

Agust Kvaran

List of Publications by Year in descending order

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1,579
citations

257450

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98
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98
docs citations

98
times ranked

462
citing authors

#	ARTICLE	IF	CITATIONS
1	Spectroscopic characterization of the lowest singlet states of CdNe, CdAr, and CdKr. <i>Journal of Chemical Physics</i> , 1989, 90, 2915-2926.	3.0	77
2	Spectroscopic characterization of the X(10+) and A(30+) states of CdNe, CdAr, CdKr, and CdXe. <i>Journal of Chemical Physics</i> , 1988, 89, 6069-6080.	3.0	75
3	Conformations of Silicon-Containing Rings. 5. Conformational Properties of 1-Methyl-1-silacyclohexane: Gas Electron Diffraction, Low-Temperature NMR, and Quantum Chemical Calculations. <i>Journal of Organic Chemistry</i> , 2002, 67, 3827-3831.	3.2	72
4	Conformational Properties of 1-Fluoro-1-silacyclohexane, C ₅ H ₁₀ SiHF: Gas Electron Diffraction, Low-Temperature NMR, Temperature-Dependent Raman Spectroscopy, and Quantum Chemical Calculations. <i>Organometallics</i> , 2007, 26, 6544-6550.	2.3	54
5	Unexpected Conformational Properties of 1-Trifluoromethyl-1-Silacyclohexane, C ₅ H ₁₀ SiHCF ₃ : Gas Electron Diffraction, Low-Temperature NMR Spectroscopic Studies, and Quantum Chemical Calculations. <i>Chemistry - A European Journal</i> , 2007, 13, 1776-1783.	3.3	51
6	(2+1) REMPI spectra of $\hat{I}\hat{O}=0$ states of the hydrogen halides: Spectroscopy, perturbations and excitation mechanisms. <i>Journal of Chemical Physics</i> , 1998, 109, 5856-5867.	3.0	45
7	Ion-pair formation in the photodissociation of HCl and DCl. <i>Journal of Chemical Physics</i> , 1993, 99, 4986-4992.	3.0	42
8	Resonance enhanced multiphoton ionization of the hydrogen halides: Rotational structure and anomalies in Rydberg and ion-pair states of HCl and HBr. <i>Journal of Chemical Physics</i> , 2000, 112, 10811-10820.	3.0	41
9	Conformational Properties of 1-Silyl-1-Silacyclohexane, C ₅ H ₁₀ SiH ₃ : Gas Electron Diffraction, Low-Temperature NMR, Temperature-Dependent Raman Spectroscopy, and Quantum Chemical Calculations. <i>Journal of Physical Chemistry A</i> , 2010, 114, 2127-2135.	2.5	39
10	Structures and Energetics of Axial and Equatorial 1-Methyl-1-silacyclohexane. <i>Organometallics</i> , 2006, 25, 3813-3816.	2.3	35
11	Conformational properties of 1-fluoro-1-methyl-silacyclohexane and 1-methyl-1-trifluoromethyl-1-silacyclohexane: Gas electron diffraction, low-temperature NMR, temperature-dependent Raman spectroscopy, and quantum chemical calculations. <i>Journal of Molecular Structure</i> , 2010, 978, 209-219.	3.6	34
12	Vibrational relaxation of KrF* and XeCl* by rare gases. <i>Applied Physics B, Photophysics and Laser Chemistry</i> , 1988, 46, 95-102.	1.5	32
13	Threshold photoelectron spectroscopy of CF ₄ up to 60.5 eV. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1994, 70, 29-37.	1.7	31
14	Two-dimensional (2+n) resonance enhanced multiphoton ionization of HCl: Photofragment channels via the F ⁿ 21 Rydberg state and ab initio spectra. <i>Journal of Chemical Physics</i> , 2008, 129, 164313.	3.0	31
15	Chemiluminescence of argon bromide. I. The emission spectrum of ArBr. <i>Journal of Chemical Physics</i> , 1980, 72, 434-441.	3.0	30
16	Comment on "Relative Energies, Stereoelectronic Interactions, and Conformational Interconversion in Silacycloalkanes": <i>International Journal of Quantum Chemistry</i> , 2006, 106, 1975-1978.	2.0	27
17	Relative Energy and Structural Differences of Axial and Equatorial 1-Fluoro-1-silacyclohexane. <i>Journal of Physical Chemistry A</i> , 2006, 110, 9995-9999.	2.5	27
18	Thermochemistry of Halomethanes CF _n Br _{4-n} (n = 0-3) Based on iPEPICO Experiments and Quantum Chemical Computations. <i>Journal of Physical Chemistry A</i> , 2011, 115, 13443-13451.	2.5	27

