Jose L Nieva

List of Publications by Year
in descending order

104 papers	2,870 citations	147801 31 h-index	197818 49 g-index
108 all docs	108 docs citations	108 times ranked	2462 citing authors

#	Article	IF	Citations
1	Interaction of the HIV-1 Fusion Peptide with Phospholipid Vesicles: Different Structural Requirements for Fusion and Leakage. Biochemistry, 1994, 33, 3201-3209.	2.5	207
2	Viroporin-mediated Membrane Permeabilization. Journal of Biological Chemistry, 2002, 277, 40434-40441.	3.4	124
3	Sphingomyelin and Cholesterol Promote HIV-1 gp41 Pretransmembrane Sequence Surface Aggregation and Membrane Restructuring. Journal of Biological Chemistry, 2002, 277, 21776-21785.	3.4	119
4	The pre-transmembrane region of the human immunodeficiency virus type-1 glycoprotein: a novel fusogenic sequence. FEBS Letters, 2000, 477, 145-149.	2.8	88
5	Structural Details of HIV-1 Recognition by the Broadly Neutralizing Monoclonal Antibody 2F5: Epitope Conformation, Antigen-Recognition Loop Mobility, and Anion-Binding Site. Journal of Molecular Biology, 2008, 384, 377-392.	4.2	81
6	Structural and Functional Roles of HIV-1 gp41 Pretransmembrane Sequence Segmentation. Biophysical Journal, 2003, 85, 3769-3780.	0.5	79
7	The three lives of viral fusion peptides. Chemistry and Physics of Lipids, 2014, 181, 40-55.	3.2	79
8	Interactions of peptides with liposomes: pore formation and fusion. Progress in Lipid Research, 2000, 39, 181-206.	11.6	77
9	Are fusion peptides a good model to study viral cell fusion?. Biochimica Et Biophysica Acta - Biomembranes, 2003, 1614, 104-115.	2.6	76
10	Dihydrosphingomyelin Impairs HIV-1 Infection by Rigidifying Liquid-Ordered Membrane Domains. Chemistry and Biology, 2010, 17, 766-775.	6.0	76
11	Differential Interaction of Equinatoxin II with Model Membranes in Response to Lipid Composition. Biophysical Journal, 2001, 80, 1343-1353.	0.5	74
12	All-or-None versus Graded: Single-Vesicle Analysis Reveals Lipid Composition Effects on Membrane Permeabilization. Biophysical Journal, 2010, 99, 3619-3628.	0.5	71
13	Mechanisms of membrane permeabilization by picornavirus 2B viroporin. FEBS Letters, 2003, 552, 68-73.	2.8	64
14	Ablation of the Complementarity-Determining Region H3 Apex of the Anti-HIV-1 Broadly Neutralizing Antibody 2F5 Abrogates Neutralizing Capacity without Affecting Core Epitope Binding. Journal of Virology, 2010, 84, 4136-4147.	3.4	64
15	Membrane Association and Epitope Recognition by HIV-1 Neutralizing Anti-gp41 2F5 and 4E10 Antibodies. AIDS Research and Human Retroviruses, 2006, 22, 998-1006.	1.1	63
16	Interfacial pre-transmembrane domains in viral proteins promoting membrane fusion and fission. Biochimica Et Biophysica Acta - Biomembranes, 2008, 1778, 1624-1639.	2.6	61
17	Conformational transitions of membrane-bound HIV-1 fusion peptide. Biochimica Et Biophysica Acta - Biomembranes, 2002, 1564, 57-65.	2.6	56
18	Classical Swine Fever Virus p7 Protein Is a Viroporin Involved in Virulence in Swine. Journal of Virology, 2012, 86, 6778-6791.	3.4	56

#	Article	IF	Citations
19	Specific phospholipid recognition by human immunodeficiency virus type-1 neutralizing anti-gp41 2F5 antibody. FEBS Letters, 2006, 580, 2395-2399.	2.8	46
20	The Broadly Neutralizing Anti-Human Immunodeficiency Virus Type 1 4E10 Monoclonal Antibody Is Better Adapted to Membrane-Bound Epitope Recognition and Blocking than 2F5. Journal of Virology, 2008, 82, 8986-8996.	3.4	44
