# Francesca Pagnanelli

# List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

121<br/>papers3,950<br/>citations36<br/>h-index60<br/>g-index129<br/>ext. papers4,429<br/>ext. citations7<br/>avg, IF5.64<br/>L-index

#	Paper	IF	Citations
121	Two-phase synthesis of Fe-loaded hydrochar for As removal: The distinct effects of initial pH, reaction time and Fe/hydrochar ratio. <i>Journal of Environmental Management</i> , <b>2022</b> , 302, 114058	7.9	1
120	Recycling of solar photovoltaic panels: Techno-economic assessment in waste management perspective. <i>Journal of Cleaner Production</i> , <b>2022</b> , 132384	10.3	3
119	Two-Dimensional Restructuring of CuO Can Improve the Performance of Nanosized n-TiO/p-CuO Photoelectrodes under UV-Visible Light. <i>ACS Applied Materials &amp; District Action Section</i> , 13, 47932-47944	9.5	3
118	Nanostructured TiO2 -Based Hydrogen Evolution Reaction (HER) Electrocatalysts: A Preliminary Feasibility Study in Electrodialytic Remediation with Hydrogen Recovery <b>2021</b> , 227-249		
117	Microalgae cultivation by uncoupled nutrient supply in sequencing batch reactor (SBR) integrated with olive mill wastewater treatment. <i>Chemical Engineering Journal</i> , <b>2021</b> , 410, 128417	14.7	7
116	Full recycling of spent lithium ion batteries with production of core-shell nanowires//exfoliated graphite asymmetric supercapacitor. <i>Journal of Energy Chemistry</i> , <b>2021</b> , 58, 336-344	12	20
115	Extracellular and intracellular phenol production by microalgae during photoautotrophic batch cultivation. <i>New Biotechnology</i> , <b>2021</b> , 62, 1-9	6.4	2
114	Optimizing the structure of NiNi(OH)2/NiO core-shell nanowire electrodes for application in pseudocapacitors: The influence of metallic core, Ni(OH)2/NiO ratio and nanowire length. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 856, 157718	5.7	6
113	Valorization of polymeric fractions and metals from end of life photovoltaic panels. <i>Waste Management</i> , <b>2021</b> , 122, 89-99	8.6	4
112	Selective recovery of cobalt from mixed lithium ion battery wastes using deep eutectic solvent. <i>Chemical Engineering Journal</i> , <b>2021</b> , 417, 129249	14.7	31
111	Electrodeposited Copper Nanocatalysts for CO2 Electroreduction: Effect of Electrodeposition Conditions on Catalysts Morphology and Selectivity. <i>Energies</i> , <b>2021</b> , 14, 5012	3.1	1
110	Material Flux through an Innovative Recycling Process Treating Different Types of End-of-Life Photovoltaic Panels: Demonstration at Pilot Scale. <i>Energies</i> , <b>2021</b> , 14, 5534	3.1	2
109	Upcycling Real Waste Mixed Lithium-Ion Batteries by Simultaneous Production of rGO and Lithium-Manganese-Rich Cathode Material. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2021</b> , 9, 13303-1	133 <sup>3</sup> 11	4
108	Single Cell Analysis of Microalgae and Associated Bacteria Flora by Using Flow Cytometry. Biotechnology and Bioprocess Engineering, <b>2021</b> , 26, 898-909	3.1	O
107	Sequential extraction of lutein and Etarotene from wet microalgal biomass. <i>Journal of Chemical Technology and Biotechnology</i> , <b>2020</b> , 95, 3024-3033	3.5	9
106	New strategies enhancing feasibility of microalgal cultivations. <i>Studies in Surface Science and Catalysis</i> , <b>2020</b> , 179, 287-316	1.8	4
105	Multivariate modeling for microalgae growth in outdoor photobioreactors. <i>Algal Research</i> , <b>2020</b> , 45, 101663	5	10

