

# Kevin K Lehmann

## List of Publications by Citations

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178  
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g-index

187  
ext. papers

7,325  
ext. citations

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L-index

#	Paper	IF	Citations
178	Spectroscopy and dynamics in helium nanodroplets. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , <b>2006</b> , 39, R127-R166	1.3	349
177	Intramolecular Dynamics from Eigenstate-Resolved Infrared Spectra. <i>Annual Review of Physical Chemistry</i> , <b>1994</b> , 45, 241-274	15.7	349
176	Helium nanodroplet isolation rovibrational spectroscopy: Methods and recent results. <i>Journal of Chemical Physics</i> , <b>2001</b> , 115, 10090	3.9	316
175	Ring-down cavity absorption spectroscopy of the very weak HCN overtone bands with six, seven, and eight stretching quanta. <i>Journal of Chemical Physics</i> , <b>1993</b> , 99, 6287-6301	3.9	273
174	On the relation of Child and Lawton's harmonically coupled anharmonic oscillator model and Darling-Dennison coupling). <i>Journal of Chemical Physics</i> , <b>1983</b> , 79, 1098-1098	3.9	155
173	Photoinduced Chemical Dynamics of High-Spin Alkali Trimers. <i>Science</i> , <b>1996</b> , 273, 629-31	33.3	148
172	Fourier transform spectra of overtone bands of HCN from 5400 to 15100 cm <sup>-1</sup> . <i>Journal of Molecular Spectroscopy</i> , <b>1989</b> , 134, 134-153	1.3	146
171	The superposition principle and cavity ring-down spectroscopy. <i>Journal of Chemical Physics</i> , <b>1996</b> , 105, 10263-10277	3.9	142
170	SUPERFLUID HELIUM: The Ultimate Spectroscopic Matrix?. <i>Science</i> , <b>1998</b> , 279, 2065-2066	33.3	127
169	Potential of a neutral impurity in a large 4He cluster. <i>Molecular Physics</i> , <b>1999</b> , 97, 645-666	1.7	115
168	Superfluid Hydrodynamic Model for the Enhanced Moments of Inertia of Molecules in Liquid 4He. <i>Physical Review Letters</i> , <b>1999</b> , 83, 5058-5061	7.4	108
167	Classical chaos and quantum simplicity: Highly excited vibrational states of HCN. <i>Journal of Chemical Physics</i> , <b>1982</b> , 77, 2853-2861	3.9	99
166	Spin Polarized Alkali Clusters: Observation of Quartet States of the Sodium Trimer. <i>Physical Review Letters</i> , <b>1996</b> , 77, 4532-4535	7.4	83
165	Where does overtone intensity come from?. <i>Journal of Chemical Physics</i> , <b>1990</b> , 93, 6140-6147	3.9	81
164	Evanescent field absorption in a passive optical fiber resonator using continuous-wave cavity ring-down spectroscopy. <i>Chemical Physics Letters</i> , <b>2004</b> , 383, 297-303	2.5	80
163	The onset of intramolecular vibrational energy redistribution and its intermediate case: The $\bar{1}$ and $2\bar{1}$ molecular beam, optothermal spectra of trifluoropropyne. <i>Journal of Chemical Physics</i> , <b>1991</b> , 95, 3891-3916	3.9	78
162	Trace moisture detection using continuous-wave cavity ring-down spectroscopy. <i>Analytical Chemistry</i> , <b>2003</b> , 75, 4599-605	7.8	75

