

Luigi Toro

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64
papers

2,575
citations

30
h-index

50
g-index

65
ext. papers

2,767
ext. citations

6.8
avg, IF

4.75
L-index

| # | Paper | IF | Citations |
|----|---|------|-----------|
| 64 | Biosorption of Metal Ions on Arthrobacter sp.: Biomass Characterization and Biosorption Modeling. <i>Environmental Science & Technology</i> , 2000 , 34, 2773-2778 | 10.3 | 266 |
| 63 | Heavy metal removal by olive pomace: biosorbent characterisation and equilibrium modelling. <i>Chemical Engineering Science</i> , 2003 , 58, 4709-4717 | 4.4 | 236 |
| 62 | Metal speciation and pH effect on Pb, Cu, Zn and Cd biosorption onto <i>Sphaerotilus natans</i> : Langmuir-type empirical model. <i>Water Research</i> , 2003 , 37, 627-33 | 12.5 | 177 |
| 61 | 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> , 2012 , 206, 393-401 | 8.9 | 114 |
| 60 | Cobalt products from real waste fractions of end of life lithium ion batteries. <i>Waste Management</i> , 2016 , 51, 214-221 | 8.6 | 96 |
| 59 | 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> , 2012 , 212, 205-211 | 8.9 | 90 |
| 58 | 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> , 2014 , 20, 3201-3207 ⁶³ | 6.3 | 80 |
| 57 | Olive mill solid residues as heavy metal sorbent material: a preliminary study. <i>Waste Management</i> , 2002 , 22, 901-7 | 8.6 | 75 |
| 56 | Shrinking core model with variable activation energy: a kinetic model of manganiferous ore leaching with sulphuric acid and lactose. <i>Hydrometallurgy</i> , 2001 , 60, 167-179 | 4 | 68 |
| 55 | Ionic strength effect on copper biosorption by <i>Sphaerotilus natans</i> : equilibrium study and dynamic modelling in membrane reactor. <i>Water Research</i> , 2006 , 40, 144-52 | 12.5 | 67 |
| 54 | Biosorption of copper by <i>Sphaerotilus natans</i> immobilised in polysulfone matrix: equilibrium and kinetic analysis. <i>Hydrometallurgy</i> , 2003 , 70, 101-112 | 4 | 65 |
| 53 | Chemical treatment of olive pomace: effect on acid-basic properties and metal biosorption capacity. <i>Journal of Hazardous Materials</i> , 2008 , 156, 448-57 | 12.8 | 64 |
| 52 | Biotreatment and bioassessment of heavy metal removal by sulphate reducing bacteria in fixed bed reactors. <i>Water Research</i> , 2010 , 44, 151-8 | 12.5 | 63 |
| 51 | Reductive acid leaching of manganese dioxide with glucose: Identification of oxidation derivatives of glucose. <i>Hydrometallurgy</i> , 2006 , 81, 234-240 | 4 | 59 |
| 50 | Biosorption of protons and heavy metals onto olive pomace: modelling of competition effects. <i>Water Research</i> , 2005 , 39, 1639-51 | 12.5 | 54 |
| 49 | Reductive leaching of manganiferous ores by glucose and H ₂ SO ₄ : effect of alcohols. <i>Hydrometallurgy</i> , 2001 , 59, 1-14 | 4 | 52 |
| 48 | Physical and chemical treatment of end of life panels: An integrated automatic approach viable for different photovoltaic technologies. <i>Waste Management</i> , 2017 , 59, 422-431 | 8.6 | 51 |

