

Feliu Maseras

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L-index

#	Paper	IF	Citations
285	IMOMM: A new integrated ab initio + molecular mechanics geometry optimization scheme of equilibrium structures and transition states. <i>Journal of Computational Chemistry</i> , 1995 , 16, 1170-1179	3.5	1464
284	Proton abstraction mechanism for the palladium-catalyzed intramolecular arylation. <i>Journal of the American Chemical Society</i> , 2006 , 128, 1066-7	16.4	643
283	Proton-abstraction mechanism in the palladium-catalyzed intramolecular arylation: substituent effects. <i>Journal of the American Chemical Society</i> , 2007 , 129, 6880-6	16.4	479
282	Direct arylation of arene C-H bonds by cooperative action of NHcarbene-ruthenium(II) catalyst and carbonate via proton abstraction mechanism. <i>Journal of the American Chemical Society</i> , 2008 , 130, 1156-7	16.4	347
281	A DFT Study of the Full Catalytic Cycle of the Suzuki-Miyaura Cross-Coupling on a Model System. <i>Organometallics</i> , 2006 , 25, 3647-3658	3.8	324
280	Transition metal polyhydrides: from qualitative ideas to reliable computational studies. <i>Chemical Reviews</i> , 2000 , 100, 601-36	68.1	304
279	Managing the computational chemistry big data problem: the ioChem-BD platform. <i>Journal of Chemical Information and Modeling</i> , 2015 , 55, 95-103	6.1	289
278	Computational characterization of the role of the base in the Suzuki-Miyaura cross-coupling reaction. <i>Journal of the American Chemical Society</i> , 2005 , 127, 9298-307	16.4	284
277	Computational perspective on Pd-catalyzed C-C cross-coupling reaction mechanisms. <i>Accounts of Chemical Research</i> , 2013 , 46, 2626-34	24.3	253
276	Merging sustainability with organocatalysis in the formation of organic carbonates by using CO(2) as a feedstock. <i>ChemSusChem</i> , 2012 , 5, 2032-8	8.3	247
275	Redox Non-innocent Ligand Controls Water Oxidation Overpotential in a New Family of Mononuclear Cu-Based Efficient Catalysts. <i>Journal of the American Chemical Society</i> , 2015 , 137, 6758-61	16.4	210
274	[(NHC)AuI]-catalyzed formation of conjugated enones and enals: an experimental and computational study. <i>Chemistry - A European Journal</i> , 2007 , 13, 6437-51	4.8	168
273	C-C reductive elimination in palladium complexes, and the role of coupling additives. A DFT study supported by experiment. <i>Journal of the American Chemical Society</i> , 2009 , 131, 3650-7	16.4	167
272	A valuable, inexpensive Cu(I)/n-heterocyclic carbene catalyst for the selective diboration of styrene. <i>Chemistry - A European Journal</i> , 2007 , 13, 2614-21	4.8	145
271	Experimental and theoretical investigations of new dinuclear palladium complexes as precatalysts for the amination of aryl chlorides. <i>Journal of the American Chemical Society</i> , 2006 , 128, 6376-90	16.4	141
270	A general mechanism for the copper- and silver-catalyzed olefin aziridination reactions: concomitant involvement of the singlet and triplet pathways. <i>Journal of the American Chemical Society</i> , 2013 , 135, 1338-48	16.4	136
269	Metal-arene interactions in dialkylbiarylphosphane complexes of copper, silver, and gold. <i>Chemistry - A European Journal</i> , 2010 , 16, 5324-32	4.8	135

268	Catecholborane Bound to Titanocene. Unusual Coordination of Ligand π Bonds. <i>Journal of the American Chemical Society</i> , 1996 , 118, 10936-10937	16.4	133
267	Application of the New Integrated MO + MM (IMOMM) Method to the Organometallic Reaction $Pt(PR_3)_2 + H_2$ (R = H, Me, t-Bu, and Ph). <i>The Journal of Physical Chemistry</i> , 1996 , 100, 2573-2580		130
266	Unraveling the origin of regioselectivity in rhodium diphosphine catalyzed hydroformylation. A DFT QM/MM study. <i>Journal of the American Chemical Society</i> , 2001 , 123, 7630-7	16.4	127
265	Computational study of the transmetalation process in the Suzuki-Miyaura cross-coupling of aryls. <i>Journal of Organometallic Chemistry</i> , 2006 , 691, 4459-4466	2.3	122
264	Catalytic Mechanism of Galactose Oxidase: A Theoretical Study. <i>Journal of the American Chemical Society</i> , 2000 , 122, 8031-8036	16.4	117
263	Bidentate phosphines as ligands in the palladium-catalyzed intramolecular arylation: the intermolecular base-assisted proton abstraction mechanism. <i>Tetrahedron</i> , 2008 , 64, 6021-6029	2.4	115
262	Gold(I)-catalyzed intermolecular hydroalkoxylation of allenes: a DFT study. <i>Organic Letters</i> , 2009 , 11, 2237-40	6.2	114
261	Selective homogeneous and heterogeneous gold catalysis with alkynes and alkenes: similar behavior, different origin. <i>ChemPhysChem</i> , 2008 , 9, 1624-9	3.2	111
260	Stereoselective and Versatile Preparation of Tri- and Tetrasubstituted Allylic Amine Scaffolds under Mild Conditions. <i>Journal of the American Chemical Society</i> , 2016 , 138, 11970-8	16.4	109
259	Computational Evidence of the Importance of Substituent Bulk on Agostic Interactions in $Ir(H)_2(PtBu_2Ph)_2^+$. <i>Journal of the American Chemical Society</i> , 1998 , 120, 361-365	16.4	106
258	Theory Does Not Support an Osmaoxetane Intermediate in the Osmium-Catalyzed Dihydroxylation of Olefins. <i>Journal of the American Chemical Society</i> , 1996 , 118, 11660-11661	16.4	104
257	Computational approaches to asymmetric synthesis. <i>New Journal of Chemistry</i> , 2007 , 31, 333	3.6	99
256	Protonation of transition-metal hydrides: a not so simple process. <i>Chemical Society Reviews</i> , 2009 , 38, 957-66	58.5	93
255	A critical analysis of the cyclic and open alternatives of the transmetalation step in the stille cross-coupling reaction. <i>Journal of the American Chemical Society</i> , 2006 , 128, 14571-8	16.4	93
254	Computational and Experimental Test of Steric Influence on Agostic Interactions: A Homologous Series for Ir(III). <i>Journal of the American Chemical Society</i> , 1999 , 121, 97-106	16.4	92
253	Scope and Challenge of Computational Methods for Studying Mechanism and Reactivity in Homogeneous Catalysis. <i>ACS Catalysis</i> , 2019 , 9, 6803-6813	13.1	91
252	A Domino Process toward Functionally Dense Quaternary Carbons through Pd-Catalyzed Decarboxylative C(sp)-C(sp) Bond Formation. <i>Journal of the American Chemical Society</i> , 2018 , 140, 3981-3987	16.4	87
251	Bond energy M-C/H-C correlations: dual theoretical and experimental approach to the sensitivity of M-C bond strength to substituents. <i>Chemical Communications</i> , 2003 , 490-1	5.8	85

