Lester S Andrews

List of Publications by Year in Descending Order

580 papers	21,323 citations	68 h-index	98 g-index
594 ext. papers	22,469 ext. citations	5.7 avg, IF	7.05 L-index

#	Paper	IF	Citations
580	M<-NCCH, M-□(NC)-CH, and CN-M-CH Prepared by Reactions of Ce, Sm, Eu, and Lu Atoms with Acetonitrile: Matrix Infrared Spectra and Theoretical Calculations. *Inorganic Chemistry*, **2021**, 60, 17649-17656	5.1	
579	Matrix Infrared Spectroscopic and Theoretical Investigations of M□□NCCN, M□□CNCN, M□□C()CN, NCMCN, CNMNC, CNMCN, and [M□□NCCN] Produced in the Reactions of Group 11 Metal Atoms with Cyanogen. *Inorganic Chemistry*, **2021**, 60, 6421-6432	5.1	1
578	Matrix Infrared Spectroscopic Studies of B-NCCN, B--(NC)-CN, NCBCN, CNBCN, CNBNC, and High-Order Products Produced in Reactions of Boron Atoms with Cyanogen. *Journal of Physical Chemistry A*, **2021**, 125, 6189-6197	2.8	
577	Cyanides, Isocyanides, and Hydrides of Zn, Cd and Hg from Metal Atom and HCN Reactions: Matrix Infrared Spectra and Electronic Structure Calculations. *ChemPhysChem*, **2021**, 22, 1914-1934	3.2	3
576	Cyanides and Isocyanides of Zinc, Cadmium and Mercury: Matrix Infrared Spectra and Electronic Structure Calculations for the Linear MNC, NCMCN, CNMNC, NCMMCN, and CNMMNC Molecules. *ChemPhysChem*, **2021**, 22, 204-220	3.2	3
575	(Noble Gas) -NC Molecular Ions in Noble Gas Matrices: Matrix Infrared Spectra and Electronic Structure Calculations.. *Chemistry - A European Journal*, **2021**, e202103142	4.8	0
574	Formation of Short Zn-Zn Bonds Stabilized by Simple Cyanide and Isocyanide Ligands. *Angewandte Chemie - International Edition*, **2020**, 59, 2496-2504	16.4	5
573	Formation of Short Zn□n Bonds Stabilized by Simple Cyanide and Isocyanide Ligands. *Angewandte Chemie*, **2020**, 132, 2517-2525	3.6	1
572	Matrix Infrared Spectroscopic and Theoretical Investigations of XCX□□MX and CX-MX Provided in Reactions of Ag and Au with Tetrahalomethanes. *Inorganic Chemistry*, **2020**, 59, 15438-15446	5.1	1
571	End-On Cyanogen Complexes of Iridium, Palladium, and Platinum. *Inorganic Chemistry*, **2020**, 59, 6489-6495	5.1	4
570	Formation of Cerium and Neodymium Isocyanides in the Reactions of Cyanogen with Ce and Nd Atoms in Argon Matrices. *Journal of Physical Chemistry A*, **2019**, 123, 8208-8219	2.8	3
569	Boron-Transition-Metal Triple-Bond FB?MF Complexes. *Inorganic Chemistry*, **2019**, 58, 13418-13425	5.1	7
568	Mercury Cyanides and Isocyanides: NCHgCN and CNHgNC as well as NCHgHgCN and CNHgHgNC: Simple Molecules with Short, Strong Hg-Hg Bonds. *Angewandte Chemie - International Edition*, **2019**, 58, 11874-11878	16.4	8
567	Matrix Infrared Spectra and Electronic Structure Calculations of Linear Alkaline Earth Metal Di-isocyanides CNMNC, Ionic (NC)M(NC) Bowties, and Ionic (MNC) Rings. *Journal of Physical Chemistry A*, **2019**, 123, 3743-3760	2.8	9
566	Mercury Cyanides and Isocyanides: NCHgCN and CNHgNC as well as NCHgHgCN and CNHgHgNC: Simple Molecules with Short, Strong Hg□g Bonds. *Angewandte Chemie*, **2019**, 131, 12000-12004	3.6	5
