Alecâ€M Wodtke

List of Publications by Year
in descending order

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218 papers	7,584 citations	61687 45 h-index	87275 74 g-index
231 all docs	231 docs citations	231 times ranked	5687 citing authors

#	Article	IF	Citations
1	Effective medium theory for bcc metals: electronically non-adiabatic H atom scattering in full dimensions. Physical Chemistry Chemical Physics, 2022, 24, 8738-8748.	1.3	5
2	Application of an Event-Based Camera for Real-Time Velocity Resolved Kinetics. Journal of Physical Chemistry A, 2022, 126, 2142-2148.	1.1	1
3	Spin-Forbidden Carbonâ€“Carbon Bond Formation in Vibrationally Excited Î±-CO. Journal of Physical Chemistry A, 2022, 126, 2270-2277.	1.1	5
4	Velocityâ€resolved Laserâ€induced Desorption for Kinetics on Surface Adsorbates. Chemistry Methods, 2022, 2, .	1.8	1
5	Transporting and concentrating vibrational energy to promote isomerization. Nature, 2021, 589, 391-395.	13.7	8
6	Small Nuclear Quantum Effects in Scattering of H and D from Graphene. Journal of Physical Chemistry Letters, 2021, 12, 1991-1996.	2.1	17
7	Inelastic Scattering of H Atoms from Surfaces. Journal of Physical Chemistry A, 2021, 125, 3059-3076.	1.1	14
8	Chemical dynamics from the gasâ€phase to surfaces. Natural Sciences, 2021, 1, e10005.	1.0	27
9	NO Binding Energies to and Diffusion Barrier on Pd Obtained with Velocity-Resolved Kinetics. Journal of Physical Chemistry C, 2021, 125, 11773-11781.	1.5	6
10	Random Force in Molecular Dynamics with Electronic Friction. Journal of Physical Chemistry C, 2021, 125, 14468-14473.	1.5	13
11	Multibounce and Subsurface Scattering of H Atoms Colliding with a van der Waals Solid. Journal of Physical Chemistry A, 2021, 125, 5745-5752.	1.1	8
12	Adsorbate modification of electronic nonadiabaticity: H atom scattering from p(2 Ã— 2) O on Pt(111). Journal of Chemical Physics, 2021, 155, 034702.	1.2	6
13	A free electron laser-based 1+1â€² Resonance-Enhanced Multiphoton Ionization scheme for rotationally resolved detection of OH radicals with correct relative intensities. Journal of Molecular Spectroscopy, 2021, 380, 111509.	0.4	3
14	The puzzle of rapid hydrogen oxidation on Pt(111). Molecular Physics, 2021, 119, .	0.8	7
15	The Barrier for CO₂ Functionalization to Formate on Hydrogenated Pt. Journal of Physical Chemistry A, 2021, 125, 7396-7405.	1.1	8
16	Kinetics of NH₃ Desorption and Diffusion on Pt: Implications for the Ostwald Process. Journal of the American Chemical Society, 2021, 143, 18305-18316.	6.6	15
17	Observation of an isomerizing double-well quantum system in the condensed phase. Science, 2020, 367, 175-178.	6.0	25
18	Measuring Transient Reaction Rates from Nonstationary Catalysts. ACS Catalysis, 2020, 10, 14056-14066.	5.5	14

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19	First principles rates for surface chemistry employing exact transition state theory: application to recombinative desorption of hydrogen from Cu(111). Physical Chemistry Chemical Physics, 2020, 22, 17532-17539.	1.3	10
20	The coverage dependence of the infrared absorption of CO adsorbed to NaCl(100). Journal of Chemical Physics, 2020, 153, 154703.	1.2	3
21	Vibrationally inelastic scattering of HCl from Ag(111). Journal of Chemical Physics, 2020, 153, 164703.	1.2	7
22	An experimentally validated neural-network potential energy surface for H-atom on free-standing graphene in full dimensionality. Physical Chemistry Chemical Physics, 2020, 22, 26113-26120.	1.3	14
