Mika Pettersson

List of Publications by Year
in descending order

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		53939	73587
134	6,761	47	79
papers	citations	h-index	g-index

136	136	136	4146
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Shaping graphene with optical forging: from a single blister to complex 3D structures. Nanoscale Advances, 2021, 3, 1431-1442.	2.2	5
2	Triggering a transient organo-gelation system in a chemically active solvent. Chemical Communications, 2021, 57, 10375-10378.	2.2	6
3	Tuning protein adsorption on graphene surfaces via laser-induced oxidation. Nanoscale Advances, 2021, 3, 2065-2074.	2.2	12
4	Covalent and non-covalent coupling of a Au₁₀₂ nanocluster with a fluorophore: energy transfer, quenching and intracellular pH sensing. Nanoscale Advances, 2021, 3, 6649-6658.	2.2	7
5	Deterministic Modification of CVD Grown Monolayer MoS₂ with Optical Pulses. Advanced Materials Interfaces, 2021, 8, 2002119.	1.9	6
6	Optical Modification of Monolayer MoS₂: Deterministic Modification of CVD Grown Monolayer MoS₂ with Optical Pulses (Adv. Mater. Interfaces 10/2021). Advanced Materials Interfaces, 2021, 8, 2170056.	1.9	0
7	Ultrastiff graphene. Npj 2D Materials and Applications, 2021, 5, .	3.9	9
8	Photoactive Yellow Protein Chromophore Photoisomerizes around a Single Bond if the Double Bond Is Locked. Journal of Physical Chemistry Letters, 2020, 11, 2177-2181.	2.1	4
9	Making Graphene Luminescent by Direct Laser Writing. Journal of Physical Chemistry C, 2020, 124, 8371-8377.	1.5	11
10	Revealing lattice disorder, oxygen incorporation and pore formation in laser induced two-photon oxidized graphene. Carbon, 2019, 143, 720-727.	5.4	21
11	Reduction-oxidation dynamics of oxidized graphene: Functional group composition dependent path to reduction. Carbon, 2018, 129, 396-402.	5.4	11
12	Optically Forged Diffraction-Unlimited Ripples in Graphene. Journal of Physical Chemistry Letters, 2018, 9, 6179-6184.	2.1	10
13	Chemical composition of two-photon oxidized graphene. Carbon, 2017, 115, 77-82.	5.4	36
14	Time-Resolved Coherent Anti-Stokes Raman Scattering of Graphene: Dephasing Dynamics of Optical Phonon. Journal of Physical Chemistry Letters, 2017, 8, 4108-4112.	2.1	21
15	Optical Forging of Graphene into Three-Dimensional Shapes. Nano Letters, 2017, 17, 6469-6474.	4.5	29
16	Preface to the Special Issue â€œISSPIC XVIII: International Symposium on Small Particles and Inorganic Clusters 2016â€• Journal of Physical Chemistry C, 2017, 121, 10629-10631.	1.5	0
17	Dynamic Stabilization of the Ligandâ€“Metal Interface in Atomically Precise Gold Nanoclusters Au₆₈ and Au₁₄₄ Protected by meta-Mercaptobenzoic Acid. ACS Nano, 2017, 11, 11872-11879.	7.3	37
18	Real-time monitoring of graphene patterning with wide-field four-wave mixing microscopy. Applied Physics Letters, 2016, 108, .	1.5	8

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19	Acidâ€“Base Properties and Surface Charge Distribution of the Water-Soluble Au₁₀₂(pMBA)₄₄ Nanocluster. Journal of Physical Chemistry C, 2016, 120, 10041-10050.	1.5	47
20	From Seeds to Islands: Growth of Oxidized Graphene by Two-Photon Oxidation. Journal of Physical Chemistry C, 2016, 120, 22330-22341.	1.5	21
21	Covalently linked multimers of gold nanoclusters Au₁₀₂(p-MBA)₄₄and Au_{â¼250}(p-MBA)_n. Nanoscale, 2016, 8, 18665-18674.	2.8	59
22	Insights into localized manipulation of organogel-related microcrystalline spherulite formation. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 474, 18-28.	2.3	4
