

Gernot Frenking

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

300
papers

21,503
citations

83
h-index

135
g-index

319
ext. papers

24,104
ext. citations

9.1
avg. IF

7.44
L-index

#	Paper	IF	Citations
300	Revisiting the Bonding Scenario of Two Donor Ligand Stabilized C Species. <i>Journal of Physical Chemistry A</i> , 2021 , 125, 291-301	2.8	4
299	Dinitrogen complexation and reduction at low-valent calcium. <i>Science</i> , 2021 , 371, 1125-1128	33.3	44
298	Chemical Bonding in Homoleptic Carbonyl Cations [M{Fe(CO)}] (M=Cu, Ag, Au). <i>Chemistry - A European Journal</i> , 2021 , 27, 6936-6944	4.8	5
297	Metal-CO Bonding in Mononuclear Transition Metal Carbonyl Complexes. <i>Jacs Au</i> , 2021 , 1, 623-645		7
296	Highly Coordinated Heteronuclear Calcium-Iron Carbonyl Cation Complexes [CaFe(CO) _n] ⁺ (n=5-12) with d-d Bonding. <i>Angewandte Chemie</i> , 2021 , 133, 13984-13989	3.6	
295	Bonding in M(NHBMe) ₂ and M[Mn(CO) ₅] ₂ complexes (M=Zn, Cd, Hg; NHBMe=(HCNMe) ₂ B): divalent group 12 metals with zero oxidation state. <i>Theoretical Chemistry Accounts</i> , 2021 , 140, 1	1.9	3
294	Highly Coordinated Heteronuclear Calcium-Iron Carbonyl Cation Complexes [CaFe(CO)] (n=5-12) with d-d Bonding. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 13865-13870	16.4	5
293	Isolation of a Uranium(III)-Carbon Multiple Bond Complex. <i>Chemistry - A European Journal</i> , 2021 , 27, 10006-10011	16.4	11
292	CO-Induced Dinitrogen Fixation and Cleavage Mediated by Boron. <i>Chemistry - A European Journal</i> , 2021 , 27, 2131-2137	4.8	11
291	Isolable dicarbon stabilized by a single phosphine ligand. <i>Nature Chemistry</i> , 2021 , 13, 89-93	17.6	6
290	Generation and Characterization of the C ₃ O ₂ ⁻ Anion with an Unexpected Unsymmetrical Structure. <i>Angewandte Chemie</i> , 2021 , 133, 4568-4573	3.6	
289	Generation and Characterization of the C ₃ O Anion with an Unexpected Unsymmetrical Structure. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 4518-4523	16.4	3
288	Carbodicarbene Bismaalkene Cations: Unravelling the Complexities of Carbene versus Carbene in Heavy Pnictogen Chemistry. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 6682-6690	16.4	14
287	Carbodicarbene Bismaalkene Cations: Unravelling the Complexities of Carbene versus Carbene in Heavy Pnictogen Chemistry. <i>Angewandte Chemie</i> , 2021 , 133, 6756-6764	3.6	2
286	Generation and Identification of the Linear OCBNO and OBNCO Molecules with 24 Valence Electrons. <i>Chemistry - A European Journal</i> , 2021 , 27, 412-418	4.8	5
285	Donor-Stabilized Antimony(I) and Bismuth(I) Ions: Heavier Valence Isoelectronic Analogues of Carbones. <i>Journal of the American Chemical Society</i> , 2021 , 143, 1301-1306	16.4	11
284	Transition-Metal Chemistry of the Heavier Alkaline Earth Atoms Ca, Sr, and Ba. <i>Accounts of Chemical Research</i> , 2021 , 54, 3071-3082	24.3	5

283	A Critical Look at Linus Pauling's Influence on the Understanding of Chemical Bonding. <i>Molecules</i> , 2021 , 26,	4.8	2
282	Covalent Bonding Between Be and CO in BeOCO with a Surprisingly High Antisymmetric OCO Stretching Vibration. <i>Journal of the American Chemical Society</i> , 2021 , 143, 14300-14305	16.4	1
281	d-d Dative Bonding Between Iron and the Alkaline-Earth Metals Calcium, Strontium, and Barium. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 14615-14620	16.4	21
280	Synthesis and characterization of heterometallic complexes involving coinage metals and isoelectronic Fe(CO), [Mn(CO)] and [Fe(CO)CN] ligands. <i>Dalton Transactions</i> , 2020 , 49, 8566-8581	4.3	7
279	Alkaline Earth Metals Activate N and CO in Cubic Complexes Just Like Transition Metals: A Conceptual Density Functional Theory and Energy Decomposition Analysis Study. <i>Chemistry - A European Journal</i> , 2020 , 26, 12785-12793	4.8	14
278	Filling a Gap: The Coordinatively Saturated Group 4 Carbonyl Complexes TM(CO) (TM=Zr, Hf) and Ti(CO). <i>Chemistry - A European Journal</i> , 2020 , 26, 10487-10500	4.8	8
277	Side-On Bonded Beryllium Dinitrogen Complexes. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 10603-10609	16.4	24
276	Beryllium Atom Mediated Dinitrogen Activation via Coupling with Carbon Monoxide. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 18201-18207	16.4	13
275	Side-On Bonded Beryllium Dinitrogen Complexes. <i>Angewandte Chemie</i> , 2020 , 132, 10690-10696	3.6	10
274	Double donation in trigonal planar iron-carbodiphosphorane complexes - a concise study on their spectroscopic and electronic properties. <i>Dalton Transactions</i> , 2020 , 49, 2537-2546	4.3	15
273	Comment on "Revisiting Backbonding: the influence of d orbitals on metal-CO bonds and ligand red shifts" by D. Koch, Y. Chen, P. Golub and S. Manzhos, <i>Phys. Chem. Chem. Phys.</i> , 2019, 21, 20814. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 5377-5379	3.6	6
272	A Stable, Crystalline Beryllium Radical Cation. <i>Journal of the American Chemical Society</i> , 2020 , 142, 4560-4564	16.4	37
271	Isolable cyclic radical cations of heavy main-group elements. <i>Chemical Communications</i> , 2020 , 56, 2167-2170	3.6	8
270	Bonding Analysis of the Shortest Bond between Two Atoms Heavier than Hydrogen and Helium: O. <i>Journal of Physical Chemistry A</i> , 2020 , 124, 1087-1092	2.8	8
269	Comment on Realization of Lewis Basic Sodium Anion in the NaBH ₃ Cluster. <i>Angewandte Chemie</i> , 2020 , 132, 8836-8839	3.6	9
268	Comment on "Realization of Lewis Basic Sodium Anion in the NaBH Cluster". <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 8756-8759	16.4	25
267	Persistent Borafluorene Radicals. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 3850-3854	16.4	34
266	Persistent Borafluorene Radicals. <i>Angewandte Chemie</i> , 2020 , 132, 3878-3882	3.6	10

