Paul B Rimmer

List of Publications by Year
in descending order

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60 papers	2,724 citations	25 h-index	49 g-index
69 all docs	69 docs citations	69 times ranked	2509 citing authors

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#	Article	IF	Citations
1	Stellar Flares from the First TESS Data Release: Exploring a New Sample of M Dwarfs. Astronomical Journal, 2020, 159, 60.	1.9	184
2	Atomic iron and titanium in the atmosphere of the exoplanet KELT-9b. Nature, 2018, 560, 453-455.	13.7	179
3	Phosphine gas in the cloud decks of Venus. Nature Astronomy, 2021, 5, 655-664.	4.2	174
4	Interstellar OH⁺, H₂O⁺and H₃O⁺along the sight-line to G10.6â€“0.4. Astronomy and Astrophysics, 2010, 518, L110.	2.1	155
5	A spectral survey of an ultra-hot Jupiter. Astronomy and Astrophysics, 2019, 627, A165.	2.1	145
6	VULCAN: An Open-source, Validated Chemical Kinetics Python Code for Exoplanetary Atmospheres. Astrophysical Journal, Supplement Series, 2017, 228, 20.	3.0	135
7	The Peculiar Atmospheric Chemistry of KELT-9b. Astrophysical Journal, 2018, 863, 183.	1.6	107
8	A CHEMICAL KINETICS NETWORK FOR LIGHTNING AND LIFE IN PLANETARY ATMOSPHERES. Astrophysical Journal, Supplement Series, 2016, 224, 9.	3.0	102
9	The origin of RNA precursors on exoplanets. Science Advances, 2018, 4, eaar3302.	4.7	100
10	Interstellar CH absorption in the diffuse interstellar medium along the sight-lines to G10.6â€“0.4 (W31C), W49N, and W51. Astronomy and Astrophysics, 2010, 521, L16.	2.1	77
11	Disk Evolution, Element Abundances and Cloud Properties of Young Gas Giant Planets. Life, 2014, 4, 142-173.	1.1	76
12	Hydrogen cyanide in nitrogen-rich atmospheres of rocky exoplanets. Icarus, 2019, 329, 124-131.	1.1	68
13	Nitrogen Oxide Concentrations in Natural Waters on Early Earth. Geochemistry, Geophysics, Geosystems, 2019, 20, 2021-2039.	1.0	65
14	IONIZATION IN ATMOSPHERES OF BROWN DWARFS AND EXTRASOLAR PLANETS. IV. THE EFFECT OF COSMIC RAYS. Astrophysical Journal, 2013, 774, 108.	1.6	64
15	Lightning chemistry on Earth-like exoplanets. Monthly Notices of the Royal Astronomical Society, 2017, 470, 187-196.	1.6	55
16	Origin of Lifeâ€™s Building Blocks in Carbon- and Nitrogen-Rich Surface Hydrothermal Vents. Life, 2019, 9, 12.	1.1	54
17	Detection of an Atmosphere on a Rocky Exoplanet. Astronomical Journal, 2021, 161, 213.	1.9	50
18	Observing a column-dependent<i>Î¶</i>in dense interstellar sources: the case of the Horsehead nebula. Astronomy and Astrophysics, 2012, 537, A7.	2.1	49

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19	Lightning climatology of exoplanets and brown dwarfs guided by Solar system data. Monthly Notices of the Royal Astronomical Society, 2016, 461, 3927-3947.	1.6	49
20	TRAPPIST-1: Global results of the <i>Spitzer</i> Exploration Science Program Red Worlds. Astronomy and Astrophysics, 2020, 640, A112.	2.1	45
21	Multiwaveband photometry of the irradiated brown dwarf WD0137â˜349B. Monthly Notices of the Royal Astronomical Society, 2015, 447, 3218-3226.	1.6	44
22	Phosphine on Venus Cannot Be Explained by Conventional Processes. Astrobiology, 2021, 21, 1277-1304.	1.5	44
23	IONIZATION IN ATMOSPHERES OF BROWN DWARFS AND EXTRASOLAR PLANETS. V. ALFVÃ‰N IONIZATION. Astrophysical Journal, 2013, 776, 11.	1.6	42
24	The influence of galactic cosmic rays on ionâ€“neutral hydrocarbon chemistry in the upper atmospheres of free-floating exoplanets. International Journal of Astrobiology, 2014, 13, 173-181.	0.9	41
25	Hydroxide Salts in the Clouds of Venus: Their Effect on the Sulfur Cycle and Cloud Droplet pH. Planetary Science Journal, 2021, 2, 133.	1.5	41
26	Is lightning a possible source of the radio emission on HAT-P-11b?. Monthly Notices of the Royal Astronomical Society, 2016, 461, 1222-1226.	1.6	40
27	Small hydrocarbon molecules in cloud-forming brown dwarf and giant gas planet atmospheres. Monthly Notices of the Royal Astronomical Society, 2013, 435, 1888-1903.	1.6	28
28	A chemical kinetics code for modelling exoplanetary atmospheres. Monthly Notices of the Royal Astronomical Society, 2019, 487, 2242-2261.	1.6	27
29	Can volcanism build hydrogen-rich early atmospheres?. Earth and Planetary Science Letters, 2020, 550, 116546.	1.8	26
30	Identifiable Acetylene Features Predicted for Young Earth-like Exoplanets with Reducing Atmospheres Undergoing Heavy Bombardment. Astrophysical Journal, 2020, 888, 21.	1.6	25
31	Calibration-free quantitative elemental analysis of meteor plasma using reference laser-induced breakdown spectroscopy of meteorite samples. Astronomy and Astrophysics, 2018, 610, A73.	2.1	24
32	Formation of Methane and (Per)Chlorates on Mars. ACS Earth and Space Chemistry, 2019, 3, 221-232.	1.2	24
33	One-Pot Hydrogen Cyanide-Based Prebiotic Synthesis of Canonical Nucleobases and Glycine Initiated by High-Velocity Impacts on Early Earth. Astrobiology, 2020, 20, 1476-1488.	1.5	24
34	Sulfur chemistry in the atmospheres of warm and hot Jupiters. Monthly Notices of the Royal Astronomical Society, 2021, 506, 3186-3204.	1.6	24
35	Reply to: No evidence of phosphine in the atmosphere of Venus from independent analyses. Nature Astronomy, 2021, 5, 636-639.	4.2	24
36	Production of ammonia makes Venusian clouds habitable and explains observed cloud-level chemical anomalies. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	24

