Paola Caselli

List of Publications by Year
in descending order

449 papers	21,537 citations	8181 76 h-index	16650 123 g-index
451 all docs	451 docs citations	451 times ranked	5388 citing authors

#	Article	IF	Citations
1	Clouds, filaments, and protostars: TheHerschelâ€‰Hi-GAL Milky Way. Astronomy and Astrophysics, 2010, 518, L100.	5.1	573
2	Dense Cores in Dark Clouds. XIV. N2H+(1â€“0) Maps of Dense Cloud Cores. Astrophysical Journal, 2002, 572, 238-263.	4.5	487
3	Systematic Molecular Differentiation in Starless Cores. Astrophysical Journal, 2002, 569, 815-835.	4.5	453
4	Hi-GAL: The Herschel Infrared Galactic Plane Survey. Publications of the Astronomical Society of the Pacific, 2010, 122, 314-325.	3.1	440
5	CO Depletion in the Starless Cloud Core L1544. Astrophysical Journal, 1999, 523, L165-L169.	4.5	417
6	On the internal structure of starless cores. Astronomy and Astrophysics, 2004, 416, 191-212.	5.1	364
7	Our astrochemical heritage. Astronomy and Astrophysics Review, 2012, 20, 1.	25.5	327
8	Probing the Evolutionary Status of Starless Cores through N2H+and N2D+Observations. Astrophysical Journal, 2005, 619, 379-406.	4.5	323
9	Molecular Ions in L1544. II. The Ionization Degree. Astrophysical Journal, 2002, 565, 344-358.	4.5	321
10	The Ionization Fraction in Dense Cloud Cores. Astrophysical Journal, 1998, 499, 234-249.	4.5	263
11	L1544: A Starless Dense Core with Extended Inward Motions. Astrophysical Journal, 1998, 504, 900-914.	4.5	240
12	CO Isotopologues in the Perseus Molecular Cloud Complex: theXâ€factor and Regional Variations. Astrophysical Journal, 2008, 679, 481-496.	4.5	236
13	Chemical differentiation between star-forming regions - The Orion Hot Core and Compact Ridge. Astrophysical Journal, 1993, 408, 548.	4.5	230
14	The COMPLETE Survey of Star-Forming Regions: Phase I Data. Astronomical Journal, 2006, 131, 2921-2933.	4.7	227
15	The Line Width--Size Relation in Massive Cloud Cores. Astrophysical Journal, 1995, 446, 665.	4.5	219
16	Observing the gas temperature drop in the high-density nucleus of LÂ1544. Astronomy and Astrophysics, 2007, 470, 221-230.	5.1	218
17	First detection of [CII]158ÂÎ¼m at high redshift: vigorous star formation in the early universe. Astronomy and Astrophysics, 2005, 440, L51-L54.	5.1	209
18	Water in star-forming regions withHerschel(WISH). Astronomy and Astrophysics, 2012, 542, A8.	5.1	207

