Pedro Partal

List of Publications by Year in descending order

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71061 114418 4,659 119 41 63 citations h-index g-index papers 119 119 119 2889 docs citations times ranked citing authors all docs

| # | Article | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Ageing Effects on a Softened Bitumen by the Addition of DSA (Dodecenyl Succinic Anhydride). Polymers, 2022, 14, 2437. | 2.0 | O |
| 2 | Emulsion Stabilization by Cationic Lignin Surfactants Derived from Bioethanol Production and Kraft Pulping Processes. Polymers, 2022, 14, 2879. | 2.0 | 1 |
| 3 | Oil-in-Oil emulsions of stearic acid dispersed in silicone oil with enhanced energy storage capability for heat transfer fluids. Solar Energy Materials and Solar Cells, 2022, 245, 111893. | 3.0 | 5 |
| 4 | Formulation and processing of novel non-aqueous polyethylene glycol-in-silicone oil (o/o) phase change emulsions. Solar Energy Materials and Solar Cells, 2021, 221, 110898. | 3.0 | 17 |
| 5 | Rheology of Polymer Processing in Spain (1995–2020). Polymers, 2021, 13, 2314. | 2.0 | 3 |
| 6 | Bioethanol Production and Alkali Pulp Processes as Sources of Anionic Lignin Surfactants. Polymers, 2021, 13, 2703. | 2.0 | 1 |
| 7 | Role of crystallinity on the thermal and viscous behaviour of polyethylene glycol-in-silicone oil (o/o) phase change emulsions. Journal of Industrial and Engineering Chemistry, 2021, 103, 348-357. | 2.9 | 4 |
| 8 | Synergistic ethylcellulose/polyphosphoric acid modification of bitumen for paving applications. Materials and Structures/Materiaux Et Constructions, 2020, 53, 1. | 1.3 | 8 |
| 9 | Short- and Long-Term Epoxy Modification of Bitumen: Modification Kinetics, Rheological Properties, and Microstructure. Polymers, 2020, 12, 508. | 2.0 | 13 |
| 10 | Bioplastics based on wheat gluten processed by extrusion. Journal of Cleaner Production, 2019, 239, 117994. | 4.6 | 78 |
| 11 | Reprint of: Education of chemical engineering in Spain: A global picture. Education for Chemical Engineers, 2019, 26, 2-7. | 2.8 | 2 |
| 12 | Use of plastic wastes from greenhouse in asphalt mixes manufactured by dry process. Road Materials and Pavement Design, 2019, 20, S265-S281. | 2.0 | 30 |
| 13 | Hybrid Rubberised Bitumen from Reactive and Non-Reactive Ethylene Copolymers. Polymers, 2019, 11, 1974. | 2.0 | 8 |
| 14 | Effect of pH and nanoclay content on the morphology and physicochemical properties of soy protein/montmorillonite nanocomposite obtained by extrusion. Composites Part B: Engineering, 2018, 140, 197-203. | 5.9 | 37 |
| 15 | Selection of ethylene-vinyl-acetate properties for modified bitumen with enhanced end-performance. Rheologica Acta, 2018, 57, 71-82. | 1.1 | 10 |
| 16 | Sustainable asphalt mixes manufactured with reclaimed asphalt and modified-lignin-stabilized bitumen emulsions. Construction and Building Materials, 2018, 173, 662-671. | 3.2 | 15 |
| 17 | Education of chemical engineering in Spain: A global picture. Education for Chemical Engineers, 2018, 24, 27-31. | 2.8 | 11 |
| 18 | Thermomechanical and microstructural evaluation of hybrid rubberised bitumen containing a thermoplastic polymer. Construction and Building Materials, 2017, 157, 873-884. | 3.2 | 20 |

