

# Mattia Melosso

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/5502853/mattia-melosso-publications-by-year.pdf>

**Version:** 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

39  
papers

341  
citations

10  
h-index

17  
g-index

44  
ext. papers

740  
ext. citations

3.9  
avg, IF

3.46  
L-index

#	Paper	IF	Citations
39	Synchrotron-based far-infrared spectroscopy of HC <sub>3</sub> N: Extended ro-vibrational analysis and new line list up to 3360 cm <sup>-1</sup> . <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , <b>2022</b> , 279, 108044	2.1	
38	Gas-phase identification of ()-1,2-ethenediol, a key prebiotic intermediate in the formose reaction.. <i>Chemical Communications</i> , <b>2022</b> ,	5.8	3
37	Precursors of the RNA World in Space: Detection of (Z)-1,2-ethenediol in the Interstellar Medium, a Key Intermediate in Sugar Formation. <i>Astrophysical Journal Letters</i> , <b>2022</b> , 929, L11	7.9	6
36	Spectroscopic Characterization of 3-Aminoisoxazole, a Prebiotic Precursor of Ribonucleotides. <i>Molecules</i> , <b>2022</b> , 27, 3278	4.8	0
35	An improved study of HCO and He system: Interaction potential, collisional relaxation, and pressure broadening.. <i>Journal of Chemical Physics</i> , <b>2021</b> , 155, 234306	3.9	0
34	Improved centrifugal and hyperfine analysis of ND <sub>2</sub> H and NH <sub>2</sub> D and its application to the spectral line survey of L1544. <i>Journal of Molecular Spectroscopy</i> , <b>2021</b> , 377, 111431	1.3	2
33	High-Resolution Infrared Spectroscopy of DC <sub>3</sub> N in the Stretching Region. <i>Frontiers in Astronomy and Space Sciences</i> , <b>2021</b> , 8,	3.8	2
32	Computational molecular spectroscopy. <i>Nature Reviews Methods Primers</i> , <b>2021</b> , 1,		18
31	An improved rovibrational linelist of formaldehyde, H <sub>2</sub> 12C <sub>16</sub> O. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , <b>2021</b> , 266, 107563	2.1	7
30	High resolution FTIR study of the $\bar{6}$ , $\bar{8}$ , and $\bar{9}$ fundamental bands of CH <sub>2</sub> D <sub>37</sub> Cl. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , <b>2021</b> , 270, 107719	2.1	0
29	Hunting the relatives of benzonitrile: Rotational spectroscopy of dicyanobenzenes. <i>Astronomy and Astrophysics</i> , <b>2021</b> , 652, A163	5.1	1
28	The GUAPOS project. <i>Astronomy and Astrophysics</i> , <b>2021</b> , 653, A129	5.1	6
27	Hyperfine-Resolved Near-Infrared Spectra of HO. <i>Journal of Physical Chemistry A</i> , <b>2021</b> , 125, 7884-7890	2.8	2
26	The HITRAN2020 molecular spectroscopic database. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , <b>2021</b> , 277, 107949	2.1	96
25	Spectroscopy of a low global warming power refrigerant. Infrared and millimeter-wave spectra of trifluoroethene (HFO-1123) in the ground and some vibrational excited states. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , <b>2020</b> , 248, 106980	2.1	3
24	Rotational spectroscopy of rare iron monoxide isotopologues: A mass-independent analysis. <i>Molecular Physics</i> , <b>2020</b> , 118, e1774087	1.7	1
23	DC <sub>3</sub> N observations towards high-mass star-forming regions. <i>Monthly Notices of the Royal Astronomical Society</i> , <b>2020</b> , 496, 1990-1999	4.3	4

