Thomas Chamberlain

List of Publications by Year
in descending order

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84	2,637	172457	206112
papers	citations	29 h-index	48 g-index

89	89	89	3561
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Automated multi-objective reaction optimisation: which algorithm should I use?. Reaction Chemistry and Engineering, 2022, 7, 987-993.	3.7	21
2	Furfural Adsorption and Hydrogenation at the Oxideâ€Metal Interface: Evidence of the Support Influence on the Selectivity of Iridiumâ€Based Catalysts. ChemCatChem, 2022, 14, .	3.7	7
3	Efficient Hydrolytic Hydrogen Evolution from Sodium Borohydride Catalyzed by Polymer Immobilized Ionic Liquidâ€Stabilized Platinum Nanoparticles. ChemCatChem, 2022, 14, .	3.7	11
4	A Fullereneâ€“Platinum Complex for Direct Functional Patterning of Single Metal Atom-Embedded Carbon Nanostructures. Journal of Physical Chemistry Letters, 2022, 13, 1578-1586.	4.6	5
5	Modern advancements in continuous-flow aided kinetic analysis. Reaction Chemistry and Engineering, 2022, 7, 1037-1046.	3.7	16
6	Development of a multistep, electrochemical flow platform for automated catalyst screening. Catalysis Science and Technology, 2022, 12, 4266-4272.	4.1	3
7	Heteroatom modified polymer immobilized ionic liquid stabilized ruthenium nanoparticles: Efficient catalysts for the hydrolytic evolution of hydrogen from sodium borohydride. Molecular Catalysis, 2022, 528, 112476.	2.0	1
8	Alternating polarity for enhanced electrochemical synthesis. Reaction Chemistry and Engineering, 2021, 6, 147-151.	3.7	37
9	Selective separation of amines from continuous processes using automated pH controlled extraction. Reaction Chemistry and Engineering, 2021, 6, 1806-1810.	3.7	4
10	Autonomous optimisation of a nanoparticle catalysed reduction reaction in continuous flow. Chemical Communications, 2021, 57, 4926-4929.	4.1	16
11	An automated computational approach to kinetic model discrimination and parameter estimation. Reaction Chemistry and Engineering, 2021, 6, 1404-1411.	3.7	16
12	Flow chemistry for process optimisation using design of experiments. Journal of Flow Chemistry, 2021, 11, 75-86.	1.9	32
13	Engineering of Microcage Carbon Nanotube Architectures with Decoupled Multimodal Porosity and Amplified Catalytic Performance. Advanced Materials, 2021, 33, e2008307.	21.0	9
14	Piecing Together Large Polycyclic Aromatic Hydrocarbons and Fullerenes: A Combined ChemTEM Imaging and MALDI-ToF Mass Spectrometry Approach. Frontiers in Chemistry, 2021, 9, 700562.	3.6	4
15	MVMOO: Mixed variable multi-objective optimisation. Journal of Global Optimization, 2021, 80, 865-886.	1.8	16
16	Palladium Nanoparticles Hardwired in Carbon Nanoreactors Enable Continually Increasing Electrocatalytic Activity During the Hydrogen Evolution Reaction. ChemSusChem, 2021, 14, 4973-4984.	6.8	6
17	Palladium Nanoparticles Hardwired in Carbon Nanoreactors Enable Continually Increasing Electrocatalytic Activity During the Hydrogen Evolution Reaction. ChemSusChem, 2021, 14, 4849.	6.8	1
18	Automated self-optimisation of multi-step reaction and separation processes using machine learning. Chemical Engineering Journal, 2020, 384, 123340.	12.7	97

