

Lester S Andrews

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580
papers

21,323
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68
h-index

98
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594
ext. papers

22,469
ext. citations

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avg, IF

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L-index

#	Paper	IF	Citations
580	Spectroscopic and theoretical investigations of vibrational frequencies in binary unsaturated transition-metal carbonyl cations, neutrals, and anions. <i>Chemical Reviews</i> , 2001 , 101, 1931-61	68.1	384
579	Reactions of boron atoms with molecular oxygen. Infrared spectra of BO, BO ₂ , B ₂ O ₂ , B ₂ O ₃ , and BO ₂ in solid argon. <i>Journal of Chemical Physics</i> , 1991 , 95, 8697-8709	3.9	319
578	Spectroscopic and theoretical studies of transition metal oxides and dioxygen complexes. <i>Chemical Reviews</i> , 2009 , 109, 6765-808	68.1	317
577	Matrix infrared spectra and density functional calculations of transition metal hydrides and dihydrogen complexes. <i>Chemical Society Reviews</i> , 2004 , 33, 123-32	58.5	295
576	Infrared spectra and density functional theory calculations on transition metal nitrosyls. Vibrational frequencies of unsaturated transition metal nitrosyls. <i>Chemical Reviews</i> , 2002 , 102, 885-912	68.1	272
575	Noble gas-actinide compounds: complexation of the CUO molecule by Ar, Kr, and Xe atoms in noble gas matrices. <i>Science</i> , 2002 , 295, 2242-5	33.3	205
574	Matrix Preparation and Spectroscopic and Theoretical Investigations of Simple Methylidene and Methylidyne Complexes of Group 4B Transition Metals. <i>Organometallics</i> , 2006 , 25, 4040-4053	3.8	199
573	Reactions of Laser Ablated Titanium, Zirconium, and Hafnium Atoms with Oxygen Molecules in Condensing Argon. <i>The Journal of Physical Chemistry</i> , 1995 , 99, 6356-6366		152
572	Reactions of Pulsed-Laser Evaporated Boron Atoms with Hydrogen. Infrared Spectra of Boron Hydride Intermediate Species in Solid Argon. <i>Journal of the American Chemical Society</i> , 1994 , 116, 4970-4974	16.4	151
571	Infrared Spectrum, Structure, Vibrational Potential Function, and Bonding in the Lithium Superoxide Molecule LiO ₂ . <i>Journal of Chemical Physics</i> , 1969 , 50, 4288-4299	3.9	146
570	Similarities and differences in the structure of 3d-metal monocarbides and monoxides. <i>Theoretical Chemistry Accounts</i> , 2003 , 109, 298-308	1.9	145
569	Pulsed laser-assisted reactions of boron and nitrogen atoms in a condensing nitrogen stream. <i>The Journal of Physical Chemistry</i> , 1992 , 96, 9177-9182		143
568	Reactions of Laser-Ablated Iron Atoms with Oxygen Molecules in Condensing Argon. Infrared Spectra and Density Functional Calculations of Iron Oxide Product Molecules. <i>The Journal of Physical Chemistry</i> , 1996 , 100, 5261-5273		141
567	Noble Gas Complexes with BeO: Infrared Spectra of NG-BeO (NG = Ar, Kr, Xe). <i>Journal of the American Chemical Society</i> , 1994 , 116, 423-424	16.4	130
566	Infrared Spectrum of the Trichloromethyl Radical in Solid Argon. <i>Journal of Chemical Physics</i> , 1968 , 48, 972-979	3.9	121
565	Infrared Spectra of UO ₂ , UO ₂ ⁺ , and UO ₂ ⁻ in Solid Neon. <i>Journal of Physical Chemistry A</i> , 2000 , 104, 5495-5502		119
564	Noble gas-actinide complexes of the CUO molecule with multiple Ar, Kr, and Xe atoms in noble-gas matrices. <i>Journal of the American Chemical Society</i> , 2003 , 125, 3126-39	16.4	117

