Marcin Nowotny

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1740277/publications.pdf

Version: 2024-02-01

45 papers

3,234 citations

304743 22 h-index 276875 41 g-index

45 all docs 45 docs citations

45 times ranked

3498 citing authors

| # | Article | IF | CITATIONS |
|----|---|-------------|-----------|
| 1 | Crystal Structures of RNase H Bound to an RNA/DNA Hybrid: Substrate Specificity and Metal-Dependent Catalysis. Cell, 2005, 121, 1005-1016. | 28.9 | 552 |
| 2 | Making and Breaking Nucleic Acids: Two-Mg2+-lon Catalysis and Substrate Specificity. Molecular Cell, 2006, 22, 5-13. | 9.7 | 495 |
| 3 | Structure of Human RNase H1 Complexed with an RNA/DNA Hybrid: Insight into HIV Reverse Transcription. Molecular Cell, 2007, 28, 264-276. | 9.7 | 282 |
| 4 | Stepwise analyses of metal ions in RNase H catalysis from substrate destabilization to product release. EMBO Journal, 2006, 25, 1924-1933. | 7.8 | 225 |
| 5 | Retroviral integrase superfamily: the structural perspective. EMBO Reports, 2009, 10, 144-151. | 4. 5 | 173 |
| 6 | Catalytic Mechanism of RNA Backbone Cleavage by Ribonuclease H from Quantum Mechanics/Molecular Mechanics Simulations. Journal of the American Chemical Society, 2011, 133, 8934-8941. | 13.7 | 164 |
| 7 | The RNase H-like superfamily: new members, comparative structural analysis and evolutionary classification. Nucleic Acids Research, 2014, 42, 4160-4179. | 14.5 | 135 |
| 8 | RNase H2 roles in genome integrity revealed by unlinking its activities. Nucleic Acids Research, 2013, 41, 3130-3143. | 14.5 | 124 |
| 9 | RNases H: Structure and mechanism. DNA Repair, 2019, 84, 102672. | 2.8 | 96 |
| 10 | Specific recognition of RNA/DNA hybrid and enhancement of human RNase H1 activity by HBD. EMBO Journal, 2008, 27, 1172-1181. | 7.8 | 91 |
| 11 | Crystal Structures of RNase H2 in Complex with Nucleic Acid Reveal the Mechanism of RNA-DNA Junction Recognition and Cleavage. Molecular Cell, 2010, 40, 658-670. | 9.7 | 90 |
| 12 | Single-molecule imaging of UvrA and UvrB recruitment to DNA lesions in living Escherichia coli. Nature Communications, 2016, 7, 12568. | 12.8 | 88 |
| 13 | Structure of UvrA nucleotide excision repair protein in complex with modified DNA. Nature Structural and Molecular Biology, 2011, 18, 191-197. | 8.2 | 75 |
| 14 | Crystal structure of RuvC resolvase in complex with Holliday junction substrate. Nucleic Acids Research, 2013, 41, 9945-9955. | 14.5 | 61 |
| 15 | The Structural and Biochemical Characterization of Human RNase H2 Complex Reveals the Molecular Basis for Substrate Recognition and Aicardi-GoutiĀ res Syndrome Defects. Journal of Biological Chemistry, 2011, 286, 10540-10550. | 3.4 | 56 |
| 16 | Origins of the Increased Affinity of Phosphorothioate-Modified Therapeutic Nucleic Acids for Proteins. Journal of the American Chemical Society, 2020, 142, 7456-7468. | 13.7 | 56 |
| 17 | Structural and functional modules in RNA interference. Current Opinion in Structural Biology, 2009, 19, 286-293. | 5.7 | 50 |
| 18 | Natural Compounds Inhibit SARS-CoV-2 nsp13 Unwinding and ATPase Enzyme Activities. ACS Pharmacology and Translational Science, 2022, 5, 226-239. | 4.9 | 43 |

