

Jose Cernicharo

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4080017/publications.pdf>

Version: 2024-02-01

498
papers

22,357
citations

8181

76
h-index

20961

115
g-index

499
all docs

499
docs citations

499
times ranked

7399
citing authors

#	ARTICLE	IF	CITATIONS
1	Clouds, filaments, and protostars: The <i>Herschel</i> Hi-GAL Milky Way. <i>Astronomy and Astrophysics</i> , 2010, 518, L100.	5.1	573
2	[ITAL]Infrared Space Observatory's [ITAL] Discovery of C ₄ H ₂ , C ₆ H ₂ , and Benzene in CRL 618. <i>Astrophysical Journal</i> , 2001, 546, L123-L126.	4.5	491
3	Hi-GAL: The <i>Herschel</i> Infrared Galactic Plane Survey. <i>Publications of the Astronomical Society of the Pacific</i> , 2010, 122, 314-325.	3.1	440
4	Atmospheric transmission at microwaves (ATM): an improved model for millimeter/submillimeter applications. <i>IEEE Transactions on Antennas and Propagation</i> , 2001, 49, 1683-1694.	5.1	334
5	A λ 2 mm molecular line survey of the C-star envelope IRC+10216. <i>Astronomy and Astrophysics</i> , 2000, 142, 181-215.	2.1	259
6	DISCOVERY OF THE METHOXY RADICAL, CH ₃ O, TOWARD B1: DUST GRAIN AND GAS-PHASE CHEMISTRY IN COLD DARK CLOUDS. <i>Astrophysical Journal Letters</i> , 2012, 759, L43.	8.3	243
7	Astronomical and laboratory detection of the SiC radical. <i>Astrophysical Journal</i> , 1989, 341, L25.	4.5	232
8	Astronomical detection of C ₄ H ⁻ , the second interstellar anion. <i>Astronomy and Astrophysics</i> , 2007, 467, L37-L40.	5.1	231
9	Laboratory and Astronomical Detection of the Negative Molecular Ion C ₃ N ⁻ . <i>Astrophysical Journal</i> , 2008, 677, 1132-1139.	4.5	216
10	Detection of C ₅ N ⁻ and Vibrationally Excited C ₆ H in IRC +10216. <i>Astrophysical Journal</i> , 2008, 688, L83-L86.	4.5	214
11	Astronomical identification of CN ⁻ , the smallest observed molecular anion. <i>Astronomy and Astrophysics</i> , 2010, 517, L2.	5.1	207
12	Water in Star-forming Regions with the <i>Herschel</i> Space Observatory (WISH). I. Overview of Key Program and First Results. <i>Publications of the Astronomical Society of the Pacific</i> , 2011, 123, 138-170.	3.1	206
13	In-orbit performance of <i>Herschel</i> -HIFI. <i>Astronomy and Astrophysics</i> , 2012, 537, A17.	5.1	205
14	Detection of MgCn in IRC + 10216: A new metal-bearing free radical. <i>Astrophysical Journal</i> , 1995, 445, L47.	4.5	197
15	Astronomical detection of H ₂ CCC. <i>Astrophysical Journal</i> , 1991, 368, L39.	4.5	194
16	BASECOL2012: A collisional database repository and web service within the Virtual Atomic and Molecular Data Centre (VAMDC). <i>Astronomy and Astrophysics</i> , 2013, 553, A50.	5.1	193
17	Are PAHs precursors of small hydrocarbons in photo-dissociation regions? The Horsehead case. <i>Astronomy and Astrophysics</i> , 2005, 435, 885-899.	5.1	183
18	Detection of a Noble Gas Molecular Ion, ³⁶ ArH ⁺ , in the Crab Nebula. <i>Science</i> , 2013, 342, 1343-1345.	12.6	164

#	ARTICLE	IF	CITATIONS
19	Interstellar OH ⁺ , H ₂ O ⁺ and H ₃ O ⁺ along the sight-line to G10.6+0.4. <i>Astronomy and Astrophysics</i> , 2010, 518, L110.	5.1	155
20	Pure hydrocarbon cycles in TMC-1: Discovery of ethynyl cyclopropenylidene, cyclopentadiene, and indene. <i>Astronomy and Astrophysics</i> , 2021, 649, L15.	5.1	151
21	A STUBBORNLY LARGE MASS OF COLD DUST IN THE EJECTA OF SUPERNOVA 1987A. <i>Astrophysical Journal</i> , 2015, 800, 50.	4.5	148
22	Discovery of Interstellar Propylene (CH ₂ CHCH ₃): Missing Links in Interstellar Gas-Phase Chemistry. <i>Astrophysical Journal</i> , 2007, 665, L127-L130.	4.5	146
23	<i>Herschel</i> /HIFI observations of interstellar OH ⁺ and H ₂ O ⁺ towards W49N: a probe of diffuse clouds with a small molecular fraction. <i>Astronomy and Astrophysics</i> , 2010, 521, L10.	5.1	143
24	A line confusion limited millimeter survey of Orion-KL I. Sulfur carbon chains. <i>Astronomy and Astrophysics</i> , 2010, 517, A96.	5.1	142
25	More Metal Cyanide Species: Detection of [C ₂ N] ([X]) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 502 Td ([TSU	4.5	131
26	Far-infrared Detection of C ₃ [TINF] in Sagittarius B2 and IRC +10216. <i>Astrophysical Journal</i> , 2000, 534, L199-L202.	4.5	124
27	Methylpolyynes and Small Hydrocarbons in CRL 618. <i>Astrophysical Journal</i> , 2001, 546, L127-L130.	4.5	122
28	Shedding light on the formation of the pre-biotic molecule formamide with ASAI. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 449, 2438-2458.	4.4	122
29	Discovery of Phosphaethyne (HCP) in Space: Phosphorus Chemistry in Circumstellar Envelopes. <i>Astrophysical Journal</i> , 2007, 662, L91-L94.	4.5	119
30	THE CHEMISTRY OF VIBRATIONALLY EXCITED H ₂ IN THE INTERSTELLAR MEDIUM. <i>Astrophysical Journal</i> , 2010, 713, 662-670.	4.5	119
31	Molecular Carbon Chains and Rings in TMC-1. <i>Astrophysical Journal</i> , 2001, 552, 168-174.	4.5	115
32	Oxygen Chemistry in the Circumstellar Envelope of the Carbon-Rich Star IRC +10216. <i>Astrophysical Journal</i> , 2006, 650, 374-393.	4.5	114
33	Detection of circumstellar CH ₂ CHCN, CH ₂ CN, CH ₃ CCH, and H ₂ CS. <i>Astronomy and Astrophysics</i> , 2008, 479, 493-501.	5.1	114
34	DISCOVERY OF FULMINIC ACID, HCNO, IN DARK CLOUDS. <i>Astrophysical Journal</i> , 2009, 690, L27-L30.	4.5	114
35	Comparative study of CH ⁺ and SH ⁺ absorption lines observed towards distant star-forming regions. <i>Astronomy and Astrophysics</i> , 2012, 540, A87.	5.1	112
36	Laboratory astrophysics and astrochemistry in the <i>Herschel</i> /ALMA era. <i>EAS Publications Series</i> , 2012, 58, 251-261.	0.3	111

#	ARTICLE	IF	CITATIONS
37	<i>Herschel</i> observations of EXtra-Ordinary Sources (HEXOS): The present and future of spectral surveys with <i>Herschel</i> /HIFI. <i>Astronomy and Astrophysics</i> , 2010, 521, L20.	5.1	110
38	Molecular abundances in the inner layers of IRC+10216. <i>Astronomy and Astrophysics</i> , 2012, 543, A48.	5.1	107
39	<i>HERSCHEL</i> OBSERVATIONS OF EXTRAORDINARY SOURCES: ANALYSIS OF THE HIFI 1.2 THz WIDE SPECTRAL SURVEY TOWARD ORION KL. I. METHODS. <i>Astrophysical Journal</i> , 2014, 787, 112.	4.5	106
40	New molecules in IRC +10216: confirmation of C ₅ S and tentative identification of MgCCH, NCCP, and SiH ₃ CN. <i>Astronomy and Astrophysics</i> , 2014, 570, A45.	5.1	105
41	Discovery of Far-Infrared Pure Rotational Transitions of CH[TSUP]+[TSUP] in NGC 7027. <i>Astrophysical Journal</i> , 1997, 483, L65-L68.	4.5	105
42	Search for anions in molecular sources: C ₄ H ⁻ detection in L1527. <i>Astronomy and Astrophysics</i> , 2008, 478, L19-L22.	5.1	103
43	The space infrared telescope for cosmology and astrophysics: SPICA A joint mission between JAXA and ESA. <i>Experimental Astronomy</i> , 2009, 23, 193-219.	3.7	100
44	<i>Herschel</i> spectral surveys of star-forming regions. <i>Astronomy and Astrophysics</i> , 2010, 521, L22.	5.1	99
45	The Far-Infrared Spectrum of the Sagittarius B2 Region: Extended Molecular Absorption, Photodissociation, and Photoionization. <i>Astrophysical Journal</i> , 2004, 600, 214-233.	4.5	97
46	The CHESS spectral survey of star forming regions: Peering into the protostellar shock L1157-B1. <i>Astronomy and Astrophysics</i> , 2010, 518, L112.	5.1	97
47	The chemistry and spatial distribution of small hydrocarbons in UV-irradiated molecular clouds: the Orion Bar PDR. <i>Astronomy and Astrophysics</i> , 2015, 575, A82.	5.1	95
48	Compression and ablation of the photo-irradiated molecular cloud the Orion Bar. <i>Nature</i> , 2016, 537, 207-209.	27.8	94
49	The Far-Infrared Spectrum of Arp 220. <i>Astrophysical Journal</i> , 2004, 613, 247-261.	4.5	93
50	MESS (Mass-loss of Evolved StarS), a <i>Herschel</i> key program. <i>Astronomy and Astrophysics</i> , 2011, 526, A162.	5.1	93
51	The Polymerization of Acetylene, Hydrogen Cyanide, and Carbon Chains in the Neutral Layers of Carbon-rich Proto-planetary Nebulae. <i>Astrophysical Journal</i> , 2004, 608, L41-L44.	4.5	92
52	Detection of hydrogen fluoride absorption in diffuse molecular clouds with <i>Herschel</i> /HIFI: an ubiquitous tracer of molecular gas. <i>Astronomy and Astrophysics</i> , 2010, 521, L12.	5.1	92
53	DISCOVERY OF METHYL ACETATE AND GAUCHE ETHYL FORMATE IN ORION. <i>Astrophysical Journal Letters</i> , 2013, 770, L13.	8.3	92
54	CONFIRMATION OF CIRCUMSTELLAR PHOSPHINE. <i>Astrophysical Journal Letters</i> , 2014, 790, L27.	8.3	92

