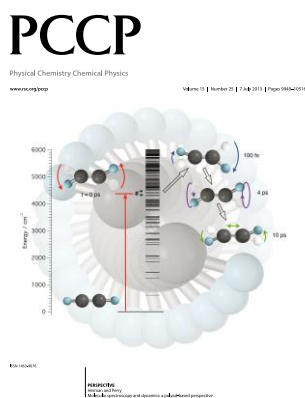


LIST OF PUBLICATIONS

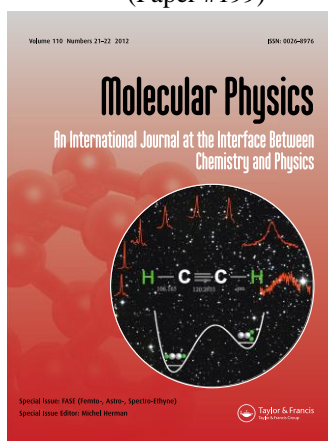
(for an overview of the full CV, see **short CV** file from <https://squares.ulb.be/people/mherman/main.html>)

Peer reviewed publications in international scientific journals

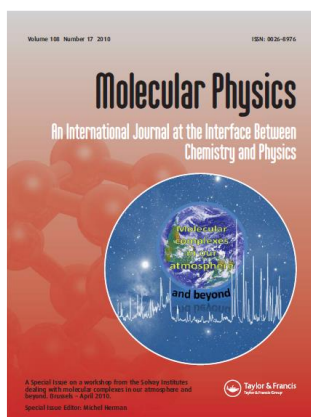
(Paper #204)



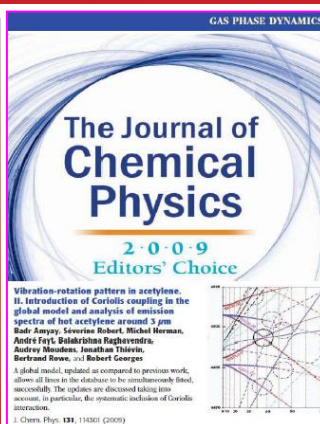
(Paper #199)



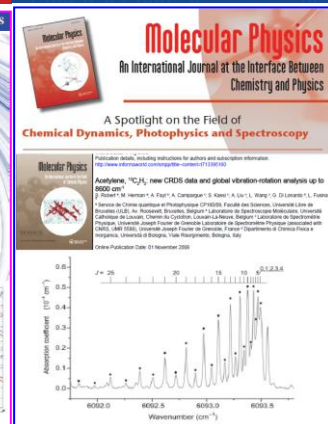
(Paper #176)



(Paper #174)

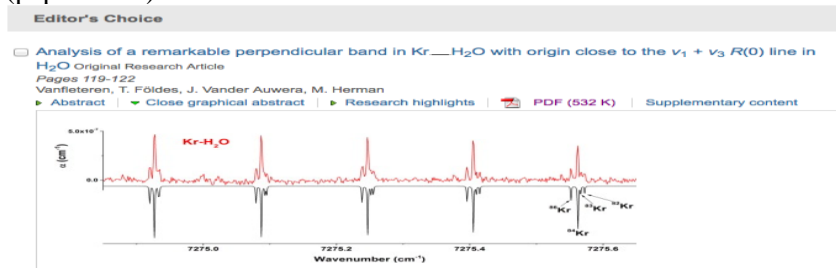


(Paper #167)



(Paper #162)

(paper #212)



2024

232. “Improvements on the FANTASIO set-up and new spectroscopic results concerning the Ar-H₂O van der Waals complex in the 2 OH overtone range.”
R. Glorieux, B.M. Hays, A.S. Bogomolov, M. Herman, T. Vanfleteren, N. Moazzen-Ahmadi, and C. Lauzin”
Molecular Physics, DOI:10.1080/00268976.2024.2413417 (2024).

2023

231. “Understanding the high-resolution spectral signature of the N₂-H₂O van der Waals complex in the 2OH stretch region”
R. Glorieux, B.M. Hays, A.S. Bogomolov, M. Herman, T. Vanfleteren, N. Moazzen-Ahmadi, and C. Lauzin”
Journal of Chemical Physics, DOI: 10.1063/5.0150823 (2023).

2021

230. “Spectroscopic study of the tunnelling dynamics in N₂-water observed in the O-D stretch region”
R. Glorieux, C. Lauzin, A. Barclay, M. Herman, and N. Moazzen-Ahmadi
Journal of Chemical Physics, DOI: 10.1063/5.0071732 (2021).
229. “The rotationally resolved symmetric 2OH excitation in H₂O-CO₂ observed using pulsed supersonic expansion and CW-CRDS”
A.S. Bogomolov, A. Roucou, R. Bejjani, M. Herman, N. Moazzen-Ahmadi, and C. Lauzin
Chemical Physics Letters, 774, 138606 (2021).

2019

228. “High-resolution spectroscopic study of the H₂O-CO₂ van der Waals complex in the 2OH overtone range”
C. Lauzin, A.C. Imbreckx, T. Foldes, T. Vanfleteren, N. Moazzen-Ahmadi, and M. Herman
Molecular Physics, 118, 1-9 (2019).

2018

227. “Rovibrational laser control targeting a dark state in acetylene. Simulation in the N_s=1, N_r=5 polyad.”
L. Santos, M. Herman, M. Desouter-Lecomte, and N. Vaeck
Molecular Physics, 116, 2213-2225 (2018.)

2017

226. “Experimental and theoretical investigations of H₂O-Ar”
T. Vanfleteren, T. Földes, M. Herman, J. Liévin, J. Loreau, and L. Coudert
Journal of Chemical Physics, 147, 014302/1-014302/14 (2017).
225. “Overtone, 2OH spectroscopy of H₂O-Kr”
T. Vanfleteren, T. Földes, A. Rizopoulos, and M. Herman
Journal of Molecular Spectroscopy, 342, 92-99 (2017).
224. “The high resolution spectrum of ¹⁵NH₃ in the far-infrared: Rotation-Inversion

transitions in the ground, $v_2=1$, 2 and $v_4=1$ states”

L. Fusina, G. Di Lonardo, E. Vane, A. Predoi-Cross, H. Rozario, and M. Herman
Journal of Quantitative Spectroscopy and Radiative Transfer, 203, 417-424 (2017).

2016

223. “Overtone spectroscopy of molecular complexes containing small polyatomic molecules”
M. Herman, T. Földes, K. Didriche, C. Lauzin, and T. Vanfleteren
International Reviews in Physical Chemistry, 35, 243-295 (2016).
Review on personal invitation
222. “Vibration-rotation spectroscopic database on acetylene, $X^1\Sigma_g^+$ ($^{12}\text{C}_2\text{H}_2$)”
B. Amyay, A. Fayt, M. Herman, and J. Vander Auwera
Journal of Physical and Chemical Reference Data, 45, 023103/1-19 (2016).
221. “High resolution room temperature and jet-cooled spectroscopic investigation of $^{15}\text{NH}_3$ in the v_1+v_3 band region (1.51 micron)”
T. Földes, T. Vanfleteren, A. Rizopoulos, M. Herman, T.P. Softley, G. Di Lonardo, and L. Fusina
Journal of Quantitative Spectroscopy and Radiative Transfer, 179, 112-125 (2016).

