Nanoscale synthesis and affinity ranking

Nature 557, 228-232 DOI: 10.1038/s41586-018-0056-8

Citation Report

CITATION REDORT

#	Article	IF	CITATIONS
1	AIR-Chem: Authentic Intelligent Robotics for Chemistry. Journal of Physical Chemistry A, 2018, 122, 9142-9148.	1.1	36
2	Mapping the dark space of chemical reactions with extended nanomole synthesis and MALDI-TOF MS. Science, 2018, 361, .	6.0	126
3	Reaction miniaturization in eco-friendly solvents. Current Opinion in Green and Sustainable Chemistry, 2018, 11, 91-98.	3.2	21
4	Streamlining bioactive molecular discovery through integration and automation. Nature Reviews Chemistry, 2018, 2, 174-183.	13.8	31
5	Expanding the medicinal chemistry synthetic toolbox. Nature Reviews Drug Discovery, 2018, 17, 709-727.	21.5	391
6	Advances with weak affinity chromatography for fragment screening. Expert Opinion on Drug Discovery, 2019, 14, 1125-1135.	2.5	8
7	Holistic prediction of enantioselectivity in asymmetric catalysis. Nature, 2019, 571, 343-348.	13.7	190
8	Use of a Droplet Platform To Optimize Pd-Catalyzed C–N Coupling Reactions Promoted by Organic Bases. Organic Process Research and Development, 2019, 23, 1594-1601.	1.3	50
9	Quick Building Blocks (QBB): An Innovative and Efficient Business Model To Speed Medicinal Chemistry Analog Synthesis. ACS Medicinal Chemistry Letters, 2019, 10, 1104-1109.	1.3	18
11	Automated and accelerated synthesis of indole derivatives on a nano-scale. Green Chemistry, 2019, 21, 225-232.	4.6	36
12	Chemical Diversification Based on Substrate Promiscuity of a Standalone Adenylation Domain in a Reconstituted NRPS System. ACS Chemical Biology, 2019, 14, 256-265.	1.6	15
13	Pharmaceutical diversification via palladium oxidative addition complexes. Science, 2019, 363, 405-408.	6.0	112
14	Idea2Data: Toward a New Paradigm for Drug Discovery. ACS Medicinal Chemistry Letters, 2019, 10, 278-286.	1.3	35
15	Therapeutic Potential and Biological Applications of Cordycepin and Metabolic Mechanisms in Cordycepin-Producing Fungi. Molecules, 2019, 24, 2231.	1.7	61
16	The digitization of organic synthesis. Nature, 2019, 570, 175-181.	13.7	69
17	RNA-ALIS: Methodology for screening soluble RNAs as small molecule targets using ALIS affinity-selection mass spectrometry. Methods, 2019, 167, 28-38.	1.9	19
18	Closing the Loop: Developing an Integrated Design, Make, and Test Platform for Discovery. ACS Medicinal Chemistry Letters, 2019, 10, 848-856.	1.3	24
19	Accelerating the Throughput of Affinity Mass Spectrometry-Based Ligand Screening toward a G Protein-Coupled Receptor. Analytical Chemistry, 2019, 91, 8162-8169.	3.2	25

