# Mirta I Aranguren

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 118 papers | 7,368 citations | 70961 41 h-index | 56606 83 g-index |
| 121 all docs | 121 docs citations | 121 times ranked | 7194 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Review: current international research into cellulose nanofibres and nanocomposites. Journal of Materials Science, 2010, 45, 1-33. | 1.7 | 2,042 |
| 2 | Effect of reinforcing fillers on the rheology of polymer melts. Journal of Rheology, 1992, 36, 1165-1182. | 1.3 | 258 |
| 3 | Physicoâ€Mechanical Properties of Biodegradable Starch Nanocomposites. Macromolecular Materials and Engineering, 2009, 294, 169-177. | 1.7 | 225 |
| 4 | Cellulose micro/nanocrystals reinforced polyurethane. Journal of Materials Research, 2006, 21, 870-881. | 1.2 | 211 |
| 5 | Effect of glycerol on the morphology of nanocomposites made from thermoplastic starch and starch nanocrystals. Carbohydrate Polymers, 2011, 84, 203-210. | 5.1 | 207 |
| 6 | Polyelectrolyte films based on chitosan/olive oil and reinforced with cellulose nanocrystals. Carbohydrate Polymers, 2014, 101, 1018-1026. | 5.1 | 192 |
| 7 | A short review on novel biocomposites based on plant oil precursors. European Polymer Journal, 2013, 49, 1243-1256. | 2.6 | 181 |
| 8 | Characterization of nanocelluloseâ€•reinforced shape memory polyurethanes. Polymer International, 2008, 57, 651-659. | 1.6 | 162 |
| 9 | Polyurethane Foams Obtained from Castor Oil-based Polyol and Filled with Wood Flour. Journal of Composite Materials, 2009, 43, 3057-3072. | 1.2 | 149 |
| 10 | Crystallization of polydimethylsiloxane: effect of silica filler and curing. Polymer, 1998, 39, 4897-4903. | 1.8 | 140 |
| 11 | Mechanical characterization of polypropylene-wood flour composites. Journal of Applied Polymer Science, 2003, 88, 1420-1428. | 1.3 | 128 |
| 12 | Modified woodflour as thermoset fillersPart I. Effect of the chemical modification and percentage of filler on the mechanical properties. Polymer, 2001, 42, 815-825. | 1.8 | 110 |
| 13 | Thermal and dynamic mechanical characterization of polypropylene-woodflour composites. Polymer Engineering and Science, 2002, 42, 733-742. | 1.5 | 106 |
| 14 | Characterization of chitosan/caseinate films. Journal of Applied Polymer Science, 2008, 107, 1080-1090. | 1.3 | 106 |
| 15 | A comparison between the physico-chemical properties of tuber and cereal starches. Food Research International, 2009, 42, 976-982. | 2.9 | 104 |
| 16 | Modified woodflour as thermoset fillers. Thermochimica Acta, 2001, 372, 45-57. | 1.2 | 103 |
| 17 | Dependence of the mechanical properties of woodflour-polymer composites on the moisture content. Journal of Applied Polymer Science, 1998, 68, 2069-2076. | 1.3 | 100 |
| 18 | Moisture diffusion in polyesterâ€"woodflour composites. Polymer, 1999, 40, 7313-7320. | 1.8 | 99 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Polyurethanes from tung oil: Polymer characterization and composites. Polymer Engineering and Science, 2009, 49, 685-692. | 1.5 | 85 |
| 20 | Caseinate films modified with tung oil. Food Hydrocolloids, 2010, 24, 800-808. | 5.6 | 85 |
| 21 | Compounding Fumed Silicas into Polydimethylsiloxane: Bound Rubber and Final Aggregate Size. Journal of Colloid and Interface Science, 1997, 195, 329-337. | 5.0 | 82 |
| 22 | Analysis of the creep behavior of polypropylene-woodflour composites. Polymer Engineering and Science, 2004, 44, 1594-1603. | 1.5 | 79 |
| 23 | Rheology of particle suspensions in viscoelastic media. Wood flour-polypropylene melt. Rheologica Acta, 2004, 43, 293-303. | 1.1 | 76 |
| 24 | Liquid rubber modified vinyl ester resins: fracture and mechanical behavior. Polymer, 2001, 42, 3723-3730. | 1.8 | 74 |
