

Curt Wittig

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115
papers

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117
ext. papers

3,518
ext. citations

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#	Paper	IF	Citations
115	The 266 nm photolysis of ICN: Recoil velocity anisotropies and nascent E,V,R,T excitations for the CN+I(2P3/2) and CN+I(2P1/2) channels. <i>Journal of Chemical Physics</i> , 1985 , 82, 3885-3893	3.9	172
114	The Landau-Zener formula. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 8428-30	3.4	158
113	Nascent product excitations in unimolecular reactions: The separate statistical ensembles method. <i>Journal of Chemical Physics</i> , 1985 , 83, 5581-5588	3.9	136
112	Kinetic and internal energy distributions via velocity-aligned Doppler spectroscopy: The 193 nm photodissociation of H ₂ S and HBr. <i>Journal of Chemical Physics</i> , 1987 , 87, 1062-1069	3.9	112
111	Orienting reactants using van der Waals precursors: OCO + HBr → HCO + H + Br → HO + OH + Br. <i>Journal of Chemical Physics</i> , 1986 , 84, 727-738	3.9	109
110	Subpicosecond resolution studies of the H+CO ₂ -HO+OH reaction photoinitiated in CO ₂ ···H ₂ O complexes. <i>Journal of Chemical Physics</i> , 1993 , 99, 6553-6561	3.9	89
109	Probing the NO ₂ -HO+O transition state via time resolved unimolecular decomposition. <i>Journal of Chemical Physics</i> , 1993 , 99, 3420-3435	3.9	85
108	The use of van der Waals forces to orient chemical reactants: The H+CO ₂ reaction. <i>Journal of Chemical Physics</i> , 1985 , 83, 444-445	3.9	84
107	Kinetics of free radicals generated by IR laser photolysis. IV. Intersystem crossings and reactions of C ₂ (X 1 ^g) and C ₂ (a 3 ^u) in the gaseous phase. <i>Journal of Chemical Physics</i> , 1980 , 73, 2280-2286	3.9	83
106	NCNO → HCN+NO: Complete NO(E, V, R) and CN(V, R) nascent population distributions from well-characterized monoenergetic unimolecular reactions. <i>Journal of Chemical Physics</i> , 1985 , 83, 5573-5580	3.9	75
105	Infrared absorption spectroscopy of CO ₂ ···X complexes using the CO ₂ asymmetric stretch chromophore: CO ₂ HF(D _F) and CO ₂ HCl(D _{Cl}) linear and CO ₂ HBr bent equilibrium geometries. <i>Journal of Chemical Physics</i> , 1990 , 92, 943-958	3.9	74
104	IR multiple photon dissociation of fluorinated ethanes and ethylenes: HF vibrational energy distributions. <i>Journal of Chemical Physics</i> , 1980 , 72, 1694-1700	3.9	72
103	Optically pumped molecular lasers in the 11-17- μ m region. <i>Journal of Applied Physics</i> , 1978 , 49, 61-64	2.5	71
102	Infrared molecular lasers pumped by electronic-vibrational energy transfer from Br(42P1/2): CO ₂ , N ₂ O, HCN, and C ₂ H ₂ . <i>Applied Physics Letters</i> , 1975 , 27, 305-307	3.4	69
101	Photodissociation of HCl at 193.3 nm: Spin-orbit branching ratio. <i>Journal of Chemical Physics</i> , 1997 , 107, 1403-1405	3.9	67
100	The monoenergetic vibrational predissociation of expansion cooled NCNO: Nascent CN(V,R) distributions at excess energies 0-1000 cm ⁻¹ . <i>Journal of Chemical Physics</i> , 1985 , 82, 2608-2619	3.9	66
99	Propensities toward C ₂ H(A 2 ^u) in acetylene photodissociation. <i>Journal of Chemical Physics</i> , 1995 , 103, 6815-6818	3.9	65

