

# Jamie H D Cate

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

111 papers	6,505 citations	40 h-index	79 g-index
133 ext. papers	7,975 ext. citations	11.1 avg, IF	6.08 L-index

#	Paper	IF	Citations
111	Two distinct RNase activities of CRISPR-C2c2 enable guide-RNA processing and RNA detection. <i>Nature</i> , <b>2016</b> , 538, 270-273	50.4	527
110	Engineered <i>Saccharomyces cerevisiae</i> capable of simultaneous cellobiose and xylose fermentation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 504-9	11.5	398
109	Structures of the <i>Escherichia coli</i> ribosome with antibiotics bound near the peptidyl transferase center explain spectra of drug action. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2010</b> , 107, 17152-7	11.5	312
108	Structures of the bacterial ribosome in classical and hybrid states of tRNA binding. <i>Science</i> , <b>2011</b> , 332, 981-4	33.3	285
107	Cellodextrin transport in yeast for improved biofuel production. <i>Science</i> , <b>2010</b> , 330, 84-6	33.3	255
106	Systems analysis of plant cell wall degradation by the model filamentous fungus <i>Neurospora crassa</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2009</b> , 106, 22157-62	11.5	240
105	Selection of chromosomal DNA libraries using a multiplex CRISPR system. <i>ELife</i> , <b>2014</b> , 3,	8.9	224
104	eIF3 targets cell-proliferation messenger RNAs for translational activation or repression. <i>Nature</i> , <b>2015</b> , 522, 111-4	50.4	220
103	Structures of the ribosome in intermediate states of ratcheting. <i>Science</i> , <b>2009</b> , 325, 1014-7	33.3	209
102	Induction of lignocellulose-degrading enzymes in <i>Neurospora crassa</i> by cellodextrins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 6012-7	11.5	174
101	eIF3d is an mRNA cap-binding protein that is required for specialized translation initiation. <i>Nature</i> , <b>2016</b> , 536, 96-9	50.4	165
100	High-resolution structure of the <i>Escherichia coli</i> ribosome. <i>Nature Structural and Molecular Biology</i> , <b>2015</b> , 22, 336-41	17.6	154
99	Clades of huge phages from across Earth's ecosystems. <i>Nature</i> , <b>2020</b> , 578, 425-431	50.4	154
98	Enhanced biofuel production through coupled acetic acid and xylose consumption by engineered yeast. <i>Nature Communications</i> , <b>2013</b> , 4, 2580	17.4	151
97	Structural basis for mRNA and tRNA positioning on the ribosome. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2006</b> , 103, 15830-4	11.5	148
96	Microbial biosynthesis of medium-chain 1-alkenes by a nonheme iron oxidase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 18237-42	11.5	137
95	Control of ribosomal subunit rotation by elongation factor G. <i>Science</i> , <b>2013</b> , 340, 1235970	33.3	132

