Feliciano Protasi

List of Publications by Year
in descending order

78 papers	5,747 citations	81900 39 h-index	76900 74 g-index
80 all docs	80 docs citations	80 times ranked	5131 citing authors

#	Article	IF	Citations
1	Shape, Size, and Distribution of Ca2+ Release Units and Couplons in Skeletal and Cardiac Muscles. Biophysical Journal, 1999, 77, 1528-1539.	0.5	540
2	The contribution of reactive oxygen species to sarcopenia and muscle ageing. Experimental Gerontology, 2004, 39, 17-24.	2.8	345
3	RyR1 S-Nitrosylation Underlies Environmental Heat Stroke and Sudden Death in Y522S RyR1 Knockin Mice. Cell, 2008, 133, 53-65.	28.9	321
4	DRP1-mediated mitochondrial shape controls calcium homeostasis and muscle mass. Nature Communications, 2019, 10, 2576.	12.8	274
5	Mitochondria Are Linked to Calcium Stores in Striated Muscle by Developmentally Regulated Tethering Structures. Molecular Biology of the Cell, 2009, 20, 1058-1067.	2.1	240
6	Long-Term Denervation in Humans Causes Degeneration of Both Contractile and Excitation-Contraction Coupling Apparatus, Which Is Reversible by Functional Electrical Stimulation (FES): A Role for Myofiber Regeneration?. Journal of Neuropathology and Experimental Neurology, 2004, 63, 919-931.	1.7	173
7	The Mitochondrial Calcium Uniporter Controls Skeletal Muscle Trophism InÂVivo. Cell Reports, 2015, 10, 1269-1279.	6.4	170
8	Structural differentiation of skeletal muscle fibers in the absence of innervation in humans. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 19339-19344.	7.1	153
9	Long-Term High-Level Exercise Promotes Muscle Reinnervation With Age. Journal of Neuropathology and Experimental Neurology, 2014, 73, 284-294.	1.7	136
10	Role of Ryanodine Receptors in the Assembly of Calcium Release Units in Skeletal Muscle. Journal of Cell Biology, 1998, 140, 831-842.	5.2	134
11	Reorganized stores and impaired calcium handling in skeletal muscle of mice lacking calsequestrinâ€1. Journal of Physiology, 2007, 583, 767-784.	2.9	130
12	Comparative Ultrastructure of Ca2+ Release Units in Skeletal and Cardiac Muscle. Annals of the New York Academy of Sciences, 1998, 853, 20-30.	3.8	129
13	Electrical Stimulation Counteracts Muscle Decline in Seniors. Frontiers in Aging Neuroscience, 2014, 6, 189.	3.4	128
14	Orai1-dependent calcium entry promotes skeletal muscle growth and limits fatigue. Nature Communications, 2013, 4, 2805.	12.8	118
15	Characterization and temporal development of cores in a mouse model of malignant hyperthermia. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 21996-22001.	7.1	113
16	The Assembly of Calcium Release Units in Cardiac Muscle. Annals of the New York Academy of Sciences, 2005, 1047, 76-85.	3.8	112
17	Role of Mitofusin-2 in mitochondrial localization and calcium uptake in skeletal muscle. Cell Calcium, 2015, 57, 14-24.	2.4	104
18	RYR1 and RYR3 Have Different Roles in the Assembly of Calcium Release Units of Skeletal Muscle. Biophysical Journal, 2000, 79, 2494-2508.	0.5	99

