## Media Ion Composition Controls Regulatory and Virule Spaceflight

PLoS ONE

3, e3923

DOI: 10.1371/journal.pone.0003923

**Citation Report** 

| #  | Article   | IF  | CITATIONS   |
|--|---|---|---|
| 1  | The response of Cupriavidus metallidurans CH34 to spaceflight in the international space station.<br>Antonie Van Leeuwenhoek, 2009, 96, 227-245.  | 0.7   | 44  |
| 2  | Experimental design and environmental parameters affect <i>Rhodospirillum rubrum</i> S1H response<br>to space flight. ISME Journal, 2009, 3, 1402-1419.   | 4.4   | 52  |
| 3  | Spaceflight and modeled microgravity effects on microbial growth and virulence. Applied Microbiology and Biotechnology, 2010, 85, 885-891.  | 1.7   | 118   |
| 4  | Simulated microgravity inhibits cell wall regeneration of Penicillium decumbens protoplasts.<br>Advances in Space Research, 2010, 46, 701-706.  | 1.2   | 5   |
| 5  | International utilization at the threshold of "assembly completeâ€â€"science returns from the<br>International Space Station. Acta Astronautica, 2010, 67, 513-519.   | 1.7   | 5   |
| 6  | Differential proteomic analysis using isotopeâ€coded proteinâ€labeling strategies: Comparison,<br>improvements and application to simulated microgravity effect on <i>Cupriavidus metallidurans</i> CH34. Proteomics, 2010, 10, 2281-2291.  | 1.3   | 54  |
| 7  | Response of <i>Pseudomonas aeruginosa</i> PAO1 to low shear modelled microgravity involves AlgU regulation. Environmental Microbiology, 2010, 12, 1545-1564.  | 1.8   | 95  |
| 8  | Space, Gravity and the Physiology of Aging: Parallel or Convergent Disciplines? A Mini-Review.<br>Gerontology, 2010, 56, 157-166.   | 1.4   | 157   |
| 9  | Space Microbiology. Microbiology and Molecular Biology Reviews, 2010, 74, 121-156.  | 2.9   | 535   |
|  |   |   |   |
| 10   | How and why does the proteome respond to microgravity?. Expert Review of Proteomics, 2011, 8, 13-27.  | 1.3   | 59  |
| 10   | How and why does the proteome respond to microgravity?. Expert Review of Proteomics, 2011, 8, 13-27.<br>Host Stress and Virulence Expression in Intestinal Pathogens: Development of Therapeutic Strategies<br>Using Mice and C. elegans. Current Pharmaceutical Design, 2011, 17, 1254-1260.   | 1.3<br>0.9                                    | 59<br>30  |
| 10<br>11<br>12   | How and why does the proteome respond to microgravity?. Expert Review of Proteomics, 2011, 8, 13-27.<br>Host Stress and Virulence Expression in Intestinal Pathogens: Development of Therapeutic Strategies<br>Using Mice and C. elegans. Current Pharmaceutical Design, 2011, 17, 1254-1260.<br>Microbiological Lessons Learned From the Space Shuttle. , 2011, , .  | 1.3<br>0.9                                    | 59<br>30<br>7   |
| 10<br>11<br>12<br>13   | How and why does the proteome respond to microgravity?. Expert Review of Proteomics, 2011, 8, 13-27.         Host Stress and Virulence Expression in Intestinal Pathogens: Development of Therapeutic Strategies Using Mice and C. elegans. Current Pharmaceutical Design, 2011, 17, 1254-1260.         Microbiological Lessons Learned From the Space Shuttle., 2011, ,.         The challenge of relating gene expression to the virulence of Salmonella enterica serovar Typhimurium. Current Opinion in Biotechnology, 2011, 22, 200-210.   | 1.3<br>0.9<br>3.3                             | 59<br>30<br>7<br>24   |
