

Douglas Fudge

List of Publications by Year in descending order

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Version: 2024-02-01

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	Migratory Movements, Depth Preferences, and Thermal Biology of Atlantic Bluefin Tuna. <i>Science</i> , 2001, 293, 1310-1314.	6.0	556
2	The Mechanical Properties of Hydrated Intermediate Filaments: Insights from Hagfish Slime Threads. <i>Biophysical Journal</i> , 2003, 85, 2015-2027.	0.2	228
3	Biomechanical properties of intermediate filaments: from tissues to single filaments and back. <i>BioEssays</i> , 2007, 29, 26-35.	1.2	105
4	Composition, morphology and mechanics of hagfish slime. <i>Journal of Experimental Biology</i> , 2005, 208, 4613-4625.	0.8	95
5	Molecular design of the keratin composite: insights from a matrix-free model, hagfish slime threads. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2004, 271, 291-299.	1.2	94
6	Calcification provides mechanical reinforcement to whale baleen keratin. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2010, 277, 2597-2605.	1.2	63
7	A Fish Out of Water: Gill and Skin Remodeling Promotes Osmo- and Ionoregulation in the Mangrove Killifish <i>Kryptolebias marmoratus</i> . <i>Physiological and Biochemical Zoology</i> , 2010, 83, 932-949.	0.6	62
8	Hagfish slime ecomechanics: testing the gill-clogging hypothesis. <i>Journal of Experimental Biology</i> , 2006, 209, 702-710.	0.8	61
9	The Intermediate Filament Network in Cultured Human Keratinocytes Is Remarkably Extensible and Resilient. <i>PLoS ONE</i> , 2008, 3, e2327.	1.1	54
10	Intermediate Filaments Regulate Tissue Size and Stiffness in the Murine Lens. , 2011, 52, 3860.		48
11	Morphology and Development of Blue Whale Baleen: An Annotated Translation of Tycho Tullberg's Classic 1883 Paper. <i>Aquatic Mammals</i> , 2009, 35, 226-252.	0.4	47
12	Hagfish slime threads as a biomimetic model for high performance protein fibres. <i>Bioinspiration and Biomimetics</i> , 2010, 5, 035002.	1.5	45
13	Non-linear viscoelasticity of hagfish slime. <i>International Journal of Non-Linear Mechanics</i> , 2011, 46, 627-636.	1.4	44
14	Deployment of hagfish slime thread skeins requires the transmission of mixing forces via mucin strands. <i>Journal of Experimental Biology</i> , 2010, 213, 1235-1240.	0.8	40
15	From ultra-soft slime to hard keratins: The many lives of intermediate filaments. <i>Integrative and Comparative Biology</i> , 2009, 49, 32-39.	0.9	38
16	Self-Assembly Enhances the Strength of Fibers Made from Vimentin Intermediate Filament Proteins. <i>Biomacromolecules</i> , 2014, 15, 574-581.	2.6	38
17	Coiling and maturation of a high-performance fibre in hagfish slime gland thread cells. <i>Nature Communications</i> , 2014, 5, 3534.	5.8	37
18	Stabilization and swelling of hagfish slime mucin vesicles. <i>Journal of Experimental Biology</i> , 2010, 213, 1092-1099.	0.8	36

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19	The Production of Fibers and Films from Solubilized Hagfish Slime Thread Proteins. <i>Biomacromolecules</i> , 2012, 13, 3475-3482.	2.6	35
20	Physiology, Biomechanics, and Biomimetics of Hagfish Slime. <i>Annual Review of Biochemistry</i> , 2015, 84, 947-967.	5.0	26
21	The Mechanical Behavior of Mutant K14-R125P Keratin Bundles and Networks in NEB-1 Keratinocytes. <i>PLoS ONE</i> , 2012, 7, e31320.	1.1	26
22	Skeletal stiffening in an amphibious fish out of water is a response to increased body weight. <i>Journal of Experimental Biology</i> , 2017, 220, 3621-3631.	0.8	25
23	Identification of Wet-Spinning and Post-Spin Stretching Methods Amenable to Recombinant Spider Aciniform Silk. <i>Biomacromolecules</i> , 2016, 17, 2737-2746.	2.6	23
24	Fast-start muscle dynamics in the rainbow trout <i>Oncorhynchus mykiss</i> : phase relationship of white muscle shortening and body curvature. <i>Journal of Experimental Biology</i> , 2005, 208, 929-938.	0.8	22
25	Regulation of hard α -keratin mechanics via control of intermediate filament hydration: matrix squeeze revisited. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2013, 280, 20122158.	1.2	22
26	Defensive slime formation in Pacific hagfish requires Ca^{2+} and aquaporin mediated swelling of released mucin vesicles. <i>Journal of Experimental Biology</i> , 2014, 217, 2288-96.	0.8	22
27	Confocal imaging and phylogenetic considerations of the subcutaneous neurons in the Atlantic hagfish <i>Myxine glutinosa</i> . <i>Acta Zoologica</i> , 2015, 96, 209-217.	0.6	22
28	Spontaneous unraveling of hagfish slime thread skeins is mediated by a seawater-soluble protein adhesive. <i>Journal of Experimental Biology</i> , 2014, 217, 1263-1268.	0.8	17
29	The Hagfish Gland Thread Cell: A Fiber-Producing Cell Involved in Predator Defense. <i>Cells</i> , 2016, 5, 25.	1.8	14
30	Morphological analysis of the hagfish heart. I. The ventricle, the arterial connection and the ventral aorta. <i>Journal of Morphology</i> , 2016, 277, 326-340.	0.6	14
31	Concentration-independent mechanics and structure of hagfish slime. <i>Acta Biomaterialia</i> , 2018, 79, 123-134.	4.1	13
32	Fifty years of J. R. Platt's strong inference. <i>Journal of Experimental Biology</i> , 2014, 217, 1202-1204.	0.8	12
33	Comparative Animal Mucomics: Inspiration for Functional Materials from Ubiquitous and Understudied Biopolymers. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 5377-5398.	2.6	12
34	Morphological analysis of the hagfish heart. II. The venous pole and the pericardium. <i>Journal of Morphology</i> , 2016, 277, 853-865.	0.6	10
35	Flaccid skin protects hagfishes from shark bites. <i>Journal of the Royal Society Interface</i> , 2017, 14, 20170765.	1.5	10
36	A test of biochemical symmorphosis in a heterothermic tissue: bluefin tuna white muscle. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2001, 280, R108-R114.	0.9	9

