F Sousa

List of Publications by Citations

127	2,110	26	38
papers	citations	h-index	g-index
138	2,405	4.7	5.13
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
127	Affinity chromatography approaches to overcome the challenges of purifying plasmid DNA. *Trends in Biotechnology*, **2008**, 26, 518-25	15.1	97
126	Poly(2-ethyl-2-oxazoline)-PLA-g-PEI amphiphilic triblock micelles for co-delivery of minicircle DNA and chemotherapeutics. *Journal of Controlled Release*, **2014**, 189, 90-104	11.7	69
125	Bioreducible poly(2-ethyl-2-oxazoline)-PLA-PEI-SS triblock copolymer micelles for co-delivery of DNA minicircles and Doxorubicin. *Journal of Controlled Release*, **2015**, 213, 175-191	11.7	68
124	Selective purification of supercoiled plasmid DNA from clarified cell lysates with a single histidine-agarose chromatography step. *Biotechnology and Applied Biochemistry*, **2006**, 45, 131-40	2.8	66
123	Improvement of transfection efficiency by using supercoiled plasmid DNA purified with arginine affinity chromatography. *Journal of Gene Medicine*, **2009**, 11, 79-88	3.5	65
122	Recombinant pre-miR-29b for Alzheimer's disease therapeutics. *Scientific Reports*, **2016**, 6, 19946	4.9	59
121	Nanoparticle mediated delivery of pure P53 supercoiled plasmid DNA for gene therapy. *Journal of Controlled Release*, **2011**, 156, 212-22	11.7	59
120	Formulation of chitosan-TPP-pDNA nanocapsules for gene therapy applications. *Nanotechnology*, **2011**, 22, 015101	3.4	58
119	Minicircle DNA vectors for gene therapy: advances and applications. *Expert Opinion on Biological Therapy*, **2015**, 15, 353-79	5.4	56
118	Specific recognition of supercoiled plasmid DNA in arginine affinity chromatography. *Analytical Biochemistry*, **2008**, 374, 432-4	3.1	54
117	Advances in chromatographic supports for pharmaceutical-grade plasmid DNA purification. *Journal of Separation Science*, **2012**, 35, 3046-58	3.4	50
116	Separation of supercoiled and open circular plasmid DNA isoforms by chromatography with a histidine-agarose support. *Analytical Biochemistry*, **2005**, 343, 183-5	3.1	45
115	Folate-targeted multifunctional amino acid-chitosan nanoparticles for improved cancer therapy. *Pharmaceutical Research*, **2015**, 32, 562-77	4.5	40
114	Dynamic binding capacity of plasmid DNA in histidine-agarose chromatography. *Biomedical Chromatography*, **2007**, 21, 993-8	1.7	38
113	Differential interactions of plasmid DNA, RNA and genomic DNA with amino acid-based affinity matrices. *Journal of Separation Science*, **2010**, 33, 2610-8	3.4	37
112	Pichia pastoris: a recombinant microfactory for antibodies and human membrane proteins. *Journal of Microbiology and Biotechnology*, **2013**, 23, 587-601	3.3	35
111	Gas-generating TPGS-PLGA microspheres loaded with nanoparticles (NIMPS) for co-delivery of minicircle DNA and anti-tumoral drugs. *Colloids and Surfaces B: Biointerfaces*, **2015**, 134, 287-94	6	33

