

Carole A Bewley

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8235787/publications.pdf>

Version: 2024-02-01

77
papers

5,615
citations

109321

35
h-index

79698

73
g-index

81
all docs

81
docs citations

81
times ranked

6202
citing authors

#	ARTICLE	IF	CITATIONS
1	Structure of HIV-1 gp120 V1/V2 domain with broadly neutralizing antibody PG9. <i>Nature</i> , 2011, 480, 336-343.	27.8	794
2	Structures of the CCR5 N Terminus and of a Tyrosine-Sulfated Antibody with HIV-1 gp120 and CD4. <i>Science</i> , 2007, 317, 1930-1934.	12.6	379
3	Trimeric HIV-1-Env Structures Define Glycan Shields from Clades A, B, and G. <i>Cell</i> , 2016, 165, 813-826.	28.9	379
4	The solution structure of an HMG-I(Y)-DNA complex defines a new architectural minor groove binding motif. <i>Nature Structural Biology</i> , 1997, 4, 657-665.	9.7	337
5	Structural basis for diverse N-glycan recognition by HIV-1-neutralizing V1-V2-directed antibody PG16. <i>Nature Structural and Molecular Biology</i> , 2013, 20, 804-813.	8.2	257
6	Solution structure of cyanovirin-N, a potent HIV-inactivating protein. <i>Nature Structural Biology</i> , 1998, 5, 571-578.	9.7	249
7	MINOR GROOVE-BINDING ARCHITECTURAL PROTEINS: Structure, Function, and DNA Recognition. <i>Annual Review of Biophysics and Biomolecular Structure</i> , 1998, 27, 105-131.	18.3	233
8	Lithistid Sponges: Star Performers or Hosts to the Stars. <i>Angewandte Chemie - International Edition</i> , 1998, 37, 2162-2178.	13.8	181
9	Crystal structure of cyanovirin-N, a potent HIV-inactivating protein, shows unexpected domain swapping. <i>Journal of Molecular Biology</i> , 1999, 288, 403-412.	4.2	160
10	Design of an expression system for detecting folded protein domains and mapping macromolecular interactions by NMR. <i>Protein Science</i> , 1997, 6, 2359-2364.	7.6	142
11	The Potent Anti-HIV Protein Cyanovirin-N Contains Two Novel Carbohydrate Binding Sites That Selectively Bind to Man8D1D3 and Man9 with Nanomolar Affinity: A Implications for Binding to the HIV Envelope Protein gp120. <i>Journal of the American Chemical Society</i> , 2001, 123, 3892-3902.	13.7	131
12	Solution Structure of a Cyanovirin-N:Man1-2Man1 Complex. <i>Structure</i> , 2001, 9, 931-940.	3.3	130
13	Design of a Novel Peptide Inhibitor of HIV Fusion That Disrupts the Internal Trimeric Coiled-coil of gp41. <i>Journal of Biological Chemistry</i> , 2002, 277, 14238-14245.	3.4	125
14	Impact of Residual Dipolar Couplings on the Accuracy of NMR Structures Determined from a Minimal Number of NOE Restraints. <i>Journal of the American Chemical Society</i> , 1999, 121, 6513-6514.	13.7	108
15	Griffithsin: An Antiviral Lectin with Outstanding Therapeutic Potential. <i>Viruses</i> , 2016, 8, 296.	3.3	108
16	Chrysopaentins A-H, Antibacterial Bisdiarylbutene Macrocycles That Inhibit the Bacterial Cell Division Protein FtsZ. <i>Journal of the American Chemical Society</i> , 2010, 132, 9069-9077.	13.7	97
17	Crambescidin 826 and Dehydrocrambine A: New Polycyclic Guanidine Alkaloids from the Marine Sponge <i>Monanchora</i> sp. that Inhibit HIV-1 Fusion. <i>Journal of Natural Products</i> , 2003, 66, 1490-1494.	3.0	95
18	Covalent Trimers of the Internal N-terminal Trimeric Coiled-coil of gp41 and Antibodies Directed against Them Are Potent Inhibitors of HIV Envelope-mediated Cell Fusion. <i>Journal of Biological Chemistry</i> , 2003, 278, 20278-20285.	3.4	94