- 265 Quadruple bonding of bare group-13 atoms in transition metal complexes. *Dalton Transactions*, **2020**, 49, 14815-14825 4.3 5
- 264 The bonding situation in heteromultimetallic carbonyl complexes. *Dalton Transactions*, **2020**, 49, 16762-16771 4.3 1
- 263 The Valence Orbitals of the Alkaline-Earth Atoms. *Chemistry - A European Journal*, **2020**, 26, 14194-14210 4.8 23
- 262 A diradical based on odd-electron π bonds. *Nature Communications*, **2020**, 11, 3441 17.4 5
- 261 $d\pi$ Dative Bonding Between Iron and the Alkaline-Earth Metals Calcium, Strontium, and Barium. *Angewandte Chemie*, **2020**, 132, 14723-14728 3.6 6
- 260 Stabilization of Linear C by Two Donor Ligands: A Theoretical Study of L-C-L (L=PPh, NHC, cAAC)*. *Chemistry - A European Journal*, **2020**, 26, 14211-14220 4.8 13
- 259 Carbones and Carbon Atom as Ligands in Transition Metal Complexes. *Molecules*, **2020**, 25, 4.8 17
- 258 Group 6 Hexacarbonyls as Ligands for the Silver Cation: Syntheses, Characterization, and Analysis of the Bonding Compared with the Isoelectronic Group 5 Hexacarbonylates. *Chemistry - A European Journal*, **2020**, 26, 17203-17211 4.8 8
- 257 Beryllium Atom Mediated Dinitrogen Activation via Coupling with Carbon Monoxide. *Angewandte Chemie*, **2020**, 132, 18358-18364 3.6 3
- 256 Comment on "Topological Analysis of the Electron Density in the Carbonyl Complexes $M(CO)_8$ (M = Ca, Sr, Ba)" *Organometallics*, **2020**, 39, 2956-2958 3.8 2
- 255 Di-ortho-beryllated Carbodiphosphorane: A Compound with a Metal-Carbon Double Bond to an Element of the s-Block. *Organometallics*, **2020**, 39, 3224-3231 3.8 23
- 254 Alkali Metal Covalent Bonding in Nickel Carbonyl Complexes $ENi(CO)_3$ *Angewandte Chemie*, **2019**, 131, 1746-1752 3.6 20
- 253 Synthesis of cAAC stabilized biradical of "MeSi" and "MeSiCl" monoradical from MeSiCl - an important feedstock material. *Chemical Communications*, **2019**, 55, 4534-4537 5.8 6
- 252 Chemical bonding in the hexamethylbenzene- BO_2^+ dication. *Theoretical Chemistry Accounts*, **2019**, 138, 1 1.9 17
- 251 Bent Phosphaallenes With "Hidden" Lone Pairs as Ligands. *Chemistry - A European Journal*, **2019**, 25, 7912-7920 4.8 1
- 250 Response to Comment on "Observation of alkaline earth complexes $M(CO)$ (M = Ca, Sr, or Ba) that mimic transition metals". *Science*, **2019**, 365, 33-3 32
- 249 Octa-coordinated alkaline earth metal-dinitrogen complexes $M(N)_2$ (M=Ca, Sr, Ba). *Nature Communications*, **2019**, 10, 3375 17.4 55
- 248 Nine questions on energy decomposition analysis. *Journal of Computational Chemistry*, **2019**, 40, 2248-2283 3.3 70

247	Chemical Bonding and Bonding Models of Main-Group Compounds. <i>Chemical Reviews</i> , 2019 , 119, 8781-8885	119
246	Octacarbonyl Anion Complexes of Actinides [An(CO) ₈] (An=Th, U) and the Role of f Orbitals in Metal-Ligand Bonding. <i>Chemistry - A European Journal</i> , 2019 , 25, 11772-11784	4.8 18
245	Transition-Metal Chemistry of Alkaline-Earth Elements: The Trisbenzene Complexes M(Bz) ₃ (M=Sr, Ba). <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 17365-17374	16.4 48
244	Transition-Metal Chemistry of Alkaline-Earth Elements: The Trisbenzene Complexes M(Bz) ₃ (M=Sr, Ba). <i>Angewandte Chemie</i> , 2019 , 131, 17526-17535	3.6 23
243	An Experimental and Theoretical Study of the Structures and Properties of [CDPMe-Ni(CO) ₃] and [Ni ₂ (CO) ₄ (μ ₂ -CO)(μ ₂ -CDPMe)]. <i>European Journal of Inorganic Chemistry</i> , 2019 , 2019, 4546-4554	2.3 8
242	Cerium-carbon dative interactions supported by carbodiphosphorane. <i>Dalton Transactions</i> , 2019 , 48, 16108-16114	4.3 13
241	The Diels-Alder Reaction from the EDA-NOCV Perspective: A Re-Examination of the Frontier Molecular Orbital Model. <i>European Journal of Organic Chemistry</i> , 2019 , 2019, 478-485	3.2 7
240	Octacarbonyl Anion Complexes of the Late Lanthanides Ln(CO) ₈ (Ln=Tm, Yb, Lu) and the 32-Electron Rule. <i>Chemistry - A European Journal</i> , 2019 , 25, 3229-3234	4.8 23
239	The Lewis electron-pair bonding model: the physical background, one century later. <i>Nature Reviews Chemistry</i> , 2019 , 3, 35-47	34.6 31
238	The Lewis electron-pair bonding model: modern energy decomposition analysis. <i>Nature Reviews Chemistry</i> , 2019 , 3, 48-63	34.6 104
237	Dative versus electron-sharing bonding in N-imides and phosphane imides R ₂ ENX and relative energies of the R ₂ EN(X)R isomers (E = N, P; R = H, Cl, Me, Ph; X = H, F, Cl)** This paper is dedicated to the memory of Dieter Cremer. View all notes. <i>Molecular Physics</i> , 2019 , 117, 1306-1314	1.7 9
236	Isolation of Transient Acyclic Germanium(I) Radicals Stabilized by Cyclic Alkyl(amino) Carbenes. <i>Journal of the American Chemical Society</i> , 2019 , 141, 1908-1912	16.4 15
235	Dative and electron-sharing bonding in transition metal compounds. <i>Journal of Computational Chemistry</i> , 2019 , 40, 247-264	3.5 30
234	Synthesis and Reactivity Studies of Amido-Substituted Germanium(I)/Tin(I) Dimers and Clusters. <i>Chemistry - A European Journal</i> , 2019 , 25, 2773-2785	4.8 23
233	Alkali Metal Covalent Bonding in Nickel Carbonyl Complexes ENi(CO). <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 1732-1738	16.4 49
232	Barium as Honorary Transition Metal in Action: Experimental and Theoretical Study of Ba(CO) ⁺ and Ba(CO) ₂ ⁺ . <i>Angewandte Chemie</i> , 2018 , 130, 4038-4044	3.6 15
231	Electronic Structure and Bonding Situation in MO (M = Be, Mg, Ca) Rhombic Clusters. <i>Journal of Physical Chemistry A</i> , 2018 , 122, 2816-2822	2.8 21
230	Octacarbonyl Anion Complexes of Group Three Transition Metals [TM(CO) ₈] ⁻ (TM=Sc, Y, La) and the 18-Electron Rule. <i>Angewandte Chemie</i> , 2018 , 130, 6344-6349	3.6 8