21	Structural Analysis and Assembly of the HIV-1 Gp41 Amino-Terminal Fusion Peptide and the Pretransmembrane Amphipathic-At-Interface Sequence. Biochemistry, 2006, 45, 14337-14346.	2.5	42
22	Recognition and Blocking of HIV-1 gp41 Pre-transmembrane Sequence by Monoclonal 4E10 Antibody in a Raft-like Membrane Environment. Journal of Biological Chemistry, 2006, 281, 39598-39606.	3.4	41
23	Plasma Membrane-porating Domain in Poliovirus 2B Protein. A Short Peptide Mimics Viroporin Activity. Journal of Molecular Biology, 2007, 374, 951-964.	4.2	41
24	Pre-transmembrane sequence of Ebola glycoprotein. FEBS Letters, 2003, 533, 47-53.	2.8	39
25	Cholesterol-Dependent Membrane Fusion Induced by the gp41 Membrane-Proximal External Regionâ€"Transmembrane Domain Connection Suggests a Mechanism for Broad HIV-1 Neutralization. Journal of Virology, 2014, 88, 13367-13377.	3.4	39
26	Membrane-transferring Sequences of the HIV-1 Gp41 Ectodomain Assemble into an Immunogenic Complex. Journal of Molecular Biology, 2006, 360, 45-55.	4.2	38
27	Functional organization of the HIV lipid envelope. Scientific Reports, 2016, 6, 34190.	3.3	38
28	The Atomic Structure of the HIV-1 gp41 Transmembrane Domain and Its Connection to the Immunogenic Membrane-proximal External Region. Journal of Biological Chemistry, 2015, 290, 12999-13015.	3.4	37
29	Interactions of the HIV-1 fusion peptide with large unilamellar vesicles and monolayers. A cryo-TEM and spectroscopic study. Biochimica Et Biophysica Acta - Biomembranes, 2000, 1467, 153-164.	2.6	36
30	Roles of a conserved proline in the internal fusion peptide of Ebola glycoprotein. FEBS Letters, 2004, 569, 261-266.	2.8	34
31	Structural basis for broad neutralization of HIV-1 through the molecular recognition of 10E8 helical epitope at the membrane interface. Scientific Reports, 2016, 6, 38177.	3.3	34
32	Membrane Fusion Induced by the HIV Type 1 Fusion Peptide: Modulation by Factors Affecting Glycoprotein 41 Activity and Potential Anti-HIV Compounds. AIDS Research and Human Retroviruses, 1997, 13, 1203-1211.	1.1	32
33	Distinct Mechanisms of Lipid Bilayer Perturbation Induced by Peptides Derived from the Membrane-Proximal External Region of HIV-1 gp41. Biochemistry, 2009, 48, 5320-5331.	2.5	32
34	Interbilayer lipid mixing induced by the human immunodeficiency virus type-1 fusion peptide on large unilamellar vesicles: the nature of the nonlamellar intermediates. Chemistry and Physics of Lipids, 1999, 103, 11-20.	3.2	31
35	Molecular recognition of the native HIV-1 MPER revealed by STED microscopy of single virions. Nature Communications, 2019, 10, 78.	12.8	31
36	Charge Pair Interactions in Transmembrane Helices and Turn Propensity of the Connecting Sequence Promote Helical Hairpin Insertion. Journal of Molecular Biology, 2013, 425, 830-840.	4.2	30

#	Article	IF	Citations
37	Hydrophobic-at-Interface Regions in Viral Fusion Protein Ectodomains. Bioscience Reports, 2000, 20, 519-533.	2.4	29
38	Two-Photon Laurdan Studies of the Ternary Lipid Mixture DOPC:SM:Cholesterol Reveal a Single Liquid Phase at Sphingomyelin:Cholesterol Ratios Lower Than 1. Langmuir, 2015, 31, 2808-2817.	3.5	29
39	Effects of sphingomyelin on melittin pore formation. Biochimica Et Biophysica Acta - Biomembranes, 2003, 1612, 83-89.	2.6	27
40	Pore-forming activity of pestivirus p7 in a minimal model system supports genus-specific viroporin function. Antiviral Research, 2014, 101, 30-36.	4.1	27
41	Phospholipase-C-promoted liposome fusion. Biochemical Society Transactions, 1994, 22, 839-844.	3.4	26
