Kenneth C Catania

List of Publications by Year
in descending order

86 papers	3,554 citations	117625 34 h-index	149698 56 g-index
86 all docs	86 docs citations	86 times ranked	2789 citing authors

#	Article	IF	Citations
1	Electric Eels Wield a Functional Venom Analogue. Toxins, 2021, 13, 48.	3.4	1
2	La stupÃ©fiante attaque de la guÃªpe Ã©meraude. Pourlascience Fr, 2021, NÂ° 521 - mars, 44-51.	0.0	0
3	All in the Family â€“ Touch Versus Olfaction in Moles. Anatomical Record, 2020, 303, 65-76.	1.4	8
4	Getting the Most Out of Your Zombie: Abdominal Sensors and Neural Manipulations Help Jewel Wasps Find the Roachâ€™s Weak Spot. Brain, Behavior and Evolution, 2020, 95, 181-202.	1.7	4
5	Les superpouvoirs de lâ€™anguille Ã©lectrique. Pourlascience Fr, 2020, NÂ° 508 - fÃ©vrier, 36-43.	0.0	0
6	The Astonishing Behavior of Electric Eels. Frontiers in Integrative Neuroscience, 2019, 13, 23.	2.1	17
7	How Not to Be Turned into a Zombie. Brain, Behavior and Evolution, 2018, 92, 32-46.	1.7	10
8	Power Transfer to a Human during an Electric Eelâ€™s Shocking Leap. Current Biology, 2017, 27, 2887-2891.e2.	3.9	11
9	Behavioral pieces of neuroethological puzzles. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2017, 203, 677-689.	1.6	3
10	Electrical Potential of Leaping Eels. Brain, Behavior and Evolution, 2017, 89, 262-273.	1.7	10
11	Somatosensory organ topography across the star of the starâ€nosed mole (<i>Condylura cristata</i>). Journal of Comparative Neurology, 2016, 524, 917-929.	1.6	11
12	Leaping eels electrify threats, supporting Humboldtâ€™s account of a battle with horses. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 6979-6984.	7.1	66
13	Electric eels use high-voltage to track fast-moving prey. Nature Communications, 2015, 6, 8638.	12.8	37
14	Mammalian Brains Are Made of These: A Dataset of the Numbers and Densities of Neuronal and Nonneuronal Cells in the Brain of Glires, Primates, Scandentia, Eulipotyphlans, Afrotherians and Artiodactyls, and Their Relationship with Body Mass. Brain, Behavior and Evolution, 2015, 86, 145-163.	1.7	176
15	An Optimized Biological Taser: Electric Eels Remotely Induce or Arrest Movement in Nearby Prey. Brain, Behavior and Evolution, 2015, 86, 38-47.	1.7	16
16	Compartmentation of the Cerebellar Cortex: Adaptation to Lifestyle in the Star-Nosed Mole Condylura cristata. Cerebellum, 2015, 14, 106-118.	2.5	17
17	Electric Eels Concentrate Their Electric Field to Induce Involuntary Fatigue in Struggling Prey. Current Biology, 2015, 25, 2889-2898.	3.9	27
18	Comparative Studies of Somatosensory Systems and Active Sensing. , 2015, , 7-28.		3

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19	Greater addition of neurons to the olfactory bulb than to the cerebral cortex of eulipotyphlans but not rodents, afrotherians or primates. Frontiers in Neuroanatomy, 2014, 8, 23.	1.7	22
20	The shocking predatory strike of the electric eel. Science, 2014, 346, 1231-1234.	12.6	77
21	Organization of the spinal trigeminal nucleus in starâ€nosed moles. Journal of Comparative Neurology, 2014, 522, 3335-3350.	1.6	15
22	Brain Mass and Cranial Nerve Size in Shrews and Moles. Scientific Reports, 2014, 4, 6241.	3.3	11
23	The neurobiology and behavior of the American water shrew (Sorex palustris). Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2013, 199, 545-554.	1.6	5
24	Stereo and serial sniffing guide navigation to an odour source in a mammal. Nature Communications, 2013, 4, 1441.	12.8	97
25	The Star-Nosed Mole Reveals Clues to the Molecular Basis of Mammalian Touch. PLoS ONE, 2013, 8, e55001.	2.5	41
26	Barrelettes without Barrels in the American Water Shrew. PLoS ONE, 2013, 8, e65975.	2.5	10
27	Cutaneous and periodontal inputs to the cerebellum of the naked mole-rat (Heterocephalus glaber). Frontiers in Neuroanatomy, 2013, 7, 39.	1.7	3
28	Evolution of brains and behavior for optimal foraging: A tale of two predators. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 10701-10708.	7.1	27
29	Structure, innervation and response properties of integumentary sensory organs in crocodilians. Journal of Experimental Biology, 2012, 215, 4217-4230.	1.7	109
30	Tactile sensing in specialized predators â€" from behavior to the brain. Current Opinion in Neurobiology, 2012, 22, 251-258.	4.2	16
31	The sense of touch in the star-nosed mole: from mechanoreceptors to the brain. Philosophical Transactions of the Royal Society B: Biological Sciences, 2011, 366, 3016-3025.	4.0	40
32	Chemoarchitecture of Layer 4 Isocortex in the American Water Shrew <i>(Sorex palustris)</i>. Brain, Behavior and Evolution, 2011, 78, 261-271.	1.7	6
33	The brain and behavior of the tentacled snake. Annals of the New York Academy of Sciences, 2011, 1225, 83-89.	3.8	7
34	Compartmentation of the Cerebellar Cortex in the Naked Mole-Rat (Heterocephalus glaber). Cerebellum, 2011, 10, 435-448.	2.5	19
35	Heterochrony and developmental modularity of cranial osteogenesis in lipotyphlan mammals. EvoDevo, 2011, 2, 21.	3.2	45
36	Organization of somatosensory cortex in the Northern grasshopper mouse (<i>Onychomys) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62 Td	1.6	18

