

# Nuria Marcelino

## List of Publications by Year in descending order

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60  
papers

4,441  
citations

81900

39  
h-index

128289

60  
g-index

60  
all docs

60  
docs citations

60  
times ranked

3305  
citing authors

#	ARTICLE	IF	CITATIONS
1	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. <i>Astronomy and Astrophysics</i> , 2021, 646, L9.	5.1	28
2	Space and laboratory discovery of HC <sub>3</sub> S <sup>+</sup> . <i>Astronomy and Astrophysics</i> , 2021, 646, L3.	5.1	43
3	Discovery of the acetyl cation, CH <sub>3</sub> CO <sup>+</sup> , in space and in the laboratory. <i>Astronomy and Astrophysics</i> , 2021, 646, L7.	5.1	36
4	Discovery of CH <sub>2</sub> CHCCH and detection of HCCN, HC <sub>4</sub> N, CH <sub>3</sub> CH <sub>2</sub> CN, and, tentatively, CH <sub>3</sub> CH <sub>2</sub> CCH in TMC-1. <i>Astronomy and Astrophysics</i> , 2021, 647, L2.	5.1	41
5	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. <i>Astronomy and Astrophysics</i> , 2021, 647, L10.	5.1	47
6	Discovery of allenyl acetylene, H <sub>2</sub> CCCHCCH, in TMC-1. <i>Astronomy and Astrophysics</i> , 2021, 647, L3.	5.1	30
7	TMC-1, the starless core sulfur factory: Discovery of NCS, HCCS, H <sub>2</sub> CCS, H <sub>2</sub> CCCS, and C <sub>4</sub> S and detection of C <sub>5</sub> S. <i>Astronomy and Astrophysics</i> , 2021, 648, L3.	5.1	59
8	Space and laboratory observation of the deuterated cyanomethyl radical HDCCN. <i>Astronomy and Astrophysics</i> , 2021, 646, L1.	5.1	30
9	Molecular globules in the Veil bubble of Orion. <i>Astronomy and Astrophysics</i> , 2020, 639, A1.	5.1	18
10	Interstellar nitrile anions: Detection of C <sub>3</sub> N <sup>+</sup> and C <sub>5</sub> N <sup>+</sup> in TMC-1. <i>Astronomy and Astrophysics</i> , 2020, 641, L9.	5.1	53
11	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. <i>Astronomy and Astrophysics</i> , 2020, 642, L8.	5.1	53
12	Discovery of HC <sub>3</sub> O <sup>+</sup> in space: The chemistry of O-bearing species in TMC-1. <i>Astronomy and Astrophysics</i> , 2020, 642, L17.	5.1	49
13	Tentative detection of HC <sub>5</sub> NH <sup>+</sup> in TMC-1. <i>Astronomy and Astrophysics</i> , 2020, 643, L6.	5.1	40
14	Molecular tracers of radiative feedback in Orion (OMC-1). <i>Astronomy and Astrophysics</i> , 2019, 622, A91.	5.1	23
15	Oxygen fractionation in dense molecular clouds. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 485, 5777-5789.	4.4	27
16	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
17	The interstellar chemistry of C <sub>3</sub> H and C <sub>3</sub> H <sub>2</sub> isomers. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 470, 4075-4088.	4.4	58
18	THE SPATIAL DISTRIBUTION OF COMPLEX ORGANIC MOLECULES IN THE L1544 PRE-STELLAR CORE. <i>Astrophysical Journal Letters</i> , 2016, 830, L6.	8.3	171

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19	Ionization fraction and the enhanced sulfur chemistry in Barnard 1. <i>Astronomy and Astrophysics</i> , 2016, 593, A94.	5.1	51
20	Compression and ablation of the photo-irradiated molecular cloud the Orion Bar. <i>Nature</i> , 2016, 537, 207-209.	27.8	94
21	The interstellar chemistry of H <sub>2</sub> C <sub>3</sub> O isomers. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 456, 4101-4110.	4.4	63
22	HINTS OF A ROTATING SPIRAL STRUCTURE IN THE INNERMOST REGIONS AROUND IRC +10216. <i>Astrophysical Journal</i> , 2016, 818, 192.	4.5	24
23	THE 2014 ALMA LONG BASELINE CAMPAIGN: AN OVERVIEW. <i>Astrophysical Journal Letters</i> , 2015, 808, L1.	8.3	90
24	Molecular shells in IRC+10216: tracing the mass loss history. <i>Astronomy and Astrophysics</i> , 2015, 575, A91.	5.1	65
25	THE 2014 ALMA LONG BASELINE CAMPAIGN: OBSERVATIONS OF THE STRONGLY LENSED SUBMILLIMETER GALAXY HATLAS J090311.6+003906 AT $z = 3.042$ . <i>Astrophysical Journal Letters</i> , 2015, 808, L4.	8.3	86
26	Probing non-polar interstellar molecules through their protonated form: Detection of protonated cyanogen (NCCNH <sup>+</sup> ). <i>Astronomy and Astrophysics</i> , 2015, 579, L10.	5.1	79
27	THE 2014 ALMA LONG BASELINE CAMPAIGN: OBSERVATIONS OF ASTEROID 3 JUNO AT 60 KILOMETER RESOLUTION. <i>Astrophysical Journal Letters</i> , 2015, 808, L2.	8.3	15
28	THE PECULIAR DISTRIBUTION OF CH <sub>3</sub> CN IN IRC +10216 SEEN BY ALMA. <i>Astrophysical Journal</i> , 2015, 814, 143.	4.5	23
29	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
30	Si-BEARING MOLECULES TOWARD IRC+10216: ALMA UNVEILS THE MOLECULAR ENVELOPE OF CWLeo. <i>Astrophysical Journal Letters</i> , 2015, 805, L13.	8.3	40
31	THE 2014 ALMA LONG BASELINE CAMPAIGN: FIRST RESULTS FROM HIGH ANGULAR RESOLUTION OBSERVATIONS TOWARD THE HL TAU REGION. <i>Astrophysical Journal Letters</i> , 2015, 808, L3.	8.3	877
32	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
33	Extended warm gas in Orion KL as probed by methyl cyanide. <i>Astronomy and Astrophysics</i> , 2014, 564, A114.	5.1	23
34	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. <i>Astrophysical Journal</i> , 2014, 795, 13.	4.5	36
35	TENTATIVE DETECTION OF THE NITROSYLIUM ION IN SPACE. <i>Astrophysical Journal</i> , 2014, 795, 40.	4.5	26
36	<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

