Noam Sobel

List of Publications by Year
in descending order

90 papers	6,612 citations	66315 42 h-index	66879 78 g-index
100 all docs	100 docs citations	100 times ranked	4772 citing authors

#	Article	IF	Citations
1	An Odor is Not Worth a Thousand Words: From Multidimensional Odors to Unidimensional Odor Objects. Annual Review of Psychology, 2010, 61, 219-241.	9.9	355
2	Predicting Odor Pleasantness from Odorant Structure: Pleasantness as a Reflection of the Physical World. Journal of Neuroscience, 2007, 27, 10015-10023.	1.7	345
3	The Sniff Is Part of the Olfactory Percept. Chemical Senses, 2006, 31, 181-196.	1.1	317
4	Mechanisms of scent-tracking in humans. Nature Neuroscience, 2007, 10, 27-29.	7.1	292
5	Time Course of Odorant-Induced Activation in the Human Primary Olfactory Cortex. Journal of Neurophysiology, 2000, 83, 537-551.	0.9	276
6	Attentional modulation in human primary olfactory cortex. Nature Neuroscience, 2005, 8, 114-120.	7.1	241
7	Odorant-Induced and Sniff-Induced Activation in the Cerebellum of the Human. Journal of Neuroscience, 1998, 18, 8990-9001.	1.7	221
8	A metric for odorant comparison. Nature Methods, 2008, 5, 425-429.	9.0	212
9	Blind smell: brain activation induced by an undetected air-borne chemical. Brain, 1999, 122, 209-217.	3.7	194
10	Human Tears Contain a Chemosignal. Science, 2011, 331, 226-230.	6.0	184
11	Smelling a Single Component of Male Sweat Alters Levels of Cortisol in Women. Journal of Neuroscience, 2007, 27, 1261-1265.	1.7	180
12	Humans can learn new information during sleep. Nature Neuroscience, 2012, 15, 1460-1465.	7.1	180
13	Brain Mechanisms for Extracting Spatial Information from Smell. Neuron, 2005, 47, 581-592.	3.8	164
14	Olfactomotor activity during imagery mimics that during perception. Nature Neuroscience, 2003, 6, 1142-1144.	7.1	156
15	Human olfaction: a constant state of change-blindness. Experimental Brain Research, 2010, 205, 13-29.	0.7	150
16	The world smells different to each nostril. Nature, 1999, 402, 35-35.	13.7	147
17	Rapid Olfactory Processing Implicates Subcortical Control of an Olfactomotor System. Journal of Neurophysiology, 2003, 90, 1084-1094.	0.9	137
18	Hedonic-Specific Activity in Piriform Cortex During Odor Imagery Mimics That During Odor Perception. Journal of Neurophysiology, 2007, 98, 3254-3262.	0.9	133

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19	Perceptual convergence of multi-component mixtures in olfaction implies an olfactory white. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 19959-19964.	3.3	117
20	Auditory aversive learning increases discrimination thresholds. Nature Neuroscience, 2011, 14, 791-796.	7.1	114
21	Human non-olfactory cognition phase-locked with inhalation. Nature Human Behaviour, 2019, 3, 501-512.	6.2	114
22	Humans as an Animal Model for Systems-Level Organization of Olfaction. Neuron, 2005, 48, 431-454.	3.8	102
23	Predicting Odor Perceptual Similarity from Odor Structure. PLoS Computational Biology, 2013, 9, e1003184.	1.5	92
24	Global Features of Neural Activity in the Olfactory System Form a Parallel Code That Predicts Olfactory Behavior and Perception. Journal of Neuroscience, 2010, 30, 9017-9026.	1.7	86
25	Neural activity at the human olfactory epithelium reflects olfactory perception. Nature Neuroscience, 2011, 14, 1455-1461.	7.1	86
26	One nostril knows what the other learns. Nature, 2002, 419, 802-802.	13.7	84
27	Dissociating Intensity from Valence as Sensory Inputs to Emotion. Neuron, 2003, 39, 581-583.	3.8	79
28	Altered responses to social chemosignals in autism spectrum disorder. Nature Neuroscience, 2018, 21, 111-119.	7.1	78
29	A Mechanistic Link between Olfaction and Autism Spectrum Disorder. Current Biology, 2015, 25, 1904-1910.	1.8	77
30	Methods for building an olfactometer with known concentration outcomes. Journal of Neuroscience Methods, 2007, 160, 231-245.	1.3	74
31	Olfactory Aversive Conditioning during Sleep Reduces Cigarette-Smoking Behavior. Journal of Neuroscience, 2014, 34, 15382-15393.	1.7	74
32	Spared and Impaired Olfactory Abilities after Thalamic Lesions. Journal of Neuroscience, 2009, 29, 12059-12069.	1.7	73
33	Measuring and Characterizing the Human Nasal Cycle. PLoS ONE, 2016, 11, e0162918.	1.1	73
34	The Prevalence of Androstenone Anosmia. Chemical Senses, 2003, 28, 423-432.	1.1	71
35	Olfactory Impairments in Patients with Unilateral Cerebellar Lesions Are Selective to Inputs from the Contralesional Nostril. Journal of Neuroscience, 2005, 25, 6362-6371.	1.7	68
36	A Specialized Odor Memory Buffer in Primary Olfactory Cortex. PLoS ONE, 2009, 4, e4965.	1.1	62

