Marvin H Caruthers

List of Publications by Year
in descending order

51	2,445	318942	223390
papers	citations	23 h-index	49 g-index

57	57	57	2106
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nuclear compartmentalization of TERT mRNA and TUG1 lncRNA is driven by intron retention. Nature Communications, 2021, 12, 3308.	5.8	25
2	Synthesis and Characterization of Thiophosphoramidate Morpholino Oligonucleotides and Chimeras. Journal of the American Chemical Society, 2020, 142, 16240-16253.	6.6	30
3	DNA Analogues Modified at the Nonlinking Positions of Phosphorus. Accounts of Chemical Research, 2020, 53, 2152-2166.	7.6	17
4	Exploring siteâ€specific activation of bisâ€N,Nâ€™â€dialkylaminophosphordiamidites and the synthesis of morpholinophosphoramidate oligonucleotides. FEBS Letters, 2019, 593, 1459-1467.	1.3	6
5	Pyridinium Boranephosphonate Modified DNA Oligonucleotides. Journal of Organic Chemistry, 2017, 82, 1420-1427.	1.7	8
6	Synthesis of Small-Molecule/DNA Hybrids through On-Bead Amide-Coupling Approach. Journal of Organic Chemistry, 2017, 82, 10803-10811.	1.7	8
7	Boranephosphonate DNA-Mediated Metallization of Single-Walled Carbon Nanotubes. Chemistry of Materials, 2017, 29, 2239-2245.	3.2	12
8	Oligodeoxynucleotides containing 2â€²-amino-LNA nucleotides as constrained morpholino phosphoramidate and phosphorodiamidate monomers. Bioorganic and Medicinal Chemistry Letters, 2017, 27, 3173-3176.	1.0	3
9	Synthesis of Phosphorodiamidate Morpholino Oligonucleotides and Their Chimeras Using Phosphoramidite Chemistry. Journal of the American Chemical Society, 2016, 138, 15663-15672.	6.6	19
10	Peptide-substituted oligonucleotide synthesis and non-toxic, passive cell delivery. Signal Transduction and Targeted Therapy, 2016, 1, 16019.	7.1	9
11	Formation of Silver Nanostructures by Rolling Circle Amplification Using Boranephosphonate-Modified Nucleotides. Analytical Chemistry, 2015, 87, 6660-6666.	3.2	12
12	Oxidative Substitution of Boranephosphonate Diesters as a Route to Post-synthetically Modified DNA. Journal of the American Chemical Society, 2015, 137, 3253-3264.	6.6	27
13	Solid-Phase Synthesis, Hybridizing Ability, Uptake, and Nuclease Resistant Profiles of Position-Selective Cationic and Hydrophobic Phosphotriester Oligonucleotides. Journal of Organic Chemistry, 2015, 80, 9147-9158.	1.7	5
14	Effect of 2â€²-O-methyl/thiophosphonoacetate-modified antisense oligonucleotides on huntingtin expression in patient-derived cells. Artificial DNA, PNA & XNA, 2014, 5, e1146391.	1.4	4
15	Robert Letsinger: The father of synthetic DNA chemistry. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 18098-18099.	3.3	4
16	Silver Nanoassemblies Constructed from Boranephosphonate DNA. Journal of the American Chemical Society, 2013, 135, 6234-6241.	6.6	34
17	The Chemical Synthesis of DNA/RNA: Our Gift to Science. Journal of Biological Chemistry, 2013, 288, 1420-1427.	1.6	70
18	Synthesis and biological activity of phosphonoacetate- and thiophosphonoacetate-modified 2â€²-O-methyl oligoribonucleotides. Organic and Biomolecular Chemistry, 2012, 10, 746-754.	1.5	27

