# Measurements of Energetic Particle Radiation in Transi Laboratory

Science

340, 1080-1084

DOI: 10.1126/science.1235989

Citation Report

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Personalized medicine in human space flight: using Omics based analyses to develop individualized countermeasures that enhance astronaut safety and performance. Metabolomics, 2013, 9, 1134-1156. | 1.4 | 61 |
| 2 | The effects of radiation on angiogenesis. Vascular Cell, 2013, 5, 19. | 0.2 | 37 |
| 3 | Two distinct types of the inhibition of vasculogenesis by different species of charged particles. Vascular Cell, 2013, 5, 16. | 0.2 | 31 |
| 4 | Acute and Fractionated Exposure to High-LET<sup>56</sup>Fe HZE-Particle Radiation Both Result in Similar Long-Term Deficits in Adult Hippocampal Neurogenesis. Radiation Research, 2013, 180, 658-667. | 0.7 | 59 |
| 5 | Nuclear Thermal Propulsion (NTP): A Proven, Growth Technology for 'Fast Transit' Human Missions to Mars. , 2013, , . | | 8 |
| 6 | Relative contributions of galactic cosmic rays and lunar proton â€œalbedoâ€•to dose and dose rates near the Moon. Space Weather, 2013, 11, 643-650. | 1.3 | 26 |
| 7 | Interplanetary Disturbances Affecting Space Weather. Proceedings of the International Astronomical Union, 2013, 8, 297-306. | 0.0 | 2 |
| 8 | Dose spectra from energetic particles and neutrons. Space Weather, 2013, 11, 547-556. | 1.3 | 3 |
| 9 | How Safe Is Safe Enough? Radiation Risk for a Human Mission to Mars. PLoS ONE, 2013, 8, e74988. | 1.1 | 183 |
| 10 | Spacecraft data nail down radiation risk for humans going to Mars. Nature, 2013, , . | 13.7 | 0 |
| 11 | Space Radiation Risks for Astronauts on Multiple International Space Station Missions. PLoS ONE, 2014, 9, e96099. | 1.1 | 152 |
| 12 | Cardiovascular Risks Associated with Low Dose Ionizing Particle Radiation. PLoS ONE, 2014, 9, e110269. | 1.1 | 60 |
| 13 | Stepping Stone. , 0, , 392-431. | | 0 |
| 14 | The effect of spaceflight on mouse olfactory bulb volume, neurogenesis, and cell death indicates the protective effect of novel environment. Journal of Applied Physiology, 2014, 116, 1593-1604. | 1.2 | 15 |
| 15 | GCR environmental models I: Sensitivity analysis for GCR environments. Space Weather, 2014, 12, 217-224. | 1.3 | 38 |
| 16 | Influence of dust loading on atmospheric ionizing radiation on Mars. Journal of Geophysical Research: Space Physics, 2014, 119, 452-461. | 0.8 | 21 |
| 17 | Cosmic Rays: Hurdles on the Road to Mars. Nuclear Physics News, 2014, 24, 32-34. | 0.1 | 2 |
| 18 | Distinct Roles of Ape1 Protein, an Enzyme Involved in DNA Repair, in High or Low Linear Energy Transfer Ionizing Radiation-induced Cell Killing. Journal of Biological Chemistry, 2014, 289, 30635-30644. | 1.6 | 8 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | 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. | 0.2 | 14 |
| 20 | Does the worsening galactic cosmic radiation environment observed by CRaTER preclude future manned deep space exploration?. Space Weather, 2014, 12, 622-632. | 1.3 | 55 |
| 21 | Comparison of Martian surface ionizing radiation measurements from MSLâ€RAD with Badhwarâ€O'Neill 2011/HZETRN model calculations. Journal of Geophysical Research E: Planets, 2014, 119, 1311-1321. | 1.5 | 42 |
| 22 | Diurnal variations of energetic particle radiation at the surface of Mars as observed by the Mars Science Laboratory Radiation Assessment Detector. Journal of Geophysical Research E: Planets, 2014, 119, 1345-1358. | 1.5 | 44 |
| 23 | Space Radiation: The Number One Risk to Astronaut Health beyond Low Earth Orbit. Life, 2014, 4, 491-510. | 1.1 | 258 |
| 24 | Positron Lifetime Studies of Irradiated Ultra-High Molecular Weight Polyethylene and Composites Made of Martian Regolith. Materials Science Forum, 0, 783-786, 1585-1590. | 0.3 | 2 |
| 25 | Analysis of the charged particle radiation effect for a CubeSat transiting from Earth to Mars. Current Applied Physics, 2014, 14, 575-581. | 1.1 | 4 |
| 26 | GCR environmental models II: Uncertainty propagation methods for GCR environments. Space Weather, 2014, 12, 225-232. | 1.3 | 12 |
| 27 | Variation of Proton Flux Profiles with the Observerâ€™s Latitude in Simulated Gradual SEP Events. Solar Physics, 2014, 289, 1745-1762. | 1.0 | 15 |
| 28 | Individual Differences in Attentional Deficits and Dopaminergic Protein Levels following Exposure to Proton Radiation. Radiation Research, 2014, 181, 258-271. | 0.7 | 90 |
| 29 | The repair of environmentally relevant DNA double strand breaks caused by high linear energy transfer irradiation â€“ No simple task. DNA Repair, 2014, 17, 64-73. | 1.3 | 52 |
| 30 | Marsâ€™ Surface Radiation Environment Measured with the Mars Science Laboratoryâ€™s Curiosity Rover. Science, 2014, 343, 1244797. | 6.0 | 475 |
| 31 | Feasibility study of astronaut standardized career dose limits in LEO and the outlook for BLEO. Acta Astronautica, 2014, 104, 565-573. | 1.7 | 30 |
| 32 | Space radiation accelerator experiments â€“ The role of neutrons and light ions. Life Sciences in Space Research, 2014, 3, 90-94. | 1.2 | 29 |
| 33 | <sup>28</sup>Silicon Radiation Impairs Neuronal Output in CA1 Neurons of Mouse Ventral Hippocampus without Altering Dendritic Excitability. Radiation Research, 2014, 181, 407-415. | 0.7 | 30 |
| 34 | Development of a Metabolomic Radiation Signature in Urine from Patients Undergoing Total Body Irradiation. Radiation Research, 2014, 181, 350. | 0.7 | 76 |
| 35 | 56Fe particle exposure results in a long-lasting increase in a cellular index of genomic instability and transiently suppresses adult hippocampal neurogenesis in vivo. Life Sciences in Space Research, 2014, 2, 70-79. | 1.2 | 33 |
| 36 | A Magnesium Diboride Superconducting Toroid for Astroparticle Shielding. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-4. | 1.1 | 16 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Verification of shielding effect by the water-filled materials for space radiation in the International Space Station using passive dosimeters. Advances in Space Research, 2014, 53, 1-7. | 1.2 | 44 |
| 38 | Space radiation protection: Destination Mars. Life Sciences in Space Research, 2014, 1, 2-9. | 1.2 | 144 |
| 39 | New challenges in high-energy particle radiobiology. British Journal of Radiology, 2014, 87, 20130626. | 1.0 | 108 |
| 40 | Space radiation effects on plant and mammalian cells. Acta Astronautica, 2014, 104, 419-431. | 1.7 | 78 |
| 41 | Space radiation risks to the central nervous system. Life Sciences in Space Research, 2014, 2, 54-69. | 1.2 | 210 |
| 42 | Effects of Fe particle irradiation on human endothelial barrier structure and function. Life Sciences in Space Research, 2014, 2, 29-37. | 1.2 | 11 |
| 43 | GCR environmental models III: GCR model validation and propagated uncertainties in effective dose. Space Weather, 2014, 12, 233-245. | 1.3 | 18 |
| 44 | Radiation modeling in the Earth and Mars atmospheres using LRO/CRaTER with the EMMREM Module. Space Weather, 2014, 12, 112-119. | 1.3 | 8 |
| 45 | Space Radiation Superconducting Shields. Journal of Physics: Conference Series, 2014, 507, 032033. | 0.3 | 10 |
| 46 | Charged particle spectra obtained with the Mars Science Laboratory Radiation Assessment Detector (MSL/RAD) on the surface of Mars. Journal of Geophysical Research E: Planets, 2014, 119, 468-479. | 1.5 | 64 |
| 47 | Radiation activated CHK1/MEPE pathway may contribute to microgravity-induced bone density loss. Life Sciences in Space Research, 2015, 7, 53-56. | 1.2 | 4 |
| 48 | Designing an upgrade of the Medley setup for light-ion production and fission cross-section measurements. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 794, 141-150. | 0.7 | 2 |
| 49 | Space Radiation Dosimetry to Evaluate the Effect of Polyethylene Shielding in the Russian Segment of the International Space Station. Physics Procedia, 2015, 80, 25-35. | 1.2 | 16 |
| 50 | Comparison of the Effectiveness of Exposure to Low-LET Helium Particles (<sup>4</sup>He) and Gamma Rays (<sup>137</sup>Cs) on the Disruption of Cognitive Performance. Radiation Research, 2015, 184, 266-272. | 0.7 | 25 |
| 51 | Nanomaterials for radiation shielding. MRS Bulletin, 2015, 40, 836-841. | 1.7 | 118 |
| 52 | Realâ€time prediction of the occurrence and intensity of the first hours of >100 MeV solar energetic proton events. Space Weather, 2015, 13, 807-819. | 1.3 | 30 |
| 53 | Positron kinetics in an idealized PET environment. Scientific Reports, 2015, 5, 12674. | 1.6 | 23 |
| 54 | MODELING THE VARIATIONS OF DOSE RATE MEASURED BY RAD DURING THE FIRSTMSLMARTIAN YEAR: 2012â€“2014. Astrophysical Journal, 2015, 810, 24. | 1.6 | 43 |