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19	Conformational Properties of 1-Halogenated-1-Silacyclohexanes, $C_5H_{10}SiHX$ (X = F, Cl, Br, I) by FTIR Spectroscopy, and Quantum-Chemical Calculations. <i>Organometallics</i> , 2013, 32, 6996-7005.	2.3	27
20	Reactions of $Xe(3P_2)$ and $Xe(3P_1)$ with HCl, HBr and HI; energy utilization, energy disposal, product rotational polarization and reaction dynamics. <i>Molecular Physics</i> , 1986, 57, 255-273.	1.7	26
21	The dynamics of electronically excited states in the rare-gas-halogen systems. <i>Faraday Discussions of the Chemical Society</i> , 1987, 84, 221-238.	2.2	26
22	Ion-pair ($Br^+ + Br^{\bullet}$) formation from photodissociation of Br_2 near the first ionisation limit. <i>Chemical Physics Letters</i> , 1990, 165, 283-288.	2.6	25
23	Vibrationally resolved excitation functions for direct ion-pair ($I^+ + I^{\bullet}$) formation from photodissociation of I_2 . <i>Chemical Physics Letters</i> , 1991, 179, 263-267.	2.6	25
24	Two-dimensional (2+n) resonance enhanced multiphoton ionization of HCl: State interactions and photofragmentation channels via low-energy triplet Rydberg states. <i>Journal of Chemical Physics</i> , 2009, 131, 044324.	3.0	25
25	Emission spectra of the noble-gas halides: the $B_{12}^{\bullet}-A_{12}$ system. <i>Chemical Physics Letters</i> , 1978, 59, 51-56.	2.6	24
26	Three-photon absorption spectroscopy: the $L(1^{\bullet}3)$ and $m(3I1)$ states of HCl and DCl. <i>Molecular Physics</i> , 2002, 100, 3513-3519.	1.7	24
27	Analysis of the 350-400 nm oscillatory continuum from I_2 ($D(1^{\bullet}u)$). <i>Chemical Physics Letters</i> , 1982, 92, 322-326.	2.6	22
28	What to see and what not to see in three-photon absorption: (3+1) REMPI of HBr. <i>Journal of Chemical Physics</i> , 2000, 113, 1755-1761.	3.0	22
29	The rotational spectrum of silacyclohexane. <i>Journal of Molecular Spectroscopy</i> , 2005, 229, 188-192.	1.2	22
30	1H NMR and UV-Vis spectroscopy of chlorine substituted stilbenes: conformational studies. <i>Journal of Molecular Structure</i> , 2000, 553, 79-90.	3.6	21
31	Photofragmentations, state interactions, and energetics of Rydberg and ion-pair states: Resonance enhanced multiphoton ionization via $\langle i \rangle E \langle i \rangle$ and $\langle i \rangle V \langle i \rangle$ (B) states of HCl and HBr. <i>Journal of Chemical Physics</i> , 2013, 138, 044308.	3.0	21
32	Two-dimensional (2+n) REMPI of HCl: Observation and characterisation of a new Rydberg state. <i>Journal of Molecular Spectroscopy</i> , 2009, 255, 1-5.	1.2	20
33	Two-dimensional resonance enhanced multiphoton ionization of $H \langle i \rangle Cl$; $\langle i \rangle = 35, 37$: State interactions, photofragmentations and energetics of high energy Rydberg states. <i>Journal of Chemical Physics</i> , 2011, 134, 164302.	3.0	20
34	Three- and two-photon absorption in HCl and DCl: identification of $\hat{I}^{\bullet}=3$ states and state interaction analysis. <i>Journal of Molecular Spectroscopy</i> , 2004, 228, 143-151.	1.2	18
35	Chemiluminescent reactions of rare gas atoms, $Rg(ns, 3P_2, 3P_1, 1P_1)$ with N_2O , SCO and $SeCO$: Spectroscopy and energy disposal in rare gas oxide, sulphide and selenide excimers. <i>Chemical Physics Letters</i> , 1987, 137, 209-218.	2.6	17
36	Photofragmentations, state interactions, and energetics of Rydberg and ion-pair states: Two-dimensional resonance enhanced multiphoton ionization of HBr via singlet-, triplet-, $\hat{I}^{\bullet} = 0$ and 2 states. <i>Journal of Chemical Physics</i> , 2012, 136, 214315.	3.0	17

