Martin Quack

List of Publications by Citations

Source: https://exaly.com/author-pdf/3042535/martin-quack-publications-by-citations.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.

299 papers	14,137 citations	60 h-index	102 g-index
312 ext. papers	14,868 ext. citations	3.4 avg, IF	6.55 L-index

#	Paper	IF	Citations
299	Specific Rate Constants of Unimolecular Processes II. Adiabatic Channel Model. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1974**, 78, 240-252		483
298	Spectra and Dynamics of Coupled Vibrations in Polyatomic Molecules. *Annual Review of Physical Chemistry*, **1990**, 41, 839-874	15.7	405
297	How important is parity violation for molecular and biomolecular chirality?. *Angewandte Chemie - International Edition*, **2002**, 41, 4618-30	16.4	344
296	Detailed symmetry selection rules for reactive collisions. *Molecular Physics*, **1977**, 34, 477-504	1.7	282
295	Theory of unimolecular reactions induced by monochromatic infrared radiation. *Journal of Chemical Physics*, **1978**, 69, 1282	3.9	282
294	Potential energy surfaces, quasiadiabatic channels, rovibrational spectra, and intramolecular dynamics of (HF)2 and its isotopomers from quantum Monte Carlo calculations. *Journal of Chemical Physics*, **1991**, 95, 28-59	3.9	260
293	Structure and Dynamics of Chiral Molecules. *Angewandte Chemie International Edition in English*, **1989**, 28, 571-586		254
292	Tridiagonal Fermi resonance structure in the IR spectrum of the excited CH chromophore in CF3H. *Journal of Chemical Physics*, **1984**, 81, 3779-3791	3.9	247
291	Anchoring the water dimer potential energy surface with explicitly correlated computations and focal point analyses. *Journal of Chemical Physics*, **2002**, 116, 690-701	3.9	239
290	IR-laser photochemistry. *Chemical Reviews*, **1987**, 87, 181-216	68.1	233
289	Complex Formation in Reactive and Inelastic Scattering: Statistical Adiabatic Channel Model of Unimolecular Processes III. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1975**, 79, 170-183		232
288	High-resolution spectroscopic studies and theory of parity violation in chiral molecules. *Annual Review of Physical Chemistry*, **2008**, 59, 741-69	15.7	193
287	On the measurement of the parity violating energy difference between enantiomers. *Chemical Physics Letters*, **1986**, 132, 147-153	2.5	186
286	Vibrational spectrum and potential energy surface of the CH chromophore in CHD3. *Journal of Chemical Physics*, **1988**, 88, 5408-5432	3.9	183
285	A new six-dimensional analytical potential up to chemically significant energies for the electronic ground state of hydrogen peroxide. *Journal of Chemical Physics*, **1999**, 111, 2565-2587	3.9	165
284	Unimolecular Processes V: Maximum Free Energy Criterion for the High Pressure Limit of Dissociation Reactions. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1977**, 81, 329-337		159
283	Resonance fluorescence of aniline vapour. *Journal of Molecular Spectroscopy*, **1972**, 43, 87-116	1.3	149

282	Global analysis of the high resolution infrared spectrum of methane 12CH4 in the region from 0 to 4800cm−1. *Chemical Physics*, **2009**, 356, 131-146	2.3	146
281	HF dimer: Empirically refined analytical potential energy and dipole hypersurfaces from ab initio calculations. *Journal of Chemical Physics*, **1998**, 108, 10096-10115	3.9	146
280	Ab initio calculation of molecular energies including parity violating interactions. *Journal of Chemical Physics*, **1998**, 109, 7263-7285	3.9	140
279	Structure and dynamics of the excited CH chromophore in (CF3)3CH. *Journal of Chemical Physics*, **1985**, 82, 1186-1194	3.9	136
278	Tridiagonal Fermi resonance structure in the vibrational spectrum of the CH chromophore in CHF3. II. Visible spectra. *Journal of Chemical Physics*, **1987**, 86, 634-646	3.9	128
277	High-resolution interferometric Fourier transform infrared absorption spectroscopy in supersonic free jet expansions: carbon monoxide, nitric oxide, methane, ethyne, propyne, and trifluoromethane. *The Journal of Physical Chemistry*, **1988**, 92, 5455-5466		124
276	Vibrational spectra of (HF)2, (HF)n and their D-isotopomers: Mode selective rearrangements and nonstatistical unimolecular decay. *Chemical Physics*, **1989**, 139, 31-53	2.3	112
275	Methane line parameters in the HITRAN2012 database. *Journal of Quantitative Spectroscopy and Radiative Transfer*, **2013**, 130, 201-219	2.1	110
274	Influence of parity violating weak nuclear potentials on vibrational and rotational frequencies in chiral molecules. *Physical Review Letters*, **2000**, 84, 3807-10	7.4	103
273	Spectroscopy and dynamics of the isolated CH chromophore in CD3H: Experiment and theory. *Chemical Physics Letters*, **1984**, 109, 563-569	2.5	102
272	Multiconfiguration linear response approach to the calculation of parity violating potentials in polyatomic molecules. *Journal of Chemical Physics*, **2000**, 112, 3148-3158	3.9	100
271	Dipole moment function and equilibrium structure of methane in an analytical, anharmonic nine-dimensional potential surface related to experimental rotational constants and transition moments by quantum Monte Carlo calculations. *Journal of Chemical Physics*, **1994**, 101, 3588-3602	3.9	100
270	Electroweak quantum chemistry of alanine: parity violation in gas and condensed phases. *ChemPhysChem*, **2000**, 1, 57-60	3.2	95
269	Mode selective stereomutation tunnelling in hydrogen peroxide isotopomers. *Chemical Physics Letters*, **1999**, 300, 312-320	2.5	94
268	The wave packet motion and intramolecular vibrational redistribution in CHX3 molecules under infrared multiphoton excitation. *Journal of Chemical Physics*, **1991**, 95, 4854-4876	3.9	94
267	High resolution interferometric FTIR spectroscopy of (HF)2: analysis of a low frequency fundamental near 400 cm-1. *Molecular Physics*, **1987**, 62, 1047-1064	1.7	94
266	The far infrared pure rotational spectrum and the Coriolis coupling between v 3 and v 8 in CH35ClF2. *Molecular Physics*, **1989**, 68, 745-758	1.7	93
265	Vibrational overtone intensities of the isolated CH and CD chromophores in fluoroform and chloroform. *Chemical Physics Letters*, **1986**, 123, 197-202	2.5	90