| 10<br>11<br>12<br>13<br>14   | How and why does the proteome respond to microgravity?. Expert Review of Proteomics, 2011, 8, 13-27.         Host Stress and Virulence Expression in Intestinal Pathogens: Development of Therapeutic Strategies         Using Mice and C. elegans. Current Pharmaceutical Design, 2011, 17, 1254-1260.         Microbiological Lessons Learned From the Space Shuttle. , 2011, , .         The challenge of relating gene expression to the virulence of Salmonella enterica serovar         Typhimurium. Current Opinion in Biotechnology, 2011, 22, 200-210.         Transcriptional and Proteomic Responses of <i>Pseudomonas aeruginosa </i> PAO1 to Spaceflight         Conditions Involve Hfq Regulation and Reveal a Role for Oxygen. Applied and Environmental         Microbiology, 2011, 77, 1221-1230.  | 1.3<br>0.9<br>3.3<br>1.4                      | <ul> <li>59</li> <li>30</li> <li>7</li> <li>24</li> <li>157</li> </ul>                                    |
| 10<br>11<br>12<br>13<br>14<br>15   | How and why does the proteome respond to microgravity?. Expert Review of Proteomics, 2011, 8, 13-27.         Host Stress and Virulence Expression in Intestinal Pathogens: Development of Therapeutic Strategies         Using Mice and C. elegans. Current Pharmaceutical Design, 2011, 17, 1254-1260.         Microbiological Lessons Learned From the Space Shuttle. , 2011, , .         The challenge of relating gene expression to the virulence of Salmonella enterica serovar         Typhimurium. Current Opinion in Biotechnology, 2011, 22, 200-210.         Transcriptional and Proteomic Responses of <1> Pseudomonas aeruginosa          PAO1 to Spaceflight         Conditions Involve Hfq Regulation and Reveal a Role for Oxygen. Applied and Environmental         Microbiology, 2011, 77, 1221-1230.         Characterization of the Salmonella enterica Serovar Typhimurium <1>>ydcl > Gene, Which Encodes a         Conserved DNA Binding Protein Required for Full Acid Stress Resistance. Journal of Bacteriology, 2011, 193, 2208-2217.   | 1.3<br>0.9<br>3.3<br>1.4                      | <ul> <li>59</li> <li>30</li> <li>7</li> <li>24</li> <li>157</li> <li>26</li> </ul>                        |
| 10<br>11<br>12<br>13<br>14<br>15<br>16   | How and why does the proteome respond to microgravity?. Expert Review of Proteomics, 2011, 8, 13-27.         Host Stress and Virulence Expression in Intestinal Pathogens: Development of Therapeutic Strategies         Using Mice and C. elegans. Current Pharmaceutical Design, 2011, 17, 1254-1260.         Microbiological Lessons Learned From the Space Shuttle., 2011,,.         The challenge of relating gene expression to the virulence of Salmonella enterica serovar         Typhimurium. Current Opinion in Biotechnology, 2011, 22, 200-210.         Transcriptional and Proteomic Responses of <\>Pseudomonas aeruginosa <\>PAO1 to Spaceflight         Conditions Involve Hfq Regulation and Reveal a Role for Oxygen. Applied and Environmental         Microbiology, 2011, 77, 1221-1230.         Characterization of the Salmonella enterica Serovar Typhimurium <i>ydcl&lt;\i&gt;Gene, Which Encodes a         Conserved DNA Binding Protein Required for Full Acid Stress Resistance. Journal of Bacteriology, 2011, 193, 2208-2217.         Modeled Microgravity Increases Filamentation, Biofilm Formation, Phenotypic Switching, and         Antimicrobial Resistance in <i>Candida albicans</i></i>  | 1.3<br>0.9<br>3.3<br>1.4<br>1.0               | <ul> <li>59</li> <li>30</li> <li>7</li> <li>24</li> <li>157</li> <li>26</li> <li>42</li> </ul>            |
| <ol> <li>10</li> <li>11</li> <li>12</li> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> </ol> | How and why does the proteome respond to microgravity?. Expert Review of Proteomics, 2011, 8, 13-27.         Host Stress and Virulence Expression in Intestinal Pathogens: Development of Therapeutic Strategies<br>Using Mice and C. elegans. Current Pharmaceutical Design, 2011, 17, 1254-1260.         Microbiological Lessons Learned From the Space Shuttle., 2011, , .         The challenge of relating gene expression to the virulence of Salmonella enterica serovar<br>Typhimurium. Current Opinion in Biotechnology, 2011, 22, 200-210.         