Stuart Lee

List of Publications by Year in descending order

106 papers	3,227 citations	136740 32 h-index	161609 54 g-index
106 all docs	106 docs citations	106 times ranked	2367 citing authors

#	Article	IF	Citations
1	The NASA Twins Study: A multidimensional analysis of a year-long human spaceflight. Science, 2019, 364, .	6.0	576
2	Assessment of Jugular Venous Blood Flow Stasis and Thrombosis During Spaceflight. JAMA Network Open, 2019, 2, e1915011.	2.8	152
3	Muscle Volume, Strength, Endurance, and Exercise Loads During 6-Month Missions in Space. Aviation, Space, and Environmental Medicine, 2010, 81, 91-104.	0.6	129
4	Physiological and Functional Alterations after Spaceflight and Bed Rest. Medicine and Science in Sports and Exercise, 2018, 50, 1961-1980.	0.2	108
5	Supine lower body negative pressure exercise during bed rest maintains upright exercise capacity. Journal of Applied Physiology, 2000, 89, 218-227.	1.2	107
6	Peak exercise oxygen uptake during and following long-duration spaceflight. Journal of Applied Physiology, 2014, 117, 231-238.	1.2	105
7	Musculoskeletal Adaptations to Training with the Advanced Resistive Exercise Device. Medicine and Science in Sports and Exercise, 2011, 43, 146-156.	0.2	88
8	Optic Disc Edema after 30 Days of Strict Head-down Tilt Bed Rest. Ophthalmology, 2019, 126, 467-468.	2.5	76
9	Lower body negative pressure treadmill exercise as a countermeasure for bed rest-induced bone loss in female identical twins. Bone, 2007, 40, 529-537.	1.4	75
10	WISE-2005: Supine treadmill exercise within lower body negative pressure and flywheel resistive exercise as a countermeasure to bed rest-induced bone loss in women during 60-day simulated microgravity. Bone, 2008, 42, 572-581.	1.4	72
11	Artificial gravity training reduces bed rest-induced cardiovascular deconditioning. European Journal of Applied Physiology, 2012, 112, 605-616.	1.2	72
12	Orthostatic Intolerance After ISS and Space Shuttle Missions. Aerospace Medicine and Human Performance, 2015, 86, 54-67.	0.2	69
13	Optic Disc Edema and Choroidal Engorgement in Astronauts During Spaceflight and Individuals Exposed to Bed Rest. JAMA Ophthalmology, 2020, 138, 165.	1.4	65
14	Cardiovascular exercise in the U.S. space program: Past, present and future. Acta Astronautica, 2010, 66, 974-988.	1.7	64
15	Association of Long-Duration Spaceflight With Anterior and Posterior Ocular Structure Changes in Astronauts and Their Recovery. JAMA Ophthalmology, 2020, 138, 553.	1.4	64
16	Compression Garments as Countermeasures to Orthostatic Intolerance. Aviation, Space, and Environmental Medicine, 2009, 80, 437-442.	0.6	58
17	Training with the International Space Station Interim Resistive Exercise Device. Medicine and Science in Sports and Exercise, 2003, 35, 1935-1945.	0.2	57
18	Effects of shortâ€term mild hypercapnia during headâ€down tilt on intracranial pressure and ocular structures in healthy human subjects. Physiological Reports, 2017, 5, e13302.	0.7	55