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19	Water in Star-forming Regions with theHerschel Space Observatory(WISH). I.ÂOverview of Key Program and First Results. Publications of the Astronomical Society of the Pacific, 2011, 123, 138-170.	3.1	206
20	Radio-astronomical Spectroscopy of the Hyperfine Structure of N[TINF]2[/TINF]H[TSUP]+[/TSUP]. Astrophysical Journal, 1995, 455, .	4.5	183
21	Molecular Evolution in Collapsing Prestellar Cores. III. Contraction of a Bonnorâ€Ebert Sphere. Astrophysical Journal, 2005, 620, 330-346.	4.5	179
22	Molecular Ions in L1544. I. Kinematics. Astrophysical Journal, 2002, 565, 331-343.	4.5	174
23	An Ammonia Spectral Atlas of Dense Cores in Perseus. Astrophysical Journal, Supplement Series, 2008, 175, 509-521.	7.7	172
24	THE SPATIAL DISTRIBUTION OF COMPLEX ORGANIC MOLECULES IN THE L1544 PRE-STELLAR CORE. Astrophysical Journal Letters, 2016, 830, L6.	8.3	171
25	Abundant H$mathsf{_{2}}$D$mathsf{^{+}}$ in the preâ€“stellar core L1544. Astronomy and Astrophysics, 2003, 403, L37-L41.	5.1	162
26	Formation of Complex Molecules in Prestellar Cores: A Multilayer Approach. Astrophysical Journal, 2017, 842, 33.	4.5	158
27	On the internal structure of starless cores. Astronomy and Astrophysics, 2006, 455, 577-593.	5.1	155
28	DIRECT OBSERVATION OF A SHARP TRANSITION TO COHERENCE IN DENSE CORES. Astrophysical Journal Letters, 2010, 712, L116-L121.	8.3	149
29	FIRST DETECTION OF WATER VAPOR IN A PRE-STELLAR CORE. Astrophysical Journal Letters, 2012, 759, L37.	8.3	148
30	Resetting chemical clocks of hot cores based on S-bearing molecules. Astronomy and Astrophysics, 2004, 422, 159-169.	5.1	141
31	Are gas-phase models of interstellar chemistry tenable? The case of methanol. Faraday Discussions, 2006, 133, 51.	3.2	138
32	HERSCHELMEASUREMENTS OF MOLECULAR OXYGEN IN ORION. Astrophysical Journal, 2011, 737, 96.	4.5	138
33	The Ionization Fraction in Dense Molecular Gas. I. Lowâ€Mass Cores. Astrophysical Journal, 1998, 503, 689-699.	4.5	138
34	Dynamics and depletion in thermally supercritical starless cores. Monthly Notices of the Royal Astronomical Society, 2010, 402, 1625-1634.	4.4	131
35	A Proposed Modification of the Rate Equations for Reactions on Grain Surfaces. Astrophysical Journal, 1998, 495, 309-316.	4.5	125
36	Seeds Of Life In Space (SOLIS): The Organic Composition Diversity at 300â€“1000 au Scale in Solar-type Star-forming Regions[*]. Astrophysical Journal, 2017, 850, 176.	4.5	116

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37	The Green Bank Ammonia Survey: First Results of NH₃ Mapping ofÂthe Gould Belt. Astrophysical Journal, 2017, 843, 63.	4.5	115
38	THE DYNAMICS OF MASSIVE STARLESS CORES WITH ALMA. Astrophysical Journal, 2013, 779, 96.	4.5	113
39	The N₂D⁺/N₂H⁺ ratio as an evolutionary tracer ofÂClassÂ0Âprotostars. Astronomy and Astrophysics, 2009, 493, 89-105.	5.1	112
40	Cosmic-ray ionisation in circumstellar discs. Astronomy and Astrophysics, 2018, 614, A111.	5.1	111
41	Dense Cores in Dark Clouds. XI. A Survey for N2H+, C3H2, and CCS. Astrophysical Journal, 1998, 506, 743-757.	4.5	109
42	Four annular structures in a protostellar disk less than 500,000 years old. Nature, 2020, 586, 228-231.	27.8	109
43	Survey of ortho-H$mathsf{_{2}}$D$mathsf{^{+}}$ (1$mathsf{_{1,0}}$â€“1$mathsf{_{1,1}}$) in dense cloud cores. Astronomy and Astrophysics, 2008, 492, 703-718.	5.1	108
44	Parsec-scale SiO emission in an infrared dark cloud. Monthly Notices of the Royal Astronomical Society, 2010, 406, 187-196.	4.4	108
45	Modeling sulfur depletion in interstellar clouds. Astronomy and Astrophysics, 2019, 624, A108.	5.1	107
46	Parametrization of C-shocks. Evolution of the sputtering of grains. Astronomy and Astrophysics, 2008, 482, 549-559.	5.1	104
47	H2D+ observations give an age of at least one million years for a cloud core forming Sun-like stars. Nature, 2014, 516, 219-221.	27.8	102
48	The sulphur depletion problem. Monthly Notices of the Royal Astronomical Society, 1999, 306, 691-695.	4.4	101
49	Herschelspectral surveys of star-forming regions. Astronomy and Astrophysics, 2010, 521, L22.	5.1	99
50	Deuteration as an evolutionary tracer in massive-star formation. Astronomy and Astrophysics, 2011, 529, L7.	5.1	99
51	ALMA resolves turbulent, rotating [CII] emission in a young starburst galaxy atz= 4.8. Astronomy and Astrophysics, 2014, 565, A59.	5.1	99
52	The dynamical properties of dense filaments in the infrared dark cloud G035.39âˆ’00.33âˆ.... Monthly Notices of the Royal Astronomical Society, 2014, 440, 2860-2881.	4.4	99
53	Water in star-forming regions withHerschel(WISH). Astronomy and Astrophysics, 2013, 552, A141.	5.1	98
54	Seeds of Life in Space (SOLIS). Astronomy and Astrophysics, 2017, 605, L3.	5.1	98

