Xavier Fernà ndez-Busquets

List of Publications by Year in descending order

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124 papers 4,713 citations

76326 40 h-index 64 g-index

125 all docs

125
docs citations

125 times ranked 6077 citing authors

#	Article	IF	CITATIONS
1	The blood-brain barrier: Structure, function and therapeutic approaches to cross it. Molecular Membrane Biology, 2014, 31, 152-167.	2.0	298
2	Immunohistochemical analysis of human brain suggests pathological synergism of Alzheimer's disease and diabetes mellitus. Neurobiology of Disease, 2010, 37, 67-76.	4.4	178
3	Development of curcumin loaded sodium hyaluronate immobilized vesicles (hyalurosomes) and their potential on skin inflammation and wound restoring. Biomaterials, 2015, 71, 100-109.	11.4	166
4	Synthesis of both enantiomeric forms of 2-substituted 1,3-propanediol monoacetates starting from a common prochiral precursor, using enzymatic transformations in aqueous and in organic media. Tetrahedron Letters, 1986, 27, 5707-5710.	1.4	142
5	Fine structure study of Aβ 1–42 fibrillogenesis with atomic force microscopy. FASEB Journal, 2005, 19, 1344-1346.	0.5	141
6	Inclusion bodies: Specificity in their aggregation process and amyloid-like structure. Biochimica Et Biophysica Acta - Molecular Cell Research, 2008, 1783, 1815-1825.	4.1	131
7	Stability, biocompatibility and antioxidant activity of PEG-modified liposomes containing resveratrol. International Journal of Pharmaceutics, 2018, 538, 40-47.	5.2	122
8	Effect of quercetin and resveratrol co-incorporated in liposomes against inflammatory/oxidative response associated with skin cancer. International Journal of Pharmaceutics, 2016, 513, 153-163.	5.2	115
9	Overexpression of Arabidopsis thaliana farnesyl diphosphate synthase (FPS1S) in transgenic Arabidopsis induces a cell death/senescence-like response and reduced cytokinin levels. Plant Journal, 2002, 30, 123-132.	5.7	102
10	Subcellular Localization of Arabidopsis 3-Hydroxy-3-Methylglutaryl-Coenzyme A Reductase. Plant Physiology, 2005, 137, 57-69.	4.8	102
11	Amyloid-dependent triosephosphate isomerase nitrotyrosination induces glycation and tau fibrillation. Brain, 2009, 132, 1335-1345.	7.6	93
12	Antioxidant activity of quercetin in Eudragit-coated liposomes for intestinal delivery. International Journal of Pharmaceutics, 2019, 565, 64-69.	5.2	84
13	Physico-chemical characterization of succinyl chitosan-stabilized liposomes for the oral co-delivery of quercetin and resveratrol. Carbohydrate Polymers, 2017, 157, 1853-1861.	10.2	83
14	Amphiphilic dendritic derivatives as nanocarriers for the targeted delivery of antimalarial drugs. Biomaterials, 2014, 35, 7940-7950.	11.4	81
15	A nanovector with complete discrimination for targeted delivery to Plasmodium falciparum-infected versus non-infected red blood cells in vitro. Journal of Controlled Release, 2011, 151, 202-211.	9.9	80
16	Tocopherol-loaded transfersomes: In vitro antioxidant activity and efficacy in skin regeneration. International Journal of Pharmaceutics, 2018, 551, 34-41.	5.2	79
17	Topical Anti-Inflammatory Potential of Quercetin in Lipid-Based Nanosystems: In Vivo and In Vitro Evaluation. Pharmaceutical Research, 2014, 31, 959-968.	3.5	78
18	Therapeutic efficacy of quercetin enzyme-responsive nanovesicles for the treatment of experimental colitis in rats. Acta Biomaterialia, 2015, 13, 216-227.	8.3	74