229	Dative and Electron-Sharing Bonding in C F. <i>Chemistry - A European Journal</i> , 2018 , 24, 9083-9089	4.8	50
228	Octacarbonyl Anion Complexes of Group Three Transition Metals [TM(CO)] (TM=Sc, Y, La) and the 18-Electron Rule. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 6236-6241	16.4	34
227	Dative versus electron-sharing bonding in N-oxides and phosphane oxides REO and relative energies of the REOR isomers (E = N, P; R = H, F, Cl, Me, Ph). A theoretical study. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 11856-11866	3.6	21
226	Barium as Honorary Transition Metal in Action: Experimental and Theoretical Study of Ba(CO) and Ba(CO). <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 3974-3980	16.4	42
225	Photoinduced Sulfur-Nitrogen Bond Rotation and Thermal Nitrogen Inversion in Heterocumulene OSNSO. <i>Journal of the American Chemical Society</i> , 2018 , 140, 1231-1234	16.4	8
224	Relativistic Effects on Donor-Acceptor Interactions in Coinage Metal Carbonyl Complexes [TM(CO)] (TM=Cu, Ag, Au; n=1, 2). <i>Chemistry - A European Journal</i> , 2018 , 24, 11675-11682	4.8	12
223	Comparison of Two Phosphinidenes Binding to Silicon(IV)dichloride as well as to Silylene. <i>Journal of the American Chemical Society</i> , 2018 , 140, 9409-9412	16.4	30
222	Anion stabilised hypercloso-hexaalane AlH. <i>Nature Communications</i> , 2018 , 9, 3079	17.4	27
221	Bonding in Binuclear Carbonyl Complexes M(CO) (M = Fe, Ru, Os). <i>Inorganic Chemistry</i> , 2018 , 57, 7780-7791	3.6	33
220	A Route to Base Coordinate Silicon Difluoride and the Silicon Trifluoride Radical. <i>Chemistry - A European Journal</i> , 2018 , 24, 1264-1268	4.8	19
219	Energy decomposition analysis. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2018 , 8, e1345	7.9	230
218	Berichtigung: Barium as Honorary Transition Metal in Action: Experimental and Theoretical Study of Ba(CO) ⁺ and Ba(CO)□. <i>Angewandte Chemie</i> , 2018 , 130, 15856-15857	3.6	
217	Double dative bond between divalent carbon(0) and uranium. <i>Nature Communications</i> , 2018 , 9, 4997	17.4	37
216	Vinyltrifluoroborate Complexes of Silver Supported by N-Heterocyclic Carbenes. <i>European Journal of Inorganic Chemistry</i> , 2018 , 2018, 4142-4152	2.3	10
215	Suppressed Phosphine Dissociation by Polarization Effects on the Donor-Acceptor Bonds in [Ni(P(Et)(ECp*))] (E = Al, Ga). <i>Inorganic Chemistry</i> , 2018 , 57, 12657-12664	5.1	8
214	Buckyball Difluoride F @C -A Single-Molecule Crystal. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 13931-13934	16.4	18
213	Buckyball Difluoride F2 @C60 -A Single-Molecule Crystal. <i>Angewandte Chemie</i> , 2018 , 130, 14127-14130	3.6	0
212	Observation of alkaline earth complexes M(CO) (M = Ca, Sr, or Ba) that mimic transition metals. <i>Science</i> , 2018 , 361, 912-916	33.3	141

211	Heterocumulene Sulfinyl Radical OCNSO. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 2140-2144	46.4	15
210	Heterocumulene Sulfinyl Radical OCNSO. <i>Angewandte Chemie</i> , 2017 , 129, 2172-2176	3.6	5
209	Aromaticity, the Hückel 4n+2 Rule and Magnetic Current. <i>ChemistrySelect</i> , 2017 , 2, 863-870	1.8	41
208	The Bonding Situation in Metalated Ylides. <i>Chemistry - A European Journal</i> , 2017 , 23, 4422-4434	4.8	64
207	Ein stabiles neutrales Radikal in der Koordinationssphäre des Aluminiums. <i>Angewandte Chemie</i> , 2017 , 129, 407-411	3.6	17
206	Ligand-Supported E Clusters (E=Si-Sn). <i>Chemistry - A European Journal</i> , 2017 , 23, 7463-7473	4.8	10
205	(L)C ₂ P ₂ : Dicarbondiphosphide Stabilized by N-Heterocyclic Carbenes or Cyclic Diamido Carbenes. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 5744-5749	16.4	65
204	(L)2C ₂ P ₂ : Dicarbondiphosphide Stabilized by N-Heterocyclic Carbenes or Cyclic Diamido Carbenes. <i>Angewandte Chemie</i> , 2017 , 129, 5838-5843	3.6	39
203	Helium Accepts Back-Donation In Highly Polar Complexes: New Insights into the Weak Chemical Bond. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 3334-3340	6.4	20
202	Normal-to-abnormal rearrangement of an N-heterocyclic carbene with a silylene transition metal complex. <i>Dalton Transactions</i> , 2017 , 46, 7791-7799	4.3	28
201	Carbene stabilized interconnected bis-germylene and its silicon analogue with small methyl substituents. <i>Dalton Transactions</i> , 2017 , 46, 7947-7952	4.3	17
200	Dative bonding in main group compounds. <i>Coordination Chemistry Reviews</i> , 2017 , 344, 163-204	23.2	129
199	Dicarbonyls of Carbon and Methylidyne Cations. <i>Journal of Physical Chemistry A</i> , 2017 , 121, 2903-2910	2.8	3
198	An Electrophilic Carbene-Anchored Silylene-Phosphinidene. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 4219-4223	16.4	42
197	The aromaticity of dicupra[10]annulenes. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 9669-9675	3.6	28
196	An Electrophilic Carbene-Anchored Silylene-Phosphinidene. <i>Angewandte Chemie</i> , 2017 , 129, 4283-4287	3.6	24
195	Carbenes as Ligands in Novel Main-Group Compounds E[C(NHC)] (E=Be, B, C, N, Mg, Al, Si, P): A Theoretical Study. <i>Chemistry - A European Journal</i> , 2017 , 23, 3347-3356	4.8	59
194	A Very Short Be-Be Distance but No Bond: Synthesis and Bonding Analysis of Ng-Be O -Ng' (Ng, Ng'=Ne, Ar, Kr, Xe). <i>Chemistry - A European Journal</i> , 2017 , 23, 2035-2039	4.8	34