- 563 The infrared spectrum of Al₂H₆ in solid hydrogen. *Science*, **2003**, 299, 2049-52 33.3 116
- 562 Argon matrix infrared spectra and vibrational analysis of the hydroperoxyl and deuteroperoxyl free radicals. *Journal of Chemical Physics*, **1974**, 60, 81-85 3.9 112
- 561 Matrix Reactions of K and Rb Atoms with Oxygen Molecules. *Journal of Chemical Physics*, **1971**, 54, 4935-4943 3.9 111
- 560 Matrix Infrared Spectroscopic and ab Initio Studies of ZnH₂, CdH₂, and Related Metal Hydride Species. *The Journal of Physical Chemistry*, **1995**, 99, 7925-7934 10.9
- 559 Infrared spectra of aluminum hydrides in solid hydrogen: Al₂H₄ and Al₂H₆. *Journal of the American Chemical Society*, **2003**, 125, 9218-28 16.4 105
- 558 Mercury is a transition metal: the first experimental evidence for HgF(4). *Angewandte Chemie - International Edition*, **2007**, 46, 8371-5 16.4 103
- 557 Reaction of Laser-Ablated Uranium Atoms with CO: Infrared Spectra of the CUO, CUO⁻, OUCCO, (U-C₂)UO₂, and U(CO)_x (x = 1B) Molecules in Solid Neon. *Journal of the American Chemical Society*, **1999**, 121, 9712-9721 16.4 103
- 556 Matrix infrared spectra of NUN formed by the insertion of uranium atoms into molecular nitrogen. *Journal of Chemical Physics*, **1993**, 98, 6070-6074 3.9 102
- 555 Reactions of pulsed-laser evaporated uranium atoms with molecular oxygen: Infrared spectra of UO, UO₂, UO₃, UO₂⁺, UO₂²⁺, and UO₃⁺ in solid argon. *Journal of Chemical Physics*, **1993**, 98, 3690-3696 3.9 102
- 554 Matrix reactions of alkali metal atoms with ozone: Infrared spectra of the alkali metal ozonide molecules. *Journal of Chemical Physics*, **1973**, 59, 1851-1862 3.9 99
- 553 Polyfluoride anions, a matrix-isolation and quantum-chemical investigation. *Inorganic Chemistry*, **2010**, 49, 7156-64 5.1 98
- 552 Experimental and Theoretical Evidence for the Formation of Several Uranium Hydride Molecules. *Journal of the American Chemical Society*, **1997**, 119, 1682-1687 16.4 96
- 551 On microwave discharge sources of new chemical species for matrix-isolation spectroscopy and the identification of charged species. *Journal of Chemical Physics*, **1976**, 65, 1244-1249 3.9 95
- 550 Reactions of Laser-Ablated Ni, Pd, and Pt Atoms with Carbon Monoxide: Matrix Infrared Spectra and Density Functional Calculations on M(CO)_n (n = 1A), M(CO)_n⁻ (n = 1B), and M(CO)_n⁺ (n = 1C), (M = Ni, Pd, Pt). *Journal of Physical Chemistry A*, **2000**, 104, 3905-3914 2.8 94
- 549 FTIR spectra of ammonia clusters in noble gas matrices. *Journal of Chemical Physics*, **1987**, 87, 5131-5140 3.9 91
- 548 Reactions of laser-ablated chromium atoms with dioxygen. Infrared spectra of CrO, OCrO, CrOO, CrO₃, Cr(OO)₂, Cr₂O₂, Cr₂O₃ and Cr₂O₄ in solid argon. *Journal of Chemical Physics*, **1997**, 107, 2798-2806 3.9 90
- 547 Reactions of Laser-Ablated Ag and Au Atoms with Carbon Monoxide: Matrix Infrared Spectra and Density Functional Calculations on Ag(CO)_n (n = 2, 3), Au(CO)_n (n = 1, 2) and M(CO)_n⁺ (n = 1A; M = Ag, Au). *Journal of Physical Chemistry A*, **2000**, 104, 9156-9164 2.8 90
- 546 FTIR spectra of hydrogen fluoride complexes in solid argon. *The Journal of Physical Chemistry*, **1984**, 88, 2940-2949 8.9

