Eriks Rozners

List of Publications by Year
in descending order

79 papers	2,248 citations	236612 25 h-index	243296 44 g-index
89 all docs	89 docs citations	89 times ranked	1379 citing authors

#	Article	IF	Citations
1	Unexpected origins of the enhanced pairing affinity of 2â€²-fluoro-modified RNA. Nucleic Acids Research, 2011, 39, 3482-3495.	6.5	153
2	Unique Geneâ€Silencing and Structural Properties of 2â€²â€Fluoroâ€Modified siRNAs. Angewandte Chemie - International Edition, 2011, 50, 2284-2288.	7.2	147
3	Short Peptide Nucleic Acids Bind Strongly to Homopurine Tract of Double Helical RNA at pH 5.5. Journal of the American Chemical Society, 2010, 132, 8676-8681.	6.6	109
4	Parallel Kinetic Resolution under Catalytic Conditions:Â A Three-Phase System Allows Selective Reagent Activation Using Two Catalysts. Journal of the American Chemical Society, 2001, 123, 2428-2429.	6.6	96
5	Tripleâ€Helical Recognition of RNA Using 2â€Aminopyridineâ€Modified PNA at Physiologically Relevant Conditions. Angewandte Chemie - International Edition, 2012, 51, 12593-12596.	7.2	85
6	Hydration of short DNA, RNA and 2'-OMe oligonucleotides determined by osmotic stressing. Nucleic Acids Research, 2004, 32, 248-254.	6.5	83
7	2â€²â€Fluoro RNA Shows Increased Watsonâ€“Crick Hâ€Bonding Strength and Stacking Relative to RNA: Evidence from NMR and Thermodynamic Data. Angewandte Chemie - International Edition, 2012, 51, 11863-11866.	7.2	73
8	Triple helical recognition of pyrimidine inversions in polypurine tracts of RNA by nucleobase-modified PNA. Chemical Communications, 2011, 47, 11125.	2.2	66
9	Synthesis and Properties of RNA Analogues Having Amides as Interuridine Linkages at Selected Positions. Journal of the American Chemical Society, 2003, 125, 12125-12136.	6.6	62
10	Recognition of Double-Stranded RNA by Guanidine-Modified Peptide Nucleic Acids. Biochemistry, 2012, 51, 63-73.	1.2	58
11	Nucleobaseâ€Modified PNA Suppresses Translation by Forming a Triple Helix with a Hairpin Structure in mRNA Inâ€…Vitro and in Cells. Angewandte Chemie - International Edition, 2016, 55, 899-903.	7.2	56
12	Sequence-selective recognition of double-stranded RNA and enhanced cellular uptake of cationic nucleobase and backbone-modified peptide nucleic acids. Rna, 2017, 23, 58-69.	1.6	52
13	Sequence Selective Recognition of Double-Stranded RNA at Physiologically Relevant Conditions Using PNA-Peptide Conjugates. ACS Chemical Biology, 2013, 8, 1683-1686.	1.6	51
14	Crystal structure, stability and in vitro RNAi activity of oligoribonucleotides containing the ribo-difluorotoluyl nucleotide: insights into substrate requirements by the human RISC Ago2 enzyme. Nucleic Acids Research, 2007, 35, 6424-6438.	6.5	48
15	Amides are excellent mimics of phosphate internucleoside linkages and are well tolerated in short interfering RNAs. Nucleic Acids Research, 2014, 42, 6542-6551.	6.5	48
16	Asymmetric Synthesis oftrans-3,4-Dialkyl-Î³-butyrolactones via an Acyl-Claisen and Iodolactonization Route. Organic Letters, 2005, 7, 2821-2824.	2.4	46
17	Amides as Excellent Mimics of Phosphate Linkages in RNA. Angewandte Chemie - International Edition, 2011, 50, 2068-2070.	7.2	45
18	Recent Advances in Chemical Modification of Peptide Nucleic Acids. Journal of Nucleic Acids, 2012, 2012, 1-8.	0.8	41

