

Joan Llorens

List of Publications by Year in descending order

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112
papers

2,904
citations

147801

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197818

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115
all docs

115
docs citations

115
times ranked

3187
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 1 | Agro-industrial oily wastes as substrates for PHA production by the new strain <i>Pseudomonas aeruginosa</i> NCIB 40045: Effect of culture conditions. <i>Biochemical Engineering Journal</i> , 2005, 26, 159-167. | 3.6 | 143 |
| 2 | Dewaterability of sewage sludge by ultrasonic, thermal and chemical treatments. <i>Chemical Engineering Journal</i> , 2013, 230, 102-110. | 12.7 | 126 |
| 3 | Effect of ultrasound, low-temperature thermal and alkali pre-treatments on waste activated sludge rheology, hygienization and methane potential. <i>Water Research</i> , 2014, 61, 119-129. | 11.3 | 101 |
| 4 | Experimental and modeling study of the adsorption of single and binary dye solutions with an ion-exchange membrane adsorber. <i>Chemical Engineering Journal</i> , 2011, 166, 536-543. | 12.7 | 94 |
| 5 | Poly 3-(hydroxyalkanoates) produced from oily substrates by <i>Pseudomonas aeruginosa</i> 47T2 (NCBIM) Tj ETQq1 1 0.784314 rgBT /Over <i>Engineering Journal</i> , 2007, 35, 99-106. | 3.6 | 88 |
| 6 | Modeling of the dynamic adsorption of an anionic dye through ion-exchange membrane adsorber. <i>Journal of Membrane Science</i> , 2009, 340, 234-240. | 8.2 | 86 |
| 7 | Simple Equation for Suitability of Heat Pump Use in Distillation. <i>Computer Aided Chemical Engineering</i> , 2014, 33, 1327-1332. | 0.5 | 81 |
| 8 | Preparation of zeolite NaA membranes on the inner side of tubular supports by means of a controlled seeding technique. <i>Catalysis Today</i> , 2005, 104, 281-287. | 4.4 | 77 |
| 9 | Ultrasound, thermal and alkali treatments affect extracellular polymeric substances (EPSs) and improve waste activated sludge dewatering. <i>Process Biochemistry</i> , 2015, 50, 438-446. | 3.7 | 73 |
| 10 | Emergence of Supramolecular Chirality by Flows. <i>ChemPhysChem</i> , 2010, 11, 3511-3516. | 2.1 | 66 |
| 11 | Impact of a new functionalization of multiwalled carbon nanotubes on antifouling and permeability of PVDF nanocomposite membranes for dye wastewater treatment. <i>Chemosphere</i> , 2022, 294, 133699. | 8.2 | 66 |
| 12 | Feasibility study on the recovery of chromium (III) by polymer enhanced ultrafiltration. <i>Desalination</i> , 2009, 249, 577-581. | 8.2 | 65 |
| 13 | Membrane separation technology for the reduction of alcoholic degree of a white model wine. <i>LWT - Food Science and Technology</i> , 2009, 42, 1390-1395. | 5.2 | 63 |
| 14 | Separation of cadmium from aqueous streams by polymer enhanced ultrafiltration: a two-phase model for complexation binding. <i>Journal of Membrane Science</i> , 2004, 239, 173-181. | 8.2 | 62 |
| 15 | Effect of ultrasound, thermal and alkali treatments on the rheological profile and water distribution of waste activated sludge. <i>Chemical Engineering Journal</i> , 2014, 255, 14-22. | 12.7 | 58 |
| 16 | Description of the pervaporation dehydration performance of A-type zeolite membranes: A modeling approach based on the Maxwell-Stefan theory. <i>Catalysis Today</i> , 2006, 118, 73-84. | 4.4 | 55 |
| 17 | Preparation of inner-side tubular zeolite NaA membranes in a semi-continuous synthesis system. <i>Journal of Membrane Science</i> , 2006, 278, 401-409. | 8.2 | 53 |
| 18 | Comparison of Polysulfone and Ceramic Membranes for the Separation of Phenol in Micellar-Enhanced Ultrafiltration. <i>Journal of Colloid and Interface Science</i> , 2002, 246, 157-163. | 9.4 | 51 |

