

Christof Maul

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8610156/publications.pdf>

Version: 2024-02-01

85

papers

1,227

citations

331538

21

h-index

434063

31

g-index

86

all docs

86

docs citations

86

times ranked

635

citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Photo induced three body decay. International Reviews in Physical Chemistry, 1997, 16, 1-79. | 0.9 | 109 |
| 2 | Imaging chemical reactions – 3D velocity mapping. International Reviews in Physical Chemistry, 2009, 28, 607-680. | 0.9 | 72 |
| 3 | Aspects of Photoinduced Molecular Three-Body Decay. Journal of Physical Chemistry A, 2000, 104, 2531-2541. | 1.1 | 47 |
| 4 | High resolution analysis of the (111) vibrational state of SO ₂ . Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 144, 1-10. | 1.1 | 46 |
| 5 | High resolution ro-vibrational analysis of interacting bands $\tilde{\nu}_2$ 4, $\tilde{\nu}_2$ 7, $\tilde{\nu}_2$ 10, and $\tilde{\nu}_2$ 12 of 13C2H4. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 151, 224-238. Study of the high resolution FTIR spectrum of C_2H_4 . | 1.1 | 46 |
| 6 | Precise ro-vibrational analysis of molecular bands forbidden in absorption: The $\tilde{\nu}_2$ 1/2 band of 13C2H4. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 151, 224-238. in the region of 1300–1450 cm ⁻¹ : The $\tilde{\nu}_2$ 1/2 band of 13C2H4. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 151, 224-238. | 1.1 | 46 |
| 7 | Spin selectivity in the ultraviolet photodissociation of phosgene. Journal of Chemical Physics, 1995, 102, 3238-3247. | 1.2 | 36 |
| 8 | Precise ro-vibrational analysis of molecular bands forbidden in absorption: The $\tilde{\nu}_2$ 1/2 band of 13C2H4. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 151, 224-238. | 1.1 | 36 |
| 9 | Intermediate state polarization in multiphoton ionization of HCl. Journal of Chemical Physics, 2006, 125, 034310. | 1.2 | 35 |
| 10 | Re-analysis of the high resolution FTIR spectrum of C2H2D2-cis in the region of 1280–1400 cm ⁻¹ . Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 170, 69-82. | 1.1 | 35 |
| 11 | Photoionization and photodissociation of HCl(B $\tilde{\Sigma}^+$ +1,J=0) near 236 and 239 nm using three-dimensional ion imaging. Journal of Chemical Physics, 2006, 124, 224324. | 1.2 | 34 |
| 12 | Photodissociation dynamics of HN ₃ . The N ₃ fragment internal energy distribution. Chemical Physics Letters, 1993, 202, 108-114. | 1.2 | 33 |
| 13 | Three-dimensional imaging technique for direct observation of the complete velocity distribution of state-selected photodissociation products. Review of Scientific Instruments, 2002, 73, 1856-1865. | 0.6 | 32 |
| 14 | Photodissociation dynamics of OCIO: O(3PJ) state and energy distributions. Journal of Chemical Physics, 1997, 107, 10582-10591. | 1.2 | 26 |
| 15 | Photoinduced Near Ultraviolet Three Body Decay of Phosgene. Journal of Physical Chemistry A, 1997, 101, 6619-6632. | 1.1 | 26 |
| 16 | Ro-vibrational analysis of the hot bands of 13C2H4: $\tilde{\nu}_2$ 1/2 band of 13C2H4. Journal of Molecular Spectroscopy, 2015, 317, 32-40. | 0.4 | 26 |
| 17 | High resolution analysis of C2D4 in the region of 600–1150 cm ⁻¹ . Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 182, 55-70. | 1.1 | 26 |
| 18 | High-resolution spectroscopy and global analysis of CF ₄ rovibrational bands to model its atmospheric absorption. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 201, 75-93. | 1.1 | 25 |