161	Martian CH(4): sources, flux, and detection. <i>Astrobiology</i> , <b>2006</b> , 6, 377-95	3.7	74
160	The high-resolution visible overtone spectrum of CH <sub>4</sub> and CD <sub>3</sub> H at 77 K. <i>Journal of Chemical Physics</i> , <b>1984</b> , 81, 5319-5325	3.9	74
159	Alkali-helium exciplex formation on the surface of helium nanodroplets. II. A time-resolved study. <i>Journal of Chemical Physics</i> , <b>2000</b> , 113, 9694-9701	3.9	73
158	Finite size effects and rotational relaxation in superfluid helium nanodroplets: Microwave-infrared double-resonance spectroscopy of cyanoacetylene. <i>Journal of Chemical Physics</i> , <b>2000</b> , 113, 4636-4646	3.9	73
157	Eigenstate resolved infrared/infrared double resonance spectroscopy of the 3 $\mu$ overtone band of 1-propyne: Intramolecular vibrational energy redistribution into a Coriolis-coupled bath. <i>Journal of Chemical Physics</i> , <b>1994</b> , 100, 2612-2622	3.9	73
156	First overtone helium nanodroplet isolation spectroscopy of molecules bearing the acetylenic CH chromophore. <i>Journal of Chemical Physics</i> , <b>2000</b> , 113, 10535-10550	3.9	72
155	Microwave spectra of HCN and DCN in 4He nanodroplets: A test of adiabatic following. <i>Journal of Chemical Physics</i> , <b>2000</b> , 113, 4840	3.9	70
154	Spectroscopy of Mg atoms solvated in helium nanodroplets. <i>Journal of Chemical Physics</i> , <b>2000</b> , 112, 8409-8416	3.9	69
153	Optimal design of external fields for controlling molecular motion: application to rotation. <i>Journal of Molecular Structure</i> , <b>1990</b> , 223, 425-456	3.4	69
152	Alkali-helium exciplex formation on the surface of helium nanodroplets. I. Dispersed emission spectroscopy. <i>Journal of Chemical Physics</i> , <b>2000</b> , 113, 9686-9693	3.9	68
151	Sub-Doppler, infrared laser spectroscopy of the propyne 2 $\mu$ band: Evidence of z-axis Coriolis dominated intramolecular state mixing in the acetylenic CH stretch overtone. <i>Journal of Chemical Physics</i> , <b>1994</b> , 100, 2596-2611	3.9	68
150	Spin-orbit effects in the formation of the NaHe excimer on the surface of He clusters. <i>Faraday Discussions</i> , <b>1997</b> , 108, 161-174	3.6	67
149	Cavity ring-down overtone spectroscopy of HCN, H <sup>13</sup> CN and HC <sup>15</sup> N. <i>Journal of Chemical Physics</i> , <b>1995</b> , 102, 633-642	3.9	67
148	Modeling the rotational and vibrational structure of the i.r. optical spectrum of NH <sub>3</sub> . <i>Spectrochimica Acta Part A: Molecular Spectroscopy</i> , <b>1989</b> , 45, 47-56		67
147	Extended line positions, intensities, empirical lower state energies and quantum assignments of NH <sub>3</sub> from 6300 to 7000cm <sup>-1</sup> . <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , <b>2012</b> , 113, 1066-1083	2.1	66
146	The interaction of rotation and local mode tunneling in the overtone spectra of symmetrical hydrides. <i>Journal of Chemical Physics</i> , <b>1991</b> , 95, 2361-2370	3.9	65
145	Beyond the x-K relations. <i>Molecular Physics</i> , <b>1989</b> , 66, 1129-1137	1.7	61
144	Spectroscopy and intramolecular dynamics of highly excited vibrational states of NH <sub>3</sub> . <i>Journal of the Chemical Society, Faraday Transactions 2</i> , <b>1988</b> , 84, 1389		60

