Tony C Slaba

List of Publications by Year
in descending order

59 papers	1,455 citations	23 h-index (279798)	36 g-index (345221)
60 all docs	60 docs citations	60 times ranked	974 citing authors

#	Article	IF	Citations
1	NASAâ€™s first ground-based Galactic Cosmic Ray Simulator: Enabling a new era in space radiobiology research. PLoS Biology, 2020, 18, e3000669.	5.6	144
2	Galactic cosmic ray simulation at the NASA Space Radiation Laboratory. Life Sciences in Space Research, 2016, 8, 38-51.	2.3	112
3	OLTARIS: On-line tool for the assessment of radiation in space. Acta Astronautica, 2011, 68, 1086-1097.	3.2	76
4	The Martian surface radiation environment â€" a comparison of models and MSL/RAD measurements. Journal of Space Weather and Space Climate, 2016, 6, A13.	3.3	70
5	Optimal shielding thickness for galactic cosmic ray environments. Life Sciences in Space Research, 2017, 12, 1-15.	2.3	66
6	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.	2.3	57
7	Reference field specification and preliminary beam selection strategy for accelerator-based GCR simulation. Life Sciences in Space Research, 2016, 8, 52-67.	2.3	55
8	Advances in space radiation physics and transport at NASA. Life Sciences in Space Research, 2019, 22, 98-124.	2.3	46
9	Solar particle event storm shelter requirements for missions beyond low Earth orbit. Life Sciences in Space Research, 2018, 17, 32-39.	2.3	42
10	GCR environmental models I: Sensitivity analysis for GCR environments. Space Weather, 2014, 12, 217-224.	3.7	38
11	Advances in NASA radiation transport research: 3DHZETRN. Life Sciences in Space Research, 2014, 2, 6-22.	2.3	35
12	Pion and electromagnetic contribution to dose: Comparisons of HZETRN to Monte Carlo results and ISS data. Advances in Space Research, 2013, 52, 62-78.	2.6	33
13	Utilization of CAM, CAF, MAX, and FAX for space radiation analyses using HZETRN. Advances in Space Research, 2010, 45, 866-883.	2.6	32
14	Comparison of the transport codes HZETRN, HETC and FLUKA for galactic cosmic rays. Advances in Space Research, 2011, 47, 1089-1105.	2.6	32
15	An extension of HZETRN for cosmic ray initiated electromagnetic cascades. Advances in Space Research, 2013, 51, 2251-2260.	2.6	31
16	The Badhwarâ€O'Neill 2020 GCR Model. Space Weather, 2020, 18, e2020SW002456.	3.7	30
17	Variation in Lunar Neutron Dose Estimates. Radiation Research, 2011, 176, 827-841.	1.5	29
18	Space radiation accelerator experiments â€" The role of neutrons and light ions. Life Sciences in Space Research, 2014, 3, 90-94.	2.3	29

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19	Statistical validation of HZETRN as a function of vertical cutoff rigidity using ISS measurements. Advances in Space Research, 2011, 47, 600-610.	2.6	28
20	Comparison of the transport codes HZETRN, HETC and FLUKA for a solar particle event. Advances in Space Research, 2011, 47, 1079-1088.	2.6	27
21	Dependence of the Martian radiation environment on atmospheric depth: Modeling and measurement. Journal of Geophysical Research E: Planets, 2017, 122, 329-341.	3.6	26
22	An improved neutron transport algorithm for HZETRN. Advances in Space Research, 2010, 46, 800-810.	2.6	24
23	3DHZETRN: Shielded ICRU spherical phantom. Life Sciences in Space Research, 2015, 4, 46-61.	2.3	24
24	Solar proton exposure of an ICRU sphere within a complex structure Part I: Combinatorial geometry. Life Sciences in Space Research, 2016, 9, 69-76.	2.3	24
25	Solar proton exposure of an ICRU sphere within a complex structure part II: Ray-trace geometry. Life Sciences in Space Research, 2016, 9, 77-83.	2.3	23
26	RITCARD: Radiation-Induced Tracks, Chromosome Aberrations, Repair and Damage. Radiation Research, 2019, 192, 282.	1.5	23
27	Comparing HZETRN, SHIELD, FLUKA and GEANT transport codes. Life Sciences in Space Research, 2017, 14, 64-73.	2.3	22
28	Active Dosimeterâ€Based Estimate of Astronaut Acute Radiation Risk for Realâ€Time Solar Energetic Particle Events. Space Weather, 2018, 16, 1291-1316.	3.7	20
29	GCR environmental models III: GCR model validation and propagated uncertainties in effective dose. Space Weather, 2014, 12, 233-245.	3.7	18
30	Are Further Cross Section Measurements Necessary for Space Radiation Protection or Ion Therapy Applications? Helium Projectiles. Frontiers in Physics, 2020, 8, .	2.1	18
31	A Bi-Exponential Repair Algorithm for Radiation-Induced Double-Strand Breaks: Application to Simulation of Chromosome Aberrations. Genes, 2019, 10, 936.	2.4	16
32	Updated deterministic radiation transport for future deep space missions. Life Sciences in Space Research, 2020, 27, 6-18.	2.3	15
33	3DHZETRN: Neutron leakage in finite objects. Life Sciences in Space Research, 2015, 7, 27-38.	2.3	14
34	Evaluation of HZETRN on the Martian surface: Sensitivity tests and model results. Life Sciences in Space Research, 2017, 14, 29-35.	2.3	14
35	A comparative study of space radiation organ doses and associated cancer risks using PHITS and HZETRN. Physics in Medicine and Biology, 2013, 58, 7183-7207.	3.0	13
36	Cosmic-ray interaction data for designing biological experiments in space. Life Sciences in Space Research, 2017, 13, 51-59.	2.3	13