#	ARTICLE	IF	CITATIONS
55	SPECTROSCOPIC CHARACTERIZATION AND DETECTION OF ETHYL MERCAPTAN IN ORION. <i>Astrophysical Journal Letters</i> , 2014, 784, L7.	8.3	91
56	Detection of the SiNC radical in IRC+10216. <i>Astronomy and Astrophysics</i> , 2004, 426, L49-L52.	5.1	90
57	Strong absorption by interstellar hydrogen fluoride: <i>Herschel</i> /HIFI observations of the sight-line to G10.6 \hat{e} 0.4 (W31C). <i>Astronomy and Astrophysics</i> , 2010, 518, L108.	5.1	90
58	Nitrogen isotopic ratios in Barnard 1: a consistent study of the N ₂ H ⁺ , NH ₃ , CN, HCN, and HNC isotopologues. <i>Astronomy and Astrophysics</i> , 2013, 560, A3.	5.1	90
59	Origin of the hot gas in low-mass protostars. <i>Astronomy and Astrophysics</i> , 2010, 518, L121.	5.1	89
60	Astronomical detection of H ₂ CCCC. <i>Astrophysical Journal</i> , 1991, 368, L43.	4.5	89
61	VELOCITY-RESOLVED [C ii] EMISSION AND [C ii]/FIR MAPPING ALONG ORION WITH <i>HERSCHEL</i> . <i>Astrophysical Journal</i> , 2015, 812, 75.	4.5	88
62	Warm water vapour in the sooty outflow from a luminous carbon star. <i>Nature</i> , 2010, 467, 64-67.	27.8	87
63	A rigorous detection of interstellar CH ₃ NCO: An important missing species in astrochemical networks. <i>Astronomy and Astrophysics</i> , 2016, 587, L4.	5.1	87
64	A Detailed Analysis of the Dust Formation Zone of IRC +10216 Derived from Mid-Infrared Bands of C ₂ H ₂ and HCN. <i>Astrophysical Journal</i> , 2008, 673, 445-469.	4.5	86
65	Submillimeter atmospheric transmission measurements on Mauna Kea during extremely dry El Niño conditions: implications for broadband opacity contributions. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2001, 68, 419-433.	2.3	85
66	Astrochemical evolution along star formation: overview of the IRAM Large Program ASAI. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 477, 4792-4809.	4.4	85
67	Phosphorus in the dense interstellar medium. <i>Astrophysical Journal</i> , 1990, 365, 569.	4.5	84
68	<i>Herschel</i> /HIFI discovery of interstellar chloronium (H ₂ Cl ⁺). <i>Astronomy and Astrophysics</i> , 2010, 521, L9.	5.1	83
69	Probing highly obscured, self-absorbed galaxy nuclei with vibrationally excited HCN. <i>Astronomy and Astrophysics</i> , 2015, 584, A42.	5.1	83
70	Hydrides in young stellar objects: Radiation tracers in a protostar-disk-outflow system. <i>Astronomy and Astrophysics</i> , 2010, 521, L35.	5.1	80
71	Water cooling of shocks in protostellar outflows. <i>Astronomy and Astrophysics</i> , 2010, 518, L120.	5.1	79
72	Probing non-polar interstellar molecules through their protonated form: Detection of protonated cyanogen (NCCNH ⁺). <i>Astronomy and Astrophysics</i> , 2015, 579, L10.	5.1	79

#	ARTICLE	IF	CITATIONS
73	Discovery of Interstellar Heavy Water. <i>Astrophysical Journal</i> , 2007, 659, L137-L140.	4.5	78
74	Detection of interstellar oxidaniumyl: Abundant H_2O^+ towards the star-forming regions DR21, Sgr B2, and NGC6334. <i>Astronomy and Astrophysics</i> , 2010, 518, L111.	5.1	78
75	Interstellar CH absorption in the diffuse interstellar medium along the sight-lines to G10.6+0.4 (W31C), W49N, and W51. <i>Astronomy and Astrophysics</i> , 2010, 521, L16.	5.1	77
76	Sensitive limits on the abundance of cold water vapor in the T Tauri protoplanetary disk. <i>Astronomy and Astrophysics</i> , 2010, 521, L33.	5.1	76
77	Formation of simple organic molecules in inner T Tauri disks. <i>Astronomy and Astrophysics</i> , 2008, 483, 831-837.	5.1	76
78	Collisional excitation rate coefficients of N_2H^+ by He. <i>Monthly Notices of the Royal Astronomical Society</i> , 2005, 363, 1083-1091.	4.4	75
79	Rotational excitation of carbon monosulfide by collisions with helium. <i>Astronomy and Astrophysics</i> , 2006, 451, 1125-1132.	5.1	75
80	A line-confusion limited millimeter survey of Orion KL. <i>Astronomy and Astrophysics</i> , 2011, 528, A26.	5.1	75
81	DISCOVERY OF SiCSi IN IRC+10216: A MISSING LINK BETWEEN GAS AND DUST CARRIERS OF Si-C BONDS. <i>Astrophysical Journal Letters</i> , 2015, 806, L3.	8.3	75
82	Yebes 40 m radio telescope and the broad band Nanocosmos receivers at 7 mm and 3 mm for line surveys. <i>Astronomy and Astrophysics</i> , 2021, 645, A37.	5.1	75
83	The Excitation of N_2H^+ in Interstellar Molecular Clouds. I. Models. <i>Astrophysical Journal</i> , 2006, 648, 461-471.	4.5	74
84	Discovery of interstellar ketenyl (HCCO), a surprisingly abundant radical. <i>Astronomy and Astrophysics</i> , 2015, 577, L5.	5.1	74
85	The ISO/SWS Spectrum of IRC +10216: The Vibrational Bands of C_2H_2 and HCN. <i>Astrophysical Journal</i> , 1999, 526, L41-L44.	4.5	73
86	Water in low-mass star-forming regions with <i>Herschel</i> . <i>Astronomy and Astrophysics</i> , 2010, 521, L30.	5.1	72
87	A sensitive N_2H^+ 3 mm line survey of L483. <i>Astronomy and Astrophysics</i> , 2019, 625, A147.	5.1	72
88	Widespread water vapor emission in Orion. <i>Astrophysical Journal</i> , 1994, 432, L59.	4.5	72
89	Deuterated Thioformaldehyde in the Barnard 1 Cloud. <i>Astrophysical Journal</i> , 2005, 620, 308-320.	4.5	69
90	LABORATORY AND ASTRONOMICAL DISCOVERY OF HYDROMAGNESIUM ISOCYANIDE. <i>Astrophysical Journal</i> , 2013, 775, 133.	4.5	69

#	ARTICLE	IF	CITATIONS
91	The hot core towards the intermediate-mass protostar NGC 7129 FIRS 2. <i>Astronomy and Astrophysics</i> , 2014, 568, A65.	5.1	69
92	A high-resolution line survey of IRC+10216 with <i>Herschel</i> /HIFI. <i>Astronomy and Astrophysics</i> , 2010, 521, L8.	5.1	68
93	Nitrogen hydrides in interstellar gas. <i>Astronomy and Astrophysics</i> , 2010, 521, L45.	5.1	68
94	$H_{2}(v=0,1) + C^{+}(^{2}P)$ H+CH ⁺ STATE-TO-STATE RATE CONSTANTS FOR CHEMICAL PUMPING MODELS IN ASTROPHYSICAL MEDIA. <i>Astrophysical Journal</i> , 2013, 766, 80.	4.5	67
95	The complete far-infrared and submillimeter spectrum of the Class 0 protostar Serpens SMM1 obtained with <i>Herschel</i> . <i>Astronomy and Astrophysics</i> , 2012, 548, A77.	5.1	66
96	Molecular shells in IRC+10216: tracing the mass loss history. <i>Astronomy and Astrophysics</i> , 2015, 575, A91.	5.1	65
97	Herbig-Haro Jets, CO Flows, and CO Bullets: The Case of HH 111. <i>Astrophysical Journal</i> , 1996, 460, .	4.5	64
98	The [ITAL]ISO[/ITAL]â€“SWS 2.4â€“45.2 Micron Spectrum toward Orion IR[CLC]c[/CLC]2. <i>Astrophysical Journal</i> , 1998, 502, L173-L176.	4.5	63
99	The interstellar chemistry of H ₂ C ₃ O isomers. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 456, 4101-4110.	4.4	63
100	Widespread S[CLC]i[/CLC]O Emission in NGC 1333. <i>Astrophysical Journal</i> , 1998, 504, L109-L112.	4.5	63
101	PHOTOCHEMISTRY IN THE INNER LAYERS OF CLUMPY CIRCUMSTELLAR ENVELOPES: FORMATION OF WATER IN C-RICH OBJECTS AND OF C-BEARING MOLECULES IN O-RICH OBJECTS. <i>Astrophysical Journal Letters</i> , 2010, 724, L133-L136.	8.3	62
102	THE CHESS SURVEY OF THE L1157-B1 SHOCK REGION: CO SPECTRAL SIGNATURES OF JET-DRIVEN BOW SHOCKS. <i>Astrophysical Journal Letters</i> , 2012, 757, L25.	8.3	62
103	<i>Herschel</i> /HIFI observations of O-rich AGB stars: molecular inventory. <i>Astronomy and Astrophysics</i> , 2012, 537, A144.	5.1	62
104	The CHESS spectral survey of star forming regions: Peering into the protostellar shock L1157-B1. <i>Astronomy and Astrophysics</i> , 2010, 518, L113.	5.1	61
105	IDENTIFICATION OF KCN IN IRC+10216: EVIDENCE FOR SELECTIVE CYANIDE CHEMISTRY. <i>Astrophysical Journal Letters</i> , 2010, 725, L181-L185.	8.3	61
106	First results of <i>Herschel</i> -PACS observations of Neptune. <i>Astronomy and Astrophysics</i> , 2010, 518, L152.	5.1	60
107	UNVEILING THE DUST NUCLEATION ZONE OF IRC+10216 WITH ALMA. <i>Astrophysical Journal Letters</i> , 2013, 778, L25.	8.3	60
108	Laboratory characterization and astrophysical detection of vibrationally excited states of vinyl cyanide in Orion-KL. <i>Astronomy and Astrophysics</i> , 2014, 572, A44.	5.1	60

#	ARTICLE	IF	CITATIONS
109	Growth of carbon chains in IRC+10216 mapped with ALMA. <i>Astronomy and Astrophysics</i> , 2017, 601, A4.	5.1	60
110	The puzzling behavior of HNCO isomers in molecular clouds. <i>Astronomy and Astrophysics</i> , 2010, 516, A105.	5.1	59
111	On the physical structure of IRC+10216. <i>Astronomy and Astrophysics</i> , 2012, 539, A108.	5.1	59
112	Graphene etching on SiC grains as a path to interstellar polycyclic aromatic hydrocarbons formation. <i>Nature Communications</i> , 2014, 5, 3054.	12.8	59
113	The Thermal Profile and Water Abundance in the Venus Mesosphere from H ₂ O and HDO Millimeter Observations. <i>Icarus</i> , 1995, 117, 162-172.	2.5	58
114	An ISO Long Wavelength Spectrometer detection of CH in NGC 7027 and an HeH + upper limit. <i>Monthly Notices of the Royal Astronomical Society</i> , 1997, 290, L71-L75.	4.4	58
115	Water in Space: The Water World of ISO. <i>Space Science Reviews</i> , 2005, 119, 29-69.	8.1	58
116	Millimetron—a large Russian-European submillimeter space observatory. <i>Experimental Astronomy</i> , 2009, 23, 221-244.	3.7	58
117	Water and related chemistry in the solar system. A guaranteed time key programme for Herschel. <i>Planetary and Space Science</i> , 2009, 57, 1596-1606.	1.7	58
118	AN INTERFEROMETRIC SPECTRAL-LINE SURVEY OF IRC+10216 IN THE 345 GHz BAND. <i>Astrophysical Journal, Supplement Series</i> , 2011, 193, 17.	7.7	58
119	New observations and models of circumstellar CO line emission of AGB stars in the <i>Herschel</i> SUCCESS programme. <i>Astronomy and Astrophysics</i> , 2015, 581, A60.	5.1	58
120	The interstellar chemistry of C ₃ H and C ₃ H ₂ isomers. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 470, 4075-4088.	4.4	58
121	Plateau de bure observations of IRC+10216: high sensitivity maps of SiC ₂ , SiS, and CS. <i>Astrophysics and Space Science</i> , 1995, 224, 293-296.	1.4	57
122	<i>Herschel</i> /HIFI measurements of the ortho/para ratio in water towards Sagittarius B2(M) and W31C. <i>Astronomy and Astrophysics</i> , 2010, 521, L26.	5.1	57
123	<i>Herschel</i> /HIFI observations of Mars: First detection of O ₂ at submillimetre wavelengths and upper limits on HCl and H ₂ O ₂ . <i>Astronomy and Astrophysics</i> , 2010, 521, L49.	5.1	57
124	A line confusion-limited millimeter survey of Orion KL. <i>Astronomy and Astrophysics</i> , 2013, 556, A143.	5.1	57
125	The millimeter IRAM-30m line survey toward IK Tauri. <i>Astronomy and Astrophysics</i> , 2017, 597, A25.	5.1	57
126	G-Band Spectral Synthesis in Solar Magnetic Concentrations. <i>Astrophysical Journal</i> , 2001, 555, 978-989.	4.5	57