143	Single-cell detection by cavity ring-down spectroscopy. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 4523	3.4	59
142	Influence of methyl group deuteration on the rate of intramolecular vibrational energy relaxation. <i>Journal of Chemical Physics</i> , <b>1993</b> , 98, 1116-1122	3.9	59
141	The intensities of HCN overtone transitions from 12 600–18 400 cm <sup>-1</sup> . <i>Journal of Chemical Physics</i> , <b>1987</b> , 87, 5649-5656	3.9	58
140	Molecular Structure and Chirality Detection by Fourier Transform Microwave Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 196-200	6.4	56
139	Microwave detected, microwave-optical double resonance spectra of NO <sub>2</sub> : A test of Hardwick's ergodicity conjecture. <i>Journal of Chemical Physics</i> , <b>1985</b> , 83, 3290-3296	3.9	56
138	Multiphoton resonance ionization bands in I <sub>2</sub> . <i>Journal of Chemical Physics</i> , <b>1978</b> , 69, 1569-1573	3.9	56
137	Eigenstate resolved infrared-infrared double-resonance study of intramolecular vibrational relaxation in benzene: First overtone of the CH stretch. <i>Journal of Chemical Physics</i> , <b>1997</b> , 106, 432-435	3.9	53
136	Rotational structure of ammonia N-H stretch overtones: Five and six quanta bands. <i>Journal of Chemical Physics</i> , <b>1986</b> , 84, 5239-5249	3.9	53
135	Intramolecular vibrational redistribution in aromatic molecules. I. Eigenstate resolved CH stretch first overtone spectra of benzene. <i>Journal of Chemical Physics</i> , <b>2000</b> , 113, 10583-10596	3.9	52
134	On the importance of exchange effects in three-body interactions: The lowest quartet state of Na <sub>3</sub> . <i>Journal of Chemical Physics</i> , <b>2000</b> , 112, 5751-5761	3.9	52
133	Single and Double Resonance Microwave Spectroscopy in Superfluid H <sub>4</sub> e Clusters. <i>Physical Review Letters</i> , <b>1999</b> , 82, 5036-5039	7.4	52
132	Experimental and ab initio determination of the bending potential of HCP. <i>Journal of Chemical Physics</i> , <b>1985</b> , 82, 4460-4469	3.9	50
131	Cavity ringdown strain gauge. <i>Optics Letters</i> , <b>2004</b> , 29, 1339-41	3	49
130	Gain-swept superradiance applied to the stand-off detection of trace impurities in the atmosphere. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 7806-11	11.5	49
129	MOLECULAR SPECTROSCOPY: Nanomatrices Are Cool. <i>Science</i> , <b>2000</b> , 287, 2429-2430	33.3	49
128	Photoinduced nonadiabatic dynamics in quartet Na <sub>3</sub> and K <sub>3</sub> formed using helium nanodroplet isolation. <i>Journal of Chemical Physics</i> , <b>2001</b> , 115, 10265	3.9	47
127	The rate of intramolecular vibrational energy relaxation of the fundamental C-H stretch in (CF <sub>3</sub> ) <sub>3</sub> CCl. <i>Journal of Chemical Physics</i> , <b>1993</b> , 98, 1748-1749	3.9	47
126	Reinvestigation of the acetylenic C-H stretching fundamental of propyne via high resolution, optothermal infrared spectroscopy: Nonresonant perturbations to $\nu_1$ . <i>Journal of Chemical Physics</i> , <b>1994</b> , 100, 2588-2595	3.9	44