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55	Water in star-forming regions: physics and chemistry from clouds to disks as probed by Herschel spectroscopy. Astronomy and Astrophysics, 2021, 648, A24.	5.1	98
56	Strong [CII] emission at high redshift. Astronomy and Astrophysics, 2009, 500, L1-L4.	5.1	97
57	The CHESS spectral survey of star forming regions: Peering into the protostellar shock L1157-B1. Astronomy and Astrophysics, 2010, 518, L112.	5.1	97
58	Protostellar disc formation enabled by removal of small dust grains. Monthly Notices of the Royal Astronomical Society, 2016, 460, 2050-2076.	4.4	97
59	The Different Structures of the Two Classes of Starless Cores. Astrophysical Journal, 2008, 683, 238-247.	4.5	95
60	The formation of a quadruple star system with wide separation. Nature, 2015, 518, 213-215.	27.8	93
61	Origin of the hot gas in low-mass protostars. Astronomy and Astrophysics, 2010, 518, L121.	5.1	89
62	Decoupling of magnetic fields in collapsing protostellar envelopes and disc formation and fragmentation. Monthly Notices of the Royal Astronomical Society, 2018, 473, 4868-4889.	4.4	88
63	N2H+(1â€“0) survey of massive molecular cloud cores. Astronomy and Astrophysics, 2003, 405, 639-654.	5.1	87
64	THE ENIGMATIC CORE L1451-mm: A FIRST HYDROSTATIC CORE? OR A HIDDEN VeLLO?. Astrophysical Journal, 2011, 743, 201.	4.5	87
65	Multi-line detection of O₂towardÏOphiuchi A. Astronomy and Astrophysics, 2012, 541, A73.	5.1	84
66	Herschel/HIFI discovery of interstellar chloronium (H₂Cl⁺). Astronomy and Astrophysics, 2010, 521, L9.	5.1	83
67	Molecular depletion times and the CO-to-H₂conversion factor in metal-poor galaxies. Astronomy and Astrophysics, 2015, 583, A114.	5.1	83
68	THE FIRST DETECTIONS OF THE KEY PREBIOTIC MOLECULE PO IN STAR-FORMING REGIONS. Astrophysical Journal, 2016, 826, 161.	4.5	83
69	Deuterated methanol in the pre-stellar core L1544. Astronomy and Astrophysics, 2014, 569, A27.	5.1	81
70	Sulphur chemistry in the L1544 pre-stellar core. Monthly Notices of the Royal Astronomical Society, 2018, 478, 5514-5532.	4.4	81
71	Observations ofÂL1521F: A highly evolved starless core. Astronomy and Astrophysics, 2004, 420, 957-974.	5.1	81
72	Hydrides in young stellar objects: Radiation tracers in a protostar-disk-outflow system. Astronomy and Astrophysics, 2010, 521, L35.	5.1	80

