Michele Alagia

List of Publications by Year
in descending order

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114 papers	3,632 citations	101496 36 h-index	149623 56 g-index
116 all docs	116 docs citations	116 times ranked	2477 citing authors

#	Article	IF	Citations
1	Reactive scattering of atoms and radicals. Journal of the Chemical Society, Faraday Transactions, 1995, 91, 575.	1.7	142
2	Crossed beam studies of fourâ€atom reactions: The dynamics of OH+CO. Journal of Chemical Physics, 1993, 98, 8341-8344.	1.2	134
3	The dynamics of the reaction OH + D2 â†' HOD + D: Crossed beam experiments and quantum mechanical scattering calculations on ab initio potential energy surfaces. Chemical Physics, 1996, 207, 389-409.	0.9	114
4	Electronic structure of copper phthalocyanine: An experimental and theoretical study of occupied and unoccupied levels. Journal of Chemical Physics, 2007, 126, 124709.	1.2	106
5	Dynamics of the Simplest Chlorine Atom Reaction: An Experimental and Theoretical Study. Science, 1996, 273, 1519-1522.	6.0	100
6	Magnetic Analysis of Supersonic Beams of Atomic Oxygen, Nitrogen, and Chlorine Generated from a Radioâ€Frequency Discharge. Israel Journal of Chemistry, 1997, 37, 329-342.	1.0	96
7	Comparative dynamics of Cl(2P) and O(3P) interactions with a hydrocarbon surface. Journal of Chemical Physics, 2000, 112, 5975-5984.	1.2	95
8	Crossed molecular beams and quasiclassical trajectory studies of the reaction O(1D)+H2(D2). Journal of Chemical Physics, 1998, 108, 6698-6708.	1.2	89
9	Valence photoionization dynamics in circular dichroism of chiral free molecules: The methyl-oxirane. Journal of Chemical Physics, 2005, 122, 244303.	1.2	89
10	Exploring the reaction dynamics of nitrogen atoms: A combined crossed beam and theoretical study of N(2D)+D2â†'ND+D. Journal of Chemical Physics, 1999, 110, 8857-8860.	1.2	87
11	Core-shell photoabsorption and photoelectron spectra of gas-phase pentacene: Experiment and theory. Journal of Chemical Physics, 2005, 122, 124305.	1.2	83
12	Crossed beam studies of fourâ€atom reactions: The dynamics of OH+D2. Journal of Chemical Physics, 1993, 98, 2459-2462.	1.2	82
13	Near Edge X-ray Absorption Spectra of Some Small Polyatomic Molecules. Journal of Physical Chemistry A, 2003, 107, 1955-1963.	1.1	80
14	Circular dichroism in photoelectron spectroscopy of free chiral molecules: Experiment and theory on methyl-oxirane. Physical Review A, 2004, 70, .	1.0	78
15	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
16	Reactive Scattering of Oxygen and Nitrogen Atoms. Accounts of Chemical Research, 1999, 32, 503-511.	7.6	77
17	Influence of the Radiative Decay on the Cross Section for Double Excitations in Helium. Physical Review Letters, 1999, 83, 947-950.	2.9	75
18	Cyanomethylene Formation from the Reaction of Excited Nitrogen Atoms with Acetylene:Â A Crossed Beam and ab Initio Study. Journal of the American Chemical Society, 2000, 122, 4443-4450.	6.6	71

