

# Gregory E Hall

## List of Publications by Year in descending order

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117  
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citations

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168389

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g-index

121  
all docs

121  
docs citations

121  
times ranked

1401  
citing authors

#	ARTICLE	IF	CITATIONS
1	CW autocorrelation measurements of picosecond laser pulses. IEEE Journal of Quantum Electronics, 1980, 16, 990-996.	1.9	231
2	Methyl rotation, vibration, and alignment from a multiphoton ionization study of the 266 nm photodissociation of methyl iodide. Journal of Chemical Physics, 1989, 90, 4222-4236.	3.0	202
3	Vector Correlations in Photodissociation Dynamics. Annual Review of Physical Chemistry, 1989, 40, 375-405.	10.8	184
4	State-resolved photodissociation of OCS monomers and clusters. Journal of Chemical Physics, 1988, 88, 3692-3708.	3.0	123
5	State-resolved photofragment velocity distributions by pulsed extraction time-of-flight mass spectrometry. The Journal of Physical Chemistry, 1988, 92, 5-8.	2.9	123
6	Primary and secondary processes in the 193 nm photodissociation of vinyl chloride. Journal of Chemical Physics, 1998, 108, 5414-5425.	3.0	101
7	Reactions of velocity-aligned atoms probed by Doppler profiles: H+O <sub>2</sub> †OH+O. Journal of Chemical Physics, 1994, 101, 2033-2050.	3.0	100
8	Rotational alignment of the CN fragment of ICN photodissociation. Journal of Chemical Physics, 1986, 84, 2120-2128.	3.0	76
9	State-to-state photodissociation dynamics of trans-glyoxal. Journal of Chemical Physics, 1987, 86, 1258-1268.	3.0	73
10	Measurement of the Angular Correlation between Recoil Velocity and Angular Momentum Vectors in Molecular Photodissociation. Physical Review Letters, 1986, 56, 1671-1674.	7.8	71
11	Nonintuitive Asymmetry in the Three-Body Photodissociation of CH <sub>3</sub> COCN. Journal of Physical Chemistry A, 1997, 101, 9224-9232.	2.5	68
12	TRANSIENTLASERFREQUENCYMODULATIONSPECTROSCOPY. Annual Review of Physical Chemistry, 2000, 51, 243-274.	10.8	60
13	Angular correlations between recoil velocity and angular momentum vectors in molecular photodissociation. Journal of Chemical Physics, 1988, 88, 3682-3691.	3.0	57
14	Vector signatures of adiabatic and diabatic dynamics in the photodissociation of ICN. Journal of Chemical Physics, 1999, 111, 6735-6749.	3.0	55
15	Photodissociation of acetone at 193 nm: Rotational and vibrational state distributions of methyl fragments by diode laser absorption/gain spectroscopy. Journal of Chemical Physics, 1991, 94, 4182-4188.	3.0	54
16	Photodissociation of Bromoform at 248 nm: Single and Multiphoton Processes. Journal of Physical Chemistry A, 2004, 108, 1482-1488.	2.5	53
17	Time-resolved frequency modulation spectroscopy of photochemical transients. Journal of Chemical Physics, 1994, 101, 1717-1720.	3.0	52
18	Resonance enhanced multiphoton ionization time-of-flight study of CF <sub>2</sub> I <sub>2</sub> photodissociation. Journal of Chemical Physics, 1998, 109, 474-483.	3.0	50