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19	Anestheticâ€and heatâ€induced sudden death in calsequestrinâ€1â€knockout mice. FASEB Journal, 2009, 23, 1710-1720.	0.5	99
20	Calsequestrinâ€1: a new candidate gene for malignant hyperthermia and exertional/environmental heat stroke. Journal of Physiology, 2009, 587, 3095-3100.	2.9	95
21	Electrical Stimulation of Denervated Muscles: First Results of a Clinical Study. Artificial Organs, 2005, 29, 203-206.	1.9	93
22	Mitochondrial superoxide flashes: metabolic biomarkers of skeletal muscle activity and disease. FASEB Journal, 2011, 25, 3068-3078.	0.5	90
23	Coordinated Incorporation of Skeletal Muscle Dihydropyridine Receptors and Ryanodine Receptors in Peripheral Couplings of BC3H1 Cells. Journal of Cell Biology, 1997, 137, 859-870.	5.2	84
24	Age-dependent uncoupling of mitochondria from Ca2+ release units in skeletal muscle. Oncotarget, 2015, 6, 35358-35371.	1.8	83
25	Progressive Disorganization of the Excitation-Contraction Coupling Apparatus in Aging Human Skeletal Muscle as Revealed by Electron Microscopy: A Possible Role in the Decline of Muscle Performance. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2006, 61, 995-1008.	3.6	82
26	Formation and Maturation of the Calcium Release Apparatus in Developing and Adult Avian Myocardium. Developmental Biology, 1996, 173, 265-278.	2.0	80
27	Multiple Regions of RyR1 Mediate Functional and Structural Interactions with Î±1S-Dihydropyridine Receptors in Skeletal Muscle. Biophysical Journal, 2002, 83, 3230-3244.	0.5	80
28	Structural interaction between RYRs and DHPRs in calcium release units of cardiac and skeletal muscle cells. Frontiers in Bioscience - Landmark, 2002, 7, d650-658.	3.0	74
29	The Relative Position of RyR Feet and DHPR Tetrads in Skeletal Muscle. Journal of Molecular Biology, 2004, 342, 145-153.	4.2	71
30	Physical exercise in aging human skeletal muscle increases mitochondrial calcium uniporter expression levels and affects mitochondria dynamics. Physiological Reports, 2016, 4, e13005.	1.7	71
31	Exercise-dependent formation of new junctions that promote STIM1-Orai1 assembly in skeletal muscle. Scientific Reports, 2017, 7, 14286.	3.3	67
32	Allele-Specific Silencing of Mutant mRNA Rescues Ultrastructural and Arrhythmic Phenotype in Mice Carriers of the R4496C Mutation in the Ryanodine Receptor Gene (<i>RYR2</i>). Circulation Research, 2017, 121, 525-536.	4.5	64
33	Sequential stages in the age-dependent gradual formation and accumulation of tubular aggregates in fast twitch muscle fibers: SERCA and calsequestrin involvement. Age, 2012, 34, 27-41.	3.0	54
34	A Mutation in the<i>CASQ1</i>Gene Causes a Vacuolar Myopathy with Accumulation of Sarcoplasmic Reticulum Protein Aggregates. Human Mutation, 2014, 35, 1163-1170.	2.5	53
35	Differential impact of mitochondrial positioning on mitochondrial Ca²⁺ uptake and Ca²⁺ spark suppression in skeletal muscle. American Journal of Physiology - Cell Physiology, 2011, 301, C1128-C1139.	4.6	50
36	Expression of ryanodine receptor RyR3 produces Ca 2+ sparks in dyspedic myotubes. Journal of Physiology, 2000, 525, 91-103.	2.9	48