565	Infrared Spectroscopic and Theoretical Studies of the 3d Transition Metal Oxyfluoride Molecules. *Inorganic Chemistry*, **2019**, 58, 9796-9810	5.1	4
564	Matrix Infrared Spectroscopic and Theoretical Studies for Products Provided in Reactions of Sn with Ethane and Halomethanes. *Journal of Physical Chemistry A*, **2019**, 123, 6259-6268	2.8	

563	Infrared Spectra of CHCN-M, M-□(NC)-CH, CH-MNC Prepared by Reactions of Laser-Ablated Fe, Ru, and Pt Atoms with Acetonitrile in Excess Argon. *Inorganic Chemistry*, **2019**, 58, 16194-16204	5.1	4
562	Matrix Infrared Spectra, Photochemistry and Density Functional Calculations of Cl-HCCl, ClHCl, Cl-ClCCl, and Cl-HCHCl Produced from CHCl and CHCl Exposed to Irradiation from Laser Ablation. *Journal of Physical Chemistry A*, **2019**, 123, 1051-1061	2.8	3
561	Infrared Spectra of the HAnX and H AnX Molecules (An=Th and U, X=Cl and Br) in Argon Matrices Supported by Electronic Structure Calculations. *Chemistry - A European Journal*, **2019**, 25, 1795-1805	4.8	3
560	Tungsten Hydride Phosphorus- and Arsenic-Bearing Molecules with Double and Triple W-P and W-As Bonds. *Inorganic Chemistry*, **2018**, 57, 5320-5332	5.1	
559	Laser-Ablated U Atom Reactions with (CN) to Form UNC, U(NC), and U(NC): Matrix Infrared Spectra and Quantum Chemical Calculations. *Journal of Physical Chemistry A*, **2018**, 122, 516-528	2.8	12
558	Matrix-Infrared Spectra and Structures of HM-SiH (M = Ge, Sn, Pb, Sb, Bi, Te Atoms). *Journal of Physical Chemistry A*, **2018**, 122, 81-88	2.8	3
557	Oxygen radical character in group 11 oxygen fluorides. *Nature Communications*, **2018**, 9, 1267	17.4	7
556	Publications of W. Lester S. Andrews. *Journal of Physical Chemistry A*, **2018**, 122, 2832-2848	2.8	
555	Assignment of Raman spectra for trifluoride anions in solid argon. *Physical Chemistry Chemical Physics*, **2018**, 20, 23378-23385	3.6	8
554	Infrared Spectroscopic and Theoretical Studies of Group 3 Metal Isocyanide Molecules. *Journal of Physical Chemistry A*, **2018**, 122, 7099-7106	2.8	11
553	Matrix Infrared Spectroscopic and Theoretical Studies for the Products of Lead Atom Reactions with Ethane and Halomethanes. *Journal of Physical Chemistry A*, **2018**, 122, 8911-8922	2.8	3
552	OMS, OM(□SO), and OM(□SO)(□OS) Molecules (M = Ce, Th) with Chiral Structure: Matrix Infrared Spectra and Theoretical Calculations. *Journal of Physical Chemistry A*, **2018**, 122, 5391-5400	2.8	3
551	Reactions of Laser-Ablated Aluminum Atoms with Cyanogen: Matrix Infrared Spectra and Electronic Structure Calculations for Aluminum Isocyanides Al(NC) and Their Novel Dimers. *Journal of Physical Chemistry A*, **2018**, 122, 5342-5353	2.8	9
550	Thorium and Uranium Hydride Phosphorus and Arsenic Bearing Molecules with Single and Double Actinide-Pnictogen and Bridged Agostic Hydrogen Bonds. *Inorganic Chemistry*, **2017**, 56, 2949-2957	5.1	7
549	Properties of Lanthanide Hydroxide Molecules Produced in Reactions of Lanthanide Atoms with HO and H + O Mixtures: Roles of the +I, +II, +III, and +IV Oxidation States. *Journal of Physical Chemistry A*, **2017**, 121, 1779-1796	2.8	8