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37	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
38	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
39	LABORATORY CHARACTERIZATION AND ASTROPHYSICAL DETECTION OF VIBRATIONALLY EXCITED STATES OF ETHYL CYANIDE. <i>Astrophysical Journal</i> , 2013, 768, 81.	4.5	50
40	DETECTION OF THE AMMONIUM ION IN SPACE. <i>Astrophysical Journal Letters</i> , 2013, 771, L10.	8.3	56
41	CH <sub>2</sub> D <sup>+</sup> , the Search for the Holy Grail. <i>Journal of Physical Chemistry A</i> , 2013, 117, 9959-9967.	2.5	45
42	UNVEILING THE DUST NUCLEATION ZONE OF IRC+10216 WITH ALMA. <i>Astrophysical Journal Letters</i> , 2013, 778, L25.	8.3	60
43	A line confusion-limited millimeter survey of Orion KL. <i>Astronomy and Astrophysics</i> , 2013, 556, A143.	5.1	57
44	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. <i>Astronomy and Astrophysics</i> , 2013, 560, A3.	5.1	90
45	Combined IRAM and <i>Herschel</i> /HIFI study of cyano(di)acetylene in Orion KL: tentative detection of DC <sub>3</sub> N. <i>Astronomy and Astrophysics</i> , 2013, 559, A51.	5.1	29
46	DISCOVERY OF THE METHOXY RADICAL, CH <sub>3</sub> O, TOWARD B1: DUST GRAIN AND GAS-PHASE CHEMISTRY IN COLD DARK CLOUDS. <i>Astrophysical Journal Letters</i> , 2012, 759, L43.	8.3	243
47	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
48	A line-confusion limited millimeter survey of Orion KL. <i>Astronomy and Astrophysics</i> , 2011, 528, A26.	5.1	75
49	The Kelvin-Helmholtz instability as a source of turbulence in Orion. <i>EAS Publications Series</i> , 2011, 52, 281-282.	0.3	1
50	The puzzling behavior of HNCO isomers in molecular clouds. <i>Astronomy and Astrophysics</i> , 2010, 516, A105.	5.1	59
51	Astronomical identification of CN <sup>-</sup> , the smallest observed molecular anion. <i>Astronomy and Astrophysics</i> , 2010, 517, L2.	5.1	207
52	Waves on the surface of the Orion molecular cloud. <i>Nature</i> , 2010, 466, 947-949.	27.8	44
53	Molecular content of the circumstellar disk in AB Aurigae. <i>Astronomy and Astrophysics</i> , 2010, 524, A19.	5.1	44
54	ROTATIONAL SPECTRUM AND TENTATIVE DETECTION OF DCOOCH <sub>3</sub> -METHYL FORMATE IN ORION. <i>Astrophysical Journal</i> , 2010, 714, 1120-1132.	4.5	46

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55	Detection of $^{15}\text{NH}_2\text{D}$ in dense cores: a new tool for measuring the $^{14}\text{N}/^{15}\text{N}$ ratio in the cold ISM. <i>Astronomy and Astrophysics</i> , 2009, 498, L9-L12.	5.1	63
56	DISCOVERY OF FULMINIC ACID, HCNO, IN DARK CLOUDS. <i>Astrophysical Journal</i> , 2009, 690, L27-L30.	4.5	114
57	Molecular outflows towards O-type young stellar objects. <i>Astronomy and Astrophysics</i> , 2009, 499, 811-825.	5.1	66
58	Organic Chemistry in the Dark Clouds L1448 and L183: A Unique Grain Mantle Composition. <i>Astrophysical Journal</i> , 2007, 655, L37-L40.	4.5	31
59	Discovery of Interstellar Propylene ( $\text{CH}_2\text{CHCH}_3$ ): Missing Links in Interstellar Gas-Phase Chemistry. <i>Astrophysical Journal</i> , 2007, 665, L127-L130.	4.5	146
60	Deuterated Thioformaldehyde in the Barnard 1 Cloud. <i>Astrophysical Journal</i> , 2005, 620, 308-320.	4.5	69