Robert W. Field

List of Publications by Year
in descending order

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245 papers	9,061 citations	44444 50 h-index	66518 82 g-index
249 all docs	249 docs citations	249 times ranked	4511 citing authors

#	Article	IF	Citations
1	Diabatic Valence-Hole States in the C₂ Molecule: â€œPutting Humpty Dumpty Together Againâ€• Journal of Physical Chemistry A, 2022, 126, 3090-3100.	1.1	8
2	Substitution Reactions in the Pyrolysis of Acetone Revealed through a Modeling, Experiment, Theory Paradigm. Journal of the American Chemical Society, 2021, 143, 3124-3142.	6.6	28
3	Enantioselective orientation of chiral molecules induced by terahertz pulses with twisted polarization. Physical Review Research, 2021, 3, .	1.3	19
4	Nonlinear rotational spectroscopy reveals many-body interactions in water molecules. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	9
5	Photodissociation of dicarbon: How nature breaks an unusual multiple bond. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	16
6	Long-range model of vibrational autoionization in core-nonpenetrating Rydberg states of NO. Journal of Chemical Physics, 2021, 155, 244303.	1.2	1
7	Determination of the sign of the population difference in a two-level system by frequency-modulation spectroscopy. Molecular Physics, 2020, 118, e1660007.	0.8	1
8	Photodissociation transition states characterized by chirped pulse millimeter wave spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 146-151.	3.3	11
9	Preparation of high orbital angular momentum Rydberg states by optical-millimeter-wave STIRAP. Journal of Chemical Physics, 2020, 153, 084301.	1.2	2
10	One-colour (â¼220â€‰nm) resonance-enhanced (S₁â€‰â†’â€‰S₀) multi-photon dissociation of acetylene: probe of the C₂ A¹ Î_uâ€‰â†’â€‰X¹ Î£⁺_g band by frequency-modulation spectroscopy. Molecular Physics, 2020, 118, e1724340.	0.8	1
11	Precision spectroscopy and comprehensive analysis of perturbations in the A¹Î (v=) Tj ETQq1 1 0.784314 rgBT /Ov	0.8	8
12	Roadmap on STIRAP applications. Journal of Physics B: Atomic, Molecular and Optical Physics, 2019, 52, 202001.	0.6	108
13	One-color (212â€“220â€¯nm) resonantly-enhanced (S1â€“S0) multi-photon dissociation of acetylene. Journal of Molecular Spectroscopy, 2019, 361, 24-33.	0.4	4
14	The frequency-domain infrared spectrum of ammonia encodes changes in molecular dynamics caused by a DC electric field. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 23444-23447.	3.3	14
15	Analysis of vibrational autoionization of CaF Rydberg states. Journal of Chemical Physics, 2019, 150, 154305.	1.2	4
16	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. Journal of Molecular Spectroscopy, 2019, 356, 46.	0.4	0
17	Visible and ultraviolet laser spectroscopy of ThF. Journal of Molecular Spectroscopy, 2019, 358, 1-16.	0.4	8
18	Anomalous Intensities in the 2+1 REMPI Spectrum of the E ¹Îâ€“X ¹Î£⁺ Transition of CO. Journal of Physical Chemistry A, 2019, 123, 2780-2788.	1.1	1

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19	The dicarbon bonding puzzle viewed with photoelectron imaging. Nature Communications, 2019, 10, 5199.	5.8	19
20	Tribute to Hai-Lung Dai. Journal of Physical Chemistry A, 2019, 123, 10463-10464.	1.1	0
21	Probing the predissociated levels of the S1 state of acetylene via H-atom fluorescence and photofragment fluorescence action spectroscopy. Journal of Chemical Physics, 2018, 149, 174309.	1.2	5
22	Experimental studies of the NaCs 12(0+) [71Î£+] state: Spin-orbit and non-adiabatic interactions and quantum interference in the 12(0+) [71Î£+] and 11(0+) [53Î0] emission spectra. Journal of Chemical Physics, 2017, 146, 104302.	1.2	4
23	Encoding of vinylidene isomerization in its anion photoelectron spectrum. Science, 2017, 358, 336-339.	6.0	55
24	Perturbations in the A¹Î,v = 0 state of¹²C¹⁸O investigated via complementary spectroscopic techniques. Molecular Physics, 2017, 115, 3178-3191.	0.8	8
25	Direct single-shot observation of millimeter-wave superradiance in Rydberg-Rydberg transitions. Physical Review A, 2017, 95, .	1.0	19
26	Fourier transform emission spectra and deperturbation analysis of the A 2 Î â€“ X 2 Î£ + and B 2 Î£ + â€“ X 2 Î£ + electronic transitions of ZnH. Journal of Molecular Spectroscopy, 2017, 340, 21-28.	0.4	0
27	Coherent laser-millimeter-wave interactions en route to coherent population transfer. Journal of Chemical Physics, 2017, 147, 144201.	1.2	3
28	VIS and VUV spectroscopy of ¹²C¹⁷O and deperturbation analysis of the A¹Î, Ï... = 1â€“5 levels. RSC Advances, 2016, 6, 31588-31606.	1.7	9
29	Perspective: The first ten years of broadband chirped pulse Fourier transform microwave spectroscopy. Journal of Chemical Physics, 2016, 144, 200901.	1.2	109
30	Electric potential invariants and ions-in-molecules effective potentials for molecular Rydberg states. Journal of Chemical Physics, 2016, 145, 234301.	1.2	3
31	Spectroscopy and perturbation analysis of the CO A¹Î â^'X¹Î£⁺(2,0), (3,0) and (4,0) bands. Molecular Physics, 2016, 114, 627-636.	0.8	17
32	A Molecular Precursor to Phosphaethyne and Its Application in Synthesis of the Aromatic 1,2,3,4-Phosphatriazolate Anion. Journal of the American Chemical Society, 2016, 138, 6731-6734.	6.6	40
33	Stark Interference of Electric and Magnetic Dipole Transitions in the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>A</mml:mi><mml:mo>â^'</mml:mo><mml:mi>X</mml:mi></mml:mrow></mml:math>Band of OH. Physical Review Letters, 2016, 116, 153001.	2.9	2
34	Saddle point localization of molecular wavefunctions. Scientific Reports, 2016, 6, 33068.	1.6	6
35	The origin of unequal bond lengths in the CÌƒ1B2 state of SO2: Signatures of high-lying potential energy surface crossings in the low-lying vibrational structure. Journal of Chemical Physics, 2016, 144, 144313.	1.2	10
36	Observation of b2 symmetry vibrational levels of the SO2â€ˆCÌƒâ€ˆ1B2 state: Vibrational level staggering, Coriolis interactions, and rotation-vibration constants. Journal of Chemical Physics, 2016, 144, 144311.	1.2	14