## (2019-2020)

104	Recovery and application of magnetic nanosized sorbents from waste lithium-ion batteries. <i>Ceramics International</i> , <b>2020</b> , 46, 7559-7567	5.1	3
103	Recovery of nanoferrites from metal bearing wastes: Synthesis, characterization and adsorption study. <i>Journal of Molecular Liquids</i> , <b>2020</b> , 318, 114047	6	1
102	Process Simulation for Li-MnO2 Primary Battery Recycling: Cryo-Mechanical and Hydrometallurgical Treatments at Pilot Scale. <i>Energies</i> , <b>2020</b> , 13, 4546	3.1	1
101	Production of an iron-coated adsorbent for arsenic removal by hydrothermal carbonization of olive pomace: Effect of the feedwater pH. <i>Journal of Environmental Management</i> , <b>2020</b> , 273, 111164	7.9	14
100	Magnetic force microscopy characterization of coreBhell cobalt-oxide/hydroxide nanoparticles. Journal of Magnetism and Magnetic Materials, <b>2020</b> , 516, 167299	2.8	О
99	Cryo-Mechanical Treatment and Hydrometallurgical Process for Recycling Li-MnO2 Primary Batteries with the Direct Production of LiMnPO4 Nanoparticles. <i>Energies</i> , <b>2020</b> , 13, 4004	3.1	2
98	Development and Techno-Economic Analysis of an Advanced Recycling Process for Photovoltaic Panels Enabling Polymer Separation and Recovery of Ag and Si. <i>Energies</i> , <b>2020</b> , 13, 6690	3.1	5
97	Manganese ferrite nanoparticle production from industrial wastes as sorbent material for arsenic removal from aqueous solutions. <i>Particulate Science and Technology</i> , <b>2020</b> , 38, 433-442	2	5
96	Ti/TiO2/Cu2O electrodes for photocatalytic applications: Synthesis and characterization 2019,		3
95	Electrochemical synthesis of nanowires electrodes and their application in energy storage devices <b>2019</b> ,		1
94	Closed-loop hydrometallurgical treatment of end-of-life lithium ion batteries: Towards zero-waste process and metal recycling in advanced batteries. <i>Journal of Energy Chemistry</i> , <b>2019</b> , 35, 220-227	12	44
93	Heterotrophic cultivation of T. obliquus under non-axenic conditions by uncoupled supply of nitrogen and glucose. <i>Biochemical Engineering Journal</i> , <b>2019</b> , 145, 127-136	4.2	18
92	Shape evolution and effect of organic additives in the electrosynthesis of Cu nanostructures. Journal of Solid State Electrochemistry, <b>2019</b> , 23, 2723-2735	2.6	3
91	Solvent versus thermal treatment for glass recovery from end of life photovoltaic panels: Environmental and economic assessment. <i>Journal of Environmental Management</i> , <b>2019</b> , 248, 109313	7.9	6
90	Electrochemical synthesis of nanowire anodes from spent lithium ion batteries. <i>Electrochimica Acta</i> , <b>2019</b> , 319, 481-489	6.7	20
89	Extraction of Carotenoids and Fat-Soluble Vitamins from Microalgae: An Optimized Approach by Using Supercritical CO. <i>Molecules</i> , <b>2019</b> , 24,	4.8	18
88	Electrodeposition of cobalt nanoparticles: An analysis of the mechanisms behind the deviation from three-dimensional diffusion-control. <i>Journal of Electroanalytical Chemistry</i> , <b>2019</b> , 851, 113413	4.1	13
87	Nucleation and growth of metal nanoparticles on a planar electrode: A new model based on iso-nucleation-time classes of particles. <i>Electrochimica Acta</i> , <b>2019</b> , 296, 82-93	6.7	7