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19	Amide linkages mimic phosphates in RNA interactions with proteins and are well tolerated in the guide strand of short interfering RNAs. Nucleic Acids Research, 2017, 45, 8142-8155.	6.5	33
20	Synthetic, Structural, and RNA Binding Studies on 2â€Aminopyridineâ€Modified Triplexâ€Forming Peptide Nucleic Acids. Chemistry - A European Journal, 2019, 25, 4367-4372.	1.7	33
21	Carbohydrate Chemistry for RNA Interference: Synthesis and Properties of RNA Analogues Modified in Sugar-Phosphate Backbone. Current Organic Chemistry, 2006, 10, 675-692.	0.9	32
22	Chemical approaches to discover the full potential of peptide nucleic acids in biomedical applications. Beilstein Journal of Organic Chemistry, 2021, 17, 1641-1688.	1.3	32
23	Structural Insights into Conformation Differences between DNA/TNA and RNA/TNA Chimeric Duplexes. ChemBioChem, 2016, 17, 1705-1708.	1.3	31
24	Monomers for Preparation of Amide-Linked RNA:Â Asymmetric Synthesis of All Four Nucleoside 5â€˜-Azido 3â€˜-Carboxylic Acids. Journal of Organic Chemistry, 2005, 70, 9841-9848.	1.7	28
25	Synthesis and properties of triazole-linked RNA. Bioorganic and Medicinal Chemistry Letters, 2011, 21, 3420-3422.	1.0	28
26	Toward Amide-Linked RNA Mimics:â€‰ Total Synthesis of 3â€˜-C Branched Uridine Azido Acid via an Eneâ€“Iodolactonization Approach. Organic Letters, 2003, 5, 181-184.	2.4	25
27	Interplay of Structure, Hydration and Thermal Stability in Formacetal Modified Oligonucleotides: RNA May Tolerate Nonionic Modifications Better than DNA. Journal of the American Chemical Society, 2009, 131, 14932-14937.	6.6	25
28	Synthesis, biophysical studies and RNA interference activity of RNA having three consecutive amide linkages. Organic and Biomolecular Chemistry, 2014, 12, 1207-1210.	1.5	25
29	Synthesis and Properties of Oligoribonucleotide Analogs Having Formacetal Internucleoside Linkages. Journal of Organic Chemistry, 1997, 62, 1846-1850.	1.7	23
30	PNA containing isocytidine nucleobase: Synthesis and recognition of double helical RNA. Bioorganic and Medicinal Chemistry Letters, 2011, 21, 2121-2124.	1.0	23
31	A Single Amide Linkage in the Passenger Strand Suppresses Its Activity and Enhances Guide Strand Targeting of siRNAs. ACS Chemical Biology, 2018, 13, 533-536.	1.6	23
32	Triplex-forming peptide nucleic acid modified with 2-aminopyridine as a new tool for detection of A-to-I editing. Chemical Communications, 2016, 52, 7935-7938.	2.2	22
33	Amide-Modified RNA: Using Protein Backbone to Modulate Function of Short Interfering RNAs. Accounts of Chemical Research, 2020, 53, 1782-1790.	7.6	21
34	Chemical Modifications of CRISPR RNAs to Improve Gene-Editing Activity and Specificity. Journal of the American Chemical Society, 2022, 144, 12584-12594.	6.6	21
35	Total Synthesis of 3â€˜,5â€˜-C-Branched Nucleosides. Organic Letters, 2003, 5, 3999-4001.	2.4	20
36	Effects of nonâ€catalytic, distal amino acid residues on activity of E. coli DinB (DNA polymerase) Tj ETQq0 0 0 rgBT /Overlock 10	0.9	20