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37	Competitive channels in the interaction of Xe(3 P J) with Cl ₂ , Br ₂ and I ₂ . Atom transfer, excitation transfer, energy disposal and product rotational alignment. <i>Journal of the Chemical Society, Faraday Transactions 2</i> , 1986, 82, 1281.	1.1	16
38	Rydberg and ion-pair states of HBr: New REMPI observations and analysis. <i>Journal of Molecular Spectroscopy</i> , 2012, 282, 20-26.	1.2	15
39	Photofragmentation, state interaction, and energetics of Rydberg and ion-pair states: Resonance enhanced multiphoton ionization of HI. <i>Journal of Chemical Physics</i> , 2014, 140, 244304.	3.0	14
40	Ion-pair (X ⁺ + Y ⁻) formation from photodissociation of the interhalogen molecules BrCl, ICl and IBr. <i>Organic Mass Spectrometry</i> , 1993, 28, 327-334.	1.3	13
41	Rotationally resolved (2+1) REMPI spectra of gerade Rydberg state of molecular iodine: The (v̂ ^ε =0, v̂ ^ε =1) band of the Dalby system. <i>Journal of Molecular Structure</i> , 1993, 293, 217-221.	3.6	13
42	Three-photon absorption spectroscopy: (3+1)REMPI of HCl (I1̂ ^π 2̂ ^σ ←X1̂ ^σ +). <i>Journal of Molecular Structure</i> , 2001, 563-564, 235-239.	3.6	13
43	REMPI Spectra of IBr: Vibrational and Rotational Analysis of the b[2.Pi.1/2]c6s;1 Rydberg States of I79Br and I81Br. <i>The Journal of Physical Chemistry</i> , 1995, 99, 4451-4457.	2.9	12
44	Unexpected Conformational Properties of 1-Trifluormethyl-1-Silacyclohexane, C ₅ H ₁₀ SiHCF ₃ : Gas Electron Diffraction, Low Temperature NMR, and Quantum Chemical Calculations. <i>Chemistry - A European Journal</i> , 2009, 15, 8929-8929.	3.3	12
45	New REMPI observations and analyses for Rydberg and ion-pair states of HI. <i>Journal of Molecular Spectroscopy</i> , 2013, 290, 5-12.	1.2	12
46	Conformational properties of 1-tert-butyl-1-silacyclohexane, C ₅ H ₁₀ SiH(t-Bu): gas-phase electron diffraction, temperature-dependent Raman spectroscopy, and quantum chemical calculations. <i>Structural Chemistry</i> , 2015, 26, 445-453.	2.0	12
47	Two-Dimensional (2+ <i>i>n</i> REMPI of CH₃Br: Photodissociation Channels via Rydberg States. <i>Journal of Physical Chemistry A</i>, 2010, 114, 9991-9998.</i>	2.5	11
48	Rydberg and valence state excitation dynamics: a velocity map imaging study involving the Ê ^σ V state interaction in HBr. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 10468-10477.	2.8	11
49	Conformational properties of 1-cyano-1-silacyclohexane, C ₅ H ₁₀ SiHCN: Gas electron diffraction, low-temperature NMR and quantum chemical calculations. <i>Journal of Molecular Structure</i> , 2017, 1132, 149-156.	3.6	11
50	Chemiluminescence of argon bromide. II. Potential curves of ArBr and population distributions in the B (1/2) and C (3/2) electronic states. <i>Journal of Chemical Physics</i> , 1980, 72, 442-452.	3.0	10
51	Vibrational population distributions from rare gas halide spectra. <i>Molecular Physics</i> , 1983, 50, 981-992.	1.7	10
52	REMPI spectra of I ₂ . The [32]c5d; 1g Rydberg state and interactions with ion pair states. <i>Chemical Physics Letters</i> , 1994, 222, 436-442.	2.6	10
53	REMPI-TOF studies of the HF dimer. <i>Journal of Molecular Structure</i> , 2006, 790, 27-30.	3.6	10
54	State interactions and illumination of hidden states through perturbations and observations of new states: High energy resonance enhanced multiphoton ionization of HI. <i>Journal of Chemical Physics</i> , 2015, 142, 244312.	3.0	10