| 25 | Effect of the nano-cellulose content on the properties of reinforced polyurethanes. A study using mechanical tests and positron anihilation spectroscopy. Polymer Testing, 2013, 32, 115-122. | 2.3 | 70 |
| 26 | Mechanical properties of linseed oil monoglyceride maleate/styrene copolymers. Journal of Applied Polymer Science, 2005, 97, 825-836. | 1.3 | 69 |
| 27 | Nanocomposites made from cellulose nanocrystals and tailored segmented polyurethanes. Journal of Applied Polymer Science, 2010, 115, 1215-1225. | 1.3 | 68 |
| 28 | Biodegradable materials from grafting of modified PLA onto starch nanocrystals. Polymer Degradation and Stability, 2012, 97, 2021-2026. | 2.7 | 66 |
| 29 | Castor oilâ€based polyurethanes containing cellulose nanocrystals. Polymer Engineering and Science, 2011, 51, 1389-1396. | 1.5 | 61 |
| 30 | Biodegradation of a vegetable oil based polyurethane and wood flour composites. Polymer Testing, 2012, 31, 7-15. | 2.3 | 61 |
| 31 | Highâ€strength composites based on tung oil polyurethane and wood flour: Effect of the filler concentration on the mechanical properties. Polymer Engineering and Science, 2009, 49, 713-721. | 1.5 | 60 |
| 32 | Water vapor absorption and permeability of films based on chitosan and sodium caseinate. Journal of Applied Polymer Science, 2009, 111, 2777-2784. | 1.3 | 57 |
| 33 | Composites from sawdust and unsaturated polyester. Journal of Applied Polymer Science, 1996, 61, 119-124. | 1.3 | 52 |
| 34 | Polyanilineâ€modified cellulose nanofibrils as reinforcement of a smart polyurethane. Polymer International, 2011, 60, 743-750. | 1.6 | 52 |
| 35 | Nanocomposites with superparamagnetic behavior based on a vegetable oil and magnetite nanoparticles. European Polymer Journal, 2014, 53, 90-99. | 2.6 | 49 |
| 36 | Microfoams based on castor oil polyurethanes and vegetable fibers. Journal of Applied Polymer Science, 2007, 105, 2791-2800. | 1.3 | 48 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Polymeric networks based on tung oil: Reaction and modification with green oil monomers. European Polymer Journal, 2015, 67, 551-560. | 2.6 | 48 |
| 38 | Preparation and characterization of conductive nanostructured particles based on polyaniline and cellulose nanofibers. Ultrasonics Sonochemistry, 2014, 21, 1641-1648. | 3.8 | 45 |
| 39 | Synthesis and characterization of a waterborne polyurethane made from castor oil and tartaric acid. European Polymer Journal, 2018, 102, 151-160. | 2.6 | 44 |
| 40 | Kinetic and statistical aspects of the formation of polyurethanes from toluene diisocyanate. Polymer, 1986, 27, 425-430. | 1.8 | 43 |
| 41 | Mechanical properties of woodflour/linseed oil resin composites. Polymer International, 2005, 54, 829-836. | 1.6 | 43 |
| 42 | Recent developments in plant oil based functional materials. Polymer International, 2016, 65, 28-38. | 1.6 | 42 |
| 43 | Rapeseed oilâ€based polyurethane foams modified with glycerol and cellulose micro/nanocrystals. Journal of Applied Polymer Science, 2015, 132, . | 1.3 | 40 |
| 44 | Nanocomposites of Waterborne Polyurethane Reinforced with Cellulose Nanocrystals from Sisal Fibres. Journal of Polymers and the Environment, 2018, 26, 1869-1880. | 2.4 | 39 |
| 45 | Rheological study of the curing kinetics of epoxyâ€“phenol novolac resin. Journal of Applied Polymer Science, 2006, 102, 4430-4439. | 1.3 | 38 |
| 46 | Composite films based on shape memory polyurethanes and nanostructured polyaniline or celluloseâ€“polyaniline particles. Synthetic Metals, 2012, 162, 1654-1664. | 2.1 | 37 |
| 47 | Rheological and Mechanical Properties of Filled Rubber: Silica-Silicone. Rubber Chemistry and Technology, 1994, 67, 820-833. | 0.6 | 36 |