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19	Immunoliposome-mediated drug delivery to Plasmodium -infected and non-infected red blood cells as a dual therapeutic/prophylactic antimalarial strategy. Journal of Controlled Release, 2015, 210, 217-229.	9.9	73
20	Probing Single Biomolecules with Atomic Force Microscopy. Journal of Structural Biology, 1997, 119, 165-171.	2.8	72
21	Sulfated Polysaccharides Promote the Assembly of Amyloid β1–42 Peptide into Stable Fibrils of Reduced Cytotoxicity. Journal of Biological Chemistry, 2008, 283, 32471-32483.	3.4	70
22	Modulation of Aβ ₄₂ fìbrillogenesis by glycosaminoglycan structure. FASEB Journal, 2010, 24, 4250-4261.	0.5	66
23	Use of poly(amidoamine) drug conjugates for the delivery of antimalarials to Plasmodium. Journal of Controlled Release, 2014, 177, 84-95.	9.9	66
24	The metabolic imbalance underlying lesion formation in Arabidopsis thaliana overexpressing farnesyl diphosphate synthase (isoformi;½1/21S) leads to oxidative stress and is triggered by the developmental decline of endogenous HMGR activity. Planta, 2004, 219, 982-992.	3.2	65
25	Recent Structural and Computational Insights into Conformational Diseases. Current Medicinal Chemistry, 2008, 15, 1336-1349.	2.4	62
26	Circular proteoglycans from sponges: first members of the spongican family. Cellular and Molecular Life Sciences, 2003, 60, 88-112.	5.4	57
27	Application of heparin as a dual agent with antimalarial and liposome targeting activities toward Plasmodium-infected red blood cells. Nanomedicine: Nanotechnology, Biology, and Medicine, 2014, 10, 1719-1728.	3.3	55
28	Nanotools for the Delivery of Antimicrobial Peptides. Current Drug Targets, 2012, 13, 1158-1172.	2.1	54
29	Molecular arrangements and interconnected bilayer formation induced by alcohol or polyalcohol in phospholipid vesicles. Colloids and Surfaces B: Biointerfaces, 2014, 117, 360-367.	5.0	52
30	Marine organism sulfated polysaccharides exhibiting significant antimalarial activity and inhibition of red blood cell invasion by Plasmodium. Scientific Reports, 2016, 6, 24368.	3.3	52
31	Electrochemical POC device for fast malaria quantitative diagnosis in whole blood by using magnetic beads, Poly-HRP and microfluidic paper electrodes. Biosensors and Bioelectronics, 2020, 150, 111925.	10.1	52
32	Bifunctional viscous nanovesicles co-loaded with resveratrol and gallic acid for skin protection against microbial and oxidative injuries. European Journal of Pharmaceutics and Biopharmaceutics, 2017, 114, 278-287.	4.3	51
33	Cell adhesion and histocompatibility in sponges. Microscopy Research and Technique, 1999, 44, 204-218.	2.2	50
34	Amyloid- \hat{l}^2 Peptide Nitrotyrosination Stabilizes Oligomers and Enhances NMDAR-Mediated Toxicity. Journal of Neuroscience, 2016, 36, 11693-11703.	3.6	50
35	Adaptation of targeted nanocarriers to changing requirements in antimalarial drug delivery. Nanomedicine: Nanotechnology, Biology, and Medicine, 2017, 13, 515-525.	3.3	49
36	The Main Protein of the Aggregation Factor Responsible for Species-specific Cell Adhesion in the Marine Sponge Microciona prolifera Is Highly Polymorphic. Journal of Biological Chemistry, 1997, 272, 27839-27847.	3.4	48