2015

220. “Overtone, 2NH (v_1+v_3) spectroscopy of $^{15}\text{NH}_3\text{-Ar}$ ”
T. Vanfleteren, T. Földes, M. Herman, G. Di Lonardo and L. Fusina
Journal of Molecular Spectroscopy, 318, 107-109 (215).
219. “The Water Dimer Investigated in the 2OH Spectral Range Using Cavity Ring-Down Spectroscopy”
T. Vanfleteren, N. Suas-David, T. Földes, S. Kassi, R. Georges, and M. Herman
Journal of Physical Chemistry A, 119, 10022-10034 (2015).
Paper on personal invitation
218. “A test of optimal laser impulsion for controlling population within the $N_s=1$, $N_r=5$ polyad of $^{12}\text{C}_2\text{H}_2$ ”
L. Santos, N. Iacobellis, M. Herman, D.S. Perry, M. Desouter-Lecomte, and N. Vaeck
Molecular Physics, 113, 4000-4006 (2015).
217. “Foreword: Atomic and Molecular Collision Mechanisms”
T.P. Softley, M. Herman and N. Vaeck
Molecular Physics, 113, 3917 (2015).
216. “Overtone, 2NH (v_1+v_3) spectroscopy of $\text{NH}_3\text{-Ar}$ and $\text{NH}_3\text{-Kr}$ ”
T. Vanfleteren, T. Földes, J. Liévin and M. Herman
Molecular Physics, 113, 3934-3945 (2015).
215. “Complementary cavity-enhanced spectrometers to investigate the $\text{OH}+\text{CH}$ combination band in *trans*-formic acid.”
D. Golebiowski, T. Földes, T. Vanfleteren, M. Herman, and A. Perrin
Journal of Chemical Physics, 143, 014201-1/7 (2015).
214. “Analysis of a perpendicular band in $\text{Ar-H}_2\text{O}$ with origin close to the v_1+v_3 , $R(0)$ line in H_2O .”
T. Vanfleteren, T. Földes, and M. Herman
Chemical Physics Letters, 627, 36-38 (2015).
213. “Analysis of a remarkable perpendicular band in $\text{Kr-H}_2\text{O}$ with origin close to the v_1+v_3 , $R(0)$ line in H_2O ”
T. Vanfleteren, T. Földes, J. Vander Auwera and M. Herman

Editor's choice article

- Chemical Physics Letters, 618, 119-122 (2015).
212. "High-resolution, near-infrared cw-CRDS, and *ab initio* investigations of N₂O-HDO
T. Földes, C. Lauzin, T. Vanfleteren, M. Herman, J. Liévin, and K. Didriche
Molecular Physics, 113, 473-482 (2015).

2014

211. "A rotationally resolved (2OH) overtone band in the water dimer (H₂O)₂"
T. Földes, T. Vanfleteren, and M. Herman
Journal of Chemical Physics, 141, 111103-1/4 (2014).
210. "High sensitivity (Femto-FT-CEAS) spectra of carbonyl sulphide between 6200 and 8200 cm⁻¹, and new energy pattern in the global rovibrational analysis of ¹⁶O¹²C³²S"
D. Golebiowski, X. de Ghellinck d'Elseghem Vaernewijck, M. Herman, and A. Fayt
Journal of Quantitative Spectroscopy and Radiative Transfer, 149, 184-203 (2014).
209. "Special issue: 23rd Colloquium on High Resolution Molecular Spectroscopy"
T.P. Softley, A.G. Csazar, P. De Natale, M. Herman, and M. Quack
Molecular Physics, <http://dx.doi.org/10.1080/00268976.2014.943982> (2014).
208. "Low temperature high-resolution absorption spectrum of ¹⁴NH₃ in the ν₁+ν₃ band region (1.51 μm)"
T. Földes, D. Golebiowski, M. Herman, T.P. Softley, G. Di Lonardo, and L. Fusina
Molecular Physics, 112, 2407-2418 (2014).

2013

207. Ab initio intermolecular potential of Ar-C₂H₂ refined using high-resolution spectroscopic data"
C. Lauzin, L. Coudert, M. Herman, and J. Liévin
Journal of Physical Chemistry A, 117, 13767-13774 (2013).
206. "Overtone (2NH) spectroscopy of NH₃-Ar"
K. Didriche, T. Földes, T. Vanfleteren, and M. Herman
Journal of Chemical Physics 138, 181101 1/3 (2013).
205. "Molecular spectroscopy and dynamics: A polyad-based perspective"
M. Herman and D.S. Perry
Perspective review on personal invitation and cover paper
Physical Chemistry and Chemical Physics, 15, 9949-10516 (2013).
204. "Femto-FT-CEAS investigation of rare acetylene isotopologues (H¹²C¹³CD, D¹²C¹³CH and D¹²C¹³CD)"
M. Villa, L. Fusina, G. Di Lonardo, X. De Ghellinck d'Elseghem Vaernewijck, and M. Herman
Molecular Physics, 111, 1972-1976 (2013).
203. "¹⁶O¹²C¹⁷O and ¹⁸O¹²C¹⁷O spectroscopy in the 1.20 – 1.25 μm region"
D. Golebiowski, M. Herman, and O. Lyulin
Canadian Journal of Physics, 91, 963-965 (2013).

2012

202. "Femto-FT-CEAS applied to carbon disulfide around 1.54 μm"
X. de Ghellinck d'Elseghem Vaernewijck, P. KongoloTshikala, M. Lepère, and M. Herman
Journal of Molecular Spectroscopy, 282, 27-29 (2012).
201. "FASE (Femto-, Astro-, Spectro-Ethyne)", foreword"
M. Herman

- Molecular Physics 110, 2619-2620 (2012).
- Cover paper**
200. "Accurate ground-state potential energy surfaces of the HCCH-Kr and HCCH-Xe van der Waals complexes"
C. Lauzin, E. Cauët, J. Demaison, A. Stolle, M. Herman, and J. Liévin
Molecular Physics, 110, 2751-2760 (2012).
199. "The 2CH excitation band in C₂H₂-N₂O and 2CH+torsion combination bands in C₂H₂-N₂O and C₂H₂-CO₂"
K. Didriche, T. Földes, C. Lauzin, and M. Herman
Molecular Physics 110, 2773-2779 (2012).
198. "Special issue: 22nd Colloquium on High Resolution Molecular Spectroscopy"
T.P Softley, V. Boudon, P. De Natale, M. Herman, and M. Quack
Molecular Physics 110, 2001-2002 (2012).
197. "¹⁷O¹²C¹⁷O and ¹⁸O¹²C¹⁷O spectroscopy in the 1.6 μm region"
X. de Ghellinck d'Elseghem Vaernewijck, S. Kassi and M. Herman
Molecular Physics 110, 2665-2671 (2012).
196. "The infrared spectrum of ¹³C₂H₂ in the 60 to 2600 cm⁻¹ region: bending states up to $v_4 + v_5 = 4$ "
A. Predoi-Cross, M. Herman, L. Fusina, and G. Di Lonardo
Molecular Physics 110, 2621-2632 (2012).
195. "Hierarchies of Intramolecular Vibration-Rotation Dynamical Processes in Acetylene up to 13,000 cm⁻¹"
D.S. Perry, J. Martens, B. Amyay, and M. Herman
Molecular Physics 110, 2687-2705 (2012).
194. "Experimental 2CH excitation in acetylene-containing van der Waals complexes"
K. Didriche, T. Földes, C. Lauzin, D. Golebiowski, J. Liévin, and M. Herman
Molecular Physics 110, 2781-2796 (2012).
193. "Femto-Fourier transform- cavity enhanced absorption spectroscopy in a supersonic expansion"
X. de Ghellinck d'Elseghem Vaernewijck, D. Golebiowski, and M. Herman
Molecular Physics, 110, 2735-2741 (2012).
192. "The infrared spectrum of propyne in the range 6200-6700 cm⁻¹"
L. Fusina, M. Villa, G. Nivellini, K. Didriche, X. de Ghellinck d'Elseghem Vaernewijck, and M. Herman
Chemical Physics 402, 14-21 (2012).
191. "The Far Infrared Spectrum of Trans-Formic Acid: An Extension up to 175 cm⁻¹"
A. Predoi-Cross, M. Herman, L. Fusina, and G. Di Lonardo
Journal of Quantitative Spectroscopy and Radiative Transfer, 113, 1134-1137 (2012).

2011

190. "High accuracy partition function and other thermodynamical properties of ¹²C₂H₂ over a broad temperature range"
B. Amyay, A. Fayt and M. Herman
Journal of Chemical Physics, 135, 234305/1-9 (2011).
189. "First principles potential for the acetylene dimer and refinement by fitting to experiments"
C. Leforestier, A. Tekin, G. Jansen, and M. Herman
Journal of Chemical Physics, 135, 234306/1-9 (2011).
188. "22nd Colloquium on high resolution molecular spectroscopy: Special issue dedicated to Gianfranco Di Lonardo"
T.P Softley, V. Boudon, P. De Natale, L. Fusina, M. Herman, and M. Quack
Molecular Physics, 109, 2069-2070 (2011).

