

Robert W. Field

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

243
papers

7,962
citations

46
h-index

76
g-index

249
ext. papers

8,503
ext. citations

4.2
avg, IF

5.69
L-index

#	Paper	IF	Citations
243	Enantioselective orientation of chiral molecules induced by terahertz pulses with twisted polarization. <i>Physical Review Research</i> , 2021 , 3,	3.9	7
242	Substitution Reactions in the Pyrolysis of Acetone Revealed through a Modeling, Experiment, Theory Paradigm. <i>Journal of the American Chemical Society</i> , 2021 , 143, 3124-3142	16.4	9
241	Nonlinear rotational spectroscopy reveals many-body interactions in water molecules. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	2
240	Photodissociation of dicarbon: How nature breaks an unusual multiple bond.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	3
239	Long-range model of vibrational autoionization in core-nonpenetrating Rydberg states of NO.. <i>Journal of Chemical Physics</i> , 2021 , 155, 244303	3.9	0
238	One-colour (~220 nm) resonance-enhanced (S1 Σ^0) multi-photon dissociation of acetylene: probe of the C2 A1 Σ^+ Π Σ^+ Π g band by frequency-modulation spectroscopy. <i>Molecular Physics</i> , 2020 , 118, e1724340	1.7	0
237	Photodissociation transition states characterized by chirped pulse millimeter wave spectroscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 146-151	11.5	5
236	Preparation of high orbital angular momentum Rydberg states by optical-millimeter-wave STIRAP. <i>Journal of Chemical Physics</i> , 2020 , 153, 084301	3.9	2
235	Determination of the sign of the population difference in a two-level system by frequency-modulation spectroscopy. <i>Molecular Physics</i> , 2020 , 118, e1660007	1.7	0
234	Analysis of vibrational autoionization of CaF Rydberg states. <i>Journal of Chemical Physics</i> , 2019 , 150, 154305	3.9	4
233	Call for Papers for the Journal of Molecular Spectroscopy Special Issue on Electronic Spectra and Structure of Small Molecules in Honor of Anthony J. Merer. <i>Journal of Molecular Spectroscopy</i> , 2019 , 356, 46	1.3	
232	Visible and ultraviolet laser spectroscopy of ThF. <i>Journal of Molecular Spectroscopy</i> , 2019 , 358, 1-16	1.3	6
231	Anomalous Intensities in the 2+1 REMPI Spectrum of the E Σ^+ Π Transition of CO. <i>Journal of Physical Chemistry A</i> , 2019 , 123, 2780-2788	2.8	
230	Precision spectroscopy and comprehensive analysis of perturbations in the A1 ($v = 0$) state of $^{13}\text{C}^{18}\text{O}$. <i>Molecular Physics</i> , 2019 , 117, 79-96	1.7	6
229	Roadmap on STIRAP applications. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2019 , 52, 202001	1.3	54
228	One-color (212-220 nm) resonantly-enhanced (S1 Σ^0) multi-photon dissociation of acetylene. <i>Journal of Molecular Spectroscopy</i> , 2019 , 361, 24-33	1.3	2
227	The frequency-domain infrared spectrum of ammonia encodes changes in molecular dynamics caused by a DC electric field. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 23444-23447	11.5	10

226	The dicarbon bonding puzzle viewed with photoelectron imaging. <i>Nature Communications</i> , 2019 , 10, 5199	17.4	7
225	Tribute to Hai-Lung Dai. <i>Journal of Physical Chemistry A</i> , 2019 , 123, 10463-10464	2.8	
224	Probing the predissociated levels of the S state of acetylene via H-atom fluorescence and photofragment fluorescence action spectroscopy. <i>Journal of Chemical Physics</i> , 2018 , 149, 174309	3.9	4
223	Experimental studies of the NaCs $12(0) [7\sigma]$ state: Spin-orbit and non-adiabatic interactions and quantum interference in the $12(0) [7\sigma]$ and $11(0) [5\sigma]$ emission spectra. <i>Journal of Chemical Physics</i> , 2017 , 146, 104302	3.9	3
222	Encoding of vinylidene isomerization in its anion photoelectron spectrum. <i>Science</i> , 2017 , 358, 336-339	33.3	36
221	Perturbations in the $A1\sigma_v = 0$ state of $12C18O$ investigated via complementary spectroscopic techniques. <i>Molecular Physics</i> , 2017 , 115, 3178-3191	1.7	6
220	Direct single-shot observation of millimeter-wave superradiance in Rydberg-Rydberg transitions. <i>Physical Review A</i> , 2017 , 95,	2.6	7
219	Fourier transform emission spectra and deperturbation analysis of the $A 2 \Sigma^+ 2 \Pi$ and $B 2 \Sigma^+ \Pi$ $X 2 \Sigma^+$ electronic transitions of ZnH. <i>Journal of Molecular Spectroscopy</i> , 2017 , 340, 21-28	1.3	
218	Coherent laser-millimeter-wave interactions en route to coherent population transfer. <i>Journal of Chemical Physics</i> , 2017 , 147, 144201	3.9	3
217	Stark Interference of Electric and Magnetic Dipole Transitions in the A-X Band of OH. <i>Physical Review Letters</i> , 2016 , 116, 153001	7.4	2
216	Saddle point localization of molecular wavefunctions. <i>Scientific Reports</i> , 2016 , 6, 33068	4.9	5
215	The origin of unequal bond lengths in the $C (1)B2$ state of SO_2 : Signatures of high-lying potential energy surface crossings in the low-lying vibrational structure. <i>Journal of Chemical Physics</i> , 2016 , 144, 144313	3.9	9
214	Observation of b_2 symmetry vibrational levels of the $SO_2 C (1)B2$ state: Vibrational level staggering, Coriolis interactions, and rotation-vibration constants. <i>Journal of Chemical Physics</i> , 2016 , 144, 144311	3.9	12
213	The rotation-vibration structure of the $SO_2 C (1)B2$ state explained by a new internal coordinate force field. <i>Journal of Chemical Physics</i> , 2016 , 144, 144312	3.9	13
212	VIS and VUV spectroscopy of $12C17O$ and deperturbation analysis of the $A1\sigma_v = 1B$ levels. <i>RSC Advances</i> , 2016 , 6, 31588-31606	3.7	8
211	Perspective: The first ten years of broadband chirped pulse Fourier transform microwave spectroscopy. <i>Journal of Chemical Physics</i> , 2016 , 144, 200901	3.9	83
210	Electric potential invariants and ions-in-molecules effective potentials for molecular Rydberg states. <i>Journal of Chemical Physics</i> , 2016 , 145, 234301	3.9	3
209	Spectroscopy and perturbation analysis of the $CO A1\sigma_v = 1B (2,0), (3,0)$ and $(4,0)$ bands. <i>Molecular Physics</i> , 2016 , 114, 627-636	1.7	14