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19	Atomic mechanism of metal crystal nucleus formation in a single-walled carbon nanotube. Nature Chemistry, 2020, 12, 921-928.	13.6	58
20	Decoupling the relative rate of hydrogen uptake via convection and mass transfer by a single catalytic pellet in a scaled down trickle bed reactor. Chemical Engineering Journal, 2020, 394, 124290.	12.7	4
21	Self-optimising reactive extractions: towards the efficient development of multi-step continuous flow processes. Journal of Flow Chemistry, 2020, 10, 199-206.	1.9	20
22	Algorithms for the self-optimisation of chemical reactions. Reaction Chemistry and Engineering, 2019, 4, 1545-1554.	3.7	92
23	Direct Synthesis of Multiplexed Metalâ€Nanowireâ€Based Devices by Using Carbon Nanotubes as Vector Templates. Angewandte Chemie, 2019, 131, 10033-10037.	2.0	4
24	Zinc 1s Valence-to-Core X-ray Emission Spectroscopy of Halozincate Complexes. Journal of Physical Chemistry A, 2019, 123, 9552-9559.	2.5	18
25	Wallâ€•and Hybridisationâ€Selective Synthesis of Nitrogenâ€Doped Doubleâ€Walled Carbon Nanotubes. Angewandte Chemie, 2019, 131, 10382-10386.	2.0	2
26	Wallâ€•and Hybridisationâ€Selective Synthesis of Nitrogenâ€Doped Doubleâ€Walled Carbon Nanotubes. Angewandte Chemie - International Edition, 2019, 58, 10276-10280.	13.8	4
27	Direct Synthesis of Multiplexed Metalâ€Nanowireâ€Based Devices by Using Carbon Nanotubes as Vector Templates. Angewandte Chemie - International Edition, 2019, 58, 9928-9932.	13.8	10
28	Highly Selective and Solvent-Dependent Reduction of Nitrobenzene to N-Phenylhydroxylamine, Azoxybenzene, and Aniline Catalyzed by Phosphino-Modified Polymer Immobilized Ionic Liquid-Stabilized AuNPs. ACS Catalysis, 2019, 9, 4777-4791.	11.2	77
29	Synthesis of super bright indium phosphide colloidal quantum dots through thermal diffusion. Communications Chemistry, 2019, 2, .	4.5	20
30	A Hybridised Optimisation of an Automated Photochemical Continuous Flow Reactor. Chimia, 2019, 73, 817.	0.6	11
31	Oxygen, sulfur and selenium terminated single-walled heterocyclic carbon nanobelts (SWHNBs) as potential 3D organic semiconductors. Nanoscale, 2018, 10, 7639-7648.	5.6	7
32	Highly efficient aqueous phase reduction of nitroarenes catalyzed by phosphine-decorated polymer immobilized ionic liquid stabilized PdNPs. Catalysis Science and Technology, 2018, 8, 1454-1467.	4.1	63
33	All-Fullerene-Based Cells for Nonaqueous Redox Flow Batteries. Journal of the American Chemical Society, 2018, 140, 401-405.	13.7	62
34	Direct Correlation of Carbon Nanotube Nucleation and Growth with the Atomic Structure of Rhenium Nanocatalysts Stimulated and Imaged by the Electron Beam. Nano Letters, 2018, 18, 6334-6339.	9.1	14
35	Magnetically Recyclable Catalytic Carbon Nanoreactors. Advanced Functional Materials, 2018, 28, 1802869.	14.9	17
36	Heteroatom Donorâ€Decorated Polymerâ€Immobilized Ionic Liquid Stabilized Palladium Nanoparticles: Efficient Catalysts for Roomâ€Temperature Suzukiâ€Miyaura Crossâ€Coupling in Aqueous Media. Advanced Synthesis and Catalysis, 2018, 360, 3716-3731.	4.3	32

