# Anthony Haynes

## List of Publications by Year in descending order

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|---|---|---|---|
| 56 papers | 2,575 citations | 218677 26 h-index | 197818 49 g-index |
| 60 all docs | 60 docs citations | 60 times ranked | 1855 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Methanol carbonylation revisited: thirty years on. Journal of the Chemical Society Dalton Transactions, 1996, , 2187. | 1.1 | 290 |
| 2 | Promotion of Iridium-Catalyzed Methanol Carbonylation:Â Mechanistic Studies of the Cativa Process. Journal of the American Chemical Society, 2004, 126, 2847-2861. | 13.7 | 252 |
| 3 | Mechanistic studies on rhodium-catalyzed carbonylation reactions: spectroscopic detection and reactivity of a key intermediate, [MeRh(CO)2I3]-. Journal of the American Chemical Society, 1993, 115, 4093-4100. | 13.7 | 132 |
| 4 | Theoretical and Experimental Evidence for SN2 Transition States in Oxidative Addition of Methyl Iodide to cis-[M(CO)2I2]- (M = Rh, Ir). Journal of the American Chemical Society, 1996, 118, 3029-3030. | 13.7 | 127 |
| 5 | Steric and Electronic Effects on the Reactivity of Rh and Ir Complexes Containing Pâˆ'S, Pâˆ'P, and Pâˆ'O Ligands. Implications for the Effects of Chelate Ligands in Catalysis. Journal of the American Chemical Society, 2002, 124, 13597-13612. | 13.7 | 115 |
| 6 | Iodide effects in transition metal catalyzed reactions. Dalton Transactions, 2004, , 3409. | 3.3 | 103 |
| 7 | Oxidative Addition of Alkyl Halides to Rhodium(I) and Iridium(I) Dicarbonyl Diiodides: Key Reactions in the Catalytic Carbonylation of Alcohols. Organometallics, 1994, 13, 3215-3226. | 2.3 | 92 |
| 8 | Theoretical, Thermodynamic, Spectroscopic, and Structural Studies of the Consequences of One-Electron Oxidation on the Feâˆ'X Bonds in 17- and 18-Electron Cp*Fe(dppe)X Complexes (X = F, Cl, Br,) Tj ETQq1 1 0 rgBT /Overlock | 13.7 | 92 |
| 9 | Quantifying Steric Effects of Î±-Diimine Ligands. Oxidative Addition of MeI to Rhodium(I) and Migratory Insertion in Rhodium(III) Complexes. Organometallics, 2003, 22, 1047-1054. | 2.3 | 91 |
| 10 | A Dramatic Steric Effect on the Rate of Migratory CO Insertion on Rhodium. Journal of the American Chemical Society, 1999, 121, 11233-11234. | 13.7 | 83 |
| 11 | Direct observation of MeRh(CO)2I3-, the key intermediate in rhodium-catalyzed methanol carbonylation. Journal of the American Chemical Society, 1991, 113, 8567-8569. | 13.7 | 74 |
| 12 | Acetic Acid Synthesis by Catalytic Carbonylation of Methanol. , 2006, , 179-205. | | 71 |
| 13 | Oxidative Addition of MeI to a Rhodium(I) N-Heterocyclic Carbene Complex. A Kinetic Study. Organometallics, 2003, 22, 4451-4458. | 2.3 | 59 |
| 14 | Encapsulation of an organometallic cationic catalyst by direct exchange into an anionic MOF. Chemical Science, 2016, 7, 2037-2050. | 7.4 | 57 |
| 15 | Catalytic Methanol Carbonylation. Advances in Catalysis, 2010, , 1-45. | 0.2 | 54 |
| 16 | Ligand Stereoelectronic Effects in Complexes of Phospholanes, Phosphinanes, and Phosphepanes and Their Implications for Hydroformylation Catalysis. Organometallics, 2007, 26, 713-725. | 2.3 | 53 |
| 17 | Mechanistic Study of Rhodium/xantphos-Catalyzed Methanol Carbonylation. Organometallics, 2011, 30, 6166-6179. | 2.3 | 52 |
| 18 | Encapsulation of Crabtree's Catalyst in Sulfonated MILâ€101(Cr): Enhancement of Stability and Selectivity between Competing Reaction Pathways by the MOF Chemical Microenvironment. Angewandte Chemie - International Edition, 2018, 57, 4532-4537. | 13.8 | 52 |