208	A Molecular Precursor to Phosphaethyne and Its Application in Synthesis of the Aromatic 1,2,3,4-Phosphatriazolate Anion. <i>Journal of the American Chemical Society</i> , 2016 , 138, 6731-4	16.4	26
207	Product Branching in the Low Temperature Reaction of CN with Propyne by Chirped-Pulse Microwave Spectroscopy in a Uniform Supersonic Flow. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 1599-604	6.4	37
206	Does Infrared Multiphoton Dissociation of Vinyl Chloride Yield Cold Vinylidene?. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 2457-62	6.4	4
205	Edge effects in chirped-pulse Fourier transform microwave spectra. <i>Journal of Molecular Spectroscopy</i> , 2015 , 312, 54-57	1.3	7
204	Millimeter-wave optical double resonance schemes for rapid assignment of perturbed spectra, with applications to the C (1)B(2) state of SO ₂ . <i>Journal of Chemical Physics</i> , 2015 , 142, 144201	3.9	17
203	Ultrafast isomerization initiated by X-ray core ionization. <i>Nature Communications</i> , 2015 , 6, 8199	17.4	74
202	Probing cis-trans isomerization in the S ₁ state of C ₂ H ₂ via H-atom action and hot band-pumped IR-UV double resonance spectroscopies. <i>Journal of Chemical Physics</i> , 2015 , 143, 084310	3.9	9
201	Communication: Observation of local-bender eigenstates in acetylene. <i>Journal of Chemical Physics</i> , 2015 , 143, 071101	3.9	3
200	Direct detection of Rydberg millimeter-wave transitions in a buffer gas cooled molecular beam. <i>Chemical Physics Letters</i> , 2015 , 640, 124-136	2.5	18
199	Observation of the simplest Criegee intermediate CH ₂ OO in the gas-phase ozonolysis of ethylene. <i>Science Advances</i> , 2015 , 1, e1400105	14.3	66
198	Spectroscopic characterization of isomerization transition states. <i>Science</i> , 2015 , 350, 1338-42	33.3	35
197	Simplified Cartesian basis model for intrapolyad emission intensities in the bent-to-linear electronic transition of acetylene. <i>Journal of Physical Chemistry A</i> , 2015 , 119, 857-65	2.8	3
196	A chirped-pulse Fourier-transform microwave/pulsed uniform flow spectrometer. I. The low-temperature flow system. <i>Journal of Chemical Physics</i> , 2014 , 141, 154202	3.9	34
195	A Signature of Roaming Dynamics in the Thermal Decomposition of Ethyl Nitrite: Chirped-Pulse Rotational Spectroscopy and Kinetic Modeling. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 3641-8	6.4	26
194	Gas-Phase Structure Determination of Dihydroxycarbene, One of the Smallest Stable Singlet Carbenes. <i>Angewandte Chemie</i> , 2014 , 126, 4173-4176	3.6	3
193	Chirped-Pulse millimeter-Wave spectroscopy for dynamics and kinetics studies of pyrolysis reactions. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 15739-15751	3.6	43
192	Reduced dimension rovibrational variational calculations of the S(1) state of C ₂ H ₂ . II. The S(1) rovibrational manifold and the effects of isomerization. <i>Journal of Chemical Physics</i> , 2014 , 140, 024313	3.9	9
191	A chirped-pulse Fourier-transform microwave/pulsed uniform flow spectrometer. II. Performance and applications for reaction dynamics. <i>Journal of Chemical Physics</i> , 2014 , 141, 214203	3.9	46