264	Infrared laser chemistry and the dynamics of molecular multiphoton excitation. *Infrared Physics*, **1989**, 29, 441-466		87
263	Combined high resolution infrared and microwave study of bromochlorofluoromethane. *Journal of Chemical Physics*, **1997**, 106, 7558-7570	3.9	86
262	Vibrational spectrum, dipole moment function, and potential energy surface of the CH chromophore in CHX3 molecules. *Journal of Chemical Physics*, **1989**, 91, 6698-6713	3.9	84
261	Is the stereomutation of methane possible?. *Journal of Computational Chemistry*, **1995**, 16, 207-225	3.5	83
260	Unimolecular Processes IV: Product State Distributions after Dissociation. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1975**, 79, 469-475		82
259	A critical analysis of electronic density functionals for structural, energetic, dynamic, and magnetic properties of hydrogen fluoride clusters. *Journal of Computational Chemistry*, **1997**, 18, 1695-1719	3.5	81
258	Molecular quantum dynamics from high resolution spectroscopy and laser chemistry. *Journal of Molecular Structure*, **1993**, 292, 171-195	3.4	81
257	Time-dependent processes in polyatomic molecules during and after intense infrared irradiation. *Faraday Discussions of the Chemical Society*, **1983**, 75, 197-210		80
256	Global analytical potential hypersurfaces for large amplitude nuclear motion and reactions in methane. I. Formulation of the potentials and adjustment of parameters to ab initio data and experimental constraints. *Journal of Chemical Physics*, **1998**, 109, 10628-10643	3.9	79
255	A new ab initio based six-dimensional semi-empirical pair interaction potential for HF. *Chemical Physics Letters*, **1996**, 261, 35-44	2.5	78
254	Reaction Dynamics and Statistical Mechanics of the Preparation of Highly Excited States by Intense Infrared Radiation. *Advances in Chemical Physics*, **2007**, 395-473		77
253	Global Analytical Potential Hypersurface for Large Amplitude Nuclear Motion and Reactions in Methane II. Characteristic Properties of the Potential and Comparison to Other Potentials and Experimental Information *Journal of Physical Chemistry A*, **2004**, 108, 3166-3181	2.8	77
252	Molecular Spectroscopy and Molecular Dynamics: Theory and Experiment. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1995**, 99, 231-245		75
251	Multiple anharmonic resonances in the vibrational overtone spectra of CHClF2. *Molecular Physics*, **1985**, 56, 727-735	1.7	72
250	High-resolution Fourier transform infrared and cw-diode laser cavity ringdown spectroscopy of the 2+2 band of methane near 7510 cm in slit jet expansions and at room temperature. *Journal of Chemical Physics*, **2002**, 116, 6045-6055	3.9	70
249	Spectral bandshape and intensity of the C-H chromophore in the infrared spectra of CF3H and C4F9H. *Chemical Physics Letters*, **1980**, 72, 342-347	2.5	69
248	Current Aspects of Unimolecular Reactions. *International Reviews in Physical Chemistry*, **1981**, 1, 97-147	7	69
247	High-resolution cavity ring-down absorption spectroscopy of nitrous oxide and chloroform using a near-infrared cw diode laser. *Chemical Physics Letters*, **1998**, 289, 527-534	2.5	68

246	Observation and assignment of the hydrogen bond exchange disrotatory in-plane bending vibration v5 in (HF)2. *Chemical Physics Letters*, **1990**, 171, 517-524	2.5	68
245	High resolution spectroscopy and the first global analysis of the Tetradecad region of methane 12CH4. *Physical Chemistry Chemical Physics*, **2013**, 15, 10071-93	3.6	66
244	Combined multidimensional anharmonic and parity violating effects in CDBrClF. *Journal of Chemical Physics*, **2003**, 119, 11228-11240	3.9	66
243	Vibrational overtone spectra and vibrational dynamics of CFHCl2 and (CH3)2CFH. *Molecular Physics*, **1984**, 53, 257-264	1.7	64
242	Unimolecular reactions and energy transfer of highly excited molecules175-238		64
241	Spectrum and dynamics of the CH chromophore in CD2HF. I. Vibrational Hamiltonian and analysis of rovibrational spectra. *Chemical Physics Letters*, **1992**, 190, 581-589	2.5	62
240	Accurate quantum Monte Carlo calculations of the tunneling splitting in (HF)2 on a six-dimensional potential hypersurface. *Chemical Physics Letters*, **1995**, 234, 71-76	2.5	60
239	Potential energy surface and energy levels of (HF)2 and its D isotopomers. *Molecular Physics*, **1990**, 69, 791-801	1.7	60
238	Observation and assignment of tunnelling-rotational transitions in the far infrared spectrum of (HF)2. *Molecular Physics*, **1988**, 65, 1025-1045	1.7	60
237	Master Equations for Photochemistry with Intense Infrared Light. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1979**, 83, 757-775		59
236	A spectroscopic determination of the methyl radical recombination rate constant in shock waves. *Chemical Physics Letters*, **1976**, 39, 304-309	2.5	59
235	Cw cavity ring-down infrared absorption spectroscopy in pulsed supersonic jets: nitrous oxide and methane. *Chemical Physics Letters*, **1999**, 314, 273-281	2.5	57
234	Intramolecular energy transfer and vibrational redistribution in chiral molecules: experiment and theory. *Faraday Discussions*, **1994**, 99, 49	3.6	57
233	On the densities and numbers of rovibronic states of a given symmetry species: Rigid and nonrigid molecules, transition states, and scattering channels. *Journal of Chemical Physics*, **1985**, 82, 3277-3283	3.9	57
232	Molecular chirality and the fundamental symmetries of physics: influence of parity violation on rovibrational frequencies and thermodynamic properties. *Chirality*, **2001**, 13, 745-53	2.1	56
231	Parity Violation Dominates the Dynamics of Chirality in Dichlorodisulfane. *Angewandte Chemie - International Edition*, **2001**, 40, 4195-4198	16.4	56
230	Inversion Tunneling in Aniline from High Resolution Infrared Spectroscopy and an Adiabatic Reaction Path Hamiltonian Approach. *Zeitschrift Fur Physikalische Chemie*, **1999**, 209, 1-19	3.1	56
229	Evidence for the (HF) 5 complex in the HF stretching FTIR absorption spectra of pulsed and continuous supersonic jet expansions of hydrogen fluoride. *Chemical Physics Letters*, **1993**, 208, 446-452	2.5	56