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|---|---|---|---|
| 19 | A mechanism for the photochemical conversion of FpSi2Me5 to FpSiMe3 (Fp = (.eta.5-C5H5)Fe(CO)2). Infrared evidence for an intermediate iron-silylene complex. Journal of the American Chemical Society, 1991, 113, 2011-2020. | 13.7 | 51 |
| 20 | Bis(imino)carbazolide Complexes of Rhodium:â€‰ Highly Nucleophilic Ligands Exerting a Dramatic Accelerating Effect on MeI Oxidative Addition. Organometallics, 2004, 23, 1015-1023. | 2.3 | 50 |
| 21 | Spectroscopic identification and reactivity of [Ir(CO)3I2Me], a key reactive intermediate in iridium catalysed methanol carbonylation. Chemical Communications, 1998, , 1023-1024. | 4.1 | 44 |
| 22 | Oxidative addition of MeI to cationic Rh(I) carbonyl complexes with pyridyl bis(carbene) ligands. Journal of Organometallic Chemistry, 2005, 690, 6089-6095. | 1.8 | 37 |
| 23 | A Mechanistic Investigation of Oxidative Addition of Methyl Iodide to [Tp*Rh(CO)(L)]. Inorganic Chemistry, 2002, 41, 3280-3290. | 4.0 | 36 |
| 24 | Dramatic acceleration of migratory insertion in [MeIr(CO)2I3]? by methanol and by tin(II) iodide. Journal of the Chemical Society Chemical Communications, 1995, , 1045. | 2.0 | 35 |
| 25 | The carbonylation of methyl iodide and methanol to methyl acetate catalysed by palladium and platinum iodides. Chemical Communications, 1999, , 179-180. | 4.1 | 32 |
| 26 | Oxidative addition of methyl iodide to [Rh(CO)2I]2: synthesis, structure and reactivity of neutral rhodium acetyl complexes, [Rh(CO)(NCR)(COMe)I2]2. Inorganica Chimica Acta, 2004, 357, 3027-3037. | 2.4 | 31 |
| 27 | Ligand Effects on Reactivity of Cobalt Acyl Complexes. ACS Catalysis, 2012, 2, 2512-2523. | 11.2 | 28 |
| 28 | rs-Type coordinates in weakly-bound dimers: application to linear dimers Bâ‹¯HCN, where Bî—»CO, N2 and HCN. Journal of Molecular Structure, 1988, 189, 153-164. | 3.6 | 27 |
| 29 | The photochemistry of dinuclear osmium carbonyl complexes; characterisation of Os2(CO)8 using matrix isolation. Journal of Organometallic Chemistry, 1990, 383, 497-519. | 1.8 | 27 |
| 30 | Model reactions of a carbonylation catalyst: phosphite induced migratory CO insertion in [MeIr(CO)2I3]â^'. Inorganica Chimica Acta, 1998, 270, 382-391. | 2.4 | 27 |
| 31 | Structure and reactivity of polymer-supported carbonylation catalysts. Dalton Transactions RSC, 2002, , 2565. | 2.3 | 27 |
| 32 | Cisâ€“trans isomerism in [M(CO)2I4]â^' (M=Rh, Ir): Kinetic, mechanistic and spectroscopic studies. Journal of Organometallic Chemistry, 1998, 551, 339-347. | 1.8 | 25 |
| 33 | The synthesis, characterisation and reactivity of 2-phosphanylethylcyclopentadienyl complexes of cobalt, rhodium and iridium. Dalton Transactions, 2006, , 91-107. | 3.3 | 25 |
| 34 | Kinetics and thermodynamics of Câ€”Cl bond activation by [Ir(CO) 2 Cl 2 ] â^'. Journal of Physical Organic Chemistry, 2004, 17, 1007-1016. | 1.9 | 24 |
| 35 | Dicarbonylrhodium(I) Complexes of Bipyridine Ligands with Proximate H-Bonding Substituents and Their Application in Methyl Acetate Carbonylation. European Journal of Inorganic Chemistry, 2011, 2011, 3511-3522. | 2.0 | 22 |
| 36 | Formation and Reactivity of Ir(III) Hydroxycarbonyl Complexes. Inorganic Chemistry, 2006, 45, 6269-6275. | 4.0 | 20 |

