Barbara Gatto

List of Publications by Year
in descending order

79 papers	2,568 citations	218677 26 h-index	206112 48 g-index
83 all docs	83 docs citations	83 times ranked	2924 citing authors

#	Article	IF	Citations
1	Substituted 2,5â€˜-Bi-1H-benzimidazoles:Â Topoisomerase I Inhibition and Cytotoxicity. Journal of Medicinal Chemistry, 1996, 39, 992-998.	6.4	231
2	Quinolone binding to DNA is mediated by magnesium ions.. Proceedings of the National Academy of Sciences of the United States of America, 1992, 89, 9671-9675.	7.1	164
3	Nucleic Acid Aptamers Based on the G-Quadruplex Structure: Therapeutic and Diagnostic Potential. Current Medicinal Chemistry, 2009, 16, 1248-1265.	2.4	138
4	6-Aminoquinolones as New Potential Anti-HIV Agents. Journal of Medicinal Chemistry, 2000, 43, 3799-3802.	6.4	105
5	Structure-activity relationships of benzimidazoles and related heterocycles as topoisomerase I poisons. Bioorganic and Medicinal Chemistry, 1996, 4, 621-630.	3.0	95
6	Coralyne and related compounds as mammalian topoisomerase I and topoisomerase II poisons. Bioorganic and Medicinal Chemistry, 1996, 4, 781-791.	3.0	93
7	The evolving world of protein-G-quadruplex recognition: A medicinal chemistâ€™s perspective. Biochimie, 2011, 93, 1219-1230.	2.6	89
8	In vitro selection of DNA aptamers that bind l-tyrosinamide. Bioorganic and Medicinal Chemistry, 2001, 9, 2543-2548.	3.0	86
9	On the mechanism of action of quinolone drugs. Trends in Microbiology, 1993, 1, 232-235.	7.7	81
10	Synthesis and Evaluation of Terbenzimidazoles as Topoisomerase I Inhibitors. Journal of Medicinal Chemistry, 1995, 38, 3638-3644.	6.4	80
11	Involvement of p53 in specific anti-neuroectodermal tumor activity of aloe-emodin. International Journal of Cancer, 2003, 106, 836-847.	5.1	70
12	Design, Synthesis, and Biological Properties of New Bis(acridine-4-carboxamides) as Anticancer Agents. Journal of Medicinal Chemistry, 2003, 46, 3109-3115.	6.4	60
13	New Anti-Human Immunodeficiency Virus Type 1 6-Aminoquinolones: Mechanism of Action. Antimicrobial Agents and Chemotherapy, 2003, 47, 889-896.	3.2	60
14	Inhibition of Subgenomic Hepatitis C Virus RNA Replication by Acridone Derivatives: Identification of an NS3 Helicase Inhibitor. Journal of Medicinal Chemistry, 2009, 52, 3354-3365.	6.4	54
15	Mg 2+ -mediated binding of 6-Substituted quinolones to DNA: relevance to biological activity. Bioorganic and Medicinal Chemistry, 1998, 6, 1555-1561.	3.0	52
16	Anthracyclines: recent developments in their separation and quantitation. Biomedical Applications, 2001, 764, 161-171.	1.7	51
17	Structure activity of topoisomerase i poisons related to hoechst 33342. Bioorganic and Medicinal Chemistry Letters, 1994, 4, 2871-2876.	2.2	47
18	Peptidyl Anthraquinones as Potential Antineoplastic Drugs:â€‰ Synthesis, DNA Binding, Redox Cycling, and Biological Activity. Journal of Medicinal Chemistry, 1996, 39, 3114-3122.	6.4	41