23	Role of Vibrational Dynamics in Electronic Relaxation of Cr(acac)3. Journal of Physical Chemistry A, 2015, 119, 2727-2734.	1.1	14
24	Tribute to Markku O. RÃsÃnen. Journal of Physical Chemistry A, 2015, 119, 2187-2190.	1.1	1
25	Molecule-like Photodynamics of Au₁₀₂(pMBA)₄₄ Nanocluster. ACS Nano, 2015, 9, 2328-2335.	7.3	66
26	Photodynamics of a Molecular Water-Soluble Nanocluster Identified as Au₁₃₀(pMBA)₅₀. Journal of Physical Chemistry C, 2015, 119, 20224-20229.	1.5	20
27	Patterning and tuning of electrical and optical properties of graphene by laser induced two-photon oxidation. Nanoscale, 2015, 7, 2851-2855.	2.8	50
28	Local photo-oxidation of individual single walled carbon nanotubes probed by femtosecond four wave mixing imaging. Physical Chemistry Chemical Physics, 2015, 17, 209-216.	1.3	6
29	Background-Free Second-Harmonic Generation Microscopy of Individual Carbon Nanotubes. , 2015, , .		0
30	Site-specific targeting of enterovirus capsid by functionalized monodisperse gold nanoclusters. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 1277-1281.	3.3	95
31	Vibrational Perturbations and Ligandâ€“Layer Coupling in a Single Crystal of Au₁₄₄(SC₂H₄Ph)₆₀ Nanocluster. Journal of Physical Chemistry Letters, 2014, 5, 387-392.	2.1	34
32	Ultrafast Electronic Relaxation and Vibrational Cooling Dynamics of Au₁₄₄(SC₂H₄Ph)₆₀ Nanocluster Probed by Transient Mid-IR Spectroscopy. Journal of Physical Chemistry C, 2014, 118, 18233-18239.	1.5	49
33	Chemically Selective Imaging of Overlapping Câ€“H Stretching Vibrations with Time-Resolved Coherent Anti-Stokes Raman Scattering (CARS) Microscopy. Journal of Physical Chemistry B, 2014, 118, 4363-4369.	1.2	4
34	Electron microscopy of gold nanoparticles at atomic resolution. Science, 2014, 345, 909-912.	6.0	269
35	Synthesis of carbon nanotubes on FexOy doped Al2O3â€“ZrO2 nanopowder. Powder Technology, 2014, 266, 106-112.	2.1	8
36	Nondestructive Size Determination of Thiol-Stabilized Gold Nanoclusters in Solution by Diffusion Ordered NMR Spectroscopy. Analytical Chemistry, 2013, 85, 3489-3492.	3.2	57

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37	Why are hydrogen ions best for MeV ion beam lithography?. Microelectronic Engineering, 2013, 102, 22-24.	1.1	6
38	Visible Light-Driven Chemistry of Oxalic Acid in Solid Argon, Probed by Raman Spectroscopy. Journal of Physical Chemistry A, 2013, 117, 1492-1502.	1.1	11
39	Dynamics Behind the Long-Lived Coherences of I₂ in Solid Xe. Journal of Physical Chemistry A, 2013, 117, 4884-4897.	1.1	2
40	Raman spectroscopy and high-overtone driven isomerization of glyoxylic acid in solid argon. Biomedical Spectroscopy and Imaging, 2013, 2, 339-348.	1.2	0
41	Raman spectroscopy and crystal-field split rotational states of photoproducts CO and H2 after dissociation of formaldehyde in solid argon. Journal of Chemical Physics, 2012, 137, 164310.	1.2	3
42	Electronic spectroscopy of I2â€“Xe complexes in solid Krypton. Journal of Chemical Physics, 2012, 136, 174501.	1.2	2
43	Librational motion of CO in solid Ar: Raman and IR spectra and quantum simulations. Low Temperature Physics, 2012, 38, 708-716.	0.2	7
44	Experimental and Theoretical Determination of the Optical Gap of the Au₁₄₄(SC₂H₄Ph)₆₀ Cluster and the (Au/Ag)₁₄₄(SC₂H₄Ph)₆₀ Nanoalloys. Journal of Physical Chemistry Letters, 2012, 3, 3076-3080.	2.1	48
