CecÃ-lia Roque

List of Publications by Year in descending order

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114 papers 3,718 citations

30 h-index 57 g-index

117 all docs

117 docs citations

117 times ranked 4754 citing authors

#	Article	IF	CITATIONS
1	Nanoscale Events on Cyanobiphenyl-Based Self-Assembled Droplets Triggered by Gas Analytes. ACS Applied Materials & Samp; Interfaces, 2022, 14, 6261-6273.	8.0	11
2	Tackling Humidity with Designer Ionic Liquidâ€Based Gas Sensing Soft Materials. Advanced Materials, 2022, 34, e2107205.	21.0	38
3	Synergy between silk fibroin and ionic liquids for active gas-sensing materials. Materials Today Bio, 2022, 15, 100290.	5 . 5	13
4	Native, engineered and de novo designed ligands targeting the SARS-CoV-2 spike protein. Biotechnology Advances, 2022, 59, 107986.	11.7	4
5	Learning to see VOCs with Liquid Crystal Droplets. , 2022, , .		0
6	Affinity-triggered hydrogels: Developments and prospects in biomaterials science. Biomaterials, 2021, 268, 120563.	11.4	3
7	Magnetic particles used in a new approach for designed protein crystallization. CrystEngComm, 2021, 23, 1083-1090.	2.6	5
8	Optical Gas Sensing with Liquid Crystal Droplets and Convolutional Neural Networks. Sensors, 2021, 21, 2854.	3.8	13
9	A purification platform for antibodies and derived fragments using a de novo designed affinity adsorbent. Separation and Purification Technology, 2021, 265, 118476.	7.9	5
10	Ionogels Based on a Single Ionic Liquid for Electronic Nose Application. Chemosensors, 2021, 9, 201.	3.6	10
11	Stable and Oriented Liquid Crystal Droplets Stabilized by Imidazolium Ionic Liquids. Molecules, 2021, 26, 6044.	3.8	9
12	Affinity Tags in Protein Purification and Peptide Enrichment: An Overview. Methods in Molecular Biology, 2021, 2178, 107-132.	0.9	14
13	Discovery of phosphotyrosine-binding oligopeptides with supramolecular target selectivity. Chemical Science, 2021, 13, 210-217.	7.4	7
14	Microfluidics in Gas Sensing and Artificial Olfaction. Sensors, 2020, 20, 5742.	3.8	22
15	Sustainable plant polyesters as substrates for optical gas sensors. Materials Today Bio, 2020, 8, 100083.	5. 5	6
16	Versatile and Tunable Poly(Ethylene Glycol)â€Based Hydrogels Crosslinked through the Ugi Reaction. ChemPlusChem, 2020, 85, 2737-2741.	2.8	0
17	Magnetic Precipitation: A New Platform for Protein Purification. Biotechnology Journal, 2020, 15, 2000151.	3.5	5
18	Natural Multimerization Rules the Performance of Affinity-Based Physical Hydrogels for Stem Cell Encapsulation and Differentiation. Biomacromolecules, 2020, 21, 3081-3091.	5.4	3

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19	Rational design of affinity ligands for bioseparation. Journal of Chromatography A, 2020, 1619, 460871.	3.7	17
20	Seeing the Unseen: The Role of Liquid Crystals in Gasâ€Sensing Technologies. Advanced Optical Materials, 2020, 8, 1902117.	7.3	73
21	Anything but Conventional Chromatography Approaches in Bioseparation. Biotechnology Journal, 2020, 15, e1900274.	3.5	47
22	Identification and Antibioticâ€Susceptibility Profiling of Infectious Bacterial Agents: A Review of Current and Future Trends. Biotechnology Journal, 2019, 14, e1700750.	3.5	105
23	Free Marine Natural Products Databases for Biotechnology and Bioengineering. Biotechnology Journal, 2019, 14, e1800607.	3.5	19
24	Affinityâ€Triggered Assemblies Based on a Designed Peptide–Peptide Affinity Pair. Biotechnology Journal, 2019, 14, e1800559.	3.5	2
25	Enhanced gas sensing with soft functional materials. , 2019, , .		2
26	Effect of film thickness in gelatin hybrid gels for artificial olfaction. Materials Today Bio, $2019, 1, 100002$.	5. 5	16
27	\hat{l}^2 -Hairpins as peptidomimetics of human phosphoprotein-binding domains. Organic and Biomolecular Chemistry, 2019, 17, 3996-4004.	2.8	9
28	Hydrolytic zinc metallopeptides using a computational multi-state design approach. Catalysis Science and Technology, 2019, 9, 6723-6736.	4.1	4
29	Designed affinity ligands to capture human serum albumin. Journal of Chromatography A, 2019, 1583, 88-97.	3.7	15
30	Impact of Sensing Film's Production Method on Classification Accuracy by Electronic Nose. , 2019, , .		0
31	An Optimized E-nose for Efi¬cient Volatile Sensing and Discrimination. , 2019, , .		5
32	Machine learning for the meta-analyses of microbial pathogens' volatile signatures. Scientific Reports, 2018, 8, 3360.	3.3	40
33	Tilapia fish microbial spoilage monitored by a single optical gas sensor. Food Control, 2018, 89, 72-76.	5.5	69
34	Protein- and Peptide-Based Biosensors in Artificial Olfaction. Trends in Biotechnology, 2018, 36, 1244-1258.	9.3	97
35	Design and Evolution of an Opto-electronic Device for VOCs Detection. , 2018, 1, 48-55.		4
36	Magnetic crystallization proof-of-concept: lysozyme and trypsin case study. Acta Crystallographica Section A: Foundations and Advances, 2018, 74, e183-e184.	0.1	0

