Michael J Pecaut

List of Publications by Year
in descending order

91 papers	2,614 citations	147566 31 h-index	223531 46 g-index
93 all docs	93 docs citations	93 times ranked	2124 citing authors

#	Article	IF	Citations
1	Acute Risks of Space Radiation. , 2021, , 263-276.		0
2	Brain organoids: A promising model to assess oxidative stressâ€induced central nervous system damage. Developmental Neurobiology, 2021, 81, 653-670.	1.5	15
3	Immunological and hematological outcomes following protracted low dose/low dose rate ionizing radiation and simulated microgravity. Scientific Reports, 2021, 11, 11452.	1.6	11
4	An Analysis of the Effects of Spaceflight and Vaccination on Antibody Repertoire Diversity. ImmunoHorizons, 2021, 5, 675-686.	0.8	2
5	Spaceflight induces oxidative damage to bloodâ€brain barrier integrity in a mouse model. FASEB Journal, 2020, 34, 15516-15530.	0.2	39
6	Acute Risks of Space Radiation. , 2020, , 1-11.		0
7	Spaceflight influences gene expression, photoreceptor integrity, and oxidative stress-related damage in the murine retina. Scientific Reports, 2019, 9, 13304.	1.6	38
8	Effects of skeletal unloading on the antibody repertoire of tetanus toxoid and/or CpG treated C57BL/6J mice. PLoS ONE, 2019, 14, e0210284.	1.1	22
9	Proteomic Analysis of Mouse Brain Subjected to Spaceflight. International Journal of Molecular Sciences, 2019, 20, 7.	1.8	33
10	Effects of skeletal unloading on the bone marrow antibody repertoire of tetanus toxoid and/or CpG treated C57BL/6J mice. Life Sciences in Space Research, 2019, 22, 16-28.	1.2	5
11	Characterization of mouse ocular response to a 35-day spaceflight mission: Evidence of blood-retinal barrier disruption and ocular adaptations. Scientific Reports, 2019, 9, 8215.	1.6	30
12	Acute Risks of Space Radiation. , 2019, , 1-11.		0
13	A comparison of unamplified and massively multiplexed PCR amplification for murine antibody repertoire sequencing. FASEB BioAdvances, 2019, 1, 6-17.	1.3	3
14	A comparison of unamplified and massively multiplexed PCR amplification for murine antibody repertoire sequencing. FASEB BioAdvances, 2019, 1, 6-17.	1.3	3
15	Spaceflight Activates Protein Kinase C Alpha Signaling and Modifies the Developmental Stage of Human Neonatal Cardiovascular Progenitor Cells. Stem Cells and Development, 2018, 27, 805-818.	1.1	14
16	Effects of spaceflight on the immunoglobulin repertoire of unimmunized C57BL/6 mice. Life Sciences in Space Research, 2018, 16, 63-75.	1.2	26
17	Vive la radiorÃ©sistance!: converging research in radiobiology and biogerontology to enhance human radioresistance for deep space exploration and colonization. Oncotarget, 2018, 9, 14692-14722.	0.8	62
18	Impact of Spaceflight and Artificial Gravity on the Mouse Retina: Biochemical and Proteomic Analysis. International Journal of Molecular Sciences, 2018, 19, 2546.	1.8	41