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73	Water cooling of shocks in protostellar outflows. Astronomy and Astrophysics, 2010, 518, L120.	5.1	79
74	Deuterium fractionation on interstellar grains studied with modified rate equations and a Monte Carlo approach. Planetary and Space Science, 2002, 50, 1257-1266.	1.7	78
75	Detection of interstellar oxidaniumyl: Abundant H₂O⁺towards the star-forming regions DR21, SgrÂB2, and NGC6334. Astronomy and Astrophysics, 2010, 518, L111.	5.1	78
76	INTERSTELLAR DUST CHARGING IN DENSE MOLECULAR CLOUDS: COSMIC RAY EFFECTS. Astrophysical Journal, 2015, 812, 135.	4.5	77
77	A protostellar system fed by a streamer of 10,500â€‰au length. Nature Astronomy, 2020, 4, 1158-1163.	10.1	77
78	Sensitive limits on the abundance of cold water vapor inÂtheÂDMÂTauri protoplanetary disk. Astronomy and Astrophysics, 2010, 521, L33.	5.1	76
79	Complex, quiescent kinematics in a highly filamentary infrared dark cloudâ˜…. Monthly Notices of the Royal Astronomical Society, 2013, 428, 3425-3442.	4.4	76
80	Water formation on bare grains: When the chemistry on dust impacts interstellar gas. Astronomy and Astrophysics, 2010, 522, A74.	5.1	75
81	The dynamics of collapsing cores and star formation. Monthly Notices of the Royal Astronomical Society, 2015, 446, 3731-3740.	4.4	73
82	Water in low-mass star-forming regions withHerschel. Astronomy and Astrophysics, 2010, 521, L30.	5.1	72
83	The Distribution of Orthoâ€“H2D+(1,0â€“1,1) in L1544: Tracing the Deuteration Factory in Prestellar Cores. Astrophysical Journal, 2006, 645, 1198-1211.	4.5	71
84	ALMA reveals a chemically evolved submillimeter galaxy atz= 4.76. Astronomy and Astrophysics, 2012, 542, L34.	5.1	71
85	MAPPING LARGE-SCALE CO DEPLETION IN A FILAMENTARY INFRARED DARK CLOUD. Astrophysical Journal, 2011, 738, 11.	4.5	70
86	The hot core towards the intermediate-mass protostar NGC 7129 FIRS 2. Astronomy and Astrophysics, 2014, 568, A65.	5.1	69
87	Gravitational Infall in the Dense Cores L1527 and L483. Astrophysical Journal, 1995, 449, .	4.5	68
88	L1157-B1: WATER AND AMMONIA AS DIAGNOSTICS OF SHOCK TEMPERATURE. Astrophysical Journal Letters, 2011, 740, L3.	8.3	66
89	Chemical differentiation in a prestellar core traces non-uniform illumination. Astronomy and Astrophysics, 2016, 592, L11.	5.1	66
90	Gas phase Elemental abundances in Molecular cloudS (GEMS). Astronomy and Astrophysics, 2019, 624, A105.	5.1	66

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91	Searching for massive pre-stellar cores through observations of N$_mathsf{2}$H+and N$_mathsf{2}$D+. Astronomy and Astrophysics, 2006, 460, 709-720.	5.1	64
92	DENSE CORES IN PERSEUS: THE INFLUENCE OF STELLAR CONTENT AND CLUSTER ENVIRONMENT. Astrophysical Journal, 2009, 696, 298-319.	4.5	63
93	Molecular gas in QSO host galaxies at z > 5. Astronomy and Astrophysics, 2007, 472, L33-L37.	5.1	63
94	Deuterated molecules as a probe of ionization fraction in dense interstellar clouds. Planetary and Space Science, 2002, 50, 1133-1144.	1.7	62
95	Accurate sub-millimetre rest frequencies for HOCO⁺ and DOCO⁺ ions. Astronomy and Astrophysics, 2017, 602, A34.	5.1	62
96	The CHESS spectral survey of star forming regions: Peering into the protostellar shock L1157-B1. Astronomy and Astrophysics, 2010, 518, L113.	5.1	61
97	HERSCHEL FINDS EVIDENCE FOR STELLAR WIND PARTICLES IN A PROTOSTELLAR ENVELOPE: IS THIS WHAT HAPPENED TO THE YOUNG SUN?. Astrophysical Journal Letters, 2014, 790, L1.	8.3	61
98	INTERSTELLAR ICES AS WITNESSES OF STAR FORMATION: SELECTIVE DEUTERATION OF WATER AND ORGANIC MOLECULES UNVEILED. Astrophysical Journal Letters, 2011, 741, L34.	8.3	60
99	IMPULSIVE SPOT HEATING AND THERMAL EXPLOSION OF INTERSTELLAR GRAINS REVISITED. Astrophysical Journal, 2015, 805, 59.	4.5	60
100	THE DEUTERIUM FRACTIONATION TIMESCALE IN DENSE CLOUD CORES: A PARAMETER SPACE EXPLORATION. Astrophysical Journal, 2015, 804, 98.	4.5	60
101	The Green Bank Ammonia Survey: Dense Cores under Pressure in Orion A. Astrophysical Journal, 2017, 846, 144.	4.5	60
102	The chemistry of protoplanetary fragments formed via gravitational instabilities. Monthly Notices of the Royal Astronomical Society, 2017, 472, 189-204.	4.4	60
103	The observed chemical structure of L1544. Astronomy and Astrophysics, 2017, 606, A82.	5.1	60
104	Estimation and reduction of the uncertainties in chemical models: application to hot core chemistry. Astronomy and Astrophysics, 2005, 444, 883-891.	5.1	59
105	THE DUST EMISSIVITY SPECTRAL INDEX IN THE STARLESS CORE TMC-1C. Astrophysical Journal, 2010, 708, 127-136.	4.5	59
106	Constraining the Nature of the PDS 70 Protoplanets with VLTI/GRAVITY ^{âˆ—}. Astronomical Journal, 2021, 161, 148.	4.7	59
107	ALMA and ROSINA detections of phosphorus-bearing molecules: the interstellar thread between star-forming regions and comets. Monthly Notices of the Royal Astronomical Society, 2020, 492, 1180-1198.	4.4	58
108	EXPANDED VERY LARGE ARRAY OBSERVATIONS OF THE BARNARD 5 STAR-FORMING CORE: EMBEDDED FILAMENTS REVEALED. Astrophysical Journal Letters, 2011, 739, L2.	8.3	57

