

# Mohit N Shivdasani

## List of Publications by Year in descending order

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Version: 2024-02-01

70  
papers

2,238  
citations

361296

20  
h-index

276775

41  
g-index

71  
all docs

71  
docs citations

71  
times ranked

1828  
citing authors

#	ARTICLE	IF	CITATIONS
1	First-in-Human Trial of a Novel Suprachoroidal Retinal Prosthesis. PLoS ONE, 2014, 9, e115239.	1.1	274
2	Visual prostheses for the blind. Trends in Biotechnology, 2013, 31, 562-571.	4.9	202
3	Soft, Flexible Freestanding Neural Stimulation and Recording Electrodes Fabricated from Reduced Graphene Oxide. Advanced Functional Materials, 2015, 25, 3551-3559.	7.8	117
4	Factors Affecting Perceptual Thresholds in a Suprachoroidal Retinal Prosthesis. , 2014, 55, 6467.		115
5	Electrical stimulation of retinal ganglion cells with diamond and the development of an all diamond retinal prosthesis. Biomaterials, 2012, 33, 5812-5820.	5.7	109
6	An all-diamond, hermetic electrical feedthrough array for a retinal prosthesis. Biomaterials, 2014, 35, 908-915.	5.7	89
7	Visual Cortex Responses to Single- and Simultaneous Multiple-Electrode Stimulation of the Retina: Implications for Retinal Prostheses. , 2012, 53, 6291.		84
8	Evaluation of stimulus parameters and electrode geometry for an effective suprachoroidal retinal prosthesis. Journal of Neural Engineering, 2010, 7, 036008.	1.8	80
9	Audiovisual integration in noise by children and adults. Journal of Experimental Child Psychology, 2010, 105, 38-50.	0.7	78
10	Visual cortex responses to suprachoroidal electrical stimulation of the retina: effects of electrode return configuration. Journal of Neural Engineering, 2012, 9, 036009.	1.8	72
11	<i>In Vivo</i> and <i>In Vitro</i> Comparison of the Charge Injection Capacity of Platinum Macroelectrodes. IEEE Transactions on Biomedical Engineering, 2015, 62, 849-857.	2.5	63
12	The relationship between multisensory integration and IQ in children.. Developmental Psychology, 2011, 47, 877-885.	1.2	60
13	Virtual Electrodes by Current Steering in Retinal Prostheses. Investigative Ophthalmology and Visual Science, 2014, 55, 8077-8085.	3.3	51
14	The Appearance of Phosphenes Elicited Using a Suprachoroidal Retinal Prosthesis. , 2016, 57, 4948.		51
15	Chronic Electrical Stimulation with a Suprachoroidal Retinal Prosthesis: A Preclinical Safety and Efficacy Study. PLoS ONE, 2014, 9, e97182.	1.1	44
16	Maturation of auditory brainstem projections and calyces in the congenitally deaf (<i>dn/dn</i>) mouse. Journal of Comparative Neurology, 2008, 506, 442-451.	0.9	39
17	Vision function testing for a suprachoroidal retinal prosthesis: effects of image filtering. Journal of Neural Engineering, 2016, 13, 036013.	1.8	35
18	Susceptibility to the flash-beep illusion is increased in children compared to adults. Developmental Science, 2011, 14, 1089-1099.	1.3	31

