Justin M Chalker

List of Publications by Year in Descending Order

77 papers	4,730 citations	33 h-index	68 g-index
144 ext. papers	5,558 ext. citations	7.9 avg, IF	5.98 L-index

#	Paper	IF	Citations
77	Stretchable and Durable Inverse Vulcanized Polymers with Chemical and Thermal Recycling. *Chemistry of Materials*, **2022**, 34, 1167-1178	9.6	5
76	Vortex fluidic induced mass transfer across immiscible phases.. *Chemical Science*, **2022**, 13, 3375-3385	9.4	1
75	Inverse Vulcanisation of canola oil as a route to recyclable chopped carbon fibre composites. *Sustainable Materials and Technologies*, **2022**, 32, e00400	5.3	0
74	Trace Amine-Associated Receptor 1 (TAAR1): Molecular and Clinical Insights for the Treatment of Schizophrenia and Related Comorbidities.. *ACS Pharmacology and Translational Science*, **2022**, 5, 183-188	5.9	1
73	Insulating Composites Made from Sulfur, Canola Oil, and Wool*. *ChemSusChem*, **2021**, 14, 2352-2359	8.3	6
72	Polymers Made by Inverse Vulcanization for Use as Mercury Sorbents. *Organic Materials*, **2021**, 03, 362-373	1.9	10
71	Reaction of [F]Fluoride at Heteroatoms and Metals for Imaging of Peptides and Proteins by Positron Emission Tomography. *Frontiers in Chemistry*, **2021**, 9, 687678	5	5
70	A critical evaluation of probes for cysteine sulfenic acid. *Current Opinion in Chemical Biology*, **2021**, 60, 55-65	9.7	9
69	Azide-alkyne cycloadditions in a vortex fluidic device: enhanced "on water" effects and catalysis in flow. *Chemical Communications*, **2021**, 57, 659-662	5.8	4
68	Sub-micron moulding topological mass transport regimes in angled vortex fluidic flow. *Nanoscale Advances*, **2021**, 3, 3064-3075	5.1	11
67	Carbonisation of a polymer made from sulfur and canola oil. *Chemical Communications*, **2021**, 57, 6296-6299	5.9	2
66	A fairer way to compare researchers at any career stage and in any discipline using open-access citation data. *PLoS ONE*, **2021**, 16, e0257141	3.7	0
65	Reactive Compression Molding Post-Inverse Vulcanization: A Method to Assemble, Recycle, and Repurpose Sulfur Polymers and Composites. *Chemistry - A European Journal*, **2020**, 26, 10035-10044	4.8	29
64	Chemically induced repair, adhesion, and recycling of polymers made by inverse vulcanization. *Chemical Science*, **2020**, 11, 5537-5546	9.4	37
63	Mercury Sorbents Made By Inverse Vulcanization of Sustainable Triglycerides: The Plant Oil Structure Influences the Rate of Mercury Removal from Water. *Advanced Sustainable Systems*, **2020**, 4, 1900111	5.9	37
62	Vortex Fluidic Ethenolysis, Integrating a Rapid Quench of Ruthenium Olefin Metathesis Catalysts. *Australian Journal of Chemistry*, **2020**, 73, 1138	1.2	0
61	Proteome-Wide Survey of Cysteine Oxidation by Using a Norbornene Probe. *ChemBioChem*, **2020**, 21, 1329-1334	3.8	8

