Irwin Chaiken

List of Publications by Year
in descending order

53	1,275	394421	377865
papers	citations	19 h-index	34 g-index

56	56	56	1133
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Antiâ€S2 Protection in COVIDâ€19 Infection and SARSâ€CoVâ€2 Spike Vaccination. FASEB Journal, 2022, 36, .	0.5	0
2	HIV-1 Env-Dependent Cell Killing by Bifunctional Small-Molecule/Peptide Conjugates. ACS Chemical Biology, 2021, 16, 193-204.	3.4	4
3	The Case for S2: The Potential Benefits of the S2 Subunit of the SARS-CoV-2 Spike Protein as an Immunogen in Fighting the COVID-19 Pandemic. Frontiers in Immunology, 2021, 12, 637651.	4.8	86
4	Roles of variable linker length in dual acting virucidal entry inhibitors on HIV â€1 potency via onâ€theâ€fly free energy molecular simulations. Protein Science, 2020, 29, 2304-2310.	7.6	3
5	The HIV-1 Env gp120 Inner Domain Shapes the Phe43 Cavity and the CD4 Binding Site. MBio, 2020, 11, .	4.1	37
6	Metastable HIV-1 Surface Protein Env Sensitizes Cell Membranes to Transformation and Poration by Dual-Acting Virucidal Entry Inhibitors. Biochemistry, 2020, 59, 818-828.	2.5	8
7	Identification of a glycan cluster in gp120 essential for irreversible HIV-1 lytic inactivation by a lectin-based recombinantly engineered protein conjugate. Biochemical Journal, 2020, 477, 4263-4280.	3.7	0
8	Pharmacokinetic stability of macrocyclic peptide triazole HIVâ€1 inactivators alone and in liposomes. Journal of Peptide Science, 2019, 25, e3155.	1.4	11
9	Mechanical characterization of HIVâ€1 with a solidâ€state nanopore sensor. Electrophoresis, 2019, 40, 776-783.	2.4	38
10	Roles of conserved tryptophans in trimerization of HIVâ€1 membraneâ€proximal external regions: Implications for virucidal design via alchemical freeâ€energy molecular simulations. Proteins: Structure, Function and Bioinformatics, 2018, 86, 707-711.	2.6	4
11	Restricted HIV-1 Env glycan engagement by lectin-reengineered DAVEI protein chimera is sufficient for lytic inactivation of the virus. Biochemical Journal, 2018, 475, 931-957.	3.7	15
12	Bifunctional Chimera That Coordinately Targets Human Immunodeficiency Virus 1 Envelope gp120 and the Host-Cell CCR5 Coreceptor at the Virusâ€“Cell Interface. Journal of Medicinal Chemistry, 2018, 61, 5020-5033.	6.4	8
13	Recognition of HIV-inactivating peptide triazoles by the recombinant soluble Env trimer, BG505 SOSIP.664. Proteins: Structure, Function and Bioinformatics, 2017, 85, 843-851.	2.6	7
14	Targeting cell surface HIV-1 Env protein to suppress infectious virus formation. Virus Research, 2017, 235, 33-36.	2.2	6
15	Chemical optimization of macrocyclic HIV-1 inactivators for improving potency and increasing the structural diversity at the triazole ring. Organic and Biomolecular Chemistry, 2017, 15, 7770-7782.	2.8	18
16	Computational Evaluation of HIV-1 gp120 Conformations of Soluble Trimeric gp140 Structures as Targets for de Novo Docking of First- and Second-Generation Small-Molecule CD4 Mimics. Journal of Chemical Information and Modeling, 2016, 56, 2069-2079.	5.4	9
17	Impact of HIV-1 Membrane Cholesterol on Cell-Independent Lytic Inactivation and Cellular Infectivity. Biochemistry, 2016, 55, 447-458.	2.5	10
18	Short Communication: Inhibition of DC-SIGN-Mediated HIV-1 Infection by Complementary Actions of Dendritic Cell Receptor Antagonists and Env-Targeting Virus Inactivators. AIDS Research and Human Retroviruses, 2016, 32, 93-100.	1.1	10