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19	Lower body negative pressure exercise plus brief postexercise lower body negative pressure improve post-bed rest orthostatic tolerance. Journal of Applied Physiology, 2007, 103, 1964-1972.	1.2	51
20	Isokinetic Strength Changes Following Long-Duration Spaceflight on the ISS. Aerospace Medicine and Human Performance, 2015, 86, 68-77.	0.2	51
21	Upright exercise or supine lower body negative pressure exercise maintains exercise responses after bed rest. Medicine and Science in Sports and Exercise, 1997, 29, 892-900.	0.2	49
22	Early-phase musculoskeletal adaptations to different levels of eccentric resistance after 8Âweeks of lower body training. European Journal of Applied Physiology, 2014, 114, 2263-2280.	1.2	46
23	WISE-2005: Countermeasures to prevent muscle deconditioning during bed rest in women. Journal of Applied Physiology, 2014, 116, 654-667.	1.2	45
24	Supine LBNP Exercise Maintains Exercise Capacity in Male Twins during 30-d Bed Rest. Medicine and Science in Sports and Exercise, 2007, 39, 1315-1326.	0.2	44
25	WISE-2005. Medicine and Science in Sports and Exercise, 2009, 41, 2165-2176.	0.2	43
26	LBNP exercise protects aerobic capacity and sprint speed of female twins during 30 days of bed rest. Journal of Applied Physiology, 2009, 106, 919-928.	1.2	40
27	Aerobic Exercise Deconditioning and Countermeasures During Bed Rest. Aviation, Space, and Environmental Medicine, 2010, 81, 52-63.	0.6	40
28	Left ventricular remodeling during and after 60 days of sedentary head-down bed rest. Journal of Applied Physiology, 2016, 120, 956-964.	1.2	39
29	Multi-omic, Single-Cell, and Biochemical Profiles of Astronauts Guide Pharmacological Strategies for Returning to Gravity. Cell Reports, 2020, 33, 108429.	2.9	37
30	Arterial structure and function during and after long-duration spaceflight. Journal of Applied Physiology, 2020, 129, 108-123.	1.2	36
31	Lower-body negative-pressure exercise and bed-rest???mediated orthostatic intolerance. Medicine and Science in Sports and Exercise, 2002, 34, 1446-1453.	0.2	35
32	Gradient Compression Garments as a Countermeasure to Post-Spaceflight Orthostatic Intolerance. Aviation, Space, and Environmental Medicine, 2010, 81, 883-887.	0.6	35
33	Internal jugular pressure increases during parabolic flight. Physiological Reports, 2016, 4, e13068.	0.7	33
34	Core temperature measurement during supine exercise: esophageal, rectal, and intestinal temperatures. Aviation, Space, and Environmental Medicine, 2000, 71, 939-45.	0.6	33
35	Role of skin blood flow and sweating rate in exercise thermoregulation after bed rest. Journal of Applied Physiology, 2002, 92, 2026-2034.	1.2	32
36	Association of Genetics and B Vitamin Status With the Magnitude of Optic Disc Edema During 30-Day Strict Head-Down Tilt Bed Rest. JAMA Ophthalmology, 2019, 137, 1195.	1.4	32

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37	WISE 2005: Aerobic and resistive countermeasures prevent paraspinal muscle deconditioning during 60-day bed rest in women. Journal of Applied Physiology, 2016, 120, 1215-1222.	1.2	30
38	Spatial Heterogeneity in the Response of the Proximal Femur to Two Lower-Body Resistance Exercise Regimens. Journal of Bone and Mineral Research, 2014, 29, 1337-1345.	3.1	28
39	Maximal exercise as a countermeasure to orthostatic intolerance after spaceflight. Medicine and Science in Sports and Exercise, 2001, 33, 75-80.	0.2	26
40	Unchanged cerebrovascular CO₂ reactivity and hypercapnic ventilatory response during strict headâ€down tilt bed rest in a mild hypercapnic environment. Journal of Physiology, 2020, 598, 2491-2505.	1.3	26
41	Noninvasive determination of exercise-induced hydrodgen ion threshold through direct optical measurement. Journal of Applied Physiology, 2008, 104, 837-844.	1.2	25
42	Thigh Cuffs as a Countermeasure for Ocular Changes in Simulated Weightlessness. Ophthalmology, 2018, 125, 459-460.	2.5	23
43	Space Exercise and Earth Benefits. Current Pharmaceutical Biotechnology, 2005, 6, 305-317.	0.9	21
44	Abdomen-High Elastic Gradient Compression Garments During Post-Spaceflight Stand Tests. Aviation, Space, and Environmental Medicine, 2013, 84, 459-466.	0.6	21
45	Intraocular pressure and choroidal thickness respond differently to lower body negative pressure during spaceflight. Journal of Applied Physiology, 2021, 131, 613-620.	1.2	21
46	Inflight exercise affects stand test responses after space flight. Medicine and Science in Sports and Exercise, 1999, 31, 1755.	0.2	21
47	Sex differences in blood pressure control during 6Â° head-down tilt bed rest. American Journal of Physiology - Heart and Circulatory Physiology, 2013, 304, H1114-H1123.	1.5	19
48	Optic disc edema and chorioretinal folds develop during strict 6Â° headâ€down tilt bed rest with or without artificial gravity. Physiological Reports, 2021, 9, e14977.	0.7	18
49	Treadmill exercise within lower-body negative pressure attenuates simulated spaceflight-induced reductions of balance abilities in men but not women. Npj Microgravity, 2016, 2, 16022.	1.9	16
50	Changes in the Optic Nerve Head and Choroid Over 1 Year of Spaceflight. JAMA Ophthalmology, 2021, 139, 663.	1.4	16
51	Test Battery Designed to Quickly and Safely Assess Diverse Indices of Neuromuscular Function After Unweighting. Journal of Strength and Conditioning Research, 2011, 25, 545-555.	1.0	15
52	Mechanical countermeasures to headward fluid shifts. Journal of Applied Physiology, 2021, 130, 1766-1777.	1.2	15
53	Lower body negative pressure reduces jugular and portal vein volumes and counteracts the elevation of middle cerebral vein velocity during long-duration spaceflight. Journal of Applied Physiology, 2021, 131, 1080-1087.	1.2	14
54	Virtual Guidance as a Tool to Obtain Diagnostic Ultrasound for Spaceflight and Remote Environments. Aviation, Space, and Environmental Medicine, 2012, 83, 995-1000.	0.6	13