187. “Cavity enhanced FTIR spectroscopy using a femto-OPO absorption source for recording overtone bands in $^{12}\text{C}^{17}\text{O}_2$ ”
X. de Ghellinck, S. Kassı, and M. Herman
Chemical Physics Letters, 514, 29-31 (2011).
186. “Cavity enhanced FTIR spectroscopy using a femto-OPO absorption source”
X. de Ghellinck, K. Didriche, C. Lauzin, A. Rizopoulos, M. Herman and S. Kassı
Molecular Physics, 109, 2173-2179 (2011).
185. “The 2009 edition of the GEISA spectroscopic database”
N. Jacquinet-Husson, L. Crepeau, R. Armante, C. Boutammıne, A. Chédin, N.A. Scott, C. Crevoisier, V. Capelle, C. Boone, N. Poulet-Crovisier, A. Barbe, A. Campargue, D. Chris Benner, Y. Benilan, B. Bézard, V. Boudon, L.R. Brown, L.H. Coudert, A. Coustenis, V. Dana, V.M. Devi, S. Fally, A. Fayt, J.-M. Flaud, A. Goldman, M. Herman, G.J. Harris, D. Jacquemart, A. Jolly, I. Kleiner, A. Kleinböhl, F. Kwabia-Tchana, N. Lavrentieva, N. Lacome, Li-Hong Xu, O.M. Lyulin, J.-Y. Mandin, A. Maki, S. Mikhailenko, C.E. Miller, T. Mishina, N. Moazzen-Ahmadi, H.S.P. Müller, A. Nikitin, J. Orphal, V. Perevalov, A. Perrin, D.T. Petkie, A. Predoi-Cross, C.P. Rinsland, J.J. Remedios, M. Rotger, M.A.H. Smith, K. Sung, S. Tashkun, J. Tennyson, R.A. Toth, A.-C. Vandaele, J. Vander Auwera.
Journal of Quantitative Spectroscopy & Radiative Transfer, 112, 2395-2445 (2011).
184. “Torsional excitation in the 2CH vibrational overtone of the $\text{C}_2\text{H}_2\text{-CO}_2$ and $\text{C}_2\text{H}_2\text{-N}_2\text{O}$ van der Waals complexes”
C. Lauzin, K. Didriche, T. Földes and M. Herman
Molecular Physics, 109, 2105-2109 (2011).
183. “High resolution overtone spectroscopy of the acetylene van der Waals dimer, $(^{12}\text{C}_2\text{H}_2)_2$.”
K. Didriche, C. Lauzin, T. Földes, D. Golebiowski, M. Herman, and C. Leforestier.
Physical Chemistry and Chemical Physics, 13, 14010-14018 (2011).
182. “Acetylene, $^{12}\text{C}_2\text{H}_2$: refined analysis of CRDS spectra around 1.52 microns”
B. Amyay, M. Herman, A. Fayt, A. Campargue, and S. Kassı
Journal of Molecular Spectroscopy, 267, 80-91 (2011).
181. “Comparison of the experimental, semi-experimental and *ab initio* equilibrium structures of acetylene”
J. Liévin, J. Demaison, M. Herman, A. Fayt, and C. Puzzarini
Journal of Chemical Physics, 134, 064119 1-8 (2011).
180. “The far-infrared spectrum of $^{12}\text{C}_2\text{HD}$ ”
A. Predoi-Cross, M. Herman, L. Fusina, and G. Di Lonardo
Molecular Physics, 109, 559–563 (2011).
179. “Radiative model for emission spectroscopy from optically thick laboratory acetylene samples at high temperature”
A. Moudens, R. Georges, A. Benidar, B. Amyay, M. Herman, A. Fayt, and B. Plez.
Journal of Quantitative Spectroscopy & Radiative Transfer, 112, 540-549 (2011).
178. “High resolution infrared spectroscopy of acetylene: theoretical background and research trends”
M. Herman
Handbook of high resolution spectroscopy, Wiley, 2011, (ISBN 978-0-470-06653-9). M. Quack and F. Merkt, editors, pp. 1993-2025.

Paper on personal invitation

2010

177. “A four-atom molecule at the forefront of spectroscopy, intramolecular dynamics and astrochemistry: acetylene”

- K. Didriche and M. Herman
 Chemical Physics Letters, 496, 1-7 (2010).
Frontiers article on personal invitation; Cover paper
176. "Foreword: Molecular complexes in our atmosphere and beyond"
 M. Herman and R.J. Saykally
 Molecular Physics, 108, 2153 (2010).
175. "The FANTASIO+ set-up to investigate jet-cooled molecules: Focus on overtone bands of acetylene dimers."
 K. Didriche, C. Lauzin, T. Foldès, X. de Ghellinck D'Elseghem Vaernewijck, and M. Herman.
 Molecular Physics, 108, 2155-2163 (2010).
Cover paper
174. "High resolution spectroscopy and preliminary global analysis of CH stretching vibrations of C₂H₄ in the 3000 and 6000 cm⁻¹ regions"
 M.-A. Lorono Gonzales, V. Boudon, M. Loëte, M. Rotger, M.-T. Bourgeois, K. Didriche, M. Herman, V.A. Kapitanov, Yu N. Ponomarev, A.A. Solodov, A.M. Solodoc, T.M. Petrova
 Journal of Quantitative Spectroscopy & Radiative Transfer, 111, 2265-2278 (2010).
173. "Foreword: Twenty First Colloquium on High Resolution Molecular Spectroscopy"
 P. De Natale, G. Di Lonardo, M. Herman, M. Quack, and T. Softley
 Molecular Physics, 108, 675-676 (2010).
172. "High resolution FTIR investigation of ¹²C₂H₂ in the FIR spectral range using synchrotron radiation"
 B. Amyay and M. Herman, A. Fayt, L. Fusina, and A. Predoi-Cross
 Chemical Physics Letters, 491, 17-19 (2010).
171. "The high resolution infrared spectrum of the ν₄ band of 1,1,1- trifluoro – ethane"
 A. Predoi-Cross, A. Ibrahim, M. Herman, L. Fusina, G. Nivellini and G. Di Lonardo
 Molecular Physics, 108, 2303-2307 (2010).
170. "Vibration-rotation alchemy in acetylene (¹²C₂H₂), X¹Σ_g⁺ at low vibrational excitation: From high resolution spectroscopy to fast intramolecular dynamics"
 D. Perry, A. Miller, B. Amyay, A. Fayt, and M. Herman
 Molecular Physics, 108, 1115-1132 (2010).
Paper on personal invitation
169. "Demonstration of cavity enhanced FTIR spectroscopy using a femtosecond laser absorption source"
 S. Kassi, K. Didriche, C. Lauzin, X. de Ghellinck, A. Rizopoulos, and M. Herman
 Spectrochimica Acta A 75, 142-145 (2010).

2009

168. "Vibration-rotation pattern in acetylene. II. Introduction of Coriolis coupling in the global model and analysis of emission spectra of hot acetylene around 3 microns"
 B. Amyay, S. Robert, M. Herman, A. Fayt, B. Raghavendra, A. Moudens, J. Thiévin, B. Rowe, and R. Georges
 Journal of Chemical Physics, 131, 114301-114314 (2009).
This paper was selected by the editors of the Journal of Chemical Physics as one of the few of the many notable JCP articles published in 2009 that present ground-breaking research
167. "The vibration-rotation energy pattern in acetylene: ¹³CH¹²CH up to 10 120 cm⁻¹"
 S. Robert, B. Amyay, A. Fayt, G. Di Lonardo, L. Fusina, F. Tamassia, and M. Herman
 Journal of Physical Chemistry A, 113, 13251-13259 (2009).
Paper on personal invitation

166. "Investigation of the C₂H₂-CO₂ van der Waals complex in the overtone range using CW-CRDS"
C. Lauzin, K. Didriche, J. Liévin, M. Herman and A. Perrin
Journal of Chemical Physics, 130, 204306/1-204306/7 (2009).
165. "The ¹²C₂H₂-Ar van der Waals complex"
C. Lauzin, K. Didriche, P. Macko, J. Demaison, J. Liévin, and M. Herman
Journal of Physical Chemistry A, 113, 2359-2369 (2009).
164. "Observation of the C₂H₂-N₂O van der Waals complex in the overtone range using CW-CRDS"
K. Didriche, C. Lauzin, P. Macko, M. Herman, and W.J. Lafferty
Chemical Physics Letters, 469, 35-37 (2009).