Transcriptional and Proteomic Responses of <i>&gt; Pseudomonas aeruginosa          Microbiology, 2011, 77, 1221-1230.         Characterization of the Salmonella enterica Serovar Typhimurium <i>&gt;ydcl</i>&gt; Gene, Which Encodes a<br/>Conserved DNA Binding Protein Required for Full Acid Stress Resistance. Journal of Bacteriology,<br/>2011, 193, 2208-2217.         Modeled Microgravity Increases Filamentation, Biofilm Formation, Phenotypic Switching, and<br/>Antimicrobial Resistance in <i>&gt; Candida albicans </i>&gt; Astrobiology, 2011, 11, 825-836.         Rotating wall vessel exposure alters protein secretion and global gene expression in<br/><br/><br/><br/><br/><br/><br/><br/><br/></i> | 1.3<br>0.9<br>3.3<br>1.4<br>1.0<br>1.5<br>0.9 | <ul> <li>59</li> <li>30</li> <li>7</li> <li>24</li> <li>157</li> <li>26</li> <li>42</li> <li>9</li> </ul> |

| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | The microbiome: the forgotten organ of the astronaut's body – probiotics beyond terrestrial limits.<br>Future Microbiology, 2012, 7, 1037-1046.   | 1.0 | 53        |
| 20 | Expression of Multiple Stress Response Genes by Escherichia Coli Under Modeled Reduced Gravity.<br>Microgravity Science and Technology, 2012, 24, 267-279.  | 0.7 | 6         |
| 21 | The effect of low shear force on the virulence potential of Yersinia pestis: new aspects that space-like growth conditions and the final frontier can teach us about a formidable pathogen. Frontiers in Cellular and Infection Microbiology, 2012, 2, 107. | 1.8 | 9         |
| 22 | Modelled microgravity cultivation modulates N-acylhomoserine lactone production in<br>Rhodospirillum rubrum S1H independently of cell density. Microbiology (United Kingdom), 2013, 159,<br>2456-2466.  | 0.7 | 26        |
| 23 | The Effects of Modeled Microgravity on Growth Kinetics, Antibiotic Susceptibility, Cold Growth, and the Virulence Potential of a <i>Yersinia pestis ymoA</i> -Deficient Mutant and Its Isogenic Parental Strain. Astrobiology, 2013, 13, 821-832.           | 1.5 | 24        |
| 24 | Draft Genome Sequences and Annotation of Enterococcus faecium Strain LCT-EF20. Genome Announcements, 2013, 1, .   | 0.8 | 0         |
| 25 | Impact of simulated microgravity on the normal developmental time line of an animal-bacteria symbiosis. Scientific Reports, 2013, 3, 1340.  | 1.6 | 29        |
| 26 | The development of space microbiology in the future: the value and significance of space microbiology research. Future Microbiology, 2013, 8, 5-8.  | 1.0 | 29        |
| 27 | Effect of spaceflight on Pseudomonas aeruginosa final cell density is modulated by nutrient and oxygen availability. BMC Microbiology, 2013, 13, 241.   | 1.3 | 59        |
| 28 | Effect of Simulated Microgravity on E. coli K12 MG1655 Growth and Gene Expression. PLoS ONE, 2013, 8, e57860.   | 1.1 | 60        |
| 29 | Spaceflight Promotes Biofilm Formation by Pseudomonas aeruginosa. PLoS ONE, 2013, 8, e62437.  | 1.1 | 153       |
| 30 | Spaceflight Enhances Cell Aggregation and Random Budding in Candida albicans. PLoS ONE, 2013, 8, e80677.  | 1.1 | 80        |
| 31 | Role of Hfq in an animal–microbe symbiosis under simulated microgravity conditions. International<br>Journal of Astrobiology, 2014, 13, 53-61.  | 0.9 | 12        |
| 32 | Host-Microbe Interactions in Microgravity: Assessment and Implications. Life, 2014, 4, 250-266.   | 1.1 | 27        |
| 33 | Low-shear force associated with modeled microgravity and spaceflight does not similarly impact the virulence of notable bacterial pathogens. Applied Microbiology and Biotechnology, 2014, 98, 8797-8807.   | 1.7 | 46        |
| 34 | Microbial Monitoring of Crewed Habitats in Space—Current Status and Future Perspectives. Microbes and Environments, 2014, 29, 250-260.  | 0.7 | 89        |