193	NHC-Stabilised Acetylene-How Far Can the Analogy Be Pushed?. <i>Chemistry - A European Journal</i> , 2017 , 23, 2926-2934	4.8	48
192	A Stable Neutral Radical in the Coordination Sphere of Aluminum. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 397-400	16.4	40
191	Heterobimetallic Complexes Featuring Fe(CO) as a Ligand on Gold. <i>Chemistry - A European Journal</i> , 2017 , 23, 17222-17226	4.8	11
190	The trans Effect in Palladium Phosphine Sulfonate Complexes. <i>Journal of Physical Chemistry A</i> , 2017 , 121, 7709-7716	2.8	8
189	Organosilicon Radicals with Si-H and Si-Me Bonds from Commodity Precursors. <i>Journal of the American Chemical Society</i> , 2017 , 139, 11028-11031	16.4	18
188	Parent Thioketene S-Oxide H CCSO: Gas-Phase Generation, Structure, and Bonding Analysis. <i>Chemistry - A European Journal</i> , 2017 , 23, 16566-16573	4.8	27
187	The hypothiocyanite radical OSCN and its isomers. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 16713-16720	5	
186	Innenrücktitelbild: Heterocumulene Sulfinyl Radical OCNSO (Angew. Chem. 8/2017). <i>Angewandte Chemie</i> , 2017 , 129, 2253-2253	3.6	
185	Carbodicarbenes: Unexpected π -Accepting Ability during Reactivity with Small Molecules. <i>Journal of the American Chemical Society</i> , 2017 , 139, 12830-12836	16.4	38
184	A C(sp ³)-H Dehydrogenation of Heteroarenes and Arenes by a Functionalized Aluminum Hydride. <i>Chemistry - A European Journal</i> , 2017 , 23, 13633-13637	4.8	21
183	A C2 Fragment as Four-Electron π -Donor. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2017 , 643, 1096-1099	1.3	14
182	Theoretical Studies of Metallabenzenes: From Bonding Situation to Reactivity 2017 , 267-304		1
181	Covalent Bonding and Charge Shift Bonds: Comment on "The Carbon-Nitrogen Bonds in Ammonium Compounds Are Charge Shift Bonds". <i>Chemistry - A European Journal</i> , 2017 , 23, 18320-18324	4.8	3
180	An acyclic zincagermylene: rapid activation of dihydrogen at sub-ambient temperature. <i>Chemical Communications</i> , 2017 , 53, 12692-12695	5.8	22
179	New Avenues in s-Block Chemistry: Beryllium(0) Complexes. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 13380-13382	16.4	16
178	Neue Wege in der s-Block-Chemie π -Komplexe mit Beryllium in der Oxidationsstufe Null. <i>Angewandte Chemie</i> , 2016 , 128, 13576-13578	3.6	6
177	A Triatomic Silicon(0) Cluster Stabilized by a Cyclic Alkyl(amino) Carbene. <i>Angewandte Chemie</i> , 2016 , 128, 3210-3213	3.6	22
176	Unusually Short Be-Be Distances with and without a Bond in Be2F2 and in the Molecular Discs Be2B8 and Be2B7. <i>Angewandte Chemie</i> , 2016 , 128, 7972-7977	3.6	29

- 157 Two-coordinate group 14 element(ii) hydrides as reagents for the facile, and sometimes reversible, hydrogermylation/hydrostannylation of unactivated alkenes and alkynes. *Chemical Science*, **2015**, 6, 7249-7257^{9.4}₅₂
- 156 Cyclic trinuclear copper(I), silver(I), and gold(I) complexes: a theoretical insight. *Dalton Transactions*, **2015**, 44, 377-85 4.3 26
- 155 Experimental and theoretical studies of the infrared spectra and bonding properties of NgBeCO π and a comparison with NgBeO (Ng = He, Ne, Ar, Kr, Xe). *Journal of Physical Chemistry A*, **2015**, 119, 2543-52⁸ 52
- 154 Reaction Mechanism of the Symmetry-Forbidden [2+2] Addition of Ethylene and Acetylene to Amido-Substituted Digermynes and Distannynes Ph₂N-EE-NPh₂, (E = Ge, Sn): A Theoretical Study. *Chemistry - A European Journal*, **2015**, 21, 12405-13 4.8 23
- 153 Formation and Characterization of the Boron Dicarboxyl Complex [B(CO)₂] π *Angewandte Chemie*, **2015**, 127, 11230-11235 3.6 50
- 152 Stabilization of heterodiatom SiC through ligand donation: theoretical investigation of SiC(L)₂ (L=NHC(Me), CAAC(Me), PMe₃). *Angewandte Chemie - International Edition*, **2015**, 54, 12319-24 16.4 81
- 151 Stabilisierung von heterodiatomarem SiC durch Donorliganden π theoretische Untersuchung von SiC(L)₂ (L=NHCMe, CAACMe, PMe₃). *Angewandte Chemie*, **2015**, 127, 12494-12500 3.6 42
- 150 Carbon Monoxide Bonding With BeO and BeCO₃: Surprisingly High CO Stretching Frequency of OCBeco₃. *Angewandte Chemie*, **2015**, 127, 126-130 3.6 30
- 149 Formation and characterization of the boron dicarbonyl complex [B(CO)₂]⁻. *Angewandte Chemie - International Edition*, **2015**, 54, 11078-83 16.4 86
- 148 Carbon monoxide bonding with BeO and BeCO₃: surprisingly high CO stretching frequency of OCBeco₃. *Angewandte Chemie - International Edition*, **2015**, 54, 124-8 16.4 63
- 147 No need for a re-examination of the electrostatic notation of the hydrogen bonding: a comment. *Angewandte Chemie - International Edition*, **2015**, 54, 2596-9 16.4 69
- 146 The fate of NHC-stabilized dicarbon. *Chemistry - A European Journal*, **2015**, 21, 3377-86 4.8 34
- 145 Comparative bonding analysis of N₂ and P₂ versus tetrahedral N₄ and P₄. *Theoretical Chemistry Accounts*, **2014**, 133, 1 1.9 23
- 144 Stabilization of a cobalt-cobalt bond by two cyclic alkyl amino carbenes. *Journal of the American Chemical Society*, **2014**, 136, 1770-3 16.4 50
- 143 Dative bonds in main-group compounds: a case for more arrows!. *Angewandte Chemie - International Edition*, **2014**, 53, 6040-6 16.4 198
- 142 Reaction mechanisms of small-molecule activation by amidoditetrylnes R₂(N)-EE-NR₂ (E = Si, Ge, Sn). *Inorganic Chemistry*, **2014**, 53, 6482-90 5.1 21
- 141 The Physical Origin of Covalent Bonding **2014**, 1-68 16
- 140 The EDA Perspective of Chemical Bonding **2014**, 121-157 137

