

Leonid Khriachtchev

List of Publications by Year in descending order

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178
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179
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179
docs citations

179
times ranked

4228
citing authors

#	ARTICLE	IF	CITATIONS
1	A stable argon compound. <i>Nature</i> , 2000, 406, 874-876.	27.8	555
2	Single-walled carbon nanotube synthesis using ferrocene and iron pentacarbonyl in a laminar flow reactor. <i>Chemical Engineering Science</i> , 2006, 61, 4393-4402.	3.8	272
3	Noble-Gas Hydrides: New Chemistry at Low Temperatures. <i>Accounts of Chemical Research</i> , 2009, 42, 183-191.	15.6	241
4	IR Spectrum of the Other Rotamer of Formic Acid, cis-HCOOH. <i>Journal of the American Chemical Society</i> , 1997, 119, 11715-11716.	13.7	210
5	Neutral rare-gas containing charge-transfer molecules in solid matrices. III. HXeCN, HXeNC, and HKrCN in Kr and Xe. <i>Journal of Chemical Physics</i> , 1998, 109, 618-625.	3.0	191
6	Fluorine-Free Organoxenon Chemistry: HXeCCH, HXeCC, and HXeCCXeH. <i>Journal of the American Chemical Society</i> , 2003, 125, 4696-4697.	13.7	181
7	A More Stable Configuration of HArF in Solid Argon. <i>Journal of the American Chemical Society</i> , 2001, 123, 8610-8611.	13.7	170
8	A Chemical Compound Formed from Water and Xenon: HXeOH. <i>Journal of the American Chemical Society</i> , 1999, 121, 11904-11905.	13.7	166
9	A Gate to Organokrypton Chemistry: HKrCCH. <i>Journal of the American Chemical Society</i> , 2003, 125, 6876-6877.	13.7	160
10	Optical gain in Si/SiO ₂ lattice: Experimental evidence with nanosecond pulses. <i>Applied Physics Letters</i> , 2001, 79, 1249-1251.	3.3	158
11	HXeSH, the First Example of a Xenon-Sulfur Bond. <i>Journal of the American Chemical Society</i> , 1998, 120, 7979-7980.	13.7	143
12	HKrF in solid krypton. <i>Journal of Chemical Physics</i> , 2002, 116, 2508-2515.	3.0	133
13	The mechanism of formation and infrared-induced decomposition of HXeI in solid Xe. <i>Journal of Chemical Physics</i> , 1997, 107, 8423-8431.	3.0	120
14	Rotational Isomerism in Acetic Acid: The First Experimental Observation of the High-Energy Conformer. <i>Journal of the American Chemical Society</i> , 2003, 125, 16188-16189.	13.7	119
15	Chemical Compounds Formed from Diacetylene and Rare-Gas Atoms: HKrC ₄ H and HXeC ₄ H. <i>Journal of the American Chemical Society</i> , 2003, 125, 16361-16366.	13.7	114
16	Vibrational spectroscopy of cis- and trans-formic acid in solid argon. <i>Journal of Molecular Spectroscopy</i> , 2003, 219, 70-80.	1.2	112
17	A Small Neutral Molecule with Two Noble-Gas Atoms: HXeOXeH. <i>Journal of the American Chemical Society</i> , 2008, 130, 6114-6118.	13.7	111
18	A theoretical study of HArF, a newly observed neutral argon compound. <i>Journal of Chemical Physics</i> , 2001, 114, 836.	3.0	104

