MoisÃ©s GarcÃ-a-Morales

List of Publications by Year
in descending order

59 papers	2,140 citations	218677 26 h-index	233421 45 g-index
59 all docs	59 docs citations	59 times ranked	1418 citing authors

#	Article	IF	Citations
1	Viscous properties and microstructure of recycled eva modified bitumen. Fuel, 2004, 83, 31-38.	6.4	186
2	Effect of waste polymer addition on the rheology of modified bitumen. Fuel, 2006, 85, 936-943.	6.4	171
3	Rheology and stability of bitumen/EVA blends. European Polymer Journal, 2004, 40, 2365-2372.	5.4	145
4	Development of highly-transparent protein/starch-based bioplastics. Bioresource Technology, 2010, 101, 2007-2013.	9.6	107
5	Valorization of phosphogypsum waste as asphaltic bitumen modifier. Journal of Hazardous Materials, 2014, 279, 11-16.	12.4	95
6	Bitumen modification with reactive and non-reactive (virgin and recycled) polymers: A comparative analysis. Journal of Industrial and Engineering Chemistry, 2009, 15, 458-464.	5.8	91
7	Linear Viscoelasticity of Recycled EVA-Modified Bitumens. Energy & Fuels, 2004, 18, 357-364.	5.1	81
8	Bitumen modification with a low-molecular-weight reactive isocyanate-terminated polymer. Fuel, 2007, 86, 2291-2299.	6.4	75
9	Processing of bitumens modified by a bio-oil-derived polyurethane. Fuel, 2014, 118, 83-90.	6.4	63
10	Effect of processing on the rheological properties of poly-urethane/urea bituminous products. Fuel Processing Technology, 2010, 91, 1139-1145.	7.2	62
11	Thermal, rheological and microstructural characterisation ofÂcommercial biodegradable polyesters. Polymer Testing, 2013, 32, 716-723.	4.8	60
12	Effect of processing on the viscoelastic, tensile and optical properties of albumen/starch-based bioplastics. Carbohydrate Polymers, 2011, 84, 308-315.	10.2	56
13	Processing, rheology, and storage stability of recycled EVA/LDPE modified bitumen. Polymer Engineering and Science, 2007, 47, 181-191.	3.1	53
14	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.	5.4	53
15	The rheology of recycled EVA/LDPE modified bitumen. Rheologica Acta, 2004, 43, 482-490.	2.4	46
16	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.	3.7	45
17	Isocyanate-functionalized castor oil as a novel bitumen modifier. Chemical Engineering Science, 2013, 97, 320-327.	3.8	41
18	The development of polyurethane modified bitumen emulsions for cold mix applications. Materials and Structures/Materiaux Et Constructions, 2015, 48, 3407-3414.	3.1	39

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19	Development of protein-based bioplastics with antimicrobial activity by thermo-mechanical processing. Journal of Food Engineering, 2013, 117, 247-254.	5.2	38
20	Influence of the prepolymer molecular weight and free isocyanate content on the rheology of polyurethane modified bitumens. European Polymer Journal, 2014, 57, 151-159.	5.4	36
21	Formulation and processing of recycled-low-density-polyethylene-modified bitumen emulsions for reduced-temperature asphalt technologies. Chemical Engineering Science, 2016, 156, 197-205.	3.8	36
22	Effect of processing temperature on the bitumen/MDI-PEG reactivity. Fuel Processing Technology, 2009, 90, 525-530.	7.2	35
23	Novel bitumen/isocyanate-based reactive polymer formulations for the paving industry. Rheologica Acta, 2010, 49, 563-572.	2.4	33
24	Bitumen chemical modification by thiourea dioxide. Fuel, 2011, 90, 2294-2300.	6.4	30
25	On the phase affinity of multi-walled carbon nanotubes in PMMA:LDPE immiscible polymer blends. Polymer, 2017, 118, 1-11.	3.8	30
26	Role of Water in the Development of New Isocyanate-Based Bituminous Products. Industrial & Engineering Chemistry Research, 2008, 47, 6933-6940.	3.7	28
27	Bitumen Chemical Foaming for Asphalt Paving Applications. Industrial & Engineering Chemistry Research, 2010, 49, 8538-8543.	3.7	26
28	Influence of tragacanth gum in egg white based bioplastics: Thermomechanical and water uptake properties. Carbohydrate Polymers, 2016, 152, 62-69.	10.2	26
29	Bitumen modifiers for reduced temperature asphalts: A comparative analysis between three polymeric and non-polymeric additives. Construction and Building Materials, 2014, 51, 82-88.	7.2	23
30	Effect of plasticizer and storage conditions on thermomechanical properties of albumen/tragacanth based bioplastics. Food and Bioproducts Processing, 2015, 95, 264-271.	3.6	23
31	Linear and non-linear viscoelastic behavior of SBS and LDPE modified bituminous mastics. Construction and Building Materials, 2016, 123, 464-472.	7.2	23
32	Rheological behaviour of polymer-modified bituminous mastics: A comparative analysis between physical and chemical modification. Construction and Building Materials, 2012, 27, 234-240.	7.2	21
33	Dodecylbenzenesulfonic Acid as a Bitumen Modifier: A Novel Approach To Enhance Rheological Properties of Bitumen. Energy & Fuels, 2017, 31, 5003-5010.	5.1	19
34	Thermo-mechanical behaviour and structure of novel bitumen/nanoclay/MDI composites. Composites Part B: Engineering, 2015, 76, 192-200.	12.0	18
35	Comparative assessment of the effect of micro- and nano- fillers on the microstructure and linear viscoelasticity of polyethylene-bitumen mastics. Construction and Building Materials, 2018, 169, 83-92.	7.2	15
36	Thermo-mechanical properties and microstructural considerations ofÂMDI isocyanate-based bituminous foams. Materials Chemistry and Physics, 2014, 146, 261-268.	4.0	13

