Paul A Clemons

List of Publications by Year
in descending order

90 papers	19,360 citations	43973 48 h-index	49773 87 g-index
95 all docs	95 docs citations	95 times ranked	25632 citing authors

#	Article	IF	Citations
1	The Connectivity Map: Using Gene-Expression Signatures to Connect Small Molecules, Genes, and Disease. Science, 2006, 313, 1929-1935.	6.0	4,472
2	Regulation of Ferroptotic Cancer Cell Death by GPX4. Cell, 2014, 156, 317-331.	13.5	4,187
3	Dependency of a therapy-resistant state of cancer cells on a lipid peroxidase pathway. Nature, 2017, 547, 453-457.	13.7	1,194
4	Target identification and mechanism of action in chemical biology and drug discovery. Nature Chemical Biology, 2013, 9, 232-240.	3.9	814
5	Correlating chemical sensitivity and basal gene expression reveals mechanism of action. Nature Chemical Biology, 2016, 12, 109-116.	3.9	636
6	An Interactive Resource to Identify Cancer Genetic and Lineage Dependencies Targeted by Small Molecules. Cell, 2013, 154, 1151-1161.	13.5	615
7	Harnessing Connectivity in a Large-Scale Small-Molecule Sensitivity Dataset. Cancer Discovery, 2015, 5, 1210-1223.	7.7	575
8	Data-analysis strategies for image-based cell profiling. Nature Methods, 2017, 14, 849-863.	9.0	535
9	A GPX4-dependent cancer cell state underlies the clear-cell morphology and confers sensitivity to ferroptosis. Nature Communications, 2019, 10, 1617.	5.8	499
10	Plasticity of ether lipids promotes ferroptosis susceptibility and evasion. Nature, 2020, 585, 603-608.	13.7	420
11	Small molecules of different origins have distinct distributions of structural complexity that correlate with protein-binding profiles. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 18787-18792.	3.3	302
12	Predicting Cancer-Specific Vulnerability via Data-Driven Detection of Synthetic Lethality. Cell, 2014, 158, 1199-1209.	13.5	249
13	Route to three-dimensional fragments using diversity-oriented synthesis. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 6799-6804.	3.3	246
14	Selective covalent targeting of GPX4 using masked nitrile-oxide electrophiles. Nature Chemical Biology, 2020, 16, 497-506.	3.9	229
15	Multiplex Cytological Profiling Assay to Measure Diverse Cellular States. PLoS ONE, 2013, 8, e80999.	1.1	224
16	Diversity-oriented synthesis yields novel multistage antimalarial inhibitors. Nature, 2016, 538, 344-349.	13.7	214
17	Toward performance-diverse small-molecule libraries for cell-based phenotypic screening using multiplexed high-dimensional profiling. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10911-10916.	3.3	191
18	A precision oncology approach to the pharmacological targeting of mechanistic dependencies in neuroendocrine tumors. Nature Genetics, 2018, 50, 979-989.	9.4	168

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19	Comparison of Methods for Image-Based Profiling of Cellular Morphological Responses to Small-Molecule Treatment. Journal of Biomolecular Screening, 2013, 18, 1321-1329.	2.6	166
20	Inhibition of DYRK1A Stimulates Human Î²-Cell Proliferation. Diabetes, 2016, 65, 1660-1671.	0.3	157
21	Identification of Regulators of Polyploidization Presents Therapeutic Targets for Treatment of AMKL. Cell, 2012, 150, 575-589.	13.5	136
22	Advancing Biological Understanding and Therapeutics Discovery with Small-Molecule Probes. Cell, 2015, 161, 1252-1265.	13.5	135
23	An expanded universe of cancer targets. Cell, 2021, 184, 1142-1155.	13.5	135
24	A High-Throughput Platform to Identify Small-Molecule Inhibitors of CRISPR-Cas9. Cell, 2019, 177, 1067-1079.e19.	13.5	133
25	Small-molecule targeting of brachyury transcription factor addiction in chordoma. Nature Medicine, 2019, 25, 292-300.	15.2	120
26	Niche-based screening identifies small-molecule inhibitors of leukemia stem cells. Nature Chemical Biology, 2013, 9, 840-848.	3.9	103
27	A one-bead, one-stock solution approach to chemical genetics: part 2. Chemistry and Biology, 2001, 8, 1183-1195.	6.2	101
28	Quantifying structure and performance diversity for sets of small molecules comprising small-molecule screening collections. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 6817-6822.	3.3	98
29	Chemogenomic Data Analysis: Prediction of Small-Molecule Targets and the Advent of Biological Fingerprints. Combinatorial Chemistry and High Throughput Screening, 2007, 10, 719-731.	0.6	97
30	A pipeline for ligand discovery using small-molecule microarrays. Current Opinion in Chemical Biology, 2007, 11, 74-82.	2.8	97
31	High-Throughput Luminescent Reporter of Insulin Secretion for Discovering Regulators of Pancreatic Beta-Cell Function. Cell Metabolism, 2015, 21, 126-137.	7.2	97
32	Complex phenotypic assays in high-throughput screening. Current Opinion in Chemical Biology, 2004, 8, 334-338.	2.8	93
33	Distinct Biological Network Properties between the Targets of Natural Products and Disease Genes. Journal of the American Chemical Society, 2010, 132, 9259-9261.	6.6	79
34	DNA Barcoding a Complete Matrix of Stereoisomeric Small Molecules. Journal of the American Chemical Society, 2019, 141, 10225-10235.	6.6	79
35	Identification of cancer-cytotoxic modulators of PDE3A by predictive chemogenomics. Nature Chemical Biology, 2016, 12, 102-108.	3.9	72
36	Small Molecules, Big Players: the National Cancer Institute's Initiative for Chemical Genetics. Cancer Research, 2006, 66, 8935-8942.	0.4	69

