

# John H Black

## List of Publications by Year in descending order

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73  
papers

3,635  
citations

186265

28  
h-index

128289

60  
g-index

76  
all docs

76  
docs citations

76  
times ranked

3156  
citing authors

#	ARTICLE	IF	CITATIONS
1	PDRs4All: A JWST Early Release Science Program on Radiative Feedback from Massive Stars. Publications of the Astronomical Society of the Pacific, 2022, 134, 054301.	3.1	26
2	OH mid-infrared emission as a diagnostic of H <sub>2</sub> O UV photodissociation. Astronomy and Astrophysics, 2021, 650, A192.	5.1	18
3	Discovery of methanimine (CH <sub>2</sub> NH) megamasers toward compact obscured galaxy nuclei. Astronomy and Astrophysics, 2021, 654, A110.	5.1	3
4	The Leiden Atomic and Molecular Database (LAMDA): Current Status, Recent Updates, and Future Plans. Atoms, 2020, 8, 15.	1.6	59
5	Detection of deuterated molecules, but not of lithium hydride, in the $\tau = 0.89$ absorber toward PKS 1830-211. Astronomy and Astrophysics, 2020, 637, A7.	5.1	9
6	Detection of highly excited OH towards AGB stars. Astronomy and Astrophysics, 2019, 623, L1.	5.1	9
7	Spatially resolved images of reactive ions in the Orion Bar. Astronomy and Astrophysics, 2017, 601, L9.	5.1	33
8	OH <sup>+</sup> and H <sub>2</sub> O <sup>+</sup> absorption toward PKS 1830-211. Astronomy and Astrophysics, 2016, 595, A128.	5.1	36
9	Detection of extragalactic argonium, ArH <sup>+</sup> , toward PKS 1830-211. Astronomy and Astrophysics, 2015, 582, L4.	5.1	52
10	HERSCHEL SURVEY OF GALACTIC OH <sup>+</sup> , H <sub>2</sub> O <sup>+</sup> , AND H <sub>3</sub> O <sup>+</sup> : PROBING THE MOLECULAR HYDROGEN FRACTION AND COSMIC-RAY IONIZATION RATE. Astrophysical Journal, 2015, 800, 40.	4.5	183
11	The Nine Lives of Cosmic Rays in Galaxies. Annual Review of Astronomy and Astrophysics, 2015, 53, 199-246.	24.3	218
12	HERSCHEL OBSERVATIONS OF INTERSTELLAR CHLORONIUM. II. DETECTIONS TOWARD G29.96-0.02, W49N, W51, AND W3(OH), AND DETERMINATIONS OF THE ORTHO-TO-PARA AND <sup>35</sup> Cl/ <sup>37</sup> Cl ISOTOPIC RATIOS. Astrophysical Journal, 2015, 807, 54.	4.5	20
13	Detection of interstellar C2 and C3 in the Small Magellanic Cloud... Monthly Notices of the Royal Astronomical Society, 2013, 428, 1107-1115.	4.4	18
14	CO rotational line emission from a dense knot in Cassiopeia A. Astronomy and Astrophysics, 2013, 558, L2.	5.1	23
15	FAINT EXTENDED OH EMISSION FROM THE LOCAL INTERSTELLAR MEDIUM IN THE DIRECTION $l = 108^\circ$ , $b = 5^\circ$ . Astronomical Journal, 2012, 143, 97.	4.7	33
16	H <sub>3</sub> <sup>+</sup> at the interface between astrochemistry and astroparticle physics. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 5130-5141.	3.4	10
17	HERSCHEL SEARCH FOR O <sub>2</sub> TOWARD THE ORION BAR. Astrophysical Journal, 2012, 752, 26.	4.5	32
18	HERSCHEL OBSERVATIONS OF INTERSTELLAR CHLORONIUM. Astrophysical Journal, 2012, 748, 37.	4.5	51