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37	Single Molecule DNA Biophysics with Atomic Force Microscopy. Single Molecules, 2000, 1, 53-58.	0.9	47
38	Supramolecular Structure of a New Family of Circular Proteoglycans Mediating Cell Adhesion in Sponges. Journal of Structural Biology, 2000, 132, 95-105.	2.8	47
39	Study of the efficacy of antimalarial drugs delivered inside targeted immunoliposomal nanovectors. Nanoscale Research Letters, 2011, 6, 620.	5.7	47
40	Antimalarial Activity of Orally Administered Curcumin Incorporated in Eudragit®-Containing Liposomes. International Journal of Molecular Sciences, 2018, 19, 1361.	4.1	44
41	Effect of diclofenac and glycol intercalation on structural assembly of phospholipid lamellar vesicles. International Journal of Pharmaceutics, 2013, 456, 1-9.	5.2	43
42	Discovering Putative Prion-Like Proteins in Plasmodium falciparum: A Computational and Experimental Analysis. Frontiers in Microbiology, 2018, 9, 1737.	3.5	42
43	Potential therapeutic effect of curcumin loaded hyalurosomes against inflammatory and oxidative processes involved in the pathogenesis of rheumatoid arthritis: The use of fibroblast-like synovial cells cultured in synovial fluid. European Journal of Pharmaceutics and Biopharmaceutics, 2019, 136, 84-92.	4.3	42
44	Posttranslational Nitro-Glycative Modifications of Albumin in Alzheimer's Disease: Implications in Cytotoxicity and Amyloid-1 ² Peptide Aggregation. Journal of Alzheimer's Disease, 2014, 40, 643-657.	2.6	41
45	The Role of Protein Sequence and Amino Acid Composition in Amyloid Formation: Scrambling and Backward Reading of IAPP Amyloid Fibrils. Journal of Molecular Biology, 2010, 404, 337-352.	4.2	38
46	Demonstration of specific binding of heparin to Plasmodium falciparum-infected vs. non-infected red blood cells by single-molecule force spectroscopy. Nanoscale, 2013, 5, 3673.	5.6	38
47	Promising nanomaterials in the fight against malaria. Journal of Materials Chemistry B, 2020, 8, 9428-9448.	5.8	37
48	Micelle carriers based on dendritic macromolecules containing bis-MPA and glycine for antimalarial drug delivery. Biomaterials Science, 2019, 7, 1661-1674.	5.4	36
49	Proteoglycan Mechanics Studied by Single-molecule Force Spectroscopy of Allotypic Cell Adhesion Glycans. Journal of Biological Chemistry, 2006, 281, 5992-5999.	3.4	35
50	Modulation of Amyloid & Samp; #946; Peptide 1-42 Cytotoxicity and Aggregation in Vitro by Glucose and Chondroitin Sulfate. Current Alzheimer Research, 2010, 7, 428-438.	1.4	35
51	ImmunoPEGliposomes for the targeted delivery of novel lipophilic drugs to red blood cells in a falciparum malaria murine model. Biomaterials, 2017, 145, 178-191.	11.4	34
52	A 35-kDa Protein Is the Basic Unit of the Core from the 2 \tilde{A} — 104-kDa Aggregation Factor Responsible for Species-specific Cell Adhesion in the Marine Sponge. Journal of Biological Chemistry, 1996, 271, 23558-23565.	3.4	33
53	Self-Recognition and Ca2+-Dependent Carbohydrate-Carbohydrate Cell Adhesion Provide Clues to the Cambrian Explosion. Molecular Biology and Evolution, 2009, 26, 2551-2561.	8.9	32
54	Cyclosporin A Suspends Transplantation Reactions in the Marine Sponge <i>Microciona prolifera</i> Journal of Immunology, 2007, 179, 5927-5935.	0.8	30

