# Mary Ann H Smith

List of Publications by Year
in descending order



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|---|---|---|---|
| 39 papers | 10,031 citations | 331670 21 h-index | 302126 39 g-index |
| 40 all docs | 40 docs citations | 40 times ranked | 6660 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | The HITRAN 2008 molecular spectroscopic database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2009, 110, 533-572. | 2.3 | 3,129 |
| 2 | The HITRAN2012 molecular spectroscopic database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 130, 4-50. | 2.3 | 2,810 |
| 3 | The HITRAN 2004 molecular spectroscopic database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2005, 96, 139-204. | 2.3 | 2,601 |
| 4 | The 2009 edition of the GEISA spectroscopic database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 2395-2445. | 2.3 | 306 |
| 5 | A multispectrum nonlinear least squares fitting technique. Journal of Quantitative Spectroscopy and Radiative Transfer, 1995, 53, 705-721. | 2.3 | 263 |
| 6 | Methane line parameters in the HITRAN2012 database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 130, 201-219. | 2.3 | 121 |
| 7 | Spectral line parameters including temperature dependences of self- and air-broadening in the 2â†0 band of CO at 2.3Î¼m. Journal of Quantitative Spectroscopy and Radiative Transfer, 2012, 113, 1013-1033. | 2.3 | 59 |
| 8 | Temperature dependence of broadening and shifts of methane lines in the Î½4 band. Spectrochimica Acta Part A: Molecular Spectroscopy, 1992, 48, 1257-1272. | 0.1 | 57 |
| 9 | Line parameters including temperature dependences of self- and air-broadened line shapes of 12C16O2: 1.6-Î¼m region. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 177, 117-144. | 2.3 | 52 |
| 10 | Line parameters including temperature dependences of air- and self-broadened line shapes of 12C16O2: 2.06-Î¼m region. Journal of Molecular Spectroscopy, 2016, 326, 21-47. | 1.2 | 42 |
| 11 | Measurements of pressure-induced shifts in the 1-0 and 2-0 bands of HF and in the 2-0 bands of H35Cl and H37Cl. Journal of Quantitative Spectroscopy and Radiative Transfer, 1978, 20, 35-47. | 2.3 | 41 |
| 12 | A multispectrum analysis of widths and shifts in the 2010â€“2260cmâ^'1 region of 12C16O broadened by Helium at temperatures between 80 and 297K. Journal of Molecular Structure, 2005, 742, 99-110. | 3.6 | 38 |
| 13 | Self- and air-broadened line shapes in the 2Î½3 P and R branches of 12CH4. Journal of Molecular Spectroscopy, 2015, 315, 114-136. | 1.2 | 37 |
| 14 | FT-IR measurements of cold C3H8 cross sections at 7â€“15Î¼m for Titan atmosphere. Icarus, 2013, 226, 1499-1513. | 2.5 | 36 |
| 15 | Multispectrum analysis of 12CH4 in the Î½4 band: I.. Journal of Quantitative Spectroscopy and Radiative Transfer, 2009, 110, 639-653. | 2.3 | 32 |
| 16 | Multispectrum analysis of 12CH4 in the Î½4 spectral region: II. Self-broadened half widths, pressure-induced shifts, temperature dependences and line mixing. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 1152-1166. | 2.3 | 29 |
| 17 | Cryogenic absorption cells operating inside a Bruker IFS-125HR: First results for 13CH4 at 7Î¼m. Journal of Molecular Spectroscopy, 2010, 262, 122-134. | 1.2 | 29 |
| 18 | Spectrum of 13C16O2 at 2.8 Î¼m. Journal of Molecular Spectroscopy, 1982, 94, 351-362. | 1.2 | 28 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | A cryogenic Herriott cell vacuum-coupled to a Bruker IFS-125HR. Journal of Molecular Spectroscopy, 2014, 304, 12-24. | 1.2 | 25 |
| 20 | Spectral line parameters including line shapes in the 2Î½3 Q branch of 12CH4. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 177, 152-169. | 2.3 | 25 |