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37	Using Tripleâ€Helixâ€Forming Peptide Nucleic Acids for Sequenceâ€Selective Recognition of Doubleâ€Stranded RNA. Current Protocols in Nucleic Acid Chemistry, 2014, 58, 4.60.1-23.	0.5	20
38	Synthesis and RNA-Binding Properties of Extended Nucleobases for Triplex-Forming Peptide Nucleic Acids. Journal of Organic Chemistry, 2019, 84, 13276-13298.	1.7	20
39	Discrimination against major groove adducts by Y-family polymerases of the DinB subfamily. DNA Repair, 2013, 12, 713-722.	1.3	18
40	The 2-Aminopyridine Nucleobase Improves Triple-Helical Recognition of RNA and DNA When Used Instead of Pseudoisocytosine in Peptide Nucleic Acids. Biochemistry, 2021, 60, 1919-1925.	1.2	18
41	FTIR Spectroscopic Studies of Oligonucleotides That Model a Triple-Helical Domain in Self-Splicing Group I Intronsâ€. Biochemistry, 1997, 36, 15463-15471.	1.2	17
42	Expanding functionality of RNA: synthesis and properties of RNA containing imidazole modified tandem Gâ€“U wobble base pairs. Chemical Communications, 2005, , 5778.	2.2	16
43	Fluorescent 2â€Aminopyridine Nucleobases for Triplexâ€Forming Peptide Nucleic Acids. ChemBioChem, 2016, 17, 1558-1562.	1.3	16
44	Synthesis and properties of peptide nucleic acid labeled at the N-terminus with HiLyte Fluor 488 fluorescent dye. Bioorganic and Medicinal Chemistry, 2016, 24, 4199-4205.	1.4	16
45	Triplex-forming PNA modified with unnatural nucleobases: the role of protonation entropy in RNA binding. Physical Chemistry Chemical Physics, 2016, 18, 32002-32006.	1.3	15
46	Nucleobase-Modified Triplex-Forming Peptide Nucleic Acids for Sequence-Specific Recognition of Double-Stranded RNA. Methods in Molecular Biology, 2020, 2105, 157-172.	0.4	15
47	Toward Amide-Modified RNA:Â Synthesis of 3â€˜-Aminomethyl-5â€˜-carboxy-3â€˜,5â€˜-dideoxy Nucleosides. Journal of Organic Chemistry, 2006, 71, 5906-5913.	1.7	14
48	Pyridazine Nucleobase in Triplex-Forming PNA Improves Recognition of Cytosine Interruptions of Polypurine Tracts in RNA. ACS Chemical Biology, 2021, 16, 872-881.	1.6	14
49	Triple-Helical Binding of Peptide Nucleic Acid Inhibits Maturation of Endogenous MicroRNA-197. ACS Chemical Biology, 2021, 16, 1147-1151.	1.6	13
50	Synthesis and Properties of Oligoribonucleotide Analogues Having Amide (3â€³-CH₂-CO-NH-5â€²) Internucleoside Linkages. Nucleosides & Nucleotides, 1997, 16, 967-970.	0.5	12
51	Oligoribonucleotide Analogues Containing a Mixed Backbone of Phosphodiester and Formacetal Internucleoside Linkages, Together with Vicinal 2â€²-O-Methyl Groups. ChemBioChem, 2007, 8, 537-545.	1.3	12
52	Monomers for preparation of amide linked RNA: synthesis of C3â€²-homologated nucleoside amino acids from d-xylose. Tetrahedron, 2010, 66, 4961-4964.	1.0	12
53	Determination of Nucleic Acid Hydration Using Osmotic Stress. Current Protocols in Nucleic Acid Chemistry, 2010, 43, Unit 7.14.	0.5	12
54	Concurrent Hydrogenation of Three Functional Groups Enables Synthesis of C3â€²-Homologated Nucleoside Amino Acids. Organic Letters, 2017, 19, 4122-4125.	2.4	11

