

Leonid Khriachtchev

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2943882/publications.pdf>

Version: 2024-02-01

178
papers

8,540
citations

³¹⁹⁷⁶
53
h-index

⁵⁴⁹¹¹
84
g-index

179
all docs

179
docs citations

179
times ranked

4228
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermal decomposition of the HXeCl $\cdot\hat{\cdot}$ H ₂ O complex in solid xenon: Experimental characterization of the two-body decomposition channel. <i>Chemical Physics Letters</i> , 2020, 739, 136987.	2.6	1
2	The HKrCCH $\hat{\cdot}$ CO ₂ complex: an ab initio and matrix-isolation study. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 3656-3661.	2.8	8
3	Formic acid in deuterium and hydrogen matrices. <i>Molecular Physics</i> , 2019, 117, 1708-1718.	1.7	4
4	Low-temperature Wafer-scale Deposition of Continuous 2D SnS ₂ Films. <i>Small</i> , 2018, 14, e1800547.	10.0	48
5	Formic acid dimers in a nitrogen matrix. <i>Journal of Chemical Physics</i> , 2018, 148, 034301.	3.0	11
6	Photochemistry of the H ₂ O/CO System Revisited: The HXeOH $\hat{\cdot}$ CO Complex in a Xenon Matrix. <i>Journal of Physical Chemistry A</i> , 2018, 122, 159-166.	2.5	5
7	Atomic layer deposition of crystalline molybdenum oxide thin films and phase control by post-deposition annealing. <i>Materials Today Chemistry</i> , 2018, 9, 17-27.	3.5	44
8	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
9	Effect of Noncovalent Interactions on Vibronic Transitions: An Experimental and Theoretical Study of the C ₂ H $\hat{\cdot}$ CO ₂ Complex. <i>ChemPhysChem</i> , 2017, 18, 949-958.	2.1	9
10	Matrix-isolation and theoretical study of the HXeCCXeH $\hat{\cdot}$ HCCH and HXeCC $\hat{\cdot}$ HCCH complexes. <i>RSC Advances</i> , 2017, 7, 813-820.	3.6	9
11	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
12	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
13	Complex between Formic Acid and Nitrous Oxide: A Matrix-Isolation and Computational Study. <i>Journal of Physical Chemistry A</i> , 2017, 121, 8728-8737.	2.5	6
14	An aromatic noble-gas hydride: C ₆ H ₅ CCXeH. <i>Scientific Reports</i> , 2017, 7, 3130.	3.3	14
15	Spectroscopic characterization of the complex of vinyl radical and carbon dioxide: Matrix isolation and <i>ab initio</i> study. <i>Journal of Chemical Physics</i> , 2017, 147, 184301.	3.0	9
16	VUV photochemistry of the H ₂ O $\hat{\cdot}$ CO complex in noble-gas matrices: formation of the OH $\hat{\cdot}$ CO complex and the HOCO radical. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 356-365.	2.8	27
17	Acetic acid $\hat{\cdot}$ water complex: The first observation of structures containing the higher-energy acetic acid conformer. <i>Journal of Chemical Physics</i> , 2016, 144, 084308.	3.0	7
18	Matrix-isolation and computational study of H ₂ CCCl and H ₂ CCBr radicals. <i>Journal of Chemical Physics</i> , 2016, 145, 074312.	3.0	3