228	Intramolecular vibrational redistribution and unimolecular reaction: Concepts and new results on the femtosecond dynamics and statistics in CHBrClF. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1997**, 101, 311-328		55
227	Roadmap on STIRAP applications. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2019**, 52, 202001	1.3	54
226	Synchrotron-based highest resolution Fourier Transform infrared spectroscopy of naphthalene (C10H8) and indole (C8H7N) and its application to astrophysical problems. *Faraday Discussions*, **2011**, 150, 71-99; discussion 113-60	3.6	54
225	High resolution infrared spectroscopy and global vibrational analysis for the CH3D and CHD3 isotopomers of methane. *Molecular Physics*, **2010**, 108, 1209-1240	1.7	54
224	Representation of parity violating potentials in molecular main chiral axes. *Chemical Physics Letters*, **1999**, 303, 547-557	2.5	54
223	Femtosecond quantum dynamics of functional groups under coherent infrared multiphoton excitation as derived from the analysis of high-resolution spectra. *The Journal of Physical Chemistry*, **1993**, 97, 12574-12590		54
222	Vibrational dynamics of (HF)n aggregates from an ab initio based analytical (1+2+3)-body potential. *Journal of Molecular Structure*, **1993**, 294, 33-36	3.4	53
221	Overtone intensities and dipole moment surfaces for the isolated CH chromophore in CHD3 and CHF3: Experiment and ab initio theory. *Journal of Chemical Physics*, **1990**, 93, 7097-7109	3.9	53
220	On FTIR Spectroscopy in Asynchronously Pulsed Supersonic Free Jet Expansions and on the Interpretation of Stretching Spectra of HF Clusters. *Zeitschrift Fur Elektrotechnik Und Elektrochemie* , **1995**, 99, 457-468		52
219	Fermi resonance structure and femtosecond quantum dynamics of a chiral molecule from the analysis of vibrational overtone spectra of CHBrClF. *Zeitschrift Fur Elektrotechnik Und Elektrochemie* , **1996**, 100, 1853-1875		52
218	Struktur und Dynamik chiraler Molekle. *Angewandte Chemie*, **1989**, 101, 588-604	3.6	52
217	Statistical mechanics and dynamics of molecular fragmentation. *Societa Italiana Di Fisica Nuovo Cimento B-General Physics, Relativity Astronomy and Mathematical Physics and Methods*, **1981**, 63, 358-377		52
216	Survey of the high resolution infrared spectrum of methane ((12)CH4 and (13)CH4): partial vibrational assignment extended towards 12,000 cm(-1.). *Journal of Chemical Physics*, **2014**, 141, 234302	3.9	51
215	Quantitative comparison between detailed (state selected) relative rate data and averaged (thermal) absolute rate data for complex forming reactions. *The Journal of Physical Chemistry*, **1979**, 83, 150-158		50
214	High-resolution IR spectrum of fluoroform: a close resonance. *Chemical Physics Letters*, **1981**, 80, 439-444	2.5	50
213	High-resolution rovibrational analysis of vibrational states of A2 symmetry of the dideuterated methane CH2D2: the levels 5 and 7 + 9. *Molecular Physics*, **2006**, 104, 3371-3386	1.7	49
212	Wie wichtig ist Paritsverletzung fi die molekulare und biomolekulare Chiralit?. *Angewandte Chemie*, **2002**, 114, 4812-4825	3.6	49
211	Group additivity and overtone intensities for the isolated CH chromophore. *Chemical Physics Letters* , **1984**, 112, 387-392	2.5	49

210	High resolution FTIR spectra of 12CF3I, 13CF3I and 12CF3 79Br near 1050 cm-1 and 550 cm-1. *Molecular Physics*, **1985**, 55, 255-275	1.7	49
209	High-resolution near infrared spectroscopy and vibrational dynamics of dideuteromethane (CH2D2). *Journal of Physical Chemistry A*, **2009**, 113, 2218-31	2.8	48
208	Ab initio calculations of mode selective tunneling dynamics in 12CH3OH and 13CH3OH. *Journal of Chemical Physics*, **2003**, 119, 5534-5544	3.9	48
207	The dependence of rate coefficients and product yields upon fluence, intensity, and time in unimolecular reactions induced by monochromatic infrared radiation. *Journal of Chemical Physics*, **1980**, 73, 247-255	3.9	48
206	High resolution Fourier transform spectroscopy of CH2D2 in the region 2350-2650 cm(-1): the bands nu5 + nu7, 2nu9, nu3 + nu4, nu3 + nu7 and nu5 + nu9. *Physical Chemistry Chemical Physics*, **2005**, 7, 1142-50	3.6	47
205	Molecular infrared spectra and molecular motion. *Journal of Molecular Structure*, **1995**, 347, 245-266	3.4	47
204	Stereomutation dynamics in hydrogen peroxide. *Chemical Physics*, **2007**, 338, 90-105	2.3	46
203	Mode Selective Stereomutation and Parity Violation in Disulfane Isotopomers H2S2, D2S2, T2S2. *Helvetica Chimica Acta*, **2001**, 84, 1846-1861	2	46
202	High-resolution infrared spectrum and analysis of the v 11, A2u(B2) fundamental band of 12C6H6 and 13C12C5H6. *Molecular Physics*, **1990**, 71, 759-768	1.7	46
201	Statistical Methods in Scattering **1981**, 199-276		46
200	Analysis of the rovibrational spectrum of 13CH4 in the Octad range. *Journal of Molecular Spectroscopy*, **2013**, 291, 33-47	1.3	45
199	Absolute rate parameters for infrared photochemistry: CF3I-ϵF3+I. *Journal of Chemical Physics*, **1982**, 76, 955-965	3.9	45
198	Parity Violation in Chiral Molecules. *Chimia*, **2005**, 59, 530-538	1.3	44
197	Analytical three-body interaction potentials and hydrogen bond dynamics of hydrogen fluoride aggregates, (HF) n , n ∃. *Journal of Molecular Structure*, **2001**, 599, 381-425	3.4	44
196	Investigation of fermi resonances in CHX3 molecules with an internal-coordinate hamiltonian. *Journal of the Chemical Society, Faraday Transactions 2*, **1988**, 84, 1371		44
195	Quantum-mechanical wavepacket dynamics of the CH group in symmetric top X3CH compounds using effective Hamiltonians from high-resolution spectroscopy. *Journal of the Chemical Society, Faraday Transactions 2*, **1986**, 82, 1173		44
194	FTIR spectroscopy of hydrogen fluoride clusters in synchronously pulsed supersonic jets. Isotopic isolation, substitution and 3-d condensation. *Chemical Physics Letters*, **1997**, 269, 29-38	2.5	43
193	Quasiadiabatic channels and effective transition-state barriers for the disrotatory in-plane hydrogen-bond exchange motion in (HF)2. *Chemical Physics Letters*, **1991**, 183, 187-194	2.5	42

