Gabriel A Monteiro

List of Publications by Year
in descending order

107	3,041	218592	197736
papers	citations	26 h-index	49 g-index

116	116	116	3035
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recombinant protein secretion in Escherichia coli. Biotechnology Advances, 2005, 23, 177-202.	6.0	415
2	Large-scale production of pharmaceutical-grade plasmid DNA for gene therapy: problems and bottlenecks. Trends in Biotechnology, 1999, 17, 169-174.	4.9	230
3	Downstream processing of plasmid DNA for gene therapy and DNA vaccine applications. Trends in Biotechnology, 2000, 18, 380-388.	4.9	191
4	Purification of a cystic fibrosis plasmid vector for gene therapy using hydrophobic interaction chromatography. , 2000, 68, 576-583.		181
5	Fluorometric determination of ethidium bromide efflux kinetics in Escherichia coli. Journal of Biological Engineering, 2009, 3, 18.	2.0	164
6	Isolation of plasmid DNA from cell lysates by aqueous two-phase systems. Biotechnology and Bioengineering, 2002, 78, 376-384.	1.7	87
7	Effects of clay's chemical interactions on biocementation. Applied Clay Science, 2018, 156, 96-103.	2.6	86
8	Production, purification and analysis of an experimental DNA vaccine against rabies. Journal of Gene Medicine, 2001, 3, 577-584.	1.4	82
9	The impact of polyadenylation signals on plasmid nuclease-resistance and transgene expression. Journal of Gene Medicine, 2007, 9, 392-402.	1.4	79
10	Plasmid DNA Size Does Affect Nonviral Gene Delivery Efficiency in Stem Cells. Cellular Reprogramming, 2012, 14, 130-137.	0.5	46
11	Separation and Analysis of Plasmid Denatured Forms Using Hydrophobic Interaction Chromatography. Analytical Biochemistry, 1999, 275, 122-124.	1.1	43
12	Supercritical antisolvent micronization of minocycline hydrochloride. Journal of Supercritical Fluids, 2008, 44, 238-244.	1.6	43
13	Time-course determination of plasmid content in eukaryotic and prokaryotic cells using Real-Time PCR. Molecular Biotechnology, 2007, 37, 120-126.	1.3	42
14	Rational engineering of Escherichia coli strains for plasmid biopharmaceutical manufacturing. Biotechnology Journal, 2012, 7, 251-261.	1.8	42
15	Structural instability of plasmid biopharmaceuticals: challenges and implications. Trends in Biotechnology, 2009, 27, 503-511.	4.9	41
16	Implementing a strategy for on-chip detection of cell-free DNA fragments using GMR sensors: A translational application in cancer diagnostics using ALU elements. Analytical Methods, 2016, 8, 119-128.	1.3	41
17	Thein vivo activation ofSaccharomyces cerevisiae plasma membrane H+-ATPase by ethanol depends on the expression of thePMA1 gene, but not of thePMA2 gene. Yeast, 1994, 10, 1439-1446.	0.8	38
18	Comparison of real-time polymerase chain reaction and hybridization assays for the detection of Escherichia coli genomic DNA in process samples and pharmaceutical-grade plasmid DNA products. Analytical Biochemistry, 2003, 322, 127-129.	1.1	38

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19	The role of polyadenylation signal secondary structures on the resistance of plasmid vectors to nucleases. Journal of Gene Medicine, 2004, 6, 565-573.	1.4	37
20	About calcium carbonate precipitation on sand biocementation. Engineering Geology, 2020, 271, 105612.	2.9	36
21	De novo creation of MG1655-derived E. coli strains specifically designed for plasmid DNA production. Applied Microbiology and Biotechnology, 2013, 97, 611-620.	1.7	35
22	Title is missing!. Biotechnology Letters, 2000, 22, 1397-1400.	1.1	34
23	Plasmid Biopharmaceuticals. Microbiology Spectrum, 2014, 2, .	1.2	32
24	Evaluation of bottlenecks in proinsulin secretion by Escherichia coli. Journal of Biotechnology, 2004, 109, 31-43.	1.9	31
25	Towards the miniaturization of GPCR-based live-cell screening assays. Trends in Biotechnology, 2012, 30, 566-574.	4.9	31
26	Optimization of the primary recovery of human interferon Î±2b from Escherichia coli inclusion bodies. Protein Expression and Purification, 2006, 45, 226-234.	0.6	29
27	The Impact of IPTG Induction on Plasmid Stability and Heterologous Protein Expression by Escherichia coli Biofilms. International Journal of Molecular Sciences, 2020, 21, 576.	1.8	28
28	In vivo activation of yeast plasma membrane H+-ATPase by ethanol: effect on the kinetic parameters and involvement of the carboxyl-terminus regulatory domain. Biochimica Et Biophysica Acta - Biomembranes, 1998, 1370, 310-316.	1.4	27
29	Characterization of the topography and wettability of English weed leaves and biomimetic replicas. Journal of Bionic Engineering, 2014, 11, 346-359.	2.7	26
30	Towards effective non-viral gene delivery vector. Biotechnology and Genetic Engineering Reviews, 2015, 31, 82-107.	2.4	26
31	High Frequency Plasmid Recombination Mediated by 28Âbp Direct Repeats. Molecular Biotechnology, 2008, 40, 252-60.	1.3	25
32	Purification of plasmids for gene therapy and DNA vaccination. Biotechnology Annual Review, 2001, 7, 1-30.	2.1	24
33	DNA vaccines: a rational design against parasitic diseases. Expert Review of Vaccines, 2010, 9, 175-191.	2.0	24
34	Plasmid DNA production with Escherichia coli GALG20, a pgi-gene knockout strain: Fermentation strategies and impact on downstream processing. Journal of Biotechnology, 2014, 186, 119-127.	1.9	24
35	Trans-sialidase from Trypanosoma brucei as a potential target for DNA vaccine development against African trypanosomiasis. Parasitology Research, 2009, 105, 1223-9.	0.6	23
36	Application of central composite design for DNA hybridization onto magnetic microparticles. Analytical Biochemistry, 2009, 391, 17-23.	1.1	23