| # | ARTICLE | IF | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Influence of sodium polyacrylate on the rheology of aqueous Laponite dispersions. <i>Journal of Colloid and Interface Science</i> , 2005, 289, 86-93. | 9.4 | 51 |
| 20 | Modeling Pervaporation of Ethanol/Water Mixtures within 'Real' Zeolite NaA Membranes. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 3213-3224. | 3.7 | 47 |
| 21 | Preparation of inner-side tubular zeolite NaA membranes in a continuous flow system. <i>Separation and Purification Technology</i> , 2008, 59, 141-150. | 7.9 | 46 |
| 22 | Rheological properties of an apatitic bone cement during initial setting. <i>Journal of Materials Science: Materials in Medicine</i> , 2001, 12, 905-909. | 3.6 | 41 |
| 23 | Comparison of DMF and UF pre-treatments for particulate material and dissolved organic matter removal in SWRO desalination. <i>Desalination</i> , 2013, 322, 144-150. | 8.2 | 41 |
| 24 | A structural model for thixotropy of colloidal dispersions. <i>Rheologica Acta</i> , 2006, 45, 305-314. | 2.4 | 40 |
| 25 | Rheology changes of Laponite aqueous dispersions due to the addition of sodium polyacrylates of different molecular weights. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2007, 301, 8-15. | 4.7 | 37 |
| 26 | Separation of phosphoric acid from an industrial rinsing water by means of nanofiltration. <i>Desalination</i> , 2009, 243, 218-228. | 8.2 | 37 |
| 27 | Effect of Hydrodynamic Forces on <i>meso</i> - α -(4-Sulfonatophenyl)- β -Substituted Porphyrin J-aggregate Nanoparticles: Elasticity, Plasticity and Breaking. <i>Chemistry - A European Journal</i> , 2016, 22, 9740-9749. | 3.3 | 37 |
| 28 | Study of the dissolution of dealuminated kaolin in sodium-potassium hydroxide during the gel formation step in zeolite X synthesis. <i>Microporous and Mesoporous Materials</i> , 2007, 100, 302-311. | 4.4 | 36 |
| 29 | Effect of ultrasonic waves on the rheological features of secondary sludge. <i>Biochemical Engineering Journal</i> , 2010, 52, 131-136. | 3.6 | 35 |
| 30 | Determination of equilibrium distribution constants of phenol between surfactant micelles and water using ultrafiltering centrifuge tubes. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1999, 150, 229-245. | 4.7 | 34 |
| 31 | Reversible Mechanical Induction of Optical Activity in Solutions of Soft-Matter Nanophases. <i>Chemistry - an Asian Journal</i> , 2009, 4, 1687-1696. | 3.3 | 34 |
| 32 | Characterization of natural organic matter from Mediterranean coastal seawater. <i>Journal of Water Supply: Research and Technology - AQUA</i> , 2013, 62, 42-51. | 1.4 | 32 |
| 33 | Discrimination of the effects of surfactants in gas absorption. <i>Chemical Engineering Science</i> , 1988, 43, 443-450. | 3.8 | 31 |
| 34 | A simple model to describe the thixotropic behavior of paints. <i>Progress in Organic Coatings</i> , 2006, 57, 229-235. | 3.9 | 31 |
| 35 | Polydispersity index from linear viscoelastic data: unimodal and bimodal linear polymer melts. <i>Polymer</i> , 2003, 44, 1741-1750. | 3.8 | 30 |
| 36 | NOM characterization by LC-OCD in a SWRO desalination line. <i>Desalination and Water Treatment</i> , 2013, 51, 1776-1780. | 1.0 | 30 |

