Marco Brotto

List of Publications by Year
in descending order

109 papers	2,578 citations	218381 26 h-index	214527 47 g-index
115 all docs	115 docs citations	115 times ranked	3345 citing authors

#	Article	IF	Citations
1	Bone and muscle: Interactions beyond mechanical. Bone, 2015, 80, 109-114.	1.4	232
2	Uncontrolled calcium sparks act as a dystrophic signal for mammalian skeletal muscle. Nature Cell Biology, 2005, 7, 525-530.	4.6	151
3	Î²-aminoisobutyric Acid, l-BAIBA, Is a Muscle-Derived Osteocyte Survival Factor. Cell Reports, 2018, 22, 1531-1544.	2.9	131
4	Muscle aging is associated with compromised Ca2+ spark signaling and segregated intracellular Ca2+ release. Journal of Cell Biology, 2006, 174, 639-645.	2.3	120
5	Prostaglandin E2: From Clinical Applications to Its Potential Role in Bone- Muscle Crosstalk and Myogenic Differentiation. Recent Patents on Biotechnology, 2012, 6, 223-229.	0.4	109
6	Visual gene-network analysis reveals the cancer gene co-expression in human endometrial cancer. BMC Genomics, 2014, 15, 300.	1.2	94
7	Deficiency of MIP/MTMR14 phosphatase induces a muscle disorder by disrupting Ca2+ homeostasis. Nature Cell Biology, 2009, 11, 769-776.	4.6	91
8	Prostaglandin E₂ promotes proliferation of skeletal muscle myoblasts via EP4 receptor activation. Cell Cycle, 2015, 14, 1507-1516.	1.3	86
9	Endocrine Crosstalk Between Muscle and Bone. Current Osteoporosis Reports, 2014, 12, 135-141.	1.5	83
10	Crosstalk Between MLOâ€Y4 Osteocytes and C2C12 Muscle Cells Is Mediated by the Wnt/Î²â€Catenin Pathway. JBMR Plus, 2017, 1, 86-100.	1.3	83
11	<i>METTL21C</i> Is a Potential Pleiotropic Gene for Osteoporosis and Sarcopenia Acting Through the Modulation of the NF-ÎºB Signaling Pathway. Journal of Bone and Mineral Research, 2014, 29, 1531-1540.	3.1	80
12	Compromised storeâ€operated Ca²⁺ entry in aged skeletal muscle. Aging Cell, 2008, 7, 561-568.	3.0	77
13	Physiology of Mechanotransduction: How Do Muscle and Bone â€œTalkâ€•to One Another?. Clinical Reviews in Bone and Mineral Metabolism, 2014, 12, 77-85.	1.3	65
14	Store-operated Ca2+entry in muscle physiology and diseases. BMB Reports, 2014, 47, 69-79.	1.1	62
15	Sarcopenia: Pharmacology of Today and Tomorrow. Journal of Pharmacology and Experimental Therapeutics, 2012, 343, 540-546.	1.3	60
16	SH3BP2 Cherubism Mutation Potentiates TNF-Î±â€“Induced Osteoclastogenesis via NFATc1 and TNF-Î±â€“Mediated Inflammatory Bone Loss. Journal of Bone and Mineral Research, 2014, 29, 2618-2635.	3.1	57
17	Muscle-specific inositide phosphatase (MIP/MTMR14) is reduced with age and its loss accelerates skeletal muscle aging process by altering calcium homeostasis. Aging, 2010, 2, 504-513.	1.4	57
18	Store-Operated Ca2+ Entry (SOCE) Contributes to Normal Skeletal Muscle Contractility in young but not in aged skeletal muscle. Aging, 2011, 3, 621-634.	1.4	53