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37	Integration of Molecular Dynamics Based Predictions into the Optimization of De Novo Protein Designs: Limitations and Benefits. Methods in Molecular Biology, 2017, 1529, 181-201.	0.9	2
38	Renaissance of protein crystallization and precipitation in biopharmaceuticals purification. Biotechnology Advances, 2017, 35, 41-50.	11.7	81
39	Hybrid Magnetic-Polymeric Iron Oxide Nanoprobes for Magnetic Resonance Imaging. Journal of Nanoscience and Nanotechnology, 2017, 17, 4410-4431.	0.9	3
40	Tunable Gas Sensing Gels by Cooperative Assembly. Advanced Functional Materials, 2017, 27, 1700803.	14.9	50
41	Magnetic fishing of recombinant green fluorescent proteins and tagged proteins with designed synthetic ligands. Separation Science and Technology, 2017, 52, 2909-2917.	2.5	2
42	Liquid Crystals: Tunable Gas Sensing Gels by Cooperative Assembly (Adv. Funct. Mater. 27/2017). Advanced Functional Materials, 2017, 27, .	14.9	0
43	The future of protein scaffolds as affinity reagents for purification. Biotechnology and Bioengineering, 2017, 114, 481-491.	3.3	22
44	Affinity adsorbents for proline-rich peptide sequences: a new role for WW domains. RSC Advances, 2016, 6, 68979-68988.	3.6	8
45	Mimicking nature: Phosphopeptide enrichment using combinatorial libraries of affinity ligands. Journal of Chromatography A, 2016, 1457, 76-87.	3.7	10
46	An affinity triggered MRI nanoprobe for pH-dependent cell labeling. RSC Advances, 2016, 6, 113503-113512.	3 . 6	3
47	Retroviral particles are effectively purified on an affinity matrix containing peptides selected by phageâ€display. Biotechnology Journal, 2016, 11, 1513-1524.	3.5	9
48	Petasis-Ugi ligands: New affinity tools for the enrichment of phosphorylated peptides. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2016, 1031, 86-93.	2.3	9
49	Tryptophan tags and de novo designed complementary affinity ligands for the expression and purification of recombinant proteins. Journal of Chromatography A, 2016, 1472, 55-65.	3.7	11
50	Affitins for protein purification by affinity magnetic fishing. Journal of Chromatography A, 2016, 1457, 50-58.	3.7	22
51	Small synthetic ligands for the enrichment of viral particles pseudotyped with amphotropic murine leukemia virus envelope. Journal of Chromatography A, 2016, 1438, 160-170.	3.7	6
52	Phosphopeptide Enrichment Using Various Magnetic Nanocomposites: An Overview. Methods in Molecular Biology, 2016, 1355, 193-209.	0.9	12
53	Covalent coupling of gum arabic onto superparamagnetic iron oxide nanoparticles for MRI cell labeling: physicochemical and <i>in vitro</i> characterization. Contrast Media and Molecular Imaging, 2015, 10, 320-328.	0.8	16
54	Comparison of the Internal Dynamics of Metalloproteases Provides New Insights on Their Function and Evolution. PLoS ONE, 2015, 10, e0138118.	2.5	7

