Roberto Herrero

List of Publications by Year
in descending order

63 papers	2,692 citations	172207 29 h-index	182168 51 g-index
63 all docs	63 docs citations	63 times ranked	2638 citing authors

#	Article	IF	Citations
1	The marine macroalga Cystoseira baccata as biosorbent for cadmium(II) and lead(II) removal: Kinetic and equilibrium studies. Environmental Pollution, 2006, 142, 264-273.	3.7	325
2	Green synthesis of iron oxide nanoparticles. Development of magnetic hybrid materials for efficient As(V) removal. Chemical Engineering Journal, 2016, 301, 83-91.	6.6	204
3	Biosorption of cadmium by biomass of brown marine macroalgae. Bioresource Technology, 2005, 96, 1796-1803.	4.8	177
4	Removal of inorganic mercury from aqueous solutions by biomass of the marine macroalga Cystoseira baccata. Water Research, 2005, 39, 3199-3210.	5.3	130
5	Physicochemical studies of Cadmium(II) biosorption by the invasive alga in Europe,Sargassum muticum. Biotechnology and Bioengineering, 2004, 88, 237-247.	1.7	118
6	Biosorption of Cadmium by Fucus spiralis. Environmental Chemistry, 2004, 1, 180.	0.7	116
7	Removal of Methylene Blue from aqueous solutions using as biosorbentSargassum muticum: an invasive macroalga in Europe. Journal of Chemical Technology and Biotechnology, 2005, 80, 291-298.	1.6	111
8	The use of protonated Sargassum muticum as biosorbent for cadmium removal in a fixed-bed column. Journal of Hazardous Materials, 2006, 137, 244-253.	6.5	83
9	Interactions of cadmium(II) and protons with dead biomass of marine algae Fucus sp.. Marine Chemistry, 2006, 99, 106-116.	0.9	73
10	Biosorption of phenolic compounds by the brown algaSargassum muticum. Journal of Chemical Technology and Biotechnology, 2006, 81, 1093-1099.	1.6	72
11	Thermodynamic and Kinetic Aspects on the Biosorption of Cadmium by Low Cost Materials: A Review. Environmental Chemistry, 2006, 3, 400.	0.7	70
12	Batch desorption studies and multiple sorptionâ€“regeneration cycles in a fixed-bed column for Cd(II) elimination by protonated Sargassum muticum. Journal of Hazardous Materials, 2006, 137, 1649-1655.	6.5	64
13	Dipole Potentials of Monolayers of Phosphatidylcholine, Phosphatidylserine, and Phosphatidic Acid on Mercury. Langmuir, 2000, 16, 7694-7700.	1.6	62
14	The efficiency of the red alga Mastocarpus stellatus for remediation of cadmium pollution. Bioresource Technology, 2008, 99, 4138-4146.	4.8	56
15	Kinetics of electron and proton transfer to ubiquinone-10 and from ubiquinol-10 in a self-assembled phosphatidylcholine monolayer. Biochimica Et Biophysica Acta - Bioenergetics, 1998, 1364, 373-384.	0.5	51
16	Alkanethiol monolayers and alkanethiol|phospholipid bilayers supported by mercury: an electrochemical characterization. Journal of Electroanalytical Chemistry, 1998, 452, 33-42.	1.9	48
17	Acidâ^'Base Properties of Brown Seaweed Biomass Considered As a Donnan Gel. A Model Reflecting Electrostatic Effects and Chemical Heterogeneity. Environmental Science & Technology, 2003, 37, 5159-5167.	4.6	48
18	Adsorption of Methylene Blue on Chemically Modified Algal Biomass: Equilibrium, Dynamic, and Surface Data. Journal of Chemical & Engineering Data, 2010, 55, 5707-5714.	1.0	46