22	Rich Collection of n-Propylamine and Isopropylamine Conformers: Rotational Fingerprints and State-of-the-Art Quantum Chemical Investigation. <i>Journal of Physical Chemistry A</i> , <b>2020</b> , 124, 1372-1381	2.8	8
21	Submillimeter and Far-infrared Spectroscopy of Monodeuterated Amidogen Radical (NHD): Improved Rest Frequencies for Astrophysical Observations. <i>Astrophysical Journal, Supplement Series</i> , <b>2020</b> , 247, 59	8	2
20	The Submillimeter Rotational Spectrum of Ethylene Glycol up to 890 GHz and Application to ALMA Band 10 Spectral Line Data of NGC 6334I. <i>Journal of Physical Chemistry A</i> , <b>2020</b> , 124, 240-246	2.8	11
19	Determination of a semi-experimental equilibrium structure of 1-phosphapropyne from millimeter-wave spectroscopy of CH <sub>3</sub> CP and CD <sub>3</sub> CP. <i>Journal of Molecular Structure</i> , <b>2020</b> , 1203, 127429	3.4	7
18	First detection of NHD and ND <sub>2</sub> in the interstellar medium. <i>Astronomy and Astrophysics</i> , <b>2020</b> , 641, A1535	1	7
17	Far-infrared laboratory spectroscopy of aminoacetonitrile and first interstellar detection of its vibrationally excited transitions. <i>Astronomy and Astrophysics</i> , <b>2020</b> , 641, A160	5.1	7
16	Deuterium hyperfine splittings in the rotational spectrum of NH <sub>2</sub> D as revealed by Lamb-dip spectroscopy. <i>Journal of Molecular Spectroscopy</i> , <b>2020</b> , 370, 111291	1.3	7
15	High-resolution millimeter-wave spectroscopy of CH <sub>2</sub> DCl: Paving the way for future astronomical observations of chloromethane isotopologues. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , <b>2020</b> , 248, 106982	2.1	2
14	A Journey from Thermally Tunable Synthesis to Spectroscopy of Phenylmethanimine in Gas Phase and Solution. <i>Chemistry - A European Journal</i> , <b>2020</b> , 26, 15016-15022	4.8	2
13	Extensive ro-vibrational analysis of deuterated-cyanoacetylene (DC <sub>3</sub> N) from millimeter-wavelengths to the infrared domain. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , <b>2020</b> , 254, 107221	2.1	3
12	The rotational spectrum of ND. Isotopic-independent Dunham-type analysis of the imidogen radical. <i>Physical Chemistry Chemical Physics</i> , <b>2019</b> , 21, 3564-3573	3.6	11
11	Astronomical Search of Vinyl Alcohol Assisted by Submillimeter Spectroscopy. <i>ACS Earth and Space Chemistry</i> , <b>2019</b> , 3, 1189-1195	3.2	12
10	The pure rotational spectrum of 15ND <sub>2</sub> observed by millimetre and submillimetre-wave spectroscopy. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , <b>2019</b> , 222-223, 186-189	2.1	14
9	Rotational and Infrared Spectroscopy of Ethanamine: A Route toward Its Astrophysical and Planetary Detection. <i>Astrophysical Journal</i> , <b>2018</b> , 855, 123	4.7	24
8	Laboratory measurements and astronomical search for cyanomethanimine. <i>Astronomy and Astrophysics</i> , <b>2018</b> , 609,	5.1	24
7	Accurate Laboratory Measurement of the Complete Fine Structure of the N = 1 $\Delta$ Transition of 15NH. <i>Astrophysical Journal</i> , <b>2018</b> , 863, 3	4.7	4
6	Rotational and High-resolution Infrared Spectrum of HC <sub>3</sub> N: Global Ro-vibrational Analysis and Improved Line Catalog for Astrophysical Observations. <i>Astrophysical Journal, Supplement Series</i> , <b>2017</b> , 233, 11	8	17
5	Terahertz Spectroscopy and Global Analysis of the Rotational Spectrum of Doubly Deuterated Amidogen Radical ND <sub>2</sub> . <i>Astrophysical Journal, Supplement Series</i> , <b>2017</b> , 233, 15	8	9

4	Millimeter-wave and Submillimeter-wave Spectra of Aminoacetonitrile in the Three Lowest Vibrational Excited States. <i>Astrophysical Journal, Supplement Series</i> , <b>2017</b> , 230, 26	8	10
3	Conformational stability of cyclopropanecarboxaldehyde is ruled by vibrational effects. <i>Molecular Physics</i> , e1955988	1.7	1
2	First detection of C <sub>2</sub> H <sub>5</sub> NCO in the ISM and search of other isocyanates towards the G+0.693-0.027 molecular cloud. <i>Astronomy and Astrophysics</i> ,	5.1	4
1	Dipolar spin-spin coupling as auxiliary tool for structure determination of small isolated molecules. <i>Physical Chemistry Chemical Physics</i> ,	3.6	