| 48 | Vegetable oil/styrene thermoset copolymers with shape memory behavior and damping capacity. Polymer International, 2012, 61, 735-742. | 1.6 | 34 |
| 49 | Bio-based waterborne polyurethanes reinforced with cellulose nanocrystals as coating films. Progress in Organic Coatings, 2020, 144, 105649. | 1.9 | 34 |
| 50 | Shape memory segmented polyurethanes: dependence of behavior on nanocellulose addition and testing conditions. Polymer International, 2012, 61, 321-327. | 1.6 | 32 |
| 51 | Cellulose nanocrystals in aqueous suspensions: rheology of lyotropic chiral liquid crystals. Cellulose, 2019, 26, 2317-2332. | 2.4 | 31 |
| 52 | Cellulose nanocrystals suspensions: Liquid crystal anisotropy, rheology and films iridescence. Carbohydrate Polymers, 2021, 261, 117848. | 5.1 | 31 |
| 53 | Epoxy-based divinyl ester resin/styrene copolymers: Composition dependence of the mechanical and thermal properties. Journal of Applied Polymer Science, 1997, 66, 1059-1066. | 1.3 | 30 |
| 54 | Influence of fiber volume fraction and aspect ratio in resol-sisal composites. Journal of Applied Polymer Science, 2003, 89, 2714-2722. | 1.3 | 30 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Effect of crosslinking on the properties of sodium caseinate films. Journal of Applied Polymer Science, 2010, 116, 18-26. | 1.3 | 30 |
| 56 | Linseed Oil-Based Polyurethane Rigid Foams: Synthesis and Characterization. Journal of Renewable Materials, 2015, 3, 3-13. | 1.1 | 30 |
| 57 | Thermal degradation of a phenolic resin, vegetable fibers, and derived composites. Journal of Applied Polymer Science, 2008, 107, 2977-2985. | 1.3 | 29 |
| 58 | Modulus of polybutadiene networks made by hydrosilation crosslinking. Macromolecules, 1988, 21, 2484-2491. | 2.2 | 26 |
| 59 | Plant Oil-Based Waterborne Polyurethanes: A Brief Review. Journal of Renewable Materials, 2020, 8, 579-601. | 1.1 | 26 |
| 60 | Statistics of novolacs. Industrial & Engineering Chemistry Product Research and Development, 1984, 23, 370-374. | 0.5 | 25 |
| 61 | Ageing of thermosets based on tung oil/styrene/divinylbenzene. Polymer Testing, 2013, 32, 249-255. | 2.3 | 25 |
| 62 | Waterborne polyurethane nanocomposites based on vegetable oil and microfibrillated cellulose. Journal of Applied Polymer Science, 2016, 133, . | 1.3 | 25 |
| 63 | Physical and mechanical properties of a vegetable oil based nanocomposite. European Polymer Journal, 2018, 98, 116-124. | 2.6 | 25 |
| 64 | Polyurethane-ductilized epoxy resins. Journal of Applied Polymer Science, 1998, 68, 1781-1789. | 1.3 | 24 |
| 65 | EPR spectroscopy applied to the study of the TEMPO mediated oxidation of nanocellulose. Carbohydrate Polymers, 2016, 136, 744-749. | 5.1 | 24 |
| 66 | Comparative effects of two different crosslinkers on the properties of vegetable oilâ€based polyurethanes. Journal of Applied Polymer Science, 2020, 137, 48741. | 1.3 | 23 |
| 67 | Curing kinetics of divinyl ester resins with styrene. Journal of Applied Polymer Science, 1999, 74, 1044-1053. | 1.3 | 22 |
| 68 | Effect of natural rubber on wood-reinforced tannin composites. Journal of Applied Polymer Science, 2007, 105, 1825-1832. | 1.3 | 21 |
| 69 | Composite films obtained from a waterborne biopolyurethane. Incorporation of tartaric acid and nanocellulose. Industrial Crops and Products, 2019, 142, 111879. | 2.5 | 21 |
| 70 | Some aspects of curing novolac with hexamethylenetetramine. Journal of Polymer Science: Polymer Chemistry Edition, 1982, 20, 311-318. | 0.8 | 20 |
| 71 | FTIR spectroscopy applied to woodflour. Composite Interfaces, 1996, 4, 119-132. | 1.3 | 19 |
