Yury S Polikanov

List of Publications by Year
in descending order

48	3,076	159585	214800
papers	citations	30 h-index	47 g-index

56	56	56	3691
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nucleosomes Can Form a Polar Barrier to Transcript Elongation by RNA Polymerase II. Molecular Cell, 2006, 24, 469-479.	9.7	248
2	Structural insights into the role of rRNA modifications in protein synthesis and ribosome assembly. Nature Structural and Molecular Biology, 2015, 22, 342-344.	8.2	224
3	Ribosome-Targeting Antibiotics: Modes of Action, Mechanisms of Resistance, and Implications for Drug Design. Annual Review of Biochemistry, 2018, 87, 451-478.	11.1	199
4	How Hibernation Factors RMF, HPF, and YfiA Turn Off Protein Synthesis. Science, 2012, 336, 915-918.	12.6	193
5	A proton wire to couple aminoacyl-tRNA accommodation and peptide-bond formation on the ribosome. Nature Structural and Molecular Biology, 2014, 21, 787-793.	8.2	191
6	Structural and evolutionary insights into ribosomal RNA methylation. Nature Chemical Biology, 2018, 14, 226-235.	8.0	138
7	Pseudouridinylation of mRNA coding sequences alters translation. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 23068-23074.	7.1	127
8	Distant Activation of Transcription: Mechanisms of Enhancer Action. Molecular and Cellular Biology, 2012, 32, 4892-4897.	2.3	109
9	A synthetic antibiotic class overcoming bacterial multidrug resistance. Nature, 2021, 599, 507-512.	27.8	102
10	Odilorhabdins, Antibacterial Agents that Cause Miscoding by Binding at a New Ribosomal Site. Molecular Cell, 2018, 70, 83-94.e7.	9.7	96
11	The Mechanisms of Action of Ribosome-Targeting Peptide Antibiotics. Frontiers in Molecular Biosciences, 2018, 5, 48.	3.5	84
12	Distinct tRNA Accommodation Intermediates Observed on the Ribosome with the Antibiotics Hygromycin A and A201A. Molecular Cell, 2015, 58, 832-844.	9.7	79
13	In vitroactivity of apramycin against multidrug-, carbapenem- and aminoglycoside-resistant Enterobacteriaceae andAcinetobacter baumannii. Journal of Antimicrobial Chemotherapy, 2019, 74, 944-952.	3.0	76
14	Amicoumacin A Inhibits Translation by Stabilizing mRNA Interaction with the Ribosome. Molecular Cell, 2014, 56, 531-540.	9.7	73
15	Structure of Erm-modified 70S ribosome reveals the mechanism of macrolide resistance. Nature Chemical Biology, 2021, 17, 412-420.	8.0	70
16	Insights into RNA binding by the anticancer drug cisplatin from the crystal structure of cisplatin-modified ribosome. Nucleic Acids Research, 2016, 44, 4978-4987.	14.5	69
17	Internucleosomal Interactions Mediated by Histone Tails Allow Distant Communication in Chromatin. Journal of Biological Chemistry, 2012, 287, 20248-20257.	3.4	52
18	Klebsazolicin inhibits 70S ribosome by obstructing the peptide exit tunnel. Nature Chemical Biology, 2017, 13, 1129-1136.	8.0	50