#	ARTICLE	IF	CITATIONS
127	Nitrogen hydrides in the cold envelope of IRAS A16293-2422. <i>Astronomy and Astrophysics</i> , 2010, 521, L52.	5.1	56
128	DETECTION OF THE AMMONIUM ION IN SPACE. <i>Astrophysical Journal Letters</i> , 2013, 771, L10.	8.3	56
129	Structure of photodissociation fronts in star-forming regions revealed by <i>Herschel</i> observations of high-J CO emission lines. <i>Astronomy and Astrophysics</i> , 2018, 615, A129.	5.1	56
130	The Water Vapor Abundance in Circumstellar Envelopes. <i>Astrophysical Journal</i> , 1999, 525, 845-862.	4.5	55
131	Rotational spectrum of $^{13}\text{C}_2$ -methyl formate ($\text{HCOO}^{13}\text{CH}_3$) and detection of the ^{13}C -methyl formate in Orion. <i>Astronomy and Astrophysics</i> , 2009, 500, 1109-1118.	5.1	55
132	Chemical equilibrium in AGB atmospheres: successes, failures, and prospects for small molecules, clusters, and condensates. <i>Astronomy and Astrophysics</i> , 2020, 637, A59.	5.1	55
133	OH emission from warm and dense gas in the Orion Bar PDR. <i>Astronomy and Astrophysics</i> , 2011, 530, L16.	5.1	54
134	Searching for trans ethyl methyl ether in Orion KL. <i>Astronomy and Astrophysics</i> , 2015, 582, L1.	5.1	54
135	Discovery of the Ubiquitous Cation NS^+ in Space Confirmed by Laboratory Spectroscopy. <i>Astrophysical Journal Letters</i> , 2018, 853, L22.	8.3	54
136	O-bearing Molecules in Carbon-rich Proto-Planetary Objects. <i>Astrophysical Journal</i> , 2000, 530, L129-L132.	4.5	54
137	A complete model of CH^+ rotational excitation including radiative and chemical pumping processes. <i>Astronomy and Astrophysics</i> , 2013, 550, A8.	5.1	53
138	REACTIVITY OF OH AND CH_3OH BETWEEN 22 AND 64 K: MODELING THE GAS PHASE PRODUCTION OF CH_3O IN BARNARD 1b. <i>Astrophysical Journal</i> , 2016, 823, 25.	4.5	53
139	Interstellar nitrile anions: Detection of C_3N^- and C_5N^- in TMC-1. <i>Astronomy and Astrophysics</i> , 2020, 641, L9.	5.1	53
140	Discovery of HC_4NC in TMC-1: A study of the isomers of HC_3N , HC_5N , and HC_7N . <i>Astronomy and Astrophysics</i> , 2020, 642, L8.	5.1	53
141	Infrared Imaging and Spectroscopy of the Helix with ISOCAM. <i>Astrophysical Journal</i> , 1998, 495, L23-L26.	4.5	52
142	Isotopic ethyl cyanide $^{13}\text{CH}_3\text{CH}_2\text{CN}$, $^{13}\text{CH}_3\text{CH}_2\text{CN}$, and $^{13}\text{CH}_3\text{CH}_2\text{CN}$: laboratory rotational spectrum and detection in Orion. <i>Astronomy and Astrophysics</i> , 2007, 466, 255-259.	5.1	52
143	Discovery of Interstellar Isocyanogen (CNCN): Further Evidence that Dicyanopolynes Are Abundant in Space*. <i>Astrophysical Journal Letters</i> , 2018, 861, L22.	8.3	52
144	The Excitation of SO in Cold Molecular Clouds: TMC-1. <i>Astrophysical Journal</i> , 2006, 653, 1342-1352.	4.5	51

#	ARTICLE	IF	CITATIONS
145	Modelling the sulphur chemistry evolution in Orion KL. <i>Astronomy and Astrophysics</i> , 2014, 567, A95.	5.1	51
146	Ionization fraction and the enhanced sulfur chemistry in Barnard 1. <i>Astronomy and Astrophysics</i> , 2016, 593, A94.	5.1	51
147	Tentative detection of phosphine in IRC +10216. <i>Astronomy and Astrophysics</i> , 2008, 485, L33-L36.	5.1	50
148	LABORATORY CHARACTERIZATION AND ASTROPHYSICAL DETECTION OF VIBRATIONALLY EXCITED STATES OF ETHYL CYANIDE. <i>Astrophysical Journal</i> , 2013, 768, 81.	4.5	50
149	Molecular Line Survey of CRL 618 from 80 to 276 GHz and Complete Model. <i>Astrophysical Journal</i> , 2007, 661, 250-261.	4.5	49
150	CH ⁺ (1 \hat{a} €"0) and ¹³ CH ⁺ (1 \hat{a} €"0) absorption lines in the direction of massive star-forming regions. <i>Astronomy and Astrophysics</i> , 2010, 521, L15.	5.1	49
151	Water content and wind acceleration in the envelope around the oxygen-rich AGB star IK Tauri as seen by <i>Herschel</i> /HIFI. <i>Astronomy and Astrophysics</i> , 2010, 521, L4.	5.1	49
152	<i>Herschel</i> observations of the Sagittarius B2 cores: Hydrides, warm CO, and cold dust. <i>Astronomy and Astrophysics</i> , 2013, 556, A137.	5.1	49
153	Discovery of two new magnesium-bearing species in IRC+10216: MgC ₃ N and MgC ₄ H. <i>Astronomy and Astrophysics</i> , 2019, 630, L2.	5.1	49
154	Discovery of HC ₃ O ⁺ in space: The chemistry of O-bearing species in TMC-1. <i>Astronomy and Astrophysics</i> , 2020, 642, L17.	5.1	49
155	Far-Infrared OH Fluorescent Emission in Sagittarius B2. <i>Astrophysical Journal</i> , 2002, 576, L77-L81.	4.5	49
156	The Excitation of N ₂ H ⁺ in Interstellar Molecular Clouds. II. Observations. <i>Astrophysical Journal</i> , 2007, 667, 980-1001.	4.5	48
157	<i>Herschel</i> observations of EXtra-Ordinary Sources (HEXOS): Detection of hydrogen fluoride in absorption towards Orion A. <i>Astronomy and Astrophysics</i> , 2010, 518, L109.	5.1	48
158	Nascent bipolar outflows associated with the first hydrostatic core candidates Barnard 1b-N and 1b-S. <i>Astronomy and Astrophysics</i> , 2015, 577, L2.	5.1	48
159	Prevalence of non-aromatic carbonaceous molecules in the inner regions of circumstellar envelopes. <i>Nature Astronomy</i> , 2020, 4, 97-105.	10.1	48
160	Detection of HNC and tentative detection of CN at z = 3.9. <i>Astronomy and Astrophysics</i> , 2007, 462, L45-L48.	5.1	48
161	Far-Infrared Detection of H ₃ O ⁺ in Sagittarius B2. <i>Astrophysical Journal</i> , 2001, 554, L213-L216.	4.5	47
162	<i>Herschel</i> /HIFI observations of high-J CO lines in the NGC 1333 low-mass star-forming region. <i>Astronomy and Astrophysics</i> , 2010, 521, L40.	5.1	47

#	ARTICLE	IF	CITATIONS
163	Discovery of the propargyl radical (CH ₂ CCH) in TMC-1: One of the most abundant radicals ever found and a key species for cyclization to benzene in cold dark clouds. <i>Astronomy and Astrophysics</i> , 2021, 647, L10.	5.1	47
164	CO and H ₂ O vibrational emission toward Orion Peak 1 and Peak 2. <i>Astronomy and Astrophysics</i> , 2002, 386, 1074-1102.	5.1	47
165	ROTATIONAL SPECTRUM AND TENTATIVE DETECTION OF DCOOCH ₃ -METHYL FORMATE IN ORION. <i>Astrophysical Journal</i> , 2010, 714, 1120-1132.	4.5	46
166	<i>Trans-cis</i> molecular photoswitching in interstellar space. <i>Astronomy and Astrophysics</i> , 2016, 596, L1.	5.1	46
167	Complex organic molecules in strongly UV-irradiated gas. <i>Astronomy and Astrophysics</i> , 2017, 603, A124.	5.1	46
168	Water vapor toward starless cores: The <i>Herschel</i> view. <i>Astronomy and Astrophysics</i> , 2010, 521, L29.	5.1	45
169	CH ₂ D ⁺ , the Search for the Holy Grail. <i>Journal of Physical Chemistry A</i> , 2013, 117, 9959-9967.	2.5	45
170	Water in massive star-forming regions: HIFI observations of W3 IRS5. <i>Astronomy and Astrophysics</i> , 2010, 521, L37.	5.1	44
171	Waves on the surface of the Orion molecular cloud. <i>Nature</i> , 2010, 466, 947-949.	27.8	44
172	Molecular content of the circumstellar disk in AB Aurigae. <i>Astronomy and Astrophysics</i> , 2010, 524, A19.	5.1	44
173	An independent distance estimate to CW Leonis. <i>Astronomy and Astrophysics</i> , 2012, 543, L8.	5.1	44
174	<i>HERSCHEL</i> * FAR-INFRARED SPECTROSCOPY OF THE GALACTIC CENTER. HOT MOLECULAR GAS: SHOCKS VERSUS RADIATION NEAR Sgr A. <i>Astrophysical Journal Letters</i> , 2013, 769, L13.	8.3	44
175	Antifreeze in the hot core of Orion. <i>Astronomy and Astrophysics</i> , 2015, 576, A129.	5.1	44
176	Silicon-bearing molecules in the shock L1157-B1: first detection of SiS around a Sun-like protostar. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2017, 470, L16-L20.	3.3	44
177	Laboratory microwave spectroscopy of the vibrational satellites for the ν_7 and $2\nu_7$ states of C ₄ H and their astronomical identification. <i>Astrophysical Journal</i> , 1987, 323, L149.	4.5	44
178	Induced Massive Star Formation in the Trifid Nebula?. , 1998, 282, 462-465.		43
179	Microwave and submillimeter spectroscopy and first ISM detection of ¹⁸ O-methyl formate. <i>Astronomy and Astrophysics</i> , 2012, 538, A119.	5.1	43
180	ALMA observations of the young protostellar system Barnard 1b: Signatures of an incipient hot corino in B1b-S. <i>Astronomy and Astrophysics</i> , 2018, 620, A80.	5.1	43