110	Ribonucleic acid purification. *Journal of Chromatography A*, **2014**, 1355, 1-14	4.5	33
109	Cervical cancer and HPV infection: ongoing therapeutic research to counteract the action of E6 and E7 oncoproteins. *Drug Discovery Today*, **2019**, 24, 2044-2057	8.8	32
108	Successful application of monolithic innovative technology using a carbonyldiimidazole disk to purify supercoiled plasmid DNA suitable for pharmaceutical applications. *Journal of Chromatography A*, **2011**, 1218, 8333-43	4.5	32
107	Amino acids-nucleotides biomolecular recognition: from biological occurrence to affinity chromatography. *Journal of Molecular Recognition*, **2010**, 23, 505-18	2.6	31
106	Purification of human papillomavirus 16 E6/E7 plasmid deoxyribonucleic acid-based vaccine using an arginine modified monolithic support. *Journal of Chromatography A*, **2013**, 1320, 72-9	4.5	30
105	Histidine affinity chromatography of homo-oligonucleotides. Role of multiple interactions on retention. *Biomedical Chromatography*, **2009**, 23, 745-53	1.7	30
104	Characterization of polyplexes involving small RNA. *Journal of Colloid and Interface Science*, **2012**, 387, 84-94	9.3	28
103	Biorecognition of supercoiled plasmid DNA isoform in lysine-affinity chromatography. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2009**, 877, 3257-60	3.2	27
102	Performance of a non-grafted monolithic support for purification of supercoiled plasmid DNA. *Journal of Chromatography A*, **2011**, 1218, 1701-6	4.5	27
101	Purification of pre-miR-29 by arginine-affinity chromatography. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2014**, 951-952, 16-23	3.2	26
100	Influence of growth conditions on plasmid DNA production. *Journal of Microbiology and Biotechnology*, **2009**, 19, 1408-14	3.3	26
99	Circular dichroism investigation of the effect of plasmid DNA structure on retention in histidine chromatography. *Archives of Biochemistry and Biophysics*, **2007**, 467, 154-62	4.1	26
98	Impact of lysine-affinity chromatography on supercoiled plasmid DNA purification. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2011**, 879, 3507-15	3.2	25
97	Rhodamine based plasmid DNA nanoparticles for mitochondrial gene therapy. *Colloids and Surfaces B: Biointerfaces*, **2014**, 121, 129-40	6	24
96	Current progress on microRNAs-based therapeutics in neurodegenerative diseases. *Wiley Interdisciplinary Reviews RNA*, **2017**, 8, e1409	9.3	24
95	Biofunctionalized nanoparticles with pH-responsive and cell penetrating blocks for gene delivery. *Nanotechnology*, **2013**, 24, 275101	3.4	24
94	Supercoiled plasmid quality assessment by analytical arginine-affinity chromatography. *Journal of Chromatography A*, **2011**, 1218, 124-9	4.5	24
93	Improved minicircle DNA biosynthesis for gene therapy applications. *Human Gene Therapy Methods*, **2014**, 25, 93-105	4.9	23

92	Mitochondrial Gene Therapy: Advances in Mitochondrial Gene Cloning, Plasmid Production, and Nanosystems Targeted to Mitochondria. *Molecular Pharmaceutics*, **2017**, 14, 626-638	5.6	22
91	Histamine monolith versatility to purify supercoiled plasmid deoxyribonucleic acid from Escherichia coli lysate. *Journal of Chromatography A*, **2014**, 1355, 125-33	4.5	22
90	A new affinity approach to isolate Escherichia coli 6S RNA with histidine-chromatography. *Journal of Molecular Recognition*, **2010**, 23, 519-24	2.6	22
89	Binding and elution strategy for improved performance of arginine affinity chromatography in supercoiled plasmid DNA purification. *Biomedical Chromatography*, **2009**, 23, 160-5	1.7	21
88	Smart micelleplexes as a new therapeutic approach for RNA delivery. *Expert Opinion on Drug Delivery*, **2017**, 14, 353-371	8	20
87	p53 as the Focus of Gene Therapy: Past, Present and Future. *Current Drug Targets*, **2018**, 19, 1801-1817	3	20
86	Optimization of supercoiled HPV-16 E6/E7 plasmid DNA purification with arginine monolith using design of experiments. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2015**, 978-979, 145-50	3.2	19
85	Rapid quantification of supercoiled plasmid deoxyribonucleic acid using a monolithic ion exchanger. *Journal of Chromatography A*, **2013**, 1291, 114-21	4.5	19
84	Selectivity of arginine chromatography in promoting different interactions using synthetic oligonucleotides as model. *Journal of Separation Science*, **2009**, 32, 1665-72	3.4	19
83	Thiacarbocyanine as ligand in dye-affinity chromatography for protein purification. II. Dynamic binding capacity using lysozyme as a model. *Biomedical Chromatography*, **2009**, 23, 987-93	1.7	18
82	Cholinium-based Good's buffers ionic liquids as remarkable stabilizers and recyclable preservation media for recombinant small RNAs. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 16645-16656	8.3	18
81	Histidine affinity chromatography-based methodology for the simultaneous isolation of Escherichia coli small and ribosomal RNA. *Biomedical Chromatography*, **2012**, 26, 781-8	1.7	17
80	Ultrafiltration of supercoiled plasmid DNA: Modeling and application. *Journal of Membrane Science*, **2011**, 378, 280-289	9.6	17
79	Purification of pre-miR-29 by a new O-phospho-l-tyrosine affinity chromatographic strategy optimized using design of experiments. *Journal of Chromatography A*, **2014**, 1343, 119-27	4.5	16
78	Advances in time course extracellular production of human pre-miR-29b from Rhodovulum sulfidophilum. *Applied Microbiology and Biotechnology*, **2016**, 100, 3723-34	5.7	15
77	Development of a model for membrane filtration of long and flexible macromolecules: Application to predict dextran and linear DNA rejections in ultrafiltration. *Journal of Membrane Science*, **2009**, 336, 61-70	9.6	14
76	A new strategy for RNA isolation from eukaryotic cells using arginine affinity chromatography. *Journal of Separation Science*, **2012**, 35, 3217-26	3.4	13
75	Biomedical application of plasmid DNA in gene therapy: A new challenge for chromatography. *Biotechnology and Genetic Engineering Reviews*, **2009**, 26, 83-116	4.1	13

