Sara R Zwart

List of Publications by Year
in descending order

66 papers	3,849 citations	159585 30 h-index	133252 59 g-index
66 all docs	66 docs citations	66 times ranked	2781 citing authors

#	Article	IF	Citations
1	Pre-flight exercise and bone metabolism predict unloading-induced bone loss due to spaceflight. British Journal of Sports Medicine, 2022, 56, 196-203.	6.7	37
2	Albumin, oral contraceptives, and venous thromboembolism risk in astronauts. Journal of Applied Physiology, 2022, 132, 1232-1239.	2.5	8
3	Dermatitis during Spaceflight Associated with HSV-1 Reactivation. Viruses, 2022, 14, 789.	3.3	12
4	Incomplete recovery of bone strength and trabecular microarchitecture at the distal tibia 1Âyear after return from long duration spaceflight. Scientific Reports, 2022, 12, .	3.3	14
5	Antioxidant Supplementation Does Not Affect Bone Turnover Markers During 60 Days of 6Â° Head-Down Tilt Bed Rest: Results from an Exploratory Randomized Controlled Trial. Journal of Nutrition, 2021, 151, 1527-1538.	2.9	9
6	Ophthalmic changes in a spaceflight analog are associated with brain functional reorganization. Human Brain Mapping, 2021, 42, 4281-4297.	3.6	10
7	The role of nutrition in space exploration: Implications for sensorimotor, cognition, behavior and the cerebral changes due to the exposure to radiation, altered gravity, and isolation/confinement hazards of spaceflight. Neuroscience and Biobehavioral Reviews, 2021, 127, 307-331.	6.1	17
8	Nutrition as Fuel for Human Spaceflight. Physiology, 2021, 36, 324-330.	3.1	1
9	Use of Quantitative Computed Tomography to Assess for Clinically-relevant Skeletal Effects of Prolonged Spaceflight on Astronaut Hips. Journal of Clinical Densitometry, 2020, 23, 155-164.	1.2	9
10	Space Food for Thought: Challenges and Considerations for Food and Nutrition on Exploration Missions. Journal of Nutrition, 2020, 150, 2242-2244.	2.9	62
11	Fundamental Biological Features of Spaceflight: Advancing the Field to Enable Deep-Space Exploration. Cell, 2020, 183, 1162-1184.	28.9	185
12	Comprehensive Multi-omics Analysis Reveals Mitochondrial Stress as a Central Biological Hub for Spaceflight Impact. Cell, 2020, 183, 1185-1201.e20.	28.9	161
13	Beyond Low-Earth Orbit: Characterizing Immune and microRNA Differentials following Simulated Deep Spaceflight Conditions in Mice. IScience, 2020, 23, 101747.	4.1	17
14	Multi-omic, Single-Cell, and Biochemical Profiles of Astronauts Guide Pharmacological Strategies for Returning to Gravity. Cell Reports, 2020, 33, 108429.	6.4	37
15	Telomere Length Dynamics and DNA Damage Responses Associated with Long-Duration Spaceflight. Cell Reports, 2020, 33, 108457.	6.4	48
16	Vitamin D and COVID-19: Lessons from Spaceflight Analogs. Journal of Nutrition, 2020, 150, 2624-2627.	2.9	11
17	Red risks for a journey to the red planet: The highest priority human health risks for a mission to Mars. Npj Microgravity, 2020, 6, 33.	3.7	148
18	Temporal Telomere and DNA Damage Responses in the Space Radiation Environment. Cell Reports, 2020, 33, 108435.	6.4	40

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19	Arterial structure and function during and after long-duration spaceflight. Journal of Applied Physiology, 2020, 129, 108-123.	2.5	36
20	Countermeasures-based Improvements in Stress, Immune System Dysregulation and Latent Herpesvirus Reactivation onboard the International Space Station â€“ Relevance for Deep Space Missions and Terrestrial Medicine. Neuroscience and Biobehavioral Reviews, 2020, 115, 68-76.	6.1	36
21	Meal replacement in isolated and confined mission environments: Consumption, acceptability, and implications for physical and behavioral health. Physiology and Behavior, 2020, 219, 112829.	2.1	16
22	Nutritional Countermeasures for Spaceflight-Related Stress. , 2020, , 593-616.		4
23	Reply to Greaves et al.. Journal of Applied Physiology, 2020, 129, 1113-1113.	2.5	0
24	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.	2.5	32
25	Specific Immunologic Countermeasure Protocol for Deep-Space Exploration Missions. Frontiers in Immunology, 2019, 10, 2407.	4.8	29
26	The NASA Twins Study: A multidimensional analysis of a year-long human spaceflight. Science, 2019, 364, .	12.6	576
27	Spaceflight Metabolism and Nutritional Support. , 2019, , 413-439.		7
28	Spaceflight-related ocular changes. Current Opinion in Clinical Nutrition and Metabolic Care, 2018, 21, 481-488.	2.5	29
29	Immune System Dysregulation During Spaceflight: Potential Countermeasures for Deep Space Exploration Missions. Frontiers in Immunology, 2018, 9, 1437.	4.8	257
30	Effects of high-protein intake on bone turnover in long-term bed rest in women. Applied Physiology, Nutrition and Metabolism, 2017, 42, 537-546.	1.9	16
31	Excretion of Zinc and Copper Increases in Men during 3 Weeks of Bed Rest, with or without Artificial Gravity. Journal of Nutrition, 2017, 147, 1113-1120.	2.9	7
32	Astronaut ophthalmic syndrome. FASEB Journal, 2017, 31, 3746-3756.	0.5	39
33	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.	1.7	55
34	Increased core body temperature in astronauts during long-duration space missions. Scientific Reports, 2017, 7, 16180.	3.3	68
35	Regulatory Physiology. , 2016, , 283-305.		0
36	High dietary iron increases oxidative stress and radiosensitivity in the rat retina and vasculature after exposure to fractionated gamma radiation. Npj Microgravity, 2016, 2, 16014.	3.7	14

