Maria Schlangen

List of Publications by Year
in descending order

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140	4,671	109137	133063
papers	citations	35 h-index	59 g-index

165	165	165	2110
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Thermal Hydrogenâ€Atom Transfer from Methane: The Role of Radicals and Spin States in Oxoâ€Cluster Chemistry. Angewandte Chemie - International Edition, 2012, 51, 5544-5555.	7.2	377
2	Diatomic [CuO]⁺ and Its Role in the Spinâ€Selective Hydrogenâ€•and Oxygenâ€Atom Transfers in the Thermal Activation of Methane. Angewandte Chemie - International Edition, 2011, 50, 4966-4969.	7.2	156
3	Effects of Ligands, Cluster Size, and Charge State in Gas-Phase Catalysis: A Happy Marriage of Experimental and Computational Studies. Catalysis Letters, 2012, 142, 1265-1278.	1.4	130
4	Direct Conversion of Methane into Formaldehyde Mediated by [Al₂O₃]^{.+} at Room Temperature. Angewandte Chemie - International Edition, 2012, 51, 3703-3707.	7.2	98
5	Electrostatic and Charge-Induced Methane Activation by a Concerted Double Câ€“H Bond Insertion. Journal of the American Chemical Society, 2017, 139, 1684-1689.	6.6	96
6	Unexpected Mechanistic Variants in the Thermal Gas-Phase Activation of Methane. Organometallics, 2017, 36, 8-17.	1.1	91
7	Electronic Origins of the Variable Efficiency of Room-Temperature Methane Activation by Homo- and Heteronuclear Cluster Oxide Cations [XYO₂]⁺ (X, Y = Al, Si, Mg): Competition between Proton-Coupled Electron Transfer and Hydrogen-Atom Transfer. Journal of the American Chemical Society, 2016, 138, 7973-7981.	6.6	90
8	Conversion of Methane to Methanol: Nickel, Palladium, and Platinum (d⁹) Cations as Catalysts for the Oxidation of Methane by Ozone at Room Temperature. Chemistry - A European Journal, 2010, 16, 11605-11610.	1.7	89
9	Ligand and electronic-structure effects in metal-mediated gas-phase activation of methane: A cold approach to a hot problem. Dalton Transactions, 2009, , 10155.	1.6	87
10	Gas-Phase Câ^'H and Nâ^'H Bond Activation by a High Valent Nitrido-Iron Dication and ã€ˆNHã€‰-Transfer to Activated Olefins. Journal of the American Chemical Society, 2008, 130, 4285-4294.	6.6	85
11	Mechanistic Variants in Gas-Phase Metal-Oxide Mediated Activation of Methane at Ambient Conditions. Journal of the American Chemical Society, 2016, 138, 11368-11377.	6.6	85
12	Structure of the Oxygen-Rich Cluster Cation Al₂O₇⁺and its Reactivity toward Methane and Water. Journal of the American Chemical Society, 2011, 133, 16930-16937.	6.6	73
13	Generation, Reactivity Towards Hydrocarbons, and Electronic Structure of Heteronuclear Vanadium Phosphorous Oxygen Cluster Ions. Angewandte Chemie - International Edition, 2011, 50, 1430-1434.	7.2	73
14	Thermal Reactions of YAlO₃^{+.} with Methane: Increasing the Reactivity of Y₂O₃^{+.} and the Selectivity of Al₂O₃^{+.} by Doping. Angewandte Chemie - International Edition, 2012, 51, 5991-5994.	7.2	69
15	Bond Activation by Metalâ€“Carbene Complexes in the Gas Phase. Accounts of Chemical Research, 2016, 49, 494-502.	7.6	68
16	Control of Product Distribution and Mechanism by Ligation and Electric Field in the Thermal Activation of Methane. Angewandte Chemie - International Edition, 2017, 56, 10219-10223.	7.2	68
17	Alkane Oxidation by VO2+in the Gas Phase:Â A Unique Dependence of Reactivity on the Chain Length. Organometallics, 2003, 22, 3933-3943.	1.1	67