#	ARTICLE	IF	CITATIONS
181	Space and laboratory discovery of HC ₃ S ⁺ . <i>Astronomy and Astrophysics</i> , 2021, 646, L3.	5.1	43
182	<i>Herschel</i> observations of EXtra-Ordinary Sources (HEXOS): Methanol as a probe of physical conditions in Orion ÅKL. <i>Astronomy and Astrophysics</i> , 2011, 527, A95.	5.1	42
183	Rotational spectrum of formamide up to 1 THz and first ISM detection of its $\hat{1}/2$ vibrational state. <i>Astronomy and Astrophysics</i> , 2012, 548, A71.	5.1	42
184	Radiative Transfer Models of Emission and Absorption in the H ₂ O 6 Micron Vibration-Rotation Band toward Orion-BN-KL. <i>Astrophysical Journal</i> , 1998, 502, L169-L172.	4.5	42
185	Cold H ₂ O and CO Ice and Gas toward the Galactic Center. <i>Astrophysical Journal</i> , 2001, 549, L203-L207.	4.5	42
186	First detection of ND in the solar-mass protostar IRAS16293-2422. <i>Astronomy and Astrophysics</i> , 2010, 521, L42.	5.1	41
187	The wind of W ^{Hydrae} as seen by <i>Herschel</i> . <i>Astronomy and Astrophysics</i> , 2014, 561, A5.	5.1	41
188	<i>HERSCHEL</i> FAR-INFRARED SPECTRAL-MAPPING OF ORION BN/KL OUTFLOWS: SPATIAL DISTRIBUTION OF EXCITED CO, H ₂ O, OH, O, AND C ⁺ IN SHOCKED GAS. <i>Astrophysical Journal</i> , 2015, 799, 102.	4.5	41
189	Detection of interstellar HCS and its metastable isomer HSC: new pieces in the puzzle of sulfur chemistry. <i>Astronomy and Astrophysics</i> , 2018, 611, L1.	5.1	41
190	Discovery of CH ₂ CHCCH and detection of HCCN, HC ₄ N, CH ₃ CH ₂ CN, and, tentatively, CH ₃ CH ₂ CCH in TMC-1. <i>Astronomy and Astrophysics</i> , 2021, 647, L2.	5.1	41
191	O-bearing complex organic molecules at the cyanopolyne peak of TMC-1: Detection of C ₂ H ₃ CHO, C ₂ H ₃ OH, HCOOCH ₃ , and CH ₃ OCH ₃ . <i>Astronomy and Astrophysics</i> , 2021, 649, L4.	5.1	41
192	Chemical segregation of complex organic O-bearing species in Orion KL. <i>Astronomy and Astrophysics</i> , 2018, 620, L6.	5.1	41
193	Detection of the Linear Radical HC ₄ N in IRC +10216. <i>Astrophysical Journal</i> , 2004, 615, L145-L148.	4.5	40
194	Warm Water Vapor around Sagittarius B2. <i>Astrophysical Journal</i> , 2006, 642, 940-953.	4.5	40
195	Ortho-to-para ratio of interstellar heavy water. <i>Astronomy and Astrophysics</i> , 2010, 521, L31.	5.1	40
196	Detection of OH ⁺ and H ₂ O ⁺ towards Orion ÅKL. <i>Astronomy and Astrophysics</i> , 2010, 521, L47.	5.1	40
197	The CHESS survey of the L1157-B1 shock: the dissociative jet shock as revealed by <i>Herschel</i> "PACS". <i>Astronomy and Astrophysics</i> , 2012, 539, L3.	5.1	40
198	DISCOVERY OF TIME VARIATION OF THE INTENSITY OF MOLECULAR LINES IN IRC+10216 IN THE SUBMILLIMETER AND FAR-INFRARED DOMAINS. <i>Astrophysical Journal Letters</i> , 2014, 796, L21.	8.3	40

#	ARTICLE	IF	CITATIONS
199	Si-BEARING MOLECULES TOWARD IRC+10216: ALMA UNVEILS THE MOLECULAR ENVELOPE OF CWLeo. <i>Astrophysical Journal Letters</i> , 2015, 805, L13.	8.3	40
200	Collisional excitation of sulfur dioxide in cold molecular clouds. <i>Astronomy and Astrophysics</i> , 2011, 531, A103.	5.1	40
201	Tentative detection of HC ₅ NH ⁺ in TMC-1. <i>Astronomy and Astrophysics</i> , 2020, 643, L6.	5.1	40
202	The Photoionization of a Star-forming Core in the Trifid Nebula. <i>Astrophysical Journal</i> , 2002, 581, 335-356.	4.5	40
203	Chemical Evolution of the Circumstellar Envelopes of Carbon-rich Post-Asymptotic Giant Branch Objects. <i>Astrophysical Journal</i> , 2002, 577, 961-973.	4.5	39
204	A far-infrared molecular and atomic line survey of the Orion KL region. <i>Monthly Notices of the Royal Astronomical Society</i> , 2006, 370, 597-628.	4.4	39
205	Molecular Abundances in CRL 618. <i>Astrophysical Journal</i> , 2007, 654, 978-987.	4.5	39
206	Detection of anhydrous hydrochloric acid, HCl, in IRC+10216 with the <i>Herschel</i> SPIRE and PACS spectrometers. <i>Astronomy and Astrophysics</i> , 2010, 518, L136.	5.1	39
207	Far-infrared molecular lines from low- to high-mass star forming regions observed with <i>Herschel</i> . <i>Astronomy and Astrophysics</i> , 2014, 562, A45.	5.1	39
208	Discovery of the elusive radical NCO and confirmation of H ₂ NCO ⁺ in space. <i>Astronomy and Astrophysics</i> , 2018, 612, L10.	5.1	39
209	Deuterium Enhancement in Water toward Orion IRC2 Deduced from HDO Lines above 800 GHz. <i>Astrophysical Journal</i> , 2001, 562, 799-803.	4.5	38
210	A New Infrared Band in Interstellar and Circumstellar Clouds: C ₄ or C ₄ H?. <i>Astrophysical Journal</i> , 2002, 580, L157-L160.	4.5	38
211	Probing the dust formation region in IRC +10216 with the high vibrational states of hydrogen cyanide. <i>Astronomy and Astrophysics</i> , 2011, 529, L3.	5.1	37
212	Physical Conditions in Shocked Regions of Orion from Ground-based Observations of H ₂ O. <i>Astrophysical Journal</i> , 1999, 520, L131-L134.	4.5	37
213	A New Water Vapor Megamaser. <i>Astrophysical Journal</i> , 2006, 646, L49-L52.	4.5	36
214	High-J [FORMULA] _v [/FORMULA] SiS Maser Emission in IRC +10216: A New Case of Infrared Overlaps. <i>Astrophysical Journal</i> , 2006, 646, L127-L130.	4.5	36
215	<i>Herschel</i> /HIFI detections of hydrides towards AFGL 2591. <i>Astronomy and Astrophysics</i> , 2010, 521, L44.	5.1	36
216	HIFI detection of hydrogen fluoride in the carbon star envelope IRC +10216. <i>Astronomy and Astrophysics</i> , 2011, 533, L6.	5.1	36

#	ARTICLE	IF	CITATIONS
217	Spectral line survey of the ultracompact HII region Monoceros R2. <i>Astronomy and Astrophysics</i> , 2012, 543, A27.	5.1	36
218	IRAM 30 m LARGE SCALE SURVEY OF $^{12}\text{CO}(2-1)$ AND $^{13}\text{CO}(2-1)$ EMISSION IN THE ORION MOLECULAR CLOUD. <i>Astrophysical Journal</i> , 2014, 795, 13.	4.5	36
219	IRC +10 216 in 3D: morphology of a TP-AGB star envelope. <i>Astronomy and Astrophysics</i> , 2018, 610, A4.	5.1	36
220	Discovery of the acetyl cation, CH_3CO^+ , in space and in the laboratory. <i>Astronomy and Astrophysics</i> , 2021, 646, L7.	5.1	36
221	Infrared and Millimetric Study of the Young Outflow Cepheus E. <i>Astrophysical Journal</i> , 2001, 555, 146-159.	4.5	36
222	The abundance of C^{36} in IRC+10216 and its production in the Galaxy. <i>Astronomy and Astrophysics</i> , 2004, 426, 219-227.	5.1	35
223	Observational Evidence of the Formation of Cyanopolynes in CRL 618 through the Polymerization of HCN. <i>Astrophysical Journal</i> , 2005, 628, 275-282.	4.5	35
224	<i>Herschel</i> observations of ortho- and para-oxidaniumyl (H_2O^+) in spiral arm clouds toward Sagittarius B2(M). <i>Astronomy and Astrophysics</i> , 2010, 521, L11.	5.1	35
225	A study of the distant activity of comet C/2006 W3 (Christensen) with <i>Herschel</i> and ground-based radio telescopes. <i>Astronomy and Astrophysics</i> , 2010, 518, L149.	5.1	35
226	OH^+ IN ASTROPHYSICAL MEDIA: STATE-TO-STATE FORMATION RATES, EINSTEIN COEFFICIENTS AND INELASTIC COLLISION RATES WITH He. <i>Astrophysical Journal</i> , 2014, 794, 33.	4.5	35
227	<i>Herschel</i> /PACS spectroscopy of trace gases of the stratosphere of Titan. <i>Astronomy and Astrophysics</i> , 2014, 561, A4.	5.1	35
228	Is the Gas-phase $\text{OH}+\text{H}_2\text{CO}$ Reaction a Source of HCO in Interstellar Cold Dark Clouds? A Kinetic, Dynamic, and Modeling Study. <i>Astrophysical Journal</i> , 2017, 850, 28.	4.5	34
229	High-excitation SiO maser emission in VY Canis Majoris - Detection of the $V = 4 J = 5-4$ transition. <i>Astrophysical Journal</i> , 1993, 407, L33.	4.5	34
230	Nonequilibrium CO Chemistry in the Solar Atmosphere. <i>Astrophysical Journal</i> , 2003, 588, L61-L64.	4.5	33
231	Warm Molecular Hydrogen and Ionized Neon in the HH 2 Outflow. <i>Astrophysical Journal</i> , 2003, 590, L41-L44.	4.5	33
232	The ISO LWS high-resolution spectral survey towards Sagittarius B2. <i>Monthly Notices of the Royal Astronomical Society</i> , 2007, 377, 1122-1150.	4.4	33
233	THE WIDESPREAD OCCURRENCE OF WATER VAPOR IN THE CIRCUMSTELLAR ENVELOPES OF CARBON-RICH ASYMPTOTIC GIANT BRANCH STARS: FIRST RESULTS FROM A SURVEY WITH <i>HERSCHEL</i> /HIFI. <i>Astrophysical Journal Letters</i> , 2011, 727, L29.	8.3	33
234	Chemistry of C_3 and carbon chain molecules in DR21(OH). <i>Astronomy and Astrophysics</i> , 2012, 546, A75.	5.1	33