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55	Mechanism of vibrational relaxation and intersystem crossing within excited ion-pair states of I ₂ . Journal of Chemical Sciences, 1991, 103, 417-428.	1.5	10
56	¹ H NMR Investigation of Si-alkylsubstituted 1,3,5-Trisilacyclohexanes. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 1998, 624, 65-73.	1.2	9
57	Cyanocyclohexane: Axial-to-equatorial ¹³ C- ¹⁵ N parity in gas and condensed phases. Journal of Molecular Structure, 2018, 1168, 127-134.	3.6	9
58	Resolving the F ₂ bond energy discrepancy using coincidence ion pair production (cipp) spectroscopy. Physical Chemistry Chemical Physics, 2021, 23, 8292-8299.	2.8	9
59	Vibrational relaxation of xenon bromide (XeBr)(B) by argon. The Journal of Physical Chemistry, 1984, 88, 6383-6388.	2.9	8
60	(2+n) REMPI of acetylene: Gerade Rydberg states and photorupture channels. Chemical Physics Letters, 2008, 458, 58-63.	2.6	8
61	Conformational properties of 1-methyl-1-germacyclohexane: low-temperature NMR and quantum chemical calculations. Structural Chemistry, 2013, 24, 769-774.	2.0	8
62	Effect of a triplet to singlet state interaction on photofragmentation dynamics: highly excited states of HBr probed by VMI and REMPI as a case study. Physical Chemistry Chemical Physics, 2016, 18, 26291-26299.	2.8	8
63	Two-color studies of CH ₃ Br excitation dynamics with MPI and slice imaging. Physical Chemistry Chemical Physics, 2019, 21, 10391-10401.	2.8	8
64	Excitation dynamics involving homogeneous multistate interactions: one and two color VMI and REMPI of HBr. Physical Chemistry Chemical Physics, 2017, 19, 11354-11365.	2.8	7
65	Formation of highly excited iodine atoms from multiphoton excitation of CH ₃ I. Physical Chemistry Chemical Physics, 2020, 22, 4984-4992.	2.8	7
66	Laser photoisomerization of methyl ¹³ C-aryl cinnamates; effect of chloro substitution. Journal of Photochemistry and Photobiology A: Chemistry, 1993, 73, 179-185.	3.9	6
67	REMPI Spectra of Cl ₂ : Vibrational and Rotational Analysis of the 21 st Rydberg States of ³⁵ Cl ₂ , ³⁵ Cl ³⁷ Cl, and ³⁷ Cl ₂ . Journal of Molecular Spectroscopy, 1996, 179, 334-341.	1.2	6
68	Rotational perturbations in the (2 + 1) REMPI spectrum of the Rydberg state. Chemical Physics, 1996, 204, 65-75.	1.9	6
69	On the origin of the dip in the KrF laser gain spectrum. Journal of Chemical Physics, 1996, 105, 1815-1824.	3.0	6
70	Two-dimensional REMPI of CF ₃ Br: Rydberg states and photofragmentation channels. Chemical Physics Letters, 2011, 516, 12-16.	2.6	6
71	Revealing photofragmentation dynamics through interactions between Rydberg states: REMPI of HI as a case study. Physical Chemistry Chemical Physics, 2015, 17, 32517-32527.	2.8	6
72	Dissociative Photoionization of 1-Halogenated Silacyclohexanes: Silicon Traps the Halogen. Journal of Physical Chemistry A, 2016, 120, 9188-9197.	2.5	6

