Douglas Fudge

List of Publications by Year
in descending order

56 papers	2,115 citations	304602 22 h-index	243529 44 g-index
58 all docs	58 docs citations	58 times ranked	2157 citing authors

#	Article	IF	Citations
1	Review of the hagfishes (Myxinidae) from the Galapagos Islands, with descriptions of four new species and their phylogenetic relationships. Zoological Journal of the Linnean Society, 2021, 192, 453-474.	1.0	5
2	From reductionism to synthesis: The case of hagfish slime. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2021, 255, 110610.	0.7	1
3	Evolution of a remarkable intracellular polymer and extreme cell allometry in hagfishes. Current Biology, 2021, 31, 5062-5068.e4.	1.8	2
4	The best predictions in experimental biology are critical and persuasive. Journal of Experimental Biology, 2020, 223, .	0.8	3
5	Comparative Animal Mucomics: Inspiration for Functional Materials from Ubiquitous and Understudied Biopolymers. ACS Biomaterials Science and Engineering, 2020, 6, 5377-5398.	2.6	12
6	A New Model of Hagfish Slime Mucous Vesicle Stabilization and Deployment. Langmuir, 2020, 36, 6681-6689.	1.6	3
7	Concentration effects of three common fish anesthetics on Pacific hagfish (Eptatretus stoutii). Fish Physiology and Biochemistry, 2020, 46, 931-943.	0.9	8
8	High concentrations of trimethylamines in slime glands inhibit skein unraveling in Pacific hagfish. Journal of Experimental Biology, 2019, 222, .	0.8	6
9	Functional plasticity in lamellar autotomy by larval damselflies in response to predatory larval dragonfly cues. Evolutionary Ecology, 2019, 33, 257-272.	0.5	2
10	Emptying and refilling of slime glands in Atlantic (Myxine glutinosa) and Pacific (Eptatretus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.8	5
11	Unraveling inter-species differences in hagfish slime skein deployment. Journal of Experimental Biology, 2018, 221, .	0.8	6
12	Concentration-independent mechanics and structure of hagfish slime. Acta Biomaterialia, 2018, 79, 123-134.	4.1	13
13	Cellular mechanisms of slime gland refilling in Pacific hagfish (Eptatretus stoutii). Journal of Experimental Biology, 2018, 221, .	0.8	9
14	Hagfish Houdinis: biomechanics and behavior of squeezing through small openings. Journal of Experimental Biology, 2017, 220, 822-827.	0.8	5
15	Giant axonal neuropathy alters the structure of keratin intermediate filaments in human hair. Journal of the Royal Society Interface, 2017, 14, 20170123.	1.5	7
16	Skeletal stiffening in an amphibious fish out of water is a response to increased body weight. Journal of Experimental Biology, 2017, 220, 3621-3631.	0.8	25
17	Flaccid skin protects hagfishes from shark bites. Journal of the Royal Society Interface, 2017, 14, 20170765.	1.5	10
18	The Hagfish Gland Thread Cell: A Fiber-Producing Cell Involved in Predator Defense. Cells, 2016, 5, 25.	1.8	14

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19	Morphological analysis of the hagfish heart. I. The ventricle, the arterial connection and the ventral aorta. Journal of Morphology, 2016, 277, 326-340.	0.6	14
20	Identification of Wet-Spinning and Post-Spin Stretching Methods Amenable to Recombinant Spider Aciniform Silk. Biomacromolecules, 2016, 17, 2737-2746.	2.6	23
21	Morphological analysis of the hagfish heart. II. The venous pole and the pericardium. Journal of Morphology, 2016, 277, 853-865.	0.6	10
22	Hagfish Slime and Slime Glands. , 2015, , 272-290.		0
23	Physiology, Biomechanics, and Biomimetics of Hagfish Slime. Annual Review of Biochemistry, 2015, 84, 947-967.	5.0	26
24	Confocal imaging and phylogenetic considerations of the subcutaneous neurons in the Atlantic hagfish Myxine glutinosa. Acta Zoologica, 2015, 96, 209-217.	0.6	22
25	The effects of actomyosin disruptors on the mechanical integrity of the avian crystalline lens. Molecular Vision, 2015, 21, 98-109.	1.1	7
26	Eco-mechanics of lamellar autotomy in larval damselflies. Journal of Experimental Biology, 2014, 217, 185-191.	0.8	9
27	Spontaneous unraveling of hagfish slime thread skeins is mediated by a seawater-soluble protein adhesive. Journal of Experimental Biology, 2014, 217, 1263-1268.	0.8	17
28	Fifty years of J. R. Platt's strong inference. Journal of Experimental Biology, 2014, 217, 1202-1204.	0.8	12
29	Coiling and maturation of a high-performance fibre in hagfish slime gland thread cells. Nature Communications, 2014, 5, 3534.	5.8	37
30	Self-Assembly Enhances the Strength of Fibers Made from Vimentin Intermediate Filament Proteins. Biomacromolecules, 2014, 15, 574-581.	2.6	38
31	Defensive slime formation in Pacific hagfish requires Ca2+ and aquaporin mediated swelling of released mucin vesicles. Journal of Experimental Biology, 2014, 217, 2288-96.	0.8	22
32	Physiology of Swimming and Migration in Tunas. , 2013, , 45-78.		3
33	Regulation of hard Î±-keratin mechanics via control of intermediate filament hydration: matrix squeeze revisited. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20122158.	1.2	22
34	The Production of Fibers and Films from Solubilized Hagfish Slime Thread Proteins. Biomacromolecules, 2012, 13, 3475-3482.	2.6	35
35	The Mechanical Behavior of Mutant K14-R125P Keratin Bundles and Networks in NEB-1 Keratinocytes. PLoS ONE, 2012, 7, e31320.	1.1	26
36	Intermediate Filaments Regulate Tissue Size and Stiffness in the Murine Lens. , 2011, 52, 3860.		48