23	Following the microscopic pathway to adsorption through chemisorption and physisorption wells. Science, 2020, 369, 1461-1465.	6.0	42
24	Closing the Gap Between Experiment and Theory: Reactive Scattering of HCl from Au(111). Journal of Physical Chemistry C, 2020, 124, 15944-15960.	1.5	18
25	Quantum-state resolved lifetime of triplet (<mml:math) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 522 Td (xmlns:mml="http://www.	0.4	3
26	Fundamental mechanisms for molecular energy conversion and chemical reactions at surfaces. Reports on Progress in Physics, 2019, 82, 096401.	8.1	34
27	Vibrational Relaxation Lifetime of a Physisorbed Molecule at a Metal Surface. Physical Review Letters, 2019, 123, 156101.	2.9	20
28	The kinetics of elementary thermal reactions in heterogeneous catalysis. Nature Reviews Chemistry, 2019, 3, 723-732.	13.8	31
29	Electron transfer mediates vibrational relaxation of CO in collisions with Ag(111). Physical Chemistry Chemical Physics, 2019, 21, 1650-1655.	1.3	10
30	Directional Ostwald Ripening for Producing Aligned Arrays of Nanowires. Nano Letters, 2019, 19, 4306-4313.	4.5	14
31	Imaging covalent bond formation by H atom scattering from graphene. Science, 2019, 364, 379-382.	6.0	76
32	Origin of Thermal and Hyperthermal CO₂ from CO Oxidation on Pt Surfaces: The Role of Postâ€Transitionâ€State Dynamics, Active Sites, and Chemisorbed CO₂. Angewandte Chemie, 2019, 131, 6990-6994.	1.6	7
33	Origin of Thermal and Hyperthermal CO₂ from CO Oxidation on Pt Surfaces: The Role of Postâ€Transitionâ€State Dynamics, Active Sites, and Chemisorbed CO₂. Angewandte Chemie - International Edition, 2019, 58, 6916-6920.	7.2	31
34	Probing the Effect of Surface Strain on CO Binding to Pd Thin Films. Journal of Physical Chemistry C, 2019, 123, 12255-12260.	1.5	4
35	The Sommerfeld ground-wave limit for a molecule adsorbed at a surface. Science, 2019, 363, 158-161.	6.0	43
36	Observation of the adsorption and desorption of vibrationally excited molecules on a metal surface. Nature Chemistry, 2018, 10, 592-598.	6.6	70

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37	Work Function Dependence of Vibrational Relaxation Probabilities: NO(v = 2) Scattering from Ultrathin Metallic Films of Ag/Au(111). Journal of Physical Chemistry C, 2018, 122, 10027-10033.	1.5	14
38	Inelastic H Atom Scattering from Ultrathin Aluminum Oxide Films Grown by Atomic Layer Deposition on Pt(111). Journal of Physical Chemistry C, 2018, 122, 10096-10102.	1.5	6
39	Unified description of H-atomâ€“induced chemicurrents and inelastic scattering. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 680-684.	3.3	39
40	Hydrogen collisions with transition metal surfaces: Universal electronically nonadiabatic adsorption. Journal of Chemical Physics, 2018, 148, 034706.	1.2	31
41	An ultrahigh vacuum apparatus for H atom scattering from surfaces. Review of Scientific Instruments, 2018, 89, 094101.	0.6	18
42	Associative desorption of hydrogen isotopologues from copper surfaces: Characterization of two reaction mechanisms. Journal of Chemical Physics, 2018, 148, 194703.	1.2	28
43	Ultra-sensitive mid-infrared emission spectrometer with sub-ns temporal resolution. Optics Express, 2018, 26, 14859.	1.7	42
44	Translational Inelasticity of NO and CO in Scattering from Ultrathin Metallic Films of Ag/Au(111). Journal of Physical Chemistry C, 2018, 122, 18942-18948.	1.5	9
45	A simple means of producing highly transparent graphene on sapphire using chemical vapor deposition on a copper catalyst. Carbon, 2018, 139, 593-598.	5.4	2