192	Molecular Spectra, Reaction Dynamics, Symmetries and Life. *Chimia*, **2003**, 57, 147-160	1.3	41
191	The NH and ND stretching fundamentals of 14ND2H. *Journal of Chemical Physics*, **2003**, 119, 7893-7902	3.9	41
190	High-resolution FTIR spectroscopy of CHClF2 in a supersonic free jet expansion. *Chemical Physics Letters*, **1988**, 152, 275-280	2.5	41
189	Sequence structure in the high-resolution infrared spectrum of trifluoropropyne. *Chemical Physics Letters*, **1982**, 90, 370-374	2.5	41
188	Fermi resonance in CHX3: a hamiltonian in symmetrized curvilinear internal coordinates. *Chemical Physics Letters*, **1987**, 140, 512-519	2.5	40
187	On the validity of the quasiresonant approximation for molecular infrared-multiphoton excitation. *Journal of Chemical Physics*, **1985**, 83, 3805-3812	3.9	40
186	Master equations for photochemistry with intense infrared light (III) the influence of molecular parameters in URIMIR. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1979**, 83, 1287-1293		40
185	Isotopic chirality and molecular parity violation. *Angewandte Chemie - International Edition*, **2005**, 44, 3623-6	16.4	39
184	Isotope selective overtone spectroscopy of CHCl3 by vibrationally assisted dissociation and photofragment ionization. *Journal of Chemical Physics*, **1996**, 104, 7426-7430	3.9	39
183	On the measurement of CP-violating energy differences in matter-antimatter enantiomers. *Chemical Physics Letters*, **1994**, 231, 421-428	2.5	39
182	Global analytical potential energy surface for large amplitude nuclear motions in ammonia. *Journal of Physical Chemistry B*, **2005**, 109, 8439-51	3.4	38
181	The permanentectric dipole moment of CH2D2: FIR el spectroscopy. *Molecular Physics*, **1996**, 89, 297-313	1.7	38
180	Synthesis, Structure, High-Resolution Spectroscopy, and Laser Chemistry of Fluorooxirane and 2,2-[2H2]-Fluorooxirane. *Angewandte Chemie International Edition in English*, **1997**, 36, 140-143		37
179	Global Analysis of the Infrared Spectrum of 13CH4: Lines in the Region 0 to 3200 cm−1. *Chimia*, **2008**, 62, 273-276	1.3	37
178	High resolution rovibrational spectroscopy of chiral and aromatic compounds. *ChemPhysChem*, **2007**, 8, 1271-81	3.2	37
177	Tunneling dynamics of the NH chromophore in NHD2 during and after coherent infrared excitation. *Journal of Chemical Physics*, **2003**, 118, 643-658	3.9	37
176	Infrared spectrum and dynamics of the hydrogen bonded dimer (HF)2. *Infrared Physics*, **1989**, 29, 535-539		37
175	High resolution interferometric Fourier transform infrared absorption spectroscopy in a supersonic free jet expansion. *Molecular Physics*, **1987**, 60, 237-248	1.7	37

174	Isotopomer-selective overtone spectroscopy by ionization detected IR+UV double resonance of jet-cooled aniline. *Chemical Physics Letters*, **1998**, 298, 320-328	2.5	36
173	Rovibrational analysis of the 2□3, 3□3 and □1 bands of CHCl2F measured at 170 and 298 K by high-resolution FTIR spectroscopy. *Molecular Physics*, **2007**, 105, 541-558	1.7	36
172	How do Parity Violating Weak Nuclear Interactions Influence Rovibrational Frequencies in Chiral Molecules?. *Zeitschrift Fur Physikalische Chemie*, **2000**, 214,	3.1	36
171	IR laser chemistry. *Infrared Physics and Technology*, **1995**, 36, 365-380	2.7	36
170	Fermi resonance in the overtone spectra of the CH chromophore in tribromomethane. 2. Visible spectra. *The Journal of Physical Chemistry*, **1991**, 95, 1201-1209		36
169	Infrared-multiphoton excitation and wave packet motion of the harmonic and anharmonic oscillators: Exact solutions and quasiresonant approximation. *Journal of Chemical Physics*, **1989**, 90, 6320-6327	3.9	36
168	On the possibility of mode-selective IR-multiphoton excitation of ozone. *Chemical Physics Letters*, **1984**, 105, 147-152	2.5	36
167	Global analytical potential energy surface for the electronic ground state of NH3 from high level ab initio calculations. *Journal of Physical Chemistry A*, **2013**, 117, 7502-22	2.8	35
166	Stereomutation tunneling switching dynamics and parity violation in chlorineperoxide Cl-O-O-Cl. *Journal of Physical Chemistry A*, **2006**, 110, 3338-48	2.8	35
165	Radiative excitation of the harmonic oscillator with applications to stereomutation in chiral molecules. *Zeitschrift F□ Physik D-Atoms Molecules and Clusters*, **1996**, 36, 229-237		35
164	Frontiers in spectroscopy. *Faraday Discussions*, **2011**, 150, 533-65	3.6	34
163	Electroweak Quantum Chemistry for Possible Precursor Molecules in the Evolution of Biomolecular Homochirality. *Helvetica Chimica Acta*, **2000**, 83, 1919-1950	2	34
162	Dynamical Chirality and the Quantum Dynamics of Bending Vibrations of the CH Chromophore in Methane Isotopomers□*Journal of Physical Chemistry A*, **2000**, 104, 6129-6149	2.8	34
161	On the Mechanism of Reversible Unimolecular Reactions and the Canonical (□High Pressure□)Limit of the Rate Coefficient at Low Pressures*). *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1984**, 88, 94-100		34
160	Statistical models for product energy distributions in bimolecular reactions with metastable intermediates. *Chemical Physics*, **1980**, 51, 353-367	2.3	34
159	Tunneling and tunneling switching dynamics in phenol and its isotopomers from high-resolution FTIR spectroscopy with synchrotron radiation. *Angewandte Chemie - International Edition*, **2013**, 52, 346-9	16.4	33
158	The v 1 and v 3 bands of ND3. *Molecular Physics*, **2000**, 98, 837-854	1.7	33
157	Ab initio calculation and spectroscopic analysis of the intramolecular vibrational redistribution in 1,1,1,2-tetrafluoroiodoethane CF3CHFI. *Journal of Chemical Physics*, **2000**, 113, 2719-2735	3.9	33

156	Information, Memory and Statistical Theories of Elementary Chemical Reactions. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1976**, 80, 1140-1149		33
155	A global electric dipole function of ammonia and isotopomers in the electronic ground state. *Journal of Chemical Physics*, **2003**, 119, 10724-10732	3.9	32
154	Ab initio calculations for the anharmonic vibrational resonance dynamics in the overtone spectra of the coupled OH and CH chromophores in CD2HOH. *Journal of Chemical Physics*, **1999**, 110, 11958-11970	3.9	32
153	High-resolution FTIR spectra of NO2 and N2O4 in supersonic jet expansions and their rovibrational analysis. *Chemical Physics Letters*, **1992**, 199, 293-301	2.5	32
152	Isotope effects in the fermi resonance of the CH chromophore in CHX3 molecules. *Chemical Physics Letters*, **1990**, 165, 175-183	2.5	31
151	Vibrational Relaxation of Diatomic Molecules in Complex Forming Collisions with Reactive Atoms. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1977**, 81, 160-162		31
150	Explicitly correlated coupled cluster calculations of the dissociation energies and barriers to concerted hydrogen exchange of (HF)n oligomers (n = 2,3,4,5). *Molecular Physics*, **1998**, 94, 105-119	1.7	31
149	Parity Violation in Fluorooxirane. *Angewandte Chemie - International Edition*, **2001**, 40, 1667-1670	16.4	30
148	Explicitly correlated coupled cluster calculations of the dissociation energies and barriers to concerted hydrogen exchange of (HF)n oligomers (n=2,3,4,5). *Molecular Physics*, **1998**, 94, 105-119	1.7	30
147	Infrared multiphoton excitation, dissociation and ionization of C60. *Chemical Physics Letters*, **1997**, 278, 111-120	2.5	29
146	Vibrational spectra and intramolecular vibrational redistribution in highly excited deuterobromochlorofluoromethane CDBrClF: Experiment and theory. *Journal of Chemical Physics*, **2000**, 113, 2701-2718	3.9	29
145	Reinvestigation of the 2 + 2 subband in the overtone icosad of 12CH4 using cavity ring-down (CRD) spectroscopy of a supersonic jet expansion. *Molecular Physics*, **2012**, 110, 2111-2135	1.7	28
144	Theory of Stereomutation Dynamics and Parity Violation in Hydrogen Thioperoxide Isotopomers 1,2,3HSO1,2,3H. *Helvetica Chimica Acta*, **2003**, 86, 1641-1652	2	28
143	Steps towards molecular parity violation in axially chiral molecules. I. Theory for allene and 1,3-difluoroallene. *Journal of Chemical Physics*, **2005**, 123, 084305	3.9	28
142	Spectrum and dynamics of the CH chromophore in CD2HF. II. Ab initio calculations of the potential and dipole moment functions. *Chemical Physics Letters*, **1992**, 190, 590-598	2.5	28
141	The role of potential anisotropy in the dynamics of the CH chromophore in CHX3 (C3v) symmetric tops. *Chemical Physics Letters*, **1993**, 205, 277-284	2.5	28
140	Analysis of the v4 and v1 bands of CF3Cl measured by supersonic free-jet ftir spectroscopy. *Chemical Physics Letters*, **1987**, 139, 82-88	2.5	28
139	Mode selective tunneling dynamics observed by high resolution spectroscopy of the bending fundamentals of 14NH2D and 14ND2H. *Journal of Chemical Physics*, **2006**, 125, 194319	3.9	27

