Daniel H Appella

List of Publications by Year
in descending order

52 papers	1,321 citations	331670 21 h-index	361022 35 g-index
77 all docs	77 docs citations	77 times ranked	1614 citing authors

#	Article	IF	Citations
1	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
2	Conformational constraints of cyclopentane peptide nucleic acids facilitate tunable binding to DNA. Nucleic Acids Research, 2021, 49, 713-725.	14.5	20
3	Cyclopentane FIT-PNAs: bright RNA sensors. Chemical Communications, 2021, 57, 540-543.	4.1	8
4	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
5	PNA Clamping in Nucleic Acid Amplification Protocols to Detect Single Nucleotide Mutations Related to Cancer. Molecules, 2020, 25, 786.	3.8	19
6	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
7	The structure-activity profile of mercaptobenzamidesâ€™ 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
8	Synthesis and Application of LKÎ³T Peptide Nucleic Acids. Methods in Molecular Biology, 2019, 1973, 131-145.	0.9	0
9	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
10	Chemical Features Important for Activity in a Class of Inhibitors Targeting the Wip1 Flap Subdomain. ChemMedChem, 2018, 13, 894-901.	3.2	8
11	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
12	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
13	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
14	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
15	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
16	Probing Mercaptobenzamides as HIV Inactivators via Nucleocapsid Proteinâ€…7. ChemMedChem, 2017, 12, 714-721.	3.2	9
17	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
18	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

#	Article	IF	Citations
19	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
20	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
21	PNA-Based Multivalent Scaffolds Activate the Dopamine D₂ Receptor. ACS Medicinal Chemistry Letters, 2015, 6, 425-429.	2.8	13
22	Multivalent L KÎ³-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
23	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
24	PPG Peptide Nucleic Acids that Promote DNA Guanine Quadruplexes. ChemBioChem, 2014, 15, 1887-1890.	2.6	5
25	Quantification of plasma HIV RNA using chemically engineered peptide nucleic acids. Nature Communications, 2014, 5, 5079.	12.8	30
26	Cyclopentane-Peptide Nucleic Acids for Qualitative, Quantitative, and Repetitive Detection of Nucleic Acids. Analytical Chemistry, 2013, 85, 251-257.	6.5	16
27	Targeting DNA G-Quadruplex Structures with Peptide Nucleic Acids. Current Pharmaceutical Design, 2012, 18, 1984-1991.	1.9	24
28	Programmable multivalent display of receptor ligands using peptide nucleic acid nanoscaffolds. Nature Communications, 2012, 3, 614.	12.8	94
29	Optimization of a Cyclic Peptide Inhibitor of Ser/Thr Phosphatase PPM1D (Wip1). Biochemistry, 2011, 50, 4537-4549.	2.5	42
30	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
31	A one-pot preparation of N-2-mercaptobenzoyl-amino amides. Tetrahedron Letters, 2011, 52, 4103-4105.	1.4	6
32	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
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	Overcoming biology's limitations. Nature Chemical Biology, 2010, 6, 87-88.	8.0	5
35	Small-molecule inactivation of HIV-1 NCp7 by repetitive intracellular acyl transfer. Nature Chemical Biology, 2010, 6, 887-889.	8.0	52
36	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

#	Article	IF	Citations
37	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
38	Non-natural nucleic acids for synthetic biology. Current Opinion in Chemical Biology, 2009, 13, 687-696.	6.1	58
39	N-Acylpolyamine inhibitors of HDM2 and HDMX binding to p53. Bioorganic and Medicinal Chemistry, 2009, 17, 7884-7893.	3.0	23
40	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
41	Multivalent binding oligomers inhibit HIV Tatâ€“TAR interaction critical for viral replication. Bioorganic and Medicinal Chemistry Letters, 2009, 19, 6893-6897.	2.2	11
42	A Small Molecular Scaffold for Selective Inhibition of Wip1 Phosphatase. ChemMedChem, 2008, 3, 230-232.	3.2	15
43	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
44	Î³-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
45	PNAâ'DNA Duplexes, Triplexes, and Quadruplexes Are Stabilized withtrans-Cyclopentane Units. Journal of the American Chemical Society, 2006, 128, 16456-16457.	13.7	43
46	Synthesis of Î³-Substituted Peptide Nucleic Acids:â€‰ A New Place to Attach Fluorophores without Affecting DNA Binding. Organic Letters, 2005, 7, 3465-3467.	4.6	74
47	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
48	Cyclopentane-modified PNA improves the sensitivity of nanoparticle-based scanometric DNA detection. Chemical Communications, 2005, , 2101.	4.1	23
49	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
50	(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
51	Peptide Nucleic Acids with a Flexible Secondary Amine in the Backbone Maintain Oligonucleotide Binding Affinity. Organic Letters, 2004, 6, 4699-4702.	4.6	22
52	A Cyclopentane Conformational Restraint for a Peptide Nucleic Acid:â€‰ Design, Asymmetric Synthesis, and Improved Binding Affinity to DNA and RNA. Organic Letters, 2003, 5, 2695-2698.	4.6	47