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37	Development of a recombinant fusion protein based on the dynein light chain LC8 for non-viral gene delivery. Journal of Controlled Release, 2012, 159, 222-231.	4.8	23
38	Trypanosoma brucei: Immunisation with plasmid DNA encoding invariant surface glycoprotein gene is able to induce partial protection in experimental African trypanosomiasis. Experimental Parasitology, 2011, 127, 18-24.	0.5	22
39	Recombination frequency in plasmid DNA containing direct repeatsâ€"predictive correlation with repeat and intervening sequence length. Plasmid, 2008, 60, 159-165.	0.4	21
40	Analysis of DNA repeats in bacterial plasmids reveals the potential for recurrent instability events. Applied Microbiology and Biotechnology, 2010, 87, 2157-2167.	1.7	21
41	Analysis and use of endogenous nuclease activities inEscherichia coli lysates during the primary isolation of plasmids for gene therapy. , 1999, 66, 189-194.		20
42	In situ<scp>NIR</scp> spectroscopy monitoring of plasmid production processes: effect of producing strain, medium composition and the cultivation strategy. Journal of Chemical Technology and Biotechnology, 2015, 90, 255-261.	1.6	20
43	Development of a nicking endonuclease-assisted method for the purification of minicircles. Journal of Chromatography A, 2016, 1443, 136-144.	1.8	20
44	Analysis of factors affecting the periplasmic production of recombinant proteins in Escherichia coli. Journal of Microbiology and Biotechnology, 2007, 17, 1236-41.	0.9	20
45	Translational Features of Human Alpha 2b Interferon Production in Escherichia coli. Applied and Environmental Microbiology, 2004, 70, 5033-5036.	1.4	19
46	On the stability of plasmid DNA vectors during cell culture and purification. Molecular Biotechnology, 2007, 36, 151-158.	1.3	19
47	Protein-DNA interactions define the mechanistic aspects of circle formation and insertion reactions in IS2 transposition. Mobile DNA, 2012, 3, 1.	1.3	19
48	Medium and copy number effects on the secretion of human proinsulin in Escherichia coli using the universal stress promoters uspA and uspB. Applied Microbiology and Biotechnology, 2003, 61, 495-501.	1.7	16
49	Impact of Plasmid Quality on Lipoplex-Mediated Transfection. Journal of Pharmaceutical Sciences, 2013, 102, 3932-3941.	1.6	16
50	Engineering of Human Mesenchymal Stem/Stromal Cells with Vascular Endothelial Growth Factorâ€"Encoding Minicircles for Angiogenic Ex Vivo Gene Therapy. Human Gene Therapy, 2019, 30, 316-329.	1.4	16
51	Quantitation of plasmid DNA in aqueous two-phase systems by fluorescence analysis. Biotechnology Letters, 2000, 22, 1101-1104.	1.1	15
52	Evaluation of inducible promoters on the secretion of a ZZ-proinsulin fusion protein in Escherichia coli. Biotechnology and Applied Biochemistry, 2003, 38, 87.	1.4	15
53	On the dual effect of glucose during production of pBAD/AraC-based minicircles. Vaccine, 2014, 32, 2843-2846.	1.7	14
54	Effect of cationic liposomes/DNA charge ratio on gene expression and antibody response of a candidate DNA vaccine against Maedi Visna virus. International Journal of Pharmaceutics, 2009, 377, 92-98.	2.6	13