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19	Observation of Nitrogen-Bearing Organic Molecules from Reactions of Nitrogen Atoms with Hydrocarbons:â€‰ A Crossed Beam Study of N(2D) + Ethylene. Journal of Physical Chemistry A, 2000, 104, 5655-5659.	1.1	70
20	Observation of Triplet Doubly Excited States in Single Photon Excitation from Ground State Helium. Physical Review Letters, 2001, 86, 2758-2761.	2.9	67
21	Reactive scattering of ground-state and electronically excited oxygen atoms on a liquid hydrocarbon surface. Faraday Discussions, 1997, 108, 387-399.	1.6	62
22	Radiative and Relativistic Effects in the Decay of Highly Excited States in Helium. Physical Review Letters, 2000, 85, 1202-1205.	2.9	56
23	The soft X-ray absorption spectrum of the allyl free radical. Physical Chemistry Chemical Physics, 2013, 15, 1310-1318.	1.3	53
24	Dynamics of the N(2D) + D2Reaction from Crossed-Beam and Quasiclassical Trajectory Studiesâ€. Journal of Physical Chemistry A, 2001, 105, 2414-2422.	1.1	51
25	Angular and energy distribution of fragment ions in dissociative double photoionization of acetylene molecules at 39 eV. Journal of Chemical Physics, 2012, 136, 204302.	1.2	51
26	Kinetic Energy Release in molecular dications fragmentation after VUV and EUV ionization and escape from planetary atmospheres. Planetary and Space Science, 2014, 99, 149-157.	0.9	49
27	Double Photoionization of CO₂ Molecules in the 34â˜50 eV Energy Range. Journal of Physical Chemistry A, 2009, 113, 14755-14759.	1.1	48
28	Dynamics of the Cl+H2/D2 reaction: a comparison of crossed molecular beam experiments with quasiclassical trajectory and quantum mechanical calculations. Physical Chemistry Chemical Physics, 2000, 2, 599-612.	1.3	46
29	The Low Density Matter (LDM) beamline at FERMI: optical layout and first commissioning. Journal of Synchrotron Radiation, 2015, 22, 538-543.	1.0	46
30	Production of ions at high energy and its role in extraterrestrial environments. Rendiconti Lincei, 2013, 24, 53-65.	1.0	45
31	Double photoionization of N2O molecules in the 28â€“40eV energy range. Chemical Physics Letters, 2006, 432, 398-402.	1.2	44
32	Dissociative double photoionization of CO2 molecules in the 36â€“49 eV energy range: angular and energy distribution of ion products. Physical Chemistry Chemical Physics, 2010, 12, 5389.	1.3	43
33	Dissociative double photoionization of benzene molecules in the 26â€“33 eV energy range. Physical Chemistry Chemical Physics, 2011, 13, 8245.	1.3	41
34	The Role of the Partner Atom and Resonant Excitation Energy in Interatomic Coulombic Decay in Rare Gas Dimers. Journal of Physical Chemistry Letters, 2013, 4, 1797-1801.	2.1	41
35	Low-lying electronic states of HBr2+. Journal of Chemical Physics, 2004, 120, 6985-6991.	1.2	38
36	The double photoionization of HCl: An ionâ€“electron coincidence study. Journal of Chemical Physics, 2004, 121, 10508-10512.	1.2	38