250	Reactions of a HexahydridoOsmium Complex with Aromatic Ketones: C-H Activation versus C=C Activation. <i>Organometallics</i> , 2001 , 20, 442-452	3.8	85
249	Mechanism of the gold-catalyzed cyclopropanation of alkenes with 1,6-enynes. <i>Chemical Science</i> , 2011 , 2, 141-149	9.4	83
248	Inertness of the Aryl-H Bond toward Oxidative Addition to Osmium and Rhodium Complexes: Thermodynamic or Kinetic Origin?. <i>Journal of the American Chemical Society</i> , 1998 , 120, 12634-12640	16.4	83
247	Calculation of Reaction Free Energies in Solution: A Comparison of Current Approaches. <i>Journal of Physical Chemistry A</i> , 2018 , 122, 1392-1399	2.8	82
246	Theoretical Study on the Origin of Enantioselectivity in the Bis(dihydroquinidine)-3,6-pyridazine-Osmium Tetroxide-Catalyzed Dihydroxylation of Styrene. <i>Journal of the American Chemical Society</i> , 1999 , 121, 1317-1323	16.4	82
245	Transition metal catalysis by density functional theory and density functional theory/molecular mechanics. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2012 , 2, 375-385	7.9	78
244	Application of the natural population analysis to transition-metal complexes. Should the empty metal p orbitals be included in the valence space?. <i>Chemical Physics Letters</i> , 1992 , 195, 500-504	2.5	77
243	Chemo-, regio-, and stereoselective silver-catalyzed aziridination of dienes: scope, mechanistic studies, and ring-opening reactions. <i>Journal of the American Chemical Society</i> , 2014 , 136, 5342-50	16.4	76
242	Mechanism of Alkane C-H Bond Activation by Copper and Silver Homoscorpionate Complexes. <i>Organometallics</i> , 2006 , 25, 5292-5300	3.8	74
241	practical implications of boron-to-zinc transmetalation for the catalytic asymmetric arylation of aldehydes. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 1098-101	16.4	71
240	Palladium round trip in the Negishi coupling of trans-[PdMeCl(PMePh ₂) ₂] with ZnMeCl: an experimental and DFT study of the transmetalation step. <i>Chemistry - A European Journal</i> , 2010 , 16, 8596-98	4.8	70
239	Brønsted acid catalyzed Morita-Baylis-Hillman reaction: a new mechanistic view for thioureas revealed by ESI-MS(/MS) monitoring and DFT calculations. <i>Chemistry - A European Journal</i> , 2009 , 15, 12460-9	4.8	69
238	QM/MM methods in inorganic chemistry. <i>Dalton Transactions</i> , 2008 , 2911-9	4.3	69
237	The IMOMM method opens the way for the accurate calculation of real transition metal complexes. <i>Chemical Communications</i> , 2000 , 1821-1827	5.8	69
236	RuX(CO)(NO)L ₂ and Ru(CO)(NO)L ₂ ⁺ : Ru(0) or Ru(II) or In Between?. <i>Journal of the American Chemical Society</i> , 1997 , 119, 8642-8651	16.4	68
235	Computational rationalization of the dependence of the enantioselectivity on the nature of the catalyst in the vanadium-catalyzed oxidation of sulfides by hydrogen peroxide. <i>Journal of the American Chemical Society</i> , 2005 , 127, 3624-34	16.4	68
234	Influence of media and homoconjugate pairing on transition metal hydride protonation. An IR and DFT study on proton transfer to CpRuH(CO)(PCy ₃). <i>Journal of the American Chemical Society</i> , 2003 , 125, 7715-25	16.4	68
233	A Density Functional Study on the Effect of the Trans Axial Ligand of Cobalamin on the Homolytic Cleavage of the Co-H Bond. <i>Journal of Physical Chemistry B</i> , 2001 , 105, 7564-7571	3.4	68

232	A quantum mechanics/molecular mechanics study of the highly enantioselective addition of diethylzinc to benzaldehyde promoted by (R)-2-piperidino-1,1,2-triphenylethanol. <i>Journal of Organic Chemistry</i> , 2000 , 65, 7303-9	4.2	67
231	Towards configurationally stable [4]helicenes: enantioselective synthesis of 12-substituted 7,8-dihydro[4]helicene quinones. <i>Chemistry - A European Journal</i> , 2008 , 14, 603-20	4.8	65
230	Synthesis of PCP-supported nickel complexes and their reactivity with carbon dioxide. <i>Chemistry - A European Journal</i> , 2012 , 18, 6915-27	4.8	63
229	Mechanistic insights into the transmetalation step of a SuzukiMiyaura reaction of 2(4)-bromopyridines: characterization of an intermediate. <i>Tetrahedron</i> , 2008 , 64, 7437-7443	2.4	63
228	Oxidative Additions of Aryl Halides to Palladium Proceed through the Monoligated Complex. <i>ChemCatChem</i> , 2013 , 5, 3604-3609	5.2	62
227	Competitive and selective Csp ³ -Br versus Csp ² -Br bond activation in palladium-catalysed Suzuki cross-coupling: an experimental and theoretical study of the role of phosphine ligands. <i>Chemistry - A European Journal</i> , 2010 , 16, 13390-7	4.8	62
226	Highly modular P-OP ligands for asymmetric hydrogenation: synthesis, catalytic activity, and mechanism. <i>Chemistry - A European Journal</i> , 2010 , 16, 6495-508	4.8	61
225	Microkinetic modeling in homogeneous catalysis. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2018 , 8, e1372	7.9	60
224	Rationale for the sluggish oxidative addition of aryl halides to Au(I). <i>Chemical Communications</i> , 2014 , 50, 1533-6	5.8	59
223	The importance of conformational search: a test case on the catalytic cycle of the SuzukiMiyaura cross-coupling. <i>Theoretical Chemistry Accounts</i> , 2011 , 128, 639-646	1.9	57
222	Experimental and computational studies of hydrogen bonding and proton transfer to [Cp*Fe(dppe)H]. <i>Chemistry - A European Journal</i> , 2005 , 11, 873-88	4.8	57
221	Amine conformational change and spin conversion induced by metal-assisted ligand oxidation: from the seven-coordinate iron(II)PAA complex to the two oxidized iron(II)(py) ₃ tren isomers. Characterization, crystal structures, and density functional study. <i>Inorganica Chimica Acta</i> , 2000 , 287, 229-250	2.7	57
220	Oxidative Coupling Mechanisms: Current State of Understanding. <i>ACS Catalysis</i> , 2018 , 8, 1161-1172	13.1	56
219	Computational study with DFT and kinetic models on the mechanism of photoinitiated aromatic perfluoroalkylations. <i>Organic Letters</i> , 2015 , 17, 2676-9	6.2	55
218	The Transmetalation Process in SuzukiMiyaura Reactions: Calculations Indicate Lower Barrier via Boronate Intermediate. <i>ChemCatChem</i> , 2014 , 6, 3132-3138	5.2	55
217	Catalytic cross-coupling of diazo compounds with coinage metal-based catalysts: an experimental and theoretical study. <i>Dalton Transactions</i> , 2013 , 42, 4132-8	4.3	55
216	Density functional study on the mechanism of the vanadium-catalyzed oxidation of sulfides by hydrogen peroxide. <i>Journal of Organic Chemistry</i> , 2003 , 68, 4265-74	4.2	55
215	Experimental and Theoretical Studies of Bonding and Oxidative Addition of Germanes and Silanes, EH ₄ -nPhn (E = Si, Ge; n = 0B), to Mo(CO)(diphosphine) ₂ . The First Structurally Characterized Germane π Complex. <i>Organometallics</i> , 2003 , 22, 5307-5323	3.8	55

