Marcel Drabbels

List of Publications by Year
in descending order

76	2,164	147566 31	253896 43
papers	citations	h-index	g-index

77	77	77	1447
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A modular end-station for atomic, molecular, and cluster science at the low density matter beamline of FERMI@Elettra. Journal of Physics B: Atomic, Molecular and Optical Physics, 2013, 46, 164007.	0.6	78
2	Novel Collective Autoionization Process Observed in Electron Spectra of He Clusters. Physical Review Letters, 2014, 112, 073401.	2.9	70
3	Critical Landau Velocity in Helium Nanodroplets. Physical Review Letters, 2013, 111, 153002.	2.9	66
4	Photoelectron Spectroscopy of Doped Helium Nanodroplets. Physical Review Letters, 2005, 95, 163401.	2.9	64
5	A far infrared laser sideband spectrometer in the frequency region 550â€“2700 GHz. Review of Scientific Instruments, 1990, 61, 1612-1625.	0.6	62
6	IR Spectroscopy of Molecular Ions by Nonthermal Ion Ejection from Helium Nanodroplets. Journal of the American Chemical Society, 2010, 132, 14086-14091.	6.6	60
7	Steric asymmetry in state-resolved NOâ€“Ar collisions. Chemical Physics Letters, 1999, 313, 491-498.	1.2	56
8	A study of the singletâ€“triplet perturbations in the Aì ƒâ€‰1Au state of acetylene by high resolution ultraviolet spectroscopy. Journal of Chemical Physics, 1994, 100, 165-174.	1.2	54
9	Photodissociation of alkyl iodides in helium nanodroplets. I. Kinetic energy transfer. Journal of Chemical Physics, 2007, 127, 114303.	1.2	54
10	Collective Autoionization in Multiply-Excited Systems: A novel ionization process observed in Helium Nanodroplets. Scientific Reports, 2014, 4, 3621.	1.6	54
11	Tracking attosecond electronic coherences using phase-manipulated extreme ultraviolet pulses. Nature Communications, 2020, 11, 883.	5.8	50
12	The correlated product state distribution of ketene photodissociation at 308 nm. Journal of Chemical Physics, 1996, 104, 7460-7474.	1.2	49
13	Excited State Dynamics of Ag Atoms in Helium Nanodropletsâ€. Journal of Physical Chemistry A, 2007, 111, 7504-7515.	1.1	49
14	Three-Dimensional Shapes of Spinning Helium Nanodroplets. Physical Review Letters, 2018, 121, 255301.	2.9	49
15	Desorption of alkali atoms from 4He nanodroplets. Physical Chemistry Chemical Physics, 2012, 14, 3996.	1.3	48
16	Charge Transfer and Penning Ionization of Dopants in or on Helium Nanodroplets Exposed to EUV Radiation. Journal of Physical Chemistry A, 2013, 117, 4394-4403.	1.1	48
17	High resolution doubleâ€resonance spectroscopy on Rydberg states of CO. Journal of Chemical Physics, 1993, 99, 5701-5711.	1.2	47
18	Extreme ultraviolet ionization of pure He nanodroplets: Mass-correlated photoelectron imaging, Penning ionization, and electron energy-loss spectra. Journal of Chemical Physics, 2013, 139, 084301.	1.2	47