86	Recycling of end of life photovoltaic panels: A chemical prospective on process development. <i>Solar Energy</i> , <b>2019</b> , 177, 746-761	6.8	60
85	Effect of Ca concentration on Scenedesmus sp. growth in heterotrophic and photoautotrophic cultivation. <i>New Biotechnology</i> , <b>2018</b> , 40, 228-235	6.4	14
84	The influence of phenols extracted from olive mill wastewater on the heterotrophic and mixotrophic growth of Scenedesmus sp <i>Journal of Chemical Technology and Biotechnology</i> , <b>2018</b> , 93, 3619-3626	3.5	21
83	Quantification of Tetradesmus obliquus (Chlorophyceae) cell size and lipid content heterogeneity at single-cell level. <i>Journal of Phycology</i> , <b>2018</b> , 54, 187-197	3	14
82	Electrodeposition of cobalt nanowires into alumina templates generated by one-step anodization. <i>Electrochimica Acta</i> , <b>2018</b> , 259, 711-722	6.7	26
81	Two electrodeposition strategies for the morphology-controlled synthesis of cobalt nanostructures <b>2018</b> ,		7
8o	A versatile electrochemical method to synthesize Co-CoO core-shell nanowires anodes for lithium ion batteries with superior stability and rate capability. <i>Electrochimica Acta</i> , <b>2018</b> , 290, 347-355	6.7	17
79	Integrated microalgae biomass production and olive mill wastewater biodegradation: Optimization of the wastewater supply strategy. <i>Chemical Engineering Journal</i> , <b>2018</b> , 349, 539-546	14.7	28
78	Leaching of electrodic powders from lithium ion batteries: Optimization of operating conditions and effect of physical pretreatment for waste fraction retrieval. <i>Waste Management</i> , <b>2017</b> , 60, 706-715	8.6	50
77	Biosorption of Copper by Saccharomyces cerevisiae: From Biomass Characterization to Process Development <b>2017</b> , 205-224		O
76	Physical and chemical treatment of end of life panels: An integrated automatic approach viable for different photovoltaic technologies. <i>Waste Management</i> , <b>2017</b> , 59, 422-431	8.6	51
75	Morphology-controlled synthesis of cobalt nanostructures by facile electrodeposition: transition from hexagonal nanoplatelets to nanoflakes. <i>Electrochimica Acta</i> , <b>2016</b> , 220, 405-416	6.7	33
74	Cobalt products from real waste fractions of end of life lithium ion batteries. <i>Waste Management</i> , <b>2016</b> , 51, 214-221	8.6	96
73	Recovery of critical metals from LCDs and Li-ion batteries <b>2016</b> ,		2
72	Electrochemical nucleation and three-dimensional growth of metal nanoparticles under mixed kinetic-diffusion control: model development and validation. <i>Electrochimica Acta</i> , <b>2016</b> , 206, 116-126	6.7	40
71	Electrochemical nucleation and three-dimensional growth under mixed kinetic-diffusion control: analytical approximation of the current transient. <i>Electrochimica Acta</i> , <b>2016</b> , 205, 113-117	6.7	16
70	Study of the synthesis of copper nanoparticles: the role of capping and kinetic towards control of particle size and stability. <i>Journal of Nanoparticle Research</i> , <b>2016</b> , 18, 1	2.3	36
69	Photovoltaic panel recycling: from type-selective processes to flexible apparatus for simultaneous treatment of different types. <i>Institutions of Mining and Metallurgy Transactions Section C: Mineral Processing and Extractive Metallurgy</i> , <b>2016</b> , 125, 221-227		5