214	Cyclobutene vs 1,3-Diene Formation in the Gold-Catalyzed Reaction of Alkynes with Alkenes: The Complete Mechanistic Picture. <i>Journal of the American Chemical Society</i> , 2017 , 139, 10302-10311	16.4	52
213	A DFT Study of the Effect of the Ligands in the Reductive Elimination from Palladium Bis(allyl) Complexes. <i>Organometallics</i> , 2010 , 29, 4983-4991	3.8	52
212	Why is the Suzuki-Miyaura cross-coupling of sp ³ carbons in alpha-bromo sulfoxide systems fast and stereoselective? A DFT study on the mechanism. <i>Journal of Organic Chemistry</i> , 2009 , 74, 4049-54	4.2	52
211	Single Electron Transfer Steps in Water Oxidation Catalysis. Redefining the Mechanistic Scenario. <i>ACS Catalysis</i> , 2017 , 7, 1712-1719	13.1	51
210	On the Origin of η -Bond and π -Agostic Distortions in Early-Transition-Metal Alkyl Complexes. <i>Organometallics</i> , 2008 , 27, 1128-1134	3.8	51
209	Critical Role of the Correlation Functional in DFT Descriptions of an Agostic Niobium Complex. <i>Journal of Chemical Theory and Computation</i> , 2007 , 3, 1329-36	6.4	51
208	A theoretical analysis of a classic example of supramolecular catalysis. <i>Chemical Communications</i> , 2007 , 748-50	5.8	50
207	Crucial role of anions on the deprotonation of the cationic dihydrogen complex trans-[FeH(η -H ₂)(dppe) ₂] ⁺ . <i>Journal of the American Chemical Society</i> , 2007 , 129, 6608-18	16.4	50
206	Hydride Exchange Processes in the Coordination Sphere of Transition Metal Complexes: The OsH ₃ (BH ₄)(PR ₃) ₂ System. <i>Journal of the American Chemical Society</i> , 1996 , 118, 8388-8394	16.4	50
205	Computational Study on the Mechanism of the Acceleration of 1,3-Dipolar Cycloaddition inside Cucurbit[6]uril. <i>ACS Catalysis</i> , 2015 , 5, 2445-2451	13.1	49
204	The role of cyclobutenes in gold(I)-catalysed skeletal rearrangement of 1,6-enynes. <i>Organic and Biomolecular Chemistry</i> , 2012 , 10, 6105-11	3.9	49
203	Theoretical Study of the Hydrogen Exchange Coupling in the Metallocene Trihydride Complexes [(C ₅ H ₅) ₂ MH ₃] ⁿ⁺ (M = Mo, W, n = 1; M = Nb, Ta, n = 0). <i>Journal of the American Chemical Society</i> , 1996 , 118, 4617-4621	16.4	49
202	Bonding in Elongated Dihydrogen Complexes. Theoretical Analysis of the Electron Density in [MLn(H \cdots H)] Species. <i>Organometallics</i> , 1996 , 15, 2947-2953	3.8	47
201	Toward a mechanistic understanding of oxidative homocoupling: the Glaser-Hay reaction. <i>Catalysis Science and Technology</i> , 2014 , 4, 4200-4209	5.5	46
200	The Mechanism of the Catalytic Functionalization of Haloalkanes by Carbene Insertion: An Experimental and Theoretical Study. <i>Organometallics</i> , 2009 , 28, 5968-5981	3.8	46
199	Synthesis and Spectroscopic Properties of Dihydrogen Isocyanide Niobocene [Nb(η -C ₅ H ₄ SiMe ₃) ₂ (η -H ₂)(CNR)] ⁺ Complexes. Experimental and Theoretical Study of the Blocked Rotation of a Coordinated Dihydrogen. <i>Journal of the American Chemical Society</i> , 1997 , 119, 6107-6114	16.4	46
198	σ - and π -agostic interactions in cycloalkyl tris(pyrazolyl)boratoniobium complexes. <i>Dalton Transactions</i> , 2003 , 4057-4064	4.3	46
197	Functional-Group-Tolerant, Silver-Catalyzed N-N Bond Formation by Nitrene Transfer to Amines. <i>Journal of the American Chemical Society</i> , 2017 , 139, 2216-2223	16.4	45

196	Copper-Catalyzed N-F Bond Activation for Uniform Intramolecular C-H Amination Yielding Pyrrolidines and Piperidines. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 8912-8916	16.4	45
195	Equilibria between alpha- and beta-agostic stabilized rotamers of secondary alkyl niobium complexes. <i>Journal of the American Chemical Society</i> , 2001 , 123, 6000-13	16.4	45
194	Molecular hydrogen complexes with a hydride ligand. An ab initio study on the iron hydride, [Fe(PR ₃) ₄ H(H ₂)] ⁺ , system. <i>Journal of the American Chemical Society</i> , 1991 , 113, 2879-2884	16.4	45
193	Phosphine and solvent effects on oxidative addition of CH ₃ Br to Pd(PR ₃) and Pd(PR ₃) ₂ complexes. <i>Dalton Transactions</i> , 2011 , 40, 11089-94	4.3	44
192	Agostic interactions in alkyl derivatives of sterically hindered tris(pyrazolyl)borate complexes of niobium. <i>Coordination Chemistry Reviews</i> , 2009 , 253, 635-646	23.2	44
191	Dynamic Behavior in Solution of the Trans-Hydridodihydrogen Complex [OsHCl(n ₂ -H ₂)(CO)(PiPr ₃) ₂]: Ab Initio and NMR Studies. <i>Chemistry - A European Journal</i> , 1996 , 2, 815-825 ^{4.8}		44
190	Light-Driven Enantioselective Organocatalytic β -Benzoylation of Enals. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 3304-3308	16.4	43
189	Preparation and Characterization of Osmium-Stannyl Polyhydrides: d ⁴ β Oxidative Addition of Neutral Molecules in a Late Transition Metal. <i>Organometallics</i> , 2003 , 22, 2087-2096	3.8	43
188	Competition between Steric and Electronic Control of Structure in Ru(CO) ₂ L ₂ L ⁺ Complexes. <i>Organometallics</i> , 1997 , 16, 1979-1993	3.8	42
187	Density Functional Study on the Effect of the trans Axial Ligand of B ₁₂ Cofactors on the Heterolytic Cleavage of the Co-C Bond. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 306-315	3.4	42
186	An unprecedented alpha-C-C agostic interaction in a cyclopropyl tris(pyrazolyl)boratoniobium complex. <i>Chemical Communications</i> , 2003 , 876-7	5.8	42
185	Computational study on the difference between the Co-C bond dissociation energy in methylcobalamin and adenosylcobalamin. <i>Journal of Biological Inorganic Chemistry</i> , 2005 , 10, 509-17	3.7	42
184	Elucidating the Mechanism of Aryl Aminations Mediated by NHC-Supported Nickel Complexes: Evidence for a Nonradical Ni(0)/Ni(II) Pathway. <i>ACS Catalysis</i> , 2018 , 8, 3733-3742	13.1	41
183	Mechanistic Studies on Gold-Catalyzed Direct Arene C-H Bond Functionalization by Carbene Insertion: The Coinage-Metal Effect. <i>Organometallics</i> , 2017 , 36, 172-179	3.8	41
182	Mechanism of the [(NHC)Au(I)]-catalyzed rearrangement of allylic acetates. A DFT study. <i>Organic Letters</i> , 2009 , 11, 81-4	6.2	41
181	Applications of Hybrid DFT/Molecular Mechanics to Homogeneous Catalysis. <i>Structure and Bonding</i> , 2004 , 117-150	0.9	41
180	Oxidative Addition of Group 14 Element Hydrido Compounds to OsH ₂ (eta ² -CH ₂ =CH ₂)(CO)(P(i)Pr ₃) ₂ : Synthesis and Characterization of the First Trihydrido-Silyl, Trihydrido-Germyl, and Trihydrido-Stannyl Derivatives of Osmium(IV). <i>Inorganic Chemistry</i> , 1996 , 35, 1250-1256	5.1	41
179	Stabilization of the adenosyl radical in coenzyme B ₁₂ - a theoretical study. <i>Chemical Physics Letters</i> , 2004 , 386, 174-178	2.5	40