545	Raman Spectra of the Products of Na and K Atom Argon Matrix Reactions with O ₂ Molecules. <i>Journal of Chemical Physics</i> , 1972 , 57, 1327-1333	3.9	88
544	Reactions of Laser-Ablated Vanadium Atoms with Dioxygen. Infrared Spectra of VO, VO ₂ , OOVO ₂ , and V ₂ O ₂ in Solid Argon. <i>Journal of Physical Chemistry A</i> , 1997 , 101, 5090-5096	2.8	87
543	Reactions of pulsed-laser ablated aluminum atoms with hydrogen: infrared spectra of aluminum hydride (AlH, AlH ₂ , AlH ₃ , and Al ₂ H ₂) species. <i>The Journal of Physical Chemistry</i> , 1993 , 97, 10295-10300		87
542	Reactions of Laser-Ablated Iron Atoms with Oxygen Molecules: Matrix Infrared Spectra and Density Functional Calculations of OFeO, FeOO, and Fe(O ₂). <i>Journal of the American Chemical Society</i> , 1996 , 118, 467-470	16.4	86
541	Reactions of Laser-Ablated Niobium and Tantalum Atoms with Oxygen Molecules: Infrared Spectra of Niobium and Tantalum Oxide Molecules, Anions, and Cations. <i>Journal of Physical Chemistry A</i> , 1998 , 102, 8251-8260	2.8	84
540	Infrared spectra of group 14 hydrides in solid hydrogen: experimental observation of PbH ₄ , Pb ₂ H ₂ , and Pb ₂ H ₄ . <i>Journal of the American Chemical Society</i> , 2003 , 125, 6581-7	16.4	83
539	Reactions of Laser-Ablated Nickel Atoms with Dioxygen. Infrared Spectra and Density Functional Calculations of Nickel Oxides NiO, ONiO, Ni ₂ O ₂ , and Ni ₂ O ₃ , Superoxide NiOO, Peroxide Ni(O ₂), and Higher Complexes in Solid Argon. <i>Journal of Physical Chemistry A</i> , 1997 , 101, 3109-3118	2.8	82
538	Infrared spectra and structures of the stable CuH(2)(-), AgH(2)(-), AuH(2)(-), and AuH(4)(-) anions and the AuH(2) molecule. <i>Journal of the American Chemical Society</i> , 2003 , 125, 11751-60	16.4	82
537	Significant interactions between uranium and noble-gas atoms: coordination of the UO ₂ ⁺ cation by Ne, Ar, Kr, and Xe atoms. <i>Angewandte Chemie - International Edition</i> , 2004 , 43, 2554-7	16.4	80
536	Infrared spectra and structures of isotopically enriched sulfur (S ₃ and S ₄) in solid argon. <i>The Journal of Physical Chemistry</i> , 1991 , 95, 79-86		80
535	Infrared spectra of OCH ₃ hydrogen-bonded complexes in solid argon. <i>Journal of Chemical Physics</i> , 1983 , 78, 6347-6352	3.9	80
534	Infrared Spectrum of the Methyl Radical in Solid Argon. <i>Journal of Chemical Physics</i> , 1967 , 47, 3637-3644	3.9	80
533	Visible Spectra of Lithium in Inert-Gas Matrices. <i>Journal of Chemical Physics</i> , 1967 , 47, 2905-2910	3.9	79
532	Raman and Infrared Spectra of LiO ₂ in Oxygen Matrices. <i>Journal of Chemical Physics</i> , 1972 , 56, 3398-3403	3.9	78
531	Argon matrix Raman spectrum of LiO ₂ . Bonding in the M+O ₂ ⁺ molecules and the ionic model. <i>Journal of Chemical Physics</i> , 1973 , 58, 2258-2261	3.9	77
530	Agostic interaction in the methylenide metal dihydride complexes H ₂ MCH ₂ (M=Y, Zr, Nb, Mo, Ru, Th, or U). <i>Journal of Physical Chemistry A</i> , 2007 , 111, 6420-4	2.8	75
529	Matrix photoionization and radiolysis of dichloromethane and dibromomethane. Infrared and ultraviolet absorption spectra and photolysis of CH ₂ Cl ₂ ⁺ and CH ₂ Br ₂ ⁺ . <i>Journal of the American Chemical Society</i> , 1979 , 101, 9-15	16.4	75
528	Formation of unprecedented actinide triple bond carbon in uranium methyldiyne molecules. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 18919-24	11.5	74