#	ARTICLE	IF	CITATIONS
19	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
20	Surface-Enhanced Raman Scattering of Silicon Nanocrystals in a Silica Film. <i>Scientific Reports</i> , 2016, 6, 27027.	3.3	9
21	Photoisomerization of azobenzenes isolated in cryogenic matrices. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 16802-16811.	2.8	14
22	X-ray induced dimerization of cinnamic acid: Time-resolved inelastic X-ray scattering study. <i>Scientific Reports</i> , 2015, 5, 15851.	3.3	18
23	Fluorinated noble-gas cyanides FKrCN, FXeCN, and FXeNC. <i>Journal of Chemical Physics</i> , 2015, 143, 074306.	3.0	23
24	Matrix-isolation and <i>ab initio</i> study of HKrCCl and HXeCCl. <i>Journal of Chemical Physics</i> , 2015, 143, 244319.	3.0	22
25	Optical and Structural Properties of Si Nanocrystals in SiO ₂ Films. <i>Nanomaterials</i> , 2015, 5, 614-655.	4.1	42
26	Experimental and theoretical study of the HXe ⁺ HCl and HXe ⁺ HCCH complexes. <i>Journal of Chemical Physics</i> , 2015, 142, 144306.	3.0	9
27	Matrix-Isolation Studies of Noncovalent Interactions: More Sophisticated Approaches. <i>Journal of Physical Chemistry A</i> , 2015, 119, 2735-2746.	2.5	43
28	Matrix-isolation and computational study of the HKrCCH ⁺ HCCH complex. <i>RSC Advances</i> , 2015, 5, 35783-35791.	3.6	12
29	HXeI and HXeH in Ar, Kr, and Xe matrices: Experiment and simulation. <i>Journal of Chemical Physics</i> , 2015, 142, 054305.	3.0	11
30	Acetic acid dimers in a nitrogen matrix: Observation of structures containing the higher-energy conformer. <i>Journal of Chemical Physics</i> , 2015, 143, 104307.	3.0	8
31	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
32	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
33	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
34	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
35	Matrix-isolation and computational study of the HXeY ⁺ H ₂ O complexes (Y = Cl, Br, and I). <i>Journal of Chemical Physics</i> , 2014, 140, 044323.	3.0	18
36	Non-covalent interactions of nitrous oxide with aromatic compounds: Spectroscopic and computational evidence for the formation of 1:1 complexes. <i>Journal of Chemical Physics</i> , 2014, 140, 144304.	3.0	10

#	ARTICLE	IF	CITATIONS
37	Matrix effect on vibrational frequencies: Experiments and simulations for HCl and HNgCl (Ng = Kr and Tj ETQq1 1 0.784314 rgBT /Over	3.0	21
38	Reaction of atomic hydrogen with formic acid. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 5993.	2.8	20
39	Modeling of HXeBr in CO ₂ and Xe environments: Structure, energetics and vibrational spectra. <i>Chemical Physics Letters</i> , 2014, 594, 18-22.	2.6	20
40	Continuous-Wave Laser Annealing of a Si/SiO ₂ /Si Superlattice: Effect of the Ambient Atmosphere and Exposure Period. <i>Science of Advanced Materials</i> , 2014, 6, 1000-1010.	0.7	3
41	Experimental and computational study of the HXeY complexes (Y = Br and I). <i>Journal of Chemical Physics</i> , 2013, 138, 104314.	3.0	19
42	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
43	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
44	Programming nanostructured soft biological surfaces by atomic layer deposition. <i>Nanotechnology</i> , 2013, 24, 245701.	2.6	27
45	Giant Raman gain in annealed silicon-rich silicon oxide films: Measurements at 785 nm. <i>Applied Physics Letters</i> , 2013, 103, 151110.	3.3	10
46	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
47	Silicon Nanoscale Materials: From Theoretical Simulations to Photonic Applications. <i>International Journal of Photoenergy</i> , 2012, 2012, 1-21.	2.5	21
48	Photonic Properties of Silicon-Based Materials. <i>International Journal of Photoenergy</i> , 2012, 2012, 1-2.	2.5	1
49	Surface fingerprints of individual silicon nanocrystals in laser-annealed Si/SiO ₂ superlattice: Evidence of nanoeruptions of laser-pressurized silicon. <i>Journal of Applied Physics</i> , 2012, 111, 124302.	2.5	3
50	Giant Raman gain in silicon nanocrystals. <i>Nature Communications</i> , 2012, 3, 1220.	12.8	91
51	Intrinsic lifetimes and kinetic stability in media of noble-gas hydrides. <i>Chemical Physics Letters</i> , 2012, 545, 1-8.	2.6	23
52	Interaction of phenol with xenon and nitrogen: Spectroscopic and computational characterization. <i>Journal of Chemical Physics</i> , 2012, 137, 134305.	3.0	18
53	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
54	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