| 35 | The influence of simulated microgravity on the proteome of Daphnia magna. Npj Microgravity, 2015, 1, 15016.   | 1.9 | 14        |
| 36 | Dysbiosis and Immune Dysregulation in Outer Space. International Reviews of Immunology, 2016, 35, 1-16.   | 1.5 | 62        |

| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | Effects of Space Environment on Genome, Transcriptome, and Proteome of Klebsiella pneumoniae.<br>Archives of Medical Research, 2015, 46, 609-618.   | 1.5 | 9         |
| 38 | The Challenge of Maintaining a Healthy Microbiome during Long-Duration Space Missions. Frontiers in Astronomy and Space Sciences, 2016, 3, .  | 1.1 | 48        |
| 39 | Microbiota and Neurological Disorders: A Gut Feeling. BioResearch Open Access, 2016, 5, 137-145.  | 2.6 | 108       |
| 40 | Using Spaceflight and Spaceflight Analogue Culture for Novel Mechanistic Insight into Salmonella<br>Pathogenesis. , 2016, , 209-235.  |     | 4         |
| 41 | Effect of Shear Stress on Pseudomonas aeruginosa Isolated from the Cystic Fibrosis Lung. MBio, 2016,<br>7, .  | 1.8 | 23        |
| 42 | The International Space Station: an Extreme Environment for Key Host-Microbe Discoveries. Microbe<br>Magazine, 2016, 11, 253-261.   | 0.4 | 2         |
| 45 | Spaceflight and Spaceflight Analogue Induced Responses in Gram Positive Bacteria. , 2016, , 283-296.  |     | 0         |
| 46 | Overview and Translational Impact of Space Cell Biology Research. , 2016, , 3-37.   |     | 0         |
| 47 | Microgravity as a biological tool to examine host–pathogen interactions and to guide development of therapeutics and preventatives that target pathogenic bacteria. Pathogens and Disease, 2016, 74, ftw095.                                | 0.8 | 25        |
| 48 | Elucidating the "Gravome― Quantitative Proteomic Profiling of the Response to Chronic Hypergravity<br>in <i>Drosophila</i> . Journal of Proteome Research, 2016, 15, 4165-4175.   | 1.8 | 8         |
| 49 | A Systems Biology Analysis Unfolds the Molecular Pathways and Networks of Two Proteobacteria in<br>Spaceflight and Simulated Microgravity Conditions. Astrobiology, 2016, 16, 677-689.  | 1.5 | 10        |
| 50 | Towards human exploration of space: The THESEUS review series on immunology research priorities.<br>Npj Microgravity, 2016, 2, 16040.   | 1.9 | 72        |
| 51 | The Bacterial iprA Gene Is Conserved across Enterobacteriaceae, Is Involved in Oxidative Stress<br>Resistance, and Influences Gene Expression in Salmonella enterica Serovar Typhimurium. Journal of<br>Bacteriology, 2016, 198, 2166-2179. | 1.0 | 14        |
| 52 | Microbial succession in an inflated lunar/Mars analog habitat during a 30-day human occupation.<br>Microbiome, 2016, 4, 22.   | 4.9 | 31        |
| 53 | Microgravity-driven remodeling of the proteome reveals insights into molecular mechanisms and signal networks involved in response to the space flight environment. Journal of Proteomics, 2016, 137, 3-18.                                 | 1.2 | 40        |
| 54 | Transient gene and microRNA expression profile changes of confluent human fibroblast cells in spaceflight. FASEB Journal, 2016, 30, 2211-2224.  | 0.2 | 29        |
| 55 | Toward biotechnology in space: High-throughput instruments for in situ biological research beyond<br>Earth. Biotechnology Advances, 2017, 35, 905-932.  | 6.0 | 48        |
| 56 | Intestinal microbiota contributes to colonic epithelial changes in simulated microgravity mouse model. FASEB Journal, 2017, 31, 3695-3709.  | 0.2 | 43        |

| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 57 | Investigation of simulated microgravity effects on Streptococcus mutans physiology and global gene expression. Npj Microgravity, 2017, 3, 4.  | 1.9 | 30        |