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109	Deep observations of O₂toward a low-mass protostar withHerschel-HIFI. Astronomy and Astrophysics, 2013, 558, A58.	5.1	57
110	AN ORDERED BIPOLAR OUTFLOW FROM A MASSIVE EARLY-STAGE CORE. Astrophysical Journal Letters, 2016, 821, L3.	8.3	57
111	Gas flow and accretion via spiral streamers and circumstellar disks in a young binary protostar. Science, 2019, 366, 90-93.	12.6	57
112	Dust emissivity in the submm/mm. Astronomy and Astrophysics, 2003, 399, L43-L46.	5.1	56
113	Nitrogen hydrides in the cold envelope of IRASÂ16293-2422. Astronomy and Astrophysics, 2010, 521, L52.	5.1	56
114	High CO depletion in southern infrared dark clouds. Monthly Notices of the Royal Astronomical Society, 2012, 423, 2342-2358.	4.4	56
115	Detection of¹⁵NNH⁺in L1544: non-LTE modelling of dyazenilium hyperfine line emission and accurate¹⁴N/¹⁵N values. Astronomy and Astrophysics, 2013, 555, A109.	5.1	56
116	Benchmarking spin-state chemistry in starless core models. Astronomy and Astrophysics, 2015, 578, A55.	5.1	55
117	Enhanced [CII] emission in azâ€‰=â€‰4.76 submillimetre galaxy. Astronomy and Astrophysics, 2011, 530, L8.	5.1	55
118	Seeds of Life in Space (SOLIS). Astronomy and Astrophysics, 2017, 605, A57.	5.1	54
119	Water in star-forming regions withHerschel(WISH). Astronomy and Astrophysics, 2013, 554, A83.	5.1	53
120	Deuteration and evolution in the massive star formation process. Astronomy and Astrophysics, 2015, 575, A87.	5.1	53
121	Grain Surface Chemistry: Modified Models. Astrophysical Journal, 1998, 502, 652-660.	4.5	53
122	Detection of H 2 D + : Measuring the Midplane Degree of Ionization in the Disks of DM Tauri and TW Hydrae. Astrophysical Journal, 2004, 607, L51-L54.	4.5	52
123	Chemistry and radiative transfer of water in cold, dense clouds. Monthly Notices of the Royal Astronomical Society, 2014, 440, 2616-2624.	4.4	52
124	Penetration of Cosmic Rays into Dense Molecular Clouds: Role of Diffuse Envelopes^{âˆ—}. Astrophysical Journal, 2018, 855, 23.	4.5	52
125	Magnetic field in a young circumbinary disk. Astronomy and Astrophysics, 2018, 616, A56.	5.1	52
126	Comparative study of complex N- and O-bearing molecules in hot molecular cores. Astronomy and Astrophysics, 2007, 470, 639-652.	5.1	50