#	ARTICLE	IF	CITATIONS
55	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
56	Halogenated Xenon Cyanides ClXeCN, ClXeNC, and BrXeCN. <i>Inorganic Chemistry</i> , 2012, 51, 4398-4402.	4.0	58
57	Infrared Characterization of the HCOOH $\cdot\hat{A}\cdot\hat{A}\cdot\text{CO}_2$ Complexes in Solid Argon: Stabilization of the Higher-Energy Conformer of Formic Acid. <i>Journal of Physical Chemistry A</i> , 2012, 116, 5305-5311.	2.5	19
58	High Kinetic Stability of HXeBr upon Interaction with Carbon Dioxide: HXeBr $\cdot\hat{A}\cdot\hat{A}\cdot\text{CO}_2$ 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
59	HXeOBr in a xenon matrix. <i>Journal of Chemical Physics</i> , 2011, 134, 124307.	3.0	58
60	Conformation Resolved Induced Infrared Activity: <i>trans</i> - and <i>cis</i> -Formic Acid Isolated in Solid Molecular Hydrogen. <i>Journal of Physical Chemistry A</i> , 2011, 115, 13346-13355.	2.5	19
61	Identification of New Dimers of Formic Acid: The Use of a Continuous-Wave Optical Parametric Oscillator in Matrix Isolation Experiments. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 695-699.	4.6	39
62	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
63	Characterization of ion-irradiation-induced defects in multi-walled carbon nanotubes. <i>New Journal of Physics</i> , 2011, 13, 073004.	2.9	55
64	Optical and Structural Properties of Silicon Nanocrystals and Laser-Induced Thermal Effects. <i>Journal of the Electrochemical Society</i> , 2011, 159, K21-K26.	2.9	5
65	Controlled Synthesis of Single-Walled Carbon Nanotubes in an Aerosol Reactor. <i>Journal of Physical Chemistry C</i> , 2011, 115, 7309-7318.	3.1	40
66	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
67	Matrix-isolation study of the phenol $\cdot\hat{A}\cdot\text{water}$ complex and phenol dimer. <i>Chemical Physics Letters</i> , 2011, 517, 9-15.	2.6	26
68	Optical and structural properties of silicon $\cdot\hat{A}\cdot\text{rich}$ 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
69	(Invited) Optical and Structural Properties of Silicon Nanocrystals and Laser-Induced Thermal Effects. <i>ECS Transactions</i> , 2011, 35, 21-33.	0.5	1
70	Infrared spectrum of elusive C ₂ F radical: A matrix-isolation and computational study. <i>Chemical Physics Letters</i> , 2010, 493, 220-224.	2.6	8
71	Ion irradiation of multi $\cdot\hat{A}\cdot\text{walled}$ boron nitride nanotubes. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2010, 7, 1256-1259.	0.8	17
72	HY $\cdot\hat{A}\cdot\text{N}_2$ and HXeY $\cdot\hat{A}\cdot\text{N}_2$ 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

#	ARTICLE	IF	CITATIONS
73	Continuous-wave laser annealing of Si-rich oxide: A microscopic picture of macroscopic Si ⁺ -SiO ₂ phase separation. <i>Journal of Applied Physics</i> , 2010, 108, .	2.5	15
74	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
75	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
76	Matrix Isolation and Ab Initio Study of Trans ⁺ Trans and Trans ⁺ Cis Dimers of Formic Acid. <i>Journal of Physical Chemistry A</i> , 2010, 114, 3495-3502.	2.5	74
77	Interaction of Formic Acid with Nitrogen: Stabilization of the Higher-Energy Conformer. <i>Journal of Physical Chemistry A</i> , 2010, 114, 10584-10589.	2.5	44
78	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
79	Spectroscopic study of <i>cis</i> -to- <i>trans</i> tunneling reaction of HCOOD in rare gas matrices. <i>Journal of Chemical Physics</i> , 2009, 130, 154509.	3.0	51
80	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
81	Matrix-isolation and ab initio study of HXeCCH complexed with acetylene. <i>Chemical Physics Letters</i> , 2009, 481, 83-87.	2.6	32
82	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
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	Noble-Gas Hydrides: New Chemistry at Low Temperatures. <i>Accounts of Chemical Research</i> , 2009, 42, 183-191.	15.6	241
85	Matrix-Isolation and Ab Initio Study of the HKrCl ⁺ ·HCl Complex. <i>Journal of Physical Chemistry A</i> , 2009, 113, 10687-10692.	2.5	31
86	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
87	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
88	Solution properties of an aqueous poly(methacryl oxyethyl trimethylammonium chloride) and its poly(oxyethylene) grafted analog. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2008, 46, 547-557.	2.1	5
89	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
90	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