18	Pronounced Ligand Effects and the Role of Formal Oxidation States in the Nickel-Mediated Thermal Activation of Methane. Angewandte Chemie - International Edition, 2007, 46, 1641-1644.	7.2	66

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19	Catalytic Redox Reactions in the CO/N₂O System Mediated by the Bimetallic Oxideâ€Cluster Couple AlVO₃⁺/AlVO₄⁺. Angewandte Chemie - International Edition, 2011, 50, 12351-12354.	7.2	66
20	Structure and Chemistry of the Heteronuclear Oxo-Cluster [VPO₄]^{â€¢+}: A Model System for the Gas-Phase Oxidation of Small Hydrocarbons. Journal of the American Chemical Society, 2013, 135, 3711-3721.	6.6	66
21	Thermal Activation of Methane by Groupâ€…10 Metal Hydrides MH+: The Same and Not the Same. Angewandte Chemie - International Edition, 2007, 46, 5614-5617.	7.2	58
22	On the Origin of the Surprisingly Sluggish Redox Reaction of the N₂O/CO Couple Mediated by [Y₂O₂]^{+.} and [YAlO₂]^{+.} Cluster Ions in the Gas Phase. Angewandte Chemie - International Edition, 2013, 52, 1226-1230.	7.2	57
23	â€œRollâ€overâ€•Cyclometalation of 2,2â€²â€Bipyridine Platinum(II) Complexes in the Gas Phase: A Combined Experimental and Computational Study. Chemistry - A European Journal, 2008, 14, 11050-11060.	1.7	54
24	Hidden Hydride Transfer as a Decisive Mechanistic Step in the Reactions of the Unligated Gold Carbide [AuC]⁺ with Methane under Ambient Conditions. Angewandte Chemie - International Edition, 2016, 55, 13072-13075.	7.2	54
25	CH- and NH-activation by gaseous Rh2+ and PtRh+ cluster ions. International Journal of Mass Spectrometry, 2004, 237, 19-23.	0.7	50
26	Probing elementary steps of nickel-mediated bond activation in gas-phase reactions: Ligand- and cluster-size effects. Journal of Catalysis, 2011, 284, 126-137.	3.1	49
27	On the Mechanisms of Degenerate Ligand Exchange in [M(CH₃)]⁺/CH₄ Couples (M=Fe, Co, Ni, Ru, Rh, Pd, Os, Ir, Pt) as Explored by Mass Spectrometric and Computational Studies: Oxidative Addition/Reductive Elimination versus Ïâ€Complexâ€Assisted Metathesis. Chemistry - A European Journal, 2008, 14, 5229-5236.	1.7	47
28	Thermal Activation of Methane and Ethene by Bare MO^{.+} (M=Ge, Sn, and Pb): A Combined Theoretical/Experimental Study. Chemistry - A European Journal, 2011, 17, 9619-9625.	1.7	45
29	Darstellung, ReaktivitÃt gegenÃ¼ber Kohlenwasserstoffen und elektronische Struktur von heteronuclearen Vanadium-Phosphor-Sauerstoff-Clusterionen. Angewandte Chemie, 2011, 123, 1466-1470.	1.6	42
30	Differences and Commonalities in the Gasâ€Phase Reactions of Closedâ€Shell Metal Dioxide Clusters [MO₂]⁺ (M=V, Nb, and Ta) with Methane. Chemistry - A European Journal, 2016, 22, 7225-7228.	1.7	39
31	Isomerâ€Selective Thermal Activation of Methane in the Gas Phase by [HMO]⁺ and [M(OH)]⁺ (M=Ti and V). Angewandte Chemie - International Edition, 2013, 52, 6097-6101.	7.2	38
32	Ligandâ€Controlled CO₂ Activation Mediated by Cationic Titanium Hydride Complexes, [LTiH]⁺ (L=Cp₂, O). Chemistry - A European Journal, 2015, 21, 8483-8490.	1.7	38
33	A Redox Non-Innocent Ligand Controls the Life Time of a Reactive Quartet Excited State - An MCSCF Study of [Ni(H)(OH)]+. Journal of the American Chemical Society, 2009, 131, 12634-12642.	6.6	36
34	On the Role of the Electronic Structure of the Heteronuclear Oxide Cluster [Ga₂Mg₂O₅]^{.+} in the Thermal Activation of Methane and Ethane: An Unusual Doping Effect. Angewandte Chemie - International Edition, 2015, 54, 5074-5078.	7.2	36
