Peter Armentrout

List of Publications by Citations

414 papers	23,039 citations	82 h-index	127 g-index
431 ext. papers	24,183 ext. citations	4.7 avg, IF	7.2 L-index

#	Paper	IF	Citations
414	Translational energy dependence of Ar++XY-ArX++Y (XY=H2,D2,HD) from thermal to 30 eV c.m.. *Journal of Chemical Physics*, **1985**, 83, 166-189	3.9	710
413	Statistical modeling of collision-induced dissociation thresholds. *Journal of Chemical Physics*, **1997**, 106, 4499-4508	3.9	402
412	Solvation of Transition Metal Ions by Water. Sequential Binding Energies of M+(H2O)x (x = 1-4) for M = Ti to Cu Determined by Collision-Induced Dissociation. *Journal of the American Chemical Society*, **1994**, 116, 3519-3528	16.4	377
411	Sequential bond energies of iron carbonyl Fe(CO)x+ (x = 1-5): systematic effects on collision-induced dissociation measurements. *Journal of the American Chemical Society*, **1991**, 113, 8590-8601	16.4	330
410	Noncovalent metal-ligand bond energies as studied by threshold collision-induced dissociation. *Mass Spectrometry Reviews*, **2000**, 19, 215-47	11	304
409	The chemistry of atomic transition-metal ions: insight into fundamental aspects of organometallic chemistry. *Accounts of Chemical Research*, **1989**, 22, 315-321	24.3	286
408	Guided ion beam study of collision-induced dissociation dynamics: integral and differential cross sections. *Journal of Chemical Physics*, **2001**, 115, 1213-1228	3.9	281
407	Activation of hydrogen and methane by thermalized FeO+ in the gas phase as studied by multiple mass spectrometric techniques. *International Journal of Mass Spectrometry and Ion Processes*, **1997**, 161, 175-191		274
406	Collision-induced dissociation of Fe+n (n=2□10) with Xe: Ionic and neutral iron binding energies. *Journal of Chemical Physics*, **1989**, 90, 5466-5485	3.9	256
405	Electronic State-Specific Transition Metal ION Chemistry. *Annual Review of Physical Chemistry*, **1990**, 41, 313-344	15.7	250
404	Sequential bond energies of chromium carbonyls (Cr(CO)x+, x = 1-6). *The Journal of Physical Chemistry*, **1993**, 97, 7978-7987		244
403	Chemistry of excited electronic States. *Science*, **1991**, 251, 175-9	33.3	234
402	An Absolute Sodium Cation Affinity Scale: Threshold Collision-Induced Dissociation Experiments and ab Initio Theory. *Journal of Physical Chemistry A*, **2000**, 104, 2238-2247	2.8	232
401	Stepwise solvation enthalpies of protonated water clusters: collision-induced dissociation as an alternative to equilibrium studies. *Journal of the American Chemical Society*, **1993**, 115, 12125-12131	16.4	231
400	Reactions and thermochemistry of small transition metal cluster ions. *Annual Review of Physical Chemistry*, **2001**, 52, 423-61	15.7	224
399	Statistical modeling of competitive threshold collision-induced dissociation. *Journal of Chemical Physics*, **1998**, 109, 1787-1800	3.9	221
398	Reactions of N+4 with rare gases from thermal to 10eV center-of-mass energy: collision-induced dissociation, charge transfer and ligand exchange. *International Journal of Mass Spectrometry and Ion Processes*, **1991**, 107, 29-48		212

397	Collision-induced dissociation of vanadium monoxide ion. *The Journal of Physical Chemistry*, **1986**, 90, 5135-5140		203
396	Absolute Binding Energies of Alkali-Metal Cation Complexes with Benzene Determined by Threshold Collision-Induced Dissociation Experiments and ab Initio Theory. *Journal of Physical Chemistry A*, **2000**, 104, 11420-11432	2.8	201
395	Noncovalent Interactions of Nucleic Acid Bases (Uracil, Thymine, and Adenine) with Alkali Metal Ions. Threshold Collision-Induced Dissociation and Theoretical Studies. *Journal of the American Chemical Society*, **2000**, 122, 8548-8558	16.4	200