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37	The rotation-vibration structure of the SO2 Cl̀ƒ1B2 state explained by a new internal coordinate force field. Journal of Chemical Physics, 2016, 144, 144312.	1.2	14
38	Probing cis-trans isomerization in the S1 state of C2H2 via H-atom action and hot band-pumped IR-UV double resonance spectroscopies. Journal of Chemical Physics, 2015, 143, 084310.	1.2	11
39	Communication: Observation of local-bender eigenstates in acetylene. Journal of Chemical Physics, 2015, 143, 071101.	1.2	3
40	Direct detection of Rydbergâ€“Rydberg millimeter-wave transitions in a buffer gas cooled molecular beam. Chemical Physics Letters, 2015, 640, 124-136.	1.2	20
41	Observation of the simplest Criegee intermediate CH ₂ OO in the gas-phase ozonolysis of ethylene. Science Advances, 2015, 1, e1400105.	4.7	73
42	Spectroscopic characterization of isomerization transition states. Science, 2015, 350, 1338-1342.	6.0	45
43	Simplified Cartesian Basis Model for Intrapolyad Emission Intensities in the Bent-to-Linear Electronic Transition of Acetylene. Journal of Physical Chemistry A, 2015, 119, 857-865.	1.1	3
44	Product Branching in the Low Temperature Reaction of CN with Propyne by Chirped-Pulse Microwave Spectroscopy in a Uniform Supersonic Flow. Journal of Physical Chemistry Letters, 2015, 6, 1599-1604.	2.1	49
45	Does Infrared Multiphoton Dissociation of Vinyl Chloride Yield Cold Vinylidene?. Journal of Physical Chemistry Letters, 2015, 6, 2457-2462.	2.1	4
46	Edge effects in chirped-pulse Fourier transform microwave spectra. Journal of Molecular Spectroscopy, 2015, 312, 54-57.	0.4	7
47	Millimeter-wave optical double resonance schemes for rapid assignment of perturbed spectra, with applications to the Cl̀ƒ1B2 state of SO2. Journal of Chemical Physics, 2015, 142, 144201.	1.2	18
48	Ultrafast isomerization initiated by X-ray core ionization. Nature Communications, 2015, 6, 8199.	5.8	92
49	Chirped-pulse millimeter-wave spectroscopy for dynamics and kinetics studies of pyrolysis reactions. Physical Chemistry Chemical Physics, 2014, 16, 15739-15751.	1.3	54
50	Reduced dimension rovibrational variational calculations of the S1 state of C2H2. II. The S1 rovibrational manifold and the effects of isomerization. Journal of Chemical Physics, 2014, 140, 024313.	1.2	9
51	A chirped-pulse Fourier-transform microwave/pulsed uniform flow spectrometer. II. Performance and applications for reaction dynamics. Journal of Chemical Physics, 2014, 141, 214203.	1.2	54
52	Full dimensional Franck-Condon factors for the acetylene Aì̀ƒ 1Auâ€”Xì̀ƒ Î£g+1 transition. II. Vibrational overlap factors for levels involving excitation in ungerade modes. Journal of Chemical Physics, 2014, 141, 134305.	1.2	8
53	A chirped-pulse Fourier-transform microwave/pulsed uniform flow spectrometer. I. The low-temperature flow system. Journal of Chemical Physics, 2014, 141, 154202.	1.2	46
54	A Signature of Roaming Dynamics in the Thermal Decomposition of Ethyl Nitrite: Chirped-Pulse Rotational Spectroscopy and Kinetic Modeling. Journal of Physical Chemistry Letters, 2014, 5, 3641-3648.	2.1	28