#	Article	IF	Citations
20	Rapid analytical characterization of high-throughput chemistry screens utilizing desorption electrospray ionization mass spectrometry. Reaction Chemistry and Engineering, 2019, 4, 1589-1594.	1.9	23
21	Practical and regioselective amination of arenes using alkyl amines. Nature Chemistry, 2019, 11, 426-433.	6.6	181
22	Catalysis in medicinal chemistry. Reaction Chemistry and Engineering, 2019, 4, 1530-1535.	1.9	13
23	Microscale synthesis of multiblock copolymers using ultrafast RAFT polymerisation. Polymer Chemistry, 2019, 10, 1186-1191.	1.9	25
24	Acoustic Droplet Ejection Enabled Automated Reaction Scouting. ACS Central Science, 2019, 5, 451-457.	5.3	40
25	An automated platform for the enzyme-mediated assembly of complex oligosaccharides. Nature Chemistry, 2019, 11, 229-236.	6.6	124
26	Reactive Metal–Biopolymer Interactions for Semihydrogenation of Acetylene. ACS Catalysis, 2019, 9, 11146-11152.	5.5	22
27	Hochdurchsatzstrategien zur Entdeckung und Optimierung katalytischer Reaktionen. Angewandte Chemie, 2019, 131, 7254-7267.	1.6	16
28	High Throughput Strategies for the Discovery and Optimization of Catalytic Reactions. Angewandte Chemie - International Edition, 2019, 58, 7180-7191.	7.2	95
29	The importance of synthetic chemistry in the pharmaceutical industry. Science, 2019, 363, .	6.0	312
30	The power and accessibility of high-throughput methods for catalysis research. Nature Catalysis, 2019, 2, 2-4.	16.1	65
31	Autonomous Discovery in the Chemical Sciences Partâ€I: Progress. Angewandte Chemie - International Edition, 2020, 59, 22858-22893.	7.2	180
32	Autonomous Discovery in the Chemical Sciences Partâ€II: Outlook. Angewandte Chemie - International Edition, 2020, 59, 23414-23436.	7.2	139
33	Autonome Entdeckung in den chemischen Wissenschaften, Teil l: Fortschritt. Angewandte Chemie, 2020, 132, 23054-23091.	1.6	11
34	Autonome Entdeckung in den chemischen Wissenschaften, Teil II: Ausblick. Angewandte Chemie, 2020, 132, 23620-23643.	1.6	4
35	Rethinking drug design in the artificial intelligence era. Nature Reviews Drug Discovery, 2020, 19, 353-364.	21.5	394
36	Highâ€Throughput Labelâ€Free Enzymatic Assays Using Desorption Electrosprayâ€lonization Mass Spectrometry. Angewandte Chemie - International Edition, 2020, 59, 20459-20464.	7.2	56
37	High-Throughput Screening: today's biochemical and cell-based approaches. Drug Discovery Today, 2020, 25, 1807-1821.	3.2	119

	C	CITATION REPORT	
#	Article	IF	Citations
38	Digitising chemical synthesis in automated and robotic flow. Chemical Science, 2020, 11, 11973-11	988. 3.7	26
39	Highâ€Throughput Labelâ€Free Enzymatic Assays Using Desorption Electrosprayâ€lonization Mass Spectrometry. Angewandte Chemie, 2020, 132, 20639-20644.	1.6	13
40	Solving the Competitive Binding Equilibria between Many Ligands: Application to High-Throughput Screening and Affinity Optimization. Analytical Chemistry, 2020, 92, 12630-12638.	3.2	3
41	A droplet microfluidic platform for high-throughput photochemical reaction discovery. Nature Communications, 2020, 11, 6202.	5.8	96
42	Sulfur(VI) Fluoride Exchange (SuFEx)-Enabled High-Throughput Medicinal Chemistry. Journal of the American Chemical Society, 2020, 142, 10899-10904.	6.6	105
43	Activityâ€Directed Synthesis of Inhibitors of the p53/ h DM2 Protein–Protein Interaction. Chemist European Journal, 2020, 26, 10682-10689.	ry - A 1.7	11
44	Late-Stage Lead Diversification Coupled with Quantitative Nuclear Magnetic Resonance Spectroscop to Identify New Structure–Activity Relationship Vectors at Nanomole-Scale Synthesis: Application Loratadine, a Human Histamine H ₁ Receptor Inverse Agonist. Journal of Medicinal Chemistry, 2020, 63, 7268-7292.		21
45	Cobalt-catalysed C–H methylation for late-stage drug diversification. Nature Chemistry, 2020, 12, 511-519.	6.6	154
46	Fully Automated Chemical Synthesis: Toward the Universal Synthesizer. Organic Process Research ar Development, 2020, 24, 2064-2077.	nd 1.3	48
47	A strategy combining machine learning and multiscale calculation to predict tensile strength for pearlitic steel wires with industrial data. Scripta Materialia, 2020, 186, 272-277.	2.6	38
48	Hyperpolarization-Enhanced NMR Spectroscopy with Femtomole Sensitivity Using Quantum Defects Diamond. Physical Review X, 2020, 10, .	s in 2.8	34
49	A map of the amine–carboxylic acid coupling system. Nature, 2020, 580, 71-75.	13.7	67
50	Discovery of Novel Peptidomimetic Boronate ClpP Inhibitors with Noncanonical Enzyme Mechanism Potent Virulence Blockers <i>in Vitro</i> and <i>in Vivo</i> . Journal of Medicinal Chemistry, 2020, 6 3104-3119.		16
51	The Quest for the Ideal Base: Rational Design of a Nickel Precatalyst Enables Mild, Homogeneous Câ Cross-Coupling. Journal of the American Chemical Society, 2020, 142, 4500-4507.	€"N 6.6	77
52	Toward "Onâ€Ðemand―Materials Synthesis and Scientific Discovery through Intelligent Robots Advanced Science, 2020, 7, 1901957.	5. 5.6	42
53	Automated, Accelerated Nanoscale Synthesis of Iminopyrrolidines. Angewandte Chemie, 2020, 132, 12523-12527.	1.6	3
54	Automated, Accelerated Nanoscale Synthesis of Iminopyrrolidines. Angewandte Chemie - Internatior Edition, 2020, 59, 12423-12427.	nal 7.2	17
55	A Novel G Protein-Biased and Subtype-Selective Agonist for a G Protein-Coupled Receptor Discovered from Screening Herbal Extracts. ACS Central Science, 2020, 6, 213-225.	d 5.3	25