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37	Towards patient-based cancer therapeutics. Nature Biotechnology, 2010, 28, 904-906.	9.4	65
38	Uncleaved BAP31 in Association with A4 Protein at the Endoplasmic Reticulum Is an Inhibitor of Fas-initiated Release of Cytochromec from Mitochondria. Journal of Biological Chemistry, 2003, 278, 14461-14468.	1.6	62
39	Small-molecule inducers of insulin expression in pancreatic Î±-cells. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 15099-15104.	3.3	62
40	NAMPT Is the Cellular Target of STF-31-Like Small-Molecule Probes. ACS Chemical Biology, 2014, 9, 2247-2254.	1.6	60
41	Chemical Genomic Profiling of Biological Networks Using Graph Theory and Combinations of Small Molecule Perturbations. Journal of the American Chemical Society, 2003, 125, 10543-10545.	6.6	57
42	Linking Tumor Mutations to Drug Responses via a Quantitative Chemicalâ€"Genetic Interaction Map. Cancer Discovery, 2015, 5, 154-167.	7.7	57
43	Small-molecule enhancers of autophagy modulate cellular disease phenotypes suggested by human genetics. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4281-7.	3.3	56
44	A Human Islet Cell Culture System for High-Throughput Screening. Journal of Biomolecular Screening, 2012, 17, 509-518.	2.6	54
45	DiSCoVERing Innovative Therapies for Rare Tumors: Combining Genetically Accurate Disease Models with <i>In Silico</i> Analysis to Identify Novel Therapeutic Targets. Clinical Cancer Research, 2016, 22, 3903-3914.	3.2	54
46	Chromatin-targeting small molecules cause class-specific transcriptional changes in pancreatic endocrine cells. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 5364-5369.	3.3	53
47	Assay of the Multiple Energy-Producing Pathways of Mammalian Cells. PLoS ONE, 2011, 6, e18147.	1.1	52
48	Human Genetics in Rheumatoid Arthritis Guides a High-Throughput Drug Screen of the CD40 Signaling Pathway. PLoS Genetics, 2013, 9, e1003487.	1.5	52
49	Small-Molecule Fluorophores To Detect Cell-State Switching in the Context of High-Throughput Screening. Journal of the American Chemical Society, 2008, 130, 4208-4209.	6.6	51
50	Commentary. Current Opinion in Chemical Biology, 1999, 3, 112-115.	2.8	50
51	Stereochemical and Skeletal Diversity Arising from Amino Propargylic Alcohols. Organic Letters, 2010, 12, 2822-2825.	2.4	50
52	Alpha Shapes Applied to Molecular Shape Characterization Exhibit Novel Properties Compared to Established Shape Descriptors. Journal of Chemical Information and Modeling, 2009, 49, 2231-2241.	2.5	48
53	Synergistic Effects of Stereochemistry and Appendages on the Performance Diversity of a Collection of Synthetic Compounds. Journal of the American Chemical Society, 2018, 140, 11784-11790.	6.6	47
54	Exploiting Siteâˆ'Site Interactions on Solid Support to Generate Dimeric Molecules. Organic Letters, 2001, 3, 1185-1188.	2.4	46