46	Velocity-resolved kinetics of site-specific carbon monoxide oxidation on platinum surfaces. Nature, 2018, 558, 280-283.	13.7	92
47	Genetic algorithm approach to global optimization of the full-dimensional potential energy surface for hydrogen atom at fcc-metal surfaces. Chemical Physics Letters, 2017, 683, 286-290.	1.2	19
48	Ion and velocity map imaging for surface dynamics and kinetics. Journal of Chemical Physics, 2017, 147, 013939.	1.2	36
49	Mid-infrared Laser-Induced Fluorescence with Nanosecond Time Resolution Using a Superconducting Nanowire Single-Photon Detector: New Technology for Molecular Science. Accounts of Chemical Research, 2017, 50, 1400-1409.	7.6	51
50	Evidence for Electronâ€“Hole Pair Excitation in the Associative Desorption of H2 and D2 from Au(111). Journal of Physical Chemistry Letters, 2017, 8, 1657-1663.	2.1	20
51	Vibrational Relaxation of Highly Vibrationally Excited CO Scattered from Au(111): Evidence for CO^{â€“} Formation. Journal of Physical Chemistry Letters, 2017, 8, 4887-4892.	2.1	16
52	The collision-free photochemistry of methyl azide at 157 nm: Mechanism and energy release. Journal of Chemical Physics, 2017, 147, 064307.	1.2	1
53	An axis-specific rotational rainbow in the direct scatter of formaldehyde from Au(111) and its influence on trapping probability. Physical Chemistry Chemical Physics, 2017, 19, 19904-19915.	1.3	12
54	Trapping-desorption and direct-scattering of formaldehyde at Au(111). Physical Chemistry Chemical Physics, 2017, 19, 19896-19903.	1.3	7

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55	A 1 + 1â€² resonance-enhanced multiphoton ionization scheme for rotationally state-selective detection of formaldehyde via the Ãƒ ¹A₂ â†•Ì‚ƒ ¹A₁ transition. Physical Chemistry Chemical Physics, 2016, 18, 22355-22363.	1.3	10
56	Final rotational state distributions from NO(v_i = 11) in collisions with Au(111): the magnitude of vibrational energy transfer depends on orientation in moleculeâ€“surface collisions. Physical Chemistry Chemical Physics, 2016, 18, 14976-14979.	1.3	9
57	Vibrational energy transfer near a dissociative adsorption transition state: State-to-state study of HCl collisions at Au(111). Journal of Chemical Physics, 2016, 145, 054709.	1.2	29
58	Activated Dissociation of HCl on Au(111). Journal of Physical Chemistry Letters, 2016, 7, 1346-1350.	2.1	29
59	Surface reaction dynamics. Chemical Society Reviews, 2016, 45, 3573-3575.	18.7	7
60	Electronically non-adiabatic influences in surface chemistry and dynamics. Chemical Society Reviews, 2016, 45, 3641-3657.	18.7	82
61	Vacuum ultraviolet photodissociation of hydrogen bromide. Physical Chemistry Chemical Physics, 2016, 18, 15399-15405.	1.3	5
62	Rotationally Resolved Vacuum Ultraviolet Resonance-Enhanced Multiphoton Ionization (VUV REMPI) of Acetylene via the GÌƒ Rydberg State. Journal of Physical Chemistry A, 2016, 120, 5399-5407.	1.1	1
63	Quality of graphene on sapphire: long-range order from helium diffraction versus lattice defects from Raman spectroscopy. RSC Advances, 2016, 6, 21235-21245.	1.7	24
64	Vibrational Inelasticity of Highly Vibrationally Excited NO on Ag(111). Journal of Physical Chemistry Letters, 2016, 7, 441-446.	2.1	33
65	Local transport measurements in graphene on SiO2 using Kelvin probe force microscopy. Carbon, 2016, 102, 470-476.	5.4	16
66	Temperature programmed desorption of weakly bound adsorbates on Au(111). Surface Science, 2016, 650, 11-16.	0.8	27