125	The intensity and self-broadening of overtone transitions in HCN. <i>Journal of Chemical Physics</i> , <b>1986</b> , 85, 4958-4965	3.9	44
124	Cavity enhanced absorption spectroscopy using a broadband prism cavity and a supercontinuum source. <i>Optics Express</i> , <b>2008</b> , 16, 15013-23	3.3	42
123	On the fallibility of variational calculations: Ab initio versus empirical potential energy functions for HCN. <i>Journal of Chemical Physics</i> , <b>1991</b> , 94, 5040-5050	3.9	42
122	Long-term stability in continuous wave cavity ringdown spectroscopy experiments. <i>Applied Optics</i> , <b>2010</b> , 49, 1378-87	0.2	41
121	Statistical intramolecular vibrational relaxation and its hindrance: The fundamentals of (CH <sub>3</sub> ) <sub>3</sub> CCl and (CH <sub>3</sub> ) <sub>3</sub> SiCl. <i>Journal of Chemical Physics</i> , <b>1990</b> , 93, 2152-2153	3.9	41
120	Crossed-beam study of the reactions of H <sub>2</sub> with D <sub>2</sub> and D <sub>2</sub> with H <sub>2</sub> . <i>Chemical Physics</i> , <b>1976</b> , 16, 109-116	3.3	41
119	Doppler-free nonlinear absorption in ethylene by use of continuous-wave cavity ringdown spectroscopy. <i>Applied Optics</i> , <b>2000</b> , 39, 3154-64	1.7	39
118	On the relationship of normal modes to local modes in the vibrations of D <sub>6h</sub> symmetry molecules. <i>Journal of Chemical Physics</i> , <b>1986</b> , 84, 6524-6525	3.9	38
117	Noise in cavity ring-down spectroscopy caused by transverse mode coupling. <i>Optics Express</i> , <b>2007</b> , 15, 8745-59	3.3	37
116	Numerical Laplace transform density of states calculation for medium and large molecules. <i>Journal of Chemical Physics</i> , <b>1993</b> , 98, 6437-6444	3.9	37
115	Microwave detected, microwave-optical double resonance of NH <sub>3</sub> , NH <sub>2</sub> D, NHD <sub>2</sub> , and ND <sub>3</sub> . II. Predissociation dynamics of the $\nu_2$ state. <i>Journal of Chemical Physics</i> , <b>1995</b> , 102, 4783-4792	3.9	36
114	Enhanced instability of extreme motion states in propyne: Lifetimes of overtone versus isoenergetic combination states. <i>Journal of Chemical Physics</i> , <b>1993</b> , 99, 9314-9317	3.9	36
113	High power injection seeded optical parametric oscillator. <i>Optics Communications</i> , <b>1991</b> , 86, 294-300	2	36
112	Rotation in liquid 4He: Lessons from a highly simplified model. <i>Journal of Chemical Physics</i> , <b>2001</b> , 114, 4643	3.9	35
111	Microwave detected, microwave-optical double resonance of NH <sub>3</sub> , NH <sub>2</sub> D, NHD <sub>2</sub> , and ND <sub>3</sub> . I. Structure and force field of the $\nu_2$ state. <i>Journal of Chemical Physics</i> , <b>1995</b> , 102, 4772-4782	3.9	34
110	Response to highly excited states of HCN: The probable applicability of classical dynamics. <i>Journal of Chemical Physics</i> , <b>1983</b> , 78, 608-609	3.9	34
109	Observation of highly vibrationally excited X <sup>1</sup> $\Sigma^+$ HCP by stimulated emission pumping spectroscopy. <i>Journal of Chemical Physics</i> , <b>1990</b> , 93, 2149-2151	3.9	33
108	UV spectra of benzene isotopomers and dimers in helium nanodroplets. <i>Journal of Chemical Physics</i> , <b>2004</b> , 121, 2701-10	3.9	32