139	The NBO View of Chemical Bonding 2014 , 91-120		40
138	Low coordinate germanium(II) and tin(II) hydride complexes: efficient catalysts for the hydroboration of carbonyl compounds. <i>Journal of the American Chemical Society</i> , 2014 , 136, 3028-31	16.4	232
137	New bonding modes of carbon and heavier group 14 atoms Si-Pb. <i>Chemical Society Reviews</i> , 2014 , 43, 5106-39	58.5	179
136	Coinage metals binding as main group elements: structure and bonding of the carbene complexes [TM(cAAC)2] and [TM(cAAC)2](+) (TM = Cu, Ag, Au). <i>Journal of the American Chemical Society</i> , 2014 , 136, 17123-35	16.4	73
135	One-electron-mediated rearrangements of 2,3-disiladibene. <i>Journal of the American Chemical Society</i> , 2014 , 136, 8919-22	16.4	60
134	Experimentelle Elektronendichteuntersuchung eines Silylons. <i>Angewandte Chemie</i> , 2014 , 126, 2806-2811	3.6	34
133	Dative Bindungen bei Hauptgruppenelementverbindungen: ein Pfeil oder mehrere Pfeile. <i>Angewandte Chemie</i> , 2014 , 126, 6152-6158	3.6	87
132	Analysis of the EB Bond in Group-13 Complexes [(PMe3)2(E2Hn)] (E = B, In, n = 4, 2, 0). <i>Croatica Chemica Acta</i> , 2014 , 87, 413-422	0.8	8
131	Bonding Situation in Dimeric Group 15 Complexes [(NHC)2(E2)] (E = N, Bi). <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 2014 , 69, 385-395	1.4	12
130	Experimental charge density study of a silolone. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 2766-70	16.4	89
129	Beryllium chemistry the safe way: a theoretical evaluation of low oxidation state beryllium compounds. <i>Dalton Transactions</i> , 2013 , 42, 11375-84	4.3	85
128	Isolation of neutral mono- and dinuclear gold complexes of cyclic (alkyl)(amino)carbenes. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 8964-7	16.4	110
127	Exploiting the Twofold Donor Ability of Carbodiphosphanes: Theoretical Studies of [(PPh)2C→EH] (E = Be, B, C, N, O) and Synthesis of the Dication [(Ph)2P]2C≡CH. <i>ChemPlusChem</i> , 2013 , 78, 1024-1032	2.8	55
126	Formation of a 1,4-diamino-2,3-disila-1,3-butadiene derivative. <i>Journal of the American Chemical Society</i> , 2013 , 135, 15990-3	16.4	42
125	Reductive elimination: a pathway to low-valent aluminium species. <i>Chemical Communications</i> , 2013 , 49, 2858-60	5.8	77
124	End-on and side-on π-acid ligand adducts of gold(I): carbonyl, cyanide, isocyanide, and cyclooctyne gold(I) complexes supported by N-heterocyclic carbenes and phosphines. <i>Inorganic Chemistry</i> , 2013 , 52, 729-42	5.1	60
123	Reaction Pathways for Addition of H2 to Amido-Ditetrylenes R2NBEtR2 (E = Si, Ge, Sn). A Theoretical Study. <i>Organometallics</i> , 2013 , 32, 6666-6673	3.8	34
122	A stable singlet biradicaloid siladibene: (L:)2Si. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 2963-7	16.4	218

121	Conversion of a singlet silylene to a stable biradical. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 1801-5	16.4	155
120	Dinitrogen as double Lewis acid: structure and bonding of triphenylphosphinazine N ₂ (PPh ₃) ₂ . <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 3004-8	16.4	65
119	Bonding Analysis of the Trimethylenemethane (TMM) Complexes [(η -C ₆ H ₆)M-TMM] (M = Fe, Ru, Os), [(η -C ₅ H ₅)M-TMM] (M = Co, Rh, Ir), and [(η -C ₄ H ₄)M-TMM] (M = Ni, Pd, Pt). <i>Organometallics</i> , 2013 , 32, 1743-1751	3.8	36
118	Bonding analysis of trimethylenemethane (TMM) complexes [(CO) ₃ M η TMM] (M' = Fe, Ru, Os, Rh+). Absence of expected bond paths. <i>Journal of Organometallic Chemistry</i> , 2013 , 748, 2-7	2.3	16
117	Critical comments on "One molecule, two atoms, three views, four bonds?". <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 5922-5	16.4	47
116	Tris(alkyne) and Bis(alkyne) Complexes of Coinage Metals: Synthesis and Characterization of (cyclooctyne) ₃ M ⁺ (M = Cu, Ag) and (cyclooctyne) ₂ Au ⁺ and Coinage Metal (M = Cu, Ag, Au) Family Group Trends. <i>Organometallics</i> , 2013 , 32, 3135-3144	3.8	55
115	Complexation behavior of two-coordinated carbon compounds containing fluorenyl ligands. <i>Dalton Transactions</i> , 2013 , 42, 13349-56	4.3	14
114	Structure and bonding of tetrylone complexes [(CO) ₄ W{E(PPh ₃) ₂ }] (E = C β). <i>Molecular Physics</i> , 2013 , 111, 2640-2646	1.7	22
113	Isolierung neutraler mono- und dinuklearer Goldkomplexe von cyclischen Alkyl(amino)carbenen. <i>Angewandte Chemie</i> , 2013 , 125, 9134-9137	3.6	48
112	Umwandlung eines Singulett-Silylens in ein stabiles Biradikal. <i>Angewandte Chemie</i> , 2013 , 125, 1845-1850	3.6	81
111	Activation of H ₂ by a Multiply Bonded Amido-Digermyne: Evidence for the Formation of a Hydrido-Germylene. <i>Angewandte Chemie</i> , 2013 , 125, 10389-10393	3.6	38
110	Distickstoff als doppelte Lewis-Säure: Struktur und Bindung von Triphenylphosphinazin N ₂ (PPh ₃) ₂ . <i>Angewandte Chemie</i> , 2013 , 125, 3078-3082	3.6	35
109	Ein stabiles biradikaloides Singulett-Siladicarben: (L) ₂ Si. <i>Angewandte Chemie</i> , 2013 , 125, 3036-3040	3.6	112
108	Activation of H ₂ by a multiply bonded amido-digermyne: evidence for the formation of a hydrido-germylene. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 10199-203	16.4	116
107	An N-heterocyclic carbene adduct of diatomic tin, :Sn=Sn:. <i>Chemical Communications</i> , 2012 , 48, 9855-7	5.8	140
106	Transition-metal complexes of tetrylones [(CO) ₅ W-E(PPh ₃) ₂] and tetrylenes [(CO) ₅ W-NHE] (E=C-Pb): a theoretical study. <i>Chemistry - A European Journal</i> , 2012 , 18, 12733-48	4.8	62
105	A crystalline singlet phosphinonitrene: a nitrogen atom-transfer agent. <i>Science</i> , 2012 , 337, 1526-8	33.3	109
104	Energy decomposition analysis. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2012 , 2, 43-62	7.9	499