45	Long-Lived Electronic Coherence of Iodine in the Condensed Phase: Sharp Zero-Phonon Lines in the Bâ†”X Absorption and Emission of I₂ in Solid Xe. Journal of Physical Chemistry Letters, 2012, 3, 1847-1852.	2.1	1
46	Electronic and Vibrational Signatures of the Au₁₀₂(p-MBA)₄₄ Cluster. Journal of the American Chemical Society, 2011, 133, 3752-3755.	6.6	80
47	Synthesis and photophysical properties of hyperbranched polyfluorenes containing 2,4,6-tris(thiophen-2-yl)-1,3,5-triazine as the core. Physical Chemistry Chemical Physics, 2011, 13, 8838.	1.3	26
48	Raman spectroscopy of acetic acid monomer and dimers isolated in solid argon. Journal of Raman Spectroscopy, 2011, 42, 1670-1681.	1.2	31
49	Water-soluble carbon nanotubes through sugar azide functionalization. Carbon, 2011, 49, 1299-1304.	5.4	25
50	Rotational coherence imaging and control for CN molecules through time-frequency resolved coherent anti-Stokes Raman scattering. Journal of Chemical Physics, 2011, 135, 224514.	1.2	3
51	New nitrene functionalizations onto sidewalls of carbon nanotubes and their spectroscopic analysis. Carbon, 2010, 48, 2425-2434.	5.4	24
52	Impulsive excitation of high vibrational states in I2â€“Xe complex on the electronic ground state. Chemical Physics Letters, 2010, 491, 44-48.	1.2	3
53	Photolysis of HCOOH monomer and dimer in solid argon: Raman characterization of in situ formed molecular complexes. Physical Chemistry Chemical Physics, 2010, 12, 7138.	1.3	15
54	Femtosecond Four-Wave-Mixing Spectroscopy of Suspended Individual Semiconducting Single-Walled Carbon Nanotubes. ACS Nano, 2010, 4, 6780-6786.	7.3	17

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55	Electronic transport measurements and Raman spectroscopy on carbon nanotube devices. Physica Status Solidi (B): Basic Research, 2009, 246, 2853-2856.	0.7	0
56	Raman spectroscopy of formic acid and its dimers isolated in low temperature argon matrices. Chemical Physics Letters, 2009, 468, 176-183.	1.2	69
57	From Monomer to Bulk: Appearance of the Structural Motif of Solid Iodine in Small Clusters. Journal of the American Chemical Society, 2009, 131, 1050-1056.	6.6	18
58	Characterization of Ironâ^'Carbonyl-Protected Gold Clusters. Journal of the American Chemical Society, 2009, 131, 12573-12575.	6.6	17
59	Raman Spectroscopy and Low-Temperature Transport Measurements of Individual Single-Walled Carbon Nanotubes with Varying Thickness. Journal of Physical Chemistry C, 2009, 113, 15398-15404.	1.5	6
60	Vibrational Relaxation of Matrix-Isolated Carboxylic Acid Dimers and Monomers. Journal of Physical Chemistry A, 2009, 113, 7227-7234.	1.1	21
61	Iodineâ^'Benzene Complex as a Candidate for a Real-Time Control of a Bimolecular Reaction. Spectroscopic Studies of the Properties of the 1:1 Complex Isolated in Solid Krypton. Journal of Physical Chemistry A, 2009, 113, 6326-6333.	1.1	15
62	Vibrational Characterization of the 1:1 Iodineâ^'Benzene Complex Isolated in Solid Krypton. Journal of Physical Chemistry A, 2008, 112, 5025-5027.	1.1	7
63	Investigating isomerization reactions in solid state by using simultaneous high overtone pumping and Raman detection. Journal of Chemical Physics, 2008, 129, 041101.	1.2	9
64	Molecular coupling of light with plasmonic waveguides. Optics Express, 2007, 15, 9908.	1.7	19
65	Temperature Dependence of Electronic Transitions of Single-Wall Carbon Nanotubes:â€‰ Observation of an Abrupt Blueshift in Near-Infrared Absorption. Journal of Physical Chemistry C, 2007, 111, 1888-1894.	1.5	4