190	Full dimensional Franck-Condon factors for the acetylene $\sigma(\sigma_g^2)\pi(\pi_g^2)\pi(\pi_g^2)\pi(\pi_g^2)$ transition. II. Vibrational overlap factors for levels involving excitation in ungerade modes. <i>Journal of Chemical Physics</i> , 2014 , 141, 134305	3.9	8
189	A new approach toward transition state spectroscopy. <i>Faraday Discussions</i> , 2013 , 163, 33-57; discussion 117-38	3.6	34
188	High resolution spectroscopy and perturbation analysis of the CO A $1\sigma_g^2$ (0,0) and (1,0) bands. <i>Molecular Physics</i> , 2013 , 111, 2163-2174	1.7	28
187	Laser-induced fluorescence study of the S 1 state of doubly-substituted ^{13}C acetylene and harmonic force field determination. <i>Journal of Physical Chemistry A</i> , 2013 , 117, 13696-703	2.8	9
186	High-accuracy estimates for the vinylidene-acetylene isomerization energy and the ground state rotational constants of C_2CH_2 . <i>Journal of Physical Chemistry A</i> , 2013 , 117, 11679-83	2.8	32
185	Chirped-pulse millimeter-wave spectroscopy: spectrum, dynamics, and manipulation of Rydberg-Rydberg transitions. <i>Journal of Chemical Physics</i> , 2013 , 138, 014301	3.9	17
184	Broadband velocity modulation spectroscopy of HfF^+ : Towards a measurement of the electron electric dipole moment. <i>Chemical Physics Letters</i> , 2012 , 546, 1-11	2.5	41
183	The $\sigma(\sigma_g^2)\pi(\pi_g^2)$ Au state of acetylene: ungerade vibrational levels in the region 45,800–46,550 cm^{-1} . <i>Molecular Physics</i> , 2012 , 110, 2707-2723	1.7	19
182	Commensurate two-quantum coherences induced by time-delayed THz fields. <i>Physical Review Letters</i> , 2012 , 109, 123603	7.4	57
181	Production of a beam of highly vibrationally excited CO using perturbations. <i>Journal of Chemical Physics</i> , 2012 , 136, 214201	3.9	11
180	Laser-induced fluorescence studies of HfF^+ produced by autoionization. <i>Journal of Chemical Physics</i> , 2011 , 135, 154308	3.9	11
179	Molecular orientation and alignment by intense single-cycle THz pulses. <i>Physical Review Letters</i> , 2011 , 107, 163603	7.4	218
178	Design and evaluation of a pulsed-jet chirped-pulse millimeter-wave spectrometer for the 70-102 GHz region. <i>Journal of Chemical Physics</i> , 2011 , 135, 024202	3.9	61
177	Cis-trans isomerization in the S 1 state of acetylene: identification of cis-well vibrational levels. <i>Journal of Chemical Physics</i> , 2011 , 134, 244310	3.9	20
176	Reduced dimension discrete variable representation study of cis-trans isomerization in the S 1 state of C_2H_2 . <i>Journal of Chemical Physics</i> , 2011 , 134, 244311	3.9	23
175	Chirped-pulse millimeter-wave spectroscopy of Rydberg-Rydberg transitions. <i>Physical Review Letters</i> , 2011 , 107, 143001	7.4	21
174	Determination of the ground electronic state in transition metal halides: ZrF. <i>Journal of Physical Chemistry A</i> , 2011 , 115, 9620-32	2.8	5
173	Spectral signatures of inter-system crossing mediated by energetically distant doorway levels: examples from the acetylene S 1 state. <i>Journal of Physical Chemistry A</i> , 2011 , 115, 11921-43	2.8	5

172	A quantum defect model for the s, p, d, and f Rydberg series of CaF. <i>Journal of Chemical Physics</i> , 2011 , 134, 114313	3.9	23
171	Rotational analysis and deperturbation of the A ² Σ^+ and B' ² Σ^- emission spectra of MgH. <i>Journal of Chemical Physics</i> , 2011 , 135, 094308	3.9	24
170	Deconvolution of spectral data using a doorway-coupling model Hamiltonian. <i>Journal of Chemical Physics</i> , 2010 , 132, 134302	3.9	4
169	Time-Dependent Center-of-Gravity Metric Determines Key Dynamical Features of Doorway-Mediated Intersystem Crossing. <i>Journal of Physical Chemistry Letters</i> , 2010 , 1, 2144-2148	6.4	1
168	The Stark effect in Rydberg states of a highly polar diatomic molecule: CaF. <i>Journal of Chemical Physics</i> , 2009 , 131, 064301	3.9	6
167	Interference in acetylene intersystem crossing acts as the molecular analog of Young's double-slit experiment. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 2510-4	11.5	6
166	Stretch-bend combination polyads in the π^2 Au state of acetylene, C ₂ H ₂ . <i>Journal of Molecular Spectroscopy</i> , 2009 , 256, 256-278	1.3	22
165	Ab initio investigation of high multiplicity π^2 optical transitions in the spectra of CN and isoelectronic species. <i>Journal of Molecular Spectroscopy</i> , 2009 , 258, 6-12	1.3	8
164	Room-temperature metal-hydride discharge source, with observations on NiH and FeH. <i>Journal of Physical Chemistry A</i> , 2009 , 113, 13159-66	2.8	16
163	Perturbations in the 4 Σ^- level of the $\{^7\Pi^7\}$ state of acetylene, C ₂ H ₂ This article is part of a Special Issue on Spectroscopy at the University of New Brunswick in honour of Colan Linton and Ron Lees. <i>Canadian Journal of Physics</i> , 2009 , 87, 437-441	1.1	6
162	Separation of long-range and short-range interactions in Rydberg states of diatomic molecules. <i>Journal of Chemical Physics</i> , 2008 , 128, 194301	3.9	15
161	Direct observation of the symmetric stretching modes of π^2 A u acetylene by pulsed supersonic jet laser induced fluorescence. <i>Molecular Physics</i> , 2008 , 106, 1867-1877	1.7	16
160	Darling-Dennison resonance and Coriolis coupling in the bending overtones of the A ¹ A(u) state of acetylene, C ₂ H ₂ . <i>Journal of Chemical Physics</i> , 2008 , 129, 054304	3.9	25
159	Polarization dependence of transition intensities in double resonance experiments: unresolved spin doublets. <i>Journal of Chemical Physics</i> , 2008 , 128, 014301	3.9	11
158	Experimental mapping of the absolute magnitude of the transition dipole moment function $\mu(R)$ of the Na ₂ A ¹ Σ^+ + ¹ Σ^+ transition. <i>Physical Review A</i> , 2008 , 77,	2.6	16
157	Evolution of chemical bonding during HCN HNC isomerization as revealed through nuclear quadrupole hyperfine structure. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 2969-72	16.4	18
156	Theoretical emission spectra of HNC(. <i>Chemical Physics Letters</i> , 2008 , 455, 145-150	2.5	0
155	Contrasting singlet-triplet dynamical behavior of two vibrational levels of the acetylene S ₁ 2(1)3(1)B ₂ polyad. <i>Journal of Physical Chemistry A</i> , 2007 , 111, 12534-7	2.8	6