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19	Chromatin structure can strongly facilitate enhancer action over a distance. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 17690-17695.	7.1	48
20	High-resolution crystal structures of ribosome-bound chloramphenicol and erythromycin provide the ultimate basis for their competition. Rna, 2019, 25, 600-606.	3.5	48
21	Binding and Action of Amino Acid Analogs of Chloramphenicol upon the Bacterial Ribosome. Journal of Molecular Biology, 2018, 430, 842-852.	4.2	47
22	Design, Multigram Synthesis, and in Vitro and in Vivo Evaluation of Propylamycin: A Semisynthetic 4,5-Deoxystreptamine Class Aminoglycoside for the Treatment of Drug-Resistant Enterobacteriaceae and Other Gram-Negative Pathogens. Journal of the American Chemical Society, 2019, 141, 5051-5061.	13.7	46
23	Structures of the orthosomycin antibiotics avilamycin and evernimicin in complex with the bacterial 70S ribosome. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7527-7532.	7.1	45
24	Structure of ribosome-bound azole-modified peptide phazolicin rationalizes its species-specific mode of bacterial translation inhibition. Nature Communications, 2019, 10, 4563.	12.8	45
25	Tetracenomycin X inhibits translation by binding within the ribosomal exit tunnel. Nature Chemical Biology, 2020, 16, 1071-1077.	8.0	43
26	Negamycin Interferes with Decoding and Translocation by Simultaneous Interaction with rRNA and tRNA. Molecular Cell, 2014, 56, 541-550.	9.7	41
27	A nucleotide-switch mechanism mediates opposing catalytic activities of Rel enzymes. Nature Chemical Biology, 2020, 16, 834-840.	8.0	39
28	Structural basis for the context-specific action of the classic peptidyl transferase inhibitor chloramphenicol. Nature Structural and Molecular Biology, 2022, 29, 152-161.	8.2	38
29	The Antibiotics Dityromycin and GE82832 Bind Protein S12 and Block EF-G-Catalyzed Translocation. Cell Reports, 2014, 6, 357-365.	6.4	36
30	Mechanistic insights into the slow peptide bond formation with D-amino acids in the ribosomal active site. Nucleic Acids Research, 2019, 47, 2089-2100.	14.5	36
31	Madumycin II inhibits peptide bond formation by forcing the peptidyl transferase center into an inactive state. Nucleic Acids Research, 2017, 45, 7507-7514.	14.5	35
32	Probability of the Site Juxtaposition Determines the Rate of Protein-Mediated DNA Looping. Biophysical Journal, 2007, 93, 2726-2731.	0.5	33
33	A selective antibiotic for Lyme disease. Cell, 2021, 184, 5405-5418.e16.	28.9	33
34	Sarecycline interferes with tRNA accommodation and tethers mRNA to the 70S ribosome. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 20530-20537.	7.1	30
35	Co-produced natural ketolides methymycin and pikromycin inhibit bacterial growth by preventing synthesis of a limited number of proteins. Nucleic Acids Research, 2017, 45, 9573-9582.	14.5	29
36	Nucleosome-free DNA regions differentially affect distant communication in chromatin. Nucleic Acids Research, 2017, 45, 3059-3067.	14.5	27

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37	Two transmembrane dimers of the bovine papillomavirus E5 oncoprotein clamp the PDGF Î² receptor in an active dimeric conformation. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E7262-E7271.	7.1	26
38	Peptide Inhibitors of Bacterial Protein Synthesis with Broad Spectrum and SbmA-Independent Bactericidal Activity against Clinical Pathogens. Journal of Medicinal Chemistry, 2020, 63, 9590-9602.	6.4	24
39	Acoustic vibrations contribute to the diffuse scatter produced by ribosome crystals. Acta Crystallographica Section D: Biological Crystallography, 2015, 71, 2021-2031.	2.5	22
40	Elements of ribosomal drug resistance and specificity. Current Opinion in Structural Biology, 2012, 22, 750-758.	5.7	17
41	Binding and Action of Triphenylphosphonium Analog of Chloramphenicol upon the Bacterial Ribosome. Antibiotics, 2021, 10, 390.	3.7	16
42	Biochemical analysis of enhancerâ€“promoter communication in chromatin. Methods, 2007, 41, 250-258.	3.8	15
43	Insights into the improved macrolide inhibitory activity from the high-resolution cryo-EM structure of dirithromycin bound to the E. coli 70S ribosome. Rna, 2020, 26, 715-723.	3.5	15
44	Structural basis for the inability of chloramphenicol to inhibit peptide bond formation in the presence of A-site glycine. Nucleic Acids Research, 2022, 50, 7669-7679.	14.5	15
45	Structure of Dirithromycin Bound to the Bacterial Ribosome Suggests New Ways for Rational Improvement of Macrolides. Antimicrobial Agents and Chemotherapy, 2019, 63, .	3.2	11
46	Analysis of Distant Communication on Defined Chromatin Templates In Vitro. Methods in Molecular Biology, 2009, 543, 563-576.	0.9	9
47	The Odilorhabdin Antibiotic Biosynthetic Cluster and Acetyltransferase Self-Resistance Locus Are Niche and Species Specific. MBio, 2022, 13, e0282621.	4.1	8
48	The Role of Release Factors in the Hydrolysis of Ester Bond in Peptidyl-tRNA. Biochemistry (Moscow), 2021, 86, 1122-1127.	1.5	0