#	Article	IF	CITATIONS
56	Exploring new targets and chemical space with affinity selection-mass spectrometry. Nature Reviews Chemistry, 2021, 5, 62-71.	13.8	45
57	Acoustic Ejection/Full-Scan Mass Spectrometry Analysis for High-Throughput Compound Quality Control. SLAS Technology, 2021, 26, 178-188.	1.0	22
58	Computational Mapping of Dirhodium(II) Catalysts. Chemistry - A European Journal, 2021, 27, 2402-2409.	1.7	10
59	Organic Superbases in Recent Synthetic Methodology Research. Chemistry - A European Journal, 2021, 27, 4216-4229.	1.7	65
60	Affinity selection–mass spectrometry for the discovery of pharmacologically active compounds from combinatorial libraries and natural products. Journal of Mass Spectrometry, 2021, 56, e4647.	0.7	28
61	LABELâ€FREE BIOâ€AFFINITY MASS SPECTROMETRY FOR SCREENING AND LOCATING BIOACTIVE MOLECULES. N Spectrometry Reviews, 2021, 40, 53-71.	1ass 2.8	10
62	Nanoscale, automated, high throughput synthesis and screening for the accelerated discovery of protein modifiers. RSC Medicinal Chemistry, 2021, 12, 809-818.	1.7	20
63	Automated and enabling technologies for medicinal chemistry. Progress in Medicinal Chemistry, 2021, 60, 191-272.	4.1	4
64	Synthesis of HDAC Inhibitor Libraries via Microscale Workflow. ACS Medicinal Chemistry Letters, 2021, 12, 337-342.	1.3	10
65	Automation and computer-assisted planning for chemical synthesis. Nature Reviews Methods Primers, 2021, 1, .	11.8	83
66	Flow parallel synthesizer for multiplex synthesis of aryl diazonium libraries via efficient parameter screening. Communications Chemistry, 2021, 4, .	2.0	15
67	Ultrahigh-Throughput Experimentation for Information-Rich Chemical Synthesis. Accounts of Chemical Research, 2021, 54, 2337-2346.	7.6	40
68	Lessons in Organic Fluorescent Probe Discovery. ChemBioChem, 2021, 22, 3109-3139.	1.3	31
69	Combining Highâ€Throughput Synthesis and Highâ€Throughput Protein Crystallography for Accelerated Hit Identification. Angewandte Chemie - International Edition, 2021, 60, 18231-18239.	7.2	19
70	Combining Highâ€Throughput Synthesis and Highâ€Throughput Protein Crystallography for Accelerated Hit Identification. Angewandte Chemie, 2021, 133, 18379-18387.	1.6	1
71	Late-stage C–H functionalization offers new opportunities in drug discovery. Nature Reviews Chemistry, 2021, 5, 522-545.	13.8	341
72	Chemputation and the Standardization of Chemical Informatics. Jacs Au, 2021, 1, 1572-1587.	3.6	47
73	Picomoleâ€Scale Synthesis and Screening of Macrocyclic Compound Libraries by Acoustic Liquid Transfer, Angewandte Chemie - International Edition, 2021, 60, 21702-21707	7.2	14

