Jean-Michel Mestdagh

List of Publications by Year in descending order

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76 papers

941 citations

394421 19 h-index 27 g-index

78 all docs

78 docs citations

78 times ranked 840 citing authors

#	Article	IF	CITATIONS
1	Gas-Phase Dynamics of Spiropyran and Spirooxazine Molecules. Journal of the American Chemical Society, 2006, 128, 3169-3178.	13.7	61
2	A simple method to determine the mean cluster size in a molecular beam. Zeitschrift FÃ $\frac{1}{4}$ r Physik D-Atoms Molecules and Clusters, 1991, 21, 265-269.	1.0	48
3	Transition state in metal atom reactions. International Reviews in Physical Chemistry, 2003, 22, 285-339.	2.3	47
4	Ultrafast Dynamics of Acetylacetone (2,4-Pentanedione) in the S ₂ State. Journal of the American Chemical Society, 2008, 130, 2974-2983.	13.7	39
5	Two-electron pseudopotential investigation of the electronic structure of the CaAr molecule. Journal of Chemical Physics, 2002, 117, 7534-7550.	3.0	38
6	Binding energies of first and second shell water molecules in the Fe(H2 O)2+, Co(H2 O)2+ and Au(H2) Tj ETQq	0	/Qyerlock 10
7	Gas phase dynamics of triplet formation in benzophenone. Physical Chemistry Chemical Physics, 2014, 16, 9610-9618.	2.8	34
8	Dynamics of highly excited barium atoms deposited on large argon clusters. I. General trends. Journal of Chemical Physics, 2010, 133, 054307.	3.0	31
9	Experimental Evidence for Ultrafast Electronic Relaxation in Molecules, Mediated by Diffuse States. Journal of the American Chemical Society, 2005, 127, 16529-16534.	13.7	30
10	Direct mapping of recoil in the ion-pair dissociation of molecular oxygen by a femtosecond depletion method. Journal of Chemical Physics, 2008, 129, 214306.	3.0	30
11	Multifragmentation of the Au(H2O)nâ‰≇O+ Cluster Ions by Collision with Helium. Journal of Physical Chemistry A, 2002, 106, 5455-5462.	2.5	29
12	Rayleigh Scattering of Laser and Synchrotron Radiation from Pulsed Free Jets of Arn and (N2O)n Clusters. Journal of Physical Chemistry A, 1998, 102, 6457-6463.	2.5	26
13	Femtosecond Dynamics of the tert-Butyl Radical, t-C4H9. Journal of Physical Chemistry A, 2007, 111, 1771-1779.	2.5	24
14	A roaming wavepacket in the dynamics of electronically excited 2-hydroxypyridine. Physical Chemistry Chemical Physics, 2014, 16, 581-587.	2.8	24
15	Probing several structures of Fe(H2O)n+ and Co(H2O)n+ (n=1, $\hat{a}\in \ \mid \ ,10$) cluster ions. International Journal of Mass Spectrometry, 2002, 220, 111-126.	1.5	23
16	Ab-initio calculation of the ground and excited states of MgH using a pseudopotential approach. Chemical Physics Letters, 2009, 471, 22-28.	2.6	22
17	Unusual Quantum Interference in the S ₁ State of DABCO and Observation of Intramolecular Vibrational Redistribution. Journal of Physical Chemistry A, 2010, 114, 3313-3319.	2.5	22
18	Direct observation of slow intersystem crossing in an aromatic ketone, fluorenone. Physical Chemistry Chemical Physics, 2016, 18, 22914-22920.	2.8	21