548	Observation and Characterization of CH3CH2□MH, (CH2)2□MH2, and CH3□?MH3 Prepared in Reactions of Ethane with Laser-Ablated Group 6 Metal Atoms. *Organometallics*, **2017**, 36, 1479-1487	3.8	5
547	Formation and Characterization of Homoleptic Thorium Isocyanide Complexes. *Inorganic Chemistry*, **2017**, 56, 5060-5068	5.1	18
546	Double and Triple Si-H-M Bridge Bonds: Matrix Infrared Spectra and Theoretical Calculations for Reaction Products of Silane with Ti, Zr, and Hf Atoms. *Journal of Physical Chemistry A*, **2017**, 121, 3898-3908	2.8	3

545	Matrix preparation and spectroscopic and theoretical investigation of small high oxidation-state complexes of groups 3□12, 14, lanthanide and actinide metal atoms: Carbon-metal single, double and triple bonds. *Coordination Chemistry Reviews*, **2017**, 335, 76-102	23.2	35
544	Matrix Infrared Spectra of Insertion and Metallacyclopropane Complexes [CHCH-MH and (CH)-MH] Prepared in Reactions of Laser-Ablated Group 3 Metal Atoms with Ethane. *Journal of Physical Chemistry A*, **2017**, 121, 8583-8595	2.8	1
543	Infrared Spectroscopic and Theoretical Studies on the OMF and OMF (M = Cr, Mo, W) Molecules in Solid Argon. *Journal of Physical Chemistry A*, **2017**, 121, 7603-7612	2.8	6
542	Observation and Characterization of CHCH-MH, (CH)-MH, CH?CH-MH, and CH-C?MH Produced by Reactions of Group 5 Metal Atoms with Ethane. *Journal of Physical Chemistry A*, **2017**, 121, 6766-6777	2.8	2
541	Infrared Spectroscopic and Electronic Structure Investigations of Beryllium Halide Molecules, Cations, and Anions in Noble Gas Matrices. *Journal of Physical Chemistry A*, **2017**, 121, 8843-8855	2.8	5
540	Matrix Infrared Spectra of Manganese and Iron Isocyanide Complexes. *Journal of Physical Chemistry A*, **2017**, 121, 8835-8842	2.8	5
539	Matrix Infrared Spectra and Quantum Chemical Calculations of Ti, Zr, and Hf Dihydride Phosphinidene and Arsinidene Molecules. *Inorganic Chemistry*, **2016**, 55, 8786-93	5.1	20
538	Infrared Spectra and DFT Calcula□tions of Planar and Bridged Methyl□dene Intermediates in Reactions of Laser-Ablated Yttrium and Lanthanum Atoms with Di-, Tri-, and Tetrahalomethanes. *European Journal of Inorganic Chemistry*, **2016**, 2016, 380-392	2.3	8
537	Detection and Electronic Structure of Naked Actinide Complexes: Rhombic-Ring (AnN)2 Molecules Stabilized by Delocalized □Bonding. *Journal of the American Chemical Society*, **2016**, 138, 893-905	16.4	17
536	Properties of Cerium Hydroxides from Matrix Infrared Spectra and Electronic Structure Calculations. *Inorganic Chemistry*, **2016**, 55, 1702-14	5.1	17
535	Infrared Spectra and Density Functional Calculations for Singlet CH2?SiX2 and Triplet HC-SiX3 and XC-SiX3 Intermediates in Reactions of Laser-Ablated Silicon Atoms with Di-, Tri-, and Tetrahalomethanes. *Inorganic Chemistry*, **2016**, 55, 2819-29	5.1	10
534	Structures and Properties of the Products of the Reaction of Lanthanide Atoms with H2O: Dominance of the +II Oxidation State. *Journal of Physical Chemistry A*, **2016**, 120, 793-804	2.8	15