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55	DIRECT OBSERVATION OF RYDBERG-RYDBERG TRANSITIONS VIA CPMMW SPECTROSCOPY. , 2014, , .		1
56	A new approach toward transition state spectroscopy. Faraday Discussions, 2013, 163, 33.	1.6	39
57	High resolution spectroscopy and perturbation analysis of the CO A¹Î â^'X¹Î£⁺ (0,0) and (1,0) bands. Molecular Physics, 2013, 111, 2163-2174.	0.8	29
58	Laser-Induced Fluorescence Study of the S₁ State of Doubly-Substituted ¹³C Acetylene and Harmonic Force Field Determination. Journal of Physical Chemistry A, 2013, 117, 13696-13703.	1.1	9
59	High-Accuracy Estimates for the Vinylidene-Acetylene Isomerization Energy and the Ground State Rotational Constants of :Câ•CH₂. Journal of Physical Chemistry A, 2013, 117, 11679-11683.	1.1	40
60	Chirped-pulse millimeter-wave spectroscopy: Spectrum, dynamics, and manipulation of Rydbergâ€“Rydberg transitions. Journal of Chemical Physics, 2013, 138, 014301.	1.2	20
61	Commensurate Two-Quantum Coherences Induced by Time-Delayed THz Fields. Physical Review Letters, 2012, 109, 123603.	2.9	69
62	Production of a beam of highly vibrationally excited CO using perturbations. Journal of Chemical Physics, 2012, 136, 214201.	1.2	11
63	Broadband velocity modulation spectroscopy of HfF+: Towards a measurement of the electron electric dipole moment. Chemical Physics Letters, 2012, 546, 1-11.	1.2	49
64	The Ãƒ¹A_u state of acetylene: ungerade vibrational levels in the region 45,800â€“46,550â€‰cm^{â^'1}. Molecular Physics, 2012, 110, 2707-2723.	0.8	19
65	Chirped-Pulse Millimeter-Wave Spectroscopy of Rydberg-Rydberg Transitions. Physical Review Letters, 2011, 107, 143001.	2.9	22
66	Determination of the Ground Electronic State in Transition Metal Halides: ZrF. Journal of Physical Chemistry A, 2011, 115, 9620-9632.	1.1	5
67	Spectral Signatures of Inter-System Crossing Mediated by Energetically Distant Doorway Levels: Examples from the Acetylene S₁ State. Journal of Physical Chemistry A, 2011, 115, 11921-11943.	1.1	5
68	Laser-induced fluorescence studies of HfF+ produced by autoionization. Journal of Chemical Physics, 2011, 135, 154308.	1.2	13
69	Molecular Orientation and Alignment by Intense Single-Cycle THz Pulses. Physical Review Letters, 2011, 107, 163603.	2.9	261
70	Design and evaluation of a pulsed-jet chirped-pulse millimeter-wave spectrometer for the 70â€“102 GHz region. Journal of Chemical Physics, 2011, 135, 024202.	1.2	70
71	Cis-trans isomerization in the S1 state of acetylene: Identification of cis-well vibrational levels. Journal of Chemical Physics, 2011, 134, 244310.	1.2	21
72	Reduced dimension discrete variable representation study of cisâ€“trans isomerization in the S1 state of C2H2. Journal of Chemical Physics, 2011, 134, 244311.	1.2	23

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73	A quantum defect model for the s, p, d, and f Rydberg series of CaF. Journal of Chemical Physics, 2011, 134, 114313.	1.2	27
74	Rotational analysis and deperturbation of the Aâ€ˆ2Î â†' Xâ€ˆ2Î£+ and Bâ€²â€ˆ2Î£+ â†' Xâ€ˆ2Î£+ emission spectra of MgH. Journal of Chemical Physics, 2011, 135, 094308.	1.2	27
75	Deconvolution of spectral data using a doorway-coupling model Hamiltonian. Journal of Chemical Physics, 2010, 132, 134302.	1.2	4
76	Time-Dependent Center-of-Gravity Metric Determines Key Dynamical Features of Doorway-Mediated Intersystem Crossing. Journal of Physical Chemistry Letters, 2010, 1, 2144-2148.	2.1	1
77	The Stark effect in Rydberg states of a highly polar diatomic molecule: CaF. Journal of Chemical Physics, 2009, 131, 064301.	1.2	7
78	Interference in acetylene intersystem crossing acts as the molecular analog of Young's double-slit experiment. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 2510-2514.	3.3	8
79	Stretch-bend combination polyads in the Ãƒ1Au state of acetylene, C2H2. Journal of Molecular Spectroscopy, 2009, 256, 256-278.	0.4	23
80	Ab initio investigation of high multiplicity optical transitions in the spectra of CN and isoelectronic species. Journal of Molecular Spectroscopy, 2009, 258, 6-12.	0.4	9
81	Room-Temperature Metalâ^'Hydride Discharge Source, with Observations on NiH and FeH. Journal of Physical Chemistry A, 2009, 113, 13159-13166.	1.1	19
82	Autobiography of Robert W. Field. Journal of Physical Chemistry A, 2009, 113, 13045-13056.	1.1	0
83	Perturbations in the 4Î½₃ level of the {i= PS7CD9 {alse7ptilde lower7ptAclap}^lower4pt{hskip-.5pt1}hskip-1ptA_u} state of acetylene, C₂H₂This article is part of a Special Issue on Spectroscopy at the University of New Brunswick in honour of Colan Linton and Ron Lees.. Canadian Journal of Physics, 2009, 87, 437-441.	0.4	6
84	Evolution of Chemical Bonding during HCNâ‡„HNC Isomerization as Revealed through Nuclear Quadrupole Hyperfine Structure. Angewandte Chemie - International Edition, 2008, 47, 2969-2972.	7.2	20
85	Theoretical emission spectra of HNC(<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq1 1 0.784314 rgBT /Ove on a new ab initio potenti. Chemical Physics Letters, 2008, 455, 145-150.	1.2	2
86	Separation of long-range and short-range interactions in Rydberg states of diatomic molecules. Journal of Chemical Physics, 2008, 128, 194301.	1.2	16
87	Direct observation of the symmetric stretching modes ofÃƒ¹A_uacetylene by pulsed supersonic jet laser induced fluorescence. Molecular Physics, 2008, 106, 1867-1877.	0.8	17
88	Darlingâ€"Dennison resonance and Coriolis coupling in the bending overtones of the Ã¬ƒAu1 state of acetylene, C2H2. Journal of Chemical Physics, 2008, 129, 054304.	1.2	25
89	Polarization dependence of transition intensities in double resonance experiments: Unresolved spin doublets. Journal of Chemical Physics, 2008, 128, 014301.	1.2	13
90	Experimental mapping of the absolute magnitude of the transition dipole moment function<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi>Î¼</mml:mi><mml:mi>e</mml:mi></mml:msub><mml:mrow><mml:mo>(</mml:m the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Na</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msu Physical Review A, 2008, 77, .	1.0	16