35	Spinâ€Selective Thermal Activation of Methane by Closedâ€Shell [TaO₃]⁺. Angewandte Chemie - International Edition, 2016, 55, 7257-7260.	7.2	36
36	Câ€“H Bond Activation ofMethane with Gaseous [(CH3)Pt(L)]+ Complexes (L = Pyridine, Bipyridine, and) Tj ETQq0 0 0 rgBT /Overlock 10 309-313.	0.3	35

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37	Mechanistic Aspects and Elementary Steps of Nï£¿H Bond Activation of Ammonia and Cï£¿N Coupling Induced by Gasâ€Phase Ions: A Combined Experimental/Computational Exercise. Chemistry - A European Journal, 2012, 18, 40-49.	1.7	35
38	Ligand and Substrate Effects in Gas-Phase Reactions of NiX+/RH Couples (X=F, Cl, Br, I; R=CH3,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 70	1.7	34
39	Roomâ€Temperature Alkyneâ€“Nitrile Metathesis and Unambiguous Proof for the Existence of a Highâ€Valent Ironâ€Nitrido Dication in the Gas Phase. Short Communication. Helvetica Chimica Acta, 2008, 91, 1430-1434.	1.0	33
40	Ligand Effects on the Mechanisms of Thermal Bond Activation in the Gasâ€Phase Reactions NiX⁺/CH₄â†'Ni(CH₃)⁺/HX (X=H, CH₃, OH, F). Short Communication. Helvetica Chimica Acta, 2008, 91, 2203-2210.	1.0	33
41	Neutral Metal Atoms Acting as a Leaving Group in Gas-Phase S_N2 Reactions: M(CH₃)⁺ + NH₃ â†' CH₃NH₃⁺ + M (M = Zn, Cd, Hg). Organometallics, 2012, 31, 3816-3824.	1.1	32
42	Efficient Roomâ€Temperature, Au⁺â€Mediated Coupling of a Carbene Ligand with Methane To Generate C₂H_x (x=4, 6). Angewandte Chemie - International Edition, 2016, 55, 441-444.	7.2	32
43	Penetrating the Elusive Mechanism of Copper-Mediated Fluoromethylation in the Presence of Oxygen through the Gas-Phase Reactivity of Well-Defined [LCuO]⁺ Complexes with Fluoromethanes (CH_(4â€“n)F_n, n = 1â€“3). Journal of the American Chemical Society, 2016, 138, 3125-3135.	6.6	32
44	On divorcing isomers, dissecting reactivity, and resolving mechanisms of propane CH and aryl CX (X=halogen) bond activations mediated by a ligated copper(III) oxo complex. Chemical Physics Letters, 2014, 608, 408-424.	1.2	30
45	Thermal Methane Activation by a Binary Vâ€“Nb Transitionâ€Metal Oxide Cluster Cation: A Further Example for the Crucial Role of Oxygenâ€Centered Radicals. Chemistry - A European Journal, 2013, 19, 11496-11501.	1.7	29
46	Activation of Methane and Carbon Dioxide Mediated by Transitionâ€Metal Doped Magnesium Oxide Clusters [MMgO]^{+/0/â•'} (M=Scâ€“Zn). Chemistry - A European Journal, 2015, 21, 7780-7789.	1.7	28
47	Facile Dissociation of [(LNi^{II})₂E₂] Dichalcogenides: Evidence for [LNi^{II}E₂] Superselenides and Supertellurides in Solution. Angewandte Chemie - International Edition, 2009, 48, 4551-4554.	7.2	27
48	Efficient and Selective Gasâ€Phase Monomethylation versus Nï£¿H Bond Activation of Ammonia by â€œBareâ€• Zn(CH₃)⁺: Atomic Zinc as a Leaving Group in an S_N2 Reaction. Angewandte Chemie - International Edition, 2011, 50, 5387-5391.	7.2	25
49	Distinct Mechanistic Differences in the Hydrogenâ€Atom Transfer from Methane and Water by the Heteronuclear Oxide Cluster [Ga₂MgO₄]^{.+}. Angewandte Chemie - International Edition, 2015, 54, 12298-12302.	7.2	25
50	Sequential Gas-Phase Activation of Carbon Dioxide and Methane by [Re(CO)₂]⁺: The Sequence of Events Matters!. Journal of the American Chemical Society, 2017, 139, 6169-6176.	6.6	25