98	CF4 and NOCl molecular lasers operating in the 16- μ m region. <i>Applied Physics Letters</i> , 1977 , 30, 420-422	3.4	63
97	Photoinitiated H2CO unimolecular decomposition: Accessing H+HCO products via S0 and T1 pathways. <i>Journal of Chemical Physics</i> , 2000 , 112, 2752-2761	3.9	56
96	Subpicosecond OH production from photoexcited CO2/Ar complexes. <i>Journal of Chemical Physics</i> , 1992 , 97, 9486-9489	3.9	52
95	Infrared photodissociation of fluorinated ethanes and ethylenes: Collisional effects in the multiple photon absorption process. <i>Journal of Chemical Physics</i> , 1978 , 69, 4201-4205	3.9	52
94	Photodissociation of methanol at 193.3 nm: Translational energy release spectra. <i>Journal of Chemical Physics</i> , 1994 , 101, 5665-5671	3.9	49
93	Infrared absorption spectroscopy of the CO2/Ar complex in the 2376 cm ⁻¹ combination band region: The intermolecular bend. <i>Journal of Chemical Physics</i> , 1991 , 94, 233-238	3.9	49
92	Velocity-aligned Doppler spectroscopy. <i>Journal of Chemical Physics</i> , 1989 , 90, 2692-2702	3.9	49
91	Photoinitiated Reactions in Weakly Bonded Complexes. <i>Advances in Photochemistry</i> , 2007 , 249-363		46
90	The density of reactive levels in NO2 unimolecular decomposition. <i>Journal of Chemical Physics</i> , 1994 , 101, 4809-4818	3.9	45
89	Electronic-vibrational energy transfer from Br(4 2P1/2) to HCN, and deactivation of HCN (001) . <i>Journal of Chemical Physics</i> , 1976 , 65, 1872-1875	3.9	44
88	Optical time of flight spectroscopy: A method for the direct state selective measurement of photofragment recoil energies. <i>Journal of Chemical Physics</i> , 1978 , 69, 3854-3857	3.9	44
87	An experimental study of HF photodissociation: Spin-orbit branching ratio and infrared alignment. <i>Journal of Chemical Physics</i> , 1996 , 104, 7027-7035	3.9	43
86	Photoinitiated H- and D-atom reactions with N2O in the gas phase and in N2O/Ar and N2O/DI complexes. <i>Journal of Chemical Physics</i> , 1992 , 97, 2536-2547	3.9	40
85	The unimolecular reaction of t-BuNO on singlet and triplet surfaces: Spectroscopy, real-time rate measurements, and NO energy distributions. <i>Journal of Chemical Physics</i> , 1986 , 85, 5763-5773	3.9	40
84	Unimolecular decomposition of NO3: The NO+O2 threshold regime. <i>Journal of Chemical Physics</i> , 1996 , 105, 6807-6817	3.9	38
83	Active mode locking of the XeF laser. <i>Applied Physics Letters</i> , 1976 , 29, 424-425	3.4	38
82	Electronic-to-vibrational pumped CO2 laser operating at 4.3, 10.6, and 14.1 μ m. <i>Journal of Applied Physics</i> , 1976 , 47, 1051-1054	2.5	37
81	Calculated rotational spectrum of Ar...CO from an ab initio potential energy surface: A very floppy van der Waals molecule. <i>Journal of Chemical Physics</i> , 1994 , 101, 1006-1018	3.9	35

80	Infrared absorption spectroscopy of gas-phase $\text{N}_2\text{O} \cdots \text{X}$ ($\text{X}=\text{F}, \text{Cl}, \text{Br}$) weakly bonded complexes utilizing the N_2O β chromophore. <i>Journal of Chemical Physics</i> , 1990 , 93, 183-196	3.9	35
79	The kinetics of free radicals generated by IR laser photolysis. III. Intersystem crossing between $\text{C}_2(\text{X } 1\text{g}^+)$ and $\text{C}_2(\text{a } 3\text{u})$ induced by collisions with oxygen. <i>Journal of Chemical Physics</i> , 1980 , 73, 829-835	3.9	35
78	The 540000 nm photodissociation of 300 K NCNO: One- and two-photon processes. <i>Journal of Chemical Physics</i> , 1984 , 81, 653-660	3.9	34
77	Photoinitiated $\text{H}+\text{CO}_2 \rightarrow \text{H}+\text{CO}$ reactions: OH distributions and three-body interactions in $\text{CO}_2\text{H}_2\text{S}$ complexes. <i>Journal of Chemical Physics</i> , 1988 , 88, 2841-2843	3.9	32
76	The unimolecular reaction of isolated CF_3CN : Energy disposal into CN product degrees of freedom. <i>Journal of Chemical Physics</i> , 1982 , 76, 997-1006	3.9	31
75	Electronic to vibrational energy transfer from $\text{Br}(42\text{P}1/2)$ to CO_2 , COS , and CS_2 . <i>Journal of Chemical Physics</i> , 1977 , 67, 4454-4462	3.9	31
74	Correlated product state distributions in the unimolecular reaction of NCNO. <i>Journal of Chemical Physics</i> , 1989 , 90, 209-218	3.9	30
73	ir photolysis of SeF_6 : Isotope separation and dissociation enhancement using NH_3 and CO_2 lasers. <i>Journal of Chemical Physics</i> , 1978 , 69, 4756-4761	3.9	29
72	Unimolecular Reaction Rate Constants of NO_2 Just above D_0 . <i>Journal of Physical Chemistry A</i> , 1999 , 103, 10268-10273	2.8	28
71	Infrared spectroscopy of $\text{CO}_2\text{D}(\text{H})\text{Br}$: Molecular structure and its reliability. <i>Journal of Chemical Physics</i> , 1992 , 97, 5392-5402	3.9	26
70	CO internal excitation from the reaction: $\text{H}+\text{CO}_2 \rightarrow \text{CO}+\text{OH}$. <i>Journal of Chemical Physics</i> , 1992 , 96, 4378-4386	3.9	26
69	The rotationally resolved $A \ 1A' \leftarrow X \ 1A'$ spectrum of expansion cooled NCNO: Vibrational fundamentals, rotational constants, and perturbations. <i>Journal of Chemical Physics</i> , 1984 , 81, 4333-4340	3.9	26
68	The production of $\text{CN}(X \ 2\text{u})$ and $\text{C}_2(\text{a } 3\text{u})$ via the infrared multiple photon dissociation of $\text{C}_2\text{H}_3\text{CN}$. <i>Journal of Chemical Physics</i> , 1980 , 72, 3789-3795	3.9	26
67	An experimental investigation of the effect of rotation on the rate of unimolecular decomposition of NO_2 . <i>Chemical Physics Letters</i> , 1997 , 272, 257-264	2.5	23
66	Amorphous solid water films: transport and guest-host interactions with CO_2 and N_2O dopants. <i>Journal of Physical Chemistry A</i> , 2006 , 110, 2097-105	2.8	23
65	Isotopically selective ir photodissociation of SeF_6 . <i>Applied Physics Letters</i> , 1978 , 32, 236-238	3.4	23
64	Vibrationally resolved translational energy release spectra from the ultraviolet photodissociation of methyl mercaptan. <i>Journal of Chemical Physics</i> , 1993 , 99, 6600-6606	3.9	22
63	Trapping and release of CO_2 guest molecules by amorphous ice. <i>Journal of Physical Chemistry A</i> , 2007 , 111, 13365-70	2.8	21