| 58 | Preventing Infectious Diseases in Spacecraft and Space Habitats. Advances in Environmental<br>Microbiology, 2017, , 3-17.   | 0.1 | 2         |
| 59 | From the bench to exploration medicine: NASA life sciences translational research for human exploration and habitation missions. Npj Microgravity, 2017, 3, 5.  | 1.9 | 23        |
| 60 | The adaptation of Escherichia coli cells grown in simulated microgravity for an extended period is both phenotypic and genomic. Npj Microgravity, 2017, 3, 15.  | 1.9 | 48        |
| 61 | The theory and application of space microbiology: China's experiences in space experiments and beyond. Environmental Microbiology, 2017, 19, 426-433.   | 1.8 | 23        |
| 62 | Knowing What We Are Getting: Evaluating Scientific Research on the International Space Station*.<br>Social Science Quarterly, 2017, 98, 1151-1159.  | 0.9 | 2         |
| 63 | Phenotypic Changes Exhibited by E. coli Cultured in Space. Frontiers in Microbiology, 2017, 8, 1598.  | 1.5 | 84        |
| 64 | Transfer and analysis of <i>Salmonella pdu</i> genes in a range of Gramâ€negative bacteria demonstrate<br>exogenous microcompartment expression across a variety of species. Microbial Biotechnology, 2018,<br>11, 199-210. | 2.0 | 23        |
| 65 | Transcriptional profiling of the mutualistic bacterium Vibrio fischeri and an hfq mutant under<br>modeled microgravity. Npj Microgravity, 2018, 4, 25.  | 1.9 | 16        |
| 66 | Meta-analysis of data from spaceflight transcriptome experiments does not support the idea of a<br>common bacterial "spaceflight response― Scientific Reports, 2018, 8, 14403.  | 1.6 | 17        |
| 67 | Characterization of Aspergillus niger Isolated from the International Space Station. MSystems, 2018, 3,   | 1.7 | 42        |
| 68 | Microbiology of the Built Environment in Spacecraft Used for Human Flight. Methods in Microbiology, 2018, , 3-26.   | 0.4 | 9         |
| 69 | Spaceflight Modifies Escherichia coli Gene Expression in Response to Antibiotic Exposure and Reveals<br>Role of Oxidative Stress Response. Frontiers in Microbiology, 2018, 9, 310.   | 1.5 | 77        |
| 70 | Probiotics into outer space: feasibility assessments of encapsulated freeze-dried probiotics during 1<br>month's storage on the International Space Station. Scientific Reports, 2018, 8, 10687.                            | 1.6 | 19        |
| 71 | Remote Controlled Autonomous Microgravity Lab Platforms for Drug Research in Space.<br>Pharmaceutical Research, 2019, 36, 183.  | 1.7 | 32        |
| 72 | Vaccines in Space. , 2019, , 1-17.  |     | 0         |
| 73 | International Space Station conditions alter genomics, proteomics, and metabolomics in Aspergillus nidulans. Applied Microbiology and Biotechnology, 2019, 103, 1363-1377.  | 1.7 | 32        |
| 74 | Gut Microbiome and Space Travelers' Health: State of the Art and Possible Pro/Prebiotic Strategies for Long-Term Space Missions. Frontiers in Physiology, 2020, 11, 553929.   | 1.3 | 56        |

| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 75 | Space food and bacterial infections: Realities of the risk and role of science. Trends in Food Science and Technology, 2020, 106, 275-287.  | 7.8 | 10        |
| 76 | Towards a passive limitation of particle surface contamination in the Columbus module (ISS) during the MATISS experiment of the Proxima Mission. Npj Microgravity, 2020, 6, 29.                               | 1.9 | 3         |
| 77 | Molecular Mechanisms of Microbial Survivability in Outer Space: A Systems Biology Approach.<br>Frontiers in Microbiology, 2020, 11, 923.  | 1.5 | 32        |
| 78 | Exploration of space to achieve scientific breakthroughs. Biotechnology Advances, 2020, 43, 107572.   | 6.0 | 21        |