51	The Electric Field as a â€œSmartâ€•Ligand in Controlling the Thermal Activation of Methane and Molecular Hydrogen. Angewandte Chemie - International Edition, 2018, 57, 14635-14639.	7.2	25
52	Gas-Phase Reactions of Homo- and Heteronuclear Clusters MMâ€²+ (M, Mâ€²=Fe, Co, Ni) with Linear Alkanenitriles. Helvetica Chimica Acta, 2005, 88, 1405-1420.	1.0	24
53	Metal-dependent alternative activation of Oâ€“H and Câ€“H bonds of methanol: on the formation and structure of â€œbareâ€•[M,C,H3,O]+ complexes (M = Fe, Co, Ni) in the gas phase. Chemical Communications, 2010, 46, 1878-1880.	2.2	24
54	Cï£¿N and Cï£¿C Bond Formations in the Thermal Reactions of â€œBareâ€•Ni(NH₂)⁺ with C₂H₄: Mechanistic Insight on the Metalâ€Mediated Hydroamination of an Unactivated Olefin. Angewandte Chemie - International Edition, 2012, 51, 3483-3488.	7.2	24

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55	Gasâ€Phase Reactions of Cationic Vanadiumâ€Phosphorus Oxide Clusters with C₂H_x (x=4, 6): A DFTâ€Based Analysis of Reactivity Patterns. Chemistry - A European Journal, 2013, 19, 3017-3028.	1.7	24
56	Thermal Ethane Activation by Bare [V₂O₅]⁺ and [Nb₂O₅]⁺ Cluster Cations: on the Origin of Their Different Reactivities. Chemistry - A European Journal, 2014, 20, 6672-6677.	1.7	24
57	Insertion of Molecular Oxygen in Transitionâ€Metal Hydride Bonds, Oxygenâ€Bond Activation, and Unimolecular Dissociation of Metal Hydroperoxide Intermediates. Short Communication. Helvetica Chimica Acta, 2008, 91, 379-386.	1.0	23
58	Mechanistic Aspects of Gasâ€Phase Hydrogenâ€Atom Transfer from Methane to [CO]^{.+} and [SiO]^{.+}: Why Do They Differ?. Chemistry - A European Journal, 2013, 19, 6662-6669.	1.7	23
59	Oriented external electric fields as mimics for probing the role of metal ions and ligands in the thermal gas-phase activation of methane. Dalton Transactions, 2018, 47, 15271-15277.	1.6	23
60	Hidden Hydride Transfer as a Decisive Mechanistic Step in the Reactions of the Unligated Gold Carbide [AuC]⁺ with Methane under Ambient Conditions. Angewandte Chemie, 2016, 128, 13266-13269.	1.6	22
61	Efficient Roomâ€Temperature Activation of Methane by TaN⁺ under Câ€“N Coupling. Angewandte Chemie - International Edition, 2016, 55, 11678-11681.	7.2	21
62	The Unique Gasâ€Phase Chemistry of the [AuO]⁺/CH₄ Couple: Selective Oxygenâ€Atom Transfer to, Rather than Hydrogenâ€Atom Abstraction from, Methane. Angewandte Chemie - International Edition, 2016, 55, 10877-10880.	7.2	21
63	Striking Doping Effects on Thermal Methane Activation Mediated by the Heteronuclear Metal Oxides [XAlO₄]^{.+} (X=V, Nb, and Ta). Chemistry - A European Journal, 2017, 23, 788-792.	1.7	21
64	Formation, Structure, and Reactivity of Gaseous Ni2O2+. European Journal of Inorganic Chemistry, 2005, 2005, 2464-2469.	1.0	20
65	Platinum(II)-mediated dehydrosulfurization and oxidative carbonâ€“carbon coupling in the gas-phase decomposition of thioethers. International Journal of Mass Spectrometry, 2009, 283, 3-8.	0.7	20
66	Toward extension of the gas-phase basicity scale by novel pyridine containing guanidines. International Journal of Mass Spectrometry, 2013, 354-355, 113-122.	0.7	20
67	Thermal Dehydrogenation of Methane by [ReN]+. Angewandte Chemie - International Edition, 2016, 55, 14863-14866.	7.2	20
68	Selective Cï£¿H versus Oï£¿H Bond Activation of CH₃OH upon Electrospraying Methanolic Solutions of MX₂ (M=Fe, Co, Ni; X=Br, I): A DFT Study. ChemCatChem, 2010, 2, 799-802.	1.8	19