154	The pure rotational spectrum of CrCN ($X \ 6 \ \Sigma^-$): an unexpected geometry and unusual spin interactions. <i>Molecular Physics</i> , 2007 , 105, 585-597	1.7	29
153	Intramolecular Dynamics in the Frequency Domain. <i>Advances in Chemical Physics</i> , 2007 , 463-490		7
152	Studies of intersystem crossing dynamics in acetylene. <i>Journal of Chemical Physics</i> , 2007 , 126, 184307	3.9	6
151	Observation of the A1A" state of isocyanogen. <i>Journal of Chemical Physics</i> , 2007 , 126, 244307	3.9	2
150	New spectroscopic data, spin-orbit functions, and global analysis of data on the A $1\Sigma^+$ and b 3Π states of Na ₂ . <i>Journal of Chemical Physics</i> , 2007 , 127, 044301	3.9	37
149	Resonance between electronic and rotational motions in Rydberg states of CaF. <i>Molecular Physics</i> , 2007 , 105, 1661-1673	1.7	10
148	The spin-orbit and rotational constants for the N ₂ C" $5\Pi(u)$ ($v = 3$) state. <i>Journal of Chemical Physics</i> , 2006 , 124, 081103	3.9	11
147	Broad shape resonance effects in CaF Rydberg states. <i>Journal of Chemical Physics</i> , 2006 , 124, 194302	3.9	3
146	Accurate inertias for large-amplitude motions: improvements on prevailing approximations. <i>Journal of Physical Chemistry A</i> , 2006 , 110, 7406-13	2.8	26
145	Electronic signatures of large amplitude motions: dipole moments of vibrationally excited local-bend and local-stretch states of S ₀ acetylene. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 18912-20	3.4	17
144	Laboratory Measurements of the Hyperfine Structure of H ¹⁴ N ¹² C and D ¹⁴ N ¹² C. <i>Astrophysical Journal</i> , 2006 , 649, L53-L56	4.7	23
143	Differential temperature laser induced fluorescence spectroscopy. <i>Chemical Physics</i> , 2006 , 324, 709-720	2.3	2
142	Infrared-Infrared double resonance spectroscopy of ³⁹ K ₂ : The $1 \ 3\Sigma^-$ state. <i>Chemical Physics Letters</i> , 2006 , 431, 267-271	2.5	17
141	Multi-isotopologue analyses of new vibration-rotation and pure rotation spectra of ZnH and CdH. <i>Journal of Molecular Spectroscopy</i> , 2006 , 237, 87-96	1.3	19
140	Millimeter-wave-detected, millimeter-wave optical polarization spectroscopy. <i>Journal of Chemical Physics</i> , 2005 , 123, 141102	3.9	6
139	Quantum defect theory of dipole and vibronic mixing in Rydberg states of CaF. <i>Journal of Chemical Physics</i> , 2005 , 122, 184314	3.9	22
138	Properties of nearly one-electron molecules. II. Application to the Rydberg spectrum of CaF. <i>Journal of Chemical Physics</i> , 2005 , 123, 084319	3.9	12
137	Properties of nearly one-electron molecules. I. An iterative Green function approach to calculating the reaction matrix. <i>Journal of Chemical Physics</i> , 2005 , 123, 084318	3.9	10

136	New S1 state vibrational and T3, 2, 1 spin-rotational assignments in the vicinity of the acetylene A ¹ Σ ⁺ g + v03K01 band. <i>Journal of Molecular Spectroscopy</i> , 2004 , 228, 565-579	1.3	11
135	"Spectrum-only" assignment of core-penetrating and core-nonpenetrating Rydberg states of calcium monofluoride. <i>Canadian Journal of Chemistry</i> , 2004 , 82, 791-803	0.9	14
134	Contrasting origins of the isomerization barriers for vinylidene, fluorovinylidene, and difluorovinylidene. <i>Journal of Chemical Physics</i> , 2003 , 118, 4037-4044	3.9	21
133	New vibrational assignments in the ¹ Σ ⁺ g electronic transition of acetylene, C2H2: the v ₁ frequency. <i>Molecular Physics</i> , 2003 , 101, 663-673	1.7	21
132	Unexpected simplicity in the S1B0 dispersed fluorescence spectra of ¹³ C2H2. <i>Journal of Chemical Physics</i> , 2002 , 116, 7939-7947	3.9	4
131	Semiclassical modeling of Rydberg wave-packet dynamics in diatomic molecules: Average decoupling theory. <i>Physical Review A</i> , 2002 , 65,	2.6	4
130	The Mechanism of Surface Electron Ejection by Laser Excited Metastable Molecules. <i>Journal of Physical Chemistry A</i> , 2002 , 106, 1122-1130	2.8	8
129	Comparison of CaF, ZnF, CaO, and ZnO: Their Anions and Cations in Their Ground and Low-Lying Excited States. <i>ACS Symposium Series</i> , 2002 , 238-259	0.4	14
128	Baseline subtraction using robust local regression estimation. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2001 , 68, 179-193	2.1	96
127	Core-Penetrating Rydberg Series of BaF: Single-State and Two-State Fits of New Electronic States in the 4.4 . <i>Journal of Molecular Spectroscopy</i> , 2001 , 205, 197-220	1.3	7
126	An assumption-violating application of the Lawrance-Knight deconvolution procedure: A retrieval of electronic coupling mechanisms underlying complex spectra. <i>Journal of Chemical Physics</i> , 2001 , 114, 6557-6561	3.9	9
125	The infrared-ultraviolet dispersed fluorescence spectrum of acetylene: New classes of bright states. <i>Journal of Chemical Physics</i> , 2001 , 114, 7424-7442	3.9	35
124	The dynamics of "stretched molecules": experimental studies of highly vibrationally excited molecules with stimulated emission pumping. <i>Annual Review of Physical Chemistry</i> , 2001 , 52, 811-52	15.7	99
123	Relabeling and classification of the Rydberg states. <i>Journal of Chemical Physics</i> , 2001 , 114, 7859-7865	3.9	15
122	Detection of OH(X,v ₁) via the B 2 _{1/2} - 2 _{1/2} Transition and Properties of the B 2 _{1/2} State. <i>Journal of Physical Chemistry A</i> , 2001 , 105, 6030-6037	2.8	5
121	Observation of Coriolis Coupling between nu(2) + 4nu(4) and 7nu(4) in Acetylene ˜(1)Sigma(+)(g) by Stimulated Emission Pumping Spectroscopy. <i>Journal of Molecular Spectroscopy</i> , 2000 , 199, 265-274	1.3	24
120	Remarks on the signs of g factors in atomic and molecular Zeeman spectroscopy. <i>Molecular Physics</i> , 2000 , 98, 1597-1601	1.7	20
119	A statistical approach for the study of singlet-triplet interactions in small polyatomic molecules. <i>Journal of Chemical Physics</i> , 2000 , 113, 6640-6651	3.9	14