#	Article	IF	CITATIONS
19	Time resolved observation of the solvation dynamics of a Rydberg excited molecule deposited on an argon cluster-l: DABCO $<$ sup $>$ $\hat{a}^-\uparrow<$ sup $>$ at short times. Physical Chemistry Chemical Physics, 2014, 16, 516-526.	2.8	19
20	Femtosecond Dynamics of Isolated Phenylcarbenes. Journal of the American Chemical Society, 2008, 130, 14908-14909.	13.7	17
21	Photochemistry of acetylacetone isolated in parahydrogen matrices upon 266 nm irradiation. Physical Chemistry Chemical Physics, 2012, 14, 3450.	2.8	17
22	Low Field Laser Ionization of Argon Clusters: The Remarkable Fragmentation Dynamics of Doubly Ionized Clusters. Physical Review Letters, 2007, 99, 103401.	7.8	16
23	Femtosecond dynamics of cyclopropenylidene, c-C ₃ H ₂ . Physical Chemistry Chemical Physics, 2012, 14, 6173-6178.	2.8	16
24	Nuclear Spin Conversion to Probe the Methyl Rotation Effect on Hydrogenâ€Bond and Vibrational Dynamics. Angewandte Chemie - International Edition, 2012, 51, 6947-6950.	13.8	15
25	Transition State Spectroscopy of the Photoinduced Ca + CH3F Reaction. 1. A Cluster Isolated Chemical Reaction Study. Journal of Physical Chemistry A, 2005, 109, 9494-9498.	2.5	14
26	Coupled Electronic and Structural Relaxation Pathways in the Postexcitation Dynamics of Rydberg States of mml:mmml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>BaAr</mml:mi></mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mm< td=""><td>ımľ:mi>N<</td><td>/mml:mi></td></mm<></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:msub></mml:mrow>	ımľ:mi>N<	/mml:mi>
27	Competitive direct vs. indirect photochromism dynamics of constrained inverse dithienylethene molecules. Physical Chemistry Chemical Physics, 2014, 16, 22262-22272.	2.8	11
28	Transition State Spectroscopy of the Photoinduced Ca + CH3F Reaction. 2. Experimental and Ab Initio Studies of the Free Ca \hat{A} · \hat{A} ·FCH3Complex. Journal of Physical Chemistry A, 2006, 110, 7355-7363.	2.5	10
29	Theoretical investigations of the electronic states of NaXe: A comparative study. Journal of Chemical Physics, 2012, 137, 224310.	3.0	10
30	Dynamics of electronically inelastic collisions from 3D Doppler measurements. Physical Review Letters, 1991, 67, 3070-3073.	7.8	9
31	Direct Observation of Microscopic Solvation at the Surface of Clusters by Ultrafast Photoelectron Imaging. Journal of Physical Chemistry A, 2008, 112, 9200-9210.	2.5	9
32	Evidence for a non-Rydberg molecular doubly excited state of Ca2. Chemical Physics Letters, 2009, 467, 260-264.	2.6	9
33	Dynamics of acetylene dimers hosted in helium droplets. Physical Chemistry Chemical Physics, 2018, 20, 2597-2605.	2.8	9
34	On the perturbations in the (000-000) band of the BaOH transition. Journal of Molecular Spectroscopy, 1991, 145, 210-221.	1.2	8
35	Transition-State Spectroscopy of the Photoinduced Ca + CH3F Reaction. 3. Reaction Following the Local Excitation to Ca(4s3d 1D). Journal of Physical Chemistry A, 2008, 112, 1408-1420.	2.5	8
36	Self-trapping relaxation decay investigated by time-resolved photoelectron spectroscopy. Physical Chemistry Chemical Physics, 2018, 20, 11206-11214.	2.8	8

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37	Large amplitude motions within molecules trapped in solid parahydrogen. Faraday Discussions, 2018, 212, 499-515.	3.2	8
38	Ba(6s6pP1,mj1)→Ba(6s6pP2,mj′3) Zeeman cross sections in single collisions withN2,O2, andH2. Physical Review A, 1993, 47, 241-254.	2.5	7
39	Photoionization of Benzophenone in the Gas Phase: Theory and Experiment. Journal of Physical Chemistry A, 2015, 119, 6148-6154.	2.5	7
40	Multipronged mapping to the dynamics of a barium atom deposited on argon clusters. Physical Chemistry Chemical Physics, 2016, 18, 32378-32386.	2.8	7
41	Collision-Induced Dissociation by Helium:Â A Piecewise Construction of the Cross Section. Journal of Physical Chemistry A, 2002, 106, 1714-1726.	2.5	6
42	Reactions of N2O with Lin in the gas-phase and on the surfaces of large Arn clusters. Chemical Physics Letters, 2002, 364, 225-230.	2.6	6
43	Dynamics of excited tetrakis(dimethylamino)ethylene solvated by argon atoms. Chemical Physics, 2004, 301, 225-237.	1.9	6
44	Investigation of Ionâ [^] Molecule ReactionsviaFemtosecond Excitation and Ionization of [Tetrakis(dimethylamino)ethylene]n≥1. Journal of Physical Chemistry A, 2004, 108, 3884-3895.	2.5	6
45	Side-Chain Effects on the Electronic Relaxation of Radicals followed by Time-Resolved Pumpâ^Probe Spectroscopy: 2,3-Dimethylbut-2-yl vs <i>tert</i> Butyl. Journal of Physical Chemistry A, 2010, 114, 3045-3049.	2.5	6
46	Fluorescence emission of Ca-atom from photodissociated Ca2 in Ar doped helium droplets. II. Theoretical. Journal of Chemical Physics, 2012, 137, 184311.	3.0	6
47	Vacuum-Ultraviolet Absorption Spectrum of 3-Methoxyacrylonitrile. Journal of Physical Chemistry A, 2020, 124, 9470-9477.	2.5	6
48	Theoretical study of the finite-temperature spectroscopy in van der Waals clusters. III. Solvated chromophore as an effective diatomics. Journal of Chemical Physics, 2003, 118, 8763-8769.	3.0	5
49	Observation of a barium xenon exciplex within a large argon cluster. Journal of Chemical Physics, 2010, 133, 034306.	3.0	5
50	A new Monte Carlo method for getting the density of states of atomic cluster systems. Journal of Chemical Physics, 2011, 135, 144109.	3.0	5
51	Determination of the Ground Electronic State in Transition Metal Halides: ZrF. Journal of Physical Chemistry A, 2011, 115, 9620-9632.	2.5	5
52	Fluorescence emission of Ca-atom from photodissociated Ca2 in Ar-doped helium droplets. I. Experimental. Journal of Chemical Physics, 2012, 137, 184310.	3.0	5
53	Large amplitude motion of the acetylene molecule within acetylene–neon complexes hosted in helium droplets. Physical Chemistry Chemical Physics, 2016, 18, 16414-16422.	2.8	4
54	A HElium NanoDroplet Isolation (HENDI) investigation of the weak hydrogen bonding in the propyne dimer (CH3CCH)2. Physical Chemistry Chemical Physics, 2018, 20, 28658-28666.	2.8	4