103	Chemistry. A boron-boron triple bond. <i>Science</i> , 2012 , 336, 1394-5	33.3	77
102	Isolable Tris(alkyne) and Bis(alkyne) Complexes of Gold(I). <i>Angewandte Chemie</i> , 2012 , 124, 4006-4009	3.6	9
101	The Facile Reduction of Carbon Dioxide to Carbon Monoxide with an Amido-Digermyne. <i>Angewandte Chemie</i> , 2012 , 124, 8739-8742	3.6	30
100	Isolable tris(alkyne) and bis(alkyne) complexes of gold(I). <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 3940-3	16.4	45
99	The facile reduction of carbon dioxide to carbon monoxide with an amido-digermyne. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 8611-4	16.4	78
98	Are they linear, bent, or cyclic? Quantum chemical investigation of the heavier group 14 and group 15 homologues of HCN and HNC. <i>Chemistry - an Asian Journal</i> , 2012 , 7, 1296-311	4.5	15
97	Borylene complexes (BH)L ₂ and nitrogen cation complexes (N ⁺)L ₂ : isoelectronic homologues of carbones CL ₂ . <i>Chemistry - A European Journal</i> , 2012 , 18, 5676-92	4.8	114
96	N-Heterocyclic carbenes versus transition metals for stabilizing phosphinyl radicals. <i>Chemical Science</i> , 2011 , 2, 858	9.4	94
95	Synthesis and characterization of a neutral tricoordinate organoboron isoelectronic with amines. <i>Science</i> , 2011 , 333, 610-3	33.3	440
94	A digermyne with a Ge-Ge single bond that activates dihydrogen in the solid state. <i>Journal of the American Chemical Society</i> , 2011 , 133, 18622-5	16.4	165
93	Preparation, characterization, and theoretical analysis of group 14 element(I) dimers: a case study of magnesium(I) compounds as reducing agents in inorganic synthesis. <i>Inorganic Chemistry</i> , 2011 , 50, 12315-25	5.1	126
92	Cationic gold carbonyl complex on a phosphine support. <i>Inorganic Chemistry</i> , 2011 , 50, 4253-5	5.1	41
91	Carbodicarbenes—divalent carbon(0) compounds exhibiting carbon-carbon donor-acceptor bonds. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2011 , 1, 869-878	7.9	56
90	Divalent Pb(0) compounds. <i>Theoretical Chemistry Accounts</i> , 2011 , 129, 615-623	1.9	35
89	The Reaction of BeCl ₂ with Carbodiphosphorane C(PPh ₃) ₂ ; Experimental and Theoretical Studies. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2011 , 637, 1702-1710	1.3	40
88	1,5-electrocyclization versus 1,5-proton shift in imidazolium allylides and 2-phospha-allylides: a DFT investigation. <i>Journal of Physical Organic Chemistry</i> , 2011 , 24, 786-797	2.1	6
87	Distinguishing carbones from allenes by complexation to AuCl. <i>Chemistry - A European Journal</i> , 2011 , 17, 9944-56	4.8	72
86	Structures and stabilities of group 13 adducts [(NHC)(EX ₃)] and [(NHC) ₂ (E ₂ X(n))] (E=B to In; X=H, Cl; n=4, 2, 0; NHC=N-heterocyclic carbene) and the search for hydrogen storage systems: a theoretical study. <i>Chemistry - A European Journal</i> , 2011 , 17, 13517-25	4.8	120

85	Building a bridge between coordination compounds and clusters: bonding analysis of the icosahedral molecules $[M(ER)_{12}]$ ($M = Cr, Mo, W$; $E = Zn, Cd, Hg$). <i>Journal of Physical Chemistry A</i> , 2011 , 115, 12758-68	2.8	22
84	Syntheses and Crystal Structures of $[Hg\{C(PPh_3)_2\}_2][Hg_2I_6]$ and $[Cu\{C(PPh_3)_2\}_2]I$ and Comparative Theoretical Study of Carbene Complexes $[M(NHC)_2]$ with Carbene Complexes $[M\{C(PH_3)_2\}_2]$ ($M = Cu^+, Ag^+, Au^+, Zn^{2+}, Cd^{2+}, Hg^{2+}$). <i>Organometallics</i> , 2011 , 30, 3330-3339	3.8	35
83	Isolation of crystalline carbene-stabilized P(2)-radical cations and P(2)-dications. <i>Nature Chemistry</i> , 2010 , 2, 369-73	17.6	248
82	Synthesis of a stable adduct of dialane(4) (Al_2H_4) via hydrogenation of a magnesium(I) dimer. <i>Nature Chemistry</i> , 2010 , 2, 865-9	17.6	197
81	A crystalline phosphinyl radical cation. <i>Journal of the American Chemical Society</i> , 2010 , 132, 10262-3	16.4	169
80	Carbodiphosphanes and Related Ligands. <i>Topics in Organometallic Chemistry</i> , 2010 , 49-92	0.6	82
79	Carbodicarbenes and related divalent carbon(0) compounds. <i>Chemistry - A European Journal</i> , 2010 , 16, 10160-70	4.8	118
78	Molecular alloys: experimental and theoretical investigations on the substitution of zinc by cadmium and mercury in the homologous series $[Mo(M'R)_{12}]$ and $[M(M'R)_8]$ ($M = Pd, Pt$; $M' = Zn, Cd, Hg$). <i>Chemistry - A European Journal</i> , 2010 , 16, 13372-84	4.8	24
77	Carbodiylide $C(ECp^*)_2$ ($E = B\equiv I$): eine weitere Klasse theoretisch vorhergesagter Kohlenstoff(0)-Verbindungen. <i>Angewandte Chemie</i> , 2010 , 122, 7260-7264	3.6	9
76	Carbodiylides $C(ECp^*)_2$ ($E = B-Tl$): another class of theoretically predicted divalent carbon(0) compounds. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 7106-10	16.4	20
75	Divalent carbon(0) compounds. <i>Pure and Applied Chemistry</i> , 2009 , 81, 597-614	2.1	183
74	Divalent silicon(0) compounds. <i>Chemistry - A European Journal</i> , 2009 , 15, 3448-56	4.8	124
73	Divalent E(0) compounds ($E = Si-Sn$). <i>Chemistry - A European Journal</i> , 2009 , 15, 8593-604	4.8	123
72	Carbodiphosphorane $C(PPh_3)_2$ as a Single and Twofold Lewis Base with Boranes: Synthesis, Crystal Structures and Theoretical Studies on $[H_3B\{C(PPh_3)_2\}]$ and $[{(EH)H_4B_2}\{C(PPh_3)_2\}]^+$. <i>European Journal of Inorganic Chemistry</i> , 2009 , 2009, 4507-4517	2.3	81
71	N-Heterocyclic Carbene Stabilized Digermanium(0). <i>Angewandte Chemie</i> , 2009 , 121, 9881-9884	3.6	99
70	Synthesis and ligand properties of a persistent, all-carbon four-membered-ring allene. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 4792-5	16.4	111
69	N-heterocyclic carbene stabilized digermanium(0). <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 9701-4	16.4	270
68	Molecular alloys, linking organometallics with intermetallic Hume-Rothery phases: the highly coordinated transition metal compounds $[M(ZnR)(n)]$ ($n \geq 8$) containing organo-zinc ligands. <i>Journal of the American Chemical Society</i> , 2009 , 131, 16063-77	16.4	61