69	On the Mechanisms of Hydrogenâ€Atom Transfer from Water to the Heteronuclear Oxide Cluster [Ga₂Mg₂O₅]^{.+}: Remarkable Electronic Structure Effects. Angewandte Chemie - International Edition, 2015, 54, 11861-11864.	7.2	19
70	Directed, Remote Gasâ€Phase Cï£¿H and Cï£¿C Bond Activations by Metal Oxide Cations Anchored to a Nitrile Group. Chemistry - A European Journal, 2011, 17, 1783-1788.	1.7	18
71	SpinabhÃngige, thermische Aktivierung von Methan durch den geschlossenschaligen Cluster [TaO₃]⁺. Angewandte Chemie, 2016, 128, 7374-7377.	1.6	18
72	Thermal Activation of Methane by [HfO]^{.+} and [XHfO]⁺ (X=F, Cl, Br, I) and the Origin of a Remarkable Ligand Effect. Angewandte Chemie - International Edition, 2016, 55, 7685-7688.	7.2	18

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73	Intermediates of Nâ€Heterocyclic Carbene (NHC) Dimerization Probed in the Gas Phase by Ion Mobility Mass Spectrometry: Câ‹¯Hâ‹…â‹…â‹…:C Hydrogen Bonding Versus Covalent Dimer Formation. Chemistry - A European Journal, 2019, 25, 2511-2518.	1.7	18
74	Specific Processes and Scrambling in the Dehydrogenation of Ethane and the Degenerate Hydrogen Exchange in the Gas-Phase Ion Chemistry of the Ni(C,H3,O)+/C2H6 Couple. Helvetica Chimica Acta, 2007, 90, 847-853.	1.0	17
75	Thermal Ammonia Activation by Cationic Transitionâ€Metal Hydrides of the First Row â€“ Small but Mighty. Chemistry - an Asian Journal, 2012, 7, 1214-1220.	1.7	17
76	On the Origin of the Remarkably Variable Reactivities of [AlCeO_x]⁺ (x=2â€“4) towards Methane as a Function of Oxygen Content. Angewandte Chemie - International Edition, 2017, 56, 413-416.	7.2	17
77	Câ€“N coupling in the gas-phase reactions of ammonia and [M(CH)]+ (M = Ni, Pd, Pt): a combined experimental/computational exercise. Dalton Transactions, 2013, 42, 4153.	1.6	16
78	On the Activation of Methane and Carbon Dioxide by [HTaO]⁺ and [TaOH]⁺ in the Gas Phase: A Mechanistic Study. Chemistry - A European Journal, 2016, 22, 10581-10589.	1.7	16
79	Direct Identification of Acetaldehyde Formation and Characterization of the Active Site in the [VPO₄]^{.+}/C₂H₄ Couple by Gasâ€Phase Vibrational Spectroscopy. Angewandte Chemie - International Edition, 2019, 58, 18868-18872.	7.2	16
80	On the Remarkable Role of the Nitrogen Ligand in the Gasâ€Phase Redox Reaction of the N₂O/CO Couple Catalyzed by [NbN]⁺. Angewandte Chemie - International Edition, 2019, 58, 3635-3639.	7.2	16
81	Thermal Activation of Nï£¿H Bonds by Transitionâ€metal Oxide Cations: Does a Hierarchy Exist in the First Row?. Chemistry - A European Journal, 2011, 17, 3886-3892.	1.7	15
82	The Origin of the Efficient, Thermal Chemisorption of Methane by the Heteronuclear Metalâ€Oxide Cluster [Al₂TaO₅]⁺. Angewandte Chemie - International Edition, 2016, 55, 14867-14871.	7.2	15
83	On the Origin of the Distinctly Different Reactivity of Ruthenium in [MO]⁺/CH₄ Systems (M=Fe, Ru, Os). Angewandte Chemie - International Edition, 2018, 57, 5934-5937.	7.2	15
84	Direct Roomâ€Temperature Conversion of Methane into Protonated Formaldehyde: The Gasâ€Phase Chemistry of Mercury among the Zinc Triad Oxide Cations. Angewandte Chemie - International Edition, 2018, 57, 3251-3255.	7.2	15
85	Competitive Intramolecular Arylâ€and Alkylâ€Cï£¿H Bond Activation and Ligand Evaporation from Gaseous Bisimino Complexes [Pt(L)(CH₃)((CH₃)₂S)]⁺ (L=C₆H₅Nï£¾C(CH₃)ï£¿C(CH₃)ï£¾NC₆H₅). Helvetica Chimica Acta, 2008, 91, 1902-1915.	1.0	14