533	A Matrix Isolation and Computational Study of Molecular Palladium Fluorides: Does PdF6 Exist?. *Inorganic Chemistry*, **2016**, 55, 1108-23	5.1	8
532	Infrared Spectra and Structures of SiH2□(CH2)2 and CH2?CH□SiH3 Intermediates Prepared in Reactions of Laser-ablated Silicon Atoms with Ethane. *Bulletin of the Korean Chemical Society*, **2016**, 37, 415-417	1.2	5
531	Investigation of thorium hydride fluorides by matrix-isolation spectroscopy. *Journal of Fluorine Chemistry*, **2015**, 174, 2-7	2.1	7
530	Infrared Spectra of Planar and Agostic-Like Bridged Scandium Methylidene Complexes Prepared in Reactions of Laser-Ablated Sc Atoms with Di-, Tri-, and Tetrahalomethanes. *Organometallics*, **2015**, 34, 3390-3399	3.8	12
529	Infrared spectra of M-□2-C2H2 and HMCCH produced in reactions of laser-ablated Fe and Os atoms with acetylene. *Journal of Molecular Spectroscopy*, **2015**, 310, 84-91	1.3	6
528	Gas Phase Properties of MX2 and MX4 (X = F, Cl) for M = Group 4, Group 14, Cerium, and Thorium. *Journal of Physical Chemistry A*, **2015**, 119, 5790-803	2.8	39

527	Reaction of Laser-Ablated Uranium and Thorium Atoms with H2Se: A Rare Example of Selenium Multiple Bonding. *Inorganic Chemistry*, **2015**, 54, 9761-9	5.1	15
526	Reactions of laser-ablated U atoms with (CN)2: infrared spectra and electronic structure calculations of UNC, U(NC)2, and U(NC)4 in solid argon. *Chemical Communications*, **2015**, 51, 3899-902	5.8	24
525	Matrix Infrared Spectra and Density Functional Calculations of CH2Cl□Cl and CH2Br□Br Produced by Laser-ablated Metal Plume Irradiation. *Bulletin of the Korean Chemical Society*, **2015**, 36, 1580-1585	1.2	1
524	Reactions of Laser-Ablated U Atoms with HCN: Infrared Spectra in Solid Argon and Quantum Chemical Calculations for HUNC. *European Journal of Inorganic Chemistry*, **2015**, 2015, 2974-2981	2.3	10
523	IR Spectra and DFT Calculations of □M□2-(NC)□CH3, CH3□MNC, and CH2=M(H)NC Prepared by Reactions of Laser-Ablated Hf and Ti Atoms with Aceto□nitrile. *European Journal of Inorganic Chemistry*, **2015**, 2015, 4379-4387	2.3	7
522	Fluorreiche Fluoride □neue Erkenntnisse □er die Chemie von Polyfluoridanionen. *Angewandte Chemie*, **2015**, 127, 8397-8401	3.6	24
521	Fluorine-Rich Fluorides: New Insights into the Chemistry of Polyfluoride Anions. *Angewandte Chemie - International Edition*, **2015**, 54, 8279-83	16.4	43
520	Matrix Infrared Spectroscopic and Quantum Chemical Investigations of the Group 5 Transition Metal Atom and CX4 Molecule (X = H, F, and Cl) Reaction Products. *Journal of Physical Chemistry A*, **2015**, 119, 12742-55	2.8	7
519	Methane activation by laser-ablated Th atoms: matrix infrared spectra and theoretical investigations of CH□Th-H and CH2□ThH□ *Journal of Physical Chemistry A*, **2015**, 119, 2289-97	2.8	7
518	Reactions of laser-ablated U atoms with HF: infrared spectra and quantum chemical calculations of HUF, UH, and UF in noble gas solids. *Journal of Physical Chemistry A*, **2015**, 119, 2253-61	2.8	8
517	Actinide-silicon multiradical bonding: infrared spectra and electronic structures of the Si(□X)AnF3 (An = Th, U; X = H, F) molecules. *Journal of the American Chemical Society*, **2014**, 136, 1427-37	16.4	37