118	Rovibrational spectroscopy of the $v=6$ manifold in $^{12}\text{C}_2\text{H}_2$ and $^{13}\text{C}_2\text{H}_2$. <i>Journal of Chemical Physics</i> , 2000 , 113, 7376-7383	3.9	21
117	Acetylene at the Threshold of Isomerization. <i>Journal of Physical Chemistry A</i> , 2000 , 104, 3073-3086	2.8	105
116	State-by-state assignment of the bending spectrum of acetylene at 15 000 cm^{-1} : A case study of quantum-classical correspondence. <i>Journal of Chemical Physics</i> , 1999 , 111, 600-618	3.9	94
115	Toward a global and causal understanding of the unusual Rydberg state potential energy curves of the heteronuclear rare gas dimers. <i>Journal of Chemical Physics</i> , 1999 , 110, 10653-10656	3.9	25
114	Local mode behavior in the acetylene bending system. <i>Journal of Chemical Physics</i> , 1999 , 110, 845-859	3.9	67
113	The Predissociation Mechanism for $2\Sigma^+$ Rydberg States of CaCl. <i>Journal of Molecular Spectroscopy</i> , 1999 , 193, 412-417	1.3	12
112	Diabatic analysis of the electronic states of hydrogen chloride. <i>Journal of Chemical Physics</i> , 1998 , 109, 8374-8387	3.9	27
111	A unified model of the dynamics and spectroscopy of the $g\ 3\sigma$ and $E\ 1\pi$ states of hydrogen chloride. <i>Journal of Chemical Physics</i> , 1998 , 108, 984-989	3.9	3
110	Pure bending dynamics in the acetylene $X\ 1\sigma^+$ state up to 15 000 cm^{-1} of internal energy. <i>Journal of Chemical Physics</i> , 1998 , 109, 121-133	3.9	100
109	Numerical pattern recognition analysis of acetylene dispersed fluorescence spectra. <i>Journal of Chemical Physics</i> , 1998 , 108, 7100-7113	3.9	54
108	Anomalously slow intramolecular vibrational redistribution in the acetylene $X\ 1\sigma^+$ state above 10 000 cm^{-1} of internal energy. <i>Journal of Chemical Physics</i> , 1998 , 109, 3831-3840	3.9	43
107	Spectroscopic investigation of the generation of isomerization states: Eigenvector analysis of the bend-CP stretch polyad. <i>Journal of Chemical Physics</i> , 1998 , 109, 492-503	3.9	33
106	The effects of triplet perturbbers on photophysical processes in the $\pi\pi^*$ state of acetylene. <i>Journal of Chemical Physics</i> , 1997 , 106, 3423-3426	3.9	11
105	Observation of the isomerization states of HCP by stimulated emission pumping spectroscopy: Comparison between theory and experiment. <i>Journal of Chemical Physics</i> , 1997 , 106, 2980-2983	3.9	31
104	Laser excited metastable states of acetylene in the 5.5-7 eV region. <i>Journal of Chemical Physics</i> , 1997 , 107, 49-53	3.9	24
103	Sideband optical-optical double resonance Zeeman spectroscopy. III. Analysis of composite lines and selective detection. <i>Journal of Chemical Physics</i> , 1997 , 107, 4189-4193	3.9	4
102	Sideband optical-optical double resonance Zeeman spectroscopy. II. Studies of NiH, PdD, and PtH. <i>Journal of Chemical Physics</i> , 1997 , 107, 4179-4188	3.9	12
101	Extended cross correlation: A technique for spectroscopic pattern recognition. <i>Journal of Chemical Physics</i> , 1997 , 107, 8349-8356	3.9	30

100	Realistic representation of the induced electric dipole moment of a polarizable ligand: The missing factor in the Rittner polarization model. <i>Journal of Chemical Physics</i> , 1997 , 106, 10379-10382	3.9	7
99	Rydberg series of BaF: perturbation-facilitated studies of core-penetrating states. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 1997 , 355, 1507-1523		16
98	Vibrational Energy Flow in Highly Excited Molecules: Role of Intramolecular Vibrational Redistribution. <i>The Journal of Physical Chemistry</i> , 1996 , 100, 12735-12756		624
97	Detection of DCl by multiphoton ionization and determination of DCl and HCl internal state distributions. <i>Journal of Chemical Physics</i> , 1996 , 105, 10251-10262	3.9	14
96	Highly vibrationally excited $^{12}\text{C}_2\text{H}_2$ in the $X^1\text{g}$ state: Complementarity of absorption and dispersed fluorescence spectra. <i>Journal of Chemical Physics</i> , 1996 , 105, 11357-11359	3.9	58
95	Dispersed Fluorescence Spectrum of Acetylene from the ^1g Au Origin: Recognition of Polyads and Test of Multiresonant Effective Hamiltonian Model for the X State. <i>The Journal of Physical Chemistry</i> , 1996 , 100, 7797-7809		85
94	Core-Penetrating Rydberg Series of BaF: New Electronic States in the $n^*\text{f}$ Region. <i>Journal of Molecular Spectroscopy</i> , 1996 , 179, 99-124	1.3	14
93	Stimulated emission pumping spectroscopy of HCP near the isomerization barrier: EVIB $5\ 315\ \text{cm}^{-1}$. <i>Journal of Chemical Physics</i> , 1996 , 105, 7383-7401	3.9	37
92	A Trans-Pacific Collaboration: Dynamical Experiments and Experiences. <i>Laser Chemistry</i> , 1995 , 15, 79-80		0
91	A multichannel quantum defect fit to the $n^*=6\text{g}$ core-penetrating $s\sim p\sim d$ supercomplexes of CaF. <i>Journal of Chemical Physics</i> , 1995 , 103, 6459-6466	3.9	20
90	Electronic control of the spin-orbit branching ratio in the photodissociation and predissociation of HCl. <i>Journal of Chemical Physics</i> , 1995 , 103, 6811-6814	3.9	92
89	The electronic structure of LaO: Ligand field versus ab initio calculations. <i>Journal of Chemical Physics</i> , 1995 , 103, 8004-8013	3.9	36
88	Sideband optical-optical double resonance Zeeman spectroscopy. I. Theory of saturation and line shape behavior. <i>Journal of Chemical Physics</i> , 1995 , 102, 8295-8307	3.9	4
87	How robust are molecular properties? A stability criterion for eigenstates. <i>Journal of Chemical Physics</i> , 1995 , 102, 337-345	3.9	1
86	The Acetylene S0 Surface: From Dispersed Fluorescence Spectra to Polyads to Dynamics. <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1995 , 99, 555-560		45
85	CONTINUOUS WAVE PERTURBATION-FACILITATED OPTICAL-DOUBLE RESONANCE SPECTROSCOPY OF Na2 and Li2. <i>Advanced Series in Physical Chemistry</i> , 1995 , 251-277		1
84	New Scheme for Extracting Molecular Dynamics from Spectra: Case Study on Vibrationally Highly Excited Acetylene. <i>Laser Chemistry</i> , 1994 , 14, 183-190		10
83	Laser spectroscopic studies of terbium monofluoride: ligand field assignments of some $f_8[7F]sp-f_8[7F]s_2$ transitions. <i>Molecular Physics</i> , 1994 , 83, 881-905	1.7	15