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19	Extracellular Membrane Vesicles Derived from 143B Osteosarcoma Cells Contain Pro-Osteoclastogenic Cargo: A Novel Communication Mechanism in Osteosarcoma Bone Microenvironment. Translational Oncology, 2014, 7, 331-340.	1.7	50
20	Novel 3D-printed methacrylated chitosan-laponite nanosilicate composite scaffolds enhance cell growth and biomineral formation in MC3T3 pre-osteoblasts. Journal of Materials Research, 2020, 35, 58-75.	1.2	46
21	Deletion of Mbtps1 (Pcsk8, S1p, Ski-1) Gene in Osteocytes Stimulates Soleus Muscle Regeneration and Increased Size and Contractile Force with Age. Journal of Biological Chemistry, 2016, 291, 4308-4322.	1.6	42
22	Histone methylase MLL1 coordinates with HIF and regulate lncRNA HOTAIR expression under hypoxia. Gene, 2017, 629, 16-28.	1.0	40
23	Quantification of aminobutyric acids and their clinical applications as biomarkers for osteoporosis. Communications Biology, 2020, 3, 39.	2.0	39
24	Ex Vivo Assessment of Contractility, Fatigability and Alternans in Isolated Skeletal Muscles. Journal of Visualized Experiments, 2012, , e4198.	0.2	38
25	Novel excitation-contraction coupling related genes reveal aspects of muscle weakness beyond atrophyâ€"new hopes for treatment of musculoskeletal diseases. Frontiers in Physiology, 2014, 5, 37.	1.3	37
26	Fibroblast growth factor 23 does not directly influence skeletal muscle cell proliferation and differentiation or ex vivo muscle contractility. American Journal of Physiology - Endocrinology and Metabolism, 2018, 315, E594-E604.	1.8	30
27	Outcomes of Stay Strong, Stay Healthy in Community Settings. Journal of Aging and Health, 2013, 25, 1388-1397.	0.9	28
28	Targeted quantification of lipid mediators in skeletal muscles using restricted access media-based trap-and-elute liquid chromatography-mass spectrometry. Analytica Chimica Acta, 2017, 984, 151-161.	2.6	28
29	The effect of malaria and anti-malarial drugs on skeletal and cardiac muscles. Malaria Journal, 2016, 15, 524.	0.8	27
30	Skeletal Muscle Troponin as a Novel Biomarker to Enhance Assessment of the Impact of Strength Training on Fall Prevention in the Older Adults. Nursing Research, 2014, 63, 75-82.	0.8	26
31	Transitioning from Acute to Chronic Pain: An Examination of Different Trajectories of Low-Back Pain. Healthcare (Switzerland), 2018, 6, 48.	1.0	25
32	Aging, sarcopenia and store-operated calcium entry. Cell Cycle, 2011, 10, 4201-4202.	1.3	24
33	Skeletal Muscle, but not Cardiovascular Function, Is Altered in a Mouse Model of Autosomal Recessive Hypophosphatemic Rickets. Frontiers in Physiology, 2016, 7, 173.	1.3	24
34	Fibroblast growth factor 9 (FGF9) inhibits myogenic differentiation of C2C12 and human muscle cells. Cell Cycle, 2019, 18, 3562-3580.	1.3	24
35	Cellular and Physiological Effects of Dietary Supplementation with Î2-Hydroxy-Î2-Methylbutyrate (HMB) and Î2-Alanine in Late Middle-Aged Mice. PLoS ONE, 2016, 11, e0150066.	1.1	22
36	Nampt activator P7C3 ameliorates diabetes and improves skeletal muscle function modulating cell metabolism and lipid mediators. Journal of Cachexia, Sarcopenia and Muscle, 2022, 13, 1177-1196.	2.9	21