| # | ARTICLE | | IF | CITATIONS |
|----|--|--|-----|-----------|
| 19 | Photodissociation dynamics of SOCl ₂ . Physical Chemistry Chemical Physics, 2005, 7, 301-309. | | 1.3 | 22 |
| 20 | Three-dimensional velocity map imaging: Setup and resolution improvement compared to three-dimensional ion imaging. Review of Scientific Instruments, 2009, 80, 083301. | | 0.6 | 22 |
| 21 | High-resolution spectroscopy and analysis of the $\frac{1}{2}\langle\text{sub}\rangle 3\langle/\text{sub}\rangle / 2\frac{1}{2}\langle\text{sub}\rangle 4\langle/\text{sub}\rangle$ dyad of CF ₄ . Molecular Physics, 2011, 109, 2273-2290. | | 0.8 | 22 |
| 22 | Evidence for the onset of three-body decay in photodissociation of vibrationally excited CHFCI ₂ . Journal of Chemical Physics, 2001, 114, 9033-9039. | | 1.2 | 20 |
| 23 | Photodissociation dynamics of phosgene: New observations by applying a three-dimensional imaging technique. Journal of Chemical Physics, 2002, 116, 2803-2810. | | 1.2 | 18 |
| 24 | Competitive channels in the photodissociation of thionyl chloride. Physical Chemistry Chemical Physics, 2002, 4, 2932-2940. | | 1.3 | 18 |
| 25 | Proton formation dynamics in the REMPI[2+n] process via the F ¹² and F ¹³ Rydberg states of HCl investigated by three-dimensional velocity mapping. Journal of Chemical Physics, 2010, 133, 024301. | | 1.2 | 18 |
| 26 | Competing dissociation channels in the photolysis of S ₂ Cl ₂ at 235 nm. Journal of Chemical Physics, 2002, 117, 4214-4219. | | 1.2 | 15 |
| 27 | Photodissociation of CS ₂ Cl ₂ at 235 nm: Kinetic energy distributions and branching ratios of Cl atoms and CS ₂ radicals. Journal of Chemical Physics, 2002, 117, 1123-1129. | | 1.2 | 15 |
| 28 | Photodissociation dynamics of carbonyl chloride fluoride and its implications for phosgene three body decay. Physical Chemistry Chemical Physics, 1999, 1, 1441-1446. | | 1.3 | 14 |
| 29 | An experimental study of interaction-induced effects in the IR spectra of H ₂ Xe gas mixtures. Molecular Physics, 2006, 104, 2685-2690. | | 0.8 | 14 |
| 30 | Dynamics of vibrationally mediated photodissociation of CH ₃ CFCI ₂ . Journal of Chemical Physics, 2001, 115, 6418-6425. | | 1.2 | 13 |
| 31 | Spectral line parameters in the (3 $\hat{\nu}$) overtone band of the HI molecule and line-mixing in the band head. Journal of Molecular Spectroscopy, 2005, 230, 87-92. | | 0.4 | 13 |
| 32 | Ultraviolet photolysis of formyl fluoride: the F+HCO product channel. Physical Chemistry Chemical Physics, 1999, 1, 767-772. | | 1.3 | 12 |
| 33 | Non-invasive and isotope-selective laser-induced fluorescence spectroscopy of nitric oxide in exhaled air. Journal of Breath Research, 2007, 1, 026003. | | 1.5 | 12 |
| 34 | First high resolution study of the interacting $\frac{1}{2}\langle\text{sub}\rangle 8 + \frac{1}{2}\langle\text{sub}\rangle 10$, $\frac{1}{2}\langle\text{sub}\rangle 6 + \frac{1}{2}\langle\text{sub}\rangle 10$, $\frac{1}{2}\langle\text{sub}\rangle 6 + \frac{1}{2}\langle\text{sub}\rangle 7$ bands and re-analysis of the $\frac{1}{2}\langle\text{sub}\rangle 7 + \frac{1}{2}\langle\text{sub}\rangle 8$ band of trans-d ₂ -ethylene. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 184, 76-88. First high resolution analysis of the $\frac{1}{2}\langle\text{sub}\rangle 1$, $\frac{1}{2}\langle\text{sub}\rangle 3$, and $\frac{1}{2}\langle\text{sub}\rangle 5$ bands of trans-d ₂ -ethylene. | | 1.1 | 12 |
| 35 | Study of resonance interactions in polyatomic molecules on the basis of highly accurate experimental data: Set of strongly interacting Bands | | 1.1 | 12 |
| 36 | data. Set of strongly interacting Bands | | 1.1 | 11 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Excited state dynamics of Cl ₂ O in the near ultraviolet. Journal of Chemical Physics, 2002, 117, 2141-2150. | 1.2 | 10 |