67	Heavy Halogen Atom Effect on (13)C NMR Chemical Shifts in Monohalo Derivatives of Cyclohexane and Pyran. Experimental and Theoretical Study. <i>Journal of Chemical Theory and Computation</i> , 2009 , 5, 2222-8	6.4	30
66	Molecules with all triple bonds: OCBBCO, N2BBN2, and [OB BBBO](2-). <i>Journal of Physical Chemistry A</i> , 2009 , 113, 11693-8	2.8	60
65	Tolman's Electronic Parameters for Divalent Carbon(0) Compounds. <i>Organometallics</i> , 2009 , 28, 3901-3905	5.8	99
64	The Dewar-Chatt-Duncanson model reversed: Bonding analysis of group-10 complexes [(PMe3)2MEX3] (M = Ni, Pd, Pt; E = B, Al, Ga, In, Tl; X = H, F, Cl, Br, I). <i>Canadian Journal of Chemistry</i> , 2009 , 87, 1470-1479	0.9	19
63	Donor acceptor complexes of noble gases. <i>Journal of the American Chemical Society</i> , 2009 , 131, 3942-9	16.4	66
62	Isolation of a C5-deprotonated imidazolium, a crystalline "abnormal" N-heterocyclic carbene. <i>Science</i> , 2009 , 326, 556-9	33.3	366
61	Exocyclic delocalization at the expense of aromaticity in 3,5-bis(pi-donor) substituted pyrazolium ions and corresponding cyclic bent allenes. <i>Journal of the American Chemical Society</i> , 2009 , 131, 11875-81	16.4	108
60	Divalent carbon(0) chemistry, part 1: Parent compounds. <i>Chemistry - A European Journal</i> , 2008 , 14, 3260-73	7.8	331
59	Divalent carbon(0) chemistry, part 2: Protonation and complexes with main group and transition metal Lewis acids. <i>Chemistry - A European Journal</i> , 2008 , 14, 3273-89	4.8	261
58	First and second proton affinities of carbon bases. <i>ChemPhysChem</i> , 2008 , 9, 1474-81	3.2	160
57	Nonclassical Metal Carbonyls. <i>Progress in Inorganic Chemistry</i> , 2007 , 1-112		70
56	Is this a chemical bond? A theoretical study of Ng2@C60 (Ng=He, Ne, Ar, Kr, Xe). <i>Chemistry - A European Journal</i> , 2007 , 13, 8256-70	4.8	154
55	Reply to Riquie: A New Concept for Bonding in Carbodiphosphoranes?. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 2986-2987	16.4	35
54	C(NHC)2: divalent carbon(0) compounds with N-heterocyclic carbene ligands-theoretical evidence for a class of molecules with promising chemical properties. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 8695-8	16.4	319
53	C(NHC)2: zweibindige Kohlenstoff(0)-Verbindungen mit N-heterocyclischen Carbenliganden - theoretische Belege für eine Molekülklasse mit vielversprechenden Eigenschaften. <i>Angewandte Chemie</i> , 2007 , 119, 8850-8853	3.6	167
52	Electronic structure of CO--an exercise in modern chemical bonding theory. <i>Journal of Computational Chemistry</i> , 2007 , 28, 117-26	3.5	89
51	Unicorns in the world of chemical bonding models. <i>Journal of Computational Chemistry</i> , 2007 , 28, 15-24	3.5	174
50	Transition metal-carbon complexes. A theoretical study. <i>Journal of the American Chemical Society</i> , 2007 , 129, 7596-610	16.4	101

49	Pseudopotential Calculations of Transition Metal Compounds: Scope and Limitations. <i>Reviews in Computational Chemistry</i> , 2007 , 63-144		75
48	The Dewar-chatt-Duncanson bonding model of transition metal-olefin complexes examined by modern quantum chemical methods 2007 , 111-122		19
47	Orbital overlap and chemical bonding. <i>Chemistry - A European Journal</i> , 2006 , 12, 9196-216	4.8	254
46	"Naked" Ga ⁺ and In ⁺ as pure acceptor ligands: structure and bonding of [GaPt(GaCp*) ₄][BARF]. <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 5207-10	16.4	56
45	Carbodiphosphanes: the chemistry of divalent carbon(0). <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 8038-42	16.4	320
44	Carbodiphosphorane: die Chemie von zweibindigem Kohlenstoff(0). <i>Angewandte Chemie</i> , 2006 , 118, 8206-8211	3.6	152
43	Why do the heavy-atom analogues of acetylene E ₂ H ₂ (E = Si-Pb) exhibit unusual structures?. <i>Journal of the American Chemical Society</i> , 2005 , 127, 6290-9	16.4	157
42	The nature of the chemical bond revisited: an energy-partitioning analysis of nonpolar bonds. <i>Chemistry - A European Journal</i> , 2005 , 11, 1813-25	4.8	124
41	The nature of the chemical bond in the light of an energy decomposition analysis 2005 , 291-372		57
40	Chemical Bonding in Octahedral XeF ₆ and SF ₆ . <i>Australian Journal of Chemistry</i> , 2004 , 57, 1191	1.2	15
39	The nature of the chemical bond revisited. An energy partitioning analysis of diatomic molecules E ₂ (E=NBi, FI), CO and BF. <i>Theoretical Chemistry Accounts</i> , 2004 , 111, 381-389	1.9	120
38	Energy Partitioning Analysis of the Bonding in Ethylene and Acetylene Complexes of Group 6, 8, and 11 Metals: (CO) ₅ TM σ 2Hx and Cl ₄ TM σ 2Hx (TM = Cr, Mo, W), (CO) ₄ TM σ 2Hx (TM = Fe, Ru, Os), and TM σ 2Hx (TM = Cu, Ag, Au) σ 2Hx,?. <i>Journal of Physical Chemistry A</i> , 2004 , 108, 3134-3142	2.8	134
37	Towards a rigorously defined quantum chemical analysis of the chemical bond in donor-acceptor complexes. <i>Coordination Chemistry Reviews</i> , 2003 , 238-239, 55-82	23.2	371
36	Energy Partitioning Analysis of the Bonding in L ₂ TM σ 2H ₂ and L ₂ TM σ 2H ₄ (TM = Ni, Pd, Pt; L ₂ = (PH ₃) ₂ , (PMe ₃) ₂ , H ₂ PCH ₂ PH ₂ , H ₂ P(CH ₂) ₂ PH ₂) σ 2H ₂ <i>Organometallics</i> , 2003 , 22, 2758-2765	3.8	82
35	Energy decomposition analysis of the chemical bond in main group and transition metal compounds. <i>Faraday Discussions</i> , 2003 , 124, 365-78; discussion 393-403, 453-5	3.6	129
34	Bis(benzene)chromium Is a σ Bonded Molecule and Ferrocene Is a π Bonded Molecule σ <i>Organometallics</i> , 2003 , 22, 3304-3308	3.8	104
33	Structures, bond energies, heats of formation, and quantitative bonding analysis of main-group metallocenes [E(Cp) ₂] (E = Be-Ba, Zn, Si-Pb) and [E(Cp)] (E = Li-Cs, B-Tl). <i>Chemistry - A European Journal</i> , 2002 , 8, 4693-707	4.8	114
32	Nature of the Metal-Ligand Bond in M(CO) ₅ PX ₃ Complexes (M = Cr, Mo, W; X = H, Me, F, Cl): Synthesis, Molecular Structure, and Quantum-Chemical Calculations. <i>Organometallics</i> , 2002 , 21, 2921-2930	3.8	145