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19	Differential Poisoning of Topoisomerases by Menogaril and Nogalamycin Dictated by the Minor Groove-Binding Nogalose Sugar. Biochemistry, 1997, 36, 13285-13291.	2.5	41
20	Pyrrolo-quinoline derivatives as potential antineoplastic drugs. Bioorganic and Medicinal Chemistry, 2000, 8, 1415-1422.	3.0	41
21	Inhibition of Human Immunodeficiency Virus Type 1 Tat- trans -Activation-Responsive Region Interaction by an Antiviral Quinolone Derivative. Antimicrobial Agents and Chemotherapy, 2004, 48, 1895-1899.	3.2	40
22	Novel Pyrrolo[3,2-f]quinolines: Synthesis and Antiproliferative Activity. Bioorganic and Medicinal Chemistry, 2001, 9, 1843-1848.	3.0	35
23	Quinolino[3,4- b]quinoxalines and pyridazino[4,3- c]quinoline derivatives: Synthesis, inhibition of topoisomerase IÍ±, G-quadruplex binding and cytotoxic properties. European Journal of Medicinal Chemistry, 2016, 123, 704-717.	5.5	30
24	The 6-Aminoquinolone WC5 Inhibits Human Cytomegalovirus Replication at an Early Stage by Interfering with the Transactivating Activity of Viral Immediate-Early 2 Protein. Antimicrobial Agents and Chemotherapy, 2010, 54, 1930-1940.	3.2	29
25	Human Thrombin Detection Through a Sandwich Aptamer Microarray: Interaction Analysis in Solution and in Solid Phase. Sensors, 2011, 11, 9426-9441.	3.8	29
26	Mapping Drug Interactions at the Covalent Topoisomerase II-DNA Complex by Bisantrene/Amsacrine Congeners. Journal of Biological Chemistry, 1998, 273, 12732-12739.	3.4	26
27	Studies of Antiâ€HIV Transcription Inhibitor Quinolones: Identification of Potent N1â€Vinyl Derivatives. ChemMedChem, 2010, 5, 1880-1892.	3.2	26
28	Development of a Multiplex Sandwich Aptamer Microarray for the Detection of VEGF165 and Thrombin. Sensors, 2013, 13, 13425-13438.	3.8	26
29	Monoclonal Antibodies in Cancer Therapy. Anti-Cancer Agents in Medicinal Chemistry, 2004, 4, 411-414.	7.0	26
30	The topoisomerase II poison clerocidin alkylates non-paired guanines of DNA: implications for irreversible stimulation of DNA cleavage. Nucleic Acids Research, 2001, 29, 4224-4230.	14.5	25
31	Ellagic Acid and Polyhydroxylated Urolithins Are Potent Catalytic Inhibitors of Human Topoisomerase II: An in Vitro Study. Journal of Agricultural and Food Chemistry, 2012, 60, 9162-9170.	5.2	25
32	Quantitation of camptothecin and related compounds. Biomedical Applications, 2001, 764, 121-140.	1.7	23
33	Sequence-specific interactions of drugs interfering with the topoisomeraseâ€“DNA cleavage complex. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2002, 1587, 145-154.	3.8	23
34	Perylene side chains modulate G-quadruplex conformation in biologically relevant DNA sequences. Bioorganic and Medicinal Chemistry, 2008, 16, 9331-9339.	3.0	23
35	2,6-Di(ï‰-aminoalkyl)-2,5,6,7-tetrahydropyrazolo[3,4,5-mn]pyrimido[5,6,1-de]acridine-5,7-diones:Â Novel, Potent, Cytotoxic, and DNA-Binding Agents. Journal of Medicinal Chemistry, 2002, 45, 696-702.	6.4	21
36	Clerocidin alkylates DNA through its epoxide function: evidence for a fine tuned mechanism of action. Nucleic Acids Research, 2003, 31, 5149-5156.	14.5	21