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37	Anisotropy of the angular distribution of fragment ions in dissociative double photoionization of N2O molecules in the 30â€“50eV energy range. Journal of Chemical Physics, 2007, 126, 201101.	1.2	37
38	Crossed beam studies of the O(3P,1D)+CH3I reactions: Direct evidence of intersystem crossing. Faraday Discussions, 1999, 113, 133-150.	1.6	36
39	Core level ionization dynamics in small molecules studied by x-ray-emission threshold-electron coincidence spectroscopy. Physical Review A, 2005, 71, .	1.0	36
40	Mass spectrometric study of double photoionization of HBr molecules. Journal of Chemical Physics, 2002, 117, 1098-1102.	1.2	35
41	Threshold-photoelectron-spectroscopy-coincidence study of the double photoionization of HBr. Journal of Chemical Physics, 2004, 120, 6980-6984.	1.2	35
42	Dissociative double photoionization of singly deuterated benzene molecules in the 26â€“33 eV energy range. Journal of Chemical Physics, 2011, 135, 144304.	1.2	34
43	Time-Resolved Measurement of Interatomic Coulombic Decay Induced by Two-Photon Double Excitation of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Ne</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></ Physical Review Letters, 2017, 118, 033202.	2.9	32
44	Inner shell excitation spectroscopy of the tetrahedral molecules CX4(X = H, F, Cl). Journal of Physics B: Atomic, Molecular and Optical Physics, 2002, 35, 61-75.	0.6	31
45	Lifetime and kinetic energy release of metastable dications dissociation. Chemical Physics, 2012, 398, 134-141.	0.9	31
46	On the dynamics of the O(1D) + CF3Br reaction. Chemical Physics Letters, 1996, 258, 323-329.	1.2	30
47	The escape of O+ ions from the atmosphere: An explanation of the observed ion density profiles on Mars. Chemical Physics Letters, 2016, 666, 1-6.	1.2	30
48	Experimental Determination of the Lifetime for the2p3d(P01)Helium Doubly Excited State. Physical Review Letters, 2003, 90, 153004.	2.9	28
49	High resolution NEXAFS of perylene and PTCDI: a surface science approach to molecular orbital analysis. Physical Chemistry Chemical Physics, 2014, 16, 14834.	1.3	28
50	High-resolution inner-shell photoabsorption of the OH and OD free radicals. Journal of Chemical Physics, 2002, 116, 3676-3680.	1.2	26
51	Molecular Dications in Planetary Atmospheric Escape. Atmosphere, 2016, 7, 112.	1.0	26
52	Probing the potential energy surface by high-resolution x-ray absorption spectroscopy: The umbrella motion of the core-excited<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">C</mml:mi><mml:msub><mml:mi mathvariant="normal">H</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>free radical. Physical Review A, 2007, 76, .	1.0	24
53	Selectivity in fragmentation of N-methylacetamide after resonant K-shell excitation. Physical Chemistry Chemical Physics, 2014, 16, 15231.	1.3	24
54	Slow Interatomic Coulombic Decay of Multiply Excited Neon Clusters. Physical Review Letters, 2016, 117, 276806.	2.9	24

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55	The double photoionization of hydrogen iodide molecules. Journal of Chemical Physics, 2006, 124, 204318.	1.2	22
56	NEXAFS and XPS studies of nitrosyl chloride. Physical Chemistry Chemical Physics, 2015, 17, 9040-9048.	1.3	22
57	Detailed observations of photo-accessible triplet doubly excited states in helium. Journal of Physics B: Atomic, Molecular and Optical Physics, 2003, 36, 4339-4350.	0.6	20
58	A Crossed Molecular Beam Study of the Reaction O(1D) + HI â†' IO + H. Journal of Physical Chemistry A, 1997, 101, 6455-6462.	1.1	19
59	Gas-Phase Photoemission Study of 2-Mercaptobenzoxazole. Journal of Physical Chemistry A, 2000, 104, 9675-9680.	1.1	18
60	Symmetry breaking effect in the ferrocene electronic structure by hydrocarbon-monosubstitution: An experimental and theoretical study. Journal of Chemical Physics, 2008, 128, 154315.	1.2	18
61	High-Resolution Inner-Shell Photoabsorption and Dissociation of Ozone. Journal of Physical Chemistry A, 2001, 105, 3400-3406.	1.1	17
62	Pump-probe studies of autoionizing states of noble gases combining laser and synchrotron radiationâ€"The nfâ€² Rydberg states of neon. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 588, 502-508.	0.7	17
63	Single Photon Thermal Ionization of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi mathvariant="normal">C</mml:mi></mml:mrow><mml:mrow><mml:mn>60</mml:mn></mml:mrow></mml:msub></mml:mrow></m Physical Review Letters, 2017, 118, 103001.	2.9	17
64	Double Excitations of Helium in Weak Static Electric Fields. Physical Review Letters, 2006, 96, 043002.	2.9	16
65	Experimental and theoretical XPS and NEXAFS studies of N-methylacetamide and N-methyltrifluoroacetamide. Physical Chemistry Chemical Physics, 2016, 18, 2210-2218.	1.3	16
66	Gas-Phase Experimental and Theoretical Near Edge X-ray Absorption Fine Structure Study of 2-Mercaptobenzothiazole. Journal of Physical Chemistry A, 2001, 105, 7308-7314.	1.1	15
67	Observation of the spinâ€"orbit activated interchannel coupling in the 3d photoionization of caesium atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 2006, 39, 765-771.	0.6	14
68	Angular distribution of the fluorescence of helium doubly photo-excited states converging on the He+(N= 2) ionization threshold. Journal of Physics B: Atomic, Molecular and Optical Physics, 2003, 36, 4351-4359.	0.6	13
69	Angular and energy distributions of fragment ions in dissociative double photoionization of acetylene molecules in the 31.9-50.0 eV photon energy range. Journal of Chemical Physics, 2016, 145, 114308.	1.2	13
70	Double photoionization of propylene oxide: A coincidence study of the ejection of a pair of valence-shell electrons. Journal of Chemical Physics, 2018, 148, 114302.	1.2	13
71	Photoelectron spectroscopy (PES) study of gas-phase 2,5-(2,2â€²-dithienyl)diethynyl-thiophene (TRIM): an experimental and theoretical study. Chemical Physics Letters, 2001, 340, 449-457.	1.2	12
72	Gas-Phase Photoemission Study of 2-Mercaptobenzothiazole. Journal of Physical Chemistry A, 2002, 106, 2833-2837.	1.1	12