107	Evaporative cooling of helium nanodroplets with angular momentum conservation. <i>Physical Review Letters</i> , <b>2004</b> , 92, 173401	7.4	31
106	Millimeter-wave optical double resonance spectra of NO <sub>2</sub> : How good a quantum number is N?. <i>Journal of Chemical Physics</i> , <b>1986</b> , 85, 4297-4303	3.9	30
105	Spontaneous coherent microwave emission and the sawtooth instability in a compact storage ring. <i>Physical Review Special Topics: Accelerators and Beams</i> , <b>2001</b> , 4,		29
104	Comment on "Direct deconvolution of extensively perturbed spectra: the singlet-triplet molecular eigenstate spectrum of pyrazine". <i>The Journal of Physical Chemistry</i> , <b>1991</b> , 95, 7556-7557		29
103	Energetics and possible formation and decay mechanisms of vortices in helium nanodroplets. <i>Physical Review B</i> , <b>2003</b> , 68,	3.3	28
102	Quantum hydrodynamic model for the enhanced moments of inertia of molecules in helium nanodroplets: Application to SF <sub>6</sub> . <i>Journal of Chemical Physics</i> , <b>2002</b> , 117, 1595-1603	3.9	27
101	The $\beta$ vibrational predissociation lifetime of (HCN) <sub>2</sub> determined from upperstate microwave-infrared double-resonance measurements. <i>Journal of Chemical Physics</i> , <b>1993</b> , 99, 8559-8570	3.9	27
100	The interaction of rotation and local mode tunneling in the overtone spectra of symmetric hydrides. II. The spatial properties of the XH <sub>4</sub> eigenstates. <i>Journal of Chemical Physics</i> , <b>1992</b> , 96, 7402-7409	3.8	27
99	The Optical Spectrum of NO <sub>2</sub> : Is it or Isn't it Chaotic?. <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , <b>1988</b> , 92, 306-311		26
98	Noise caused by a finite extinction ratio of the light modulator in CW cavity ring-down spectroscopy. <i>Applied Physics B: Lasers and Optics</i> , <b>2009</b> , 94, 355-366	1.9	25
97	Intramolecular vibrational relaxation in aromatic molecules. 2: An experimental and computational study of pyrrole and triazine near the IVR threshold. <i>Molecular Physics</i> , <b>2003</b> , 101, 551-568	1.7	25
96	Effects of linear birefringence and polarization-dependent loss of supermirrors in cavity ring-down spectroscopy. <i>Applied Optics</i> , <b>2008</b> , 47, 3817-27	0.2	24
95	Vibrational assignments for the Raman and the phosphorescence spectra of 9,10-anthraquinone and 9,10-anthraquinone-d <sub>8</sub> . <i>The Journal of Physical Chemistry</i> , <b>1979</b> , 83, 1200-1205		24
94	Spectroscopy and Dynamics of Al Atoms Solvated in Superfluid Helium Nanodroplets. <i>Journal of Physical Chemistry A</i> , <b>2000</b> , 104, 3620-3626	2.8	22
93	Coherence transfer between rotation-inversion transitions in the $\beta$ fundamental of NH <sub>3</sub> . <i>Chemical Physics Letters</i> , <b>1988</b> , 144, 281-285	2.5	22
92	Variational calculation of the rotational constants for acetylene and its isotopic derivatives. <i>Journal of Chemical Physics</i> , <b>1983</b> , 79, 1369-1376	3.9	22
91	Influence of spatial degeneracy on rotational spectroscopy: Three-wave mixing and enantiomeric state separation of chiral molecules. <i>Journal of Chemical Physics</i> , <b>2018</b> , 149, 094201	3.9	22
90	Near infrared cavity ring-down spectroscopy for isotopic analyses of CH <sub>4</sub> on future Martian surface missions. <i>Planetary and Space Science</i> , <b>2015</b> , 105, 117-122	2	21