2008

163. "Acetylene, ¹²C₂H₂: new CRDS data and global vibration-rotation analysis up to 8600 cm⁻¹"
S. Robert, M. Herman, A. Fayt, A. Campargue, S. Kassi, A. Liu, L. Wang, G. Di Lonardo, and L. Fusina
Molecular Physics, 106, 2581-2605 (2008).
This paper was selected by the editors of Molecular Physics as one of the key MP articles published in 2008
162. "The FT absorption spectrum of ¹³CH¹²CH (III): Vibrational states in the range 6750 to 9500 cm⁻¹"
G. Di Lonardo, L. Fusina, F. Tamassia, A. Fayt, S. Robert, J. Vander Auwera, and M. Herman
Molecular Physics, 106, 1161-1169 (2008).
161. "Measured integrated band intensities and simulated line by line spectra for ¹²C₂HD between 25 and 2.5 μm, and new global vibration-rotation parameters for the bending vibrations"
A. Jolly, Y. Benilan, E. Cané, L. Fusina, F. Tamassia, A. Fayt, S. Robert, and M. Herman
Journal of Quantitative Spectroscopy and Radiative Transfer, 109, 2846-2856 (2008).
160. "On the role of molecular clustering on infrared absorption line shapes of acetylene in a supersonic expansion"
K. Didriche, C. Lauzin, P. Macko, W.J. Lafferty, R.J. Saykally, and M. Herman
Chemical Physics Letters, 463, 345-348 (2008).

2007

159. "High resolution spectroscopy of the 2CH band in the ¹²C₂H₂-Ar van der Waals complex"
P. Macko, C. Lauzin, and M. Herman
Chemical Physics Letters, 445, 113-116 (2007).
158. "The bending vibrations in ¹²C₂H₂ : Global vibration-rotation analysis"
S. Robert, M. Herman, J. Vander Auwera, G. Di Lonardo, L. Fusina, G. Blanquet, M. Lepère and A. Fayt
Molecular Physics, 105, 559-568 (2007)-Erratum.
157. "Anharmonic force field of cis- and trans-formic acid from high-level ab initio calculations, and analysis of resonance polyads"
J. Demaison, M. Herman, and J. Liévin
Journal of Chemical Physics, 126, 164305/1-164305/9 (2007).
156. "Rotational spectrum and structure of asymmetric dinitrogen trioxide, N₂O₃"
J. Demaison, M. Herman, J. Liévin, L. Margulès, and H. Mollendal
Journal of Molecular Spectroscopy, 244, 160-169 (2007).
155. « The Acetylene Saga »
M. Herman

- Molecular Physics, 105, 2217-2241 (2007).
Paper on personal invitation.
154. "The equilibrium OH bond length"
 J. Demaison, M. Herman and J. Liévin
 International Reviews in Physical Chemistry, 26, 391-420 (2007).
 153. "Perturbation activated transitions in the high resolution infrared spectrum of C₂H₆ : rotational constants and torsional splitting in the ground state"
 F. Lattanzi, C. di Lauro, V.M. Horneman, M. Herman, J. Vander Auwera
 Molecular Physics, 105, 761-768 (2007).
 152. "Equilibrium structure of sulfuric acid"
 J. Demaison, M. Herman, J. Liévin and H.D. Rudolph
 Journal of Physical Chemistry A, 111, 2602-2609 (2007).
 151. "Self-broadening coefficients and absolute line intensities in the $\nu_4 + \nu_5$ band of acetylene"
 M. Lepère, G. Blanquet, J. Walrand, J.P. Bouanich, M. Herman and J. Vander Auwera
 Journal of Molecular Spectroscopy, 242, 25-30 (2007).
 150. "The bending vibrations in ¹²C₂H₂ : Global vibration-rotation analysis"
 S. Robert, M. Herman, J. Vander Auwera, G. Di Lonardo, L. Fusina, G. Blanquet, M. Lepère and A. Fayt
 Molecular Physics, 105, 559-568 (2007).
 149. "FANTASIO : a versatile experimental set-up to investigate jet-cooled molecules"
 M. Herman, K. Didriche, D. Hurtmans, B. Kizil, P. Macko, A. Rizopoulos and P. Van Poucke
 Molecular Physics, 105, 843-851 (2007).
 148. "Vibration-rotation energy pattern in acetylene : ¹³CH¹²CH up to 6750 cm⁻¹"
 A. Fayt, S. Robert, G. Di Lonardo, L. Fusina, F. Tamassia and M. Herman
 Journal of Chemical Physics, 126, 114303/1-8 (2007).
 147. "Investigation of the shape of the R(0) absorption line in ν_3 , N₂O recorded from an axisymmetric supersonic free jet expansion"
 K. Didriche, P. Macko, M. Herman, A. Benidar and R. Georges
 Journal of Quantitative Spectroscopy & Radiative Transfer, 105, 128-138 (2007).
 146. "Infrared spectra of C₂H₂ under jet-cooled and para-H₂ matrix conditions"
 Y.C. Lee, V. Venkatesan, Y-P. Lee, P. Macko, K. Didriche and M. Herman
 Chemical Physics Letters, 435, 247-251 (2007).

2006

145. "The FT Absorption Spectrum of ¹³CH¹²CH (II) : rotational analysis of the range 9500 to 10000 cm⁻¹"
 G. Di Lonardo, L. Fusina, F. Tamassia, A. Fayt, S. Robert, J. Vander Auwera and M. Herman
 Molecular Physics, 104, 2617-2625 (2006).
144. "The FT Absorption Spectrum of ¹³CH¹²CH : rotational analysis of the vibrational states from 3800 to 6750 cm⁻¹"
 E. Cané, L. Fusina, F. Tamassia, A. Fayt, M. Herman, S. Robert and J. Vander Auwera
 Molecular Physics, 104, 515-526 (2006).
143. "Resolved Torsional Splittings in the ν_{18} and ν_{19} Bands of Propene"
 W.J. Lafferty, J.M. Flaud and M. Herman
 Journal of Molecular Structure, 780-781, 65-69 (2006).
142. "Absolute Line Intensity with FT-ICLAS : ¹²C₂H₂ near 12800 cm⁻¹"
 P. Macko and M. Herman
 Chemical Physics Letters, 417, 471-474 (2006).

2005-2000

141. "FT-Jet Spectroscopy : Vibrational Energy Transfer in N₂O"
M. Herman, K. Didriche, A. Rizopoulos and D. Hurtmans
Chemical Physics Letters, 414, 282-286 (2005).
140. "The Vibrational Energy Pattern in Acetylene VII : ¹²C¹³CH₂"
S. Robert, A. Fayt, G. Di Lonardo, L. Fusina, F. Tamassia and M. Herman
Journal of Chemical Physics, 123, 174302-174307 (2005).
139. "New Combination Bands in ¹²C¹³CH₂ Around 0.83 μm Recorded Using FT-ICLAS"
C. Depiesse, G. Di Lonardo, A. Fayt, L. Fusina, D. Hurtmans, S. Robert, F. Tamassia, J. Vander Auwera, A. Baldan and M. Herman.
Journal of Molecular Spectroscopy, 229, 137-139 (2005).
138. "Jet-Cooled and Room Temperature FTIR Spectra of the Dimer of Formic Acid in the Gas Phase"
R. Georges, M. Freytes, D. Hurtmans, I. Kleiner, J. Vander Auwera and M. Herman.
Chemical Physics, 305, 187-196 (2004).
137. "The Vibration-Rotation Spectrum of ¹²C₂HD : New Overtone Bands and Global Vibrational Analysis"
M. Herman, C. Depiesse, G. Di Lonardo, A. Fayt, L. Fusina, D. Hurtmans, S. Kassi, M. Mollabashi and J. Vander Auwera.
Journal of Molecular Spectroscopy, 228 (2004) 499-510.
136. "The IR Acetylene Spectrum in Hitran : Update and New Results"
D. Jacquemart, J.-Y. Mandin, V. Dana, C. Claveau, J. Vander Auwera, M. Herman, L.S. Rothman, L. Régalia-Jarlot and A. Barbe.
Journal of Quantum Spectroscopy and Radiative Transfer, 82 (2003) 363-382.
135. "Vibrational Spectroscopic Database on Acetylene, $\tilde{X}^1\Sigma_g^+$ (¹²C₂H₂, ¹²C₂D₂ and ¹³C₂H₂)."
M. Herman, A. Campargue, M.I. El Idrissi and J. Vander Auwera
Journal of Physical and Chemical Reference Data, 32 (2003) 921-1361.
134. "Fourier Transform-Intracavity Laser Absorption Spectroscopy : Sampling the Overtone Spectrum of ¹²C₂HD"
S. Kassi, C. Depiesse, M. Herman and D. Hurtmans
Molecular Physics, 101 (2003) 1155-1163.
133. "Vibrational State Densities in ¹²C₂H₂, ¹³C₂H₂ and ¹²C₂D₂, $\tilde{X}^1\Sigma_g^+$ "
M.I. El Idrissi, B. Zhilinskii, P. Gaspard and M. Herman
Molecular Physics, 101 (2003) 595-601.
132. "Torsional Line-Splittings in the (v₄+ v₈)- v₄ Hot Transitions of C₂H₆ between 1400 and 1510 cm⁻¹"
F. Lattanzi, C. di Lauro, M. Herman and J. Vander Auwera
Journal of Molecular Spectroscopy, 216 (2002) 308-314.
131. "New High-Resolution Analysis of the v₇ and v₉ Fundamental Bands of Trans-Formic Acid by IR Fourier Transform and Millimeterwave Spectroscopies"
A. Perrin, J.-M. Flaud, L. Margulès, J. Demaison, O. Baskakov, S.V. Sirota, M. Herman and J. Vander Auwera
Journal of Molecular Spectroscopy, 216 (2002) 203-213.
130. "Assignment of a Perturbation in the FT-ICLAS Spectrum of ¹²C₂H₂ around 12709,5 cm⁻¹"
D. Hurtmans, S. Kassi, C. Depiesse and M. Herman
Molecular Physics, 100 (2002) 3507-3511.
129. "ICLAS of ¹²C₂H₂ between 10140-10600 cm⁻¹"
Y. Ding, M. Herman and A. Campargue
Journal of Molecular Spectroscopy, 212 (2002) 125-129.
128. "Overtone Spectroscopy of Trans-Formic Acid"
M. Freytes, D. Hurtmans, S. Kassi, J. Liévin, J. Vander Auwera, A. Campargue and M. Herman
Chemical Physics, 283 (2002) 47-61.
- Paper on personal invitation**