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19	Experimental evidences for a new model in the description of the adsorption-coupled reduction of Cr(VI) by protonated banana skin. Bioresource Technology, 2013, 139, 181-189.	4.8	42
20	Adsorption of Tetraphenylphosphonium and Tetraphenylborate in Self-Assembled Phosphatidylcholine and Phosphatidylserine Monolayers Deposited on Mercury Electrodes. The Journal of Physical Chemistry, 1995, 99, 9940-9951.	2.9	39
21	Gibbsâ€“Donnan and specific-ion interaction theory descriptions of the effect of ionic strength on proton dissociation of alginic acid. Journal of Electroanalytical Chemistry, 2004, 564, 223-230.	1.9	39
22	Waste spider crab shell and derived chitin as low-cost materials for cadmium and lead removal. Journal of Chemical Technology and Biotechnology, 2007, 82, 39-46.	1.6	39
23	Interaction of heavy metals with Ca-pretreated Sargassum muticum algal biomass: Characterization as a cation exchange process. Chemical Engineering Journal, 2015, 264, 181-187.	6.6	39
24	CrIII binding by surface polymers in natural biomass: the role of carboxylic groups. Environmental Chemistry, 2008, 5, 355.	0.7	36
25	A dynamic proof of mercury elimination from solution through a combined sorptionâ€“reduction process. Bioresource Technology, 2010, 101, 8969-8974.	4.8	36
26	Adsorptive behaviour of mercury on algal biomass: Competition with divalent cations and organic compounds. Journal of Hazardous Materials, 2011, 192, 284-91.	6.5	36
27	Biosorption of cadmium by the protonated macroalga Sargassum muticum: Binding analysis with a nonideal, competitive, and thermodynamically consistent adsorption (NICCA) model. Journal of Colloid and Interface Science, 2005, 289, 352-358.	5.0	34
28	New polymeric/inorganic hybrid sorbents based on red mud and nanosized magnetite for large scale applications in As(V) removal. Chemical Engineering Journal, 2017, 311, 117-125.	6.6	32
29	Aluminium removal from wastewater by refused beach cast seaweed. Equilibrium and dynamic studies. Journal of Hazardous Materials, 2010, 178, 861-866.	6.5	31
30	Reduction of Cr (VI) levels in solution using bracken fern biomass: Batch and column studies. Chemical Engineering Journal, 2010, 165, 517-523.	6.6	30
31	Interaction of mercury with chitin: A physicochemical study of metal binding by a natural biopolymer. Reactive and Functional Polymers, 2008, 68, 1609-1618.	2.0	29
32	Effect of ionic strength on the formal potential of the glass electrode in various saline media. Talanta, 1998, 46, 1469-1477.	2.9	28
33	Cr(VI) removal from synthetic and real wastewaters: The use of the invasive biomass Sargassum muticum in batch and column experiments. Journal of Industrial and Engineering Chemistry, 2012, 18, 1370-1376.	2.9	24
34	Mercury removal: a physicochemical study of metal interaction with natural materials. Journal of Chemical Technology and Biotechnology, 2009, 84, 1688-1696.	1.6	22
35	Surface modifications of Sargassum muticum algal biomass for mercury removal: A physicochemical study in batch and continuous flow conditions. Chemical Engineering Journal, 2013, 229, 378-387.	6.6	21
36	Protonation constants of .alpha.-alanine, .gamma.-aminobutyric acid, and .epsilon.-aminocaproic acid. Journal of Chemical & Engineering Data, 1993, 38, 531-533.	1.0	19