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19	Line shape analysis of Doppler broadened frequency-modulated line spectra. <i>Journal of Chemical Physics</i> , 1996, 104, 2129-2135.	3.0	49
20	Near-Infrared vibronic spectrum of the CH <sub>2</sub> b <sub>1</sub> ←1B <sub>1</sub> transition. <i>Journal of Chemical Physics</i> , 1994, 101, 9236-9245.	3.0	47
21	Vector and scalar correlations in statistical dissociation: The photodissociation of NCCN at 193 nm. <i>Journal of Chemical Physics</i> , 1997, 106, 60-76.	3.0	46
22	Near-Infrared Spectroscopy of Bromomethylene in a Slit-Jet Expansion. <i>Journal of Molecular Spectroscopy</i> , 2000, 202, 131-143.	1.2	41
23	Product correlations in photofragment dynamics. <i>Faraday Discussions of the Chemical Society</i> , 1986, 82, 13.	2.2	40
24	Dissociation of CD <sub>3</sub> I at 248 nm studied by diode laser absorption spectroscopy. <i>Journal of Chemical Physics</i> , 1989, 90, 6234-6242.	3.0	40
25	Kinetics and Product Study of the Reaction of CH <sub>3</sub> Radicals with O(3P) Atoms Using Time Resolved Time-of-Flight Spectrometry. <i>Journal of Physical Chemistry A</i> , 1999, 103, 5722-5731.	2.5	39
26	Imaging O(3P)+alkane reactions in crossed molecular beams: Vertical versus adiabatic H abstraction dynamics. <i>Journal of Chemical Physics</i> , 2002, 117, 7947-7959.	3.0	39
27	Relationship between bipolar moments and molecule-frame polarization parameters in Doppler photofragment spectroscopy. <i>Journal of Chemical Physics</i> , 1999, 111, 8751-8754.	3.0	38
28	Studies of the 193 nm photolysis of diethyl ketone and acetone using time-resolved Fourier transform emission spectroscopy. <i>Journal of Chemical Physics</i> , 1995, 102, 6660-6668.	3.0	37
29	Quantum phase space theory for the calculation of v̂...j vector correlations. <i>Journal of Chemical Physics</i> , 1996, 104, 1864-1874.	3.0	37
30	Photofragment vector correlations measured by transient absorption spectroscopy: cyanogen fragments from ethyl thiocyanate photodissociation. <i>The Journal of Physical Chemistry</i> , 1993, 97, 10911-10919.	2.9	35
31	Photodissociation of acrylonitrile at 193 nm: A photofragment translational spectroscopy study using synchrotron radiation for product photoionization. <i>Journal of Chemical Physics</i> , 1998, 108, 5784-5794.	3.0	35
32	Consequences of Conical Intersections in the H + O <sub>2</sub> → OH + O Reaction?. <i>Journal of Physical Chemistry A</i> , 1997, 101, 2541-2545.	2.5	34
33	Electronic-to-Vibrational Energy Transfer from I(52P <sub>1/2</sub> ) to I <sub>2</sub> (25<v<43). <i>The Journal of Physical Chemistry</i> , 1983, 87, 2153-2161.	2.9	33
34	Correlated product distributions from ketene dissociation measured by dc sliced ion imaging. <i>Journal of Chemical Physics</i> , 2006, 124, 014303.	3.0	33
35	Axis-Switching and Coriolis Coupling in the $\tilde{A}^1(010) \leftarrow \tilde{X}^1(000)$ Transitions of DCCl and HCCl. <i>Journal of Molecular Spectroscopy</i> , 2002, 214, 216-224.	1.2	32
36	Superexcited State Dynamics Probed with an Extreme-Ultraviolet Free Electron Laser. <i>Physical Review Letters</i> , 2004, 92, 083002.	7.8	32

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37	Anisotropy of photofragment recoil as a function of dissociation lifetime, excitation frequency, rotational level, and rotational constant. <i>Journal of Chemical Physics</i> , 2006, 125, 1333-1316.	3.0	29
38	Frequency-comb referenced spectroscopy of $v_4$ - and $v_5$ -excited hot bands in the 1.5 $\mu\text{m}$ spectrum of $\text{C}_2\text{H}_2$ . <i>Journal of Molecular Spectroscopy</i> , 2015, 316, 64-71.	1.2	29
39	Reflectron velocity map ion imaging. <i>Review of Scientific Instruments</i> , 2005, 76, 104101.	1.3	28
40	The radical photodissociation channel of acrylonitrile. <i>Chemical Physics Letters</i> , 1996, 263, 148-153.	2.6	27
41	Coherent and incoherent orientation and alignment of ICN photoproducts. <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 272-287.	2.8	27
42	What Is the Best DFT Functional for Vibronic Calculations? A Comparison of the Calculated Vibronic Structure of the $S_1 \rightarrow S_0$ Transition of Phenylacetylene with Cavity Ringdown Band Intensities. <i>Journal of Physical Chemistry A</i> , 2012, 116, 6750-6758.	2.5	27
43	Picosecond dynamics of electrons in fluids and laser-induced electron transfer. <i>The Journal of Physical Chemistry</i> , 1980, 84, 1145-1150.	2.9	26
44	The laser-induced, two-photon photoionization of pyrene: A double-pulse investigation. <i>Chemical Physics</i> , 1978, 28, 205-214.	1.9	24
45	CN radical reaction rate measurements by time-resolved FM spectroscopy. , 1997, 29, 127-129.		24
46	Repetitively sampled time-of-flight mass spectrometry for gas-phase kinetics studies. <i>Review of Scientific Instruments</i> , 1999, 70, 3259-3264.	1.3	23
47	Applications of Doppler Spectroscopy to Photofragmentation. <i>Advances in Chemical Physics</i> , 2007, , 1-50.	0.3	23
48	Nanosecond laser measurements of optical absorption coefficients of electrons in polar fluids. <i>Chemical Physics</i> , 1978, 32, 313-322.	1.9	22
49	Time-resolved FTIR studies of the photodissociation of pyruvic acid at 193 nm. <i>Chemical Physics Letters</i> , 1992, 193, 77-83.	2.6	22
50	Time-resolved Fourier transform infrared study of the photodissociation of 1,1-difluoroethene at 193 nm. <i>Journal of Chemical Physics</i> , 1994, 101, 3679-3687.	3.0	22
51	Vector correlations in the 157 nm photodissociation of OCS and the 266 nm photodissociation of methyl iodide. <i>Journal of the Chemical Society, Faraday Transactions 2</i> , 1989, 85, 1185.	1.1	20
52	Vector correlations in the 308 nm photodissociation of ICN. <i>Chemical Physics Letters</i> , 1997, 276, 103-109.	2.6	19
53	The $E_3 \leftarrow X_3^+$ Transition of Jet-Cooled TiO Observed in Absorption. <i>Journal of Molecular Spectroscopy</i> , 2002, 212, 133-141.	1.2	19
54	Rotationally resolved spectrum of the band of HCB $\dot{\text{r}}$ . <i>Journal of Molecular Spectroscopy</i> , 2006, 235, 125-131.	1.2	19