42	Structure and Immunogenicity of a Peptide Vaccine, Including the Complete HIV-1 gp41 2F5 Epitope. Journal of Biological Chemistry, 2014, 289, 6565-6580.	3.4	26
43	Structural and Thermodynamic Basis of Epitope Binding by Neutralizing and Nonneutralizing Forms of the Anti-HIV-1 Antibody 4E10. Journal of Virology, 2015, 89, 11975-11989.	3.4	22
44	Calcium-dependent conformational changes of membrane-bound Ebola fusion peptide drive vesicle fusion. FEBS Letters, 2003, 535, 23-28.	2.8	21
45	Structural Constraints Imposed by the Conserved Fusion Peptide on the HIV-1 gp41 Epitope Recognized by the Broadly Neutralizing Antibody 2F5. Journal of Physical Chemistry B, 2009, 113, 13626-13637.	2.6	21
46	Mechanism of membrane perturbation by the HIV-1 gp41 membrane-proximal external region and its modulation by cholesterol. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 2521-2528.	2.6	21
47	Functional Optimization of Broadly Neutralizing HIV-1 Antibody 10E8 by Promotion of Membrane Interactions. Journal of Virology, 2018, 92, .	3.4	21
48	The Use of Liposomes to Shape Epitope Structure and Modulate Immunogenic Responses of Peptide Vaccines Against HIV MPER. Advances in Protein Chemistry and Structural Biology, 2015, 99, 15-54.	2.3	20
49	Lipid modulation of membraneâ€bound epitope recognition and blocking by HIVâ€1 neutralizing antibodies. FEBS Letters, 2008, 582, 3798-3804.	2.8	19
50	Confocal microscopy of giant vesicles supports the absence of HIVâ€1 neutralizing 2F5 antibody reactivity to plasma membrane phospholipids. FEBS Letters, 2010, 584, 1591-1596.	2.8	19
51	Interaction of Phospholipases C and Sphingomyelinase with Liposomes. Methods in Enzymology, 2003, 372, 3-19.	1.0	18
52	Functional and Structural Characterization of 2B Viroporin Membranolytic Domains. Biochemistry, 2008, 47, 10731-10739.	2.5	18
53	Membrane-Proximal External HIV-1 gp41 Motif Adapted for Destabilizing the Highly Rigid Viral Envelope. Biophysical Journal, 2011, 101, 2426-2435.	0.5	17
54	Membrane-Active Peptides Derived from Picornavirus 2B Viroporin. Current Protein and Peptide Science, 2012, 13, 632-643.	1.4	15

#	Article	IF	Citations
55	Structure of HIV-1 gp41 with its membrane anchors targeted by neutralizing antibodies. ELife, 2021, 10, .	6.0	15
56	The Hydrophobic Internal Region of Bovine Prion Protein Shares Structural and Functional Properties with HIV Type 1 Fusion Peptide. AIDS Research and Human Retroviruses, 2003, 19, 969-978.	1.1	14
57	Poliovirus 2b insertion into lipid monolayers and pore formation in vesicles modulated by anionic phospholipids. Biochimica Et Biophysica Acta - Biomembranes, 2008, 1778, 2621-2626.	2.6	14
58	Ion channel activity of the CSFV p7 viroporin in surrogates of the ER lipid bilayer. Biochimica Et Biophysica Acta - Biomembranes, 2016, 1858, 30-37.	2.6	14
59	Functional Contacts between MPER and the Anti-HIV-1 Broadly Neutralizing Antibody 4E10 Extend into the Core of the Membrane. Journal of Molecular Biology, 2017, 429, 1213-1226.	4.2	14
60	Classical Swine Fever Virus p7 Protein Interacts with Host Protein CAMLG and Regulates Calcium Permeability at the Endoplasmic Reticulum. Viruses, 2018, 10, 460.	3.3	14
61	Hexapeptides that interfere with HIV-1 fusion peptide activity in liposomes block GP41-mediated membrane fusion. FEBS Letters, 2006, 580, 2561-2566.	2.8	13
62	A peptide based on the pore-forming domain of pro-apoptotic poliovirus 2B viroporin targets mitochondria. Biochimica Et Biophysica Acta - Biomembranes, 2010, 1798, 52-58.	2.6	12