#	ARTICLE	IF	CITATIONS
235	Spatially resolved images of reactive ions in the Orion Bar. <i>Astronomy and Astrophysics</i> , 2017, 601, L9.	5.1	33
236	Water abundance variations around high-mass protostars: HIFI observations of the DR21 region. <i>Astronomy and Astrophysics</i> , 2010, 518, L107.	5.1	32
237	The rotational excitation of HCN and HNC by He: new insights on the HCN/HNC abundance ratio in molecular clouds. <i>Monthly Notices of the Royal Astronomical Society</i> , 2010, , .	4.4	32
238	<i>Herschel</i> observations of the hydroxyl radical (OH) in young stellar objects. <i>Astronomy and Astrophysics</i> , 2010, 521, L36.	5.1	32
239	Detection of C ₃ O in IRC +10216: Oxygen-Carbon Chain Chemistry in the Outer Envelope. <i>Astrophysical Journal</i> , 2006, 649, L17-L20.	4.5	31
240	Variations in H ₂ O ⁺ /H ₂ O ratios toward massive star-forming regions. <i>Astronomy and Astrophysics</i> , 2010, 521, L34.	5.1	31
241	HIFI observations of water in the atmosphere of comet C/2008 Q3 (Garradd). <i>Astronomy and Astrophysics</i> , 2010, 518, L150.	5.1	31
242	Laboratory measurements and astronomical search for cyanomethanimine. <i>Astronomy and Astrophysics</i> , 2018, 609, A121.	5.1	31
243	The sulphur saga in TMC-1: Discovery of HCSCN and HCSCCH. <i>Astronomy and Astrophysics</i> , 2021, 650, L14.	5.1	31
244	Rotational spectrum of deuterated and ^{15}N ethyl cyanides: CH ₃ CHDCN and CH ₂ DCH ₂ CN and of CH ₃ CH ₂ C ^{15}N . <i>Astronomy and Astrophysics</i> , 2009, 493, 565-569.	5.1	31
245	Excitation and abundance of C ₃ in star forming cores. <i>Astronomy and Astrophysics</i> , 2010, 521, L13.	5.1	30
246	The distribution of water in the high-mass star-forming region NGC 6334. <i>Astronomy and Astrophysics</i> , 2010, 521, L28.	5.1	30
247	NEW ACCURATE MEASUREMENT OF ³⁶ ArH ⁺ AND ³⁸ ArH ⁺ RO-VIBRATIONAL TRANSITIONS BY HIGH RESOLUTION IR ABSORPTION SPECTROSCOPY. <i>Astrophysical Journal Letters</i> , 2014, 783, L5.	8.3	30
248	High spatial resolution imaging of SO and H ₂ CO in AB Auriga: The first SO image in a transitional disk. <i>Astronomy and Astrophysics</i> , 2016, 589, A60.	5.1	30
249	The Chemistry of Cosmic Dust Analogs from C, C ₂ , and C ₂ H ₂ in C-rich Circumstellar Envelopes. <i>Astrophysical Journal</i> , 2020, 895, 97.	4.5	30
250	Discovery of allenyl acetylene, H ₂ CCCHCCH, in TMC-1. <i>Astronomy and Astrophysics</i> , 2021, 647, L3.	5.1	30
251	Space and laboratory observation of the deuterated cyanomethyl radical HDCCN. <i>Astronomy and Astrophysics</i> , 2021, 646, L1.	5.1	30
252	The Slowly Expanding Envelope of CRL 618 Probed with HC3N Rotational Ladders. <i>Astrophysical Journal</i> , 2004, 615, 495-505.	4.5	29

#	ARTICLE	IF	CITATIONS
253	The Water Vapor Abundance in Orion KL Outflows. <i>Astrophysical Journal</i> , 2006, 649, L33-L36.	4.5	29
254	<i>Herschel</i> observations of EXtra-Ordinary Sources (HEXOS): Observations of H ₂ O and its isotopologues towards Orion KL. <i>Astronomy and Astrophysics</i> , 2010, 521, L27.	5.1	29
255	<i>Herschel</i> observations of EXtra-Ordinary Sources (HEXOS): The Terahertz spectrum of Orion KL seen at high spectral resolution. <i>Astronomy and Astrophysics</i> , 2010, 521, L21.	5.1	29
256	Silicon in the dust formation zone of IRC+10216. <i>Astronomy and Astrophysics</i> , 2010, 518, L143.	5.1	29
257	Combined IRAM and <i>Herschel</i> /HIFI study of cyano(di)acetylene in Orion KL: tentative detection of DC ₃ N. <i>Astronomy and Astrophysics</i> , 2013, 559, A51.	5.1	29
258	Identification of PAH Isomeric Structure in Cosmic Dust Analogs: The AROMA Setup. <i>Astrophysical Journal</i> , 2017, 843, 34.	4.5	29
259	Spatial distribution of small hydrocarbons in the neighborhood of the ultra compact HII region Monoceros R2. <i>Astronomy and Astrophysics</i> , 2013, 554, A87.	5.1	29
260	Discovery of methyl silane and confirmation of silyl cyanide in IRC+10216. <i>Astronomy and Astrophysics</i> , 2017, 606, L5.	5.1	28
261	Abundance of SiC ₂ in carbon star envelopes. <i>Astronomy and Astrophysics</i> , 2018, 611, A29.	5.1	28
262	A study of C ₄ H ₃ N isomers in TMC-1: Line by line detection of HCCC ₂ CN. <i>Astronomy and Astrophysics</i> , 2021, 646, L9.	5.1	28
263	<i>Herschel</i> observations of EXtra-Ordinary Sources (HEXOS): detecting spiral arm clouds by CH absorption lines. <i>Astronomy and Astrophysics</i> , 2010, 521, L14.	5.1	27
264	<i>Herschel</i> -SPIRE FTS spectroscopy of the carbon-rich objects AFGL2688, AFGL618, and NGC7027. <i>Astronomy and Astrophysics</i> , 2010, 518, L144.	5.1	27
265	Precisely controlled fabrication, manipulation and in-situ analysis of Cu based nanoparticles. <i>Scientific Reports</i> , 2018, 8, 7250.	3.3	27
266	Oxygen fractionation in dense molecular clouds. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 485, 5777-5789.	4.4	27
267	Far-Infrared Excited Hydroxyl Lines from Orion KL Outflows. <i>Astrophysical Journal</i> , 2006, 641, L49-L52.	4.5	26
268	Unveiling the chemistry of hot protostellar cores with ALMA. <i>Astrophysics and Space Science</i> , 2008, 313, 45-51.	1.4	26
269	Solving radiative transfer with line overlaps using Gauss-Seidel algorithms. <i>Astronomy and Astrophysics</i> , 2008, 488, 1237-1247.	5.1	26
270	Deuteration around the ultracompact HII region Monoceros R2. <i>Astronomy and Astrophysics</i> , 2014, 569, A19.	5.1	26

#	ARTICLE	IF	CITATIONS
271	TENTATIVE DETECTION OF THE NITROSYLIUM ION IN SPACE. <i>Astrophysical Journal</i> , 2014, 795, 40.	4.5	26
272	Organic Molecules in Interstellar Space: Latest Advances. <i>Frontiers in Astronomy and Space Sciences</i> , 2022, 9, .	2.8	26
273	PDRs4All: A JWST Early Release Science Program on Radiative Feedback from Massive Stars. <i>Publications of the Astronomical Society of the Pacific</i> , 2022, 134, 054301.	3.1	26
274	Herschel/HIFI deepens the circumstellar NH ₃ enigma. <i>Astronomy and Astrophysics</i> , 2010, 521, L7.	5.1	25
275	PACS and SPIRE spectroscopy of the red supergiant VY CMa. <i>Astronomy and Astrophysics</i> , 2010, 518, L145.	5.1	25
276	Water production in comet 81P/Wild 2 as determined by Herschel/HIFI. <i>Astronomy and Astrophysics</i> , 2010, 521, L50.	5.1	25
277	THE FIRST ASTROPHYSICAL DETECTION, TERAHERTZ SPECTRUM, AND DATABASE FOR THE MONODEUTERATED SPECIES OF METHYL FORMATE HCOOCH ₂ D. <i>Astrophysical Journal</i> , 2013, 779, 119.	4.5	25
278	Molecular ions in the O-rich evolved star OH231.8+4.2: HCO ⁺ , H ¹³ CO ⁺ and first detection of SO ⁺ , N ₂ H ⁺ , and H ₃ O ⁺ . <i>Astronomy and Astrophysics</i> , 2015, 577, A52.	5.1	25
279	Laboratory measurements and astronomical search for the HSO radical. <i>Astronomy and Astrophysics</i> , 2016, 591, A126.	5.1	25
280	The Photodissociation of HCN and HNC: Effects on the HNC/HCN Abundance Ratio in the Interstellar Medium. <i>Astrophysical Journal</i> , 2017, 838, 33.	4.5	25
281	Study of CS, SiO, and SiS abundances in carbon star envelopes: assessing their role as gas-phase precursors of dust. <i>Astronomy and Astrophysics</i> , 2019, 628, A62.	5.1	25
282	Pre-Orion Cores in the Trifid Nebula. <i>Astrophysical Journal</i> , 2000, 545, 340-352.	4.5	25
283	Understanding the chemical complexity in Circumstellar Envelopes of C-Rich AGB stars: the case of IRC +10216. <i>Astrophysics and Space Science</i> , 2008, 313, 229-233.	1.4	24
284	Herschel/HIFI observations of molecular emission in protoplanetary nebulae and young planetary nebulae. <i>Astronomy and Astrophysics</i> , 2012, 537, A8.	5.1	24
285	The millimeter wave tunneling rotational spectrum of phenol. <i>Journal of Molecular Spectroscopy</i> , 2013, 289, 13-20.	1.2	24
286	The complex dust formation zone of the AGB star IRC+10216 probed with CARMA 0.25 arcsec angular resolution molecular observations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 445, 3289-3308.	4.4	24
287	INVESTIGATION OF HNCO ISOMER FORMATION IN ICE MANTLES BY UV AND THERMAL PROCESSING: AN EXPERIMENTAL APPROACH. <i>Astrophysical Journal</i> , 2014, 788, 19.	4.5	24
288	HINTS OF A ROTATING SPIRAL STRUCTURE IN THE INNERMOST REGIONS AROUND IRC +10216. <i>Astrophysical Journal</i> , 2016, 818, 192.	4.5	24

#	ARTICLE	IF	CITATIONS
289	Discovery of the first Ca-bearing molecule in space: CaNC. <i>Astronomy and Astrophysics</i> , 2019, 627, L4.	5.1	24
290	A Tentative Detection of the 183-GHz Water Vapor Line in the Martian Atmosphere: Constraints upon the H ₂ O Abundance and Vertical Distribution. <i>Icarus</i> , 1995, 113, 110-118.	2.5	23
291	Water abundances in high-mass protostellar envelopes: <i>Herschel</i> observations with HIFI. <i>Astronomy and Astrophysics</i> , 2010, 521, L32.	5.1	23
292	<i>Herschel</i> /HIFI observations of CO, H ₂ O and NH ₃ in <i>Monoceros</i> R2. <i>Astronomy and Astrophysics</i> , 2012, 544, A110.	5.1	23
293	<i>Herschel</i> SPIRE and PACS observations of the red supergiant VY CMa: analysis of the molecular line spectra... <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 437, 532-546.	4.4	23
294	Extended warm gas in Orion KL as probed by methyl cyanide. <i>Astronomy and Astrophysics</i> , 2014, 564, A114.	5.1	23
295	THE PECULIAR DISTRIBUTION OF CH ₃ CN IN IRC +10216 SEEN BY ALMA. <i>Astrophysical Journal</i> , 2015, 814, 143.	4.5	23
296	Molecular tracers of radiative feedback in Orion (OMC-1). <i>Astronomy and Astrophysics</i> , 2019, 622, A91.	5.1	23
297	Reversal of infall in SgrB2(M) revealed by <i>Herschel</i> /HIFI observations of HCN lines at THz frequencies. <i>Astronomy and Astrophysics</i> , 2010, 521, L46.	5.1	23
298	New N-bearing species towards OH $\pm 231.8 \pm 4.2$. <i>Astronomy and Astrophysics</i> , 2015, 575, A84.	5.1	23
299	New molecular species at redshift $z = 0.89$. <i>Astronomy and Astrophysics</i> , 2020, 636, L7.	5.1	23
300	Successive ejection events in the L1551 molecular outflow. <i>Astrophysical Journal</i> , 1994, 425, L93.	4.5	23
301	Evidence for disks at an early stage in class 0 protostars?. <i>Astronomy and Astrophysics</i> , 2017, 606, A35.	5.1	22
302	Building blocks of dust: A coordinated laboratory and astronomical study of the archtype AGB carbon star IRC+10216. <i>Journal of Molecular Spectroscopy</i> , 2019, 356, 7-20.	1.2	22
303	Magnesium radicals MgC ₅ N and MgC ₆ H in IRC +10216. <i>Astronomy and Astrophysics</i> , 2021, 652, L13.	5.1	22
304	The ³⁵ Cl/ ³⁷ Cl isotopic ratio in dense molecular clouds: HIFI observations of hydrogen chloride towards W3A. <i>Astronomy and Astrophysics</i> , 2010, 518, L115.	5.1	22
305	Disks around hot stars in the Trifid nebula. <i>Astronomy and Astrophysics</i> , 2001, 368, L13-L16.	5.1	22
306	<i>Herschel</i> -PACS spectroscopy of the intermediate mass protostar NGC 7129 FIRS 2. <i>Astronomy and Astrophysics</i> , 2010, 518, L86.	5.1	21