#	ARTICLE	IF	CITATIONS
91	Experimental and Computational Study of HXeY $\cdot\cdot$ HX Complexes (X, Y = Cl and Br): An Example of Exceptionally Large Complexation Effect. <i>Journal of Physical Chemistry A</i> , 2008, 112, 5486-5494.	2.5	49
92	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
93	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
94	Hindered rotation of HARF in solid argon: Infrared spectroscopy and a theoretical model. <i>Physical Review B</i> , 2008, 77, .	3.2	14
95	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
96	Spectroscopy of silica layers containing Si nanocrystals: Experimental evidence of optical birefringence. <i>Journal of Applied Physics</i> , 2007, 101, 044310.	2.5	10
97	Silicon nanophotonics: light emission, wavelength-selective waveguiding, and laser-induced thermal effects. , 2007, , .		0
98	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
99	Photochemical Synthesis of H ₂ O ₂ from the H ₂ O $\cdot\cdot$ O(³ P) van der Waals Complex: Experimental Observations in Solid Krypton and Theoretical Modeling. <i>Journal of Physical Chemistry A</i> , 2007, 111, 11444-11449.	2.5	18
100	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
101	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
102	cis \rightarrow 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
103	Insight into Thermally Induced Phase Transformations of Erythromycin A Dihydrate. <i>Crystal Growth and Design</i> , 2006, 6, 369-374.	3.0	37
104	On theoretical predictions of noble-gas hydrides. <i>Journal of Chemical Physics</i> , 2006, 125, 184514.	3.0	84
105	UV Photolysis Products of Propiolic Acid in Noble-Gas Solids. <i>Journal of Physical Chemistry A</i> , 2006, 110, 11479-11487.	2.5	21
106	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
107	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
108	Protons solvated in noble-gas matrices: Interaction with nitrogen. <i>Physical Chemistry Chemical Physics</i> , 2006, 8, 2457-2463.	2.8	10

#	ARTICLE	IF	CITATIONS
109	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
110	HXeCCH in Ar and Kr matrices. <i>Journal of Chemical Physics</i> , 2006, 125, 074501.	3.0	32
111	Laser-controlled stress of Si nanocrystals in a free-standing Si ⁺ /SiO ₂ superlattice. <i>Applied Physics Letters</i> , 2006, 88, 013102.	3.3	43
112	Continuous-wave laser annealing of free-standing Si ⁺ /SiO ₂ superlattice: Modification of optical, structural, and light-emitting properties. <i>Journal of Applied Physics</i> , 2006, 100, 053502.	2.5	18
113	Laser-induced thermal effects on optical and light-emitting properties of free-standing silica films containing Si nanocrystals. , 2005, , .		1
114	Interaction of bihalogen anions with nitrogen: Matrix-isolation study and first principle calculations of the (ClHCl) ⁺ N ₂ and (BrHBr) ⁺ N ₂ complexes. <i>Chemical Physics Letters</i> , 2005, 405, 448-452.	2.6	3
115	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
116	Neutralization of solvated protons and formation of noble-gas hydride molecules: Matrix-isolation indications of tunneling mechanisms?. <i>Journal of Chemical Physics</i> , 2005, 123, 064507.	3.0	20
117	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
118	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
119	Rotational isomerization of small carboxylic acids isolated in argon matrices: Tunneling and quantum yields for the photoinduced processes. <i>Physical Chemistry Chemical Physics</i> , 2005, 7, 743-749.	2.8	66
120	Infrared absorption and electron paramagnetic resonance studies of vinyl radical in noble-gas matrices. <i>Journal of Chemical Physics</i> , 2005, 123, 064318.	3.0	41
121	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
122	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
123	Infrared-induced conformational interconversion in carboxylic acids isolated in low-temperature rare-gas matrices. <i>Vibrational Spectroscopy</i> , 2004, 34, 73-82.	2.2	42
124	A study on stabilization of HHeF molecule upon complexation with Xe atoms. <i>Chemical Physics Letters</i> , 2004, 390, 256-260.	2.6	33
125	Matrix isolation and quantum chemical studies on the H ₂ O ⁺ SO ₂ complex. <i>Physical Chemistry Chemical Physics</i> , 2004, 6, 4607-4613.	2.8	19
126	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