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127	INTERSTELLAR DETECTION OF c-C ₃ D ₂. Astrophysical Journal Letters, 2013, 769, L19.	8.3	50
128	HD depletion in starless cores. Astronomy and Astrophysics, 2013, 554, A92.	5.1	50
129	Water in star-forming regions withHerschel(WISH). Astronomy and Astrophysics, 2014, 572, A21.	5.1	50
130	Chemistry in a gravitationally unstable protoplanetary disc. Monthly Notices of the Royal Astronomical Society, 2011, 417, 2950-2961.	4.4	49
131	Simulated observations of young gravitationally unstable protoplanetary discs. Monthly Notices of the Royal Astronomical Society, 2013, 433, 2064-2074.	4.4	48
132	A Case of Simultaneous Star and Planet Formation. Astrophysical Journal Letters, 2020, 904, L6.	8.3	48
133	Herschel/HIFI observations of high-JCO lines in the NGC 1333 low-mass star-forming region. Astronomy and Astrophysics, 2010, 521, L40.	5.1	47
134	Investigating the structure and fragmentation of a highly filamentary IRDC. Monthly Notices of the Royal Astronomical Society, 2016, 463, 146-169.	4.4	47
135	Molecular outflow launched beyond the disk edge. Astronomy and Astrophysics, 2017, 603, L3.	5.1	47
136	The structure of molecular clumps around high-mass young stellar objects. Astronomy and Astrophysics, 2002, 389, 603-617.	5.1	47
137	Methanol and Silicon Monoxide Observations toward Bipolar Outflows Associated with Class 0 Objects. Astrophysical Journal, 2002, 567, 980-998.	4.5	47
138	Massive Star Formation. , 2014, , .		47
139	Parameterizing the interstellar dust temperature. Astronomy and Astrophysics, 2017, 604, A58.	5.1	46
140	Effect of grain size on differential desorption of volatile species and on non-ideal MHD diffusivity. Monthly Notices of the Royal Astronomical Society, 2018, 478, 2723-2736.	4.4	46
141	Droplets. I. Pressure-dominated Coherent Structures in L1688 and B18. Astrophysical Journal, 2019, 877, 93.	4.5	46
142	High-sensitivity maps of molecular ions in L1544. Astronomy and Astrophysics, 2019, 629, A15.	5.1	46
143	Water vapor toward starless cores: TheHerschelview. Astronomy and Astrophysics, 2010, 521, L29.	5.1	45
144	REVEALING H₂D⁺DEPLETION AND COMPACT STRUCTURE IN STARLESS AND PROTOSTELLAR CORES WITH ALMA. Astrophysical Journal, 2014, 797, 27.	4.5	45

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145	Spin-state chemistry of deuterated ammonia. Astronomy and Astrophysics, 2015, 581, A122.	5.1	45
146	Propargylimine in the laboratory and in space: millimetre-wave spectroscopy and its first detection in the ISM. Astronomy and Astrophysics, 2020, 640, A98.	5.1	45
147	Efficient Production of S₈ in Interstellar Ices: The Effects of Cosmic-Ray-driven Radiation Chemistry and Nondiffusive Bulk Reactions. Astrophysical Journal, 2020, 888, 52.	4.5	45
148	Line profiles of molecular ions toward the pre-stellar core LDN 1544. Astronomy and Astrophysics, 2005, 439, 195-203.	5.1	45
149	TMCâ€1C: An Accreting Starless Core. Astrophysical Journal, 2007, 671, 1839-1857.	4.5	45
150	Water in massive star-forming regions: HIFI observations of W3ÂIRS5. Astronomy and Astrophysics, 2010, 521, L37.	5.1	44
151	Gas kinematics and excitation in the filamentary IRDC G035.39-00.33. Monthly Notices of the Royal Astronomical Society, 2014, 439, 1996-2013.	4.4	44
152	Gas phase Elemental abundances in Molecular cloudS (GEMS). Astronomy and Astrophysics, 2020, 637, A39.	5.1	44
153	Chemical signatures of shocks in hot cores. Astronomy and Astrophysics, 2001, 370, 1017-1025.	5.1	44
154	Modified rate equations revisited. A corrected treatment for diffusive reactions on grain surfaces. Astronomy and Astrophysics, 2001, 375, 673-679.	5.1	43
155	The Central 1000 au of a Pre-stellar Core Revealed with ALMA. I. 1.3 mm Continuum Observations. Astrophysical Journal, 2019, 874, 89.	4.5	43
156	Chemical differentiation along the CepA-East outflows. Monthly Notices of the Royal Astronomical Society, 2005, 361, 244-258.	4.4	42
157	A HUNT FOR MASSIVE STARLESS CORES. Astrophysical Journal, 2017, 834, 193.	4.5	42
158	Discovery of Deuterated Water in a Young Protoplanetary Disk. Astrophysical Journal, 2005, 631, L81-L84.	4.5	41
159	First detection of ND in the solar-mass protostar IRAS16293-2422. Astronomy and Astrophysics, 2010, 521, L42.	5.1	41
160	ALMA observations of cool dust in a low-metallicity starburst, SBSâ€‰0335âˆ’052. Astronomy and Astrophysics, 2014, 561, A49.	5.1	41
161	Hot Corinos Chemical Diversity: Myth or Reality?. Astrophysical Journal Letters, 2020, 896, L3.	8.3	41
162	Chemical differentiation in regions of high-mass star formation - II. Molecular multiline and dust continuum studies of selected objects. Monthly Notices of the Royal Astronomical Society, 2009, 395, 2234-2247.	4.4	40