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55	An in silico and chemical approach towards small protein production and application in phosphoproteomics. RSC Advances, 2015, 5, 19743-19751.	3.6	4
56	Biobased Monoliths for Adenovirus Purification. ACS Applied Materials & Samp; Interfaces, 2015, 7, 6605-6612.	8.0	12
57	A value-added exopolysaccharide as a coating agent for MRI nanoprobes. Nanoscale, 2015, 7, 14272-14283.	5.6	17
58	Purification of human antibodies from animal cell cultures using gum arabic coated magnetic particles. Journal of Chemical Technology and Biotechnology, 2015, 90, 838-846.	3.2	2
59	Mild and cost-effective green fluorescent protein purification employing small synthetic ligands. Journal of Chromatography A, 2015, 1418, 83-93.	3.7	12
60	Effects of phase transfer ligands on monodisperse iron oxide magnetic nanoparticles. Journal of Colloid and Interface Science, 2015, 437, 147-155.	9.4	66
61	Hybrid Monoliths for Magneticallyâ€Driven Protein Separations. Advanced Functional Materials, 2014, 24, 4528-4541.	14.9	20
62	The interaction of polymer-coated magnetic nanoparticles with seawater. Science of the Total Environment, 2014, 487, 771-777.	8.0	16
63	Magnetic aqueous two phase fishing: A hybrid process technology for antibody purification. Journal of Chromatography A, 2014, 1339, 59-64.	3.7	30
64	Challenges and opportunities in the purification of recombinant tagged proteins. Biotechnology Advances, 2014, 32, 366-381.	11.7	121
65	Structural evaluation of an alternative Protein A biomimetic ligand for antibody purification. Journal of Computer-Aided Molecular Design, 2014, 28, 25-34.	2.9	13
66	Exploring the potential of magnetic antimicrobial agents for water disinfection. Water Research, 2014, 66, 160-168.	11.3	22
67	A theoretical and experimental approach toward the development of affinity adsorbents for GFP and GFP-fusion proteins purification. Journal of Biotechnology, 2014, 186, 13-20.	3.8	6
68	Boronic acid-modified magnetic materials for antibody purification. Journal of the Royal Society Interface, 2014, 11, 20130875.	3.4	22
69	An extracellular polymer at the interface of magnetic bioseparations. Journal of the Royal Society Interface, 2014, 11, 20140743.	3.4	22
70	Affinity Tags in Protein Purification and Peptide Enrichment: An Overview. Methods in Molecular Biology, 2014, 1129, 147-168.	0.9	15
71	A Tailorâ€Made "Tag–Receptor―Affinity Pair for the Purification of Fusion Proteins. ChemBioChem, 2014, 15, 1423-1435.	2.6	14
72	Magnetic separations in biotechnology. Biotechnology Advances, 2013, 31, 1374-1385.	11.7	189

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73	A green approach toward antibody purification: a sustainable biomimetic ligand for direct immobilization on (bio)polymeric supports. Journal of Molecular Recognition, 2013, 26, 662-671.	2.1	10
74	In situ magnetic separation of antibody fragments from Escherichia coli in complex media. BMC Biotechnology, 2013, 13, 44.	3.3	11
75	Functional monolithic platforms: Chromatographic tools for antibody purification. Biotechnology Journal, 2013, 8, 671-681.	3.5	29
76	Stimuliâ€Responsive magnetic nanoparticles for monoclonal antibody purification. Biotechnology Journal, 2013, 8, 709-717.	3.5	31
77	Antibody-Conjugated Nanoparticles for Therapeutic Applications. Current Medicinal Chemistry, 2012, 19, 3103-3127.	2.4	106
78	Fishing human monoclonal antibodies from a CHO cell supernatant with boronic acid magnetic particles. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2012, 903, 163-170.	2.3	23
79	Dextran-Coated Magnetic Supports Modified with a Biomimetic Ligand for IgG Purification. ACS Applied Materials & Samp; Interfaces, 2012, 4, 5907-5914.	8.0	32
80	Immobilization of enterokinase on magnetic supports for the cleavage of fusion proteins. Journal of Biotechnology, 2012, 161, 378-382.	3.8	10
81	Bioinspired and sustainable chitosan-based monoliths for antibody capture and release. RSC Advances, 2012, 2, 11285.	3.6	14
82	Understanding the molecular recognition between antibody fragments and protein A biomimetic ligand. Journal of Chromatography A, 2012, 1244, 106-115.	3.7	32
83	Platforms for enrichment of phosphorylated proteins and peptides in proteomics. Trends in Biotechnology, 2012, 30, 100-110.	9.3	80
84	Fluorescence recognition of proteinaceous binders in works of art by a novel integrated system of investigation. Microscopy Research and Technique, 2012, 75, 316-324.	2.2	17
85	A biotechnological perspective on the application of iron oxide magnetic colloids modified with polysaccharides. Biotechnology Advances, 2011, 29, 142-155.	11.7	307
86	Potential of boronic acid functionalized magnetic particles in the adsorption of human antibodies under mammalian cell culture conditions. Journal of Chromatography A, 2011, 1218, 7821-7827.	3.7	29
87	Gum Arabic coated magnetic nanoparticles with affinity ligands specific for antibodies. Journal of Molecular Recognition, 2010, 23, 462-471.	2.1	61
88	<i>In vitro</i> studies with mammalian cell lines and gum arabicâ€coated magnetic nanoparticles. Journal of Molecular Recognition, 2010, 23, 536-542.	2.1	8
89	Anti-CD8 conjugated nanoparticles to target mammalian cells expressing CD8. International Journal of Pharmaceutics, 2010, 399, 80-86.	5.2	28
90	Preparation and characterization of a cellulose affinity membrane for human immunoglobulin G (IgG) purification. Journal of Membrane Science, 2010, 348, 224-230.	8.2	41