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19	The Low Density Matter (LDM) beamline at FERMI: optical layout and first commissioning. Journal of Synchrotron Radiation, 2015, 22, 538-543.	1.0	46
20	Imaging the Translational Dynamics ofCF3in Liquid Helium Droplets. Physical Review Letters, 2004, 93, 253401.	2.9	42
21	Translational dynamics of photoexcited atoms in 4He nanodroplets: the case of silver. Physical Chemistry Chemical Physics, 2013, 15, 18388.	1.3	42
22	Mid-infrared spectroscopy of molecular ions in helium nanodroplets. Journal of Chemical Physics, 2012, 136, 044305.	1.2	40
23	Acetone, a laser-induced fluorescence study with rotational resolution at 320 nm. Chemical Physics, 1992, 163, 193-208.	0.9	38
24	Unusual Rydberg System Consisting of a Positively Charged Helium Nanodroplet with an Orbiting Electron. Physical Review Letters, 2011, 106, 083401.	2.9	38
25	Parity-Resolved State-to-State Cross Sections for Inelastic Scattering of NOX2Î1/2(v= 20,J= 0.5,e/f) from He:Â A Comparison between Crossed Molecular Beams Experiments and ab Initio Theory. Journal of Physical Chemistry A, 1997, 101, 6463-6474.	1.1	36
26	High-Resolution Excitation and Absorption Spectroscopy of Gas-Phase p-Coumaric Acid: Unveiling an Elusive Chromophore. Journal of the American Chemical Society, 2010, 132, 6315-6317.	6.6	36
27	Spectroscopy on Rydberg States of Sodium Atoms on the Surface of Helium Nanodroplets. Journal of Physical Chemistry A, 2011, 115, 6779-6788.	1.1	35
28	Ultrafast relaxation of photoexcited superfluid He nanodroplets. Nature Communications, 2020, 11, 112.	5.8	34
29	Picosecond solvation dynamics of alkali cations in superfluid<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi mathvariant="normal">He</mml:mi><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>4</mml:mn></mml:mrow></mml:mmultiscripts></mml:math>nanodroplets. Physical Review B, 2014, 90, .	1.1	33
30	TheCâ€‰3Î(vâ€™=0â€“6)â€“Xâ€‰3Î(vâ€˜=0) transition in SiC. Journal of Chemical Physics, 1991, 95, 2292-2298.	1.2	32
31	Determination of electric dipole moments and transition probabilities of lowâ€lying singlet states of CO. Journal of Chemical Physics, 1993, 99, 2352-2358.	1.2	32
32	The determination of the infrared radiative lifetimes of a vibrationally excited neutral molecule using stimulated-emission-pumping, molecular-beam time-of-flight. Journal of Chemical Physics, 1997, 106, 3024-3028.	1.2	31
33	The first vibronically resolved measurement of correlatedâ€productâ€state distributions in ultraviolet photodissociation: Ketene at 308 nm. Journal of Chemical Physics, 1995, 102, 611-614.	1.2	29
34	Communication: Nucleation of quantized vortex rings in 4He nanodroplets. Journal of Chemical Physics, 2014, 140, 131101.	1.2	29
35	Electronic Spectroscopy of Aniline Ions Embedded in Helium Nanodroplets. Journal of Physical Chemistry Letters, 2011, 2, 1563-1566.	2.1	28
36	Stateâ€specific neutral timeâ€ofâ€flight of CO from ketene photodissociation at 351 nm: The internal energy distribution of CH2(XÌƒâ€‰3B1). Journal of Chemical Physics, 1996, 105, 4550-4555.	1.2	27

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37	Spectroscopy and dynamics of barium-doped helium nanodroplets. Journal of Chemical Physics, 2012, 136, 154302.	1.2	27
38	Characterization of a time-resolved electron microscope with a Schottky field emission gun. Structural Dynamics, 2020, 7, 054304.	0.9	27
39	Accurate determination of predissociation rates and transition frequencies for carbon monoxide. Astrophysical Journal, 1994, 427, L55.	1.6	27
40	Photodissociation of alkyl iodides in helium nanodroplets. III. Recombination. Journal of Chemical Physics, 2007, 127, 114305.	1.2	26
41	Communication: Barium ions and helium nanodroplets: Solvation and desolvation. Journal of Chemical Physics, 2012, 137, 051102.	1.2	26
42	Photodissociation of alkyl iodides in helium nanodroplets. II. Solvation dynamics. Journal of Chemical Physics, 2007, 127, 114304.	1.2	24
43	In Situ Observation of Coulomb Fission of Individual Plasmonic Nanoparticles. ACS Nano, 2019, 13, 12445-12451.	7.3	24
44	The spinâ€forbiddenaâ€‰4Î(Î½=13â€“15) andbâ€‰4Î£â^'(Î½=3)â†Xâ€‰2Î(Î½=0) bands of nitric oxide: A new scheme for quantum stateâ€specific highâ€resolution kinetic energy measurements. Journal of Chemical Physics, 1995, 103, 7700-7707.	1.2	20
45	Dynamics of Excited Sodium Atoms Attached to Helium Nanodroplets. Journal of Physical Chemistry A, 2014, 118, 2738-2748.	1.1	20
46	The first LIF spectrum of SiC. Chemical Physics Letters, 1991, 176, 404-406.	1.2	18
47	Production of an intense pulsed beam of oriented metastable CO a 3Î. Chemical Physics Letters, 1992, 200, 108-112.	1.2	18
48	Infrared imaging camera based on a Rydberg atom photodetector. Applied Physics Letters, 1999, 74, 1797-1799.	1.5	17
49	A new sensitive detection scheme for helium nanodroplet isolation spectroscopy: application to benzene. Physical Chemistry Chemical Physics, 2008, 10, 6107.	1.3	17
50	Direct spectroscopic determination of the degree of orientation of parity-selected NO. Chemical Physics Letters, 1998, 294, 332-338.	1.2	16
51	Demonstration of a far-infrared streak camera. IEEE Journal of Quantum Electronics, 1998, 34, 2138-2144.	1.0	16
52	Real-Time Dynamics of the Formation of Hydrated Electrons upon Irradiation of Water Clusters with Extreme Ultraviolet Light. Physical Review Letters, 2019, 122, 133001.	2.9	16
53	Microsecond melting and revitrification of cryo samples. Structural Dynamics, 2021, 8, 054302.	0.9	16
54	Streak camera operating in the mid infrared. Optics Letters, 1997, 22, 1436.	1.7	15