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| 19 | Assessment of modified lignin cationic emulsifier for bitumen emulsions used in road paving. Materials and Design, 2017, 131, 242-251. | 3.3 | 50 |
| 20 | Improvement of mechanical and water absorption properties of plant protein based bioplastics. Food Hydrocolloids, 2017, 73, 21-29. | 5.6 | 40 |
| 21 | Binder Design for Asphalt Mixes with Reduced Temperature: EVA Modified Bitumen and its Emulsions. Transportation Research Procedia, 2016, 14, 3512-3518. | 0.8 | 12 |
| 22 | Formulation and processing of recycled-low-density-polyethylene-modified bitumen emulsions for reduced-temperature asphalt technologies. Chemical Engineering Science, 2016, 156, 197-205. | 1.9 | 36 |
| 23 | Linear and non-linear viscoelastic behavior of SBS and LDPE modified bituminous mastics. Construction and Building Materials, 2016, 123, 464-472. | 3.2 | 23 |
| 24 | Development of antimicrobial active packaging materials based on gluten proteins. Journal of the Science of Food and Agriculture, 2016, 96, 3432-3438. | 1.7 | 20 |
| 25 | Stability assessment of non-aqueous polymer dispersions through viscous flow and linear viscoelastic rheological tests. Polymer Testing, 2016, 50, 164-171. | 2.3 | 5 |
| 26 | Synergistic effect of combined nanoparticles to elaborate exfoliated egg-white protein-based nanobiocomposites. Composites Part B: Engineering, 2016, 88, 36-43. | 5.9 | 16 |
| 27 | Influence of polymer melting point and Melt Flow Index on the performance of ethylene-vinyl-acetate modified bitumen for reduced-temperature application. Materials and Design, 2016, 96, 180-188. | 3.3 | 49 |
| 28 | The development of polyurethane modified bitumen emulsions for cold mix applications. Materials and Structures/Materiaux Et Constructions, 2015, 48, 3407-3414. | 1.3 | 39 |
| 29 | Chemically modified bitumens with enhanced rheology and adhesion properties to siliceous aggregates. Construction and Building Materials, 2015, 93, 766-774. | 3.2 | 28 |
| 30 | Effect of transesterification degree and post-treatment on the in-service performance of NCO-functionalized vegetable oil bituminous products. Chemical Engineering Science, 2014, 111, 126-134. | 1.9 | 10 |
| 31 | Processing of bitumens modified by a bio-oil-derived polyurethane. Fuel, 2014, 118, 83-90. | 3.4 | 63 |
| 32 | Effect of aldehydes on thermomechanical properties of gluten-based bioplastics. Food and Bioproducts Processing, 2014, 92, 20-29. | 1.8 | 46 |
| 33 | Thermo-mechanical and hydrophilic properties of polysaccharide/gluten-based bioplastics. Carbohydrate Polymers, 2014, 112, 24-31. | 5.1 | 60 |
| 34 | Influence of the prepolymer molecular weight and free isocyanate content on the rheology of polyurethane modified bitumens. European Polymer Journal, 2014, 57, 151-159. | 2.6 | 36 |
| 35 | End-performance evaluation of thiourea-modified bituminous binders through viscous flow and linear viscoelasticy testing. Rheologica Acta, 2013, 52, 145-154. | 1.1 | 10 |
| 36 | Linear viscoelastic behaviour of oil-in-water food emulsions stabilised by tuna-protein isolates. Food Science and Technology International, 2013, 19, 3-10. | 1.1 | 3 |

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| 37 | Gluten-based bioplastics with modified controlled-release and hydrophilic properties. Industrial Crops and Products, 2013, 43, 704-710. | 2.5 | 36 |
| 38 | Thermal, rheological and microstructural characterisation ofÂcommercial biodegradable polyesters. Polymer Testing, 2013, 32, 716-723. | 2.3 | 60 |
| 39 | Development of protein-based bioplastics with antimicrobial activity by thermo-mechanical processing. Journal of Food Engineering, 2013, 117, 247-254. | 2.7 | 38 |
| 40 | Isocyanate-functionalized castor oil as a novel bitumen modifier. Chemical Engineering Science, 2013, 97, 320-327. | 1.9 | 41 |
| 41 | Droplet-size distribution and stability of commercial injectable lipid emulsions containing fish oil. American Journal of Health-System Pharmacy, 2012, 69, 1332-1335. | 0.5 | 5 |
| 42 | Manufacturing Terminal and Field Bitumen-Tyre Rubber Blends: The Importance of Processing Conditions. Procedia, Social and Behavioral Sciences, 2012, 53, 485-494. | 0.5 | 53 |
| 43 | Formulation of new synthetic binders: Thermomechanical properties of resin/recycled polymer blends. Polymer Engineering and Science, 2012, 52, 242-249. | 1.5 | 2 |
| 44 | Enhancing the viscoelastic properties of bituminous binders via thiourea-modification. Fuel, 2012, 97, 862-868. | 3 . 4 | 9 |
| 45 | Rheological behaviour of polymer-modified bituminous mastics: A comparative analysis between physical and chemical modification. Construction and Building Materials, 2012, 27, 234-240. | 3.2 | 21 |
| 46 | Influence of the Addition of a Polysaccharide to Protein-based Biodegradable Polymeric Materials Processed by a Thermomechanical Procedure. Special Publication - Royal Society of Chemistry, 2012, , 295-302. | 0.0 | 0 |
| 47 | Influence of Processing Temperature on the Modification Route and Rheological Properties of Thiourea Dioxide-Modified Bitumen. Energy & Samp; Fuels, 2011, 25, 4055-4062. | 2.5 | 10 |
| 48 | Linear and non-linear viscoelasticity of puddings for nutritional management of dysphagia. Food Hydrocolloids, 2011, 25, 586-593. | 5.6 | 49 |
| 49 | Modelling of pyrolysis and combustion of gluten–glycerol-based bioplastics. Bioresource Technology, 2011, 102, 6246-6253. | 4.8 | 13 |
| 50 | Wheat glutenâ€based materials plasticised with glycerol and water by thermoplastic mixing and thermomoulding. Journal of the Science of Food and Agriculture, 2011, 91, 625-633. | 1.7 | 59 |
| 51 | Effect of processing on the viscoelastic, tensile and optical properties of albumen/starch-based bioplastics. Carbohydrate Polymers, 2011, 84, 308-315. | 5.1 | 56 |
| 52 | Bitumen chemical modification by thiourea dioxide. Fuel, 2011, 90, 2294-2300. | 3.4 | 30 |
| 53 | Modification of bitumen using polyurethanes., 2011,, 43-71. | | 8 |
| 54 | Novel bitumen/isocyanate-based reactive polymer formulations for the paving industry. Rheologica Acta, 2010, 49, 563-572. | 1.1 | 33 |