74	Cancer gene therapy mediated by RALA/plasmid DNA vectors: Nitrogen to phosphate groups ratio (N/P) as a tool for tunable transfection efficiency and apoptosis. *Colloids and Surfaces B: Biointerfaces*, **2020**, 185, 110610	6	13
73	New insights for therapeutic recombinant human miRNAs heterologous production: Rhodovolum sulfidophilum vs Escherichia coli. *Bioengineered*, **2017**, 8, 670-677	5.7	12
72	Effect of chromatographic conditions and plasmid DNA size on the dynamic binding capacity of a monolithic support. *Journal of Separation Science*, **2014**, 37, 2284-92	3.4	12
71	Affinity approaches in RNAi-based therapeutics purification. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2016**, 1021, 45-56	3.2	11
70	Integrated Extraction-Preservation Strategies for RNA Using Biobased Ionic Liquids. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 9439-9448	8.3	10
69	Minicircle DNA: The Future for DNA-Based Vectors?. *Trends in Biotechnology*, **2020**, 38, 1047-1051	15.1	10
68	New approach for purification of pre-miR-29 using lysine-affinity chromatography. *Journal of Chromatography A*, **2014**, 1331, 129-32	4.5	10
67	Binding mechanisms for histamine and agmatine ligands in plasmid deoxyribonucleic acid purifications. *Journal of Chromatography A*, **2014**, 1366, 110-9	4.5	10
66	Sensitive detection of peptide-minicircle DNA interactions by surface plasmon resonance. *Analytical Chemistry*, **2013**, 85, 2304-11	7.8	10
65	Minicircle DNA purification using a CIM DEAE-1 monolithic support. *Journal of Separation Science*, **2016**, 39, 3544-9	3.4	10
64	Minicircle DNA purification: Performance of chromatographic monoliths bearing lysine and cadaverine ligands. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2019**, 1118-1119, 7-16	3.2	9
63	Purification of influenza deoxyribonucleic acid-based vaccine using agmatine monolith. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2016**, 1012-1013, 153-61	3.2	9
62	DoE to improve supercoiled p53-pDNA purification by O-phospho-l-tyrosine chromatography. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2019**, 1105, 184-192	3.2	9
61	Stabilization of novel immunoglobulin switch regions G-quadruplexes by naphthalene and quinoline-based ligands. *Tetrahedron*, **2016**, 72, 1229-1237	2.4	8
60	Selective purification of supercoiled p53-encoding pDNA with L-methionine-agarose matrix. *Analytical Biochemistry*, **2014**, 459, 61-9	3.1	8
59	New approach in RNA quantification using arginine-affinity chromatography: potential application in eukaryotic and chemically synthesized RNA. *Analytical and Bioanalytical Chemistry*, **2013**, 405, 8849-58	4.4	8
58	Non-coding RNAs: Emerging from the discovery to therapeutic applications. *Biochemical Pharmacology*, **2021**, 189, 114469	6	8
57	The biological performance of purified supercoiled p53 plasmid DNA in different cancer cell lines. *Process Biochemistry*, **2018**, 75, 240-249	4.8	8