94	The mechanisms of RNA SHAPE chemistry. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 6617-24	16.4	116
93	Binding and action of CEM-101, a new fluoroketolide antibiotic that inhibits protein synthesis. <i>Antimicrobial Agents and Chemotherapy</i> , <b>2010</b> , 54, 4961-70	5.9	116
92	A steric block in translation caused by the antibiotic spectinomycin. <i>ACS Chemical Biology</i> , <b>2007</b> , 2, 545-552	11.2	105
91	Construction of a quadruple auxotrophic mutant of an industrial polyploid <i>Saccharomyces cerevisiae</i> strain by using RNA-guided Cas9 nuclease. <i>Applied and Environmental Microbiology</i> , <b>2014</b> , 80, 7694-701	4.8	90
90	Functional reconstitution of human eukaryotic translation initiation factor 3 (eIF3). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 20473-8	11.5	88
89	Enhanced xylitol production through simultaneous co-utilization of cellobiose and xylose by engineered <i>Saccharomyces cerevisiae</i> . <i>Metabolic Engineering</i> , <b>2013</b> , 15, 226-34	9.7	86
88	Ribosome structure and dynamics during translocation and termination. <i>Annual Review of Biophysics</i> , <b>2010</b> , 39, 227-44	21.1	83
87	Selective stalling of human translation through small-molecule engagement of the ribosome nascent chain. <i>PLoS Biology</i> , <b>2017</b> , 15, e2001882	9.7	74
86	Connecting the kinetics and energy landscape of tRNA translocation on the ribosome. <i>PLoS Computational Biology</i> , <b>2013</b> , 9, e1003003	5	63
85	Multiplex engineering of industrial yeast genomes using CRISPRm. <i>Methods in Enzymology</i> , <b>2014</b> , 546, 473-89	1.7	62
84	The proteome and phosphoproteome of <i>Neurospora crassa</i> in response to cellulose, sucrose and carbon starvation. <i>Fungal Genetics and Biology</i> , <b>2014</b> , 72, 21-33	3.9	60
83	Overcoming glucose repression in mixed sugar fermentation by co-expressing a cellobiose transporter and a $\beta$ -glucosidase in <i>Saccharomyces cerevisiae</i> . <i>Molecular BioSystems</i> , <b>2010</b> , 6, 2129-32		60
82	Factors that Influence the Formation and Stability of Thin, Cryo-EM Specimens. <i>Biophysical Journal</i> , <b>2016</b> , 110, 749-55	2.9	58
81	Simultaneous utilization of cellobiose, xylose, and acetic acid from lignocellulosic biomass for biofuel production by an engineered yeast platform. <i>ACS Synthetic Biology</i> , <b>2015</b> , 4, 707-13	5.7	56
80	Architecture of human translation initiation factor 3. <i>Structure</i> , <b>2013</b> , 21, 920-8	5.2	55
79	Quantitative determination of ribosome nascent chain stability. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 13402-13407	11.5	54
78	Two RNA-binding motifs in eIF3 direct HCV IRES-dependent translation. <i>Nucleic Acids Research</i> , <b>2013</b> , 41, 7512-21	20.1	52
77	Evidence for transceptor function of cellodextrin transporters in <i>Neurospora crassa</i> . <i>Journal of Biological Chemistry</i> , <b>2014</b> , 289, 2610-9	5.4	51