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91	Studies of intersystem crossing dynamics in acetylene. Journal of Chemical Physics, 2007, 126, 184307.	1.2	8
92	Observation of the Aì*f*Aâ€³1 state of isocyanogen. Journal of Chemical Physics, 2007, 126, 244307.	1.2	3
93	New spectroscopic data, spin-orbit functions, and global analysis of data on the AÎ£u+1 and bÎu3 states of Na2. Journal of Chemical Physics, 2007, 127, 044301.	1.2	39
94	Resonance between electronic and rotational motions in Rydberg states of CaF. Molecular Physics, 2007, 105, 1661-1673.	0.8	11
95	Contrasting Singletâ^Triplet Dynamical Behavior of Two Vibrational Levels of the Acetylene S₁ 23¹B Polyad. Journal of Physical Chemistry A, 2007, 111, 12534-12537.	1.1	6
96	The pure rotational spectrum of CrCN (Xâ€‰â€‰6 Î£ +): an unexpected geometry and unusual spin interactions. Molecular Physics, 2007, 105, 585-597.	0.8	32
97	Intramolecular Dynamics in the Frequency Domain. Advances in Chemical Physics, 2007, , 463-490.	0.3	7
98	Accurate Inertias for Large-Amplitude Motions:Â Improvements on Prevailing Approximations. Journal of Physical Chemistry A, 2006, 110, 7406-7413.	1.1	28
99	Electronic Signatures of Large Amplitude Motions:Â Dipole Moments of Vibrationally Excited Local-Bend and Local-Stretch States of S0Acetyleneâ€. Journal of Physical Chemistry B, 2006, 110, 18912-18920.	1.2	20
100	Laboratory Measurements of the Hyperfine Structure of H 14 N 12 C and D 14 N 12 C. Astrophysical Journal, 2006, 649, L53-L56.	1.6	25
101	Differential temperature laser induced fluorescence spectroscopy. Chemical Physics, 2006, 324, 709-720.	0.9	3
102	Infraredâ€“Infrared double resonance spectroscopy of 39K2: The 1 3Î”g state. Chemical Physics Letters, 2006, 431, 267-271.	1.2	20
103	Multi-isotopologue analyses of new vibrationâ€“rotation and pure rotation spectra of ZnH and CdH. Journal of Molecular Spectroscopy, 2006, 237, 87-96.	0.4	22
104	The spin-orbit and rotational constants for the N2 Câ€³Îui5(v=3) state. Journal of Chemical Physics, 2006, 124, 081103.	1.2	12
105	Broad shape resonance effects in CaF Rydberg states. Journal of Chemical Physics, 2006, 124, 194302.	1.2	4
106	Quantum defect theory of dipole and vibronic mixing in Rydberg states of CaF. Journal of Chemical Physics, 2005, 122, 184314.	1.2	26
107	Properties of nearly one-electron molecules. II. Application to the Rydberg spectrum of CaF. Journal of Chemical Physics, 2005, 123, 084319.	1.2	12
108	Properties of nearly one-electron molecules. I. An iterative Green function approach to calculating the reaction matrix. Journal of Chemical Physics, 2005, 123, 084318.	1.2	10

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109	Millimeter-wave-detected, millimeter-wave optical polarization spectroscopy. Journal of Chemical Physics, 2005, 123, 141102.	1.2	8
110	New S1 state vibrational and T3,2,1 spinâ€“rotational assignments in the vicinity of the acetylene band. Journal of Molecular Spectroscopy, 2004, 228, 565-579.	0.4	11
111	"Spectrum-only" assignment of core-penetrating and core-nonpenetrating Rydberg states of calcium monofluoride. Canadian Journal of Chemistry, 2004, 82, 791-803.	0.6	16
112	Contrasting origins of the isomerization barriers for vinylidene, fluorovinylidene, and difluorovinylidene. Journal of Chemical Physics, 2003, 118, 4037-4044.	1.2	24
113	New vibrational assignments in the Ä€1Au-[Xtilde]1Î£+gelectronic transition of acetylene, C2H2: the vâ€²1frequency. Molecular Physics, 2003, 101, 663-673.	0.8	23
114	Unexpected simplicity in the S1â€“S0 dispersed fluorescence spectra of 13C2H2. Journal of Chemical Physics, 2002, 116, 7939-7947.	1.2	5
115	Semiclassical modeling of Rydberg wave-packet dynamics in diatomic molecules: Average decoupling theory. Physical Review A, 2002, 65, .	1.0	5
116	The Mechanism of Surface Electron Ejection by Laser Excited Metastable Molecules. Journal of Physical Chemistry A, 2002, 106, 1122-1130.	1.1	10
117	Comparison of CaF, ZnF, CaO, and ZnO: Their Anions and Cations in Their Ground and Low-Lying Excited States. ACS Symposium Series, 2002, , 238-259.	0.5	14
118	THEDYNAMICS OFâ€œSTRETCHEDMOLECULESâ€• Experimental Studies of Highly Vibrationally Excited Molecules With Stimulated Emission Pumping. Annual Review of Physical Chemistry, 2001, 52, 811-852.	4.8	104
119	Relabeling and classification of the Rydberg states. Journal of Chemical Physics, 2001, 114, 7859-7865.	1.2	16
120	Detection of OH(X,vâ€˜â€‰â€˜,Jâ€˜â€‰â€˜) via the B 2Î£+â†'X 2Î Transition and Properties of the B 2Î£+ State. Journal of Physical Chemistry A, 2001, 105, 6030-6037.	1.1	5
121	Baseline subtraction using robust local regression estimation. Journal of Quantitative Spectroscopy and Radiative Transfer, 2001, 68, 179-193.	1.1	126
122	Core-Penetrating Rydberg Series of BaF: Single-State and Two-State Fits of New Electronic States in the 4.4 â‰ n* â‰ 14.3 Region. Journal of Molecular Spectroscopy, 2001, 205, 197-220.	0.4	8
123	An assumption-violating application of the Lawranceâ€“Knight deconvolution procedure: A retrieval of electronic coupling mechanisms underlying complex spectra. Journal of Chemical Physics, 2001, 114, 6557-6561.	1.2	11
124	The infrared-ultraviolet dispersed fluorescence spectrum of acetylene: New classes of bright states. Journal of Chemical Physics, 2001, 114, 7424-7442.	1.2	38
125	Observation of Coriolis Coupling between Î½2 + 4Î½4 and 7Î½4 in Acetylene XÌƒ1Î£+g by Stimulated Emission Pumping Spectroscopy. Journal of Molecular Spectroscopy, 2000, 199, 265-274.	0.4	24
126	Remarks on the signs ofgfactors in atomic and molecular Zeeman spectroscopy. Molecular Physics, 2000, 98, 1597-1601.	0.8	27