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| 55 | Novel recycled polyethylene/ground tire rubber/bitumen blends for use in roofing applications: Thermo-mechanical properties. Polymer Testing, 2010, 29, 588-595. | 2.3 | 95 |
| 56 | Effect of processing on the rheological properties of poly-urethane/urea bituminous products. Fuel Processing Technology, 2010, 91, 1139-1145. | 3.7 | 62 |
| 57 | Development of highly-transparent protein/starch-based bioplastics. Bioresource Technology, 2010, 101, 2007-2013. | 4.8 | 107 |
| 58 | Emulsiones alimentarias aceite-en-agua estabilizadas con proteÃnas de atún. Grasas Y Aceites, 2010, 61, 352-360. | 0.3 | 7 |
| 59 | Bitumen Chemical Foaming for Asphalt Paving Applications. Industrial & Engineering Chemistry Research, 2010, 49, 8538-8543. | 1.8 | 26 |
| 60 | Droplet-size distribution and stability of lipid injectable emulsions. American Journal of Health-System Pharmacy, 2009, 66, 162-166. | 0.5 | 16 |
| 61 | Effect of processing temperature on the bitumen/MDI-PEG reactivity. Fuel Processing Technology, 2009, 90, 525-530. | 3.7 | 35 |
| 62 | Bitumen modification with reactive and non-reactive (virgin and recycled) polymers: A comparative analysis. Journal of Industrial and Engineering Chemistry, 2009, 15, 458-464. | 2.9 | 91 |
| 63 | Rheological behaviour and physical properties of controlled-release gluten-based bioplastics. Bioresource Technology, 2009, 100, 1828-1832. | 4.8 | 51 |
| 64 | Characterization of sepiolite-gel-based formulations for controlled release of pesticides. Applied Clay Science, 2009, 46, 289-295. | 2.6 | 27 |
| 65 | Influence of Bitumen Colloidal Nature on the Design of Isocyanate-Based Bituminous Products with Enhanced Rheological Properties. Industrial & Engineering Chemistry Research, 2009, 48, 8464-8470. | 1.8 | 45 |
| 66 | Gelation of egg yolk: DSC, rheology and electron microscopy. Special Publication - Royal Society of Chemistry, 2009, , 179-186. | 0.0 | 1 |
| 67 | Evaluation of thermal and mechanical properties of recycled polyethylene modified bitumen. Polymer Testing, 2008, 27, 1005-1012. | 2.3 | 110 |
| 68 | Use of a MDI-functionalized reactive polymer for the manufacture of modified bitumen with enhanced properties for roofing applications. European Polymer Journal, 2008, 44, 1451-1461. | 2.6 | 53 |
| 69 | Role of Water in the Development of New Isocyanate-Based Bituminous Products. Industrial & Samp; Engineering Chemistry Research, 2008, 47, 6933-6940. | 1.8 | 28 |
| 70 | The Effect of Water on the Modification of Bitumen with MDI-PEG Prepolymer. AIP Conference Proceedings, 2008, , . | 0.3 | 0 |
| 71 | New routes for roads: using recycled greenhouse films to modify bitumens. International Journal of Environmental Technology and Management, 2007, 7, 218. | 0.1 | 2 |
| 72 | Influence of processing conditions on the rheological behavior of crumb tire rubber-modified bitumen. Journal of Applied Polymer Science, 2007, 104, 1683-1691. | 1.3 | 61 |

