Edna C Hardeman

List of Publications by Year
in descending order

117 papers	7,074 citations	66343 42 h-index	62596 80 g-index
126 all docs	126 docs citations	126 times ranked	8537 citing authors

#	Article	IF	Citations
1	Correlative cryo-ET identifies actin/tropomyosin filaments that mediate cellâ€“substrate adhesion in cancer cells and mechanosensitivity of cell proliferation. Nature Materials, 2022, 21, 120-128.	27.5	19
2	Induction of muscle-regenerative multipotent stem cells from human adipocytes by PDGF-AB and 5-azacytidine. Science Advances, 2021, 7, .	10.3	3
3	A robust method for particulate detection of a genetic tag for 3D electron microscopy. ELife, 2021, 10, .	6.0	16
4	Targeting the actin/tropomyosin cytoskeleton in epithelial ovarian cancer reveals multiple mechanisms of synergy with anti-microtubule agents. British Journal of Cancer, 2021, 125, 265-276.	6.4	7
5	Actinâ€“tropomyosin distribution in non-muscle cells. Journal of Muscle Research and Cell Motility, 2020, 41, 11-22.	2.0	23
6	Impact of the actin cytoskeleton on cell development and function mediated via tropomyosin isoforms. Seminars in Cell and Developmental Biology, 2020, 102, 122-131.	5.0	15
7	Irradiation impairs mitochondrial function and skeletal muscle oxidative capacity: significance for metabolic complications in cancer survivors. Metabolism: Clinical and Experimental, 2020, 103, 154025.	3.4	8
8	Visualizing the in vitro assembly of tropomyosin/actin filaments using TIRF microscopy. Biophysical Reviews, 2020, 12, 879-885.	3.2	5
9	Life and death agendas of actin filaments. Nature Materials, 2020, 19, 135-136.	27.5	2
10	Tropomyosin Tpm3.1 Is Required to Maintain the Structure and Function of the Axon Initial Segment. IScience, 2020, 23, 101053.	4.1	21
11	Drug Targeting the Actin Cytoskeleton Potentiates the Cytotoxicity of Low Dose Vincristine by Abrogating Actin-Mediated Repair of Spindle Defects. Molecular Cancer Research, 2020, 18, 1074-1087.	3.4	15
12	Dynamic polyhedral actomyosin lattices remodel micron-scale curved membranes during exocytosis in live mice. Nature Cell Biology, 2019, 21, 933-939.	10.3	19
13	Molecular integration of the anti-tropomyosin compound ATM-3507 into the coiled coil overlap region of the cancer-associated Tpm3.1. Scientific Reports, 2019, 9, 11262.	3.3	15
14	High-Content Imaging of Unbiased Chemical Perturbations Reveals that the Phenotypic Plasticity of the Actin Cytoskeleton Is Constrained. Cell Systems, 2019, 9, 496-507.e5.	6.2	14
15	Impairments in contractility and cytoskeletal organisation cause nuclear defects in nemaline myopathy. Acta Neuropathologica, 2019, 138, 477-495.	7.7	25
16	Tropomyosin concentration but not formin nucleators mDia1 and mDia3 determines the level of tropomyosin incorporation into actin filaments. Scientific Reports, 2019, 9, 6504.	3.3	11
17	Chemical biology approaches targeting the actin cytoskeleton through phenotypic screening. Current Opinion in Chemical Biology, 2019, 51, 40-47.	6.1	13
18	Colocation of Tpm3.1 and myosin IIa heads defines a discrete subdomain in stress fibres. Journal of Cell Science, 2019, 132, .	2.0	15