56	Enhanced biosynthesis of plasmid DNA from Escherichia coli VH33 using Box-Behnken design associated to aromatic amino acids pathway. *Biochemical Engineering Journal*, **2015**, 98, 117-126	4.2	7
55	Application of ethylenediamine monolith to purify a hemagglutinin influenza deoxyribonucleic acid-based vaccine. *Separation and Purification Technology*, **2015**, 154, 320-327	8.3	7
54	Preparation of well-defined brush-like block copolymers for gene delivery applications under biorelevant reaction conditions. *Colloids and Surfaces B: Biointerfaces*, **2018**, 169, 107-117	6	7
53	Protein purification by aminosquarylium cyanine dye-affinity chromatography. *Biomedical Chromatography*, **2013**, 27, 1671-9	1.7	7
52	Pharmaceutical-grade pre-miR-29 purification using an agmatine monolithic support. *Journal of Chromatography A*, **2014**, 1368, 173-82	4.5	7
51	Affinity analysis between immobilized L-arginine and plasmid isoforms provided by surface plasmon resonance. *Analytical Methods*, **2013**, 5, 1682	3.2	7
50	The use of size-exclusion chromatography in the isolation of supercoiled minicircle DNA from Escherichia coli lysate. *Journal of Chromatography A*, **2020**, 1609, 460444	4.5	7
49	Development of mitochondrial targeting plasmid DNA nanoparticles: Characterization and in vitro studies. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2015**, 480, 287-295	5.1	6
48	Affinity analysis and application of dipeptides derived from l-tyrosine in plasmid purification. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2015**, 1006, 47-58	3.2	6
47	Purification of supercoiled G-quadruplex pDNA for in vitro transcription. *Separation and Purification Technology*, **2016**, 163, 59-71	8.3	6
46	Chromatographic HPV-16 E6/E7 plasmid vaccine purification employing L-histidine and 1-benzyl-L-histidine affinity ligands. *Electrophoresis*, **2017**, 38, 2975-2980	3.6	6
45	Thermodynamic study of the interaction between linear plasmid DNA and an anion exchange support under linear and overloaded conditions. *Journal of Chromatography A*, **2014**, 1372C, 166-173	4.5	6
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43	Effect of Chromatographic Conditions on Supercoiled Plasmid DNA Stability and Bioactivity. *Applied Sciences (Switzerland)*, **2019**, 9, 5170	2.6	6
42	Ligand screening to pre-miRNA 149 G-quadruplex investigated by molecular dynamics. *Journal of Biomolecular Structure and Dynamics*, **2020**, 38, 2276-2286	3.6	6
41	Supercoiled plasmid DNA purification by integrating membrane technology with a monolithic chromatography. *Journal of Separation Science*, **2014**, 37, 1229-36	3.4	5
40	Optimization of a chromatographic stationary phase based on gellan gum using central composite design. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2014**, 957, 46-52	3.2	5
39	Effect of Plasmid DNA Size on Chitosan or Polyethyleneimine Polyplexes Formulation. *Polymers*, **2021**, 13,	4.5	5

38	Composite Central Face Design-An Approach to Achieve Efficient Alginate Microcarriers. *Polymers*, **2019**, 11,	4.5	5
37	Highly selective capture of minicircle DNA biopharmaceuticals by a novel zinc-histidine peptide conjugate. *Separation and Purification Technology*, **2017**, 174, 417-424	8.3	4
36	Screening of L-histidine-based ligands to modify monolithic supports and selectively purify the supercoiled plasmid DNA isoform. *Journal of Molecular Recognition*, **2015**, 28, 349-58	2.6	4
35	Arginine homopeptides for plasmid DNA purification using monolithic supports. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2018**, 1087-1088, 149-157	3.2	4
34	Quantitative analysis of histamine- and agmatine-DNA interactions using surface plasmon resonance. *International Journal of Biological Macromolecules*, **2014**, 70, 131-7	7.9	4
33	Ethylenediamine-Derived Chromatographic Ligand to Separate BSA, Lysozyme, and RNase A. *Chromatographia*, **2014**, 77, 1529-1537	2.1	4
32	Study of the specific interaction between L-methionine chromatography support and nucleotides. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2012**, 909, 1-5	3.2	4
31	Insights on the DNA Stability in Aqueous Solutions of Ionic Liquids. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 547857	5.8	4
30	Multifunctional nanocarriers for codelivery of nucleic acids and chemotherapeutics to cancer cells **2016**, 163-207		4
29	Enhancement of a biotechnological platform for the purification and delivery of a human papillomavirus supercoiled plasmid DNA vaccine. *New Biotechnology*, **2020**, 59, 1-9	6.4	3
28	Arginine and di-arginine ligands for plasmid DNA purification using negative chromatography. *Separation and Purification Technology*, **2018**, 202, 281-289	8.3	3
27	HPV-16 targeted DNA vaccine expression: The role of purification. *Biotechnology Progress*, **2018**, 34, 546-551	2.5	3
26	Analysis of pre-miR-29b binding conditions to amino acids by using a surface plasmon resonance biosensor. *Analytical Methods*, **2016**, 8, 205-213	3.2	3
25	Molecular recognition of oligonucleotides and plasmid DNA by l-methionine. *Journal of Molecular Recognition*, **2014**, 27, 588-96	2.6	3
24	Naphthalene amine support for G-quadruplex isolation. *Analyst, The*, **2017**, 142, 2982-2994	5	3
23	Dilemma on plasmid DNA purification: binding capacity vs selectivity. *Journal of Chromatography A*, **2021**, 1637, 461848	4.5	3
22	Purification of supercoiled p53-encoding plasmid using an arginine-modified macroporous support. *Journal of Chromatography A*, **2020**, 1618, 460890	4.5	2
21	Improved recovery of a fusion protein containing the antigenic domain 1 of the human cytomegalovirus glycoprotein B. *Biotechnology Letters*, **2005**, 27, 1241-5	3	2