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73	NEXAFS spectroscopy and site-specific fragmentation of N-methylformamide, N,N-dimethylformamide, and N,N-dimethylacetamide. Journal of Chemical Physics, 2016, 144, 244310.	1.2	12
74	A velocity map imaging apparatus for gas phase studies at FERMI@Elettra. Nuclear Instruments & Methods in Physics Research B, 2012, 284, 69-73.	0.6	11
75	On the electrochemical properties of titanium hydride. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1991, 316, 347-352.	0.3	9
76	Photoabsorption cross section and ion-yield spectra of helium double-excitation resonances. Physical Review A, 2003, 68, .	1.0	9
77	X-ray-emission-threshold-electron coincidence spectroscopy. Journal of Electron Spectroscopy and Related Phenomena, 2004, 141, 161-170.	0.8	9
78	Magnetic-Field Induced Enhancement in the Fluorescence Yield Spectrum of Doubly Excited States in Helium. Physical Review Letters, 2006, 97, 253002.	2.9	9
79	The Escape Probability of Some Ions from Mars and Titan Ionospheres. Lecture Notes in Computer Science, 2014, , 554-570.	1.0	9
80	Effect of electric fields on the decay branching ratio ofPe1doubly excited states in helium measured by time-resolved fluorescence. Physical Review A, 2006, 74, .	1.0	8
81	Excitation ofS1andS3Metastable Helium Atoms to Doubly Excited States. Physical Review Letters, 2009, 102, 153001.	2.9	8
82	The umbrella motion of core-excited CH3 and CD3 methyl radicals. Journal of Chemical Physics, 2008, 128, 044302.	1.2	7
83	O 1s excitation and ionization processes in the CO2molecule studied via detection of low-energy fluorescence emission. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 165103.	0.6	7
84	Resonant Auger electron-ion-coincidence spectroscopy of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>N</mml:mi></mml:math> -methyltrifluoroacetamide: Site-specific fragmentation studies. Physical Review A, 2020, 102, .	1.0	7
85	High resolution K-edge spectroscopy of oxygen transient species: the metastable O2 a1Î”g molecule and the O (3P) atom. Journal of Electron Spectroscopy and Related Phenomena, 2001, 114-116, 85-92.	0.8	6
86	Câ€“C bond unsaturation degree in monosubstituted ferrocenes for molecular electronics investigated by a combined near-edge x-ray absorption fine structure, x-ray photoemission spectroscopy, and density functional theory approach. Journal of Chemical Physics, 2012, 136, 134308.	1.2	6
87	Angular Distribution of Ion Products in the Double Photoionization of Propylene Oxide. Frontiers in Chemistry, 2019, 7, 621.	1.8	6
88	The resonant 4d photoemission spectrum of atomic cesium. Journal of Electron Spectroscopy and Related Phenomena, 2005, 144-147, 67-70.	0.8	5
89	The valence electronic structure and conformational flexibility of epichlorohydrin. Physical Chemistry Chemical Physics, 2011, 13, 12517.	1.3	5
90	Soft X-ray absorption spectroscopy of Ar₂ and ArNe dimers and small Ar clusters. Physical Chemistry Chemical Physics, 2015, 17, 22160-22169.	1.3	5