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19	Parallel assembly of actin and tropomyosin but not myosin II during de novo actin filament formation in live mice. Journal of Cell Science, 2018, 131, .	2.0	15
20	On-target action of anti-tropomyosin drugs regulates glucose metabolism. Scientific Reports, 2018, 8, 4604.	3.3	20
21	Fundamental differences. ELife, 2018, 7, .	6.0	7
22	Co-polymers of Actin and Tropomyosin Account for a Major Fraction of the Human Actin Cytoskeleton. Current Biology, 2018, 28, 2331-2337.e5.	3.9	47
23	Tropomyosins. Current Biology, 2017, 27, R8-R13.	3.9	24
24	Epidermal YAP2-5SA-Î”C Drives Î²-Catenin Activation to Promote Keratinocyte Proliferation in Mouse Skin InÂVivo. Journal of Investigative Dermatology, 2017, 137, 716-726.	0.7	17
25	Identification of Cancer-Targeted Tropomyosin Inhibitors and Their Synergy with Microtubule Drugs. Molecular Cancer Therapeutics, 2017, 16, 1555-1565.	4.1	38
26	A RhoA-FRET Biosensor Mouse for Intravital Imaging in Normal Tissue Homeostasis and Disease Contexts. Cell Reports, 2017, 21, 274-288.	6.4	83
27	ER/Golgi trafficking is facilitated by unbranched actin filaments containing Tpm4.2. Cytoskeleton, 2017, 74, 379-389.	2.0	11
28	Developmental Profiling of Tropomyosin Expression in Mouse Brain Reveals Tpm4.2 as the Major Post-synaptic Tropomyosin in the Mature Brain. Frontiers in Cellular Neuroscience, 2017, 11, 421.	3.7	14
29	Cover Image, Volume 74, Issue 10. Cytoskeleton, 2017, 74, C4.	2.0	0
30	Mutations in tropomyosin 4 underlie a rare form of human macrothrombocytopenia. Journal of Clinical Investigation, 2017, 127, 814-829.	8.2	57
31	Recruitment Kinetics of Tropomyosin Tpm3.1 to Actin Filament Bundles in the Cytoskeleton Is Independent of Actin Filament Kinetics. PLoS ONE, 2016, 11, e0168203.	2.5	12
32	A small molecule inhibitor of tropomyosin dissociates actin binding from tropomyosin-directed regulation of actin dynamics. Scientific Reports, 2016, 6, 19816.	3.3	28
33	Tropomyosin Promotes Lamellipodial Persistence by Collaborating with Arp2/3 at the Leading Edge. Current Biology, 2016, 26, 1312-1318.	3.9	39
34	RNA-Seq analysis of Gtf2ird1 knockout epidermal tissue provides potential insights into molecular mechanisms underpinning Williams-Beuren syndrome. BMC Genomics, 2016, 17, 450.	2.8	13
35	Treatment with ActRIIB-mFc Produces Myofiber Growth and Improves Lifespan in the Acta1 H40Y Murine Model of Nemaline Myopathy. American Journal of Pathology, 2016, 186, 1568-1581.	3.8	23
36	Intravital FRAP Imaging using an E-cadherin-GFP Mouse Reveals Disease- and Drug-Dependent Dynamic Regulation of Cell-Cell Junctions in Live Tissue. Cell Reports, 2016, 14, 152-167.	6.4	54

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37	Modulating myosin restores muscle function in a mouse model of nemaline myopathy. Annals of Neurology, 2016, 79, 717-725.	5.3	22
38	An Actin Filament Population Defined by the Tropomyosin Tpm3.1 Regulates Glucose Uptake. Traffic, 2015, 16, 691-711.	2.7	61
39	Regulation of cell proliferation by ERK and signal-dependent nuclear translocation of ERK is dependent on Tm5NM1-containing actin filaments. Molecular Biology of the Cell, 2015, 26, 2475-2490.	2.1	52
40	Tropomyosin â€“ master regulator of actin filament function in the cytoskeleton. Journal of Cell Science, 2015, 128, 2965-74.	2.0	215
41	The nuclear localization pattern and interaction partners of GTF2IRD1 demonstrate a role in chromatin regulation. Human Genetics, 2015, 134, 1099-1115.	3.8	14
42	The role of GTF2IRD1 in the auditory pathology of Williamsâ€“Beuren Syndrome. European Journal of Human Genetics, 2015, 23, 774-780.	2.8	7
43	Cell Elasticity Is Regulated by the Tropomyosin Isoform Composition of the Actin Cytoskeleton. PLoS ONE, 2015, 10, e0126214.	2.5	50
44	Alterations at the Cross-Bridge Level Are Associated with a Paradoxical Gain of Muscle Function In Vivo in a Mouse Model of Nemaline Myopathy. PLoS ONE, 2014, 9, e109066.	2.5	6
45	Lighting up microtubule cytoskeleton dynamics in skeletal muscle. Intravital, 2014, 3, e29293.	2.0	0
46	Tropomyosin isoforms support actomyosin biogenesis to generate contractile tension at the epithelial zonula adherens. Cytoskeleton, 2014, 71, 663-676.	2.0	25
47	Tropomyosins induce neuritogenesis and determine neurite branching patterns in B35 neuroblastoma cells. Molecular and Cellular Neurosciences, 2014, 58, 11-21.	2.2	27
48	Sexually dimorphic myofilament function in a mouse model of nemaline myopathy. Archives of Biochemistry and Biophysics, 2014, 564, 37-42.	3.0	2
49	A Novel Class of Anticancer Compounds Targets the Actin Cytoskeleton in Tumor Cells. Cancer Research, 2013, 73, 5169-5182.	0.9	155
50	Tropomyosin Regulates Cell Migration during Skin Wound Healing. Journal of Investigative Dermatology, 2013, 133, 1330-1339.	0.7	38
51	What makes a model system great?. Intravital, 2013, 2, e26287.	2.0	3
52	Cardiac Â-actin over-expression therapy in dominant ACTA1 disease. Human Molecular Genetics, 2013, 22, 3987-3997.	2.9	22
53	Aged skeletal muscle retains the ability to fully regenerate functional architecture. Bioarchitecture, 2013, 3, 25-37.	1.5	51
54	Distinct Underlying Mechanisms of Limb and Respiratory Muscle Fiber Weaknesses in Nemaline Myopathy. Journal of Neuropathology and Experimental Neurology, 2013, 72, 472-481.	1.7	30