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19	Hydrate formation during wet granulation studied by spectroscopic methods and multivariate analysis. <i>Pharmaceutical Research</i> , 2002, 19, 1285-1291.	3.5	99
20	Atomic Layer Deposition of Crystalline MoS ₂ Thin Films: New Molybdenum Precursor for Low-Temperature Film Growth. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700123.	3.7	98
21	Thermal study on electrospun polyvinylpyrrolidone/ammonium metatungstate nanofibers: optimising the annealing conditions for obtaining WO ₃ nanofibers. <i>Journal of Thermal Analysis and Calorimetry</i> , 2011, 105, 73-81.	3.6	95
22	Intermolecular Complexes of HXeOH with Water: Stabilization and Destabilization Effects. <i>Journal of the American Chemical Society</i> , 2002, 124, 10706-10711.	13.7	91
23	Giant Raman gain in silicon nanocrystals. <i>Nature Communications</i> , 2012, 3, 1220.	12.8	91
24	Interaction of rare-gas-containing molecules with nitrogen: Matrix-isolation and ab initio study of HArF ⁻ N ₂ , HKrF ⁻ N ₂ , and HKrCl ⁻ N ₂ complexes. <i>Journal of Chemical Physics</i> , 2003, 118, 11120-11128.	3.0	90
25	Systematic correlation between Raman spectra, photoluminescence intensity, and absorption coefficient of silica layers containing Si nanocrystals. <i>Applied Physics Letters</i> , 2004, 85, 1511-1513.	3.3	84
26	On theoretical predictions of noble-gas hydrides. <i>Journal of Chemical Physics</i> , 2006, 125, 184514.	3.0	84
27	Conformational Isomerization of Formic Acid by Vibrational Excitation at Energies below the Torsional Barrier. <i>Journal of the American Chemical Society</i> , 2003, 125, 4058-4059.	13.7	83
28	Formic and acetic acids in a nitrogen matrix: Enhanced stability of the higher-energy conformer. <i>Journal of Chemical Physics</i> , 2010, 133, 144507.	3.0	83
29	Matrix-Isolation and ab Initio Study of HN _g CCF and HCCN _g F Molecules (N _g = Ar, Kr, and Xe). <i>Journal of Physical Chemistry A</i> , 2010, 114, 4181-4187.	2.5	83
30	Insertion of Noble Gas Atoms into Cyanoacetylene: An ab Initio and Matrix Isolation Study. <i>Journal of Physical Chemistry A</i> , 2006, 110, 11876-11885.	2.5	81
31	A Neutral Xenon-Containing Radical, HXeO. <i>Journal of the American Chemical Society</i> , 2003, 125, 1454-1455.	13.7	80
32	Conformational Memory in Photodissociation of Formic Acid. <i>Journal of the American Chemical Society</i> , 2002, 124, 10994-10995.	13.7	75
33	Matrix Isolation and Ab Initio Study of Trans ⁺ and Trans ⁻ Cis Dimers of Formic Acid. <i>Journal of Physical Chemistry A</i> , 2010, 114, 3495-3502.	2.5	74
34	Internal Rotation in Propionic Acid: Near-Infrared-Induced Isomerization in Solid Argon. <i>Journal of Physical Chemistry A</i> , 2005, 109, 3617-3625.	2.5	72
35	HONO in solid Kr: Site-selective trans ⁺ cis isomerization with narrow-band infrared radiation. <i>Journal of Chemical Physics</i> , 2000, 113, 4265-4273.	3.0	70
36	Substrate-dependent crystallization and enhancement of visible photoluminescence in thermal annealing of Si/SiO ₂ superlattices. <i>Applied Physics Letters</i> , 2001, 78, 323-325.	3.3	68

