## Nuria Marcelino

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1070205/publications.pdf

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60 papers

4,441 citations

39 h-index 60 g-index

60 all docs 60 docs citations

times ranked

60

3305 citing authors

#	Article	IF	CITATIONS
1	THE 2014 ALMA LONG BASELINE CAMPAIGN: FIRST RESULTS FROM HIGH ANGULAR RESOLUTION OBSERVATIONS TOWARD THE HL TAU REGION. Astrophysical Journal Letters, 2015, 808, L3.	8.3	877
2	DISCOVERY OF THE METHOXY RADICAL, CH <sub>3</sub> O, TOWARD B1: DUST GRAIN AND GAS-PHASE CHEMISTRY IN COLD DARK CLOUDS. Astrophysical Journal Letters, 2012, 759, L43.	8.3	243
3	Astronomical identification of CN <sup>-</sup> , the smallest observed molecular anion. Astronomy and Astrophysics, 2010, 517, L2.	5.1	207
4	THE SPATIAL DISTRIBUTION OF COMPLEX ORGANIC MOLECULES IN THE L1544 PRE-STELLAR CORE. Astrophysical Journal Letters, 2016, 830, L6.	8.3	171
5	Discovery of Interstellar Propylene (CH <sub>2</sub> CHCH <sub>3</sub> ): Missing Links in Interstellar Gas-Phase Chemistry. Astrophysical Journal, 2007, 665, L127-L130.	4.5	146
6	DISCOVERY OF FULMINIC ACID, HCNO, IN DARK CLOUDS. Astrophysical Journal, 2009, 690, L27-L30.	4.5	114
7	<i>HERSCHEL</i> OBSERVATIONS OF EXTRAORDINARY SOURCES: ANALYSIS OF THE HIFI 1.2 THz WIDE SPECTRAL SURVEY TOWARD ORION KL. I. METHODS. Astrophysical Journal, 2014, 787, 112.	4.5	106
8	Compression and ablation of the photo-irradiated molecular cloud the Orion Bar. Nature, 2016, 537, 207-209.	27.8	94
9	Nitrogen isotopic ratios in Barnard 1: a consistent study of the N <sub>2</sub> H <sup>+</sup> , NH <sub>3</sub> , CN, HCN, and HNC isotopologues. Astronomy and Astrophysics, 2013, 560, A3.	5.1	90
10	THE 2014 ALMA LONG BASELINE CAMPAIGN: AN OVERVIEW. Astrophysical Journal Letters, 2015, 808, L1.	8.3	90
11	VELOCITY-RESOLVED [C ii] EMISSION AND [C ii]/FIR MAPPING ALONG ORION WITH <i>HERSCHEL</i> Astrophysical Journal, 2015, 812, 75.	4.5	88
12	THE 2014 ALMA LONG BASELINE CAMPAIGN: OBSERVATIONS OF THE STRONGLY LENSED SUBMILLIMETER GALAXY HATLAS J090311.6+003906 AT $\langle i \rangle z \langle j \rangle = 3.042$ . Astrophysical Journal Letters, 2015, 808, L4.	8.3	86
13	Astrochemical evolution along star formation: overview of the IRAM Large Program ASAI. Monthly Notices of the Royal Astronomical Society, 2018, 477, 4792-4809.	4.4	85
14	Probing non-polar interstellar molecules through their protonated form: Detection of protonated cyanogen (NCCNH <sup>+</sup> ). Astronomy and Astrophysics, 2015, 579, L10.	5.1	79
15	A line-confusion limited millimeter survey of Orion KL. Astronomy and Astrophysics, 2011, 528, A26.	5.1	75
16	Deuterated Thioformaldehyde in the Barnard 1 Cloud. Astrophysical Journal, 2005, 620, 308-320.	4.5	69
17	Molecular outflows towards O-type young stellar objects. Astronomy and Astrophysics, 2009, 499, 811-825.	5.1	66
18	Molecular shells in IRC+10216: tracing the mass loss history. Astronomy and Astrophysics, 2015, 575, A91.	5.1	65