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55	Real-Time Biological Annotation of Synthetic Compounds. Journal of the American Chemical Society, 2016, 138, 8920-8927.	6.6	39
56	Small-Molecule Suppressors of Cytokine-Induced Î²-Cell Apoptosis. ACS Chemical Biology, 2010, 5, 729-734.	1.6	38
57	Biolink Model: A universal schema for knowledge graphs in clinical, biomedical, and translational science. Clinical and Translational Science, 2022, 15, 1848-1855.	1.5	38
58	Synthesis of Calcineurin-Resistant Derivatives of FK506 and Selection of Compensatory Receptors. Chemistry and Biology, 2002, 9, 49-61.	6.2	37
59	Connecting Small Molecules with Similar Assay Performance Profiles Leads to New Biological Hypotheses. Journal of Biomolecular Screening, 2014, 19, 771-781.	2.6	37
60	Connecting synthetic chemistry decisions to cell and genome biology using small-molecule phenotypic profiling. Current Opinion in Chemical Biology, 2009, 13, 539-548.	2.8	34
61	Mapping Chemical Space Using Molecular Descriptors and Chemical Genetics: Deacetylase Inhibitors. Combinatorial Chemistry and High Throughput Screening, 2004, 7, 669-76.	0.6	29
62	Kinase-Independent Small-Molecule Inhibition of JAK-STAT Signaling. Journal of the American Chemical Society, 2015, 137, 7929-7934.	6.6	29
63	Expanding Stereochemical and Skeletal Diversity Using Petasis Reactions and 1,3-Dipolar Cycloadditions. Organic Letters, 2010, 12, 5230-5233.	2.4	28
64	Quantitative-Proteomic Comparison of Alpha and Beta Cells to Uncover Novel Targets for Lineage Reprogramming. PLoS ONE, 2014, 9, e95194.	1.1	27
65	CTD2 Dashboard: a searchable web interface to connect validated results from the Cancer Target Discovery and Development Network. Database: the Journal of Biological Databases and Curation, 2017, 2017, .	1.4	23
66	An Overview of the Challenges in Designing, Integrating, and Delivering BARD: A Public Chemical-Biology Resource and Query Portal for Multiple Organizations, Locations, and Disciplines. Journal of Biomolecular Screening, 2014, 19, 614-627.	2.6	22
67	High-resolution specificity profiling and off-target prediction for site-specific DNA recombinases. Nature Communications, 2019, 10, 1937.	5.8	22
68	A Small-Molecule Screening Strategy To Identify Suppressors of Statin Myopathy. ACS Chemical Biology, 2011, 6, 900-904.	1.6	21
69	RWEN: response-weighted elastic net for prediction of chemosensitivity of cancer cell lines. Bioinformatics, 2018, 34, 3332-3339.	1.8	21
70	Machine Learning on DNA-Encoded Library Count Data Using an Uncertainty-Aware Probabilistic Loss Function. Journal of Chemical Information and Modeling, 2022, 62, 2316-2331.	2.5	20
71	Using Biological Performance Similarity To Inform Disaccharide Library Design. Journal of the American Chemical Society, 2009, 131, 5075-5083.	6.6	19
72	Automated Structureâ€"Activity Relationship Mining: Connecting Chemical Structure to Biological Profiles. Journal of Biomolecular Screening, 2014, 19, 738-748.	2.6	19

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73	Modeling the impact of drug interactions on therapeutic selectivity. Nature Communications, 2018, 9, 3452.	5.8	18
74	Disease allele-dependent small-molecule sensitivities in blood cells from monogenic diabetes. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 492-497.	3.3	16
75	Integrating phenotypic small-molecule profiling and human genetics: the next phase in drug discovery. Trends in Genetics, 2015, 31, 16-23.	2.9	16
76	Targeted brachyury degradation disrupts a highly specific autoregulatory program controlling chordoma cell identity. Cell Reports Medicine, 2021, 2, 100188.	3.3	15
77	An Economic Framework to Prioritize Confirmatory Tests after a High-Throughput Screen. Journal of Biomolecular Screening, 2010, 15, 680-686.	2.6	14
78	Chemical Genomics. Molecular Diagnosis and Therapy, 2004, 4, 313-320.	3.3	9
79	The Use of Informer Sets in Screening: Perspectives on an Efficient Strategy to Identify New Probes. SLAS Discovery, 2021, 26, 855-861.	1.4	8
80	Utility-Aware Screening with Clique-Oriented Prioritization. Journal of Chemical Information and Modeling, 2012, 52, 29-37.	2.5	7
81	Chemical Space Overlap with Critical Proteinâ€Protein Interface Residues in Commercial and Specialized Smallâ€Molecule Libraries. ChemMedChem, 2018, 14, 119-131.	1.6	4
82	Phenotypic Screening for Small Molecules that Protect Î²-Cells from Glucolipotoxicity. ACS Chemical Biology, 2022, , .	1.6	4
83	Inhibition of the Enzyme Dihydroorotate Dehydrogenase Overcomes Differentiation Blockade in Acute Myeloid Leukemia. Blood, 2016, 128, 1656-1656.	0.6	3
84	Phenothiazines Induce Apoptosis in T-Cell Acute Lymphoblastic Leukemia by Activating the Phosphatase Activity of the PP2A Tumor Suppressor. Blood, 2012, 120, 3558-3558.	0.6	2
85	Cover Picture: The Binding of Fluorophores to Proteins Depends on the Cellular Environment (Angew. Chem. Int. Ed. 12/2011). Angewandte Chemie - International Edition, 2011, 50, 2649-2649.	7.2	1
86	Computational Analyses Connect Small-Molecule Sensitivity to Cellular Features Using Large Panels of Cancer Cell Lines. Methods in Molecular Biology, 2019, 1888, 233-254.	0.4	1
87	Be still my beating heart. Trends in Biotechnology, 2000, 18, 407.	4.9	0
88	Better signaling through chemistry. Trends in Biotechnology, 2001, 19, 127.	4.9	0
89	Dual-purpose drug discovery. Trends in Biotechnology, 2002, 20, 492-493.	4.9	0
90	Knowledge from Small-Molecule Screening and Profiling Data. Journal of Biomolecular Screening, 2014, 19, 611-613.	2.6	0