127. "High Resolution Analysis of the ν_6 , ν_{17} and ν_{21} Bands of Dimethyl Ether"
L.H. Coudert, P. Carçabal, M. Chevalier, M. Broquier, M. Hepp and M. Herman
Journal of Molecular Spectroscopy, 212 (2002) 203-207.
126. "The Vibrational Spectrum of Pyrrole (C_4H_5N) and Furan (C_4H_4O) in the Gas Phase"
A. Mellouki, J. Liévin and M. Herman
Chemical Physics, 271 (2001) 239-266.
125. "Rotational Analysis of the ν_6 Band in Furan (C_4H_4O)"
A. Mellouki, J. Vander Auwera, J. Demaison and M. Herman
Journal of Molecular Spectroscopy, 209 (2001) 136-138.
124. "The Absorption Spectrum of Dideuteroacetylene in the 10000-12500 cm^{-1} Spectral Region"
G. Weirauch, M.I. El Idrissi, J. Vander Auwera, M. Herman and A. Campargue
Molecular Physics, 99 (2001) 969-980.
123. "High Resolution Infrared Spectroscopy"
M. Herman, D. Hurtmans and J. Vander Auwera
Spectroscopy from space, NATO-ASI Series, Kluwer Pub, J. Demaison *et al* eds., pp. 201-218 (2001).
122. "First High-Resolution Analysis of the Absorption Spectrum of Propane in the 6.7-7.5 μm Spectral Region"
J.-M. Flaud, W.J. Lafferty and M. Herman
Journal of Chemical Physics, 114 (2001) 9361-9366.
121. "The Vibrational Energy Pattern in Propyne ($^{12}CH_3$ $^{12}C_2H$) "
M.I. El Idrissi, J. Liévin, M. Herman, A. Campargue and G. Graner
Chemical Physics, 265 (2001) 273-289.
120. "Vibration-Rotation Analysis of the Jet-Cooled ν_{12} , $\nu_7+\nu_8$ and $\nu_6+\nu_{10}$ Absorption Bands of $^{12}C_2H_4$ "
D. Hurtmans, A. Rizopoulos, M. Herman, L.M.S. Hassan and A. Perrin
Molecular Physics, 99 (2001) 455-461.
119. "The Absorption Spectrum of $^{12}C_2H_2$: IV. The Regions 7600-9200 and 10600-11500 cm^{-1} "
G. Weirauch, A. Campargue, M.I. El Idrissi and M. Herman
Molecular Physics, 99 (2001) 143-149.
118. "The Vibrational Energy Pattern in Acetylene (VI) : Inter- and Intra-Polyad Structures"
B.I. Zhilinskii, M.I. El Idrissi and M. Herman
Journal of Chemical Physics, 113 (2000) 7885-7890.
117. "Spectroscopic and *Ab Initio* Investigation of the ν_{OH} Overtone Excitation in Trans-Formic Acid"
D. Hurtmans, F. Herregodts, M. Herman, J. Liévin, A.A. Kachanov and A. Campargue
Journal of Chemical Physics, 113 (2000) 1535-1545.
116. "High Resolution Fourier Transform Spectroscopy of Jet-Cooled Molecules "
M. Herman, R. Georges, M. Hepp, and D. Hurtmans
International Reviews in Physical Chemistry, 19 (2000) 277-325.
Paper on personal invitation, 186 refs.
115. "High Resolution Absorption Spectroscopy of the $3\nu_1$ and $3\nu_1+\nu_3$ Bands of Propyne"
A. Campargue, E. Bertseva, G. Graner and M. Herman
Journal of Molecular Spectroscopy, 201 (2000) 156-163.
114. "Refined Investigation of the Overtone Spectrum of Nitrous Oxide"
G. Weirauch, A.A. Kachanov, A. Campargue, M. Bach, M. Herman and J. Vander Auwera
Journal of Molecular Spectroscopy, 202 (2000) 98-106.
113. "Vibration-Rotation Bands in Ethane"
M. Hepp and M. Herman
Molecular Physics, 98 (2000) 57-61.
112. "Striking Anharmonic Resonances in N_2O_4 : Supersonic Jet Fourier Transform Spectra at 13.3, 7.9, 5.7 and 3.2 μm "

- M. Hepp, R. Georges and M. Herman, W.J. Lafferty and J.-M. Flaud
Journal of Molecular Structure, 517-518 (2000) 171-180.
111. "Ar-Induced Pressure Effects in the $\nu_1+3\nu_3$ Absorption Band in $^{12}\text{C}_2\text{H}_2$ "
F. Herregodts, D. Hurtmans, J. Vander Auwera, and M. Herman
Chemical Physics Letters, 316 (2000) 460-464.
110. "An Intercomparison of Laboratory Measurements of Absorption Cross Sections and Integrated Absorption Intensities for HCFC-22"
J. Ballard, R.J. Knight, J. Vander Auwera, M. Herman, G. Di Lonardo, G. Masciarelli, F.M. Nicolaisen, J.A. Beukes, L.K. Christensen, R. Mc Pheat, G. Duxbury, R. Freckleton and K.P. Shine
Journal of Quantitative Spectroscopy and Radiative Transfer, 66 (2000) 109-128.

1999-1995

109. "Rotational Analysis of the ν_7 Band in Furan ($\text{C}_4\text{H}_4\text{O}$)"
A. Mellouki, M. Herman, J. Demaison, B. Lemoine and L. Margulès
Journal of Molecular Spectroscopy, 198 (1999) 348-357.
108. "Laser Spectroscopy of the $\nu_1+3\nu_3$ Absorption Band in $^{12}\text{C}_2\text{H}_2(\text{II})$: Self-Collisional Lineshift Measurements"
F. Herregodts, M. Hepp, D. Hurtmans, J. Vander Auwera and M. Herman
Journal of Chemical Physics, 111 (1999) 7961-7966.
107. "Laser Spectroscopy of the $\nu_1+3\nu_3$ Absorption Band in $^{12}\text{C}_2\text{H}_2(\text{I})$: Pressure Broadening and Absolute Line Intensity Measurements"
F. Herregodts, D. Hurtmans, J. Vander Auwera and M. Herman
Journal of Chemical Physics, 111 (1999) 7954-7960.
106. "High Resolution Absorption Spectroscopy of the $\nu_1=2-6$ Acetylenic Overtone Bands of Propyne : Spectroscopy and Dynamics"
A. Campargue, L. Biennier, A. Garnache, A. Kachanov, D. Romanini and M. Herman
Journal of Chemical Physics, 111 (1999) 7888-7903.
105. "Global and accurate vibration Hamiltonians from high resolution molecular spectroscopy"
M. Herman, J. Liévin, J. Vander Auwera and A. Campargue
Advances in Chemical Physics 108 (1999), 1-431
J. Wiley & Sons, Inc.
Paper on personal invitation; Cover paper (contains more than 1500 references)
104. "The Vibrational Energy Pattern in Acetylene. V. $^{13}\text{C}_2\text{H}_2$ "
G. Di Lonardo, L. Fusina, E. Venuti, J.W.C. Johns, M.I. El Idrissi, J. Liévin and M. Herman
Journal of Chemical Physics, 111 (1999) 1008-1016.
103. "Weak Combination Bands in the $3\mu\text{m}$ Region of Ethane"
M. Hepp and M. Herman
Journal of Molecular Spectroscopy, 197 (1999) 56-63.
102. "Spectroscopic Investigation of Vibration-Rotation Bands in Acetaldehyde : Focus on the $n\nu_3$ ($n=1-5$) Aldehyde CH Stretch Bands"
M. Herman, F. Herregodts, R. Georges, M. Hepp, I. Hadj Bachir, M. Lecoutre and I. Kleiner
Chemical Physics, 246 (1999) 433-444.
101. "Effective Rotation-Vibration Parameters for the ν_8 and $\nu_4+\nu_{12}$ Bands of Ethane"
M. Hepp and M. Herman
Journal of Molecular Spectroscopy, 194 (1999) 87-94.
100. "The Vibrational Energy Pattern in Ethylene ($^{12}\text{C}_2\text{H}_4$)"
R. Georges, M. Bach and M. Herman
Molecular Physics, 97 (1999) 279-292.

