Bryan C Dickinson

List of Publications by Year
in descending order

84 papers	7,173 citations	117625 34 h-index	64796 79 g-index
108 all docs	108 docs citations	108 times ranked	11218 citing authors

#	Article	IF	Citations
1	Cannabidiol inhibits SARS-CoV-2 replication through induction of the host ER stress and innate immune responses. Science Advances, 2022, 8, .	10.3	77
2	CASowary: CRISPR-Cas13 guide RNA predictor for transcript depletion. BMC Genomics, 2022, 23, 172.	2.8	9
3	Dysregulated mitochondrial and cytosolic tRNA m1A methylation in Alzheimerâ€™s disease. Human Molecular Genetics, 2022, 31, 1673-1680.	2.9	23
4	Cln5 represents a new type of cysteine-based S -depalmitoylase linked to neurodegeneration. Science Advances, 2022, 8, eabj8633.	10.3	12
5	Methods for the directed evolution of biomolecular interactions. Trends in Biochemical Sciences, 2022, 47, 403-416.	7.5	3
6	Cannabidiol inhibits SARS-CoV-2 replication through induction of the host ER stress and innate immune responses.. Science Advances, 2022, , eabi6110.	10.3	11
7	Development of Mild Chemical Catalysis Conditions for m¹A-to-m⁶A Rearrangement on RNA. ACS Chemical Biology, 2022, , .	3.4	4
8	A High-Throughput Fluorescent Turn-On Assay for Inhibitors of DHHC Family Proteins. ACS Chemical Biology, 2022, 17, 2018-2023.	3.4	1
9	Imaging in Living Cells. Methods in Molecular Biology, 2021, 2275, 127-140.	0.9	0
10	Bisindolylmaleimide IX: A novel anti-SARS-CoV2 agent targeting viral main protease 3CLpro demonstrated by virtual screening pipeline and in-vitro validation assays. Methods, 2021, 195, 57-71.	3.8	29
11	Structure of papain-like protease from SARS-CoV-2 and its complexes with non-covalent inhibitors. Nature Communications, 2021, 12, 743.	12.8	297
12	A stop sign for RAS trafficking. Nature Chemical Biology, 2021, 17, 840-841.	8.0	0
13	Contingency and chance erase necessity in the experimental evolution of ancestral proteins. ELife, 2021, 10, .	6.0	30
14	A System for the Evolution of Proteinâ€“Protein Interaction Inducers. ACS Synthetic Biology, 2021, 10, 2096-2110.	3.8	5
15	Development of an Acrylamide-Based Inhibitor of Protein S-Acylation. ACS Chemical Biology, 2021, 16, 1546-1556.	3.4	22
16	Masitinib is a broad coronavirus 3CL inhibitor that blocks replication of SARS-CoV-2. Science, 2021, 373, 931-936.	12.6	173
17	Editorial overview: Engineering, evolving, andÂdesigning proteins. Current Opinion in Structural Biology, 2021, 69, iii-v.	5.7	1
18	Phage-Assisted Continuous Evolution and Selection of Enzymes for Chemical Synthesis. ACS Central Science, 2021, 7, 1581-1590.	11.3	13

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19	Antiviral evaluation of hydroxyethylamine analogs: Inhibitors of SARS-CoV-2 main protease (3CLpro), a virtual screening and simulation approach. Bioorganic and Medicinal Chemistry, 2021, 47, 116393.	3.0	15
20	Programmable technologies to manipulate gene expression at the RNA level. Current Opinion in Chemical Biology, 2021, 64, 27-37.	6.1	2
21	Inhibitors of DHHC family proteins. Current Opinion in Chemical Biology, 2021, 65, 118-125.	6.1	29
22	Editorial Overview: Molecular synthetic biology: from understanding life to creating smart therapeutics. Current Opinion in Chemical Biology, 2021, 64, A1-A2.	6.1	0
23	Small Molecule-Inducible RNA-Targeting Systems for Temporal Control of RNA Regulation. ACS Central Science, 2020, 6, 1987-1996.	11.3	27
24	Split T7 RNA polymerase biosensors to study multiprotein interaction dynamics. Methods in Enzymology, 2020, 641, 413-432.	1.0	3
25	Endothelial Palmitoylation Cycling Coordinates Vessel Remodeling in Peripheral Artery Disease. Circulation Research, 2020, 127, 249-265.	4.5	26
26	Expanding the Chemical Scope of RNA Base Editors. Biochemistry, 2019, 58, 3555-3556.	2.5	0
27	Programmable RNA-Guided RNA Effector Proteins Built from Human Parts. Cell, 2019, 178, 122-134.e12.	28.9	110
28	Recent advances in developing and applying biosensors for synthetic biology. Nano Futures, 2019, 3, 042002.	2.2	9
29	Palmitoylation is required for TNF-R1 signaling. Cell Communication and Signaling, 2019, 17, 90.	6.5	30
30	Activity-Based Sensing of S-Depalmitoylases: Chemical Technologies and Biological Discovery. Accounts of Chemical Research, 2019, 52, 3029-3038.	15.6	18
31	Evolution of a reverse transcriptase to map N1-methyladenosine in human messenger RNA. Nature Methods, 2019, 16, 1281-1288.	19.0	113
32	Development of a Split Esterase for Proteinâ€“Protein Interaction-Dependent Small-Molecule Activation. ACS Central Science, 2019, 5, 1768-1776.	11.3	22
33	Measuring S-Depalmitoylation Activity In Vitro and In Live Cells with Fluorescent Probes. Methods in Molecular Biology, 2019, 2009, 99-109.	0.9	4
34	Targeted m6A reader proteins to study the epitranscriptome. Methods in Enzymology, 2019, 621, 1-16.	1.0	5
35	Evolution of Câ€Terminal Modification Tolerance in Fullâ€Length and Split T7 RNA Polymerase Biosensors. ChemBioChem, 2019, 20, 1547-1553.	2.6	15
36	ABHD10 is an S-depalmitoylase affecting redox homeostasis through peroxiredoxin-5. Nature Chemical Biology, 2019, 15, 1232-1240.	8.0	72

