Dev P Arya

List of Publications by Year
in descending order

81	3,067	126901	182417
papers	citations	33 h-index	51 g-index

115	115	115	2043
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	New Approaches Toward Recognition of Nucleic Acid Triple Helices. Accounts of Chemical Research, 2011, 44, 134-146.	15.6	152
2	Natural product DNA major groove binders. Natural Product Reports, 2012, 29, 134-143.	10.3	115
3	Aminoglycosideâ^'Nucleic Acid Interactions:Â Remarkable Stabilization of DNA and RNA Triple Helices by Neomycin. Journal of the American Chemical Society, 2001, 123, 5385-5395.	13.7	105
4	Recognition of the unique structure of DNA:RNA hybrids. Biochimie, 2008, 90, 1026-1039.	2.6	101
5	Neomycin Binding to Watsonâ^'Hoogsteen (Wâ^'H) DNA Triplex Groove:Â A Model. Journal of the American Chemical Society, 2003, 125, 3733-3744.	13.7	100
6	An overview of recent advances in duplex DNA recognition by small molecules. Beilstein Journal of Organic Chemistry, 2018, 14, 1051-1086.	2.2	97
7	Neomycin-Induced Hybrid Triplex Formation. Journal of the American Chemical Society, 2001, 123, 11093-11094.	13.7	92
8	Synthesis and Spectroscopic Studies of the Aminoglycoside (Neomycin)â^'Perylene Conjugate Binding to Human Telomeric DNA. Biochemistry, 2011, 50, 2838-2849.	2.5	82
9	Aminoglycoside (Neomycin) Preference Is for A-Form Nucleic Acids, Not Just RNA:Â Results from a Competition Dialysis Study. Journal of the American Chemical Society, 2003, 125, 10148-10149.	13.7	78
10	Thermodynamics of Nucleic Acid â€œShape Readoutâ€•by an Aminosugar. Biochemistry, 2011, 50, 9088-9113.	2.5	72
11	Neomycinâ^'Neomycin Dimer: An All-Carbohydrate Scaffold with High Affinity for AT-Rich DNA Duplexes. Journal of the American Chemical Society, 2011, 133, 7361-7375.	13.7	71
12	Combining the Best in Triplex Recognition:â€‰ Synthesis and Nucleic Acid Binding of a BQQâ^'Neomycin Conjugate. Journal of the American Chemical Society, 2003, 125, 8070-8071.	13.7	70
13	Molecular recognition of a DNA:RNA hybrid: Sub-nanomolar binding by a neomycinâ€“methidium conjugate. Bioorganic and Medicinal Chemistry Letters, 2008, 18, 4142-4145.	2.2	65
14	Triple Recognition of B-DNA by a Neomycinâ^'Hoechst 33258â^'Pyrene Conjugate. Biochemistry, 2010, 49, 452-469.	2.5	63
15	Aminoglycoside Binding toOxytricha novaTelomeric DNA. Biochemistry, 2010, 49, 9891-9903.	2.5	61
16	Dual recognition of the human telomeric G-quadruplex by a neomycinâ€“anthraquinone conjugate. Chemical Communications, 2013, 49, 5796.	4.1	61
17	DNA Triple Helix Stabilization by Aminoglycoside Antibiotics. Bioorganic and Medicinal Chemistry Letters, 2000, 10, 1897-1899.	2.2	60
18	Pyreneâ€“neomycin conjugate: dual recognition of a DNA triple helixElectronic supplementary information (ESI) available: NMR spectra, UV spectra, extinction coefficients, melting curves of pyreneâ€“neomycin conjugate, details of modeling studies. See http://www.rsc.org/suppdata/cc/b1/b108171c/. Chemical Communications, 2002, , 70-71.	4.1	58