#	ARTICLE	IF	CITATIONS
19	Design and Properties of NCCG-gp41, a Chimeric gp41 Molecule with Nanomolar HIV Fusion Inhibitory Activity. <i>Journal of Biological Chemistry</i> , 2001, 276, 29485-29489.	3.4	88
20	Determination of the Relative Orientation of the Two Halves of the Domain-Swapped Dimer of Cyanovirin-N in Solution Using Dipolar Couplings and Rigid Body Minimization. <i>Journal of the American Chemical Society</i> , 2000, 122, 6009-6016.	13.7	83
21	Solution Structure of the Monovalent Lectin Microvirin in Complex with Man α 1-6Man Provides a Basis for Anti-HIV Activity with Low Toxicity. <i>Journal of Biological Chemistry</i> , 2011, 286, 20788-20796.	3.4	67
22	A Neutralizing Antibody Recognizing Primarily N-Linked Glycan Targets the Silent Face of the HIV Envelope. <i>Immunity</i> , 2018, 48, 500-513.e6.	14.3	66
23	Site-specific Discrimination by Cyanovirin-N for α -Linked Trisaccharides Comprising the Three Arms of Man α 8 and Man α 9. <i>Journal of Molecular Biology</i> , 2002, 322, 881-889.	4.2	65
24	Motualevic Acids A α -F, Antimicrobial Acids from the Sponge <i>Siliquariaspongia</i> sp.. <i>Organic Letters</i> , 2009, 11, 1087-1090.	4.6	60
25	Conformational Changes in HIV-1 gp41 in the Course of HIV-1 Envelope Glycoprotein-Mediated Fusion and Inactivation. <i>Biochemistry</i> , 2005, 44, 12471-12479.	2.5	59
26	New Carbohydrate Specificity and HIV-1 Fusion Blocking Activity of the Cyanobacterial Protein MVL: NMR, ITC and Sedimentation Equilibrium Studies. <i>Journal of Molecular Biology</i> , 2004, 339, 901-914.	4.2	56
27	Targeted Isolation of Antibodies Directed against Major Sites of SIV Env Vulnerability. <i>PLoS Pathogens</i> , 2016, 12, e1005537.	4.7	51
28	Antibody elicited against the gp41 N-heptad repeat (NHR) coiled-coil can neutralize HIV-1 with modest potency but non-neutralizing antibodies also bind to NHR mimetics. <i>Virology</i> , 2008, 377, 170-183.	2.4	50
29	Inhibition of HIV-1 Envelope-Mediated Fusion by Synthetic Batzelladine Analogues. <i>Journal of Natural Products</i> , 2004, 67, 1319-1324.	3.0	47
30	Chrysophaentins are competitive inhibitors of FtsZ and inhibit Z-ring formation in live bacteria. <i>Bioorganic and Medicinal Chemistry</i> , 2013, 21, 5673-5678.	3.0	47
31	Structural Basis of HIV-1 Neutralization by Affinity Matured Fabs Directed against the Internal Trimeric Coiled-Coil of gp41. <i>PLoS Pathogens</i> , 2010, 6, e1001182.	4.7	44
32	Dequalinium, a New Inhibitor of Mycobacterium tuberculosis Mycothiol Ligase Identified by High-Throughput Screening. <i>Journal of Biomolecular Screening</i> , 2009, 14, 643-652.	2.6	43
33	Inhibition of Hepatitis C Virus by the Cyanobacterial Protein <i>Microcystis viridis</i> Lectin: Mechanistic Differences between the High-Mannose Specific Lectins MVL, CV-N, and GNA. <i>Molecular Pharmaceutics</i> , 2013, 10, 4590-4602.	4.6	43
34	Tulongicin, an Antibacterial Tri-Indole Alkaloid from a Deep-Water <i>Topsentia</i> sp. Sponge. <i>Journal of Natural Products</i> , 2017, 80, 2556-2560.	3.0	40
35	A Monoclonal Fab Derived from a Human Nonimmune Phage Library Reveals a New Epitope on gp41 and Neutralizes Diverse Human Immunodeficiency Virus Type 1 Strains. <i>Journal of Virology</i> , 2007, 81, 12946-12953.	3.4	37
36	HIV-1 gp120 as a therapeutic target: navigating a moving labyrinth. <i>Expert Opinion on Therapeutic Targets</i> , 2015, 19, 765-783.	3.4	34