60	Confining a spent lead sorbent in a polymer made by inverse vulcanization prevents leaching. *Sustainable Materials and Technologies*, **2020**, 26, e00222	5.3	5
59	Sulfur polymer composites as controlled-release fertilisers. *Organic and Biomolecular Chemistry*, **2019**, 17, 1929-1936	3.9	65
58	Crosslinker Copolymerization for Property Control in Inverse Vulcanization. *Chemistry - A European Journal*, **2019**, 25, 10433-10440	4.8	51
57	Polymer Supported Carbon for Safe and Effective Remediation of PFOA- and PFOS-Contaminated Water. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 11044-11049	8.3	27
56	Synthesis and Applications of Polymers Made by Inverse Vulcanization. *Topics in Current Chemistry*, **2019**, 377, 16	7.2	42
55	Norbornene Probes for the Detection of Cysteine Sulfenic Acid in Cells. *ACS Chemical Biology*, **2019**, 14, 594-598	4.9	25
54	Synthesis and Applications of Polymers Made by Inverse Vulcanization. *Topics in Current Chemistry Collections*, **2019**, 125-151	1.8	3
53	Chemoselective and Continuous Flow Hydrogenations in Thin Films Using a Palladium Nanoparticle Catalyst Embedded in Cellulose Paper.. *ACS Applied Bio Materials*, **2019**, 2, 488-494	4.1	13
52	Chemo- and Regioselective Lysine Modification on Native Proteins. *Journal of the American Chemical Society*, **2018**, 140, 4004-4017	16.4	145
51	Sustainable Polysulfides for Oil Spill Remediation: Repurposing Industrial Waste for Environmental Benefit. *Advanced Sustainable Systems*, **2018**, 2, 1800024	5.9	77
50	The Mercury Problem in Artisanal and Small-Scale Gold Mining. *Chemistry - A European Journal*, **2018**, 24, 6905-6916	4.8	154
49	Polysulfides made from re-purposed waste are sustainable materials for removing iron from water.. *RSC Advances*, **2018**, 8, 1232-1236	3.7	49
48	Frontispiece: The Mercury Problem in Artisanal and Small-Scale Gold Mining. *Chemistry - A European Journal*, **2018**, 24,	4.8	2
47	Chemical methods for mapping cysteine oxidation. *Chemical Society Reviews*, **2018**, 47, 231-268	58.5	107
46	Organic oxidations promoted in vortex driven thin films under continuous flow. *Green Chemistry*, **2018**, 20, 118-124	10	22
45	Norbornene probes for the study of cysteine oxidation. *Tetrahedron*, **2018**, 74, 1220-1228	2.4	20
44	A silicon-labelled amino acid suitable for late-stage fluorination and unexpected oxidative cleavage reactions in the preparation of a key intermediate in the Strecker synthesis. *Peptide Science*, **2018**, 110, e24069	3	1
43	Green chemistry and polymers made from sulfur. *Green Chemistry*, **2017**, 19, 2748-2761	10	186

42	Metal-Mediated Bioconjugation **2017**, 231-270		14
41	Laying Waste to Mercury: Inexpensive Sorbents Made from Sulfur and Recycled Cooking Oils. *Chemistry - A European Journal*, **2017**, 23, 16219-16230	4.8	123
40	Precise Probing of Residue Roles by Post-Translational β,N Aza-Michael Mutagenesis in Enzyme Active Sites. *ACS Central Science*, **2017**, 3, 1168-1173	16.8	20
39	Sulfur-Limonene Polysulfide: A Material Synthesized Entirely from Industrial By-Products and Its Use in Removing Toxic Metals from Water and Soil. *Angewandte Chemie - International Edition*, **2016**, 55, 1714-8	16.4	158
38	Sulfur-Limonene Polysulfide: A Material Synthesized Entirely from Industrial By-Products and Its Use in Removing Toxic Metals from Water and Soil. *Angewandte Chemie*, **2016**, 128, 1746-1750	3.6	24
37	Posttranslational mutagenesis: A chemical strategy for exploring protein side-chain diversity. *Science*, **2016**, 354,	33.3	182
36	Allyl sulphides in olefin metathesis: catalyst considerations and traceless promotion of ring-closing metathesis. *Chemical Communications*, **2015**, 51, 515-8	5.8	10
35	Rapid Vortex Fluidics: Continuous Flow Synthesis of Amides and Local Anesthetic Lidocaine. *Chemistry - A European Journal*, **2015**, 21, 10660-5	4.8	48
34	Allyl Sulfides: Reactive Substrates for Olefin Metathesis. *Australian Journal of Chemistry*, **2015**, 68, 1801	1.2	11
33	Halide inhibition of the copper-catalysed azide-alkyne cycloaddition. *Organic and Biomolecular Chemistry*, **2015**, 13, 1974-8	3.9	12
32	High density growth of ZnO nanorods on cotton fabric enables access to a flame resistant composite. *RSC Advances*, **2014**, 4, 14582	3.7	18
31	Facile preparation of ammonium alginate-derived nanofibers carrying diverse therapeutic cargo. *Chemical Communications*, **2014**, 50, 156-8	5.8	17
30	Melamine and melamine-formaldehyde polymers as ligands for palladium and application to Suzuki-Miyaura cross-coupling reactions in sustainable solvents. *Journal of Organic Chemistry*, **2014**, 79, 2094-104	4.2	46
29	An Operationally Simple Aqueous Suzuki–Miyaura Cross-Coupling Reaction for an Undergraduate Organic Chemistry Laboratory. *Journal of Chemical Education*, **2013**, 90, 1509-1513	2.4	29
28	Prospects in the total synthesis of protein therapeutics. *Chemical Biology and Drug Design*, **2013**, 81, 122-35	2.9	22
27	Investigation of cotton functionalized with ZnO nanorods and its interaction with E. coli. *RSC Advances*, **2013**, 3, 10662	3.7	24
26	Conversion of cysteine into dehydroalanine enables access to synthetic histones bearing diverse post-translational modifications. *Angewandte Chemie - International Edition*, **2012**, 51, 1835-9	16.4	146
25	Conversion of Cysteine into Dehydroalanine Enables Access to Synthetic Histones Bearing Diverse Post-Translational Modifications. *Angewandte Chemie*, **2012**, 124, 1871-1875	3.6	41