67	An accurate full-dimensional potential energy surface for Hâ€“Au(111): Importance of nonadiabatic electronic excitation in energy transfer and adsorption. Journal of Chemical Physics, 2015, 143, 124708.	1.2	62
68	Observation of Translation-to-Vibration Excitation in Acetylene Scattering from Au(111): A REMPI Based Approach. Zeitschrift Fur Physikalische Chemie, 2015, 229, 1929-1949.	1.4	10
69	Electronically Nonadiabatic Vibrational Excitation of N₂ Scattered from Pt(111). Journal of Physical Chemistry C, 2015, 119, 14722-14727.	1.5	8
70	Using Ion Imaging to Measure Velocity Distributions in Surface Scattering Experiments. Journal of Physical Chemistry A, 2015, 119, 12255-12262.	1.1	28
71	Adsorbate enhancement of electron emission during the quenching of metastable CO at metal surfaces. Physical Chemistry Chemical Physics, 2015, 17, 11540-11545.	1.3	8
72	NO Vibrational Energy Transfer on a Metal Surface: Still a Challenge to First-Principles Theory. Journal of Physical Chemistry C, 2015, 119, 3268-3272.	1.5	47

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73	CO Desorption from a Catalytic Surface: Elucidation of the Role of Steps by Velocity-Selected Residence Time Measurements. Journal of the American Chemical Society, 2015, 137, 1465-1475.	6.6	30
74	The Dynamics of Molecular Interactions and Chemical Reactions at Metal Surfaces: Testing the Foundations of Theory. Annual Review of Physical Chemistry, 2015, 66, 399-425.	4.8	99
75	A new Stark decelerator based surface scattering instrument for studying energy transfer at the gas-surface interface. Review of Scientific Instruments, 2015, 86, 043306.	0.6	7
76	Helium diffraction and acoustic phonons of graphene grown on copper foil. Carbon, 2015, 95, 731-737.	5.4	42
77	Electron-hole pair excitation determines the mechanism of hydrogen atom adsorption. Science, 2015, 350, 1346-1349.	6.0	136
78	Polymer Superstructure Dynamics on Free-Standing Graphene Resolved by Ultrafast Low-Energy Electron Diffraction. , 2014, , .		0
79	Controlling an Electronâ€Transfer Reaction at a Metal Surface by Manipulating Reactant Motion and Orientation. Angewandte Chemie - International Edition, 2014, 53, 13690-13694.	7.2	26
80	CO (a3Î) quenching at a metal surface: Evidence of an electron transfer mediated mechanism. Journal of Chemical Physics, 2014, 141, 044712.	1.2	8
81	The importance of accurate adiabatic interaction potentials for the correct description of electronically nonadiabatic vibrational energy transfer: A combined experimental and theoretical study of NO(v = 3) collisions with a Au(111) surface. Journal of Chemical Physics, 2014, 140, 044701.	1.2	39
82	Electron hole pair mediated vibrational excitation in CO scattering from Au(111): Incidence energy and surface temperature dependence. Journal of Chemical Physics, 2014, 141, 124704.	1.2	15
83	Enhancing the Electrochemical and Electronic Performance of CVDâ€Grown Graphene by Minimizing Trace Metal Impurities. ChemElectroChem, 2014, 1, 2070-2074.	1.7	33
84	Generation of ultra-short hydrogen atom pulses by bunch-compression photolysis. Nature Communications, 2014, 5, 5373.	5.8	7
85	Incidence energy dependent state-to-state time-of-flight measurements of NO(v = 3) collisions with Au(111): the fate of incidence vibrational and translational energy. Physical Chemistry Chemical Physics, 2014, 16, 7602.	1.3	16
86	Chemical Vapor Deposition of Graphene on a â€œPeeled-Offâ€•Epitaxial Cu(111) Foil: A Simple Approach to Improved Properties. ACS Nano, 2014, 8, 8636-8643.	7.3	65
