

# Juan J Iruin

## List of Publications by Year in descending order

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91  
papers

1,955  
citations

257357

24  
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315616

38  
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91  
docs citations

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times ranked

1613  
citing authors

| #  | ARTICLE                                                                                                                                                                                                 | IF  | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 1  | Manganese oxide catalysts for secondary zinc air batteries: from electrocatalytic activity to bifunctional air electrode performance. <i>Electrochimica Acta</i> , 2016, 217, 80-91.                    | 2.6 | 88        |
| 2  | Microphase separation and hydrophobicity of urethane/siloxane copolymers with low siloxane content. <i>Progress in Organic Coatings</i> , 2014, 77, 798-802.                                            | 1.9 | 20        |
| 3  | Preparation of superhydrophobic silica nanoparticles by microwave assisted sol-gel process. <i>Journal of Sol-Gel Science and Technology</i> , 2012, 61, 8-13.                                          | 1.1 | 13        |
| 4  | Oxygen permeability through poly(ethylene-co-vinyl acetate)/clay nanocomposites prepared by microwave irradiation. <i>Journal of Membrane Science</i> , 2011, 373, 173-177.                             | 4.1 | 13        |
| 5  | Production of hydrophobic surfaces in biodegradable and biocompatible polymers using polymer solution electrospinning. <i>Journal of Applied Polymer Science</i> , 2011, 120, 1520-1524.                | 1.3 | 6         |
| 6  | Silica nanoparticles obtained by microwave assisted sol-gel process: multivariate analysis of the size and conversion dependence. <i>Journal of Sol-Gel Science and Technology</i> , 2010, 53, 667-672. | 1.1 | 14        |
| 7  | Electrospinning of waterborne polyurethanes. <i>Journal of Applied Polymer Science</i> , 2010, 115, 1176-1179.                                                                                          | 1.3 | 41        |
| 8  | Pyrolysis analysis of different Cuban natural fibres by TGA and GC/FTIR. <i>Biomass and Bioenergy</i> , 2010, 34, 1573-1577.                                                                            | 2.9 | 12        |
| 9  | Migration of antifog additives in agricultural films of low-density polyethylene and ethylene-vinyl acetate copolymers. <i>Journal of Applied Polymer Science</i> , 2009, 111, 2299-2307.               | 1.3 | 23        |
| 10 | Role of specific interactions on fiber formation in the electrospinning of poly(vinyl Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 387 Td (phenol 2922-2928.                                                    | 1.3 | 4         |
| 11 | Electrospinning of poly (2-ethyl-2-oxazoline). <i>Journal of Materials Science</i> , 2009, 44, 3186-3191.                                                                                               | 1.7 | 26        |
| 12 | Proton-conducting membranes from phosphotungstic acid-doped sulfonated polyimide for direct methanol fuel cell applications. <i>Polymer Bulletin</i> , 2009, 62, 813-827.                               | 1.7 | 23        |
| 13 | Diffusivity of ethylene and propylene in atactic and isotactic polypropylene: Morphology effects and free-volume simulations. <i>Journal of Applied Polymer Science</i> , 2007, 104, 3871-3878.         | 1.3 | 13        |
| 14 | Origins of Product Heterogeneity in the Spheripol High Impact Polypropylene Process. <i>Industrial &amp; Engineering Chemistry Research</i> , 2006, 45, 4178-4187.                                      | 1.8 | 24        |
| 15 | Hybrid Proton-Conducting Membranes as Fuel Cells Solid Polyelectrolytes. <i>Journal of Fuel Cell Science and Technology</i> , 2006, 3, 308-311.                                                         | 0.8 | 2         |
| 16 | The phase behaviour of poly(styrene-co-methacrylic acid)/poly(2,6-dimethyl-1,4-phenylene oxide) by inverse gas chromatography. <i>Journal of Chromatography A</i> , 2006, 1127, 237-245.                | 1.8 | 21        |
| 17 | Determination of the self-association and inter-association equilibrium constants of a carboxylic acid and its mixtures with pyridine derivatives. <i>Vibrational Spectroscopy</i> , 2006, 41, 21-27.   | 1.2 | 6         |
| 18 | Transport properties of trogamid: Comparison of different experimental techniques. <i>Journal of Applied Polymer Science</i> , 2006, 102, 2034-2042.                                                    | 1.3 | 14        |