| # | Article | IF | Citations |
|---|---|---|---|
| 56 | Variations of dose rate observed by MSL/RAD in transit to Mars. Astronomy and Astrophysics, 2015, 577, A58. | 2.1 | 35 |
| 57 | Space radiation and cardiovascular disease risk. World Journal of Cardiology, 2015, 7, 882. | 0.5 | 75 |
| 58 | Radiation Measurements Performed with Active Detectors Relevant for Human Space Exploration. Frontiers in Oncology, 2015, 5, 273. | 1.3 | 22 |
| 59 | Issues for Simulation of Galactic Cosmic Ray Exposures for Radiobiological Research at Ground-Based Accelerators. Frontiers in Oncology, 2015, 5, 122. | 1.3 | 46 |
| 60 | Radiation survey in the International Space Station. Journal of Space Weather and Space Climate, 2015, 5, A37. | 1.1 | 19 |
| 61 | Medical Concerns with Space Radiation and Radiobiological Effects. , 2015, , 259-293. | | 3 |
| 62 | Recommendations to mitigate against human health risks incurred due to energetic particle irradiation beyond low earth orbit/BLEO. Acta Astronautica, 2015, 109, 182-193. | 1.7 | 20 |
| 63 | Relative Effectiveness at 1 Gy after Acute and Fractionated Exposures of Heavy Ions with Different Linear Energy Transfer for Lung Tumorigenesis. Radiation Research, 2015, 183, 233-239. | 0.7 | 34 |
| 64 | Multifunctional Electroactive Nanocomposites Based on Piezoelectric Boron Nitride Nanotubes. ACS Nano, 2015, 9, 11942-11950. | 7.3 | 111 |
| 65 | MSL-RAD radiation environment measurements. Radiation Protection Dosimetry, 2015, 166, 290-294. | 0.4 | 18 |
| 66 | Ionizing Radiation Stimulates Expression of Pro-Osteoclastogenic Genes in Marrow and Skeletal Tissue. Journal of Interferon and Cytokine Research, 2015, 35, 480-487. | 0.5 | 43 |
| 67 | Selling space colonization and immortality: A psychosocial, anthropological critique of the rush to colonize Mars. Acta Astronautica, 2015, 113, 89-104. | 1.7 | 29 |
| 68 | Radiation environment at aviation altitudes and in space. Radiation Protection Dosimetry, 2015, 164, 477-483. | 0.4 | 17 |
| 69 | Space radiation-associated lung injury in a murine model. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2015, 308, L416-L428. | 1.3 | 36 |
| 70 | What happens to your brain on the way to Mars. Science Advances, 2015, 1, . | 4.7 | 179 |
| 71 | EMMIâ€"Electric solar wind sail facilitated Manned Mars Initiative. Acta Astronautica, 2015, 113, 22-28. | 1.7 | 12 |
| 72 | Measurements of the neutron spectrum in transit to Mars on the Mars Science Laboratory. Life Sciences in Space Research, 2015, 5, 6-12. | 1.2 | 34 |
| 73 | Proton Radiation Alters Intrinsic and Synaptic Properties of CA1 Pyramidal Neurons of the Mouse Hippocampus. Radiation Research, 2015, 183, 208. | 0.7 | 64 |

| # | Article | IF | Citations |
|---|---|---|---|
| 74 | Review of NASA Approach to Space Radiation Risk Assessments for Mars Exploration. Health Physics, 2015, 108, 131-142. | 0.3 | 80 |
| 75 | Evaluation of the Application of Carbon Nanotubes for Radiation Shielding. , 2015, , . | | 3 |
| 77 | Your Brain on Mars. Radiation Research, 2015, 184, 1-2. | 0.7 | 6 |
| 78 | Concepts and challenges in cancer risk prediction for the space radiation environment. Life Sciences in Space Research, 2015, 6, 92-103. | 1.2 | 75 |
| 79 | Colorectal Carcinogenesis, Radiation Quality, and the Ubiquitin-Proteasome Pathway. Journal of Cancer, 2016, 7, 174-183. | 1.2 | 21 |
| 80 | Cultivation of Staphylococcus epidermidis in the Human Spaceflight Environment Leads to Alterations in the Frequency and Spectrum of Spontaneous Rifampicin-Resistance Mutations in the rpoB Gene. Frontiers in Microbiology, 2016, 7, 999. | 1.5 | 49 |
| 81 | The Role of Nuclear Fragmentation in Particle Therapy and Space Radiation Protection. Frontiers in Oncology, 2016, 6, 65. | 1.3 | 34 |
| 82 | Evaluation of Superconducting Magnet Shield Configurations for Long Duration Manned Space Missions. Frontiers in Oncology, 2016, 6, 97. | 1.3 | 15 |
| 83 | Combined Exposure to Simulated Microgravity and Acute or Chronic Radiation Reduces Neuronal Network Integrity and Survival. PLoS ONE, 2016, 11, e0155260. | 1.1 | 26 |
| 84 | 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 |
| 85 | Space Radiation and Human Exposures, A Primer. Radiation Research, 2016, 185, 349-358. | 0.7 | 135 |
| 86 | THE MAJOR GEOEFFECTIVE SOLAR ERUPTIONS OF 2012 MARCH 7: COMPREHENSIVE SUN-TO-EARTH ANALYSIS. Astrophysical Journal, 2016, 817, 14. | 1.6 | 63 |
| 87 | DOSIS & DOSIS 3D: long-term dose monitoring onboard the Columbus Laboratory of the International Space Station (ISS). Journal of Space Weather and Space Climate, 2016, 6, A39. | 1.1 | 49 |
| 88 | Neurogenic Effects of Low-Dose Whole-Body HZE (Fe) Ion and Gamma Irradiation. Radiation Research, 2016, 186, 614-623. | 0.7 | 21 |
| 89 | The Martian surface radiation environment â€“ a comparison of models and MSL/RAD measurements. Journal of Space Weather and Space Climate, 2016, 6, A13. | 1.1 | 70 |
| 90 | Dried plum diet protects from bone loss caused by ionizing radiation. Scientific Reports, 2016, 6, 21343. | 1.6 | 52 |
| 91 | Radiation impacts on human health during spaceflight beyond Low Earth Orbit. Reach, 2016, 2-4, 1-7. | 0.4 | 5 |
| 92 | Extreme solar event of AD775: Potential radiation exposure to crews in deep space. Acta Astronautica, 2016, 123, 116-120. | 1.7 | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 93 | Cosmic ray dose monitoring using RadFET sensors of the Rosetta instruments SESAME and COSIMA. Acta Astronautica, 2016, 125, 22-29. | 1.7 | 7 |
| 94 | Reference field specification and preliminary beam selection strategy for accelerator-based GCR simulation. Life Sciences in Space Research, 2016, 8, 52-67. | 1.2 | 55 |
| 95 | Exposure to 12 C particles alters the normal dynamics of brain monoamine metabolism and behaviour in rats. Physica Medica, 2016, 32, 1088-1094. | 0.4 | 11 |
| 96 | Charged particle spectra measured during the transit to Mars with the Mars Science Laboratory Radiation Assessment Detector (MSL/RAD). Life Sciences in Space Research, 2016, 10, 29-37. | 1.2 | 23 |
| 97 | Hibernation for space travel: Impact on radioprotection. Life Sciences in Space Research, 2016, 11, 1-9. | 1.2 | 57 |
| 98 | <sup>56</sup>Fe irradiation-induced cognitive deficits through oxidative stress in mice. Toxicology Research, 2016, 5, 1672-1679. | 0.9 | 10 |
| 99 | Reducing Mission Costs by Extending Crew Stay for Initial Crewed Missions to the Moon and Mars. , 2016, , . | | 0 |
| 100 | Radiation environment onboard spacecraft at LEO and in deep space. , 2016, , . | | 7 |
| 101 | Aquarius, a reusable water-based interplanetary human spaceflight transport. Acta Astronautica, 2016, 128, 160-179. | 1.7 | 9 |
| 102 | MULTI-VIEWPOINT OBSERVATIONS OF A WIDELY DISTRIBUTED SOLAR ENERGETIC PARTICLE EVENT: THE ROLE OF EUV WAVES AND WHITE-LIGHT SHOCK SIGNATURES. Astrophysical Journal, 2016, 821, 31. | 1.6 | 26 |
| 103 | Simulating the Lunar Environment: Partial Weightbearing and High-LET Radiation-Induce Bone Loss and Increase Sclerostin-Positive Osteocytes. Radiation Research, 2016, 186, 254-263. | 0.7 | 23 |
| 104 | Apollo Lunar Astronauts Show Higher Cardiovascular Disease Mortality: Possible Deep Space Radiation Effects on the Vascular Endothelium. Scientific Reports, 2016, 6, 29901. | 1.6 | 144 |
| 105 | High Energy Particle Radiation-associated Oncogenic Transformation in Normal Mice: Insight into the Connection between Activation of Oncotargets and Oncogene Addiction. Scientific Reports, 2016, 6, 37623. | 1.6 | 11 |
| 106 | Risk of defeats in the central nervous system during deep space missions. Neuroscience and Biobehavioral Reviews, 2016, 71, 621-632. | 2.9 | 35 |
| 107 | Segmental interpolating spectra for solar particle events and in situ validation. Space Weather, 2016, 14, 742-753. | 1.3 | 5 |
| 108 | Calibration and Characterization of the Radiation Assessment Detector (RAD) on Curiosity. Space Science Reviews, 2016, 201, 201-233. | 3.7 | 30 |
| 109 | Cosmic radiation exposure and persistent cognitive dysfunction. Scientific Reports, 2016, 6, 34774. | 1.6 | 167 |
| 110 | Large gradual solar energetic particle events. Living Reviews in Solar Physics, 2016, 13, 3. | 7.8 | 308 |