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|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 37 | Rheological model to predict the thixotropic behaviour of colloidal dispersions. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2004, 249, 123-126. | 4.7 | 29 |
| 38 | Rheological characterization of the gel point in sol-gel transition. <i>Journal of Non-Crystalline Solids</i> , 2006, 352, 2220-2225. | 3.1 | 27 |
| 39 | Simulation of a continuous metal separation process by polymer enhanced ultrafiltration. <i>Journal of Membrane Science</i> , 2006, 268, 37-47. | 8.2 | 27 |
| 40 | Separation of metal ions and chelating agents by nanofiltration. <i>Journal of Membrane Science</i> , 2009, 345, 31-35. | 8.2 | 27 |
| 41 | Improvement of the analysis of the biochemical oxygen demand (BOD) of Mediterranean seawater by seeding control. <i>Talanta</i> , 2011, 85, 527-532. | 5.5 | 27 |
| 42 | Structural model to study the influence of thermal treatment on the thixotropic behaviour of waste activated sludge. <i>Chemical Engineering Journal</i> , 2015, 262, 242-249. | 12.7 | 27 |
| 43 | The effects of some polyelectrolyte chemical compositions on the rheological behaviour of kaolin suspensions. <i>Powder Technology</i> , 2004, 148, 43-47. | 4.2 | 23 |
| 44 | Flow Effects in Supramolecular Chirality. <i>Israel Journal of Chemistry</i> , 2011, 51, 1007-1016. | 2.3 | 23 |
| 45 | Technical and economical feasibility of zeolite NaA membrane-based reactors in liquid-phase etherification reactions. <i>Chemical Engineering and Processing: Process Intensification</i> , 2009, 48, 1072-1079. | 3.6 | 22 |
| 46 | Chirality generated by flows in pseudocyanine dye aggregates: Revisiting 40 years old reports. <i>Chirality</i> , 2011, 23, 585-592. | 2.6 | 22 |
| 47 | Study on the removal of biodegradable NOM from seawater using biofiltration. <i>Desalination</i> , 2013, 316, 8-16. | 8.2 | 21 |
| 48 | Two-phases model for calcium removal from aqueous solution by polymer enhanced ultrafiltration. <i>Journal of Membrane Science</i> , 2002, 204, 139-152. | 8.2 | 20 |
| 49 | Seawater disinfection by chlorine dioxide and sodium hypochlorite. A comparison of biofilm formation. <i>Water, Air, and Soil Pollution</i> , 2014, 225, 1. | 2.4 | 20 |
| 50 | Effect of aging time on the rheology of Laponite dispersions. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2008, 329, 1-6. | 4.7 | 18 |
| 51 | Wool scouring waste treatment by a combination of coagulation-flocculation process and membrane separation technology. <i>Chemical Engineering and Processing: Process Intensification</i> , 2008, 47, 1061-1068. | 3.6 | 18 |
| 52 | Influence of surface heterogeneity on hydrogen adsorption on activated carbons. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2009, 350, 63-72. | 4.7 | 18 |
| 53 | Permeation of organic solutes in water-ethanol mixtures with nanofiltration membranes. <i>Desalination</i> , 2013, 315, 83-90. | 8.2 | 18 |
| 54 | Rheology of Laponite colloidal dispersions modified by sodium polyacrylates. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2004, 249, 127-129. | 4.7 | 17 |

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|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 55 | Adsorption of some linear copolymers onto kaolin particles in concentrated suspensions. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2005, 270-271, 291-295. | 4.7 | 17 |
| 56 | Process intensification in biodiesel production with energy reduction by pinch analysis. <i>Energy</i> , 2015, 79, 273-287. | 8.8 | 17 |
| 57 | Influence of pH and operation variables on biogenic amines nanofiltration. <i>Separation and Purification Technology</i> , 2008, 58, 424-428. | 7.9 | 16 |
| 58 | Influence of coion and counterion size on multi-ionic solution nanofiltration. <i>Journal of Membrane Science</i> , 2009, 345, 298-304. | 8.2 | 16 |
| 59 | Understanding of naphthalene sulfonate formaldehyde condensates as a dispersing agent to stabilise raw porcelain gres suspensions. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2007, 299, 180-185. | 4.7 | 15 |
| 60 | A thermodynamic analysis of gas adsorption on microporous materials: Evaluation of energy heterogeneity. <i>Journal of Colloid and Interface Science</i> , 2009, 331, 302-311. | 9.4 | 15 |
| 61 | On a rapid method to characterize intercrystalline defects in zeolite membranes using pervaporation data. <i>Chemical Engineering Science</i> , 2008, 63, 2367-2377. | 3.8 | 14 |
| 62 | Ceramic membranes from sol-gel technology. <i>Journal of Non-Crystalline Solids</i> , 1992, 147-148, 518-522. | 3.1 | 13 |
| 63 | Crystallization and properties of poly(ethylene terephthalate) copolymers containing 5-tert-butyl isophthalic units. <i>Polymer</i> , 2002, 43, 7529-7537. | 3.8 | 13 |
| 64 | Improvement of the deflocculating power of polyacrylates in ceramic slips by small additions of quaternary ammonium salts. <i>Powder Technology</i> , 2005, 155, 181-186. | 4.2 | 13 |
| 65 | High-density YSZ tapes fabricated via the multi-folding lamination process. <i>Ceramics International</i> , 2009, 35, 1219-1226. | 4.8 | 13 |
| 66 | Pressure selection for non-reactive and reactive pressure-swing distillation. <i>Chemical Engineering and Processing: Process Intensification</i> , 2019, 135, 9-21. | 3.6 | 13 |
| 67 | Effect of ultrasonication on waste activated sludge rheological properties and process economics. <i>Water Research</i> , 2022, 208, 117855. | 11.3 | 13 |
| 68 | Nitrogen Sorption Studies of Silica Particles Obtained in Emulsion and Microemulsion Media. <i>Journal of Colloid and Interface Science</i> , 2000, 225, 291-298. | 9.4 | 12 |
| 69 | Evaluation of confinement effects in zeolites under Henry's adsorption regime. <i>Applied Surface Science</i> , 2010, 256, 5305-5310. | 6.1 | 12 |
| 70 | Yield and kinetic constants estimation in the production of hydroxy fatty acids from oleic acid in a bioreactor by <i>Pseudomonas aeruginosa</i> 42A2. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 9609-9621. | 3.6 | 12 |
| 71 | Bioethanol dehydration and mixing by heterogeneous azeotropic distillation. <i>Journal of Cleaner Production</i> , 2021, 320, 128810. | 9.3 | 12 |
| 72 | Surface charge and rheological properties of raw porcelain gres suspension with acrylic copolymers bearing carboxylic groups. <i>Journal of the European Ceramic Society</i> , 2009, 29, 559-564. | 5.7 | 11 |