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|----|--|------|-----------|
| 19 | Structural analysis of monomeric retroviral reverse transcriptase in complex with an RNA/DNA hybrid. Nucleic Acids Research, 2013, 41, 3874-3887. | 14.5 | 42 |
| 20 | Ty3 reverse transcriptase complexed with an RNA-DNA hybrid shows structural and functional asymmetry. Nature Structural and Molecular Biology, 2014, 21, 389-396. | 8.2 | 31 |
| 21 | Structural and Mechanistic Analysis of the Slx1-Slx4 Endonuclease. Cell Reports, 2015, 10, 1467-1476. | 6.4 | 28 |
| 22 | Coordination between the polymerase and RNase H activity of HIV-1 reverse transcriptase. Nucleic Acids Research, 2017, 45, gkx004. | 14.5 | 28 |
| 23 | Crystal structure of the catalytic core of Rad2: insights into the mechanism of substrate binding. Nucleic Acids Research, 2014, 42, 10762-10775. | 14.5 | 24 |
| 24 | Structural analysis of mtEXO mitochondrial RNA degradosome reveals tight coupling of nuclease and helicase components. Nature Communications, 2018, 9, 97. | 12.8 | 23 |
| 25 | RuvC uses dynamic probing of the Holliday junction to achieve sequence specificity and efficient resolution. Nature Communications, 2019, 10, 4102. | 12.8 | 23 |
| 26 | Mechanism of polypurine tract primer generation by HIV-1 reverse transcriptase. Journal of Biological Chemistry, 2018, 293, 191-202. | 3.4 | 21 |
| 27 | Crystal structure of RNase H3–substrate complex reveals parallel evolution of RNA/DNA hybrid recognition. Nucleic Acids Research, 2014, 42, 9285-9294. | 14.5 | 18 |
| 28 | Discovery of OATD-01 , a First-in-Class Chitinase Inhibitor as Potential New Therapeutics for Idiopathic Pulmonary Fibrosis. Journal of Medicinal Chemistry, 2020, 63, 15527-15540. | 6.4 | 18 |
| 29 | Structural basis of transposon end recognition explains central features of Tn7 transposition systems. Molecular Cell, 2022, 82, 2618-2632.e7. | 9.7 | 18 |
| 30 | Structural Insights into the Interaction of Clinically Relevant Phosphorothioate mRNA Cap Analogs with Translation Initiation Factor 4E Reveal Stabilization via Electrostatic Thio-Effect. ACS Chemical Biology, 2021, 16, 334-343. | 3.4 | 16 |
| 31 | The expression of Rpb10, a small subunit common to RNA polymerases, is modulated by the R3H domain-containing Rbs1 protein and the Upf1 helicase. Nucleic Acids Research, 2020, 48, 12252-12268. | 14.5 | 15 |
| 32 | A combined structural and biochemical approach reveals translocation and stalling of UvrB on the DNA lesion as a mechanism of damage verification in bacterial nucleotide excision repair. DNA Repair, 2020, 85, 102746. | 2.8 | 13 |
| 33 | Structure of Human RNase H1 Complexed with an RNA/DNA Hybrid: Insight into HIV Reverse Transcription. Molecular Cell, 2007, 28, 513. | 9.7 | 12 |
| 34 | Structure and mechanism of nucleases regulated by SLX4. Current Opinion in Structural Biology, 2016, 36, 97-105. | 5.7 | 11 |
| 35 | Recognition and processing of branched DNA substrates by Slx1–Slx4 nuclease. Nucleic Acids Research, 2019, 47, 11681-11690. | 14.5 | 10 |
| 36 | A heterotypic assembly mechanism regulates <scp>CHIP E3</scp> ligase activity. EMBO Journal, 2022, 41, | 7.8 | 9 |

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|----|---|------|-----------|
| 37 | Reverse Transcriptases. Nucleic Acids and Molecular Biology, 2014, , 189-214. | 0.2 | 7 |
| 38 | Disulfide bridge cross-linking between protein and the RNA backbone as a tool to study RNase H1. Bioorganic and Medicinal Chemistry, 2020, 28, 115741. | 3.0 | 4 |
| 39 | The Pet127 protein is a mitochondrial 5′-to-3′ exoribonuclease from the PD-(D/E)XK superfamily involved in RNA maturation and intron degradation in yeasts. Rna, 2022, 28, 711-728. | 3.5 | 3 |
| 40 | Structure and mechanism of CutA, RNA nucleotidyl transferase with an unusual preference for cytosine. Nucleic Acids Research, 2020, 48, 9387-9405. | 14.5 | 2 |
| 41 | Structures of Substrate Complexes of Foamy Viral Protease-Reverse Transcriptase. Journal of Virology, 2021, 95, e0084821. | 3.4 | 2 |
| 42 | Novel insights from structural analysis of lentiviral and gammaretroviral reverse transcriptases in complex with RNA/DNA hybrids. Retrovirology, 2013, 10, . | 2.0 | 0 |
| 43 | Structural Studies of RNases H2 as an Example of Crystal Structure Determination of Protein–Nucleic Acid Complexes. Methods in Enzymology, 2017, 592, 123-143. | 1.0 | 0 |
| 44 | Crosslink and shield: protecting abasic sites from error-prone repair. Nature Structural and Molecular Biology, 2019, 26, 530-532. | 8.2 | 0 |
| 45 | The RNase H Domain: Structure, Function and Mechanism., 2013,, 53-75. | | 0 |