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37	The Influence of Odorants on Respiratory Patterns in Sleep. Chemical Senses, 2010, 35, 31-40.	1.1	62
38	Predicting Odor Pleasantness with an Electronic Nose. PLoS Computational Biology, 2010, 6, e1000740.	1.5	57
39	Sniffing enables communication and environmental control for the severely disabled. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 14413-14418.	3.3	55
40	Relationship Between Odor Intensity Estimates and COVID-19 Prevalence Prediction in a Swedish Population. Chemical Senses, 2020, 45, 449-456.	1.1	53
41	A measure of smell enables the creation of olfactory metamers. Nature, 2020, 588, 118-123.	13.7	50
42	A social chemosignaling function for human handshaking. ELife, 2015, 4, .	2.8	50
43	Measuring smells. Current Opinion in Neurobiology, 2008, 18, 438-444.	2.0	48
44	Human Olfaction without Apparent Olfactory Bulbs. Neuron, 2020, 105, 35-45.e5.	3.8	48
45	A Comparison of Methods for Sniff Measurement Concurrent with Olfactory Tasks in Humans. Chemical Senses, 2006, 31, 795-806.	1.1	47
46	Odors enhance slow-wave activity in non-rapid eye movement sleep. Journal of Neurophysiology, 2016, 115, 2294-2302.	0.9	47
47	Individual olfactory perception reveals meaningful nonolfactory genetic information. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 8750-8755.	3.3	44
48	The Privileged Brain Representation of First Olfactory Associations. Current Biology, 2009, 19, 1869-1874.	1.8	43
49	The perceptual logic of smell. Current Opinion in Neurobiology, 2014, 25, 107-115.	2.0	43
50	Olfactory sniffing signals consciousness in unresponsive patients with brain injuries. Nature, 2020, 581, 428-433.	13.7	36
51	Local Targeted Memory Reactivation in Human Sleep. Current Biology, 2020, 30, 1435-1446.e5.	1.8	30
52	From Nose to Brain: Un-Sensed Electrical Currents Applied in the Nose Alter Activity in Deep Brain Structures. Cerebral Cortex, 2016, 26, 4180-4191.	1.6	27
53	Proof of concept for real-time detection of SARS CoV-2 infection with an electronic nose. PLoS ONE, 2021, 16, e0252121.	1.1	27
54	Neural Processing at the Speed of Smell. Neuron, 2004, 44, 744-747.	3.8	26