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73	Multiphoton Rydberg and valence dynamics of CH ₃ Br probed by mass spectrometry and slice imaging. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 17423-17433.	2.8	6
74	Analyses of the 290–400 nm oscillatory continua due to transitions from the E(O+) ion pair state of BrCl. <i>Molecular Physics</i> , 1992, 75, 197-207.	1.7	5
75	Photochemistry of substituted methyl- $\hat{\alpha}$ -arylcinnamates: ortho- and para-substitution. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 1998, 115, 57-61.	3.9	4
76	Photochemical conversion of 2,6-dihalo substituted methyl $\hat{\alpha}$ -phenylcinnamates. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2001, 144, 175-177.	3.9	4
77	Energy and angular momentum disposal in chemiluminescent reactions of Xe (3P ₁). <i>Journal De Chimie Physique Et De Physico-Chimie Biologique</i> , 1987, 84, 371-379.	0.2	4
78	Resonance enhanced multiphoton ionization spectra of HCl ^{1/4} šanalysis of F1 ^ŧ 2 spectral perturbation. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2013, 62, 163302.	0.5	4
79	Spectroscopy of Flames: Luminescence Spectra of Reactive Intermediates. <i>Journal of Chemical Education</i> , 2000, 77, 1345.	2.3	3
80	¹ H NMR and UV–vis spectroscopy of fluorine and chlorine substituted stilbenes: conformational studies. <i>Journal of Molecular Structure</i> , 2001, 563-564, 513-516.	3.6	3
81	Resonance-Enhanced Multiphoton Ionization of CH ₂ Br ₂ : Rydberg States, Photofragmentation, and CH Spectra. <i>Journal of Physical Chemistry A</i> , 2014, 118, 1826-1831.	2.5	3
82	High energy Rydberg and ion-pair states, state mixing and excitation dynamics of HI. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 23154-23161.	2.8	3
83	Non-rigid coordination behavior of the ambidentate phosphinoyldithioformate ligands, [S ₂ CP(O)R ₂], (R _A = Ph, CH ₂ Ph) in organometallic Lead(IV) and Mercury(II) compounds. <i>Journal of Organometallic Chemistry</i> , 2018, 854, 38-48.	1.8	3
84	Bromine emission spectra of discharged mixtures of argon + bromine-containing compounds. <i>Journal of the Chemical Society, Faraday Transactions 2</i> , 1982, 78, 2131.	1.1	2
85	Long term puzzles of the CH and CD energetics and related phenomena revisited; solutions sought through REMPI-photofragmentations of bromomethanes. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 1797-1806.	2.8	2
86	High energy Rydberg and valence states and state interactions of DCl: New observations by mass resolved REMPI. <i>Journal of Molecular Spectroscopy</i> , 2017, 341, 1-9.	1.2	2
87	Photo- and autoionization processes of superexcited iodine atoms in MPI of CH ₃ I and HI. <i>Chemical Physics</i> , 2021, 541, 111016.	1.9	2
88	Coordination Properties of Non-Rigid Phosphinoyldithioformate Complexes of the [Mo ₂ O ₂ ($\hat{\mu}$ -S) ₂] ²⁺ Cation in Catalytic Sulfur Transfer Reactions with Thiiranes. <i>Catalysts</i> , 2021, 11, 593.	3.5	2
89	Three- and two-photon absorption spectroscopy: REMPI of HCl and HBr. <i>Canadian Journal of Physics</i> , 2001, 79, 197-210.	1.1	2
90	Mechanism of the two-photon laser assisted reaction of Xe and Cl ₂ to form XeCl. <i>Journal of Molecular Structure</i> , 1992, 267, 13-19.	3.6	1

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91	The Conformational Preference of the Methyl Group in 1-Methyl-1-Silacyclohexane. , 0, , 135-138.		1
92	Addition to and revision of the HI Rydberg states energy region. Journal of Molecular Spectroscopy, 2020, 372, 111329.	1.2	1
93	REMPI Spectra of the Hydrogen Halides. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2007, 23, 1543-1552.	4.9	0
94	High energy state interactions, energetics and multiphoto-fragmentation processes of HI. Physical Chemistry Chemical Physics, 2022, 24, 6676-6689.	2.8	0
95	The Conformational Preference of the Methyl Group in 1-Methyl-1-Silacyclohexane. , 0, , 135-138.		0
96	Melatonin photoreactivity: phosphorescence formation and quenching processes. Chemical Papers, 0, , .	2.2	0
97	Coincidence ion pair production (cipp) spectroscopy of diiodine. Physical Chemistry Chemical Physics, 0, , .	2.8	0