527	Matrix reactions of alkali metal fluoride molecules with fluorine. Infrared and Raman spectra of the trifluoride ion in the M+F ₃ - species. <i>Journal of the American Chemical Society</i> , 1976 , 98, 1591-1593	16.4	74
526	Infrared Spectra of Magnesium Hydride Molecules, Complexes, and Solid Magnesium Dihydride. <i>Journal of Physical Chemistry A</i> , 2004 , 108, 11511-11520	2.8	73
525	On the electronic structure of molecular UO ₂ in the presence of Ar atoms: evidence for direct U-Ar bonding. <i>Journal of the American Chemical Society</i> , 2004 , 126, 3424-5	16.4	73
524	Reactions of beryllium atoms with hydrogen. Matrix infrared spectra of novel product molecules. <i>Journal of the American Chemical Society</i> , 1993 , 115, 12111-12116	16.4	72
523	Reactions of Laser-Ablated Copper Atoms with Dioxygen. Infrared Spectra of the Copper Oxides CuO, OCuO, CuOCuO, and OCuOCuO and Superoxide CuOO in Solid Argon. <i>Journal of Physical Chemistry A</i> , 1997 , 101, 4026-4034	2.8	71
522	Reactions of Laser-Ablated Manganese Atoms with Dioxygen. Infrared Spectra of MnO, OMnO, Mn(O ₂), (MnO) ₂ , and Higher Oxide Complexes in Solid Argon. <i>Journal of Physical Chemistry A</i> , 1997 , 101, 8547-8553	2.8	71
521	Simple N≡UF ₃ and P≡UF ₃ molecules with triple bonds to uranium. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 5366-70	16.4	71
520	Reactions of laser-ablated iron atoms with carbon monoxide: Infrared spectra and density functional calculations of Fe _x CO, Fe(CO) _x , and Fe(CO) _x (x=1,2,3) in solid argon. <i>Journal of Chemical Physics</i> , 1998 , 109, 10893-10904	3.9	71
519	Infrared spectra and pseudopotential calculations for NUO ⁺ , NUO, and NThO in solid neon. <i>Journal of Chemical Physics</i> , 1999 , 111, 11044-11049	3.9	71
518	Infrared Spectrum of Dichlorocarbene in Solid Argon. <i>Journal of Chemical Physics</i> , 1968 , 48, 979-982	3.9	71
517	Matrix reactions of cesium atoms with oxygen molecules. Infrared spectrum and vibrational analysis of cesium superoxide (Cs+O ₂ ⁻). Infrared observation of cesium peroxide (Cs+O ₂ ²⁻ -Cs ⁺) and cesium disuperoxide (Cs+O ₄ ⁻). Theoretical structure of alkali metal oxides (M+O ₄ ⁻). <i>The Journal of Physical Chemistry</i> , 1973 , 77, 1065-1073		71
516	Infrared spectra of the CO ₂ ⁻ and C ₂ O ₄ ⁻ anions isolated in solid argon. <i>Journal of Chemical Physics</i> , 1999 , 110, 2414-2422	3.9	70
515	Reactions of Laser-Ablated Co, Rh, and Ir with CO: Infrared Spectra and Density Functional Calculations of the Metal Carbonyl Molecules, Cations and Anions in Solid Neon. <i>Journal of Physical Chemistry A</i> , 1999 , 103, 7773-7784	2.8	70
514	Infrared spectra of the CO ₂ ····HF and N ₂ O····HF complexes in solid argon at 12 K. <i>Journal of Chemical Physics</i> , 1982 , 76, 2875-2880	3.9	70
513	Reactions of Laser-Ablated V, Cr, and Mn Atoms with Nitrogen Atoms and Molecules. Infrared Spectra and Density Functional Calculations on Metal Nitrides and Dinitrogen Complexes. <i>Journal of Physical Chemistry A</i> , 1997 , 101, 8417-8427	2.8	69
512	Infrared spectrum and bonding in uranium methylenide dihydride, CH ₂ =UH ₂ . <i>Inorganic Chemistry</i> , 2007 , 46, 4917-25	5.1	68
511	Reactions of Laser-Ablated Aluminum Atoms with Nitrogen Atoms and Molecules. Infrared Spectra and Density Functional Calculations for the AlN ₂ , Al ₂ N, Al ₂ N ₂ , AlN ₃ , and Al ₃ N Molecules. <i>Journal of Physical Chemistry A</i> , 2000 , 104, 1656-1661	2.8	68
510	Infrared Spectrum of Methyl Lithium Monomer in Solid Argon. <i>Journal of Chemical Physics</i> , 1967 , 47, 4834-4842	3.9	68

