

Feliu Maseras

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1823770/publications.pdf>

Version: 2024-02-01

294
papers

16,867
citations

16437

64
h-index

20343

116
g-index

315
all docs

315
docs citations

315
times ranked

11674
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | 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. | 1.5 | 1,635 |
| 2 | Proton Abstraction Mechanism for the Palladium-Catalyzed Intramolecular Arylation. <i>Journal of the American Chemical Society</i> , 2006, 128, 1066-1067. | 6.6 | 698 |
| 3 | Proton-Abstraction Mechanism in the Palladium-Catalyzed Intramolecular Arylation: σ -Substituent Effects. <i>Journal of the American Chemical Society</i> , 2007, 129, 6880-6886. | 6.6 | 509 |
| 4 | Managing the Computational Chemistry Big Data Problem: The <i>bioChem-BD</i> Platform. <i>Journal of Chemical Information and Modeling</i> , 2015, 55, 95-103. | 2.5 | 403 |
| 5 | Direct Arylation of Arene $C-H$ Bonds by Cooperative Action of <i>NHC</i> -Ruthenium(II) Catalyst and Carbonate via Proton Abstraction Mechanism. <i>Journal of the American Chemical Society</i> , 2008, 130, 1156-1157. | 6.6 | 367 |
| 6 | 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. | 1.1 | 348 |
| 7 | Transition Metal Polyhydrides: From Qualitative Ideas to Reliable Computational Studies. <i>Chemical Reviews</i> , 2000, 100, 601-636. | 23.0 | 341 |
| 8 | 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, 9298-9307. | 6.6 | 317 |
| 9 | Computational Perspective on Pd-Catalyzed $C-C$ Cross-Coupling Reaction Mechanisms. <i>Accounts of Chemical Research</i> , 2013, 46, 2626-2634. | 7.6 | 306 |
| 10 | Merging Sustainability with Organocatalysis in the Formation of Organic Carbonates by Using CO_2 as a Feedstock. <i>ChemSusChem</i> , 2012, 5, 2032-2038. | 3.6 | 283 |
| 11 | 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, 6758-6761. | 6.6 | 266 |
| 12 | [(<i>NHC</i>)AuI]-Catalyzed Formation of Conjugated Enones and Enals: An Experimental and Computational Study. <i>Chemistry - A European Journal</i> , 2007, 13, 6437-6451. | 1.7 | 180 |
| 13 | $C-C$ 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, 3650-3657. | 6.6 | 178 |
| 14 | 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, 1338-1348. | 6.6 | 160 |
| 15 | A Valuable, Inexpensive CuI/ <i>N</i> -Heterocyclic Carbene Catalyst for the Selective Diboration of Styrene. <i>Chemistry - A European Journal</i> , 2007, 13, 2614-2621. | 1.7 | 156 |
| 16 | Catecholborane Bound to Titanocene. Unusual Coordination of Ligand σ -Bonds. <i>Journal of the American Chemical Society</i> , 1996, 118, 10936-10937. | 6.6 | 151 |
| 17 | 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, 6376-6390. | 6.6 | 148 |
| 18 | Scope and Challenge of Computational Methods for Studying Mechanism and Reactivity in Homogeneous Catalysis. <i>ACS Catalysis</i> , 2019, 9, 6803-6813. | 5.5 | 145 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Application of the New σ -Integrated MO + MM σ -(IMOMM) Method to the Organometallic Reaction Pt(PR ₃) ₂ + H ₂ (R = H, Me, t-Bu, and Ph). The Journal of Physical Chemistry, 1996, 100, 2573-2580. | 2.9 | 142 |
| 20 | Metal π -Arene Interactions in Dialkylbiarylphosphane Complexes of Copper, Silver, and Gold. Chemistry - A European Journal, 2010, 16, 5324-5332. | 1.7 | 142 |
| 21 | Stereoselective and Versatile Preparation of Tri- and Tetrasubstituted Allylic Amine Scaffolds under Mild Conditions. Journal of the American Chemical Society, 2016, 138, 11970-11978. | 6.6 | 142 |
| 22 | Unraveling the Origin of Regioselectivity in Rhodium Diphosphine Catalyzed Hydroformylation. A DFT QM/MM Study. Journal of the American Chemical Society, 2001, 123, 7630-7637. | 6.6 | 141 |
| 23 | Computational study of the transmetalation process in the Suzuki π -Miyaura cross-coupling of aryls. Journal of Organometallic Chemistry, 2006, 691, 4459-4466. | 0.8 | 140 |
| 24 | Catalytic Mechanism of Galactose Oxidase: A Theoretical Study. Journal of the American Chemical Society, 2000, 122, 8031-8036. | 6.6 | 134 |
| 25 | Bidentate phosphines as ligands in the palladium-catalyzed intramolecular arylation: the intermolecular base-assisted proton abstraction mechanism. Tetrahedron, 2008, 64, 6021-6029. | 1.0 | 123 |
| 26 | Theory Does Not Support an Osmaoxetane Intermediate in the Osmium-Catalyzed Dihydroxylation of Olefins. Journal of the American Chemical Society, 1996, 118, 11660-11661. | 6.6 | 121 |
| 27 | Computational Evidence of the Importance of Substituent Bulk on Agostic Interactions in Ir(H) ₂ (PtBu ₂ Ph) ₂ +. Journal of the American Chemical Society, 1998, 120, 361-365. | 6.6 | 121 |
| 28 | Selective Homogeneous and Heterogeneous Gold Catalysis with Alkynes and Alkenes: Similar Behavior, Different Origin. ChemPhysChem, 2008, 9, 1624-1629. | 1.0 | 119 |
| 29 | Gold(I)-Catalyzed Intermolecular Hydroalkoxylation of Allenes: A DFT study. Organic Letters, 2009, 11, 2237-2240. | 2.4 | 118 |
| 30 | A Domino Process toward Functionally Dense Quaternary Carbons through Pd-Catalyzed Decarboxylative C(sp ³) π -C(sp ³) Bond Formation. Journal of the American Chemical Society, 2018, 140, 3981-3987. | 6.6 | 113 |
| 31 | Computational approaches to asymmetric synthesis. New Journal of Chemistry, 2007, 31, 333. | 1.4 | 108 |
| 32 | Computational and Experimental Test of Steric Influence on Agostic Interactions: A Homologous Series for Ir(III). Journal of the American Chemical Society, 1999, 121, 97-106. | 6.6 | 105 |
| 33 | Calculation of Reaction Free Energies in Solution: A Comparison of Current Approaches. Journal of Physical Chemistry A, 2018, 122, 1392-1399. | 1.1 | 101 |
| 34 | A Critical Analysis of the Cyclic and Open Alternatives of the Transmetalation Step in the Stille Cross-Coupling Reaction. Journal of the American Chemical Society, 2006, 128, 14571-14578. | 6.6 | 100 |
| 35 | Protonation of transition-metal hydrides: a not so simple process. Chemical Society Reviews, 2009, 38, 957. | 18.7 | 99 |
| 36 | Theoretical Study on the Origin of Enantioselectivity in the Bis(dihydroquinidine)-3,6-pyridazine π -Osmium Tetroxide-Catalyzed Dihydroxylation of Styrene. Journal of the American Chemical Society, 1999, 121, 1317-1323. | 6.6 | 94 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Transition metal catalysis by density functional theory and density functional theory/molecular mechanics. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2012, 2, 375-385. | 6.2 | 91 |