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55	Nanoformulation of curcumin-loaded eudragit-nutriosomes to counteract malaria infection by a dual strategy: Improving antioxidant intestinal activity and systemic efficacy. International Journal of Pharmaceutics, 2019, 556, 82-88.	5.2	30
56	Heparin: new life for an old drug. Nanomedicine, 2017, 12, 1727-1744.	3.3	29
57	Accumulation in Marine Sponge Grafts of the mRNA Encoding the Main Proteins of the Cell Adhesion System. Journal of Biological Chemistry, 1998, 273, 29545-29553.	3.4	28
58	Nanomedicine Against Malaria. Current Medicinal Chemistry, 2014, 21, 605-629.	2.4	28
59	A singleâ€molecule force spectroscopy nanosensor for the identification of new antibiotics and antimalarials. FASEB Journal, 2010, 24, 4203-4217.	0.5	27
60	The Effect of Amyloidogenic Peptides on Bacterial Aging Correlates with Their Intrinsic Aggregation Propensity. Journal of Molecular Biology, 2012, 421, 270-281.	4.2	27
61	Carbohydrate-Carbohydrate Interactions Mediated by Sulfate Esters and Calcium Provide the Cell Adhesion Required for the Emergence of Early Metazoans. Journal of Biological Chemistry, 2016, 291, 9425-9437.	3.4	27
62	Development of drug-loaded immunoliposomes for the selective targeting and elimination of rosetting Plasmodium falciparum- infected red blood cells. Journal of Controlled Release, 2016, 241, 57-67.	9.9	27
63	Origin and evolution of the sponge aggregation factor gene family. Molecular Biology and Evolution, 2017, 34, msx058.	8.9	27
64	The ESCRT-III machinery participates in the production of extracellular vesicles and protein export during Plasmodium falciparum infection. PLoS Pathogens, 2021, 17, e1009455.	4.7	27
65	An ImmunoPEGliposome for Targeted Antimalarial Combination Therapy at the Nanoscale. Pharmaceutics, 2019, 11, 341.	4.5	26
66	Extracellular vesicles derived from Plasmodium-infected and non-infected red blood cells as targeted drug delivery vehicles. International Journal of Pharmaceutics, 2020, 587, 119627.	5.2	26
67	Single-Molecule Force Spectroscopy of Cartilage Aggrecan Self-Adhesion. Biophysical Journal, 2010, 99, 3498-3504.	0.5	25
68	Different mechanisms for in vitro formation of nucleosome core particles. Biochemistry, 1991, 30, 5022-5032.	2.5	23
69	Cell adhesion-related proteins as specific markers of sponge cell types involved in allogeneic recognition. Developmental and Comparative Immunology, 2002, 26, 313-323.	2.3	21
70	Mechanism of Nucleosome Dissociation Produced by Transcription Elongation in a Short Chromatin Template. Biochemistry, 1995, 34, 6711-6719.	2.5	20
71	Resveratrol and artemisinin eudragit-coated liposomes: A strategy to tackle intestinal tumors. International Journal of Pharmaceutics, 2021, 592, 120083.	5.2	20
72	Zwitterionic self-assembled nanoparticles as carriers for Plasmodium targeting in malaria oral treatment. Journal of Controlled Release, 2021, 331, 364-375.	9.9	20