| # | Article | IF | Citations |
|---|---|---|---|
| 111 | Interactions of protons with furan molecules studied by collision-induced emission spectroscopy at the incident energy range of 50â€“1000 eV. European Physical Journal D, 2016, 70, 1. | 0.6 | 10 |
| 112 | Mars ainâ€™t the kind of place to raise your kid: ethical implications of pregnancy on missions to colonize other planets. Life Sciences, Society and Policy, 2016, 12, 10. | 3.1 | 7 |
| 113 | Monte Carlo simulations for the space radiation superconducting shield project (SR2S). Life Sciences in Space Research, 2016, 8, 22-29. | 1.2 | 26 |
| 114 | Venturing into new realms? Microorganisms in space. FEMS Microbiology Reviews, 2016, 40, 722-737. | 3.9 | 75 |
| 115 | Galactic cosmic ray simulation at the NASA Space Radiation Laboratory. Life Sciences in Space Research, 2016, 8, 38-51. | 1.2 | 112 |
| 116 | Martian Superoxide and Peroxide O<sub>2</sub>Release (OR) Assay: A New Technology for Terrestrial and Planetary Applications. Astrobiology, 2016, 16, 126-142. | 1.5 | 5 |
| 117 | Danger! Radiation!. Science and Fiction, 2016, , 187-210. | 0.0 | 0 |
| 119 | Detection of DNA damage by space radiation in human fibroblasts flown on the International Space Station. Life Sciences in Space Research, 2017, 12, 24-31. | 1.2 | 34 |
| 120 | Dependence of the Martian radiation environment on atmospheric depth: Modeling and measurement. Journal of Geophysical Research E: Planets, 2017, 122, 329-341. | 1.5 | 26 |
| 121 | Development and performance evaluation of a three-dimensional clinostat synchronized heavy-ion irradiation system. Life Sciences in Space Research, 2017, 12, 51-60. | 1.2 | 20 |
| 122 | Using spectral shape and predictor fluence to evaluate temporal dependence of exposures from solar particle events. Space Weather, 2017, 15, 374-391. | 1.3 | 3 |
| 123 | Irradiation effects on antibody performance in the frame of biochip-based instruments development for space exploration. International Journal of Astrobiology, 2017, 16, 82-90. | 0.9 | 12 |
| 124 | Toward biotechnology in space: High-throughput instruments for in situ biological research beyond Earth. Biotechnology Advances, 2017, 35, 905-932. | 6.0 | 48 |
| 125 | Cosmic-ray interaction data for designing biological experiments in space. Life Sciences in Space Research, 2017, 13, 51-59. | 1.2 | 13 |
| 126 | Comparison of novel active semiconductor pixel detectorwith passive radiation detectors during the NASA Orion ExplorationÂFlight Test 1 (EFT-1). Radiation Measurements, 2017, 106, 290-297. | 0.7 | 9 |
| 127 | The DOSIS and DOSIS 3D project on-board the ISS â€” Current status and scientific overview. , 2017, , . | | 3 |
| 128 | Different Sequences of Fractionated Low-Dose Proton and Single Iron-Radiation-Induced Divergent Biological Responses in the Heart. Radiation Research, 2017, 188, 191-203. | 0.7 | 25 |
| 129 | Low and high dose rate heavy ion radiation-induced intestinal and colonic tumorigenesis in APC1638N/+ mice. Life Sciences in Space Research, 2017, 13, 45-50. | 1.2 | 16 |

| # | Article | IF | Citations |
|---|---|---|---|
| 130 | Non-Targeted Effects Models Predict Significantly Higher Mars Mission Cancer Risk than Targeted Effects Models. Scientific Reports, 2017, 7, 1832. | 1.6 | 66 |
| 131 | Stable, Reliable, and Bit-Interleaving 12T SRAM for Space Applications: A Device Circuit Co-Design. IEEE Transactions on Semiconductor Manufacturing, 2017, 30, 276-284. | 1.4 | 50 |
| 132 | Thick-target yields of secondary ions and neutrons for validation of radiation transport codes. , 2017, , . | | 4 |
| 133 | Evaluation of HZETRN on the Martian surface: Sensitivity tests and model results. Life Sciences in Space Research, 2017, 14, 29-35. | 1.2 | 14 |
| 134 | NEUDOSE: A CubeSat Mission for Dosimetry of Charged Particles and Neutrons in Low-Earth Orbit. Radiation Research, 2017, 187, 42-49. | 0.7 | 0 |
| 135 | High Energies and Radiation Effects. Lecture Notes in Physics, 2017, , 103-111. | 0.3 | 0 |
| 136 | Radiation and Radical Chemistry of Ionic Liquids for Energy Applications. ACS Symposium Series, 2017, , 251-272. | 0.5 | 7 |
| 137 | Proton Radiation Studies on Conjugated Polymer Thin Films. MRS Advances, 2017, 2, 2967-2972. | 0.5 | 0 |
| 138 | The radiation environment on the surface of Mars - Summary of model calculations and comparison to RAD data. Life Sciences in Space Research, 2017, 14, 18-28. | 1.2 | 57 |
| 140 | Radiation transport simulation of the Martian GCR surface flux and dose estimation using spherical geometry in PHITS compared to MSL-RAD measurements. Life Sciences in Space Research, 2017, 14, 36-42. | 1.2 | 9 |
| 141 | Exploring innovative radiation shielding approaches in space: A material and design study for a wearable radiation protection spacesuit. Life Sciences in Space Research, 2017, 15, 69-78. | 1.2 | 29 |
| 142 | Interplanetary coronal mass ejection observed at STEREOâ€A, Mars, comet 67P/Churyumovâ€Gerasimenko, Saturn, and New Horizons en route to Pluto: Comparison of its Forbush decreases at 1.4, 3.1, and 9.9ÂAU. Journal of Geophysical Research: Space Physics, 2017, 122, 7865-7890. | 0.8 | 87 |
| 143 | Novel Indications for Commonly Used Medications as Radiation Protectants in Spaceflight. Aerospace Medicine and Human Performance, 2017, 88, 665-676. | 0.2 | 30 |
| 144 | Triboelectric nanogenerator for Mars environment. Nano Energy, 2017, 39, 238-244. | 8.2 | 49 |
| 145 | DOSIS & DOSIS 3D: radiation measurements with the DOSTEL instruments onboard the Columbus Laboratory of the ISS in the years 2009â€“2016. Journal of Space Weather and Space Climate, 2017, 7, A8. | 1.1 | 44 |
| 146 | Space as a Tool for Astrobiology: Review and Recommendations for Experimentations in Earth Orbit and Beyond. Space Science Reviews, 2017, 209, 83-181. | 3.7 | 54 |
| 147 | In vitro and in vivo assessment of direct effects of simulated solar and galactic cosmic radiation on human hematopoietic stem/progenitor cells. Leukemia, 2017, 31, 1398-1407. | 3.3 | 28 |
| 148 | Nanopore DNA Sequencing and Genome Assembly on the International Space Station. Scientific Reports, 2017, 7, 18022. | 1.6 | 264 |

| # | Article | IF | Citations |
|---|---|---|---|
| 149 | A Satellite Data Analysis and CubeSat Instrument Simulator Tool for Simultaneous Multi-spacecraft Measurements of Solar Energetic Particles. Journal of Astrophysics and Astronomy, 2017, 38, 1. | 0.4 | 0 |
| 150 | Radiation neurobiology of long-term spaceflights. Biology Bulletin Reviews, 2017, 7, 443-468. | 0.3 | 3 |
| 151 | Personalized Medicine in Space Flight, Part II. , 2017, , 673-693. | | 1 |
| 152 | Impact of Particle Irradiation on the Immune System: From the Clinic to Mars. Frontiers in Immunology, 2017, 8, 177. | 2.2 | 52 |
| 153 | Editorial: Charged Particles in Oncology. Frontiers in Oncology, 2017, 7, 301. | 1.3 | 7 |
| 154 | Dose- and Ion-Dependent Effects in the Oxidative Stress Response to Space-Like Radiation Exposure in the Skeletal System. International Journal of Molecular Sciences, 2017, 18, 2117. | 1.8 | 19 |
| 155 | Modeling the effectiveness of shielding in the earth-moon-mars radiation environment using PREDICCS: five solar events in 2012. Journal of Space Weather and Space Climate, 2017, 7, A16. | 1.1 | 5 |
| 156 | MMR Deficiency Does Not Sensitize or Compromise the Function of Hematopoietic Stem Cells to Low and High LET Radiation. Stem Cells Translational Medicine, 2018, 7, 513-520. | 1.6 | 4 |
| 157 | Radiation: A Primer. SpringerBriefs in Space Development, 2018, , 1-14. | 0.1 | 0 |
| 159 | Solar Particle Events and Human Deep Space Exploration: Measurements and Considerations. , 2018, , 433-451. | | 9 |
| 160 | Effects of<sup>1</sup>H +<sup>16</sup>O Charged Particle Irradiation on Short-Term Memory and Hippocampal Physiology in a Murine Model. Radiation Research, 2018, 189, 53-63. | 0.7 | 26 |
| 161 | Synthetic torpor: A method for safely and practically transporting experimental animals aboard spaceflight missions to deep space. Life Sciences in Space Research, 2018, 16, 101-107. | 1.2 | 18 |
| 162 | Charged particles radiation measurements with Liulin-MO dosimeter of FREND instrument aboard ExoMars Trace Gas Orbiter during the transit and in high elliptic Mars orbit. Icarus, 2018, 303, 53-66. | 1.1 | 28 |
| 163 | Late effects of 1 H irradiation on hippocampal physiology. Life Sciences in Space Research, 2018, 17, 51-62. | 1.2 | 19 |
| 164 | Detecting Upward Directed Charged Particle Fluxes in the Mars Science Laboratory Radiation Assessment Detector. Earth and Space Science, 2018, 5, 2-18. | 1.1 | 6 |
| 165 | Biomedical Consequences of Exposure to Space Radiation. SpringerBriefs in Space Development, 2018, , 15-27. | 0.1 | 1 |
| 166 | Whole-Body Oxygen (<sup>16</sup>O) Ion-Exposure-Induced Impairments in Social Odor Recognition Memory in Rats are Dose and Time Dependent. Radiation Research, 2018, 189, 292-299. | 0.7 | 28 |
| 167 | The effect of carbon irradiation is associated with greater oxidative stress in mouse intestine and colon relative to Î³-rays. Free Radical Research, 2018, 52, 556-567. | 1.5 | 13 |