87	Ultrafast low-energy electron diffraction in transmission resolves polymer/graphene superstructure dynamics. Science, 2014, 345, 200-204.	6.0	167
88	Dynamical steering in an electron transfer surface reaction: Oriented NO(v = 3, 0.08 <) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 2014, 140, 054710.	1.2	29
89	Suppression of Spontaneous Emission in the Optical Pumping of Molecules: Pumpâ€“Dumpâ€“Sweepâ€“Probe. Journal of Physical Chemistry Letters, 2013, 4, 2367-2370.	2.1	16
90	Adiabatic Energy Loss in Hyperthermal H Atom Collisions with Cu and Au: A Basis for Testing the Importance of Nonadiabatic Energy Loss. Journal of Physical Chemistry Letters, 2013, 4, 3735-3740.	2.1	44

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91	International Collaborations are nothing new... and sometimes they are simply amazing. Zeitschrift Fur Physikalische Chemie, 2013, 227, .	1.4	1
92	Toward Detection of Electron-Hole Pair Excitation in H-atom Collisions with Au(111): Adiabatic Molecular Dynamics with a Semi-Empirical Full-Dimensional Potential Energy Surface. Zeitschrift Fur Physikalische Chemie, 2013, 227, .	1.4	17
93	Phosphorus stimulated unidirectional growth of TiO2 nanostructures. Journal of Materials Chemistry A, 2013, 1, 6091.	5.2	2
94	Observation of direct vibrational excitation in gas-surface collisions of CO with Au(111): a new model system for surface dynamics. Physical Chemistry Chemical Physics, 2013, 15, 1863-1867.	1.3	20
95	Competition between Direct and Indirect Dissociation Pathways in Ultraviolet Photodissociation of HNCO. Journal of Physical Chemistry A, 2013, 117, 11673-11678.	1.1	20
96	Vibrational enhancement of electron emission in CO (a3Î) quenching at a clean metal surface. Physical Chemistry Chemical Physics, 2013, 15, 14951.	1.3	7
97	Experimental and Theoretical Study of Multi-Quantum Vibrational Excitation: NO(v = 0â†'1,2,3) in Collisions with Au(111). Journal of Physical Chemistry A, 2013, 117, 7091-7101.	1.1	22
98	State-to-State Time-of-Flight Measurements of NO Scattering from Au(111): Direct Observation of Translation-to-Vibration Coupling in Electronically Nonadiabatic Energy Transfer. Journal of Physical Chemistry A, 2013, 117, 8750-8760.	1.1	34
99	Observation of orientation-dependent electron transfer in moleculeâ€“surface collisions. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 17738-17743.	3.3	49
100	Vibrational Energy Transfer at Surfaces: The Importance of Non-Adiabatic Electronic Effects. Springer Series in Surface Sciences, 2013, , 267-297.	0.3	3
101	On the determination of absolute vibrational excitation probabilities in molecule-surface scattering: Case study of NO on Au(111). Journal of Chemical Physics, 2012, 137, 064705.	1.2	20
102	Vibrational excitation and relaxation of NO molecules scattered from a Au(111) surface. , 2012, , .		1
103	Production of a beam of highly vibrationally excited CO using perturbations. Journal of Chemical Physics, 2012, 136, 214201.	1.2	11
104	Surface photochemistry probed by two-photon photoemission spectroscopy. Energy and Environmental Science, 2012, 5, 6833.	15.6	27
105	Photofragmentation Translational Spectroscopy of Methyl Azide (CH₃N₃) Photolysis at 193 nm: Molecular and Radical Channel Product Branching Ratio. Journal of Physical Chemistry A, 2012, 116, 4695-4704.	1.1	9