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19	Cardiovascular progenitor cells cultured aboard the International Space Station exhibit altered developmental and functional properties. Npj Microgravity, 2018, 4, 13.	1.9	29
20	Characterization of the naive murine antibody repertoire using unamplified high-throughput sequencing. PLoS ONE, 2018, 13, e0190982.	1.1	44
21	Role of NADPH Oxidase as a Mediator of Oxidative Damage in Low-Dose Irradiated and Hindlimb-Unloaded Mice. Radiation Research, 2017, 188, 392-399.	0.7	17
22	Spaceflight Activates Autophagy Programs and the Proteasome in Mouse Liver. International Journal of Molecular Sciences, 2017, 18, 2062.	1.8	48
23	Is spaceflight-induced immune dysfunction linked to systemic changes in metabolism?. PLoS ONE, 2017, 12, e0174174.	1.1	45
24	Validation of Methods to Assess the Immunoglobulin Gene Repertoire in Tissues Obtained from Mice on the International Space Station. Gravitational and Space Research: Publication of the American Society for Gravitational and Space Research, 2017, 5, 2-23.	0.3	10
25	Validation of Methods to Assess the Immunoglobulin Gene Repertoire in Tissues Obtained from Mice on the International Space Station. Gravitational and Space Research: Publication of the American Society for Gravitational and Space Research, 2017, 5, 2-23.	0.3	8
26	Spaceflight Activates Lipotoxic Pathways in Mouse Liver. PLoS ONE, 2016, 11, e0152877.	1.1	69
27	Changes in the distribution and function of leukocytes after whole-body iron ion irradiation. Journal of Radiation Research, 2016, 57, 477-491.	0.8	10
28	Simulated Microgravity and Low-Dose/Low-Dose-Rate Radiation Induces Oxidative Damage in the Mouse Brain. Radiation Research, 2016, 185, 647-657.	0.7	62
29	Biological Effects of Passive Versus Active Scanning Proton Beams on Human Lung Epithelial Cells. Technology in Cancer Research and Treatment, 2015, 14, 81-98.	0.8	25
30	Chlorisondamine, a sympathetic ganglionic blocker, moderates the effects of whole-body irradiation (WBI) on early host defense to a live bacterial challenge. Immunology Letters, 2015, 167, 103-115.	1.1	1
31	Genetic and Apoptotic Changes in Lungs of Mice Flown on the STS-135 Mission in Space. In Vivo, 2015, 29, 423-33.	0.6	10
32	Effects of Targeted Proton Radiation on Spinal Cord in a Porcine Model: A Pilot Study. In Vivo, 2015, 29, 651-9.	0.6	0
33	Impact of total-body irradiation on the response to a live bacterial challenge. International Journal of Radiation Biology, 2014, 90, 515-526.	1.0	4
34	Biological and metabolic response in STS-135 space-flown mouse skin. Free Radical Research, 2014, 48, 890-897.	1.5	42
35	Minocycline modulates cytokine and gene expression profiles in the brain after whole-body exposure to radiation. In Vivo, 2014, 28, 21-32.	0.6	9
36	Space-relevant radiation modifies cytokine profiles, signaling proteins and Foxp3+T cells. International Journal of Radiation Biology, 2013, 89, 26-35.	1.0	14