178	The reaction of the unsaturated rhenium fragment $\{\text{Re}(\eta\text{-C}_5\text{Me}_5)(\text{CO})_2\}$ with 1,4-difluorobenzene. Thermal intramolecular conversion of a rhenium (difluorophenyl)(hydride) to $\text{Re}(\eta\text{-C}_6\text{H}_4\text{F}_2)$ and a [1,4]-metallotropic shift. <i>Dalton Transactions RSC</i> , 2001 , 1452-1461		40
177	Mechanism of the base-assisted displacement of chloride by alcohol in sulfinyl derivatives. <i>Journal of Organic Chemistry</i> , 2006 , 71, 6388-96	4.2	39
176	The effect of the "inert" counteranions in the deprotonation of the dihydrogen complex $\text{trans-}[\text{FeH}(\eta\text{-}2\text{-H}_2)(\text{dppe})_2]^+$: kinetic and theoretical studies. <i>Journal of the American Chemical Society</i> , 2004 , 126, 2320-1	16.4	39
175	Intramolecular atom exchange between molecular hydrogen and hydride ligands in $\text{cis-}[\text{Fe}(\text{PR}_3)_4\text{H}(\text{H}_2)]^+$ complexes. An ab initio theoretical study. <i>Journal of the American Chemical Society</i> , 1992 , 114, 2922-2928	16.4	39
174	Cooperative Reductive Elimination: The Missing Piece in the Oxidative-Coupling Mechanistic Puzzle. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 2764-7	16.4	38
173	Reaction of alkynes and azides: not triazoles through copper-acetylides but oxazoles through copper-nitrene intermediates. <i>Chemistry - A European Journal</i> , 2014 , 20, 3463-74	4.8	37
172	Mechanism of Side Reactions in Alkane C-H Bond Functionalization by Diazo Compounds Catalyzed by Ag and Cu Homoscorpionate Complexes: A DFT Study. <i>ChemCatChem</i> , 2011 , 3, 1646-1652	5.2	37
171	Hybrid quantum-mechanical and molecular mechanics study of Cu atoms deposition on SiO_2 surface defects. <i>Chemical Physics Letters</i> , 1998 , 294, 611-618	2.5	37
170	Ab Initio MO and MM Study on the Nature of $[\text{Ru}(\text{P-P})_2\text{H}_3]^+$ (P-P = dppb, diop, dpmb, dppe) Complexes. <i>Organometallics</i> , 1994 , 13, 4008-4016	3.8	37
169	Halide Abstraction Competes with Oxidative Addition in the Reactions of Aryl Halides with $[\text{Ni}(\text{PMePh})_2]$. <i>Chemistry - A European Journal</i> , 2017 , 23, 16728-16733	4.8	36
168	Thermally Activated Site Exchange and Quantum Exchange Coupling Processes in Unsymmetrical Trihydride Osmium Compounds. <i>Inorganic Chemistry</i> , 1999 , 38, 1814-1824	5.1	36
167	On the Feasibility of Nickel-Catalyzed Trifluoromethylation of Aryl Halides. <i>Organometallics</i> , 2014 , 33, 6531-6543	3.8	35
166	C-H bond activation of benzene by unsaturated $\eta\text{-cyclopropene}$ and $\eta\text{-benzyne}$ complexes of niobium. <i>Journal of the American Chemical Society</i> , 2010 , 132, 14239-50	16.4	35
165	Mechanistic and computational studies of the atom transfer radical addition of CCl_4 to styrene catalyzed by copper homoscorpionate complexes. <i>Inorganic Chemistry</i> , 2011 , 50, 2458-67	5.1	35
164	Theoretical modeling of the heme group with a hybrid QM/MM method. <i>Journal of Computational Chemistry</i> , 2000 , 21, 282-294	3.5	35
163	A computational view on the reactions of hydrocarbons with coinage metal complexes. <i>Journal of Organometallic Chemistry</i> , 2015 , 784, 2-12	2.3	33
162	Computational characterization of a mechanism for the copper-catalyzed aerobic oxidative trifluoromethylation of terminal alkynes. <i>Chemical Communications</i> , 2013 , 49, 10486-8	5.8	33
161	Computational characterization of the mechanism for coinage-metal-catalyzed carboxylation of terminal alkynes. <i>Journal of Organic Chemistry</i> , 2014 , 79, 11981-7	4.2	32

160	An unusual example of hypervalent silicon: a five-coordinate silyl group bridging two palladium or nickel centers through a nonsymmetrical four-center two-electron bond. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 1103-8	16.4	32
159	Different van der Waals radii for organic and inorganic halogen atoms: a significant improvement in IMOMM performance. <i>Theoretical Chemistry Accounts</i> , 1997 , 96, 146-150	1.9	32
158	Copper-Catalyzed Borylative Ring Closing C-C Coupling toward Spiro- and Dispiroheterocycles. <i>ACS Catalysis</i> , 2018 , 8, 2833-2838	13.1	31
157	Synthesis and reactivity of $[\text{OsH}\{\text{C}_6\text{H}_4(\text{CHCHH})\}(\text{CO})(\text{PPri}_3)_2]$ and the formate compounds $[\text{Os}\{\text{E}-\text{CHCHPh}\}(\text{D}-\text{O}_2\text{CH})(\text{CO})(\text{PPri}_3)_2]$ and $[\text{OsH}(\text{D}-\text{O}_2\text{CH})(\text{CO})(\text{PPri}_3)_2]^*$. <i>Journal of the Chemical Society Dalton Transactions</i> , 1997 , 181-192		31
156	Polyene Cyclization by a Double Intramolecular Heck Reaction. A DFT Study. <i>Organometallics</i> , 2004 , 23, 2784-2796	3.8	31
155	DFT Rationalization of the Diverse Outcomes of the Iodine(III)-Mediated Oxidative Amination of Alkenes. <i>Chemistry - A European Journal</i> , 2016 , 22, 7545-53	4.8	31
154	Hybrid Quantum Mechanics/Molecular Mechanics Methods in Transition Metal Chemistry. <i>Topics in Organometallic Chemistry</i> , 1999 , 165-191	0.6	31
153	Site Preference Energetics, Fluxionality, and Intramolecular M-H...H Hydrogen Bonding in a Dodecahedral Transition Metal Polyhydride. <i>Inorganic Chemistry</i> , 1997 , 36, 5505-5511	5.1	30
152	Dihydrogen to dihydride isomerization mechanism in $[(\text{C}_5\text{Me}_5)\text{FeH}_2(\text{Ph}_2\text{PCH}_2\text{CH}_2\text{PPh}_2)]^+$ through the experimental and theoretical analysis of kinetic isotope effects. <i>Inorganic Chemistry</i> , 2006 , 45, 10248-52	5.1	30
151	Copper(I) Olefin Complexes: The Effect of the Trispyrazolylborate Ancillary Ligand in Structure and Reactivity. <i>Organometallics</i> , 2010 , 29, 3481-3489	3.8	29
150	A DFT/MM analysis of the effect of ligand substituents on asymmetric hydrogenation catalyzed by rhodium complexes with phosphine-phosphinite ligands. <i>Canadian Journal of Chemistry</i> , 2009 , 87, 1273-1279	9.9	29
149	Opposing steric and electronic contributions in $\text{OsCl}_2\text{H}_2(\text{PPr}_3)_2$. A theoretical study of an unusual structure. <i>New Journal of Chemistry</i> , 1998 , 22, 5-9	3.6	29
148	Catalytic Nitrene Transfer To Alkynes: A Novel and Versatile Route for the Synthesis of Sulfinamides and Isothiazoles. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 12842-12847	16.4	28
147	Performance of the semiempirical PM3 (tm) method in the geometry optimization of transition metal complexes. <i>Journal of Computational Chemistry</i> , 2000 , 21, 562-571	3.5	28
146	Mechanism for Hydride-Assisted Rearrangement from Ethylidene to Ethylene in Iridium Cationic Complexes. <i>Organometallics</i> , 2010 , 29, 2040-2045	3.8	27
145	Mechanistic study of amine to imine oxidation in a dinuclear Cu(II) complex containing an octaaza dinucleating ligand. <i>Inorganic Chemistry</i> , 2010 , 49, 5977-85	5.1	27
144	Factors affecting imine coordination in (iminoterpyridine)MX ₂ (M = Fe, Co, Ni, Zn): synthesis, structures, DFT calculations and ethylene oligomerisation studies. <i>New Journal of Chemistry</i> , 2007 , 31, 75-85	3.6	27
143	Hybrid quantum mechanics/molecular mechanics studies of the active site of the blue copper proteins amicyanin and rusticyanin. <i>Inorganica Chimica Acta</i> , 2001 , 324, 21-26	2.7	27