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55	State-resolved thermalization of singlet and mixed singlet-triplet states of CH <sub>2</sub> . Journal of Chemical Physics, 2006, 125, 084308.	3.0	19
56	Application of the Hartmann-Tran profile to precise experimental data sets of 12C <sub>2</sub> H <sub>2</sub> . Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 165, 28-37.	2.3	19
57	Vector and scalar correlations in the photodissociation of NCCN. Journal of Photochemistry and Photobiology A: Chemistry, 1994, 80, 45-52.	3.9	18
58	An ab initio molecular dynamics study of S <sub>0</sub> ketene fragmentation. Journal of Chemical Physics, 2001, 115, 2134-2145.	3.0	18
59	Multiphoton ionization of nitrogen dioxide: Four photon spectroscopy of the np <sup>1</sup> Rydberg series. Journal of Chemical Physics, 1983, 78, 7124-7131.	3.0	17
60	State Correlations in the Unimolecular Dissociation of Ketene. Journal of Physical Chemistry A, 2000, 104, 10247-10258.	2.5	17
61	Observation of the c <sup>1</sup> Σ <sup>+</sup> state of methylene by optical-optical double resonance. Journal of Chemical Physics, 2005, 123, 024306.	3.0	17
62	Photoproducts ejected from liquid surfaces: The importance of photochemical, diffusional, kinetic, and surface structural effects. Journal of Chemical Physics, 1998, 109, 10390-10399.	3.0	15
63	Transient frequency modulation absorption spectroscopy of molecules produced in a laser ablation supersonic expansion source. Chemical Physics Letters, 2000, 319, 363-367.	2.6	15
64	The Approach to Equilibrium: Detailed Balance and the Master Equation. Journal of Chemical Education, 2011, 88, 1538-1543.	2.3	15
65	Sub-Doppler laser absorption spectroscopy of the A <sup>2</sup> Σ <sup>+</sup> X <sup>2</sup> Σ <sup>+</sup> (1,0) band of CN: Measurement of the <sup>14</sup> N hyperfine parameters in A <sup>2</sup> Σ <sup>+</sup> CN. Journal of Molecular Spectroscopy, 2009, 253, 122-128.	1.2	14
66	Temperature-Dependent, Nitrogen-Perturbed Line Shape Measurements in the <sup>1</sup> Σ <sup>+</sup> + <sup>1</sup> Σ <sup>+</sup> Band of Acetylene Using a Diode Laser Referenced to a Frequency Comb. Journal of Physical Chemistry A, 2013, 117, 13908-13918.	2.5	14
67	Frequency measurements and self-broadening of sub-Doppler transitions in the v <sub>1</sub> + v <sub>3</sub> band of C <sub>2</sub> H <sub>2</sub> . Journal of Chemical Physics, 2018, 149, 154308.	3.0	14
68	Rotational populations in OD formed in the reaction O(1D)+D <sub>2</sub> investigated by infrared rotational absorption spectroscopy. Journal of Chemical Physics, 1989, 91, 5201-5207.	3.0	13
69	Fourier transform spectrophotometer for time-resolved emission measurements using a 100-point transient digitizer. Review of Scientific Instruments, 1993, 64, 95-102.	1.3	13
70	Doppler-Resolved Spectroscopy as an Assignment Tool in the Spectrum of Singlet Methylene. Journal of Physical Chemistry A, 2004, 108, 7922-7927.	2.5	13
71	Influence of micellar interface on molecular ionization potentials: a tunable laser spectroscopy study of photoionization of pyrene. Chemical Physics, 1980, 49, 279-287.	1.9	12
72	Hyperfine quantum beats from photolytic orientation and alignment. Physical Chemistry Chemical Physics, 2005, 7, 1408.	2.8	12