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37	Rotational isomerization of small carboxylic acids isolated in argon matrices: Tunnelling and quantum yields for the photoinduced processes. <i>Physical Chemistry Chemical Physics</i> , 2005, 7, 743-749.	2.8	66
38	Photochemistry of HNCO in Solid Xenon: Photoinduced and Thermally Activated Formation of HXeNCO. <i>Journal of Physical Chemistry A</i> , 2000, 104, 3579-3583.	2.5	65
39	A Matrix Isolation Spectroscopic and Quantum Chemical Study of Fumaric and Maleic Acid. <i>Journal of Physical Chemistry A</i> , 2001, 105, 3922-3933.	2.5	64
40	cis-trans Formic Acid Dimer: Experimental Observation and Improved Stability against Proton Tunneling. <i>Journal of the American Chemical Society</i> , 2006, 128, 12060-12061.	13.7	64
41	Large blueshift of the H-Kr stretching frequency of HKrCl upon complexation with N ₂ . <i>Journal of Chemical Physics</i> , 2002, 117, 961-964.	3.0	63
42	Hydrogen Bonding between Formic Acid and Water: Complete Stabilization of the Intrinsically Unstable Conformer. <i>Journal of Physical Chemistry A</i> , 2007, 111, 2040-2042.	2.5	63
43	Infrared Spectroscopy of H ₂ S and SH in Rare-Gas Matrixes. <i>Journal of Physical Chemistry A</i> , 1999, 103, 679-685.	2.5	62
44	Thermal annealing of Si/SiO ₂ materials: Modification of structural and photoluminescence emission properties. <i>Journal of Applied Physics</i> , 2002, 92, 5856-5862.	2.5	62
45	Analysis of the Size Distribution of Single-Walled Carbon Nanotubes Using Optical Absorption Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 1143-1148.	4.6	62
46	Photocatalytic Properties of WO ₃ /TiO ₂ Core/Shell Nanofibers prepared by Electrospinning and Atomic Layer Deposition. <i>Chemical Vapor Deposition</i> , 2013, 19, 149-155.	1.3	62
47	Isotopic effect on thermal mobility of atomic hydrogen in solid xenon. <i>Journal of Chemical Physics</i> , 2002, 116, 5708-5716.	3.0	61
48	High-energy conformer of formic acid in solid neon: Giant difference between the proton tunneling rates of cis monomer and trans-cis dimer. <i>Journal of Chemical Physics</i> , 2007, 126, 241102.	3.0	59
49	Intermolecular interactions involving noble-gas hydrides: Where the blue shift of vibrational frequency is a normal effect. <i>Journal of Molecular Structure</i> , 2008, 889, 1-11.	3.6	59
50	HXeOBr in a xenon matrix. <i>Journal of Chemical Physics</i> , 2011, 134, 124307.	3.0	58
51	Halogenated Xenon Cyanides ClXeCN, ClXeNC, and BrXeCN. <i>Inorganic Chemistry</i> , 2012, 51, 4398-4402.	4.0	58
52	Characterization of ion-irradiation-induced defects in multi-walled carbon nanotubes. <i>New Journal of Physics</i> , 2011, 13, 073004.	2.9	55
53	On photochemistry of water in solid Xe: Thermal and light-induced decomposition of HXeOH and HXeH and formation of H ₂ O ₂ . <i>Journal of Chemical Physics</i> , 2002, 116, 5649-5656.	3.0	54
54	Rotational isomers of small molecules in noble-gas solids: From monomers to hydrogen-bonded complexes. <i>Journal of Molecular Structure</i> , 2008, 880, 14-22.	3.6	53

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55	Spectroscopic study of <i>cis</i> -to- <i>trans</i> tunneling reaction of HCOOD in rare gas matrices. Journal of Chemical Physics, 2009, 130, 154509.	3.0	51
56	Intermediate reactions in solid-state photolysis. Journal of Chemical Physics, 2001, 114, 7727-7730.	3.0	50
57	HSO ₂ isomers in rare-gas solids. Physical Chemistry Chemical Physics, 2002, 4, 1549-1554.	2.8	50
58	Organo-noble-gas hydride compounds HKrCCH, HXeCCH, HXeCC, and HXeCCXeH: Formation mechanisms and effect of [¹³ C] isotope substitution on the vibrational properties. Journal of Chemical Physics, 2004, 121, 8291.	3.0	49
59	Experimental and Computational Study of HXeY ⁺ ⋯HX Complexes (X, Y = Cl and Br): An Example of Exceptionally Large Complexation Effect. Journal of Physical Chemistry A, 2008, 112, 5486-5494.	2.5	49
60	Efficient wavelength-selective optical waveguiding in a silica layer containing Si nanocrystals. Applied Physics Letters, 2003, 83, 3018-3020.	3.3	48
61	Low-temperature Wafer-scale Deposition of Continuous 2D SnS ₂ Films. Small, 2018, 14, e1800547.	10.0	48
62	193 nm photolysis of H ₂ S in rare-gas matrices: Luminescence spectroscopy of the products. Journal of Chemical Physics, 1998, 108, 5747-5754.	3.0	46
63	Photochemistry of hydrogen peroxide in Kr and Xe matrices. Journal of Chemical Physics, 2000, 112, 2187-2194.	3.0	44
64	Interaction of Formic Acid with Nitrogen: Stabilization of the Higher-Energy Conformer. Journal of Physical Chemistry A, 2010, 114, 10584-10589.	2.5	44
65	Atomic layer deposition of crystalline molybdenum oxide thin films and phase control by post-deposition annealing. Materials Today Chemistry, 2018, 9, 17-27.	3.5	44
66	Laser-controlled stress of Si nanocrystals in a free-standing Si ⁺ SiO ₂ superlattice. Applied Physics Letters, 2006, 88, 013102.	3.3	43
67	Matrix-Isolation Studies of Noncovalent Interactions: More Sophisticated Approaches. Journal of Physical Chemistry A, 2015, 119, 2735-2746.	2.5	43
68	Infrared-induced conformational interconversion in carboxylic acids isolated in low-temperature rare-gas matrices. Vibrational Spectroscopy, 2004, 34, 73-82.	2.2	42
69	Optical and Structural Properties of Si Nanocrystals in SiO ₂ Films. Nanomaterials, 2015, 5, 614-655.	4.1	42
70	Infrared absorption and electron paramagnetic resonance studies of vinyl radical in noble-gas matrices. Journal of Chemical Physics, 2005, 123, 064318.	3.0	41
71	Controlled Synthesis of Single-Walled Carbon Nanotubes in an Aerosol Reactor. Journal of Physical Chemistry C, 2011, 115, 7309-7318.	3.1	40
72	Identification of New Dimers of Formic Acid: The Use of a Continuous-Wave Optical Parametric Oscillator in Matrix Isolation Experiments. Journal of Physical Chemistry Letters, 2011, 2, 695-699.	4.6	39