#	ARTICLE	IF	CITATIONS
37	Tyrosine-sulfate isosteres of CCR5 N-terminus as tools for studying HIV-1 entry. <i>Bioorganic and Medicinal Chemistry</i> , 2008, 16, 10113-10120.	3.0	31
38	Structure-Based Identification and Neutralization Mechanism of Tyrosine Sulfate Mimetics That Inhibit HIV-1 Entry. <i>ACS Chemical Biology</i> , 2011, 6, 1069-1077.	3.4	31
39	Polybrominated Diphenyl Ethers: Structure Determination and Trends in Antibacterial Activity. <i>Journal of Natural Products</i> , 2016, 79, 1872-1876.	3.0	31
40	Differential Inhibition of HIV-1 and SIV Envelope-Mediated Cell Fusion by C34 Peptides Derived from the C-Terminal Heptad Repeat of gp41 from Diverse Strains of HIV-1, HIV-2, and SIV. <i>Journal of Medicinal Chemistry</i> , 2005, 48, 3036-3044.	6.4	29
41	Sequestering of the Prehairpin Intermediate of gp41 by Peptide N36 ^{Mut(e,g)} Potentiates the Human Immunodeficiency Virus Type 1 Neutralizing Activity of Monoclonal Antibodies Directed against the N-Terminal Helical Repeat of gp41. <i>Journal of Virology</i> , 2008, 82, 10032-10041.	3.4	29
42	Characterization and HIV-1 Fusion Inhibitory Properties of Monoclonal Fabs Obtained From a Human Non-immune Phage Library Selected Against Diverse Epitopes of the Ectodomain of HIV-1 gp41. <i>Journal of Molecular Biology</i> , 2005, 353, 945-951.	4.2	27
43	Marine sponge alkaloids as a source of anti-bacterial adjuvants. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016, 26, 5863-5866.	2.2	27
44	Rapid Validation of the Overall Structure of an Internal Domain-Swapped Mutant of the Anti-HIV Protein Cyanovirin-N Using Residual Dipolar Couplings. <i>Journal of the American Chemical Society</i> , 2001, 123, 1014-1015.	13.7	25
45	Peptides from Second Extracellular Loop of C-C Chemokine Receptor Type 5 (CCR5) Inhibit Diverse Strains of HIV-1. <i>Journal of Biological Chemistry</i> , 2012, 287, 15076-15086.	3.4	24
46	Synergistic Inhibition of HIV-1 Envelope-Mediated Membrane Fusion by Inhibitors Targeting the N and C-Terminal Heptad Repeats of gp41. <i>Journal of Molecular Biology</i> , 2006, 364, 283-289.	4.2	23
47	Temperature-Dependent Intermediates in HIV-1 Envelope Glycoprotein-Mediated Fusion Revealed by Inhibitors that Target N- and C-Terminal Helical Regions of HIV-1 gp41. <i>Biochemistry</i> , 2004, 43, 8230-8233.	2.5	22
48	Affinity maturation by targeted diversification of the CDR-H2 loop of a monoclonal Fab derived from a synthetic naïve human antibody library and directed against the internal trimeric coiled-coil of gp41 yields a set of Fabs with improved HIV-1 neutralization potency and breadth. <i>Virology</i> , 2009, 393, 112-119.	2.4	22
49	Illuminating the switch in influenza viruses. <i>Nature Biotechnology</i> , 2008, 26, 60-62.	17.5	20
50	Binding Site Geometry and Subdomain Valency Control Effects of Neutralizing Lectins on HIV-1 Viral Particles. <i>ACS Infectious Diseases</i> , 2016, 2, 882-891.	3.8	20
51	Structural Basis for a Dual Function ATP Grasp Ligase That Installs Single and Bicyclic β -Ester Macrocycles in a New Multicore RiPP Natural Product. <i>Journal of the American Chemical Society</i> , 2021, 143, 8056-8068.	13.7	20
52	Susceptibility and mode of binding of the Mycobacterium tuberculosis cysteinyl transferase mycothiol ligase to tRNA synthetase inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011, 21, 2480-2483.	2.2	19
53	Mammalian production of an isotopically enriched outer domain of the HIV-1 gp120 glycoprotein for NMR spectroscopy. <i>Journal of Biomolecular NMR</i> , 2011, 50, 197-207.	2.8	18
54	Geographic Variability and Anti-Staphylococcal Activity of the Chrysopaentins and Their Synthetic Fragments. <i>Marine Drugs</i> , 2012, 10, 1103-1125.	4.6	18