63	Fusion-competent state induced by a C-terminal HIV-1 fusion peptide in cholesterol-rich membranes. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 1014-1022.	2.6	12
64	Effects of HIV-1 gp41-Derived Virucidal Peptides on Virus-like Lipid Membranes. Biophysical Journal, 2017, 113, 1301-1310.	0.5	12
65	The immunogenic CBD1 peptide corresponding to the caveolin-1 binding domain in HIV-1 envelope gp41 has the capacity to penetrate the cell membrane and bind caveolin-1. Molecular Immunology, 2008, 45, 1963-1975.	2.2	11
66	Interaction of Anti-HIV Type 1 Antibody 2F5 with Phospholipid Bilayers and Its Relevance for the Mechanism of Virus Neutralization. AIDS Research and Human Retroviruses, 2011, 27, 863-876.	1.1	11
67	Engineering panâ€“HIV-1 neutralization potency through multispecific antibody avidity. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	11
68	Membrane-permeabilizing motif in Semliki forest virus E1 glycoprotein. FEBS Letters, 2004, 576, 417-422.	2.8	10
69	Affinity for the Interface Underpins Potency of Antibodies Operating In Membrane Environments. Cell Reports, 2020, 32, 108037.	6.4	10
70	A new paradigm in molecular recognition? specific antibody binding to membraneâ€inserted HIVâ€1 epitopes. Journal of Molecular Recognition, 2011, 24, 642-646.	2.1	9
71	Peripheral Membrane Interactions Boost the Engagement by an Anti-HIV-1 Broadly Neutralizing Antibody. Journal of Biological Chemistry, 2017, 292, 5571-5583.	3.4	9
72	Single-molecule conformational dynamics of viroporin ion channels regulated by lipid-protein interactions. Bioelectrochemistry, 2021, 137, 107641.	4.6	9

#	Article	IF	Citations
73	Recognition of Membrane-Bound Fusion-Peptide/MPER Complexes by the HIV-1 Neutralizing 2F5 Antibody: Implications for Anti-2F5 Immunogenicity. PLoS ONE, 2012, 7, e52740.	2.5	9
74	Destabilization exerted by peptides derived from the membrane-proximal external region of HIV-1 gp41 in lipid vesicles supporting fluid phase coexistence. Biochimica Et Biophysica Acta - Biomembranes, 2011, 1808, 1797-1805.	2.6	7
75	Mutation-induced changes of transmembrane pore size revealed by combined ion-channel conductance and single vesicle permeabilization analyses. Biochimica Et Biophysica Acta - Biomembranes, 2018, 1860, 1015-1021.	2.6	7
76	Fluorescence Microscopy of the HIV-1 Envelope. Viruses, 2020, 12, 348.	3.3	7
77	Induction of aggregation and fusion of cholesterol-containing membrane vesicles by an anti-cholesterol monoclonal antibody. Journal of Lipid Research, 2000, 41, 621-628.	4.2	7
78	HIV antivirals: targeting the functional organization of the lipid envelope. Future Virology, 2018, 13, 129-140.	1.8	6
79	The Bilayer Collective Properties Govern the Interaction of an HIV-1 Antibody with the Viral Membrane. Biophysical Journal, 2020, 118, 44-56.	0.5	6
80	Cholesterol Constrains the Antigenic Configuration of the Membrane-Proximal Neutralizing HIV-1 Epitope. ACS Infectious Diseases, 2020, 6, 2155-2168.	3.8	6
81	Membrane-Transferring Regions of gp41 as Targets for HIV-1 Fusion Inhibition and Viral Neutralization. Current Topics in Medicinal Chemistry, 2011, 11, 2985-2996.	2.1	5
82	Structure-Related Roles for the Conservation of the HIV-1 Fusion Peptide Sequence Revealed by Nuclear Magnetic Resonance. Biochemistry, 2017, 56, 5503-5511.	2.5	5
