

# Julius B Lucks

## List of Publications by Year in descending order

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Version: 2024-02-01

61  
papers

4,396  
citations

117453

34  
h-index

133063

59  
g-index

88  
all docs

88  
docs citations

88  
times ranked

3019  
citing authors

#	ARTICLE	IF	CITATIONS
1	ROSALIND: Rapid Detection of Chemical Contaminants with Factor-Based. <i>Methods in Molecular Biology</i> , 2022, 2433, 325-342.	0.4	3
2	Cotranscriptional RNA strand exchange underlies the gene regulation mechanism in a purine-sensing transcriptional riboswitch. <i>Nucleic Acids Research</i> , 2022, 50, 12001-12018.	6.5	18
3	Programming cell-free biosensors with DNA strand displacement circuits. <i>Nature Chemical Biology</i> , 2022, 18, 385-393.	3.9	59
4	How does RNA fold dynamically?. <i>Journal of Molecular Biology</i> , 2022, 434, 167665.	2.0	23
5	Engineering a Synthetic Dopamine-Responsive Riboswitch for <i>In Vitro</i> Biosensing. <i>ACS Synthetic Biology</i> , 2022, 11, 2275-2283.	1.9	9
6	Computationally reconstructing cotranscriptional RNA folding from experimental data reveals rearrangement of non-native folding intermediates. <i>Molecular Cell</i> , 2021, 81, 870-883.e10.	4.5	60
7	Dynamic Control of Gene Expression with Riboregulated Switchable Feedback Promoters. <i>ACS Synthetic Biology</i> , 2021, 10, 1199-1213.	1.9	19
8	RNA Sequence and Structure Determinants of Pol III Transcriptional Termination in Human Cells. <i>Journal of Molecular Biology</i> , 2021, 433, 166978.	2.0	4
9	RNA Engineering for Public Health: Innovations in RNA-Based Diagnostics and Therapeutics. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2021, 12, 263-286.	3.3	8
10	Point-of-Use Detection of Environmental Fluoride <i>via</i> a Cell-Free Riboswitch-Based Biosensor. <i>ACS Synthetic Biology</i> , 2020, 9, 10-18.	1.9	116
11	Design of a Transcriptional Biosensor for the Portable, On-Demand Detection of Cyanuric Acid. <i>ACS Synthetic Biology</i> , 2020, 9, 84-94.	1.9	51
12	Chemical roadblocking of DNA transcription for nascent RNA display. <i>Journal of Biological Chemistry</i> , 2020, 295, 6401-6412.	1.6	16
13	Cell-free biosensors for rapid detection of water contaminants. <i>Nature Biotechnology</i> , 2020, 38, 1451-1459.	9.4	221
14	Design and Optimization of a Cell-Free Atrazine Biosensor. <i>ACS Synthetic Biology</i> , 2020, 9, 671-677.	1.9	75
15	A primer on emerging field-deployable synthetic biology tools for global water quality monitoring. <i>Npj Clean Water</i> , 2020, 3, .	3.1	53
16	DUETT quantitatively identifies known and novel events in nascent RNA structural dynamics from chemical probing data. <i>Bioinformatics</i> , 2019, 35, 5103-5112.	1.8	4
17	Computational design of three-dimensional RNA structure and function. <i>Nature Nanotechnology</i> , 2019, 14, 866-873.	15.6	49
18	De novo-designed translation-repressing riboregulators for multi-input cellular logic. <i>Nature Chemical Biology</i> , 2019, 15, 1173-1182.	3.9	90

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19	Tracking RNA structures as RNAs transit through the cell. <i>Nature Structural and Molecular Biology</i> , 2019, 26, 256-257.	3.6	3
20	PLANT-Dx: A Molecular Diagnostic for Point-of-Use Detection of Plant Pathogens. <i>ACS Synthetic Biology</i> , 2019, 8, 902-905.	1.9	45
21	Organism Engineering for the Bioproduction of the Triaminotrinitrobenzene (TATB) Precursor Phloroglucinol (PG). <i>ACS Synthetic Biology</i> , 2019, 8, 2746-2755.	1.9	19
22	A ligand-gated strand displacement mechanism for ZTP riboswitch transcription control. <i>Nature Chemical Biology</i> , 2019, 15, 1067-1076.	3.9	47
23	Deconstructing Cell-Free Extract Preparation for <i>in Vitro</i> Activation of Transcriptional Genetic Circuitry. <i>ACS Synthetic Biology</i> , 2019, 8, 403-414.	1.9	102
24	Elements of RNA Design. <i>Biochemistry</i> , 2019, 58, 1457-1459.	1.2	6
25	Distinct timescales of RNA regulators enable the construction of a genetic pulse generator. <i>Biotechnology and Bioengineering</i> , 2019, 116, 1139-1151.	1.7	40
26	Probing of RNA structures in a positive sense RNA virus reveals selection pressures for structural elements. <i>Nucleic Acids Research</i> , 2018, 46, 2573-2584.	6.5	21
27	A flow cytometric approach to engineering <i>Escherichia coli</i> for improved eukaryotic protein glycosylation. <i>Metabolic Engineering</i> , 2018, 47, 488-495.	3.6	30
28	Mathematical Modeling of RNA-Based Architectures for Closed Loop Control of Gene Expression. <i>ACS Synthetic Biology</i> , 2018, 7, 1219-1228.	1.9	42
29	SnapShot: RNA Structure Probing Technologies. <i>Cell</i> , 2018, 175, 600-600.e1.	13.5	12
30	High-throughput determination of RNA structures. <i>Nature Reviews Genetics</i> , 2018, 19, 615-634.	7.7	140
31	Engineering a Functional Small RNA Negative Autoregulation Network with Model-Guided Design. <i>ACS Synthetic Biology</i> , 2018, 7, 1507-1518.	1.9	32
32	Achieving large dynamic range control of gene expression with a compact RNA transcription-translation regulator. <i>Nucleic Acids Research</i> , 2017, 45, 5614-5624.	6.5	43
33	Computational design of small transcription activating RNAs for versatile and dynamic gene regulation. <i>Nature Communications</i> , 2017, 8, 1051.	5.8	113
34	Characterizing the Structure-Function Relationship of a Naturally Occurring RNA Thermometer. <i>Biochemistry</i> , 2017, 56, 6629-6638.	1.2	18
35	Distributed biotin-streptavidin transcription roadblocks for mapping cotranscriptional RNA folding. <i>Nucleic Acids Research</i> , 2017, 45, e109-e109.	6.5	38
36	Turning It Up to 11: Modular Proteins Amplify RNA Sensors for Sophisticated Circuitry. <i>Cell Systems</i> , 2016, 3, 509-511.	2.9	0