509	Reactions of Laser-Ablated Cobalt Atoms with O ₂ . Infrared Spectra of Cobalt Oxides in Solid Argon. <i>Journal of Physical Chemistry A</i> , 1997 , 101, 8793-8802	2.8	67
508	The C-H activation of methane by laser-ablated zirconium atoms: CH ₂ =ZrH ₂ , the simplest carbene hydride complex, agostic bonding, and (CH ₃) ₂ ZrH ₂ . <i>Journal of the American Chemical Society</i> , 2005 , 127, 465-73	16.4	67
507	Characterization of the Reaction Products of Laser-Ablated Early Lanthanide Metal Atoms with Molecular Oxygen. Infrared Spectra of LnO, LnO ⁺ , LnO ⁻ , LnO ₂ , LnO ₂ ⁺ , LnO ₂ ⁻ , LnO ₃ ⁻ , and (LnO) ₂ in Solid Argon. <i>Journal of Physical Chemistry A</i> , 1999 , 103, 3171-3183	2.8	66
506	Infrared spectrum and structure of CH ₂ =ThH ₂ . <i>Journal of Physical Chemistry A</i> , 2005 , 109, 6796-8	2.8	65
505	Chromium Hydrides and Dihydrogen Complexes in Solid Neon, Argon, and Hydrogen: Matrix Infrared Spectra and Quantum Chemical Calculations. <i>Journal of Physical Chemistry A</i> , 2003 , 107, 570-578	2.8	65
504	Gold hydrides AuH and (H ₂)AuH and the AuH(3) transition state stabilized in (H ₂)AuH(3): infrared spectra and DFT calculations. <i>Journal of the American Chemical Society</i> , 2001 , 123, 12899-900	16.4	65
503	Reactions of laser-ablated iron atoms and cations with carbon monoxide: Infrared spectra of FeCO ⁺ , Fe(CO) ₂ ⁺ , Fe(CO) _x , and Fe(CO) _x ⁺ (x=1-4) in solid neon. <i>Journal of Chemical Physics</i> , 1999 , 110, 10370-10379	3.9	65
502	Infrared spectra and density functional calculations of Cu(CO) ₁₋₄ ⁺ , Cu(CO) ₁₋₄ , and Cu(CO) ₁₋₄ ⁻ in solid neon. <i>Journal of Chemical Physics</i> , 1999 , 111, 4548-4557	3.9	65
501	Pulsed laser evaporated boron atom reactions with acetylene. Infrared spectra and quantum chemical structure and frequency calculations for several novel organoborane BC ₂ H ₂ and HBC ₂ molecules. <i>The Journal of Physical Chemistry</i> , 1993 , 97, 5839-5847		65
500	Infrared and Raman spectra of the M ⁺ F ₃ ⁻ ion pairs and their mixed chlorine-fluorine counterparts in solid argon. <i>Inorganic Chemistry</i> , 1977 , 16, 2024-2028	5.1	65
499	Infrared Spectra of the Novel Si ₂ H ₂ and Si ₂ H ₄ Species and the SiH _{1,2,3} Intermediates in Solid Neon, Argon, and Deuterium. <i>Journal of Physical Chemistry A</i> , 2002 , 106, 7696-7702	2.8	64
498	Infrared Spectra and Density Functional Calculations for OScCO, Sc-(O-CO)O, OSc-(O-CO), and Three OScCO ⁺ Cation Isomers in Solid Argon. <i>Journal of the American Chemical Society</i> , 1998 , 120, 13230-13239	16.4	64
497	FTIR spectra of water-hydrogen fluoride complexes in solid argon. Evidence for inversion doubling in the HF librational modes of H ₂ O...HF. <i>Journal of Chemical Physics</i> , 1983 , 79, 3670-3677	3.9	64
496	The Reaction of Zinc, Cadmium, and Mercury Atoms with Methane: Infrared Spectra of the Matrix-Isolated Methylmetal Hydrides. <i>Journal of the American Chemical Society</i> , 1995 , 117, 8180-8187	16.4	62
495	Reactions of Pulsed-Laser-Evaporated Al with C and C ₂ H ₂ . Infrared Spectra and CASSCF Calculations for AlC, Al ₂ C, Al ₂ C ₂ , and AlC ₂ H. <i>Journal of the American Chemical Society</i> , 1994 , 116, 3513-3518	16.4	62
494	Infrared spectra of M(OH) _(1,2,3) (M = Mn, Fe, Co, Ni) molecules in solid argon and the character of first row transition metal hydroxide bonding. <i>Journal of Physical Chemistry A</i> , 2006 , 110, 10035-45	2.8	61
493	Reactions of Laser Ablated Ti Atoms with Hydrogen during Condensation in Excess Argon. Infrared Spectra of the TiH, TiH ₂ , TiH ₃ , and TiH ₄ Molecules. <i>Journal of the American Chemical Society</i> , 1994 , 116, 8322-8327	16.4	61
492	Resonance Raman spectrum and vibrational analysis of the ozonide ion in the argon matrix-isolated M ⁺ O ₃ ⁻ species. <i>Journal of Chemical Physics</i> , 1973 , 59, 1863-1871	3.9	60