106	Multiquantum Vibrational Excitation of NO Scattered from Au(111): Quantitative Comparison of Benchmark Data to Abâ€...Initio Theories of Nonadiabatic Moleculeâ€“Surface Interactions. Angewandte Chemie - International Edition, 2012, 51, 4954-4958.	7.2	39
107	Orienting polar molecules without hexapoles: Optical state selection with adiabatic orientation. Chemical Physics Letters, 2012, 535, 1-11.	1.2	15
108	Energy transfer at metal surfaces: the need to go beyond the electronic friction picture. Chemical Science, 2011, 2, 1647.	3.7	41

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109	Photoionization of CH₃N₃ Produces ³B₂ N₃^{â€“}: A Theoretical and Experimental Study of the Ion-Pair Channel. Journal of Physical Chemistry Letters, 2011, 2, 2311-2315.	2.1	8
110	Vibrationally promoted electron emission at a metal surface: electron kinetic energy distributions. Physical Chemistry Chemical Physics, 2011, 13, 97-99.	1.3	27
111	Electron Kinetic Energies from Vibrationally Promoted Surface Exoemission: Evidence for a Vibrational Autodetachment Mechanism. Journal of Physical Chemistry A, 2011, 115, 14306-14314.	1.1	14
112	On the Interaction of Methyl Azide (CH₃N₃) Ices with Ionizing Radiation: Formation of Methanimine (CH₂NH), Hydrogen Cyanide (HCN), and Hydrogen Isocyanide (HNC). Journal of Physical Chemistry A, 2011, 115, 250-264.	1.1	26
113	On the temperature dependence of electronically non-adiabatic vibrational energy transfer in moleculeâ€“surface collisions. Physical Chemistry Chemical Physics, 2011, 13, 8153-8162.	1.3	20
114	Quantifying the breakdown of the Bornâ€“Oppenheimer approximation in surface chemistry. Physical Chemistry Chemical Physics, 2011, 13, 12680.	1.3	44
115	Communication: Bubbles, crystals, and laser-induced nucleation. Journal of Chemical Physics, 2011, 134, 171102.	1.2	53
116	Site-specific photocatalytic splitting of methanol on TiO2(110). Chemical Science, 2010, 1, 575.	3.7	150
117	Growth direction determination of a single RuO2 nanowire by polarized Raman spectroscopy. Applied Physics Letters, 2010, 96, 213108.	1.5	25
118	Surface three-dimensional velocity map imaging: A new technique for the study of photodesorption dynamics. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2010, 28, 807-813.	0.9	9
119	Generation of tunable narrow bandwidth nanosecond pulses in the deep ultraviolet for efficient optical pumping and high resolution spectroscopy. Review of Scientific Instruments, 2010, 81, 063106.	0.6	30
120	In situ real-time monitoring of Pt-VO 2 nanoparticle-nanowire assembly by GISAXS. Proceedings of SPIE, 2010, , .	0.8	2
121	TiO2 Nanowire Growth Driven by Phosphorus-Doped Nanocatalysis. Journal of Physical Chemistry C, 2010, 114, 10697-10702.	1.5	27
122	Tin-Oxide-Nanowire-Based Electronic Nose Using Heterogeneous Catalysis as a Functionalization Strategy. ACS Nano, 2010, 4, 3117-3122.	7.3	99
123	A Surface Femtosecond Two-Photon Photoemission Spectrometer for Excited Electron Dynamics and Time-Dependent Photochemical Kinetics. Chinese Journal of Chemical Physics, 2010, 23, 255-261.	0.6	19
124	Vibrational overtone excitation in electron mediated energy transfer at metal surfaces. Chemical Science, 2010, 1, 55.	3.7	27
125	Efficient translational excitation of a solid metal surface: State-to-state translational energy distributions of vibrational ground state HCl scattering from Au(111). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2009, 27, 907-912.	0.9	27
126	Ion Dissociation of Hydrazoic Acid Investigated by Synchrotron-Radiation-Based Photoionization Mass Spectrometry. Journal of Physical Chemistry A, 2009, 113, 3822-3829.	1.1	4

