

# Paul F Goldsmith

## List of Publications by Year in descending order

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92  
papers

3,823  
citations

117625

34  
h-index

128289

60  
g-index

92  
all docs

92  
docs citations

92  
times ranked

2961  
citing authors

#	ARTICLE	IF	CITATIONS
1	Large-Scale Structure of the Molecular Gas in Taurus Revealed by High Linear Dynamic Range Spectral Line Mapping. <i>Astrophysical Journal</i> , 2008, 680, 428-445.	4.5	364
2	Molecular Depletion and Thermal Balance in Dark Cloud Cores. <i>Astrophysical Journal</i> , 2001, 557, 736-746.	4.5	357
3	THE RELATION BETWEEN GAS AND DUST IN THE TAURUS MOLECULAR CLOUD. <i>Astrophysical Journal</i> , 2010, 721, 686-708.	4.5	191
4	The [ITAL]Submillimeter Wave Astronomy Satellite[/ITAL]: Science Objectives and Instrument Description. <i>Astrophysical Journal</i> , 2000, 539, L77-L85.	4.5	164
5	COLLISIONAL EXCITATION OF THE [C II] FINE STRUCTURE TRANSITION IN INTERSTELLAR CLOUDS. <i>Astrophysical Journal, Supplement Series</i> , 2012, 203, 13.	7.7	144
6	Chemical and Physical Gradients along the OMC-1 Ridge. <i>Astrophysical Journal</i> , 1997, 482, 245-266.	4.5	141
7	HERSCHEL MEASUREMENTS OF MOLECULAR OXYGEN IN ORION. <i>Astrophysical Journal</i> , 2011, 737, 96.	4.5	138
8	EVOLUTION OF OH AND CO-DARK MOLECULAR GAS FRACTION ACROSS A MOLECULAR CLOUD BOUNDARY IN TAURUS. <i>Astrophysical Journal</i> , 2016, 819, 22.	4.5	104
9	The Five College Radio Astronomy Observatory CO Mapping Survey of the Taurus Molecular Cloud. <i>Astrophysical Journal, Supplement Series</i> , 2008, 177, 341-361.	7.7	96
10	Molecular Line Emission as a Tool for Galaxy Observations (LEGO). <i>Astronomy and Astrophysics</i> , 2017, 605, L5.	5.1	95
11	ALIGNMENT BETWEEN FLATTENED PROTOSTELLAR INFALL ENVELOPES AND AMBIENT MAGNETIC FIELDS. <i>Astrophysical Journal</i> , 2013, 770, 151.	4.5	90
12	The magnetic evolution of the Taurus molecular clouds. I - Large-scale properties. <i>Astrophysical Journal</i> , 1987, 321, 855.	4.5	85
13	Probing Pre-Protostellar Cores with Formaldehyde. <i>Astrophysical Journal</i> , 2004, 614, 252-266.	4.5	80
14	Origin and Evolution of the Cepheus Bubble. <i>Astrophysical Journal</i> , 1998, 507, 241-253.	4.5	76
15	The Large-Scale Structure, Kinematics, and Evolution of IC 1396. <i>Astrophysical Journal</i> , 1995, 447, 721.	4.5	72
16	CH <sub>3</sub> C <sub>2</sub> H as a temperature probe in dense giant molecular cloud cores. <i>Astrophysical Journal</i> , 1994, 431, 674.	4.5	69
17	The CARMA-NRO Orion Survey. <i>Astrophysical Journal, Supplement Series</i> , 2018, 236, 25.	7.7	64
18	HAWC+/SOFIA Multiwavelength Polarimetric Observations of OMC-1. <i>Astrophysical Journal</i> , 2019, 872, 187.	4.5	64