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37	Characterization of a novel murine Sost ERT2 Cre model targeting osteocytes. Bone Research, 2019, 7, 6.	5.4	20
38	Ionic Silicon Protects Oxidative Damage and Promotes Skeletal Muscle Cell Regeneration. International Journal of Molecular Sciences, 2021, 22, 497.	1.8	19
39	Amorphous Silicon Oxynitrophosphide-Coated Implants Boost Angiogenic Activity of Endothelial Cells. Tissue Engineering - Part A, 2020, 26, 15-27.	1.6	18
40	Silicon nitride enhances osteoprogenitor cell growth and differentiation via increased surface energy and formation of amide and nanocrystalline HA for craniofacial reconstruction. Medical Devices & Sensors, 2019, 2, e10032.	2.7	17
41	A Randomized-Controlled Trial Pilot Study Examining the Neurodevelopmental Effects of a 5-Week M Technique Intervention on Very Preterm Infants. Advances in Neonatal Care, 2014, 14, 187-200.	0.5	15
42	A multimodal assessment of balance in elderly and young adults. Oncotarget, 2016, 7, 13297-13306.	0.8	15
43	Identification and Functional Characterization of Metabolites for Bone Mass in Peri- and Postmenopausal Chinese Women. Journal of Clinical Endocrinology and Metabolism, 2021, 106, e3159-e3177.	1.8	14
44	Deletion of <i>SREBF1,</i> a Functional Bone-Muscle Pleiotropic Gene, Alters Bone Density and Lipid Signaling in Zebrafish. Endocrinology, 2021, 162, .	1.4	13
45	Multi-Staged Regulation of Lipid Signaling Mediators during Myogenesis by COX-1/2 Pathways. International Journal of Molecular Sciences, 2019, 20, 4326.	1.8	12
46	Silicon Oxynitrophosphide <scp>Nanoscale Coating</scp> Enhances Antioxidant Markerâ€Induced Angiogenesis During in vivo Cranial Boneâ€Defect Healing. JBMR Plus, 2021, 5, e10425.	1.3	12
47	NAD+ centric mechanisms and molecular determinants of skeletal muscle disease and aging. Molecular and Cellular Biochemistry, 2022, 477, 1829-1848.	1.4	12
48	Lessons from the FNIH-NIA-FDA sarcopenia consensus summit. IBMS BoneKEy, 2012, 9, .	0.1	10
49	New Surgical Model for Boneâ€"Muscle Injury Reveals Age and Gender-Related Healing Patterns in the 5 Lipoxygenase (5LO) Knockout Mouse. Frontiers in Endocrinology, 2020, 11, 484.	1.5	10
50	Temporal Adaptive Changes in Contractility and Fatigability of Diaphragm Muscles from Streptozotocin-Diabetic Rats. Journal of Biomedicine and Biotechnology, 2010, 2010, 1-8.	3.0	9
51	Numb is required for optimal contraction of skeletal muscle. Journal of Cachexia, Sarcopenia and Muscle, 2022, 13, 454-466.	2.9	9
52	Butyrate Ameliorates Mitochondrial Respiratory Capacity of The Motor-Neuron-like Cell Line NSC34-G93A, a Cellular Model for ALS. Biomolecules, 2022, 12, 333.	1.8	9
53	Neural control of postural sway: Relationship to strength measures in young and elderly adults. Experimental Gerontology, 2019, 118, 39-44.	1.2	8
54	The toxic effects of chloroquine and hydroxychloroquine on skeletal muscle: a systematic review and meta-analysis. Scientific Reports, 2021, 11, 6589.	1.6	8

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55	Old and new biomarkers for volumetric muscle loss. Current Opinion in Pharmacology, 2021, 59, 61-69.	1.7	8
56	The skeletal muscles of mice infected with Plasmodium berghei and Plasmodium chabaudi reveal a crosstalk between lipid mediators and gene expression. Malaria Journal, 2020, 19, 254.	0.8	7
57	Boneâ€"muscle interactions: ASBMR Topical Meeting, July 2012. IBMS BoneKEy, 2012, 9, .	0.1	6
58	Nanodrug delivery platform for glucocorticoid use in skeletal muscle injury. Canadian Journal of Physiology and Pharmacology, 2018, 96, 681-689.	0.7	6
59	A Dual Mode Pulsed Electro-Magnetic Cell Stimulator Produces Acceleration of Myogenic Differentiation. Recent Patents on Biotechnology, 2013, 7, 71-81.	0.4	6
60	A simple model of immune and muscle cell crosstalk during muscle regeneration. Mathematical Biosciences, 2021, 333, 108543.	0.9	5
61	Preliminary study of inâ€situ 3D bioprinted nanoâ€silicate biopolymer scaffolds for muscle repair in VML defects. FASEB Journal, 2020, 34, 1-1.	0.2	5
62	Microâ€patterned Bioactive Amorphous Silicon Oxynitride Enhances Adhesion, Growth, and Myotubes and Axon Alignment in Muscle and Nerve Cells. FASEB Journal, 2020, 34, 1-1.	0.2	4
63	Primum non nocere â€" Are chloroquine and hydroxychloroquine safe prophylactic/treatment options for SARS-CoV-2 (covid-19)?. Revista De Saude Publica, 2020, 54, 68.	0.7	4
64	The Muscle-Bone Connection. , 2016, , 59-92.		3
65	A comparative study on silicon nitride, titanium and polyether ether ketone on mouse preâ€osteoblast cells. Medical Devices & Sensors, 2021, 4, e10139.	2.7	3
66	Mini review: Biomaterials in repair and regeneration of nerve in a volumetric muscle loss. Neuroscience Letters, 2021, 762, 136145.	1.0	3
67	Bone and Muscle. Molecular and Integrative Toxicology, 2017, , 281-316.	0.5	2
68	The relative efficacy of two exercise methods for older adults with chronic low back pain: A preliminary randomized control study. Journal of Applied Biobehavioral Research, 2019, 24, e12132.	2.0	2
69	Evidence for pathophysiological crosstalk between bones, cardiac, skeletal and smooth muscles. FASEB Journal, 2010, 24, 1046.8.	0.2	2
70	Detrimental effects of malaria, toxoplasmosis, leishmaniosis and Chagas disease on cardiac and skeletal muscles. Medical Research Archives, 2020, 8, .	0.1	2
71	RNA-sequencing Reveals a Gene Expression Signature in Skeletal Muscle of a Mouse Model of Age-associated Postoperative Functional Decline. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2022, 77, 1939-1950.	1.7	2
72	Potential Roles of Silicon/Silicaâ€Based Nanoparticles in 3D Printed Hydrogels for Skeletal Muscle Regeneration. FASEB Journal, 2021, 35, .	0.2	1