76	Energetic benefits and rapid cellobiose fermentation by <i>Saccharomyces cerevisiae</i> expressing cellobiose phosphorylase and mutant cellodextrin transporters. <i>Metabolic Engineering</i> , <b>2013</b> , 15, 134-43	9.7	49
75	Structural Insights into ribosome recycling factor interactions with the 70S ribosome. <i>Journal of Molecular Biology</i> , <b>2008</b> , 376, 1334-47	6.5	46
74	Analysis of cellodextrin transporters from <i>Neurospora crassa</i> in <i>Saccharomyces cerevisiae</i> for cellobiose fermentation. <i>Applied Microbiology and Biotechnology</i> , <b>2014</b> , 98, 1087-94	5.7	43
73	Human eIF3: from molecular biology to biological insight. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , <b>2017</b> , 372,	5.8	42
72	CRISPR-Cas9 Genome Engineering in <i>Saccharomyces cerevisiae</i> Cells. <i>Cold Spring Harbor Protocols</i> , <b>2016</b> , 2016,	1.2	41
71	Structure of the bacterial ribosome at 2 Å resolution. <i>ELife</i> , <b>2020</b> , 9,	8.9	40
70	Differences in the path to exit the ribosome across the three domains of life. <i>Nucleic Acids Research</i> , <b>2019</b> , 47, 4198-4210	20.1	38
69	Comparison of xylose fermentation by two high-performance engineered strains of <i>Saccharomyces cerevisiae</i> . <i>Biotechnology Reports (Amsterdam, Netherlands)</i> , <b>2016</b> , 9, 53-56	5.3	38
68	Synergy of streptogramin antibiotics occurs independently of their effects on translation. <i>Antimicrobial Agents and Chemotherapy</i> , <b>2014</b> , 58, 5269-79	5.9	38
67	2,3-butanediol production from cellobiose by engineered <i>Saccharomyces cerevisiae</i> . <i>Applied Microbiology and Biotechnology</i> , <b>2014</b> , 98, 5757-64	5.7	31
66	Assembly of eIF3 Mediated by Mutually Dependent Subunit Insertion. <i>Structure</i> , <b>2016</b> , 24, 886-96	5.2	31
65	Negamycin induces translational stalling and miscoding by binding to the small subunit head domain of the <i>Escherichia coli</i> ribosome. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 16274-9	11.5	30
64	Insights into protein biosynthesis from structures of bacterial ribosomes. <i>Current Opinion in Structural Biology</i> , <b>2007</b> , 17, 302-9	8.1	30
63	Expanding xylose metabolism in yeast for plant cell wall conversion to biofuels. <i>ELife</i> , <b>2015</b> , 4,	8.9	30
62	Long shelf-life streptavidin support-films suitable for electron microscopy of biological macromolecules. <i>Journal of Structural Biology</i> , <b>2016</b> , 195, 238-244	3.4	29
61	Small Molecule Proprotein Convertase Subtilisin/Kexin Type 9 (PCSK9) Inhibitors: Hit to Lead Optimization of Systemic Agents. <i>Journal of Medicinal Chemistry</i> , <b>2018</b> , 61, 5704-5718	8.3	28
60	Distinct regions of human eIF3 are sufficient for binding to the HCV IRES and the 40S ribosomal subunit. <i>Journal of Molecular Biology</i> , <b>2010</b> , 403, 185-96	6.5	28
59	Engineering <i>Kluyveromyces marxianus</i> as a Robust Synthetic Biology Platform Host. <i>MBio</i> , <b>2018</b> , 9,	7.8	28

58	Metabolic engineering of yeast for lignocellulosic biofuel production. <i>Current Opinion in Chemical Biology</i> , <b>2017</b> , 41, 99-106	9.7	27
57	Human-like eukaryotic translation initiation factor 3 from <i>Neurospora crassa</i> . <i>PLoS ONE</i> , <b>2013</b> , 8, e78715	3.7	27
56	Structural basis for selective stalling of human ribosome nascent chain complexes by a drug-like molecule. <i>Nature Structural and Molecular Biology</i> , <b>2019</b> , 26, 501-509	17.6	26
55	Structural basis for protein synthesis: snapshots of the ribosome in motion. <i>Current Opinion in Structural Biology</i> , <b>2012</b> , 22, 743-9	8.1	26
54	Single amino acid substitutions in HXT2.4 from <i>Scheffersomyces stipitis</i> lead to improved cellobiose fermentation by engineered <i>Saccharomyces cerevisiae</i> . <i>Applied and Environmental Microbiology</i> , <b>2013</b> , 79, 1500-7	4.8	25
53	Resistance mutations generate divergent antibiotic susceptibility profiles against translation inhibitors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 8188-93	11.5	25
52	Genome-resolved metagenomics reveals site-specific diversity of episymbiotic CPR bacteria and DPANN archaea in groundwater ecosystems. <i>Nature Microbiology</i> , <b>2021</b> , 6, 354-365	26.6	24
51	Continuous co-fermentation of cellobiose and xylose by engineered <i>Saccharomyces cerevisiae</i> . <i>Bioresource Technology</i> , <b>2013</b> , 149, 525-31	11	23
50	Bacterial ribosome heterogeneity: Changes in ribosomal protein composition during transition into stationary growth phase. <i>Biochimie</i> , <b>2019</b> , 156, 169-180	4.6	23
49	Structure of ribosome-bound azole-modified peptide phazolicin rationalizes its species-specific mode of bacterial translation inhibition. <i>Nature Communications</i> , <b>2019</b> , 10, 4563	17.4	22
48	Leveraging transcription factors to speed cellobiose fermentation by <i>Saccharomyces cerevisiae</i> . <i>Biotechnology for Biofuels</i> , <b>2014</b> , 7, 126	7.8	22
47	Overcoming inefficient cellobiose fermentation by cellobiose phosphorylase in the presence of xylose. <i>Biotechnology for Biofuels</i> , <b>2014</b> , 7, 85	7.8	22
46	Cellular mRNA recruits the ribosome via eIF3-PABP bridge to initiate internal translation. <i>RNA Biology</i> , <b>2017</b> , 14, 553-567	4.8	21
45	Programmable RNA recognition using a CRISPR-associated Argonaute. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 3368-3373	11.5	21
44	Energy biotechnology in the CRISPR-Cas9 era. <i>Current Opinion in Biotechnology</i> , <b>2016</b> , 38, 79-84	11.4	21
43	Leveraging transcription factors to speed cellobiose fermentation by. <i>Biotechnology for Biofuels</i> , <b>2014</b> , 7, 126	7.8	21
42	Initiation of Protein Synthesis with Non-Canonical Amino Acids In Vivo. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 3122-3126	16.4	21
41	Overcoming the thermodynamic equilibrium of an isomerization reaction through oxidoreductive reactions for biotransformation. <i>Nature Communications</i> , <b>2019</b> , 10, 1356	17.4	20