394	Collision-induced dissociation of Nb+n (n = 2 □11): bond energies and dissociation pathways. *International Journal of Mass Spectrometry and Ion Processes*, **1990**, 102, 269-301		196
393	Understanding heterolytic bond cleavage. *Journal of the American Chemical Society*, **1992**, 114, 8627-8633	16.4	193
392	Collision-Induced Dissociation Measurements on Li+(H2O)n, n = 1□: The First Direct Measurement of the Li+□H2 Bond Energy. *Journal of Physical Chemistry A*, **1997**, 101, 1238-1249	2.8	191
391	Kinetic energy dependence of ion□olecule reactions: guided ion beams and threshold measurements. *International Journal of Mass Spectrometry*, **2000**, 200, 219-241	1.9	184
390	State-Specific Reactions of Fe+(a6D,a4F) with D2O and Reactions of FeO+ with D2. *The Journal of Physical Chemistry*, **1994**, 98, 6522-6529		173
389	Intrinsic Affinities of Alkali Cations for 15-Crown-5 and 18-Crown-6: Bond Dissociation Energies of Gas-Phase M+□rown Ether Complexes. *Journal of the American Chemical Society*, **1999**, 121, 417-423	16.4	171
388	Reaction mechanisms and thermochemistry of vanadium ions with ethane, ethene and ethyne. *Journal of the American Chemical Society*, **1986**, 108, 1806-1819	16.4	161
387	Entropy measurements and the kinetic method: a statistically meaningful approach. *Journal of the American Society for Mass Spectrometry*, **2000**, 11, 371-9	3.5	158
386	Reactions of fourth-period metal ions (Ca+□n+) with O2: Metal-oxide ion bond energies. *Journal of Chemical Physics*, **1990**, 93, 2676-2691	3.9	152
385	Potential energy surface for activation of methane by Pt(+): a combined guided ion beam and DFT study. *Journal of the American Chemical Society*, **2001**, 123, 5563-75	16.4	149
384	Collision-induced dissociation of Fen+ (n=2□9) with Xe: Bond energies, geometric structures, and dissociation pathways. *Journal of Chemical Physics*, **1992**, 97, 4072-4083	3.9	148
383	Kinetic energy dependence of Al++O2-→AlO++O. *Journal of Chemical Physics*, **1986**, 84, 1521-1529	3.9	145
382	Reactions of scandium oxide (ScO+), titanium oxide (TiO+) and vanadyl (VO+) with deuterium: M+-OH bond energies and effects of spin conservation. *The Journal of Physical Chemistry*, **1993**, 97, 544-552		143
381	Cation□ther Complexes in the Gas Phase: Bond Dissociation Energies and Equilibrium Structures of Li+(1,2-dimethoxyethane)x, x = 1 and 2, and Li+(12-crown-4). *The Journal of Physical Chemistry*, **1996**, 100, 16116-16125		140
380	Sequential Bond Energies of Water to Na+ (3s0), Mg+ (3s1), and Al+ (3s2). *The Journal of Physical Chemistry*, **1994**, 98, 4191-4195		140

379	Sequential Bond Energies of Cu(CO)x+ and Ag(CO)x+ (x = 1-4). *Journal of the American Chemical Society*, **1995**, 117, 4071-4081	16.4	137
378	Mass spectrometry--not just a structural tool: the use of guided ion beam tandem mass spectrometry to determine thermochemistry. *Journal of the American Society for Mass Spectrometry* , **2002**, 13, 419-34	3.5	135
377	Periodic trends in chemical reactivity. Reactions of scandium(+), yttrium(+), lanthanum(+), and lutetium(+) with methane and ethane. *Journal of the American Chemical Society*, **1989**, 111, 3845-3855	16.4	134
376	Reaction of Cr+, Mn+, Fe+, Co+, and Ni+ with O2 and N2O. Examination of the translational energy dependence of the cross sections of endothermic reactions. *Journal of Chemical Physics*, **1982**, 76, 2449-2457	3.9	134