89	Measurement of the $^{13}\text{C}/^{12}\text{C}$ of atmospheric $\text{CH}_4$ using near-infrared (NIR) cavity ring-down spectroscopy. <i>Analytical Chemistry</i> , <b>2013</b> , 85, 11250-7	7.8	21
88	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> , <b>2000</b> , 113, 7376-7383	3.9	21
87	Harmonically coupled, anharmonic oscillator model for the bending modes of acetylene. <i>Journal of Chemical Physics</i> , <b>1992</b> , 96, 8117-8119	3.9	21
86	Squeezing a helium nanodroplet with a Rydberg electron. <i>Journal of Physical Chemistry A</i> , <b>2007</b> , 111, 12695-701	2.8	20
85	Electronic spectroscopy of benzo[g,h,i]perylene and coronene inside helium nanodroplets. <i>Physical Chemistry Chemical Physics</i> , <b>2008</b> , 10, 1648-57	3.6	19
84	Eigenstate resolved infrared and millimeter-wave infrared double resonance spectroscopy of methylamine in the $\text{NH}_2$ stretch first overtone region. <i>Physical Chemistry Chemical Physics</i> , <b>1999</b> , 1, 2427-2433	3.6	19
83	The intensity of the $105000$ transition of HCN. <i>Journal of Chemical Physics</i> , <b>1989</b> , 90, 4633-4634	3.9	19
82	(HCN)(m)-M(n) (M = K, Ca, Sr): vibrational excitation induced solvation and desolvation of dopants in and on helium nanodroplets. <i>Journal of Physical Chemistry A</i> , <b>2010</b> , 114, 3391-402	2.8	18
81	Can molecules have permanent electric dipole moments?. <i>The Journal of Physical Chemistry</i> , <b>1993</b> , 97, 2413-2416		18
80	Regularized inversion of diatomic vibration-rotation spectral data: A functional sensitivity analysis approach. <i>Journal of Chemical Physics</i> , <b>1992</b> , 97, 852-861	3.9	18
79	The absolute intensity of visible overtone bands of acetylene. <i>Journal of Chemical Physics</i> , <b>1989</b> , 91, 2759-2760	3.9	18
78	G162: Molecular symmetry group for t-butane and other three equivalent methyl molecules. <i>Journal of Molecular Spectroscopy</i> , <b>1990</b> , 144, 443-445	1.3	18
77	Helium nanodroplet isolation spectroscopy of perylene and its complexes with oxygen. <i>Journal of Chemical Physics</i> , <b>2004</b> , 120, 6792-3	3.9	17
76	Intramolecular vibrational dynamics of diacetylene and diacetylene-d1 via eigenstate-resolved overtone spectroscopy. <i>Chemical Physics</i> , <b>1995</b> , 190, 191-205	2.3	17
75	Dynamics of the $1\ 3\ \pi\ g$ state of $\text{K}_2$ on helium nanodroplets. <i>Faraday Discussions</i> , <b>2001</b> , 33-42; discussion 43-62	3.6	16
74	The Gaussian orthogonal ensemble with missing and spurious levels: A model for experimental level-spacing distributions. <i>Journal of Chemical Physics</i> , <b>1987</b> , 87, 5415-5418	3.9	16
73	Use of microwave detected microwave-optical double resonance to assign the $6450\ \text{cm}^{-1}$ band of $\text{NH}_3$ . <i>Journal of Chemical Physics</i> , <b>1984</b> , 81, 3744-3745	3.9	16
72	Sensitivity limits of continuous wave cavity ring-down spectroscopy. <i>Journal of Physical Chemistry A</i> , <b>2013</b> , 117, 13399-411	2.8	15