#	ARTICLE	IF	CITATIONS
19	Identification of Characters and Localization of Images Using Direct Multiple-Electrode Stimulation With a Suprachoroidal Retinal Prosthesis. , 2017, 58, 3962.		30
20	Evaluation of focused multipolar stimulation for cochlear implants in acutely deafened cats. Journal of Neural Engineering, 2014, 11, 065003.	1.8	29
21	Safety Studies for a 44-Channel Suprachoroidal Retinal Prosthesis: A Chronic Passive Study. , 2018, 59, 1410.		29
22	Spatial Restriction of Neural Activation Using Focused Multipolar Stimulation With a Retinal Prosthesis. , 2016, 57, 3181.		27
23	Development and Characterization of a Sucrose Microneedle Neural Electrode Delivery System. Advanced Biology, 2018, 2, 1700187.	3.0	25
24	Inferior Colliculus Responses to Multichannel Microstimulation of the Ventral Cochlear Nucleus: Implications for Auditory Brain Stem Implants. Journal of Neurophysiology, 2008, 99, 1-13.	0.9	24
25	Suprachoroidal electrical stimulation: effects of stimulus pulse parameters on visual cortical responses. Journal of Neural Engineering, 2013, 10, 056011.	1.8	23
26	Creating virtual electrodes with 2D current steering. Journal of Neural Engineering, 2018, 15, 035002.	1.8	23
27	Determining the Contribution of Retinotopic Discrimination to Localization Performance With a Suprachoroidal Retinal Prosthesis. , 2017, 58, 3231.		22
28	Neural Responses to Multielectrode Stimulation of Healthy and Degenerate Retina. , 2017, 58, 3770.		21
29	Stimulation of a Suprachoroidal Retinal Prosthesis Drives Cortical Responses in a Feline Model of Retinal Degeneration. , 2016, 57, 5216.		20
30	Neural activity of functionally different retinal ganglion cells can be robustly modulated by high-rate electrical pulse trains. Journal of Neural Engineering, 2020, 17, 045013.	1.8	19
31	Prediction of cortical responses to simultaneous electrical stimulation of the retina. Journal of Neural Engineering, 2017, 14, 016006.	1.8	18
32	An automated system for rapid evaluation of high-density electrode arrays in neural prostheses. Journal of Neural Engineering, 2011, 8, 036011.	1.8	16
33	Electrophysiological channel interactions using focused multipolar stimulation for cochlear implants. Journal of Neural Engineering, 2015, 12, 066005.	1.8	16
34	Multisensory perception and attention in school-age children. Journal of Experimental Child Psychology, 2019, 180, 141-155.	0.7	16
35	Verbal and novel multisensory associative learning in adults. F1000Research, 2013, 2, 34.	0.8	16
36	An <i>in vivo</i> investigation of first spike latencies in the inferior colliculus in response to multichannel penetrating auditory brainstem implant stimulation. Journal of Neural Engineering, 2010, 7, 036004.	1.8	15

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37	Cortical activation following chronic passive implantation of a wide-field suprachoroidal retinal prosthesis. <i>Journal of Neural Engineering</i> , 2014, 11, 046017.	1.8	15
38	Spectral distribution of local field potential responses to electrical stimulation of the retina. <i>Journal of Neural Engineering</i> , 2016, 13, 036003.	1.8	15
39	Gaze Compensation as a Technique for Improving Hand-Eye Coordination in Prosthetic Vision. <i>Translational Vision Science and Technology</i> , 2018, 7, 2.	1.1	15
40	Spatiotemporal Interactions in the Visual Cortex Following Paired Electrical Stimulation of the Retina. <i>Investigative Ophthalmology and Visual Science</i> , 2014, 55, 7726-7738.	3.3	14
41	The Interplay Between Multisensory Associative Learning and IQ in Children. <i>Child Development</i> , 2020, 91, 620-637.	1.7	14
42	Electrically conducting diamond films grown on platinum foil for neural stimulation. <i>Journal of Neural Engineering</i> , 2019, 16, 066002.	1.8	13
43	Safety and efficacy of explanting or replacing suprachoroidal electrode arrays in a feline model. <i>Clinical and Experimental Ophthalmology</i> , 2015, 43, 247-258.	1.3	12
44	Laminin coated diamond electrodes for neural stimulation. <i>Materials Science and Engineering C</i> , 2021, 118, 111454.	3.8	12
45	Oculomotor Responses to Dynamic Stimuli in a 44-Channel Suprachoroidal Retinal Prosthesis. <i>Translational Vision Science and Technology</i> , 2020, 9, 31.	1.1	12
46	An in-silico analysis of electrically evoked responses of midget and parasol retinal ganglion cells in different retinal regions. <i>Journal of Neural Engineering</i> , 2022, 19, 026018.	1.8	12
47	Creation of virtual channels in the retina using synchronous and asynchronous stimulation—a modelling study. <i>Journal of Neural Engineering</i> , 2020, 17, 065001.	1.8	10
48	Development of a Magnetic Attachment Method for Bionic Eye Applications. <i>Artificial Organs</i> , 2016, 40, E12-24.	1.0	9
49	Neural synchrony in ventral cochlear nucleus neuron populations is not mediated by intrinsic processes but is stimulus induced: implications for auditory brainstem implants. <i>Journal of Neural Engineering</i> , 2009, 6, 065003.	1.8	8
50	Acute Cochlear Nucleus Compression Alters Tuning Properties of Inferior Colliculus Neurons. <i>Audiology and Neuro-Otology</i> , 2010, 15, 18-26.	0.6	8
51	Tapping Into the Language of Touch: Using Non-invasive Stimulation to Specify Tactile Afferent Firing Patterns. <i>Frontiers in Neuroscience</i> , 2020, 14, 500.	1.4	8
52	Electrical Field Shaping Techniques in a Feline Model of Retinal Degeneration. , 2018, 2018, 1222-1225.		7
53	Peripheral Nerve Activation Evokes Machine-Learnable Signals in the Dorsal Column Nuclei. <i>Frontiers in Systems Neuroscience</i> , 2019, 13, 11.	1.2	7
54	The eye and the chip 2019—Conference Report. <i>Journal of Neural Engineering</i> , 2020, 17, 010401.	1.8	7