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37	Effects of chronic electrical stimulation on long-term denervated muscles of the rabbit hind limb. Journal of Muscle Research and Cell Motility, 2007, 28, 203-217.	2.0	47
38	A Subpopulation of Rat Muscle Fibers Maintains an Assessable Excitation-Contraction Coupling Mechanism After Long-Standing Denervation Despite Lost Contractility. Journal of Neuropathology and Experimental Neurology, 2009, 68, 1256-1268.	1.7	45
39	Abnormal Propagation of Calcium Waves and Ultrastructural Remodeling in Recessive Catecholaminergic Polymorphic Ventricular Tachycardia. Circulation Research, 2013, 113, 142-152.	4.5	44
40	Contractile impairment and structural alterations of skeletal muscles from knockout mice lacking type 1 and type 3 ryanodine receptors. FEBS Letters, 1998, 422, 160-164.	2.8	39
41	Paradoxical buffering of calcium by calsequestrin demonstrated for the calcium store of skeletal muscle. Journal of General Physiology, 2010, 136, 325-338.	1.9	39
42	Accelerated Activation of SOCE Current in Myotubes from Two Mouse Models of Anesthetic- and Heat-Induced Sudden Death. PLoS ONE, 2013, 8, e77633.	2.5	36
43	Transverse tubule remodeling enhances Orai1-dependent Ca2+ entry in skeletal muscle. ELife, 2019, 8, .	6.0	36
44	Enhanced dihydropyridine receptor calcium channel activity restores muscle strength in JP45/CASQ1 double knockout mice. Nature Communications, 2013, 4, 1541.	12.8	35
45	Antioxidants Protect Calsequestrin-1 Knockout Mice from Halothane- and Heat-induced Sudden Death. Anesthesiology, 2015, 123, 603-617.	2.5	35
46	Atrophy-resistant fibers in permanent peripheral denervation of human skeletal muscle. Neurological Research, 2008, 30, 137-144.	1.3	34
47	Strenuous exercise triggers a lifeâ€threatening response in mice susceptible to malignant hyperthermia. FASEB Journal, 2017, 31, 3649-3662.	0.5	34
48	Oxidative stress, mitochondrial damage, and cores in muscle from calsequestrin-1 knockout mice. Skeletal Muscle, 2015, 5, 10.	4.2	33
49	Antioxidant Treatment Reduces Formation of Structural Cores and Improves Muscle Function in RYR1^{Y522S/WT}Mice. Oxidative Medicine and Cellular Longevity, 2017, 2017, 1-15.	4.0	33
50	Pre-assembled Ca2+ entry units and constitutively active Ca2+ entry in skeletal muscle of calsequestrin-1 knockout mice. Journal of General Physiology, 2020, 152, .	1.9	32
51	Differential Effect of Calsequestrin Ablation on Structure and Function of Fast and Slow Skeletal Muscle Fibers. Journal of Biomedicine and Biotechnology, 2011, 2011, 1-10.	3.0	30
52	Mechanical parameters of the molecular motor myosin II determined in permeabilised fibres from slow and fast skeletal muscles of the rabbit. Journal of Physiology, 2018, 596, 1243-1257.	2.9	29
53	Calsequestrin (CASQ1) rescues function and structure of calcium release units in skeletal muscles of CASQ1-null mice. American Journal of Physiology - Cell Physiology, 2012, 302, C575-C586.	4.6	28
54	Calcium entry units (CEUs): perspectives in skeletal muscle function and disease. Journal of Muscle Research and Cell Motility, 2021, 42, 233-249.	2.0	28