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37	Spaceflight Environment Induces Mitochondrial Oxidative Damage in Ocular Tissue. Radiation Research, 2013, 180, 340-350.	0.7	81
38	Protracted low-dose radiation priming and response of liver to acute gamma and proton radiation. Free Radical Research, 2013, 47, 811-820.	1.5	8
39	Changes in Mouse Thymus and Spleen after Return from the STS-135 Mission in Space. PLoS ONE, 2013, 8, e75097.	1.1	59
40	Effects of minocycline on hematopoietic recovery after whole-body irradiation. In Vivo, 2013, 27, 11-28.	0.6	4
41	Low-dose radiation modifies skin response to acute gamma-rays and protons. In Vivo, 2013, 27, 695-700.	0.6	1
42	Low-Dose Total-Body Î³ Irradiation Modulates Immune Response to Acute Proton Radiation. Radiation Research, 2012, 177, 251-264.	0.7	25
43	Investigation of the Effects of Head Irradiation with Gamma Rays and Protons on Startle and Pre-Pulse Inhibition Behavior in Mice. Radiation Research, 2012, 177, 685-692.	0.7	12
44	Analysis of a Metalloporphyrin Antioxidant Mimetic (MnTE-2-PyP) as a Radiomitigator: Prostate Tumor and Immune Status. Technology in Cancer Research and Treatment, 2012, 11, 447-457.	0.8	10
45	Effect of proton irradiation followed by hindlimb unloading on bone in mature mice: A model of long-duration spaceflight. Bone, 2012, 51, 756-764.	1.4	54
46	Analysis of minocycline as a countermeasure against acute radiation syndrome. In Vivo, 2012, 26, 743-58.	0.6	5
47	Genetic background and lymphocyte populations after total-body exposure to iron ion radiation. International Journal of Radiation Biology, 2011, 87, 8-23.	1.0	11
48	Low-dose Gamma-rays and Simulated Solar Particle Event Protons Modify Splenocyte Gene and Cytokine Expression Patterns. Journal of Radiation Research, 2011, 52, 701-711.	0.8	20
49	Comparison of proton and electron radiation effects on biological responses in liver, spleen and blood. International Journal of Radiation Biology, 2011, 87, 1173-1181.	1.0	23
50	Low-dose Î³-rays modify CD4+T cell signalling response to simulated solar particle event protons in a mouse model. International Journal of Radiation Biology, 2011, 87, 24-35.	1.0	23
51	Strain-related differences and radiation quality effects on mouse leukocytes: gamma-rays and protons (with and without aluminum shielding). In Vivo, 2011, 25, 871-80.	0.6	8
52	Impact of head-only iron ion radiation on the peripheral LPS response. In Vivo, 2011, 25, 903-16.	0.6	4
53	Microarray analysis of spaceflown murine thymus tissue reveals changes in gene expression regulating stress and glucocorticoid receptors. Journal of Cellular Biochemistry, 2010, 110, 372-381.	1.2	43
54	The impact of mouse strain on iron ion radio-immune response of leukocyte populations. International Journal of Radiation Biology, 2010, 86, 409-419.	1.0	20

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55	Low-dose Photon and Simulated Solar Particle Event Proton Effects on Foxp3+ T Regulatory Cells and other Leukocytes. Technology in Cancer Research and Treatment, 2010, 9, 637-649.	0.8	20
56	Spaceflight modulates expression of extracellular matrix, adhesion, and profibrotic molecules in mouse lung. Journal of Applied Physiology, 2010, 108, 162-171.	1.2	31
57	Low Dose, Low Dose Rate Photon Radiation Modifies Leukocyte Distribution and Gene Expression in CD4+ T Cells. Journal of Radiation Research, 2009, 50, 139-150.	0.8	31
58	Response of Extracellular Matrix Regulators in Mouse Lung after Exposure to Photons, Protons and Simulated Solar Particle Event Protons. Radiation Research, 2009, 172, 30-41.	0.7	25
59	Effects of spaceflight on innate immune function and antioxidant gene expression. Journal of Applied Physiology, 2009, 106, 1935-1942.	1.2	142
60	Shifts in bone marrow cell phenotypes caused by spaceflight. Journal of Applied Physiology, 2009, 106, 548-555.	1.2	42
61	Spaceflight effects on T lymphocyte distribution, function and gene expression. Journal of Applied Physiology, 2009, 106, 194-202.	1.2	137
62	Low-dose, low-dose-rate proton radiation modulates CD4⁺T cell gene expression. International Journal of Radiation Biology, 2009, 85, 250-261.	1.0	28
63	Spaceflight-relevant types of ionizing radiation and cortical bone: Potential LET effect?. Advances in Space Research, 2008, 42, 1889-1897.	1.2	24
64	Long-term changes in rat hematopoietic and other physiological systems after high-energy iron ion irradiation. International Journal of Radiation Biology, 2008, 84, 549-559.	1.0	18
65	Long-Term Dose Response of Trabecular Bone in Mice to Proton Radiation. Radiation Research, 2008, 169, 607-614.	0.7	60
66	Bone Architectural and Structural Properties after⁵⁶Fe²⁶⁺Radiation-Induced Changes in Body Mass. Radiation Research, 2008, 170, 201-207.	0.7	24
67	Low-Dose Photons Modify Liver Response to Simulated Solar Particle Event Protons. Radiation Research, 2008, 169, 280-287.	0.7	38
68	Variable hematopoietic responses to acute photons, protons and simulated solar particle event protons. In Vivo, 2008, 22, 159-69.	0.6	40
69	Radiation and secondary immune response to lipopolysaccharide. In Vivo, 2008, 22, 423-34.	0.6	6
70	Simulation of a 36h solar particle event at LLUMC using a proton beam scanning system. Nuclear Instruments & Methods in Physics Research B, 2007, 261, 791-794.	0.6	12
71	Radiation and primary response to lipopolysaccharide: bone marrow-derived cells and susceptible organs. In Vivo, 2007, 21, 453-61.	0.6	11
72	Radiation and primary immune response to lipopolysaccharide: lymphocyte distribution and function. In Vivo, 2007, 21, 463-70.	0.6	9