99. "Investigation of the Fine Structure in Overtone Absorption Bands of $^{12}\text{C}_2\text{H}_4$ "
M. Bach, R. Georges, M. Herman and A. Perrin
Molecular Physics, 97 (1999) 265-277.
98. "The Vibrational Energy Pattern in Acetylene (IV) : Updated Global Vibration Constants for $^{12}\text{C}_2\text{H}_2$ "
M.I. Idrissi, J. Liévin, A. Campargue and M. Herman
Journal of Chemical Physics, 110 (1999) 2074-2086.
97. "High Resolution FT Spectroscopic Investigation of Acetaldehyde Around 7 μm "
I. Kleiner, R. Georges, M. Hepp and M. Herman
Journal of Molecular Spectroscopy, 193 (1999) 228-230.
96. "Rotation-Vibration Constants for the ν_1 , ν_{22} , ν_{24} , $\nu_{22}+\nu_{24}$ and Ground States in Pyrrole ($^{12}\text{C}_4\text{H}_5\text{N}$)"
A. Mellouki, J. Vander Auwera and M. Herman
Journal of Molecular Spectroscopy, 193 (1999) 195-203.
95. "High Resolution Jet-Cooled Spectroscopy of SF_6 : The $\nu_2+\nu_6$ Combination Band of $^{32}\text{SF}_6$ and the ν_3 Band of the Rare Isotopomers"
V. Boudon, M. Hepp, M. Herman, I. Pak and G. Pierre
Journal of Molecular Spectroscopy, 192 (1998) 359-367.
94. "FTIR Jet Spectroscopy Using a Heated Slit-Source"
M. Hepp, F. Herregodts and M. Herman
Chemical Physics Letters, 294 (1998) 528-532.
93. "Slit-jet FTIR Spectroscopy in $^{12}\text{C}_2\text{H}_4$: Cold and Hot Bands near 3000 cm^{-1} "
M. Bach, R. Georges, M. Hepp and M. Herman
Chemical Physics Letters, 294 (1998) 533-537.
92. "The Jet-Cooled Spectrum of Ethane Between 4000 and 4500 cm^{-1} "
M. Hepp and M. Herman
Molecular Physics, 94 (1998) 829-838.
91. "The Ground Electronic State of 1,2 Dichloroethane : II. Experimental Investigation of the Fundamental and Overtone Vibrations"
Y. El Youssoufi, J. Liévin, J. Vander Auwera, M. Herman, A. Fedorov and D. L. Snavely
Molecular Physics, 94 (1998) 473-484.
90. "The Ground Electronic State of 1,2 Dichloroethane : I. Ab Initio Investigation of the Geometrical, Vibrational and Torsional Structure"
Y. El Youssoufi, M. Herman and J. Liévin
Molecular Physics, 94 (1998) 461-472.
89. "The Visible Absorption Spectrum of $^{12}\text{C}_2\text{H}_2$ III. The Region 14500-17000 cm^{-1} "
A. Campargue, L. Biennier and M. Herman
Molecular Physics, 93 (1998) 457-469.
88. "The Vibrational Energy Levels in Acetylene (III) : $^{12}\text{C}_2\text{D}_2$ "
M. Herman, M.I. El Idrissi, A. Pisarchik, A. Campargue, A.C. Gaillot, L. Biennier, G. Di Lonardo and L. Fusina
Journal of Chemical Physics, 108 (1998) 1377-1389.
87. "High Resolution FTIR Spectroscopy Using a Jet : Sampling the Rovibrational Spectrum of $^{12}\text{CH}_4$ "
R. Georges, M. Herman, J.C. Hilico and O. Robert
Journal of Molecular Spectroscopy, 187 (1998) 13-20.
86. "General discussion on regular and irregular features in unimolecular spectra and dynamics"
G. Casati, L.S. Cederbaum, P. Gaspard, A.H. Zewail, M. Quack, R.W. Field, M.E. Kellman, R.A. Marcus, M.S. Child, E. Pollak, B.A. Hess, V. Engel, J. Manz, R. Jost, and M. Herman
Advances in Chemical Physics, 101 (1997).

85. "Anharmonic resonances in monodeuteroacetylene"
M. Abbouti Tamsamani and M. Herman
Chemical Physics Letters 264 (1997) 556.
84. "High Resolution Spectroscopic Investigation of ν_{16} in trans 1,2 Dichloroethane"
Y. El Youssoufi, R. Georges, J. Liévin and M. Herman
Journal of Molecular Spectroscopy, 186 (1997) 239-245.
83. "Ar and Self Pressure Broadening Coefficient of the R(11), $5\nu_3$ line of $^{12}\text{C}_2\text{H}_2$ "
R. Georges, D. Van Der Vorst, M. Herman and D. Hurtmans
Journal of Molecular Spectroscopy, 185 (1997) 187-188.
82. "The $\nu_6+\nu_{10}$ Band of Ethane"
M. Hepp, R. Georges and M. Herman
Chemical Physics Letters, 275 (1997) 513-518.
81. "Spectroscopic Investigation of Ground State Pyrrole ($^{12}\text{C}_4\text{H}_5\text{N}$) : the N-H stretch"
A. Mellouki, R. Georges, M. Herman, D.A. Snavely and S. Leytner
Chemical Physics, 220 (1997) 311-322.
80. "The Absorption Spectrum of $^{12}\text{C}_2\text{H}_2$ Between 12800 and 18500 cm^{-1} : II
Rotational Analysis"
S.-F. Yang, L. Biennier, A. Campargue, M. Abbouti Tamsamani and M. Herman
Molecular Physics, 90 (1997) 807-816.
79. "The Absorption Spectrum of $^{12}\text{C}_2\text{H}_2$ Between 12800 and 18500 cm^{-1} : I. Vibrational
Assignments"
A. Campargue, M. Abbouti Tamsamani and M. Herman
Molecular Physics, 90 (1997) 793-805.
78. "Ab initio and Experimental Investigation of the Vibrational Energy Pattern in N_2O_4 "
Y. Elyoussoufi, M. Herman, I. Kleiner and J. Liévin
Spectrochimica Acta A, 53 (1997) 877-890.
77. "High Resolution Slit Jet/FTIR Spectroscopy : Sampling the Overtone Spectrum of
 $^{12}\text{C}_2\text{H}_4$ "
R. Georges, M. Bach and M. Herman
Molecular Physics, 90 (1997) 381-387.
76. "Highly Vibrationally Excited $^{12}\text{C}_2\text{H}_2$ in the $^1\Sigma$ state : Complementarity of Absorption and
Dispersed Fluorescence Spectra"
M. Abbouti Tamsamani, M. Herman, S.A.B. Solina, J.P. O'Brien and R.W. Field
Journal of Chemical Physics, 105 (1996) 11357-11359.
75. "Anharmonic Resonances in Monodeuteroacetylene ($^{12}\text{C}_2\text{HD}$)"
M. Abbouti Tamsamani and M. Herman
Chemical Physics Letters, 264 (1996) 556-557.
74. "Anharmonic Resonances in Monodeuteroacetylene ($^{12}\text{C}_2\text{HD}$)"
M. Abbouti Tamsamani and M. Herman
Chemical Physics Letters, 260 (1997) 253-256.
73. "The $\{2\nu_3, 4\nu_2, 2\nu_2+\nu_3\}$ and $2\nu_3-\nu_3$ Bands of $^{14}\text{N}^{16}\text{O}_2$: Line Positions and Intensities"
A. Perrin, J-M. Flaud, C. Camy-Peyret, D. Hurtmans and M. Herman
Journal of Molecular Spectroscopy, 177 (1996) 58-65.
72. "The ν_1 Band in N_2O_3 "
R. Georges, J. Liévin, M. Herman and A. Perrin
Chemical Physics Letters, 256 (1996) 675-678.
71. "The Vibrational Energy Pattern in $^{12}\text{C}_2\text{H}_2$ (II) : Vibrational Clustering and Rotational
Structure"
M. Abbouti Tamsamani and M. Herman
Journal of Chemical Physics, 105 (1996) 1355-1362.