138	High temperature UV absorption and recombination of methyl radicals in shock waves. *Proceedings of the Combustion Institute*, **1977**, 16, 949-960		27
137	Ab Initio Calculation of Molecular Energies Including Parity Violating Interactions **1996**, 287-296		27
136	Infrared laser induced population transfer and parity selection in (14)NH3: A proof of principle experiment towards detecting parity violation in chiral molecules. *Journal of Chemical Physics*, **2015** , 143, 244305	3.9	26
135	High-resolution continuous-wave-diode laser cavity ring-down spectroscopy of the hydrogen fluoride dimer in a pulsed slit jet expansion: two components of the N=2 triad near 1.3 microm. *Journal of Physical Chemistry A*, **2007**, 111, 12659-68	2.8	26
134	Nuclear spin symmetry conservation and relaxation in water ((1)H2(16)O) studied by cavity ring-down (CRD) spectroscopy of supersonic jets. *Journal of Physical Chemistry A*, **2013**, 117, 10105-18	2.8	25
133	The Concept of Law and Models in Chemistry. *European Review*, **2014**, 22, S50-S86	0.3	25
132	Ab initio calculation of parity-violating potential energy hypersurfaces of chiral molecules. *International Journal of Quantum Chemistry*, **2004**, 99, 393-407	2.1	25
131	Slit jet diode laser and FTIR spectroscopy of CF3I and improved analysis of the symmetric CF3 stretching chromophore absorption. *Chemical Physics Letters*, **1994**, 222, 176-184	2.5	25
130	Femtosecond quantum structure, equilibration and time reversal for the CH-chromophore dynamics in CHD2F. *Chemical Physics Letters*, **1993**, 212, 434-443	2.5	25
129	High resolution interferometric fourier transform infrared spectroscopy in supersonic free jet expansions: N2O, CBrF3 and CF3I. *Infrared Physics*, **1989**, 29, 561-574		25
128	On hydrogen-bonded complexes: the case of (HF). *Theoretica Chimica Acta*, **1996**, 93, 61		25
127	Rotational analysis of the ν1 band of trichlorofluoromethane from high resolution Fourier transform and diode laser spectra of supersonic jets and isotopically enriched samples. *Journal of Chemical Physics*, **1995**, 103, 8846-8853	3.9	24
126	Absolute Integrated Band Strength and Magnetic Dipole Transition Moments in the 2P3/2 -2P1/2 Fine Structure (with Hyperfine Structure) Transition of the Iodine Atom: Experiment and Theory. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1995**, 99, 384-392		24
125	Fundamental Symmetries and Symmetry Violations from High Resolution Spectroscopy **2011**,		23
124	Mode-selective stereomutation tunneling and parity violation in HOClH+ and H2Te2 isotopomers. *International Journal of Mass Spectrometry*, **2004**, 233, 373-384	1.9	23
123	Dynamics of unimolecular reactions induced by monochromatic IR radiation: experiment and theory for CnFmHkI -CnFmHk+ I probed with hyperfine-, doppler- and uncertainty-limited time resolution of iodine-atom IR absorption. *Faraday Discussions*, **1995**, 102, 275	3.6	23
122	Overtone spectroscopy by vibrationally assisted dissociation and photofragment ionization. *Chemical Physics Letters*, **1994**, 231, 75-80	2.5	23
121	Primary photophysical processes in IR multiphoton excitation: Wavepacket motion and state selectivity. *Infrared Physics*, **1985**, 25, 163-173		23

120	On the use of nonrigid-molecular symmetry in nuclear motion computations employing a discrete variable representation: A case study of the bending energy levels of CH. *Journal of Chemical Physics*, **2017**, 147, 134101	3.9	22
119	Time-resolved infrared-spectroscopic observation of relaxation and reaction processes during and after infrared-multiphoton excitation of 12CF3I and 13CF3I with shaped nanosecond pulses. *Journal of Chemical Physics*, **1992**, 96, 8727-8740	3.9	22
118	Fermi resonance in the overtone spectra of the CH chromophore in bromoform. *Chemical Physics Letters*, **1989**, 156, 455-462	2.5	22
117	High resolution Fourier-transform infrared spectroscopy of CHCl2F in supersonic jets: Analysis of ν3, ν7, and ν8. *Journal of Chemical Physics*, **1991**, 95, 6355-6361	3.9	22
116	Spectroscopy and quantum dynamics of hydrogen fluoride clusters. *Advances in Molecular Vibrations and Collision Dynamics*, **1998**, 205-248		22
115	On the "expanded local mode" approach applied to the methane molecule: isotopic substitutions CH3D <-CH4 and CHD3 <-CH4. *Molecular Physics*, **2014**, 112, 2529-2556	1.7	21
114	The NH and ND stretching fundamentals of 14NH2D. *Journal of Molecular Spectroscopy*, **2006**, 237, 143-148	1.5	21
113	High Resolution Interferometric Fourier Transform Infrared Absorption Spectroscopy in Supersonic Free Jet Expansions. *Zeitschrift Fur Physikalische Chemie*, **1987**, 154, 59-72	3.1	21
112	Tunneling and Parity Violation in Trisulfane (HSSSH): An Almost Ideal Molecule for Detecting Parity Violation in Chiral Molecules. *ChemPhysChem*, **2015**, 16, 3584-9	3.2	20
111	Diode laser detection of iodine atom hyperfine transitions during and after infrared multiphoton excitation and dissociation of CF3I with short pulse CO2 lasers. *Chemical Physics Letters*, **1993**, 215, 228-236	2.5	20
110	Generation of shaped pulses for IR laser chemistry. *Spectrochimica Acta Part A: Molecular Spectroscopy*, **1990**, 46, 523-536		20
109	The Synthesis of [2-2H1]Thiirane-1-oxide and [2,2-2H2]Thiirane-1-oxide and the Diastereoselective Infrared Laser Chemistry of [2-2H1]Thiirane-1-oxide. *Chemistry - A European Journal*, **1998**, 4, 441-448	4.8	19
108	High resolution rovibrational spectroscopy of pyrimidine: Analysis of the B1 modes ν10b and ν4 and B2 mode ν6b. *Journal of Molecular Spectroscopy*, **2007**, 243, 280-291	1.3	19
107	Parity-Violating Potentials for the Torsional Motion of Methanol (CH3OH) and Its Isotopomers (CD3OH, 13CH3OH, CH3OD, CH3OT, CHD2OH, and CHDTOH). *Helvetica Chimica Acta*, **2003**, 86, 4048-4060	2	19
106	Sub-Doppler supersonic jet spectra of the coupled 6a1 0 and 6b1 0 vibronic bands of the S1(1B2u) <- S0(1A1g) transition in monodeuterobenzene and their rovibrational analysis. *Molecular Physics*, **1994**, 81, 1-15	1.7	19
105	Dynamics of the CH chromophore in CHX3: a combined treatment for a set of isotopic species. *Journal of Molecular Structure*, **1993**, 294, 65-69	3.4	19
104	Fermi resonance structure in the CH vibrational overtones of CD3CHO. *Journal of Chemical Physics*, **1989**, 90, 3944-3951	3.9	19
103	Group Additivity for the Band Strength of the CF-Chromophore for IR-Photochemistry. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1983**, 87, 582-586		19