| 79 | Spaceflight and simulated microgravity conditions increase virulence of Serratia marcescens in the<br>Drosophila melanogaster infection model. Npj Microgravity, 2020, 6, 4.                                  | 1.9 | 43        |
| 80 | Crewmember microbiome may influence microbial composition of ISS habitable surfaces. PLoS ONE, 2020, 15, e0231838.  | 1.1 | 54        |
| 81 | Measurement and Simulation of Biocontamination in an Enclosed Habitat. Aerosol Science and Engineering, 2020, 4, 101-110.   | 1.1 | 7         |
| 82 | Metabolomic Analysis of Aspergillus niger Isolated From the International Space Station Reveals<br>Enhanced Production Levels of the Antioxidant Pyranonigrin A. Frontiers in Microbiology, 2020, 11,<br>931. | 1.5 | 16        |
| 83 | Transcriptional Profiling of the Probiotic Escherichia coli Nissle 1917 Strain under Simulated<br>Microgravity. International Journal of Molecular Sciences, 2020, 21, 2666.                                  | 1.8 | 22        |
| 84 | Gut microbiome and human health under the space environment. Journal of Applied Microbiology, 2021, 130, 14-24.   | 1.4 | 49        |
| 85 | The influence of spaceflight and simulated microgravity on bacterial motility and chemotaxis. Npj<br>Microgravity, 2021, 7, 7.  | 1.9 | 34        |
| 86 | How the space environment influences organisms: an astrobiological perspective and review.<br>International Journal of Astrobiology, 2021, 20, 159-177.   | 0.9 | 11        |
| 87 | Evaluating the effect of spaceflight on the host–pathogen interaction between human intestinal epithelial cells and Salmonella Typhimurium. Npj Microgravity, 2021, 7, 9.                                     | 1.9 | 10        |
| 88 | Investigation of Spaceflight Induced Changes to Astronaut Microbiomes. Frontiers in Microbiology, 2021, 12, 659179.   | 1.5 | 28        |
| 89 | Human immune system adaptations to simulated microgravity revealed by single-cell mass cytometry.<br>Scientific Reports, 2021, 11, 11872.   | 1.6 | 15        |
| 90 | Aging-like metabolic and adrenal changes in microgravity: State of the art in preparation for Mars.<br>Neuroscience and Biobehavioral Reviews, 2021, 126, 236-242.  | 2.9 | 8         |
| 91 | Longitudinal characterization of multispecies microbial populations recovered from spaceflight potable water. Npj Biofilms and Microbiomes, 2021, 7, 70.  | 2.9 | 9         |
| 92 | Mechanotransduction in Prokaryotes: A Possible Mechanism of Spaceflight Adaptation. Life, 2021, 11, 33.   | 1.1 | 14        |

| #   | Article  | IF   | CITATIONS |
|-----|--|------|-----------|
| 93  | Microbial Stress: Spaceflight-Induced Alterations in Microbial Virulence and Infectious Disease Risks<br>for theÂCrew. , 2020, , 327-355.  |      | 4         |
| 94  | Laboratory Science with Space Data. , 2011, , .  |      | 6         |
| 95  | Microbial Stress: Spaceflight-induced Alterations in Microbial Virulence and Infectious Disease Risks for the Crew. , 2012, , 203-225.   |      | 9         |
| 96  | Mice in Bion-M 1 Space Mission: Training and Selection. PLoS ONE, 2014, 9, e104830.  | 1.1  | 88        |
| 97  | Space Environmental Factor Impacts upon Murine Colon Microbiota and Mucosal Homeostasis. PLoS ONE, 2015, 10, e0125792.   | 1.1  | 73        |
| 98  | Conservation of the Low-shear Modeled Microgravity Response in Enterobacteriaceae and Analysis of the trp Genes in this Response. Open Microbiology Journal, 2014, 8, 51-58.   | 0.2  | 30        |
| 99  | Establishing Standard Protocols for Bacterial Culture in Biological Research in Canisters (BRIC)<br>Hardware. Gravitational and Space Research: Publication of the American Society for Gravitational<br>and Space Research, 2016, 4, 58-69. | 0.3  | 10        |