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73	Antimalarial drug delivery to the mosquito: an option worth exploring?. Future Microbiology, 2014, 9, 579-582.	2.0	19
74	Human Albumin Impairs Amyloid \hat{l}^2 -peptide Fibrillation Through its C-terminus: From docking Modeling to Protection Against Neurotoxicity in Alzheimer's disease. Computational and Structural Biotechnology Journal, 2019, 17, 963-971.	4.1	19
75	Mimicking direct protein–protein and solvent-mediated interactions in the CDP-methylerythritol kinase homodimer: a pharmacophore-directed virtual screening approach. Journal of Molecular Modeling, 2009, 15, 997-1007.	1.8	17
76	Polyamidoamine Nanoparticles for the Oral Administration of Antimalarial Drugs. Pharmaceutics, 2018, 10, 225.	4.5	17
77	Functional response of novel bioprotective poloxamer-structured vesicles on inflamed skin. Nanomedicine: Nanotechnology, Biology, and Medicine, 2017, 13, 1127-1136.	3.3	16
78	Polyamidoamine nanoparticles as nanocarriers for the drug delivery to malaria parasite stages in the mosquito vector. Nanomedicine, 2015, 10, 3401-3414.	3.3	15
79	In vitro study of magnetite-amyloid \hat{l}^2 complex formation. Nanomedicine: Nanotechnology, Biology, and Medicine, 2012, 8, 974-980.	3.3	14
80	Coupling the Antimalarial Cell Penetrating Peptide TP10 to Classical Antimalarial Drugs Primaquine and Chloroquine Produces Strongly Hemolytic Conjugates. Molecules, 2019, 24, 4559.	3.8	14
81	Advanced strategy to exploit wine-making waste by manufacturing antioxidant and prebiotic fibre-enriched vesicles for intestinal health. Colloids and Surfaces B: Biointerfaces, 2020, 193, 111146.	5.0	14
82	Nanotribology Results Show that DNA Forms a Mechanically Resistant 2D Network in Metaphase Chromatin Plates. Biophysical Journal, 2010, 99, 3951-3958.	0.5	13
83	Loading antimalarial drugs into noninfected red blood cells: an undesirable roommate forPlasmodium. Future Medicinal Chemistry, 2015, 7, 833-835.	2.3	11
84	Heparin-functionalized nanocapsules: enabling targeted delivery of antimalarial drugs. Future Medicinal Chemistry, 2013, 5, 737-739.	2.3	10
85	Apoptosis in Microciona prolifera Allografts. Biological Bulletin, 2003, 205, 199-201.	1.8	8
86	Repurposing Heparin as Antimalarial: Evaluation of Multiple Modifications Toward In Vivo Application. Pharmaceutics, 2020, 12, 825.	4.5	8
87	Efficacy of a resveratrol nanoformulation based on a commercially available liposomal platform. International Journal of Pharmaceutics, 2021, 608, 121086.	5.2	8
88	Hyaluronic Acid-Receptor Binding Demonstrated by Synthetic Adhesive Proteoglycan Peptide Constructs and by Cell Receptors on the Marine Sponge Microciona prolifera. Biological Bulletin, 1998, 195, 216-218.	1.8	7
89	Novel strategies for <i>Plasmodium</i> targeted drug delivery. Expert Opinion on Drug Delivery, 2016, 13, 919-922.	5.0	7
90	Heparin micropatterning onto fouling-release perfluoropolyether-based polymers via photobiotin activation. Colloids and Surfaces B: Biointerfaces, 2016, 146, 250-259.	5.0	7

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91	Biophysical characterization of the association of histones with single-stranded DNA. Biochimica Et Biophysica Acta - General Subjects, 2017, 1861, 2739-2749.	2.4	7
92	Modeling the Distribution of Diprotic Basic Drugs in Liposomal Systems: Perspectives on Malaria Nanotherapy. Frontiers in Pharmacology, 2019, 10, 1064.	3.5	7
93	Loading of Beclomethasone in Liposomes and Hyalurosomes Improved with Mucin as Effective Approach to Counteract the Oxidative Stress Generated by Cigarette Smoke Extract. Nanomaterials, 2021, 11, 850.	4.1	7
94	Detection of Plasmodium falciparum malaria in $1 \hat{A} h$ using a simplified enzyme-linked immunosorbent assay. Analytica Chimica Acta, 2021, 1152, 338254.	5 . 4	7
95	The antigen-binding fragment of human gamma immunoglobulin prevents amyloid \hat{l}^2 -peptide folding into \hat{l}^2 -sheet to form oligomers. Oncotarget, 2017, 8, 41154-41165.	1.8	7
96	Novel S-adenosyl-L-methionine decarboxylase inhibitors as potent antiproliferative agents against intraerythrocytic Plasmodium falciparum parasites. International Journal for Parasitology: Drugs and Drug Resistance, 2014, 4, 28-36.	3.4	6
97	2-picolylamine derivatization for high sensitivity detection of abscisic acid in apicomplexan blood-infecting parasites. Talanta, 2017, 168, 130-135.	5.5	6
98	Heparin Administered to Anopheles in Membrane Feeding Assays Blocks Plasmodium Development in the Mosquito. Biomolecules, 2020, 10, 1136.	4.0	6
99	Detection of Protein Aggregation in Live <i>Plasmodium</i> Parasites. Antimicrobial Agents and Chemotherapy, 2020, 64, .	3.2	6
100	4,9â€Diaminoacridines and 4â€Aminoacridines as Dualâ€Stage Antiplasmodial Hits. ChemMedChem, 2021, 16, 788-792.	3.2	6
101	Development of DNA Aptamers Against <i>Plasmodium falciparum </i> Blood Stages Using Cell-Systematic Evolution of Ligands by EXponential Enrichment. Journal of Biomedical Nanotechnology, 2020, 16, 315-334.	1.1	6
102	Liposomal Formulations to Improve Antioxidant Power of Myrtle Berry Extract for Potential Skin Application. Pharmaceutics, 2022, 14, 910.	4. 5	6
103	The Sponge as a Model of Cellular Recognition. , 2008, , 75-83.		5
104	Optical Tweezers Study of Topoisomerase Inhibition. Small, 2009, 5, 1269-1272.	10.0	5
105	Self-assembly of human amylin-derived peptides studied by atomic force microscopy and single molecule force spectroscopy. Soft Matter, 2012, 8, 1234-1242.	2.7	5
106	Amyloid fibrils in neurodegenerative diseases: villains or heroes?. Future Medicinal Chemistry, 2013, 5, 1903-1906.	2.3	5
107	Use of Rhodamine B Isothiocyanate to Detect Proteoglycan Core Proteins in Polyacrylamide Gels. Analytical Biochemistry, 1995, 227, 394-396.	2.4	4
108	Possible roles of amyloids in malaria pathophysiology. Future Science OA, 2015, 1, FSO43.	1.9	4