62	Photoinitiated unimolecular decomposition of NO ₂ : Rotational dependence of the dissociation rate. <i>Journal of Chemical Physics</i> , 1999 , 111, 9267-9279	3.9	21
61	Rate coefficients for photoinitiated NO ₂ unimolecular decomposition: energy dependence in the threshold regime. <i>Chemical Physics Letters</i> , 2002 , 358, 71-76	2.5	20
60	H+ClCN→HCl+CN: Product excitations and reaction mechanism at E _{c.m.} ≈ 21.6 kcal mol ⁻¹ . <i>Journal of Chemical Physics</i> , 1988 , 89, 1977-1985	3.9	20
59	Monitoring UF ₆ photodissociation via laser multiphoton ionization. <i>Applied Physics Letters</i> , 1981 , 39, 201-203	3.4	19
58	Electronic structure of tris(2-phenylpyridine)iridium: electronically excited and ionized states. <i>Molecular Physics</i> , 2012 , 110, 1849-1862	1.7	18
57	Temperature programmed desorption and infrared spectroscopic studies of thin water films on MgO(100). <i>Chemical Physics Letters</i> , 2005 , 404, 19-24	2.5	17
56	NO(X 2 ⁺) product state distributions in molecule-surface collision-induced dissociation: Direct inelastic scattering of n,i-C ₃ F ₇ NO from MgO(100) at E _{incident} = 7.0 eV. <i>Journal of Chemical Physics</i> , 1991 , 94, 2330-2345	3.9	17
55	PH ₂ internal energy distribution produced by the 193 nm photodissociation of PH ₃ . <i>Journal of Chemical Physics</i> , 1988 , 88, 879-887	3.9	17
54	H ₂ O, NO, and N ₂ O infrared lasers pumped directly and indirectly by electronic-vibrational energy transfer. <i>Journal of Applied Physics</i> , 1977 , 48, 230-233	2.5	17
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52	Electric-discharge-pumped nitrogen ion laser. <i>Applied Physics Letters</i> , 1976 , 29, 580-582	3.4	16
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50	Simultaneous one- and two-photon processes in the photodissociation of NCNO using a tunable dye laser. <i>Journal of Chemical Physics</i> , 1983 , 79, 2088-2090	3.9	14
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48	Quenching of interconversion tunneling: The free HCl stretch first overtone of (HCl) ₂ . <i>Journal of Chemical Physics</i> , 1998 , 108, 9614-9616	3.9	13
47	Reply to the Comment on: Nascent product excitations in unimolecular reactions: The separate statistical ensembles method. <i>Journal of Chemical Physics</i> , 1986 , 85, 1710-1711	3.9	13
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- 43 Vibration quenching of HgBr(X 2 Π 1/2). *Applied Physics Letters*, **1981**, 38, 731-733 3.4 12
- 42 Multiple photon excitation and ionization of NO in and on helium droplets. *Journal of Chemical Physics*, **2006**, 124, 214308 3.9 11
- 41 Nascent PO(X 2 Π E,V,R,T excitations from collision-free IR laser photolysis: Specificity toward the PO(X 2 Π /2) spin-orbit state. *Journal of Chemical Physics*, **1985**, 82, 1376-1384 3.9 11
- 40 On the ultraviolet photodissociation of H(2)Te. *Journal of Chemical Physics*, **2004**, 121, 9389-95 3.9 10
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- 38 Temperature dependence of the quenching of Br(4 2P1/2) by CO₂ and HCl with accompanying vibrational excitation. *Journal of Chemical Physics*, **1978**, 68, 3308-3309 3.9 10
- 37 Electronic to vibrational energy transfer, from Br(42P1/2) to H₂O. *Journal of Chemical Physics*, **1978**, 68, 2109-2113 3.9 10
- 36 Gas Trapping in Ice and Its Release upon Warming. *Astrophysics and Space Science Library*, **2013**, 487-499 0.3 9