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55	Energetics and ionization dynamics of two diarylketone molecules: benzophenone and fluorenone. Physical Chemistry Chemical Physics, 2019, 21, 14453-14464.	2.8	4
56	Time-Resolved Observation of the Solvation Dynamics of a Rydberg Excited Molecule Deposited on an Argon Cluster. II. DABCOâ ⁻ † at Long Time Delays. Journal of Physical Chemistry A, 2021, 125, 4341-4351.	2.5	4
57	Solvation shift of a conical intersection in clusters of excited tetrakis (dimethyl amino) ethylene with ammonia and acetonitrile molecules. Chemical Physics Letters, 2004, 399, 234-238.	2.6	3
58	Excited State Dynamics of Isolated 6―and 8â€Hydroxyquinoline Molecules. ChemPhysChem, 2020, 21, 2605-2613.	2.1	3
59	Femtosecond photodissociation dynamics of van der Waals cationic clusters: a tool for detecting metastable isomers of organic cations. Chemical Physics Letters, 2004, 391, 254-258.	2.6	2
60	Photodepletion measurements of the Zrâ< F†CH3 van der Waals complex. Chemical Physics Letters, 2010, 491, 140-145.	2.6	2
61	Absorption Spectroscopy, a Tool for Probing Local Structures and the Onset of Large-Amplitude Motions in Small KAr _{<i>n</i>} Clusters at Increasing Temperatures. Journal of Physical Chemistry A, 2015, 119, 9729-9738.	2.5	2
62	Characterisation and modeling of a pulsed molecular beam. Molecular Physics, 2021, 119, e1737743.	1.7	2
63	Bidentate ligation of magnesium by 1,2-dimethoxyethane in the gas phase. Journal of Chemical Physics, 2009, 131, 224319.	3.0	1
64	Reactivity of Ba and Ca atoms with N[sub 2]O molecules deposited on van der Waals clusters and helium droplets. , 2012, , .		1
65	Joint Bayesian decomposition of a spectroscopic signal sequence with RJMCMC., 2012,,.		1
66	Characterization of a seeded pulsed molecular beam using the velocity map imaging technique. AIP Conference Proceedings, 2016 , , .	0.4	1
67	The role of spin-orbit coupling in the optical spectroscopy of atomic sodium isolated in solid xenon. Low Temperature Physics, 2019, 45, 715-720.	0.6	1
68	Large amplitude motion within acetylene–rare gas complexes hosted in helium droplets. Physical Chemistry Chemical Physics, 2019, 21, 1038-1045.	2.8	1
69	High-resolution vacuum ultraviolet absorption spectra of 2,3- and 2,5-dihydrofuran. Journal of Chemical Physics, 2020, 153, 134303.	3.0	1
70	Reaction Dynamics within a Cluster Environment. Physical Chemistry Chemical Physics, 2022, , .	2.8	1
71	Excited state dynamics of normal dithienylethene molecules either isolated or deposited on argon cluster. Physical Chemistry Chemical Physics, 2022, , .	2.8	1
72	Transition State in Metal Atom Reactions. ChemInform, 2003, 34, no.	0.0	0

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73	Laser induced fluorescence spectroscopy of the Ca dimer deposited on helium and mixed helium/xenon clusters. , 2014, , .		О
74	Autobiography of Jean-Michel Mestdagh. Journal of Physical Chemistry A, 2015, 119, 5903-5906.	2.5	O
75	Propyne-water complexes hosted in helium droplets. Low Temperature Physics, 2019, 45, 634-638.	0.6	O
76	Ultrafast Photoelectron imaging of the electronic relaxation of a molecule deposited at the surface of an argon cluster., 2006,, 174-182.		0