| #  | ARTICLE                                                                                                                                                                                                                          | IF  | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Solvent and acidification method effects in the performance of new sulfonated copolyimides membranes in PEM-fuel cells. <i>Journal of Power Sources</i> , 2005, 151, 63-68.                                                      | 4.0 | 11        |
| 20 | Infrared spectroscopic studies of the self-association of aromatic urethanes. <i>Vibrational Spectroscopy</i> , 2005, 39, 144-150.                                                                                               | 1.2 | 3         |
| 21 | Morphology of High Impact Polypropylene Particles. <i>Macromolecules</i> , 2005, 38, 2795-2801.                                                                                                                                  | 2.2 | 72        |
| 22 | Antiplasticization of a polyamide: a positron annihilation lifetime spectroscopy study. <i>Polymer</i> , 2004, 45, 2949-2957.                                                                                                    | 1.8 | 29        |
| 23 | Miscibility behaviour of amorphous poly(3-hydroxybutyrate) (a-PHB)/styrene-vinyl phenol copolymer (STY-co-VPH) blends applying an association model. <i>Polymer</i> , 2004, 45, 1477-1483.                                       | 1.8 | 11        |
| 24 | Miscibility and carbon dioxide transport properties of poly(3-hydroxybutyrate) (iPHB) and its blends with different copolymers of styrene and vinyl phenol. <i>Polymer</i> , 2004, 45, 4139-4147.                                | 1.8 | 5         |
| 25 | Determination of the diffusion coefficients of organic solvents in polyepichlorohydrin: A comparative study of inverse gas chromatography and sorption methods. <i>Journal of Applied Polymer Science</i> , 2003, 89, 2216-2223. | 1.3 | 9         |
| 26 | Blends of bacterial poly(3-hydroxybutyrate) and a poly(epichlorohydrin-co-ethylene oxide) copolymer: thermal and CO <sub>2</sub> transport properties. <i>Polymer</i> , 2003, 44, 7701-7708.                                     | 1.8 | 11        |
| 27 | Hydrogen-Bonding Interactions between Formic Acid and Pyridine. <i>Journal of Physical Chemistry A</i> , 2002, 106, 4187-4191.                                                                                                   | 1.1 | 41        |
| 28 | Miscibility and carbon dioxide transport properties of blends of bacterial poly(3-hydroxybutyrate) and a poly(vinylidene chloride-co-acrylonitrile) copolymer. <i>Polymer</i> , 2002, 43, 6205-6211.                             | 1.8 | 15        |
| 29 | Polymer-solvent interaction parameters in polymer solutions at high polymer concentrations. <i>Journal of Chromatography A</i> , 2002, 969, 245-254.                                                                             | 1.8 | 29        |
| 30 | Free-volume evolution in the system polycarbonate-polycaprolactone studied by positron annihilation spectroscopy. <i>Journal of Non-Crystalline Solids</i> , 2001, 287, 100-103.                                                 | 1.5 | 3         |
| 31 | Blends of bacterial poly(3-hydroxybutyrate) with synthetic poly(3-hydroxybutyrate) and poly(epichlorohydrin): transport properties of carbon dioxide and water vapour. <i>Polymer</i> , 2001, 42, 953-962.                       | 1.8 | 23        |
| 32 | Infrared spectroscopic studies of the urethane/ether inter-association. <i>Vibrational Spectroscopy</i> , 2001, 27, 183-191.                                                                                                     | 1.2 | 11        |
| 33 | Miscibility windows of poly(vinyl methyl ether) with modified phenoxy resin. <i>European Polymer Journal</i> , 2001, 37, 1943-1950.                                                                                              | 2.6 | 3         |
| 34 | Infrared spectroscopic studies of the self-association of ethyl urethane. <i>Vibrational Spectroscopy</i> , 2000, 23, 187-197.                                                                                                   | 1.2 | 20        |
| 35 | Comparison between Static (Sorption) and Dynamic (IGC) Methods in the Determination of Interaction Parameters in Polymer/Polymer Blends. <i>Macromolecules</i> , 2000, 33, 9115-9121.                                            | 2.2 | 17        |
| 36 | Evaluation of the transport properties of Poly(3-hydroxybutyrate) and its 3-hydroxyvalerate copolymers for packaging applications. <i>Macromolecular Symposia</i> , 1999, 144, 427-438.                                          | 0.4 | 27        |