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| 73 | Bitumen modification with a low-molecular-weight reactive isocyanate-terminated polymer. Fuel, 2007, 86, 2291-2299. | 3.4 | 7 5 |
| 74 | Formulation of new synthetic binders: Thermo-mechanical properties of recycled polymer/oil blends. Polymer Testing, 2007, 26, 323-332. | 2.3 | 24 |
| 75 | Egg white-based bioplastics developed by thermomechanical processing. Journal of Food Engineering, 2007, 82, 608-617. | 2.7 | 82 |
| 76 | Processing, rheology, and storage stability of recycled EVA/LDPE modified bitumen. Polymer Engineering and Science, 2007, 47, 181-191. | 1.5 | 53 |
| 77 | Rheology and microstructure of MDI–PEG reactive prepolymer-modified bitumen. Mechanics of Time-Dependent Materials, 2007, 10, 347-359. | 2.3 | 25 |
| 78 | Protein-based bioplastics: effect of thermo-mechanical processing. Rheologica Acta, 2007, 46, 711-720. | 1.1 | 130 |
| 79 | Influence of pH and ionic strength on the thermalinduced transitions of egg yolk dispersions. Grasas Y Aceites, 2007, 58, . | 0.3 | 0 |
| 80 | Effect of waste polymer addition on the rheology of modified bitumen. Fuel, 2006, 85, 936-943. | 3.4 | 171 |
| 81 | Influence of pressure and temperature on the flow behaviour of heavy fuel oils. Rheologica Acta, 2006, 45, 357-365. | 1.1 | 22 |
| 82 | Process rheokinetics and microstructure of recycled EVA/LDPE-modified bitumen. Rheologica Acta, 2006, 45, 513-524. | 1.1 | 12 |
| 83 | Effect of composition and processing on the linear viscoelasticity of synthetic binders. European Polymer Journal, 2005, 41, 1429-1438. | 2.6 | 29 |
| 84 | Experimental study of grease flow in pipelines: wall slip and air entrainment effects. Chemical Engineering and Processing: Process Intensification, 2005, 44, 805-817. | 1.8 | 39 |
| 85 | Rheology and processing of gluten based bioplastics. Biochemical Engineering Journal, 2005, 26, 131-138. | 1.8 | 95 |
| 86 | Viscous flow properties and phase behaviour of oil–resin blends. Fluid Phase Equilibria, 2005, 237, 117-122. | 1.4 | 7 |
| 87 | Rheological characterization of polysaccharide–surfactant matrices for cosmetic O/W emulsions. Journal of Colloid and Interface Science, 2005, 290, 546-556. | 5.0 | 93 |
| 88 | Influence of Crumb Rubber Concentration on the Rheological Behavior of a Crumb Rubber Modified Bitumen. Energy & Energy | 2.5 | 105 |
| 89 | Rheology and microstructure of heat-induced egg yolk gels. Rheologica Acta, 2004, 43, 184-195. | 1.1 | 87 |
| 90 | The rheology of recycled EVA/LDPE modified bitumen. Rheologica Acta, 2004, 43, 482-490. | 1.1 | 46 |