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109	Structure-activity relationship of new antimalarial 1-aryl-3-susbtituted propanol derivatives: Synthesis, preliminary toxicity profiling, parasite life cycle stage studies, target exploration, and targeted delivery. European Journal of Medicinal Chemistry, 2018, 152, 489-514.	5. 5	4
110	Adhesion of freshwater sponge cells mediated by carbohydrate–carbohydrate interactions requires low environmental calcium. Glycobiology, 2020, 30, 710-721.	2.5	4
111	Review of the Current Landscape of the Potential of Nanotechnology for Future Malaria Diagnosis, Treatment, and Vaccination Strategies. Pharmaceutics, 2021, 13, 2189.	4.5	4
112	Characterization of Domiphen Bromide as a New Fast-Acting Antiplasmodial Agent Inhibiting the Apicoplastidic Methyl Erythritol Phosphate Pathway. Pharmaceutics, 2022, 14, 1320.	4.5	4
113	Up-regulation of Integrins $\hat{l}\pm3$ \hat{l}^21 in Sulfate-Starved Marine Sponge Cells: Functional Correlates. Biological Bulletin, 2001, 201, 238-239.	1.8	3
114	Effects of ethanol and diclofenac on the organization of hydrogenated phosphatidylcholine bilayer vesicles and their ability as skin carriers. Journal of Materials Science: Materials in Medicine, 2015, 26, 137.	3.6	3
115	Single Molecule DNA Biophysics with Atomic Force Microscopy. Single Molecules, 2000, 1, 53-58.	0.9	3
116	Toy kit against malaria: magic bullets, LEGO, Trojan horses and Russian dolls. Therapeutic Delivery, 2014, 5, 1049-1052.	2.2	2
117	Histories associated with single-stranded DNA do not preclude the formation of double-helical DNA. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 1995, 1260, 132-138.	2.4	1
118	Enzymatic biosynthesis of N-linked glycan by the marine sponge Microciona prolifera. Biological Bulletin, 2000, 199, 192-194.	1.8	1
119	Application of the Quartz Crystal Microbalance to the Study of Multivalent Carbohydrate–Carbohydrate Adhesion. Sensor Letters, 2009, 7, 782-787.	0.4	1
120	Rapid diagnostic tests for malaria: past, present and future. Future Microbiology, 2016, 11, 1379-1382.	2.0	0
121	Turning <i>Plasmodium </i> survival strategies against itself. Future Medicinal Chemistry, 2018, 10, 2245-2248.	2.3	0
122	In memory of Max Burger. Journal of Cellular Biochemistry, 2021, 122, 1259-1261.	2.6	0
123	Structural and Computational Insights into Conformational Diseases: A Review. , 2015, , 134-182.		0
124	Femtoliter Injection of ESCRT-III Proteins into Adhered Giant Unilamellar Vesicles. Bio-protocol, 2022, 12, e4328.	0.4	0