| #  | ARTICLE                                                                                                                                                                                                                   | IF  | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Excess Specific Heats in Miscible Binary Blends with Specific Interactions. <i>Macromolecules</i> , 1999, 32, 2661-2668.                                                                                                  | 2.2 | 12        |
| 38 | Carbon dioxide transport properties of composite membranes of a polyetherimide and a liquid crystal polymer. <i>European Polymer Journal</i> , 1998, 34, 1405-1413.                                                       | 2.6 | 19        |
| 39 | Miscibility and interactions in a mixture of poly(ethylene oxide) and an aromatic poly(ether amide). <i>Polymer</i> , 1998, 39, 1035-1042.                                                                                | 1.8 | 19        |
| 40 | Blends of amorphous and crystalline polylactides with poly(methyl methacrylate) and poly(methyl Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50                                                                                      | 1.8 | 141       |
| 41 | Interaction energies in polymer/polymer mixtures. <i>Polymer</i> , 1997, 38, 4085-4090.                                                                                                                                   | 1.8 | 4         |
| 42 | Association Equilibria and Miscibility Prediction in Blends of Poly(vinylphenol) with Poly(hydroxybutyrate) and Related Homo- and Copolymers: A FTIR Study. <i>Macromolecules</i> , 1996, 29, 5605-5610.                  | 2.2 | 89        |
| 43 | Evidence of interchange reaction in a poly(ethylene 2,6-naphthalenedicarboxylate)/poly(bisphenol-A) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50                                                                           | 2.0 | 7         |
| 44 | Gas chromatographic measurements of solute diffusion in blends of phenoxy and poly(1,4-butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50                                                                                     | 2.6 | 7         |
| 45 | Thermal and infra-red spectroscopic investigations of a miscible blend composed of poly(vinyl phenol) and poly(hydroxybutyrate). <i>Polymer</i> , 1995, 36, 3235-3237.                                                    | 1.8 | 82        |
| 46 | Molten polyarylate-poly(butylene terephthalate) blends: kinetics and statistical analysis of the exchange reactions by <sup>1</sup> H n.m.r.. <i>Polymer</i> , 1995, 36, 1357-1361.                                       | 1.8 | 25        |
| 47 | Characterization of Acid-Base Properties of a Polyetherimide and Two Liquid Crystalline Polymers by Inverse Gas Chromatography. <i>International Journal of Polymer Analysis and Characterization</i> , 1995, 1, 349-363. | 0.9 | 5         |
| 48 | Enthalpies of Mixing in Polymer Blends of Chlorinated Polymers: Application of a Group Contribution Method. <i>Macromolecules</i> , 1995, 28, 589-595.                                                                    | 2.2 | 6         |
| 49 | Hydrogen Bonding in Blends of Phenoxy Resin and Poly(vinylpyrrolidone). <i>Macromolecules</i> , 1995, 28, 3707-3712.                                                                                                      | 2.2 | 49        |
| 50 | Lattice Fluid Theory and Inverse Gas Chromatography in the Analysis of Polymer-Polymer Interactions. <i>Macromolecules</i> , 1995, 28, 7188-7195.                                                                         | 2.2 | 16        |
| 51 | Estimation of interaction parameters of a poly(hydroxy ether of bisphenol A)/poly(vinyl methyl ether) blend by inverse gas chromatography. <i>Polymer</i> , 1994, 35, 2128-2132.                                          | 1.8 | 14        |
| 52 | An extension of the Painter-Coleman miscibility guide to ternary polymer blends. <i>Polymer Engineering and Science</i> , 1994, 34, 1314-1318.                                                                            | 1.5 | 7         |
| 53 | Influence of the chemical modification of phenoxy resin on its miscibility with poly(2-vinyl pyridine). <i>Polymer International</i> , 1994, 33, 393-398.                                                                 | 1.6 | 5         |
| 54 | Interchange reactions in poly(ethylene terephthalate)/poly(hydroxy ether of bisphenol A) blends: Effect on thermal behaviour. <i>European Polymer Journal</i> , 1994, 30, 901-904.                                        | 2.6 | 18        |