82	Frequency-modulation enhanced magnetic rotation spectroscopy of PdH, PdD, NiH, and CuH. <i>Journal of Chemical Physics</i> , 1994 , 100, 6347-6358	3.9	22
81	The μ_1 van der Waals and μ_0+ double well potentials of Xe $6s[3/2]01$ +Kr 150 determined from tunable vacuum ultraviolet laser spectroscopy. <i>Journal of Chemical Physics</i> , 1994 , 101, 10242-10251	3.9	16
80	Frequency-modulation enhanced magnetic rotation spectroscopy: A sensitive and selective absorption scheme for paramagnetic molecules. <i>Journal of Chemical Physics</i> , 1994 , 100, 6331-6346	3.9	29
79	Core-penetrating Rydberg series of BaF: $s\sim p\sim d\sim f$ supercomplexes. <i>Physical Review Letters</i> , 1994 , 72, 2167-2170	7.4	22
78	First observation and electronic structure of the diatomic platinum nitride molecule. <i>Journal of Chemical Physics</i> , 1994 , 100, 6141-6152	3.9	24
77	The normal to local mode transition in AB ₂ triatomic molecules: The susceptibility of eigenstates to symmetry breaking perturbations. <i>Journal of Chemical Physics</i> , 1994 , 101, 869-875	3.9	20
76	Ionization potentials of CaF and BaF. <i>Journal of Chemical Physics</i> , 1994 , 100, 622-627	3.9	18
75	Pure Sequence Vibrational Spectra of Small Polyatomic Molecules Feature State Assignments, Sequential Dynamics, Energy and Time Scaling, and the Bag-of-Atoms Limit. <i>Progress of Theoretical Physics Supplement</i> , 1994 , 116, 143-166		22
74	Intramolecular vibrational redistribution of energy in the stimulated emission pumping spectrum of acetylene. <i>Journal of Chemical Physics</i> , 1993 , 99, 7350-7370	3.9	120
73	Observation and analysis of core-penetrating Rydberg states of calcium monofluoride. <i>Physical Review A</i> , 1993 , 48, 3012-3029	2.6	34
72	The core-penetrating Rydberg series of the CaF molecule: At the borderline between valence and Rydberg states. <i>Journal of Chemical Physics</i> , 1993 , 98, 2642-2646	3.9	20
71	Acetylene: Synergy between theory and experiment. <i>Journal of Chemical Physics</i> , 1993 , 98, 8384-8391	3.9	24
70	Comment on: High resolution laser spectroscopy of the C $2\sigma \rightarrow 2\pi$ transition of CaOH and CaOD: Vibronic coupling and the Renner-Teller effect. <i>Journal of Chemical Physics</i> , 1993 , 98, 6574-6575	3.9	11
69	The use of magnetic rotation spectroscopy to simplify and presort spectra: An application to NiH and CeF. <i>Journal of Chemical Physics</i> , 1992 , 96, 7237-7244	3.9	26
68	Rotationally resolved ultraviolet-ultraviolet double resonance study of the nonplanar E state of acetylene. <i>Journal of Chemical Physics</i> , 1992 , 97, 7180-7196	3.9	25
67	High resolution vacuum ultraviolet Stark measurement of the dipole moment of A $1A_1$ HCN. <i>Journal of Chemical Physics</i> , 1992 , 96, 7209-7217	3.9	4
66	Excitation spectra of 2,5-dihydroxy-p-benzoquinone monomer and hydrates. <i>Journal of Chemical Physics</i> , 1992 , 97, 1624-1629	3.9	1
65	Intramolecular vibrational relaxation and forbidden transitions in the SEP spectrum of acetylene. <i>Journal of Chemical Physics</i> , 1992 , 97, 2813-2816	3.9	40