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37	Surface charge and permeable gel descriptions of the ionic strength influence on proton binding to seaweed biomass. Chemical Speciation and Bioavailability, 2004, 16, 61-69.	2.0	18
38	Full description of copper uptake by algal biomass combining an equilibrium NICA model with a kinetic intraparticle diffusion driving force approach. Bioresource Technology, 2011, 102, 2990-2997.	4.8	18
39	The protonation constant of triethanolamine in KBr and KNO3 solutions at 25ï¿½C. Journal of Solution Chemistry, 1992, 21, 1185-1193.	0.6	17
40	Electroreduction of Dioctadecylviologen in a Self-Assembled Phospholipid Monolayer on Mercury and Its Role as an Electron Mediator. Journal of Physical Chemistry B, 1997, 101, 2815-2823.	1.2	16
41	Effect of Ionic Strength on the Electrochemical Behavior of Glutathione on a Phospholipid Self-Assembled Monolayer on Mercury. Langmuir, 2000, 16, 5148-5153.	1.6	16
42	Synthesis of magnetic green nanoparticle â€" Molecular imprinted polymers with emerging contaminants templates. Journal of Environmental Chemical Engineering, 2020, 8, 103889.	3.3	16
43	Pitzer and Thermodynamic Parameters of Triethanolamine and Glycine in Aqueous Saline Solutions. Collection of Czechoslovak Chemical Communications, 1993, 58, 1269-1278.	1.0	15
44	Electron and proton transferring properties of vitamin K1 across a self-assembled phospholipid monolayer. Journal of Electroanalytical Chemistry, 1998, 445, 71-80.	1.9	15
45	Physicochemical characterisation of the ubiquitous bracken fern as useful biomaterial for preconcentration of heavy metals. Bioresource Technology, 2009, 100, 1561-1567.	4.8	15
46	Achieving sub-10 ppb arsenic levels with iron based biomass-silica gel composites. Chemical Engineering Journal, 2015, 279, 1-8.	6.6	15
47	Acidâ€"base equilibria of phthalic acid in saline media: ion association from Pitzer equations. Talanta, 2003, 60, 93-101.	2.9	14
48	Hybrid polar compounds produce a positive shift in the surface dipole potential of self-assembled phospholipid monolayers. Biochimica Et Biophysica Acta - Biomembranes, 2000, 1466, 278-288.	1.4	13
49	Protonation Constants of Amino Acids in Artificial Seawater at 25.degree.C. Journal of Chemical & Engineering Data, 1995, 40, 117-119.	1.0	12
50	Adsorption and reduction kinetics of safranine T in self-assembled phospholipid monolayers deposited on mercury. Journal of Electroanalytical Chemistry, 1997, 425, 87-95.	1.9	12
51	Protonation Constants of Valine, Serine, and Î²-Alanine in Artificial Seawater at 25 Â°C. Journal of Chemical & Engineering Data, 1998, 43, 393-395.	1.0	10
52	A Physicochemical Study of Al(+3) Interactions with Edible Seaweed Biomass in Acidic Waters. Journal of Food Science, 2012, 77, C987-93.	1.5	7
53	The proton binding properties of biosorbents. Environmental Chemistry Letters, 2019, 17, 1281-1298.	8.3	6
54	Design, synthesis and HR â€" MAS NMR characterization of molecular imprinted polymers with emerging contaminants templates. Separation and Purification Technology, 2021, 257, 117860.	3.9	6

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55	Electroreduction of Diheptylviologen in a Selfâ€Assembled Phospholipid Monolayer on Mercury and its Role as an Electron Transfer Mediator. Israel Journal of Chemistry, 1997, 37, 247-257.	1.0	4
56	Trend and energetics of pK* s. ionic strength for o-chlorobenzoic, m-nitrobenzoic and benzoic acids in aqueous KNO3 solutions at 298 K. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 3093-3096.	1.7	4
57	A Systematic Analysis and Review of the Fundamental Acid-Base Properties of Biosorbents. Environmental Chemistry for A Sustainable World, 2018, , 73-133.	0.3	4
58	Biosorption of chemical species by Sargassum algal biomass: Equilibrium data, part I. , 2020, , 675-696.		3
59	Green development of iron doped silica gel materials for chromium decontamination. Journal of Environmental Chemical Engineering, 2022, 10, 108258.	3.3	3
60	Acidâ€“Base Equilibria of Cysteine in Artificial Sea Water: Effect of Ionic Strength on the Basis of Specific Interaction Theoryâ€. Journal of Chemical Research Synopses, 1997, , 222-223.	0.3	1
61	Electroreduction of Diphenyl Disulfide on a Self-Assembled Lipid Monolayer on Mercury. Langmuir, 2002, 18, 9377-9382.	1.6	1
62	Utilization of seaweed waste: Biosorption of toxic compounds onto invasive seaweed and seaweed wastes. , 2020, , 613-639.		1
63	Nonâ€Metabolic Uptake of Al³⁺ by Dead Leaves of <i>Rubus ulmifolius</i>: Comparison With Metabolic Bioaccumulation Data. Clean - Soil, Air, Water, 2016, 44, 154-161.	0.7	0