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19	A Holistic Perspective on the Dynamics of G035.39-00.33: The Interplay between Gas and Magnetic Fields. <i>Astrophysical Journal</i> , 2018, 859, 151.	4.5	57
20	<i>HERSCHEL</i> OBSERVATIONS OF INTERSTELLAR CHLORONIUM. <i>Astrophysical Journal</i> , 2012, 748, 37.	4.5	51
21	<i>HERSCHEL</i> GALACTIC PLANE SURVEY OF [N ii] FINE STRUCTURE EMISSION. <i>Astrophysical Journal</i> , 2015, 814, 133.	4.5	51
22	The TOP-SCOPE Survey of <i>Planck</i> Galactic Cold Clumps: Survey Overview and Results of an Exemplar Source, PGCC G26.53+0.17. <i>Astrophysical Journal</i> , Supplement Series, 2018, 234, 28.	7.7	50
23	Physical Conditions in Quiescent Dark Cloud Cores Determined from Multitransition Observations of CCS. <i>Astrophysical Journal</i> , 1997, 477, 241-264.	4.5	49
24	C <sup>+</sup> IN THE INTERSTELLAR MEDIUM: COLLISIONAL EXCITATION BY H <sub>2</sub> REVISITED. <i>Astrophysical Journal</i> , 2014, 780, 183.	4.5	45
25	The CARMA-NRO Orion Survey. <i>Astronomy and Astrophysics</i> , 2019, 623, A142.	5.1	45
26	Submillimeter Wave Astronomy Satellite and Arecibo Observations of H <sub>2</sub> O and OH in a Diffuse Cloud along the Line of Sight to W51. <i>Astrophysical Journal</i> , 2002, 580, 278-284.	4.5	44
27	AN AMMONIA SPECTRAL MAP OF THE L1495-B218 FILAMENTS IN THE TAURUS MOLECULAR CLOUD. I. PHYSICAL PROPERTIES OF FILAMENTS AND DENSE CORES. <i>Astrophysical Journal</i> , 2015, 805, 185.	4.5	44
28	Electron Excitation of High Dipole Moment Molecules Re-examined. <i>Astrophysical Journal</i> , 2017, 841, 25.	4.5	43
29	Where is OH and Does It Trace the Dark Molecular Gas (DMG)? <i>Astrophysical Journal</i> , Supplement Series, 2018, 235, 1.	7.7	42
30	A survey of IRAS point sources in Taurus for high-velocity molecular gas. <i>Astrophysical Journal</i> , 1987, 321, 370.	4.5	41
31	<sup>13</sup> CO CORES IN THE TAURUS MOLECULAR CLOUD. <i>Astrophysical Journal</i> , 2012, 760, 147.	4.5	40
32	OUTFLOWS AND BUBBLES IN TAURUS: STAR-FORMATION FEEDBACK SUFFICIENT TO MAINTAIN TURBULENCE. <i>Astrophysical Journal</i> , Supplement Series, 2015, 219, 20.	7.7	39
33	STAR FORMATION LAWS IN BOTH GALACTIC MASSIVE CLUMPS AND EXTERNAL GALAXIES: EXTENSIVE STUDY WITH DUST CONTINUUM, HCN (4-3), AND CS (7-6). <i>Astrophysical Journal</i> , 2016, 829, 59.	4.5	38
34	Magnetic Fields in the Infrared Dark Cloud G34.43+0.24. <i>Astrophysical Journal</i> , 2019, 883, 95.	4.5	38
35	DIFFUSE MOLECULAR CLOUD DENSITIES FROM UV MEASUREMENTS OF CO ABSORPTION. <i>Astrophysical Journal</i> , 2013, 774, 134.	4.5	34
36	MOLECULAR HYDROGEN EMISSION FROM THE BOUNDARIES OF THE TAURUS MOLECULAR CLOUD. <i>Astrophysical Journal</i> , 2010, 715, 1370-1382.	4.5	33