| 38 | Inertness of the Aryl-F Bond toward Oxidative Addition to Osmium and Rhodium Complexes: Thermodynamic or Kinetic Origin?. Journal of the American Chemical Society, 1998, 120, 12634-12640. | 6.6 | 90 |
| 39 | Bond energy, $M\text{-C}/B\text{-C}$ correlations: dual theoretical and experimental approach to the sensitivity of $M\text{-C}$ bond strength to substituents Electronic supplementary information (ESI) available: methods of calculation; Fig. S1: Comparison of calculated and experimental C-H bond dissociation energies for organic molecules; Table S1, comparison of calculated and experimental CO-stretching frequencies; Table S2, total energies, BDE for Re-C and H-C ; Table S3, NPA charges $q(\text{C})$ and $q(\text{aryl})$ for the organic fragments C_6H_6 . Chemical Communications, 2003, , 490-491. | 2.2 | 89 |
| 40 | Chemo-, Regio-, and Stereoselective Silver-Catalyzed Aziridination of Dienes: Scope, Mechanistic Studies, and Ring-Opening Reactions. Journal of the American Chemical Society, 2014, 136, 5342-5350. | 6.6 | 89 |
| 41 | Reactions of a Hexahydride-Osmium Complex with Aromatic Ketones: C-H Activation versus C-F Activation. Organometallics, 2001, 20, 442-452. | 1.1 | 88 |
| 42 | Mechanism of the gold-catalyzed cyclopropanation of alkenes with 1,6-enynes. Chemical Science, 2011, 2, 141-149. | 3.7 | 87 |
| 43 | Microkinetic modeling in homogeneous catalysis. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2018, 8, e1372. | 6.2 | 85 |
| 44 | Mechanism of Alkane C-H Bond Activation by Copper and Silver Homoscorpionate Complexes. Organometallics, 2006, 25, 5292-5300. | 1.1 | 84 |
| 45 | Application of the natural population analysis to transition-metal complexes. Should the empty metal p orbitals be included in the valence space?. Chemical Physics Letters, 1992, 195, 500-504. | 1.2 | 83 |
| 46 | Oxidative Coupling Mechanisms: Current State of Understanding. ACS Catalysis, 2018, 8, 1161-1172. | 5.5 | 83 |
| 47 | Practical Implications of Boron-Zinc Transmetalation for the Catalytic Asymmetric Arylation of Aldehydes. Angewandte Chemie - International Edition, 2008, 47, 1098-1101. | 7.2 | 82 |
| 48 | Oxidative Additions of Aryl Halides to Palladium Proceed through the Monoligated Complex. ChemCatChem, 2013, 5, 3604-3609. | 1.8 | 79 |
| 49 | $\text{RuX}(\text{CO})(\text{NO})\text{L}_2$ and $\text{Ru}(\text{CO})(\text{NO})\text{L}_2$: Ru(0) or Ru(II) or In Between?. Journal of the American Chemical Society, 1997, 119, 8642-8651. | 6.6 | 77 |
| 50 | QM/MM methods in inorganic chemistry. Dalton Transactions, 2008, , 2911. | 1.6 | 77 |
| 51 | Palladium Round Trip in the Negishi Coupling of $\text{trans-[PdMeCl(PMePh)}_2\text{]}_2$ with ZnMeCl : An Experimental and DFT Study of the Transmetalation Step. Chemistry - A European Journal, 2010, 16, 8596-8599. | 1.7 | 76 |
| 52 | A Density Functional Study on the Effect of the Trans Axial Ligand of Cobalamin on the Homolytic Cleavage of the Co-C Bond. Journal of Physical Chemistry B, 2001, 105, 7564-7571. | 1.2 | 74 |
| 53 | Influence of Media and Homoconjugate Pairing on Transition Metal Hydride Protonation. An IR and DFT Study on Proton Transfer to $\text{CpRuH}(\text{CO})(\text{PCy}_3)$. Journal of the American Chemical Society, 2003, 125, 7715-7725. | 6.6 | 74 |
| 54 | The IMOMM method opens the way for the accurate calculation of transition metal complexes. Chemical Communications, 2000, , 1821-1827. | 2.2 | 73 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 55 | 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, 3624-3634. | 6.6 | 73 |
| 56 | Synthesis of PCP-Supported Nickel Complexes and their Reactivity with Carbon Dioxide. <i>Chemistry - A European Journal</i> , 2012, 18, 6915-6927. | 1.7 | 73 |
| 57 | 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, 12460-12469. | 1.7 | 72 |
| 58 | 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. | 7.2 | 71 |
| 59 | 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, 7303-7309. | 1.7 | 70 |
| 60 | Towards Configurationally Stable [4]Helicenes: Enantioselective Synthesis of 12-Substituted 7,8-Dihydro[4]helicene Quinones. <i>Chemistry - A European Journal</i> , 2008, 14, 603-620. | 1.7 | 70 |
| 61 | Experimental and Theoretical Studies of Bonding and Oxidative Addition of Germanes and Silanes, $\text{EH}_4\text{-nPhn}$ ($\text{E} = \text{Si, Ge}; \text{n} = 0\text{--}3$), to $\text{Mo}(\text{CO})(\text{diphosphine})_2$. The First Structurally Characterized Germane η^2 Complex. <i>Organometallics</i> , 2003, 22, 5307-5323. | 1.1 | 68 |
| 62 | The Transmetalation Process in Suzuki-Miyaura Reactions: Calculations Indicate Lower Barrier via Boronate Intermediate. <i>ChemCatChem</i> , 2014, 6, 3132-3138. | 1.8 | 68 |
| 63 | Highly Modular P η OP Ligands for Asymmetric Hydrogenation: Synthesis, Catalytic Activity, and Mechanism. <i>Chemistry - A European Journal</i> , 2010, 16, 6495-6508. | 1.7 | 67 |
| 64 | The importance of conformational search: a test case on the catalytic cycle of the Suzuki-Miyaura cross-coupling. <i>Theoretical Chemistry Accounts</i> , 2011, 128, 639-646. | 0.5 | 67 |
| 65 | Mechanistic insights into the transmetalation step of a Suzuki-Miyaura reaction of 2(4)-bromopyridines: characterization of an intermediate. <i>Tetrahedron</i> , 2008, 64, 7437-7443. | 1.0 | 66 |
| 66 | Single Electron Transfer Steps in Water Oxidation Catalysis. Redefining the Mechanistic Scenario. <i>ACS Catalysis</i> , 2017, 7, 1712-1719. | 5.5 | 66 |
| 67 | Competitive and Selective Csp ³ -Br versus Csp ² -Br Bond Activation in Palladium-Catalyzed Suzuki Cross-Coupling: An Experimental and Theoretical Study of the Role of Phosphine Ligands. <i>Chemistry - A European Journal</i> , 2010, 16, 13390-13397. | 1.7 | 65 |
| 68 | Rationale for the sluggish oxidative addition of aryl halides to Au(scp). <i>Chemical Communications</i> , 2014, 50, 1533-1536. | 2.2 | 64 |
| 69 | Computational Study with DFT and Kinetic Models on the Mechanism of Photoinitiated Aromatic Perfluoroalkylations. <i>Organic Letters</i> , 2015, 17, 2676-2679. | 2.4 | 63 |
| 70 | 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. | 6.6 | 63 |
| 71 | 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. | 6.6 | 62 |