| # | Article | IF | Citations |
|---|---|---|---|
| 168 | Heart in space: effect of the extraterrestrial environment on the cardiovascular system. Nature Reviews Cardiology, 2018, 15, 167-180. | 6.1 | 161 |
| 169 | COMPARISON OF COSMIC-RAY ENVIRONMENTS ON EARTH, MOON, MARS AND IN SPACECRAFT USING PHITS. Radiation Protection Dosimetry, 2018, 180, 146-149. | 0.4 | 17 |
| 170 | Analysis of the intellectual structure of human space exploration research using a bibliometric approach: Focus on human related factors. Acta Astronautica, 2018, 143, 169-182. | 1.7 | 14 |
| 171 | Measurements of Forbush decreases at Mars: both by MSL on ground and by MAVEN in orbit. Astronomy and Astrophysics, 2018, 611, A79. | 2.1 | 29 |
| 172 | Space Radiation Effects on Crew During and After Deep Space Missions. Current Pathobiology Reports, 2018, 6, 167-175. | 1.6 | 7 |
| 173 | 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 |
| 174 | Fine Resolution Epithermal Neutron Detector (FREND) Onboard the ExoMars Trace Gas Orbiter. Space Science Reviews, 2018, 214, 1. | 3.7 | 33 |
| 175 | â€œThe Smartphoneâ€™s Guide to the Galaxyâ€• In Situ Analysis in Space. Biosensors, 2018, 8, 96. | 2.3 | 14 |
| 176 | Peripheral T Cells as a Biomarker for Oxygen-Ion-Radiation-Induced Social Impairments. Radiation Research, 2018, 190, 186. | 0.7 | 27 |
| 177 | Space Weather on the Surface of Mars: Impact of the September 2017 Events. Space Weather, 2018, 16, 1702-1708. | 1.3 | 22 |
| 178 | Alterations in synaptic density and myelination in response to exposure to high-energy charged particles. Journal of Comparative Neurology, 2018, 526, 2845-2855. | 0.9 | 23 |
| 179 | Analysis of the Radiation Hazard Observed by RAD on the Surface of Mars During the September 2017 Solar Particle Event. Geophysical Research Letters, 2018, 45, 5845-5851. | 1.5 | 29 |
| 180 | The effect of simulated space radiation on the Nâ€glycosylation of human immunoglobulin G1. Electrophoresis, 2018, 39, 2872-2876. | 1.3 | 4 |
| 181 | The Solar Particle Event on 10 September 2017 as observed onboard the International Space Station (ISS). Space Weather, 2018, 16, 1173-1189. | 1.3 | 26 |
| 182 | The Role of the Nuclear Factor ÎºB Pathway in the Cellular Response to Low and High Linear Energy Transfer Radiation. International Journal of Molecular Sciences, 2018, 19, 2220. | 1.8 | 11 |
| 183 | Space Pharmacology: How Space Affects Pharmacology. , 2018, , 1-13. | | 4 |
| 184 | Multi-spacecraft observations and transport simulations of solar energetic particles for the May 17th 2012 event. Astronomy and Astrophysics, 2018, 612, A116. | 2.1 | 16 |
| 185 | Spaceflight environment. , 2018, , 87-138. | | 11 |

| # | Article | IF | Citations |
|---|---|---|---|
| 186 | Detrimental Effects of Helium Ion Irradiation on Cognitive Performance and Cortical Levels of MAP-2 in B6D2F1 Mice. International Journal of Molecular Sciences, 2018, 19, 1247. | 1.8 | 23 |
| 187 | Apoptosis Induction by Iron Radiation via Inhibition of Autophagy in Trp53+/- Mouse Testes: Is Chronic Restraint-Induced Stress a Modifying Factor?. International Journal of Biological Sciences, 2018, 14, 1109-1121. | 2.6 | 16 |
| 188 | A water-filled garment to protect astronauts during interplanetary missions tested on board the ISS. Life Sciences in Space Research, 2018, 18, 1-11. | 1.2 | 18 |
| 189 | Landing Area Selection Based on Closed Environment Avoidance from a Single Image During Optical Coarse Hazard Detection. Earth, Moon and Planets, 2018, 121, 73-104. | 0.3 | 3 |
| 190 | Female mice are protected from space radiation-induced maladaptive responses. Brain, Behavior, and Immunity, 2018, 74, 106-120. | 2.0 | 98 |
| 191 | A Simplified Ab Initio Cosmic-ray Modulation Model with Simulated Time Dependence and Predictive Capability. Astrophysical Journal, 2018, 859, 107. | 1.6 | 40 |
| 192 | Space-like 56Fe irradiation manifests mild, early sex-specific behavioral and neuropathological changes in wildtype and Alzheimerâ€™s-like transgenic mice. Scientific Reports, 2019, 9, 12118. | 1.6 | 49 |
| 193 | A Review on Graphene Polymer Nanocomposites in Harsh Operating Conditions. Industrial & Engineering Chemistry Research, 2019, 58, 17106-17129. | 1.8 | 31 |
| 194 | A review of radiation shielding needs and concepts for space voyages beyond Earth's magnetic influence. Progress in Aerospace Sciences, 2019, 110, 100553. | 6.3 | 27 |
| 195 | Measurements of radiation quality factor on Mars with the Mars Science Laboratory Radiation Assessment Detector. Life Sciences in Space Research, 2019, 22, 89-97. | 1.2 | 13 |
| 196 | A Semi-Autonomous Method to Detect Cosmic Rays in Raman Hyperspectral Data Sets. Applied Spectroscopy, 2019, 73, 1019-1027. | 1.2 | 18 |
| 197 | Effects of exposure to 12C and 4He particles on cognitive performance of intact and ovariectomized female rats. Life Sciences in Space Research, 2019, 22, 47-54. | 1.2 | 12 |
| 198 | Limitations in predicting radiation-induced pharmaceutical instability during long-duration spaceflight. Npj Microgravity, 2019, 5, 15. | 1.9 | 37 |
| 199 | Positive impact of low-dose, high-energy radiation on bone in partial- and/or full-weightbearing mice. Npj Microgravity, 2019, 5, 13. | 1.9 | 5 |
| 200 | Design and dosimetry of a facility to study health effects following exposures to fission neutrons at low dose rates for long durations. International Journal of Radiation Biology, 2021, 97, 1063-1076. | 1.0 | 16 |
| 201 | Environmentally Robust Memristor Enabled by Leadâ€Free Double Perovskite for Highâ€Performance Information Storage. Small, 2019, 15, e1905731. | 5.2 | 123 |
| 202 | Particle Acceleration at the Pileup Collision of the Twin Shock. Astrophysical Journal, 2019, 885, 66. | 1.6 | 4 |
| 203 | Fractionated and Acute Proton Radiation Show Differential Intestinal Tumorigenesis and DNA Damage and Repair Pathway Response in ApcMin/+ Mice. International Journal of Radiation Oncology Biology Physics, 2019, 105, 525-536. | 0.4 | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 204 | The Oxygen Release Instrument: Space Mission Reactive Oxygen Species Measurements for Habitability Characterization, Biosignature Preservation Potential Assessment, and Evaluation of Human Health Hazards. Life, 2019, 9, 70. | 1.1 | 0 |
| 205 | Expression Profile of Cell Cycle-Related Genes in Human Fibroblasts Exposed Simultaneously to Radiation and Simulated Microgravity. International Journal of Molecular Sciences, 2019, 20, 4791. | 1.8 | 21 |
| 206 | Why Human Enhancement is Necessary for Successful Human Deep-space Missions. New Bioethics, 2019, 25, 295-317. | 0.5 | 12 |
| 207 | Hibernation and Radioprotection: Gene Expression in the Liver and Testicle of Rats Irradiated under Synthetic Torpor. International Journal of Molecular Sciences, 2019, 20, 352. | 1.8 | 26 |
| 208 | Short and Long-Term Changes in Social Odor Recognition and Plasma Cytokine Levels Following Oxygen (16O) Ion Radiation Exposure. International Journal of Molecular Sciences, 2019, 20, 339. | 1.8 | 18 |
| 209 | 5.2.5â€ƒCalibration of Detectors that Have Flown on Mir, ISS, Lunar Reconnaissance Orbiter, the Orion Spacecraft and the Mars Science Laboratory. Radioisotopes, 2019, 68, 433-441. | 0.1 | 0 |
| 210 | Update on Galactic Cosmic Ray Integral Flux Measurements in Lunar Orbit With CRaTER. Space Weather, 2019, 17, 1011. | 1.3 | 8 |
| 211 | Radiation Risks and Countermeasures for Humans on Deep Space Missions. , 2019, , . | | 8 |
| 212 | Changes in one-carbon metabolism and DNA methylation in the hearts of mice exposed to space environment-relevant doses of oxygen ions (16O). Life Sciences in Space Research, 2019, 22, 8-15. | 1.2 | 13 |
| 213 | Research plans in Europe for radiation health hazard assessment in exploratory space missions. Life Sciences in Space Research, 2019, 21, 73-82. | 1.2 | 47 |
| 214 | Risks of cognitive detriments after low dose heavy ion and proton exposures. International Journal of Radiation Biology, 2019, 95, 985-998. | 1.0 | 51 |
| 215 | Current status of space radiobiological studies in China. Life Sciences in Space Research, 2019, 22, 1-7. | 1.2 | 9 |
| 216 | Radiation-Induced DNA Damage Cooperates with Heterozygosity of TP53 and PTEN to Generate High-Grade Gliomas. Cancer Research, 2019, 79, 3749-3761. | 0.4 | 23 |
| 217 | Mitochondrial proteomics reveals the mechanism of spermatogenic cells apoptosis induced by carbon ion radiation in zebrafish. Journal of Cellular Physiology, 2019, 234, 22439-22449. | 2.0 | 5 |
| 218 | Galactic Cosmic Ray induced absorbed dose rate in deep space â€“ Accounting for detector size, shape, material, as well as for the solar modulation. Journal of Space Weather and Space Climate, 2019, 9, A14. | 1.1 | 12 |
| 219 | Personalized Nutrition: Translating the Science of NutriGenomics Into Practice: Proceedings From the 2018 American College of Nutrition Meeting. Journal of the American College of Nutrition, 2019, 38, 287-301. | 1.1 | 27 |
| 220 | Comparison of Measured and Predicted Values of Absorbed Doses from Galactic Cosmic Rays. Cosmic Research, 2019, 57, 44-47. | 0.2 | 2 |
| 221 | Late Effects of 16O-Particle Radiation on Female Social and Cognitive Behavior and Hippocampal Physiology. Radiation Research, 2019, 191, 278. | 0.7 | 25 |