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37	A Phage-Assisted Continuous Selection Approach for Deep Mutational Scanning of Proteinâ€“Protein Interactions. ACS Chemical Biology, 2019, 14, 2757-2767.	3.4	23
38	Active and dynamic mitochondrial S-depalmitoylation revealed by targeted fluorescent probes. Nature Communications, 2018, 9, 334.	12.8	73
39	A Fluorescent Probe with Improved Water Solubility Permits the Analysis of Protein S-Depalmitoylation Activity in Live Cells. Biochemistry, 2018, 57, 221-225.	2.5	22
40	Programmable RNA Binding Proteins for Imaging and Therapeutics. Biochemistry, 2018, 57, 363-364.	2.5	7
41	Multidimensional Control of Cas9 by Evolved RNA Polymerase-Based Biosensors. ACS Chemical Biology, 2018, 13, 431-437.	3.4	21
42	Targeted m⁶A Reader Proteins To Study Epitranscriptomic Regulation of Single RNAs. Journal of the American Chemical Society, 2018, 140, 11974-11981.	13.7	92
43	Controlling protein function with HCV protease. Nature Methods, 2018, 15, 489-490.	19.0	1
44	Wnt5a signaling induced phosphorylation increases APT1 activity and promotes melanoma metastatic behavior. ELife, 2018, 7, .	6.0	29
45	Evolution of a split RNA polymerase as a versatile biosensor platform. Nature Chemical Biology, 2017, 13, 432-438.	8.0	110
46	Protective Effect of Inflammasome Activation by Hydrogen Peroxide in a Mouse Model of Septic Shock. Critical Care Medicine, 2017, 45, e184-e194.	0.9	9
47	A fluorescent probe for cysteine depalmitoylation reveals dynamic APT signaling. Nature Chemical Biology, 2017, 13, 150-152.	8.0	66
48	Michael addition-based probes for ratiometric fluorescence imaging of protein S-depalmitoylases in live cells and tissues. Chemical Science, 2017, 8, 7588-7592.	7.4	31
49	RNA Polymerase Tags To Monitor Multidimensional Proteinâ€“Protein Interactions Reveal Pharmacological Engagement of Bcl-2 Proteins. Journal of the American Chemical Society, 2017, 139, 11964-11972.	13.7	16
50	Cadmium toxicity investigated at the physiological and biophysical levels under environmentally relevant conditions using the aquatic model plant Ceratophyllum demersum. New Phytologist, 2016, 210, 1244-1258.	7.3	62
51	An animal model of Miller Fisher syndrome: Mitochondrial hydrogen peroxide is produced by the autoimmune attack of nerve terminals and activates Schwann cells. Neurobiology of Disease, 2016, 96, 95-104.	4.4	26
52	MnTE-2-PyP modulates thiol oxidation in a hydrogen peroxide-mediated manner in a human prostate cancer cell. Free Radical Biology and Medicine, 2016, 101, 32-43.	2.9	31
53	Selenoprotein H is an essential regulator of redox homeostasis that cooperates with p53 in development and tumorigenesis. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E5562-71.	7.1	49
54	A Panel of Protease-Responsive RNA Polymerases Respond to Biochemical Signals by Production of Defined RNA Outputs in Live Cells. Journal of the American Chemical Society, 2015, 137, 15996-15999.	13.7	22