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73	Red photoluminescence of gold island films. <i>Applied Physics Letters</i> , 2001, 78, 1994-1996.	3.3	38
74	Matrix isolation and ab initio study of the HXeCCH \cdot CO ₂ complex. <i>Journal of Chemical Physics</i> , 2007, 127, 154313.	3.0	38
75	Infrared absorption spectrum of matrix-isolated noble-gas hydride molecules: Fingerprints of specific interactions and hindered rotation. <i>Journal of Chemical Physics</i> , 2005, 122, 014510.	3.0	37
76	Insight into Thermally Induced Phase Transformations of Erythromycin A Dihydrate. <i>Crystal Growth and Design</i> , 2006, 6, 369-374.	3.0	37
77	Low-temperature thermoluminescence in solid argon: Short-range mobility of atoms. <i>Journal of Chemical Physics</i> , 1999, 111, 1650-1657.	3.0	36
78	H/D isotope effects on formation and photodissociation of HKrCl in solid Kr. <i>Journal of Chemical Physics</i> , 2003, 118, 6403-6410.	3.0	36
79	Dimers of the Higher-Energy Conformer of Formic Acid: Experimental Observation. <i>Journal of Physical Chemistry A</i> , 2012, 116, 2101-2108.	2.5	36
80	Tunneling Isomerization of Small Carboxylic Acids and Their Complexes in Solid Matrixes: A Computational Insight. <i>Journal of Physical Chemistry A</i> , 2015, 119, 2628-2635.	2.5	36
81	Matrix Isolation and Ab Initio Study of the Hydrogen-Bonded H ₂ O ₂ -CO Complex. <i>Chemistry - A European Journal</i> , 2001, 7, 1670-1678.	3.3	34
82	A study on stabilization of HHeF molecule upon complexation with Xe atoms. <i>Chemical Physics Letters</i> , 2004, 390, 256-260.	2.6	33
83	Conformation-Dependent Chemical Reaction of Formic Acid with an Oxygen Atom. <i>Journal of Physical Chemistry A</i> , 2009, 113, 8143-8146.	2.5	33
84	Photolysis of HI in solid Xe: production and distribution of hydrogen atoms. <i>Chemical Physics Letters</i> , 2000, 323, 506-513.	2.6	32
85	HXeCCH in Ar and Kr matrices. <i>Journal of Chemical Physics</i> , 2006, 125, 074501.	3.0	32
86	High-energy conformer of formic acid in solid hydrogen: conformational change promoted by host excitation. <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 5748.	2.8	32
87	Matrix-isolation and ab initio study of HXeCCH complexed with acetylene. <i>Chemical Physics Letters</i> , 2009, 481, 83-87.	2.6	32
88	HY \cdot N ₂ and HXeY \cdot N ₂ complexes in solid xenon (Y=Cl and Br): Unexpected suppression of the complex formation for deposition at higher temperature. <i>Journal of Chemical Physics</i> , 2010, 133, 084309.	3.0	32
89	High Kinetic Stability of HXeBr upon Interaction with Carbon Dioxide: HXeBr \cdot CO ₂ Complex in a Xenon Matrix and HXeBr in a Carbon Dioxide Matrix. <i>Journal of Physical Chemistry A</i> , 2012, 116, 4510-4517.	2.5	32
90	Matrix-Isolation and Ab Initio Study of the HKrCl \cdot HCl Complex. <i>Journal of Physical Chemistry A</i> , 2009, 113, 10687-10692.	2.5	31