375	Infrared multiphoton dissociation spectroscopy of cationized serine: effects of alkali-metal cation size on gas-phase conformation. *Journal of Physical Chemistry A*, **2008**, 112, 2248-57	2.8	132
374	A thermodynamic "vocabulary" for metal ion interactions in biological systems. *Accounts of Chemical Research*, **2004**, 37, 989-98	24.3	129
373	Experimental and Theoretical Dissection of Sodium Cation/Glycine Interactions. *Journal of Physical Chemistry A*, **2002**, 106, 10350-10362	2.8	128
372	Gas-Phase Ion Dynamics and Chemistry. *The Journal of Physical Chemistry*, **1996**, 100, 12866-12877		126
371	Conversion of CH4 to CH3OH: Reactions of CoO+ with CH4 and D2, Co+ with CH3OD and D2O, and Co+(CH3OD) with Xe. *Journal of the American Chemical Society*, **1994**, 116, 7815-7826	16.4	124
370	Cation□Ether Complexes in the Gas Phase: Bond Dissociation Energies of Na+(dimethyl ether)x, x = 1□4; Na+(1,2-dimethoxyethane)x, x = 1 and 2; and Na+(12-crown-4). *Journal of Physical Chemistry A*, **1997**, 101, 831-839	2.8	123
369	Metal oxide and carbide thermochemistry of Y+, Zr+, Nb+, and Mo+. *Journal of Chemical Physics*, **1996**, 105, 6322-6333	3.9	119
368	Collision-induced dissociation of Co+n (n=2□18) with Xe: Bond energies of cationic and neutral cobalt clusters, dissociation pathways, and structures. *Journal of Chemical Physics*, **1994**, 100, 1049-1057	3.9	119
367	Guided ion beam studies of transition metal□ligand thermochemistry. *International Journal of Mass Spectrometry*, **2003**, 227, 289-302	1.9	118
366	Infrared multiphoton dissociation spectroscopy of cationized threonine: effects of alkali-metal cation size on gas-phase conformation. *Journal of Physical Chemistry A*, **2008**, 112, 2258-67	2.8	109
365	Sequential Bond Dissociation Energies of M+(NH3)x (x = 1□4) for M = Ti□Cu. *Journal of the American Chemical Society*, **1998**, 120, 3176-3187	16.4	109
364	Electronic effects in C-H and C-C bond activation. State-specific reactions of FE+ (6D,4F) with methane, ethane, and propane. *Journal of the American Chemical Society*, **1988**, 110, 411-423	16.4	109
363	Kinetic-energy dependence of competitive spin-allowed and spin-forbidden reactions: V++CS2. *Journal of Chemical Physics*, **1999**, 110, 7858-7870	3.9	108
362	Methane activation by titanium(1+): electronic and translational energy dependence. *The Journal of Physical Chemistry*, **1988**, 92, 1209-1219		106

361	Cationic Noncovalent Interactions: Energetics and Periodic Trends. *Chemical Reviews*, **2016**, 116, 5642-87	68.1	105
360	Photodissociation measurements of bond dissociation energies: Ti+2, V+2, Co+2, and Co+3. *Journal of Chemical Physics*, **1994**, 100, 4747-4755	3.9	105
359	Effect of internal excitation on the collision-induced dissociation and reactivity of Co +2. *Journal of Cluster Science*, **1990**, 1, 127-142	3	105
358	Absolute Binding Energies of Lithium Ions to Short Chain Alcohols, CnH2n+2O, n = 1–4, Determined by Threshold Collision-Induced Dissociation. *Journal of Physical Chemistry A*, **1997**, 101, 2614-2625	2.8	102
357	Transition-Metal Ethene Bonds: Thermochemistry of M+(C2H4)n (M = Ti–Cu, n = 1 and 2) Complexes. *Journal of the American Chemical Society*, **1998**, 120, 1891-1899	16.4	101
356	Collision-induced dissociation and charge transfer reactions of SF+x (x=1–5): Thermochemistry of sulfur fluoride ions and neutrals. *Journal of Chemical Physics*, **1992**, 97, 4859-4870	3.9	101
355	Gas-phase thermochemistry of transition metal ligand systems: reassessment of values and periodic trends **1996**, 1-45		101
354	Cation–ether Complexes in the Gas Phase: Bond Dissociation Energies of M+(dimethyl ether)x,x= 1–3, M+(1,2-dimethoxyethane)x,x= 1 and 2, and M+(12-crown-4) Where M = Rb and Cs. *Journal of Physical Chemistry A*, **1997**, 101, 7007-7017	2.8	100