64	Experimental distinction of electric and magnetic transition moments. <i>Journal of Chemical Physics</i> , 1992 , 96, 7189-7190	3.9	2
63	A reexamination of the Rydberg-Klein-Rees potential of the $3\sigma_u$ state of Na_2 . <i>Journal of Chemical Physics</i> , 1992 , 96, 2444-2448	3.9	21
62	Ultraviolet-Optical Double-Resonance study of the predissociated state of acetylene. <i>Journal of Molecular Spectroscopy</i> , 1992 , 156, 104-122	1.3	19
61	Pressure-induced rotational energy transfer in H_2CO : Dipolar M-dependence with no single-collision elastic contribution. <i>Journal of Molecular Spectroscopy</i> , 1992 , 153, 340-375	1.3	17
60	Vibrationally highly excited acetylene as studied by dispersed fluorescence and stimulated emission pumping spectroscopy: Vibrational assignment of the feature states. <i>Journal of Chemical Physics</i> , 1991 , 95, 6330-6342	3.9	118
59	The electronic structure of NiH : The $\{\text{Ni}+3d\ 9\ 2D\}$ supermultiplet. <i>Journal of Chemical Physics</i> , 1991 , 95, 7164-7178	3.9	60
58	Rydberg states and ionization potential of calcium monofluoride. <i>Physical Review Letters</i> , 1990 , 65, 1861-1864	1.7	42
57	$A\ 1B_2 \rightarrow 1A_1$ transitions of ^{18}O -enriched tropolone. <i>Journal of Chemical Physics</i> , 1990 , 92, 6456-6462	3.9	48
56	Collision-induced angular momentum reorientation and rotational energy transfer in $\text{CaF}(A\ 2\Pi/2) \rightarrow r$ thermal collisions. <i>Journal of Chemical Physics</i> , 1990 , 92, 76-89	3.9	21
55	Zeeman spectroscopy and deperturbation of the low-lying states of NiH . <i>Journal of Chemical Physics</i> , 1990 , 92, 4651-4659	3.9	35
54	Fluorescence-based intracavity laser spectroscopy and the electronic structure of NiH . <i>Journal of Chemical Physics</i> , 1990 , 93, 1-5	3.9	29
53	Stimulated-emission pumping studies of acetylene X^1g+ in the $11\ 400\text{--}5\ 700\text{-cm}^{-1}$ region: the onset of mixing. <i>Journal of the Optical Society of America B: Optical Physics</i> , 1990 , 7, 1805	1.7	38
52	A new determination of the dissociation energy of acetylene. <i>Journal of Chemical Physics</i> , 1989 , 91, 5160-5163	3.9	58
51	High resolution spectroscopic detection of acetylene-vinylidene isomerization by spectral cross correlation. <i>Journal of Chemical Physics</i> , 1989 , 91, 3976-3987	3.9	90
50	Multiphoton ionization of $\text{O}_2(X\ 3g, a\ 1g, \text{ and } b\ 1g)$ via the two-photon resonant $nsg, ndg,$ and ndg Rydberg levels. <i>Journal of Chemical Physics</i> , 1989 , 91, 5185-5200	3.9	57
49	High precision dipole moments in $A\ 1A_2$ formaldehyde determined via Stark quantum beat spectroscopy. <i>Journal of Chemical Physics</i> , 1989 , 90, 4150-4167	3.9	24
48	The hyperfine structure of the $\text{Na}_2\ 4\ 3g$ state. <i>Molecular Physics</i> , 1989 , 66, 685-694	1.7	30
47	The $\text{CaO}\ c\ 3g\text{-}a\ 3g(0,0)$ band. <i>Molecular Physics</i> , 1989 , 66, 235-268	1.7	25

46	Collisional relaxation of H ₂ CO (A 1A ₂ , v ₄ =1, J _{K_a} , K _c =132,12) by He, Ar, Xe, and N ₂ . <i>Journal of Chemical Physics</i> , 1989 , 91, 1008-1011	3.9	8
45	Sideband optical double resonance Zeeman spectroscopy of NiH: A new diagnostic for electronic and rotational assignment. <i>Journal of Chemical Physics</i> , 1989 , 90, 2967-2970	3.9	20
44	Polarization-detected transient gain studies of relaxation processes in v ₄ =1 A 1A ₂ formaldehyde-h ₂ . <i>Journal of Chemical Physics</i> , 1988 , 88, 4819-4833	3.9	26
43	Laser fluorescence excitation spectrum of jet-cooled tropolone: The A 1B ₂ –1A ₁ system. <i>Journal of Chemical Physics</i> , 1988 , 88, 627-633	3.9	109
42	Broad spectral features in the stimulated emission pumping spectrum of acetylene. <i>Journal of Chemical Physics</i> , 1988 , 88, 5972-5974	3.9	48
41	Acetylene: Isomerization and Dissociation. <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1988 , 92, 329-336		46
40	New Order Out of the Chaotic Bath of Highly Vibrational States of C ₂ H ₂ . <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1988 , 92, 422-424		12
39	Collisional energy transfer in highly vibrationally excited H ₂ CO(X 1A ₁). <i>Journal of Chemical Physics</i> , 1987 , 87, 1895-1897	3.9	31
38	The electronic structure of LaF: A multiconfiguration ligand field calculation. <i>Journal of Chemical Physics</i> , 1987 , 87, 2898-2912	3.9	38
37	The potential energy barrier of the Na ₂ B 1Π state. <i>Journal of Chemical Physics</i> , 1987 , 86, 3082-3088	3.9	26
36	An unsuspected Fermi perturbation in the acetylene A 1A _u 3Π level. <i>Journal of Chemical Physics</i> , 1986 , 85, 6315-6323	3.9	43
35	Sub-Doppler Zeeman spectroscopy of the CeO molecule. <i>Journal of Chemical Physics</i> , 1986 , 85, 751-762	3.9	32
34	The Zeeman effect as an aid to electronic assignment: The NiH A 2Π/2 state. <i>Journal of Chemical Physics</i> , 1986 , 84, 1041-1042	3.9	28
33	The Na ₂ a 3Π _u state. Rotationally resolved OODR 3Π _g –3Π _u fluorescence spectroscopy. <i>Journal of Chemical Physics</i> , 1985 , 82, 1178-1182	3.9	112
32	The electric dipole moment of NiH X 2Π/2 and B 2Π/2. <i>Journal of Chemical Physics</i> , 1985 , 82, 4717-4718	3.9	54
31	Rotational relaxation in the H ₂ CO A 1A ₂ state by transient gain spectroscopy. <i>Journal of Chemical Physics</i> , 1985 , 82, 5755-5756	3.9	20
30	The bound and quasibound levels of 6Li ₂ a 3Π _u . <i>Journal of Chemical Physics</i> , 1985 , 83, 6193-6196	3.9	34
29	Rotation-induced vibrational mixing in X 1A ₁ formaldehyde: Nonnegligible dynamical consequences of rotation. <i>Journal of Chemical Physics</i> , 1985 , 82, 1688-1701	3.9	145

