

# Jay A Labinger

## List of Publications by Year in descending order

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99  
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50244

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104  
docs citations

104  
times ranked

7008  
citing authors

#	ARTICLE	IF	CITATIONS
1	John E. Bercaw: A joint appreciation. <i>Polyhedron</i> , 2020, 177, 114307.	1.0	1
2	Isotopic labelling in ethylene oligomerization: addressing the issue of 1-octene <i>vs.</i> 1-hexene selectivity. <i>Dalton Transactions</i> , 2019, 48, 40-44.	1.6	21
3	Comment on "Selective anaerobic oxidation of methane enables direct synthesis of methanol". <i>Science</i> , 2018, 359, .	6.0	9
4	Approaches to homogeneously catalyzed CO hydrogenation: A personal retrospective. <i>Journal of Organometallic Chemistry</i> , 2017, 847, 4-12.	0.8	16
5	Mechanistic Studies on Selective Trimerization of Linear $\alpha$ -Olefins over a Supported Titanium Catalyst. <i>ACS Catalysis</i> , 2017, 7, 4922-4926.	5.5	8
6	Platinum-Catalyzed C-H Functionalization. <i>Chemical Reviews</i> , 2017, 117, 8483-8496.	23.0	201
7	Tin Silsesquioxanes as Models for the "Open" Site in Tin-Containing Zeolite Beta. <i>ChemCatChem</i> , 2016, 8, 121-124.	1.8	34
8	Cosupported Tandem Catalysts for Production of Linear Low-Density Polyethylene from an Ethylene-Only Feed. <i>ACS Catalysis</i> , 2016, 6, 6581-6584.	5.5	10
9	Elusive active site in focus. <i>Nature</i> , 2016, 536, 280-281.	13.7	4
10	Enhanced Productivity of a Supported Olefin Trimerization Catalyst. <i>ACS Catalysis</i> , 2016, 6, 19-22.	5.5	23
11	Mechanistic studies on the Shilov system: A retrospective. <i>Journal of Organometallic Chemistry</i> , 2015, 793, 47-53.	0.8	44
12	Upgrading Light Hydrocarbons: A Tandem Catalytic System for Alkane/Alkene Coupling. <i>Topics in Catalysis</i> , 2015, 58, 494-501.	1.3	27
13	Tutorial on Oxidative Addition. <i>Organometallics</i> , 2015, 34, 4784-4795.	1.1	128
14	Route to Renewable PET: Reaction Pathways and Energetics of Diels-Alder and Dehydrative Aromatization Reactions Between Ethylene and Biomass-Derived Furans Catalyzed by Lewis Acid Molecular Sieves. <i>ACS Catalysis</i> , 2015, 5, 5904-5913.	5.5	92
15	Nickel-Exchanged Zincosilicate Catalysts for the Oligomerization of Propylene. <i>ACS Catalysis</i> , 2014, 4, 4189-4195.	5.5	42
16	Scope and Mechanism of Homogeneous Tantalum/Iridium Tandem Catalytic Alkane/Alkene Upgrading using Sacrificial Hydrogen Acceptors. <i>Organometallics</i> , 2014, 33, 3353-3365.	1.1	28
17	Guanidine-Functionalized Rhenium Cyclopentadienyl Carbonyl Complexes: Synthesis and Cooperative Activation of C-H and O-H Bonds. <i>Organometallics</i> , 2014, 33, 4107-4117.	1.1	12
18	Alfred Werner's Role in the mid-20th Century Flourishing of American Inorganic Chemistry. <i>Chimia</i> , 2014, 68, 292.	0.3	1

