Antonio Cruz

List of Publications by Year
in descending order

66 papers	2,289 citations	201674 27 h-index	214800 47 g-index
68 all docs	68 docs citations	68 times ranked	1940 citing authors

#	Article	IF	Citations
1	Interfacial properties of pulmonary surfactant layers. Advances in Colloid and Interface Science, 2005, 117, 33-58.	14.7	169
2	Barrier or carrier? Pulmonary surfactant and drug delivery. European Journal of Pharmaceutics and Biopharmaceutics, 2015, 95, 117-127.	4.3	136
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	Lipid Phase Coexistence Favors Membrane Insertion of Equinatoxin-II, a Pore-forming Toxin from Actinia equina. Journal of Biological Chemistry, 2004, 279, 34209-34216.	3.4	118
5	Combined and Independent Action of Proteins SP-B and SP-C in the Surface Behavior and Mechanical Stability of Pulmonary Surfactant Films. Biophysical Journal, 2010, 99, 3290-3299.	0.5	111
6	Solubility of hydrophobic surfactant proteins in organic solvent/water mixtures. Structural studies on SP-B and SP-C in aqueous organic solvents and lipids. Lipids and Lipid Metabolism, 1993, 1168, 261-270.	2.6	97
7	Effect of Pulmonary Surfactant Protein SP-B on the Micro- and Nanostructure of Phospholipid Films. Biophysical Journal, 2004, 86, 308-320.	0.5	83
8	Pulmonary surfactant and nanocarriers: Toxicity versus combined nanomedical applications. Biochimica Et Biophysica Acta - Biomembranes, 2017, 1859, 1740-1748.	2.6	82
9	The Lord of the Lungs: The essential role of pulmonary surfactant upon inhalation of nanoparticles. European Journal of Pharmaceutics and Biopharmaceutics, 2019, 144, 230-243.	4.3	78
10	Pulmonary surfactant layers accelerate O2 diffusion through the air-water interface. Biochimica Et Biophysica Acta - Biomembranes, 2010, 1798, 1281-1284.	2.6	70
11	Influence of a Fluorescent Probe on the Nanostructure of Phospholipid Membranes:Â Dipalmitoylphosphatidylcholine Interfacial Monolayers. Langmuir, 2005, 21, 5349-5355.	3.5	66
12	Microstructure and dynamic surface properties of surfactant protein SP-B/dipalmitoylphosphatidylcholine interfacial films spread from lipid-protein bilayers. European Biophysics Journal, 2000, 29, 204-213.	2.2	64
13	Depth Profiles of Pulmonary Surfactant Protein B in Phosphatidylcholine Bilayers, Studied by Fluorescence and Electron Spin Resonance Spectroscopy. Biochemistry, 1998, 37, 9488-9496.	2.5	59
14	Segregated ordered lipid phases and protein-promoted membrane cohesivity are required for pulmonary surfactant films to stabilize and protect the respiratory surface. Faraday Discussions, 2013, 161, 535-548.	3.2	57
15	A model for the structure and mechanism of action of pulmonary surfactant protein B. FASEB Journal, 2015, 29, 4236-4247.	0.5	50
16	Different modes of interaction of pulmonary surfactant protein SP-B in phosphatidylcholine bilayers. Biochemical Journal, 1997, 327, 133-138.	3.7	49
17	Plant Virus Cell-to-Cell Movement Is Not Dependent on the Transmembrane Disposition of Its Movement Protein. Journal of Virology, 2009, 83, 5535-5543.	3.4	49
18	Meconium Impairs Pulmonary Surfactant by a Combined Action of Cholesterol and Bile Acids. Biophysical Journal, 2011, 100, 646-655.	0.5	48