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55	Dynamics of photoexcited Ba+ cations in 4He nanodroplets. Journal of Chemical Physics, 2016, 144, 094302.	1.2	15
56	Sign of the state-to-state steric asymmetry of rotationally inelastic atomâ€“molecule collisions. Chemical Physics, 2004, 301, 293-308.	0.9	14
57	Collisions and Chemistry of Super-Excited Molecules:â€‰ Experiments Using the PUMPâ^'DUMPâ^'PROBE Technique. Journal of Physical Chemistry A, 1999, 103, 7142-7154.	1.1	13
58	Absorption spectroscopy of adenine, 9-methyladenine, and 2-aminopurine in helium nanodroplets. Physical Chemistry Chemical Physics, 2010, 12, 15600.	1.3	12
59	Excitation of Sodium Atoms Attached to Helium Nanodroplets: The 3p â†•3s Transition Revisited. Journal of Physical Chemistry A, 2015, 119, 6033-6044.	1.1	12
60	Conformational Flexibility of a Rotaxane Thread Probed by Electronic Spectroscopy in Helium Nanodroplets. Journal of the American Chemical Society, 2009, 131, 12902-12903.	6.6	11
61	High-resolution laser-induced fluorescence study of a cage molecule, 1,4-diazabicyclo [2,2,2] octane, DABCO. Chemical Physics, 1993, 174, 267-276.	0.9	10
62	The electric dipole moment and hyperfine structure of NO B2Î: high resolution laser-induced fluorescence spectroscopy of the B2Î(Î½ = 3â€“5) Â« X2Î(Î½ = 0) bands. Chemical Physics Letters, 1996, 256, 8-14.	1.2	10
63	Decay of oriented Rydberg wave packets excited with far-infrared radiation. Physical Review A, 1998, 57, 440-445.	1.0	10
64	Harmonium: An Ultrafast Vacuum Ultraviolet Facility. Chimia, 2017, 71, 268.	0.3	7
65	High resolution pulsed-cw double-resonance spectroscopy on the B1Î£+(Î½â€²=0) Â« A1ÐŸ(Î½â€³=0) system of CO. Chemical Physics Letters, 1997, 267, 127-131.	1.2	6
66	Elementary Excitations of Superfluid Helium Droplets Probed by Ion Spectroscopy. Journal of Physical Chemistry Letters, 2014, 5, 3100-3105.	2.1	6
67	Intense microsecond electron pulses from a Schottky emitter. Applied Physics Letters, 2020, 116, .	1.5	6
68	Rotational motion compensates the energy defect in near-resonant vibrationâ€“vibration energy transfer: A state-to-state study of NO(v)+N2O. Journal of Chemical Physics, 1998, 109, 355-358.	1.2	5
69	Simple procedure to extract speed distributions from ion images with a large background contribution. Review of Scientific Instruments, 2005, 76, 113103.	0.6	5
70	Rotational analysis of the origin and the inversion bands of the S1â†S0 spectrum of acetaldehyde. Journal of Chemical Physics, 2001, 114, 8316-8327.	1.2	4
71	Helium-induced electronic transitions in photo-excited Ba+â€“Hen exciplexes. Journal of Chemical Physics, 2018, 148, 144302.	1.2	4
72	Real-time observation of jumping and spinning nanodroplets. Structural Dynamics, 2020, 7, 011101.	0.9	3

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73	Time-resolved formation of excited atomic and molecular states in XUV-induced nanoplasmas in ammonia clusters. Physical Chemistry Chemical Physics, 2020, 22, 7828-7834.	1.3	3
74	Migration of surface excitations in highly-excited nanosystems probed by intense resonant XUV radiation. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 244011.	0.6	2
75	Infrared Streak Camera. Optics and Photonics News, 1997, 8, 48.	0.4	1
76	Accurate time zero determination in an ultrafast transmission electron microscope without energy filter. Applied Physics Letters, 2022, 120, 104103.	1.5	1