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55	Combined MRI and 31P-MRS Investigations of the ACTA1(H40Y) Mouse Model of Nemaline Myopathy Show Impaired Muscle Function and Altered Energy Metabolism. PLoS ONE, 2013, 8, e61517.	2.5	17
56	GTF2IRD2from the Williams-Beuren critical region encodes a mobile element-derived fusion protein that antagonizes the action of its related family members. Journal of Cell Science, 2012, 125, 5040-50.	2.0	13
57	SUMOylation of GTF2IRD1 Regulates Protein Partner Interactions and Ubiquitin-Mediated Degradation. PLoS ONE, 2012, 7, e49283.	2.5	8
58	Mutation of Gtf2ird1 from the Williamsâ€“Beuren syndrome critical region results in facial dysplasia, motor dysfunction, and altered vocalisations. Neurobiology of Disease, 2012, 45, 913-922.	4.4	40
59	Thin Filament Diseases of Striated Muscle. , 2012, , 123-140.		0
60	Hypertrophy and dietary tyrosine ameliorate the phenotypes of a mouse model of severe nemaline myopathy. Brain, 2011, 134, 3516-3529.	7.6	59
61	Negative Autoregulation of GTF2IRD1 in Williams-Beuren Syndrome via a Novel DNA Binding Mechanism. Journal of Biological Chemistry, 2010, 285, 4715-4724.	3.4	27
62	Dendritic Function of Tau Mediates Amyloid-Î² Toxicity in Alzheimer's Disease Mouse Models. Cell, 2010, 142, 387-397.	28.9	1,563
63	Cytoskeletal Tropomyosin Tm5NM1 Is Required for Normal Excitationâ€“Contraction Coupling in Skeletal Muscle. Molecular Biology of the Cell, 2009, 20, 400-409.	2.1	45
64	A cytoskeletal tropomyosin can compromise the structural integrity of skeletal muscle. Cytoskeleton, 2009, 66, 710-720.	4.4	10
65	Diverse roles of the actin cytoskeleton in striated muscle. Journal of Muscle Research and Cell Motility, 2009, 30, 187-197.	2.0	50
66	Methylguanine DNA Methyltransferase-Mediated Drug Resistance-Based Selective Enrichment and Engraftment of Transplanted Stem Cells in Skeletal Muscle. Stem Cells, 2009, 27, 1098-1108.	3.2	7
67	Tropomyosin 4 defines novel filaments in skeletal muscle associated with muscle remodelling/regeneration in normal and diseased muscle. Cytoskeleton, 2008, 65, 73-85.	4.4	39
68	Divergent Regulation of the Sarcomere and the Cytoskeleton. Journal of Biological Chemistry, 2008, 283, 275-283.	3.4	36
69	Identification of FHL1 as a regulator of skeletal muscle mass: implications for human myopathy. Journal of Cell Biology, 2008, 183, 1033-1048.	5.2	111
70	An Actn3 knockout mouse provides mechanistic insights into the association between Â-actinin-3 deficiency and human athletic performance. Human Molecular Genetics, 2008, 17, 1076-1086.	2.9	266
71	The Murine Stanniocalcin 2 Gene Is a Negative Regulator of Postnatal Growth. Endocrinology, 2008, 149, 2403-2410.	2.8	82
72	Tropomyosin-Based Regulation of the Actin Cytoskeleton in Time and Space. Physiological Reviews, 2008, 88, 1-35.	28.8	411