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55	Gradient compression garments protect against orthostatic intolerance during recovery from bed rest. European Journal of Applied Physiology, 2014, 114, 597-608.	1.2	13
56	Treadmill exercise within lower body negative pressure protects leg lean tissue mass and extensor strength and endurance during bed rest. Physiological Reports, 2016, 4, e12892.	0.7	11
57	Efficacy of Gradient Compression Garments in the Hours After Long-Duration Spaceflight. Frontiers in Physiology, 2020, 11, 784.	1.3	11
58	Carbon dioxide accumulation, walking performance, and metabolic cost in the NASA launch and entry suit. Aviation, Space, and Environmental Medicine, 1999, 70, 656-65.	0.6	11
59	Cardiac Effects of Repeated Weightlessness During Extreme Duration Swimming Compared With Spaceflight. Circulation, 2021, 143, 1533-1535.	1.6	10
60	Determinants of Time to Fatigue During Nonmotorized Treadmill Exercise. Journal of Strength and Conditioning Research, 2009, 23, 883-890.	1.0	9
61	Near infrared spectroscopy-derived interstitial hydrogen ion concentration and tissue oxygen saturation during ambulation. European Journal of Applied Physiology, 2011, 111, 1705-1714.	1.2	9
62	Vestibular and Cardiovascular Responses After Long-Duration Spaceflight. Aerospace Medicine and Human Performance, 2020, 91, 621-627.	0.2	9
63	Venous and Arterial Responses to Partial Gravity. Frontiers in Physiology, 2020, 11, 863.	1.3	9
64	Association of Structural Changes in the Brain and Retina After Long-Duration Spaceflight. JAMA Ophthalmology, 2021, 139, 781.	1.4	9
65	Foot-ground reaction force during resistive exercise in parabolic flight. Aviation, Space, and Environmental Medicine, 2004, 75, 405-12.	0.6	7
66	Metabolic Consequences of Garments Worn to Protect Against Post-Spaceflight Orthostatic Intolerance. Aviation, Space, and Environmental Medicine, 2011, 82, 648-653.	0.6	5
67	International standard measures during the VaPER bed rest study. Acta Astronautica, 2022, 190, 208-217.	1.7	5
68	Long-term Cardiovascular Risk in Astronauts. Mayo Clinic Proceedings, 2022, 97, 1237-1246.	1.4	5
69	Physical Performance, Countermeasures, and Postflight Reconditioning. , 2019, , 609-658.		4
70	Simulated shuttle egress: role of helmet visor position during approach and landing. Aviation, Space, and Environmental Medicine, 2001, 72, 484-9.	0.6	4
71	Cardiovascular Deconditioning and Exercise. , 2019, , 1-19.		3
72	Simulated shuttle egress: comparison of two Space Shuttle protective garments. Aviation, Space, and Environmental Medicine, 2001, 72, 110-4.	0.6	3