| 72 | Theoretical Study of the Hydrogen Exchange Coupling in the Metallocene Trihydride Complexes $[(\text{C}_5\text{H}_5)_2\text{MH}_3]_n$ ($\text{M} = \text{Mo, W}, \text{n} = 1$; $\text{M} = \text{Nb, Ta}, \text{n} = 0$). <i>Journal of the American Chemical Society</i> , 1996, 118, 4617-4621. | 6.6 | 60 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | The role of cyclobutenes in gold(i)-catalysed skeletal rearrangement of 1,6-enynes. <i>Organic and Biomolecular Chemistry</i> , 2012, 10, 6105. | 1.5 | 60 |
| 74 | 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. | 5.5 | 60 |
| 75 | Amine conformational change and spin conversion induced by metal-assisted ligand oxidation: from the seven-coordinate iron(II) η^5 -TPAA complex to the two oxidized iron(II) η^5 -(py) ₃ tren isomers. Characterization, crystal structures, and density functional study. <i>Inorganica Chimica Acta</i> , 2000, 297, 338-350. | 1.2 | 59 |
| 76 | Equilibria between η^1 - and η^2 -Agostic Stabilized Rotamers of Secondary Alkyl Niobium Complexes. <i>Journal of the American Chemical Society</i> , 2001, 123, 6000-6013. | 6.6 | 59 |
| 77 | Experimental and Computational Studies of Hydrogen Bonding and Proton Transfer to [Cp*Fe(dppe)H]. <i>Chemistry - A European Journal</i> , 2005, 11, 873-888. | 1.7 | 58 |
| 78 | Hydride Exchange Processes in the Coordination Sphere of Transition Metal Complexes: η^5 -The OsH ₃ (BH ₄)(PR ₃) ₂ System. <i>Journal of the American Chemical Society</i> , 1996, 118, 8388-8394. | 6.6 | 57 |
| 79 | Synthesis and Spectroscopic Properties of Dihydrogen Isocyanide Niobocene [Nb(η^5 -C ₅ H ₄ SiMe ₃) ₂ (η^2 -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. | 6.6 | 57 |
| 80 | Density Functional Study on the Mechanism of the Vanadium-Catalyzed Oxidation of Sulfides by Hydrogen Peroxide. <i>Journal of Organic Chemistry</i> , 2003, 68, 4265-4274. | 1.7 | 57 |
| 81 | 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. | 1.1 | 57 |
| 82 | Catalytic cross-coupling of diazo compounds with coinage metal-based catalysts: an experimental and theoretical study. <i>Dalton Transactions</i> , 2013, 42, 4132. | 1.6 | 57 |
| 83 | Toward a mechanistic understanding of oxidative homocoupling: the Glaser η^5 -Hay reaction. <i>Catalysis Science and Technology</i> , 2014, 4, 4200-4209. | 2.1 | 57 |
| 84 | Dynamic Behavior in Solution of the <i>trans</i> - η^5 -Hydridodihydrogen Complex [OsHCl(η^5 -C ₅ H ₅) ₂](CO)(P(<i>i</i> -Pr) ₃) ₂]: Ab Initio and NMR Studies. <i>Chemistry - A European Journal</i> , 1996, 2, 815-825. | 1.7 | 56 |
| 85 | Bonding in Elongated Dihydrogen Complexes. Theoretical Analysis of the Electron Density in [MLn(HA...H)] Species. <i>Organometallics</i> , 1996, 15, 2947-2953. | 1.1 | 55 |
| 86 | Light-Driven Enantioselective Organocatalytic η^2 -Benzoylation of Enals. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 3304-3308. | 7.2 | 55 |
| 87 | A theoretical analysis of a classic example of supramolecular catalysis. <i>Chemical Communications</i> , 2007, , 748-750. | 2.2 | 54 |
| 88 | On the Origin of η^1 - and η^2 -Agostic Distortions in Early-Transition-Metal Alkyl Complexes. <i>Organometallics</i> , 2008, 27, 1128-1134. | 1.1 | 54 |
| 89 | Why Is the Suzuki-Miyaura Cross-Coupling of <i>sp</i> ³ Carbons in η^1 -Bromo Sulfoxide Systems Fast and Stereoselective? A DFT Study on the Mechanism. <i>Journal of Organic Chemistry</i> , 2009, 74, 4049-4054. | 1.7 | 54 |
| 90 | Water oxidation electrocatalysis using ruthenium coordination oligomers adsorbed on multiwalled carbon nanotubes. <i>Nature Chemistry</i> , 2020, 12, 1060-1066. | 6.6 | 54 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 91 | Elucidating the Mechanism of Aryl Aminations Mediated by NHC-Supported Nickel Complexes: Evidence for a Nonradical Ni(O)/Ni(II) Pathway. <i>ACS Catalysis</i> , 2018, 8, 3733-3742. | 5.5 | 53 |
| 92 | Oxidative Addition of Group 14 Element Hydrido Compounds to OsH ₂ (<i>i</i> -2-CH ₂ CH ₂ Et)(CO)(PiPr 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. | 1.9 | 52 |
| 93 | Critical Role of the Correlation Functional in DFT Descriptions of an Agostic Niobium Complex. <i>Journal of Chemical Theory and Computation</i> , 2007, 3, 1329-1336. | 2.3 | 52 |
| 94 | 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. | 1.1 | 52 |
| 95 | The role of computational results databases in accelerating the discovery of catalysts. <i>Nature Catalysis</i> , 2018, 1, 809-810. | 16.1 | 52 |
| 96 | 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. | 6.6 | 51 |
| 97 | Competition between Steric and Electronic Control of Structure in Ru(CO) ₂ L ₂ L ⁻ Complexes. <i>Organometallics</i> , 1997, 16, 1979-1993. | 1.1 | 51 |
| 98 | Crucial Role of Anions on the Deprotonation of the Cationic Dihydrogen Complex trans-[FeH(<i>i</i> -2-H ₂)(dppe) ₂] ⁺ . <i>Journal of the American Chemical Society</i> , 2007, 129, 6608-6618. | 6.6 | 51 |
| 99 | An unprecedented σ -C agostic interaction in a cyclopropyl tris(pyrazolyl)boratoniobium complex Electronic supplementary information (ESI) available: experimental section. See http://www.rsc.org/suppdata/cc/b3/b300324h/ . <i>Chemical Communications</i> , 2003, , 876-877. | 2.2 | 50 |
| 100 | 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. | 1.6 | 50 |
| 101 | C-H and C agostic interactions in cycloalkyl tris(pyrazolyl)boratoniobium complexes. <i>Dalton Transactions</i> , 2003, , 4057-4064. | 1.6 | 49 |
| 102 | The Mechanism of the Catalytic Functionalization of Haloalkanes by Carbene Insertion: An Experimental and Theoretical Study. <i>Organometallics</i> , 2009, 28, 5968-5981. | 1.1 | 49 |
| 103 | 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. | 1.2 | 48 |
| 104 | Intramolecular atom exchange between molecular hydrogen and hydride ligands in cis-[Fe(PR ₃) ₄ H(H ₂)] ⁺ complexes. An ab initio theoretical study. <i>Journal of the American Chemical Society</i> , 1992, 114, 2922-2928. | 6.6 | 47 |
| 105 | Stabilization of the adenosyl radical in coenzyme B ₁₂ a theoretical study. <i>Chemical Physics Letters</i> , 2004, 386, 174-178. | 1.2 | 47 |
| 106 | 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, 509-517. | 1.1 | 47 |
| 107 | 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. | 1.8 | 47 |