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|----|---|------|----|
| 47 | Isolation and quantification of cadmium removal mechanisms in batch reactors inoculated by sulphate reducing bacteria: biosorption versus bioprecipitation. <i>Bioresource Technology</i> , 2010 , 101, 2981-7 | 11 | 51 |
| 46 | 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> , 2017 , 60, 706-715 | 8.6 | 50 |
| 45 | Acid leaching process by using glucose as reducing agent: A comparison among the efficiency of different kinds of manganiferous ores. <i>Minerals Engineering</i> , 2000 , 13, 217-221 | 4.9 | 50 |
| 44 | Preparation and characterisation of chemical manganese dioxide: Effect of the operating conditions. <i>Journal of Power Sources</i> , 2007 , 166, 567-577 | 8.9 | 45 |
| 43 | Mixotrophic growth of Chlorella vulgaris and Nannochloropsis oculata: interaction between glucose and nitrate. <i>Journal of Chemical Technology and Biotechnology</i> , 2014 , 89, 652-661 | 3.5 | 44 |
| 42 | Leaching of low-grade manganese ores by using nitric acid and glucose: optimization of the operating conditions. <i>Hydrometallurgy</i> , 2004 , 75, 157-167 | 4 | 43 |
| 41 | Modelling of the acid-base properties of natural and synthetic adsorbent materials used for heavy metal removal from aqueous solutions. <i>Chemosphere</i> , 2004 , 54, 905-15 | 8.4 | 43 |
| 40 | Preliminary screening of purification processes of liquor leach solutions obtained from reductive leaching of low-grade manganese ores. <i>Hydrometallurgy</i> , 2004 , 71, 319-327 | 4 | 41 |
| 39 | Acid leaching of manganiferous ores by sucrose: Kinetic modelling and related statistical analysis. <i>Minerals Engineering</i> , 2001 , 14, 175-184 | 4.9 | 37 |
| 38 | Pulsed electrodeposition of cobalt nanoparticles on copper: influence of the operating parameters on size distribution and morphology. <i>Electrochimica Acta</i> , 2015 , 155, 228-235 | 6.7 | 36 |
| 37 | Recovery of manganese from zinc alkaline batteries by reductive acid leaching using carbohydrates as reductant. <i>Hydrometallurgy</i> , 2009 , 99, 115-118 | 4 | 36 |
| 36 | Assessment of solid reactive mixtures for the development of biological permeable reactive barriers. <i>Journal of Hazardous Materials</i> , 2009 , 170, 998-1005 | 12.8 | 35 |
| 35 | Automobile shredded residue valorisation by hydrometallurgical metal recovery. <i>Journal of Hazardous Materials</i> , 2011 , 185, 44-8 | 12.8 | 30 |
| 34 | Two-layer shrinking-core model: parameter estimation for the reaction order in leaching processes. <i>Chemical Engineering Journal</i> , 2002 , 90, 231-240 | 14.7 | 28 |
| 33 | 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> , 2007 , 148, 409-18 | 12.8 | 27 |
| 32 | Development of new composite biosorbents from olive pomace wastes. <i>Applied Surface Science</i> , 2010 , 256, 5492-5497 | 6.7 | 26 |
| 31 | Biosorption-mediated reduction of Cr(VI) using heterotrophically-grown Chlorella vulgaris: Active sites and ionic strength effect. <i>Chemical Engineering Journal</i> , 2013 , 231, 94-102 | 14.7 | 25 |
| 30 | Bioleaching of a pyrrhotite ore by a sulfooxidans strain: kinetic analysis. <i>Chemical Engineering Science</i> , 2000 , 55, 783-795 | 4.4 | 24 |