86	Effect of Adduct Formation with Molecular Nitrogen on the Measured Collisional Cross Sections of Transition Metalâ€“1,10-Phenanthroline Complexes in Traveling Wave Ion-Mobility Spectrometry: N₂ Is Not Always an â€œInertâ€•Buffer Gas. Analytical Chemistry, 2015, 87, 9769-9776.	3.2	14
87	Mechanistic Aspects of the Gasâ€Phase Reactions of Halobenzenes with Bare Lanthanide Cations: A Combined Experimental/Theoretical Investigation. Chemistry - A European Journal, 2015, 21, 2123-2131.	1.7	13
88	Efficient Roomâ€Temperature Methane Activation by the Closedâ€Shell, Metalâ€Free Cluster [OSiOH]⁺: A Novel Mechanistic Variant. Chemistry - A European Journal, 2016, 22, 14257-14263.	1.7	13
89	Metalâ€Free, Roomâ€Temperature Oxygenâ€Atom Transfer in the N 2 O/CO Redox Couple as Catalyzed by [Si 2 O x] .+ (x =2 â€“ 5). Angewandte Chemie - International Edition, 2017, 56, 9990-9993.	7.2	13
90	Electronic Origin of the Competitive Mechanisms in the Thermal Activation of Methane by the Heteronuclear Cluster Oxide [Al₂ZnO₄]^{.+}. Angewandte Chemie - International Edition, 2017, 56, 14297-14300.	7.2	13

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91	Steuerung der Produktverteilung und der Mechanismen der thermischen Aktivierung von Methan durch Ligandeneffekte und elektrische Felder. Angewandte Chemie, 2017, 129, 10353-10357.	1.6	13
92	Carbonâ€Atom Extrusion from Halobenzenes and Its Coupling with a Methylene Ligand to Form Acetylene. Chemistry - A European Journal, 2015, 21, 9629-9631.	1.7	12
93	Selective Nitrogenâ€Atom Transfer Driven by a Highly Efficient Intersystem Crossing in the [CeON]⁺/CH₄ System. Angewandte Chemie - International Edition, 2018, 57, 15902-15906.	7.2	12
94	DFT Studies on the Thermal Activation of Molecular Oxygen by Bare [Ni(H)(OH)]⁺. Helvetica Chimica Acta, 2009, 92, 151-164.	1.0	11
95	Highly regioselective hydride transfer, oxidative dehydrogenation, and hydrogen-atom abstraction in the thermal gas-phase chemistry of [Zn(OH)]⁺/C₃H₈. Physical Chemistry Chemical Physics, 2014, 16, 26617-26623.	1.3	11
96	Thermal Activation of CH₄ and H₂ as Mediated by the Ruthenium Oxide Cluster Ions [RuO_x]⁺ (x=1â€“3): On the Influence of Oxidation States. Chemistry - A European Journal, 2019, 25, 3550-3559.	1.7	11
97	Breaking and Making of Carbonâ€“Carbon Bonds by Lanthanides and Thirdâ€Row Transition Metals. Chemistry - A European Journal, 2016, 22, 3073-3076.	1.7	10
98	On the Origin of Roomâ€“temperature, Au⁺â€mediated Coupling of a Methylene Ligand with H₂. Implications for the Mechanism of Methane Dehydrogenation.. ChemistrySelect, 2016, 1, 444-447.	0.7	10
99	Zum Ursprung der effizienten thermischen Chemisorption von Methan durch den heteronuklearen Metalloxidcluster [Al₂TaO₅]⁺. Angewandte Chemie, 2016, 128, 15090-15094.	1.6	10
100	Thermal Methane Activation by the Metalâ€Free Cluster Cation [Si₂O₄]^{.+}. Chemistry - A European Journal, 2017, 23, 1498-1501.	1.7	10
101	Spinâ€Selective, Competitive Hydrogenâ€Atom Transfer versus CH₂Oâ€Generation from the CH₄/[ReO₄]⁺ Couple at Ambient Conditions. Chemistry - A European Journal, 2017, 23, 17469-17472.	1.7	10
102	Oâ”O Bond Formation and Liberation of Dioxygen Mediated by N₅â€Coordinate Nonâ€Heme Iron(IV) Complexes. Angewandte Chemie - International Edition, 2019, 58, 13472-13478.	7.2	10
