Harry F Noller

List of Publications by Year
in descending order

48 papers	6,793 citations	172207 29 h-index	243296 44 g-index
48 all docs	48 docs citations	48 times ranked	3507 citing authors

#	Article	IF	Citations
1	Crystal Structure of the Ribosome at 5.5 A Resolution. Science, 2001, 292, 883-896.	6.0	1,789
2	Intermediate states in the movement of transfer RNA in the ribosome. Nature, 1989, 342, 142-148.	13.7	727
3	RIBOSOMES AND TRANSLATION. Annual Review of Biochemistry, 1997, 66, 679-716.	5.0	510
4	Crystal Structure of a 70S Ribosome-tRNA Complex Reveals Functional Interactions and Rearrangements. Cell, 2006, 126, 1065-1077.	13.5	463
5	Spontaneous Intersubunit Rotation in Single Ribosomes. Molecular Cell, 2008, 30, 578-588.	4.5	370
6	RNA Structure: Reading the Ribosome. Science, 2005, 309, 1508-1514.	6.0	302
7	A base pair between tRNA and 23S rRNA in the peptidyl transferase centre of the ribosome. Nature, 1995, 377, 309-314.	13.7	250
8	Crystal Structures of EF-Gâ€"Ribosome Complexes Trapped in Intermediate States of Translocation. Science, 2013, 340, 1236086.	6.0	206
9	Observation of Intersubunit Movement of the Ribosome in Solution Using FRET. Journal of Molecular Biology, 2007, 370, 530-540.	2.0	190
10	How the ribosome hands the A-site tRNA to the P site during EF-Gâ€"catalyzed translocation. Science, 2014, 345, 1188-1191.	6.0	157
11	Catalysis of Ribosomal Translocation by Sparsomycin. Science, 2003, 300, 1159-1162.	6.0	134
12	The antibiotic viomycin traps the ribosome in an intermediate state of translocation. Nature Structural and Molecular Biology, 2007, 14, 493-497.	3.6	129
13	mRNA translocation occurs during the second step of ribosomal intersubunit rotation. Nature Structural and Molecular Biology, 2011, 18, 457-462.	3.6	125
14	Visualization of two transfer RNAs trapped in transit during elongation factor G-mediated translocation. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 20964-20969.	3.3	122
15	Elongation factor G stabilizes the hybrid-state conformation of the 70S ribosome. Rna, 2007, 13, 1473-1482.	1.6	118
16	Rotation of the head of the 30S ribosomal subunit during mRNA translocation. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20391-20394.	3.3	113
17	Efficient reconstitution of functional Escherichia coli 30S ribosomal subunits from a complete set of recombinant small subunit ribosomal proteins. Rna, 1999, 5, 832-843.	1.6	104
18	Evolution of Protein Synthesis from an RNA World. Cold Spring Harbor Perspectives in Biology, 2012, 4, a003681-a003681.	2.3	95

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19	Molecular mechanics of 30S subunit head rotation. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 13325-13330.	3.3	88
20	Crystal structure of release factor RF3 trapped in the GTP state on a rotated conformation of the ribosome. Rna, 2012, 18, 230-240.	1.6	87
21	Identification of an RNA-Protein Bridge Spanning the Ribosomal Subunit Interface. Science, 1999, 285, 2133-2135.	6.0	82
22	The driving force for molecular evolution of translation. Rna, 2004, 10, 1833-1837.	1.6	82
23	The ribosome moves: RNA mechanics and translocation. Nature Structural and Molecular Biology, 2017, 24, 1021-1027.	3.6	76
24	Initiation of translation in bacteria by a structured eukaryotic IRES RNA. Nature, 2015, 519, 110-113.	13.7	51
25	Co-temporal Force and Fluorescence Measurements Reveal a Ribosomal Gear Shift Mechanism of Translation Regulation by Structured mRNAs. Molecular Cell, 2019, 75, 1007-1019.e5.	4.5	46
26	Recurring RNA structural motifs underlie the mechanics of L1 stalk movement. Nature Communications, 2017, 8, 14285.	5.8	44
27	Ribosome structural dynamics in translocation: yet another functional role for ribosomal RNA. Quarterly Reviews of Biophysics, 2017, 50, e12.	2.4	44
28	Spontaneous ribosomal translocation of mRNA and tRNAs into a chimeric hybrid state. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 7813-7818.	3.3	43
29	Structure of a conserved RNA component of the peptidyl transferase centre. Nature Structural Biology, 1997, 4, 775-778.	9.7	35
30	Antibiotics that bind to the A site of the large ribosomal subunit can induce mRNA translocation. Rna, 2013, 19, 158-166.	1.6	30
31	The 30S ribosomal P site: a function of 16S rRNA. FEBS Letters, 2005, 579, 855-858.	1.3	27
32	Directed hydroxyl radical probing of 16S ribosomal RNA in ribosomes containing Fe(II) tethered to ribosomal protein S20. Rna, 1998, 4, 1471-1480.	1.6	25
33	Structural evidence for product stabilization by the ribosomal mRNA helicase. Rna, 2019, 25, 364-375.	1.6	21
34	The location of protein S8 and surrounding elements of 16S rRNA in the 70S ribosome from combined use of directed hydroxyl radical probing and X-ray crystallography. Rna, 2000, 6, 717-729.	1.6	20
35	The structural basis for inhibition of ribosomal translocation by viomycin. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 10271-10277.	3.3	16
36	Calculation of the relative geometry of tRNAs in the ribosome from directed hydroxyl-radical probing data. Rna, 2000, 6, 220-232.	1.6	13

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37	Mutations in domain IV of elongation factor EF-G confer â^'1 frameshifting. Rna, 2021, 27, 40-53.	1.6	12
38	Directed hydroxyl radical probing of 16S rRNA in the ribosome: Spatial proximity of RNA elements of the 3â€² and 5â€² domains. Rna, 1999, 5, 849-855.	1.6	10
39	A tandem active site model for the ribosomal helicase. FEBS Letters, 2019, 593, 1009-1019.	1.3	9
40	How Does the Ribosome Sense a Cognate tRNA?. Journal of Molecular Biology, 2013, 425, 3776-3777.	2.0	8
41	The parable of the caveman and the Ferrari: protein synthesis and the RNA world. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20160187.	1.8	8
42	The universally conserved nucleotides of the small subunit ribosomal RNAs. Rna, 2022, 28, 623-644.	1.6	6
43	By Ribosome Possessed. Journal of Biological Chemistry, 2013, 288, 24872-24885.	1.6	3
44	Secondary structure adventures with Carl Woese. RNA Biology, 2014, 11, 225-231.	1.5	2
45	Studies on the Structure and Function of Ribosomes by Combined Use of Chemical Probing and X-Ray Crystallography. , 0, , 127-150.		1
46	Brave new RNA world. Rna, 2015, 21, 478-479.	1.6	0
47	Crystal Structures of Translation Termination Complexes. FASEB Journal, 2010, 24, 197.3.	0.2	0
48	THE MOLECULAR MECHANICS OF THE RIBOSOME. , 2014, , .		0