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37	Genotype, Bâ€vitamin status, and androgens affect spaceflightâ€induced ophthalmic changes. FASEB Journal, 2016, 30, 141-148.	0.5	52
38	Magnesium and Space Flight. Nutrients, 2015, 7, 10209-10222.	4.1	5
39	Nutrition and Bone Health in Space. , 2015, , 687-705.		8
40	Bone metabolism and renal stone risk during International Space Station missions. Bone, 2015, 81, 712-720.	2.9	119
41	Space Environmental Factor Impacts upon Murine Colon Microbiota and Mucosal Homeostasis. PLoS ONE, 2015, 10, e0125792.	2.5	73
42	Increased dietary iron and radiation in rats promote oxidative stress, induce localized and systemic immune system responses, and alter colon mucosal environment. FASEB Journal, 2014, 28, 1486-1498.	0.5	14
43	Sexâ€specific responses of bone metabolism and renal stone risk during bed rest. Physiological Reports, 2014, 2, e12119.	1.7	17
44	Plasma Cytokine Concentrations Indicate That <i>In Vivo</i> Hormonal Regulation of Immunity Is Altered During Long-Duration Spaceflight. Journal of Interferon and Cytokine Research, 2014, 34, 778-786.	1.2	140
45	Men and Women in Space: Bone Loss and Kidney Stone Risk After Long-Duration Spaceflight. Journal of Bone and Mineral Research, 2014, 29, 1639-1645.	2.8	72
46	Body Mass Changes During Long-Duration Spaceflight. Aviation, Space, and Environmental Medicine, 2014, 85, 897-904.	0.5	30
47	A 250Âμg/week dose of vitamin D was as effective as a 50Âμg/d dose in healthy adults, but a regimen of four weekly followed by monthly doses of 1250Âμg raised the risk of hypercalciuria. British Journal of Nutrition, 2013, 110, 1866-1872.	2.3	7
48	Iron status and its relations with oxidative damage and bone loss during long-duration space flight on the International Space Station. American Journal of Clinical Nutrition, 2013, 98, 217-223.	4.7	76
49	Vision Changes after Spaceflight Are Related to Alterations in Folate- and Vitamin B-12-Dependent One-Carbon Metabolism,. Journal of Nutrition, 2012, 142, 427-431.	2.9	96
50	Bone metabolism and nutritional status during 30-day head-down-tilt bed rest. Journal of Applied Physiology, 2012, 113, 1519-1529.	2.5	54
51	Benefits for bone from resistance exercise and nutrition in long-duration spaceflight: Evidence from biochemistry and densitometry. Journal of Bone and Mineral Research, 2012, 27, 1896-1906.	2.8	273
52	Long-Duration Space Flight and Bed Rest Effects on Testosterone and Other Steroids. Journal of Clinical Endocrinology and Metabolism, 2012, 97, 270-278.	3.6	61
53	Space Flight Calcium: Implications for Astronaut Health, Spacecraft Operations, and Earth. Nutrients, 2012, 4, 2047-2068.	4.1	59
54	Saturation Diving Alters Folate Status and Biomarkers of DNA Damage and Repair. PLoS ONE, 2012, 7, e31058.	2.5	17

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55	Vitamin K status in spaceflight and ground-based models of spaceflight. Journal of Bone and Mineral Research, 2011, 26, 948-954.	2.8	38
56	Response to Vitamin D Supplementation during Antarctic Winter Is Related to BMI, and Supplementation Can Mitigate Epstein-Barr Virus Reactivation1â€“3. Journal of Nutrition, 2011, 141, 692-697.	2.9	58
57	Response to Vitamin D Intake: From the Antarctic to the Institute of Medicine1,2. Journal of Nutrition, 2011, 141, 985-986.	2.9	4
58	Capacity of omega-3 fatty acids or eicosapentaenoic acid to counteract weightlessness-induced bone loss by inhibiting NF-Î°B activation: From cells to bed rest to astronauts. Journal of Bone and Mineral Research, 2010, 25, 1049-1057.	2.8	95
59	Nutritional Status Assessment Before, During, and After Long-Duration Head-Down Bed Rest. Aviation, Space, and Environmental Medicine, 2009, 80, A15-A22.	0.5	55
60	Body Iron Stores and Oxidative Damage in Humans Increased during and after a 10- to 12-Day Undersea Dive. Journal of Nutrition, 2009, 139, 90-95.	2.9	17
61	Stability of analytes related to clinical chemistry and bone metabolism in blood specimens after delayed processing. Clinical Biochemistry, 2009, 42, 907-910.	1.9	28
62	Nutrition issues for space exploration. Acta Astronautica, 2008, 63, 609-613.	3.2	18
63	Nutritional Status Is Altered in the Self-Neglecting Elderly. Journal of Nutrition, 2006, 136, 2534-2541.	2.9	42
64	Artificial Gravity During Bed Rest Deconditioning: A Case Report. , 2006, , .		0
65	The Nutritional Status of Astronauts Is Altered after Long-Term Space Flight Aboard the International Space Station. Journal of Nutrition, 2005, 135, 437-443.	2.9	239
66	Nutritional Status Changes in Humans during a 14-Day Saturation Dive: The NASA Extreme Environment Mission Operations V Project. Journal of Nutrition, 2004, 134, 1765-1771.	2.9	35