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127	A statistical approach for the study of singletâ€“triplet interactions in small polyatomic molecules. Journal of Chemical Physics, 2000, 113, 6640-6651.	1.2	16
128	Rovibrational spectroscopy of the v=6 manifold in 12C2H2 and 13C2H2. Journal of Chemical Physics, 2000, 113, 7376-7383.	1.2	24
129	Acetylene at the Threshold of Isomerization. Journal of Physical Chemistry A, 2000, 104, 3073-3086.	1.1	115
130	State-by-state assignment of the bending spectrum of acetylene at 15â€Š000 cmâ¯1: A case study of quantum-classical correspondence. Journal of Chemical Physics, 1999, 111, 600-618.	1.2	100
131	Toward a global and causal understanding of the unusual Rydberg state potential energy curves of the heteronuclear rare gas dimers. Journal of Chemical Physics, 1999, 110, 10653-10656.	1.2	29
132	Local mode behavior in the acetylene bending system. Journal of Chemical Physics, 1999, 110, 845-859.	1.2	72
133	The Predissociation Mechanism for2Î£+Rydberg States of CaCl. Journal of Molecular Spectroscopy, 1999, 193, 412-417.	0.4	13
134	Diabatic analysis of the electronic states of hydrogen chloride. Journal of Chemical Physics, 1998, 109, 8374-8387.	1.2	28
135	A unified model of the dynamics and spectroscopy of the gâ€‰3Î£0â¯ and Eâ€‰1Î£+ states of hydrogen chloride. Journal of Chemical Physics, 1998, 108, 984-989.	1.2	4
136	Pure bending dynamics in the acetylene XÌƒâ€‰1Î£g+ state up to 15â€‰000 cmâ¯1 of internal energy. Journal of Chemical Physics, 1998, 109, 121-133.	1.2	110
137	Numerical pattern recognition analysis of acetylene dispersed fluorescence spectra. Journal of Chemical Physics, 1998, 108, 7100-7113.	1.2	59
138	Anomalously slow intramolecular vibrational redistribution in the acetylene XÌƒâ€‰1Î£g+ state above 10â€‰000 cmâ¯1 of internal energy. Journal of Chemical Physics, 1998, 109, 3831-3840.	1.2	46
139	Spectroscopic investigation of the generation of â€œisomerizationâ€•states: Eigenvector analysis of the bend-CP stretch polyad. Journal of Chemical Physics, 1998, 109, 492-503.	1.2	37
140	The effects of triplet perturbers on photophysical processes in the Ãƒ1Au state of acetylene. Journal of Chemical Physics, 1997, 106, 3423-3426.	1.2	12
141	Observation of the â€œisomerization statesâ€™â€™ of HCP by stimulated emission pumping spectroscopy: Comparison between theory and experiment. Journal of Chemical Physics, 1997, 106, 2980-2983.	1.2	34
142	Laser excited metastable states of acetylene in the 5.5â€“5.7 eV region. Journal of Chemical Physics, 1997, 107, 49-53.	1.2	25
143	Sideband opticalâ€“optical double resonance Zeeman spectroscopy. III. Analysis of composite lines and selective detection. Journal of Chemical Physics, 1997, 107, 4189-4193.	1.2	5
144	Sideband opticalâ€“optical double resonance Zeeman spectroscopy. II. Studies of NiH, PdD, and PtH. Journal of Chemical Physics, 1997, 107, 4179-4188.	1.2	14

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145	Extended cross correlation: A technique for spectroscopic pattern recognition. Journal of Chemical Physics, 1997, 107, 8349-8356.	1.2	31
146	Realistic representation of the induced electric dipole moment of a polarizable ligand: The missing factor in the Rittner polarization model. Journal of Chemical Physics, 1997, 106, 10379-10382.	1.2	8
147	Rydberg series of BaF: peturbationâ€“facilitated studies of coreâ€“nonâ€“penetrating states. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 1997, 355, 1507-1526.	1.6	16
148	Dissociation of the Rydberg States of CaCl Investigated by Ion-dip Spectroscopy. , 1997, , .		0
149	Vibrational Energy Flow in Highly Excited Molecules:Â Role of Intramolecular Vibrational Redistribution. The Journal of Physical Chemistry, 1996, 100, 12735-12756.	2.9	690
150	Detection of DCl by multiphoton ionization and determination of DCl and HCl internal state distributions. Journal of Chemical Physics, 1996, 105, 10251-10262.	1.2	17
151	Highly vibrationally excited 12C2H2 in the Xìƒâ€‰1â^“+g state: Complementarity of absorption and dispersed fluorescence spectra. Journal of Chemical Physics, 1996, 105, 11357-11359.	1.2	63
152	Dispersed Fluorescence Spectrum of Acetylene from the Ãƒ1AuOrigin:Â Recognition of Polyads and Test of Multiresonant Effective Hamiltonian Model for the Xìƒ State. The Journal of Physical Chemistry, 1996, 100, 7797-7809.	2.9	88
153	Core-Penetrating Rydberg Series of BaF: New Electronic States in then* â‰^ 4 Region. Journal of Molecular Spectroscopy, 1996, 179, 99-124.	0.4	17
154	Stimulated emission pumping spectroscopy of HCP near the isomerization barrier: EVIBâ‰25â€‰315 cmâ^'1. Journal of Chemical Physics, 1996, 105, 7383-7401.	1.2	42
155	A Trans-Pacific Collaboration: Dynamical Experiments and Experiences. Laser Chemistry, 1995, 15, 79-80.	0.5	1
156	A multichannel quantum defect fit to the n*=6â€“8 coreâ€penetrating sâ^¼pâ^¼d supercomplexes of CaF. Journal of Chemical Physics, 1995, 103, 6459-6466.	1.2	22
157	Electronic control of the spinâ€“orbit branching ratio in the photodissociation and predissociation of HCl. Journal of Chemical Physics, 1995, 103, 6811-6814.	1.2	99
158	The electronic structure of LaO: Ligand field versusabinitiocalculations. Journal of Chemical Physics, 1995, 103, 8004-8013.	1.2	41
159	Sideband opticalâ€“optical double resonance Zeeman spectroscopy. I. Theory of saturation and line shape behavior. Journal of Chemical Physics, 1995, 102, 8295-8307.	1.2	5
160	How robust are molecular properties? A stability criterion for eigenstates. Journal of Chemical Physics, 1995, 102, 337-345.	1.2	2
161	The Acetylene S₀ Surface: From Dispersed Fluorescence Spectra to Polyads to Dynamics. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1995, 99, 555-560.	0.9	46
162	CONTINUOUS WAVE PERTURBATION-FACILITATED OPTICALâ€“OPTICAL DOUBLE RESONANCE SPECTROSCOPY OF Na2 and Li2. Advanced Series in Physical Chemistry, 1995, , 251-277.	1.5	1