516	Reactions of lanthanide atoms with oxygen difluoride and the role of the Ln oxidation state. *Inorganic Chemistry*, **2014**, 53, 446-56	5.1	23
515	Spectroscopic observation of photo-induced metastable linkage isomers of coinage metal (Cu, Ag, Au) sulfur dioxide complexes. *Physical Chemistry Chemical Physics*, **2014**, 16, 2607-20	3.6	12
514	Properties of ThF(x) from infrared spectra in solid argon and neon with supporting electronic structure and thermochemical calculations. *Journal of Physical Chemistry A*, **2014**, 118, 2107-19	2.8	15
513	Infrared Spectra of CX3□AuCl and CX2□AuCl2 Generated in Reactions of Laser-Ablated Gold Atoms with Chlorofluoromethanes and Carbon Tetrachloride. *Organometallics*, **2014**, 33, 4315-4322	3.8	9
512	Infrared spectra and electronic structure calculations for NN complexes with U, UN, and NUN in solid argon, neon, and nitrogen. *Journal of Physical Chemistry A*, **2014**, 118, 5289-303	2.8	19
511	Matrix infrared spectra and density functional calculations for new iso-halomethanes: CHCl2-Cl, CHFCl-Cl, CFCl2-Cl, CHBr2-Br, and CBr3-Br in solid argon. *Journal of Physical Chemistry A*, **2013**, 117, 6525-35	2.8	10
510	Spontaneous sulfur dioxide activation by Group V metal (V, Nb, Ta) atoms in excess argon at cryogenic temperatures. *Physical Chemistry Chemical Physics*, **2013**, 15, 9823-32	3.6	14

509	Formation and characterization of HUF and DUF in solid argon. *Chemical Communications*, **2013**, 49, 3863-5	5.8	9
508	Matrix infrared spectroscopy and quantum-chemical calculations for the coinage-metal fluorides: comparisons of Ar-AuF, Ne-AuF, and Molecules MF2 and MF3. *Chemistry - A European Journal*, **2013**, 19, 1397-409	4.8	59
507	Infrared Spectra of CH3MX and CH2XMH Prepared in Reactions of Laser-Ablated Gold, Platinum, Palladium, and Nickel Atoms with CH3Cl and CH3Br. *Organometallics*, **2013**, 32, 2753-2759	3.8	16
506	Infrared Spectra of Manganese Insertion, Vinyl, and Cyclic Complexes Prepared in Reactions of Laser-Ablated Mn Atoms with Methane, Ethane, Ethyl Chloride, and 1,2-Dichloroethane. *Organometallics*, **2013**, 32, 3458-3468	3.8	8
505	Thorium fluorides ThF, ThF2, ThF3, ThF4, ThF3(F2), and ThF5- characterized by infrared spectra in solid argon and electronic structure and vibrational frequency calculations. *Inorganic Chemistry*, **2013**, 52, 8228-33	5.1	16
504	Infrared spectra of H2ThS and H2US in noble gas matrixes: enhanced H-An-S covalent bonding. *Inorganic Chemistry*, **2013**, 52, 10275-85	5.1	23
503	Infrared spectra and electronic structure calculations for the NUN(NN)1-5 and NU(NN)1-6 complexes in solid argon. *Inorganic Chemistry*, **2013**, 52, 9989-93	5.1	19
502	Tantalum atom reactions with ammonia: Matrix infrared spectra and DFT calculations of the H2TaNH and H2Ta(NH2)2 molecules. *Chemical Physics Letters*, **2012**, 523, 6-10	2.5	4
501	Infrared Spectra of Rh12C and Rh13C in Solid Neon and Solid Argon. *Chemical Physics Letters*, **2012**, 528, 7-10	2.5	0