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73	WISEâ€2005: Lower Body Negative Pressure Treadmill and Resistive Exercise Countermeasures Maintain Physiologic Function in Women during 60â€days of Simulated Microgravity. FASEB Journal, 2008, 22, 752.15.	0.2	2
74	Multi-Omic,ÂSingle-Cell, and Biochemical Profiles of Astronauts Guide Pharmacological Strategies for Returning to Gravity. SSRN Electronic Journal, 0, , .	0.4	2
75	High-Intensity Resistive and Rowing Exercises Do Not Prevent Orthostatic Intolerance after 70 Days of Bed Rest. Medicine and Science in Sports and Exercise, 2015, 47, 717-718.	0.2	1
76	Fluid Shifts and Cardiovascular-Related Factors That May Contribute to the VIIP Syndrome in Astronauts. , 2017, , 39-68.		1
77	Bellagio II Report: Terrestrial Applications of Space Medicine Research. Aerospace Medicine and Human Performance, 2021, 92, 650-669.	0.2	1
78	Near-infrared Spectroscopic Measurements Of Calf Muscle During Walking At Simulated Reduced Gravity- Preliminary Results. Medicine and Science in Sports and Exercise, 2009, 41, 58-59.	0.2	1
79	The change in lower limb venous compliance is different between women and men following 60 days of headâ€down bedrest but is not associated with venoconstrictor dysfunction. FASEB Journal, 2012, 26, 1085.5.	0.2	1
80	Gender Differences in Baroreflex Sensitivity after Bed Rest. Medicine and Science in Sports and Exercise, 2010, 42, 535-536.	0.2	0
81	Metabolic Cost of Simulated Egress while Wearing Compression Garments Used to Prevent Orthostatic Intolerance. Medicine and Science in Sports and Exercise, 2010, 42, 512-513.	0.2	0
82	Oxygen Consumption and Heart Rate Responses in Graded Exercise during Long-Duration Space Flight. Medicine and Science in Sports and Exercise, 2010, 42, 515.	0.2	0
83	Splanchnic Compression Improves the Efficacy of Compression Stockings to Prevent Orthostatic Intolerance. Medicine and Science in Sports and Exercise, 2010, 42, 515.	0.2	0
84	Reliability of a Test Battery Designed for Quickly and Safely Assessing Diverse Indices of Neuromuscular Function. Medicine and Science in Sports and Exercise, 2010, 42, 80.	0.2	0
85	Heart Rate Response during Mission-Critical Tasks after Space Flight. Medicine and Science in Sports and Exercise, 2011, 43, 820.	0.2	0
86	Custom Gradient Compression Stockings May Prevent Orthostatic Intolerance In Astronauts After Space Flight. Medicine and Science in Sports and Exercise, 2011, 43, 822.	0.2	0
87	Development Of An Integrated Countermeasure Device For Use In Long-duration Space Flight. Medicine and Science in Sports and Exercise, 2011, 43, 820-821.	0.2	0
88	NIRS-Derived Tissue Oxygen Saturation and Hydrogen Ion Concentration following Bed Rest. Medicine and Science in Sports and Exercise, 2011, 43, 823.	0.2	0
89	Virtual Guidance Ultrasound: A New Instructional Concept for Untrained Scanners. Journal for Vascular Ultrasound, 2013, 37, 91-94.	0.2	0
90	Peak Oxygen Uptake During And After Long-duration Space Flight. Medicine and Science in Sports and Exercise, 2014, 46, 429.	0.2	0

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91	WISE 2005. Medicine and Science in Sports and Exercise, 2015, 47, 586.	0.2	0
92	Submaximal Exercise Responses Before and During Long Duration Space Flight. Medicine and Science in Sports and Exercise, 2017, 49, 290.	0.2	0
93	Abstract P192: Orthostatic Tolerance Before And After 60 Days Of Strict Head Down Tilt Bedrest With And Without Daily Artificial Gravity Training. Hypertension, 2021, 78, .	1.3	0
94	Cardiovascular Deconditioning and Exercise. , 2021, , 129-153.		0
95	Artificial Gravity Prevents Loss of Peak Oxygen Uptake During 21 Days of Bed Rest. Medicine and Science in Sports and Exercise, 2008, 40, S302.	0.2	0
96	Joint Angles at Heel Strike and Toe Off during Motorized and Non-Motorized Treadmill Locomotion. Medicine and Science in Sports and Exercise, 2008, 40, S302-S303.	0.2	0
97	Bone Mineral Density Adaptations of the Hip and Spine to Training with the Advanced Resistive Exercise Device and with Free Weights in Ambulatory Subjects. Medicine and Science in Sports and Exercise, 2008, 40, S303.	0.2	0
98	Comparison of Noninvasively Determined Hydrogen Ion and Lactate Thresholds During Cycle Exercise. Medicine and Science in Sports and Exercise, 2008, 40, S426.	0.2	0
99	Arterial Structure And Function In Women And Men Following Long Duration Bed Rest. Medicine and Science in Sports and Exercise, 2009, 41, 68.	0.2	0
100	Time-to-fatigue And Intramuscular Ph Measured Via Nirs During Handgrip Exercise In Trained And Sedentary Individuals. Medicine and Science in Sports and Exercise, 2009, 41, 205-206.	0.2	0
101	Reliability Of Maximal Strength Testing In Novice Weightlifters. Medicine and Science in Sports and Exercise, 2009, 41, 132.	0.2	0
102	Using Maximal Isometric Force To Determine The Optimal Load For Measuring Dynamic Muscle Power. Medicine and Science in Sports and Exercise, 2009, 41, 263.	0.2	0
103	Changes In Muscle Volume And Strength Following 16 Weeks Of Training Using The Advanced Resistive Exercise Device (ARED) And Free Weights. Medicine and Science in Sports and Exercise, 2009, 41, 284-285.	0.2	0
104	Reliability of the Portable Metabolic Gas Analysis System used on the International Space Station. Medicine and Science in Sports and Exercise, 2018, 50, 338.	0.2	0
105	Cardiovascular Deconditioning and Exercise. , 2020, , 1-20.		0
106	Reply to Greaves et al.. Journal of Applied Physiology, 2020, 129, 1113-1113.	1.2	0