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55	Deletion formation mutations in plasmid expression vectors are unfavored by runaway amplification conditions and differentially selected under kanamycin stress. Journal of Biotechnology, 2009, 143, 231-238.	1.9	13
56	Design and characterization of plasmids encoding antigenic peptides of Aha1 from Aeromonas hydrophila as prospective fish vaccines. Journal of Biotechnology, 2017, 241, 116-126.	1.9	13
57	Conjugal transfer of recombinant plasmids into gellan gum-producing and non-producing variants of Pseudomonas elodea ATCC 31461. Letters in Applied Microbiology, 1991, 12, 85-87.	1.0	12
58	Chemiluminescent bead-based hybridization assay for the detection of genomic DNA from E. coli in purified plasmid samples. Analytical and Bioanalytical Chemistry, 2008, 391, 2179-2187.	1.9	12
59	Stabilization of naked and condensed plasmid DNA against degradation induced by ultrasounds and highâ€shear vortices. Biotechnology and Applied Biochemistry, 2009, 53, 237-246.	1.4	12
60	Improvement of DNA minicircle production by optimization of the secondary structure of the 5â€²-UTR of ParA resolvase. Applied Microbiology and Biotechnology, 2016, 100, 6725-6737.	1.7	12
61	A Quantitative ELISA for Monitoring the Secretion of ZZ-Fusion Proteins Using SpA Domain as Immunodetection Reporter System. Molecular Biotechnology, 2001, 19, 239-244.	1.3	11
62	Engineering of Escherichia coli strains for plasmid biopharmaceutical production: Scale-up challenges. Vaccine, 2014, 32, 2847-2850.	1.7	11
63	Multimodal chromatography of supercoiled minicircles: A closer look into DNA-ligand interactions. Separation and Purification Technology, 2019, 212, 161-170.	3.9	11
64	Development of a candidate DNA vaccine against Maedi-Visna virus. Veterinary Immunology and Immunopathology, 2007, 119, 222-232.	0.5	10
65	A quantitative method to evaluate mesenchymal stem cell lipofection using realâ€time PCR. Biotechnology Progress, 2010, 26, 1501-1504.	1.3	10
66	Monitoring intracellular calcium in response to GPCR activation using thin-film silicon photodiodes with integrated fluorescence filters. Biosensors and Bioelectronics, 2014, 52, 232-238.	5.3	10
67	Quantitative Evaluation of DNA Dissociation from Liposome Carriers and DNA Escape from Endosomes During Lipid-Mediated Gene Delivery. Human Gene Therapy Methods, 2014, 25, 303-313.	2.1	10
68	Conditioned Medium From Azurin-Expressing Human Mesenchymal Stromal Cells Demonstrates Antitumor Activity Against Breast and Lung Cancer Cell Lines. Frontiers in Cell and Developmental Biology, 2020, 8, 471.	1.8	10
69	Electrotransformation of gellanâ€gum producing and nonâ€producing Pseudomonas elodea strains. Journal of Applied Bacteriology, 1992, 72, 423-428.	1.1	9
70	Production and Purification of Supercoiled Minicircles by a Combination of In Vitro Endonuclease Nicking and Hydrophobic Interaction Chromatography. Human Gene Therapy Methods, 2018, 29, 157-168.	2.1	9
71	Mesenchymal Stromal Cells (MSCs): A Promising Tool for Cell-Based Angiogenic Therapy. Current Gene Therapy, 2021, 21, 382-405.	0.9	9
72	Minicircle Biopharmaceuticalsâ€“An Overview of Purification Strategies. Frontiers in Chemical Engineering, 2021, 2, .	1.3	9