66	Relaxation Dynamics of Cr(acac)3Probed by Ultrafast Infrared Spectroscopy. Journal of the American Chemical Society, 2007, 129, 8934-8935.	6.6	17
67	Ultrafast Electronic and Vibrational Energy Relaxation of Fe(acetylacetonate)3 in Solution. Journal of Physical Chemistry A, 2007, 111, 2054-2061.	1.1	24
68	Femtosecond coherent anti-Stokes Raman-scattering polarization beat spectroscopy of I2â€“Xe complex in solid krypton. Journal of Chemical Physics, 2006, 125, 164302.	1.2	13
69	Time-resolved coherent anti-Stokes Raman-scattering measurements of I2 in solid Kr: Vibrational dephasing on the ground electronic state at 2.6â€“32 K. Journal of Chemical Physics, 2005, 123, 064509.	1.2	31
70	Internal Rotation in Propionic Acid:Â Near-Infrared-Induced Isomerization in Solid Argon. Journal of Physical Chemistry A, 2005, 109, 3617-3625.	1.1	72
71	Rotational isomerization of small carboxylic acids isolated in argon matrices: Tunnelling and quantum yields for the photoinduced processes. Physical Chemistry Chemical Physics, 2005, 7, 743-749.	1.3	66
72	Infrared-induced conformational interconversion in carboxylic acids isolated in low-temperature rare-gas matrices. Vibrational Spectroscopy, 2004, 34, 73-82.	1.2	42

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73	A study on stabilization of HHeF molecule upon complexation with Xe atoms. Chemical Physics Letters, 2004, 390, 256-260.	1.2	33
74	Matrix isolation and quantum chemical studies on the H2O2â€“SO2complex. Physical Chemistry Chemical Physics, 2004, 6, 4607-4613.	1.3	19
75	Formation of HXeO in a xenon matrix: Indirect evidence of production, trapping, and mobility of XeOâ€Š(1â€Š1Î£+) in solid Xe. Journal of Chemical Physics, 2004, 121, 1839-1848.	1.2	18
76	A Gate to Organokrypton Chemistry:Â HKrCCH. Journal of the American Chemical Society, 2003, 125, 6876-6877.	6.6	160
77	Vibrational spectroscopy of cis- and trans-formic acid in solid argon. Journal of Molecular Spectroscopy, 2003, 219, 70-80.	0.4	112
78	Interaction of rare-gas-containing molecules with nitrogen: Matrix-isolation and ab initio study of HArFâ‹¯N2, HKrFâ‹¯N2, and HKrClâ‹¯N2 complexes. Journal of Chemical Physics, 2003, 118, 11120-11128.	1.2	90
79	Fluorine-Free Organoxenon Chemistry:â€‰ HXeCCH, HXeCC, and HXeCCXeH. Journal of the American Chemical Society, 2003, 125, 4696-4697.	6.6	181
80	A Neutral Xenon-Containing Radical, HXeO. Journal of the American Chemical Society, 2003, 125, 1454-1455.	6.6	80
81	Rotational Isomerism in Acetic Acid:Â The First Experimental Observation of the High-Energy Conformer. Journal of the American Chemical Society, 2003, 125, 16188-16189.	6.6	119
82	Conformational Isomerization of Formic Acid by Vibrational Excitation at Energies below the Torsional Barrier. Journal of the American Chemical Society, 2003, 125, 4058-4059.	6.6	83
83	H/D isotope effects on formation and photodissociation of HKrCl in solid Kr. Journal of Chemical Physics, 2003, 118, 6403-6410.	1.2	36
84	Trapping site structures of HArF and HKrF in solid rare gases. Journal of Chemical Physics, 2003, 119, 7356-7364.	1.2	25
85	Anomalous isotopic effect on vibrational properties of HXeOH. Journal of Chemical Physics, 2002, 116, 4758.	1.2	21
86	Isotopic effect on thermal mobility of atomic hydrogen in solid xenon. Journal of Chemical Physics, 2002, 116, 5708-5716.	1.2	61