- 35 Photoexcitation of NO₂ in He droplets above the Gas-Phase Dissociation Threshold. *Journal of Physical Chemistry A*, **2004**, 108, 9841-9846 2.8 9
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- 32 Formation of He via electron impact of helium droplets. *Journal of Chemical Physics*, **2018**, 148, 044302 3.9 8
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- 30 The unimolecular reaction of vinyl fluoride. *Journal of Chemical Physics*, **1985**, 82, 1332-1337 3.9 8
- 29 Reactions of hot deuterium atoms with OCS in the gas phase and in OCS/D₂ complexes. *Journal of Chemical Physics*, **1993**, 99, 6545-6552 3.9 7
- 28 Dissociation of benzylamine ions following infrared multiple photon absorption, electron impact ionization, and UV multiphoton ionization. *Journal of Chemical Physics*, **1983**, 78, 5506-5512 3.9 7
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24	Multiphoton Ionization of Gaseous Molecules. <i>Advances in Chemical Physics</i> , 2007 , 1-29		6
23	Picosecond absorption recovery of diphenyl butadiene. <i>IEEE Journal of Quantum Electronics</i> , 1979 , 15, 1202-1205	2	6
22	Photoionization of tris(2-phenylpyridine)iridium. <i>Molecular Physics</i> , 2012 , 110, 1893-1908	1.7	5
21	The collisional de-excitation of Hg(6 3P ₀) by HgBr(X 2 Π), Br(4 2P), and Br ₂ (X 1 Σ) Evidence for ion-pair formation in the entrance channel. <i>Journal of Chemical Physics</i> , 1982 , 76, 3505-3512	3.9	5
20	Photon and electron spins. <i>Journal of Physical Chemistry A</i> , 2009 , 113, 15320-7	2.8	4
19	Ultrafast OH production in clusters containing N ₂ O and HI. <i>Journal of Chemical Physics</i> , 1997 , 107, 9457-9463	3.5	4
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16	Intramolecular quantum chaos in doped helium nanodroplets. <i>Chemical Physics Letters</i> , 2003 , 375, 253-260		4
15	Molecule-Surface dissociative scattering of n-C ₃ F ₇ NO from MgO(100) at hyperthermal energies: Nascent NO (X 2 Π) <i>Journal of Chemical Physics</i> , 1989 , 90, 3883-3885	3.9	4
14	Optically pumped NSF molecular laser. <i>Applied Physics Letters</i> , 1980 , 37, 592-594	3.4	4
13	Line-tunable CO ₂ laser operating in the region 2280-360 cm ⁻¹ pumped by energy transfer from Br(42P1/2). <i>Journal of Applied Physics</i> , 1977 , 48, 3665-3668	2.5	4
12	Conversion of He(2 S) to He(a Σ) in Liquid Helium. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 6017-6023	3.4	4
11	Photoinitiated Dynamics in Amorphous Solid Water via Nanoimprint Lithography. <i>Journal of Physical Chemistry A</i> , 2017 , 121, 4968-4981	2.8	2
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- 6 Tribute to Hanna Reisler. *Journal of Physical Chemistry A*, **2019**, 123, 6381-6383 2.8
- 5 Triplet Excitons in Small Helium Clusters. *Journal of Physical Chemistry A*, **2019**, 123, 6113-6122 2.8
- 4 Collision-Induced Dissociation of Highly Excited NO2 in the Gas Phase and on MgO (100) Surfaces. *ACS Symposium Series*, **1997**, 291-303 0.4
- 3 Ring opening reaction dynamics in the reaction of hydrogen atoms with ethylene oxide. *Journal of Chemical Physics*, **1994**, 101, 6615-6624 3.9
- 2 Stepwise Excitation Processes in Photodissociation and Detection. *Israel Journal of Chemistry*, **1984**, 24, 259-265 3.4
- 1 NaCl surface reaction in chemical-laser devices. *IEEE Journal of Quantum Electronics*, **1975**, 11, 110-111 2