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37	Synthesis and biological evaluation of 2-phenylquinolones targeted at Tat/TAR recognition. Bioorganic and Medicinal Chemistry Letters, 2009, 19, 714-717.	2.2	21
38	Computationally driven discovery of SARS-CoV-2 M^{pro}inhibitors: from design to experimental validation. Chemical Science, 2022, 13, 3674-3687.	7.4	21
39	Atacicept, a homodimeric fusion protein for the potential treatment of diseases triggered by plasma cells. Current Opinion in Investigational Drugs, 2008, 9, 1216-27.	2.3	20
40	Synthesis and DNA Cleavage Activity of Bisâ€3â€chloropiperidines as Alkylating Agents. ChemMedChem, 2014, 9, 2178-2185.	3.2	19
41	2â€Phenylquinolones as Inhibitors of the HIVâ€1 Tatâ€“TAR Interaction. ChemMedChem, 2009, 4, 935-938.	3.2	18
42	Effects of Common Buffer Systems on Drug Activity:â€‰ The Case of Clerocidin. Chemical Research in Toxicology, 2004, 17, 492-501.	3.3	17
43	Antiviral 6-amino-quinolones: Molecular basis for potency and selectivity. Bioorganic and Medicinal Chemistry Letters, 2005, 15, 4247-4251.	2.2	17
44	Rational Design, Synthesis, and DNA Binding Properties of Novel Sequenceâ€Selective Peptidyl Congeners of Ametantrone. ChemMedChem, 2010, 5, 1080-1091.	3.2	17
45	DNA-Interactive Anticancer Aza-Anthrapyrazoles: Biophysical and Biochemical Studies Relevant to the Mechanism of Action. Molecular Pharmacology, 2001, 59, 96-103.	2.3	16
46	From Proteins to Nucleic Acid-Based Drugs: The Role of Biotech in Anti-VEGF Therapy. Anti-Cancer Agents in Medicinal Chemistry, 2006, 6, 287-301.	1.7	16
47	Design, synthesis and biological evaluation of TAR and cTAR binders as HIV-1 nucleocapsid inhibitors. MedChemComm, 2013, 4, 1388.	3.4	16
48	Synthesis and in Vitro Screening of New Series of 2,6-Dipeptidyl-anthraquinones: Influence of Side Chain Length on HIV-1 Nucleocapsid Inhibitors. Journal of Medicinal Chemistry, 2016, 59, 1914-1924.	6.4	15
49	Indenocinnoline derivatives as G-quadruplex binders, topoisomerase IIÎ± inhibitors and antiproliferative agents. Bioorganic and Medicinal Chemistry, 2017, 25, 2625-2634.	3.0	15
50	Drugs Acting on the Beta Isoform of Human Topoisomerase II (p180). Anti-Cancer Agents in Medicinal Chemistry, 2003, 3, 173-185.	7.0	15
51	Synthesis and evaluation of a bis-3-chloropiperidine derivative incorporating an anthraquinone pharmacophore. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 4606-4609.	2.2	14
52	Bis-3-chloropiperidines containing bridging lysine linkers: Influence of side chain structure on DNA alkylating activity. Bioorganic and Medicinal Chemistry, 2015, 23, 1241-1250.	3.0	13
53	Direct and Topoisomeraseâ€…II Mediated DNA Damage by Bisâ€3â€chloropiperidines: The Importance of Being an Earnest G. ChemMedChem, 2017, 12, 1471-1479.	3.2	13
54	Behind the Mirror: Chirality Tunes the Reactivity and Cytotoxicity of Chloropiperidines as Potential Anticancer Agents. ACS Medicinal Chemistry Letters, 2019, 10, 552-557.	2.8	13