### (2011-2015)

68	Integrated biomass production and biodegradation of olive mill wastewater by cultivation of Scenedesmus sp <i>Algal Research</i> , <b>2015</b> , 9, 306-311	5	40
67	Metal recovery from end-of-life hydrotreating catalysts by selective precipitation: Laboratory tests and preliminary process analysis. <i>Environmental Progress and Sustainable Energy</i> , <b>2015</b> , 34, 703-712	2.5	6
66	Pulsed electrodeposition of cobalt nanoparticles on copper: influence of the operating parameters on size distribution and morphology. <i>Electrochimica Acta</i> , <b>2015</b> , 155, 228-235	6.7	36
65	Effect of surfactant/water ratio and reagentsltoncentration on size distribution of manganese carbonate nanoparticles synthesized by microemulsion mediated route. <i>Applied Surface Science</i> , <b>2015</b> , 331, 463-471	6.7	15
64	Mechanistic modelling of copper biosorption by wild type and engineered Saccharomyces cerevisiae biomasses. <i>Chemical Engineering Journal</i> , <b>2014</b> , 244, 561-568	14.7	13
63	Mixotrophic growth of Chlorella vulgaris and Nannochloropsis oculata: interaction between glucose and nitrate. <i>Journal of Chemical Technology and Biotechnology</i> , <b>2014</b> , 89, 652-661	3.5	44
62	Acid reducing leaching of cathodic powder from spent lithium ion batteries: Glucose oxidative pathways and particle area evolution. <i>Journal of Industrial and Engineering Chemistry</i> , <b>2014</b> , 20, 3201-32	2073	80
61	Bioactive and passive mechanisms of pollutant removal in bioreduction processes in fixed bed columns: Numerical simulations. <i>Environmental Progress and Sustainable Energy</i> , <b>2014</b> , 33, 70-80	2.5	1
60	Biosorption-mediated reduction of Cr(VI) using heterotrophically-grown Chlorella vulgaris: Active sites and ionic strength effect. <i>Chemical Engineering Journal</i> , <b>2013</b> , 231, 94-102	14.7	25
59	Selective precipitation of metals from synthetic spent refinery catalyst leach liquor with biogenic H2S produced in a lactate-fed anaerobic baffled reactor. <i>Hydrometallurgy</i> , <b>2013</b> , 139, 154-161	4	20
58	Synthesis of MnCO3 nanoparticles by microemulsions: statistical evaluation of the effects of operating conditions on particle size distribution. <i>Journal of Nanoparticle Research</i> , <b>2013</b> , 15, 1	2.3	10
57	Product recovery from Li-ion battery wastes coming from an industrial pre-treatment plant: Lab scale tests and process simulations. <i>Journal of Power Sources</i> , <b>2012</b> , 206, 393-401	8.9	114
56	Simultaneous recycling of nickel metal hydride, lithium ion and primary lithium batteries: Accomplishment of European Guidelines by optimizing mechanical pre-treatment and solvent extraction operations. <i>Journal of Power Sources</i> , <b>2012</b> , 212, 205-211	8.9	90
55	Biotreatment of Cr(VI) contaminated waters by sulphate reducing bacteria fed with ethanol. <i>Journal of Hazardous Materials</i> , <b>2012</b> , 199-200, 186-92	12.8	46
54	Acid mine drainage attenuation by inhibition of pyrite bioleaching using limestone and olive pomace. <i>Chemistry and Ecology</i> , <b>2012</b> , 28, 293-303	2.3	1
53	Equilibrium, Kinetic and Dynamic Modelling of Biosorption Processes <b>2011</b> , 59-120		7
52	Adsorption onto activated carbon for molybdenum recovery from leach liquors of exhausted hydrotreating catalysts. <i>Hydrometallurgy</i> , <b>2011</b> , 110, 67-72	4	32
51	Automobile shredded residue valorisation by hydrometallurgical metal recovery. <i>Journal of Hazardous Materials</i> , <b>2011</b> , 185, 44-8	12.8	30