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19	Conformational flexibility of pulmonary surfactant proteins SP-B and SP-C, studied in aqueous organic solvents. Lipids and Lipid Metabolism, 1995, 1255, 68-76.	2.6	46
20	A combined action of pulmonary surfactant proteins SP-B and SP-C modulates permeability and dynamics of phospholipid membranes. Biochemical Journal, 2011, 438, 555-564.	3.7	45
21	Hydrophobic Pulmonary Surfactant Proteins SP-B and SP-C Induce Pore Formation in Planar Lipid Membranes: Evidence for Proteolipid Pores. Biophysical Journal, 2013, 104, 146-155.	0.5	45
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	Functional organization of the HIV lipid envelope. Scientific Reports, 2016, 6, 34190.	3.3	38
24	Efficient Interfacially Driven Vehiculization of Corticosteroids by Pulmonary Surfactant. Langmuir, 2017, 33, 7929-7939.	3.5	35
25	Pulmonary surfactant and drug delivery: Vehiculization, release and targeting of surfactant/tacrolimus formulations. Journal of Controlled Release, 2021, 329, 205-222.	9.9	34
26	Langmuirâˆ'Blodgett Films Formed by Continuously Varying Surface Pressure. Characterization by IR Spectroscopy and Epifluorescence Microscopy. Langmuir, 2007, 23, 4950-4958.	3.5	33
27	Structural hallmarks of lung surfactant: Lipid-protein interactions, membrane structure and future challenges. Archives of Biochemistry and Biophysics, 2021, 703, 108850.	3.0	33
28	Rotational dynamics of spin-labelled surfactant-associated proteins SP-B and SP-C in dipalmitoylphosphatidylcholine and dipalmitoylphosphatidylglycerol bilayers. Biochimica Et Biophysica Acta - Biomembranes, 1998, 1415, 125-134.	2.6	26
29	High-throughput evaluation of pulmonary surfactant adsorption and surface film formation. Journal of Lipid Research, 2008, 49, 2479-2488.	4.2	26
30	Langmuir Films to Determine Lateral Surface Pressure on Lipid Segregation. Methods in Molecular Biology, 2007, 400, 439-457.	0.9	24
31	Adaptations to hibernation in lung surfactant composition of 13-lined ground squirrels influence surfactant lipid phase segregation properties. Biochimica Et Biophysica Acta - Biomembranes, 2013, 1828, 1707-1714.	2.6	24
32	Superficial disposition of the N-terminal region of the surfactant protein SP-C and the absence of specific SP-Bâ€"SP-C interactions in phospholipid bilayers. Biochemical Journal, 2001, 359, 651-659.	3.7	22
33	Interfacial behavior and structural properties of a clinical lung surfactant from porcine source. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 2756-2766.	2.6	22
34	Pneumocytes Assemble Lung Surfactant as Highly Packed/Dehydrated States with Optimal Surface Activity. Biophysical Journal, 2015, 109, 2295-2306.	0.5	21
35	Intrinsic Structural and Functional Determinants within the Amino Acid Sequence of Mature Pulmonary Surfactant Protein SP-B. Biochemistry, 2005, 44, 417-430.	2.5	20
36	Transient Exposure of Pulmonary Surfactant to Hyaluronan Promotes Structural and Compositional Transformations into a Highly Active State. Journal of Biological Chemistry, 2013, 288, 29872-29881.	3.4	20