71	CW cavity ring-down spectroscopy (CRDS) with a semiconductor optical amplifier as intensity modulator. <i>Chemical Physics Letters</i> , <b>2008</b> , 463, 246-250	2.5	15
70	Near-infrared spectroscopy of ethylene and ethylene dimer in superfluid helium droplets. <i>Journal of Chemical Physics</i> , <b>2005</b> , 122, 104307	3.9	15
69	Line-mixing in the 106<-000 overtone transition of HCN. <i>Journal of Chemical Physics</i> , <b>1996</b> , 105, 81-88	3.9	15
68	Vibrationally mediated photodissociation of HCN. <i>Chemical Physics Letters</i> , <b>1998</b> , 294, 173-180	2.5	14
67	Lorentzian line shape due to an inhomogeneous size distribution without relaxation. <i>Journal of Chemical Physics</i> , <b>2007</b> , 126, 024108	3.9	14
66	Microcanonical thermodynamic properties of helium nanodroplets. <i>Journal of Chemical Physics</i> , <b>2003</b> , 119, 3336-3342	3.9	14
65	Calculation of the Herman-Wallis effect in vibrational overtone transitions in a linear molecule: Comparison with HCN experimental results. <i>Journal of Chemical Physics</i> , <b>1996</b> , 105, 68-80	3.9	14
64	Energy-level statistics for a relaxation Hamiltonian. <i>Physical Review A</i> , <b>1987</b> , 36, 404-407	2.6	14
63	Comment on "High-lying levels of ozone via an algebraic approach". <i>The Journal of Physical Chemistry</i> , <b>1984</b> , 88, 1047-1047		14
62	Theoretical detection limit of saturated absorption cavity ring-down spectroscopy (SCAR) and two-photon absorption cavity ring-down spectroscopy. <i>Applied Physics B: Lasers and Optics</i> , <b>2014</b> , 116, 147-155	1.9	13
61	Electronic spectroscopy of nonalternant hydrocarbons inside helium nanodroplets. <i>Journal of Physical Chemistry A</i> , <b>2007</b> , 111, 12200-9	2.8	13
60	The infrared multiphoton excitation and photochemistry of DN3. <i>Journal of Chemical Physics</i> , <b>1983</b> , 79, 3373-3381	3.9	13
59	Doppler-free two-photon cavity ring-down spectroscopy of a nitrous oxide (N2O) vibrational overtone transition. <i>Physical Review A</i> , <b>2020</b> , 101,	2.6	12
58	Brewster angle prism retroreflectors for cavity enhanced spectroscopy. <i>Applied Optics</i> , <b>2009</b> , 48, 2966-78.2		12
57	Computer-generated character tables and nuclear spin statistical weights: application to benzene dimer and methane dimer. <i>Journal of Molecular Spectroscopy</i> , <b>2004</b> , 226, 201-202	1.3	12
56	Calculation of hydrodynamic mass for atomic impurities in helium. <i>Physical Review Letters</i> , <b>2002</b> , 88, 1453-01	3.0	12
55	Reinvestigation of the HCP electronic spectrum: Experimental determination of D0 for the X state and observation of hyperfine quantum beats in the B state. <i>Journal of Chemical Physics</i> , <b>1993</b> , 98, 5184-5190	3.9	12
54	Chromophore dependence of intramolecular vibrational relaxation: Si-H stretch second overtone versus C-H stretch first overtone in methylsilane. <i>Journal of Chemical Physics</i> , <b>1997</b> , 107, 6549-6561	3.9	11



53	Thermodynamic and noise considerations for the detection of microscopic particles in a gas by photoacoustic Raman spectroscopy. <i>Optics Communications</i> , <b>2005</b> , 246, 551-559	2	11
52	Calculation of high order resonance interactions in C <sub>2</sub> H <sub>2</sub> using the cubic force field. <i>Journal of Chemical Physics</i> , <b>1992</b> , 96, 1636-1639	3.9	11
51	Lightweight Raman spectroscope using time-correlated photon-counting detection. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 12315-20	11.5	10
50	Resonance enhanced two-photon cavity ring-down spectroscopy of vibrational overtone bands: A proposal. <i>Journal of Chemical Physics</i> , <b>2019</b> , 151, 144201	3.9	10
49	Sensitivity limit of rapidly swept continuous wave cavity ring-down spectroscopy. <i>Journal of Physical Chemistry A</i> , <b>2011</b> , 115, 9411-21	2.8	10
48	Optimal Signal Processing in Cavity Ring-Down Spectroscopy <b>2009</b> , 623-658		10
47	Spectroscopy of highly excited vibrational states of HCN in its ground electronic state. <i>Journal of Chemical Physics</i> , <b>2004</b> , 120, 691-703	3.9	10
46	Molecular Beam Infrared Spectrum of Nitromethane in the Region of the First C-H Stretching Overtone. <i>Journal of Physical Chemistry A</i> , <b>1998</b> , 102, 9124-9128	2.8	10
45	Hierarchical structure in the 3 <sub>01</sub> band of propyne. <i>Journal of Chemical Physics</i> , <b>1994</b> , 101, 2642-2643	3.9	10
44	The gas-phase structure of the asymmetric, trans-dinitrogen tetroxide (NO <sub>2</sub> ), formed by dimerization of nitrogen dioxide (NO), from rotational spectroscopy and ab initio quantum chemistry. <i>Journal of Chemical Physics</i> , <b>2017</b> , 146, 134305	3.9	9
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