| #  | ARTICLE                                                                                                                                                                                                     | IF  | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | On the application of an association model to blends of phenoxy and ether-containing polymers. <i>Polymer</i> , 1994, 35, 3712-3718.                                                                        | 1.8 | 22        |
| 56 | Probing Polymer-Polymer Interaction Parameters in Miscible Blends by Inverse Gas Chromatography: Solvent Effects. <i>Macromolecules</i> , 1994, 27, 1245-1248.                                              | 2.2 | 22        |
| 57 | A Study of Mixtures of Poly(hydroxy ether of bisphenol A) and Poly(epsilon-caprolactone) by Inverse Gas Chromatography. <i>Macromolecules</i> , 1994, 27, 1395-1400.                                        | 2.2 | 19        |
| 58 | Influence of the Blending Method and Poly(methyl methacrylate) Tacticity in Its Miscibility with Poly(hydroxy ether of bisphenol A, phenoxy). <i>Polymer Journal</i> , 1994, 26, 1037-1046.                 | 1.3 | 12        |
| 59 | Miscibility of poly(vinyl chloride)/poly(ethylene oxide) blends I. Thermal properties and solid state <sup>13</sup> C-NMR study. <i>European Polymer Journal</i> , 1993, 29, 1477-1481.                     | 2.6 | 24        |
| 60 | Miscibility of poly(vinyl chloride)/poly(ethylene oxide) blends II. An inverse gas chromatography study. <i>European Polymer Journal</i> , 1993, 29, 1483-1487.                                             | 2.6 | 21        |
| 61 | Phenoxy blends: an approach to the miscibility by FTi.r. and chemical modification of the interacting sites. <i>Polymer</i> , 1993, 34, 38-42.                                                              | 1.8 | 29        |
| 62 | On the application of an association model to blends containing poly(hydroxy ether of bisphenol A). <i>Macromolecules</i> , 1993, 26, 4586-4590.                                                            | 2.2 | 9         |
| 63 | Crystallization and melting behaviour of poly(butylene terephthalate) in poly(butylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50                                                                         | 1.7 | 6         |
| 64 | Inverse gas chromatography in the characterization of polymeric materials. <i>Journal of Chromatography A</i> , 1992, 607, 227-237.                                                                         | 1.8 | 36        |
| 65 | Miscible blends of poly(ethylene oxide) and the poly(hydroxy ether) of bisphenol A (phenoxy). <i>Macromolecules</i> , 1991, 24, 5546-5551.                                                                  | 2.2 | 35        |
| 66 | An attempt to predict phenoxy resin miscibility using a group contribution method. <i>Macromolecules</i> , 1991, 24, 6458-6463.                                                                             | 2.2 | 18        |
| 67 | Solution crystallization and annealing of polyarylate. <i>European Polymer Journal</i> , 1991, 27, 965-968.                                                                                                 | 2.6 | 3         |
| 68 | Poly(ethylene terephthalate)/polyarylate blends: Influence of interchange reactions on the melting behavior of poly(ethylene terephthalate). <i>Journal of Applied Polymer Science</i> , 1991, 42, 489-493. | 1.3 | 34        |
| 69 | Chemical modifications of phenoxy resin. Synthesis and <sup>1</sup> H NMR study of model compounds. <i>Magnetic Resonance in Chemistry</i> , 1991, 29, 1005-1011.                                           | 1.1 | 1         |
| 70 | Polyarylate/polyamide 6 blends: A calorimetric study. <i>Polymer Bulletin</i> , 1990, 24, 641-647.                                                                                                          | 1.7 | 7         |
| 71 | Chromatographic studies of a poly(vinyl methyl ether)/phenoxy resin blend near the lower critical solution temperature. <i>Polymer</i> , 1989, 30, 1155-1159.                                               | 1.8 | 13        |
| 72 | Ternary blends containing polyarylate, polycarbonate and poly(butylene terephthalate). <i>European Polymer Journal</i> , 1989, 25, 1169-1172.                                                               | 2.6 | 18        |