#	ARTICLE	IF	CITATIONS
307	Probing the Cold Dust Emission in the AB Aur Disk: A Dust Trap in a Decaying Vortex?*. <i>Astrophysical Journal Letters</i> , 2017, 846, L3.	8.3	21
308	IRC +10216 as a spectroscopic laboratory: improved rotational constants for SiC ₂ , its isotopologues, and Si ₂ C. <i>Astronomy and Astrophysics</i> , 2018, 618, A4.	5.1	21
309	Cumulene carbenes in TMC-1: Astronomical discovery of <i>i</i> -H ₂ C ₅ . <i>Astronomy and Astrophysics</i> , 2021, 650, L9.	5.1	21
310	Detection of H/C-17/O plus in Sagittarius B2. <i>Astrophysical Journal</i> , 1982, 263, L89.	4.5	21
311	Discovery of the elusive thioketenylium, HCCS ⁺ , in TMC-1. <i>Astronomy and Astrophysics</i> , 2022, 657, L4.	5.1	21
312	<i>i</i> Herschel/HIFI observations of high- <i>J</i> CO transitions in the protoplanetary nebula CRL 618. <i>Astronomy and Astrophysics</i> , 2010, 521, L3.	5.1	20
313	Detection of circumstellar nitric oxide. <i>Astronomy and Astrophysics</i> , 2013, 560, L2.	5.1	20
314	Full dimensional potential energy surface and low temperature dynamics of the H ₂ CO + OH → HCO + H ₂ O reaction. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 5415-5426.	2.8	20
315	Through the magnifying glass: ALMA acute viewing of the intricate nebular architecture of OH 231.8+4.2. <i>Astronomy and Astrophysics</i> , 2018, 618, A164.	5.1	20
316	A Molecular Counterpart to the HH 102 Flow. <i>Astrophysical Journal</i> , 1999, 520, L111-L114.	4.5	20
317	First results on Martian carbon monoxide from <i>i</i> Herschel/HIFI observations. <i>Astronomy and Astrophysics</i> , 2010, 521, L48.	5.1	19
318	The abundance of C ¹⁸ O and HDO in the envelope and hot core of the intermediate mass protostar NGC 7129 FIRS 2. <i>Astronomy and Astrophysics</i> , 2012, 540, A75.	5.1	19
319	Spectroscopic parameters for silacyclopropynylidene, SiC ₂ , from extensive astronomical observations toward CW Leo (IRC +10216) with the Herschel satellite. <i>Journal of Molecular Spectroscopy</i> , 2012, 271, 50-55.	1.2	19
320	Searches for HCl and HF in comets 103P/Hartley 2 and C/2009 P1 (Garradd) with the <i>i</i> Herschel Space Observatory. <i>Astronomy and Astrophysics</i> , 2014, 562, A5.	5.1	19
321	Laboratory detection of the rotational-tunnelling spectrum of the hydroxymethyl radical, CH ₂ OH. <i>Astronomy and Astrophysics</i> , 2017, 598, A9.	5.1	19
322	<i>i</i> Herschel/HIFI spectroscopy of the intermediate mass protostar NGC 7129 FIRS 2. <i>Astronomy and Astrophysics</i> , 2010, 521, L41.	5.1	18
323	<i>i</i> HERSCHEL/HIFI OBSERVATIONS OF IRC+10216: WATER VAPOR IN THE INNER ENVELOPE OF A CARBON-RICH ASYMPTOTIC GIANT BRANCH STAR. <i>Astrophysical Journal Letters</i> , 2011, 727, L28.	8.3	18
324	Proton transfer chains in cold plasmas of H ₂ with small amounts of N ₂ . The prevalence of NH ₄ ⁺ . <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 1699-1706.	2.8	18

#	ARTICLE	IF	CITATIONS
325	IMPROVED DETERMINATION OF THE 1_{0-0} ROTATIONAL FREQUENCY OF NH_3 D FROM THE HIGH-RESOLUTION SPECTRUM OF THE $\hat{\nu}_2$ INFRARED BAND. <i>Astrophysical Journal Letters</i> , 2013, 771, L11.	8.3	18
326	HIFISTARS <i>Herschel</i> /HIFI observations of VY Canis Majoris. <i>Astronomy and Astrophysics</i> , 2013, 559, A93.	5.1	18
327	THz spectroscopy and first ISM detection of excited torsional states of ^{13}C -methyl formate. <i>Astronomy and Astrophysics</i> , 2014, 568, A58.	5.1	18
328	A COMPLETE SPECTROSCOPIC CHARACTERIZATION OF SO AND ITS ISOTOPOLOGUES UP TO THE TERAHERTZ DOMAIN. <i>Astrophysical Journal</i> , 2015, 799, 115.	4.5	18
329	A 3mm and 1mm line survey toward the yellow hypergiant IRC+10420. <i>Astronomy and Astrophysics</i> , 2016, 592, A51.	5.1	18
330	Discovery of C_5H and detection of C_3H in TMC-1 with the QUIJOTE line survey. <i>Astronomy and Astrophysics</i> , 2022, 657, L16.	5.1	18
331	Measured telluric continuum-like opacity beyond 1THz. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2005, 96, 537-545.	2.3	17
332	THE ABUNDANCES OF POLYACETYLENES TOWARD CRL618. <i>Astrophysical Journal</i> , 2011, 728, 43.	4.5	17
333	Kinematics of the ionized-to-neutral interfaces in Monoceros R2. <i>Astronomy and Astrophysics</i> , 2014, 561, A69.	5.1	17
334	Upper limits to interstellar NH and para- NH_2 abundances. <i>Astronomy and Astrophysics</i> , 2014, 567, A130.	5.1	17
335	Polycyclic aromatic hydrocarbons and molecular hydrogen in oxygen-rich planetary nebulae: the case of NGC 6720. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2015, 456, L89-L93.	3.3	17
336	Subarcsecond imaging of the water emission in Arp 220. <i>Astronomy and Astrophysics</i> , 2017, 602, A42.	5.1	17
337	The Abundance of C_2H_4 in the Circumstellar Envelope of IRC+10216. <i>Astrophysical Journal</i> , 2017, 835, 196.	4.5	17
338	Formation and Destruction of SiS in Space. <i>Astrophysical Journal</i> , 2018, 862, 38.	4.5	17
339	Discovery of HCCCO and C_5O in TMC-1 with the QUIJOTE line survey. <i>Astronomy and Astrophysics</i> , 2021, 656, L21.	5.1	17
340	OH Rotational Lines as a Diagnostic of the Warm Neutral Gas in Galaxies. <i>Astrophysical Journal</i> , 2005, 619, 291-296.	4.5	16
341	The methanol lines and hot core of OMC2-FIR4, an intermediate-mass protostar, with <i>Herschel</i> /HIFI. <i>Astronomy and Astrophysics</i> , 2010, 521, L39.	5.1	16
342	The abundance of $^{28}\text{Si}^{32}\text{S}$, $^{29}\text{Si}^{32}\text{S}$, $^{28}\text{Si}^{34}\text{S}$, and $^{30}\text{Si}^{32}\text{S}$ in the inner layers of the envelope of IRC+10216. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 453, 439-449.	4.4	16

#	ARTICLE	IF	CITATIONS
343	Photodissociation of HCN and HNC isomers in the 7-10 eV energy range. <i>Journal of Chemical Physics</i> , 2016, 144, 144306.	3.0	16
344	Interstellar detection of the simplest aminocarbonyl H ₂ NC: an ignored but abundant molecule. <i>Astronomy and Astrophysics</i> , 2021, 654, A45.	5.1	16
345	<i>Herschel</i> /HIFI observations of red supergiants and yellow hypergiants. <i>Astronomy and Astrophysics</i> , 2012, 545, A99.	5.1	16
346	Extended Far-Infrared CO Emission in the OMC-1 Core of Orion. <i>Astrophysical Journal</i> , 2000, 530, L123-L127.	4.5	15
347	Anatomy of HH 111 from CO Observations: A Shock-driven Molecular Outflow. <i>Astrophysical Journal</i> , 2007, 658, 498-508.	4.5	15
348	Discovery of water vapour in the carbon star V Cygni from observations with <i>Herschel</i> /HIFI. <i>Astronomy and Astrophysics</i> , 2010, 521, L5.	5.1	15
349	Revised spectroscopic parameters of SH ⁺ from ALMA and IRAM 30m observations. <i>Astronomy and Astrophysics</i> , 2014, 569, L5.	5.1	15
350	Constraints on the H ₂ O formation mechanism in the wind of carbon-rich AGB stars. <i>Astronomy and Astrophysics</i> , 2016, 588, A124.	5.1	15
351	Carbon Chemistry in IRC+10216: Infrared Detection of Diacetylene. <i>Astrophysical Journal</i> , 2018, 852, 80.	4.5	15
352	Direct estimation of electron density in the Orion Bar PDR from mm-wave carbon recombination lines. <i>Astronomy and Astrophysics</i> , 2019, 625, L3.	5.1	15
353	Broad-band high-resolution rotational spectroscopy for laboratory astrophysics. <i>Astronomy and Astrophysics</i> , 2019, 626, A34.	5.1	15
354	Side-by-Side Comparison of Fourier Transform Spectroscopy and Water Vapor Radiometry as Tools for the Calibration of Millimeter/Submillimeter Ground-based Observatories. <i>Astrophysical Journal, Supplement Series</i> , 2004, 153, 363-367.	7.7	14
355	Physical parameters for Orion KL from modelling its ISO high-resolution far-IR CO line spectrum. <i>Monthly Notices of the Royal Astronomical Society</i> , 2008, 387, 1660-1668.	4.4	14
356	Star formation in the Trifid Nebula. <i>Astronomy and Astrophysics</i> , 2008, 489, 157-171.	5.1	14
357	<i>Herschel</i> /HIFI observations of spectrally resolved methylidyne signatures toward the high-mass star-forming core NGC 6334. <i>Astronomy and Astrophysics</i> , 2010, 521, L43.	5.1	14
358	<i>Herschel</i> /HIFI observation of highly excited rotational lines of HNC toward IRC +10216. <i>Astronomy and Astrophysics</i> , 2012, 542, A37.	5.1	14
359	LA-MB-FTMW spectroscopy of AlCCH and AgCCH with a discharge source. <i>Journal of Molecular Spectroscopy</i> , 2012, 278, 31-34.	1.2	14
360	<i>Herschel</i> spectral mapping of the Helix nebula (NGC 7293). <i>Astronomy and Astrophysics</i> , 2014, 566, A78.	5.1	14