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55	A new inactive conformation of SARS-CoV-2 main protease. Acta Crystallographica Section D: Structural Biology, 2022, 78, 363-378.	2.3	13
56	Polyphenolic C-glucosidic ellagitannins present in oak-aged wine inhibit HIV-1 nucleocapsid protein. Tetrahedron, 2015, 71, 3020-3026.	1.9	11
57	Mechanisms of HIV-1 Nucleocapsid Protein Inhibition by Lysyl-Peptidyl-Anthraquinone Conjugates. Bioconjugate Chemistry, 2016, 27, 247-256.	3.6	11
58	Virtual Cross-Linking of the Active Nemorubicin Metabolite PNU-159682 to Double-Stranded DNA. Chemical Research in Toxicology, 2017, 30, 614-624.	3.3	11
59	Development and Optimization of a Thrombin Sandwich Aptamer Microarray. Microarrays (Basel,) Tj ETQq1 1 0.784314 rgBT /Overloc	1.4	10
60	Identification of novel 2-benzoxazolinone derivatives with specific inhibitory activity against the HIV-1 nucleocapsid protein. European Journal of Medicinal Chemistry, 2018, 145, 154-164.	5.5	10
61	Aromatic Linkers Unleash the Antiproliferative Potential of 3â€Chloropiperidines Against Pancreatic Cancer Cells. ChemMedChem, 2020, 15, 2040-2051.	3.2	10
62	Clerocidin interacts with the cleavage complex of Streptococcus pneumoniae topoisomerase IV to induce selective irreversible DNA damage. Nucleic Acids Research, 2006, 34, 1982-1991.	14.5	9
63	Aminoacyl-analogues of mitoxantrone as novel DNA-damaging cytotoxic agents. Arkivoc, 2004, 2004, 204-218.	0.5	9
64	Preferred interaction of d-peptidyl-anthraquinones with double-stranded B-DNA. International Journal of Biological Macromolecules, 1997, 21, 319-326.	7.5	7
65	Nucleocapsid Annealing-Mediated Electrophoresis (NAME) Assay Allows the Rapid Identification of HIV-1 Nucleocapsid Inhibitors. Journal of Visualized Experiments, 2015, , 52474.	0.3	7
66	Non-Natural Linker Configuration in 2,6-Dipeptidyl-Anthraquinones Enhances the Inhibition of TAR RNA Binding/Annealing Activities by HIV-1 NC and Tat Proteins. Bioconjugate Chemistry, 2018, 29, 2195-2207.	3.6	7
67	Appended Aromatic Moieties in Flexible Bisâ€3â€chloropiperidines Confer Tropism against Pancreatic Cancer Cells. ChemMedChem, 2021, 16, 860-868.	3.2	7
68	Bis-3-Chloropiperidines Targeting TAR RNA as A Novel Strategy to Impair the HIV-1 Nucleocapsid Protein. Molecules, 2021, 26, 1874.	3.8	7
69	Effective DNA Inhibitors of Cathepsin G by In Vitro Selection. International Journal of Molecular Sciences, 2008, 9, 1008-1023.	4.1	6
70	Enzymatic Formation of PEGylated Oligonucleotides. Bioconjugate Chemistry, 2014, 25, 433-441.	3.6	6
71	B-CePs as cross-linking probes for the investigation of RNA higher-order structure. Nucleic Acids Research, 2021, 49, 6660-6672.	14.5	5
72	Topoisomerase I-targeting drugs. Advances in DNA Sequence-Specific Agents, 1998, 3, 39-66.	0.3	4

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73	Aminoacyl-Anthraquinones: DNA-Binding and Sequence Specificity. Jerusalem Symposia on Quantum Chemistry and Biochemistry, 1990, , 207-224.	0.2	4
74	Further insight into the Zn2+-mediated binding of streptonigrin to DNA. Il Farmaco, 1998, 53, 645-649.	0.9	2
75	Understanding the Alkylation Mechanism of 3â€Chloropiperidines â€“ NMR Kinetic Studies and Isolation of Bicyclic Aziridinium Ions. European Journal of Organic Chemistry, 2021, 2021, 5905-5913.	2.4	2
76	Design and Synthesis of WM5 Analogues as HIV-1 TAR RNA Binders. Open Medicinal Chemistry Journal, 2019, 13, 16-28.	2.4	2
77	Multiple in Vitro Inhibition of HIV-1 Proteins by 2,6-Dipeptidyl-anthraquinone Conjugates Targeting the PBS RNA. ACS Medicinal Chemistry Letters, 2020, 11, 949-955.	2.8	1
78	In Vitro Evaluation of Bis-3-Chloropiperidines as RNA Modulators Targeting TAR and TAR-Protein Interaction. International Journal of Molecular Sciences, 2022, 23, 582.	4.1	1
79	DNA-Binding Properties of Cytotoxic Naphtindolizinedione-Carboxamides Acting as Type II Topoisomerase Inhibitors. A Combined In Silico and Experimental Study. Chemistry Proceedings, 2021, 3, 96.	0.1	0