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127	UV photodissociation of methyl bromide and methyl bromide cation studied by velocity map imaging. Journal of Chemical Physics, 2009, 130, 034304.	1.2	37
128	Pd-Sensitized Single Vanadium Oxide Nanowires: Highly Responsive Hydrogen Sensing Based on the Metalâ^'Insulator Transition. Nano Letters, 2009, 9, 3980-3984.	4.5	121
129	Growth of Metal Oxide Nanowires from Supercooled Liquid Nanodroplets. Nano Letters, 2009, 9, 4138-4146.	4.5	70
130	Three-dimensional velocity map imaging of KBr surface photochemistry. Physical Chemistry Chemical Physics, 2009, 11, 7540.	1.3	19
131	Energy transfer and chemical dynamics at solid surfaces: The special role of charge transfer. Progress in Surface Science, 2008, 83, 167-214.	3.8	158
132	Oriented Growth of Ge Nanowires with Diameters below the Bohr Radius. Journal of Physical Chemistry C, 2008, 112, 13797-13800.	1.5	10
133	Observation of Photochemical Câ^'N Bond Cleavage in CH₃N₃:â€‰ A New Photochemical Route to Cyclic N₃. Journal of Physical Chemistry A, 2008, 112, 1105-1111.	1.1	29
134	Nanostructure-Dependent Metalâ^'Insulator Transitions in Vanadium-Oxide Nanowires. Journal of Physical Chemistry C, 2008, 112, 13328-13331.	1.5	58
135	Inverse Velocity Dependence of Vibrationally Promoted Electron Emission from a Metal Surface. Science, 2008, 321, 1191-1194.	6.0	62
136	High-yield TiO2 nanowire synthesis and single nanowire field-effect transistor fabrication. Applied Physics Letters, 2008, 92, .	1.5	47
137	Efficient vibrational and translational excitations of a solid metal surface: State-to-state time-of-flight measurements of HCl(v=2,J=1) scattering from Au(111). Journal of Chemical Physics, 2008, 129, 214708.	1.2	51
138	Dynamics of molecule-induced electron emission from surfaces. Molecular Physics, 2008, 106, 2227-2244.	0.8	8
139	An advanced molecule-surface scattering instrument for study of vibrational energy transfer in gas-solid collisions. Review of Scientific Instruments, 2007, 78, 104104.	0.6	34
140	UV Photodissociation Dynamics of HN3 in 190-248 nm. Chinese Journal of Chemical Physics, 2007, 20, 345-351.	0.6	5
141	Observation of a Change of Vibrational Excitation Mechanism with Surface Temperature: HCl Collisions with Au(111). Physical Review Letters, 2007, 98, 237601.	2.9	54
142	The simplest all-nitrogen ring: Photolytically filling the cyclic-N3 well. Journal of Chemical Physics, 2007, 126, 041101.	1.2	23
143	Casting a new light on azide photochemistry: photolytic production of cyclic-N3. Physical Chemistry Chemical Physics, 2007, 9, 3054.	1.3	31
144	Advances in the Measurement of Correlation in Photoproduct Motion. Advances in Photochemistry, 2007, , 279-350.	0.4	2

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145	Direct translation-to-vibrational energy transfer of HCl on gold: Measurement of absolute vibrational excitation probabilities. Nuclear Instruments & Methods in Physics Research B, 2007, 258, 1-6.	0.6	23
146	Dissociative photoionization of ClN3 using high-resolution synchrotron radiation: The Nâ€“Cl bond energy in ClN3. International Journal of Mass Spectrometry, 2007, 265, 261-266.	0.7	5
147	Imaging ClN3 photodissociation from 234 to 280 nm. Physical Chemistry Chemical Physics, 2006, 8, 2958.	1.3	14
148	An experimental and theoretical study of ring closing dynamics in HN3. Physical Chemistry Chemical Physics, 2006, 8, 1690.	1.3	28