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91	Conformational Switching of HOCO Radical: Selective Vibrational Excitation and Hydrogen-Atom Tunneling. <i>Journal of the American Chemical Society</i> , 2017, 139, 9551-9557.	13.7	30
92	Light-emission mechanism of thermally annealed silicon-rich silicon oxide revisited: What is the role of silicon nanocrystals?. <i>Applied Physics Letters</i> , 2009, 94, 043115.	3.3	27
93	Programming nanostructured soft biological surfaces by atomic layer deposition. <i>Nanotechnology</i> , 2013, 24, 245701.	2.6	27
94	VUV photochemistry of the H ₂ O ⁺ CO complex in noble-gas matrices: formation of the OH ⁺ CO complex and the HOCO radical. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 356-365.	2.8	27
95	Matrix-isolation study of the phenol-water complex and phenol dimer. <i>Chemical Physics Letters</i> , 2011, 517, 9-15.	2.6	26
96	Free-standing silica film containing Si nanocrystals: Photoluminescence, Raman scattering, optical waveguiding, and laser-induced thermal effects. <i>Applied Physics Letters</i> , 2005, 86, 141911.	3.3	25
97	HArF in Solid Argon Revisited: Transition from Unstable to Stable Configuration. <i>Journal of Physical Chemistry A</i> , 2009, 113, 7654-7659.	2.5	24
98	Optical and structural properties of SiO _x films grown by molecular beam deposition: Effect of the Si concentration and annealing temperature. <i>Journal of Applied Physics</i> , 2012, 112, .	2.5	24
99	Intrinsic lifetimes and kinetic stability in media of noble-gas hydrides. <i>Chemical Physics Letters</i> , 2012, 545, 1-8.	2.6	23
100	Fluorinated noble-gas cyanides FKrCN, FXeCN, and FXeNC. <i>Journal of Chemical Physics</i> , 2015, 143, 074306.	3.0	23
101	Intralanthanide Separation on Layered Titanium(IV) Organophosphate Materials via a Selective Transmetalation Process. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 22083-22093.	8.0	23
102	Electronic structure and short-range recombination dynamics of S ₂ in solid argon. <i>Journal of Chemical Physics</i> , 2000, 112, 7475-7483.	3.0	22
103	Tunable wavelength-selective waveguiding of photoluminescence in Si-rich silica optical wedges. <i>Journal of Applied Physics</i> , 2004, 95, 7592-7601.	2.5	22
104	Spectroscopic and Computational Characterization of the HCO ⁺ ·H ₂ O Complex. <i>Journal of Physical Chemistry A</i> , 2013, 117, 4385-4393.	2.5	22
105	Matrix-isolation and <i>ab initio</i> study of HKrCCl and HXeCCl. <i>Journal of Chemical Physics</i> , 2015, 143, 244319.	3.0	22
106	Anomalous isotopic effect on vibrational properties of HXeOH. <i>Journal of Chemical Physics</i> , 2002, 116, 4758.	3.0	21
107	UV Photolysis Products of Propiolic Acid in Noble-Gas Solids. <i>Journal of Physical Chemistry A</i> , 2006, 110, 11479-11487.	2.5	21
108	Optical properties of silicon nanocrystals in silica: Results from spectral filtering effect, m-line technique, and x-ray photoelectron spectroscopy. <i>Journal of Applied Physics</i> , 2008, 104, .	2.5	21