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73	Very-Low-Temperature Infrared Laser Absorption Spectroscopy of N <sub>2</sub> O, NO, and NO <sub>2</sub> . Journal of Molecular Spectroscopy, 1995, 173, 442-451.	1.2	11
74	Measurement of the $\hat{1}/23$ fundamental transition moment and vibrational relaxation rates of the CD <sub>3</sub> radical. Journal of Chemical Physics, 1996, 105, 7889-7895.	3.0	11
75	Observation of the state of CH <sub>2</sub> by optical double resonance. Journal of Molecular Spectroscopy, 2006, 240, 269-271.	1.2	11
76	Rotational and angular distributions of NO products from NO-Rg (Rg = He, Ne, Ar) complex photodissociation. Journal of Chemical Physics, 2016, 144, 044309.	3.0	11
77	Supercontinuum Fourier transform spectrometry with balanced detection on a single photodiode. Journal of Chemical Physics, 2016, 145, 084201.	3.0	11
78	Diode laser measurements of CD <sub>3</sub> quantum yields and internal energy for the dissociation of dimethyl sulfoxide-d <sub>6</sub> . Journal of Chemical Physics, 1997, 106, 1346-1352.	3.0	10
79	Pseudo-continuous resonance enhanced multiphoton ionisation: application to the determination of the hyperfine constants of <sup>208</sup> Pb <sup>19</sup> F. Molecular Physics, 2010, 108, 927-935.	1.7	10
80	Vector Correlations in the Photodissociation of CH <sub>3</sub> I, OCS, and Glyoxal. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1988, 92, 281-288.	0.9	9
81	Argon-Induced Pressure Broadening, Shifting, and Narrowing in the CN A <sup>2</sup> ←X <sup>2</sup> (1 <sup>+</sup> ←0) Band. Journal of Physical Chemistry A, 2013, 117, 11837-11846.	2.5	9
82	Collisional quenching of excited iodine atoms (5p <sup>5</sup> 2P <sub>1/2</sub> ) by Cl <sub>2</sub> in a flow system. Journal of Chemical Physics, 1985, 82, 2590-2597.	3.0	8
83	Photofragment vector correlations as a probe of <i>K</i> scrambling in unimolecular dissociation. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1997, 101, 459-464.	0.9	8
84	AC Stark detection of optical double resonance in CH <sub>2</sub> . Physical Chemistry Chemical Physics, 2006, 8, 2823-2825.	2.8	8
85	State Mixing and Predissociation in the c $\hat{1}$ $\hat{1}$ Band System of Singlet Methylene Studied by Optical Double Resonance. Journal of Physical Chemistry A, 2008, 112, 9248-9254.	2.5	8
86	Quadrupole splittings in the near-infrared spectrum of <sup>14</sup> NH <sub>3</sub> . Journal of Chemical Physics, 2016, 145, 144302.	3.0	8
87	Kinetic study of the OH + ethylene reaction using frequency modulated laser absorption spectroscopy. International Journal of Chemical Kinetics, 2019, 51, 412-421.	1.6	8
88	Vector correlations in the 308 nm photodissociation of ICN. Chemical Physics Letters, 1997, 276, 103-109.	2.6	8
89	Spectroscopic constants of the known electronic states of lead monofluoride. Journal of Molecular Spectroscopy, 2010, 262, 89-92.	1.2	7
90	CH <sub>2</sub> B <sub>1</sub> Band Origin at 1.20 $\hat{1}/4$ m. Journal of Physical Chemistry A, 2011, 115, 9440-9446.	2.5	7