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19	Upgrading Light Hydrocarbons via Tandem Catalysis: A Dual Homogeneous Ta/Ir System for Alkane/Alkene Coupling. <i>Journal of the American Chemical Society</i> , 2013, 135, 10302-10305.	6.6	61
20	Spectral Studies of a Cr(PNP)â€‘MAO System for Selective Ethylene Trimerization Catalysis: Searching for the Active Species. <i>ACS Catalysis</i> , 2013, 3, 2582-2585.	5.5	74
21	Highly Selective Olefin Trimerization Catalysis by a Borane-Activated Titanium Trimethyl Complex. <i>Organometallics</i> , 2013, 32, 6899-6902.	1.1	53
22	A Thermodynamic Analysis of Rhenium(I)â€‘Formyl Câ€‘H Bond Formation via Base-Assisted Heterolytic H <sub>2</sub> Cleavage in the Secondary Coordination Sphere. <i>Organometallics</i> , 2013, 32, 5530-5545.	1.1	24
23	Kinetics and Mechanism of Indene Câ€‘H Bond Activation by [(COD)Ir(1/4 <sub>2</sub> -OH)] <sub>2</sub> . <i>Organometallics</i> , 2013, 32, 3322-3326.	1.1	8
24	Alkane Functionalization via Electrophilic Activation. <i>Catalysis By Metal Complexes</i> , 2012, , 17-71.	0.6	10
25	A Versatile Ligand Platform that Supports Lewis Acid Promoted Migratory Insertion. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 8268-8271.	7.2	34
26	Heterobimetallic Complexes of Rhenium and Zinc: Potential Catalysts for Homogeneous Syngas Conversion. <i>Organometallics</i> , 2011, 30, 2690-2700.	1.1	37
27	Large Kinetic Isotope Effects for the Protonolysis of Metalâ€‘Methyl Complexes Are Not Reliable Mechanistic Indicators. <i>Organometallics</i> , 2011, 30, 4374-4378.	1.1	15
28	Intra- and Intermolecular Câ€‘H Activation by Bis(phenolate)pyridineiridium(III) Complexes. <i>Organometallics</i> , 2011, 30, 6751-6765.	1.1	27
29	Homogeneous syngas conversion. <i>Coordination Chemistry Reviews</i> , 2011, 255, 881-898.	9.5	130
30	Oxidation of Organometallic Platinum and Palladium Complexes Obtained from Câ€‘H Activation. <i>Organometallics</i> , 2010, 29, 789-794.	1.1	15
31	Mechanism of Glucose Isomerization Using a Solid Lewis Acid Catalyst in Water. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 8954-8957.	7.2	612
32	Intramolecular Câ€‘H Activation of a Bisphenolate(benzene)-Ligated Titanium Dibenzyl Complex. Competing Pathways Involving Î±-Hydrogen Abstraction and Î¶-Bond Metathesis. <i>Organometallics</i> , 2010, 29, 5026-5032.	1.1	37
33	Homogeneous CO Hydrogenation: Ligand Effects on the Lewis Acid-Assisted Reductive Coupling of Carbon Monoxide. <i>Organometallics</i> , 2010, 29, 4499-4516.	1.1	88
34	Protonolysis of Platinum(II) and Palladium(II) Methyl Complexes: A Combined Experimental and Theoretical Investigation. <i>Organometallics</i> , 2010, 29, 4354-4359.	1.1	51
35	Mechanism of Reductive Elimination of Methyl Iodide from a Novel Gold(III)â€‘Monomethyl Complex. <i>Organometallics</i> , 2010, 29, 4090-4096.	1.1	74
36	Homogeneous CO Hydrogenation: Dihydrogen Activation Involves a Frustrated Lewis Pair Instead of a Platinum Complex. <i>Journal of the American Chemical Society</i> , 2010, 132, 3301-3303.	6.6	119