| 108 | Preparation and Characterization of Osmium [^] Stannyl Polyhydrides: d ₄ d ₂ Oxidative Addition of Neutral Molecules in a Late Transition Metal. <i>Organometallics</i> , 2003, 22, 2087-2096. | 1.1 | 46 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 109 | Halide Abstraction Competes with Oxidative Addition in the Reactions of Aryl Halides with $[\text{Ni}(\text{PMe}_2)_2(\text{Ph})_3]$. <i>Chemistry - A European Journal</i> , 2017, 23, 16728-16733. | 1.7 | 46 |
| 110 | Agostic interactions in alkyl derivatives of sterically hindered tris(pyrazolyl)borate complexes of niobium. <i>Coordination Chemistry Reviews</i> , 2009, 253, 635-646. | 9.5 | 45 |
| 111 | Reaction of Alkynes and Azides: Not Triazoles Through Copper Acetylides but Oxazoles Through Copper Nitrene Intermediates. <i>Chemistry - A European Journal</i> , 2014, 20, 3463-3474. | 1.7 | 45 |
| 112 | Cooperative Reductive Elimination: The Missing Piece in the Oxidative Coupling Mechanistic Puzzle. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 2764-2767. | 7.2 | 45 |
| 113 | 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. | 1.1 | 44 |
| 114 | On the Feasibility of Nickel-Catalyzed Trifluoromethylation of Aryl Halides. <i>Organometallics</i> , 2014, 33, 6531-6543. | 1.1 | 43 |
| 115 | The reaction of the unsaturated rhenium fragment $\{\text{Re}(\text{i-C}_5\text{Me}_5)(\text{CO})_2\}$ with 1,4-difluorobenzene. Thermal intramolecular conversion of a rhenium (difluorophenyl)(hydride) to $\text{Re}(\text{i-C}_6\text{H}_4\text{F}_2)$ and a [1,4]-metallotropic shift. <i>Dalton Transactions RSC</i> , 2001, , 1452-1461. | 2.3 | 42 |
| 116 | Mechanism of the [(NHC)Au]-Catalyzed Rearrangement of Allylic Acetates. A DFT Study. <i>Organic Letters</i> , 2009, 11, 81-84. | 2.4 | 42 |
| 117 | Diastereodivergent Enantioselective [8 + 2] Annulation of Tropones and Enals Catalyzed by N-Heterocyclic Carbenes. <i>Organic Letters</i> , 2019, 21, 3187-3192. | 2.4 | 42 |
| 118 | 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. | 1.2 | 41 |
| 119 | Applications of Hybrid DFT/Molecular Mechanics to Homogeneous Catalysis. <i>Structure and Bonding</i> , 2004, , 117-150. | 1.0 | 41 |
| 120 | Copper-Catalyzed Borylative Ring Closing C-C Coupling toward Spiro- and Dispiroheterocycles. <i>ACS Catalysis</i> , 2018, 8, 2833-2838. | 5.5 | 40 |
| 121 | Measuring the Relative Reactivity of the Carbon-Hydrogen Bonds of Alkanes as Nucleophiles. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 13848-13852. | 7.2 | 40 |
| 122 | Theoretical modeling of the heme group with a hybrid QM/MM method. <i>Journal of Computational Chemistry</i> , 2000, 21, 282-294. | 1.5 | 39 |
| 123 | The Effect of the Inert Counteranions in the Deprotonation of the Dihydrogen Complex $[\text{FeH}(\text{i-C}_2\text{H}_2)(\text{dppe})_2]^+$: A Kinetic and Theoretical Studies. <i>Journal of the American Chemical Society</i> , 2004, 126, 2320-2321. | 6.6 | 39 |
| 124 | Mechanism of the Base-Assisted Displacement of Chloride by Alcohol in Sulfinyl Derivatives. <i>Journal of Organic Chemistry</i> , 2006, 71, 6388-6396. | 1.7 | 39 |
| 125 | C-H Bond Activation of Benzene by Unsaturated C_2 -Cyclopropene and C_2 -Benzyne Complexes of Niobium. <i>Journal of the American Chemical Society</i> , 2010, 132, 14239-14250. | 6.6 | 39 |
| 126 | A computational view on the reactions of hydrocarbons with coinage metal complexes. <i>Journal of Organometallic Chemistry</i> , 2015, 784, 2-12. | 0.8 | 39 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 127 | Thermally Activated Site Exchange and Quantum Exchange Coupling Processes in Unsymmetrical Trihydride Osmium Compounds. <i>Inorganic Chemistry</i> , 1999, 38, 1814-1824. | 1.9 | 38 |
| 128 | Computational characterization of a mechanism for the copper-catalyzed aerobic oxidative trifluoromethylation of terminal alkynes. <i>Chemical Communications</i> , 2013, 49, 10486. | 2.2 | 37 |
| 129 | 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, 1103-1108. | 7.2 | 37 |
| 130 | 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, 2458-2467. | 1.9 | 36 |
| 131 | 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. | 7.2 | 36 |
| 132 | Computational Characterization of the Mechanism for Coinage-Metal-Catalyzed Carboxylation of Terminal Alkynes. <i>Journal of Organic Chemistry</i> , 2014, 79, 11981-11987. | 1.7 | 35 |
| 133 | Site Preference Energetics, Fluxionality, and Intramolecular $\text{M}^{\text{II}}\text{H}^{\text{I}}\text{H}^{\text{II}}\text{N}$ Hydrogen Bonding in a Dodecahedral Transition Metal Polyhydride. <i>Inorganic Chemistry</i> , 1997, 36, 5505-5511. | 1.9 | 34 |
| 134 | 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. | 0.5 | 34 |
| 135 | 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. | 1.4 | 34 |
| 136 | Polyene Cyclization by a Double Intramolecular Heck Reaction. A DFT Study. <i>Organometallics</i> , 2004, 23, 2784-2796. | 1.1 | 33 |
| 137 | Hybrid Quantum Mechanics/Molecular Mechanics Methods in Transition Metal Chemistry. <i>Topics in Organometallic Chemistry</i> , 1999, , 165-191. | 0.7 | 33 |
| 138 | Copper(I) Olefin Complexes: The Effect of the Trispyrazolylborate Ancillary Ligand in Structure and Reactivity. <i>Organometallics</i> , 2010, 29, 3481-3489. | 1.1 | 32 |
| 139 | DFT Rationalization of the Diverse Outcomes of the Iodine(III)-Mediated Oxidative Amination of Alkenes. <i>Chemistry - A European Journal</i> , 2016, 22, 7545-7553. | 1.7 | 32 |
| 140 | $[\text{MLn}(\text{SiR}_3)(\text{I}-2\text{H}^{\text{II}}\text{H})]$ or $[\text{MLn}(\text{H})(\text{I}-2\text{H}^{\text{II}}\text{SiR}_3)]$? An ab Initio MO Study on $[\text{OsCl}(\text{CO})(\text{PR}_3)_2\text{H}_2\text{SiR}_3]$ Complexes. <i>Organometallics</i> , 1996, 15, 1218-1222. | 1.1 | 31 |
| 141 | Synthesis and reactivity of $[\text{Os}(\text{H})(\text{C}_6\text{H}_4(\text{CH}=\text{CH}_2)_2)(\text{CO})(\text{PPri}_3)_2]$ and the formato compounds $[\text{Os}(\text{H})(\text{C}_6\text{H}_4(\text{CH}=\text{CH}_2)_2)(\text{CO})(\text{PPri}_3)_2]$ and $[\text{Os}(\text{H})(\text{I}-2\text{O}_2\text{CH})(\text{CO})(\text{PPri}_3)_2]^*$. <i>Journal of the Chemical Society Dalton Transactions</i> , 1997, , 181-192. | 1.1 | 31 |
| 142 | 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. | 1.5 | 31 |
| 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. | 1.2 | 30 |
| 144 | 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, 10248-10262. | 1.9 | 30 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 145 | 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. | 1.4 | 30 |