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37	<i>HERSCHEL</i> HIFI OBSERVATIONS OF O <sub>2</sub> TOWARD ORION: SPECIAL CONDITIONS FOR SHOCK ENHANCED EMISSION. <i>Astrophysical Journal</i> , 2014, 793, 111.	4.5	33
38	<i>HERSCHEL</i> SEARCH FOR O <sub>2</sub> TOWARD THE ORION BAR. <i>Astrophysical Journal</i> , 2012, 752, 26.	4.5	32
39	Characterizing the Transition from Diffuse Atomic to Dense Molecular Clouds in the Magellanic Clouds with [C ii], [C i], and CO. <i>Astrophysical Journal</i> , 2017, 839, 107.	4.5	32
40	DISCOVERY OF AN EXTREMELY WIDE-ANGLE BIPOLAR OUTFLOW IN AFGL 5142. <i>Astrophysical Journal</i> , 2016, 824, 31.	4.5	31
41	PLANCK COLD CLUMPS IN THE Î» ORIONIS COMPLEX. I. DISCOVERY OF AN EXTREMELY YOUNG CLASS 0 PROTOSTELLAR OBJECT AND A PROTO-BROWN DWARF CANDIDATE IN THE BRIGHT-RIMMED CLUMP PGCC G192.32â€“11.88. <i>Astrophysical Journal</i> , Supplement Series, 2016, 222, 7.	7.7	31
42	An Improved Technique for Measurement of Cold H <sub>2</sub> in Molecular Cloud Cores. <i>Astrophysical Journal</i> , 2008, 689, 276-289.	4.5	28
43	SOFIA Far-infrared Imaging Polarimetry of M82 and NGC 253: Exploring the Supergalactic Wind. <i>Astrophysical Journal Letters</i> , 2019, 870, L9.	8.3	24
44	A Proposed Heterodyne Receiver for the Origins Space Telescope. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2018, 8, 558-571.	3.1	23
45	ALMA Survey of Orion Planck Galactic Cold Clumps (ALMASOP). II. Survey Overview: A First Look at 1.3 mm Continuum Maps and Molecular Outflows. <i>Astrophysical Journal</i> , Supplement Series, 2020, 251, 20.	7.7	22
46	A SURVEY OF H I NARROW SELF-ABSORPTION IN MOLECULAR CORES. <i>Astrophysical Journal</i> , 2010, 724, 1402-1429.	4.5	21
47	<i>HERSCHEL</i> 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. <i>Astrophysical Journal</i> , 2015, 807, 54.	4.5	20
48	An Ammonia Spectral Map of the L1495-B218 Filaments in the Taurus Molecular Cloud. II. CCS and HC <sub>7</sub> N Chemistry and Three Modes of Star Formation in the Filaments. <i>Astrophysical Journal</i> , 2019, 871, 134.	4.5	19
49	ALMA Observations Reveal No Preferred Outflow-filament and Outflow-magnetic Field Orientations in Protoclusters. <i>Astrophysical Journal</i> , 2020, 890, 44.	4.5	16
50	ALMA Survey of Orion Planck Galactic Cold Clumps (ALMASOP): Detection of Extremely High-density Compact Structure of Prestellar Cores and Multiple Substructures Within. <i>Astrophysical Journal Letters</i> , 2021, 907, L15.	8.3	16
51	The Core Mass Function in the Orion Nebula Cluster Region: What Determines the Final Stellar Masses?. <i>Astrophysical Journal Letters</i> , 2021, 910, L6.	8.3	15
52	Sub-millimeter heterodyne focal-plane arrays for high-resolution astronomical spectroscopy. <i>URSI Radio Science Bulletin</i> , 2017, 2017, 53-73.	0.1	15
53	OH Survey along Sightlines of Galactic Observations of Terahertz C+. <i>Astrophysical Journal</i> , 2017, 839, 8.	4.5	14
54	A SOFIA Survey of [C ii] in the Galaxy M51. I. [C ii] as a Tracer of Star Formation. <i>Astrophysical Journal Letters</i> , 2018, 869, L30.	8.3	14

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55	Probing ISM Structure in Trumpler 14 and Carina I Using the Stratospheric Terahertz Observatory 2. <i>Astrophysical Journal</i> , 2019, 878, 120.	4.5	14
56	Catching the Birth of a Dark Molecular Cloud for the First Time. <i>Astrophysical Journal</i> , 2018, 867, 13.	4.5	13
57	Argus: a 16-pixel millimeter-wave spectrometer for the Green Bank Telescope. <i>Proceedings of SPIE</i> , 2014, , .	0.8	12
58	PHOTON-DOMINATED REGION MODELING OF THE [C I], [C II], AND CO LINE EMISSION FROM A BOUNDARY IN THE TAURUS MOLECULAR CLOUD. <i>Astrophysical Journal</i> , 2014, 795, 26.	4.5	11
59	THE MAGNETIC FIELD OF L1544. I. NEAR-INFRARED POLARIMETRY AND THE NON-UNIFORM ENVELOPE. <i>Astrophysical Journal</i> , 2016, 833, 176.	4.5	11
60	Modeling Collisional Excitation of [O i] Fine Structure Line Emission from PDRs. I. Homogeneous Clouds. <i>Astrophysical Journal</i> , 2019, 887, 54.	4.5	11
61	HAWC+ Far-infrared Observations of the Magnetic Field Geometry in M51 and NGC 891. <i>Astronomical Journal</i> , 2020, 160, 167.	4.7	11
62	L1599B: CLOUD ENVELOPE AND C <sup>+</sup> EMISSION IN A REGION OF MODERATELY ENHANCED RADIATION FIELD. <i>Astrophysical Journal</i> , 2016, 824, 141.	4.5	10
63	The TOP-SCOPE Survey of PGCCs: PMO and SCUBA-2 Observations of 64 PGCCs in the Second Galactic Quadrant. <i>Astrophysical Journal, Supplement Series</i> , 2018, 236, 49.	7.7	10
64	Velocity-resolved [ ] Emission from Cold Diffuse Clouds in the Interstellar Medium. <i>Astrophysical Journal</i> , 2018, 856, 96.	4.5	10
65	Interstellar Cloud Conditions Based on 63 $\mu$ m [O i] Emission and Absorption in W3. <i>Astrophysical Journal</i> , 2021, 916, 6.	4.5	10
66	Compressed Magnetic Field in the Magnetically Regulated Global Collapsing Clump of G9.62+0.19. <i>Astrophysical Journal Letters</i> , 2018, 869, L5.	8.3	9
67	An ALMA study of outflow parameters of protoclusters: outflow feedback to maintain the turbulence. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 507, 4316-4334.	4.4	9
68	Electron Densities and Nitrogen Abundances in Ionized Gas Derived Using [N ii] Fine-structure and Hydrogen Recombination Lines. <i>Astrophysical Journal</i> , 2019, 886, 1.	4.5	8
69	A Spherical Aberration Corrective Lens for Centimeter Through Submillimeter Wavelength Antennas. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2018, 17, 2228-2231.	4.0	6
70	The CARMA-NRO Orion Survey: Core Emergence and Kinematics in the Orion A Cloud. <i>Astrophysical Journal</i> , 2019, 882, 45.	4.5	6
71	Molecular Oxygen in the Nearest QSO Mrk 231. <i>Astrophysical Journal</i> , 2020, 889, 129.	4.5	6
72	Carbon-chain Chemistry versus Complex-organic-molecule Chemistry in Envelopes around Three Low-mass Young Stellar Objects in the Perseus Region. <i>Astrophysical Journal</i> , 2021, 910, 141.	4.5	6