102	Mode Selective Vibrational Redistribution and Unimolecular Reactions During and After Ir□laser Excitation. *Jerusalem Symposia on Quantum Chemistry and Biochemistry*, **1991**, 47-65		19
101	Controlling tunneling in ammonia isotopomers. *Journal of Chemical Physics*, **2019**, 150, 014102	3.9	19
100	Synchrotron-based highest resolution FTIR spectroscopy of chlorobenzene. *Journal of Molecular Spectroscopy*, **2015**, 315, 92-101	1.3	18
99	Excited vibrational states of benzene: High resolution FTIR spectra and analysis of some out-of-plane vibrational fundamentals of C6H5D. *Chemical Physics*, **1997**, 225, 107-130	2.3	18
98	Parit□sverletzung dominiert die Dynamik der Chiralit□ in Dischwefeldichlorid. *Angewandte Chemie* , **2001**, 113, 4342-4345	3.6	18
97	Dipole Moment Function of Methane and Analytical Anharmonic, 9-dimensional Potential Surface: Theory and Experiment for the Permanent Electric Dipole Moment of CH2D2 Using Quantum Monte Carlo Calculations and FIR Spectroscopy. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1995**, 99, 275-281		18
96	Free-jet high-resolution FTIR spectroscopy of the complex structure of the □ band of CF3I near 9 □m. *Chemical Physics Letters*, **1989**, 156, 557-563	2.5	18
95	Energy redistribution in reacting systems		18
94	Intramolecular energy transfer from isotope selective overtone spectroscopy by vibrationally assisted dissociation and photofragment ionization. *Zeitschrift Fur Elektrotechnik Und Elektrochemie* , **1997**, 101, 356-362		17
93	On hydrogen-bonded complexes: the case of (HF)2. *Theoretica Chimica Acta*, **1996**, 93, 61-65		17
92	The rotational structure of the v 4-band of CH35ClF2. *Molecular Physics*, **1989**, 66, 1273-1277	1.7	17
91	High resolution FTIR spectra of CDF3 in the CD stretching fundamental and overtone regions. *Journal of Chemical Physics*, **1986**, 85, 34-39	3.9	17
90	Temperature-dependent infrared band structure and dynamics of the CH choromophore in C4F9?C?C?H. *Chemical Physics Letters*, **1983**, 95, 358-362	2.5	17
89	Wavepacket Dynamics of the Axially Chiral Molecule Cl-O-O-Cl under Coherent Radiative Excitation and Including Electroweak Parity Violation. *Journal of Physical Chemistry A*, **2015**, 119, 12805-22	2.8	16
88	Isotopomer-Selective Overtone Spectroscopy of Jet-Cooled Benzene by Ionization Detected IR + UV Double Resonance:□TheN= 2 CH Chromophore Absorption of12C6H6and13C12C5H6near 6000 cm-1. *Journal of Physical Chemistry A*, **2003**, 107, 10743-10752	2.8	16
87	High-resolution spectroscopy of the □ band of WF6 and ReF6 in a supersonic jet. *Journal of Chemical Physics*, **2002**, 117, 3196-3207	3.9	16
86	Overtone Spectroscopy of Chloroform in a Supersonic Jet by Vibrationally Assisted Dissociation and Photofragment Ionization. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1995**, 99, 417-421		16
85	Time-resolved detection of reaction products in the infrared laser chemistry of sulfoxides: C2H4SO, (CH3)2SO, (CD3)2SO. *Chemical Physics Letters*, **1993**, 213, 122-130	2.5	16