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37	Updated Neuronal Scaling Rules for the Brains of Glires (Rodents/Lagomorphs). Brain, Behavior and Evolution, 2011, 78, 302-314.	1.7	107
38	A Star in the Brainstem Reveals the First Step of Cortical Magnification. PLoS ONE, 2011, 6, e22406.	2.5	19
39	Born Knowing: Tentacled Snakes Innately Predict Future Prey Behavior. PLoS ONE, 2010, 5, e10953.	2.5	36
40	Cellular scaling rules of insectivore brains. Frontiers in Neuroanatomy, 2009, 3, 8.	1.7	82
41	Tentacled snakes turn C-starts to their advantage and predict future prey behavior. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 11183-11187.	7.1	93
42	Symposium Overview. Annals of the New York Academy of Sciences, 2009, 1170, 407-412.	3.8	4
43	Central Projections of Trigeminal Afferents Innervating the Face in Naked Moleâ€Rats (<i>Heterocephalus glaber</i>). Anatomical Record, 2008, 291, 988-998.	1.4	11
44	Water shrews detect movement, shape, and smell to find prey underwater. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 571-576.	7.1	70
45	Worm Grunting, Fiddling, and Charmingâ€"Humans Unknowingly Mimic a Predator to Harvest Bait. PLoS ONE, 2008, 3, e3472.	2.5	49
46	Response properties of primary afferents supplying Eimer's organ. Journal of Experimental Biology, 2007, 210, 765-780.	1.7	21
47	Fine structure of Eimer's organ in the coast mole (Scapanus orarius). Anatomical Record, 2007, 290, 437-448.	1.4	7
48	Adaptive Neural Organization of Naked Mole-Rat Somatosensation (and Those Similarly Challenged). , 2007, , 175-193.		9
49	Underwater 'sniffing' by semi-aquatic mammals. Nature, 2006, 444, 1024-1025.	27.8	68
50	Touching on somatosensory specializations in mammals. Current Opinion in Neurobiology, 2006, 16, 467-473.	4.2	79
51	Central visual system of the naked mole-rat (Heterocephalus glaber). The Anatomical Record Part A: Discoveries in Molecular, Cellular, and Evolutionary Biology, 2006, 288A, 205-212.	2.0	67
52	Cortical, callosal, and thalamic connections from primary somatosensory cortex in the naked mole-rat (Heterocephalus glaber), with special emphasis on the connectivity of the incisor representation. The Anatomical Record Part A: Discoveries in Molecular, Cellular, and Evolutionary Biology, 2006, 288A, 626-645.	2.0	23
53	Organization of the somatosensory cortex in elephant shrews (<i>E. edwardii</i>). The Anatomical Record Part A: Discoveries in Molecular, Cellular, and Evolutionary Biology, 2006, 288A, 859-866.	2.0	18
54	Organization of somatosensory cortical areas in the naked moleâ€rat (<i>Heterocephalus glaber</i>). Journal of Comparative Neurology, 2006, 495, 434-452.	1.6	44