| 146 | Palladium-Catalyzed Aerobic Homocoupling of Alkynes: Full Mechanistic Characterization of a More Complex Oxidase-Type Behavior. <i>ACS Catalysis</i> , 2018, 8, 7495-7506. | 5.5 | 30 |
| 147 | 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. | 1.9 | 29 |
| 148 | Observing and modelling energetically close $\hat{1}\pm$ - and $\hat{1}^2$ -carbon \hat{c} hydrogen agostic interactions in an isopropyl tris(pyrazolyl)boratoniobium complex. <i>Chemical Communications</i> , 1998, , 2011-2012. | 2.2 | 29 |
| 149 | A DFT/MM analysis of the effect of ligand substituents on asymmetric hydrogenation catalyzed by rhodium complexes with phosphine \hat{c} phosphinite ligands. <i>Canadian Journal of Chemistry</i> , 2009, 87, 1273-1279. | 0.6 | 29 |
| 150 | Mechanistic Study of Amine to Imine Oxidation in a Dinuclear Cu(II) Complex Containing an Octaaza Dinucleating Ligand. <i>Inorganic Chemistry</i> , 2010, 49, 5977-5985. | 1.9 | 29 |
| 151 | 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. | 1.9 | 28 |
| 152 | Silyl, Hydrido-Silylene, or Other Bonding Modes: \hat{A} Some Unusual Structures of [(dhpe)Pt(SiHR ₂)] ⁺ (dhpe) ⁻ Tj ETQq0 0 0 rgBT /Overlock 1 Calculations. <i>Inorganic Chemistry</i> , 2002, 41, 7105-7112. | 1.9 | 28 |
| 153 | Mechanism for Hydride-Assisted Rearrangement from Ethylidene to Ethylene in Iridium Cationic Complexes. <i>Organometallics</i> , 2010, 29, 2040-2045. | 1.1 | 28 |
| 154 | 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. | 1.7 | 28 |
| 155 | Theoretical Characterization of an Intermediate for the [3 + 2] Cycloaddition Mechanism in the Bis(dihydroxy-quinidine) \hat{c} 3,6-Pyridazine \hat{c} Osmium Tetroxide-Catalyzed Dihydroxylation of Styrene. <i>Journal of Organic Chemistry</i> , 1997, 62, 7892-7894. | 1.7 | 27 |
| 156 | DFT modeling of reactivity in an ionic liquid: How many ion pairs?. <i>Journal of Computational Chemistry</i> , 2008, 29, 892-899. | 1.5 | 27 |
| 157 | Computationally Guided Design of a Readily Assembled Phosphite \hat{c} Thioether Ligand for a Broad Range of Pd-Catalyzed Asymmetric Allylic Substitutions. <i>ACS Catalysis</i> , 2018, 8, 3587-3601. | 5.5 | 27 |
| 158 | Four Oxidation States in a Single Photoredox Nickel \hat{c} Based Catalytic Cycle: A Computational Study. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 3898-3902. | 7.2 | 27 |
| 159 | Phosphine Dissociation Mediates C \hat{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. | 6.6 | 26 |
| 160 | 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, 429-441. | 1.6 | 26 |
| 161 | C \hat{c} C Coupling Constants, JCC, Are Reliable Probes for $\hat{1}\pm$ -C \hat{c} C Agostic Structures. <i>Organometallics</i> , 2009, 28, 940-943. | 1.1 | 26 |
| 162 | Pd \hat{c} Catalysed Mono \hat{c} and Dicarbonylation of Aryl Iodides: Insights into the Mechanism and the Selectivity. <i>Chemistry - A European Journal</i> , 2014, 20, 10982-10989. | 1.7 | 26 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 163 | Computational Characterization of the Origin of Selectivity in Cycloaddition Reactions Catalyzed by Phosphoric Acid Derivatives. <i>Chemistry - an Asian Journal</i> , 2016, 11, 411-416. | 1.7 | 25 |
| 164 | Intermolecular Allene Functionalization by Silver-Nitrene Catalysis. <i>Journal of the American Chemical Society</i> , 2020, 142, 13062-13071. | 6.6 | 25 |
| 165 | The Challenge of Reproducing with Calculations Raw Experimental Kinetic Data for an Organic Reaction. <i>Organic Letters</i> , 2020, 22, 2873-2877. | 2.4 | 25 |
| 166 | Analysis of solvent effect on SN2 reactions by different theoretical models. <i>Journal of Physical Organic Chemistry</i> , 1989, 2, 611-622. | 0.9 | 24 |
| 167 | Theoretical and Synthetic Studies on Dihaptoacyl and η^2 -Agostic Acyl Complexes of Molybdenum. <i>Organometallics</i> , 1999, 18, 3294-3305. | 1.1 | 24 |
| 168 | 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. | 1.4 | 24 |
| 169 | A QM/MM Study of the Asymmetric Dihydroxylation of Terminal Aliphatic Alkenes with $OsO_4 \cdot (DHQD)_2PYDZ$: Enantioselectivity as a Function of Chain Length. <i>Chemistry - A European Journal</i> , 2005, 11, 1017-1029. | 1.7 | 24 |
| 170 | Dihydrogen Formation in a Trihydride Metallocene and Its Elimination, Both Assisted by Lewis Acids: The $[Cp_2NbH_3]+BH_3$ System. <i>Angewandte Chemie International Edition in English</i> , 1997, 36, 265-266. | 4.4 | 23 |
| 171 | Chiral transition-metal complexes as Brønsted-acid catalysts for the asymmetric Friedel-Crafts hydroxyalkylation of indoles. <i>Dalton Transactions</i> , 2014, 43, 11260-11268. | 1.6 | 23 |
| 172 | Functionalization of $C_{2n}H_{2n+2}$ Alkanes: Supercritical Carbon Dioxide Enhances the Reactivity towards Primary Carbon-Hydrogen Bonds. <i>ChemCatChem</i> , 2015, 7, 3254-3260. | 1.8 | 23 |
| 173 | Mechanistic Investigation of Iridium-Catalyzed C-H Borylation of Methyl Benzoate: Ligand Effects in Regioselectivity and Activity. <i>Organometallics</i> , 2016, 35, 3221-3226. | 1.1 | 23 |
| 174 | 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. | 2.2 | 23 |
| 175 | Ab initio molecular orbital characterization of the $[Os(PR_3)_3H_5]^+$ complex. <i>Journal of the American Chemical Society</i> , 1993, 115, 8313-8320. | 6.6 | 22 |
| 176 | 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. | 1.4 | 22 |
| 177 | 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. | 1.4 | 22 |
| 178 | Electronic against steric effects in distorted amides. <i>Computational and Theoretical Chemistry</i> , 2003, 632, 131-144. | 1.5 | 22 |
| 179 | Synthesis and Computational Studies of Palladium(I) Dimers $Pd_2X_2(PtBu_2Ph)_2$ (X = Br, I): η^5 -Phenyl versus Halide Bridging Modes. <i>Organometallics</i> , 2006, 25, 5990-5995. | 1.1 | 22 |
| 180 | Silver-Catalyzed Functionalization of Esters by Carbene Transfer: The Role of Ylide Zwitterionic Intermediates. <i>ChemCatChem</i> , 2014, 6, 2206-2210. | 1.8 | 22 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 181 | Computational characterization of the mechanism for the light-driven catalytic trichloromethylation of acylpyridines. <i>Organic and Biomolecular Chemistry</i> , 2017, 15, 8641-8647. | 1.5 | 22 |
| 182 | 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. | 6.6 | 21 |