#	Article	IF	Citations
19	Reduction of metal ions by boranephosphonate DNA. Organic and Biomolecular Chemistry, 2012, 10, 9130.	1.5	17
20	Alkynyl Phosphonate DNA: A Versatile â€œClickâ€able Backbone for DNA-Based Biological Applications. Journal of the American Chemical Society, 2012, 134, 11618-11631.	6.6	43
21	Gene synthesis with H G Khorana. Resonance, 2012, 17, 1143-1156.	0.2	4
22	Har Gobind Khorana (1922â€“2011). Science, 2011, 334, 1511-1511.	6.0	2
23	Solid-Phase Synthesis, Thermal Denaturation Studies, Nuclease Resistance, and Cellular Uptake of (Oligodeoxyribonucleoside)methylborane Phosphineâ€“DNA Chimeras. Journal of the American Chemical Society, 2011, 133, 9844-9854.	6.6	19
24	Streamlined Process for the Chemical Synthesis of RNA Using 2â€²-O-Thionocarbamate-Protected Nucleoside Phosphoramidites in the Solid Phase. Journal of the American Chemical Society, 2011, 133, 11540-11556.	6.6	61
25	Synthesis And Biological Activity of Borane Phosphonate DNA. Phosphorus, Sulfur and Silicon and the Related Elements, 2011, 186, 921-932.	0.8	11
26	A brief review of DNA and RNA chemical synthesis. Biochemical Society Transactions, 2011, 39, 575-580.	1.6	60
27	Synthesis of high-quality libraries of long (150mer) oligonucleotides by a novel depurination controlled process. Nucleic Acids Research, 2010, 38, 2522-2540.	6.5	248
28	Synthesis and Biochemical Activity of New Oligonucleotide Analogs. Phosphorus, Sulfur and Silicon and the Related Elements, 2008, 183, 349-363.	0.8	12
29	Synthesis and Biological Activity of Phosphonocarboxylate DNA. Nucleosides, Nucleotides and Nucleic Acids, 2007, 26, 539-546.	0.4	14
30	Synthesis of Mixed Sequence Borane Phosphonate DNA. Journal of the American Chemical Society, 2006, 128, 8138-8139.	6.6	32
31	Synthesis and Biochemical Evaluation of Phosphonoformate Oligodeoxyribonucleotides. Journal of the American Chemical Society, 2006, 128, 5251-5261.	6.6	18
32	Oligodeoxyribonucleotide Analogs Functionalized with Phosphonoacetate and Thiophosphonoacetate Diesters. Current Protocols in Nucleic Acid Chemistry, 2004, 18, Unit 4.24.	0.5	1
33	Solid-Phase Chemical Synthesis of Phosphonoacetate and Thiophosphonoacetate Oligodeoxynucleotides. Journal of the American Chemical Society, 2003, 125, 940-950.	6.6	66
34	Biochemical properties of phosphonoacetate and thiophosphonoacetate oligodeoxyribonucleotides. Nucleic Acids Research, 2003, 31, 4109-4118.	6.5	41
35	Chemical synthesis of an oligodeoxythymidylate containing boranephosphate and phosphate linkages. Tetrahedron Letters, 2002, 43, 749-751.	0.7	16
36	Hammerhead Cleavage of the Phosphorodithioate Linkage. Biochemistry, 2000, 39, 4947-4954.	1.2	25

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37	Synthesis of an oligothymidylate containing boranophosphate linkages. Tetrahedron Letters, 1998, 39, 3899-3902.	0.7	58
38	Novel RNA Synthesis Method Using 5â€˜-O-Silyl-2â€˜-O-orthoester Protecting Groups. Journal of the American Chemical Society, 1998, 120, 11820-11821.	6.6	226
39	Interactions between single-stranded DNA binding protein and oligonucleotide analogs with different backbone chemistries. , 1997, 10, 101-107.		18
40	Biochemical and Physicochemical Properties of Phosphorodithioate DNA. Biochemistry, 1996, 35, 8734-8741.	1.2	50
41	Synthesis of 5â€²-deoxy-5â€²-methylphosphonate linked thymidine oligonucleotides.. Tetrahedron Letters, 1993, 34, 2723-2726.	0.7	24
42	Metal ion catalysis in the Tetrahymena ribozyme reaction. Nature, 1993, 361, 85-88.	13.7	403
43	Chemical synthesis of DNA and DNA analogs. Accounts of Chemical Research, 1991, 24, 278-284.	7.6	271
44	Chemical and Biochemical Studies with Dithioate DNA. Nucleosides & Nucleotides, 1991, 10, 47-59.	0.5	22
45	Synthesis and Biochemical Studies of Dithioate DNA. Novartis Foundation Symposium, 1991, 158, 158-168.	1.2	1
46	Role of the Cro repressor carboxy terminal domain and flexible dimer linkage in operator and nonspecific DNA binding. Biochemistry, 1990, 29, 9241-9249.	1.2	43
47	Phosphoramidites as Synthons for Polynucleotide Synthesis. Phosphorous and Sulfur and the Related Elements, 1987, 30, 549-553.	0.2	2
48	Nucleotide chemistry. 16. Amidine protecting groups for oligonucleotide synthesis. Journal of the American Chemical Society, 1986, 108, 2040-2048.	6.6	201
49	Optimal strategies for the chemical and enzymic synthesis of bihelical deoxyribonucleic acids. Journal of the American Chemical Society, 1975, 97, 875-884.	6.6	22
50	Reactions of Nucleosides on Polymer Supports. Synthesis of Thymidylylthymidylylthymidine*. Biochemistry, 1967, 6, 1379-1388.	1.2	44
51	Oligonucleotide syntheses utilizing .beta.-benzoylpropionyl, a blocking group with a trigger for selective cleavage. Journal of the American Chemical Society, 1967, 89, 7146-7147.	6.6	48