Daniel H Appella

List of Publications by Year in descending order

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52 papers

1,321 citations

331670 21 h-index 35 g-index

77 all docs 77
docs citations

77 times ranked 1614 citing authors

#	Article	IF	CITATIONS
1	î ³ -Substituted Peptide Nucleic Acids Constructed fromL-Lysine are a Versatile Scaffold for Multifunctional Display. Angewandte Chemie - International Edition, 2007, 46, 1414-1418.	13.8	100
2	Programmable multivalent display of receptor ligands using peptide nucleic acid nanoscaffolds. Nature Communications, 2012, 3, 614.	12.8	94
3	Colorimetric Detection of Anthrax DNA with a Peptide Nucleic Acid Sandwich-Hybridization Assay. Journal of the American Chemical Society, 2007, 129, 8424-8425.	13.7	89
4	(S,S)-trans-Cyclopentane-Constrained Peptide Nucleic Acids. A General Backbone Modification that Improves Binding Affinity and Sequence Specificity. Journal of the American Chemical Society, 2004, 126, 15067-15073.	13.7	75
5	Synthesis of γ-Substituted Peptide Nucleic Acids:  A New Place to Attach Fluorophores without Affecting DNA Binding. Organic Letters, 2005, 7, 3465-3467.	4.6	74
6	A New Family of Small Molecules To Probe the Reactivation of Mutant p53. Journal of the American Chemical Society, 2005, 127, 6152-6153.	13.7	67
7	Stabilization of G-quadruplex in the BCL2 promoter region in double-stranded DNA by invading short PNAs. Nucleic Acids Research, 2009, 37, 7570-7580.	14.5	65
8	Non-natural nucleic acids for synthetic biology. Current Opinion in Chemical Biology, 2009, 13, 687-696.	6.1	58
9	Small-molecule inactivation of HIV-1 NCp7 by repetitive intracellular acyl transfer. Nature Chemical Biology, 2010, 6, 887-889.	8.0	52
10	A Cyclopentane Conformational Restraint for a Peptide Nucleic Acid:  Design, Asymmetric Synthesis, and Improved Binding Affinity to DNA and RNA. Organic Letters, 2003, 5, 2695-2698.	4.6	47
11	PNAâ^'DNA Duplexes, Triplexes, and Quadruplexes Are Stabilized withtrans-Cyclopentane Units. Journal of the American Chemical Society, 2006, 128, 16456-16457.	13.7	43
12	Optimization of a Cyclic Peptide Inhibitor of Ser/Thr Phosphatase PPM1D (Wip1). Biochemistry, 2011, 50, 4537-4549.	2.5	42
13	Advantages of Peptide Nucleic Acids as Diagnostic Platforms for Detection of Nucleic Acids in Resourceâ€Limited Settings. Journal of Infectious Diseases, 2010, 201, S42-S45.	4.0	36
14	Quadruplex formation is necessary for stable PNA invasion into duplex DNA of BCL2 promoter region. Nucleic Acids Research, 2011, 39, 7114-7123.	14.5	30
15	Quantification of plasma HIV RNA using chemically engineered peptide nucleic acids. Nature Communications, 2014, 5, 5079.	12.8	30
16	Programmable Nanoscaffolds That Control Ligand Display to a G-Protein-Coupled Receptor in Membranes To Allow Dissection of Multivalent Effects. Journal of the American Chemical Society, 2014, 136, 12296-12303.	13.7	25
17	Targeting DNA G-Quadruplex Structures with Peptide Nucleic Acids. Current Pharmaceutical Design, 2012, 18, 1984-1991.	1.9	24
18	Cyclopentane-modified PNA improves the sensitivity of nanoparticle-based scanometric DNA detection. Chemical Communications, 2005, , 2101.	4.1	23