142	Water oxidation electrocatalysis using ruthenium coordination oligomers adsorbed on multiwalled carbon nanotubes. <i>Nature Chemistry</i> , 2020 , 12, 1060-1066	17.6	27
141	Observing and modelling energetically close σ - and π -carbon-hydrogen agostic interactions in an isopropyl tris(pyrazolyl)boratoniobium complex. <i>Chemical Communications</i> , 1998 , 2011-2012	5.8	26
140	Diastereodivergent Enantioselective [8 + 2] Annulation of Tropones and Enals Catalyzed by N-Heterocyclic Carbenes. <i>Organic Letters</i> , 2019 , 21, 3187-3192	6.2	25
139	Measuring the Relative Reactivity of the Carbon-Hydrogen Bonds of Alkanes as Nucleophiles. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 13848-13852	16.4	25
138	Theoretical Characterization of an Intermediate for the [3 + 2] Cycloaddition Mechanism in the Bis(dihydroxy-quinidine)-6-Pyridazine-Osmium Tetroxide-Catalyzed Dihydroxylation of Styrene. <i>Journal of Organic Chemistry</i> , 1997 , 62, 7892-7894	4.2	25
137	Some critical issues in the application of quantum mechanics/molecular mechanics methods to the study of transition metal complexes. <i>Faraday Discussions</i> , 2003 , 124, 429-41; discussion 443-55	3.6	25
136	Silyl, hydrido-silylene, or other bonding modes: some unusual structures of [(dhpe)Pt(SiHR ₂) ⁺] (dhpe = H ₂ P-CH ₂ -CH ₂ -PH ₂ ; R = H, Me, SiH ₃ , Cl, OMe, NMe ₂) and [(dhpe)Pt(SiR ₃) ⁺] (R = Me, Cl) from DFT calculations. <i>Inorganic Chemistry</i> , 2002 , 41, 7105-12	5.1	25
135	[ML _n (SiR ₃)(D-H)] or [ML _n (H)(D-HSiR ₃)]? An ab Initio MO Study on [OsCl(CO)(PR ₃) ₂ (SiR ₃) ₂] Complexes. <i>Organometallics</i> , 1996 , 15, 1218-1222	3.8	25
134	Pd-catalysed mono- and dicarbonylation of aryl iodides: insights into the mechanism and the selectivity. <i>Chemistry - A European Journal</i> , 2014 , 20, 10982-9	4.8	24
133	DFT modeling of reactivity in an ionic liquid: How many ion pairs?. <i>Journal of Computational Chemistry</i> , 2008 , 29, 892-9	3.5	24
132	Computational QM/MM study on the structure and energetics of species involved in the activation of the C-H and C-S bonds of thiophene by Cp [*] RhPMe ₃ . <i>New Journal of Chemistry</i> , 2004 , 28, 625-630	3.6	24
131	Phosphine Dissociation Mediates C-H Cleavage of Fluoroarenes by OsH(C ₆ H ₅)(CO)(PtBu ₂ Me) ₂ . <i>Journal of the American Chemical Society</i> , 1999 , 121, 10895-10907	16.4	24
130	Theoretical Evaluation of Steric Effects in [ReH(5)(PR(3))(2)(SiR(3))(2)] Complexes with the IMOMM Method. <i>Inorganic Chemistry</i> , 1996 , 35, 6401-6405	5.1	24
129	C-C Coupling Constants, JCC, Are Reliable Probes for C-C Agostic Structures. <i>Organometallics</i> , 2009 , 28, 940-943	3.8	23
128	Cis,trans,cis or All-cis Geometry in d ⁰ Octahedral Dioxo Complexes. An IMOMM Study of the Role of Steric Effects. <i>Inorganic Chemistry</i> , 1998 , 37, 3321-3325	5.1	23
127	A QM/MM study of the asymmetric dihydroxylation of terminal aliphatic n-alkenes with OsO ₄ .(DHQD)2PYDZ: enantioselectivity as a function of chain length. <i>Chemistry - A European Journal</i> , 2005 , 11, 1017-29	4.8	22
126	Analysis of solvent effect on S _N 2 reactions by different theoretical models. <i>Journal of Physical Organic Chemistry</i> , 1989 , 2, 611-622	2.1	22
125	Chiral transition-metal complexes as Brønsted-acid catalysts for the asymmetric Friedel-Crafts hydroxyalkylation of indoles. <i>Dalton Transactions</i> , 2014 , 43, 11260-8	4.3	21

124	Substitution reactions in dinuclear Ru-Hbpp complexes: an evaluation of through-space interactions. <i>Inorganic Chemistry</i> , 2012 , 51, 1889-901	5.1	21
123	Dihydrogen Formation in a Trihydride Metallocene and Its Elimination, Both Assisted by Lewis Acids: The [Cp ₂ NbH ₃] ⁺ BH ₃ System. <i>Angewandte Chemie International Edition in English</i> , 1997 , 36, 265-266		21
122	Electronic against steric effects in distorted amides. <i>Computational and Theoretical Chemistry</i> , 2003 , 632, 131-144		21
121	Ab initio molecular orbital characterization of the [Os(PR ₃) ₃ "H ⁵ "] ⁺ complex. <i>Journal of the American Chemical Society</i> , 1993 , 115, 8313-8320	16.4	21
120	Steric effects determine the mechanisms of reactions between bis(N-heterocyclic carbene)-nickel(0) complexes and aryl halides. <i>Chemical Communications</i> , 2018 , 54, 10646-10649	5.8	21
119	Computational Characterization of the Mechanism for the Oxidative Coupling of Benzoic Acid and Alkynes by Rhodium/Copper and Rhodium/Silver Systems. <i>Chemistry - A European Journal</i> , 2018 , 24, 12383-12388	4.8	20
118	Through-space ligand interactions in enantiomeric dinuclear Ru complexes. <i>Chemistry - A European Journal</i> , 2010 , 16, 7965-8	4.8	20
117	Breaking an electronically preferred symmetry by steric effects in a series of [Ir(biph)X(QR ₃) ₂] compounds (X=Cl or I, Q=P or As). <i>New Journal of Chemistry</i> , 1998 , 22, 1493-1498	3.6	20
116	Palladium-Catalyzed Aerobic Homocoupling of Alkynes: Full Mechanistic Characterization of a More Complex Oxidase-Type Behavior. <i>ACS Catalysis</i> , 2018 , 8, 7495-7506	13.1	20
115	Silver-Catalyzed Functionalization of Esters by Carbene Transfer: The Role of Ylide Zwitterionic Intermediates. <i>ChemCatChem</i> , 2014 , 6, 2206-2210	5.2	19
114	Functionalization of C _n H _{2n+2} Alkanes: Supercritical Carbon Dioxide Enhances the Reactivity towards Primary Carbon-Hydrogen Bonds. <i>ChemCatChem</i> , 2015 , 7, 3254-3260	5.2	19
113	The Nature of M ^π B Versus M ^σ B Bonds in Cationic Terminal Borylene Complexes: Structure and Energy Analysis in the Borylene Complexes [(B-C ₅ H ₅)(CO) ₂ M{B(B-C ₅ Me ₅)}] ⁺ , [(B-C ₅ H ₅)(CO) ₂ M(BMes)] ⁺ , and [(B-C ₅ H ₅)(CO) ₂ M(BNMe ₂)] ⁺ (M = Fe, Ru, Os). <i>Organometallics</i> , 2009 , 28, 6118-6119	3.8	19
112	Binding of dioxygen in a picket-fence porphyrin complex of iron. A theoretical QM/MM study. <i>New Journal of Chemistry</i> , 1998 , 22, 327-322	3.6	19
111	Computationally Guided Design of a Readily Assembled Phosphite-Thioether Ligand for a Broad Range of Pd-Catalyzed Asymmetric Allylic Substitutions. <i>ACS Catalysis</i> , 2018 , 8, 3587-3601	13.1	18
110	Mechanistic Investigation of Iridium-Catalyzed C-H Borylation of Methyl Benzoate: Ligand Effects in Regioselectivity and Activity. <i>Organometallics</i> , 2016 , 35, 3221-3226	3.8	18
109	Quantum mechanics/molecular mechanics methods can be more accurate than full quantum mechanics in systems involving dispersion correlations. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 10520-6	3.6	18
108	DFT/MM Study on Copper-Catalyzed Cyclopropanation: Enantioselectivity with No Enthalpy Barrier. <i>European Journal of Organic Chemistry</i> , 2008 , 2008, 5614-5621	3.2	18
107	Practical Implications of Boron-to-Zinc Transmetalation for the Catalytic Asymmetric Arylation of Aldehydes. <i>Angewandte Chemie</i> , 2008 , 120, 1114-1117	3.6	18