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19	Detection of <sup>15</sup> NH <sub>2</sub> D in dense cores: a new tool for measuring the <sup>14</sup> N/ <sup>15</sup> N ratio in the cold ISM. Astronomy and Astrophysics, 2009, 498, L9-L12.	5.1	63
20	The interstellar chemistry of H <sub>2</sub> C <sub>3</sub> O isomers. Monthly Notices of the Royal Astronomical Society, 2016, 456, 4101-4110.	4.4	63
21	UNVEILING THE DUST NUCLEATION ZONE OF IRC+10216 WITH ALMA. Astrophysical Journal Letters, 2013, 778, L25.	8.3	60
22	Laboratory characterization and astrophysical detection of vibrationally excited states of vinyl cyanide in Orion-KL. Astronomy and Astrophysics, 2014, 572, A44.	5.1	60
23	The puzzling behavior of HNCO isomers in molecular clouds. Astronomy and Astrophysics, 2010, 516, A105.	5.1	59
24	TMC-1, the starless core sulfur factory: Discovery of NCS, HCCS, H <sub>2</sub> CCS, H <sub>2</sub> CCS, and C <sub>4</sub> S and detection of C <sub>5</sub> S. Astronomy and Astrophysics, 2021, 648, L3.	5.1	59
25	The interstellar chemistry of C3H and C3H2 isomers. Monthly Notices of the Royal Astronomical Society, 2017, 470, 4075-4088.	4.4	58
26	A line confusion-limited millimeter survey of Orion KL. Astronomy and Astrophysics, 2013, 556, A143.	5.1	57
27	DETECTION OF THE AMMONIUM ION IN SPACE. Astrophysical Journal Letters, 2013, 771, L10.	8.3	56
28	Interstellar nitrile anions: Detection of C <sub>3</sub> N <sup>â^²</sup> and C <sub>5</sub> N <sup>â^²</sup> in TMC-1. Astronomy and Astrophysics, 2020, 641, L9.	5.1	53
29	Discovery of HC <sub>4</sub> NC in TMC-1: A study of the isomers of HC <sub>3</sub> N, HC <sub>5</sub> N, and HC <sub>7</sub> N. Astronomy and Astrophysics, 2020, 642, L8.	5.1	53
30	lonization fraction and the enhanced sulfur chemistry in Barnard 1. Astronomy and Astrophysics, 2016, 593, A94.	5.1	51
31	LABORATORY CHARACTERIZATION AND ASTROPHYSICAL DETECTION OF VIBRATIONALLY EXCITED STATES OF ETHYL CYANIDE. Astrophysical Journal, 2013, 768, 81.	4.5	50
32	Discovery of HC <sub>3</sub> O <sup>+</sup> in space: The chemistry of O-bearing species in TMC-1. Astronomy and Astrophysics, 2020, 642, L17.	5.1	49
33	Nascent bipolar outflows associated with the first hydrostatic core candidates Barnard 1b-N and 1b-S. Astronomy and Astrophysics, 2015, 577, L2.	5.1	48
34	Discovery of the propargyl radical (CH <sub>2</sub> CCH) in TMC-1: One of the most abundant radicals ever found and a key species for cyclization to benzene in cold dark clouds. Astronomy and Astrophysics, 2021, 647, L10.	5.1	47
35	ROTATIONAL SPECTRUM AND TENTATIVE DETECTION OF DCOOCH (sub) 3 (/sub) - METHYL FORMATE IN ORION. Astrophysical Journal, 2010, 714, 1120-1132.	4.5	46
36	CH <sub>2</sub> D <sup>+</sup> , the Search for the Holy Grail. Journal of Physical Chemistry A, 2013, 117, 9959-9967.	2.5	45