| 183 | The Nature of M ⁺ -B Versus M-B Bonds in Cationic Terminal Borylene Complexes: Structure and Energy Analysis in the Borylene Complexes [(1-5-C5H5)(CO)2M{B(1-5-C5Me5)}] ⁺ , [(1-5-C5H5)(CO)2M(BMes)] ⁺ , and [(1-5-C5H5)(CO)2M(BNMe2)] ⁺ (M = Fe, Ru, Os). <i>Organometallics</i> , 2009, 28, 6442-6449. | 1.1 | 21 |
| 184 | Substitution Reactions in Dinuclear Ru-Hbpp Complexes: an Evaluation of Through-Space Interactions. <i>Inorganic Chemistry</i> , 2012, 51, 1889-1901. | 1.9 | 21 |
| 185 | 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. | 1.9 | 21 |
| 186 | New Vistas in Transmetalation with Discrete AgCF ₃ Species: Implications in Pd-Mediated Trifluoromethylation Reactions. <i>Chemistry - A European Journal</i> , 2018, 24, 11895-11898. | 1.7 | 21 |
| 187 | The diverse mechanisms for the oxidative addition of C-Br bonds to Pd(PR ₃) ₂ and Pd(PR ₃) ₃ complexes. <i>Dalton Transactions</i> , 2019, 48, 16242-16248. | 1.6 | 21 |
| 188 | Exploring the Role of Coinage Metalates in Trifluoromethylation: A Combined Experimental and Theoretical Study. <i>Chemistry - A European Journal</i> , 2019, 25, 9390-9394. | 1.7 | 21 |
| 189 | Synthesis and Characterization of Mixed-Phosphine Osmium Polyhydrides: A Hydrogen Delocalization in [OsH5P3] ⁺ Systems. <i>Organometallics</i> , 2001, 20, 5297-5309. | 1.1 | 20 |
| 190 | Through-Space Ligand Interactions in Enantiomeric Dinuclear Ru Complexes. <i>Chemistry - A European Journal</i> , 2010, 16, 7965-7968. | 1.7 | 20 |
| 191 | Mild, Reversible Reaction of Iridium(III) Amido Complexes with Carbon Dioxide. <i>Inorganic Chemistry</i> , 2012, 51, 9683-9693. | 1.9 | 20 |
| 192 | Two Copper-Carbenes from One Diazo Compound. <i>Journal of the American Chemical Society</i> , 2021, 143, 4837-4843. | 6.6 | 20 |
| 193 | An oscillating C22 unit inside a copper rectangle Electronic supplementary information (ESI) available: NMR spectra and computational details. See http://www.rsc.org/suppdata/cc/b3/b301842c/ . <i>Chemical Communications</i> , 2003, , 1260. | 2.2 | 19 |
| 194 | Light-Driven Enantioselective Organocatalytic ¹² C-Benzylation of Enals. <i>Angewandte Chemie</i> , 2017, 129, 3352-3356. | 1.6 | 19 |
| 195 | ONIOM(QM:AMOEBA09) Study on Binding Energies and Binding Preference of OH, HCO, and CH ₃ Radicals on Hexagonal Water Ice (I _h). <i>Journal of Physical Chemistry C</i> , 2017, 121, 15223-15232. | 1.5 | 19 |
| 196 | Copper-mediated reduction of azides under seemingly oxidising conditions: catalytic and computational studies. <i>Catalysis Science and Technology</i> , 2018, 8, 5763-5773. | 2.1 | 19 |
| 197 | Theoretical study of the reaction mechanism of the uncatalyzed epoxidation of alkenes by iodobenzene Electronic supplementary information (ESI) available: B3LYP optimized geometries (Cartesian coordinates) and total energies for compounds 1 to 9. See http://www.rsc.org/suppdata/nj/b2/b203861g/ . <i>New Journal of Chemistry</i> , 2003, 27, 811-817. | 1.4 | 18 |
| 198 | Base-Catalyzed Inversion of Chiral Sulfur Centers. A Computational Study. <i>Organic Letters</i> , 2004, 6, 2197-2200. | 2.4 | 18 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 199 | Unexpected Influence of the Counteranion in the η^2 vs η^3 Hapticity of Polydentate N-Donor Ligands in $[\text{Rh}(\text{N-ligand})\text{L}_2]^+$ Complexes. <i>Organometallics</i> , 2004, 23, 5530-5539. | 1.1 | 18 |
| 200 | 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. | 2.1 | 18 |
| 201 | DFT/MM Study on Copper-Catalyzed Cyclopropanation $\hat{=}$ Enantioselectivity with No Enthalpy Barrier. <i>European Journal of Organic Chemistry</i> , 2008, 2008, 5614-5621. | 1.2 | 18 |
| 202 | Structural Analysis of Zirconocenes with Substituted Cyclopentadienyl Rings. <i>Chemistry - A European Journal</i> , 2009, 15, 924-935. | 1.7 | 18 |
| 203 | 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. | 1.3 | 18 |
| 204 | A DFT-based mechanistic proposal for the light-driven insertion of dioxygen into $\text{Pt}(\text{II})\hat{=}\text{C}$ bonds. <i>Chemical Science</i> , 2018, 9, 5039-5046. | 3.7 | 18 |
| 205 | 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. | 2.5 | 18 |
| 206 | A Quantitative Model for Alkane Nucleophilicity Based on $\text{C}\hat{=}\text{H}$ Bond Structural/Topological Descriptors. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 3112-3116. | 7.2 | 18 |
| 207 | Unexpected Nickel Complex Speciation Unlocks Alternative Pathways for the Reactions of Alkyl Halides with $\text{dppf-Ni}(\text{0})$. <i>ACS Catalysis</i> , 2020, 10, 10717-10725. | 5.5 | 18 |
| 208 | An ab initio molecular orbital study of the osmium complex $[\text{Os}(\text{PR}_3)_3\text{H}_4]$ system. Peeking into the peculiarities of seven-coordination. <i>Journal of the American Chemical Society</i> , 1993, 115, 10974-10980. | 6.6 | 17 |
| 209 | 2H-T1 Relaxation and Deuterium Quadrupole Coupling Constants in Transition Metal- 2-D_2 Complexes. <i>Chemistry - A European Journal</i> , 1999, 5, 3318-3325. | 1.7 | 17 |
| 210 | $[(\text{C}_5\text{H}_4\text{MeEt})\text{Ir}(\text{PPh}_3)_2]^+$: an agostic $\text{C}\hat{=}\text{C}$ bond or a close metal $\hat{=}$ ligand contact?. <i>Inorganica Chimica Acta</i> , 2004, 357, 345-346. | 1.2 | 17 |
| 211 | Oxidative dehydrogenation of an amine group of a macrocyclic ligand in the coordination sphere of a $\text{Cu}(\text{I})$ complex. <i>Dalton Transactions</i> , 2009, , 6013. | 1.6 | 17 |
| 212 | Aromatic versus Benzylic CH Bond Activation of Alkylaromatics by a Transient $\hat{=}\text{Cyclopropene}$ Complex. <i>Organometallics</i> , 2011, 30, 3999-4007. | 1.1 | 17 |
| 213 | Understanding Ball Milling Mechanochemical Processes with DFT Calculations and Microkinetic Modeling. <i>ChemSusChem</i> , 2021, 14, 2763-2768. | 3.6 | 17 |
| 214 | Unexpected Coexistence of Isomeric Forms and Unusual Structures of $\text{Ru}(\text{CO})_2\text{L}_3\hat{=}$. <i>Inorganic Chemistry</i> , 1996, 35, 7468-7469. | 1.9 | 16 |
| 215 | $\hat{=}\text{H}$ Abstraction/ $1,3\text{-CH}$ Bond Addition as a Mechanism for the Activation of CH Bonds at Early Transition Metal Centers. <i>Organometallics</i> , 2014, 33, 7270-7278. | 1.1 | 16 |
| 216 | Catalytic Copper-Mediated Ring Opening and Functionalization of Benzoxazoles. <i>ACS Catalysis</i> , 2014, 4, 4215-4222. | 5.5 | 16 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 217 | Theoretical Study of the Effect of Lewis Acids on Dihydrogen Elimination from Niobocene Trihydrides. <i>Chemistry - A European Journal</i> , 1999, 5, 1166-1171. | 1.7 | 15 |