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37	Transformations of Group 7 Carbonyl Complexes: Possible Intermediates in a Homogeneous Syngas Conversion Scheme. <i>Organometallics</i> , 2009, 28, 6218-6227.	1.1	43
38	Selective Oxidation of sp <sup>3</sup> C-H Bonds in Water Catalyzed by a Glycinate-Platinum(II) Complex. <i>Organometallics</i> , 2009, 28, 4899-4901.	1.1	14
39	C-H Bond Activation by [(Diimine)Pd( $\eta^4$ -OH)] <sub>2</sub> <sup>2+</sup> Dimers: Mechanism-Guided Catalytic Improvement. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 9941-9943.	7.2	49
40	C-H activation of benzene with Cp-Ru(CO)2CH3. <i>Journal of Organometallic Chemistry</i> , 2008, 693, 2700-2702.	0.8	4
41	Oxidative Aromatization of Olefins with Dioxygen Catalyzed by Palladium Trifluoroacetate. <i>Journal of Organic Chemistry</i> , 2008, 73, 8654-8657.	1.7	47
42	Reductive Coupling of Carbon Monoxide in a Rhenium Carbonyl Complex with Pendant Lewis Acids. <i>Journal of the American Chemical Society</i> , 2008, 130, 11874-11875.	6.6	140
43	Hydrogen Tunneling in Protonolysis of Platinum(II) and Palladium(II) Methyl Complexes: Mechanistic Implications. <i>Journal of the American Chemical Society</i> , 2008, 130, 17654-17655.	6.6	57
44	Selective Methylative Homologation: An Alternate Route to Alkane Upgrading. <i>Journal of the American Chemical Society</i> , 2008, 130, 11988-11995.	6.6	23
45	The role of alkane coordination in C-H bond cleavage at a Pt(II) center. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 6915-6920.	3.3	67
46	Competitive Oxidation and Protonation of Aqueous Monomethylplatinum(II) Complexes: A Comparison of Oxidants. <i>Organometallics</i> , 2007, 26, 167-172.	1.1	31
47	C-H Bond Activation by Dicationic Platinum(II) Complexes. <i>Organometallics</i> , 2007, 26, 294-301.	1.1	53
48	Reactions of Indene and Indoles with Platinum Methyl Cations: Indene C-H Activation, Indole N versus Nitrogen Lone-Pair Coordination. <i>Organometallics</i> , 2007, 26, 281-287.	1.1	14
49	Mechanistic Studies of Olefin and Alkyne Trimerization with Chromium Catalysts: Deuterium Labeling and Studies of Regiochemistry Using a Model Chromacyclopentane Complex. <i>Journal of the American Chemical Society</i> , 2007, 129, 14281-14295.	6.6	174
50	Kinetics and Mechanism of Methane, Methanol, and Dimethyl Ether C-H Activation with Electrophilic Platinum Complexes. <i>Journal of the American Chemical Society</i> , 2006, 128, 2005-2016.	6.6	95
51	C-H Activation by Platinum(II): What Do Gas-Phase Studies Tell Us about the Solution-Phase Mechanism?. <i>Organometallics</i> , 2006, 25, 805-808.	1.1	18
52	Improved One-Pot Synthesis of Mixed Methyl-Aryl Platinum(II) Diimine Complexes. <i>Organometallics</i> , 2006, 25, 1055-1058.	1.1	6
53	Organized Skepticism, Naïve Methodism, and Other -ISMS. <i>Foundations of Chemistry</i> , 2006, 8, 97-110.	0.4	0
54	Controversy in Chemistry: How Do You Prove a Negative?? The Cases of Phlogiston and Cold Fusion. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 1916-1922.	7.2	3