| 21 | SELF-BROADENING AND SELF-SHIFT COEFFICIENTS IN THE FUNDAMENTAL BAND OF 12C16O. Journal of Quantitative Spectroscopy and Radiative Transfer, 1998, 60, 815-824. | 2.3 | 24 |
| 22 | Recommendation of a consensus value of the ozone absorption cross-section at 253.65â€‰nm based on a literature review. Metrologia, 2019, 56, 034001. | 1.2 | 22 |
| 23 | Self- and air-broadened line shape parameters in the Î½2+Î½3 band of 12CH4: 4500â€“4630cmâ¯1. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 152, 149-165. | 2.3 | 21 |
| 24 | Spectroscopic line parameters of 12 CH 4 for atmospheric composition retrievals in the 4300â€“4500 cm â¯1 region. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 186, 106-117. | 2.3 | 21 |
| 25 | Spectral line parameters including temperature dependences of air-broadening for the 2â†0 bands of 13C16O and 12C18O at 2.3Î¼m. Journal of Molecular Spectroscopy, 2012, 276-277, 33-48. | 1.2 | 20 |
| 26 | Measurements and modeling of long-path 12CH4 spectra in the 5300â€“5550â€¯cmâ¯1 region. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 202, 255-264. | 2.3 | 20 |
| 27 | Air- and self-broadened half widths, pressure-induced shifts, and line mixing in the Î½2 band of 12CH4. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 133, 217-234. | 2.3 | 19 |
| 28 | FT-IR measurements of cold propene (C3H6) cross-sections at temperatures between 150 and 299ÂK. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 213, 119-132. | 2.3 | 16 |
| 29 | A multispectrum analysis of the Î½2 band of H12C14N: Part I. Intensities, broadening, and shift coefficients. Journal of Molecular Spectroscopy, 2005, 231, 66-84. | 1.2 | 15 |
| 30 | A multispectrum analysis of the Î½4 band of 13CH4: Widths, shifts, and line mixing coefficients. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 952-968. | 2.3 | 15 |
| 31 | Positions, intensities and line shape parameters for the 1â†0 bands of CO isotopologues. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 218, 203-230. | 2.3 | 14 |
| 32 | Assignment and modelling of 12CH4 spectra in the 5550â€“5695, 5718â€“5725 and 5792â€“5814Âcmâ¯1 regions. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 219, 323-332. | 2.3 | 13 |
| 33 | A multispectrum analysis of the Î½2 band of H12C14N: Part II. Theoretical calculations of self-broadening, self-induced shifts, and their temperature dependences. Journal of Molecular Spectroscopy, 2005, 231, 85-95. | 1.2 | 11 |
| 34 | Temperature dependences of N2-broadening and shift coefficients in the Î½6 perpendicular band of 12CH3D. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 163, 120-141. | 2.3 | 11 |
| 35 | Multispectrum analysis of air-broadened spectra in the Î½3 Q branch of 12CH4. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 206, 409-429. | 2.3 | 7 |
| 36 | Pseudoline parameters to represent n-butane (n-C4H10) cross-sections measured in the 7â€“15ÂÂµm region for the Titan atmosphere. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 251, 107011. | 2.3 | 6 |

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|---|---|---|---|
| 37 | The Î½4, Î½9, Î½10 and Î½6+Î½11 bands of 12CH313CH3 between 1345 and 1557cmâ¯1. Journal of Molecular Spectroscopy, 2014, 302, 36-49. | 1.2 | 5 |
| 38 | Line positions and intensities for the Î½12 band of 13C12CH6. Journal of Molecular Spectroscopy, 2014, 301, 28-38. | 1.2 | 4 |
| 39 | Supplementary files for pressure-induced line shifts in the 1-0 and 2-0 bands of HF and in the 2-0 bands of H35Cl and H37Cl. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 227, 1-3. | 2.3 | 0 |