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163	Ortho-to-para ratio of interstellar heavy water. Astronomy and Astrophysics, 2010, 521, L31.	5.1	40
164	PHOSPHORUS-BEARING MOLECULES IN MASSIVE DENSE CORES*. Astrophysical Journal Letters, 2016, 822, L30.	8.3	40
165	Unveiling the early-stage anatomy of a protocluster hub with ALMA. Monthly Notices of the Royal Astronomical Society: Letters, 2017, 464, L31-L35.	3.3	40
166	SOLIS IV. Hydrocarbons in the OMC-2 FIR4 Region, a Probe of Energetic Particle Irradiation of the Region^{â^—}. Astrophysical Journal, 2018, 859, 136.	4.5	39
167	Laboratory and radio-astronomical spectroscopy of the hyperfine structure of N2D$mathsf{^+}$. Astronomy and Astrophysics, 2004, 413, 1177-1181.	5.1	38
168	THE HERSCHEL AND IRAM CHESS SPECTRAL SURVEYS OF THE PROTOSTELLAR SHOCK L1157-B1: FOSSIL DEUTERATION. Astrophysical Journal Letters, 2012, 757, L9.	8.3	37
169	FIRST MEASUREMENTS OF ¹⁵ N FRACTIONATION IN N ₂ H ⁺ TOWARD HIGH-MASS STAR-FORMING CORES. Astrophysical Journal Letters, 2015, 808, L46.	8.3	37
170	THE DEUTERIUM FRACTION IN MASSIVE STARLESS CORES AND DYNAMICAL IMPLICATIONS. Astrophysical Journal, 2016, 821, 94.	4.5	37
171	Herschel/HIFI detections of hydrides towards AFGL 2591. Astronomy and Astrophysics, 2010, 521, L44.	5.1	36
172	Deuteration of ammonia in the starless core Ophiuchus/H-MM1. Astronomy and Astrophysics, 2017, 600, A61.	5.1	36
173	Dense Gas Kinematics and a Narrow Filament in the Orion A OMC1 Region Using NH₃. Astrophysical Journal, 2018, 861, 77.	4.5	36
174	Detection of a hot core in the intermediate-mass Class 0 protostar NGC 7129â€“FIRS 2. Astronomy and Astrophysics, 2005, 444, 481-493.	5.1	36
175	Resolved [CII]Âemission in a lensed quasar atz= 4.4. Astronomy and Astrophysics, 2012, 543, A114.	5.1	35
176	Nitrogen and hydrogen fractionation in high-mass star-forming cores from observations of HCN and HNC. Astronomy and Astrophysics, 2018, 609, A129.	5.1	35
177	Carbon isotopic fractionation in molecular clouds. Astronomy and Astrophysics, 2020, 640, A51.	5.1	35
178	Laboratory and space spectroscopy of DCO+. Astronomy and Astrophysics, 2005, 433, 1145-1152.	5.1	35
179	Widespread Molecular Outflows in the Infrared Dark Cloud G28.37+0.07: Indications of Orthogonal Outflow-filament Alignment. Astrophysical Journal, 2019, 874, 104.	4.5	34
180	The Central 1000 au of a Prestellar Core Revealed with ALMA. II. Almost Complete Freeze-out. Astrophysical Journal, 2022, 929, 13.	4.5	34

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181	HERSCHELHIFI OBSERVATIONS OF O₂TOWARD ORION: SPECIAL CONDITIONS FOR SHOCK ENHANCED EMISSION. Astrophysical Journal, 2014, 793, 111.	4.5	33
182	Nitrogen fractionation in high-mass star-forming cores across the Galaxy. Monthly Notices of the Royal Astronomical Society, 2018, 478, 3693-3720.	4.4	33
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