| 72 | Rubber modified vinyl ester resins of different molecular weights. Journal of Materials Science, 2002, 37, 4117-4126. | 1.7 | 19 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Thermal and mechanical properties of woodflour/tannin adhesive composites. Journal of Applied Polymer Science, 2004, 91, 3074-3082. | 1.3 | 19 |
| 74 | Lignocellulosic materials and unsaturated polyester matrix composites: Interfacial modifications. Composite Interfaces, 2005, 12, 3-24. | 1.3 | 18 |
| 75 | Composites from PMMA modified thermosets and chemically treated woodflour. Polymer Engineering and Science, 2003, 43, 999-1010. | 1.5 | 17 |
| 76 | Poly(methyl methacrylate)â€modified vinyl ester thermosets: Morphology, volume shrinkage, and mechanical properties. Journal of Applied Polymer Science, 2007, 106, 4007-4017. | 1.3 | 16 |
| 77 | Resinâ€"Sisal and Wood Flour Composites Made from Unsaturated Polyester Thermosets. Composite Interfaces, 2009, 16, 639-657. | 1.3 | 16 |
| 78 | Epoxy-urethane copolymers: Relation between morphology and properties. Journal of Applied Polymer Science, 2001, 82, 2544-2552. | 1.3 | 15 |
| 79 | Morphology of rubber-modified vinyl ester resins cured at different temperatures. Journal of Applied Polymer Science, 2003, 89, 274-283. | 1.3 | 15 |
| 80 | Wood Flour â€" Recycled Polyol Based Polyurethane Lightweight Composites. Journal of Composite Materials, 2009, 43, 2871-2884. | 1.2 | 15 |
| 81 | Structural properties of vegetable oil thermosets: Effect of crosslinkers, modifiers and oxidative aging. European Polymer Journal, 2020, 124, 109470. | 2.6 | 15 |
| 82 | Thermodynamic, morphological, mechanical and fracture properties of poly(methyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382 Td (meth | 1.8 | 14 |
| 83 | Aging study of linseed oil resin/styrene thermosets and their composites with wood flour. Polymer International, 2007, 56, 875-881. | 1.6 | 14 |
| 84 | Study of nanoreinforced shape memory polymers processed by casting and extrusion. Polymer Composites, 2011, 32, 455-463. | 2.3 | 14 |
| 85 | Quasibinary and quasiternary styrene, dimethacrylate resin, and CTBN (or VTBN) liquid rubber systems: phase diagrams, interaction parameters and cured materials morphologies. Polymer, 2001, 42, 6503-6513. | 1.8 | 13 |
| 86 | Moisture dependence of the properties of composites made from tung oil based polyurethane and wood flour. Journal of Polymer Research, 2012, 19, 1. | 1.2 | 13 |
| 87 | Maleic anhydride grafting of polypropylene: peroxide and solvent effects. Plastics, Rubber and Composites, 2006, 35, 117-123. | 0.9 | 12 |
| 88 | Creep behavior of wood flour composites made from linseed oilâ€based polyester thermosets. Journal of Applied Polymer Science, 2011, 121, 2626-2633. | 1.3 | 12 |
| 89 | Magnetism and structure of nanocomposites made from magnetite and vegetable oil based polymeric matrices. Materials Chemistry and Physics, 2016, 175, 81-91. | 2.0 | 12 |
| 90 | Statistical aspects for the production of novolacs. Polymer, 1982, 23, 263-266. | 1.8 | 11 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Curing kinetics of epoxy-urethane copolymers. Journal of Applied Polymer Science, 2001, 79, 1771-1779. | 1.3 | 11 |
| 92 | AFM fracture surface study of vinylester and unsaturated polyester based thermosets. Journal of Materials Science, 2006, 41, 6154-6158. | 1.7 | 11 |
| 93 | Vegetable Oil Based-Polymers Reinforced with Wood Flour. Molecular Crystals and Liquid Crystals, 2008, 484, 143/[509]-150/[516]. | 0.4 | 11 |
| 94 | Chemical and mechanical characterization of two Southâ€American plant fibers for polymer reinforcement: Caranday Palm and Phormium. Journal of Applied Polymer Science, 2010, 115, 2236-2245. | 1.3 | 11 |
| 95 | Nanocellulose reinforced polyurethane obtained from hydroxylated soybean oil. IOP Conference Series: Materials Science and Engineering, 2016, 111, 012011. | 0.3 | 11 |