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91	A Study of H₂O₂ with Threshold Photoelectron Spectroscopy (TPES) and Electronic Structure Calculations: Redetermination of the First Adiabatic Ionization Energy (AIE). Journal of Physical Chemistry A, 2016, 120, 5220-5229.	1.1	5
92	Investigating core-excited states of nitrosyl chloride (ClNO) and their break-up dynamics following Auger decay. Journal of Chemical Physics, 2018, 149, 164305.	1.2	5
93	Oxygen<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>K</mml:mi></mml:mrow></mml:math>-edge x-ray-emissionâ€“threshold-electron coincidence spectrum of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi>CO</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review A, 2007, 76, .	1.0	4
94	Photoionization of laser-excited caesium atoms above the 4d ionization threshold. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 215001.	0.6	4
95	X-ray emissionâ€“photoion coincidence spectroscopy of the CO2 molecule at the O 1s edge. Chemical Physics Letters, 2012, 531, 252-256.	1.2	4
96	Complete dissociation branching fractions and Coulomb explosion dynamics of SO2 induced by excitation of O 1s pre-edge resonances. Journal of Chemical Physics, 2015, 143, 134302.	1.2	4
97	Angular Distributions of Fragment Ions Produced by Coulomb Explosion of Simple Molecular Dications of Astrochemical Interest. Lecture Notes in Computer Science, 2015, , 291-307.	1.0	4
98	Krypton3pexcitations and subsequent resonant Auger decay. Physical Review A, 2003, 67, .	1.0	3
99	Spinâ€“orbit-activated interchannel coupling in the 3d photoionization of barium atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, 4005-4012.	0.6	3
100	Determination of structural parameters from advanced molecular electronic spectroscopy: The double ionization of nitrous oxide by synchrotron radiation. Rendiconti Lincei, 2008, 19, 215-221.	1.0	3
101	Core level absorption of laser-excited Rb and Cs atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 175001.	0.6	3
102	Metastable fragment production at the C 1s and O 1s edges of the CO₂molecule. Journal of Physics B: Atomic, Molecular and Optical Physics, 2014, 47, 155101.	0.6	3
103	The Fragmentation Dynamics of Simple Organic Molecules of Astrochemical Interest Interacting with VUV Photons. ACS Earth and Space Chemistry, 2019, 3, 1862-1872.	1.2	3
104	Atomic oxygen interactions with saturated hydrocarbon surfaces. , 1997, , .		2
105	Experimental study of linear magnetic dichroism in photoionization satellite transitions of atomic rubidium. Physical Review A, 2011, 84, .	1.0	2
106	Molecular Fragmentation of Acetylene by VUV Double Photoionization. Proceedings (mdpi), 2017, 1, .	0.2	2
107	Photoionization Dynamics of the Tetraoxo Complexes OsO₄ and RuO₄. Inorganic Chemistry, 2020, 59, 7274-7282.	1.9	2
108	Double Photoionization of Simple Molecules of Astrochemical Interest. Lecture Notes in Computer Science, 2018, , 746-762.	1.0	2

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109	Resonant Auger spectroscopy of metastable molecular oxygen. Physical Review A, 2006, 73, .	1.0	1
110	Photoemission study of ferrocenes: insights into the electronic structure of Si-based hybrid materials. Journal of Physics: Conference Series, 2008, 100, 052069.	0.3	1
111	Application of Matched-Filter Concepts to Unbiased Selection of Data in Pump-Probe Experiments with Free Electron Lasers. Applied Sciences (Switzerland), 2017, 7, 621.	1.3	1
112	Anisotropic forces and molecular dynamics. Rendiconti Lincei, 2018, 29, 179-189.	1.0	1
113	The role of the partner atom and resonant excitation energy in ICD in rare gas dimers. Journal of Physics: Conference Series, 2014, 488, 022015.	0.3	0
114	Interatomic Coulombic Decay Processes after Multiple Valence Excitations in Ne Clusters. Journal of Physics: Conference Series, 2015, 635, 112067.	0.3	0