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19	TRACING THE SOURCES OF COSMIC RAYS WITH MOLECULAR IONS. <i>Astrophysical Journal Letters</i> , 2011, 739, L43.	8.3	32
20	<i>HERSCHEL</i> MEASUREMENTS OF MOLECULAR OXYGEN IN ORION. <i>Astrophysical Journal</i> , 2011, 737, 96.	4.5	138
21	AN ULTRAVIOLET SEARCH FOR INTERSTELLAR CS. <i>Astrophysical Journal</i> , 2009, 693, 804-811.	4.5	14
22	AN OBSERVATIONAL DETERMINATION OF THE PROTON TO ELECTRON MASS RATIO IN THE EARLY UNIVERSE. <i>Astrophysical Journal</i> , 2009, 703, 1648-1662.	4.5	53
23	Alternative data reduction procedures for LIVES: Wavelength calibration and spectrum addition. <i>New Astronomy</i> , 2009, 14, 379-390.	1.8	14
24	P CYGNI PROFILES OF MOLECULAR LINES TOWARD ARP 220 NUCLEI. <i>Astrophysical Journal</i> , 2009, 700, L104-L108.	4.5	84
25	ASTROCHEMISTRY: AN UNFINISHED SYMPHONY. , 2009, , .		0
26	Chemistry and cosmology. <i>Faraday Discussions</i> , 2006, 133, 27.	3.2	9
27	The abundance and excitation of interstellar H 3 +. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2000, 358, 2515-2521.	3.4	16
28	Molecular Excitation and Radiative Transfer: Current Results and Future Prospects. Symposium - International Astronomical Union, 2000, 197, 81-94.	0.1	0
29	Molecules in harsh environments. <i>Faraday Discussions</i> , 1998, 109, 257-266.	3.2	57
30	Carbon and Oxygen Depletion and Extinction in the Translucent Cloud toward HD 24534 (X Persei). <i>Astrophysical Journal</i> , 1998, 496, L113-L116.	4.5	16
31	Spectroscopy of PKS 0528 <sup>+</sup> 250: New Limits on CO Absorption and Emission. <i>Astrophysical Journal</i> , 1997, 486, 727-737.	4.5	5
32	CO at other Wavelengths. , 1997, , 87-94.		0
33	A Study of Quasar Absorption-Line Systems With IRAS. <i>Astronomical Journal</i> , 1996, 112, 62.	4.7	12
34	The Translucent Molecular Clouds toward HD 154368. I. Extinction, Abundances, and Depletions. <i>Astrophysical Journal</i> , 1996, 465, 245.	4.5	34
35	Near-infrared observations of the proto-planetary nebula AFGL 618. <i>Astrophysical Journal</i> , 1992, 389, 347.	4.5	12
36	The diffuse interstellar cloud toward HD 179406 (20 Aquilae). <i>Astrophysical Journal</i> , 1992, 392, 571.	4.5	20

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37	Chemistry and small-scale structure of diffuse and translucent clouds. Symposium - International Astronomical Union, 1991, 147, 139-150.	0.1	0
38	Chemistry and small-scale structure of diffuse and translucent clouds. Symposium - International Astronomical Union, 1991, 147, 139-150.	0.1	0
39	Chemistry and Small-Scale Structure of Diffuse and Translucent Clouds. , 1991, , 139-150.		3
40	CO J = 3-2 observations of translucent and high-latitude molecular clouds. Astrophysical Journal, 1991, 366, 141.	4.5	41
41	Molecular hydrogen formation by excited atom radiative association. Astrophysical Journal, 1991, 372, 161.	4.5	44
42	Electron densities and the excitation of CN in molecular clouds. Astrophysical Journal, 1991, 369, L9.	4.5	49
43	Molecules at early epochs. , 1990, , 473-480.		2
44	Interstellar absorption lines toward NGC 2264 and AFGL 2591 - Abundances of H <sub>2</sub> , H <sub>3</sub> (+), and CO. Astrophysical Journal, 1990, 358, 459.	4.5	49
45	The Photodissociation and Chemistry of Interstellar CO: Erratum. Astrophysical Journal, 1990, 360, 313.	4.5	4
46	Ultraviolet, Visible, and Infrared Spectroscopy of Interstellar Molecules. Highlights of Astronomy, 1989, 8, 331-338.	0.0	1
47	The Abundances and Excitation of Interstellar Molecules. Advances in Atomic and Molecular Physics, 1989, 25, 477-512.	2.0	11
48	Molecules at high redshift. V - Improved limits on the column density of CO in two damped Lyman alpha absorption systems. Astronomical Journal, 1989, 98, 2052.	4.7	6
49	Interstellar C <sub>2</sub> , CH, and CN in translucent molecular clouds. Astrophysical Journal, 1989, 340, 273.	4.5	128
50	Ultraviolet, Visible, and Infrared Spectroscopy of Interstellar Molecules. , 1989, , 331-338.		0
51	The photodissociation of interstellar CO. Lecture Notes in Physics, 1988, , 168-169.	0.7	5
52	Diffuse Cloud Chemistry. Astrophysics and Space Science Library, 1988, , 209-237.	2.7	23
53	Mass loss from evolved stars - Response to a review by Zuckerman (1987). Publications of the Astronomical Society of the Pacific, 1988, 100, 1446.	3.1	1
54	Molecules at early epochs. IV - Confirmation of the detection of H <sub>2</sub> toward PKS 0528 - 250. Astrophysical Journal, 1988, 324, 267.	4.5	58