| # | Article | IF | Citations |
|---|---|---|---|
| 222 | The Million Person Study relevance to space exploration and Mars. International Journal of Radiation Biology, 2022, 98, 551-559. | 1.0 | 24 |
| 223 | Behavioral effects of space radiation: A comprehensive review of animal studies. Life Sciences in Space Research, 2019, 21, 1-21. | 1.2 | 70 |
| 224 | Epigenetic modification by galactic cosmic radiation as a risk factor for lung cancer: real world data issues. Translational Lung Cancer Research, 2019, 8, 116-116. | 1.3 | 1 |
| 225 | A Lunar Microbial Survival Model for Predicting the Forward Contamination of the Moon. Astrobiology, 2019, 19, 730-756. | 1.5 | 18 |
| 226 | Biological Contamination Prevention for Outer Solar System Moons of Astrobiological Interest: What Do We Need to Know?. Astrobiology, 2019, 19, 951-974. | 1.5 | 24 |
| 227 | Why space colonization will be fully automated. Technological Forecasting and Social Change, 2019, 143, 162-171. | 6.2 | 25 |
| 228 | Applied nuclear physics at the new high-energy particle accelerator facilities. Physics Reports, 2019, 800, 1-37. | 10.3 | 46 |
| 229 | Combined Effects of Three High-Energy Charged Particle Beams Important for Space Flight on Brain, Behavioral and Cognitive Endpoints in B6D2F1 Female and Male Mice. Frontiers in Physiology, 2019, 10, 179. | 1.3 | 61 |
| 230 | Tracking and Validating ICMEs Propagating Toward Mars Using STEREO Heliospheric Imagers Combined With Forbush Decreases Detected by MSL/RAD. Space Weather, 2019, 17, 586-598. | 1.3 | 9 |
| 231 | Radiation Tolerance of Nanopore Sequencing Technology for Life Detection on Mars and Europa. Scientific Reports, 2019, 9, 5370. | 1.6 | 23 |
| 232 | First results from the LUCID-Timepix spacecraft payload onboard the TechDemoSat-1 satellite in Low Earth Orbit. Advances in Space Research, 2019, 63, 1523-1540. | 1.2 | 15 |
| 233 | Comparisons of Highâ€Linear Energy Transfer Spectra on the ISS and in Deep Space. Space Weather, 2019, 17, 396-418. | 1.3 | 13 |
| 234 | LGM2605 Reduces Space Radiation-Induced NLRP3 Inflammasome Activation and Damage in In Vitro Lung Vascular Networks. International Journal of Molecular Sciences, 2019, 20, 176. | 1.8 | 16 |
| 235 | A New Vision for Therapeutic Hypothermia in the Era of Targeted Temperature Management: A Speculative Synthesis. Therapeutic Hypothermia and Temperature Management, 2019, 9, 13-47. | 0.3 | 55 |
| 236 | Cardiovascular effects of space radiation: implications for future human deep space exploration. European Journal of Preventive Cardiology, 2019, 26, 1707-1714. | 0.8 | 11 |
| 237 | Charge Transfer, Complexes Formation and Furan Fragmentation Induced by Collisions with Low-Energy Helium Cations. International Journal of Molecular Sciences, 2019, 20, 6022. | 1.8 | 6 |
| 238 | The German Aerospace Center M-42 radiation detectorâ€"A new development for applications in mixed radiation fields. Review of Scientific Instruments, 2019, 90, 125115. | 0.6 | 11 |
| 239 | Increased Chromosome Aberrations in Cells Exposed Simultaneously to Simulated Microgravity and Radiation. International Journal of Molecular Sciences, 2019, 20, 43. | 1.8 | 30 |