106	Synthesis and Computational Studies of Palladium(I) Dimers Pd ₂ X ₂ (PtBu ₂ Ph) ₂ (X = Br, I): η^5 -Phenyl versus Halide Bridging Modes. <i>Organometallics</i> , 2006 , 25, 5990-5995	3.8	18
105	Base-catalyzed inversion of chiral sulfur centers. A computational study. <i>Organic Letters</i> , 2004 , 6, 2197-260		18
104	Unexpected Influence of the Counteranion in the η^5 vs η^6 Hapticity of Polydentate N-Donor Ligands in [RhI(N-ligand)L ₂] ⁺ Complexes. <i>Organometallics</i> , 2004 , 23, 5530-5539	3.8	18
103	Synthesis and Characterization of Mixed-Phosphine Osmium Polyhydrides: σ -Hydrogen Delocalization in [OsH ₅ P ₃] ⁺ Systems. <i>Organometallics</i> , 2001 , 20, 5297-5309	3.8	18
102	Computational Characterization of the Origin of Selectivity in Cycloaddition Reactions Catalyzed by Phosphoric Acid Derivatives. <i>Chemistry - an Asian Journal</i> , 2016 , 11, 411-6	4.5	18
101	Four Oxidation States in a Single Photoredox Nickel-Based Catalytic Cycle: A Computational Study. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 3898-3902	16.4	17
100	Mild, reversible reaction of iridium(III) amido complexes with carbon dioxide. <i>Inorganic Chemistry</i> , 2012 , 51, 9683-93	5.1	17
99	Oxidative dehydrogenation of an amine group of a macrocyclic ligand in the coordination sphere of a Cu(II) complex. <i>Dalton Transactions</i> , 2009 , 6013-20	4.3	17
98	Theoretical study of the reaction mechanism of the uncatalyzed epoxidation of alkenes by iodosylbenzene. <i>New Journal of Chemistry</i> , 2003 , 27, 811-817	3.6	17
97	Four-Electron Reduction of Diazo Compounds at a Single Tungsten Metal Center: A Theoretical Study of the Mechanism. <i>Journal of the American Chemical Society</i> , 1998 , 120, 6598-6602	16.4	17
96	Theoretical and Synthetic Studies on Dihaptoacyl and η^6 -Agostic Acyl Complexes of Molybdenum. <i>Organometallics</i> , 1999 , 18, 3294-3305	3.8	17
95	Expanding the Range of Force Fields Available for ONIOM Calculations: The SICTWO Interface. <i>Journal of Chemical Information and Modeling</i> , 2018 , 58, 1828-1835	6.1	16
94	Computational characterization of the mechanism for the light-driven catalytic trichloromethylation of acylpyridines. <i>Organic and Biomolecular Chemistry</i> , 2017 , 15, 8641-8647	3.9	16
93	How does the Achiral Base Decide the Stereochemical Outcome in the Dynamic Kinetic Resolution of Sulfinyl Chlorides? A Computational Study. <i>Advanced Synthesis and Catalysis</i> , 2007 , 349, 2103-2110	5.6	16
92	An ab initio molecular orbital study of the osmium complex [Os(PR ₃) ₃ H ₄] system. Peeking into the peculiarities of seven-coordination. <i>Journal of the American Chemical Society</i> , 1993 , 115, 10974-10980	16.4	16
91	New Vistas in Transmetalation with Discrete "AgCF" Species: Implications in Pd-Mediated Trifluoromethylation Reactions. <i>Chemistry - A European Journal</i> , 2018 , 24, 11895-11898	4.8	16
90	A DFT-based mechanistic proposal for the light-driven insertion of dioxygen into Pt(II)-C bonds. <i>Chemical Science</i> , 2018 , 9, 5039-5046	9.4	15
89	η^6 H Abstraction/1,3-CH Bond Addition as a Mechanism for the Activation of CH Bonds at Early Transition Metal Centers. <i>Organometallics</i> , 2014 , 33, 7270-7278	3.8	15

88	Aromatic versus Benzylic CH Bond Activation of Alkylaromatics by a Transient η^2 -Cyclopropene Complex. <i>Organometallics</i> , 2011 , 30, 3999-4007	3.8	15
87	Structural analysis of zirconocenes with substituted cyclopentadienyl rings. <i>Chemistry - A European Journal</i> , 2009 , 15, 924-35	4.8	15
86	$[(C_5H_4MeEt)Ir(PPh_3)_2]^+$: an agostic C π bond or a close metal-ligand contact?. <i>Inorganica Chimica Acta</i> , 2004 , 357, 345-346	2.7	15
85	An oscillating C ₂ (2-) unit inside a copper rectangle. <i>Chemical Communications</i> , 2003 , 1260-1	5.8	15
84	Searching for Hidden Descriptors in the Metal-Ligand Bond through Statistical Analysis of Density Functional Theory (DFT) Results. <i>Inorganic Chemistry</i> , 2018 , 57, 14660-14670	5.1	15
83	Light-Driven Enantioselective Organocatalytic β -Benzoylation of Enals. <i>Angewandte Chemie</i> , 2017 , 129, 3352-3356	3.6	14
82	Intermolecular Allene Functionalization by Silver-Nitrene Catalysis. <i>Journal of the American Chemical Society</i> , 2020 , 142, 13062-13071	16.4	14
81	Catalytic Copper-Mediated Ring Opening and Functionalization of Benzoxazoles. <i>ACS Catalysis</i> , 2014 , 4, 4215-4222	13.1	14
80	A computational study on the role of chiral N-oxides in enantioselective Pauson-Khand reactions. <i>Chemistry - A European Journal</i> , 2011 , 17, 10050-7	4.8	14
79	Enantioselective Synthesis of Aminodiols by Sequential Rhodium-Catalysed Oxyamination/Kinetic Resolution: Expanding the Substrate Scope of Amidine-Based Catalysis. <i>Chemistry - A European Journal</i> , 2018 , 24, 4635-4642	4.8	13
78	ONIOM(QM:AMOEBA09) Study on Binding Energies and Binding Preference of OH, HCO, and CH ₃ Radicals on Hexagonal Water Ice (Ih). <i>Journal of Physical Chemistry C</i> , 2017 , 121, 15223-15232	3.8	13
77	² H-T1 Relaxation and Deuterium Quadrupole Coupling Constants in Transition Metal η^2 -D ₂ Complexes. <i>Chemistry - A European Journal</i> , 1999 , 5, 3318-3325	4.8	13
76	Unexpected Coexistence of Isomeric Forms and Unusual Structures of Ru(CO) ₂ L ₃ ?. <i>Inorganic Chemistry</i> , 1996 , 35, 7468-7469	5.1	13
75	The Challenge of Reproducing with Calculations Raw Experimental Kinetic Data for an Organic Reaction. <i>Organic Letters</i> , 2020 , 22, 2873-2877	6.2	12
74	Theoretical Study of the Effect of Lewis Acids on Dihydrogen Elimination from Niobocene Trihydrides. <i>Chemistry - A European Journal</i> , 1999 , 5, 1166-1171	4.8	12
73	Computational Description of a Huisgen Cycloaddition Inside a Self-Assembled Nanocapsule. <i>European Journal of Organic Chemistry</i> , 2018 , 2018, 2103-2109	3.2	11
72	Cooperative Reductive Elimination: The Missing Piece in the Oxidative-Coupling Mechanistic Puzzle. <i>Angewandte Chemie</i> , 2016 , 128, 2814-2817	3.6	11
71	A Quantitative Model for Alkane Nucleophilicity Based on C-H Bond Structural/Topological Descriptors. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 3112-3116	16.4	11