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55	Triplexâ€Forming Peptide Nucleic Acids with Extended Backbones. ChemBioChem, 2020, 21, 3410-3416.	1.3	11
56	Synthesis and Biological Activity of Short Interfering RNAs Having Several Consecutive Amide Internucleoside Linkages. Chemistry - A European Journal, 2020, 26, 685-690.	1.7	10
57	Extended Peptide Nucleic Acid Nucleobases Based on Isoorotic Acid for the Recognition of Aâ€“U Base Pairs in Doubleâ€Stranded RNA. Chemistry - A European Journal, 2021, 27, 4332-4335.	1.7	9
58	Sequence Selective Recognition of Double-Stranded RNA Using Triple Helix-Forming Peptide Nucleic Acids. Methods in Molecular Biology, 2014, 1050, 83-94.	0.4	8
59	Amide Internucleoside Linkages Are Well Tolerated in Protospacer Adjacent Motif-Distal Region of CRISPR RNAs. ACS Chemical Biology, 2022, 17, 509-512.	1.6	8
60	Improvement of sequence selectivity in triple helical recognition of RNA by phenylalanine-derived PNA. Artificial DNA, PNA & XNA, 2013, 4, 69-76.	1.4	7
61	Impact of Chirality and Position of Lysine Conjugation in Triplex-Forming Peptide Nucleic Acids. ACS Omega, 2020, 5, 28722-28729.	1.6	7
62	Peptide nucleic acid probe for protein affinity purification based on biotinâ€“streptavidin interaction and peptide nucleic acid strand hybridization. Analytical Biochemistry, 2015, 470, 34-40.	1.1	6
63	Fluorobenzene Nucleobase Analogues for Triplexâ€Forming Peptide Nucleic Acids. ChemBioChem, 2022, 23, .	1.3	6
64	2-Guanidyl pyridine PNA nucleobase for triple-helical Hoogsteen recognition of cytosine in double-stranded RNA. Chemical Communications, 2022, 58, 7148-7151.	2.2	6
65	Calorimetry of Nucleic Acids. Current Protocols in Nucleic Acid Chemistry, 2015, 63, 7.4.1-7.4.12.	0.5	5
66	Sequence-specific recognition of structured RNA by triplex-forming peptide nucleic acids. Methods in Enzymology, 2019, 623, 401-416.	0.4	5
67	Cellular uptake of 2â€aminopyridineâ€modified peptide nucleic acids conjugated with cellâ€penetrating peptides. Biopolymers, 2022, 113, e23484.	1.2	5
68	Enzymatic Beacons for Specific Sensing of Dilute Nucleic Acid**. ChemBioChem, 2022, 23, .	1.3	5
69	Building Blocks for Synthesis of Oligoarabinonucleotides: Preparation of Arabinonucleoside H-Phosphonates from Protected Ribonucleosides. Nucleosides & Nucleotides, 1995, 14, 2009-2025.	0.5	4
70	Nucleobaseâ€Modified PNA Suppresses Translation by Forming a Triple Helix with a Hairpin Structure in mRNA Inâ€…Vitro and in Cells. Angewandte Chemie, 2016, 128, 911-915.	1.6	4
71	Synthesis of RNA Fragments Using the H-Phosphonate Method and 2'-(2'-Chlorobenzoyl) Protection. Nucleosides, Nucleotides and Nucleic Acids, 1995, 14, 855-857.	0.4	3
72	2â€Methoxypyridine as a Thymidine Mimic in Watsonâ€“Crick Base Pairs of DNA and PNA: Synthesis, Thermal Stability, and NMR Structural Studies. ChemBioChem, 2017, 18, 2165-2170.	1.3	3

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73	Optimization of Automated Synthesis of Amide-Linked RNA. ACS Omega, 2022, 7, 20420-20427.	1.6	3
74	RNA-Synthesis Using the H-Phosphonate Approach and an Improved Protecting Group Strategy. Nucleosides, Nucleotides and Nucleic Acids, 1995, 14, 883-887.	0.4	2
75	Synthesis of Oligoarabinonucleotides Using H-Phosphonates. Nucleosides, Nucleotides and Nucleic Acids, 1995, 14, 851-853.	0.4	2
76	Synthesis and properties of 2'-O-methoxymethyl oligonucleotides. Collection of Czechoslovak Chemical Communications, 1996, 61, 283-286.	1.0	2
77	Nucleic Acids Chemistry and Engineering: Special Issue on Nucleic Acid Conjugates for Biotechnological Applications. Applied Sciences (Switzerland), 2021, 11, 3594.	1.3	1
78	Sequence-Selective Recognition of Double-Stranded RNA. , 2014, , 167-180.		1
79	Titelbild: Nucleobaseâ€Modified PNA Suppresses Translation by Forming a Triple Helix with a Hairpin Structure in mRNA Inâ€...Vitro and in Cells (Angew. Chem. 3/2016). Angewandte Chemie, 2016, 128, 833-833.	1.6	0