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19	Reaching into the Major Groove of B-DNA:Â Synthesis and Nucleic Acid Binding of a Neomycinâ˜Hoechst 33258 Conjugate. Journal of the American Chemical Society, 2003, 125, 12398-12399.	13.7	56
20	Click Dimers To Target HIV TAR RNA Conformation. Biochemistry, 2012, 51, 2331-2347.	2.5	55
21	Recognition of B-DNA by Neomycinâ˜Hoechst 33258 Conjugates. Biochemistry, 2006, 45, 10217-10232.	2.5	53
22	Probing the Recognition Surface of a DNA Triplex: Binding Studies with Intercalatorâ˜Neomycin Conjugates. Biochemistry, 2010, 49, 5540-5552.	2.5	52
23	Molecular recognition of singleâ€stranded RNA: Neomycin binding to poly(A). FEBS Letters, 2009, 583, 2269-2275.	2.8	46
24	Synthesis of aminoglycosideâ€“DNA conjugates. Bioorganic and Medicinal Chemistry Letters, 2002, 12, 1259-1262.	2.2	44
25	An Expanding View of Aminoglycosideâ€“Nucleic Acid Recognition. Advances in Carbohydrate Chemistry and Biochemistry, 2006, 60, 251-302.	0.9	44
26	Recognition of HIV TAR RNA by triazole linked neomycin dimers. Bioorganic and Medicinal Chemistry Letters, 2011, 21, 4788-4792.	2.2	44
27	Sequence-Specific Targeting of RNA with an Oligonucleotideâ˜Neomycin Conjugate. Bioconjugate Chemistry, 2007, 18, 160-169.	3.6	43
28	Recognition of HIV-TAR RNA using neomycinâ€“benzimidazole conjugates. Bioorganic and Medicinal Chemistry Letters, 2013, 23, 5689-5693.	2.2	39
29	From triplex to B-form duplex stabilization: reversal of target selectivity by aminoglycoside dimers. Bioorganic and Medicinal Chemistry Letters, 2004, 14, 4643-4646.	2.2	37
30	A fluorescence-based screen for ribosome binding antibiotics. Analytical Biochemistry, 2013, 434, 300-307.	2.4	36
31	Targeting C-myc G-Quadruplex: Dual Recognition by Aminosugar-Bisbenzimidazoles with Varying Linker Lengths. Molecules, 2013, 18, 14228-14240.	3.8	36
32	Multivalency in the recognition and antagonism of a HIV TAR RNAâ€“TAT assembly using an aminoglycoside benzimidazole scaffold. Organic and Biomolecular Chemistry, 2016, 14, 2052-2056.	2.8	36
33	Major Groove Recognition of DNA by Carbohydrates. Current Organic Chemistry, 2006, 10, 663-673.	1.6	35
34	Rapid Synthesis, RNA Binding, and Antibacterial Screening of a Peptidic-Aminosugar (PA) Library. ACS Chemical Biology, 2015, 10, 1278-1289.	3.4	35
35	Aminoglycosideâ€“Nucleic Acid Interactions: The Case for Neomycin. Topics in Current Chemistry, 2005, , 149-178.	4.0	34
36	Triple recognition of B-DNA. Bioorganic and Medicinal Chemistry Letters, 2009, 19, 4974-4979.	2.2	34