31	Understanding the nature of the bonding in transition metal complexes: from Dewar's molecular orbital model to an energy partitioning analysis of the metal-ligand bond. <i>Journal of Organometallic Chemistry</i> , 2001 , 635, 9-23	2.3	134
30	Turning a Transition State into a Minimum-The Nature of the Bonding in Diplumbylene Compounds $RPbPbR$ ($R=H, Ar$). <i>Angewandte Chemie - International Edition</i> , 2001 , 40, 2051-2055	16.4	25
29	Energy analysis of metal-ligand bonding in transition metal complexes with terminal group-13 diyl ligands $(CO)_4Fe-ER$, $Fe(EMe)_5$ and $Ni(EMe)_4$ ($E = B-Tl$; $R = Cp, N(SiH_3)_2, Ph, Me$) reveals significant pi bonding in homoleptical molecules. <i>Journal of the American Chemical Society</i> , 2001 , 123, 1683-93	16.4	180
28	Chemical bonding in mononuclear transition metal complexes with Group 13 diyl ligands ER ($E=B-Tl$): Part X: Theoretical studies of inorganic compounds. <i>Coordination Chemistry Reviews</i> , 2000 , 197, 249-276	23.2	113
27	The Nature of the Transition Metal-Carbonyl Bond and the Question about the Valence Orbitals of Transition Metals. A Bond-Energy Decomposition Analysis of $TM(CO)_6q$ ($TMq = Hf_2^-, Ta^-, W, Re^+, Os_2^+, Ir_3^+$) <i>Journal of the American Chemical Society</i> , 2000 , 122, 6449-6458	16.4	218
26	Nature of the Chemical Bond between a Transition Metal and a Group-13 Element: Structure and Bonding of Transition Metal Complexes with Terminal Group-13 Diyl Ligands ER ($E = B$ to Tl ; $R = Cp, N(SiH_3)_2, Ph, Me$). <i>Organometallics</i> , 2000 , 19, 571-582	3.8	127
25	The nature of the bonding in transition-metal compounds. <i>Chemical Reviews</i> , 2000 , 100, 717-74	68.1	962
24	Trends in Molecular Geometries and Bond Strengths of the Homoleptic d_{10} Metal Carbonyl Cations $[M(CO)_n]^{x+}$ ($Mx+=Cu^+, Ag^+, Au^+, Zn^{2+}, Cd^{2+}, Hg^{2+}$; $n=1-5$): A Theoretical Study. <i>Chemistry - A European Journal</i> , 1999 , 5, 2573-2583	4.8	105
23	Synthesis and Structure of $[Ni\{Ga\{SiMe_3\}_3\}_4]$ and Quantum-Chemical Verification of Strong π Back-Bonding in the Model Compounds $[Ni(EMe)_4]$ ($E = B, Al, Ga, In, Tl$). <i>Organometallics</i> , 1999 , 18, 3778-3780	3.8	83
22	Reaction of Carbodiphosphorane Ph_3PCPPh_3 with $Ni(CO)_4$. Experimental and Theoretical Study of the Structures and Properties of $(CO)_3NiC(PPh_3)_2$ and $(CO)_2NiC(PPh_3)_2$. <i>Organometallics</i> , 1999 , 18, 619-626	3.8	90
21	Nichtklassische Carbonylmetallverbindungen [Definitionen mit theoretischer Rechtfertigung. <i>Angewandte Chemie</i> , 1998 , 110, 2229-2232	3.6	35
20	Structure and Bonding of Low-Valent (Fischer-Type) and High-Valent (Schrock-Type) Transition Metal Carbene Complexes. <i>Chemistry - A European Journal</i> , 1998 , 4, 1428-1438	4.8	124
19	Structure and Bonding of Low-Valent (Fischer-Type) and High-Valent (Schrock-Type) Transition Metal Carbyne Complexes. <i>Chemistry - A European Journal</i> , 1998 , 4, 1439-1448	4.8	89
18	Nonclassical Metal Carbonyls: Appropriate Definitions with a Theoretical Justification. <i>Angewandte Chemie - International Edition</i> , 1998 , 37, 2113-2116	16.4	134
17	Ab initio studies of transition-metal compounds: the nature of the chemical bond to a transition metal. <i>Journal of the Chemical Society Dalton Transactions</i> , 1997 , 1653-1662		150
16	Structure and Bonding of the Isoelectronic Hexacarbonyls $[Hf(CO)_6]^{2-}$, $[Ta(CO)_6]^-$, $W(CO)_6$, $[Re(CO)_6]^+$, $[Os(CO)_6]^{2+}$, and $[Ir(CO)_6]^{3+}$: A Theoretical Study. <i>Organometallics</i> , 1997 , 16, 4807-4815	3.8	116
15	Theoretical Analysis of the Bonding between CO and Positively Charged Atoms. <i>Journal of Physical Chemistry A</i> , 1997 , 101, 9551-9559	2.8	204
14	$[(\eta^5-Cp^*)Al\{Fe(CO)_4\}]$ [Synthese, Struktur, Bindungsverhältnisse. <i>Angewandte Chemie</i> , 1997 , 109, 95-97	3.6	76

13	Structure and Bonding of the Transition-Metal Carbonyl Complexes $M(CO)_5L$ ($M = Cr, Mo, W$) and $M(CO)_3L$ ($M = Ni, Pd, Pt$; $L = CO, SiO, CS, N_2, NO^+, CN^-, NC^-, HCCH, CCH_2, CH_2, CF_2, H_2$). <i>Organometallics</i> , 1996 , 15, 105-117	3.8	173
12	The bonding of acetylene and ethylene in high-valent and low-valent transition metal compounds. <i>Journal of Organometallic Chemistry</i> , 1996 , 525, 269-278	2.3	60
11	Theoretical Studies of Organometallic Compounds. XIV. Structure and Bonding of the Transition Metal Methyl and Phenyl Compounds MCH_3 and MC_6H_5 ($M = Cu, Ag, Au$) and $M(CH_3)_2$ and $M(C_6H_5)_2$ ($M = Zn, Cd, Hg$). <i>Organometallics</i> , 1995 , 14, 4263-4268	3.8	80
10	Theoretical Studies of Organometallic Compounds. XIX. Complexes of Transition Metals in High and Low Oxidation States with Side-On-Bonded π -Ligands. <i>Organometallics</i> , 1995 , 14, 5325-5336	3.8	80
9	Investigation of Donor-Acceptor Interactions: A Charge Decomposition Analysis Using Fragment Molecular Orbitals. <i>The Journal of Physical Chemistry</i> , 1995 , 99, 9352-9362		615
8	Comparative Theoretical Study of Lewis Acid-Base Complexes of BH_3 , BF_3 , BCl_3 , $AlCl_3$, and SO_2 . <i>Journal of the American Chemical Society</i> , 1994 , 116, 8741-8753	16.4	410
7	Theoretical studies of organometallic compounds. 6. Structures and bond energies of $M(CO)_n^+$, MCN , and $M(CN)_2^-$ ($M = silver, gold$; $n = 1-3$). <i>Organometallics</i> , 1993 , 12, 4613-4622	3.8	76
6	Light noble gas chemistry: structures, stabilities, and bonding of helium, neon, and argon compounds. <i>Journal of the American Chemical Society</i> , 1990 , 112, 4240-4256	16.4	92
5	Helium bonding in singly and doubly charged first-row diatomic cations HeX_n^+ ($X = Li-Ne$; $n = 1, 2$). <i>The Journal of Physical Chemistry</i> , 1989 , 93, 3397-3410		91
4	Stabilities and nature of the attractive interactions in $HeBeO$, $NeBeO$, and $ArBeO$ and a comparison with analogs $NGLiF$, $NGBN$, and $NGLiH$ ($NG = He, Ar$). A theoretical investigation. <i>Journal of the American Chemical Society</i> , 1988 , 110, 8007-8016	16.4	152
3	Helium chemistry: theoretical predictions and experimental challenge. <i>Journal of the American Chemical Society</i> , 1987 , 109, 5917-5934	16.4	191
2	The strength of a chemical bond. <i>International Journal of Quantum Chemistry</i> , e26773	2.1	7
1	The Chemical Bond: An Entrance Door of Chemistry to the Neighboring Sciences and to Philosophy. <i>Israel Journal of Chemistry</i> ,	3.4	2