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37	GCR environmental models II: Uncertainty propagation methods for GCR environments. Space Weather, 2014, 12, 225-232.	3.7	12
38	Improving astronaut cancer risk assessment from space radiation with an ensemble model framework. Life Sciences in Space Research, 2021, 31, 14-28.	2.3	12
39	Evaluating galactic cosmic ray environment models using RaD-X flight data. Space Weather, 2016, 14, 764-775.	3.7	10
40	Comparison of space radiation GCR models to recent AMS data. Life Sciences in Space Research, 2018, 18, 64-71.	2.3	10
41	Characterization of Solar Energetic Particle Radiation Dose to Astronaut Crew on Deepâ€Space Exploration Missions. Space Weather, 2019, 17, 1650-1658.	3.7	10
42	Reduced discretization error in HZETRN. Journal of Computational Physics, 2013, 234, 217-229.	3.8	9
43	Late onset cardiovascular dysfunction in adult mice resulting from galactic cosmic ray exposure. IScience, 2022, 25, 104086.	4.1	9
44	Determination of Chromosome Aberrations in Human Fibroblasts Irradiated by Mixed Fields Generated with Shielding. Radiation Research, 2020, 194, 246.	1.5	8
45	Comparison of organ dose and dose equivalent for human phantoms of CAM vs. MAX. Advances in Space Research, 2010, 45, 850-857.	2.6	7
46	CRaTER observations and permissible mission duration for human operations in deep space. Life Sciences in Space Research, 2020, 26, 149-162.	2.3	6
47	Calibration of a radiation quality model for sparse and uncertain data. Applied Mathematical Modelling, 2021, 95, 734-759.	4.2	6
48	Track Structure Components: Characterizing Energy Deposited in Spherical Cells from Direct and Peripheral HZE Ion Hits. Life, 2021, 11, 1112.	2.4	6
49	Medical Countermeasure Requirements to Meet NASAâ€™s Space Radiation Permissible Exposure Limits for a Mars Mission Scenario. Health Physics, 2022, 123, 116-127.	0.5	6
50	Investigating material approximations in spacecraft radiation analysis. Acta Astronautica, 2011, 69, 6-17.	3.2	5
51	Comparison of space radiation GCR models to AMS heavy ion data. Life Sciences in Space Research, 2019, 22, 76-88.	2.3	4
52	A methodology for investigating the impact of medical countermeasures on the risk of exposure induced death. Life Sciences in Space Research, 2020, 25, 72-102.	2.3	4
53	Effects of the Serber first step in 3DHZETRN-v2.1. Life Sciences in Space Research, 2020, 26, 10-27.	2.3	3
54	Correct modeling results are needed to inform mission planning and shield design. Life Sciences in Space Research, 2020, 25, 143-147.	2.3	2

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55	Improvements to a quantum mechanical abrasion-ablation model of nuclear fragmentation: Revised nuclear level densities and improved ablation code. Nuclear Instruments & Methods in Physics Research B, 2020, 480, 115-126.	1.4	2
56	A practical approach for continuous in situ characterization of radiation quality factors in space. Scientific Reports, 2022, 12, 1453.	3.3	2
57	Impact of Radiation Quality on Microdosimetry and Chromosome Aberrations for High-Energy (>250) Tj ETQq1 1 0.784314 rgBT /Ove	2.4	2
58	Historical reconstruction of astronaut cancer risk â€" context for recent solar minima. Space Weather, 2021, 19, e2021SW002851.	3.7	1
59	Light Ion Yields from Bombardment of Thick Targets by Protons, Helium-4 and Iron-56. EPJ Web of Conferences, 2017, 153, 07029.	0.3	0