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91	Comparison of Fluorescence Labelling Techniques for the Selection of Affinity Ligands from Solid-Phase Combinatorial Libraries. Separation Science and Technology, 2010, 45, 2187-2193.	2.5	8
92	An Historical Overview of Drug Discovery. Methods in Molecular Biology, 2010, 572, 3-12.	0.9	32
93	Short communication: Effect of kefir grains on proteolysis of major milk proteins. Journal of Dairy Science, 2010, 93, 27-31.	3.4	21
94	Studies on the molecular recognition between bioactive peptides and angiotensinâ€converting enzyme. Journal of Molecular Recognition, 2009, 22, 162-168.	2.1	114
95	Antibody immobilization on magnetic particles. Journal of Molecular Recognition, 2009, 22, 77-82.	2.1	33
96	Bio-recognition and detection using liquid crystals. Biosensors and Bioelectronics, 2009, 25, 1-8.	10.1	94
97	Biocompatible and bioactive gum Arabic coated iron oxide magnetic nanoparticles. Journal of Biotechnology, 2009, 144, 313-320.	3.8	84
98	Adsorption of gum Arabic on bioceramic nanoparticles. Materials Science and Engineering C, 2008, 28, 443-447.	7.3	32
99	Affinity Chromatography. , 2008, , 1-23.		5
100	Rationally Designed Ligands for Use in Affinity Chromatography. , 2008, 421, 93-110.		5
101	Affinity chromatography: history, perspectives, limitations and prospects. Methods in Molecular Biology, 2008, 421, 1-21.	0.9	19
102	Development and Validation of an HPLC/UV Method for Quantification of Bioactive Peptides in Fermented Milks. Journal of Liquid Chromatography and Related Technologies, 2007, 30, 2139-2147.	1.0	26
103	Affinity-based methodologies and ligands for antibody purification: Advances and perspectives. Journal of Chromatography A, 2007, 1160, 44-55.	3.7	226
104	Wireless excitation of quartz crystals immersed in an aqueous fluid. Analyst, The, 2006, 131, 474.	3.5	1
105	Advances and applications of de novo designed affinity ligands in proteomics. Biotechnology Advances, 2006, 24, 17-26.	11.7	48
106	De novo design, synthesis and screening of a combinatorial library of complementary ligands directed towards the surface of cutinase fromFusarium solani pisi. Journal of Molecular Recognition, 2006, 19, 372-378.	2.1	13
107	Magnetic acoustic resonance immunoassay (MARIA): a multifrequency acoustic approach for the non-labelled detection of biomolecular interactions. Journal of Molecular Recognition, 2006, 19, 379-385.	2.1	6
108	Noncontact excitation of quartz crystal resonator chips. Applied Physics Letters, 2006, 89, 083516.	3.3	4

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109	An artificial protein L for the purification of immunoglobulins and Fab fragments by affinity chromatography. Journal of Chromatography A, 2005, 1064, 157-167.	3.7	86
110	Lessons from nature: On the molecular recognition elements of the phosphoprotein binding-domains. Biotechnology and Bioengineering, 2005, 91, 546-555.	3.3	29
111	Synthesis and screening of a rationally designed combinatorial library of affinity ligands mimicking protein L fromPeptostreptococcus magnus. Journal of Molecular Recognition, 2005, 18, 213-224.	2.1	51
112	Design, Synthesis, and Screening of Biomimetic Ligands for Affinity Chromatography. Methods in Molecular Biology, 2005, 310, 43-62.	0.9	14
113	Antibodies and Genetically Engineered Related Molecules: Production and Purification. Biotechnology Progress, 2004, 20, 639-654.	2.6	302
114	A new method for the screening of solid-phase combinatorial libraries for affinity chromatography. Journal of Molecular Recognition, 2004, 17, 262-267.	2.1	27