , 0, , 297-307.		1
24	Low-cost, microcontroller-based, two-channel piezoelectric bender device for somatosensory experiments. , 2020, 2020, 3897-3900.		1
25	Balanced, Orientation-Dependent Dichoptic Masking in Cortex of Visually Normal Humans Measured Using Electroencephalography (EEG). , 2021, 2021, 5901-5904.		1
26	Image Analysis, Information Theory and Prosthetic Vision. , 2011, , 343-353.		0
27	Psychophysics of Prosthetic Vision: III. Stochastic Rendering, the Phosphene Image, and Perception. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0