40	Cellular response to small molecules that selectively stall protein synthesis by the ribosome. <i>PLoS Genetics</i> , <b>2019</b> , 15, e1008057	6	19
39	Regulating the ribosome: a spotlight on RNA dark matter. <i>Molecular Cell</i> , <b>2014</b> , 54, 1-2	17.6	19
38	Cellobionic acid utilization: from <i>Neurospora crassa</i> to <i>Saccharomyces cerevisiae</i> . <i>Biotechnology for Biofuels</i> , <b>2015</b> , 8, 120	7.8	17
37	Bypassing the Pentose Phosphate Pathway: Towards Modular Utilization of Xylose. <i>PLoS ONE</i> , <b>2016</b> , 11, e0158111	3.7	15
36	Selective inhibition of human translation termination by a drug-like compound. <i>Nature Communications</i> , <b>2020</b> , 11, 4941	17.4	15
35	Investigation of the functional role of aldose 1-epimerase in engineered cellobiose utilization. <i>Journal of Biotechnology</i> , <b>2013</b> , 168, 1-6	3.7	12
34	Repression of ferritin light chain translation by human eIF3. <i>ELife</i> , <b>2019</b> , 8,	8.9	12
33	Evolutionary engineering improves tolerance for medium-chain alcohols in. <i>Biotechnology for Biofuels</i> , <b>2018</b> , 11, 90	7.8	10
32	STRUCTURE. A Big Bang in spliceosome structural biology. <i>Science</i> , <b>2016</b> , 351, 1390-2	33.3	9
31	Screening of transporters to improve xylohextrins utilization in the yeast <i>Saccharomyces cerevisiae</i> . <i>PLoS ONE</i> , <b>2017</b> , 12, e0184730	3.7	8
30	Internalization of Heterologous Sugar Transporters by Endogenous Arrestins in the Yeast <i>Saccharomyces cerevisiae</i> . <i>Applied and Environmental Microbiology</i> , <b>2016</b> , 82, 7074-7085	4.8	8
29	Cellobiose Consumption Uncouples Extracellular Glucose Sensing and Glucose Metabolism in. <i>MBio</i> , <b>2017</b> , 8,	7.8	7
28	Enhanced cellobiose fermentation by engineered <i>Saccharomyces cerevisiae</i> expressing a mutant cellobiose facilitator and cellobiose phosphorylase. <i>Journal of Biotechnology</i> , <b>2018</b> , 275, 53-59	3.7	7
27	Defects in the Assembly of Ribosomes Selected for Amino Acid Incorporation. <i>Biochemistry</i> , <b>2019</b> , 58, 4494-4504	3.2	7
26	Improving the bioconversion of plant biomass to biofuels: A multidisciplinary approach. <i>Energy and Environmental Science</i> , <b>2011</b> , 4, 3329	35.4	7
25	Mechanics of liquid-liquid interfaces and mixing enhancement in microscale flows. <i>Journal of Fluid Mechanics</i> , <b>2010</b> , 652, 207-240	3.7	7
24	Relief of Xylose Binding to Cellobiose Phosphorylase by a Single Distal Mutation. <i>ACS Synthetic Biology</i> , <b>2017</b> , 6, 206-210	5.7	5
23	The packing of ribosomes in crystals and polysomes <b>2011</b> , 65-73		5