| # | Article | IF | Citations |
|---|---|---|---|
| 240 | Nuclear interactions and medicine. European Physical Journal Plus, 2019, 134, 1. | 1.2 | 0 |
| 241 | Pharmacogenomics in Spaceflight. , 2019, , 1-39. | | 3 |
| 242 | Silicon equivalent gas in silicon equivalent proportional counter - Monte Carlo simulations. Radiation Physics and Chemistry, 2020, 167, 108259. | 1.4 | 1 |
| 243 | Cancer and circulatory disease risks for a human mission to Mars: Private mission considerations. Acta Astronautica, 2020, 166, 529-536. | 1.7 | 16 |
| 244 | Ethical Challenges in Human Space Missions: A Space Refuge, Scientific Value, and Human Gene Editing for Space. Science and Engineering Ethics, 2020, 26, 1209-1227. | 1.7 | 11 |
| 245 | Correct modeling results are needed to inform mission planning and shield design. Life Sciences in Space Research, 2020, 25, 143-147. | 1.2 | 2 |
| 246 | Ethical issues of human enhancements for space missions to Mars and beyond. Futures, 2020, 115, 102489. | 1.4 | 16 |
| 247 | The 20th Gray lecture 2019: health and heavy ions. British Journal of Radiology, 2020, 93, 20200172. | 1.0 | 16 |
| 248 | The effects of microgravity and space radiation on cardiovascular health: From low-Earth orbit and beyond. IJC Heart and Vasculature, 2020, 30, 100595. | 0.6 | 30 |
| 249 | Collision-induced luminescence spectra of pyridine bombarded by 1000ÂeV He+ cations. Results in Physics, 2020, 18, 103244. | 2.0 | 2 |
| 250 | Updated deterministic radiation transport for future deep space missions. Life Sciences in Space Research, 2020, 27, 6-18. | 1.2 | 15 |
| 251 | Effect of low-dose fast neutrons on the protein components of peripheral blood mononuclear cells of whole-body irradiated Wistar rats. Environmental Science and Pollution Research, 2020, 27, 40443-40455. | 2.7 | 12 |
| 252 | Neutron radiation shielding composites for deep space exploration: An introduction. , 2020, , 263-285. | | 3 |
| 253 | Fundamental Biological Features of Spaceflight: Advancing the Field to Enable Deep-Space Exploration. Cell, 2020, 183, 1162-1184. | 13.5 | 185 |
| 254 | Additive effects of simulated microgravity and ionizing radiation in cell death, induction of ROS and expression of RAC2 in human bronchial epithelial cells. Npj Microgravity, 2020, 6, 34. | 1.9 | 12 |
| 255 | Can a comparison of clinical and deep space irradiation scenarios shed light on the radiation response of the brain?. British Journal of Radiology, 2020, 93, 20200245. | 1.0 | 6 |
| 256 | Relative Biological Effectiveness of High LET Particles on the Reproductive System and Fetal Development. Life, 2020, 10, 298. | 1.1 | 6 |
| 257 | Immunological Changes During Space Travel: A Ground-Based Evaluation of the Impact of Neutron Dose Rate on Plasma Cytokine Levels in Human Whole Blood Cultures. Frontiers in Physics, 2020, 8, . | 1.0 | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 258 | Warning Time Analysis From SEP Simulations of a Twoâ€Tier REleASE System Applied to Mars Exploration. Space Weather, 2020, 18, e2019SW002354. | 1.3 | 10 |
| 259 | Space Pharmacology: How Space Affects Pharmacology. , 2020, , 519-531. | | 0 |
| 261 | Calculation of dose distribution in a realistic brain structure and the indication of space radiation influence on human brains. Life Sciences in Space Research, 2020, 27, 33-48. | 1.2 | 5 |
| 262 | Benchmarking risk predictions and uncertainties in the NSCR model of GCR cancer risks with revised low let risk coefficients. Life Sciences in Space Research, 2020, 27, 64-73. | 1.2 | 13 |
| 263 | Life Support Systems for Humans in Space. , 2020, , . | | 9 |
| 264 | Hybrid Active-Passive Space Radiation Simulation Concept for GSI and the Future FAIR Facility. Frontiers in Physics, 2020, 8, . | 1.0 | 16 |
| 265 | Effects of Six Sequential Charged Particle Beams on Behavioral and Cognitive Performance in B6D2F1 Female and Male Mice. Frontiers in Physiology, 2020, 11, 959. | 1.3 | 23 |
| 266 | Trajectory Design of Perseus: A CubeSat Mission Concept to Phobos. Aerospace, 2020, 7, 179. | 1.1 | 4 |
| 267 | NASAâ€™s first ground-based Galactic Cosmic Ray Simulator: Enabling a new era in space radiobiology research. PLoS Biology, 2020, 18, e3000669. | 2.6 | 144 |
| 268 | Why Personalized Medicine Is the Frontier of Medicine and Performance for Humans in Space. New Space, 2020, 8, 63-76. | 0.4 | 9 |
| 269 | Investigation of shielding material properties for effective space radiation protection. Life Sciences in Space Research, 2020, 26, 69-76. | 1.2 | 57 |
| 270 | Unloading-Induced Cortical Bone Loss is Exacerbated by Low-Dose Irradiation During a Simulated Deep Space Exploration Mission. Calcified Tissue International, 2020, 107, 170-179. | 1.5 | 15 |
| 272 | Galactic Cosmic Ray Shielding Using Spherical Field-Reversed Array of Superconducting Coils. Journal of Spacecraft and Rockets, 2020, 57, 1222-1231. | 1.3 | 7 |
| 273 | Space weather: Variability in the Sun-Earth connection. , 2020, , 61-85. | | 0 |
| 274 | The case for biotech on Mars. Nature Biotechnology, 2020, 38, 401-407. | 9.4 | 53 |
| 275 | Effects of single-dose protons or oxygen ions on function and structure of the cardiovascular system in male Long Evans rats. Life Sciences in Space Research, 2020, 26, 62-68. | 1.2 | 8 |
| 276 | Mars neutron radiation environment from HEND/Odyssey and DAN/MSL observations. Planetary and Space Science, 2020, 184, 104866. | 0.9 | 9 |
| 277 | Protons Show Greater Relative Biological Effectiveness for Mammary Tumorigenesis with Higher ERÎ±- and HER2-Positive Tumors Relative to Î³-rays in APCMin/+ Mice. International Journal of Radiation Oncology Biology Physics, 2020, 107, 202-211. | 0.4 | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 278 | A Solid-State Microdosimeter for Dose and Radiation Quality Monitoring for Astronauts in Space. IEEE Transactions on Nuclear Science, 2020, 67, 169-174. | 1.2 | 9 |
| 279 | Shielding effectiveness: A weighted figure of merit for space radiation shielding. Applied Radiation and Isotopes, 2020, 161, 109141. | 0.7 | 12 |
| 280 | Aspergillus niger Spores Are Highly Resistant to Space Radiation. Frontiers in Microbiology, 2020, 11, 560. | 1.5 | 47 |
| 281 | Genomic mapping in outbred mice reveals overlap in genetic susceptibility for HZE ionâ€“ and Î³-rayâ€“induced tumors. Science Advances, 2020, 6, eaax5940. | 4.7 | 26 |
| 282 | Space Radiation Biology for â€œLiving in Spaceâ€• BioMed Research International, 2020, 2020, 1-25. | 0.9 | 75 |
| 283 | Simultaneous exposure to chronic irradiation and simulated microgravity differentially alters immune cell phenotype in mouse thymus and spleen. Life Sciences in Space Research, 2021, 28, 66-73. | 1.2 | 12 |
| 284 | Improved radiation shielding analysis considering vector calculus. International Journal of Energy Research, 2021, 45, 11904-11915. | 2.2 | 0 |
| 285 | Analysis of Coronal Mass Ejection Flux Rope Signatures Using 3DCORE and Approximate Bayesian Computation. Astrophysical Journal, Supplement Series, 2021, 252, 9. | 3.0 | 24 |
| 286 | Space Radiation Shielding. , 2021, , 353-375. | | 4 |
| 287 | High Energies and Radiation Effects. Lecture Notes in Physics, 2021, , 135-149. | 0.3 | 0 |
| 289 | Impact of galactic cosmic ray simulation on nutritional content of foods. Life Sciences in Space Research, 2021, 28, 22-25. | 1.2 | 8 |
| 290 | Design and Realization of China Tianwen-1 Energetic Particle Analyzer. Space Science Reviews, 2021, 217, 1. | 3.7 | 5 |
| 291 | Prediction of Leakage Current and Depletion Voltage in Silicon Detectors Under Extraterrestrial Radiation Conditions. Frontiers in Physics, 2021, 9, . | 1.0 | 0 |
| 292 | Electronic energy loss and straggling in low energy H<sup>+</sup> and H<sub>2</sub><sup>+</sup> interaction with silicon films. Radiation Effects and Defects in Solids, 2021, 176, 73-91. | 0.4 | 7 |
| 293 | The RadMap Telescope on the International Space Station. , 2021, , . | | 1 |
| 294 | The Mars Environmental Dynamics Analyzer, MEDA. A Suite of Environmental Sensors for the Mars 2020 Mission. Space Science Reviews, 2021, 217, 48. | 3.7 | 57 |
| 295 | Radiation on Earth or in Space: What Does It Change?. International Journal of Molecular Sciences, 2021, 22, 3739. | 1.8 | 23 |
| 296 | Short-term metabolic disruptions in urine of mouse models following exposure to low doses of oxygen ion radiation. Journal of Environmental Science and Health, Part C: Toxicology and Carcinogenesis, 2021, 39, 234-249. | 0.4 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 297 | The Particle Radiobiology of Multipotent Mesenchymal Stromal Cells: A Key to Mitigating Radiation-Induced Tissue Toxicities in Cancer Treatment and Beyond?. Frontiers in Oncology, 2021, 11, 616831. | 1.3 | 1 |
| 299 | The Potential of Physical Exercise to Mitigate Radiation Damageâ€"A Systematic Review. Frontiers in Medicine, 2021, 8, 585483. | 1.2 | 3 |
| 300 | CME Magnetic Structure and IMF Preconditioning Affecting SEP Transport. Space Weather, 2021, 19, e2020SW002654. | 1.3 | 18 |
| 301 | Detrimental impacts of mixed-ion radiation on nervous system function. Neurobiology of Disease, 2021, 151, 105252. | 2.1 | 20 |
| 302 | The connection between space weather and Single Event Upsets in polar low earth orbit satellites. Advances in Space Research, 2021, 67, 3237-3249. | 1.2 | 2 |
| 303 | Space missions: psychological and psychopathological issues. CNS Spectrums, 2022, 27, 536-540. | 0.7 | 9 |
| 304 | Observations of neutron radiation environment during Odyssey cruise to Mars. Life Sciences in Space Research, 2021, 29, 53-62. | 1.2 | 3 |
| 305 | Rad-Bio-App: a discovery environment for biologists to explore spaceflight-related radiation exposures. Npj Microgravity, 2021, 7, 15. | 1.9 | 2 |
| 306 | Comparison between PHITS and GEANT4 Simulations of the Heavy Ion Beams at the BEVALAC at LBNL and the Booster Accelerator at BNL. Life Sciences in Space Research, 2021, 29, 38-45. | 1.2 | 5 |
| 307 | Chinaâ€™s Mars Exploration Mission and Science Investigation. Space Science Reviews, 2021, 217, 1. | 3.7 | 66 |
| 308 | An easy-to-use function to assess deep space radiation in human brains. Scientific Reports, 2021, 11, 11687. | 1.6 | 5 |
| 309 | Evaluating the long-term effect of space radiation on the reproductive normality of mammalian sperm preserved on the International Space Station. Science Advances, 2021, 7, . | 4.7 | 18 |
| 310 | Transcriptomic analysis links hepatocellular carcinoma (HCC) in HZE ion irradiated mice to a human HCC subtype with favorable outcomes. Scientific Reports, 2021, 11, 14052. | 1.6 | 3 |
| 311 | Ad Astra â€“ telomeres in space!. International Journal of Radiation Biology, 2022, 98, 395-403. | 1.0 | 5 |
| 313 | What can space radiation protection learn from radiation oncology?. Life Sciences in Space Research, 2021, 30, 82-95. | 1.2 | 8 |
| 314 | Space Radiation Protection Countermeasures in Microgravity and Planetary Exploration. Life, 2021, 11, 829. | 1.1 | 13 |
| 315 | Parametric scaling of a magnetic field-reversed conducting coil assembly for radiation shielding. Advances in Space Research, 2021, 68, 4100-4112. | 1.2 | 4 |
| 316 | Space Radiation Dosimetry at the Exposure Facility of the International Space Station for the Tanpopo Mission. Astrobiology, 2021, 21, 1473-1478. | 1.5 | 15 |

