

# Jean-Michel Hartmann

## List of Publications by Year in descending order

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Version: 2024-02-01

23  
papers

906  
citations

686830

13  
h-index

676716

22  
g-index

23  
all docs

23  
docs citations

23  
times ranked

865  
citing authors

#	ARTICLE	IF	CITATIONS
1	Recommended isolated-line profile for representing high-resolution spectroscopic transitions (IUPAC) Tj ETQq1 1 0,784314 rgBI /Ove	0,9	225
2	Update of the HITRAN collision-induced absorption section. Icarus, 2019, 328, 160-175.	1.1	105
3	Recent advances in collisional effects on spectra of molecular gases and their practical consequences. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 213, 178-227.	1.1	85
4	Collisional parameters of H2O lines: effects of vibration. Journal of Quantitative Spectroscopy and Radiative Transfer, 2004, 83, 119-147.	1.1	82
5	Infrared collision-induced absorption by N <sub>2</sub> near 4.3 $\mu$ m for atmospheric applications: measurements and empirical modeling. Applied Optics, 1996, 35, 5911.	2.1	76
6	An intercomparison of measured pressure-broadening and pressure-shifting parameters of water vapor. Canadian Journal of Chemistry, 2004, 82, 1013-1027.	0.6	62
7	Semiclassical calculations of half-widths and line shifts for transitions in the 30012 $\nu$ 00001 and 30013 $\nu$ 00001 bands of CO <sub>2</sub> . III: Self collisions. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 1536-1546.	1.1	45
8	Semiclassical calculations of half-widths and line shifts for transitions in the 30012 $\nu$ 00001 and 30013 $\nu$ 00001 bands of CO <sub>2</sub> . I: Collisions with N <sub>2</sub> . Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 976-990.	1.1	43
9	Semiclassical calculations of half-widths and line shifts for transitions in the 30012 $\nu$ 00001 and 30013 $\nu$ 00001 bands of CO <sub>2</sub> . II: Collisions with O <sub>2</sub> and air. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 991-1003.	1.1	41
10	Far infrared measurements of absorptions by CH <sub>4</sub> -CO <sub>2</sub> and H <sub>2</sub> -CO <sub>2</sub> mixtures and implications for greenhouse warming on early Mars. Icarus, 2019, 321, 189-199.	1.1	31
11	Influence of line mixing on absorption by CH <sub>4</sub> in atmospheric balloon-borne spectra near 3.3 $\mu$ m. Journal of Quantitative Spectroscopy and Radiative Transfer, 2001, 68, 117-133.	1.1	26
12	Effect of humidity on the absorption continua of CO <sub>2</sub> and N <sub>2</sub> near 4 $\mu$ m: Calculations, comparisons with measurements, and consequences for atmospheric spectra. Journal of Chemical Physics, 2018, 148, 054304.	1.2	16
13	Super- and sub-Lorentzian effects in the Ar-broadened line wings of HCl gas. Journal of Chemical Physics, 2017, 146, 194305.	1.2	15
14	<i>Ab initio</i> calculations for the far infrared collision induced absorption by N <sub>2</sub> gas. Journal of Chemical Physics, 2014, 140, 054309.	1.2	13
15	Decrease of the carbon tetrachloride (CCl <sub>4</sub> ) loading above Jungfraujoch, based on high resolution infrared solar spectra recorded between 1999 and 2011. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 1322-1329.	1.1	11
16	Influence of line mixing on absorption by CO <sub>2</sub> branches in atmospheric balloon-borne spectra near 13 $\mu$ m. Journal of Geophysical Research, 1997, 102, 12891-12899.	3.3	8
17	The CO <sub>2</sub> -broadened H <sub>2</sub> O continuum in the 100-1500 $\text{cm}^{-1}$ region: Measurements, predictions and empirical model. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 230, 75-80.	1.1	7
18	Comment on "Ortho-Para-Dependent Pressure Effects Observed in the Near Infrared Band of Acetylene by Dual-Comb Spectroscopy". Physical Review Letters, 2017, 119, 069401.	2.9	5

#	ARTICLE	IF	CITATIONS
19	Note on the two possible formulations of the Hartmann-Tran line profile. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 233, 76-77.	1.1	4
20	Toward measurements of the speed-dependence of line-mixing. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 262, 107510.	1.1	4
21	Molecular dynamics simulations of pressure-broadened symmetric-top gas spectra. Application to CH <sub>3</sub> F-Ar and CH <sub>3</sub> F-He mixtures. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 278, 108031.	1.1	1
22	Room temperature measurements of the collision-induced absorption by H <sub>2</sub> +CO <sub>2</sub> mixtures near 2.4 μm. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 283, 108161.	1.1	1
23	Direct calculations of the CH <sub>4</sub> +CO <sub>2</sub> far infrared collision-induced absorption. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 283, 108148.	1.1	0