| 218 | A Computational Study on the Role of Chiral $\text{N}=\text{O}$ Oxides in Enantioselective Pauson-Khand Reactions. <i>Chemistry - A European Journal</i> , 2011, 17, 10050-10057. | 1.7 | 15 |
| 219 | 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. | 1.7 | 15 |
| 220 | Computational Description of a Huisgen Cycloaddition Inside a Self-Assembled Nanocapsule. <i>European Journal of Organic Chemistry</i> , 2018, 2018, 2103-2109. | 1.2 | 14 |
| 221 | 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. | 1.7 | 14 |
| 222 | Redefining the Mechanistic Scenario of Carbon-Sulfur Nucleophilic Coupling via High-Valent $\text{Cp}^*\text{Co}^{\text{IV}}$ Species. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 11217-11221. | 7.2 | 14 |
| 223 | 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, 11758-11762. | 1.1 | 13 |
| 224 | Cooperative Reductive Elimination: The Missing Piece in the Oxidative-Coupling Mechanistic Puzzle. <i>Angewandte Chemie</i> , 2016, 128, 2814-2817. | 1.6 | 13 |
| 225 | Eine Kupfer-katalysierte N-F-Bindungsaktivierung für die einheitliche intramolekulare C-H-Aminierung zu Pyrrolidinen und Piperidinen. <i>Angewandte Chemie</i> , 2019, 131, 9004-9009. | 1.6 | 13 |
| 226 | Computational Characterization of Single-Electron Transfer Steps in Water Oxidation. <i>Inorganics</i> , 2019, 7, 32. | 1.2 | 13 |
| 227 | Theoretical Study of the Effect of a Lewis Acid on Hydrogen Exchange Coupling in a Trihydride Metallocene: The $\text{Cp}_2\text{NbH}_3\text{-AlH}_3$ System. <i>Inorganic Chemistry</i> , 1998, 37, 2334-2339. | 1.9 | 12 |
| 228 | Theoretical Evaluation of Phosphine Effects in Cross-Coupling Reactions. <i>Catalysis By Metal Complexes</i> , 2011, , 57-84. | 0.6 | 12 |
| 229 | Measuring the Relative Reactivity of the Carbon-Hydrogen Bonds of Alkanes as Nucleophiles. <i>Angewandte Chemie</i> , 2018, 130, 14044-14048. | 1.6 | 12 |
| 230 | The Effect of Added Ligands on the Reactions of $[\text{Ni}(\text{COD})(\text{dppf})]$ with Alkyl Halides: Halide Abstraction May Be Reversible. <i>Organometallics</i> , 2021, 40, 1997-2007. | 1.1 | 12 |
| 231 | Structure and bonding in a cyclobutyl tris(pyrazolyl)boratoniobium complex and the variation in agostic behaviour with ring size in the series $\text{TpMe}_2\text{NbCl}(\text{c-C}_n\text{H}_{2n-1})(\text{MeC}(\text{CMe})_2)$, $n = 3-6$. <i>Dalton Transactions</i> , 2006, , 2362-2367. | 1.6 | 11 |
| 232 | Silyl, Hydrido Silylene or Alternative Bonding Modes: The Many Possible Structures of $[(\text{C}_5\text{H}_5)(\text{PH}_3)\text{IrX}]^+$ ($\text{X} = \text{SiHR}_2$ and SiR_3 ; $\text{R} = \text{H}, \text{CH}_3, \text{SiH}_3$, and Cl). <i>Organometallics</i> , 2006, 25, 4748-4755. | 1.1 | 11 |
| 233 | Photoinduced O_2 -Dependent Stepwise Oxidative Deglycation of a Nonheme Iron(III) Complex. <i>Journal of the American Chemical Society</i> , 2018, 140, 14150-14160. | 6.6 | 11 |
| 234 | Computational Study of Homogeneous Multimetallic Cooperative Catalysis. <i>Topics in Catalysis</i> , 0, , 1. | 1.3 | 11 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 235 | A theoretical evaluation of steric and electronic effects on the structure of [OsO. Theoretica Chimica Acta, 1996, 94, 67. | 0.9 | 11 |
| 236 | An Expanded SET Model Associated with the Functional Hindrance Dominates the Amide-Directed Distal sp ³ C-H Functionalization. Journal of the American Chemical Society, 2021, 143, 19406-19416. | 6.6 | 11 |
| 237 | Orbiting of the lithium atom in the [Me ₂ Si(NSiMe ₃) ₂] ₂ InLi molecule: theoretical confirmation. Journal of the Chemical Society Chemical Communications, 1995, , 443-444. | 2.0 | 10 |
| 238 | Unexpectedly large basis set effects on the binding of O ₂ to heme complexes. International Journal of Quantum Chemistry, 2001, 85, 100-108. | 1.0 | 10 |
| 239 | Ab initio calculations predict a very low barrier for the rotation of the axial ligand in Fe(P)(Im). Chemical Physics Letters, 2002, 353, 379-382. | 1.2 | 10 |
| 240 | A Theoretical Assessment of the Thermodynamic Preferences in the Cyclopalladation of Amines. European Journal of Inorganic Chemistry, 2005, 2005, 4040-4047. | 1.0 | 10 |
| 241 | A DFT study on the relative affinity for oxygen of the $\hat{1}\alpha$ and $\hat{1}\beta$ subunits of hemoglobin. Journal of Computational Chemistry, 2006, 27, 1446-1453. | 1.5 | 10 |
| 242 | Di-palladium Complexes with Urea-containing Ligands as Anion Receptors. Supramolecular Chemistry, 2007, 19, 599-611. | 1.5 | 10 |
| 243 | The role of amide ligands in the stabilization of Pd(II) tricoordinated complexes: is the Pd-NR ₂ bond order single or higher?. Theoretical Chemistry Accounts, 2009, 123, 75-84. | 0.5 | 10 |
| 244 | Origin of enantioselectivity in asymmetric Pauson-Khand reactions catalyzed by [(BINAP)Co ₂ (CO) ₆] ⁺ . Journal of Molecular Catalysis A, 2010, 324, 127-132. | 4.8 | 10 |
| 245 | A computational study on the intriguing mechanisms of the gas-phase thermal activation of methane by bare [Ni(H)(OH)] ⁺ . Physical Chemistry Chemical Physics, 2012, 14, 9306. | 1.3 | 10 |
| 246 | Catalytic Nitrene Transfer To Alkynes: A Novel and Versatile Route for the Synthesis of Sulfinamides and Isothiazoles. Angewandte Chemie, 2017, 129, 13022-13027. | 1.6 | 10 |
| 247 | The Role of Electron-Donor Substituents in the Family of OPBAN-Cu Water Oxidation Catalysts: Effect on the Degradation Pathways and Efficiency. European Journal of Inorganic Chemistry, 2019, 2019, 2109-2114. | 1.0 | 10 |
| 248 | DFT characterization of the mechanism for Staudinger/aza-Wittig tandem organocatalysis. Tetrahedron, 2019, 75, 1852-1859. | 1.0 | 10 |
| 249 | 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. Journal of the Chemical Society, Faraday Transactions, 1992, 88, 1111-1117. | 1.7 | 9 |
| 250 | A comparative study of DFT and traditional ab initio methodologies on the OsO ₄ molecule. International Journal of Quantum Chemistry, 2000, 77, 544-551. | 1.0 | 9 |
| 251 | The Acetate Proton Shuttle between Mutually <i>trans</i> Ligands. Organometallics, 2018, 37, 2645-2651. | 1.1 | 9 |
| 252 | Caesium fluoride-mediated hydrocarboxylation of alkenes and allenes: scope and mechanistic insights. Chemical Science, 2019, 10, 10072-10078. | 3.7 | 9 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 253 | Molecular hydrogen complex vs dihydride in ML4 + H2 systems. Influence of the ML4 fragment geometry. <i>Inorganic Chemistry</i> , 1989, 28, 2984-2988. | 1.9 | 8 |
