Charlotte A Peterson

List of Publications by Year in descending order

85 papers	4,701 citations	101543 36 h-index	106344 65 g-index
89 all docs	89 docs citations	89 times ranked	4545 citing authors

#	Article	IF	Citations
1	Effective fiber hypertrophy in satellite cell-depleted skeletal muscle. Development (Cambridge), 2011, 138, 3657-3666.	2.5	531
2	Inducible depletion of satellite cells in adult, sedentary mice impairs muscle regenerative capacity without affecting sarcopenia. Nature Medicine, 2015, 21, 76-80.	30.7	358
3	Myogenic Progenitor Cells Control Extracellular Matrix Production by Fibroblasts during Skeletal Muscle Hypertrophy. Cell Stem Cell, 2017, 20, 56-69.	11.1	276
4	Regulation of the muscle fiber micro environment by activated satellite cells during hypertrophy. FASEB Journal, 2014, 28, 1654-1665.	0.5	225
5	Muscle inflammatory response and insulin resistance: synergistic interaction between macrophages and fatty acids leads to impaired insulin action. American Journal of Physiology - Endocrinology and Metabolism, 2009, 296, E1300-E1310.	3.5	181
6	MyoVision: software for automated high-content analysis of skeletal muscle immunohistochemistry. Journal of Applied Physiology, 2018, 124, 40-51.	2.5	161
7	Aging alters macrophage properties in human skeletal muscle both at rest and in response to acute resistance exercise. Experimental Gerontology, 2006, 41, 320-327.	2.8	131
8	Satellite cell depletion does not inhibit adult skeletal muscle regrowth following unloading-induced atrophy. American Journal of Physiology - Cell Physiology, 2012, 303, C854-C861.	4.6	122
9	Differential requirement for satellite cells during overload-induced muscle hypertrophy in growing versus mature mice. Skeletal Muscle, 2017, 7, 14.	4.2	119
10	Nuclear translocation of EndoG at the initiation of disuse muscle atrophy and apoptosis is specific to myonuclei. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2006, 291, R1730-R1740.	1.8	111
11	Starring or Supporting Role? Satellite Cells and Skeletal Muscle Fiber Size Regulation. Physiology, 2018, 33, 26-38.	3.1	107
12	Fibre typeâ€specific satellite cell response to aerobic training in sedentary adults. Journal of Physiology, 2014, 592, 2625-2635.	2.9	105
13	Intrinsic muscle clock is necessary for musculoskeletal health. Journal of Physiology, 2015, 593, 5387-5404.	2.9	100
14	Metformin blunts muscle hypertrophy in response to progressive resistance exercise training in older adults: A randomized, doubleâ€blind, placeboâ€controlled, multicenter trial: The MASTERS trial. Aging Cell, 2019, 18, e13039.	6.7	95
15	Measures of Healthspan as Indices of Aging in Miceâ€"A Recommendation. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2016, 71, 427-430.	3.6	76
16	Myonuclear transcription is responsive to mechanical load and DNA content but uncoupled from cell size during hypertrophy. Molecular Biology of the Cell, 2016, 27, 788-798.	2.1	73
17	Myonuclear Domain Flexibility Challenges Rigid Assumptions on Satellite Cell Contribution to Skeletal Muscle Fiber Hypertrophy. Frontiers in Physiology, 2018, 9, 635.	2.8	72
18	Skeletal Muscle Pathology in Peripheral Artery Disease. Arteriosclerosis, Thrombosis, and Vascular Biology, 2020, 40, 2577-2585.	2.4	70