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37	Comparison of atomic scale dynamics for the middle and late transition metal nanocatalysts. Nature Communications, 2018, 9, 3382.	12.8	35
38	Formation of Nickel Clusters Wrapped in Carbon Cages: Toward New Endohedral Metallofullerene Synthesis. Nano Letters, 2017, 17, 1082-1089.	9.1	24
39	Highly efficient aqueous phase chemoselective hydrogenation of Î±,Î²-unsaturated aldehydes catalysed by phosphine-decorated polymer immobilized IL-stabilized PdNPs. Green Chemistry, 2017, 19, 1635-1641.	9.0	39
40	Stop-Frame Filming and Discovery of Reactions at the Single-Molecule Level by Transmission Electron Microscopy. ACS Nano, 2017, 11, 2509-2520.	14.6	46
41	Comparison of alkene hydrogenation in carbon nanoreactors of different diameters: probing the effects of nanoscale confinement on ruthenium nanoparticle catalysis. Journal of Materials Chemistry A, 2017, 5, 21467-21477.	10.3	17
42	A one-pot-one-reactant synthesis of platinum compounds at the nanoscale. Nanoscale, 2017, 9, 14385-14394.	5.6	22
43	NEXAFS spectroscopy of ionic liquids: experiments versus calculations. Physical Chemistry Chemical Physics, 2017, 19, 31156-31167.	2.8	16
44	Chemical Reactions of Molecules Promoted and Simultaneously Imaged by the Electron Beam in Transmission Electron Microscopy. Accounts of Chemical Research, 2017, 50, 1797-1807.	15.6	79
45	Atomic charges of sulfur in ionic liquids: experiments and calculations. Faraday Discussions, 2017, 206, 183-201.	3.2	20
46	Investigation of the Interactions and Bonding between Carbon and Group VIII Metals at the Atomic Scale. Small, 2016, 12, 1649-1657.	10.0	27
47	Chemical reactions at the graphitic step-edge: changes in product distribution of catalytic reactions as a tool to explore the environment within carbon nanoreactors. Nanoscale, 2016, 8, 11727-11737.	5.6	7
48	Direct Measurement of Electron Transfer in Nanoscale Hostâ€“Guest Systems: Metallocenes in Carbon Nanotubes. Chemistry - A European Journal, 2016, 22, 13540-13549.	3.3	18
49	Carbon Nanotubes as Electrically Active Nanoreactors for Multi-Step Inorganic Synthesis: Sequential Transformations of Molecules to Nanoclusters and Nanoclusters to Nanoribbons. Journal of the American Chemical Society, 2016, 138, 8175-8183.	13.7	68
50	Stabilising the lowest energy charge-separated state in a {metal chromophore â€“ fullerene} assembly: a tuneable panchromatic absorbing donorâ€“acceptor triad. Chemical Science, 2016, 7, 5908-5921.	7.4	15
51	Transmission Electron Microscopy: Isotope Substitution Extends the Lifetime of Organic Molecules in Transmission Electron Microscopy (Small 5/2015). Small, 2015, 11, 510-510.	10.0	4
52	Activation and Deactivation of a Robust Immobilized Cp*Ir-Transfer Hydrogenation Catalyst: A Multielement in Situ X-ray Absorption Spectroscopy Study. Journal of the American Chemical Society, 2015, 137, 4151-4157.	13.7	19
53	Harnessing the Synergistic and Complementary Properties of Fullerene and Transition-Metal Compounds for Nanomaterial Applications. Chemical Reviews, 2015, 115, 11301-11351.	47.7	118
54	Switching intermolecular interactions by confinement in carbon nanotubes. Chemical Communications, 2015, 51, 648-651.	4.1	5