491	Matrix infrared spectroscopy and quantum-chemical calculations for the coinage-metal fluorides: comparisons of Ar-AuF, Ne-AuF, and Molecules MF ₂ and MF ₃ . <i>Chemistry - A European Journal</i> , 2013 , 19, 1397-409	4.8	59
490	Photoreversible Hydrogen Migration System in a Solid Argon Matrix Formed by the Reaction of Methyl Fluoride with Laser-Ablated Titanium Atoms. <i>Journal of Physical Chemistry A</i> , 2004 , 108, 6294-6301	2.8	59
489	Reactions of Laser-Ablated U and Th with CO ₂ : Neon Matrix Infrared Spectra and Density Functional Calculations of OUCO, OThCO, and Other Products. <i>Journal of the American Chemical Society</i> , 2000 , 122, 11440-11449	16.4	59
488	Infrared Spectra of Zn and Cd Hydride Molecules and Solids. <i>Journal of Physical Chemistry A</i> , 2004 , 108, 11006-11013	2.8	58
487	Infrared Spectra of the Novel Sn ₂ H ₂ Species and the Reactive SnH _{1,2,3} and PbH _{1,2,3} Intermediates in Solid Neon, Deuterium, and Argon. <i>Journal of Physical Chemistry A</i> , 2002 , 106, 6302-6308	2.8	58
486	Reactions of Laser-Ablated Ga, In, and Tl Atoms with Nitrogen Atoms and Molecules. Infrared Spectra and Density Functional Calculations of GaN, N ₂ GaN, NInN, and the M ₃ N and MN ₃ Molecules. <i>Journal of Physical Chemistry A</i> , 2000 , 104, 1648-1655	2.8	58
485	A Further Study of the Products of Scandium and Dioxygen Reactions. <i>Journal of Physical Chemistry A</i> , 1999 , 103, 5463-5467	2.8	58
484	Infrared spectra of cis and trans-(NO) ₂ ⁻ anions in solid argon. <i>Journal of Chemical Physics</i> , 1998 , 109, 177-185	3.9	57
483	Infrared spectra and density functional calculations of the CrO ₂ ⁻ , MoO ₂ ⁻ and WO ₂ ⁻ molecular anions in solid neon. <i>Journal of Chemical Physics</i> , 1999 , 111, 4230-4238	3.9	57
482	Reactions of laser ablated Be atoms with O ₂ : Infrared spectra of beryllium oxides in solid argon. <i>Journal of Chemical Physics</i> , 1994 , 100, 8689-8699	3.9	57
481	FTIR observation of N ₂ stretching fundamentals in hydrogen-bonded complexes in solid argon. <i>Journal of Chemical Physics</i> , 1985 , 83, 4983-4989	3.9	57
480	Matrix photodissociation and photoionization of carbon tetrahalides with noble gas resonance radiation. <i>Journal of Chemical Physics</i> , 1977 , 67, 1091	3.9	57
479	Infrared Spectra of Platinum Insertion and Methylidene Complexes Prepared in Oxidative C ₂ H(X) Reactions of Laser-Ablated Pt Atoms with Methane, Ethane, and Halomethanes. <i>Organometallics</i> , 2009 , 28, 1358-1368	3.8	56
478	Noble gas-actinide compounds: evidence for the formation of distinct CUO(Ar)(4-n)(Xe)(n) and CUO(Ar)(4-n)(Kr)(n) (n = 1, 2, 3, 4) complexes. <i>Journal of the American Chemical Society</i> , 2002 , 124, 9016-9027	16.4	56
477	Infrared Spectra of RhCO ⁺ , RhCO, and RhCO-in Solid Neon: A Scale for Charge in Supported Rh(CO) Catalyst Systems. <i>Journal of the American Chemical Society</i> , 1999 , 121, 9171-9175	16.4	56
476	Absorption and emission spectra of matrix-isolated XeF, KrF, XeCl, and XeBr. <i>Journal of Chemical Physics</i> , 1976 , 65, 4192-4201	3.9	56
475	Experimental and Theoretical Evidence for the Isolation of Thorium Hydride Molecules in Argon Matrices. <i>Journal of Physical Chemistry A</i> , 1997 , 101, 1287-1291	2.8	55
474	Gold is noble but gold hydride anions are stable. <i>Angewandte Chemie - International Edition</i> , 2003 , 42, 5201-6	16.4	55