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|---|---|---|---|
| 37 | Methane formation during the iridium/iodide catalysed carbonylation of methanol. Inorganic Chemistry Communication, 2000, 3, 11-12. | 3.9 | 17 |
| 38 | Reactivity of Rhodium(I) Iminophosphine Carbonyl Complexes with Methyl Iodide. Organometallics, 2007, 26, 1960-1965. | 2.3 | 17 |
| 39 | Identification of the Reactive cis,mer Isomer of [Ir(CO)2I3Me]â^': Relation to the Mechanism of Iridium-Catalyzed Methanol Carbonylation. Inorganic Chemistry, 2009, 48, 28-35. | 4.0 | 15 |
| 40 | The migratory insertion of carbon monoxide in pentamethylcyclopentadienyliridium (III) complexes. Structural effects on reactivity and mechanism for rhodium and iridium systems. Inorganica Chimica Acta, 1995, 240, 485-493. | 2.4 | 14 |
| 41 | Facile Alkene Insertion into a Rhodium(III)â^'Acetyl Bond:Â Potential Catalysts for CO/Alkene Copolymerization. Organometallics, 2004, 23, 5907-5909. | 2.3 | 13 |
| 42 | Infrared spectroscopic study of absorption and separation of CO using copper(<scp>i</scp>)-containing ionic liquids. Dalton Transactions, 2017, 46, 2821-2828. | 3.3 | 13 |
| 43 | Mid-IR spectroscopy for rapid on-line analysis in heterogeneous catalyst testing. Catalysis Today, 2003, 81, 309-317. | 4.4 | 12 |
| 44 | Methyl to alkylidene migration within trans-[WMe(î€†CHPh)(CO)2(Î·-C5H5)]. Chemical Communications, 1996, , 1765-1766. | 4.1 | 10 |
| 45 | The photochemistry of cyclopentadienyl platinum carbonyl dimers: characterization of [Pt2(Âµ-CO)(Î·5-C5R5)2](R = H or Me) using matrix isolation and fast time-resolved infrared spectroscopy. Journal of the Chemical Society Dalton Transactions, 1988, , 1501-1507. | 1.1 | 9 |
| 46 | Reactivity of Ir(iii) carbonyl complexes with water: alternative by-product formation pathways in catalytic methanol carbonylation. Dalton Transactions, 2013, 42, 16538. | 3.3 | 9 |
| 47 | The Use of High Pressure Infrared Spectroscopy to Study Catalytic Mechanisms. , 2005, , 107-150. | | 8 |
| 48 | Mechanistic insight into organic and industrial transformations: general discussion. Faraday Discussions, 2019, 220, 282-316. | 3.2 | 8 |
| 49 | Encapsulation of Crabtree's Catalyst in Sulfonated MIL-101(Cr): Enhancement of Stability and Selectivity between Competing Reaction Pathways by the MOF Chemical Microenvironment. Angewandte Chemie, 2018, 130, 4622-4627. | 2.0 | 7 |
| 50 | Heterogenisation of a carbonylation catalyst on dispersible microporous polymer nanoparticles. Catalysis Science and Technology, 0, , . | 4.1 | 2 |
| 51 | Structure and reactivity of polymer-supported carbonylation catalysts. Special Publication - Royal Society of Chemistry, 2007, , 166-175. | 0.0 | 1 |
| 52 | The structural characterization and hydroformylation activity of the tri-rhodium complex [Rh3(Î¼2-dppm)2(Î¼2-CO)3(K1-CO)3]BF4. Inorganic Chemistry Communication, 2009, 12, 1071-1073. | 3.9 | 1 |
| 53 | Iodide Effects in Transition Metal Catalyzed Reactions. ChemInform, 2005, 36, no. | 0.0 | 0 |
| 54 | Iridium Complexes in Organic Synthesis.Herausgegeben von Luisâ€…A. Oro und Carmen Claver.. Angewandte Chemie, 2009, 121, 6107-6108. | 2.0 | 0 |

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| 55 | Physical methods for mechanistic understanding: general discussion. Faraday Discussions, 2019, 220, 144-178. | 3.2 | 0 |
| 56 | New Explorations in Metal-Catalyzed Reactions. , 1998, , 83-93. | | 0 |