#	ARTICLE	IF	CITATIONS
127	Organo-noble-gas hydride compounds HKrCCH, HXeCCH, HXeCC, and HXeCCXeH: Formation mechanisms and effect of [¹³ C] isotope substitution on the vibrational properties. <i>Journal of Chemical Physics</i> , 2004, 121, 8291.	3.0	49
128	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
129	Formation of HXeO in a xenon matrix: Indirect evidence of production, trapping, and mobility of XeO ⁺ in solid Xe. <i>Journal of Chemical Physics</i> , 2004, 121, 1839-1848.	3.0	18
130	A Gate to Organokrypton Chemistry: HKrCCH. <i>Journal of the American Chemical Society</i> , 2003, 125, 6876-6877.	13.7	160
131	Vibrational spectroscopy of cis- and trans-formic acid in solid argon. <i>Journal of Molecular Spectroscopy</i> , 2003, 219, 70-80.	1.2	112
132	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
133	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
134	Fluorine-Free Organoxenon Chemistry: HXeCCH, HXeCC, and HXeCCXeH. <i>Journal of the American Chemical Society</i> , 2003, 125, 4696-4697.	13.7	181
135	A Neutral Xenon-Containing Radical, HXeO. <i>Journal of the American Chemical Society</i> , 2003, 125, 1454-1455.	13.7	80
136	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
137	Efficient wavelength-selective optical waveguiding in a silica layer containing Si nanocrystals. <i>Applied Physics Letters</i> , 2003, 83, 3018-3020.	3.3	48
138	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
139	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
140	Anomalous isotopic effect on vibrational properties of HXeOH. <i>Journal of Chemical Physics</i> , 2002, 116, 4758.	3.0	21
141	Comment on "Optical absorption measurements of silica containing Si nanocrystals produced by ion implantation and thermal annealing" [Appl. Phys. Lett. 80, 1325 (2002)]. <i>Applied Physics Letters</i> , 2002, 81, 1357-1358.	3.3	17
142	Isotopic effect on thermal mobility of atomic hydrogen in solid xenon. <i>Journal of Chemical Physics</i> , 2002, 116, 5708-5716.	3.0	61
143	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
144	UV Photolysis and Thermal Annealing of H ₂ S, HI, and H ₂ CO in Solid Xe: Electronic Absorption Spectra of the Products. <i>Journal of Physical Chemistry A</i> , 2002, 106, 7743-7747.	2.5	20