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91	Comment on the communication "Photoionization by green light in micellar solution". Journal of the American Chemical Society, 1978, 100, 8262-8264.	13.7	6
92	Probing chemical reaction dynamics by rotational spectroscopy: The OH rotational distribution in the reaction $H+O_2 \rightarrow OH+O$ . Chemical Physics Letters, 1989, 158, 184-188.	2.6	6
93	The sulfur (1D) + nitrogen quenching process: determination of branching ratios to triplet fine structure products. The Journal of Physical Chemistry, 1992, 96, 753-755.	2.9	6
94	The spectrum of CH <sub>2</sub> near 1.36 and 0.92 $\mu$ m: Reevaluation of rotational level structure and perturbations in a $f(010)$ . Journal of Chemical Physics, 2006, 124, 184320.	3.0	6
95	Sub-Doppler Stark Spectroscopy in the A <sup>2</sup> X (1,0) Band of CN. Journal of Physical Chemistry A, 2009, 113, 13342-13346.	2.5	6
96	Frequency modulated circular dichroism spectroscopy: application to ICN photolysis. Molecular Physics, 2010, 108, 1083-1095.	1.7	6
97	Evidence for lambda doublet propensity in the UV photodissociation of ozone. Journal of Chemical Physics, 2019, 151, 224302.	3.0	6
98	Transient laser absorption spectroscopy of CH <sub>2</sub> near 780 nm. Journal of Molecular Spectroscopy, 2011, 267, 50-57.	1.2	5
99	Doppler-Resolved Kinetics of Saturation Recovery. Journal of Physical Chemistry A, 2015, 119, 7439-7450.	2.5	5
100	The near-infrared spectrum of ethynyl radical. Journal of Chemical Physics, 2016, 145, 074306.	3.0	5
101	Comment on energy partitioning in photodissociation of methyl, ethyl, and n-propyl iodides at 304 nm. Chemical Physics, 1996, 211, 515-516.	1.9	4
102	Broadband laser enhanced dual-beam interferometry. Optics Letters, 2012, 37, 2406.	3.3	4
103	Hyperfine structures in the $v=1$ $\nu=0$ vibrational band of the of N <sub>2</sub> . Journal of Molecular Spectroscopy, 2012, 282, 50-55.	1.2	4
104	Sub-Doppler spectroscopy of mixed state levels in CH <sub>2</sub> . Journal of Chemical Physics, 2010, 133, 144310.	3.0	3
105	Collinear two-color saturation spectroscopy in CN A <sup>2</sup> X (1 $\nu=0$ ) and (2 $\nu=0$ ) bands. Journal of Molecular Spectroscopy, 2014, 296, 36-42.	1.2	3
106	Investigating the photodissociation of H <sub>2</sub> O <sub>2</sub> using frequency modulation laser absorption spectroscopy to monitor radical products. Chemical Physics Letters, 2018, 711, 148-151.	2.6	3
107	bands of the ethynyl	1.2	2
108	Tunable damage-resistant polarization rotator for ultraviolet and visible laser radiation. Applied Physics Letters, 1977, 31, 387-389.	3.3	1

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109	Laser kinetic studies of I(2P <sub>1/2</sub> ) and O <sub>2</sub> (1 <sup>g</sup> ). Journal of Photochemistry and Photobiology, 1984, 25, 551-552.	0.6	1
110	Quantum phase space theory for the calculation of v-j vector correlations. , 1995, , .		1
111	Anomalous Intensities in the 2+1 REMPI Spectrum of the E <sup>1</sup> ←X <sup>1</sup> ← <sup>+</sup> Transition of CO. Journal of Physical Chemistry A, 2019, 123, 2780-2788.	2.5	1
112	State-resolved photofragmentation of OCS and CS <sub>2</sub> . AIP Conference Proceedings, 1986, , .	0.4	0
113	Photofragment spectroscopy with coherent VUV: Product correlations and alignment. AIP Conference Proceedings, 1987, , .	0.4	0
114	Transient frequency-modulated spectroscopy: application to the measurement of vector and scalar correlations in molecular photodissociation. , 1998, , .		0
115	The 1.66 <sup>1</sup> / <sub>4</sub> m spectrum of the ethynyl radical, CCH. Journal of Molecular Spectroscopy, 2021, 376, 111404.	1.2	0
116	Supercontinuum Fourier transform spectrometry with shot noise limited differential detection on a single photodiode. , 2013, , .		0
117	Angular Momentum-Velocity Correlation of OCS Photodissociation Products. , 1986, , 429-433.		0