70	Copper-mediated reduction of azides under seemingly oxidising conditions: catalytic and computational studies. <i>Catalysis Science and Technology</i> , 2018 , 8, 5763-5773	5.5	11
69	Theoretical Evaluation of Phosphine Effects in Cross-Coupling Reactions. <i>Catalysis By Metal Complexes</i> , 2011 , 57-84		10
68	Vinyl acetate synthesis on homogeneous and heterogeneous Pd-based catalysts: a theoretical analysis on the reaction mechanisms. <i>Journal of Physical Chemistry A</i> , 2009 , 113, 11758-62	2.8	10
67	Origin of enantioselectivity in asymmetric Pauson-Khand reactions catalyzed by [(BINAP)Co ₂ (CO) ₆]? . <i>Journal of Molecular Catalysis A</i> , 2010 , 324, 127-132		10
66	A DFT study on the relative affinity for oxygen of the alpha and beta subunits of hemoglobin. <i>Journal of Computational Chemistry</i> , 2006 , 27, 1446-53	3.5	10
65	Di-palladium Complexes with Urea-containing Ligands as Anion Receptors. <i>Supramolecular Chemistry</i> , 2007 , 19, 599-611	1.8	10
64	Structure and bonding in a cyclobutyl tris(pyrazolyl)boratoniobium complex and the variation in agostic behaviour with ring size in the series Tp(Me ₂)NbCl(c-C(n)H(2n-1))(MeC[triple bond]CMe), n = 3-6. <i>Dalton Transactions</i> , 2006 , 2362-7	4.3	10
63	The diverse mechanisms for the oxidative addition of C-Br bonds to Pd(PR) and Pd(PR) ₂ complexes. <i>Dalton Transactions</i> , 2019 , 48, 16242-16248	4.3	10
62	Accelerated Ru-Cu Trinuclear Cooperative C-H Bond Functionalization of Carbazoles: A Kinetic and Computational Investigation. <i>Chemistry - A European Journal</i> , 2018 , 24, 15178-15184	4.8	9
61	A computational study on the intriguing mechanisms of the gas-phase thermal activation of methane by bare [Ni(H)(OH)] ⁺ . <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 9306-10	3.6	9
60	Silyl, Hydrido Silylene or Alternative Bonding Modes: The Many Possible Structures of [(C ₅ H ₅)(PH ₃)IrX] ⁺ (X = SiHR ₂ and SiR ₃ ; R = H, CH ₃ , SiH ₃ , and Cl). <i>Organometallics</i> , 2006 , 25, 4748-4755	3.8	9
59	A Theoretical Assessment of the Thermodynamic Preferences in the Cyclopalladation of Amines. <i>European Journal of Inorganic Chemistry</i> , 2005 , 2005, 4040-4047	2.3	9
58	Unexpectedly large basis set effects on the binding of O ₂ to heme complexes. <i>International Journal of Quantum Chemistry</i> , 2001 , 85, 100-108	2.1	9
57	Unexpected Nickel Complex Speciation Unlocks Alternative Pathways for the Reactions of Alkyl Halides with dppf-Nickel(0). <i>ACS Catalysis</i> , 2020 , 10, 10717-10725	13.1	9
56	Exploring the Role of Coinage Metalates in Trifluoromethylation: A Combined Experimental and Theoretical Study. <i>Chemistry - A European Journal</i> , 2019 , 25, 9390-9394	4.8	9
55	Computational Characterization of Single-Electron Transfer Steps in Water Oxidation. <i>Inorganics</i> , 2019 , 7, 32	2.9	8
54	The Acetate Proton Shuttle between Mutually Trans Ligands. <i>Organometallics</i> , 2018 , 37, 2645-2651	3.8	8
53	Catalytic Nitrene Transfer To Alkynes: A Novel and Versatile Route for the Synthesis of Sulfinamides and Isothiazoles. <i>Angewandte Chemie</i> , 2017 , 129, 13022-13027	3.6	8

52	The role of amide ligands in the stabilization of Pd(II) tricoordinated complexes: is the Pd-NR ₂ bond order single or higher?. <i>Theoretical Chemistry Accounts</i> , 2009 , 123, 75-84	1.9	8
51	Ab initio calculations predict a very low barrier for the rotation of the axial ligand in Fe(P)(Im). <i>Chemical Physics Letters</i> , 2002 , 353, 379-382	2.5	8
50	A comparative study of DFT and traditional ab initio methodologies on the OsO ₄ molecule. <i>International Journal of Quantum Chemistry</i> , 2000 , 77, 544-551	2.1	8
49	Orbiting of the lithium atom in the [Me ₂ Si(NSiMe ₃) ₂] ₂ InLi molecule: theoretical confirmation. <i>Journal of the Chemical Society Chemical Communications</i> , 1995 , 443-444		8
48	Molecular hydrogen complex vs dihydride in ML ₄ + H ₂ systems. Influence of the ML ₄ fragment geometry. <i>Inorganic Chemistry</i> , 1989 , 28, 2984-2988	5.1	8
47	A theoretical evaluation of steric and electronic effects on the structure of [OsO. <i>Theoretica Chimica Acta</i> , 1996 , 94, 67		8
46	The Role of Electron-Donor Substituents in the Family of OPBAN-Cu Water Oxidation Catalysts: Effect on the Degradation Pathways and Efficiency. <i>European Journal of Inorganic Chemistry</i> , 2019 , 2019, 2109-2114	2.3	7
45	Theoretical Study of the Effect of a Lewis Acid on Hydrogen Exchange Coupling in a Trihydride Metallocene: The Cp ₂ NbH ₃ AlH ₃ System. <i>Inorganic Chemistry</i> , 1998 , 37, 2334-2339	5.1	7
44	Ab initio calculations on the [Rh(PH ₃) ₃ Cl] system. Influence of the basis set on the structural and reactivity trends of transition-metal complexes. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1992 , 88, 1111-1117		7
43	Photoinduced O-Dependent Stepwise Oxidative Deglycation of a Nonheme Iron(III) Complex. <i>Journal of the American Chemical Society</i> , 2018 , 140, 14150-14160	16.4	7
42	Theoretical characterisation of the origin of symmetry distortions in TpCuCl complexes. <i>Inorganic Chemistry Communication</i> , 2000 , 3, 590-593	3.1	6
41	Two Copper-Carbenes from One Diazo Compound. <i>Journal of the American Chemical Society</i> , 2021 , 143, 4837-4843	16.4	6
40	GARLEEK: Adding an extra flavor to ONIOM. <i>Journal of Computational Chemistry</i> , 2019 , 40, 381-386	3.5	6
39	Measuring the Relative Reactivity of the Carbon-Hydrogen Bonds of Alkanes as Nucleophiles. <i>Angewandte Chemie</i> , 2018 , 130, 14044-14048	3.6	6
38	Caesium fluoride-mediated hydrocarboxylation of alkenes and allenes: scope and mechanistic insights. <i>Chemical Science</i> , 2019 , 10, 10072-10078	9.4	5
37	Eine Kupfer-katalysierte N-F-Bindungsaktivierung ff die einheitliche intramolekulare C-H-Aminierung zu Pyrrolidinen und Piperidinen. <i>Angewandte Chemie</i> , 2019 , 131, 9004-9009	3.6	5
36	QM/MM Calculations on Selectivity in Homogeneous Catalysis. <i>Structure and Bonding</i> , 2015 , 59-79	0.9	5
35	Diradical versus Concerted Mechanisms for the Dihydroxylation of Protoanemonin by OsO ₄ and OsO ₄ H ₃ The Effect of the Base in the Reaction. <i>European Journal of Organic Chemistry</i> , 2003 , 2003, 833-839	3.2	5