84	Extended analysis of the high resolution FTIR spectrum of 32S16O2 in the region of the 2 band: Line positions, strengths, and pressure broadening widths. *Journal of Quantitative Spectroscopy and Radiative Transfer*, **2018**, 210, 141-155	2.1	15
83	Rovibrational analysis of the 4,26 Fermi resonance band of CH35ClF2 by means of a polyad Hamiltonian involving the vibrational levels 4, 26,6+9 and 29, and comparison with ab initio calculations. *Molecular Physics*, **2006**, 104, 2719-2735	1.7	15
82	Computation of molecular parity violation using the coupled-cluster linear response approach. *Molecular Physics*, **2015**, 113, 1768-1779	1.7	14
81	Doppler-limited FTIR spectrum of the v 3(a?)/v 8 (a?) Coriolis resonance dyad of CHC1F2: analysis and comparison with ab initio calculations. *Molecular Physics*, **2004**, 102, 1671-1686	1.7	14
80	Potential Energy Hypersurfaces for Hydrogen Bonded Clusters (HF)n **1997**, 415-463		14
79	Synchrotron-Based Highest Resolution Terahertz Spectroscopy of the Band System of 1,2-Dithiine (CHS): A Candidate for Measuring the Parity Violating Energy Difference between Enantiomers of Chiral Molecules. *Journal of Physical Chemistry Letters*, **2016**, 7, 3847-3853	6.4	14
78	High resolution analysis of the FTIR spectra of trifluoroamine NF3. *Journal of Molecular Spectroscopy*, **2018**, 348, 87-102	1.3	13
77	High-Resolution Fourier Transform Infrared Spectroscopy **2011**,		13
76	High resolution analysis of the complex symmetric CF3 stretching chromophore absorption in CF3I. *Journal of Chemical Physics*, **2002**, 116, 974-983	3.9	13
75	Analysis of the 3 + 7 combination band of CF2Cl2 from spectra obtained by high resolution diode laser and FTIR supersonic jet techniques. *Physical Chemistry Chemical Physics*, **2002**, 4, 1531-1536	3.6	13
74	The rovibrational analysis of the high-resolution IR spectrum of CD2HF below 1200 cm1: an interacting tetrad of vibrational levels. *Chemical Physics Letters*, **1991**, 180, 524-532	2.5	13
73	High resolution GHz and THz (FTIR) spectroscopy and theory of parity violation and tunneling for 1,2-dithiine (C4H4S2) as a candidate for measuring the parity violating energy difference between enantiomers of chiral molecules. *Physical Chemistry Chemical Physics*, **2016**, 18, 21976-93	3.6	12
72	Mode-selective stereomutation tunneling as compared to parity violation in hydrogen diselenide isotopomers 1,2,3H280Se2. *Israel Journal of Chemistry*, **2003**, 43, 353-362	3.4	12
71	Diode-Laser Jet Spectra and Analysis of the nu(1) and nu(4) Fundamentals of CCl(3)F. *Journal of Molecular Spectroscopy*, **2001**, 205, 102-109	1.3	12
70	Absolute and relative rate coefficients in the IR-laser chemistry of bichromophoric fluorobutanes: tests for inter- and intra-molecular selectivity. *Chemical Physics Letters*, **1987**, 135, 487-494	2.5	12
69	Time and Time Reversal Symmetry in Quantum Chemical Kinetics **2004**, 423-474		12
68	Synthese, Struktur, hochauflsende Spektroskopie und laserchemische Reaktionen von Fluoroxiran und 2,2-[2H2]-Fluoroxiran. *Angewandte Chemie*, **1997**, 109, 136-140	3.6	11
67	Some simple mechanisms of multiphoton excitation in many-level systems. *Molecular Physics*, **2001**, 99, 1275-1287	1.7	11

66	High-resolution Fourier-transform infrared spectroscopy of the v 3(F2) fundamental of RuO4. *Molecular Physics*, **1991**, 72, 145-158	1.7	11
65	Vibrational Predissociation in Hydrogen Bonded Dimers: The Case of (HF)2 and its Isotopomers. *Chimia*, **2008**, 62, 235-239	1.3	10
64	High Resolution FTIR and Diode Laser Supersonic Jet Spectroscopy of the N = 2 HF Stretching Polyad in (HF)2 and (HFDF): Hydrogen Bond Switching and Predissociation Dynamics. *Zeitschrift Fur Physikalische Chemie*, **2007**, 221, 1581-1645	3.1	10
63	Nonlinear intensity dependence in the infrared multiphoton excitation and dissociation of methanol pre-excited to different energies. *Journal of Chemical Physics*, **2002**, 117, 9793-9805	3.9	10
62	Statistical Aspects of the Radiative Excitation of the Harmonic Oscillator. *The Journal of Physical Chemistry*, **1994**, 98, 3486-3491		10
61	A combined Gigahertz and Terahertz (FTIR) spectroscopic investigation of meta-D-phenol: observation of tunnelling switching. *Molecular Physics*, **2016**, 114, 2751-2768	1.7	10
60	Synchrotron-based rotationally resolved high-resolution FTIR spectroscopy of azulene and the unidentified infrared bands of astronomy. *ChemPhysChem*, **2013**, 14, 3204-8	3.2	9
59	Band strengths of fundamentals and overtones of the CF and CH chromophores in CHD2F. *Chemical Physics Letters*, **1988**, 149, 429-432	2.5	9
58	Molecular Parity Violation and Chirality: The Asymmetry of Life and the Symmetry Violations in Physics. *Progress in Theoretical Chemistry and Physics*, **2012**, 47-76	0.6	8
57	Global Analytical Potential Energy Surfaces for High-resolution Molecular Spectroscopy and Reaction Dynamics **2011**,		8
56	Isotopeneffekte durch Paritätsverletzung in chiralen Molekülen. *Angewandte Chemie*, **2005**, 117, 3689-3693	3.6	8
55	High resolution FTIR spectra and analysis of the ν1 fundamental and of the ν2 + ν11, ν5 + ν12 and ν7 + ν16 combination bands of 12C6D6. *Molecular Physics*, **2002**, 100, 981-1001	1.7	8
54	Vibrational spectroscopy, anharmonic resonances, and intramolecular vibrational redistribution in tetrafluoroiodoethane. *Molecular Physics*, **1998**, 95, 1055-1075	1.7	8
53	Vibrational IR-Multiphoton Excitation of Thiirane-1-oxide (C2H4SO) and d-Thiirane-1-oxide (C2H3DSO). *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1995**, 99, 358-365		8
52	Nuclear spin symmetry conservation and relaxation of water (H216O) seeded in supersonic jets of argon and oxygen: measurements by cavity ring-down laser spectroscopy. *Molecular Physics*, **2018**, 116, 3718-3730	1.7	8
51	Fundamentals of Rotation–Vibration Spectra		8
50	Some Kinetic and Spectroscopic Evidence on Intramolecular Relaxation Processes in Polyatomic Molecules **1983**, 493-511		8
49	High-resolution FTIR spectroscopy of trisulfane HSSSH: a candidate for detecting parity violation in chiral molecules. *Physical Chemistry Chemical Physics*, **2017**, 19, 11738-11743	3.6	7