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19	N-Acylpolyamine inhibitors of HDM2 and HDMX binding to p53. Bioorganic and Medicinal Chemistry, 2009, 17, 7884-7893.	3.0	23
20	Peptide Nucleic Acids with a Flexible Secondary Amine in the Backbone Maintain Oligonucleotide Binding Affinity. Organic Letters, 2004, 6, 4699-4702.	4.6	22
21	Targeting a Dark Excited State of HIVâ€1 Nucleocapsid by Antiretroviral Thioesters Revealed by NMR Spectroscopy. Angewandte Chemie - International Edition, 2018, 57, 2687-2691.	13.8	22
22	Conformational constraints of cyclopentane peptide nucleic acids facilitate tunable binding to DNA. Nucleic Acids Research, 2021, 49, 713-725.	14.5	20
23	PNA Clamping in Nucleic Acid Amplification Protocols to Detect Single Nucleotide Mutations Related to Cancer. Molecules, 2020, 25, 786.	3.8	19
24	Inhibition of Multidrug Resistance by SV40 Pseudovirion Delivery of an Antigene Peptide Nucleic Acid (PNA) in Cultured Cells. PLoS ONE, 2011, 6, e17981.	2.5	18
25	An Intravaginal Ring for the Simultaneous Delivery of an HIV-1 Maturation Inhibitor and Reverse-Transcriptase Inhibitor for Prophylaxis of HIV Transmission. Journal of Pharmaceutical Sciences, 2015, 104, 3426-3439.	3.3	18
26	Cyclopentane-Peptide Nucleic Acids for Qualitative, Quantitative, and Repetitive Detection of Nucleic Acids. Analytical Chemistry, 2013, 85, 251-257.	6.5	16
27	Nonionic Side Chains Modulate the Affinity and Specificity of Binding between Functionalized Polyamines and Structured RNA. Journal of the American Chemical Society, 2004, 126, 12762-12763.	13.7	15
28	A Small Molecular Scaffold for Selective Inhibition of Wip1 Phosphatase. ChemMedChem, 2008, 3, 230-232.	3.2	15
29	Preclinical evaluation of a mercaptobenzamide and its prodrug for NCp7-targeted inhibition of human immunodeficiency virus. Antiviral Research, 2016, 134, 216-225.	4.1	15
30	PNA-Based Multivalent Scaffolds Activate the Dopamine D ₂ Receptor. ACS Medicinal Chemistry Letters, 2015, 6, 425-429.	2.8	13
31	Synthesis of Fmoc-Protected (S,S)-trans-Cyclopentane Diamine Monomers Enables the Preparation and Study of Conformationally Restricted Peptide Nucleic Acids. Organic Letters, 2018, 20, 7637-7640.	4.6	12
32	Multivalent binding oligomers inhibit HIV Tat–TAR interaction critical for viral replication. Bioorganic and Medicinal Chemistry Letters, 2009, 19, 6893-6897.	2.2	11
33	Solid-phase synthesis and screening of N-acylated polyamine (NAPA) combinatorial libraries for protein binding. Bioorganic and Medicinal Chemistry Letters, 2010, 20, 6500-6503.	2.2	11
34	A novel preventive strategy against HIV-1 infection: combinatorial use of inhibitors targeting the nucleocapsid and fusion proteins. Emerging Microbes and Infections, 2017, 6, 1-8.	6.5	10
35	Probing Mercaptobenzamides as HIV Inactivators via Nucleocapsid Proteinâ€7. ChemMedChem, 2017, 12, 714-721.	3.2	9
36	Chemical Features Important for Activity in a Class of Inhibitors Targeting the Wip1 Flap Subdomain. ChemMedChem, 2018, 13, 894-901.	3.2	8

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37	An SAMT-247 Microbicide Provides Potent Protection against Intravaginal Simian Immunodeficiency Virus Infection of Rhesus Macaques, whereas an Added Vaccine Component Elicits Mixed Outcomes. Journal of Immunology, 2020, 204, 3315-3328.	0.8	8
38	Cyclopentane FIT-PNAs: bright RNA sensors. Chemical Communications, 2021, 57, 540-543.	4.1	8
39	Multivalent L $\hat{K1}^3$ -PNA oligomers bind to a human telomere DNA G-rich sequence to form quadruplexes. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 4757-4760.	2.2	7
40	A one-pot preparation of N-2-mercaptobenzoyl-amino amides. Tetrahedron Letters, 2011, 52, 4103-4105.	1.4	6
41	Reaction Kinetics Direct a Rational Synthesis of an HIVâ€1 Inactivator of Nucleocapsid Protein 7 and Provide Mechanistic Insight into Cellular Metabolism and Antiviral Activity. Chemistry - A European Journal, 2018, 24, 9485-9489.	3.3	6
42	Physiologically relevant orthogonal assays for the discovery of small-molecule modulators of WIP1 phosphatase in high-throughput screens. Journal of Biological Chemistry, 2019, 294, 17654-17668.	3.4	6
43	The structure-activity profile of mercaptobenzamides' anti-HIV activity suggests that thermodynamics of metabolism is more important than binding affinity to the target. European Journal of Medicinal Chemistry, 2019, 178, 818-837.	5.5	6
44	Overcoming biology's limitations. Nature Chemical Biology, 2010, 6, 87-88.	8.0	5
45	PPG Peptide Nucleic Acids that Promote DNA Guanine Quadruplexes. ChemBioChem, 2014, 15, 1887-1890.	2.6	5
46	G-Quadruplex Formation Between G-Rich PNA and Homologous Sequences in Oligonucleotides and Supercoiled Plasmid DNA. Nucleic Acid Therapeutics, 2015, 25, 78-84.	3.6	4
47	Inhibition of HIV Maturation via Selective Unfolding and Cross-Linking of Gag Polyprotein by a Mercaptobenzamide Acetylator. Journal of the American Chemical Society, 2019, 141, 8327-8338.	13.7	4
48	Cyclopentane peptide <scp>nucleic acid</scp> : Gold nanoparticle conjugates for the detection of nucleic acids in a microfluidic format. Biopolymers, 2022, 113, e23481.	2.4	3
49	Targeting a Dark Excited State of HIVâ€1 Nucleocapsid by Antiretroviral Thioesters Revealed by NMR Spectroscopy. Angewandte Chemie, 2018, 130, 2717-2721.	2.0	2
50	Induction of apoptosis promoted by Bang52; a small molecule that downregulates Bcl-xL. Bioorganic and Medicinal Chemistry Letters, 2009, 19, 2429-2434.	2.2	0
51	Reaction Kinetics Direct a Rational Synthesis of an HIV-1 Inactivator of Nucleocapsid Protein 7 and Provide Mechanistic Insight into Cellular Metabolism and Antiviral Activity. Chemistry - A European Journal, 2018, 24, 9440-9440.	3.3	0
52	Synthesis and Application of LKγT Peptide Nucleic Acids. Methods in Molecular Biology, 2019, 1973, 131-145.	0.9	0