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55	Wireless induction coils embedded in diamond for power transfer in medical implants. Biomedical Microdevices, 2017, 19, 79.	1.4	6
56	Head and Gaze Behavior in Retinitis Pigmentosa. , 2019, 60, 2263.		6
57	A Second-Generation (44-Channel) Suprachoroidal Retinal Prosthesis: Long-Term Observation of the Electrode-Tissue Interface. Translational Vision Science and Technology, 2022, 11, 12.	1.1	6
58	Visual Prostheses: Neuroengineering Handbook. , 2021, , 1-46.		5
59	Inferior colliculus responses to dual-site intralamina stimulation in the ventral cochlear nucleus. Journal of Comparative Neurology, 2010, 518, 4226-4242.	0.9	4
60	An in vivo investigation of inferior colliculus single neuron responses to cochlear nucleus pulse train stimulation. Journal of Neurophysiology, 2012, 108, 2999-3008.	0.9	4
61	Effect of current focusing on the sensitivity of inferior colliculus neurons to amplitude-modulated stimulation. Journal of Neurophysiology, 2016, 116, 1104-1116.	0.9	4
62	In vivo feasibility of epiretinal stimulation using ultrananocrystalline diamond electrodes. Journal of Neural Engineering, 2020, 17, 045014.	1.8	4
63	Classifying Retinal Degeneration in Histological Sections Using Deep Learning. Translational Vision Science and Technology, 2021, 10, 9.	1.1	4
64	Insights from Computational Modelling: Selective Stimulation of Retinal Ganglion Cells. , 2021, , 233-247.		4
65	Towards Controlling Functionally-Distinct Retinal Ganglion Cells In Degenerate Retina. , 2020, 2020, 3598-3601.		3
66	A Computational Model of Functionally-distinct Cervical Vagus Nerve Fibers. , 2020, 2020, 2475-2478.		3
67	Are long stimulus pulse durations the answer to improving spatial resolution in retinal prostheses?. Annals of Translational Medicine, 2016, 4, 434-434.	0.7	2
68	The Bionic Eye: a review of multielectrode arrays. , 0, , 294-312.		1
69	Selective activation of the visual cortex. Nature Biomedical Engineering, 2020, 4, 139-141.	11.6	1
70	A linear-nonlinear model accurately predicts cortical responses to simultaneous electrical stimulation with a retinal implant. BMC Neuroscience, 2014, 15, .	0.8	0