| 100 | Space Microbiology: Modern Research and Advantages for Human Colonization on Mars.<br>International Journal for Research in Applied Sciences and Biotechnology, 2019, 6, 4-10.   | 0.2  | 2         |
| 101 | Areas of Research. , 2011, , 55-170.   |      | 0         |
| 102 | Multiple Systems Spaceflight Effects. SpringerBriefs in Space Development, 2012, , 71-82.  | 0.1  | Ο         |
| 103 | Microbial Observatory Research in the International Space Station and Japanese Experiment Module<br>"Kibo― Journal of Disaster Research, 2015, 10, 1025-1030.  | 0.4  | 2         |
| 104 | Microbial Investigations: Overview. , 2016, , 199-208.   |      | 0         |
| 105 | Medications in Microgravity: History, Facts, and Future Trends. , 2019, , 1-14.  |      | 0         |
| 106 | Spaceflight Pharmacology. , 2019, , 815-840.   |      | 4         |
| 107 | Microbiome and Immunity: A Critical Link for Long-Duration Space Exploration Missions. , 2020, , 617-635.  |      | 0         |
| 110 | Materials, assemblies and reaction systems under rotation. Nature Reviews Materials, 2022, 7, 338-354.   | 23.3 | 13        |
| 111 | Medications in Microgravity: History, Facts, and Future Trends. , 2022, , 165-178.   |      | 0         |
| 112 | Vaccines in Space. , 2022, , 805-821.  |      | 0         |

| #   | Article  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 113 | Understanding the Complexities and Changes of the Astronaut Microbiome for Successful Long-Duration Space Missions. Life, 2022, 12, 495.   | 1.1 | 18        |
| 114 | A vision for spaceflight microbiology to enable human health and habitat sustainability. Nature<br>Microbiology, 2022, 7, 471-474.   | 5.9 | 3         |
| 119 | Wide Range Applications of Spirulina: From Earth to Space Missions. Marine Drugs, 2022, 20, 299.   | 2.2 | 29        |
| 120 | Asparagine biosynthesis as a mechanism of increased host lethality induced by Serratia marcescens in simulated microgravity environments. Heliyon, 2022, 8, e09379.                                    | 1.4 | 2         |
| 121 | Spaceflight Analogue Culture Enhances the Host-Pathogen Interaction Between Salmonella and a 3-D<br>Biomimetic Intestinal Co-Culture Model. Frontiers in Cellular and Infection Microbiology, 0, 12, . | 1.8 | 6         |
| 122 | Adaptation to simulated microgravity in Streptococcus mutans. Npj Microgravity, 2022, 8, .   | 1.9 | 2         |
| 123 | Long-Duration Space Travel Support Must Consider Wider Influences to Conserve Microbiota<br>Composition and Function. Life, 2022, 12, 1163.  | 1.1 | 2         |
| 124 | Passive limitation of surface contamination by perFluoroDecylTrichloroSilane coatings in the ISS during the MATISS experiments. Npj Microgravity, 2022, 8, .   | 1.9 | 1         |
| 125 | Role of RpoS in Regulating Stationary Phase Salmonella Typhimurium Pathogenesis-Related Stress<br>Responses under Physiological Low Fluid Shear Force Conditions. MSphere, 2022, 7, .                  | 1.3 | 1         |
| 126 | Database of space life investigations and bioinformatics of microbiology in extreme environments.<br>Frontiers in Microbiology, 0, 13, .   | 1.5 | 4         |
| 127 | Migration of surface-associated microbial communities in spaceflight habitats. Biofilm, 2023, 5, 100109.   | 1.5 | 8         |
| 128 | Biofilm formation is correlated with low nutrient and simulated microgravity conditions in a Burkholderia isolate from the ISS water processor assembly. Biofilm, 2023, 5, 100110.                     | 1.5 | 5         |
| 129 | Bacterial Virulence and Prevention for Human Spaceflight. Life, 2023, 13, 656.   | 1.1 | 0         |
| 130 | Microgravity and evasion of plant innate immunity by human bacterial pathogens. Npj Microgravity, 2023, 9, .   | 1.9 | 2         |
| 131 | Space Radiobiology. , 2023, , 503-569.   |     | 0         |