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55	Kontroversen in der Chemie: Wie beweist man ein Negativum? - Die Fälle Phlogiston und Kalte Fusion. <i>Angewandte Chemie</i> , 2005, 117, 1950-1956.	1.6	2
56	Selective Alkane Oxidation: Hot and Cold Approaches to a Hot Problem. <i>ChemInform</i> , 2005, 36, no.	0.1	0
57	SCIENCE AND CULTURE: Two-Dimensional Science. <i>Science</i> , 2005, 310, 1770-1771.	6.0	2
58	C-H Bond Activation with Neutral Platinum Methyl Complexes. <i>ACS Symposium Series</i> , 2004, , 319-333.	0.5	4
59	Controversy in Chemistry: What Counts as Evidence? Two Studies in Molecular Structure. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 2612-2619.	7.2	14
60	Selective alkane oxidation: hot and cold approaches to a hot problem. <i>Journal of Molecular Catalysis A</i> , 2004, 220, 27-35.	4.8	294
61	Mechanistic Studies of the Ethylene Trimerization Reaction with Chromium Diphosphine Catalysts: Experimental Evidence for a Mechanism Involving Metallacyclic Intermediates. <i>Journal of the American Chemical Society</i> , 2004, 126, 1304-1305.	6.6	289
62	Kinetic and Thermodynamic Preferences in Aryl vs Benzylic C-H Bond Activation with Cationic Pt(II) Complexes. <i>Journal of the American Chemical Society</i> , 2004, 126, 15034-15035.	6.6	83
63	A substrate-versatile catalyst for the selective oxidation of light alkanes I. Reactivity. <i>Journal of Catalysis</i> , 2003, 218, 42-53.	3.1	45
64	A substrate-versatile catalyst for the selective oxidation of light alkanes II. Catalyst characterization. <i>Journal of Catalysis</i> , 2003, 218, 54-66.	3.1	32
65	Heteropolyacid-based catalysts for selective alkane oxidation: mechanism of formation of maleic anhydride from propane. <i>Catalysis Today</i> , 2003, 81, 189-195.	2.2	10
66	Catalytic Alcoholysis of Tetramethylsilane via Pt-Mediated C-H Bond Activation. <i>Journal of the American Chemical Society</i> , 2003, 125, 6366-6367.	6.6	47
67	Arene C-H Bond Activation and Arene Oxidative Coupling by Cationic Palladium(II) Complexes. <i>Organometallics</i> , 2003, 22, 3884-3890.	1.1	81
68	Structural and Mechanistic Investigations of the Oxidation of Dimethylplatinum(II) Complexes by Dioxygen. <i>Inorganic Chemistry</i> , 2002, 41, 3608-3619.	1.9	135
69	C-H Bond Activation by Cationic Platinum(II) Complexes: Ligand Electronic and Steric Effects. <i>Journal of the American Chemical Society</i> , 2002, 124, 1378-1399.	6.6	257
70	A New Catalyst for the Selective Oxidation of Butane and Propane This work was funded by BP.. <i>Angewandte Chemie - International Edition</i> , 2002, 41, 858.	7.2	48
71	Bond-stretch isomerism: a case study of a quiet controversy. <i>Comptes Rendus Chimie</i> , 2002, 5, 235-244.	0.2	29
72	Understanding and exploiting C-H bond activation. <i>Nature</i> , 2002, 417, 507-514.	13.7	2,502

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73	Mechanistic Investigation of Benzene C-H Activation at a Cationic Platinum(II) Center: Direct Observation of a Platinum(II) Benzene Adduct. <i>Journal of the American Chemical Society</i> , 2000, 122, 10846-10855.	6.6	229
74	Intramolecular and intermolecular C-H activation at a cationic Pt(II) center. <i>Inorganica Chimica Acta</i> , 1998, 270, 467-478.	1.2	125
75	Homogeneous Oxidation of Alkanes by Electrophilic Late Transition Metals. <i>Angewandte Chemie - International Edition</i> , 1998, 37, 2180-2192.	7.2	548
76	Oxidation of Dimethylplatinum(II) Complexes with Dioxygen. <i>Organometallics</i> , 1998, 17, 4530-4531.	1.1	72
77	C-H Activation at Cationic Platinum(II) Centers. <i>Journal of the American Chemical Society</i> , 1997, 119, 848-849.	6.6	224
78	Exploring the Mechanism of Aqueous C-H Activation by Pt(II) through Model Chemistry: Evidence for the Intermediacy of Alkylhydridoplatinum(IV) and Alkane $\eta^2$ -Adducts. <i>Journal of the American Chemical Society</i> , 1996, 118, 5961-5976.	6.6	284
79	Science as Culture: A View from the Petri Dish. <i>Social Studies of Science</i> , 1995, 25, 285-306.	1.5	32
80	Electrocatalytic functionalization of alkanes using aqueous platinum salts. <i>Journal of Molecular Catalysis</i> , 1994, 87, L11-L15.	1.2	46
81	A simplified model for catalyzed isobutane autoxidation: implications for the mechanism of catalysis by halogenated porphyrin complexes. <i>Catalysis Letters</i> , 1994, 26, 95-99.	1.4	48
82	Oxidation of Zeise's Salt by $[\text{PtCl}_6]^{2-}$ : A Mechanistic Model for Hydrocarbon Oxidation. <i>Organometallics</i> , 1994, 13, 755-756.	1.1	56
83	Organometallic methane activation: Functionalization by aqueous platinum complexes. <i>Studies in Surface Science and Catalysis</i> , 1994, 81, 515-520.	1.5	5
84	Mechanism and stereochemistry for nucleophilic attack at carbon of platinum(IV) alkyls: model reactions for hydrocarbon oxidation with aqueous platinum chlorides. <i>Journal of the American Chemical Society</i> , 1993, 115, 3004-3005.	6.6	130
85	Oxidation of hydrocarbons by aqueous platinum salts: mechanism and selectivity. <i>Organometallics</i> , 1993, 12, 895-905.	1.1	109
86	Selective Hydroxylation of Hydrocarbons by Platinum Salts in Aqueous Media. <i>Advances in Chemistry Series</i> , 1992, , 221-232.	0.6	4
87	Is there a difference between surface and bulk oxidation levels in partially reduced metal oxide catalysts? Evidence from methane oxidative coupling kinetics. <i>Catalysis Letters</i> , 1990, 4, 245-249.	1.4	7
88	Selective hydroxylation of methyl groups by platinum salts in aqueous medium. Direct conversion of ethanol to ethylene glycol. <i>Journal of the American Chemical Society</i> , 1990, 112, 5628-5629.	6.6	67
89	Oxidative coupling of methane: An inherent limit to selectivity?. <i>Catalysis Letters</i> , 1988, 1, 371-375.	1.4	112
90	Mechanistic studies on the oxidative coupling of methane. <i>The Journal of Physical Chemistry</i> , 1987, 91, 2682-2684.	2.9	126