149	CHEMISTRY: Chemistry in a Computer: Advancing the in Silico Dream. Science, 2006, 312, 64-65.	6.0	10
150	All-nitrogen chemistry: how far are we from N60?. International Reviews in Physical Chemistry, 2006, 25, 527-552.	0.9	100
151	The heat of formation of chlorine-isocyanate and the relative stability of isoelectronic molecules: An experimental and theoretical study. Journal of Chemical Physics, 2006, 124, 241106.	1.2	1
152	Vibrationally promoted electron emission from low work-function metal surfaces. Journal of Chemical Physics, 2006, 124, 064702.	1.2	43
153	Collision-free photochemistry of methylazide: Observation of unimolecular decomposition of singlet methylnitrene. Journal of Chemical Physics, 2006, 125, 133302.	1.2	20
154	Insensitivity of trapping at surfaces to molecular vibration. Chemical Physics Letters, 2005, 413, 326-330.	1.2	42
155	Observation of orientational influences on vibrational energy transfer at metal surfaces: Rotational cooling associated with vibrational relaxation at a metal surface. Chemical Physics Letters, 2005, 414, 138-142.	1.2	7
156	Conversion of large-amplitude vibration to electron excitation at a metal surface. Nature, 2005, 433, 503-505.	13.7	193
157	Photofragment translation spectroscopy of ClN3 at 248 nm: Determination of the primary and secondary dissociation pathways. Journal of Chemical Physics, 2005, 123, 104305.	1.2	32
158	Two photoionization thresholds of N3 produced by ClN3 photodissociation at 248 nm: Further evidence for cyclic N3. Journal of Chemical Physics, 2005, 123, 051101.	1.2	38
159	Vibrationally promoted emission of electrons from low work function surfaces: Oxygen and Cs surface coverage dependence. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2005, 23, 1085-1089.	0.9	16
160	High-level ab initio studies of unimolecular dissociation of the ground-state N3 radical. Journal of Chemical Physics, 2005, 122, 014106.	1.2	72
161	Using Volatile Solvents for Ion Formation in Liquid Molecular Beam Expansion Mass Spectrometry. Analytical Chemistry, 2005, 77, 7612-7617.	3.2	7
162	Hexapole transport and focusing of vibrationally excited NO molecules prepared by optical pumping. Chemical Physics, 2004, 301, 161-172.	0.9	20

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163	The Cl to NCl branching ratio in 248-nm photolysis of chlorine azide. Chemical Physics Letters, 2004, 391, 334-337.	1.2	18
164	Electronically non-adiabatic interactions of molecules at metal surfaces: Can we trust the Bornâ€“Oppenheimer approximation for surface chemistry?. International Reviews in Physical Chemistry, 2004, 23, 513-539.	0.9	162
165	INTERACTIONS OF VIBRATIONALLY-EXCITED MOLECULES AT SURFACES: A PROBE FOR ELECTRONICALLY NONADIABATIC EFFECTS IN HETEROGENEOUS CHEMISTRY. Advanced Series in Physical Chemistry, 2004, , 383-408.	1.5	0
166	Velocity Map Ion Imaging of Chlorine Azide Photolysis:Â Evidence for Photolytic Production of Cyclic-N3â€. Journal of Physical Chemistry A, 2003, 107, 10608-10614.	1.1	69
167	Photodissociation dynamics of ClN3 at 203 nm: the NCl (/) product branching ratio. Chemical Physics Letters, 2003, 368, 568-573.	1.2	23
168	Ion dissociation dynamics of the chlorine azide cation (ClN3+) investigated by velocity map imaging. Journal of Chemical Physics, 2003, 118, 10485-10493.	1.2	24
169	Transport and focusing of highly vibrationally excited NO molecules. Journal of Chemical Physics, 2003, 118, 9477-9480.	1.2	13
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