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19	Elevated myonuclear density during skeletal muscle hypertrophy in response to training is reversed during detraining. American Journal of Physiology - Cell Physiology, 2019, 316, C649-C654.	4.6	63
20	Depletion of resident muscle stem cells negatively impacts running volume, physical function, and muscle fiber hypertrophy in response to lifelong physical activity. American Journal of Physiology - Cell Physiology, 2020, 318, C1178-C1188.	4.6	62
21	Human skeletal muscle macrophages increase following cycle training and are associated with adaptations that may facilitate growth. Scientific Reports, 2019, 9, 969.	3.3	59
22	Chronic muscle weakness and mitochondrial dysfunction in the absence of sustained atrophy in a preclinical sepsis model. ELife, 2019, 8, .	6.0	58
23	Fusion-Independent Satellite Cell Communication to Muscle Fibers During Load-Induced Hypertrophy. Function, 2020, 1, zqaa009.	2.3	53
24	Immunohistochemical Identification of Human Skeletal Muscle Macrophages. Bio-protocol, 2018, 8, .	0.4	53
25	Muscle memory: myonuclear accretion, maintenance, morphology, and miRNA levels with training and detraining in adult mice. Journal of Cachexia, Sarcopenia and Muscle, 2020, 11, 1705-1722.	7.3	51
26	Fusion and beyond: Satellite cell contributions to loadingâ€induced skeletal muscle adaptation. FASEB Journal, 2021, 35, e21893.	0.5	51
27	Fiber typing human skeletal muscle with fluorescent immunohistochemistry. Journal of Applied Physiology, 2019, 127, 1632-1639.	2.5	50
28	Reduced voluntary running performance is associated with impaired coordination as a result of muscle satellite cell depletion in adult mice. Skeletal Muscle, 2015, 5, 41.	4.2	47
29	The effect of sex on immune cells in healthy aging: Elderly women have more robust natural killer lymphocytes than do elderly men. Mechanisms of Ageing and Development, 2016, 156, 25-33.	4.6	46
30	Cocoa to Improve Walking Performance in Older People With Peripheral Artery Disease. Circulation Research, 2020, 126, 589-599.	4.5	45
31	Pioglitazone Treatment Reduces Adipose Tissue Inflammation through Reduction of Mast Cell and Macrophage Number and by Improving Vascularity. PLoS ONE, 2014, 9, e102190.	2.5	45
32	Mechanical overloadâ€induced muscleâ€derived extracellular vesicles promote adipose tissue lipolysis. FASEB Journal, 2021, 35, e21644.	0.5	44
33	Satellite Cell Depletion Disrupts Transcriptional Coordination and Muscle Adaptation to Exercise. Function, 2020, 2, zqaa033.	2.3	43
34	Association of fibromyalgia with altered skeletal muscle characteristics which may contribute to postexertional fatigue in postmenopausal women. Arthritis and Rheumatism, 2013, 65, 519-528.	6.7	41
35	Aged Muscle Demonstrates Fiber-Type Adaptations in Response to Mechanical Overload, in the Absence of Myofiber Hypertrophy, Independent of Satellite Cell Abundance. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2016, 71, 461-467.	3.6	41
36	Reduced skeletal muscle satellite cell number alters muscle morphology after chronic stretch but allows limited serial sarcomere addition. Muscle and Nerve, 2017, 55, 384-392.	2.2	41