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73	Mouse Models for Thin Filament Disease. Advances in Experimental Medicine and Biology, 2008, 642, 66-77.	1.6	15
74	Tropomyosins in Skeletal Muscle Diseases. Advances in Experimental Medicine and Biology, 2008, 644, 143-157.	1.6	47
75	Mechanisms underlying intranuclear rod formation. Brain, 2007, 130, 3275-3284.	7.6	63
76	Ultrastructural changes and sarcoplasmic reticulum Ca2+regulation in red vastus muscle following eccentric exercise in the rat. Experimental Physiology, 2007, 92, 437-447.	2.0	23
77	Loss of ACTN3 gene function alters mouse muscle metabolism and shows evidence of positive selection in humans. Nature Genetics, 2007, 39, 1261-1265.	21.4	278
78	Expression of Gtf2ird1, the Williams syndrome-associated gene, during mouse development. Gene Expression Patterns, 2007, 7, 396-404.	0.8	40
79	MusTRD can regulate postnatal fiber-specific expression. Developmental Biology, 2006, 293, 104-115.	2.0	20
80	Skeletal muscle repair in a mouse model of nemaline myopathy. Human Molecular Genetics, 2006, 15, 2603-2612.	2.9	44
81	Cardiac aquaporin expression in humans, rats, and mice. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 291, H705-H713.	3.2	86
82	Four and a Half LIM Protein 1 Binds Myosin-binding Protein C and Regulates Myosin Filament Formation and Sarcomere Assembly. Journal of Biological Chemistry, 2006, 281, 7666-7683.	3.4	113
83	Tropomyosin isoforms: divining rods for actin cytoskeleton function. Trends in Cell Biology, 2005, 15, 333-341.	7.9	279
84	An ?tropomyosin mutation alters dimer preference in nemaline myopathy. Annals of Neurology, 2005, 57, 42-49.	5.3	62
85	Specific Features of Neuronal Size and Shape Are Regulated by Tropomyosin Isoforms. Molecular Biology of the Cell, 2005, 16, 3425-3437.	2.1	69
86	Muscle weakness in a mouse model of nemaline myopathy can be reversed with exercise and reveals a novel myofiber repair mechanism. Human Molecular Genetics, 2004, 13, 2633-2645.	2.9	47
87	Sorting of a nonmuscle tropomyosin to a novel cytoskeletal compartment in skeletal muscle results in muscular dystrophy. Journal of Cell Biology, 2004, 166, 685-696.	5.2	56
88	Myofiber adaptational response to exercise in a mouse model of nemaline myopathy. Muscle and Nerve, 2004, 30, 470-480.	2.2	22
89	Specification of Actin Filament Function and Molecular Composition by Tropomyosin Isoforms. Molecular Biology of the Cell, 2003, 14, 1002-1016.	2.1	231
90	hMusTRD1Î±1 Represses MEF2 Activation of the Troponin I Slow Enhancer. Journal of Biological Chemistry, 2003, 278, 36603-36610.	3.4	39