83	Exposure of the HIV-1 broadly neutralizing antibody 10E8 MPER epitope on the membrane surface by gp41 transmembrane domain scaffolds. Biochimica Et Biophysica Acta - Biomembranes, 2018, 1860, 1259-1271.	2.6	4
84	Conformational plasticity underlies membrane fusion induced by an HIV sequence juxtaposed to the lipid envelope. Scientific Reports, 2021, 11, 1278.	3.3	4
85	Uptake of Liposomes by Cells: Experimental Procedures and Modeling. Methods in Enzymology, 2003, 372, 235-248.	1.0	2
86	Reply to â€œThe Broadly Neutralizing, Anti-HIV Antibody 4E10: an Open and Shut Case?â€• Journal of Virology, 2016, 90, 3276-3277.	3.4	2
87	CSFV p7 Viroporin ION Channel Activity in Lipid Bilayers Mimicking theÂER Membrane. Biophysical Journal, 2016, 110, 115a.	0.5	1
88	Focal accumulation of aromaticity at the CDRH3 loop mitigates 4E10 polyreactivity without altering its HIV neutralization profile. IScience, 2021, 24, 102987.	4.1	1
89	Membrane destabilization induced by the human immunodeficiency virus type-1 fusion peptide. International Journal of Peptide Research and Therapeutics, 1997, 4, 365-369.	0.1	0
90	Membrane destabilization induced by the human immunodeficiency virus type-1 fusion peptide. International Journal of Peptide Research and Therapeutics, 1997, 4, 365-369.	0.1	0

#	Article	IF	Citations
91	Distinct mechanisms of lipid bilayer perturbation induced by peptides derived from the membrane-proximal external region of HIV-1 gp41. Chemistry and Physics of Lipids, 2010, 163, S46-S47.	3.2	0
92	Membrane pore formation by the human immunodeficiency virus type-1 neutralizing anti-gp41 antibody 2F5. Chemistry and Physics of Lipids, 2010, 163, S46.	3.2	0
93	Membrane-Active Peptides Derived From HIV-1 GP41: Could They Become Useful Therapeutic Tools?. Biophysical Journal, 2010, 98, 1a.	0.5	0
94	Cholesterol Effect on The Lipid Bilayer Perturbation Induced by Peptides Derived from the Membrane-Proximal External Region of HIV-1 gp41. Biophysical Journal, 2010, 98, 217a.	0.5	0
95	Destabilization of Highly Rigid Bilayers Enriched in Cholesterol by the Membrane-Proximal External Region of HIV-1 gp41. Biophysical Journal, 2011, 100, 634a.	0.5	0
96	Phase Behavior of Lipid Mixtures that Emulate the HIV-1 Membrane: A Monolayer Approach. Biophysical Journal, 2012, 102, 648a.	0.5	0
97	Fusogenic Activity of the HIV-1 Gp41 MPER-TMD Region: Mechanism and Targeting by Immunogens and Inhibitors. Biophysical Journal, 2013, 104, 90a.	0.5	0
98	The Gp41 Sequence Connecting Mper and Tm Domains Constitutes a Distinct HIV-1 â€œFusion Peptideâ€• Targeted by Neutralizing Antibodies. Biophysical Journal, 2014, 106, 708a-709a.	0.5	0
99	Insights into the Lateral Organization and Molecular Order of Lipid Mixtures that Mimic the HIV-1 Membrane by Multiphoton Fluorescence Microscopy. Biophysical Journal, 2014, 106, 706a.	0.5	0
100	Molecular Recognition at the Membrane Interface: Protein-Membrane Electrostatic Interactions Modulate the Biological Function of Anti-HIV Antibodies. Biophysical Journal, 2018, 114, 197a.	0.5	0
101	Single Virion Super-Resolution Microscopy Unveils Mechanistic Details ofÂEnv Glycoprotein Recognition by the Broadly Neutralizing HIV-1 Antibodies 4E10 and 10E8. Biophysical Journal, 2018, 114, 537a.	0.5	0
102	Noise Properties of Ion Channels Formed by Pestivirus Viroporin p7. Biophysical Journal, 2019, 116, 221a.	0.5	0
103	Interactions of Peptides with Phospholipid Vesicles: Fusion, Leakage and Flip-Flop. , 1995, , 71-96.		0
104	Membrane topology of the HIV-1 fusion peptide. , 1999, , 381-382.		0