353	State-specific reactions of iron(1+)(6D, 4F) with oxygen and oxirane: D.degree.0(iron(1+)-oxygen) and effects of collisional relaxation. *The Journal of Physical Chemistry*, **1989**, 93, 3159-3167		100
352	Cation–ether complexes in the gas phase: thermodynamic insight into molecular recognition. *International Journal of Mass Spectrometry*, **1999**, 193, 227-240	1.9	99
351	Statistical rate theory and kinetic energy-resolved ion chemistry: theory and applications. *Journal of Physical Chemistry A*, **2008**, 112, 10071-85	2.8	96
350	Binding energies for the inner hydration shells of Ca2+: An experimental and theoretical investigation of Ca2+(H2O)x complexes (x=5–9). *International Journal of Mass Spectrometry*, **2007**, 265, 308-325	1.9	96
349	Methane activation by vanadium(1+): electronic and translational energy dependence. *The Journal of Physical Chemistry*, **1987**, 91, 6178-6188		95
348	Cation–Ether Complexes in the Gas Phase: Bond Dissociation Energies of K+(dimethyl ether)x, x = 1–4; K+(1,2-dimethoxyethane)x, x = 1 and 2; and K+(12-crown-4). *Journal of Physical Chemistry A*, **1997**, 101, 4254-4262	2.8	93
347	Collision-induced dissociation of Ni+n (n=2–18) with Xe: Bond energies, geometrical structures, and dissociation pathways. *Journal of Chemical Physics*, **1992**, 96, 7542-7554	3.9	93
346	Is the kinetic method a thermodynamic method?. *Journal of Mass Spectrometry*, **1999**, 34, 74-78	2.2	92
345	State-specific reactions of atomic transition-metal ions with molecular hydrogen, hydrogen deuteride, and molecular deuterium: effects of d orbitals on chemistry. *The Journal of Physical Chemistry*, **1987**, 91, 2037-2045		92
344	Metal cluster ions: the bond energy of diatomic manganese(1+). *The Journal of Physical Chemistry*, **1983**, 87, 3593-3596		92

343	Reaction of Sc+, Ti+, and V+ with CO. MC+ and MO+ bond energies. *Journal of Chemical Physics*, **1991**, 95, 3387-3393	3.9	91
342	An electrospray ionization source for thermochemical investigation with the guided ion beam mass spectrometer. *Journal of the American Society for Mass Spectrometry*, **2007**, 18, 1124-34	3.5	89
341	Translational energy dependence of O+(4S) + H2(D2, HD) -jOH+(OD+) + H(D) from thermal energies to 30 eV c.m.. *International Journal of Mass Spectrometry and Ion Processes*, **1987**, 80, 153-175		89
340	Effect of kinetic and electronic energy on the reactions of Mn+ with H2, HD, and D2. *Journal of Chemical Physics*, **1986**, 84, 4862-4871	3.9	88
339	Energy dependence, kinetic isotope effects, and thermochemistry of the nearly thermoneutral reactions N+(3P)+H2(HD,D2)-NH+(ND+)+H(D). *Journal of Chemical Physics*, **1987**, 86, 2659-2673	3.9	87
338	Thermochemistry of Ti+? hydrocarbon bonds: translational energy dependence of the reactions of Ti+ with ethane, propane, and trans-2-butene. *International Journal of Mass Spectrometry and Ion Processes*, **1989**, 94, 149-177		86
337	Collision-induced dissociation of Ti+n (n=2□2) with Xe: Bond energies, geometric structures, and dissociation pathways. *Journal of Chemical Physics*, **1992**, 97, 4084-4093	3.9	85
336	Effect of kinetic and electronic energy on the reaction of vanadium(1+) (V+) with molecular hydrogen, hydrogen deuteride, and molecular deuterium. *The Journal of Physical Chemistry*, **1985**, 89, 5626-5636		85
335	Potential energy surface for carbon-dioxide activation by V+: A guided ion beam study. *Journal of Chemical Physics*, **1995**, 102, 754-762	3.9	84