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37	In vivo analysis of Î³H2AX+ cells in skeletal muscle from aged and obese humans. FASEB Journal, 2020, 34, 7018-7035.	0.5	41
38	Metformin to Augment Strength Training Effective Response in Seniors (MASTERS): study protocol for a randomized controlled trial. Trials, 2017, 18, 192.	1.6	40
39	Genetic and epigenetic regulation of skeletal muscle ribosome biogenesis with exercise. Journal of Physiology, 2021, 599, 3363-3384.	2.9	40
40	Early satellite cell communication creates a permissive environment for long-term muscle growth. IScience, 2021, 24, 102372.	4.1	39
41	Walking performance is positively correlated to calf muscle fiber size in peripheral artery disease subjects, but fibers show aberrant mitophagy: an observational study. Journal of Translational Medicine, 2016, 14, 284.	4.4	37
42	Deletion of SA Î²â€Gal+ cells using senolytics improves muscle regeneration in old mice. Aging Cell, 2022, 21, e13528.	6.7	34
43	Peripheral artery disease, calf skeletal muscle mitochondrial DNA copy number, and functional performance. Vascular Medicine, 2018, 23, 340-348.	1.5	33
44	A novel tetracycline-responsive transgenic mouse strain for skeletal muscle-specific gene expression. Skeletal Muscle, 2018, 8, 33.	4.2	31
45	Muscle Fiber Splitting Is a Physiological Response to Extreme Loading in Animals. Exercise and Sport Sciences Reviews, 2019, 47, 108-115.	3.0	29
46	A guide for using NIH Image J for single slice cross-sectional area and composition analysis of the thigh from computed tomography. PLoS ONE, 2019, 14, e0211629.	2.5	28
47	Making Mice Mighty: recent advances in translational models of load-induced muscle hypertrophy. Journal of Applied Physiology, 2020, 129, 516-521.	2.5	28
48	Myonuclear transcriptional dynamics in response to exercise following satellite cell depletion. IScience, 2021, 24, 102838.	4.1	28
49	Insulin-resistant subjects have normal angiogenic response to aerobic exercise training in skeletal muscle, but not in adipose tissue. Physiological Reports, 2015, 3, e12415.	1.7	27
50	Synergist Ablation as a Rodent Model to Study Satellite Cell Dynamics in Adult Skeletal Muscle. Methods in Molecular Biology, 2016, 1460, 43-52.	0.9	27
51	Methodological issues limit interpretation of negative effects of satellite cell depletion on adult muscle hypertrophy. Development (Cambridge), 2017, 144, 1363-1365.	2.5	27
52	The myonuclear DNA methylome in response to an acute hypertrophic stimulus. Epigenetics, 2020, 15, 1151-1162.	2.7	27
53	Correlations of Calf Muscle Macrophage Content With Muscle Properties and Walking Performance in Peripheral Artery Disease. Journal of the American Heart Association, 2020, 9, e015929.	3.7	26
54	Associations of Peripheral Artery Disease With Calf Skeletal Muscle Mitochondrial DNA Heteroplasmy. Journal of the American Heart Association, 2020, 9, e015197.	3.7	26

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55	Cycle training modulates satellite cell and transcriptional responses to a bout of resistance exercise. Physiological Reports, 2016, 4, e12973.	1.7	25
56	Senolytic treatment rescues blunted muscle hypertrophy in old mice. GeroScience, 2022, 44, 1925-1940.	4.6	25
57	Metformin alters skeletal muscle transcriptome adaptations to resistance training in older adults. Aging, 2020, 12, 19852-19866.	3.1	24
58	Resident muscle stem cells are not required for testosterone-induced skeletal muscle hypertrophy. American Journal of Physiology - Cell Physiology, 2019, 317, C719-C724.	4.6	23
59	Depletion of Pax7+ satellite cells does not affect diaphragm adaptations to running in young or aged mice. Journal of Physiology, 2017, 595, 6299-6311.	2.9	22
60	â€œMuscle memoryâ€•not mediated by myonuclear number? Secondary analysis of human detraining data. Journal of Applied Physiology, 2019, 127, 1814-1816.	2.5	21
61	Automated cross-sectional analysis of trained, severely atrophied, and recovering rat skeletal muscles using MyoVision 2.0. Journal of Applied Physiology, 2022, 132, 593-610.	2.5	20
62	Human Body Composition and Immunity: Visceral Adipose Tissue Produces IL-15 and Muscle Strength Inversely Correlates with NK Cell Function in Elderly Humans. Frontiers in Immunology, 2018, 9, 440.	4.8	19
63	Integrative mRNA-microRNA analyses reveal novel interactions related to insulin sensitivity in human adipose tissue. Physiological Genomics, 2016, 48, 145-153.	2.3	18
64	A muscle cellâ€macrophage axis involving matrix metalloproteinase 14 facilitates extracellular matrix remodeling with mechanical loading. FASEB Journal, 2022, 36, e22155.	0.5	18
65	Associations of muscle lipid content with physical function and resistance training outcomes in older adults: altered responses with metformin. GeroScience, 2021, 43, 629-644.	4.6	14
66	Skeletal muscle properties show collagen organization and immune cell content are associated with resistance exercise response heterogeneity in older persons. Journal of Applied Physiology, 2022, 132, 1432-1447.	2.5	12
67	Immune Function and Muscle Adaptations to Resistance exercise in Older Adults: Study Protocol for a Randomized Controlled Trial of a Nutritional Supplement. Trials, 2015, 16, 121.	1.6	11
68	Tutorial for using SliceOmatic to calculate thigh area and composition from computed tomography images from older adults. PLoS ONE, 2018, 13, e0204529.	2.5	11
69	Muscle transcriptional networks linked to resistance exercise training hypertrophic response heterogeneity. Physiological Genomics, 2021, 53, 206-221.	2.3	11
70	Time-course analysis of the effect of embedded metal on skeletal muscle gene expression. Physiological Genomics, 2020, 52, 575-587.	2.3	10
71	Phosphorylation of eukaryotic initiation factor 4E is dispensable for skeletal muscle hypertrophy. American Journal of Physiology - Cell Physiology, 2019, 317, C1247-C1255.	4.6	9
72	Data correlations between gender, cytomegalovirus infection and T cells, NK cells, and soluble immune mediators in elderly humans. Data in Brief, 2016, 8, 536-544.	1.0	7