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91	Regulation of alternative splicing of Gtf2ird1 and its impact on slow muscle promoter activity. Biochemical Journal, 2003, 374, 359-367.	3.7	15
92	Nemaline Myopathy Caused by Mutations in the Muscle Î±-Skeletal-Actin Gene. American Journal of Human Genetics, 2001, 68, 1333-1343.	6.2	144
93	A mutation in alpha-tropomyosinslow affects muscle strength, maturation and hypertrophy in a mouse model for nemaline myopathy. Human Molecular Genetics, 2001, 10, 317-328.	2.9	85
94	Cloning and Characterization of a Novel Gene,striamin, That Interacts with the Tumor Suppressor Protein p53. Journal of Biological Chemistry, 1999, 274, 14948-14955.	3.4	5
95	Creating intracellular structural domains: spatial segregation of actin and tropomyosin isoforms in neurons. BioEssays, 1998, 20, 892-900.	2.5	62
96	ISOFORM SORTING AND THE CREATION OF INTRACELLULAR COMPARTMENTS. Annual Review of Cell and Developmental Biology, 1998, 14, 339-372.	9.4	47
97	Identification of a Novel Slow-Muscle-Fiber Enhancer Binding Protein, MusTRD1. Molecular and Cellular Biology, 1998, 18, 6641-6652.	2.3	78
98	Nerve-responsive troponin I slow promoter does not respond to unloading. Journal of Applied Physiology, 1998, 84, 1083-1087.	2.5	9
99	Creating intracellular structural domains: spatial segregation of actin and tropomyosin isoforms in neurons. BioEssays, 1998, 20, 892-900.	2.5	1
100	Variations in the Relative mRNA Levels of Actins and Myosin Heavy Chains do not Produce Corresponding Differences in their Proteins in the Adult Human Heart. Journal of Molecular and Cellular Cardiology, 1997, 29, 895-905.	1.9	20
101	Reappearance of the minor Î±-sarcomeric actins in postnatal muscle. American Journal of Physiology - Cell Physiology, 1997, 273, C1801-C1810.	4.6	9
102	Impact of .ALPHA.-Skeletal Actin but not .ALPHA.-Cardiac Actin on Myoblast Morphology.. Cell Structure and Function, 1997, 22, 173-179.	1.1	6
103	Different electrophoretic techniques produce conflicting data in the analysis of myocardial samples from dilated cardiomyopathy patients: Protein levels do not necessarily reflect mRNA levels. Electrophoresis, 1996, 17, 235-238.	2.4	9
104	The Human Troponin I Slow Promoter Directs Slow Fiber-Specific Expression in Transgenic Mice. DNA and Cell Biology, 1995, 14, 599-607.	1.9	24
105	Developmental Regulation of Troponin I Isoform Genes in Striated Muscles of Transgenic Mice. Developmental Biology, 1995, 169, 487-503.	2.0	60
106	Identification of a program of contractile protein gene expression initiated upon skeletal muscle differentiation. Developmental Dynamics, 1993, 196, 25-36.	1.8	55
107	Nerve-Dependent and -Independent Patterns of mRNA Expression in Regenerating Skeletal Muscle. Developmental Biology, 1993, 159, 173-183.	2.0	75
108	Coordination of skeletal muscle gene expression occurs late in mammalian development. Developmental Biology, 1991, 146, 167-178.	2.0	51

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109	Multiple mechanisms regulate muscle fiber diversity. FASEB Journal, 1991, 5, 3064-3070.	0.5	113
110	Coordinate reciprocal trends in glycolytic and mitochondrial transcript accumulations during the in vitro differentiation of human myoblasts. Journal of Cellular Physiology, 1990, 142, 566-573.	4.1	106
111	Differential control of tropomyosin mRNA levels during myogenesis suggests the existence of an isoform competition-autoregulatory compensation control mechanism. Developmental Biology, 1990, 138, 443-453.	2.0	73
112	Regulation of contractile protein gene family mRNA pool sizes during myogenesis. Developmental Biology, 1990, 142, 270-282.	2.0	37
113	The pattern of actin expression in human fibroblast Ã— mouse muscle heterokaryons suggests that human muscle regulatory factors are produced. Cell, 1986, 47, 123-130.	28.9	77
114	Isolation of full-length cDNAs encoding abundant adult human skeletal muscle mRNAs. Gene, 1985, 38, 177-188.	2.2	14
115	Effects of compactin on the levels of 3-hydroxy-3-methylglutaryl coenzyme A reductase in compactin-resistant C100 and wild-type cells. Archives of Biochemistry and Biophysics, 1984, 232, 549-561.	3.0	44
116	The Limits of Phenotypic Plasticity in the Actin Cytoskeleton Revealed by Unbiased Chemical Perturbation. SSRN Electronic Journal, 0, , .	0.4	0
117	Tropomyosin Tpm3.1 is Required to Maintain the Structure and Function of the Axon InitialÂSegment. SSRN Electronic Journal, 0, , .	0.4	0