| #  | ARTICLE                                                                                                                                                                                                               | IF  | CITATIONS |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 73 | Phenoxy resin: Characterization, solution properties, and inverse gas chromatography investigation of its potential miscibility with other polymers. <i>Journal of Applied Polymer Science</i> , 1989, 37, 3459-3470. | 1.3 | 28        |
| 74 | Crystallization and melting behaviour of poly(bisphenol A hydroxy ether)/poly(ethylene oxide) blends. <i>Polymer</i> , 1989, 30, 1160-1165.                                                                           | 1.8 | 34        |
| 75 | Determination of the interaction parameter $g$ by inverse gas chromatography: an additional experimental test of the classic lattice model. <i>Polymer</i> , 1989, 30, 1493-1497.                                     | 1.8 | 13        |
| 76 | Glass transition temperatures in blends of polyarylate and a styrene/acrylonitrile copolymer. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1989, 27, 1951-1953.                                       | 2.4 | 5         |
| 77 | Miscibility and phase separation in poly(vinyl methyl ether)/poly(bisphenol A hydroxy ether) blends. <i>Macromolecules</i> , 1987, 20, 3038-3042.                                                                     | 2.2 | 39        |
| 78 | Glass transition temperatures of plasticized polyarylate. <i>Polymer Bulletin</i> , 1987, 18, 149.                                                                                                                    | 1.7 | 6         |
| 79 | Miscibility and thermal decomposition in phenoxy/poly(ethylene terephthalate) and phenoxy/poly(butylene terephthalate) blends. <i>Materials Chemistry and Physics</i> , 1987, 18, 147-154.                            | 2.0 | 27        |
| 80 | Ternary polymer mixtures: Polyarylate/phenoxy/poly(butylene terephthalate). <i>Journal of Applied Polymer Science</i> , 1986, 32, 5945-5955.                                                                          | 1.3 | 45        |
| 81 | Ester exchange reactions in polyarylate/poly(ethylene terephthalate) blends. <i>Polymer</i> , 1986, 27, 2013-2018.                                                                                                    | 1.8 | 47        |
| 82 | Chromatographic determination of polymer solubility parameters. <i>Polymer Bulletin</i> , 1985, 13, 463-467.                                                                                                          | 1.7 | 12        |
| 83 | Solution properties of polyarylate in good and theta-solvents. <i>European Polymer Journal</i> , 1985, 21, 711-715.                                                                                                   | 2.6 | 8         |
| 84 | Title is missing!. <i>Die Makromolekulare Chemie</i> , 1984, 185, 1761-1766.                                                                                                                                          | 1.1 | 46        |
| 85 | Gas chromatographic determination of the interaction parameter of poly(ethylene oxide)/poly(methyl Tj ETQq1 1 0.784314 ggBT /Ov                                                                                       | 1.5 | 15        |
| 86 | Binary blends containing a commercial polyarylate. <i>Polymer Engineering and Science</i> , 1984, 24, 608-611.                                                                                                        | 1.5 | 34        |
| 87 | Determination of the interaction parameter $\chi_1^*$ of poly(ethylene oxide) by gas-liquid chromatography below the melting temperature. <i>Polymer</i> , 1983, 24, 417-422.                                         | 1.8 | 19        |
| 88 | On the unperturbed dimensions of polyisoprene chains. <i>European Polymer Journal</i> , 1982, 18, 19-23.                                                                                                              | 2.6 | 8         |
| 89 | Thermodynamics of the mixture poly(ethylene oxide)/ toluene. <i>Polymer Bulletin</i> , 1981, 4, 25-32.                                                                                                                | 1.7 | 7         |
| 90 | Solvent influence on the viscosity-temperature relationship for dilute polybutadiene solutions. <i>European Polymer Journal</i> , 1980, 16, 165-167.                                                                  | 2.6 | 5         |

| #  | ARTICLE                                                                                                              | IF  | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 91 | The Unperturbed Dimension-Temperature Coefficient for trans-Polyisoprene. <i>Macromolecules</i> , 1980, 13, 190-191. | 2.2 | 6         |