500	Reactions of group 3 metals with OF2: infrared spectroscopic and theoretical investigations of the group 3 oxydifluoride OMF2 and oxyfluoride OMF molecules. *Journal of Physical Chemistry A*, **2012**, 116, 10115-21	2.8	7
499	Infrared spectroscopic and theoretical studies of the OTiF2, OZrF2 and OHfF2 molecules with terminal oxo ligands. *Dalton Transactions*, **2012**, 41, 11706-15	4.3	23
498	Infrared spectroscopic and theoretical investigations of the OUF2 and OThF2 molecules with triple oxo bond character. *Inorganic Chemistry*, **2012**, 51, 6983-91	5.1	28
497	Infrared spectra of CH3-MH through methane activation by laser-ablated Sn, Pb, Sb, and Bi atoms. *Journal of Physical Chemistry A*, **2012**, 116, 8500-6	2.8	15
496	Infrared Spectra of the η2-M(NC)-CH3, CH3-MNC, and CH2?M(H)NC Complexes Prepared by Reactions of Thorium and Uranium Atoms with Acetonitrile. *Organometallics*, **2012**, 31, 535-544	3.8	24
495	OMS, OM(η2-SO), and OM(η2-SO)(η2-SO2) molecules (M = Ti, Zr, Hf): infrared spectra and density functional calculations. *Inorganic Chemistry*, **2012**, 51, 7415-24	5.1	25
494	Infrared Spectra of the Complexes Os<-NCCH3, Re<-NCCH3, CH3ReNC, CH2?Re(H)NC, and CH?Re(H)2NC and their Mn Counterparts Prepared by Reactions of Laser-Ablated Os, Re, and Mn Atoms with Acetonitrile in Excess Argon. *Organometallics*, **2012**, 31, 6095-6105	3.8	14
493	Infrared spectra of M-η2-C2H2 and HM-C?CH produced in reactions of laser-ablated group 6 metal atoms with acetylene. *Journal of Physical Chemistry A*, **2012**, 116, 11880-7	2.8	14
492	Infrared spectra of M-η2-C2H2, HM-C?CH, and HM-C?CH- prepared in reactions of laser-ablated group 3 metal atoms with acetylene. *Journal of Physical Chemistry A*, **2012**, 116, 10917-26	2.8	23

491	Methane to methanol conversion induced by thorium oxide through the CH3Th(O)H intermediate in solid argon. *Inorganic Chemistry*, **2012**, 51, 11055-60	5.1	10
490	Infrared spectra and density functional calculations of the M<-NCCCH3, □2M(NC)□CH3, CH3□MNC, CH2M(H)NC, and CHM(H)2NC complexes produced by reactions of Group 6 metal atoms with acetonitrile. *Journal of Organometallic Chemistry*, **2012**, 703, 25-33	2.3	11
489	Untersuchung von Goldfluoriden und ihren Edelgaskomplexen durch Matrixisolationsspektroskopie und quantenchemische Rechnungen. *Angewandte Chemie*, **2012**, 124, 10780-10784	3.6	19
488	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
487	Formation of metal oxyfluorides from specific metal reactions with oxygen difluoride: infrared spectroscopic and theoretical investigations of the OScF2 radical and OScF with terminal single and triple Sc-O bonds. *Chemistry - A European Journal*, **2012**, 18, 12446-51	4.8	9
486	Matrix infrared spectroscopic and theoretical of the difluoroamino metal fluoride molecules: F2NMF (M = Cu, Ag, Au). *Inorganic Chemistry*, **2012**, 51, 667-73	5.1	8
485	Spektroskopische Beobachtung eines Gruppe-12-Oxyfluorids: eine Matrixisolations- und quantenchemische Untersuchung von Quecksilberoxyfluoriden. *Angewandte Chemie*, **2012**, 124, 8359-8363	3.6	9