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| 91 | Effect of pH and added electrolyte on the thermal-induced transitions of egg yolk. Rheologica Acta, 2004, 43, 539-549. | 1.1 | 20 |
| 92 | Thermo-rheological behaviour and storage stability of ground tire rubber-modified bitumens. Fuel, 2004, 83, 2041-2049. | 3.4 | 278 |
| 93 | Viscous properties and microstructure of recycled eva modified bitumen. Fuel, 2004, 83, 31-38. | 3.4 | 186 |
| 94 | Rheology and stability of bitumen/EVA blends. European Polymer Journal, 2004, 40, 2365-2372. | 2.6 | 145 |
| 95 | Linear Viscoelasticity of Recycled EVA-Modified Bitumens. Energy & Energy & 2004, 18, 357-364. | 2.5 | 81 |
| 96 | Thermo-rheological behaviour and storage stability of ground tire rubber-modified bitumens. Fuel, 2004, 83, 2041-2041. | 3.4 | 14 |
| 97 | Influence of thermal treatment on the flow of starch-based food emulsions. European Food Research and Technology, 2003, 217, 17-22. | 1.6 | 10 |
| 98 | Rheological characterization of egg yolk processed by spray-drying and lipid-cholesterol extraction with carbon dioxide. JAOCS, Journal of the American Oil Chemists' Society, 2002, 79, 183-190. | 0.8 | 9 |
| 99 | Rheological characteristics of ground tire rubber-modified bitumens. Chemical Engineering Journal, 2002, 89, 53-61. | 6.6 | 114 |
| 100 | LINEAR AND NONLINEAR VISCOELASTIC BEHAVIOR OF OIL-IN-WATER EMULSIONS STABILIZED WITH POLYSACCHARIDES. Journal of Texture Studies, 2002, 33, 215-236. | 1.1 | 49 |
| 101 | Effect of Salt on the Rheological Properties of Low-in-Fat O/W Emulsions Stabilised with Polysaccharides. Food Science and Technology International, 2002, 8, 213-221. | 1.1 | 6 |
| 102 | Rheology and Microstructural Transitions in the Lamellar Phase of a Cationic Surfactant. Langmuir, 2001, 17, 1331-1337. | 1.6 | 48 |
| 103 | Influence of surfactant addition on the rheological properties of aqueous Welan matrices. Rheologica Acta, 2001, 40, 128-134. | 1.1 | 15 |
| 104 | Rheology and microstructure of asphalt binders. Rheologica Acta, 2001, 40, 135-141. | 1.1 | 32 |
| 105 | Effect of processing variables on the linear viscoelastic properties of SBS-oil blends. Polymer Engineering and Science, 2001, 41, 2216-2225. | 1.5 | 20 |
| 106 | Steady-state flow behaviour of synthetic binders. Fuel, 2001, 80, 357-365. | 3.4 | 15 |
| 107 | Influence of pH and protei thermal treatment on the rheology of pea protein-stabilized oil-in-water emulsions. JAOCS, Journal of the American Oil Chemists' Society, 2000, 77, 975-984. | 0.8 | 47 |
| 108 | Linear and non-linear viscoelasticity of low-in-cholesterol mayonnaise / Viscoelasticidad lineal y no lineal de mayonesas con bajo contenido en colesterol. Food Science and Technology International, 2000, 6, 165-172. | 1.1 | 10 |

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| 109 | Influence of Temperature and Composition on the Linear Viscoelastic Properties of Synthetic Binders. Energy & E | 2.5 | 22 |
| 110 | Rheology of spray-dried egg-yolk products. Grasas Y Aceites, 2000, 51, . | 0.3 | 6 |
| 111 | Transient flow of o/w sucrose palmitate emulsions. Journal of Food Engineering, 1999, 41, 33-41. | 2.7 | 39 |
| 112 | Rheological characterisation of synthetic binders and unmodified bitumens. Fuel, 1999, 78, 1-10. | 3.4 | 102 |
| 113 | Effect of the lupin protein/surfactant ratio on linear viscoelastic properties of oil-in-water emulsions. Journal of Surfactants and Detergents, 1999, 2, 545-551. | 1.0 | 15 |
| 114 | Linear viscoelastic properties of sucrose ester-stabilized oil-in-water emulsions. Journal of Rheology, 1998, 42, 1375-1388. | 1.3 | 51 |
| 115 | Influence of Processing on the Rheology of Egg Yolk Products. , 1998, , 191-192. | | 0 |
| 116 | Influence of concentration and temperature on the flow behavior of oil-in-water emulsions stabilized by sucrose palmitate. JAOCS, Journal of the American Oil Chemists' Society, 1997, 74, 1203-1212. | 0.8 | 45 |
| 117 | Comportamiento reológico no estacionario de emulsiones aceite en agua estabilizadas con un palmitato de sacarosa Grasas Y Aceites, 1997, 48, 425-436. | 0.3 | 3 |
| 118 | Linear viscoelasticity of O/W sucrose-palmitate emulsions. , 1996, , 246-251. | | 10 |
| 119 | FLOW BEHAVIOUR AND STABILITY OF OIL-IN-WATER EMULSIONS STABILIZED BY A SUCROSE PALMITATE. Journal of Texture Studies, 1994, 25, 331-348. | 1.1 | 23 |