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109	Silicon Nanoscale Materials: From Theoretical Simulations to Photonic Applications. International Journal of Photoenergy, 2012, 2012, 1-21.	2.5	21
110	Matrix effect on vibrational frequencies: Experiments and simulations for HCl and HNgCl (Ng = Kr and Ar). Journal of Chemical Physics, 2000, 112, 1000-1005.	3.9	21
111	Vibrational Spectra of cis and trans Oxalyl Fluoride and Their Site-Selective IR-Induced Rotamerization in an Argon Matrix. Journal of Molecular Spectroscopy, 2000, 203, 145-150.	1.2	20
112	UV Photolysis and Thermal Annealing of H ₂ S, HI, and H ₂ CO in Solid Xe: Electronic Absorption Spectra of the Products. Journal of Physical Chemistry A, 2002, 106, 7743-7747.	2.5	20
113	Neutralization of solvated protons and formation of noble-gas hydride molecules: Matrix-isolation indications of tunneling mechanisms?. Journal of Chemical Physics, 2005, 123, 064507.	3.0	20
114	Reaction of atomic hydrogen with formic acid. Physical Chemistry Chemical Physics, 2014, 16, 5993.	2.8	20
115	Modeling of HXeBr in CO ₂ and Xe environments: Structure, energetics and vibrational spectra. Chemical Physics Letters, 2014, 594, 18-22.	2.6	20
116	Matrix isolation and quantum chemical studies on the H ₂ O ⁺ ⋯SO ₂ complex. Physical Chemistry Chemical Physics, 2004, 6, 4607-4613.	2.8	19
117	Conformation Resolved Induced Infrared Activity: <i>trans</i> - and <i>cis</i> -Formic Acid Isolated in Solid Molecular Hydrogen. Journal of Physical Chemistry A, 2011, 115, 13346-13355.	2.5	19
118	Infrared Characterization of the HCOOH⋯CO ₂ Complexes in Solid Argon: Stabilization of the Higher-Energy Conformer of Formic Acid. Journal of Physical Chemistry A, 2012, 116, 5305-5311.	2.5	19
119	Experimental and computational study of the HXeI ⁺ ⋯HY complexes (Y = Br and I). Journal of Chemical Physics, 2013, 138, 104314.	3.0	19
120	Formation of HXeO in a xenon matrix: Indirect evidence of production, trapping, and mobility of XeO ⁺ (1 ⁺) in solid Xe. Journal of Chemical Physics, 2004, 121, 1839-1848.	3.0	18
121	Continuous-wave laser annealing of free-standing Si ⁺ SiO ₂ superlattice: Modification of optical, structural, and light-emitting properties. Journal of Applied Physics, 2006, 100, 053502.	2.5	18
122	Photochemical Synthesis of H ₂ O ₂ from the H ₂ O ⁺ ⋯O ⁺ (³ P) van der Waals Complex: Experimental Observations in Solid Krypton and Theoretical Modeling. Journal of Physical Chemistry A, 2007, 111, 11444-11449.	2.5	18
123	Interaction of phenol with xenon and nitrogen: Spectroscopic and computational characterization. Journal of Chemical Physics, 2012, 137, 134305.	3.0	18
124	Matrix-isolation and computational study of the HXeY ⁺ ⋯H ₂ O complexes (Y = Cl, Br, and I). Journal of Chemical Physics, 2014, 140, 044323.	3.0	18
125	X-ray induced dimerization of cinnamic acid: Time-resolved inelastic X-ray scattering study. Scientific Reports, 2015, 5, 15851.	3.3	18
126	Comment on "Optical absorption measurements of silica containing Si nanocrystals produced by ion implantation and thermal annealing" [Appl. Phys. Lett. 80, 1325 (2002)]. Applied Physics Letters, 2002, 81, 1357-1358.	3.3	17