334	Ligand Effects in Organometallic Thermochemistry: The Sequential Bond Energies of Ni(CO)x+ and Ni(N2)x+ (x = 1-4) and Ni(NO)x+ (x = 1-3). *The Journal of Physical Chemistry*, **1995**, 99, 7819-7828		83
333	Collision-induced dissociation and charge-transfer reactions of SiFx+ (x = 1-4). Thermochemistry of SiFx and SiFx+. *The Journal of Physical Chemistry*, **1993**, 97, 10204-10210		83
332	Activation of methane by gold cations: guided ion beam and theoretical studies. *Journal of Chemical Physics*, **2006**, 125, 133114	3.9	82
331	Activation of Methane by Gas-Phase Rh+. *The Journal of Physical Chemistry*, **1995**, 99, 10775-10779		82
330	Neutral and ionic metal-hydrogen and metal-carbon bond energies: reactions of cobalt, nickel, and copper with ethane, propane, methylpropane, and dimethylpropane. *Journal of the American Chemical Society*, **1989**, 111, 4251-4262	16.4	82
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328	Transition-metal hydride bond energies: first and second row. *Inorganic Chemistry*, **1986**, 25, 1078-1080	5.1	81
327	The special five-membered ring of proline: An experimental and theoretical investigation of alkali metal cation interactions with proline and its four- and six-membered ring analogues. *Journal of Physical Chemistry A*, **2006**, 110, 3933-46	2.8	80
326	Oxidation reactions at variably sized transition metal centers: Fe+n and Nb+n +O2 (n=1□). *Journal of Chemical Physics*, **1989**, 91, 6148-6163	3.9	80

325	Ammonia activation by vanadium(1+): electronic and translational energy dependence. *The Journal of Physical Chemistry*, **1990**, 94, 208-217		80
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323	Reactions of Cu+(1S and 3D) with O2, CO, CO2, N2, NO, N2O, and NO2 studied by guided ion beam mass spectrometry. *International Journal of Mass Spectrometry*, **1999**, 182-183, 99-120	1.9	77
322	Collision-induced dissociation of Vn+ (n=2□0) with Xe: Bond energies, dissociation pathways, and structures. *Journal of Chemical Physics*, **1993**, 99, 6613-6623	3.9	77
321	Experimental and theoretical studies of sodium cation interactions with the acidic amino acids and their amide derivatives. *Journal of Physical Chemistry A*, **2008**, 112, 3319-27	2.8	76
320	Reactions of Fe+, Co+, and Ni+ with Silane. Electronic State Effects, Comparison to Reactions with Methane, and M+-SiHx (x = 0-3) Bond Energies. *Journal of the American Chemical Society*, **1995**, 117, 764-773	16.4	76
319	A critical evaluation of the experimental and theoretical determination of lithium cation affinities. *International Journal of Mass Spectrometry*, **2007**, 267, 167-182	1.9	75
318	Thermochemistry and Structures of CoC3H6+: Metallacycle and Metal-Alkene Isomers. *Organometallics*, **1994**, 13, 3480-3490	3.8	75
317	Structures of the dehydrogenation products of methane activation by 5d transition metal cations. *Journal of Physical Chemistry A*, **2013**, 117, 4115-26	2.8	74
316	Absolute thermodynamic measurements of alkali metal cation interactions with a simple dipeptide and tripeptide. *Journal of Physical Chemistry A*, **2008**, 112, 3587-96	2.8	74
315	Reaction of Zn+ with NO2. The gas-phase thermochemistry of ZnO. *Journal of Chemical Physics*, **1991**, 95, 7263-7268	3.9	74
314	Collision-Induced Dissociation and Theoretical Studies of Mg+ Complexes with CO, CO2, NH3, CH4, CH3OH, and C6H6. *Journal of Physical Chemistry A*, **2000**, 104, 692-705	2.8	73
313	Guided Ion Beam Studies of the Reactions of Group 3 Metal Ions (Sc+, Y+, La+, and Lu+) with Silane. Electronic State Effects, Comparison to Reactions with Methane, and M+-SiHx (x = 0-3) Bond Energies. *Journal of the American Chemical Society*, **1995**, 117, 4057-4070	16.4	73