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37	Waves on the surface of the Orion molecular cloud. Nature, 2010, 466, 947-949.	27.8	44
38	Molecular content of the circumstellar disk in ABÂAurigae. Astronomy and Astrophysics, 2010, 524, A19.	5.1	44
39	Space and laboratory discovery of HC <sub>3</sub> S <sup>+</sup> . Astronomy and Astrophysics, 2021, 646, L3.	5.1	43
40	Discovery of CH <sub>2</sub> CHCCH and detection of HCCN, HC <sub>4</sub> N, CH <sub>3</sub> CH <sub>2</sub> CCH in TMC-1. Astronomy and Astrophysics, 2021, 647, L2.	5.1	41
41	Si-BEARING MOLECULES TOWARD IRC+10216: ALMA UNVEILS THE MOLECULAR ENVELOPE OF CWLeo. Astrophysical Journal Letters, 2015, 805, L13.	8.3	40
42	Tentative detection of HC <sub>5</sub> NH <sup>+</sup> in TMC-1. Astronomy and Astrophysics, 2020, 643, L6.	5.1	40
43	Probing the dust formation region in IRC +10216 with the high vibrational states of hydrogen cyanide. Astronomy and Astrophysics, 2011, 529, L3.	5.1	37
44	IRAM 30 m LARGE SCALE SURVEY OF (sup) $12$ (sup) CO(2-1) AND (sup) $13$ (sup) CO(2-1) EMISSION IN THE ORION MOLECULAR CLOUD. Astrophysical Journal, 2014, 795, 13.	4.5	36
45	Discovery of the acetyl cation, CH <sub>3</sub> CO <sup>+</sup> , in space and in the laboratory. Astronomy and Astrophysics, 2021, 646, L7.	5.1	36
46	Organic Chemistry in the Dark Clouds L1448 and L183: A Unique Grain Mantle Composition. Astrophysical Journal, 2007, 655, L37-L40.	4.5	31
47	Discovery of allenyl acetylene, H <sub>2</sub> CCCHCCH, in TMC-1. Astronomy and Astrophysics, 2021, 647, L3.	5.1	30
48	Space and laboratory observation of the deuterated cyanomethyl radical HDCCN. Astronomy and Astrophysics, 2021, 646, L1.	5.1	30
49	Combined IRAM and <i>Herschel </i> /IIFI study of cyano (di) acetylene in Orion KL: tentative detection of DC <sub>3 </sub> N. Astronomy and Astrophysics, 2013, 559, A51.	5.1	29
50	A study of C <sub>4</sub> H <sub>3</sub> N isomers in TMC-1: Line by line detection of HCCCH <sub>2</sub> CN. Astronomy and Astrophysics, 2021, 646, L9.	5.1	28
51	Oxygen fractionation in dense molecular clouds. Monthly Notices of the Royal Astronomical Society, 2019, 485, 5777-5789.	4.4	27
52	TENTATIVE DETECTION OF THE NITROSYLIUM ION IN SPACE. Astrophysical Journal, 2014, 795, 40.	4.5	26
53	INVESTIGATION OF HNCO ISOMER FORMATION IN ICE MANTLES BY UV AND THERMAL PROCESSING: AN EXPERIMENTAL APPROACH. Astrophysical Journal, 2014, 788, 19.	4.5	24
54	HINTS OF A ROTATING SPIRAL STRUCTURE IN THE INNERMOST REGIONS AROUND IRC +10216. Astrophysical Journal, 2016, 818, 192.	4.5	24

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55	Extended warm gas in Orion KL as probed by methyl cyanide. Astronomy and Astrophysics, 2014, 564, A114.	5.1	23
56	THE PECULIAR DISTRIBUTION OF CH <sub>3</sub> CN IN IRC +10216 SEEN BY ALMA. Astrophysical Journal, 2015, 814, 143.	4.5	23
57	Molecular tracers of radiative feedback in Orion (OMC-1). Astronomy and Astrophysics, 2019, 622, A91.	5.1	23
58	Molecular globules in the Veil bubble of Orion. Astronomy and Astrophysics, 2020, 639, A1.	5.1	18
59	THE 2014 ALMA LONG BASELINE CAMPAIGN: OBSERVATIONS OF ASTEROID 3 JUNO AT 60 KILOMETER RESOLUTION. Astrophysical Journal Letters, 2015, 808, L2.	8.3	15
60	The Kelvin-Helmholtz instability as a source of turbulence in Orion. EAS Publications Series, 2011, 52, 281-282.	0.3	1