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127	Formation of HARF in solid Ar revisited: Are mobile vacancies involved in the matrix-site conversion at 30 K?. <i>Journal of Chemical Physics</i> , 2004, 120, 3353-3357.	3.0	17
128	Ion irradiation of multi-walled boron nitride nanotubes. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2010, 7, 1256-1259.	0.8	17
129	Experimental evidence of the solid-phase H+HXeH reaction. <i>Chemical Physics Letters</i> , 2002, 359, 135-140.	2.6	16
130	Wavelength-selective optical waveguiding of photoluminescence in a thermally annealed Si/SiO ₂ superlattice. <i>Journal of Physics Condensed Matter</i> , 2004, 16, 3219-3228.	1.8	16
131	Selective and reversible control of a chemical reaction with narrow-band infrared radiation: HXeCC radical in solid xenon. <i>Journal of Chemical Physics</i> , 2006, 124, 181101.	3.0	16
132	Formation of noble-gas hydrides and decay of solvated protons revisited: diffusion-controlled reactions and hydrogen atom losses in solid noble gases. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 692-701.	2.8	16
133	Multimodal non-linear optical imaging for the investigation of drug nano-/microcrystal-cell interactions. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2015, 96, 338-348.	4.3	16
134	Interaction of Aromatic Compounds with Xenon: Spectroscopic and Computational Characterization for the Cases of <i>p</i> -Cresol and Toluene. <i>Journal of Physical Chemistry A</i> , 2015, 119, 2587-2593.	2.5	16
135	Infrared Spectrum of Toluene: Comparison of Anharmonic Isolated-Molecule Calculations and Experiments in Liquid Phase and in a Ne Matrix. <i>Journal of Physical Chemistry A</i> , 2016, 120, 3380-3389.	2.5	16
136	Continuous-wave laser annealing of Si-rich oxide: A microscopic picture of macroscopic Si ^{δ-} -SiO ₂ phase separation. <i>Journal of Applied Physics</i> , 2010, 108, .	2.5	15
137	Hindered rotation of HARF in solid argon: Infrared spectroscopy and a theoretical model. <i>Physical Review B</i> , 2008, 77, .	3.2	14
138	Matrix-isolation and ab initio study of the complex between formic acid and xenon. <i>Journal of Molecular Structure</i> , 2012, 1025, 132-139.	3.6	14
139	Photoisomerization of azobenzenes isolated in cryogenic matrices. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 16802-16811.	2.8	14
140	An aromatic noble-gas hydride: C ₆ H ₅ CCXeH. <i>Scientific Reports</i> , 2017, 7, 3130.	3.3	14
141	Excited-state site effects in luminescence spectroscopy of SH radicals in krypton matrices: Experiment and simulations. <i>Journal of Chemical Physics</i> , 1999, 110, 5836-5843.	3.0	13
142	Matrix-isolation and computational study of the HKrCCH ⁺ HCCH complex. <i>RSC Advances</i> , 2015, 5, 35783-35791.	3.6	12
143	Optical memory of silicon nanocrystals with submicron spatial resolution and very high thermal stability. <i>Applied Physics Letters</i> , 2009, 94, 173116.	3.3	11
144	Optical and structural properties of silicon-rich silicon oxide films: Comparison of ion implantation and molecular beam deposition methods. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2011, 208, 2176-2181.	1.8	11

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145	Environmental effects on noble-gas hydrides: HXeBr, HXeCCH, and HXeH in noble-gas and molecular matrices. <i>Journal of Chemical Physics</i> , 2013, 139, 204303.	3.0	11
146	HXeI and HXeH in Ar, Kr, and Xe matrices: Experiment and simulation. <i>Journal of Chemical Physics</i> , 2015, 142, 054305.	3.0	11
147	Toward Molecular Mechanism of Xenon Anesthesia: A Link to Studies of Xenon Complexes with Small Aromatic Molecules. <i>Journal of Physical Chemistry A</i> , 2015, 119, 2517-2521.	2.5	11
148	Formic acid dimers in a nitrogen matrix. <i>Journal of Chemical Physics</i> , 2018, 148, 034301.	3.0	11
149	Protons solvated in noble-gas matrices: Interaction with nitrogen. <i>Physical Chemistry Chemical Physics</i> , 2006, 8, 2457-2463.	2.8	10
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151	Experimental and computational study of crystalline formic acid composed of the higher-energy conformer. <i>Journal of Chemical Physics</i> , 2011, 134, 054506.	3.0	10
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