Elisabeth R Barton

List of Publications by Year
in descending order

53 papers	2,508 citations	257450 24 h-index	214800 47 g-index
53 all docs	53 docs citations	53 times ranked	3815 citing authors

#	Article	IF	Citations
1	Genetic and pharmacologic inhibition of mitochondrial-dependent necrosis attenuates muscular dystrophy. Nature Medicine, 2008, 14, 442-447.	30.7	324
2	SMASH â€" semi-automatic muscle analysis using segmentation of histology: a MATLAB application. Skeletal Muscle, 2014, 4, 21.	4.2	171
3	Viral expression of insulin-like growth factor-I enhances muscle hypertrophy in resistance-trained rats. Journal of Applied Physiology, 2004, 96, 1097-1104.	2.5	170
4	A Zebrafish Embryo Culture System Defines Factors that Promote Vertebrate Myogenesis across Species. Cell, 2013, 155, 909-921.	28.9	144
5	Role of IGF-I signaling in muscle bone interactions. Bone, 2015, 80, 79-88.	2.9	122
6	Viral expression of insulin-like growth factor-I isoforms promotes different responses in skeletal muscle. Journal of Applied Physiology, 2006, 100, 1778-1784.	2.5	108
7	The ABCs of IGF-I isoforms: impact on muscle hypertrophy and implications for repair. Applied Physiology, Nutrition and Metabolism, 2006, 31, 791-797.	1.9	108
8	Collagen content does not alter the passive mechanical properties of fibrotic skeletal muscle in<i>mdx</i>mice. American Journal of Physiology - Cell Physiology, 2014, 306, C889-C898.	4.6	105
9	Osteopontin ablation ameliorates muscular dystrophy by shifting macrophages to a pro-regenerative phenotype. Journal of Cell Biology, 2016, 213, 275-288.	5.2	102
10	Systemic administration ofL-arginine benefitsmdx skeletal muscle function. Muscle and Nerve, 2005, 32, 751-760.	2.2	98
11	Rat supraspinatus muscle atrophy after tendon detachment. Journal of Orthopaedic Research, 2005, 23, 259-265.	2.3	93
12	Regulation of fibrosis in muscular dystrophy. Matrix Biology, 2018, 68-69, 602-615.	3.6	87
13	Impact of sarcoglycan complex on mechanical signal transduction in murine skeletal muscle. American Journal of Physiology - Cell Physiology, 2006, 290, C411-C419.	4.6	72
14	The insulin-like growth factor (IGF)-I E-peptides are required for isoform-specific gene expression and muscle hypertrophy after local IGF-I production. Journal of Applied Physiology, 2010, 108, 1069-1076.	2.5	72
15	Deletion of muscle GRP94 impairs both muscle and body growth by inhibiting local IGF production. FASEB Journal, 2012, 26, 3691-3702.	0.5	69
16	Increased collagen crossâ€linking is a signature of dystrophinâ€deficient muscle. Muscle and Nerve, 2016, 54, 71-78.	2.2	66
17	Optimizing IGF-I for skeletal muscle therapeutics. Growth Hormone and IGF Research, 2014, 24, 157-163.	1.1	56
18	A Key Role for the Ubiquitin Ligase UBR4 in Myofiber Hypertrophy in Drosophila and Mice. Cell Reports, 2019, 28, 1268-1281.e6.	6.4	56