ARTICLE IF CITATIONS # Picomoleâ€Scale Synthesis and Screening of Macrocyclic Compound Libraries by Acoustic Liquid Transfer. Angewandte Chemie, 2021, 133, 21870-21875. 75 1.6 2 Towards Dataâ€Driven Design of Asymmetric Hydrogenation of Olefins: Database and Hierarchical Learning. Angewandte Chemie, 2021, 133, 22986-22993. 1.6 Towards Dataâ€Driven Design of Asymmetric Hydrogenation of Olefins: Database and Hierarchical 77 7.2 21 Learning. Angewandte Chemie - International Edition, 2021, 60, 22804-22811. Nanomole-scaled high-throughput chemistry plus direct bioautography on the same chromatography 78 plate for drug discovery. Analytica Chimica Ácta, 2021, 1182, 338950. G protein-coupled receptors: structure- and function-based drug discovery. Signal Transduction and 79 7.1 241 Targeted Therapy, 2021, 6, 7. A survey of applications of tetrahydropyrrolo-3,4-azoles and tetrahydropyrrolo-2,3-azoles in medicinal chemistry. Advances in Heterocyclic Chemistry, 2021, , 31-100. Chapter 6. A Prediction of Future States: Al-powered Chemical Innovation for Defense Applications. 81 0.7 1 RSC Theoretical and Computational Chemistry Series, 2020, , 136-168. Discovery of Inhibitors for Mycobacterium Tuberculosis Peptide Deformylase Based on Virtual 84 1.4 Screening in Silico. Molecular Informatics, 2021, , 2100002. Tunable and Practical Homogeneous Organic Reductants for Cross-Electrophile Coupling. Journal of 85 23 6.6 the American Chemical Society, 2021, 143, 21024-21036. Multiplexed Smallâ€Moleculeâ€Ligand Binding Assays by Affinity Labeling and DNA Sequence Analysis**. 7.2 Angewandte Chemie - International Edition, 2022, 61, . An update of label-free protein target identification methods for natural active products. 87 4.6 13 Theranostics, 2022, 12, 1829-1854. Amino-oxetanes as amide isosteres by an alternative defluorosulfonylative coupling of sulfonyl 6.6 fluorides. Nature Chemistry, 2022, 14, 160-169. Automated pipeline for superalloy data by text mining. Npj Computational Materials, 2022, 8, . 89 3.5 25 Towards 4th industrial revolution efficient and sustainable continuous flow manufacturing of active pharmaceutical ingredients. Reaction Chemistry and Engineering, 2022, 7, 214-244 Multiplexed Smallâ€Moleculeâ€Ligand Binding Assays by Affinity Labeling and DNA Sequence Analysis**. 91 1.6 4 Angewandte Chemie, 2022, 134, . Predicting reaction conditions from limited data through active transfer learning. Chemical Science, 2022, 13, 6655-6668. Design of Ni-based turbine disc superalloys with improved yield strength using machine learning. 93 1.7 5 Journal of Materials Science, 2022, 57, 10379-10394. Homogeneous Organic Electron Donors in Nickel-Catalyzed Reductive Transformations. Journal of 94 Organic Chemistry, 2022, 87, 7589-7609.