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55	The Scented Brain. Neuron, 2001, 31, 512-514.	3.8	25
56	Working memory across nostrils.. Behavioral Neuroscience, 2008, 122, 1031-1037.	0.6	25
57	Prediction Models for the Pleasantness of Binary Mixtures in Olfaction. Chemical Senses, 2008, 33, 599-609.	1.1	23
58	Olfactory perception as a compass for olfactory neural maps. Trends in Cognitive Sciences, 2011, 15, 537-545.	4.0	23
59	SmellSpace: An Odor-Based Social Network as a Platform for Collecting Olfactory Perceptual Data. Chemical Senses, 2019, 44, 267-278.	1.1	21
60	Detection of response to command using voluntary control of breathing in disorders of consciousness. Frontiers in Human Neuroscience, 2014, 8, 1020.	1.0	19
61	Sniffing patterns uncover implicit memory for undetected odors. Current Biology, 2014, 24, R263-R264.	1.8	19
62	Odorant Concentration Dependence in Electroolfactograms Recorded From the Human Olfactory Epithelium. Journal of Neurophysiology, 2009, 102, 2121-2130.	0.9	18
63	Are humans constantly but subconsciously smelling themselves?. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190372.	1.8	18
64	Predicting the Receptive Range of Olfactory Receptors. PLoS Computational Biology, 2008, 4, e18.	1.5	16
65	Unexplained repeated pregnancy loss is associated with altered perceptual and brain responses to menâ€™s body-odor. ELife, 2020, 9, .	2.8	12
66	What's primary about primary olfactory cortex?. Nature Neuroscience, 2012, 15, 10-12.	7.1	11
67	Odorant similarity in the mouse olfactory bulb. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E2916-E2917.	3.3	11
68	Mirror Sniffing: Humans Mimic Olfactory Sampling Behavior. Chemical Senses, 2014, 39, 277-281.	1.1	11
69	Smelling Pseudomonas aeruginosa infections using a whole-cell biosensor â€“ An alternative for the gold-standard culturing assay. Journal of Biotechnology, 2018, 267, 45-49.	1.9	11
70	Sniffing the human body volatile hexadecanal blocks aggression in men but triggers aggression in women. Science Advances, 2021, 7, eabg1530.	4.7	11
71	There is chemistry in social chemistry. Science Advances, 2022, 8, .	4.7	11
72	An olfactory self-test effectively screens for COVID-19. Communications Medicine, 2022, 2, .	1.9	10

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73	Male Behavior by Knockout. Neuron, 2007, 55, 689-693.	3.8	9
74	Disinhibition of olfaction: Human olfactory performance improves following low levels of alcohol. Behavioural Brain Research, 2014, 272, 66-74.	1.2	8
75	Does a unique olfactory genome imply a unique olfactory world?. Nature Neuroscience, 2014, 17, 6-8.	7.1	8
76	Increased number of volatile organic compounds over malignant glottic lesions. Laryngoscope, 2016, 126, 1606-1611.	1.1	8
77	Revisiting the revisit: added evidence for a social chemosignal in human emotional tears. Cognition and Emotion, 2017, 31, 151-157.	1.2	8
78	Functional Neuroimaging of Human Olfaction. , 2003, , .		7
79	Odor Canopy: A Method for Comfortable Odorant Delivery in MRI. Chemical Senses, 2021, 46, .	1.1	6
80	An Assay for Human Chemosignals. Methods in Molecular Biology, 2013, 1068, 373-394.	0.4	6
81	Spatial Perception: Time Tells Where a Smell Comes From. Current Biology, 2010, 20, R563-R564.	1.8	5
82	Using a Sniff Controller to Self-Trigger Abdominal Functional Electrical Stimulation for Assisted Coughing Following Cervical Spinal Cord Lesions. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 1461-1471.	2.7	5
83	Women Have Reduced Ability to Discriminate Body Odors During the Withdrawal Period of Oral Contraception. Chemosensory Perception, 2020, 13, 123-131.	0.7	5
84	Olfaction and Sleep. , 2017, , 111-112.		3
85	Learning to Smell: Olfactory Perception from Neurobiology to Behavior. By Donald A Wilson and , Richard J Stevenson. Baltimore (Maryland): Johns Hopkins University Press. $80.00. xi + 309 p; ill.; index. ISBN: 0â€8018â€8368â€7. 2006.. Quarterly Review of Biology, 2007, 82, 178-179.	0.0	2
86	Multisensory integration: an inner tongue puts an outer nose in context. Nature Neuroscience, 2010, 13, 148-149.	7.1	2
87	Human Olfaction: A Typical Yet Special Mammalian Olfactory System. , 2014, , 177-202.		1
88	Human Olfactory Psychophysics. , 2008, , 823-857.		0
89	Looking at the Nose Through Human Behavior, and at Human Behavior Through the Nose. , 2013, , .		0
90	Corrigendum to: Relationship Between Odor Intensity Estimates and COVID-19 Prevalence Prediction in a Swedish Population. Chemical Senses, 2020, 45, 491-492.	1.1	0