#	Article	IF	Citations
163	New Scheme for Extracting Molecular Dynamics from Spectra: Case Study on Vibrationally Highly Excited Acetylene. Laser Chemistry, 1994, 14, 183-190.	0.5	11
164	Laser spectroscopic studies of terbium monofluoride: ligand field assignments of some f8[7F]sp-f8[7F]s2 transitions. Molecular Physics, 1994, 83, 881-905.	0.8	16
165	Frequencyâ€modulation enhanced magnetic rotation spectroscopy of PdH, PdD, NiH, and CuH. Journal of Chemical Physics, 1994, 100, 6347-6358.	1.2	26
166	The Î©=1 van der Waals and Î©=0+double well potentials of Xeâ€‰6s[3/2]01+Krâ€‰1S0determined from tunable vacuum ultraviolet laser spectroscopy. Journal of Chemical Physics, 1994, 101, 10242-10251.	1.2	19
167	Frequencyâ€modulation enhanced magnetic rotation spectroscopy: A sensitive and selective absorption scheme for paramagnetic molecules. Journal of Chemical Physics, 1994, 100, 6331-6346.	1.2	37
168	Core-penetrating Rydberg series of BaF:sâ¼pâ¼dâ¼fsupercomplexes. Physical Review Letters, 1994, 72, 2167-2170.	2.1	23
169	First observation and electronic structure of the diatomic platinum nitride molecule. Journal of Chemical Physics, 1994, 100, 6141-6152.	1.2	26
170	The normal to local mode transition in AB2triatomic molecules: The susceptibility of eigenstates to symmetry breaking perturbations. Journal of Chemical Physics, 1994, 101, 869-875.	1.2	22
171	Ionization potentials of CaF and BaF. Journal of Chemical Physics, 1994, 100, 622-627.	1.2	20
172	Pure Sequence Vibrational Spectra of Small Polyatomic Molecules. Progress of Theoretical Physics Supplement, 1994, 116, 143-166.	0.2	22
173	Intramolecular vibrational redistribution of energy in the stimulated emission pumping spectrum of acetylene. Journal of Chemical Physics, 1993, 99, 7350-7370.	1.2	129
174	Observation and analysis of core-penetrating Rydberg states of calcium monofluoride. Physical Review A, 1993, 48, 3012-3029.	1.0	36
175	The coreâ€penetrating Rydberg series of the CaF molecule: At the borderline between valence and Rydberg states. Journal of Chemical Physics, 1993, 98, 2642-2646.	1.2	22
176	Acetylene: Synergy between theory and experiment. Journal of Chemical Physics, 1993, 98, 8384-8391.	1.2	28
177	Comment on: High resolution laser spectroscopy of the CÌƒâ€‰2Î”â€“XÌƒâ€‰2Î£+ transition of CaOH and CaOD: Vibronic coupling and the Rennerâ€“Teller effect. Journal of Chemical Physics, 1993, 98, 6574-6575.	1.2	12
178	The use of magnetic rotation spectroscopy to simplify and presort spectra: An application to NiH and CeF. Journal of Chemical Physics, 1992, 96, 7237-7244.	1.2	28
179	Rotationally resolved ultravioletâ€“ultraviolet double resonance study of the nonplanar á¹¼ state of acetylene. Journal of Chemical Physics, 1992, 97, 7180-7196.	1.2	27
180	High resolution vacuum ultraviolet Stark measurement of the dipole moment of AÌƒâ€‰1Aâ€˜ HCN. Journal of Chemical Physics, 1992, 96, 7209-7217.	1.2	5