87	Large blueshift of the Hâ€“Kr stretching frequency of HKrCl upon complexation with N2. Journal of Chemical Physics, 2002, 117, 961-964.	1.2	63
88	UV Photolysis and Thermal Annealing of H2S, HI, and H2CO in Solid Xe:Â Electronic Absorption Spectra of the Products. Journal of Physical Chemistry A, 2002, 106, 7743-7747.	1.1	20
89	Conformational Memory in Photodissociation of Formic Acid. Journal of the American Chemical Society, 2002, 124, 10994-10995.	6.6	75
90	HKrF in solid krypton. Journal of Chemical Physics, 2002, 116, 2508-2515.	1.2	133

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91	On photochemistry of water in solid Xe: Thermal and light-induced decomposition of HXeOH and HXeH and formation of H2O2. Journal of Chemical Physics, 2002, 116, 5649-5656.	1.2	54
92	Intermolecular Complexes of HXeOH with Water:â€‰ Stabilization and Destabilization Effects. Journal of the American Chemical Society, 2002, 124, 10706-10711.	6.6	91
93	Experimental evidence of the solid-phase H+HXeH reaction. Chemical Physics Letters, 2002, 359, 135-140.	1.2	16
94	A theoretical study of HArF, a newly observed neutral argon compound. Journal of Chemical Physics, 2001, 114, 836.	1.2	104
95	A More Stable Configuration of HArF in Solid Argon. Journal of the American Chemical Society, 2001, 123, 8610-8611.	6.6	170
96	A Matrix Isolation Spectroscopic and Quantum Chemical Study of Fumaric and Maleic Acid. Journal of Physical Chemistry A, 2001, 105, 3922-3933.	1.1	64
97	FT-IR Breath Test in the Diagnosis and Control of Treatment of Methanol Intoxications. Journal of Analytical Toxicology, 2001, 25, 26-30.	1.7	18
98	Intermediate reactions in solid-state photolysis. Journal of Chemical Physics, 2001, 114, 7727-7730.	1.2	50
99	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.	0.4	20
100	Infrared spectrum of HXeI revisited: anharmonic vibrational calculations and matrix isolation experiments. Chemical Physics Letters, 2000, 322, 389-394.	1.2	50
101	Photolysis of HI in solid Xe: production and distribution of hydrogen atoms. Chemical Physics Letters, 2000, 323, 506-513.	1.2	32
102	UV photolysis in rare-gas solids: spectral overlap between absorbers and emitters. Chemical Physics Letters, 2000, 316, 115-121.	1.2	10
103	Computer experiments on xenon-containing molecules. Computers & Chemistry, 2000, 24, 325-330.	1.2	18
104	A stable argon compound. Nature, 2000, 406, 874-876.	13.7	555
105	Electronic structure and short-range recombination dynamics of S2 in solid argon. Journal of Chemical Physics, 2000, 112, 7475-7483.	1.2	22
106	Photochemistry of HNCO in Solid Xenon:Â Photoinduced and Thermally Activated Formation of HXeNCOâ€. Journal of Physical Chemistry A, 2000, 104, 3579-3583.	1.1	65
107	Photochemistry of hydrogen peroxide in Kr and Xe matrixes. Journal of Chemical Physics, 2000, 112, 2187-2194.	1.2	44
108	The Use of Low-Resolution FT-IR Spectrometry for the Analysis of Alcohols in Breath. Journal of Analytical Toxicology, 2000, 24, 250-256.	1.7	18

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109	Infrared-Induced Rotamerization of Oxalic Acid Monomer in Argon Matrix. Journal of Physical Chemistry A, 2000, 104, 6956-6961.	1.1	61
110	Conformational Analysis and Near-Infrared-Induced Rotamerization of Malonic Acid in an Argon Matrix. Journal of Physical Chemistry A, 2000, 104, 11725-11732.	1.1	46
111	Low-temperature thermoluminescence in solid argon: Short-range mobility of atoms. Journal of Chemical Physics, 1999, 111, 1650-1657.	1.2	36