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73	A SOFIA Survey of [C ii] in the Galaxy M51. II. [C ii] and CO Kinematics across the Spiral Arms. <i>Astrophysical Journal</i> , 2020, 900, 132.	4.5	6
74	ALMA Survey of Orion Planck Galactic Cold Clumps (ALMASOP): Evidence for a Molecular Jet Launched at an Unprecedented Early Phase of Protostellar Evolution. <i>Astrophysical Journal</i> , 2022, 931, 130.	4.5	6
75	Distribution of Water Vapor in Molecular Clouds. II. <i>Astrophysical Journal</i> , 2020, 892, 22.	4.5	5
76	GEOMETRY-INDEPENDENT DETERMINATION OF RADIAL DENSITY DISTRIBUTIONS IN MOLECULAR CLOUD CORES AND OTHER ASTRONOMICAL OBJECTS. <i>Astrophysical Journal</i> , 2016, 822, 10.	4.5	4
77	Thermal Pressure in Diffuse H <sub>2</sub> Gas Measured by Herschel Emission and FUSE UV H <sub>2</sub> Absorption. <i>Astrophysical Journal</i> , 2017, 838, 165.	4.5	4
78	Quantum Limited SIS Receiver Technology for the Detection of Water Isotopologue Emission From Comets. <i>IEEE Transactions on Terahertz Science and Technology</i> , 2020, 10, 569-582.	3.1	4
79	Planck Galactic Cold Clumps at High Galactic Latitude—a Study with CO Lines. <i>Astrophysical Journal</i> , 2021, 920, 103.	4.5	4
80	Chemical Compositions in the Vicinity of Protostars in Ophiuchus. <i>Astrophysical Journal</i> , 2021, 922, 152.	4.5	4
81	ALMA Survey of Orion Planck Galactic Cold Clumps (ALMASOP): How Do Dense Core Properties Affect the Multiplicity of Protostars?. <i>Astrophysical Journal</i> , 2022, 931, 158.	4.5	4
82	The Connection between Different Tracers of the Diffuse Interstellar Medium: Kinematics. <i>Astrophysical Journal</i> , 2018, 858, 111.	4.5	3
83	The Transition from Diffuse Molecular Gas to Molecular Cloud Material in Taurus. <i>Astrophysical Journal</i> , 2021, 914, 59.	4.5	3
84	Tracing the Formation of Molecular Clouds in a Low-metallicity Galaxy: An H i Narrow Self-absorption Survey of the Large Magellanic Cloud. <i>Astrophysical Journal</i> , 2019, 887, 242.	4.5	3
85	Rotation of Two Micron All Sky Survey Clumps in Molecular Clouds. <i>Astrophysical Journal</i> , 2020, 898, 122.	4.5	3
86	Herschel 158 $\mu$ m [C ii] Observations of $\alpha$ -CO-dark Gas in the Perseus Giant Molecular Cloud. <i>Astrophysical Journal</i> , 2020, 899, 23.	4.5	3
87	Search for Interstellar LiH in the Milky Way. <i>Astrophysical Journal</i> , 2017, 837, 52.	4.5	2
88	Applications of Machine Learning Algorithms in Processing Terahertz Spectroscopic Data. <i>Journal of Astronomical Instrumentation</i> , 2020, 09, .	1.5	2
89	The CARMA-NRO Orion Survey—Data Release. <i>Research Notes of the AAS</i> , 2021, 5, 55.	0.7	2
90	How 50 Years of Technology Development Has Transformed Millimeter-THz Astronomical Spectroscopy. , 2021, , .		2

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91	Dual Local Oscillator SIS Receiver for Simultaneous Observations of Water Isotopologues in the Solar System. IEEE Transactions on Terahertz Science and Technology, 2021, 11, 183-193.	3.1	1
92	Probing Polarization and the Role of Magnetic Fields in Cloud Destruction in the Keyhole Nebula. Astrophysical Journal, 2021, 917, 57.	4.5	1