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37	Calorimetric and spectroscopic studies of aminoglycoside binding to AT-rich DNA triple helices. Biochimie, 2010, 92, 514-529.	2.6	34
38	Replacement of the Negative Phosphodiester Linkages of DNA by PositiveS-Methylthiourea Linkers:Â A Novel Approach to Putative Antisense Agents. Journal of the American Chemical Society, 1998, 120, 6619-6620.	13.7	33
39	Potent inhibition of miR-27a by neomycinâ€“bisbenzimidazole conjugates. Chemical Science, 2015, 6, 5837-5846.	7.4	33
40	DNA Cleaving Ability of 9-Diazofluorenes and Diaryl Diazomethanes: Implications for the Mode of Action of the Kinamycin Antibiotics. Journal of Organic Chemistry, 1995, 60, 3268-3269.	3.2	30
41	Synthesis of Neomycinâ€DNA/Peptide Nucleic Acid Conjugates. Journal of Carbohydrate Chemistry, 2005, 24, 145-160.	1.1	27
42	Selective Inhibition of Escherichia coli RNA and DNA Topoisomerase I by Hoechst 33258 Derived Mono- and Bisbenzimidazoles. Journal of Medicinal Chemistry, 2017, 60, 4904-4922.	6.4	25
43	Utilization of chromic polydiacetylene assemblies as a platform to probe specific binding between drug and RNA. RSC Advances, 2017, 7, 41435-41443.	3.6	25
44	Selective inhibition of bacterial topoisomerase I by alkynyl-bisbenzimidazoles. MedChemComm, 2014, 5, 816-825.	3.4	24
45	New Application of Neomycin Bâ€“Bisbenzimidazole Hybrids as Antifungal Agents. ACS Infectious Diseases, 2018, 4, 196-207.	3.8	24
46	Analysis of Diazofluorene DNA Binding and Damaging Activity: DNA Cleavage by a Synthetic Monomeric Diazofluorene. Angewandte Chemie - International Edition, 2014, 53, 9325-9328.	13.8	22
47	Neomycin improves cationic lipid-mediated transfection of DNA in human cells. Bioorganic and Medicinal Chemistry Letters, 2005, 15, 3467-3469.	2.2	21
48	Antimicrobial Activity, AME Resistance, and A-Site Binding Studies of Anthraquinoneâ€“Neomycin Conjugates. ACS Infectious Diseases, 2017, 3, 206-215.	3.8	21
49	Development of new DNA-binding and cleaving molecules: Design, synthesis and activity of a bisdiazonium salt. Tetrahedron Letters, 1993, 34, 7823-7826.	1.4	20
50	Positively Charged Deoxynucleic Methylthioureas:â€‰ Synthesis and Binding Properties of Pentameric Thymidyl Methylthiourea. Journal of the American Chemical Society, 1998, 120, 12419-12427.	13.7	20
51	Arginine-linked neomycin B dimers: synthesis, rRNA binding, and resistance enzyme activity. MedChemComm, 2016, 7, 164-169.	3.4	20
52	Probing A-form DNA: A fluorescent aminosugar probe and dual recognition by anthraquinone-neomycin conjugates. Bioorganic and Medicinal Chemistry, 2017, 25, 1309-1319.	3.0	19
53	Recognition of RNA duplex by a neomycinâ€“Hoechst 33258 conjugate. Bioorganic and Medicinal Chemistry, 2014, 22, 2327-2332.	3.0	18
54	Influence of Linker Length and Composition on Enzymatic Activity and Ribosomal Binding of Neomycin Dimers. Antimicrobial Agents and Chemotherapy, 2015, 59, 3899-3905.	3.2	18

