Ian A Tonks

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1653925/publications.pdf

Version: 2024-02-01

51 papers	1,441 citations	304743 22 h-index	330143 37 g-index
59 all docs	59 docs citations	59 times ranked	1296 citing authors

#	Article	IF	Citations
1	Modern applications of low-valent early transition metals in synthesis and catalysis. Nature Reviews Chemistry, 2019, 3, 15-34.	30.2	155
2	Catalytic formal [2+2+1] synthesis of pyrroles from alkynes and diazenes via TiII/TiIV redox catalysis. Nature Chemistry, 2016, 8, 63-68.	13.6	132
3	Trimethylsilylâ€Protected Alkynes as Selective Crossâ€Coupling Partners in Titaniumâ€Catalyzed [2+2+1] Pyrrole Synthesis. Angewandte Chemie - International Edition, 2018, 57, 6090-6094.	13.8	85
4	Mechanism of Ti-Catalyzed Oxidative Nitrene Transfer in [2 + 2 + 1] Pyrrole Synthesis from Alkynes and Azobenzene. Journal of the American Chemical Society, 2018, 140, 7267-7281.	13.7	76
5	Bis(imido)vanadium(V)-Catalyzed [2+2+1] Coupling of Alkynes and Azobenzenes Giving Multisubstituted Pyrroles. Journal of the American Chemical Society, 2019, 141, 4194-4198.	13.7	67
6	Ti-Catalyzed Multicomponent Oxidative Carboamination of Alkynes with Alkenes and Diazenes. Journal of the American Chemical Society, 2016, 138, 14570-14573.	13.7	62
7	Multicomponent Pyrazole Synthesis from Alkynes, Nitriles, and Titanium Imido Complexes via Oxidatively Induced Nâ€“N Bond Coupling. Journal of the American Chemical Society, 2020, 142, 4390-4399.	13.7	55
8	Reactivity of terminal imido complexes of group 4â€“6 metals: Stoichiometric and catalytic reactions involving cycloaddition with unsaturated organic molecules. Coordination Chemistry Reviews, 2020, 407, 213118.	18.8	49
9	Dative Directing Group Effects in Ti-Catalyzed [2+2+1] Pyrrole Synthesis: Chemo- and Regioselective Alkyne Heterocoupling. ACS Catalysis, 2019, 9, 216-223.	11.2	45
10	Titanium redox catalysis: insights and applications of an earth-abundant base metal. Dalton Transactions, 2017, 46, 11522-11528.	3.3	41
11	Oxidative nitrene transfer from azides to alkynes via Ti(<scp>ii</scp>)/Ti(<scp>iv</scp>) redox catalysis: formal [2+2+1] synthesis of pyrroles. Chemical Communications, 2018, 54, 6891-6894.	4.1	40
12	Alkyne Hydroamination and Trimerization with Titanium Bis(phenolate)pyridine Complexes: Evidence for Low-Valent Titanium Intermediates and Synthesis of an Ethylene Adduct of Titanium(II). Organometallics, 2013, 32, 3451-3457.	2.3	38
13	Tunable and recyclable polyesters from CO2 and butadiene. Nature Chemistry, 2022, 14, 877-883.	13.6	38
14	Analysis of Polymeryl Chain Transfer Between Group 10 Metals and Main Group Alkyls during Ethylene Polymerization. ACS Catalysis, 2014, 4, 4223-4231.	11.2	35
15	Generation of TiII Alkyne Trimerization Catalysts in the Absence of Strong Metal Reductants. Organometallics, 2017, 36, 1383-1390.	2.3	35
16	Ethylene polymerization catalyzed by bridging Ni/Zn heterobimetallics. Dalton Transactions, 2017, 46, 5513-5517.	3.3	35
17	Carbodiimide Synthesis via Ti-Catalyzed Nitrene Transfer from Diazenes to Isocyanides. ACS Catalysis, 2019, 9, 11753-11762.	11.2	30
18	ZnCl₂ Capture Promotes Ethylene Polymerization by a Salicylaldiminato Ni Complex Bearing a Pendent 2,2â€²-Bipyridine Group. Organometallics, 2016, 35, 2429-2432.	2.3	28