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|----|---|------|----|
| 29 | Gold recovery from a refractory pyrrhotite ore by biooxidation. <i>International Journal of Mineral Processing</i> , 2000 , 60, 247-262 | | 22 |
| 28 | Non-electrostatic surface complexation models for protons and lead(II) sorption onto single minerals and their mixture. <i>Chemosphere</i> , 2006 , 63, 1063-73 | 8.4 | 21 |
| 27 | Column leaching of a manganese dioxide ore: a study by using fractional factorial design. <i>Hydrometallurgy</i> , 2001 , 59, 31-44 | 4 | 19 |
| 26 | Heterotrophic cultivation of <i>T. obliquus</i> under non-axenic conditions by uncoupled supply of nitrogen and glucose. <i>Biochemical Engineering Journal</i> , 2019 , 145, 127-136 | 4.2 | 18 |
| 25 | Use of natural materials for the inhibition of iron oxidizing bacteria involved in the generation of acid mine drainage. <i>Hydrometallurgy</i> , 2007 , 87, 27-35 | 4 | 17 |
| 24 | Optimisation and validation of mechanistic models for heavy metal bio-sorption onto a natural biomass. <i>Hydrometallurgy</i> , 2005 , 80, 107-125 | 4 | 17 |
| 23 | Continuous biosorption of copper and lead in single and binary systems using <i>Sphaerotilus natans</i> cells confined by a membrane: experimental validation of dynamic models. <i>Hydrometallurgy</i> , 2005 , 76, 73-85 | 4 | 16 |
| 22 | Combined bio-hydrometallurgical process for gold recovery from refractory stibnite. <i>Minerals Engineering</i> , 2000 , 13, 1641-1646 | 4.9 | 14 |
| 21 | Synthesis of MnCO ₃ nanoparticles by microemulsions: statistical evaluation of the effects of operating conditions on particle size distribution. <i>Journal of Nanoparticle Research</i> , 2013 , 15, 1 | 2.3 | 10 |
| 20 | Structural modelling for the dissolution of non-porous ores: dissolution with sporulation. <i>Chemical Engineering Journal</i> , 2004 , 99, 89-104 | 14.7 | 10 |
| 19 | A closed-form solution of population-balance models for the dissolution of polydisperse mixtures. <i>Chemical Engineering Journal</i> , 2002 , 87, 275-284 | 14.7 | 10 |
| 18 | Mechanistic modeling of heavy metal biosorption in batch and membrane reactor systems. <i>Hydrometallurgy</i> , 2003 , 71, 201-208 | 4 | 10 |
| 17 | Copper biosorption by <i>Sphaerotilus natans</i> confined in UF membrane module: experimental study and kinetic modeling. <i>Hydrometallurgy</i> , 2004 , 72, 21-30 | 4 | 7 |
| 16 | Metal recovery from end-of-life hydrotreating catalysts by selective precipitation: Laboratory tests and preliminary process analysis. <i>Environmental Progress and Sustainable Energy</i> , 2015 , 34, 703-712 | 2.5 | 6 |
| 15 | 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> , 2020 , 13, 6690 | 3.1 | 5 |
| 14 | Proton binding onto soil by nonelectrostatic models: isolation and identification of mineral contributions. <i>Environmental Science & Technology</i> , 2004 , 38, 5443-9 | 10.3 | 4 |
| 13 | A Factorial technique for selecting dimension of Hougen-Watson models. <i>Chemical Engineering Science</i> , 1977 , 32, 1345-1348 | 4.4 | 3 |
| 12 | Sulphate bioreduction for the treatment of polluted waters: solid versus liquid organic substrates. <i>Journal of Chemical Technology and Biotechnology</i> , 2009 , 84, 859-863 | 3.5 | 2 |

LIST OF PUBLICATIONS

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|----|---|-------|---|
| 11 | Influence of surface heterogeneity in electroosmotic flowsImplications in chromatography, fluid mixing, and chemical reactions in microdevices. <i>Applied Surface Science</i> , 2007 , 253, 5785-5790 | 6.7 | 2 |
| 10 | The sporulation model for manganiferous ore dissolution. <i>Chemical Engineering Science</i> , 2004 , 59, 5107-5112 | 5.142 | 2 |
| 9 | Inversion of sucrose by immobilized beta-fructooxidase in an integral reactor. <i>Biotechnology and Bioengineering</i> , 1983 , 25, 1435-9 | 4.9 | 2 |
| 8 | Recovery of critical metals from LCDs and Li-ion batteries 2016 , | | 2 |
| 7 | Bioactive and passive mechanisms of pollutant removal in bioreduction processes in fixed bed columns: Numerical simulations. <i>Environmental Progress and Sustainable Energy</i> , 2014 , 33, 70-80 | 2.5 | 1 |
| 6 | Sulphate Reducing Bacteria for the Treatment of Heavy Metals Contaminated Waters in Permeable Reactive Barriers. <i>Advanced Materials Research</i> , 2009 , 71-73, 565-568 | 0.5 | 1 |
| 5 | Inhibition of Iron Oxidizing Bacteria Involved in the Generation of Acid Mine Drainage. <i>Advanced Materials Research</i> , 2009 , 71-73, 681-684 | 0.5 | 1 |
| 4 | Acid mine drainage attenuation by inhibition of pyrite bioleaching using limestone and olive pomace. <i>Chemistry and Ecology</i> , 2012 , 28, 293-303 | 2.3 | 1 |
| 3 | Biosorption of toxic metals by immobilised biomass and UF/MF membrane reactor. <i>Process Metallurgy</i> , 1999 , 9, 463-472 | | 1 |
| 2 | A new recirculation reactor system for kinetic studies of immobilized enzymes. <i>Canadian Journal of Biochemistry</i> , 1978 , 56, 1120-3 | | 1 |
| 1 | Process Simulation for Li-MnO ₂ Primary Battery Recycling: Cryo-Mechanical and Hydrometallurgical Treatments at Pilot Scale. <i>Energies</i> , 2020 , 13, 4546 | 3.1 | 1 |