22	Construction of low-resolution x-ray crystallographic electron density maps of the ribosome. <i>Methods</i> , <b>2001</b> , 25, 303-8	4.6	4
21	Structural basis for selective stalling of human ribosome nascent chain complexes by a drug-like molecule		4
20	Huge and variable diversity of episymbiotic CPR bacteria and DPANN archaea in groundwater ecosystems		4
19	Initiation of Protein Synthesis with Non-Canonical Amino Acids In Vivo. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 3146-3150	3.6	4
18	An tag-and-modify protein sample generation method for single-molecule fluorescence resonance energy transfer. <i>Journal of Biological Chemistry</i> , <b>2017</b> , 292, 15636-15648	5.4	3
17	Some reassembly required. <i>Molecular Microbiology</i> , <b>2010</b> , 75, 793-4	4.1	3
16	Role for ribosome-associated complex and stress-seventy subfamily B (RAC-Ssb) in integral membrane protein translation. <i>Journal of Biological Chemistry</i> , <b>2017</b> , 292, 19610-19627	5.4	2
15	Model-guided strain improvement: simultaneous hydrolysis and co-fermentation of cellulosic sugars. <i>Biotechnology Journal</i> , <b>2012</b> , 7, 328-9	5.6	2
14	A new diet for yeast to improve biofuel production. <i>Bioengineered Bugs</i> , <b>2011</b> , 2, 199-202		2
13	Author response: Selection of chromosomal DNA libraries using a multiplex CRISPR system <b>2014</b> ,		2
12	Selection of chromosomal DNA libraries using a multiplex CRISPR system in <i>Saccharomyces cerevisiae</i> <b>2014</b> ,		1
11	Cofermentation of Cellobiose and Galactose by an Engineered <i>Saccharomyces cerevisiae</i> Strain. <i>Applied and Environmental Microbiology</i> , <b>2011</b> , 77, 7438-7438	4.8	1
10	Cellular response to small molecules that selectively stall protein synthesis by the ribosome		1
9	Cellobiose consumption uncouples extracellular glucose sensing and glucose metabolism in <i>Saccharomyces cerevisiae</i>		1
8	Structure of the Bacterial Ribosome at 2 Å Resolution		1
7	Phazolicin Is a Novel Thiazole/Oxazole-Modified Peptide Inhibiting the Bacterial Ribosome in a Species-Specific Way		1
6	Programmable RNA recognition using a CRISPR-associated Argonaute		1
5	Efficient isolation of protoplasts from rice calli with pause points and its application in transient gene expression and genome editing assays. <i>Plant Methods</i> , <b>2020</b> , 16, 151	5.8	1

4	The N-terminal and central domains of CoV-2 nsp1 play key functional roles in suppression of cellular gene expression and preservation of viral gene expression	1
3	Streptavidin Monolayer-Crystal Affinity Grids: A Step Toward Controlling What Happens During Cryo-EM Sample Preparation. <i>Microscopy and Microanalysis</i> , <b>2017</b> , 23, 820-821	0.5
2	X-ray Crystal Structures of the E. coli 70S ribosome at 3.5 Å resolution. <i>FASEB Journal</i> , <b>2006</b> , 20, A35	0.9
1	Structures of the E. coli ribosome with ribosome recycling factor and antibiotics. <i>FASEB Journal</i> , <b>2008</b> , 22, 398.3	0.9