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73	Learning based automatic detection of myonuclei in isolated single skeletal muscle fibers using multi-focus image fusion. , 2013, , .		6
74	Exercise-mediated alteration of hippocampal Dicer mRNA and miRNAs is associated with lower BACE1 gene expression and Aî²1-42 in female 3xTg-AD mice. Journal of Neurophysiology, 2020, 124, 1571-1577.	1.8	5
75	Potential Benefits of Combined Statin and Metformin Therapy on Resistance Training Response in Older Individuals. Frontiers in Physiology, 2022, 13, 872745.	2.8	5
76	On the appropriateness of antibody selection to estimate mTORC1 activity. Acta Physiologica, 2020, 228, e13354.	3.8	4
77	Hydrophobic sand is a viable method of urine collection from the rat for extracellular vesicle biomarker analysis. Molecular Genetics and Metabolism Reports, 2019, 21, 100505.	1.1	3
78	Urine miRNAs as potential biomarkers for systemic reactions induced by exposure to embedded metal. Biomarkers in Medicine, 2021, 15, 1397-1410.	1.4	3
79	Sarcopenia and hypertrophy in aged skeletal muscle is independent of lifelong muscle stem cell depletion. FASEB Journal, 2013, 27, 1150.8.	0.5	1
80	Regulation of human skeletal muscle gene expression by aging, resistance exercise, and ILâ€1î²: identification of candidate mRNAs using a custom realâ€time PCR screening method. FASEB Journal, 2007, 21, A1309.	0.5	0
81	Skeletal muscle fibroblast collagen expression is negatively regulated by satellite cells. FASEB Journal, 2012, 26, 1078.15.	0.5	0
82	Satellite Cells are not Prerequisite for Skeletal Muscle Regrowth Following Unloadingâ€Induced Atrophy. FASEB Journal, 2012, 26, 1143.11.	0.5	0
83	Antiâ€Inflammatory Muscle Macrophage Phenotype is Predictive of Resistance Training Gain in Older Individuals. FASEB Journal, 2012, 26, 1143.12.	0.5	0
84	The influence of satellite cellâ€depletion on glycosaminoglycan accumulation in aged skeletal muscle. FASEB Journal, 2013, 27, 1150.10.	0.5	0
85	Satellite Cell Depletion Negatively Impacts Voluntary Wheel Running Performance in Mice. FASEB Journal, 2013, 27, 1152.9.	0.5	0