50	Biotreatment and bioassessment of heavy metal removal by sulphate reducing bacteria in fixed bed reactors. <i>Water Research</i> , <b>2010</b> , 44, 151-8	12.5	63
49	Development of new composite biosorbents from olive pomace wastes. <i>Applied Surface Science</i> , <b>2010</b> , 256, 5492-5497	6.7	26
48	Isolation and quantification of cadmium removal mechanisms in batch reactors inoculated by sulphate reducing bacteria: biosorption versus bioprecipitation. <i>Bioresource Technology</i> , <b>2010</b> , 101, 298	31 <del>-7</del>	51
47	Sulphate Reducing Bacteria for the Treatment of Heavy Metals Contaminated Waters in Permeable Reactive Barriers. <i>Advanced Materials Research</i> , <b>2009</b> , 71-73, 565-568	0.5	1
46	Inhibition of Iron Oxidizing Bacteria Involved in the Generation of Acid Mine Drainage. <i>Advanced Materials Research</i> , <b>2009</b> , 71-73, 681-684	0.5	1
45	Sulphate bioreduction for the treatment of polluted waters: solid versus liquid organic substrates. Journal of Chemical Technology and Biotechnology, 2009, 84, 859-863	3.5	2
44	Recovery of manganese from zinc alkaline batteries by reductive acid leaching using carbohydrates as reductant. <i>Hydrometallurgy</i> , <b>2009</b> , 99, 115-118	4	36
43	Assessment of solid reactive mixtures for the development of biological permeable reactive barriers. <i>Journal of Hazardous Materials</i> , <b>2009</b> , 170, 998-1005	12.8	35
42	Mechanisms of heavy-metal removal by activated sludge. <i>Chemosphere</i> , <b>2009</b> , 75, 1028-34	8.4	70
41	New biosorbent materials for heavy metal removal: product development guided by active site characterization. <i>Water Research</i> , <b>2008</b> , 42, 2953-62	12.5	60
40	Theoretical and Experimental Analysis of the Role of Sludge Age on the Removal of Adsorbed Micropollutants in Activated Sludge Processes. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2008</b> , 47, 6775-6782	3.9	9
39	Chemical treatment of olive pomace: effect on acid-basic properties and metal biosorption capacity. <i>Journal of Hazardous Materials</i> , <b>2008</b> , 156, 448-57	12.8	64
38	Bioassessment of a combined chemical-biological treatment for synthetic acid mine drainage. Journal of Hazardous Materials, <b>2008</b> , 159, 567-73	12.8	10
37	Influence of surface heterogeneity in electroosmotic flows Implications in chromatography, fluid mixing, and chemical reactions in microdevices. <i>Applied Surface Science</i> , <b>2007</b> , 253, 5785-5790	6.7	2
36	Use of natural materials for the inhibition of iron oxidizing bacteria involved in the generation of acid mine drainage. <i>Hydrometallurgy</i> , <b>2007</b> , 87, 27-35	4	17
35	Treatment of concentrated arsenic(V) solutions by micellar enhanced ultrafiltration with high molecular weight cut-off membrane. <i>Journal of Hazardous Materials</i> , <b>2007</b> , 148, 116-21	12.8	38
34	Toxic elements at a disused mine district: Particle size distribution and total concentration in stream sediments and mine tailings. <i>Journal of Hazardous Materials</i> , <b>2007</b> , 148, 409-18	12.8	27
33	Preparation and characterisation of chemical manganese dioxide: Effect of the operating conditions. <i>Journal of Power Sources</i> , <b>2007</b> , 166, 567-577	8.9	45

### (2003-2006)

32	Micellar enhanced ultrafiltration for arsenic(V) removal: effect of main operating conditions and dynamic modelling. <i>Environmental Science &amp; Environmental Science &amp; Environm</i>	10.3	37
31	Non-electrostatic surface complexation models for protons and lead(II) sorption onto single minerals and their mixture. <i>Chemosphere</i> , <b>2006</b> , 63, 1063-73	8.4	21
30	Ionic strength effect on copper biosorption by Sphaerotilus natans: equilibrium study and dynamic modelling in membrane reactor. <i>Water Research</i> , <b>2006</b> , 40, 144-52	12.5	67
29	Reductive acid leaching of manganese dioxide with glucose: Identification of oxidation derivatives of glucose. <i>Hydrometallurgy</i> , <b>2006</b> , 81, 234-240	4	59
28	Biosorption of protons and heavy metals onto olive pomace: modelling of competition effects. <i>Water Research</i> , <b>2005</b> , 39, 1639-51	12.5	54
27	Continuous biosorption of copper and lead in single and binary systems using Sphaerotilus natans cells confined by a membrane: experimental validation of dynamic models. <i>Hydrometallurgy</i> , <b>2005</b> , 76, 73-85	4	16
26	Optimisation and validation of mechanistic models for heavy metal bio-sorption onto a natural biomass. <i>Hydrometallurgy</i> , <b>2005</b> , 80, 107-125	4	17
25	Copper biosorption by Sphaerotilus natans confined in UF membrane module: experimental study and kinetic modeling. <i>Hydrometallurgy</i> , <b>2004</b> , 72, 21-30	4	7
24	Structural modelling for the dissolution of non-porous ores: dissolution with sporulation. <i>Chemical Engineering Journal</i> , <b>2004</b> , 99, 89-104	14.7	10
23	The sporulation model for manganiferous ore dissolution. Chemical Engineering Science, 2004, 59, 5107	-541412	2
22	Preliminary screening of purification processes of liquor leach solutions obtained from reductive leaching of low-grade manganese ores. <i>Hydrometallurgy</i> , <b>2004</b> , 71, 319-327	4	41
21	Leaching of low-grade manganese ores by using nitric acid and glucose: optimization of the operating conditions. <i>Hydrometallurgy</i> , <b>2004</b> , 75, 157-167	4	43
20	Proton binding onto soil by nonelectrostatic models: isolation and identification of mineral contributions. <i>Environmental Science &amp; Environmental Sci</i>	10.3	4
19	Modelling of the acid-base properties of natural and synthetic adsorbent materials used for heavy metal removal from aqueous solutions. <i>Chemosphere</i> , <b>2004</b> , 54, 905-15	8.4	43
18	Biosorption of binary heavy metal systems onto Sphaerotilus natans cells confined in an UF/MF membrane reactor: dynamic simulations by different Langmuir-type competitive models. <i>Water Research</i> , <b>2004</b> , 38, 1055-61	12.5	18
17	Heavy metal removal by olive pomace: biosorbent characterisation and equilibrium modelling. <i>Chemical Engineering Science</i> , <b>2003</b> , 58, 4709-4717	4.4	236
16	Biosorption of copper by Sphaerotilus natans immobilised in polysulfone matrix: equilibrium and kinetic analysis. <i>Hydrometallurgy</i> , <b>2003</b> , 70, 101-112	4	65
15	Mechanistic modeling of heavy metal biosorption in batch and membrane reactor systems.  Hydrometallurgy, 2003, 71, 201-208	4	10