| 38 | First high resolution analysis of the Cl_2O molecule. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 179, 187-197. | 1.1 | 10 |
| 39 | Extended analysis of the high resolution FTIR spectra of H ₂ S (M=32,33,34,36) in the region of the bending fundamental band: The $\tilde{\nu}_{12}$ and $2\tilde{\nu}_{12}\tilde{\nu}_{22}-\tilde{\nu}_{12}$ bands: Line positions, strengths, and pressure broadening widths. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 216, 76-98. | 1.1 | 10 |
| 40 | Pressure broadening and shifting parameters for the spectral lines in the fundamental vibration-rotation bands of HBr and HI in mixtures with rare gases. Journal of Molecular Spectroscopy, 2007, 243, 155-161. | 0.4 | 9 |
| 41 | First high resolution analysis of the $\tilde{\nu}_{12}$ and $3\tilde{\nu}_{12}+2\tilde{\nu}_{22}-\tilde{\nu}_{12}$ bands of S_2O_2 . Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 202, 1-5. | 1.1 | 9 |
| 42 | Photoionization of NO(A $2\tilde{\Sigma}^+$, v=0,N) at 226 nm: ion-recoil momentum spectroscopy. Chemical Physics Letters, 2004, 390, 50-54. | 1.2 | 8 |
| 43 | Photodissociation Dynamics of Cl ₂ O: Interpretation of Electronic Transitions. Journal of Physical Chemistry A, 2004, 108, 7954-7964. | 1.1 | 8 |
| 44 | First study of the ro-vibrational structure of the g-symmetry vibrational states of C ₂ D ₄ from the analysis of hot bands: The $\tilde{\nu}_{12}+\tilde{\nu}_{10}-\tilde{\nu}_{12}$ and $\tilde{\nu}_{12}+2\tilde{\nu}_{12}-\tilde{\nu}_{12}$ bands. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 187, 178-189. | 1.1 | 8 |
| 45 | The torsional fundamental band and high-J rotational spectra of the ground, first and second excited torsional states of acetone. Journal of Molecular Spectroscopy, 2019, 363, 111169. | 0.4 | 8 |
| 46 | State and energy characterisation of fluorine atoms in the A band photodissociation of F ₂ . Chemical Physics Letters, 1999, 305, 319-326. | 1.2 | 7 |
| 47 | Recoil velocity-dependent spin-orbit state distribution of chlorine photofragments. Chemical Physics, 2004, 301, 213-224. | 0.9 | 7 |
| 48 | Broadening and shifting coefficients of rotation-vibrational lines in the fundamental and first overtone bands of HCl and HBr induced by oxygen and air. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 130, 296-303. | 1.1 | 7 |
| 49 | Ethylene-1- ¹³ C (13C ₂ H ₄): First analysis of the $\tilde{\nu}_{12}$, $\tilde{\nu}_{13}$ and $2\tilde{\nu}_{12}-\tilde{\nu}_{10}$ bands and re-analysis of the $\tilde{\nu}_{12}-\tilde{\nu}_{12}$ band and of the ground vibrational state. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 187, 403-413. | 1.1 | 7 |
| 50 | State-Resolved Photofragmentation of [ClNO] _n van der Waals Clusters in a Supersonic Jet. Journal of Physical Chemistry A, 1999, 103, 1929-1938. | 1.1 | 6 |
| 51 | Pressure broadening and shifting parameters for the spectral lines in the first overtone vibration-rotation bands of HBr and HI in mixtures with rare gases. Journal of Molecular Spectroscopy, 2009, 253, 20-24. | 0.4 | 6 |
| 52 | Extended analysis of the FTIR high-resolution spectrum of D ₂ S in the region of the $\tilde{\nu}_{12}$ band. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 224, 460-473. | 1.1 | 6 |
| 53 | Experimental line strengths of the $\tilde{\nu}_{12}$ band of H ₂ S in comparison with the results of variational calculation and HITRAN database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 212, 106812. | 1.1 | 6 |
| 54 | Complete characterization of the constrained geometry bimolecular reaction O([sup 1]D)+N([sub 2]O)†NO+NO by three-dimensional velocity map imaging. Journal of Chemical Physics, 2009, 131, 054307. | 1.2 | 5 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | On the ultraviolet absorption of nitrous oxide and its van der Waals complexes. <i>Journal of Molecular Spectroscopy</i> , 2009, 256, 80-85. | 0.4 | 5 |