- 473 Infrared spectrum of the lithium acetylene molecule in solid argon. *Journal of the American Chemical Society*, **1985**, 107, 563-568 16.4 55
- 472 Infrared spectra of the hydrogen-bonded pi complex C₂H₄⋯F in solid argon. *Journal of Chemical Physics*, **1982**, 76, 5767-5773 3.9 55
- 471 Matrix Infrared Spectrum and Bonding in the Monochloromethyl Radical. *Journal of Chemical Physics*, **1970**, 53, 2956-2966 3.9 55
- 470 Reactions of methane with titanium atoms: CH₃TiH, CH₂=TiH₂, agostic bonding, and (CH₃)₂TiH₂. *Inorganic Chemistry*, **2005**, 44, 4834-42 5.1 54
- 469 Observed and Calculated Infrared Spectra of Pd(H₂)_{1,2,3} Complexes and Palladium Hydrides in Solid Argon and Neon. *Journal of Physical Chemistry A*, **2001**, 105, 3052-3063 2.8 54
- 468 Reactions of Laser-Ablated Boron Atoms with Methanol. Infrared Spectra and ab Initio Calculations of CH₃BO, CH₂BOH, and CH₂BO in Solid Argon. *Journal of Physical Chemistry A*, **1997**, 101, 1482-1487 2.8 53
- 467 Infrared Spectra of Gallium Hydrides in Solid Hydrogen: GaH_{1,2,3}, Ga₂H_{2,4,6}, and the GaH_{2,4}-Anions. *Journal of Physical Chemistry A*, **2003**, 107, 11371-11379 2.8 53
- 466 Infrared Spectra and DFT Calculations for the Coinage Metal Hydrides MH, (H₂)MH, MH₂, M₂H, M₂H-, and (H₂)CuHCu in Solid Argon, Neon, and Hydrogen. *Journal of Physical Chemistry A*, **2003**, 107, 8492-8505 2.8 53
- 465 Infrared Spectra of OMCO (M = CrNi), OMCO- (M = CrCu), and MCO₂- (M = CoCu) in Solid Argon. *Journal of Physical Chemistry A*, **1999**, 103, 2013-2023 2.8 53
- 464 Reactions of Laser-Ablated Platinum and Palladium Atoms with Dioxygen. Matrix Infrared Spectra and Density Functional Calculations of Platinum Oxides and Complexes and Palladium Complexes. *Journal of Physical Chemistry A*, **1999**, 103, 5456-5462 2.8 52
- 463 Reactions of Alkali-Metal Atoms with Carbon Tetrabromide. Infrared Spectra and Bonding in the Tribromomethyl Radical and Dibromocarbene in Solid Argon. *Journal of Chemical Physics*, **1968**, 49, 896-902 3.9 52
- 462 Investigation of gold fluorides and noble gas complexes by matrix-isolation spectroscopy and quantum-chemical calculations. *Angewandte Chemie - International Edition*, **2012**, 51, 10628-32 16.4 51
- 461 Argon matrix photolysis and photoionization studies of benzene. Absorption spectrum of benzene cation and benzene dimer cation. *Journal of Chemical Physics*, **1980**, 73, 4932-4939 3.9 51
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