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|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 73 | Minimum number of transfer units and reboiler duty for multicomponent distillation columns. <i>Applied Thermal Engineering</i> , 2013, 61, 67-79. | 6.0 | 11 |
| 74 | Study of Cr(III) desorption process from a water-soluble polymer by ultrafiltration. <i>Desalination</i> , 2011, 281, 165-171. | 8.2 | 10 |
| 75 | Viscoelastic properties in the course of hydrolysis and condensation reactions of modified titanium alkoxydes leading to gelation. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1996, 119, 57-65. | 4.7 | 9 |
| 76 | Unimodal molecular weight distribution of commercial polymers from viscoelastic data. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2000, 38, 1539-1546. | 2.1 | 9 |
| 77 | Poly(3-hydroxyalkanoate) produced from <i>Pseudomonas aeruginosa</i> 42A2 (NCBIM 40045): Effect of fatty acid nature as nutrient. <i>Journal of Non-Crystalline Solids</i> , 2006, 352, 2259-2263. | 3.1 | 9 |
| 78 | Shortcut assessment of alternative distillation sequence schemes for process intensification. <i>Computers and Chemical Engineering</i> , 2015, 83, 58-71. | 3.8 | 9 |
| 79 | Nanofiltration of biogenic amines in acidic conditions: Influence of operation variables and modeling. <i>Journal of Membrane Science</i> , 2008, 310, 594-601. | 8.2 | 8 |
| 80 | Biological activity in expanded clay (EC) and granulated activated carbon (GAC) seawater filters. <i>Desalination</i> , 2013, 328, 67-73. | 8.2 | 8 |
| 81 | Fast solvent screening for counter-current liquid-liquid extraction columns. <i>Clean Technologies and Environmental Policy</i> , 2015, 17, 1227-1238. | 4.1 | 8 |
| 82 | Stabilization of raw porcelain gres suspensions with sodium naphthalene sulfonate formaldehyde condensates. <i>Applied Clay Science</i> , 2009, 42, 473-477. | 5.2 | 7 |
| 83 | Preliminary technical feasibility analysis of carbon dioxide absorption by ecological residual solvents rich in ammonia to be used in fertigation. <i>Clean Technologies and Environmental Policy</i> , 2015, 17, 1313-1321. | 4.1 | 7 |
| 84 | Rheology of alumina sols. <i>Journal of Non-Crystalline Solids</i> , 1992, 147-148, 690-694. | 3.1 | 6 |
| 85 | Viability of the Use of Polymer-Assisted Ultrafiltration for Continuous Water Softening. <i>Separation Science and Technology</i> , 2003, 38, 295-322. | 2.5 | 6 |
| 86 | Influence of chemical speciation on the separation of metal ions from chelating agents by nanofiltration membranes. <i>Separation Science and Technology</i> , 2019, 54, 143-152. | 2.5 | 6 |
| 87 | On the Path to a New Generation of Cement-Based Composites through the Use of Lignocellulosic Micro/Nanofibers. <i>Materials</i> , 2019, 12, 1584. | 2.9 | 6 |
| 88 | Characterization of meso- and macroporous ceramic membranes in terms of flux measurement: A moment-based analysis. <i>Journal of Membrane Science</i> , 2007, 302, 218-234. | 8.2 | 5 |
| 89 | Experimental study on the vertical interface of thin-tile masonry. <i>Construction and Building Materials</i> , 2020, 261, 119976. | 7.2 | 5 |
| 90 | Experimental Behavior of Brick Masonry under Uniaxial Compression on Parallel-to-Face Brick. Single-Leaf Case Study. <i>International Journal of Architectural Heritage</i> , 2020, 14, 23-37. | 3.1 | 4 |