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37	MOVES â€“ IV. Modelling the influence of stellar XUV-flux, cosmic rays, and stellar energetic particles on the atmospheric composition of the hot Jupiter HDÂ189733b. Monthly Notices of the Royal Astronomical Society, 2021, 502, 6201-6215.	1.6	23
38	Oxidised micrometeorites as evidence for low atmospheric pressure on the early Earth. Geochemical Perspectives Letters, 2019, 9, 38-42.	1.0	22
39	Statistical analysis of Curiosity data shows no evidence for a strong seasonal cycle of martian methane. Icarus, 2020, 336, 113407.	1.1	21
40	Lightning and charge processes in brown dwarf and exoplanet atmospheres. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20180398.	1.6	18
41	Reduced Atmospheres of Post-impact Worlds: The Early Earth. Planetary Science Journal, 2022, 3, 115.	1.5	18
42	Timescales for Prebiotic Photochemistry Under Realistic Surface Ultraviolet Conditions. Astrobiology, 2021, 21, 1099-1120.	1.5	17
43	The Galactic cosmic ray intensity at the evolving Earth and young exoplanets. Monthly Notices of the Royal Astronomical Society, 2020, 499, 2124-2137.	1.6	15
44	Ionisation and discharge in cloud-forming atmospheres of brown dwarfs and extrasolar planets. Plasma Physics and Controlled Fusion, 2016, 58, 074003.	0.9	14
45	Growth and Evolution of Secondary Volcanic Atmospheres: I. Identifying the Geological Character of Hot Rocky Planets. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	14
46	JUPITER AS A GIANT COSMIC RAY DETECTOR. Astrophysical Journal Letters, 2014, 787, L25.	3.0	12
47	Linking Atmospheric Chemistry of the Hot Jupiter HD 209458b to Its Formation Location through Infrared Transmission and Emission Spectra. Astrophysical Journal, 2022, 932, 20.	1.6	12
48	Electrostatic activation of prebiotic chemistry in substellar atmospheres. International Journal of Astrobiology, 2014, 13, 165-172.	0.9	10
49	Photochemistry of Venus-like Planets Orbiting K- and M-dwarf Stars. Astrophysical Journal, 2021, 922, 44.	1.6	10
50	Low levels of sulphur dioxide contamination of Venusian phosphine spectra. Monthly Notices of the Royal Astronomical Society, 2022, 514, 2994-3001.	1.6	10
51	Venusian phosphine: a â€˜wow!â€™ signal in chemistry?. Phosphorus, Sulfur and Silicon and the Related Elements, 0, , 1-6.	0.8	8
52	Lifeâ€™s Origins and the Search for Life on Rocky Exoplanets. Elements, 2021, 17, 265-270.	0.5	7
53	Constraints on the Production of Phosphine by Venusian Volcanoes. Universe, 2022, 8, 54.	0.9	7
54	Only extraordinary volcanism can explain the presence of parts per billion phosphine on Venus. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	6

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55	Nitrogen Oxide Production in Laserâ€Induced Breakdown Simulating Impacts on the Hadean Atmosphere. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	5
56	Proposed energy-metabolisms cannot explain the atmospheric chemistry of Venus. Nature Communications, 2022, 13, .	5.8	5
57	ANN-LIBS analysis of mixture plasmas: detection of xenon. Journal of Analytical Atomic Spectrometry, 0, , .	1.6	4
58	Detectable Abundance of Cyanoacetylene (HC₃N) Predicted on Reduced Nitrogen-rich Super-Earth Atmospheres. Astrophysical Journal Letters, 2021, 921, L28.	3.0	3
59	Cosmic Rays, UV Photons, and Haze Formation in the Upper Atmospheres of Hot Jupiters. Proceedings of the International Astronomical Union, 2013, 8, 303-304.	0.0	2
60	Ariel â€“ a window to the origin of life on early earth?. Experimental Astronomy, 2020, , 1.	1.6	1