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55	Altered Ca2+ Handling and Oxidative Stress Underlie Mitochondrial Damage and Skeletal Muscle Dysfunction in Aging and Disease. Metabolites, 2021, 11, 424.	2.9	27
56	Lessons from calsequestrin-1 ablation in vivo: much more than a Ca2+ buffer after all. Journal of Muscle Research and Cell Motility, 2011, 32, 257-270.	2.0	26
57	Muscle activity prevents the uncoupling of mitochondria from Ca2+ Release Units induced by ageing and disuse. Archives of Biochemistry and Biophysics, 2019, 663, 22-33.	3.0	26
58	Mitochondrial Ca2+-Handling in Fast Skeletal Muscle Fibers from Wild Type and Calsequestrin-Null Mice. PLoS ONE, 2013, 8, e74919.	2.5	25
59	Increased Ca2+ storage capacity of the skeletal muscle sarcoplasmic reticulum of transgenic mice over-expressing membrane bound calcium binding protein junctate. Journal of Cellular Physiology, 2007, 213, 464-474.	4.1	23
60	A 3D diffusional-compartmental model of the calcium dynamics in cytosol, sarcoplasmic reticulum and mitochondria of murine skeletal muscle fibers. PLoS ONE, 2018, 13, e0201050.	2.5	23
61	Long-Term Exercise Reduces Formation of Tubular Aggregates and Promotes Maintenance of Ca2+ Entry Units in Aged Muscle. Frontiers in Physiology, 2020, 11, 601057.	2.8	21
62	Impaired Binding to Junctophilin-2 and Nanostructural Alteration in CPVT Mutation. Circulation Research, 2021, 129, e35-e52.	4.5	19
63	All three ryanodine receptor isoforms generate rapid cooling responses in muscle cells. American Journal of Physiology - Cell Physiology, 2004, 286, C662-C670.	4.6	17
64	Estrogens Protect Calsequestrin-1 Knockout Mice from Lethal Hyperthermic Episodes by Reducing Oxidative Stress in Muscle. Oxidative Medicine and Cellular Longevity, 2017, 2017, 1-15.	4.0	17
65	Parvalbumin affects skeletal muscle trophism through modulation of mitochondrial calcium uptake. Cell Reports, 2021, 35, 109087.	6.4	16
66	New method for determining total calcium content in tissue applied to skeletal muscle with and without calsequestrin. Journal of General Physiology, 2015, 145, 127-153.	1.9	14
67	Excessive Accumulation of Ca2 + in Mitochondria of Y522S-RYR1 Knock-in Mice: A Link Between Leak From the Sarcoplasmic Reticulum and Altered Redox State. Frontiers in Physiology, 2019, 10, 1142.	2.8	14
68	Post-natal heart adaptation in a knock-in mouse model of calsequestrin 2-linked recessive catecholaminergic polymorphic ventricular tachycardia. Experimental Cell Research, 2014, 321, 178-189.	2.6	12
69	Improper Remodeling of Organelles Deputed to Ca2+ Handling and Aerobic ATP Production Underlies Muscle Dysfunction in Ageing. International Journal of Molecular Sciences, 2021, 22, 6195.	4.1	11
70	A<i>CASQ1</i>founder mutation in three Italian families with protein aggregate myopathy and hyperCKaemia. Journal of Medical Genetics, 2015, 52, 617-626.	3.2	10
71	Aerobic Training Prevents Heatstrokes in Calsequestrin-1 Knockout Mice by Reducing Oxidative Stress. Oxidative Medicine and Cellular Longevity, 2018, 2018, 1-14.	4.0	8
72	PERK inhibition attenuates the abnormalities of the secretory pathway and the increased apoptotic rate induced by SIL1 knockdown in HeLa cells. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2018, 1864, 3164-3180.	3.8	7

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73	Proteomic Analysis of Marinescoâ€“Sjogren Syndrome Fibroblasts Indicates Pro-Survival Metabolic Adaptation to SIL1 Loss. International Journal of Molecular Sciences, 2021, 22, 12449.	4.1	6
74	Ageing Causes Ultrastructural Modification to Calcium Release Units and Mitochondria in Cardiomyocytes. International Journal of Molecular Sciences, 2021, 22, 8364.	4.1	4
75	Calsequestrin Deletion Facilitates Hippocampal Synaptic Plasticity and Spatial Learning in Post-Natal Development. International Journal of Molecular Sciences, 2020, 21, 5473.	4.1	3
76	Store-Operated Ca2+ Entry in Skeletal Muscle Contributes to the Increase in Body Temperature during Exertional Stress. International Journal of Molecular Sciences, 2022, 23, 3772.	4.1	3
77	Functional Electrical Stimulation: A Possible Strategy to Improve Muscle Function in Central Core Disease?. Frontiers in Neurology, 2019, 10, 479.	2.4	2
78	High-Fat Diet Impairs Muscle Function and Increases the Risk of Environmental Heatstroke in Mice. International Journal of Molecular Sciences, 2022, 23, 5286.	4.1	2