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19	Quality assessment of supercoiled minicircle DNA by cadaverine-modified analytical chromatographic monolith. *Journal of Pharmaceutical and Biomedical Analysis*, **2020**, 180, 113037	3.5	2
18	The Performance of Minicircle DNA Versus Parental Plasmid in Gene Delivery Into HPV-18-Infected Cervical Cancer Cells. *Nucleic Acid Therapeutics*, **2021**, 31, 82-91	4.8	2
17	New RNA-Based Breakthroughs in Alzheimer'ţ Disease Diagnosis and Therapeutics. *Pharmaceutics*, **2021**, 13,	6.4	2
16	Improved ionic-liquid-functionalized macroporous supports able to purify nucleic acids in one step. *Materials Today Bio*, **2020**, 8, 100086	9.9	1
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14	Molecular Beacon Assay Development for Severe Acute Respiratory Syndrome Coronavirus 2 Detection. *Sensors*, **2021**, 21,	3.8	1
13	Protein purification by aminosquarylium cyanine dye-affinity chromatography. *Methods in Molecular Biology*, **2015**, 1286, 23-33	1.4	1
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11	Applications of gellan natural polymer microspheres in recombinant catechol-O-methyltransferase direct capture from a Komagataella pastoris lysate. *International Journal of Biological Macromolecules*, **2021**, 172, 186-196	7.9	0
10	Additive Manufacturing Tools to Improve the Performance of Chromatographic Approaches. *Trends in Biotechnology*, **2021**, 39, 970-973	15.1	0
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8	3,3ŦDiamino-N-methyldipropylamine as a versatile affinity ligand. *Journal of Separation Science*, **2015**, 38, 732-40	3.4	
7	Quantitative analysis of the interaction between l-methionine derivative and oligonucleotides. *Journal of Biochemistry*, **2015**, 157, 261-70	3.1	
6	Plasmid production and purification: An integrated experiment-based biochemistry and biotechnology laboratory course. *Biochemistry and Molecular Biology Education*, **2019**, 47, 638-643	1.3	
5	Plasmid DNA purification by integrating membrane technology with arginine affinity chromatography. *New Biotechnology*, **2014**, 31, S120	6.4	
4	Isolation of a fusion protein containing the antigenic domain 1 of human cytomegalovirus glycoprotein B and its application in ELISA tests. *Biotechnology Letters*, **2006**, 28, 73-7	3	
3	p53-Encoding pDNA Purification by Affinity Chromatography for Cancer Therapy. *Methods in Molecular Biology*, **2015**, 1317, 109-24	1.4	

2	Understanding the adsorption of plasmid DNA and RNA molecules onto arginine-agarose chromatographic resin.. *Molecular Biology Reports*, **2022**, 1	2.8
1	Arginine-Affinity Chromatography for Nucleic Acid (DNA and RNA) Isolation.. *Methods in Molecular Biology*, **2022**, 2466, 135-144	1.4