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37	Linear rheology of bituminous mastics modified with various polyolefins: a comparative study with their source binders. Materials and Structures/Materiaux Et Constructions, 2017, 50, 1.	3.1	13
38	Process rheokinetics and microstructure of recycled EVA/LDPE-modified bitumen. Rheologica Acta, 2006, 45, 513-524.	2.4	12
39	Effect of shear processing on the linear viscoelastic behaviour and microstructure of bitumen/montmorillonite/MDI ternary composites. Journal of Industrial and Engineering Chemistry, 2017, 48, 212-223.	5.8	12
40	The electrorheological performance of polyaniline-based hybrid particles suspensions in silicone oil: influence of the dispersing medium viscosity. Smart Materials and Structures, 2018, 27, 075001.	3.5	12
41	Effect of selective distribution of MWCNTs on the solid-state rheological and dielectric properties of blends of PMMA and LDPE. Journal of Materials Science, 2020, 55, 8526-8540.	3.7	12
42	Preliminary Insights into Electro-Sensitive Ecolubricants: A Comparative Analysis Based on Nanocelluloses and Nanosilicates in Castor Oil. Processes, 2020, 8, 1060.	2.8	11
43	A sustainable methanol-based solvent exchange method to produce nanocellulose-based ecofriendly lubricants. Journal of Cleaner Production, 2021, 319, 128673.	9.3	11
44	Influence of Processing Temperature on the Modification Route and Rheological Properties of Thiourea Dioxide-Modified Bitumen. Energy & Fuels, 2011, 25, 4055-4062.	5.1	10
45	End-performance evaluation of thiourea-modified bituminous binders through viscous flow and linear viscoelasticy testing. Rheologica Acta, 2013, 52, 145-154.	2.4	10
46	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.	3.8	10
47	Biorefinery of paulownia by autohydrolysis and sodaâ€anthraquinone delignification process. Characterization and application of lignin. Journal of Chemical Technology and Biotechnology, 2015, 90, 534-542.	3.2	10
48	Selection of ethylene-vinyl-acetate properties for modified bitumen with enhanced end-performance. Rheologica Acta, 2018, 57, 71-82.	2.4	10
49	Enhancing the viscoelastic properties of bituminous binders via thiourea-modification. Fuel, 2012, 97, 862-868.	6.4	9
50	Achieving a better understanding of binary azeotropic mixtures distillation through Aspen Plus process simulations. Computer Applications in Engineering Education, 2019, 27, 1453-1464.	3.4	8
51	On the Electro-Active Control of Nanocellulose-Based Functional Biolubricants. ACS Applied Materials & Interfaces, 2020, 12, 46490-46500.	8.0	8
52	Electro-active control of the viscous flow and tribological performance of ecolubricants based on phyllosilicate clay minerals and castor oil. Applied Clay Science, 2020, 198, 105830.	5.2	8
53	Using process simulators in Chemical Engineering education: Is it possible to minimize the â€œblack boxâ€• effect?. Computer Applications in Engineering Education, 2020, 28, 1369-1385.	3.4	7
54	Socrative, a powerful digital tool for enriching the teachingâ€“learning process and promoting interactive learning in Chemistry and Chemical Engineering studies. Computer Applications in Engineering Education, 0, , .	3.4	7

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55	Influence of the Nanoclay Concentration and Oil Viscosity on the Rheological and Tribological Properties of Nanoclay-Based Ecolubricants. Lubricants, 2021, 9, 8.	2.9	6
56	Rheological and Tribological Properties of Nanocellulose-Based Ecolubricants. Nanomaterials, 2021, 11, 2987.	4.1	5
57	Fatigue performance evaluation of bitumen mastics reinforced with polyolefins through a dissipated energy approach. Materiales De Construccion, 2020, 70, 217.	0.7	4
58	On the integration of Mathcad capabilities into a mass transfer operations course in Chemical Engineering studies. Computer Applications in Engineering Education, 2020, 28, 938-951.	3.4	2
59	Using Stochastic Approaches for Teaching Mass Transfer Unit Operations: The Monte Carlo Method. Journal of Chemical Education, 2020, 97, 3904-3909.	2.3	1