24	Methods for converting cysteine to dehydroalanine on peptides and proteins. *Chemical Science*, **2011**, 2, 1666	9.4	241
23	A "tag-and-modify" approach to site-selective protein modification. *Accounts of Chemical Research*, **2011**, 44, 730-41	24.3	287
22	A Coordinated Synthesis and Conjugation Strategy for the Preparation of Homogeneous Glycoconjugate Vaccine Candidates. *Angewandte Chemie*, **2011**, 123, 4213-4218	3.6	11
21	A coordinated synthesis and conjugation strategy for the preparation of homogeneous glycoconjugate vaccine candidates. *Angewandte Chemie - International Edition*, **2011**, 50, 4127-32	16.4	64
20	Synthesis of (-)-□kainic acid via TMSCl-promoted Pd-catalyzed zinc-ene cyclization of an allyl acetate. *Journal of Organic Chemistry*, **2011**, 76, 7912-7	4.2	22
19	Olefin cross-metathesis on proteins: investigation of allylic chalcogen effects and guiding principles in metathesis partner selection. *Journal of the American Chemical Society*, **2010**, 132, 16805-11	16.4	146
18	Analysis of the dispersity in carbohydrate loading of synthetic glycoproteins using MALDI-TOF mass spectrometry. *Chemical Communications*, **2010**, 46, 9119-21	5.8	17
17	Site-selective chemoenzymatic construction of synthetic glycoproteins using endoglycosidases. *Chemical Science*, **2010**, 1, 709	9.4	59
16	Chemical Protein Modification **2010**, 59-91		10
15	Chemical mutagenesis: selective post-expression interconversion of protein amino acid residues. *Current Opinion in Chemical Biology*, **2010**, 14, 781-9	9.7	41
14	Safe and Scalable Preparation of Barluenga□s Reagent **2010**, 288-298		9
13	Olefin metathesis for site-selective protein modification. *ChemBioChem*, **2009**, 10, 959-69	3.8	135
12	Chemical modification of proteins at cysteine: opportunities in chemistry and biology. *Chemistry - an Asian Journal*, **2009**, 4, 630-40	4.5	438
11	A convenient catalyst for aqueous and protein Suzuki-Miyaura cross-coupling. *Journal of the American Chemical Society*, **2009**, 131, 16346-7	16.4	266
10	Enabling olefin metathesis on proteins: chemical methods for installation of S-allyl cysteine. *Chemical Communications*, **2009**, 3714-6	5.8	71
9	Facile conversion of cysteine and alkyl cysteines to dehydroalanine on protein surfaces: versatile and switchable access to functionalized proteins. *Journal of the American Chemical Society*, **2008**, 130, 5052-3	16.4	280
8	Chemical site-selective prenylation of proteins. *Molecular BioSystems*, **2008**, 4, 558-61		21
7	From disulfide- to thioether-linked glycoproteins. *Angewandte Chemie - International Edition*, **2008**, 47, 2244-7	16.4	111

6	Allyl sulfides are privileged substrates in aqueous cross-metathesis: application to site-selective protein modification. *Journal of the American Chemical Society*, **2008**, 130, 9642-3	16.4	270
5	Chemical approaches to mapping the function of post-translational modifications. *FEBS Journal*, **2008**, 275, 1949-59	5.7	39
4	Two syntheses of (-)-kainic acid via highly stereoselective zinc-ene cyclizations. *Organic Letters*, **2007**, 9, 3825-8	6.2	31
3	Allyl sulfones as precursors to allylzincs in the palladium-catalyzed zinc-ene cyclization: highly efficient synthesis of enantiopure (-)-erythrodiene. *Organic Letters*, **2005**, 7, 3637-40	6.2	35
2	Processes for coating surfaces with a copolymer made from sulfur and dicyclopentadiene. *Polymer Chemistry*,	4.9	2
1	Chemically Activated S?S Metathesis for Adhesive-Free Bonding of Polysulfide Surfaces. *Macromolecular Chemistry and Physics*,2100333	2.6	1