34	Redefining the Mechanistic Scenario of Carbon-Sulfur Nucleophilic Coupling via High-Valent Cp*Co Species. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 11217-11221	16.4	5
33	DFT characterization of the mechanism for Staudinger/aza-Wittig tandem organocatalysis. <i>Tetrahedron</i> , 2019 , 75, 1852-1859	2.4	4
32	Mechanism of Palladium-Catalyzed Cross-Coupling Reactions 109-130		4
31	Self-Consistency versus Best-Fit Approaches in Understanding the Structure of Metal Nitrosyl Complexes. <i>Organometallics</i> , 2004 , 23, 6008-6014	3.8	4
30	Theoretical assessment on the viability of possible intermediates in the reaction mechanism of catalase and peroxidase models. <i>Computational and Theoretical Chemistry</i> , 2003 , 632, 323-333		4
29	Synthesis, molecular structure and computational study of a ruthenium bis(thietane) complex. <i>Inorganica Chimica Acta</i> , 2001 , 316, 13-18	2.7	4
28	Computational Methods for Homogeneous Catalysis. <i>Catalysis By Metal Complexes</i> , 2002 , 1-21		4
27	Computational Study of Homogeneous Multimetallic Cooperative Catalysis. <i>Topics in Catalysis</i> , 1	2.3	4
26	Computational study on the mechanism of the reaction of carbon dioxide with siloxy silanes. <i>Theoretical Chemistry Accounts</i> , 2017 , 136, 1	1.9	3
25	Mechanistic Study on the Asymmetric Synthesis of the Wieland-Miescher Ketone and Analogs. <i>ChemCatChem</i> , 2019 , 11, 4064-4071	5.2	3
24	Enantioselective Synthesis of 3-Heterosubstituted-2-amino-1-ols by Sequential Metal-Free Diene Aziridination/Kinetic Resolution. <i>Chemistry - A European Journal</i> , 2019 , 25, 12628-12635	4.8	3
23	Basis set influence on the ab initio description of the dihydrogen complex [Os(PH ₃) ₂ Cl(CO)H(H ₂)] ₁ . <i>Computational and Theoretical Chemistry</i> , 1996 , 371, 59-68		3
22	The Effect of Added Ligands on the Reactions of [Ni(COD)(dppf)] with Alkyl Halides: Halide Abstraction May Be Reversible. <i>Organometallics</i> , 2021 , 40, 1997-2007	3.8	3
21	Understanding Ball Milling Mechanochemical Processes with DFT Calculations and Microkinetic Modeling. <i>ChemSusChem</i> , 2021 , 14, 2763-2768	8.3	3
20	Four Oxidation States in a Single Photoredox Nickel-Based Catalytic Cycle: A Computational Study. <i>Angewandte Chemie</i> , 2019 , 131, 3938-3942	3.6	2
19	A Quantitative Model for Alkane Nucleophilicity Based on C-H Bond Structural/Topological Descriptors. <i>Angewandte Chemie</i> , 2020 , 132, 3136-3140	3.6	2
18	Photosynthesis of a Dihydroimidazopyridine Chelate Shines Light on the Reactions of a Photoactivated Iron(III) Complex with O ₂ . <i>Inorganic Chemistry</i> , 2020 , 59, 16281-16290	5.1	2
17	A Career in Catalysis: Odile Eisenstein. <i>ACS Catalysis</i> , 2019 , 9, 10375-10388	13.1	1

16	Homogeneous Computational Catalysis: The Mechanism for Cross-Coupling and Other C-C Bond Formation Processes. <i>NATO Science for Peace and Security Series B: Physics and Biophysics</i> , 2012 , 185-206	0.2	1
15	Lewis-Säuren begünstigen die Umwandlung eines Metallocentrihydrids in einen Diwasserstoffkomplex und die H ₂ -Freisetzung aus ihm: das System [Cp ₂ NbH ₃] + BH ₃ . <i>Angewandte Chemie</i> , 1997 , 109, 259-261	3.6	1
14	Rhodium Diphosphine Hydroformylation. <i>Catalysis By Metal Complexes</i> , 2002 , 161-187		1
13	Why does {p-But-calix[4]-(OMe) ₂ (O) ₂ ZrCl ₂ } distort away from C _{2v} symmetry?. <i>Chemical Physics Letters</i> , 1999 , 315, 145-149	2.5	1
12	An Expanded SET Model Associated with the Functional Hindrance Dominates the Amide-Directed Distal sp C-H Functionalization. <i>Journal of the American Chemical Society</i> , 2021 , 143, 19406-19416	16.4	1
11	Computational insights into metal-catalyzed asymmetric hydrogenation. <i>Advances in Catalysis</i> , 2021 , 68, 385-426	2.4	1
10	Mechanistic Studies on the Synthesis of Pyrrolidines and Piperidines via Copper-Catalyzed Intramolecular C-H Amination.. <i>Organometallics</i> , 2022 , 41, 1099-1105	3.8	1
9	Computational Studies on Asymmetric Reactions with Sulfur Reagents	399-416	0
8	A computational study on the acceleration of the Prins reaction by indium trichloride. <i>Comptes Rendus Chimie</i> , 2004 , 7, 885-893	2.7	0
7	Redefining the Mechanistic Scenario of Carbon-Sulfur Nucleophilic Coupling via High-Valent Cp*CoIV Species. <i>Angewandte Chemie</i> , 2021 , 133, 11317-11321	3.6	0
6	Photolytic Activation of Late-Transition-Metal-Carbon Bonds and Their Reactivity toward Oxygen. <i>Organometallics</i> , 2021 , 40, 4077-4091	3.8	0
5	Quantum mechanical phenomena in dihydrogen and polyhydride transition metal systems	2001, 419-461	
4	Molecular Hydrogen as a Ligand in Transition Metal Complexes	1991, 375-396	
3	Computational Modeling of Selected Photoactivated Processes. <i>Topics in Organometallic Chemistry</i> , 2020 , 131-152	0.6	
2	On the Use of Thermodynamic Cycles for the Calculation of Standard Potentials for the Oxidation of Solid Metals in Solution. <i>ChemPhysChem</i> , 2019 , 20, 159-162	3.2	
1	Titelbild: Measuring the Relative Reactivity of the Carbon-Hydrogen Bonds of Alkanes as Nucleophiles (Angew. Chem. 42/2018). <i>Angewandte Chemie</i> , 2018 , 130, 13885-13885	3.6	