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19	Mechanism of Multivalent Nanoparticle Encounter with HIV-1 for Potency Enhancement of Peptide Triazole Virus Inactivation. Journal of Biological Chemistry, 2015, 290, 529-543.	3.4	46
20	Peptide Triazole Inactivators of HIV-1 Utilize a Conserved Two-Cavity Binding Site at the Junction of the Inner and Outer Domains of Env gp120. Journal of Medicinal Chemistry, 2015, 58, 3843-3858.	6.4	41
21	Disulfide Sensitivity in the Env Protein Underlies Lytic Inactivation of HIV-1 by Peptide Triazole Thiols. ACS Chemical Biology, 2015, 10, 2861-2873.	3.4	13
22	Macrocyclic Envelope Glycoprotein Antagonists that Irreversibly Inactivate HIV-1 before Host Cell Encounter. Journal of Medicinal Chemistry, 2015, 58, 7603-7608.	6.4	27
23	Peptide triazole inactivators of HIV-1: how do they work and what is their potential?. Future Medicinal Chemistry, 2015, 7, 2305-2310.	2.3	9
24	Chimeric Cyanovirin-MPER Recombinantly Engineered Proteins Cause Cell-Free Virolysis of HIV-1. Antimicrobial Agents and Chemotherapy, 2014, 58, 4249-4249.	3.2	0
25	Chimeric Cyanovirin-MPER Recombinantly Engineered Proteins Cause Cell-Free Virolysis of HIV-1. Antimicrobial Agents and Chemotherapy, 2013, 57, 4743-4750.	3.2	20
26	Interactions of peptide triazole thiols with Env gp120 induce irreversible breakdown and inactivation of HIV-1 virions. Retrovirology, 2013, 10, 153.	2.0	32
27	HIVâ€1 ENV gp120 structural determinants for peptide triazole dual receptor site antagonism. Proteins: Structure, Function and Bioinformatics, 2013, 81, 271-290.	2.6	17
28	Antiviral Breadth and Combination Potential of Peptide Triazole HIV-1 Entry Inhibitors. Antimicrobial Agents and Chemotherapy, 2012, 56, 1073-1080.	3.2	33
29	Cellâ€Free HIVâ€1 Virucidal Action by Modified Peptide Triazole Inhibitors of Env gp120. ChemMedChem, 2011, 6, 1335-1339.	3.2	36
30	The Active Core in a Triazole Peptide Dualâ€Site Antagonist of HIVâ€1 gp120. ChemMedChem, 2010, 5, 1871-1879.	3.2	37
31	Structural Determinants for Affinity Enhancement of a Dual Antagonist Peptide Entry Inhibitor of Human Immunodeficiency Virus Type-1. Journal of Medicinal Chemistry, 2008, 51, 2638-2647.	6.4	45
32	Slow-dissociation effect of common signaling subunit Î² on IL5 and GM-CSF receptor assembly. Cytokine, 2008, 42, 179-190.	3.2	12
33	Structure-Based Rationale for Interleukin 5 Receptor Antagonism. Current Pharmaceutical Design, 2008, 14, 1231-1239.	1.9	13
34	Recruitment pharmacophore for interleukin 5 receptor Î± antagonism. Biopolymers, 2007, 88, 83-93.	2.4	6
35	A recombinant allosteric lectin antagonist of HIV-1 envelope gp120 interactions. Proteins: Structure, Function and Bioinformatics, 2007, 67, 617-629.	2.6	18
36	Asymmetric Usage of Antagonist Charged Residues Drives Interleukin-5 Receptor Recruitment but Is Insufficient for Receptor Activation. Biochemistry, 2006, 45, 1106-1115.	2.5	18

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37	Modular, self-assembling peptide linkers for stable and regenerable carbon nanotube biosensor interfaces. Journal of Molecular Recognition, 2006, 19, 363-371.	2.1	21
38	Cytokine Recognition by Human Interleukin 5 Receptor. Vitamins and Hormones, 2005, 71, 321-344.	1.7	7
39	Receptor Epitope Usage by an Interleukin-5 Mimetic Peptide. Journal of Biological Chemistry, 2005, 280, 22951-22961.	3.4	12
40	Kinetic Interaction Analysis of Human Interleukin 5 Receptor Î± Mutants Reveals a Unique Binding Topology and Charge Distribution for Cytokine Recognition. Journal of Biological Chemistry, 2004, 279, 9547-9556.	3.4	39
41	Real-Time Salmonella Detection Using Lead Zirconate Titanate-Titanium Microcantilevers. Materials Research Society Symposia Proceedings, 2004, 845, 87.	0.1	0
42	Cyclic peptide interleukin 5 antagonists mimic CD turn recognition epitope for receptor ?. Biopolymers, 2004, 73, 556-568.	2.4	11
43	Proteins, recognition networks and developing interfaces for macromolecular biosensing. Journal of Molecular Recognition, 2004, 17, 198-208.	2.1	6
44	Coiled coil miniprotein randomization on phage leads to charge pattern mimicry of the receptor recognition determinant of interleukin 5. Journal of Molecular Recognition, 2002, 15, 33-43.	2.1	5
45	Epitope Randomization Redefines the Functional Role of Glutamic Acid 110 in Interleukin-5 Receptor Activation. Journal of Biological Chemistry, 2000, 275, 7351-7358.	3.4	12
46	Multisite Mutagenesis of Interleukin 5 Differentiates Sites for Receptor Recognition and Receptor Activation. Biochemistry, 2000, 39, 14939-14949.	2.5	13
47	Randomization of the Receptor Î± Chain Recruitment Epitope Reveals a Functional Interleukin-5 with Charge Depletion in the CD Loop. Journal of Biological Chemistry, 1999, 274, 20479-20488.	3.4	19
48	Conformational Changes of gp120 in Epitopes near the CCR5 Binding Site Are Induced by CD4 and a CD4 Miniprotein Mimeticâ€. Biochemistry, 1999, 38, 9405-9416.	2.5	96
49	Mutants of Single Chain Interleukin 5 Show Asymmetric Recruitment of Receptor Î± and Î²c Subunits. Journal of Biological Chemistry, 1996, 271, 31729-31734.	3.4	20
50	Single Chain Human Interleukin 5 and Its Asymmetric Mutagenesis for Mapping Receptor Binding Sites. Journal of Biological Chemistry, 1996, 271, 1817-1820.	3.4	29
51	Binding Interactions of Human Interleukin 5 with Its Receptor Î± Subunit. Journal of Biological Chemistry, 1995, 270, 9459-9471.	3.4	91
52	Analysis of macromolecular interactions using immobilized ligands. Analytical Biochemistry, 1992, 201, 197-210.	2.4	195
53	Isotropic Display of Biomolecules on CNT-Arrayed Nanostructures. , 0, , 39-65.		1