#	ARTICLE	IF	CITATIONS
361	Chemical composition of the circumstellar disk around AB Aurigae. <i>Astronomy and Astrophysics</i> , 2015, 578, A81.	5.1	14
362	Waveguide CP-FTMW and millimeter wave spectra of s-cis- and s-trans-acrylic acid. <i>Journal of Molecular Spectroscopy</i> , 2015, 316, 84-89.	1.2	14
363	Detecting the building blocks of aromatics. <i>Science</i> , 2018, 359, 156-157.	12.6	14
364	Time-dependent molecular emission in IRC + 10216. <i>Astronomy and Astrophysics</i> , 2018, 615, L4.	5.1	14
365	Detection of the propargyl radical at $\lambda = 3$ mm. <i>Astronomy and Astrophysics</i> , 2022, 657, A96.	5.1	14
366	A new protonated molecule discovered in TMC-1: HCCNCH ⁺ . <i>Astronomy and Astrophysics</i> , 2022, 659, L9.	5.1	14
367	The Kinematics of the HH 399 Jet in the Trifid Nebula. <i>Astronomical Journal</i> , 1999, 118, 2962-2973.	4.7	13
368	Windows Through the Dusty Disks Surrounding the Youngest Low-Mass Protostellar Objects. <i>Science</i> , 2000, 288, 649-652.	12.6	13
369	<i>Herschel</i> observations in the ultracompact HII region Mon R2. <i>Astronomy and Astrophysics</i> , 2010, 521, L23.	5.1	13
370	Spectral Line Surveys of Evolved Stars. <i>Proceedings of the International Astronomical Union</i> , 2011, 7, 237-248.	0.0	13
371	THE CM-, MM-, AND SUB-MM-WAVE SPECTRUM OF ALLYL ISOCYANIDE AND RADIOASTRONOMICAL OBSERVATIONS IN ORION KL AND THE SgrB2 LINE SURVEYS. <i>Astrophysical Journal</i> , 2013, 777, 120.	4.5	13
372	Generation and structural characterization of aluminum cyanoacetylide. <i>Journal of Chemical Physics</i> , 2014, 141, 104305.	3.0	13
373	<i>Herschel</i> /HIFI observations of the circumstellar ammonia lines in IRC+10216. <i>Astronomy and Astrophysics</i> , 2016, 592, A131.	5.1	13
374	The millimeter-wave spectrum of methyl ketene and the astronomical search for it. <i>Astronomy and Astrophysics</i> , 2018, 619, A92.	5.1	13
375	Linear polarization of millimeter-wave emission lines in clouds without large velocity gradients. <i>Astrophysical Journal</i> , 1988, 328, 304.	4.5	13
376	Discovery of a new molecular ion, HC ₇ NH ⁺ , in TMC-1. <i>Astronomy and Astrophysics</i> , 2022, 659, L8.	5.1	13
377	A New Unidentified Far-Infrared Band in NGC 7027. <i>Astrophysical Journal</i> , 2004, 609, 225-230.	4.5	12
378	THE FOGGY DISKS SURROUNDING HERBIG Ae STARS: A THEORETICAL STUDY OF THE H ₂ O LINE SPECTRA. <i>Astrophysical Journal</i> , 2009, 703, L123-L126.	4.5	12

#	ARTICLE	IF	CITATIONS
379	<i>Herschel</i> observations of deuterated water towards Sgr B2(M). <i>Astronomy and Astrophysics</i> , 2010, 521, L38.	5.1	12
380	Influence of collisional rate coefficients on water vapour excitation. <i>Astronomy and Astrophysics</i> , 2012, 547, A81.	5.1	12
381	Non-local radiative transfer in strongly inverted masers. <i>Astronomy and Astrophysics</i> , 2013, 553, A70.	5.1	12
382	The first CO ⁺ image. <i>Astronomy and Astrophysics</i> , 2016, 593, L12.	5.1	12
383	CO Spectral Line Energy Distributions in Galactic Sources: Empirical Interpretation of Extragalactic Observations ⁺ . <i>Astrophysical Journal</i> , 2017, 836, 117.	4.5	12
384	Using radio astronomical receivers for molecular spectroscopic characterization in astrochemical laboratory simulations: A proof of concept. <i>Astronomy and Astrophysics</i> , 2018, 609, A15.	5.1	12
385	Gas-phase kinetics of CH ₃ CHO with OH radicals between 11.7 and 177.5 K. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 20562-20572.	2.8	12
386	Polarisation observations of VY Canis Majoris H ₂ O 5 ₂ -4 ₁ 620.701 GHz maser emission with HIFI. <i>Astronomy and Astrophysics</i> , 2010, 521, L51.	5.1	12
387	Shock-induced PDR in the Herbig-Haro object HH2. <i>Astronomy and Astrophysics</i> , 2005, 433, 217-227.	5.1	12
388	Stability of CH ₃ NCO in Astronomical Ices under Energetic Processing: A Laboratory Study. <i>Astrophysical Journal</i> , 2018, 861, 61.	4.5	11
389	Detection of vibrationally excited HC ₇ N and HC ₉ N in IRC +10216. <i>Astronomy and Astrophysics</i> , 2020, 640, L13.	5.1	11
390	Detection of deuterated methylcyanoacetylene, CH ₂ DC ₃ N, in TMC-1. <i>Astronomy and Astrophysics</i> , 2021, 650, L15.	5.1	11
391	High-excitation (Si-29)O and (Si-30)O maser emission. <i>Astrophysical Journal</i> , 1992, 401, L109.	4.5	11
392	UV Capabilities to Probe the Formation of Planetary Systems: From the ISM to Planets. <i>Astrophysics and Space Science</i> , 2006, 303, 33-52.	1.4	10
393	Far-Infrared Detection of H ₂ D ⁺ toward Sgr B2. <i>Astrophysical Journal</i> , 2007, 657, L21-L24.	4.5	10
394	ESPRIT: a study concept for a far-infrared interferometer in space. , 2008, , .		10
395	Heavy water around the L1448-mm protostar. <i>Astronomy and Astrophysics</i> , 2010, 522, L1.	5.1	10
396	<i>Herschel</i> imaging of the dust in the Helix nebula (NGC 7293). <i>Astronomy and Astrophysics</i> , 2015, 574, A134.	5.1	10

#	ARTICLE	IF	CITATIONS
397	Clues to NaCN formation. <i>Astronomy and Astrophysics</i> , 2017, 607, L5.	5.1	10
398	Comment on "Methanol dimer formation drastically enhances hydrogen abstraction from methanol by OH at low temperature" by W. Siebrand, Z. Smedarchina, E. Martínez-Núñez and A. Fernández-Ramos, <i>Phys. Chem. Chem. Phys.</i> , 2016, 18, 22712. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 8349-8354.	2.8	10
399	High-speed molecular cloudlets around the Galactic center's supermassive black hole. <i>Astronomy and Astrophysics</i> , 2018, 618, A35.	5.1	10
400	The millimeter-wave spectrum and astronomical search of succinonitrile and its vibrational excited states. <i>Astronomy and Astrophysics</i> , 2019, 629, A35.	5.1	10
401	The abundance of S- and Si-bearing molecules in O-rich circumstellar envelopes of AGB stars. <i>Astronomy and Astrophysics</i> , 2020, 641, A57.	5.1	10
402	Silicon and Hydrogen Chemistry under Laboratory Conditions Mimicking the Atmosphere of Evolved Stars. <i>Astrophysical Journal</i> , 2021, 906, 44.	4.5	10
403	Discovery of interstellar 3-cyano propargyl radical, CH ₂ CCCN. <i>Astronomy and Astrophysics</i> , 2021, 654, L9.	5.1	10
404	The Herschel-SPIRE submillimetre spectrum of Mars. <i>Astronomy and Astrophysics</i> , 2010, 518, L151.	5.1	9
405	Shocked water in the Cepheus E protostellar outflow. <i>Astronomy and Astrophysics</i> , 2011, 527, L3.	5.1	9
406	Etching of Graphene in a Hydrogen-rich Atmosphere toward the Formation of Hydrocarbons in Circumstellar Clouds. <i>Journal of Physical Chemistry C</i> , 2014, 118, 26882-26886.	3.1	9
407	Laboratory study of methyl isocyanate ices under astrophysical conditions. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 470, 4222-4230.	4.4	9
408	Chemical segregation in the young protostars Barnard 1b-N and S. <i>Astronomy and Astrophysics</i> , 2017, 606, L3.	5.1	9
409	First detection of doubly deuterated methyl acetylene (CHD ₂ CCH and T ₂ ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 26	5.1	9
410	Ground-based measurements of middle atmospheric water vapor at 183 GHz. <i>Journal of Geophysical Research</i> , 1996, 101, 28723-28730.	3.3	8
411	WARM HCN IN THE PLANET FORMATION ZONE OF GV TAU N. <i>Astrophysical Journal Letters</i> , 2012, 754, L6.	8.3	8
412	A Comprehensive Rotational Study of Interstellar Iso-propyl Cyanide up to 480 GHz. <i>Astrophysical Journal, Supplement Series</i> , 2017, 233, 24.	7.7	8
413	A spectroscopic survey of Orion KL between 41.5 and 50 GHz. <i>Astronomy and Astrophysics</i> , 2017, 605, A76.	5.1	8
414	The Maser-emitting Structure and Time Variability of the SiS Lines J=14-13 and 15-14 in IRC+10216*. <i>Astrophysical Journal</i> , 2018, 860, 162.	4.5	8

#	ARTICLE	IF	CITATIONS
415	The molecular content of the Rosette's teardrops. <i>Astrophysical Journal</i> , 1994, 430, L125.	4.5	8
416	Molecules in AGB Stars Observed with ISO. , 1997, 255, 303-313.		7
417	Dissociative Shocks in the Neighborhood of Orion IRC2 Traced with Atomic Carbon. <i>Astrophysical Journal</i> , 2005, 634, L61-L64.	4.5	7
418	Evidence for a Photoevaporated Circumbinary Disk in Orion. <i>Astrophysical Journal</i> , 2008, 687, L83-L86.	4.5	7
419	A HIFI preview of warm molecular gas around ξ Cygni: first detection of H_2O emission toward an S-type AGB star. <i>Astronomy and Astrophysics</i> , 2010, 521, L6.	5.1	7
420	The millimeter wave spectrum of methyl cyanate: a laboratory study and astronomical search in space. <i>Astronomy and Astrophysics</i> , 2016, 591, A75.	5.1	7
421	Submillimeter wave spectroscopy of ethyl isocyanide and its searches in Orion. <i>Astronomy and Astrophysics</i> , 2018, 610, A44.	5.1	7
422	Millimeter wave spectra of ethyl isocyanate and searches for it in Orion KL and Sagittarius B2. <i>Astronomy and Astrophysics</i> , 2018, 616, A173.	5.1	7
423	Rotational spectrum of methoxyamine up to 480 GHz: a laboratory study and astronomical search. <i>Astronomy and Astrophysics</i> , 2018, 609, A24.	5.1	7
424	Formation of complex organic molecules in ice mantles: An ab initio molecular dynamics study. <i>Astronomy and Astrophysics</i> , 2019, 629, A28.	5.1	7
425	Submillimeter imaging of the Galactic Center starburst Sgr B2. <i>Astronomy and Astrophysics</i> , 2021, 649, A32.	5.1	7
426	Multifrequency high spectral resolution observations of HCN toward the circumstellar envelope of Y Canum Venaticorum. <i>Astronomy and Astrophysics</i> , 2021, 651, A8.	5.1	7
427	Laboratory millimeter wave spectrum and astronomical search for vinyl acetate. <i>Astronomy and Astrophysics</i> , 2015, 577, A91.	5.1	7
428	The Spatial Size of the SiO Masers in R Leonis Derived from Lunar Occultations. <i>Astrophysical Journal</i> , 1994, 423, L143.	4.5	7
429	Metal-catalyst-free gas-phase synthesis of long-chain hydrocarbons. <i>Nature Communications</i> , 2021, 12, 5937.	12.8	7
430	European Minor Constituent Radiometer: A New Millimeter Wave Receiver for Atmospheric Research. <i>Journal of Infrared, Millimeter and Terahertz Waves</i> , 2001, 22, 1555-1575.	0.6	6
431	Microwave temperature and pressure measurements with the Odin satellite: I. Observational method. <i>Canadian Journal of Physics</i> , 2002, 80, 443-454.	1.1	6
432	<i>HERSCHEL</i> /HIFI SEARCH FOR H_2^{17}O AND H_2^{18}O IN IRC+10216: CONSTRAINTS ON MODELS FOR THE ORIGIN OF WATER VAPOR. <i>Astrophysical Journal Letters</i> , 2013, 767, L3.	8.3	6