#	Article	IF	Citations
19	Î²-Oxo-Î´-diimine Nickel Complexes: A Comparison of Tautomeric Active Species in Ethylene Polymerization Catalysis. Organometallics, 2016, 35, 2076-2085.	2.3	26
20	Development and applications of selective hydroesterification reactions. Trends in Chemistry, 2021, 3, 469-484.	8.5	25
21	Structure and bonding of group 4-nickel heterobimetallics supported by 2-(diphenylphosphino)pyrrolide ligands. Dalton Transactions, 2016, 45, 9892-9901.	3.3	24
22	In Situ Catalyst Generation and Benchtop-Compatible Entry Points for Ti^{II}/Ti^{IV} Redox Catalytic Reactions. Organometallics, 2018, 37, 4439-4445.	2.3	24
23	Cp₂Ti(Î¹²-^tBuNCN^tBu): A Complex with an Unusual Î¹² Coordination Mode of a Heterocumulene Featuring a Free Carbene. Journal of the American Chemical Society, 2020, 142, 8006-8018.	13.7	24
24	Diverse Reactivity of Diazatitanacyclohexenes: Coupling Reactions of 2H-Azirines Mediated by Titanium(II). Organometallics, 2018, 37, 4327-4331.	2.3	22
25	Iterative Supervised Principal Component Analysis Driven Ligand Design for Regioselective Ti-Catalyzed Pyrrole Synthesis. ACS Catalysis, 2020, 10, 13504-13517.	11.2	20
26	Ti-Catalyzed and -Mediated Oxidative Amination Reactions. Accounts of Chemical Research, 2021, 54, 3476-3490.	15.6	19
27	Multicomponent syntheses of 5- and 6-membered aromatic heterocycles using group 4â€“8 transition metal catalysts. Chemical Science, 2021, 12, 9574-9590.	7.4	18
28	Letâ€™s Talk About Safety: Open Communication for Safer Laboratories. Organometallics, 2018, 37, 3225-3227.	2.3	17
29	Synthesis of Pyridylimido Complexes of Tantalum and Niobium by Reductive Cleavage of the Nâ•N Bond of 2,2â€²-Azopyridine: Precursors for Earlyâ€“Late Heterobimetallic Complexes. Inorganic Chemistry, 2019, 58, 15155-15165.	4.0	17
30	Homo- and heteroleptic group 4 2-(diphenylphosphino)pyrrolide complexes: Synthesis, coordination chemistry and solution state dynamics. Polyhedron, 2014, 84, 111-119.	2.2	13
31	Bioderived Acrylates from Alkyl Lactates via Pd-Catalyzed Hydroesterification. ACS Sustainable Chemistry and Engineering, 2018, 6, 9579-9584.	6.7	13
32	Synthesis of pentasubstituted 2-aryl pyrroles from boryl and stannyl alkynes via one-pot sequential Ti-catalyzed [2 + 2 + 1] pyrrole synthesis/cross coupling reactions. Chemical Science, 2020, 11, 10236-10242.	7.4	13
33	Learning Experience Reports Improve Academic Research Safety. Journal of Chemical Education, 2021, 98, 150-157.	2.3	12
34	Trimethylsilylâ€Protected Alkynes as Selective Crossâ€Coupling Partners in Titaniumâ€Catalyzed [2+2+1] Pyrrole Synthesis. Angewandte Chemie, 2018, 130, 6198-6202.	2.0	11
35	The 4-Electron Cleavage of a Nâ•N Double Bond by a Trimetallic TiNi2 Complex. Inorganic Chemistry, 2019, 58, 11762-11772.	4.0	11
36	Group 4 Diarylmetallocenes as Bespoke Aryne Precursors for Titanium-Catalyzed [2 + 2 + 2] Cycloaddition of Arynes and Alkynes. Inorganic Chemistry, 2019, 58, 10508-10515.	4.0	11

#	Article	IF	Citations
37	Ti-catalyzed ring-opening oxidative amination of methylenecyclopropanes with diazenes. Chemical Science, 2020, 11, 7204-7209.	7.4	11
38	Î±-Diimine synthesis via titanium-mediated multicomponent diimination of alkynes with C-nitrosos. Chemical Science, 2022, 13, 1469-1477.	7.4	11
39	Mechanistic Study of Palladium-Catalyzed Hydroesterificative Copolymerization of Vinyl Benzyl Alcohol and CO. Organometallics, 2019, 38, 1778-1786.	2.3	8
40	Synthesis and characterization of tantalum-based early-late heterobimetallic complexes supported by 2-(diphenylphosphino)pyrrolide ligands. Polyhedron, 2020, 181, 114471.	2.2	8
41	Redox Nonâ€Innocent Behavior of a Terminal Iridium Hydrazido(2â^') Triple Bond. Angewandte Chemie - International Edition, 2016, 55, 13169-13173.	13.8	4
42	Organometallic Complexes of Electrophilic Elements for Selective Synthesis. Organometallics, 2018, 37, 4311-4312.	2.3	4
43	Generation of Masked Ti^{II} Intermediates from Ti^{IV} Amides via Î²-H Abstraction or Alkyne Deprotonation: An Example of Ti-Catalyzed Nitrene-Coupled Transfer Hydrogenation. Organometallics, 2020, 39, 3771-3774.	2.3	4
44	Spectroscopic Study of Solâ€“Gel Entrapped Triruthenium Dodecacarbonyl Catalyst Reveals Hydride Formation. Journal of Physical Chemistry Letters, 2020, 11, 7394-7399.	4.6	4
45	Electronic structure analysis and reactivity of the bimetallic bis-titanocene vinylcarboxylate complex, [(Cp2Ti)2(O2C3TMS2)]. Polyhedron, 2021, 207, 115368.	2.2	4
46	Resources for Improving Safety Culture, Training, and Awareness in the Academic Laboratory. , 2021, , 1125-1143.		4
47	A Dual Catalyst Strategy for Controlling Aluminum Nanocrystal Growth. Nano Letters, 2022, 22, 5570-5574.	9.1	4
48	Measuring up with the early metals. Nature Chemistry, 2017, 9, 834-836.	13.6	2
49	Rethinking Graduate Recruitment Weekends in the Digital Age. Journal of Chemical Education, 2020, 97, 2544-2555.	2.3	2
50	Ruthenium hydrides encapsulated in solâ€“gel glasses exhibit new ultrafast vibrational dynamics. Journal of Chemical Physics, 2022, 156, 124502.	3.0	1
51	Ethylene Polymerizations Using Parallel Pressure Reactors and a Kinetic Analysis of Chain Transfer Polymerization. Journal of Visualized Experiments, 2015, , .	0.3	0