#	Article	IF	CITATIONS
95	Direct-to-Biology Accelerates PROTAC Synthesis and the Evaluation of Linker Effects on Permeability and Degradation. ACS Medicinal Chemistry Letters, 2022, 13, 1182-1190.	1.3	41
96	Thiocyanatoarylation of Methyl Vinyl Ketone under Meerwein Conditions for the Synthesis of 2-Aminothiazole-Based Heterocyclic Systems. Organic Letters, 2022, 24, 4575-4579.	2.4	8
97	Accelerated Identification of Cell Active KRAS Inhibitory Macrocyclic Peptides using Mixture Libraries and Automated Ligand Identification System (ALIS) Technology. Journal of Medicinal Chemistry, 2022, 65, 8961-8974.	2.9	7
98	Synthesis and direct assay of large macrocycle diversities by combinatorial late-stage modification at picomole scale. Nature Communications, 2022, 13, .	5.8	14
99	Tricyclic Aza-Andrographolide Derivatives from Late-Stage Hydroamination and Their Anti-human Coronavirus (Anti-HCoV) Activity. ACS Omega, 2022, 7, 24824-24837.	1.6	1
100	Development of copper-catalyzed deaminative esterification using high-throughput experimentation. Communications Chemistry, 2022, 5, .	2.0	5
101	Optimization of Covalent MKK7 Inhibitors <i>via</i> Crude Nanomole-Scale Libraries. Journal of Medicinal Chemistry, 2022, 65, 10341-10356.	2.9	6
102	Integrated and automated high-throughput purification of libraries on microscale. SLAS Technology, 2022, 27, 350-360.	1.0	4
103	Automated stopped-flow library synthesis for rapid optimisation and machine learning directed experimentation. Chemical Science, 2022, 13, 12087-12099.	3.7	12
104	Synthesis and Solid-State X-ray Structure of the Mononuclear Palladium(II) Complex Based on 1,2,3-Triazole Ligand. Crystals, 2022, 12, 1335.	1.0	0
106	Implementation of High Throughput Experimentation across Medicinal Chemistry, Process Chemistry and Materials Science. ACS Symposium Series, 0, , 23-33.	0.5	0
107	â€~Chemistry at the speed of sound': automated 1536-well nanoscale synthesis of 16 scaffolds in parallel. Green Chemistry, 2023, 25, 1380-1394.	4.6	7
108	Progress of Artificial Intelligence in Drug Synthesis and Prospect of Its Application in Nitrification of Energetic Materials. Molecules, 2023, 28, 1900.	1.7	0
109	A Brief Introduction to Chemical Reaction Optimization. Chemical Reviews, 2023, 123, 3089-3126.	23.0	58
110	Highâ€Throughput Optimization of Photochemical Reactions using Segmentedâ€Flow Nanoelectrospray <i>â€</i> lonization Mass Spectrometry**. Angewandte Chemie, 2023, 135, .	1.6	0
111	Highâ€Throughput Optimization of Photochemical Reactions using Segmentedâ€Flow Nanoelectrospray <i>â€</i> Ionization Mass Spectrometry**. Angewandte Chemie - International Edition, 2023, 62, .	7.2	3
112	Rapid Elaboration of Fragments into Leads Applied to Bromodomain-3 Extra-Terminal Domain. Journal of Medicinal Chemistry, 0, , .	2.9	1
113	Challenges and opportunities of machine chemists. Scientia Sinica Chimica, 2023, , .	0.2	0

#	Article	IF	CITATIONS
114	New Therapeutic Chemical Modalities: Compositions, Modes-of-action, and Drug Discovery. , 2023, , 911-961.		0
115	Biocatalysis for Lead Discovery and Optimization. , 2022, , .		1
122	ACCELERATING DRUG DISCOVERY BY HIGH-THROUGHPUT EXPERIMENTATION. Medicinal Chemistry Reviews, 0, , 443-463.	0.1	0
125	Synthesize in a Smart Way: A Brief Introduction to Intelligence and Automation in Organic Synthesis. Challenges and Advances in Computational Chemistry and Physics, 2023, , 227-275.	0.6	0