103	Direct Identification of Acetaldehyde Formation and Characterization of the Active Site in the [VPO 4] .+ /C 2 H 4 Couple by Gasâ€Phase Vibrational Spectroscopy. Angewandte Chemie, 2019, 131, 19044-19048.	1.6	10
104	Tuning the Reactivities of the Heteronuclear [Al_nV₃â”n</sub>O₇â”n</sub>]⁺ (n=1,â€¦2) Cluster Oxides towards Methane by Varying the Composition of the Metal Centers. Chemistry - A European Journal, 2019, 25, 2967-2971.	1.7	10
105	Coordination chemistry of nickel(II) nitrate with superbasic guanidines as studied by electrospray mass spectrometry. International Journal of Mass Spectrometry, 2010, 290, 22-31.	0.7	9
106	Deutlich unterschiedliche Mechanismen der Wasserstoffatomabstraktion aus Methan und Wasser durch den heteronuklearen Oxidcluster [Ga₂MgO₄]^{.+}. Angewandte Chemie, 2015, 127, 12472-12477.	1.6	9
107	Thermische Aktivierung von Methan durch [HfO]^{.+} und [XHfO]⁺ (X=F, Cl, Br,) Tj ETQq1 1 0.784314 rgBT /O	1.6	9
108	Thermische Dehydrierung von Methan durch [ReN]⁺. Angewandte Chemie, 2016, 128, 15085-15089.	1.6	9

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109	Mechanistic aspects of CO2 activation mediated by phenyl yttrium cation: A combined experimental/theoretical study. Journal of Catalysis, 2016, 343, 68-74.	3.1	9
110	On the Origin of Reactivity Enhancement/Suppression upon Sequential Ligation: [Re(CO)_x]⁺/CH₄ (x=0â€“3) Couples. Angewandte Chemie - International Edition, 2017, 56, 2951-2954.	7.2	9
111	Ursachen der unterschiedlichen ReaktivitÃt von [AlCeOx]+(x=2-4) gegenÃ¼ber Methan in AbhÃngigkeit vom Sauerstoffgehalt. Angewandte Chemie, 2017, 129, 424-428.	1.6	9
112	Ligand Effects on the Reactivity of [CoX]+ (Xâ€‰=â€‰CN, F, Cl, Br, O, OH) Towards CO2: Gas-Phase Generation of the Elusive Cyanoformate by [Co(CN)]+ and [Fe(CN)]+. Topics in Catalysis, 2018, 61, 575-584.	1.3	9
113	Effiziente, thermische Aktivierung von Methan durch TaN⁺ unter Câ€Nâ€Kupplung. Angewandte Chemie, 2016, 128, 11851-11855.	1.6	8
114	Unravelling Mechanistic Aspects of the Gasâ€Phase Ethanol Conversion: An Experimental and Computational Study on the Thermal Reactions of MO₂⁺ (M=Mo, W) with Ethanol. Chemistry - A European Journal, 2016, 22, 3077-3083.	1.7	8
115	Metallfreier, durch [Si 2 O x] .+ (x =2 â€“ 5) katalysierter Sauerstofftransfer im N 2 O/COâ€Redoxpaar bei Raumtemperatur. Angewandte Chemie, 2017, 129, 10122-10126.	1.6	8
116	Selective Câ€™O Coupling Hidden in the Thermal Reaction of [Al₂CuO₅]⁺ with Methane. Chemistry - A European Journal, 2018, 24, 14649-14653.	1.7	8
117	Single and Double Nï¿¿H Bond Activation of Ammonia by [Al₂O₃]^{.+}: Room Temperature Formation of the Aminyl Radical and Nitrene. Angewandte Chemie - International Edition, 2013, 52, 9513-9517.	7.2	7
118	Thermal Methane Activation by [Si₂O₅]^{.+} and [Si₂O₅H₂]^{.+}: Reactivity Enhancement by Hydrogenation. Angewandte Chemie - International Edition, 2016, 55, 13345-13348.	7.2	7
119	Gas-phase reactions of cationic molybdenum and tungsten monoxide with ethanol: a combined experimental/computational exercise. Structural Chemistry, 2017, 28, 403-413.	1.0	7
120	Metalâ€Dependent Strengthening and Weakening of Mâ€™H and Mâ€™C Bonds by an Oxo Ligand: Thermal Gasâ€Phase Activation of Methane by [OMH]⁺ and [MH]⁺ (M=Mo, Ti). Chemistry - A European Journal, 2017, 23, 12346-12352.	1.7	7