70. "The Absorption Spectrum of Acetylene in the $2\nu_2 + 3\nu_3$ Region : Test of the Cluster Model"
A. Campargue, M. Abbouti Tamsamani and M. Herman
Chemical Physics Letters, 242 (1995) 101-105.
69. "Multinozzle Jet set-up for Fourier Transform Interferometer Spectroscopy"
R. Georges, G. Durry, M. Bach, R. Pétrisse, R. Jost and M. Herman
Chemical Physics Letters, 246 (1995) 601-606.
68. "Overtone Spectroscopy in N_2O "
A. Campargue, D. Permogorov, M. Bach, M. Abbouti Tamsamani, J. Vander Auwera, M. Herman and M. Fujii
Journal of Chemical Physics, 103 (1995) 5931-5938.
67. "The Vibrational Energy Pattern in $^{12}C_2H_2$: Towards a Regular Pattern at Higher Energies"
M. Abbouti Tamsamani and M. Herman
Journal of Chemical Physics, 102 (1995) 6371-6385.
66. "Overtone Spectroscopy and Dynamics in C_2HD "
J. Liévin, M. Abbouti Tamsamani, P. Gaspard and M. Herman
Chemical Physics, 190 (1995) 419-445.
65. "High Resolution Spectroscopic Study of the first Overtone of the N-H stretch and of the fundamentals of the C-H stretches in pyrrole"
A. Held and M. Herman
Chemical Physics, 190 (1995) 407-418.
64. "Overtone Spectroscopy and Dynamics"
K.K. Lehmann, M. Herman and I.M. Mills
Chemical Physics, 190 (1995) 157-158.

1994-1990

63. "The Absorption Spectrum of C_2H_2 around $\nu_1+\nu_3$: Energy Standards in the 1.5 μm Region and Vibrational Clustering"
Q. Kou, G. Guelachvili, M. Abbouti Tamsamani and M. Herman
Canadian Journal of Physics, 72 (1994) 1241-1250.
62. "The $\nu_2+\nu_3$ and $\nu_2+\nu_3-\nu_2$ Bands of $^{14}N^{16}O_2$: Line Positions and Intensities"
A. Perrin, J.M. Flaud, C. Camy Peyret, D. Hurtmans, M. Herman and G. Guelachvili
Journal of Molecular Spectroscopy, 168 (1994) 54-66.
61. "The $\nu_1+\nu_3-\nu_3$ Hot Band in $BrNO$ "
D. Hurtmans, J. Vander Auwera and M. Herman
Chemical Physics Letters, 227 (1994) 588-592.
60. "The Fundamental ν_{14} Band of Acetaldehyde"
I. Kleiner and M. Herman
Journal of Molecular Spectroscopy, 167 (1994) 300-313.
59. "Spectroscopy of C_2D_2 in the $3\nu_3$ Range"
M. Herman and A. Pisarchik
Journal of Molecular Spectroscopy, 164 (1994) 210-218.
58. "Integrated Band Intensities in N_2O_4 in the Infrared Range"
D. Hurtmans, M. Herman and J. Vander Auwera
Journal of Quantum Spectroscopy and Radiative Transfer, 50 (1993) 595-602.
57. "The Coloured Vibrations in Mono and Dideuteroacetylene"
A. Pisarchik, M. Abbouti Tamsamani, J. Vander Auwera and M. Herman
Chemical Physics Letters, 206 (1993) 343-348.
56. "Rovibrational Parameters for cis-Nitrous Acid"
J.M. Guilmot, F. Mélen and M. Herman
Journal of Molecular Spectroscopy, 160 (1993) 401-410.

55. "Rovibrational Parameters for trans-Nitrous Acid"
J.M. Guilmot, M. Godefroid and M. Herman
Journal of Molecular Spectroscopy, 160 (1993) 387-400.
54. "Fourier Transform Jet Spectrum of the ν_7 Band of C_2H_6 "
F. Mélen, M. Herman, G.Y. Matti and D.M. Mc Naughton
Journal of Molecular Spectroscopy, 160 (1993) 601-603.
53. "The ν_3 Fundamental in C_2H_2 "
J. Vander Auwera, D. Hurtmans, M. Carleer and M. Herman
Journal of Molecular Spectroscopy, 157 (1993) 337-357.
52. "The Absorption Spectrum of C_2HD between 9000 and 13000 cm^{-1} "
M. Abbouti Tamsamani, J. Vander Auwera and M. Herman
Molecular Physics, 79 (1993) 359-371.
51. "Fourier Transform Jet Spectrum of the ν_9 Band of N_2O_4 "
F. Mélen, M. Carleer and M. Herman
Chemical Physics Letters, 199 (1992) 124-130.
50. "Vibrational Band Analysis of N_2O_4 "
F. Mélen, F. Pokorni and M. Herman
Chemical Physics Letters, 194 (1992) 181-186.
49. "Supersonic Molecular jet Fourier Transform Interferometry Applied to Nitric Oxides"
J.K. Holland, M. Carleer, R. Pétrisse and M. Herman
Chemical Physics Letters, 194 (1992) 175-180.
48. "Vibrational Bands of $H_xN_yO_x$ Species"
F. Mélen and M. Herman
Journal of Physical and Chemical Reference Data, 21 (1992) 831-881.
47. "Hybrid Character of the O Band of the S_1-S_0 269nm Absorption Spectrum of 1,2,4-Trifluorobenzene by Rotational Band Contour Analysis"
K.H. Hassan, M. Hollas, F. Vanhorenbeke and M. Herman
Journal of Molecular Spectroscopy, 151 (1992) 522-528.
46. "Vibration-Rotation Spectra of Monofluoroacetylene : 1700 to 7500 cm^{-1} "
J.K. Holland, D.A. Newham, I.M. Mills and M. Herman
Journal of Molecular Spectroscopy, 151 (1992) 346-368.
45. "The Bending Vibrations in C_2H_2 ($^1\Sigma$)"
Y. Kabbadj, M. Herman, L. Fusina, G. Di Lonardo and J.W.C. Johns
Journal of Molecular Spectroscopy, 150 (1991) 535-565.
44. "Lack of Intensity Alternation in C_2H_2 "
M. Herman, D. Hurtmans, J. Vander Auwera and M. Vervloet
Journal of Molecular Spectroscopy, 150 (1991) 293-295.
43. "The Fourier Transform Vibrational Spectrum of Acetylene in the Visible Range"
M. Herman, M. Abbouti Tamsamani, D. Lemaître and J. Vander Auwera
Chemical Physics Letters, 185 (1991) 220-224.
42. "Near-Infrared Absorption Spectroscopy : the $n=4$ Polyad of C_2HD "
M. Herman, M. Abbouti Tamsamani, J. Vander Auwera and R. Ottinger
Chemical Physics Letters, 185 (1991) 215-219.
41. "The ν_4 Bands of Trans and Cis HNO_2 "
I. Kleiner, J.M. Guilmot, M. Carleer and M. Herman
Journal of Molecular Spectroscopy, 149 (1991) 341-347
40. "Rotational Analysis of the O-O band of the $^3A_u-^1A_g$ system of transglyoxal"
D.A. Ramsay, M. Vervloet, F. Vanhorenbeke, M. Godefroid and M. Herman
Journal of Molecular Spectroscopy, 149 (1991) 348-355.