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55	I(CO)/N(H <sub>2</sub> ) conversions and molecular gas abundances in spiral and irregular galaxies. <i>Astrophysical Journal</i> , 1988, 325, 389.	4.5	287
56	Unresolved velocity structure in diffuse interstellar clouds. <i>Astrophysical Journal</i> , 1988, 331, 986.	4.5	42
57	The small molecular cloud toward HD 169454. <i>Astrophysical Journal</i> , 1988, 332, 995.	4.5	17
58	The photodissociation and chemistry of interstellar CO. <i>Astrophysical Journal</i> , 1988, 334, 771.	4.5	791
59	Molecules at early epochs. III - The Lyman-alpha disk system toward 1331+170. <i>Astrophysical Journal</i> , 1988, 335, 584.	4.5	9
60	The Abundance of Interstellar CO. , 1987, , 241-274.		27
61	Molecules at early epochs. II - H <sub>2</sub> and CO toward PHL 957. <i>Astrophysical Journal</i> , 1987, 317, 442.	4.5	29
62	Fluorescent excitation of interstellar H <sub>2</sub> . <i>Astrophysical Journal</i> , 1987, 322, 412.	4.5	498
63	Properties of evolved mass-losing stars in the Milky Way and variations in the interstellar dust composition. <i>Astrophysical Journal</i> , 1987, 322, 770.	4.5	36
64	Visible and Ultraviolet Studies of Interstellar Molecules. , 1985, , 215-236.		4
65	Theoretical study of AlH <sup>+</sup> : Spin splitting, core polarization, and interstellar chemistry. <i>Journal of Chemical Physics</i> , 1983, 78, 1371-1376.	3.0	11
66	Molecules in Planetary Nebulae. , 1983, , 91-102.		7
67	Ultraviolet absorption studies of H <sub>2</sub> O and other species in comet comae with satellite telescope-spectrometers. <i>Icarus</i> , 1981, 47, 441-448.	2.5	1
68	Observations of Interstellar Molecules with the International Ultraviolet Explorer. , 1980, , 257-260.		2
69	Chlorine Chemistry in Diffuse Interstellar Clouds. , 1980, , 271-272.		0
70	Rotational Fine Structure Lines of Interstellar C <sub>2</sub> Toward $\hat{\imath}$ Persei. , 1980, , 263-267.		0
71	Production of Gamma Radiation in Dense Interstellar Clouds by Cosmic-Ray Interactions. <i>Astrophysical Journal</i> , 1973, 185, L7.	4.5	40
72	Oscillator Strengths and Ground-State Photoionization Cross-Sections for Mg <sup>+</sup> and Ca <sup>+</sup> . <i>Astrophysical Journal</i> , 1972, 177, 567.	4.5	52

#	ARTICLE	IF	CITATIONS
73	The High-Resolution Frontier in Infrared Spectroscopy. , 0, , 3-14.		1