#	Article	IF	Citations
181	Excitation spectra of 2,5â€dihydroxyâ€pâ€benzoquinone monomer and hydrates. Journal of Chemical Physics, 1992, 97, 1624-1629.	1.2	3
182	Intramolecular vibrational relaxation and forbidden transitions in the SEP spectrum of acetylene. Journal of Chemical Physics, 1992, 97, 2813-2816.	1.2	43
183	Experimental distinction of electric and magnetic transition moments. Journal of Chemical Physics, 1992, 96, 7189-7190.	1.2	4
184	A reexamination of the Rydbergâ€“Kleinâ€“Rees potential of the aâ€‰3Î£+u state of Na2. Journal of Chemical Physics, 1992, 96, 2444-2448.	1.2	23
185	Ultraviolet-Optical Double-Resonance study of the predissociated state of acetylene. Journal of Molecular Spectroscopy, 1992, 156, 104-122.	0.4	21
186	Pressure-induced rotational energy transfer in H2CO : Dipolar M-dependence with no single-collision elastic contribution. Journal of Molecular Spectroscopy, 1992, 153, 340-375.	0.4	20
187	Vibrationally highly excited acetylene as studied by dispersed fluorescence and stimulated emission pumping spectroscopy: Vibrational assignment of the feature states. Journal of Chemical Physics, 1991, 95, 6330-6342.	1.2	124
188	The electronic structure of NiH: The {Ni+3dâ€‰9â€‰2D} supermultiplet. Journal of Chemical Physics, 1991, 95, 7164-7178.	1.2	69
189	Rydberg states and ionization potential of calcium monofluoride. Physical Review Letters, 1990, 65, 1861-1864.	2.9	59
190	Aì ƒâ€‰1B2â€“Xì ƒâ€‰1A1 26v0 transitions of 18Oâ€enriched tropolone. Journal of Chemical Physics, 1990, 92, 6456-6463.	1.2	23
191	Collisionâ€induced angular momentum reorientation and rotational energy transfer in CaF(Aâ€‰2Î1/2)â€“Ar thermal collisions. Journal of Chemical Physics, 1990, 92, 76-89.	1.2	22
192	Zeeman spectroscopy and deperturbation of the lowâ€lying states of NiH. Journal of Chemical Physics, 1990, 92, 4651-4659.	1.2	39
193	Fluorescenceâ€based intracavity laser spectroscopy and the electronic structure of NiH. Journal of Chemical Physics, 1990, 93, 1-5.	1.2	36
194	Stimulated-emission pumping studies of acetylene XËœÎ£1g+ in the 11 400â€“15 700-cm^â˜1 region: the onset of mixing. Journal of the Optical Society of America B: Optical Physics, 1990, 7, 1805.	0.9	41
195	A new determination of the dissociation energy of acetylene. Journal of Chemical Physics, 1989, 91, 5160-5163.	1.2	64
196	High resolution spectroscopic detection of acetyleneâ€“vinylidene isomerization by spectral cross correlation. Journal of Chemical Physics, 1989, 91, 3976-3987.	1.2	101
197	Multiphoton ionization of O2 Xâ€‰3Î£â˜'g, aâ€‰1Î”g, and bâ€‰1Î£+g via the twoâ€photon resonant nsÏƒg, ndÏƒg, and ndÏ€g Rydberg levels. Journal of Chemical Physics, 1989, 91, 5185-5200.	1.2	63
198	High precision dipole moments in Aì ƒâ€‰1A2 formaldehyde determined via Stark quantum beat spectroscopy. Journal of Chemical Physics, 1989, 90, 4150-4167.	1.2	28

#	Article	IF	Citations
199	The hyperfine structure of the Na243Î£+gstate. Molecular Physics, 1989, 66, 685-694.	0.8	34
200	The CaOc3Î£+-a3Îi(0,0) band. Molecular Physics, 1989, 66, 235-268.	0.8	42
201	Collisional relaxation of H2CO (Aì ƒâ€‰1A2, v4=1, JKaâ€‰,Kc=132,12) by He, Ar, Xe, and N2. Journal of Chemical Physics, 1989, 91, 1008-1011.	1.2	10
202	Sideband opticalâ€“optical double resonance Zeeman spectroscopy of NiH: A new diagnostic for electronic and rotational assignment. Journal of Chemical Physics, 1989, 90, 2967-2970.	1.2	22
203	Polarizationâ€detected transient gain studies of relaxation processes inv4=1Aì ƒâ€‰1A2formaldehydeâ€h2. Journal of Chemical Physics, 1988, 88, 4819-4833.	1.2	28
204	Laser fluorescence excitation spectrum of jetâ€cooled tropolone: The Aì ƒâ€‰1B2â€“Xì ƒâ€‰1A1 system. Journal of Chemical Physics, 1988, 88, 627-633.	1.2	126
205	Broad spectral features in the stimulated emission pumping spectrum of acetylene. Journal of Chemical Physics, 1988, 88, 5972-5974.	1.2	56
206	Acetylene: Isomerization and Dissociation. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1988, 92, 329-336.	0.9	51
207	New Order Out of the Chaotic Bath of Highly Vibrational States of C₂H₂. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1988, 92, 422-424.	0.9	13
208	Collisional energy transfer in highly vibrationally excited H2CO(Xì ƒâ€‰1A1). Journal of Chemical Physics, 1987, 87, 1895-1897.	1.2	34
209	The electronic structure of LaF: A multiconfiguration ligand field calculation. Journal of Chemical Physics, 1987, 87, 2898-2912.	1.2	44
210	The potential energy barrier of the Na2 Bâ€‰1Îu state. Journal of Chemical Physics, 1987, 86, 3082-3088.	1.2	26
211	An unsuspected Fermi perturbation in the acetylene Aì ƒâ€‰1Au 3Î½3 level. Journal of Chemical Physics, 1986, 85, 6315-6323.	1.2	45
212	Subâ€Doppler Zeeman spectroscopy of the CeO molecule. Journal of Chemical Physics, 1986, 85, 751-762.	1.2	34
213	The Zeeman effect as an aid to electronic assignment: The NiH Aâ€‰2Î”5/2 state. Journal of Chemical Physics, 1986, 84, 1041-1042.	1.2	28
214	The Na2 aâ€‰3Î£+u state. Rotationally resolved OODR 3Îgâ€“aâ€‰3Î£+u fluorescence spectroscopy. Journal of Chemical Physics, 1985, 82, 1178-1182.	1.2	119
215	The electric dipole moment of NiH Xâ€‰2Î”5/2 and Bâ€‰2Î”5/2. Journal of Chemical Physics, 1985, 82, 4717-4718.	1.2	60
216	Rotational relaxation in the H2COâ€‰Aì ƒâ€‰1A2 state by transient gain spectroscopy. Journal of Chemical Physics, 1985, 82, 5755-5756.	1.2	21