484	Spectroscopic observation of a Group 12 oxyfluoride: a matrix-isolation and quantum-chemical investigation of mercury oxyfluorides. *Angewandte Chemie - International Edition*, **2012**, 51, 8235-8	16.4	21
483	Infrared Spectra and Quantum Chemical Calculations of the Bridge-Bonded HC(F)LnF2(Ln = La□Lu) Complexes. *Organometallics*, **2011**, 30, 4443-4452	3.8	21
482	Combined triple and double bonds to uranium: the N?U=N-H uranimine nitride molecule prepared in solid argon. *Inorganic Chemistry*, **2011**, 50, 3826-31	5.1	34
481	The HRuCCH, RuCCH2, and Ru-□2-C2H2 molecules: infrared spectra and density functional calculations. *Journal of Physical Chemistry A*, **2011**, 115, 12194-200	2.8	14
480	Infrared spectra of CH3-MF and several fragments prepared by methyl fluoride reactions with laser-ablated Cu, Ag, and Au atoms. *Inorganic Chemistry*, **2011**, 50, 10319-27	5.1	17
479	Infrared spectra and quantum chemical calculations of the uranium-carbon molecules UC, CUC, UCH, and U(CC)2. *Journal of Chemical Physics*, **2011**, 134, 244313	3.9	30
478	Is rhodium tetroxide in the formal oxidation state VIII stable? a quantum chemical and matrix isolation investigation of rhodium oxides. *Theoretical Chemistry Accounts*, **2011**, 129, 667-676	1.9	13
477	Matrix Infrared Spectroscopy and a Theoretical Investigation of SUO and US2. *European Journal of Inorganic Chemistry*, **2011**, 2011, 4457-4463	2.3	10
476	Infrared spectra of the ethynyl metal hydrides produced in reactions of laser-ablated Mn and Re atoms with acetylene. *Journal of Physical Chemistry A*, **2011**, 115, 4929-34	2.8	18
475	Matrix infrared spectroscopic and density functional theoretical investigations on thorium and uranium atom reactions with dimethyl ether. *Dalton Transactions*, **2011**, 40, 11106-14	4.3	12
474	Infrared spectra of CH3-MH, CH3-M, and CH3-MH- prepared via methane activation by laser-ablated Au, Ag, and Cu atoms. *Dalton Transactions*, **2011**, 40, 11115-24	4.3	30

473	Quantum-chemical calculations and IR spectra of the (F2)MF2 molecules (M = B, Al, Ga, In, Tl) in solid matrices: a new class of very high electron affinity neutral molecules. *Journal of the American Chemical Society*, **2011**, 133, 3768-71	16.4	10
472	Reactions of late lanthanide metal atoms and methanol in solid argon: a matrix isolation infrared spectroscopic and theoretical study. *Journal of Physical Chemistry A*, **2011**, 115, 14581-92	2.8	13
471	Matrix infrared spectroscopic and theoretical studies on the reactions of scandium, yttrium, and lanthanide metal atoms with dimethyl ether. *Journal of Physical Chemistry A*, **2011**, 115, 11624-31	2.8	4
470	Matrix infrared spectra and theoretical studies of thorium oxide species: ThOx and Th2Oy. *Journal of Physical Chemistry A*, **2011**, 115, 14407-16	2.8	39
469	Infrared spectrum of the CH3OCH2 radical in solid argon. *Journal of Physical Chemistry A*, **2011**, 115, 3029-33	2.8	10
468	Infrared Spectra of CX3?MnX and CX2?MnX2 (X = H, F, Cl) Prepared in Reactions of Laser-Ablated Manganese Atoms with Halomethanes. *Organometallics*, **2011**, 30, 477-486	3.8	17