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73	Acute Effects of Iron-Particle Radiation on Immunity. Part II: Leukocyte Activation, Cytokines and Adhesion. Radiation Research, 2006, 165, 78-87.	0.7	32
74	A murine model for bone loss from therapeutic and space-relevant sources of radiation. Journal of Applied Physiology, 2006, 101, 789-793.	1.2	118
75	Acute Effects of Iron-Particle Radiation on Immunity. Part I: Population Distributions. Radiation Research, 2006, 165, 68-77.	0.7	32
76	Whole-body irradiation and long-term modification of bone marrow-derived cell populations by low- and high-LET radiation. In Vivo, 2006, 20, 781-9.	0.6	29
77	HZE radiation and dopaminergic modification of startle and prepulse inhibition in mice. Physiology and Behavior, 2005, 86, 103-110.	1.0	13
78	Hypergravity-induced immunomodulation in a rodent model: hematological and lymphocyte function analyses. Journal of Applied Physiology, 2004, 97, 29-38.	1.2	9
79	The Effects of Low-Dose, High-LET Radiation Exposure on Three Models of Behavior in C57BL/6 Mice. Radiation Research, 2004, 162, 148-156.	0.7	30
80	Selected Contribution: Effects of spaceflight on immunity in the C57BL/6 mouse. I. Immune population distributions. Journal of Applied Physiology, 2003, 94, 2085-2094.	1.2	70
81	Selected Contribution: Effects of spaceflight on immunity in the C57BL/6 mouse. II. Activation, cytokines, erythrocytes, and platelets. Journal of Applied Physiology, 2003, 94, 2095-2103.	1.2	79
82	Long-term effects of low-dose proton radiation on immunity in mice: shielded vs. unshielded. Aviation, Space, and Environmental Medicine, 2003, 74, 115-24.	0.6	10
83	"Out-of-field" effects of head-localized proton irradiation on peripheral immune parameters. In Vivo, 2003, 17, 513-21.	0.6	5
84	Total-body irradiation with high-LET particles: acute and chronic effects on the immune system. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2002, 282, R677-R688.	0.9	57
85	Dose and dose rate effects of whole-body proton-irradiation on lymphocyte blastogenesis and hematological variables: Part II. Immunology Letters, 2002, 80, 67-73.	1.1	37
86	Dose and dose rate effects of whole-body proton irradiation on leukocyte populations and lymphoid organs: Part I. Immunology Letters, 2002, 80, 55-66.	1.1	59
87	Behavioral consequences of radiation exposure to simulated space radiation in the C57BL/6 mouse: Open field, rotorod, and acoustic startle. Cognitive, Affective and Behavioral Neuroscience, 2002, 2, 329-340.	1.0	37
88	Spaceflight induces changes in splenocyte subpopulations: effectiveness of ground-based models. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2000, 279, R2072-R2078.	0.9	43
89	Combined effects of space flight factors and radiation on humans. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 1999, 430, 211-219.	0.4	37
90	The effects of spaceflight and Insulin-like Growth Factor-1 on the T-cell and macrophage populations. , 1997, , .		1

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91	Prevalence and arrangement of lignified vascular elements in 6-day-old alfalfa (Medicago sativa L.) seedlings raised in reduced gravity. Journal of Plant Physiology, 1996, 149, 539-547.	1.6	5