28	State-specific rates of H ₂ CO(S ₀)-H ₂ +CO at energies near the top of barrier: A violation of RRKM theory?. <i>Journal of Chemical Physics</i> , 1985 , 82, 1606-1607	3.9	45
27	Fluorescence and stimulated emission S ₁ -S ₀ spectra of acetylene: Regular and ergodic regions. <i>Journal of Chemical Physics</i> , 1985 , 83, 453-465	3.9	158
26	Evidence of quantum ergodicity in stimulated emission pumping spectra of acetylene. <i>Journal of Chemical Physics</i> , 1985 , 83, 466-475	3.9	107
25	Intramolecular vibrational dynamics including rotational degrees of freedom: Chaos and quantum spectra. <i>Journal of Chemical Physics</i> , 1985 , 82, 2161-2163	3.9	42
24	The electronic structure of the calcium monohalides. A ligand field approach. <i>Journal of Chemical Physics</i> , 1985 , 82, 5023-5034	3.9	182
23	Stimulated emission spectroscopy: A complete set of vibrational constants for X 1A ₁ formaldehyde. <i>Journal of Chemical Physics</i> , 1984 , 80, 5968-5978	3.9	166
22	Stimulated emission pumping of acetylene: Evidence for quantum chaotic behavior near 27 900 cm ⁻¹ of excitation?. <i>Journal of Chemical Physics</i> , 1984 , 80, 2298-2300	3.9	137
21	Electric dipole moments of excited vibrational levels in the X 1A ₁ state of formaldehyde by stimulated emission spectroscopy. <i>Journal of Chemical Physics</i> , 1983 , 78, 3659-3664	3.9	45
20	Direct observation of high-lying 3P _{1g} states of the sodium molecule by optical-optical double resonance. <i>The Journal of Physical Chemistry</i> , 1983 , 87, 3020-3022		111
19	Selective vibrational excitation of formaldehyde X 1A ₁ by stimulated emission pumping. <i>Journal of Chemical Physics</i> , 1982 , 77, 573-575	3.9	57
18	The orange arc bands of CaO. Analysis of a D ₂ d 1,3B ₂ system. <i>Journal of Chemical Physics</i> , 1982 , 76, 4689-4691	3.9	20
17	Excitation spectroscopy of the acetylene $\pi \rightarrow \pi^*$ transition in the 220 nm wavelength region. <i>Journal of Chemical Physics</i> , 1982 , 76, 2293-2295	3.9	47
16	Diatomic Molecule Electronic Structure beyond Simple Molecular Constants. <i>Zeitschrift Fur Elektrochemie Und Elektrochemie</i> , 1982 , 86, 771-779		172
15	Collisional depolarization of state selected (J,M,J) BaO A 1 Σ^+ measured by optical-optical double resonance. <i>Journal of Chemical Physics</i> , 1981 , 74, 6000-6008	3.9	40
14	Rotation-vibration analysis of the B 0 ⁺ Σ^+ 1g and B 0 ⁺ Σ^+ 0+g electronic systems of I ₂ by laser-induced-fluorescence Fourier-transform spectroscopy. <i>Journal of Chemical Physics</i> , 1981 , 75, 4863-4868	3.9	51
13	The hyperfine structure of the calcium monohalides. <i>Journal of Chemical Physics</i> , 1981 , 74, 5508-5515	3.9	60
12	Optical-optical double-resonance spectroscopy of CaF. <i>Journal of Molecular Spectroscopy</i> , 1980 , 82, 339-347	3.9	37
11	Simultaneous measurement of rotational and translational relaxation by sub-Doppler optical-optical double resonance spectroscopy: BaO(A 1 Σ^+)Ar and BaO(A 1 Σ^+)O ₂ . <i>Journal of Chemical Physics</i> , 1980 , 73, 599-611	3.9	36

10	Rotational and vibrational analysis of the CaF B ₂ Σ ⁺ system. <i>Canadian Journal of Physics</i> , 1980 , 58, 703-712	1.1	65
9	Collisional relaxation of highly excited vibrational levels of the I ₂ X 1 _g state using an I ₂ optically pumped laser. <i>Journal of Chemical Physics</i> , 1980 , 72, 478-483	3.9	11
8	The electronic transition moment of the BO+u _g 1 _g system of I ₂ through gain measurements of an I ₂ optically pumped laser. <i>Journal of Chemical Physics</i> , 1979 , 70, 2366-2372	3.9	54
7	OODR spectroscopy of BaO. II. New observations of a 3 _g and A ₂ 1 _g and re-examination of the Parkinson band system. <i>Journal of Chemical Physics</i> , 1978 , 68, 4110-4122	3.9	49
6	Observation of infrared-optical double resonance in NO ₂ . <i>Journal of Chemical Physics</i> , 1978 , 68, 2398-2405	3.9	21
5	cw optically pumped molecular iodine laser. <i>Journal of Applied Physics</i> , 1977 , 48, 4468-4472	2.5	46
4	Optical-optical double resonance laser spectroscopy of BaO. <i>Journal of Chemical Physics</i> , 1975 , 63, 3228-3237	3.9	41
3	Photon yields of several reactions producing diatomic strontium oxide and halides, and SrO (A ₂ 1 _g 1 _g) A new band system. <i>Journal of Chemical Physics</i> , 1975 , 62, 3131-3136	3.9	31
2	Effective Hamiltonians for Electronic Fine Structure and Polyatomic Vibrations		1
1	Modern Techniques, Modern Concepts, and Molecules Doing Stuff. <i>ACS Symposium Series</i> , 333-361	0.4	