312	Reactions of Y+, Zr+, Nb+, and Mo+ with H2, HD, and D2. *The Journal of Physical Chemistry*, **1996**, 100, 54-62		72
311	Experimental and Theoretical Studies of Vanadium Sulfide Cation. *Journal of Physical Chemistry A*, **1998**, 102, 10060-10073	2.8	72
310	Absolute Binding Energies of Sodium Ions to Short Chain Alcohols, CnH2n+2O, n = 1□, Determined by Threshold Collision-Induced Dissociation Experiments and Ab Initio Theory. *Journal of Physical Chemistry A*, **1999**, 103, 4955-4963	2.8	72
309	The Potential Energy Surface for Activation of Methane by Co+: An Experimental Study. *The Journal of Physical Chemistry*, **1995**, 99, 9110-9117		72
308	Dissociative charge transfer reactions of Ar+, Ne+, and He+ with CF4 from thermal to 50 eV. *Journal of Chemical Physics*, **1990**, 92, 2296-2302	3.9	72

307	An experimental and theoretical dissection of potassium cation/glycine interactions. *Physical Chemistry Chemical Physics*, **2004**, 6, 2588	3.6	71
306	Ammonia activation by scandium(1+) and titanium(1+): electronic and translational energy dependence. *The Journal of Physical Chemistry*, **1990**, 94, 3008-3015		70
305	Kinetic energy dependence of the reactions of Ru+, Rh+, Pd+, and Ag+ with O2. *Journal of Chemical Physics*, **1995**, 103, 618-625	3.9	69
304	Activation of O2, CO, and CO2 by Pt+: The Thermochemistry of PtO+. *Journal of Physical Chemistry A*, **2003**, 107, 8904-8914	2.8	68
303	C+(2P)+H2(D2,HD)-ĴCH+(CD+)+H(D). I. Reaction cross sections and kinetic isotope effects from threshold to 15 eV c.m.. *Journal of Chemical Physics*, **1986**, 84, 6738-6749	3.9	68
302	Methane Activation by 5 d Transition Metals: Energetics, Mechanisms, and Periodic Trends. *Chemistry - A European Journal*, **2017**, 23, 10-18	4.8	67
301	Infrared multiple photon dissociation spectroscopy of cationized asparagine: effects of metal cation size on gas-phase conformation. *Journal of Physical Chemistry A*, **2009**, 113, 5519-30	2.8	67
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299	Effect of kinetic and electronic energy on the reactions of cobalt, nickel, and copper ions with hydrogen, hydrogen deuteride, and deuterium. *The Journal of Physical Chemistry*, **1986**, 90, 6576-6586		67
298	Endothermic reactions of uranium ions with N2, D2, and CD4. *Journal of Chemical Physics*, **1977**, 66, 4683-4688	3.9	67
297	Collision-induced dissociation of Cr+n (n=2□1) with Xe: Bond energies, dissociation pathways, and structures. *Journal of Chemical Physics*, **1993**, 99, 6506-6516	3.9	65
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295	Infrared multiple photon dissociation spectroscopy of cationized cysteine: Effects of metal cation size on gas-phase conformation. *International Journal of Mass Spectrometry*, **2010**, 297, 9-17	1.9	63
294	Guided ion beam studies of the reactions of Vn+ (n=2□7) with O2: Bond energies and dissociation pathways. *Journal of Chemical Physics*, **1998**, 108, 9339-9350	3.9	63
293	Hydration energies of zinc(II): threshold collision-induced dissociation experiments and theoretical studies. *Journal of Physical Chemistry A*, **2009**, 113, 13727-41	2.8	62
292	Activation of Carbon Dioxide: Gas-Phase Reactions of Y+, YO+, and YO2+ with CO and CO2. *Inorganic Chemistry*, **1999**, 38, 397-402	5.1	62
291	Guided ion beam studies of the reactions of Fen+ (n=2□8) with O2: Iron cluster oxide and dioxide bond energies. *Journal of Chemical Physics*, **1997**, 106, 4448-4462	3.9	61