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37	Eco-mechanics of lamellar autotomy in larval damselflies. <i>Journal of Experimental Biology</i> , 2014, 217, 185-191.	0.8	9
38	Cellular mechanisms of slime gland refilling in Pacific hagfish (<i>Eptatretus stoutii</i>). <i>Journal of Experimental Biology</i> , 2018, 221, .	0.8	9
39	Concentration effects of three common fish anesthetics on Pacific hagfish (<i>Eptatretus stoutii</i>). <i>Fish Physiology and Biochemistry</i> , 2020, 46, 931-943.	0.9	8
40	Enzyme adaptation along a heterothermic tissue: the visceral retia mirabilia of the bluefin tuna. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 1997, 272, R1834-R1840.	0.9	7
41	Giant axonal neuropathy alters the structure of keratin intermediate filaments in human hair. <i>Journal of the Royal Society Interface</i> , 2017, 14, 20170123.	1.5	7
42	The effects of actomyosin disruptors on the mechanical integrity of the avian crystalline lens. <i>Molecular Vision</i> , 2015, 21, 98-109.	1.1	7
43	Unraveling inter-species differences in hagfish slime skein deployment. <i>Journal of Experimental Biology</i> , 2018, 221, .	0.8	6
44	High concentrations of trimethylamines in slime glands inhibit skein unraveling in Pacific hagfish. <i>Journal of Experimental Biology</i> , 2019, 222, .	0.8	6
45	Hagfish Houdinis: biomechanics and behavior of squeezing through small openings. <i>Journal of Experimental Biology</i> , 2017, 220, 822-827.	0.8	5
46	Emptying and refilling of slime glands in Atlantic (<i>Myxine glutinosa</i>) and Pacific (<i>Eptatretus</i>) hagfish. <i>Journal of Experimental Biology</i> , 2017, 220, 822-827.	0.8	5
47	Review of the hagfishes (Myxinidae) from the Galapagos Islands, with descriptions of four new species and their phylogenetic relationships. <i>Zoological Journal of the Linnean Society</i> , 2021, 192, 453-474.	1.0	5
48	Physiology of Swimming and Migration in Tunas. , 2013, , 45-78.		3
49	The best predictions in experimental biology are critical and persuasive. <i>Journal of Experimental Biology</i> , 2020, 223, .	0.8	3
50	A New Model of Hagfish Slime Mucous Vesicle Stabilization and Deployment. <i>Langmuir</i> , 2020, 36, 6681-6689.	1.6	3
51	No evidence for homeoviscous adaptation in a heterothermic tissue: tuna heat exchangers. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 1998, 275, R818-R823.	0.9	2
52	Functional plasticity in lamellar autotomy by larval damselflies in response to predatory larval dragonfly cues. <i>Evolutionary Ecology</i> , 2019, 33, 257-272.	0.5	2
53	Evolution of a remarkable intracellular polymer and extreme cell allometry in hagfishes. <i>Current Biology</i> , 2021, 31, 5062-5068.e4.	1.8	2
54	From reductionism to synthesis: The case of hagfish slime. <i>Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology</i> , 2021, 255, 110610.	0.7	1

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55	Music to his antennae. <i>Journal of Experimental Biology</i> , 2007, 210, 1846-1846.	0.8	0
56	Hagfish Slime and Slime Glands. , 2015, , 272-290.		0