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91	Oxidative coupling of methane: the role of solid state chemistry. Journal of the Chemical Society Chemical Communications, 1987, , 543.	2.0	14
92	Amphoteric ligands. 3. Reactions of alkylmetal carbonyls with (aluminoamino)phosphine ligands. Structure of $(\eta\text{-C}_5\text{H}_5)(\text{CO})\text{Fe}(\text{CMeOAlEt}_2\text{NCMe}_3\text{PPh}_2)$ . Organometallics, 1983, 2, 733-740.	1.1	49
93	Amphoteric ligands. 4. Reactions of $\text{HMn}(\text{CO})_5$ with (aluminoamino)phosphine ligands. Structure of $(\text{OC})_3\text{Mn}[\text{CHOAlMe}_2\text{N}(\text{CMe}_3)\text{PPh}_2][\text{PPh}_2\text{N}(\text{CMe}_3)\text{Al}(\text{HCH}_2)\text{Me}]$ . Organometallics, 1983, 2, 1325-1332.	1.1	31
94	Amphoteric ligands. 2. Formation and structure of a novel carbon-hydrogen-bond-containing product from hydridomanganese pentacarbonyl and an amphoteric ligand. Journal of the American Chemical Society, 1982, 104, 6858-6859.	6.6	28
95	Amphoteric ligands. 1. Facile acyl formation and crystal structure of a novel complex containing an $\eta\text{-}^2(\text{C},\text{O})$ -acylphosphonium ligand. Journal of the American Chemical Society, 1982, 104, 6856-6858.	6.6	39
96	Approaches to homogenous reduction of carbon monoxide. 2. Reactions of bis( $\eta\text{-}^5$ -cyclopentadienyl)trihydridoniobium with metal carbonyls: selective reduction of carbon monoxide to ethane. Journal of the American Chemical Society, 1980, 102, 3652-3653.	6.6	35
97	Hydric character of early transition metal hydride complexes. Journal of Organometallic Chemistry, 1978, 155, C25-C28.	0.8	51
98	Approaches to homogeneous reduction of carbon monoxide: reaction of niobium hydrides with coordinated carbon monoxide. Journal of the American Chemical Society, 1978, 100, 3254-3255.	6.6	54
99	Oxidative addition to iridium(I). Free-radical process. Journal of the American Chemical Society, 1972, 94, 4043-4044.	6.6	65