39. "Rotational Parameters for Acetylene C₂HD in the ¹A" Electronic State"
J. Vander Auwera, T.R. Huet, M. Abbouti Temsamani and M. Herman
Journal of Molecular Spectroscopy, 148 (1991) 93-99.
38. "The Bending Levels in C₂D₂ (¹Σ)"
T.R. Huet, M. Herman and J.W. Johns
Journal of Chemical Physics, 94 (1991) 3407-3414.
37. "l-type Resonances in C₂H₂"
M. Herman, T.R. Huet, Y. Kabbadj and J. Vander Auwera
Molecular Physics, 72 (1991) 75-88.
36. "The Electronic State of Acetylene : Geometry and Axis Switching Effects"
T.R. Huet, M. Godefroid and M. Herman
Journal of Molecular Spectroscopy, 144 (1990) 32-44.
35. "The ν₁ Fundamental Band of trans-HNO₂"
J.M. Guilmoit, M. Carleer, M. Godefroid and M. Herman
Journal of Molecular Spectroscopy, 143 (1990) 81-90.
34. "The Fundamental Torsion Band in Acetaldehyde"
I. Kleiner, M. Godefroid, M. Herman and A.R.W. Mc Kellar
Journal of Molecular Spectroscopy, 142 (1990) 238-253.
33. "Vibrational Couplings in Acetylene"
M. Herman and T.R. Huet
Molecular Physics, 70 (1990) 545-546.
32. "Optoacoustic Study of the N₂O₄ = 2NO₂ Chemical Equilibrium"
M. Van Roozendael and M. Herman
Chemical Physics Letters, 166 (1990) 233-239.

1989 and before

31. "Mechanism of the Response of the N₂O₄ = 2NO₂ Chemical Equilibrium to an Optical Perturbation"
M. Van Roozendael and M. Herman
Chemical Physics, 139 (1989) 391-400.
30. "The - Band System of C₂D₂ : Vibration-Rotation Constants for the ¹A_u State"
T.R. Huet and M. Herman
Journal of Molecular Spectroscopy, 137 (1989) 396-419.
29. "Low Energy Vibrational Levels in ¹A_u Electronic State of C₂D₂"
C. Hamilton, R.W. Field, T.R. Huet and M. Herman
Journal of Molecular Spectroscopy, 137 (1989) 427-429.
28. "The ¹A Electronic State of Monodeuterated Acetylene"
J. Vander Auwera, T.R. Huet, M. Herman, C.D. Hamilton, J.L. Kinsey and R.W. Field
Journal of Molecular Spectroscopy, 137 (1989) 381-394.
27. "Optoacoustic Experiments in the Gas Phase"
M. Van Roozendael, P. Miller and M. Herman
Optics Communications, 72 (1989) 71-75.
26. "Spectroscopy and Vibrational Couplings in the 3ν₃ Region of Acetylene"
M. Herman, T.R. Huet and M. Vervloet
Molecular Physics, 66 (1989) 333-353.
25. "Levels of the Transbending Normal Mode of Vibration in C₂D₂"
T.R. Huet and M. Herman
Journal of Molecular Spectroscopy, 132 (1988) 361-368.
24. "Fourier Transform Emission Spectroscopy of C₂H"
M. Vervloet and M. Herman
Chemical Physics Letters, 144 (1988) 48-50.

23. "High Resolution Fourier Transform Study of the ν_{10} Fundamental Band and the $(\nu_{10}+\nu_7)$ - ν_7 Hot Band of Trans Glyoxal"
J. Vander Auwera, M. Godefroid, M. Herman, T.R. Huet and J.W.C. Johns
Canadian Journal of Physics, 65 (1987) 1636-1640.
22. "Infrared Laser Stark Study of HNO_3 at $6 \mu\text{m}$ "
I. Kleiner, M. Godefroid, M. Herman and A.R.W. Mc Kellar
Journal of the Optical Society of America B, 4 (1987) 1159-1164.
21. "Infrared Optical Double Resonance Signals in $\text{C}_2\text{H}_2\text{O}_2$ "
J. Vander Auwera and M. Herman
Chemical Physics Letters, 135 (1987) 432-434.
20. "Spectroscopic Investigation of the Response of the $\text{NO}_2/\text{N}_2\text{O}_4$ Chemical System to Optical Laser Pumping"
J. Vander Auwera and M. Herman
Journal of Photochemistry, 38 (1987) 15-33.
19. "Optogalvanic Studies with a CO Laser"
M. Van Roozendael, G.W. Hills and M. Herman
Optics Communications, 58 (1986) 319-323.
18. " Ar^+ Laser Induced Fluorescence Study of NO_2 "
M. Carleer, M. Herman, J. Vander Auwera and M. Van Roozendael
Chemical Physics Letters, 127 (1986) 13-18.
17. "The ν_2 Band System of Acetylene, Analysis of Short Wavelengths Bands"
J.C. Van Craen, M. Herman, R. Colin and J.K.G. Watson
Journal of Molecular Spectroscopy, 119 (1986) 137-143.
16. "The ν_2 Band System of Acetylene, Analysis of Medium Wavelengths Bands, and Vibration-Rotation Constants for the Levels ν_3 ($n=4-6$), $\nu_2+\nu_3$ ($n=3-5$) and $\nu_1+\nu_3$ ($n=2-3$)"
J.C. Van Craen, M. Herman, R. Colin and J.K.G. Watson
Journal of Molecular Spectroscopy, 111 (1985) 185-197.
15. "Infrared Optical Double Resonance of $\text{NO}_2/\text{N}_2\text{O}_4$ Chemical Equilibrium"
M. Herman, J.C. Van Craen, J. Vander Auwera and G.W. Hills
Chemical Physics Letters, 115 (1985) 445-449.
14. "The $\text{bO}^+-\text{X}_1\text{O}^+$ Band System of the PI Molecule"
R. Colin, M. Herman and F. Prevot
Chemical Physics Letters, 91 (1982) 213-216.
13. "High Resolution Laser Stark and Fourier Transform Spectroscopy of DBr at $5.5 \mu\text{m}$ "
M. Herman, J.W.C. Johns and A.R.W. Mc Kellar
Journal of Molecular Spectroscopy, 95 (1982) 405-412.
12. "The ν_2 Band System of Acetylene. Analysis of Long Wavelengths Bands and Vibration Rotation Constants for the Levels ν_4 ($n=0-3$), ν_3 ($n=0-3$) and $\nu_2+\nu_3$ ($n=0-2$)"
J.K.G. Watson, M. Herman, J.C. Van Craen and R. Colin
Journal of Molecular Spectroscopy, 95 (1982) 101-132.
11. "High Resolution Spectroscopic Study of the Rydberg Series of the Acetylene Isotopic Molecules"
M. Herman and R. Colin
Physica Scripta, 25 (1982) 275-290.
10. "Contribution to the Tables Internationales de Constantes : Diatomic Molecules, a Critical Bibliography of Spectroscopic Data"
Editions du C.N.R.S., 1982.
9. "Acetylene : from Intensity Alternation in Spectra to Ortho and Para Molecules"
M. Herman and J. Liévin
Journal of Chemical Education, 59 (1982) 17-21 .

8. "The Absorption Spectra of C₂H₂, C₂D₂ and C₂HD in the 1260 to 1370 Å region"
M. Herman and R. Colin
Journal of Molecular Spectroscopy, 85 (1981) 449-461.
7. "The Geometrical Structure of the Acetylene Molecule in the \tilde{X} , \tilde{G} and \tilde{I} States"
M. Herman and R. Colin
Bulletin des Sociétés Chimiques de Belgique, 89 (1980) 335-342.
6. "The D²Π–X²Σ⁺ Band System of CaH"
G.D. Bell, M. Herman, J.W.C. Johns and E.R. Peck
Physica Scripta, 20 (1979) 609-616.
5. "High Resolution Laser Stark and Infrared-Radiofrequency Double Resonance Spectroscopy of H₂O at 6 μm"
M. Herman, J.W.C. Johns and A.R.W. McKellar
Canadian Journal of Physics, 57 (1979) 397-401.
4. "Improved Laser Frequencies and Dunham Coefficients for Isotopically Substituted Carbon Monoxide"
R.M. Dale, M. Herman, J.W.C. Johns, A.R.W. McKellar, S. Nagler and I.K.M. Strathy
Canadian Journal of Physics, 57 (1979) 677-686.
3. "Renner-Teller Interactions in the Acetylene Molecule"
R. Colin, M. Herman and I. Kopp
Molecular Physics, 37 (1979) 1397-1412.
2. "Group Theory : From Common Objects to Molecules"
M. Herman and J. Liévin
Journal of Chemical Education, 54 (1977) 596-598.
1. "Rotational Analysis of the A²Π–X²Σ⁺ Transition of the BeBr Molecule"
M. Carleer, M. Herman and R. Colin
Canadian Journal of Physics, 53 (1975) 1321-1326.