| 96 | Composites made from a soybean oil biopolyurethane and cellulose nanocrystals. Polymer Engineering and Science, 2018, 58, 125-132. | 1.5 | 11 |
| 97 | Reactivity ratios and copolymer composition evolution during styrene/dimethacrylate freeâ€radical crosslinking copolymerization. Journal of Applied Polymer Science, 2010, 115, 3081-3091. | 1.3 | 10 |
| 98 | Smart and structural thermosets from the cationic copolymerization of a vegetable oil. Journal of Applied Polymer Science, 2012, 124, 5071-5078. | 1.3 | 10 |
| 99 | Composites Made from Lignocellulosics and Thermoset Polymers. Molecular Crystals and Liquid Crystals, 2000, 353, 95-108. | 0.3 | 9 |
| 100 | PMMA-modified divinylester/styrene resins: Phase diagrams and morphologies. Journal of Applied Polymer Science, 2006, 100, 4539-4549. | 1.3 | 9 |
| 101 | Toughening of wood particle compositesâ€"Effects of sisal fibers. Journal of Applied Polymer Science, 2006, 101, 1982-1987. | 1.3 | 9 |
| 102 | Nanocelluloses Reinforced Bio-Waterborne Polyurethane. Polymers, 2021, 13, 2853. | 2.0 | 8 |
| 103 | Interfacial Interactions in Silica Reinforced Silicones. Materials Research Society Symposia Proceedings, 1989, 170, 303. | 0.1 | 7 |
| 104 | Magnetic Remote Activation of Shape Recovery in Nanocomposites Based on Tung Oil and Styrene. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800311. | 0.8 | 7 |
| 105 | Natural Composites: Polymeric Matrices Based on Vegetable Resources. Molecular Crystals and Liquid Crystals, 2006, 448, 145/[747]-159/[761]. | 0.4 | 6 |
| 106 | Free-radical polymerization induced macrophase separation in poly(methyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 147 Td (methacrylate) 3956-3965. | 2.6 | 6 |
| 107 | Polyurethane Composites Synthesized Using Natural Oil-Based Polyols and Sisal Fibers. Journal of Renewable Materials, 2018, 6, 426-437. | 1.1 | 6 |
| 108 | Moisture absorption effects on the thermal and mechanical properties of wood flour/linseed oil resin composites. Polymer International, 2007, 56, 779-786. | 1.6 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Synthesis and Characterization of Polyurethane Rigid Foams from Soybean Oil-Based Polyol and Glycerol. Journal of Renewable Materials, 2016, 4, 275-284. | 1.1 | 4 |
| 110 | Analysis of a styreneâ€“divinylester copolymerization: reaction heats, double bond conversions and average sequence lengths. Polymer, 2000, 41, 3317-3329. | 1.8 | 3 |
| 111 | Effect of the composition and chemical aging in tung oil-styrene networks: Free volume and dynamic-mechanical properties. European Polymer Journal, 2017, 87, 231-240. | 2.6 | 3 |
| 112 | Nanocomposites Based on Waterborne Polyurethane Matrix and Fe 3 O 4 Nanoparticles: Synthesis and Characterization. Advanced Engineering Materials, 2021, 23, 2100381. | 1.6 | 3 |
| 113 | Responsive Nanocellulose Composites. Materials and Energy, 2014, , 181-199. | 2.5 | 2 |
| 114 | Natural Fiber-Polypropylene Composites Made from Caranday Palm. Journal of Renewable Materials, 2016, 4, 101-112. | 1.1 | 2 |
| 115 | Curing of epoxy-urethane copolymers in a heated mold: Effect of the curing conditions on the phase-separation process. Journal of Applied Polymer Science, 2001, 81, 889-900. | 1.3 | 1 |
| 116 | Solid "Green" Polyurethanes Based on Rapeseed Oil Polyol and Modified with Glycerol and Microcellulose. Journal of Renewable Materials, 2016, 4, 266-274. | 1.1 | 1 |
| 117 | Selected Topics on Polypropylene/Wood Flour Composites: Thermal, Mechanical, and Time-Dependent Response. , 0, , 150-177. | | 0 |
| 118 | Nanocelluloses Reinforced Bio-Waterborne Polyurethane. Polymers, 2021, 13, . | 2.0 | 0 |