| 56 | Measurement of the differential cross section of the photoinitiated reactive collision of O(D1)+D2 using only one molecular beam: A study by three dimensional velocity mapping. <i>Journal of Chemical Physics</i> , 2010, 132, 244308. | 1.2 | 5 |
| 57 | 3-D Imaging technique – observation of the three-dimensional product momentum distribution. , 2003, , 138-164. | | 4 |
| 58 | Laser-induced fluorescence spectroscopy of $^{14}\text{N}^{18}\text{O}$ and its application to breath analysis. <i>Isotopes in Environmental and Health Studies</i> , 2009, 45, 59-67. | 0.5 | 4 |
| 59 | Nitrogen-induced broadening and shifts of rotation-vibrational lines in the fundamental, first, second and third overtone bands of Hl. <i>Journal of Molecular Spectroscopy</i> , 2011, 265, 69-73. | 0.4 | 4 |
| 60 | Multiphoton Ionization and Fragmentation of Hydrogen Chloride: A Diatomic Still Good for a Surprise. <i>Journal of Atomic, Molecular, and Optical Physics</i> , 2011, 2011, 1-9. | 0.5 | 4 |
| 61 | Extended analysis of FTIR high resolution spectra of HD32S and HD34S in the region of the $\tilde{\nu}_{1/2}$ band: Positions and strengths of individual lines. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2019, 225, 286-300. | 1.1 | 4 |
| 62 | Extended FTIR high resolution analysis of hydrogen sulfide in the region of the second hexad: Line positions and ro-vibrational energies of H2MS (M=32,33,34). <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2020, 240, 106710. | 1.1 | 4 |
| 63 | Extended high resolution analysis of the second triad of D232S, D233S and D234S. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2020, 245, 106879. | 1.1 | 4 |
| 64 | Competition between two- and three-body decay of Cl2O. <i>Physics and Chemistry of the Earth, Part C: Solar, Terrestrial and Planetary Science</i> , 2001, 26, 513-517. | 0.2 | 3 |
| 65 | Measurement of Three-Dimensional Velocity Distributions of the Products of Cl2, NO, and HCl Photodissociation or Photoionization. <i>Doklady Physical Chemistry</i> , 2005, 402, 96-100. | 0.2 | 3 |
| 66 | Direct observation of the three-dimensional velocity distributions of Cl(2 P 3/2,1/2) atoms in the photodissociation of selected chlorides. <i>Doklady Physical Chemistry</i> , 2006, 407, 72-76. | 0.2 | 3 |
| 67 | Ultra-sensitive detection of nitric oxide isotopologues. <i>Physica Scripta</i> , 2009, 80, 048122. | 1.2 | 3 |
| 68 | Spectral line parameters in the ($4\tilde{\nu}_0$) overtone band and the dipole moment function of Hl. <i>Journal of Molecular Spectroscopy</i> , 2009, 256, 75-79. | 0.4 | 3 |
| 69 | Nitrogen-induced broadening and shift coefficients of rotation-vibrational lines in the fundamental and first overtone bands of HCl and HBr. <i>Journal of Molecular Spectroscopy</i> , 2012, 282, 9-13. | 0.4 | 3 |
| 70 | Double-arm three-dimensional ion imaging apparatus for the study of ion pair channels in resonance enhanced multiphoton ionization. <i>Review of Scientific Instruments</i> , 2016, 87, 023107. | 0.6 | 3 |
| 71 | Study of highly excited ro-vibrational states of S18O2 from hot transitions: The bands $\tilde{\nu}_1\tilde{\nu}_1+\tilde{\nu}_2\tilde{\nu}_2+\tilde{\nu}_3\tilde{\nu}_3$, $2\tilde{\nu}_1\tilde{\nu}_1+\tilde{\nu}_2\tilde{\nu}_2$, and $2\tilde{\nu}_2\tilde{\nu}_2+\tilde{\nu}_3\tilde{\nu}_3$. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2017, 196, 159-164. ³ | | |
| 72 | Microwave and FIR spectroscopy of dimethylsulfide in the ground, first and second excited torsional states. <i>Journal of Molecular Structure</i> , 2020, 1200, 127114. | 1.8 | 3 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 73 | Comprehensive ro-vibrational analysis of deuterated hydrogen sulfide in the region of the $\tilde{1}\frac{1}{2}$, $2\tilde{1}\frac{1}{2}$ and $2\tilde{1}\frac{1}{2}\tilde{1}\frac{1}{2}$ bands: The D232S, D234S, and D233S isotopologues. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 252, 107106. | 1.1 | 3 |