14	Effect of equilibrium models in the simulation of heavy metal biosorption in single and two-stage UF/MF membrane reactor systems. <i>Biochemical Engineering Journal</i> , <b>2003</b> , 15, 27-35	4.2	14
13	Metal speciation and pH effect on Pb, Cu, Zn and Cd biosorption onto Sphaerotilus natans: Langmuir-type empirical model. <i>Water Research</i> , <b>2003</b> , 37, 627-33	12.5	177
12	Olive mill solid residues as heavy metal sorbent material: a preliminary study. <i>Waste Management</i> , <b>2002</b> , 22, 901-7	8.6	75
11	A closed-form solution of population-balance models for the dissolution of polydisperse mixtures. <i>Chemical Engineering Journal</i> , <b>2002</b> , 87, 275-284	14.7	10
10	Two-layer shrinking-core model: parameter estimation for the reaction order in leaching processes. <i>Chemical Engineering Journal</i> , <b>2002</b> , 90, 231-240	14.7	28
9	pH-related equilibria models for biosorption in single metal systems. <i>Chemical Engineering Science</i> , <b>2002</b> , 57, 307-313	4.4	175
8	Heavy metal biosorption in binary systems: simulation in single- and two-stage UF/MF membrane reactors. <i>Hydrometallurgy</i> , <b>2002</b> , 66, 107-115	4	10
7	Copper and cadmium biosorption onto Sphaerotilus natans: application and discrimination of commonly used adsorption models. <i>Separation Science and Technology</i> , <b>2002</b> , 37, 677-699	2.5	8
6	Multi-metallic modelling for biosorption of binary systems. Water Research, 2002, 36, 4095-105	12.5	80
5	Biosorption of heavy metals by Sphaerotilus natans: an equilibrium study at different pH and biomass concentrations. <i>Hydrometallurgy</i> , <b>2001</b> , 60, 129-141	4	228
4	Shrinking core model with variable activation energy: a kinetic model of manganiferous ore leaching with sulphuric acid and lactose. <i>Hydrometallurgy</i> , <b>2001</b> , 60, 167-179	4	68
3	Equilibrium biosorption studies in single and multi-metal systems. <i>Process Biochemistry</i> , <b>2001</b> , 37, 115-1	<b>24</b> 8	83
2	Modeling of copper biosorption by Arthrobacter sp. in a UF/MF membrane reactor. <i>Environmental Science &amp; Environmental Science</i>	10.3	23
1	Biosorption of Metal Ions onArthrobacter sp.: Biomass Characterization and Biosorption Modeling. <i>Environmental Science &amp; Discorption Modeling</i> . 2000, 34, 2773-2778	10.3	266