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73	Cross-Talk Between Muscle and Bone. , 2019, , 73-97.		1
74	Patterned Silicon Oxynitride (SiON x) Scaffolds Enhance Alignment and Myogenic Differentiation of C2C12 Muscle Cells. FASEB Journal, 2019, 33, 539.5.	0.2	1
75	Wnt3a a potent modulator of myogenic differentiation and muscle cell function. FASEB Journal, 2012, 26, 1143.2.	0.2	1
76	PinhÃ£oâ€manso (Jatropha curcas) demonstrates potent antibacterial properties in a rat model of third degree burns (1180.18). FASEB Journal, 2014, 28, 1180.18.	0.2	1
77	Fibroblast Growth Factor 9 (FGF9) is Expressed in An Osteocyteâ€like â€œMiniâ€boneâ€• Cell Line and Inhibits C2C12 Myogenesis via Overexpression of Myostatin. FASEB Journal, 2018, 32, lb491.	0.2	1
78	Comparative Analysis of Fat Composition in Marrow, Serum, and Muscle from Aging C57BL6 mice. Mechanisms of Ageing and Development, 2022, , 111690.	2.2	1
79	Musculoskeletal Biomarkers Response to Exercise in Older Adults. Frontiers in Aging, 0, 3, .	1.2	1
80	MG29/SYPL2 Contributes to Dysregulation of Lipid Composition and Store Operated Ca2+ Entry in Aging Skeletal Muscle. Biophysical Journal, 2015, 108, 268a-269a.	0.2	0
81	Transitioning from acute to chronic pain: a simulation study of trajectories of low back pain. Journal of Translational Medicine, 2019, 17, 306.	1.8	0
82	Potential Roles of Numb in Myogenesis, Mitochondrial Metabolism, and Calcium Signaling. FASEB Journal, 2021, 35, .	0.2	0
83	Acute Knockdown of MG29 in Mouse Muscle Cells Reveals Signaling Mechanisms Associated with Polyunsaturated Fatty Acid (PUFA) â€“ Implications for Sarcopenia. FASEB Journal, 2021, 35, .	0.2	0
84	Mild Heat Shock Promotes Hypertrophy in Cardiac, Skeletal and Smooth Muscle Cells. FASEB Journal, 2010, 24, 1047.3.	0.2	0
85	MIP/MTMR14 is implicated in skeletal muscle aging. FASEB Journal, 2010, 24, .	0.2	0
86	Skeletal Muscles Maintain Osteocyte Viability. FASEB Journal, 2011, 25, 1059.18.	0.2	0
87	Multipleâ€staged Regulation of Myogenic Differentiation by Prostaglandin E2. FASEB Journal, 2012, 26, 1143.1.	0.2	0
88	Cellular mechanisms of tendonâ€muscle crosstalk. FASEB Journal, 2012, 26, 1143.3.	0.2	0
89	DELETION OF MBTPS1 IN BONE LEADS TO ENHANCEMENT OF MUSCLE MASS AND FUNCTION IN MATURE MICE. FASEB Journal, 2013, 27, .	0.2	0
90	Characterization of myogenesis in C2C12 myoblasts using Flow Cytometry. FASEB Journal, 2013, 27, 1152.17.	0.2	0