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55	An oxidative fluctuation hypothesis of aging generated by imaging H2O2 levels in live Caenorhabditis elegans with altered lifespans. Biochemical and Biophysical Research Communications, 2015, 458, 896-900.	2.1	22
56	Mitochondrial alarmins released by degenerating motor axon terminals activate perisynaptic Schwann cells. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E497-505.	7.1	59
57	Plugging the leak. Nature Chemical Biology, 2015, 11, 831-832.	8.0	1
58	Imaging Mitochondrial Hydrogen Peroxide in Living Cells. Methods in Molecular Biology, 2015, 1264, 231-243.	0.9	5
59	Improvement of Human Keratinocyte Migration by a Redox Active Bioelectric Dressing. PLoS ONE, 2014, 9, e89239.	2.5	72
60	Recent advances in hydrogen peroxide imaging for biological applications. Cell and Bioscience, 2014, 4, 64.	4.8	87
61	A system for the continuous directed evolution of proteases rapidly reveals drug-resistance mutations. Nature Communications, 2014, 5, 5352.	12.8	82
62	Dephosphorylation of Tyrosine 393 in Argonaute 2 by Protein Tyrosine Phosphatase 1B Regulates Gene Silencing in Oncogenic RAS-Induced Senescence. Molecular Cell, 2014, 55, 782-790.	9.7	65
63	Mitochondrial DNA damage: Molecular marker of vulnerable nigral neurons in Parkinson's disease. Neurobiology of Disease, 2014, 70, 214-223.	4.4	155
64	Endogenous hydrogen peroxide production in the epithelium of the developing embryonic lens. Molecular Vision, 2014, 20, 458-67.	1.1	14
65	Preparation and use of MitoPY1 for imaging hydrogen peroxide in mitochondria of live cells. Nature Protocols, 2013, 8, 1249-1259.	12.0	144
66	Experimental interrogation of the path dependence and stochasticity of protein evolution using phage-assisted continuous evolution. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 9007-9012.	7.1	92
67	Receptor Protein-tyrosine Phosphatase Î± Regulates Focal Adhesion Kinase Phosphorylation and ErbB2 Oncoprotein-mediated Mammary Epithelial Cell Motility. Journal of Biological Chemistry, 2013, 288, 36926-36935.	3.4	17
68	A Population-Based Experimental Model for Protein Evolution: Effects of Mutation Rate and Selection Stringency on Evolutionary Outcomes. Biochemistry, 2013, 52, 1490-1499.	2.5	37
69	Two-photon fluorescence imaging of intracellular hydrogen peroxide with chemoselective fluorescent probes. Journal of Biomedical Optics, 2013, 18, 106002.	2.6	18
70	Glucose metabolism impacts the spatiotemporal onset and magnitude of HSC induction in vivo. Blood, 2013, 121, 2483-2493.	1.4	96
71	Imaging Localised Hydrogen Peroxide Production in Living Systems. Current Chemical Biology, 2012, 6, 113-122.	0.5	2
72	Reactive Oxygen Species-Induced Actin Glutathionylation Controls Actin Dynamics in Neutrophils. Immunity, 2012, 37, 1037-1049.	14.3	174

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73	H2O2 Production Downstream of FLT3 Is Mediated by p22phox in the Endoplasmic Reticulum and Is Required for STAT5 Signalling. PLoS ONE, 2012, 7, e34050.	2.5	54
74	Nox2 redox signaling maintains essential cell populations in the brain. Nature Chemical Biology, 2011, 7, 106-112.	8.0	248
75	A Nuclear-Localized Fluorescent Hydrogen Peroxide Probe for Monitoring Sirtuin-Mediated Oxidative Stress Responses InÂVivo. Chemistry and Biology, 2011, 18, 943-948.	6.0	125
76	Chemistry and biology of reactive oxygen species in signaling or stress responses. Nature Chemical Biology, 2011, 7, 504-511.	8.0	1,461
77	S100B and APP Promote a Gliocentric Shift and Impaired Neurogenesis in Down Syndrome Neural Progenitors. PLoS ONE, 2011, 6, e22126.	2.5	73
78	Mitochondrial-targeted fluorescent probes for reactive oxygen species. Current Opinion in Chemical Biology, 2010, 14, 50-56.	6.1	288
79	A Palette of Fluorescent Probes with Varying Emission Colors for Imaging Hydrogen Peroxide Signaling in Living Cells. Journal of the American Chemical Society, 2010, 132, 5906-5915.	13.7	477
80	Aquaporin-3 mediates hydrogen peroxide uptake to regulate downstream intracellular signaling. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 15681-15686.	7.1	595
81	Avid interactions underlie the Lys63-linked polyubiquitin binding specificities observed for UBA domains. Nature Structural and Molecular Biology, 2009, 16, 883-889.	8.2	78
82	A red-emitting naphthofluorescein-based fluorescent probe for selective detection of hydrogen peroxide in living cells. Bioorganic and Medicinal Chemistry Letters, 2008, 18, 5948-5950.	2.2	83
83	A Targetable Fluorescent Probe for Imaging Hydrogen Peroxide in the Mitochondria of Living Cells. Journal of the American Chemical Society, 2008, 130, 9638-9639.	13.7	582
84	Effects of cyclization on conformational dynamics and binding properties of Lys48-linked di-ubiquitin. Protein Science, 2007, 16, 369-378.	7.6	18