290	Bond Dissociation Energies for Diatomic Molecules Containing 3d Transition Metals: Benchmark Scalar-Relativistic Coupled-Cluster Calculations for 20 Molecules. *Journal of Chemical Theory and Computation*, **2017**, 13, 1044-1056	6.4	60

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288	Reactions of Ru+, Rh+, Pd+, and Ag+ with H2, HD, and D2. *The Journal of Physical Chemistry*, **1995**, 99, 10438-10445		60
287	The bond energies of Cr2 and Cr+2. *Chemical Physics Letters*, **1993**, 201, 199-204	2.5	60
286	Periodic trends in chemical reactivity: reactions of scandium(1+), yttrium(1+), lanthanum(1+), and lutetium(1+) with hydrogen, deuterium and hydrogen-d1. *The Journal of Physical Chemistry*, **1989**, 93, 3151-3158		59
285	Bond energy-bond order relations in transition-metal bonds: vanadium. *Journal of the American Chemical Society*, **1984**, 106, 4065-4066	16.4	59
284	Collision-induced dissociation of niobium cluster ions: transition-metal-cluster binding energies. *Journal of the American Chemical Society*, **1989**, 111, 3167-3176	16.4	58
283	Translational and electronic energy dependence of chromium ion reactions with methane. *The Journal of Physical Chemistry*, **1988**, 92, 7067-7074		58
282	IR spectroscopy of cationized aliphatic amino acids: Stability of charge-solvated structure increases with metal cation size. *International Journal of Mass Spectrometry*, **2010**, 297, 18-27	1.9	57
281	Activation of methane by size-selected iron cluster cations, Fen+ (n=2□5): Cluster-CHx (x=0□) bond energies and reaction mechanisms. *Journal of Chemical Physics*, **2001**, 115, 9747-9763	3.9	57
280	Kinetic and Electronic Energy Dependence of the Reactions of Sc+ and Ti+ with D2O. *The Journal of Physical Chemistry*, **1994**, 98, 11490-11498		57
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278	Effect of kinetic and electronic energy on the reactions of Cr+ with H2, HD, and D2. *Journal of Chemical Physics*, **1987**, 86, 1868-1877	3.9	57
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276	Fundamentals of ion□olecule chemistry. *Journal of Analytical Atomic Spectrometry*, **2004**, 19, 571-580	3.7	56
275	Cobalt carbene ion: Reactions of Co+ with C2H4, cyclo-C3H6, and cyclo-C2H4O. *Journal of Chemical Physics*, **1981**, 74, 2819-2826	3.9	56
274	Reactions of Ground-State Ti+ and V+ with Propane: Factors That Govern C□H and C□C Bond Cleavage Product Branching Ratios. *Journal of the American Chemical Society*, **1998**, 120, 5704-5712	16.4	55
273	Translational energy dependence of O+(4S)+N2-JNO++N from thermal energies to 30 eV c.m.. *Journal of Chemical Physics*, **1987**, 86, 1944-1953	3.9	55
272	Guided ion-beam studies of the reactions of Fen+ (n=1□8) with CO2: Iron cluster oxide bond energies. *Journal of Chemical Physics*, **1997**, 107, 5345-5355	3.9	54

271	Statistical modeling of sequential collision-induced dissociation thresholds. *Journal of Chemical Physics*, **2007**, 126, 234302	3.9	54
270	Is Spin Conserved in Heavy Metal Systems? Experimental and Theoretical Studies of the Reaction of Re+with Methane *Journal of Physical Chemistry A*, **2004**, 108, 9660-9672	2.8	54
269	Infrared multiple photon dissociation spectroscopy of cationized histidine: effects of metal cation size on gas-phase conformation. *Journal of Physical Chemistry A*, **2012**, 116, 1532-41	2.8	52
268	Experimental and Theoretical Studies of the Activation of Methane by Ta+ *Journal of Physical Chemistry C*, **2007**, 111, 17773-17787	3.8	52
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265	Reactions of U+ and UO+ with O2, CO, CO2, COS, CS2 and D2O. *Chemical Physics*, **1980**, 50, 27-36	2.3	52
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