112	Excited-state site effects in luminescence spectroscopy of SH radicals in krypton matrices: Experiment and simulations. Journal of Chemical Physics, 1999, 110, 5836-5843.	1.2	13
113	Quantum chemical potential energy surfaces for HXeCl. Chemical Physics, 1999, 244, 25-34.	0.9	17
114	Laser-induced fluorescence studies of S2+ in solid argon. Chemical Physics Letters, 1999, 302, 324-330.	1.2	5
115	Infrared spectroscopy and 266 nm photolysis of H2S2 in solid Ar. Chemical Physics Letters, 1999, 311, 47-54.	1.2	28
116	New Rare-Gas-Containing Neutral Molecules. European Journal of Inorganic Chemistry, 1999, 1999, 729-737.	1.0	162
117	The dihydrogen-bonded complex XeH2â€“H2O. Physical Chemistry Chemical Physics, 1999, 1, 1691-1697.	1.3	31
118	Infrared Spectroscopy of H2S and SH in Rare-Gas Matrixes. Journal of Physical Chemistry A, 1999, 103, 679-685.	1.1	62
119	The proton-bound rare gas compounds (RgHRgâ€²)+ (Rg=Ar, Kr, Xe)â€”a computational approach. Physical Chemistry Chemical Physics, 1999, 1, 4151-4155.	1.3	44
120	Matrix Isolation and ab Initio Studies of 1:1 Hydrogen-Bonded Complexes HCNâ‹¯H2O and HNCâ‹¯H2O Produced by Photolysis of Formaldoxime. Journal of Physical Chemistry A, 1999, 103, 2945-2951.	1.1	73
121	A Chemical Compound Formed from Water and Xenon:Â HXeOH. Journal of the American Chemical Society, 1999, 121, 11904-11905.	6.6	166
122	Photochemistry of HNCO in Solid Xe:Â Channels of UV Photolysis and Creation of H2NCO Radicals. Journal of Physical Chemistry A, 1999, 103, 9154-9162.	1.1	67
123	Spinâ€“orbit transitions (2P1/2â†2P3/2) of iodine and bromine atoms in solid rare-gases. Chemical Physics Letters, 1998, 283, 1-6.	1.2	19
124	On self-limitation of UV photolysis in rare-gas solids and some of its consequences for matrix studies. Chemical Physics Letters, 1998, 288, 727-733.	1.2	55
125	Photochemical Studies of Hydrogen Peroxide in Solid Rare Gases:Â Formation of the HOHÂ·Â·Â·O(3P) Complex. Journal of Physical Chemistry A, 1998, 102, 7643-7648.	1.1	60
126	HXeSH, the First Example of a Xenonâ‹¯Sulfur Bond. Journal of the American Chemical Society, 1998, 120, 7979-7980.	6.6	143

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127	Neutral rare-gas containing charge-transfer molecules in solid matrices. III. HXeCN, HXeNC, and HKrCN in Kr and Xe. Journal of Chemical Physics, 1998, 109, 618-625.	1.2	191
128	193 nm photolysis of H2S in rare-gas matrices: Luminescence spectroscopy of the products. Journal of Chemical Physics, 1998, 108, 5747-5754.	1.2	46
129	The mechanism of formation and infrared-induced decomposition of HXeI in solid Xe. Journal of Chemical Physics, 1997, 107, 8423-8431.	1.2	120
130	IR Spectroscopic Study of H2O2, HDO2, and D2O2 Isolated in Ar, Kr, and Xe Matrices. Journal of Physical Chemistry A, 1997, 101, 1166-1171.	1.1	119
131	IR Spectrum of the Other Rotamer of Formic Acid,cis-HCOOH. Journal of the American Chemical Society, 1997, 119, 11715-11716.	6.6	210
132	Gases evolved in the thermal decomposition of potassium cobalt hexacyanoferrate(II). Thermochimica Acta, 1995, 265, 25-30.	1.2	19
133	Neutral rareâ€gas containing chargeâ€transfer molecules in solid matrices. I. HXeCl, HXeBr, HXeI, and HKrCl in Kr and Xe. Journal of Chemical Physics, 1995, 102, 6423-6431.	1.2	266
134	Neutral rareâ€gas containing chargeâ€transfer molecules in solid matrices. II. HXeH, HXeD, and DXeD in Xe. Journal of Chemical Physics, 1995, 103, 205-210.	1.2	180