#	Article	IF	Citations
19	Targeting latent TGFÎ² release in muscular dystrophy. Science Translational Medicine, 2014, 6, 259ra144.	12.4	41
20	Muscle hypertrophy induced by myostatin inhibition accelerates degeneration in dysferlinopathy. Human Molecular Genetics, 2015, 24, 5711-5719.	2.9	34
21	Deletion of muscle IGFâ€ŀ transiently impairs growth and progressively disrupts glucose homeostasis in male mice. FASEB Journal, 2019, 33, 181-194.	0.5	30
22	Antagonistic control of myofiber size and muscle protein quality control by the ubiquitin ligase UBR4 during aging. Nature Communications, 2021, 12, 1418.	12.8	30
23	Caspase-12 ablation preserves muscle function in the mdx mouse. Human Molecular Genetics, 2014, 23, 5325-5341.	2.9	29
24	Diaphragm displays early and progressive functional deficits in dysferlinâ€deficient mice. Muscle and Nerve, 2010, 42, 22-29.	2.2	26
25	Insulinâ€Like Growth Factor I Regulation and Its Actions in Skeletal Muscle. , 2018, 9, 413-438.		26
26	Whole Body Periodic Acceleration Is an Effective Therapy to Ameliorate Muscular Dystrophy in mdx Mice. PLoS ONE, 2014, 9, e106590.	2.5	25
27	Matrix Metalloproteinase 13 from Satellite Cells is Required for Efficient Muscle Growth and Regeneration. Cellular Physiology and Biochemistry, 2020, 54, 333-353.	1.6	24
28	Selective Retinoic Acid Receptor Î³ Agonists Promote Repair of Injured Skeletal Muscle in Mouse. American Journal of Pathology, 2015, 185, 2495-2504.	3.8	22
29	Mature IGF-I excels in promoting functional muscle recovery from disuse atrophy compared with pro-IGF-IA. Journal of Applied Physiology, 2014, 116, 797-806.	2.5	19
30	Masticatory muscles of mouse do not undergo atrophy in space. FASEB Journal, 2015, 29, 2769-2779.	0.5	19
31	Gamma-sarcoglycan is required for the response of archvillin to mechanical stimulation in skeletal muscle. Human Molecular Genetics, 2015, 24, 2470-2481.	2.9	17
32	The ties that bind: functional clusters in limb-girdle muscular dystrophy. Skeletal Muscle, 2020, 10, 22.	4.2	17
33	Review Article: Mechanisms and Strategies to Counter Muscle Atrophy. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2003, 58, M923-M926.	3.6	16
34	Deleting nebulin's C-terminus reveals its importance to sarcomeric structure and function and is sufficient to invoke nemaline myopathy. Human Molecular Genetics, 2019, 28, 1709-1725.	2.9	15
35	Restoration of Î³-Sarcoglycan Localization and Mechanical Signal Transduction Are Independent in Murine Skeletal Muscle. Journal of Biological Chemistry, 2010, 285, 17263-17270.	3.4	14
36	Absence of Î³-sarcoglycan alters the response of p70S6 kinase to mechanical perturbation in murine skeletal muscle. Skeletal Muscle, 2014, 4, 13.	4.2	14

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37	Hesperidin Promotes Osteogenesis and Modulates Collagen Matrix Organization and Mineralization In Vitro and In Vivo. International Journal of Molecular Sciences, 2021, 22, 3223.	4.1	14
38	IGF expression in HPV-related and HPV-unrelated human cancer cells. Oncology Reports, 2014, 32, 893-900.	2.6	11
39	Actions and interactions of IGF-I and MMPs during muscle regeneration. Seminars in Cell and Developmental Biology, 2021, 119, 11-22.	5.0	10
40	Pharmacologic approaches to prevent skeletal muscle atrophy after spinal cord injury. Current Opinion in Pharmacology, 2021, 60, 193-199.	3.5	9
41	The IGF axis in HPV associated cancers. Mutation Research - Reviews in Mutation Research, 2017, 772, 67-77.	5.5	6
42	Functional muscle hypertrophy by increased insulinâ€like growth factor 1 does not require dysferlin. Muscle and Nerve, 2019, 60, 464-473.	2.2	4
43	Contrast-Enhanced Near-Infrared Optical Imaging Detects Exacerbation and Amelioration of Murine Muscular Dystrophy. Molecular Imaging, 2017, 16, 153601211773243.	1.4	3
44	Deletion of muscle <i>Igf1</i> exacerbates disuse atrophy weakness in mice. Journal of Applied Physiology, 2021, 131, 881-894.	2.5	3
45	Generation and characterization of monoclonal antibodies that recognize human and murine supervillin protein isoforms. PLoS ONE, 2018, 13, e0205910.	2.5	2
46	The impact of hindlimb disuse on sepsisâ€induced myopathy in mice. Physiological Reports, 2021, 9, e14979.	1.7	2
47	Novel Î³-sarcoglycan interactors in murine muscle membranes. Skeletal Muscle, 2022, 12, 2.	4.2	2
48	Loss of Muscle IGFâ€1 Production Delays Functional Recovery of Skeletal Muscle Following Disuse. FASEB Journal, 2019, 33, 700.23.	0.5	1
49	A calpain inhibitor fails to rescue dystrophic skeletal muscle. FASEB Journal, 2007, 21, A940.	0.5	0
50	Catalase overâ€expression protects dystrophic skeletal muscle. FASEB Journal, 2008, 22, 754.6.	0.5	0
51	Resveratrol feeding may be therapeutic for dystrophic skeletal muscle. FASEB Journal, 2009, 23, 600.2.	0.5	0
52	Postnatal PGCâ€1Î± overâ€expression improves muscle function in a mouse model of Duchenne muscular dystrophy. FASEB Journal, 2009, 23, 600.3.	0.5	0
53	Longâ€term wheel running improves cardiac function but has negative consequences for diaphragmatic function in the mdx mouse. FASEB Journal, 2013, 27, 712.16.	0.5	0