#	ARTICLE	IF	CITATIONS
145	Conformational Memory in Photodissociation of Formic Acid. Journal of the American Chemical Society, 2002, 124, 10994-10995.	13.7	75
146	HKrF in solid krypton. Journal of Chemical Physics, 2002, 116, 2508-2515.	3.0	133
147	On photochemistry of water in solid Xe: Thermal and light-induced decomposition of HXeOH and HXeH and formation of H ₂ O ₂ . Journal of Chemical Physics, 2002, 116, 5649-5656.	3.0	54
148	Thermal annealing of Si/SiO ₂ materials: Modification of structural and photoluminescence emission properties. Journal of Applied Physics, 2002, 92, 5856-5862.	2.5	62
149	HSO ₂ isomers in rare-gas solids. Physical Chemistry Chemical Physics, 2002, 4, 1549-1554.	2.8	50
150	Intermolecular Complexes of HXeOH with Water: Stabilization and Destabilization Effects. Journal of the American Chemical Society, 2002, 124, 10706-10711.	13.7	91
151	Experimental evidence of the solid-phase H+HXeH reaction. Chemical Physics Letters, 2002, 359, 135-140.	2.6	16
152	Hydrate formation during wet granulation studied by spectroscopic methods and multivariate analysis. Pharmaceutical Research, 2002, 19, 1285-1291.	3.5	99
153	A theoretical study of HArF, a newly observed neutral argon compound. Journal of Chemical Physics, 2001, 114, 836.	3.0	104
154	A More Stable Configuration of HArF in Solid Argon. Journal of the American Chemical Society, 2001, 123, 8610-8611.	13.7	170
155	A Matrix Isolation Spectroscopic and Quantum Chemical Study of Fumaric and Maleic Acid. Journal of Physical Chemistry A, 2001, 105, 3922-3933.	2.5	64
156	Red photoluminescence of gold island films. Applied Physics Letters, 2001, 78, 1994-1996.	3.3	38
157	Optical gain in Si/SiO ₂ lattice: Experimental evidence with nanosecond pulses. Applied Physics Letters, 2001, 79, 1249-1251.	3.3	158
158	Matrix Isolation and Ab Initio Study of the Hydrogen-Bonded H ₂ O ₂ -CO Complex. Chemistry - A European Journal, 2001, 7, 1670-1678.	3.3	34
159	Emission of SH radicals in solid krypton: mixed quantum-classical molecular dynamics simulations. Chemical Physics Letters, 2001, 338, 317-322.	2.6	6
160	Substrate-dependent crystallization and enhancement of visible photoluminescence in thermal annealing of Si/SiO ₂ superlattices. Applied Physics Letters, 2001, 78, 323-325.	3.3	68
161	Intermediate reactions in solid-state photolysis. Journal of Chemical Physics, 2001, 114, 7727-7730.	3.0	50
162	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

#	ARTICLE	IF	CITATIONS
163	Photolysis of HI in solid Xe: production and distribution of hydrogen atoms. <i>Chemical Physics Letters</i> , 2000, 323, 506-513.	2.6	32
164	A stable argon compound. <i>Nature</i> , 2000, 406, 874-876.	27.8	555
165	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
166	HONO in solid Kr: Site-selective trans \rightarrow cis isomerization with narrow-band infrared radiation. <i>Journal of Chemical Physics</i> , 2000, 113, 4265-4273.	3.0	70
167	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
168	Photochemistry of hydrogen peroxide in Kr and Xe matrixes. <i>Journal of Chemical Physics</i> , 2000, 112, 2187-2194.	3.0	44
169	Low-temperature thermoluminescence in solid argon: Short-range mobility of atoms. <i>Journal of Chemical Physics</i> , 1999, 111, 1650-1657.	3.0	36
170	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
171	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
172	A Chemical Compound Formed from Water and Xenon: HXeOH. <i>Journal of the American Chemical Society</i> , 1999, 121, 11904-11905.	13.7	166
173	HXeSH, the First Example of a Xenon-Sulfur Bond. <i>Journal of the American Chemical Society</i> , 1998, 120, 7979-7980.	13.7	143
174	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
175	193 nm photolysis of H ₂ S in rare-gas matrices: Luminescence spectroscopy of the products. <i>Journal of Chemical Physics</i> , 1998, 108, 5747-5754.	3.0	46
176	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
177	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
178	Raman Spectroscopy and Optical Properties of Amorphous Diamond-Like Carbon Films. , 0, , 403-421.		5