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91	METTL21C: From GWAS to in vitro function in skeletal muscle cells. FASEB Journal, 2013, 27, 942.5.	0.2	0
92	Prostaglandin E2 signaling plays an important role in the regulation of the cell cycle progression in C2C12 myoblasts. FASEB Journal, 2013, 27, 1152.18.	0.2	0
93	Dysfunctional calcium homeostasis in aged mice primary tenocytes Å' a potential functional link to tendon disorders (863.10). FASEB Journal, 2014, 28, 863.10.	0.2	0
94	Wnt3a potentiates myogenesis in C2C12 myoblasts through the modulation of intracellular calcium and activation of the Î²â€catenin signaling pathway (1102.23). FASEB Journal, 2014, 28, 1102.23.	0.2	0
95	Boneâ€muscle crosstalk: more than mechanical (704.3). FASEB Journal, 2014, 28, 704.3.	0.2	0
96	The Effect Of Prostaglandin E2 Signaling On Myogenic Differentiation And Muscle Contractility. Medicine and Science in Sports and Exercise, 2014, 46, 308.	0.2	0
97	Crosstalk between Bone and Muscle: Deletion of Mbtps1 in Bone Leads to Ageâ€Dependent Increase in Muscle Size and Contractile Function. FASEB Journal, 2015, 29, 495.2.	0.2	0
98	Cellular and Physiological Implications of Dietary Supplementation with Betaâ€Hydroxyâ€Betaâ€Methylbutyrate and Betaâ€Alanine in Late Middleâ€Aged Mice. FASEB Journal, 2015, 29, LB693.	0.2	0
99	Tendon Cells Demonstrate Storeâ€Operated Calcium Entry Capacity and Differences in Calcium Signaling Through Aging. FASEB Journal, 2015, 29, 815.7.	0.2	0
100	Prostaglandin E 2 Signaling via EP4 Receptor is Important for Cell Cycle Progression and the Regulation of Reactive Oxygen Species Production in Primary Myoblast. FASEB Journal, 2015, 29, 947.16.	0.2	0
101	Wnt3a and Wnt1 Enhance Myogenesis of C2C12 Myoblasts â€" Potential Mechanisms of Osteocyte to Muscle Cell Signaling. FASEB Journal, 2015, 29, 947.13.	0.2	0
102	KvÎ² subunit interacts with NEDD4 leading to decreased mouse skeletal muscle size.. FASEB Journal, 2018, 32, 768.3.	0.2	0
103	In vitro testing of fluticasone drug delivery system for inflammatory injury and repair. FASEB Journal, 2019, 33, 868.16.	0.2	0
104	Lipidomic analysis of lipid mediators derived from cyclooxygenaseâ€1 and â€2 pathways reveals their new implications in skeletal muscle. FASEB Journal, 2019, 33, 539.7.	0.2	0
105	Paracrine Modulation of Mechanotransduction. , 2020, , 374-391.		0
106	Genetic Profiling of Malaria and Lipid Mediator Quantification of Mouse Striated Muscles Infected with Malaria Parasites. FASEB Journal, 2020, 34, 1-1.	0.2	0
107	Higher Susceptibility to Skeletal Muscle TA (Tibialis Anterior) Injury with Increased Inflammation in Aged Mice.. FASEB Journal, 2020, 34, 1-1.	0.2	0
108	Acute Knockdown of MG29 Alters Skeletal Muscle Cells Differentiation and Leads to Cellular Atrophy. FASEB Journal, 2020, 34, 1-1.	0.2	0

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109	Enhanced Isolation of Single Myofibers in Flexor Digitorum Brevis Dissociation. FASEB Journal, 2022, 36, .	0.2	0