#	ARTICLE	IF	CITATIONS
433	Transitory O-rich chemistry in heavily obscured C-rich post-AGB stars. <i>Journal of Physics: Conference Series</i> , 2016, 728, 052003.	0.4	6
434	MILLIMETER WAVE SPECTRUM AND ASTRONOMICAL SEARCH FOR VINYL FORMATE. <i>Astrophysical Journal</i> , 2016, 832, 42.	4.5	6
435	Zeeman effect in sulfur monoxide. <i>Astronomy and Astrophysics</i> , 2017, 605, A20.	5.1	6
436	Alkaline and alkaline-earth cyanoacetylides: A combined theoretical and rotational spectroscopic investigation. <i>Journal of Chemical Physics</i> , 2019, 151, 054312.	3.0	6
437	Gas infall and possible circumstellar rotation in R Leonis. <i>Astronomy and Astrophysics</i> , 2019, 622, L14.	5.1	6
438	SiO, ²⁹ SiO, and ³⁰ SiO Emission from 67 Oxygen-rich Stars: A Survey of 61 Maser Lines from 7 to 1 mm. <i>Astrophysical Journal, Supplement Series</i> , 2021, 253, 44.	7.7	6
439	Laboratory Observation of, Astrochemical Search for, and Structure of Elusive Erythrulose in the Interstellar Medium. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 1352-1359.	4.6	6
440	New deuterated species in TMC-1: Detection of CH ₂ DC ₄ H with the QUIJOTE line survey. <i>Astronomy and Astrophysics</i> , 2022, 657, L5.	5.1	6
441	The wideband backend at the MDSCC in Robledo. <i>Astronomy and Astrophysics</i> , 2012, 542, A63.	5.1	5
442	HIGH-RESOLUTION ROTATIONAL SPECTRUM, DUNHAM COEFFICIENTS, AND POTENTIAL ENERGY FUNCTION OF NaCl. <i>Astrophysical Journal</i> , 2016, 825, 150.	4.5	5
443	High-velocity hot CO emission close to Sgr A*. <i>Astronomy and Astrophysics</i> , 2018, 616, L1.	5.1	5
444	Rotational spectroscopy and astronomical search for glutaronitrile. <i>Astronomy and Astrophysics</i> , 2020, 636, A33.	5.1	5
445	Infrared Astrophysics in the Space with ISO From ISO to FIRST. <i>Astrophysics and Space Science</i> , 1998, 263, 175-192.	1.4	4
446	REMOTE SENSING OF THE MESOSPHERIC TEMPERATURE PROFILE FROM CLOSE-TO-NADIR OBSERVATIONS: DISCUSSION ABOUT THE CAPABILITIES OF THE 57.5-62.5GHz FREQUENCY BAND AND THE 118.75GHz SINGLE O ₂ LINE. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 1998, 60, 559-571.	2.3	4
447	Ground-based spectroscopic observations of atmospheric ozone from 142 to 359 GHz in southern Europe. <i>Journal of Geophysical Research</i> , 1998, 103, 6189-6202.	3.3	4
448	Extended photoionization and photodissociation in Sgr B2. <i>Astronomische Nachrichten</i> , 2003, 324, 139-143.	1.2	4
449	Exploratory Submm Space Radio-Interferometric Telescope (ESPRIT). , 2004, , .		4
450	Exploratory submm space radio-interferometric telescope. <i>Advances in Space Research</i> , 2005, 36, 1109-1113.	2.6	4

#	ARTICLE	IF	CITATIONS
451	ESPRIT: a space interferometer concept for the far-infrared. , 2006, 6265, 637.		4
452	The molecular hydrogen explorer H2EX. Experimental Astronomy, 2009, 23, 277-302.	3.7	4
453	THE FOGGY DISKS SURROUNDING AeBe STARS: A THEORETICAL STUDY OF THE HDO LINES. Astrophysical Journal Letters, 2010, 725, L135-L139.	8.3	4
454	THE HIGH-RESOLUTION INFRARED SPECTRUM OF HCl ⁺ . Astrophysical Journal Letters, 2016, 833, L32.	8.3	4
455	Laboratory rotational spectrum and astronomical search for methoxyacetaldehyde. Astronomy and Astrophysics, 2018, 619, A67.	5.1	4
456	Circumstellar chemistry of Si-C bearing molecules in the C-rich AGB star IRC+10216. Proceedings of the International Astronomical Union, 2018, 14, 535-537.	0.0	4
457	IRC + 10 ² 16 mass loss properties through the study of C_3H 3 mm emission. Astronomy and Astrophysics, 2019, 629, A146.	5.1	4
458	The millimeter-wave spectrum and astronomical search for ethyl methyl sulfide. Astronomy and Astrophysics, 2020, 639, A129.	5.1	4
459	Water in Space: The Water World of ISO. , 2005, , 29-69.		4
460	Discovery of CH ₂ CCHC ₄ H and a rigorous detection of CH ₂ CCHC ₃ N in TMC-1 with the QUIJOTE line survey. Astronomy and Astrophysics, 2022, 663, L3.	5.1	4
461	Very Large Telescope observations of Gomez's Hamburger: Insights into a young protoplanet candidate. Astronomy and Astrophysics, 2015, 578, L8.	5.1	3
462	Comprehensive rotational study and astronomical search for cyclopropanecarboxaldehyde. Astronomy and Astrophysics, 2021, 645, A75.	5.1	3
463	Laboratory observation and astronomical search of 1-cyano propargyl radical, HCCCHCN. Astronomy and Astrophysics, 2022, 657, A24.	5.1	3
464	Detection of the S(1) Rotational Line of H ₂ toward IRC+10216: A Simultaneous Measurement of the Mass-loss Rate and CO Abundance. Astrophysical Journal Letters, 2022, 927, L33.	8.3	3
465	The chemistry of molecular anions in circumstellar sources. AIP Conference Proceedings, 2015, , .	0.4	2
466	Millimeter wave spectra of carbonyl cyanide. Astronomy and Astrophysics, 2016, 592, A43.	5.1	2
467	The ALMA view of UV-irradiated cloud edges: unexpected structures and processes. Proceedings of the International Astronomical Union, 2017, 13, 210-217.	0.0	2
468	Rotational spectroscopic study of S-methyl thioformate. Astronomy and Astrophysics, 2020, 644, A102.	5.1	2

#	ARTICLE	IF	CITATIONS
469	INFRA-ICE: An ultra-high vacuum experimental station for laboratory astrochemistry. Review of Scientific Instruments, 2020, 91, 124101.	1.3	2
470	Detection of infrared fluorescence of carbon dioxide in R Leonis with SOFIA/EXES. Astronomy and Astrophysics, 2020, 643, L15.	5.1	2
471	Ionized Carbon around IRC+10216. Astrophysical Journal, 2022, 926, 69.	4.5	2
472	The Molecular Spiral Structure in M51 Derived from CO(J=2-1) Line Observations. Highlights of Astronomy, 1989, 8, 575-577.	0.0	1
473	Are isolated galaxies boring?. Astrophysics and Space Science, 2002, 281, 427-427.	1.4	1
474	CASPER: Concordia Atmospheric Spectroscopy of Emitted Radiation. EAS Publications Series, 2005, 14, 233-238.	0.3	1
475	The Kelvin-Helmholtz instability as a source of turbulence in Orion. EAS Publications Series, 2011, 52, 281-282.	0.3	1
476	SDAI: a key piece of software to manage the new wideband backend at Robledo. Proceedings of SPIE, 2012, , .	0.8	1
477	Collisional Excitation of SO ₂ in Cold Molecular Clouds. EPJ Web of Conferences, 2012, 34, 04002.	0.3	1
478	The chemistry and spatial distribution of small hydrocarbons in UV-irradiated molecular clouds: the Orion Bar PDR(Corrigendum). Astronomy and Astrophysics, 2015, 579, C1.	5.1	1
479	The place of Quantum Chemistry in Molecular Astrophysics. Physics of Life Reviews, 2020, 32, 119-120.	2.8	1
480	Laboratory microwave spectroscopy of the doubly deuterated cyanomethyl radical, D ₂ CCN. Journal of Molecular Spectroscopy, 2021, 377, 111448.	1.2	1
481	The Herschel Space Observatory development, operation and post-operations: lessons learned. , 2020, , .		1
482	Building Blocks of Dust: A Coordinated Laboratory and Astronomical Study of AGB Stars. Journal of Molecular Spectroscopy, 2019, 356, 7-20.	1.2	1
483	Rotational spectroscopy of the large saturated dinitriles hexanedinitrile and heptanedinitrile. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 270, 120844.	3.9	1
484	Chemistry of the Universe. Scientific American, 1853, 9, 69-69.	1.0	0
485	Far-Infrared CO Rotational Lines in the Orion Molecular Cloud. Astrophysics and Space Science, 1998, 263, 205-208.	1.4	0
486	<title>EMCOR radiometer: calibration and first tests</title>. , 1998, 3503, 362.		0

#	ARTICLE	IF	CITATIONS
487	Physical and Chemical Conditions in the Dust Formation Zone of IRC+10216. Proceedings of the International Astronomical Union, 2005, 1, 509.	0.0	0
488	The wideband backend for host country radio astronomy in the Spanish DSN Robledo complex. , 2012, , .		0
489	PAH and H ₂ emission in the Ring Nebula. Journal of Physics: Conference Series, 2016, 728, 032011.	0.4	0
490	A rotating spiral structure in the innermost regions around IRC+10216. Journal of Physics: Conference Series, 2016, 728, 022005.	0.4	0
491	FIR Spectroscopy of the Galactic Center: Hot and Warm Molecular Gas. Proceedings of the International Astronomical Union, 2016, 11, 168-169.	0.0	0
492	The Abundance of SiC ₂ in Carbon Star Envelopes. Proceedings of the International Astronomical Union, 2017, 13, 261-269.	0.0	0
493	Abundance Estimates in Carbon Star Envelopes. Proceedings of the International Astronomical Union, 2018, 14, 460-461.	0.0	0
494	Design of Radio Astronomical Receivers for Laboratory Molecular Spectroscopic Measurements. , 2018, , .		0
495	Hints of the Existence of C-rich Massive Evolved Stars \hat{a}^- . Astrophysical Journal, 2019, 876, 116.	4.5	0
496	Erratum Disks around Hot Stars in the Trifid Nebula. Astronomy and Astrophysics, 2001, 372, L65-L65.	5.1	0
497	The Interstellar Gas seen in the Mid- and Far-Infrared: The Promise of SPICA Space Telescope. , 2009, , .		0
498	Discovery of HC ₃ O ⁺ in space: The chemistry of O-bearing species in TMC-1 (Corrigendum). Astronomy and Astrophysics, 2020, 644, C2.	5.1	0