#	Article	IF	Citations
217	The bound and quasibound levels of 6Li2 aâ€‰3Î£+u. Journal of Chemical Physics, 1985, 83, 6193-6196.	1.2	37
218	Rotationâ€induced vibrational mixing in XÌƒâ€‰1A1 formaldehyde: Nonâ^'negligible dynamical consequences of rotation. Journal of Chemical Physics, 1985, 82, 1688-1701.	1.2	155
219	Stateâ€specific rates of H2CO(S0)â†'H2+CO at energies near the top of barrier: A violation of RRKM theory?. Journal of Chemical Physics, 1985, 82, 1606-1607.	1.2	49
220	Fluorescence and stimulated emission S1â€‰â†'â€‰S0 spectra of acetylene: Regular and ergodic regions. Journal of Chemical Physics, 1985, 83, 453-465.	1.2	167
221	Evidence of quantum ergodicity in stimulated emission pumping spectra of acetylene. Journal of Chemical Physics, 1985, 83, 466-475.	1.2	112
222	Intramolecular vibrational dynamics including rotational degrees of freedom: Chaos and quantum spectra. Journal of Chemical Physics, 1985, 82, 2161-2163.	1.2	47
223	The electronic structure of the calcium monohalides. A ligand field approach. Journal of Chemical Physics, 1985, 82, 5023-5034.	1.2	188
224	Stimulated emission spectroscopy: A complete set of vibrational constants for XÌƒâ€‰1A1 formaldehyde. Journal of Chemical Physics, 1984, 80, 5968-5978.	1.2	176
225	Stimulated emission pumping of acetylene: Evidence for quantum chaotic behavior near 27â€‰900 cmâ^'1 of excitation?. Journal of Chemical Physics, 1984, 80, 2298-2300.	1.2	141
226	Electric dipole moments of excited vibrational levels in the XÌƒâ€‰1A1 state of formaldehyde by stimulated emission spectroscopy. Journal of Chemical Physics, 1983, 78, 3659-3664.	1.2	51
227	Direct observation of high-lying 3.PI.g states of the sodium molecule by optical-optical double resonance. The Journal of Physical Chemistry, 1983, 87, 3020-3022.	2.9	118
228	Selective vibrational excitation of formaldehyde XÌƒâ€‰1A1 by stimulated emission pumping. Journal of Chemical Physics, 1982, 77, 573-575.	1.2	62
229	The orange arc bands of CaO. Analysis of a D,dâ€‰1,3Î"â€"aâ€‰3Î system. Journal of Chemical Physics, 1982, 76, 4689-4691.	1.2	22
230	Excitation spectroscopy of the acetylene Ãƒâ€"XÌƒ transition in the 220 nm wavelength region. Journal of Chemical Physics, 1982, 76, 2293-2295.	1.2	51
231	Diatomic Molecule Electronic Structure beyond Simple Molecular Constants. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1982, 86, 771-779.	0.9	176
232	Collisional depolarization of state selected (J,MJ) BaO Aâ€‰1Î£+ measured by opticalâ€"optical double resonance. Journal of Chemical Physics, 1981, 74, 6000-6008.	1.2	41
233	Rotationâ€"vibration analysis of the Bâ€‰0+uâ€"aâ€‰1g and Bâ€‰0+uâ€"aâ€²â€‰0+g electronic systems of I2 by laserâ€induced fluorescence Fourierâ€transform spectroscopy. Journal of Chemical Physics, 1981, 75, 4863-4868.	1.2	57
234	The hyperfine structure of the calcium monohalides. Journal of Chemical Physics, 1981, 74, 5508-5515.	1.2	62

#	Article	IF	Citations
235	Optical-optical double-resonance spectroscopy of CaF. Journal of Molecular Spectroscopy, 1980, 82, 339-347.	0.4	41
236	Simultaneous measurement of rotational and translational relaxation by subâ€Doppler opticalâ€“optical double resonance spectroscopy: BaO(Aâ€‰1Î£+)â€“Ar and BaO(A1Î£+)â€“CO2. Journal of Chemical Physics, 1980, 73, 599-611.	1.2	39
237	Rotational and vibrational analysis of the CaF B²Î£⁺â€“X²Î£⁺ system. Canadian Journal of Physics, 1980, 58, 703-712.	0.4	71
238	Collisional relaxation of highly excited vibrational levels of the I2 Xâ€‰1Î£+g state using an I2 optically pumped laser. Journal of Chemical Physics, 1980, 72, 478-483.	1.2	14
239	The electronic transition moment of the BO+uâ€“Xâ€‰1Î£+g system of I2 through gain measurements of an I2 optically pumped laser. Journal of Chemical Physics, 1979, 70, 2366-2372.	1.2	56
240	OODR spectroscopy of BaO. II. New observations of aâ€‰3Î and Aâ€²â€‰1Î and reâ€examination of the Parkinson band system. Journal of Chemical Physics, 1978, 68, 4110-4122.	1.2	68
241	Observation of infraredâ€“optical double resonance in NO2. Journal of Chemical Physics, 1978, 68, 2398-2405.	1.2	23
242	cw optically pumped molecular iodine laser. Journal of Applied Physics, 1977, 48, 4468-4472.	1.1	50
243	Opticalâ€“optical double resonance laser spectroscopy of BaO. Journal of Chemical Physics, 1975, 63, 3228-3237.	1.2	59
244	Photon yields of several reactions producing diatomic strontium oxide and halides, and SrO (Aâ€²â€‰1Îâ€“Xâ€‰1Î£): A new band system. Journal of Chemical Physics, 1975, 62, 3131-3136.	1.2	49
245	Modern Techniques, Modern Concepts, and Molecules Doing Stuff. ACS Symposium Series, 0, , 333-361.	0.5	0