| # | Article | IF | Citations |
|---|---|---|---|
| 317 | Acute, Low-Dose Neutron Exposures Adversely Impact Central Nervous System Function. International Journal of Molecular Sciences, 2021, 22, 9020. | 1.8 | 6 |
| 318 | Biologically-Based and Physiochemical Life Support and In Situ Resource Utilization for Exploration of the Solar Systemâ€"Reviewing the Current State and Defining Future Development Needs. Life, 2021, 11, 844. | 1.1 | 10 |
| 319 | Commissioning of a bubble chamber for space radiation dosimetry. CEAS Space Journal, 0, , 1. | 1.1 | 0 |
| 320 | Repairable Polymer Solid Electrolyte Gated MoS<sub>2</sub> Field Effect Devices with Large Radiation Tolerance. Advanced Electronic Materials, 2022, 8, 2100619. | 2.6 | 3 |
| 321 | Radiation environment for future human exploration on the surface of Mars: the current understanding based on MSL/RAD dose measurements. Astronomy and Astrophysics Review, 2021, 29, 1. | 9.1 | 27 |
| 322 | Identification of novel biomarkers of heavy ion exposure: Proteins, miRNAs and tRNA-derived fragments in serum. Acta Astronautica, 2021, 186, 329-336. | 1.7 | 4 |
| 323 | Machine Learning Models to Predict Cognitive Impairment of Rodents Subjected to Space Radiation. Frontiers in Systems Neuroscience, 2021, 15, 713131. | 1.2 | 6 |
| 324 | A Multiâ€Purpose Heliophysics L4 Mission. Space Weather, 2021, 19, e2021SW002777. | 1.3 | 15 |
| 325 | Degradation mechanism of Schottky P-GaN gate stack in GaN power devices under neutron irradiation. Applied Physics Letters, 2021, 119, . | 1.5 | 6 |
| 326 | Beating 1 Sievert: Optimal Radiation Shielding of Astronauts on a Mission to Mars. Space Weather, 2021, 19, e2021SW002749. | 1.3 | 20 |
| 327 | The use and validation of the Convection-Diffusion approximation in cosmic-rays modulation studies. Advances in Space Research, 2021, 68, 2974-2987. | 1.2 | 1 |
| 328 | Applicability of composite materials for space radiation shielding of spacecraft. Life Sciences in Space Research, 2021, 31, 71-79. | 1.2 | 24 |
| 329 | Bone Loss. , 2021, , 117-128. | | 1 |
| 330 | Space Radiation-Induced Carcinogenesis. , 2021, , 347-352. | | 0 |
| 331 | Spaceflight Metabolism and Nutritional Support. , 2019, , 413-439. | | 7 |
| 332 | High-Resolution Electron Energy Loss Spectroscopy: Absolute Cross Section Measurements for Low Energy Electron Scattering from Biomolecules. Bioanalysis, 2019, , 3-42. | 0.1 | 2 |
| 333 | Countermeasures. , 2020, , 199-242. | | 1 |
| 334 | Space Radiation Shielding. , 2019, , 1-17. | | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 335 | Bone Loss. , 2020, , 1-10. | | 1 |
| 336 | Solar Energetic Particles and Space Weather: Science and Applications. Astrophysics and Space Science Library, 2018, , 1-26. | 1.0 | 18 |
| 337 | Risk estimation of the low-dose fast neutrons on the molecular structure of the lipids of peripheral blood mononuclear cells. Biochemical and Biophysical Research Communications, 2020, 533, 1048-1053. | 1.0 | 11 |
| 338 | Noninvasive Brain Stimulation & Space Exploration: Opportunities and Challenges. Neuroscience and Biobehavioral Reviews, 2020, 119, 294-319. | 2.9 | 23 |
| 339 | Space radiation exposure persistently increased leptin and IGF1 in serum and activated leptin-IGF1 signaling axis in mouse intestine. Scientific Reports, 2016, 6, 31853. | 1.6 | 16 |
| 340 | Long term variations of galactic cosmic radiation on board the International Space Station, on the Moon and on the surface of Mars. Journal of Space Weather and Space Climate, 0, , . | 1.1 | 13 |
| 341 | Radiation dose and its protection in the Moon from galactic cosmic rays and solar energetic particles: at the lunar surface and in a lava tube. Journal of Radiological Protection, 2020, 40, 947-961. | 0.6 | 19 |
| 342 | Estimation of the Astronautâ€™s Doses inside the Spacecraft Habitable Module in Deep Space. Physics of Particles and Nuclei, 2020, 51, 988-993. | 0.2 | 2 |
| 343 | Synergistic Effect of High Charge and Energy Particle Radiation and Chronological Age on Biomarkers of Oxidative Stress and Tissue Degeneration: A Ground-Based Study Using the Vertebrate Laboratory Model Organism Oryzias latipes. PLoS ONE, 2014, 9, e111362. | 1.1 | 5 |
| 344 | Relative Biological Effectiveness of HZE Particles for Chromosomal Exchanges and Other Surrogate Cancer Risk Endpoints. PLoS ONE, 2016, 11, e0153998. | 1.1 | 35 |
| 345 | Low doses of oxygen ion irradiation cause long-term damage to bone marrow hematopoietic progenitor and stem cells in mice. PLoS ONE, 2017, 12, e0189466. | 1.1 | 11 |
| 346 | Role of High-Linear Energy Transfer Radiobiology in Space Radiation Exposure Risks. International Journal of Particle Therapy, 2018, 5, 151-159. | 0.9 | 23 |
| 347 | New Concerns for Neurocognitive Function during Deep Space Exposures to Chronic, Low Dose-Rate, Neutron Radiation. ENeuro, 2019, 6, ENEURO.0094-19.2019. | 0.9 | 80 |
| 348 | The Protective Effect of Estrogen Against Radiation Cataractogenesis is Dependent Upon the Type of Radiation. Radiation Research, 2020, 194, 557-565. | 0.7 | 3 |
| 349 | Intestinal stem cells acquire premature senescence and senescence associated secretory phenotype concurrent with persistent DNA damage after heavy ion radiation in mice. Aging, 2019, 11, 4145-4158. | 1.4 | 27 |
| 350 | Aerospace dermatology. Indian Journal of Dermatology, 2017, 62, 79. | 0.1 | 11 |
| 351 | Effects of Age on the Disruption of Cognitive Performance by Exposure to Space Radiation. Journal of Behavioral and Brain Science, 2014, 04, 297-307. | 0.2 | 25 |
| 352 | A million persons, a million dreams: a vision for a national center of radiation epidemiology and biology. International Journal of Radiation Biology, 2022, 98, 795-821. | 1.0 | 26 |