48	Isotope effects on the resonance interactions and vibrational quantum dynamics of fluoroform CHF. *Physical Chemistry Chemical Physics*, **2017**, 19, 26527-26534	3.6	7
47	Tunneling and Tunneling Switching Dynamics in Phenol and Its Isotopomers from High-Resolution FTIR Spectroscopy with Synchrotron Radiation. *Angewandte Chemie*, **2013**, 125, 364-367	3.6	7
46	High-Resolution FTIR and Diode Laser Spectroscopy of Supersonic Jets		7
45	A molecular quantum switch based on tunneling in meta-d-phenol CHDOH. *Physical Chemistry Chemical Physics*, **2018**, 20, 7387-7394	3.6	6
44	Intramolecular vibrational energy redistribution in HCCCHX (X = Cl, Br, I) measured by femtosecond pump-probe experiments in a hollow waveguide. *Physical Chemistry Chemical Physics*, **2018**, 20, 10949-10959	3.6	6
43	Chlorine peroxide (Cl2O2) and its isomers: structures, spectroscopy, formation and thermochemistry. *Molecular Physics*, **2016**, 114, 1135-1147	1.7	6
42	Error and discovery: why repeating can be new. *Angewandte Chemie - International Edition*, **2013**, 52, 9362-70	16.4	6
41	Molecular Quantum Mechanics and Molecular Spectra, Molecular Symmetry, and Interaction of Matter with Radiation **2011**,		6
40	Femtosecond intramolecular dymanics after near-IR excitation of CH 3 I, C 2 H 5 I, CF 3 CHFI, and C 7 H 8 molecules in the gas phase and in solution **2004**, 5337, 178		6
39	Paritätsverletzung in Fluoroxiran. *Angewandte Chemie*, **2001**, 113, 1716-1719	3.6	6
38	Molecular Femtosecond Quantum Dynamics Between Less than Yoctoseconds and More than Days: Experiment and Theory781-818		6
37	On Biomolecular Homochirality as a Quasi-Fossil of the Evolution of Life. *Advances in Chemical Physics*, **2014**, 247-291		5
36	High resolution Fourier transform infrared spectroscopy of the ground state, 3,23 and 4 levels of 13CHF3. *Journal of Molecular Spectroscopy*, **2017**, 337, 96-104	1.3	4
35	Line shape of amplitude or frequency-modulated spectral profiles including resonator distortions. *Applied Optics*, **2015**, 54, 4417-31	1.7	4
34	High resolution FTIR spectroscopy of fluoroform 12CHF3 and critical analysis of the infrared spectrum from 25 to 1500 cm1. *Molecular Physics*, **2018**, 116, 1091-1107	1.7	4
33	Nuclear Spin Symmetry Conservation Studied for Symmetric Top Molecules (CHD, CHD, CHF, and CHCl) in Supersonic Jet Expansions. *Journal of Physical Chemistry A*, **2019**, 123, 6160-6174	2.8	4
32	Investigation of the 2 + 23 Subband in the Overtone Icosad of 13CH4 by Pulsed Supersonic Jet and Diode Laser Cavity Ring-Down Spectroscopy: Partial Rovibrational Analysis and Nuclear Spin Symmetry Conservation. *Zeitschrift Fur Physikalische Chemie*, **2015**, 229, 1575-1607	3.1	4
31	Irrtum und Erkenntnis: Wenn Wiederholen neu ist. *Angewandte Chemie*, **2013**, 125, 9530-9538	3.6	4

30	Analysis of the CH-chromophore spectra and dynamics in dideutero-methyliodide CHD2I1View all notes. *Molecular Physics*, **2008**, 106, 1303-1316	1.7	4
29	Theoretical Chemistry: Molecular Spectroscopy and Dynamics. *Chimia*, **2004**, 58, 263-275	1.3	4
28	Seventeenth Colloquium on High Resolution Molecular Spectroscopy. *Molecular Physics*, **2002**, 100, 3483-3483	1.7	4
27	Time Dependent Intramolecular Quantum Dynamics from High Resolution Spectroscopy and Laser Chemistry. *NATO ASI Series Series B: Physics*, **1992**, 293-310		4
26	Nuclear spin symmetry conservation studied by cavity ring-down spectroscopy of ammonia in a seeded supersonic jet from a pulsed slit nozzle. *Molecular Physics*, **2020**, 118, e1752946	1.7	4
25	Fundamental and approximate symmetries, parity violation and tunneling in chiral and achiral molecules. *Advances in Quantum Chemistry*, **2020**, 81, 51-104	1.4	4
24	The Gigahertz and Terahertz spectrum of monodeutero-oxirane (c-CHDO). *Physical Chemistry Chemical Physics*, **2019**, 21, 3669-3675	3.6	4
23	Combined synchrotron-based high resolution FTIR and IR-diode laser supersonic jet spectroscopy of the chiral molecule CDBrClF. *Journal of Molecular Spectroscopy*, **2017**, 337, 105-123	1.3	3
22	Trendbericht Physikalische Chemie 2017: Atomare und molekulare Tunnelprozesse. *Nachrichten Aus Der Chemie*, **2018**, 66, 307-315	0.1	3
21	Hydrogen fluoride clusters: from rings to nanocrystals. *Journal of Aerosol Science*, **1997**, 28, S363-S364	4.3	3
20	Eighteenth Colloquium on High Resolution Molecular Spectroscopy. *Molecular Physics*, **2004**, 102, 1499-1499	1.7	3
19	Rovibrational analysis of the ν4 and ν5+ν9 bands of CHCl2F. *Journal of Molecular Structure*, **2004**, 695-696, 385-394	3.4	3
18	The Dynamics of Polyatomic Molecules During and After Coherent Excitation. *Jerusalem Symposia on Quantum Chemistry and Biochemistry*, **1987**, 31-44		3
17	First line strength analysis of 34SO2 in the ν2 region: Isotopic relations for the dipole moment parameters. *Journal of Quantitative Spectroscopy and Radiative Transfer*, **2019**, 229, 166-178	2.1	3
16	High resolution ro-vibrational analysis of molecules in doublet electronic states: the fundamental of chlorine dioxide (OClO) in the electronic ground state. *Physical Chemistry Chemical Physics*, **2021**, 23, 4580-4596	3.6	3
15	Mass and Isotope-Selective Infrared Spectroscopy		3
14	Quantum dynamics and spectra of the iodine atom in a strong laser field as calculated with the URIMIR package. *Molecular Physics*, **2019**, 117, 3132-3147	1.7	2
13	High-resolution rovibrational spectroscopy of fluorobenzene, C6H5F: analysis of the B1 fundamentals ν4, ν10b, ν17b, the B2 fundamental ν15 and assignment of the A1 levels ν12, 2ν16a and 2ν18b. *Molecular Physics*, **2015**, 113, 2267-2289	1.7	2

12	High-resolution spectrum and rovibrational analysis of the □1 CH-stretching fundamental in CHD2I. *Molecular Physics*, **2010**, 108, 2403-2426	1.7	2
11	Nineteenth colloquium on high resolution molecular spectroscopy Salamanca 11□16 September 2005. *Molecular Physics*, **2006**, 104, 2579-2580	1.7	2
10	Physikalische Chemie 2005. *Nachrichten Aus Der Chemie*, **2006**, 54, 282-291	0.1	2
9	Fixierte Konstanten. *Nachrichten Aus Der Chemie*, **2015**, 63, 515-521	0.1	1
8	Twentieth Colloquium on High Resolution Molecular Spectroscopy. *Molecular Physics*, **2008**, 106, 1125-1126	1.7	1
7	General Discussion on Laser Control of Chemical Reactions. *Advances in Chemical Physics*, **2007**, 373-390		1
6	Myths, Challenges, Risks and Opportunities in Evaluating and Supporting Scientific Research **2015**, 223-239		1
5	Atomic and Molecular Tunneling Processes in Chemistry **2021**, 231-282		1
4	Foundations of Time Dependent Quantum Dynamics of Molecules Under Isolation and in Coherent Electromagnetic Fields **2021**, 1-41		1
3	Conventions, Symbols, Quantities, Units and Constants for High-Resolution Molecular Spectroscopy		1
2	Twenty-first Colloquium on High-Resolution Molecular Spectroscopy. *Molecular Physics*, **2010**, 108, 675-676	1.7	0
1	Isotope Selective Infrared Spectroscopy and Intramolecular Dynamics **2005**, 305-360		