| 254 | Diradical versus Concerted Mechanisms for the Dihydroxylation of Protoanemonin by OsO4 and OsO4·NH3 · The Effect of the Base in the Reaction. <i>European Journal of Organic Chemistry</i> , 2003, 2003, 833-839. | 1.2 | 8 |
| 255 | Photolytic Activation of Late-Transition-Metal-Carbon Bonds and Their Reactivity toward Oxygen. <i>Organometallics</i> , 2021, 40, 4077-4091. | 1.1 | 8 |
| 256 | QM/MM Calculations on Selectivity in Homogeneous Catalysis. <i>Structure and Bonding</i> , 2015, , 59-79. | 1.0 | 7 |
| 257 | Theoretical characterisation of the origin of symmetry distortions in TpCuCl complexes. <i>Inorganic Chemistry Communication</i> , 2000, 3, 590-593. | 1.8 | 6 |
| 258 | GARLEEK: Adding an extra flavor to ONIOM. <i>Journal of Computational Chemistry</i> , 2019, 40, 381-386. | 1.5 | 6 |
| 259 | Introducing the Catalytic Amination of Silanes via Nitrene Insertion. <i>Journal of the American Chemical Society</i> , 2022, 144, 10608-10614. | 6.6 | 6 |
| 260 | Synthesis, molecular structure and computational study of a ruthenium bis(thietane) complex. <i>Inorganica Chimica Acta</i> , 2001, 316, 13-18. | 1.2 | 5 |
| 261 | Computational Methods for Homogeneous Catalysis. <i>Catalysis By Metal Complexes</i> , 2002, , 1-21. | 0.6 | 5 |
| 262 | Self-Consistency versus "Best-Fit" Approaches in Understanding the Structure of Metal Nitrosyl Complexes. <i>Organometallics</i> , 2004, 23, 6008-6014. | 1.1 | 5 |
| 263 | Mechanistic Study on the Asymmetric Synthesis of the Wieland-Miescher Ketone and Analogs. <i>ChemCatChem</i> , 2019, 11, 4064-4071. | 1.8 | 5 |
| 264 | 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. | 1.9 | 5 |
| 265 | Understanding the Binding Properties of N-heterocyclic Carbenes through BDE Matrix App. <i>European Journal of Inorganic Chemistry</i> , 2022, 2022, . | 1.0 | 5 |
| 266 | 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. | 1.5 | 4 |
| 267 | Mechanism of Palladium-Catalyzed Cross-Coupling Reactions. , 0, , 109-130. | | 4 |
| 268 | Enantioselective Synthesis of β -Heterosubstituted α -Amino Alcohols by Sequential Metal-Free Diene Aziridination/Kinetic Resolution. <i>Chemistry - A European Journal</i> , 2019, 25, 12628-12635. | 1.7 | 4 |
| 269 | A Quantitative Model for Alkane Nucleophilicity Based on C-H Bond Structural/Topological Descriptors. <i>Angewandte Chemie</i> , 2020, 132, 3136-3140. | 1.6 | 4 |
| 270 | Excellence versus Diversity? Not an Either/Or Choice. <i>ACS Catalysis</i> , 2020, 10, 7310-7311. | 5.5 | 4 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 271 | Mechanism and selectivity of photocatalyzed CO ₂ reduction by a function-integrated Ru catalyst. Dalton Transactions, 2022, 51, 3747-3759. | 1.6 | 4 |
| 272 | Mechanistic Studies on the Synthesis of Pyrrolidines and Piperidines via Copper-Catalyzed Intramolecular C-H Amination. Organometallics, 2022, 41, 1099-1105. | 1.1 | 4 |
| 273 | Basis set influence on the ab initio description of the dihydrogen complex [Os(PH ₃) ₂ Cl(CO)H(H ₂)] ₁ . Computational and Theoretical Chemistry, 1996, 371, 59-68. | 1.5 | 3 |
| 274 | Computational study on the mechanism of the reaction of carbon dioxide with siloxy silanes. Theoretical Chemistry Accounts, 2017, 136, 1. | 0.5 | 3 |
| 275 | Four Oxidation States in a Single Photoredox Nickel-Based Catalytic Cycle: A Computational Study. Angewandte Chemie, 2019, 131, 3938-3942. | 1.6 | 3 |
| 276 | Seeking the Optimal Descriptor for S _N 2 Reactions through Statistical Analysis of Density Functional Theory Results. Journal of Organic Chemistry, 2022, 87, 363-372. | 1.7 | 3 |
| 277 | Lewis-Äuren begÄinstigen die Umwandlung eines Metallocentrihydrids in einen Diwasserstoffkomplex und die H ₂ -Freisetzung aus ihm: das System [Cp ₂ NbH ₃] + BH ₃ . Angewandte Chemie, 1997, 109, 259-261. | 1.6 | 2 |
| 278 | Rhodium Diphosphine Hydroformylation. Catalysis By Metal Complexes, 2002, , 161-187. | 0.6 | 2 |
| 279 | A Career in Catalysis: Odile Eisenstein. ACS Catalysis, 2019, 9, 10375-10388. | 5.5 | 2 |
| 280 | Why does {p-But-calix[4]-(OMe) ₂ (O) ₂ ZrCl ₂ } distort away from C _{2v} symmetry?. Chemical Physics Letters, 1999, 315, 145-149. | 1.2 | 1 |
| 281 | A computational study on the acceleration of the Prins reaction by indium trichloride. Comptes Rendus Chimie, 2004, 7, 885-893. | 0.2 | 1 |
| 282 | Computational Studies on Asymmetric Reactions with Sulfur Reagents. , 0, , 399-416. | | 1 |
| 283 | Homogeneous Computational Catalysis: The Mechanism for Cross-Coupling and Other C-C Bond Formation Processes. NATO Science for Peace and Security Series B: Physics and Biophysics, 2012, , 185-206. | 0.2 | 1 |
| 284 | Redefining the Mechanistic Scenario of Carbon-Sulfur Nucleophilic Coupling via High-Valent Cp*Co IV Species. Angewandte Chemie, 2021, 133, 11317-11321. | 1.6 | 1 |
| 285 | Computational insights into metal-catalyzed asymmetric hydrogenation. Advances in Catalysis, 2021, 68, 385-426. | 0.1 | 1 |
| 286 | When the MO-SCF procedure is not required: Thinking instead of computing. Journal of Chemical Education, 1990, 67, 648. | 1.1 | 0 |
| 287 | Quantum mechanical phenomena in dihydrogen and polyhydride transition metal systems. , 2001, , 419-461. | | 0 |
| 288 | Frontispiece: Catalytic Nitrene Transfer To Alkynes: A Novel and Versatile Route for the Synthesis of Sulfinamides and Isothiazoles. Angewandte Chemie - International Edition, 2017, 56, . | 7.2 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 289 | Frontispiz: Catalytic Nitrene Transfer To Alkynes: A Novel and Versatile Route for the Synthesis of Sulfinamides and Isothiazoles. <i>Angewandte Chemie</i> , 2017, 129, . | 1.6 | 0 |
| 290 | Titelbild: Measuring the Relative Reactivity of the Carbon-Hydrogen Bonds of Alkanes as Nucleophiles (<i>Angew. Chem.</i> 42/2018). <i>Angewandte Chemie</i> , 2018, 130, 13885-13885. | 1.6 | 0 |
| 291 | 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. | 1.0 | 0 |
| 292 | Computational Modeling of Selected Photoactivated Processes. <i>Topics in Organometallic Chemistry</i> , 2020, , 131-152. | 0.7 | 0 |
| 293 | Molecular Hydrogen as a Ligand in Transition Metal Complexes. , 1991, , 375-396. | | 0 |
| 294 | 2 Mechanistic Aspects of Carbon-Boron Bond Formation. , 2020, , . | | 0 |