| # | Article | IF | Citations |
|---|---|---|---|
| 353 | Platelets in Wound Healing: What Happens in Space?. Frontiers in Bioengineering and Biotechnology, 2021, 9, 716184. | 2.0 | 24 |
| 354 | Comparative Analysis of the Effect of Carbon- and Titanium-Ions Irradiation on Morpho-Anatomical and Biochemical Traits of Dolichos melanophthalmus DC. Seedlings Aimed to Space Exploration. Plants, 2021, 10, 2272. | 1.6 | 9 |
| 355 | Medical and Radiobiological Effects from Space Radiation. , 2014, , 1-30. | | 0 |
| 356 | Medical Concerns with Space Radiation and Radiobiological Effects. , 2015, , 1-30. | | 0 |
| 358 | Proton radiation effects of conjugated polymer thin films. Radiation Effects and Defects in Solids, 2017, 172, 355-363. | 0.4 | 2 |
| 359 | Exploration of Our Solar System. , 2018, , 243-309. | | 0 |
| 360 | Radiation Dosimetry and Detection. SpringerBriefs in Space Development, 2018, , 49-61. | 0.1 | 0 |
| 361 | Computer-Assisted formulas predicting radiation-exposure-induced-cancer risk in interplanetary travelers: Radiation safety for astronauts in space flight to mars. Journal of Medical Sciences (Taiwan), 2018, 38, 150. | 0.1 | 1 |
| 363 | Logistics of Reproduction in Space. , 2019, , 1-16. | | 2 |
| 364 | Space-Radiation Induced Carcinogenesis. , 2019, , 1-5. | | 0 |
| 365 | Bone Loss. , 2019, , 1-9. | | 0 |
| 366 | Spaceflight Pharmacology. , 2019, , 815-840. | | 4 |
| 367 | Radiation and Radiation Disorders. , 2019, , 39-108. | | 2 |
| 368 | RADIATION EXPOSURE DURING THE ORBITAL AND INTERPLANETARY SPACEFLIGHTS: MONITORING AND PROTECTION. Ekologiya Cheloveka (Human Ecology), 2019, 26, 4-9. | 0.2 | 4 |
| 369 | MISSION TO MARS: RADIATION SAFETY OR RADIATION DISASTER? SPACE TRANSIT AND MARS RADIATION EXPOSURE RISKS â€“ THE POTENTIAL SHIELDING EFFECT OF AN INTRAVEHICULAR GRAPHENE SPACE SUIT AND A STORM SHELTER DURING SPACE TRAVEL. Journal of the Australasian Society of Aerospace Medicine, 2020, 11, 1-9. | 0.1 | 0 |
| 370 | Stress and Radiation Responsiveness. , 2020, , 373-404. | | 2 |
| 371 | Space Radiation Shielding. , 2020, , 1-17. | | 1 |
| 373 | The MIDAS dosimeter/particle monitor of charged particles and neutrons for space environment. Radiation Measurements, 2020, 135, 106347. | 0.7 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 374 | Radiation in Space: The Physics. SpringerBriefs in Space Life Sciences, 2020, , 7-43. | 0.1 | 1 |
| 375 | Space-Radiation Induced Carcinogenesis. , 2020, , 1-5. | | 0 |
| 376 | Space Physiology and Psychology. , 2020, , 25-74. | | 0 |
| 377 | Dose-Effects Models for Space Radiobiology: An Overview on Dose-Effect Relationships. Frontiers in Public Health, 2021, 9, 733337. | 1.3 | 7 |
| 378 | Evolution of the Scientific Instrumentation for In Situ Mars Exploration. , 0, , . | | 2 |
| 379 | Effect of Gender on the Radiation Sensitivity of Murine Blood Cells. Gravitational and Space Research: Publication of the American Society for Gravitational and Space Research, 2014, 2, 25-31. | 0.3 | 6 |
| 380 | In situ resource utilisation: The potential for space biomining. Minerals Engineering, 2022, 176, 107288. | 1.8 | 13 |
| 381 | Extracellular vesicles-derived microRNAs expression as biomarkers for neurological radiation injury: Risk assessment for space exploration. Life Sciences in Space Research, 2022, 32, 54-62. | 1.2 | 6 |
| 382 | Effects of a 33-ion sequential beam galactic cosmic ray analog on male mouse behavior and evaluation of CDDO-EA as a radiation countermeasure. Behavioural Brain Research, 2022, 419, 113677. | 1.2 | 9 |
| 383 | Combined Effects of Proton Radiation and Simulated Microgravity on the Cell Viability and ALP Activity of Murine Osteoblast Cells. Frontiers in Public Health, 2021, 9, 759236. | 1.3 | 4 |
| 384 | Biological Protection in Deep Space Missions. Journal of Biomedical Physics and Engineering, 2021, 11, 663-674. | 0.5 | 10 |
| 385 | Long term food stability for extended space missions: a review. Life Sciences in Space Research, 2022, 32, 79-95. | 1.2 | 11 |
| 386 | A Review on Human Interplanetary Exploration Challenges. , 2022, , . | | 4 |
| 387 | Response of Arabidopsis thaliana and Mizuna Mustard Seeds to Simulated Space Radiation Exposures. Life, 2022, 12, 144. | 1.1 | 7 |
| 388 | The smallest space miners: principles of space biomining. Extremophiles, 2022, 26, 7. | 0.9 | 26 |
| 389 | A 2-year locomotive exploration and scientific investigation of the lunar farside by the Yutu-2 rover. Science Robotics, 2022, 7, eabj6660. | 9.9 | 25 |
| 390 | Experimental and Simulation Study on Shielding Performance of Developed Hydrogenous Composites. Space: Science & Technology, 2022, 2022, . | 1.0 | 4 |
| 391 | Radiation Effects on Methamphetamine Pharmacokinetics and Pharmacodynamics in Rats. European Journal of Drug Metabolism and Pharmacokinetics, 2022, 47, 319. | 0.6 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 392 | The crewed journey to Mars and its implications for the human microbiome. Microbiome, 2022, 10, 26. | 4.9 | 14 |
| 393 | Dose Limits and Countermeasures for Mitigating Radiation Risk in Moon and Mars Exploration. Physics, 2022, 4, 172-184. | 0.5 | 5 |
| 394 | Effect of Gender on the Radiation Sensitivity of Murine Blood Cells. Gravitational and Space Research: Publication of the American Society for Gravitational and Space Research, 2014, 2, 25-31. | 0.3 | 20 |
| 396 | Pharmacogenomics in Spaceflight. , 2022, , 389-427. | | 2 |
| 397 | Astrobiological Potential of Fe/Mg Smectites with Special Emphasis on Jezero Crater, Mars 2020 Landing Site. Astrobiology, 2022, , . | 1.5 | 1 |
| 398 | The Effects of Space Radiation and Microgravity on Ocular Structures. TÃ¼rk Oftalmoloji Dergisi, 2022, 52, 57-63. | 0.4 | 4 |
| 399 | Predictions and Possible Solutions for the Sustainability of Mars Settlement. Studia Humana, 2022, 11, 22-31. | 0.1 | 1 |
| 401 | Mission Overview and Scientific Contributions from the Mars Science Laboratory Curiosity Rover After Eight Years of Surface Operations. Space Science Reviews, 2022, 218, 14. | 3.7 | 25 |
| 402 | Thick shielding against galactic cosmic radiation: A Monte Carlo study with focus on the role of secondary neutrons. Life Sciences in Space Research, 2022, 33, 58-68. | 1.2 | 16 |
| 403 | Neutral Dissociation of Pyridine Evoked by Irradiation of Ionized Atomic and Molecular Hydrogen Beams. International Journal of Molecular Sciences, 2022, 23, 205. | 1.8 | 1 |
| 404 | Dose-Rate Effects of Protons and Light Ions for DNA Damage Induction, Survival and Transformation in Apparently Normal Primary Human Fibroblasts. Radiation Research, 2021, 197, . | 0.7 | 2 |
| 405 | Comparative analysis among materials for passive shielding in a manned Mars mission. Astrophysics and Space Science, 2021, 366, 1. | 0.5 | 13 |
| 406 | Cardiovascular risk in high-hazard occupations: the role of occupational cardiology. European Journal of Preventive Cardiology, 2022, 29, 702-713. | 0.8 | 4 |
| 407 | Enhanced Effects of Chronic Restraint-Induced Psychological Stress on Total Body Fe-Irradiation-Induced Hematopoietic Toxicity in Trp53-Heterozygous Mice. Life, 2022, 12, 565. | 1.1 | 0 |
| 408 | The Martian surface radiation environment at solar minimum measured with MSL/RAD. Icarus, 2023, 393, 115035. | 1.1 | 2 |
| 417 | Effectiveness of Martian regolith as a radiation shield. Planetary and Space Science, 2022, 218, 105517. | 0.9 | 6 |
| 418 | Design of a set of habitat units and the corresponding surrounding cluster for long-term scientific missions in the pre-terraforming era on Mars. Icarus, 2022, 385, 115119. | 1.1 | 5 |
| 419 | Future of life in the Solar System and beyond. , 2022, , 255-283. | | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 420 | Heavy-Ion-Induced Lung Tumors: Dose- & LET-Dependence. Life, 2022, 12, 907. | 1.1 | 0 |
| 421 | The March 2012 Heat Wave in Northeast America as a Possible Effect of Strong Solar Activity and Unusual Space Plasma Interactions. Atmosphere, 2022, 13, 926. | 1.0 | 4 |
| 422 | Accelerating space radiation countermeasure development through drug repurposing. Life Sciences in Space Research, 2022, 35, 30-35. | 1.2 | 3 |
| 423 | Extraterrestrial Gynecology: Could Spaceflight Increase the Risk of Developing Cancer in Female Astronauts? An Updated Review. International Journal of Molecular Sciences, 2022, 23, 7465. | 1.8 | 7 |
| 424 | Routine omics collection is a golden opportunity for European human research in space and analog environments. Patterns, 2022, , 100550. | 3.1 | 3 |
| 425 | First Report of a Solar Energetic Particle Event Observed by Chinaâ€™s Tianwen-1 Mission in Transit to Mars. Astrophysical Journal Letters, 2022, 934, L15. | 3.0 | 2 |
| 426 | Quantitative proteomic analytic approaches to identify metabolic changes in the medial prefrontal cortex of rats exposed to space radiation. Frontiers in Physiology, 0, 13, . | 1.3 | 3 |
| 427 | Comparison of biological measurement and physical estimates of space radiation in the International Space Station. Heliyon, 2022, 8, e10266. | 1.4 | 4 |
| 428 | The Protective Role of Neurogenetic Components in Reducing Stress-Related Effects during Spaceflights: Evidence from the Age-Related Positive Memory Approach. Life, 2022, 12, 1176. | 1.1 | 4 |
| 429 | Considerations for practical dose equivalent assessment of space radiation and exposure risk reduction in deep space. Scientific Reports, 2022, 12, . | 1.6 | 3 |
| 431 | Evolving radiological protection guidelines for exploration-class missions. Life Sciences in Space Research, 2023, 36, 70-77. | 1.2 | 2 |
| 432 | Dynamics of Dopamine and Other Monoamines Content in Rat Brain after Single Low-Dose Carbon Nuclei Irradiation. Life, 2022, 12, 1306. | 1.1 | 1 |
| 433 | Carcinogenesis induced by space radiation: A systematic review. Neoplasia, 2022, 32, 100828. | 2.3 | 9 |
| 434 | Conceptual design and research on the thermal performance of a martian human base. Acta Astronautica, 2022, 200, 524-538. | 1.7 | 4 |
| 435 | Spacecraft Scale Magnetospheric Protection from Galactic Cosmic Radiation. , 2022, , . | | 0 |
| 436 | Predominant contribution of the dose received from constituent heavy-ions in the induction of gastrointestinal tumorigenesis after simulated space radiation exposure. Radiation and Environmental Biophysics, 2022, 61, 631-637. | 0.6 | 2 |
| 437 | Radiation environment in exploration-class space missions and plantsâ€™ responses relevant for cultivation in Bioregenerative Life Support Systems. Frontiers in Plant Science, 0, 13, . | 1.7 | 6 |
| 438 | Synthetic torpor protects rats from exposure to accelerated heavy ions. Scientific Reports, 2022, 12, . | 1.6 | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 439 | Contemporary review of dermatologic conditions in space flight and future implications for long-duration exploration missions. Life Sciences in Space Research, 2022, , . | 1.2 | 0 |
| 440 | Radiation dose rate effects: what is new and what is needed?. Radiation and Environmental Biophysics, 2022, 61, 507-543. | 0.6 | 20 |
| 441 | Critical Mars Mission Elements. , 2023, , 203-323. | | 0 |
| 442 | Central Nervous System Neoplasms in Microgravity. , 2022, , 107-121. | | 1 |
| 443 | The Effects of Combined Exposure to Simulated Microgravity, Ionizing Radiation, and Cortisol on the In Vitro Wound Healing Process. Cells, 2023, 12, 246. | 1.8 | 5 |
| 444 | More efficient induction of genotoxicity by high-LET Fe-particle radiation than low-LET X-ray radiation at low doses. Radiation Medicine and Protection, 2023, 4, 11-18. | 0.4 | 1 |
| 445 | Radiation-Tolerant Proton Detector Based on the MAPbBr<sub>3</sub> Single Crystal. ACS Applied Electronic Materials, 2023, 5, 381-387. | 2.0 | 1 |
| 446 | Results from the Radiation Assessment Detector on the International Space Station: Part 1, the Charged Particle Detector. Life Sciences in Space Research, 2023, , . | 1.2 | 1 |
| 447 | Towards sustainable human space explorationâ€"priorities for radiation research to quantify and mitigate radiation risks. Npj Microgravity, 2023, 9, . | 1.9 | 12 |
| 449 | Impacts of natural irradiation on sedimentary organic matterâ€"A review. Organic Geochemistry, 2023, 180, 104602. | 0.9 | 2 |
| 450 | Biomarkers for biosensors to monitor space-induced cardiovascular ageing. Frontiers in Sensors, 0, 4, . | 1.7 | 1 |
| 451 | A Novel Magnetic Configuration for Space Radiation Active Shielding. Kongjian Kexue Xuebao, 2021, 41, 920. | 0.2 | 0 |
| 452 | ON THE COMPUTER COMPUTATION OF THE 'PROBACENT'-PROBABILITY EQUATION APPLICABLE TO BIOMEDICAL-PHENOMENA RESEARCH: A REVIEW OF THE 'PROBACENT' FORMULA. , 2023, 5, . | | 0 |
| 453 | Gallosilicate glass and fiber for radiation detection. Journal of the American Ceramic Society, 2023, 106, 3438-3445. | 1.9 | 1 |
| 454 | The Effects of Galactic Cosmic Rays on the Central Nervous System: From Negative to Unexpectedly Positive Effects That Astronauts May Encounter. Biology, 2023, 12, 400. | 1.3 | 1 |
| 455 | Observation of the radiation environment and solar energetic particle events in Mars orbit in May 2018- June 2022. Life Sciences in Space Research, 2023, 39, 106-118. | 1.2 | 3 |
| 456 | Astronaut Radiation Dose Calculation With a New Galactic Cosmic Ray Model and the AMSâ€02 Data. Space Weather, 2023, 21, . | 1.3 | 3 |
| 457 | Unraveling astrocyte behavior in the space brain: Radiation response of primary astrocytes. Frontiers in Public Health, 0, 11, . | 1.3 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 461 | Development of Polymer Composites in Radiation Shielding Applications: A Review. Journal of Inorganic and Organometallic Polymers and Materials, 2023, 33, 2191-2239. | 1.9 | 3 |
| 470 | Human Health Risks Relevant to Deep Space Mars Exploration Missions. , 2023, , 487-542. | | 0 |
| 474 | Space Radiobiology. , 2023, , 503-569. | | 0 |
| 478 | Strahlenschutz in speziellen TÃtigkeitsbereichen. , 2019, , 353-445. | | 0 |
| 480 | Strahlungswirkung. , 2019, , 67-108. | | 0 |
| 481 | Die Eroberung des Alls. , 2023, , 183-210. | | 0 |
| 493 | A review on radiation shielding materials based on low-strength chemical wastes and nanomaterials. , 2024, , 227-250. | | 1 |
| 497 | Growth methodologies of boron nitride nanotubes and their neutron shielding applications: a review. Nanoscale, 2024, 16, 3817-3837. | 2.8 | 0 |