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| 91 | Rheological Gel Point Determinations in Silica and Titanium Based Sol-Gel Systems. , 1998, , 613-614. | | 4 |
| 92 | Molecular weight distributions from viscoelastic parameters in polymeric sols as the reaction proceeds. Journal of Non-Crystalline Solids, 1993, 162, 188-196. | 3.1 | 3 |
| 93 | Prediction of Polymer Molecular Weight Distribution from Rheology: Polydimethylsiloxane Blends. Materials Science Forum, 2005, 480-481, 281-286. | 0.3 | 3 |
| 94 | Distillation Energy Assessment for Solvent Recovery from Carbon Dioxide Absorption. Computer Aided Chemical Engineering, 2016, 38, 1917-1922. | 0.5 | 3 |
| 95 | Distillation Sequence Efficiency (DSE) for Suitable Liquid-Liquid Extraction Solvents: Acetic Acid Extraction with TOA. Computer Aided Chemical Engineering, 2017, , 397-402. | 0.5 | 3 |
| 96 | Vanillin production from lignin: Rigorous process simulation results for ethyl acetate versus aliphatic-alcohol-specific process designs. Cleaner Engineering and Technology, 2021, 4, 100133. | 4.0 | 3 |
| 97 | Design of absorption columns in the presence of surfactants. Industrial & Engineering Chemistry Process Design and Development, 1986, 25, 305-307. | 0.6 | 2 |
| 98 | Effect of pH and Salt Concentration on the Nanofiltration of Glycine and Triglycine. Procedia Engineering, 2012, 44, 585-587. | 1.2 | 2 |
| 99 | Study of Seawater Biofiltration by Measuring Adenosine Triphosphate (ATP) and Turbidity. Water, Air, and Soil Pollution, 2013, 224, 1. | 2.4 | 2 |
| 100 | Computational Fluid Dynamics (CFD) Simulation of Fuel Gas and Steam Mixtures to Decrease NOx Emissions of Industrial Burners. Computer Aided Chemical Engineering, 2017, 40, 565-570. | 0.5 | 2 |
| 101 | Experimental Behavior of Thin-Tile Masonry under Uniaxial Compression. Multi-Leaf Case Study. Materials, 2021, 14, 2785. | 2.9 | 2 |
| 102 | Investigating best available technique for CO ₂ chemical absorption: solvent selection based on empirical surrogate model and exergy loss. Clean Technologies and Environmental Policy, 2022, 24, 333-350. | 4.1 | 2 |
| 103 | Advantages of Process Integration Evaluated by Gibbs Energy: Biodiesel Synthesis Case. Computer Aided Chemical Engineering, 2014, 33, 1627-1632. | 0.5 | 1 |
| 104 | Enhanced Distillation Based on Feed Impurities. Computer Aided Chemical Engineering, 2016, 38, 1923-1928. | 0.5 | 1 |
| 105 | Software Tool for Computing and Visualization of Enhanced Residue Curve Maps. Computer Aided Chemical Engineering, 2017, 40, 199-204. | 0.5 | 1 |
| 106 | Distillation Sequence Efficiency (DSE) Applied to Trains of Columns with Recycle Streams. Computer Aided Chemical Engineering, 2017, , 751-756. | 0.5 | 1 |
| 107 | Mass and Volume efficient CO ₂ Removal and O ₂ Generation System. , 0, , . | | 0 |
| 108 | Nanofiltration of Fatty Acids and Triglycerides. Procedia Engineering, 2012, 44, 1234-1236. | 1.2 | 0 |

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|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 109 | Effects of inorganic nitrogen (NH ₄ Cl) and biodegradable organic carbon (CH ₃ COONa) additions on a pilot-scale seawater biofilter. Chemosphere, 2013, 91, 1297-1303. | 8.2 | 0 |
| 110 | Seguimiento continuo del proceso de gelificaci3n de alc3xidos de silicio y titanio mediante ensayos reol3gicos. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2000, 39, 717-724. | 1.9 | 0 |
| 111 | Prediction of Molecular Weight Distribution from Rheology: Poly(Dimethylsiloxanes)s Blends. , 1998, , 326-327. | | 0 |
| 112 | Relaxation Spectrum Evolution in Polymerization Reactions. , 1998, , 615-616. | | 0 |