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37	Interfacial Behavior of Recombinant Forms of Human Pulmonary Surfactant Protein SP-C. Langmuir, 2012, 28, 7811-7825.	3.5	19
38	In Vitro Functional and Structural Characterization of A Synthetic Clinical Pulmonary Surfactant with Enhanced Resistance to Inhibition. Scientific Reports, 2020, 10, 1385.	3.3	19
39	Superficial disposition of the N-terminal region of the surfactant protein SP-C and the absence of specific SP-Bâ€'SP-C interactions in phospholipid bilayers. Biochemical Journal, 2001, 359, 651.	3.7	18
40	Selective Labeling of Pulmonary Surfactant Protein SP-C in Organic Solution. Analytical Biochemistry, 2001, 296, 49-56.	2.4	16
41	Phospholipid packing and hydration in pulmonary surfactant membranes and films as sensed by LAURDAN. Biochimica Et Biophysica Acta - Biomembranes, 2011, 1808, 696-705.	2.6	16
42	A cyclic GB virus C derived peptide with anti-HIV-1 activity targets the fusion peptide of HIV-1. European Journal of Medicinal Chemistry, 2014, 86, 589-604.	5.5	12
43	Effects of HIV-1 gp41-Derived Virucidal Peptides on Virus-like Lipid Membranes. Biophysical Journal, 2017, 113, 1301-1310.	0.5	12
44	Inhibition and counterinhibition of Surfacen, a clinical lung surfactant of natural origin. PLoS ONE, 2018, 13, e0204050.	2.5	12
45	Interfacial Activity of Phasin PhaF fromPseudomonas putidaKT2440 at Hydrophobicâ€"Hydrophilic Biointerfaces. Langmuir, 2019, 35, 678-686.	3.5	12
46	Molecular and biophysical basis for the disruption of lung surfactant function by chemicals. Biochimica Et Biophysica Acta - Biomembranes, 2021, 1863, 183499.	2.6	12
47	Pulmonary Surfactant and Drug Delivery: An Interface-Assisted Carrier to Deliver Surfactant Protein SP-D Into the Airways. Frontiers in Bioengineering and Biotechnology, 2020, 8, 613276.	4.1	10
48	Deacylated pulmonary surfactant protein SP-C has different effects on the thermotroplc behaviour of bilayers of dipalmitoylphosphatidyl-glycerol (DPPG) than the native acylated protein. Biochemical Society Transactions, 1994, 22, 372S-372S.	3.4	9
49	Phase-field model for the morphology of monolayer lipid domains. European Physical Journal E, 2012, 35, 49.	1.6	9
50	Surface Activity as a Crucial Factor of the Biological Actions of Ole e 1, the Main Aeroallergen of Olive Tree (<i>Olea europaea</i>) Pollen. Langmuir, 2016, 32, 11055-11062.	3.5	9
51	Biophysical and biological impact on the structure and IgE-binding of the interaction of the olive pollen allergen Ole e 7 with lipids. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183258.	2.6	9
52	Production in Escherichia coli of a recombinant C-terminal truncated precursor of surfactant protein B (rproSP-BÎ"c). Structure and interaction with lipid interfaces. Biochimica Et Biophysica Acta - Biomembranes, 2006, 1758, 1621-1632.	2.6	8
53	Surface behavior of peptides from E1 GBV-C protein: Interaction with anionic model membranes and importance in HIV-1 FP inhibition. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 392-407.	2.6	8
54	Towards the Molecular Mechanism of Pulmonary Surfactant Protein SP-B: At the Crossroad of Membrane Permeability and Interfacial Lipid Transfer. Journal of Molecular Biology, 2021, 433, 166749.	4.2	8

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55	Physicochemical characterization of GBV-C E1 peptides as potential inhibitors of HIV-1 fusion peptide: Interaction with model membranes. International Journal of Pharmaceutics, 2012, 436, 593-601.	5.2	7
56	Structural and Functional Characterization of Native Complexes of Pulmonary Surfactant Proteins Purified with Detergents. Biophysical Journal, 2012, 102, 625a-626a.	0.5	1
57	Compositional, structural and functional properties of discrete coexisting complexes within bronchoalveolar pulmonary surfactant. Biochimica Et Biophysica Acta - Biomembranes, 2022, 1864, 183808.	2.6	1
58	The highly packed and dehydrated structure of preformed unexposed human pulmonary surfactant isolated from amniotic fluid. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2022, 322, L191-L203.	2.9	1
59	Oxygen Diffusion Through Lung Surfactant Layers. Biophysical Journal, 2010, 98, 488a.	0.5	0
60	Effect of Hydrophobic Surfactant Proteins SP-B and SP-C on the Permeability of Phospholipid Membranes. Biophysical Journal, 2011, 100, 337a.	0.5	0
61	Effect of SP-B and/OR SP-C on the Micro- and Nano-Structure of Synthetic Lipid Interfacial Films. Biophysical Journal, 2011, 100, 339a-340a.	0.5	0
62	Phase Behavior of Lipid Mixtures that Emulate the HIV-1 Membrane: A Monolayer Approach. Biophysical Journal, 2012, 102, 648a.	0.5	0
63	Effects of Hidrophobic Surfactant Proteins SP-B and SP-C on the Mechanical Properties and Structural Stability of Phospholipid Bilayers. Biophysical Journal, 2012, 102, 491a.	0.5	0
64	Pre-Exposure of Pulmonary Surfactant to Hyaluronic Acid Alters its Structure and Interfacial Properties. Biophysical Journal, 2013, 104, 433a.	0.5	0
65	Membrane-Perturbing Activities of KL4-Related Surfactant Peptides. Biophysical Journal, 2013, 104, 94a-95a.	0.5	0
66	Lateral Membrane Structure and Lipid-Protein Interactions. , 2006, , 127-140.		0