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55	Isotope Substitution Extends the Lifetime of Organic Molecules in Transmission Electron Microscopy. Small, 2015, 11, 622-629.	10.0	39
56	Tuning the interactions between electron spins in fullerene-based triad systems. Beilstein Journal of Organic Chemistry, 2014, 10, 332-343.	2.2	8
57	Single-walled carbon nanotubes as nano-electrode and nano-reactor to control the pathways of a redox reaction. Chemical Communications, 2014, 50, 14338-14340.	4.1	15
58	Creating and testing carbon interfaces â€“ integrating oligomeric phthalocyanines onto single walled carbon nanotubes. Faraday Discussions, 2014, 172, 61-79.	3.2	7
59	Fullerene-driven encapsulation of a luminescent Eu(iii) complex in carbon nanotubes. Nanoscale, 2014, 6, 2887.	5.6	9
60	New Pathway for Heterogenization of Molecular Catalysts by Non-covalent Interactions with Carbon Nanoreactors. Chemistry of Materials, 2014, 26, 6461-6466.	6.7	23
61	The atomistic mechanism of carbon nanotube cutting catalyzed by nickel under an electron beam. Nanoscale, 2014, 6, 14877-14890.	5.6	19
62	Catalytic nanoreactors in continuous flow: hydrogenation inside single-walled carbon nanotubes using supercritical CO₂. Chemical Communications, 2014, 50, 5200-5202.	4.1	27
63	Electronic Property Modification of Singleâ€Walled Carbon Nanotubes by Encapsulation of Sulfurâ€Terminated Graphene Nanoribbons. Small, 2014, 10, 5077-5086.	10.0	9
64	Interactions and Chemical Transformations of Coronene Inside and Outside Carbon Nanotubes. Small, 2014, 10, 1369-1378.	10.0	33
65	Transition Metal Complexes of a Salenâ€“Fullerene Diad: Redox and Catalytically Active Nanostructures for Delivery of Metals in Nanotubes. Chemistry - A European Journal, 2013, 19, 11999-12008.	3.3	15
66	The effect of carbon nanotubes on chiral chemical reactions. Chemical Physics Letters, 2013, 557, 10-14.	2.6	17
67	Supercritical CO2Mediated Incorporation of Pd onto Templated Carbons: A Route to Optimizing the Pd Particle Size and Hydrogen Uptake Density. ACS Applied Materials & Interfaces, 2013, 5, 5639-5647.	8.0	24
68	Interactions and Reactions of Transition Metal Clusters with the Interior of Single-Walled Carbon Nanotubes Imaged at the Atomic Scale. Journal of the American Chemical Society, 2012, 134, 3073-3079.	13.7	83
69	Engineering molecular chains in carbon nanotubes. Nanoscale, 2012, 4, 7540.	5.6	6
70	Assembly, Growth, and Catalytic Activity of Gold Nanoparticles in Hollow Carbon Nanofibers. ACS Nano, 2012, 6, 2000-2007.	14.6	83
71	Size, Structure, and Helical Twist of Graphene Nanoribbons Controlled by Confinement in Carbon Nanotubes. ACS Nano, 2012, 6, 3943-3953.	14.6	134
72	Formation of uncapped nanometre-sized metal particles by decomposition of metal carbonyls in carbon nanotubes. Chemical Science, 2012, 3, 1919.	7.4	49

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73	An efficient route to the synthesis of symmetric and asymmetric diastereomerically pure fullerene triads. Tetrahedron, 2012, 68, 4976-4985.	1.9	5
74	Encapsulation of transition metal atoms into carbon nanotubes: a supramolecular approach. Chemical Communications, 2011, 47, 5696.	4.1	24
75	Functionalized Fullerenes in Self-Assembled Monolayers. Langmuir, 2011, 27, 10977-10985.	3.5	45
76	Self-assembly of a sulphur-terminated graphene nanoribbon within a single-walled carbon nanotube. Nature Materials, 2011, 10, 687-692.	27.5	253
77	Reactions of the inner surface of carbon nanotubes and nanoprotrusion processes imaged at the atomic scale. Nature Chemistry, 2011, 3, 732-737.	13.6	83
78	A Piggyback Ride for Transition Metals: Encapsulation of Exohedral Metallofullerenes in Carbon Nanotubes. Chemistry - A European Journal, 2011, 17, 668-674.	3.3	34
79	Multiâ€Electronâ€Acceptor Dyad and Triad Systems Based on Perylene Bisimides and Fullerenes. Chemistry - A European Journal, 2011, 17, 3759-3767.	3.3	36
80	The Role of Molecular Clusters in the Filling of Carbon Nanotubes. ACS Nano, 2010, 4, 5203-5210.	14.6	34
81	Polyareneâ€Functionalized Fullerenes in Carbon Nanotubes: Towards Controlled Geometry of Molecular Chains. Small, 2008, 4, 2262-2270.	10.0	21
82	Azafullerenes Encapsulated within Single-Walled Carbon Nanotubes. Journal of the American Chemical Society, 2008, 130, 6062-6063.	13.7	47
83	Toward Controlled Spacing in One-Dimensional Molecular Chains:Â Alkyl-Chain-Functionalized Fullerenes in Carbon Nanotubes. Journal of the American Chemical Society, 2007, 129, 8609-8614.	13.7	51
84	Highly efficient and selective aqueous phase hydrogenation of aryl ketones, aldehydes, furfural and levulinic acid and its ethyl ester catalyzed by phosphine oxide-decorated polymer immobilized ionic liquid-stabilized ruthenium nanoparticles. Catalysis Science and Technology, 0, , .	4.1	6