467	Matrix infrared spectroscopic and theoretical investigations of uranium atom and methanol reaction products. *Inorganic Chemistry*, **2011**, 50, 7099-105	5.1	14
466	Tetrahydrometalate species VH(2)(H(2)), NbH(4), and TaH(4): matrix infrared spectra and quantum chemical calculations. *Journal of Physical Chemistry A*, **2011**, 115, 14175-83	2.8	12
465	Matrix infrared spectra and density functional calculations of the H2CCN and H2CNC radicals produced from CH3CN. *Journal of Physical Chemistry A*, **2011**, 115, 8638-42	2.8	22
464	Matrix infrared spectroscopic and computational investigations of the lanthanide-methylene complexes CH2LnF2 with single Ln-C bonds. *Journal of Physical Chemistry A*, **2011**, 115, 1913-21	2.8	26
463	Matrix infrared spectroscopic and electronic structure investigations of the lanthanide metal atom-methyl fluoride reaction products CH3-LnF and CH2-LnHF: the formation of single carbon-lanthanide metal bonds. *Journal of Physical Chemistry A*, **2011**, 115, 5609-24	2.8	22
462	Infrared spectra of Rh atom reaction products with C2H2: the HRhCCH, RhCCH, RhCCH2, and Rh-?2-C2H2 molecules. *Journal of Physical Chemistry A*, **2011**, 115, 9447-55	2.8	19
461	Infrared spectra of CH3?MH, CH3?M, and CH3?MH? prepared via methane activation by laser-ablated Au, Ag, and Cu atoms. *Dalton Transactions*, **2011**, 40, 11115	4.3	1
460	Metal Atom Reactions to Form Novel Small Molecules **2011**, 25-49		1
459	Polyfluoride anions, a matrix-isolation and quantum-chemical investigation. *Inorganic Chemistry*, **2010**, 49, 7156-64	5.1	98
458	U and P4 reaction products: a quantum chemical and matrix isolation spectroscopic investigation. *Inorganic Chemistry*, **2010**, 49, 9230-5	5.1	14
457	Infrared Spectra of Simple Methylidyne, Methylidene, and Insertion Complexes Generated in Reactions of Laser-Ablated Rhodium Atoms with Halomethanes and Ethane. *Organometallics*, **2010**, 29, 2211-2222	3.8	27
456	Infrared spectra of HC?C-MH and M-?2-(C2H2) produced in reactions of laser-ablated group 5 transition-metal atoms with acetylene. *Journal of Physical Chemistry A*, **2010**, 114, 10028-39	2.8	26

455	Infrared spectra of CH(2)=Zr(H)NC, CH(3)-ZrNC, and eta(2)-Zr(NC)-CH(3) produced by reactions of laser-ablated Zr atoms with acetonitrile. *Journal of Physical Chemistry A*, **2010**, 114, 891-7	2.8	24
454	Infrared spectra of CX2=CoX2 and CX3-CoX complexes from reactions of laser-ablated cobalt atoms with halomethanes. *Journal of Physical Chemistry A*, **2010**, 114, 8056-68	2.8	17
453	Infrared spectra of CH2=M(H)NC, CH3-MNC, and eta2-M(NC)-CH3 produced by reactions of laser-ablated group 5 metal atoms with acetonitrile. *Journal of Physical Chemistry A*, **2010**, 114, 5997-6006	2.8	27
452	Infrared spectra and quantum chemical calculations of the uranium carbide molecules UC and CUC with triple bonds. *Journal of the American Chemical Society*, **2010**, 132, 8484-8	16.4	47
451	Infrared spectra of MF2, MF2+, MF4-, MF3, and M2F6 molecules (M = Sc, Y, La) in solid argon. *Journal of Physical Chemistry A*, **2010**, 114, 2293-9	2.8	22
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