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55	Targeting miRNA by tunable small molecule binders: peptidic aminosugar mediated interference in miR-21 biogenesis reverts epithelial to mesenchymal transition. MedChemComm, 2018, 9, 1147-1154.	3.4	18
56	Influence of linker length in shape recognition of Bâˆ— DNA by dimeric aminoglycosides. Bioorganic and Medicinal Chemistry, 2015, 23, 3105-3109.	3.0	17
57	Linker dependent intercalation of bisbenzimidazole-aminosugars in an RNA duplex; selectivity in RNA vs . DNA binding. Bioorganic and Medicinal Chemistry Letters, 2016, 26, 5989-5994.	2.2	17
58	Towards the development of non-enediyne approaches for mimicking enediyne chemistry: Design, synthesis and activity of a 1,4-bisdiazonium compound. Tetrahedron Letters, 1995, 36, 4369-4372.	1.4	16
59	A pH Sensitive High-Throughput Assay for miRNA Binding of a Peptide-Aminoglycoside (PA) Library. PLoS ONE, 2015, 10, e0144251.	2.5	16
60	An assay for human telomeric G-quadruplex DNA binding drugs. Bioorganic and Medicinal Chemistry Letters, 2013, 23, 6695-6699.	2.2	15
61	Solid-phase synthesis of oligomeric deoxynucleic-thiourea (DNT) and deoxynucleic S -methylthiourea (DNmt): a neutral/polycationic analogue of DNA. Bioorganic and Medicinal Chemistry Letters, 2000, 10, 691-693.	2.2	14
62	Particle beam glow discharge mass spectrometry: spectral characteristics of nucleobases. Rapid Communications in Mass Spectrometry, 2003, 17, 1749-1758.	1.5	14
63	Characterization of Ribosomal Binding and Antibacterial Activities Using Two Orthogonal High-Throughput Screens. Antimicrobial Agents and Chemotherapy, 2013, 57, 4717-4726.	3.2	14
64	Synthesis, antimicrobial activity, attenuation of aminoglycoside resistance in MRSA, and ribosomal A-site binding of pyrene-neomycin conjugates. European Journal of Medicinal Chemistry, 2019, 163, 381-393.	5.5	13
65	Structural basis for plazomicin antibiotic action and resistance. Communications Biology, 2021, 4, 729.	4.4	13
66	Eukaryotic Ribosomal Expansion Segments as Antimicrobial Targets. Biochemistry, 2017, 56, 5288-5299.	2.5	12
67	Fidelity of Deoxynucleic S-Methythiourea (DNmt) Binding to DNA Oligomers:â€‰ Influence of C Mismatches. Journal of the American Chemical Society, 1999, 121, 10680-10684.	13.7	11
68	Histone Deacetylase Inhibitors Are Protective in Acute but Not in Chronic Models of Ototoxicity. Frontiers in Cellular Neuroscience, 2017, 11, 315.	3.7	10
69	Azoester compounds for inducing DNA cleavage under physiological conditions. Tetrahedron Letters, 1995, 36, 3123-3126.	1.4	9
70	Structural and phylogenetic analyses of resistance to next-generation aminoglycosides conferred by AAC(2â€²) enzymes. Scientific Reports, 2021, 11, 11614.	3.3	9
71	Efficient Stabilization of Phosphodiester (PO), Phosphorothioate (PS), and 2â€²-O-Methoxy (2â€²-OMe) DNAÂ·RNA Hybrid Duplexes by Amino Sugars. Biochemistry, 2012, 51, 5496-5505.	2.5	7
72	Shape readout of ATâ€rich DNA by carbohydrates. Biopolymers, 2014, 101, 720-732.	2.4	7

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73	Gram-negative synergy and mechanism of action of alkynyl bisbenzimidazoles. Scientific Reports, 2019, 9, 14171.	3.3	7
74	Impact of Linker Length and Composition on Fragment Binding and Cell Permeation: Story of a Bisbenzimidazole Dye Fragment. Biochemistry, 2017, 56, 6434-6447.	2.5	6
75	Rapid solid-phase syntheses of a peptidic-aminoglycoside library. Tetrahedron, 2018, 74, 4418-4428.	1.9	6
76	A single precursor approach to new DNA cleaving and crosslinking agents. Bioorganic and Medicinal Chemistry Letters, 1995, 5, 1191-1196.	2.2	5
77	Multivalent amino sugars to recognize different TAR RNA conformations. MedChemComm, 2014, 5, 1235-1246.	3.4	5
78	Surface Dependent Dual Recognition of a G-quadruplex DNA With Neomycin-Intercalator Conjugates. Frontiers in Chemistry, 2020, 8, 60.	3.6	5
79	Fine-tuning miR-21 expression and inhibition of EMT in breast cancer cells using aromatic-neomycin derivatives. Molecular Therapy - Nucleic Acids, 2022, 27, 685-698.	5.1	5
80	A fluorescent aminosugar to rapidly screen and study RNA binders. Methods in Enzymology, 2019, 623, 291-314.	1.0	2
81	Aminoglycoside Functionalization as a Tool for Targeting Nucleic Acids. Methods in Molecular Biology, 2019, 1973, 147-162.	0.9	2