| 74 | Simultaneous imaging of both product ions: exploring gateway states for HCl as a benchmark molecule. Physical Chemistry Chemical Physics, 2014, 16, 19741-19746. Line strength analysis of the second overtone $\Delta \tilde{1}\frac{1}{2}$ | 1.3 | 2 |
| 75 | $\text{xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"} \\ \text{altimg}=\text{"si3.svg"} <\text{mml:mrow}> <\text{mml:mn}>3 </\text{mml:mn}> <\text{mml:msub}> <\text{mml:mi}>\tilde{1}\frac{1}{2} </\text{mml:mi}> <\text{mml:mn}>2 </\text{mml:mn}> <\text{mml:msub}> </\text{mml:msub}> \\ \text{band of D} <\text{mml:math}> \text{xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"} \\ \text{altimg}=\text{"si71.svg"} <\text{mml:msubsup}> <\text{mml:mrow}> <\text{mml:mn}>2 </\text{mml:mn}> <\text{mml:mn}>3 </\text{mml:mn}> </\text{mml:msubsup}> </\text{mml:math}> S. \text{ Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 288, 108275.}$ | 1.1 | 2 |
| 76 | Extreme high rotational excitation of ClO. PhysChemComm, 2001, 4, 102. | 0.8 | 1 |
| 77 | Secondary Electron and Negative-Ion Emission from Metal Surface under the Bombardment by Positive Ions (H+, Cl+, HCl+). Bulletin of the Lebedev Physics Institute, 2018, 45, 303-307. | 0.1 | 1 |
| 78 | Ultraviolet photodissociation dynamics of PCl3 at 235 nm: three-dimensional ion imaging and theoretical analysis. Physical Chemistry Chemical Physics, 2021, 23, 13583-13593. Line strength, width and shift analysis of the $\Delta \tilde{1}\frac{1}{2}$ | 1.3 | 1 |
| 79 | $\text{xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"} \\ \text{altimg}=\text{"si18.svg"} <\text{mml:mrow}> <\text{mml:mn}>2 </\text{mml:mn}> <\text{mml:msub}> <\text{mml:mi}>\tilde{1}\frac{1}{2} </\text{mml:mi}> <\text{mml:mn}>2 </\text{mml:mn}> <\text{mml:msub}> </\text{mml:msub}> <\text{mml:math}> \text{xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"} \\ \text{altimg}=\text{"si1.svg"} <\text{mml:mrow}> <\text{mml:msub}> <\text{mml:mi}>\tilde{1}\frac{1}{2} </\text{mml:mi}> <\text{mml:mn}>2 </\text{mml:mn}> <\text{mml:msub}> <\text{mml:mo}> \text{Expanded ro-vibrational analysis of the dyad region of CD} <\text{mml:math}> \text{is} <\text{mml:mn}>4 </\text{mml:mn}> </\text{mml:msub}> </\text{mml:mrow}> </\text{mml:math}>$ | 1.1 | 1 |
| 80 | $\text{xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"} \text{ altimg}=\text{"si2.svg"} <\text{mml:msub}> <\text{mml:mrow}> <\text{mml:mn}>4 </\text{mml:mn}> </\text{mml:msub}> </\text{mml:math}>: \text{ Line positions and energy levels. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 288, 108275.}$ | 1.1 | 1 |
| 81 | Photodissociation Dynamics of SOCl2.. ChemInform, 2005, 36, no. | 0.1 | 0 |
| 82 | Is spin-orbit state branching in the photodissociation of CCl4 isotope specific?. Journal of Photochemistry and Photobiology A: Chemistry, 2007, 187, 255-257. | 2.0 | 0 |
| 83 | Three-dimensional ion imaging study of PCl3 photodissociation at 235 nm. AIP Conference Proceedings, 2020, , . | 0.3 | 0 |
| 84 | Self-broadening and Shifting Coefficients for the Spectral Lines in the First Overtone Band of HBr. Optics and Spectroscopy (English Translation of Optika i Spektroskopiya), 2022, 130, 1-9. | 0.2 | 0 |
| 85 | High-resolution spectroscopy of C2H3D: Line positions and energy structure of the strongly interacting $\Delta \tilde{1}\frac{1}{2}$ $\text{altimg}=\text{"si509.svg"} <\text{mml:mrow}> <\text{mml:msub}> <\text{mml:mn}> <\text{mml:mi}>\tilde{1}\frac{1}{2} </\text{mml:mi}> </\text{mml:mrow}> <\text{mml:mrow}> <\text{mml:mn}>10^Q </\text{mml:mrow}> \text{ Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 279, 121401.}$ | 2.0 | 0 |