#	ARTICLE	IF	CITATIONS
55	Insights from NMR Spectroscopy into the Conformational Properties of Man α 9 and Its Recognition by Two HIV Binding Proteins. <i>ChemBioChem</i> , 2017, 18, 764-771.	2.6	18
56	Unprecedented Glycosidase Activity at a Lectin Carbohydrate-Binding Site Exemplified by the Cyanobacterial Lectin MVL. <i>Journal of the American Chemical Society</i> , 2009, 131, 16500-16508.	13.7	17
57	Characterizing Carbohydrate-Protein Interactions by Nuclear Magnetic Resonance Spectroscopy. <i>Biopolymers</i> , 2013, 99, 796-806.	2.4	17
58	Antimicrobial Chrysosphaentin Analogs Identified from Laboratory Cultures of the Marine Microalga <i>Chrysosphaera taylorii</i> . <i>Journal of Natural Products</i> , 2019, 82, 148-153.	3.0	14
59	Cloning, expression and rapid purification of active recombinant mycothiol ligase as B1 immunoglobulin binding domain of streptococcal protein G, glutathione-S-transferase and maltose binding protein fusion proteins in <i>Mycobacterium smegmatis</i> . <i>Protein Expression and Purification</i> , 2006, 50, 128-136.	1.3	12
60	A New Natural Product Analog of Blasticidin S Reveals Cellular Uptake Facilitated by the NorA Multidrug Transporter. <i>Antimicrobial Agents and Chemotherapy</i> , 2017, 61, .	3.2	10
61	Swinhopeptolides A and B: Cyclic Depsipeptides from the Sponge <i>Theonella swinhoei</i> That Inhibit Ras/Raf Interaction. <i>Journal of Natural Products</i> , 2020, 83, 1288-1294.	3.0	10
62	Motualevic acids and analogs: Synthesis and antimicrobial structure-activity relationships. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2010, 20, 4108-4111.	2.2	9
63	Effective Isotope Labeling of Proteins in a Mammalian Expression System. <i>Methods in Enzymology</i> , 2015, 565, 289-307.	1.0	9
64	Phylogenomic analysis of the diversity of graspetides and proteins involved in their biosynthesis. <i>Biology Direct</i> , 2022, 17, 7.	4.6	9
65	Binding of HIV-1 gp41-Directed Neutralizing and Non-Neutralizing Fragment Antibody Binding Domain (Fab) and Single Chain Variable Fragment (ScFv) Antibodies to the Ectodomain of gp41 in the Pre-Hairpin and Six-Helix Bundle Conformations. <i>PLoS ONE</i> , 2014, 9, e104683.	2.5	7
66	Glycopeptide Mimetics Recapitulate High-Mannose-Type Oligosaccharide Binding and Function. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 5603-5608.	13.8	7
67	Design and synthesis of small molecule-sulfotyrosine mimetics that inhibit HIV-1 entry. <i>Bioorganic and Medicinal Chemistry</i> , 2016, 24, 1718-1728.	3.0	7
68	Design of HIV Coreceptor Derived Peptides That Inhibit Viral Entry at Submicromolar Concentrations. <i>Molecular Pharmaceutics</i> , 2017, 14, 2681-2689.	4.6	7
69	X-ray Crystallography and Unexpected Chiroptical Properties Reassign the Configuration of Haliclonadiamine. <i>Journal of the American Chemical Society</i> , 2020, 142, 2755-2759.	13.7	7
70	Vertirhodins A-F, C-Linked Pyrrolidine-Iminosugar-Containing Pyranonaphthoquinones from <i>Streptomyces</i> sp. B15-008. <i>Organic Letters</i> , 2021, 23, 682-686.	4.6	6
71	Genome-Guided Discovery of Natural Products through Multiplexed Low-Coverage Whole-Genome Sequencing of Soil Actinomycetes on Oxford Nanopore Flongle. <i>MSystems</i> , 2021, 6, e0102021.	3.8	6
72	Synthesis of 9-Dechlorochrysosphaentin A Enables Studies Revealing Bacterial Cell Wall Biosynthesis Inhibition Phenotype in <i>B. subtilis</i> . <i>Journal of the American Chemical Society</i> , 2020, 142, 16161-16166.	13.7	4

#	ARTICLE	IF	CITATIONS
73	Regioisomerization of Antimalarial Drug WR99210 Explains the Inactivity of a Commercial Stock. Antimicrobial Agents and Chemotherapy, 2020, 65, .	3.2	3
74	Tapping into personalized chemistry. Nature Chemical Biology, 2018, 14, 108-109.	8.0	2
75	Chemical and Biophysical Approaches for Complete Characterization of Lectinâ€“Carbohydrate Interactions. Methods in Enzymology, 2018, 598, 3-35.	1.0	1
76	<i>C</i> ³ -Symmetric Aromatic Core of Griffithsin Is Essential for Potent Anti-HIV Activity. ACS Chemical Biology, 2022, 17, 1450-1459.	3.4	1
77	Lentzeacins A-E, New Bacterial-Derived 2,5- and 2,6-Disubstituted Pyrazines from a BGC-Rich Soil Bacterium <i>Lentzea</i> sp. GA3-008. Molecules, 2021, 26, 7197.	3.8	0