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37	Improving fold activation of small transcription activating RNAs (STARs) with rational RNA engineering strategies. <i>Biotechnology and Bioengineering</i> , 2016, 113, 216-225.	1.7	36
38	Using in-cell SHAPE-Seq and simulations to probe structure–function design principles of RNA transcriptional regulators. <i>Rna</i> , 2016, 22, 920-933.	1.6	34
39	Characterizing RNA structures in vitro and in vivo with selective 2-hydroxyl acylation analyzed by primer extension sequencing (SHAPE-Seq). <i>Methods</i> , 2016, 103, 34-48.	1.9	70
40	RNA systems biology: uniting functional discoveries and structural tools to understand global roles of RNAs. <i>Current Opinion in Biotechnology</i> , 2016, 39, 182-191.	3.3	54
41	Mapping RNA Structure In Vitro with SHAPE Chemistry and Next-Generation Sequencing (SHAPE-Seq). <i>Methods in Molecular Biology</i> , 2016, 1490, 135-162.	0.4	17
42	Cotranscriptional folding of a riboswitch at nucleotide resolution. <i>Nature Structural and Molecular Biology</i> , 2016, 23, 1124-1131.	3.6	163
43	Engineered Protein Machines: Emergent Tools for Synthetic Biology. <i>Cell Chemical Biology</i> , 2016, 23, 45-56.	2.5	15
44	Simultaneous characterization of cellular RNA structure and function with in-cell SHAPE-Seq. <i>Nucleic Acids Research</i> , 2016, 44, e12-e12.	6.5	76
45	Rapidly Characterizing the Fast Dynamics of RNA Genetic Circuitry with Cell-Free Transcription–Translation (TX-TL) Systems. <i>ACS Synthetic Biology</i> , 2015, 4, 503-515.	1.9	154
46	Creating small transcription activating RNAs. <i>Nature Chemical Biology</i> , 2015, 11, 214-220.	3.9	220
47	A renaissance in RNA synthetic biology: new mechanisms, applications and tools for the future. <i>Current Opinion in Chemical Biology</i> , 2015, 28, 47-56.	2.8	140
48	Characterizing and prototyping genetic networks with cell-free transcription–translation reactions. <i>Methods</i> , 2015, 86, 60-72.	1.9	112
49	Generating Effective Models and Parameters for RNA Genetic Circuits. <i>ACS Synthetic Biology</i> , 2015, 4, 914-926.	1.9	45
50	SHAPE-Seq 2.0: systematic optimization and extension of high-throughput chemical probing of RNA secondary structure with next generation sequencing. <i>Nucleic Acids Research</i> , 2014, 42, e165-e165.	6.5	119
51	The centrality of RNA for engineering gene expression. <i>Biotechnology Journal</i> , 2013, 8, 1379-1395.	1.8	76
52	A modular strategy for engineering orthogonal chimeric RNA transcription regulators. <i>Nucleic Acids Research</i> , 2013, 41, 7577-7588.	6.5	81
53	An RNA Mapping DataBase for curating RNA structure mapping experiments. <i>Bioinformatics</i> , 2012, 28, 3006-3008.	1.8	93
54	Engineering naturally occurring trans-acting non-coding RNAs to sense molecular signals. <i>Nucleic Acids Research</i> , 2012, 40, 5775-5786.	6.5	87

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55	An adaptor from translational to transcriptional control enables predictable assembly of complex regulation. <i>Nature Methods</i> , 2012, 9, 1088-1094.	9.0	67
56	Rationally designed families of orthogonal RNA regulators of translation. <i>Nature Chemical Biology</i> , 2012, 8, 447-454.	3.9	157
57	Multiplexed RNA structure characterization with selective 2'-hydroxyl acylation analyzed by primer extension sequencing (SHAPE-Seq). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 11063-11068.	3.3	346
58	Modeling and automation of sequencing-based characterization of RNA structure. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 11069-11074.	3.3	109
59	Versatile RNA-sensing transcriptional regulators for engineering genetic networks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 8617-8622.	3.3	277
60	RNA structure characterization from chemical mapping experiments. , 2011, , .		34
61	Toward scalable parts families for predictable design of biological circuits. <i>Current Opinion in Microbiology</i> , 2008, 11, 567-573.	2.3	106