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55	Neuroanatomical evidence for segregation of nerve fibers conveying light touch and pain sensation in Eimer's organ of the mole. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 9339-9344.	7.1	16
56	Asymptotic prey profitability drives star-nosed moles to the foraging speed limit. Nature, 2005, 433, 519-522.	27.8	108
57	Star-nosed moles. Current Biology, 2005, 15, R863-R864.	3.9	9
58	Plasticity of the cortical dentition representation after tooth extraction in naked mole-rats. Journal of Comparative Neurology, 2005, 485, 64-74.	1.6	37
59	Evolution of sensory specializations in insectivores. The Anatomical Record Part A: Discoveries in Molecular, Cellular, and Evolutionary Biology, 2005, 287A, 1038-1050.	2.0	64
60	Identification of retinal neurons in a regressive rodent eye (the naked mole-rat). Visual Neuroscience, 2004, 21, 107-117.	1.0	27
61	Tactile Foveation in the Star-Nosed Mole. Brain, Behavior and Evolution, 2004, 63, 1-12.	1.7	60
62	Identification of retinal neurons in a regressive rodent eye (the naked mole-rat). Visual Neuroscience, 2004, 21, 107-17.	1.0	8
63	Somatosensation in the superior colliculus of the star-nosed mole. Journal of Comparative Neurology, 2003, 464, 415-425.	1.6	21
64	Organization of somatosensory cortex in the laboratory rat (<i>Rattus norvegicus</i>): Evidence for two lateral areas joined at the representation of the teeth. Journal of Comparative Neurology, 2003, 467, 105-118.	1.6	126
65	Somatosensory cortex dominated by the representation of teeth in the naked mole-rat brain. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 5692-5697.	7.1	108
66	Receptive Fields and Response Properties of Neurons in the Star-Nosed Mole's Somatosensory Fovea. Journal of Neurophysiology, 2002, 87, 2602-2611.	1.8	22
67	Barrels, stripes, and fingerprints in the brain - implications for theories of cortical organization. Journal of Neurocytology, 2002, 31, 347-358.	1.5	20
68	Anatomic correlates of the face and oral cavity representations in the somatosensory cortical area 3b of monkeys. Journal of Comparative Neurology, 2001, 429, 455-468.	1.6	126
69	Early development of a somatosensory fovea: a head start in the cortical space race?. Nature Neuroscience, 2001, 4, 353-354.	14.8	26
70	Anatomic correlates of the face and oral cavity representations in the somatosensory cortical area 3b of monkeys. , 2001, 429, 455.		1
71	Organization of sensory cortex in the East African hedgehog (Atelerix albiventris). Journal of Comparative Neurology, 2000, 421, 256-274.	1.6	37
72	Cortical Organization in Insectivora: The Parallel Evolution of the Sensory Periphery and the Brain. Brain, Behavior and Evolution, 2000, 55, 311-321.	1.7	53

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73	Epidermal Sensory Organs of Moles, Shrew Moles, and Desmans: A Study of the Family Talpidae with Comments on the Function and Evolution of Eimerâ€™s Organ. Brain, Behavior and Evolution, 2000, 56, 146-174.	1.7	55
74	Cortical organization in moles: evidence of new areas and a specialized S2. Somatosensory & Motor Research, 2000, 17, 335-347.	0.9	21
75	Cortical organization in shrews: Evidence from five species. Journal of Comparative Neurology, 1999, 410, 55-72.	1.6	87
76	The mole nose instructs the brain. Somatosensory & Motor Research, 1997, 14, 56-58.	0.9	17
77	Deactivation and reactivation of somatosensory cortex after dorsal spinal cord injury. Nature, 1997, 386, 495-498.	27.8	194
78	Organization of somatosensory cortex and distribution of corticospinal neurons in the eastern mole (Scalopus aquaticus). Journal of Comparative Neurology, 1997, 378, 337-353.	1.6	25
79	Somatosensory fovea in the star-nosed mole: Behavioral use of the star in relation to innervation patterns and cortical representation. Journal of Comparative Neurology, 1997, 387, 215-233.	1.6	112
80	Ultrastructure of the Eimer's organ of the star-nosed mole. , 1996, 365, 343-354.		23
81	Organization of the somatosensory cortex of the starâ€nosed mole. Journal of Comparative Neurology, 1995, 351, 549-567.	1.6	125
82	A comparison of the Eimer's organs of three north american moles: The hairy-tailed mole (Parascalops) Tj ETQq0 0 0 rgBT /Overlock 10 T Journal of Comparative Neurology, 1995, 354, 150-160.	1.6	28
83	Magnified cortex in star-nosed moles. Nature, 1995, 375, 453-454.	27.8	21
84	Structure and innervation of the sensory organs on the snout of the star-nosed mole. Journal of Comparative Neurology, 1995, 351, 536-548.	1.6	52
85	Development of lateral line organs in the axolotl. Journal of Comparative Neurology, 1994, 340, 480-514.	1.6	101
86	Nose stars and brain stripes. Nature, 1993, 364, 493-493.	27.8	32