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37	Non-linear viscoelasticity of hagfish slime. International Journal of Non-Linear Mechanics, 2011, 46, 627-636.	1.4	44
38	Stabilization and swelling of hagfish slime mucin vesicles. Journal of Experimental Biology, 2010, 213, 1092-1099.	0.8	36
39	Deployment of hagfish slime thread skeins requires the transmission of mixing forcesviamucin strands. Journal of Experimental Biology, 2010, 213, 1235-1240.	0.8	40
40	Calcification provides mechanical reinforcement to whale baleen Î±-keratin. Proceedings of the Royal Society B: Biological Sciences, 2010, 277, 2597-2605.	1.2	63
41	A Fish Out of Water: Gill and Skin Remodeling Promotes Osmo- and Ionoregulation in the Mangrove KillifishKryptolebias marmoratus. Physiological and Biochemical Zoology, 2010, 83, 932-949.	0.6	62
42	Hagfish slime threads as a biomimetic model for high performance protein fibres. Bioinspiration and Biomimetics, 2010, 5, 035002.	1.5	45
43	From ultra-soft slime to hard Â-keratins: The many lives of intermediate filaments. Integrative and Comparative Biology, 2009, 49, 32-39.	0.9	38
44	Morphology and Development of Blue Whale Baleen: An Annotated Translation of Tycho Tullberg's Classic 1883 Paper. Aquatic Mammals, 2009, 35, 226-252.	0.4	47
45	The Intermediate Filament Network in Cultured Human Keratinocytes Is Remarkably Extensible and Resilient. PLoS ONE, 2008, 3, e2327.	1.1	54
46	Music to his antennae. Journal of Experimental Biology, 2007, 210, 1846-1846.	0.8	0
47	Biomechanical properties of intermediate filaments: from tissues to single filaments and back. BioEssays, 2007, 29, 26-35.	1.2	105
48	Hagfish slime ecomechanics: testing the gill-clogging hypothesis. Journal of Experimental Biology, 2006, 209, 702-710.	0.8	61
49	Composition, morphology and mechanics of hagfish slime. Journal of Experimental Biology, 2005, 208, 4613-4625.	0.8	95
50	Fast-start muscle dynamics in the rainbow trout Oncorhynchus mykiss: phase relationship of white muscle shortening and body curvature. Journal of Experimental Biology, 2005, 208, 929-938.	0.8	22
51	Molecular design of the Î±â€“keratin composite: insights from a matrixâ€“free model, hagfish slime threads. Proceedings of the Royal Society B: Biological Sciences, 2004, 271, 291-299.	1.2	94
52	The Mechanical Properties of Hydrated Intermediate Filaments: Insights from Hagfish Slime Threads. Biophysical Journal, 2003, 85, 2015-2027.	0.2	228
53	Migratory Movements, Depth Preferences, and Thermal Biology of Atlantic Bluefin Tuna. Science, 2001, 293, 1310-1314.	6.0	556
54	A test of biochemical symmorphosis in a heterothermic tissue: bluefin tuna white muscle. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2001, 280, R108-R114.	0.9	9

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55	No evidence for homeoviscous adaptation in a heterothermic tissue: tuna heat exchangers. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 1998, 275, R818-R823.	0.9	2
56	Enzyme adaptation along a heterothermic tissue: the visceral retia mirabilia of the bluefin tuna. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 1997, 272, R1834-R1840.	0.9	7