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73	The role of probeâ€“probe interactions on the hybridization of double-stranded DNA targets onto DNA-modified magnetic microparticles. Analytical and Bioanalytical Chemistry, 2009, 394, 1711-1716.	1.9	8
74	Comparative Analysis of Antigen-Targeting Sequences Used in DNA Vaccines. Molecular Biotechnology, 2010, 44, 204-212.	1.3	8
75	Evidence that the insertion events of IS2 transposition are biased towards abrupt compositional shifts in target DNA and modulated by a diverse set of culture parameters. Applied Microbiology and Biotechnology, 2014, 98, 6609-6619.	1.7	8
76	Periplasmic Targeting of Recombinant Proteins in Escherichia coli. , 2007, 390, 47-61.		7
77	The Influence of Nutrient Medium Composition on Escherichia coli Biofilm Development and Heterologous Protein Expression. Applied Sciences (Switzerland), 2021, 11, 8667.	1.3	7
78	Troubleshooting in Gene Splicing by Overlap Extension: A Step-Wise Method. Molecular Biotechnology, 1999, 12, 285-288.	1.3	6
79	The influence of stone joints width and roughness on the efficiency of biocementation sealing. Construction and Building Materials, 2021, 283, 122743.	3.2	6
80	Evaluation of the Effect of Non-B DNA Structures on Plasmid Integrity Via Accelerated Stability Studies. Journal of Pharmaceutical Sciences, 2009, 98, 1400-1408.	1.6	5
81	Quantitation of non-amplified genomic DNA by bead-based hybridization and template mediated extension coupled to alkaline phosphatase signal amplification. Biotechnology Letters, 2010, 32, 229-234.	1.1	5
82	ORMOPLEXEs for gene therapy: In vitro and in vivo assays. Materials Science and Engineering C, 2016, 63, 546-553.	3.8	5
83	Mutation detection in plasmidâ€based biopharmaceuticals. Biotechnology Journal, 2011, 6, 378-391.	1.8	4
84	Preliminary tests on a microfluidic device to study pore clogging during biocementation. E3S Web of Conferences, 2019, 92, 11018.	0.2	4
85	Plasmid Replicons for the Production of Pharmaceutical-Grade pDNA, Proteins and Antigens by Lactococcus lactis Cell Factories. International Journal of Molecular Sciences, 2021, 22, 1379.	1.8	4
86	Comparison of experimental techniques for biocementation of sands considering homogeneous volume distribution of precipitated calcium carbonate. E3S Web of Conferences, 2020, 195, 05004.	0.2	4
87	Hydrodynamic Effects on Biofilm Development and Recombinant Protein Expression. Microorganisms, 2022, 10, 931.	1.6	4
88	Re-engineering of an Escherichia coli K-12 strain for the efficient production of recombinant human Interferon Gamma. Enzyme and Microbial Technology, 2018, 117, 23-31.	1.6	3
89	Towards a portable magnetoresistive biochip for urease-based biocementation monitoring*. , 2019, , .		3
90	One-step trapping of droplets and surface functionalization of sensors using gold-patterned structures for multiplexing in biochips. RSC Advances, 2017, 7, 43273-43282.	1.7	2

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91	Draft Genome Sequence of the Plasmid-Free Lactococcus lactis subsp. lactis Strain LMG 19460. Genome Announcements, 2017, 5, .	0.8	2
92	Plasmid Copy Number of pTRKH3 inLactococcus lactisis Increased by Modification of therepDERibosomeâ€Binding Site. Biotechnology Journal, 2019, 14, 1800587.	1.8	2
93	Minicircleâ€based expression of vascular endothelial growth factor in mesenchymal stromal cells from diverse human tissues. Journal of Gene Medicine, 2021, 23, e3342.	1.4	2
94	Recombination efficiency measurement by real-time PCR: A strategy to evaluate ParA-mediated minicircle production. Analytical Biochemistry, 2021, 628, 114285.	1.1	2
95	Enhancement of DNA Vaccine Efficacy by Intracellular Targeting Strategies. Methods in Molecular Biology, 2014, 1143, 33-59.	0.4	2
96	Plasmid Biopharmaceuticals. , 0, , 669-688.		2
97	Bringing DNA vaccines closer to commercial use. IDrugs: the Investigational Drugs Journal, 2009, 12, 642-7.	0.7	2
98	Appendix 1. Essential Guides for Isolation/Purification of Nucleic Acids. , 2000, , 4560-4568.		1
99	Optimization of DNA Hybridization on Aminopropyl-Controlled Pore-Glass Particles: Detection of Non-Labeled Targets by PicoGreen Staining. Analytical Letters, 2010, 43, 2694-2704.	1.0	1
100	DNA Vaccines Against Maediâ€“Visna Virus. Methods in Molecular Biology, 2016, 1404, 59-76.	0.4	1
101	Use of DNA Stabilizers to Extend Plasmid Biological Activity. Current Bionanotechnology, 2016, 1, 102-109.	0.6	1
102	The Effect of Recombinant Protein Production in Lactococcus lactis Transcriptome and Proteome. Microorganisms, 2022, 10, 267.	1.6	1
103	Determination of plasmid content in eukaryotic and prokaryotic cells using Real-Time PCR. Microbial Cell Factories, 2006, 5, P50.	1.9	0
104	Evidence for the in vivo expression of a distant downstream gene under the control of ColE1 replication origin. Applied Microbiology and Biotechnology, 2010, 86, 671-679.	1.7	0
105	Towards a high-throughput drug discovery platform for the screening of GPCR targets in cells. , 2011, , .		0
106	Integrated On-chip Photodetection of Intracellular Calcium in Response to the Activation of G-protein Coupled Receptors. Procedia Engineering, 2012, 47, 993-996.	1.2	0
107	RNAi as a tool to inhibit the angiogenic potential of human Mesenchymal Stem/Stromal Cells in malignancy*. , 2019, , .		0