121	Elektronische Ursache konkurrierender Mechanismen bei der thermischen Aktivierung von Methan durch das heteronukleare Clusteroxid [Al₂ZnO₄]^{.+}. Angewandte Chemie, 2017, 129, 14486-14490.	1.6	7
122	Direkte Umwandlung von Methan zu protoniertem Formaldehyd bei Raumtemperatur in der Gasphase: Zur Rolle von Quecksilber unter den Oxidkationen der Zinktriade. Angewandte Chemie, 2018, 130, 3306-3310.	1.6	7
123	Die Chemie von [AuO]⁺/CH₄ in der Gasphase: Selektive Sauerstoffatomâ€Übertragung auf, statt Wasserstoffatomâ€Abstraktion von Methan. Angewandte Chemie, 2016, 128, 11036-11039.	1.6	6
124	On the Electronic Origin of Remarkable Ligand Effects on the Reactivities of [NiL]⁺ Complexes (L=C₆H₅, C₅H₄N, CN) towards Methane. Chemistry - A European Journal, 2017, 23, 14430-14433.	1.7	6
125	Über die Ursachen der deutlich unterschiedlichen ReaktivitÃt von Ruthenium unter den [MO]⁺/CH₄â€Systemen (M=Fe, Ru, Os). Angewandte Chemie, 2018, 130, 6039-6043.	1.6	5
126	Mechanistic aspects of methane activation promoted by [MO3]+ (Mâ€‰=â€‰Mn, Re). International Journal of Mass Spectrometry, 2018, 434, 240-245.	0.7	4

#	Article	IF	Citations
127	Selektive Ãœbertragung eines Stickstoffatoms im [CeON]⁺/CH₄â€Šsystem durch hocheffizientes Intersystem Crossing. Angewandte Chemie, 2018, 130, 16129-16133.	1.6	4
128	Thermal Activation of Ammonia by Transitionâ€Metal Hydroxide Cations. ChemPlusChem, 2013, 78, 952-958.	1.3	3
129	Mechanistic aspects of the gas-phase coupling of thioanisole and chlorobenzene to dibenzothiophene catalyzed by atomic Ho+. Physical Chemistry Chemical Physics, 2015, 17, 9564-9568.	1.3	3
130	â€œStrippingâ€•the Carbon Atom of Methyl Halide by a Cationic Holmium Complex: A Gasâ€Phase Study. Chemistry - A European Journal, 2015, 21, 14305-14308.	1.7	2
131	Frontispiece: Distinct Mechanistic Differences in the Hydrogen-Atom Transfer from Methane and Water by the Heteronuclear Oxide Cluster [Ga2MgO4].+. Angewandte Chemie - International Edition, 2015, 54, n/a-n/a.	7.2	2
132	Mechanistic Aspects of the Holmiumâ€Mediated, Reciprocal Hydrogen/Sulfur Exchange in the Gas Phase: C₆H₅CH₃+CH₂Sâ†'C₆H₅CHS+CH₄. Chemistry - A European Journal, 2016, 22, 4336-4339.	1.7	2
133	Thermische Methanaktivierung durch [Si₂O₅]^{.+} und [Si₂O₅H₂]^{.+}: ReaktivitÄtssteigerung durch Hydrierung. Angewandte Chemie, 2016, 128, 13540-13543.	1.6	2
134	On the Origin of Reactivity Enhancement/Suppression upon Sequential Ligation: [Re(CO)_x]⁺/CH₄ (x=0â€“3) Couples. Angewandte Chemie, 2017, 129, 2997-3000.	1.6	2
135	Ãœber die besondere Rolle des Stickstoffliganden in den durch [NbN]⁺ katalysierten Redoxreaktionen von N₂O/CO in der Gasphase. Angewandte Chemie, 2019, 131, 3674-3678.	1.6	2
136	Oâ€'O Bond Formation and Liberation of Dioxygen Mediated by N5â€Coordinate Nonâ€Heme Iron(IV) Complexes. Angewandte Chemie, 2019, 131, 13606-13612.	1.6	1
137	Elektrisches Feld als â€œsmarterâ€•Ligandenersatz zur kontrollierten thermischen Aktivierung von Methan und molekularem Wasserstoff. Angewandte Chemie, 2018, 130, 14845-14849.	1.6	1
138	Formation, Structure, and Reactivity of Gaseous Ni2O2+.. ChemInform, 2005, 36, no.	0.1	0
139	Thermal Activation of Ammonia by Transition-Metal Hydroxide Cations. ChemPlusChem, 2013, 78, 886-886.	1.3	0
140	RÃ¼cktitelbild: Steuerung der Produktverteilung und der Mechanismen der thermischen Aktivierung von Methan durch Ligandeneffekte und elektrische Felder (Angew. Chem. 34/2017). Angewandte Chemie, 2017, 129, 10382-10382.	1.6	0