Maria L. Auad

List of Publications by Year
in descending order

81	2,372	218381	223531
papers	citations	26 h-index	46 g-index

83	83	83	2648
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Cellulose micro/nanocrystals reinforced polyurethane. Journal of Materials Research, 2006, 21, 870-881.	1.2	211
2	Synthesis and Characterization of a Single-Component Thermally Remendable Polymer Network: Staudinger and Stille Revisited. Macromolecules, 2008, 41, 5203-5209.	2.2	193
3	Characterization of nanocelluloseâ€•reinforced shape memory polyurethanes. Polymer International, 2008, 57, 651-659.	1.6	162
4	Biopolymers as a sustainable solution for the enhancement of soil mechanical properties. Scientific Reports, 2020, 10, 267.	1.6	126
5	Short-fiber-reinforced epoxy foams. Composites Part A: Applied Science and Manufacturing, 2006, 37, 1952-1960.	3.8	102
6	Flammability properties and mechanical performance of epoxy modified phenolic foams. Journal of Applied Polymer Science, 2007, 104, 1399-1407.	1.3	92
7	Preparation of alginateâ€“chitosan fibers with potential biomedical applications. Carbohydrate Polymers, 2015, 134, 598-608.	5.1	76
8	Liquid rubber modified vinyl ester resins: fracture and mechanical behavior. Polymer, 2001, 42, 3723-3730.	1.8	74
9	Nanocomposites made from cellulose nanocrystals and tailored segmented polyurethanes. Journal of Applied Polymer Science, 2010, 115, 1215-1225.	1.3	68
10	Basalt fiberâ€“epoxy laminates with functionalized multi-walled carbon nanotubes. Composites Part A: Applied Science and Manufacturing, 2009, 40, 1082-1089.	3.8	66
11	Improving the dispersion and flexural strength of multiwalled carbon nanotubesâ€“stiff epoxy composites through Î²-hydroxyester surface functionalization coupled with the anionic homopolymerization of the epoxy matrix. European Polymer Journal, 2006, 42, 2765-2772.	2.6	55
12	Polyanilineâ€•modified cellulose nanofibrils as reinforcement of a smart polyurethane. Polymer International, 2011, 60, 743-750.	1.6	52
13	Synthesis and characterization of organically modified attapulgite/polyurethane nanocomposites. Journal of Applied Polymer Science, 2008, 109, 2562-2570.	1.3	49
14	Synthesis and Characterization of Bio-oil-Based Self-Curing Epoxy Resin. Industrial & Engineering Chemistry Research, 2017, 56, 9389-9400.	1.8	45
15	Single-wall carbon nanotubes/epoxy elastomers exhibiting high damping capacity in an extended temperature range. Composites Science and Technology, 2009, 69, 1088-1092.	3.8	43
16	Effects of surface functionalization on the surface phage coverage and the subsequent performance of phage-immobilized magnetoelastic biosensors. Biosensors and Bioelectronics, 2011, 26, 2361-2367.	5.3	43
17	Mechanical Behavior of Hybrid Composite Phenolic Foam. Journal of Cellular Plastics, 2008, 44, 15-36.	1.2	39
18	Rheological study of the curing kinetics of epoxyâ€“phenol novolac resin. Journal of Applied Polymer Science, 2006, 102, 4430-4439.	1.3	38

#	Article	IF	Citations
19	Synthesis and characterization of high performance, transparent interpenetrating polymer networks with polyurethane and poly(methyl methacrylate). Polymer Engineering and Science, 2013, 53, 716-723.	1.5	35
20	The effect of residual lignin on the rheological properties of cellulose nanofibril suspensions. Journal of Wood Chemistry and Technology, 2020, 40, 370-381.	0.9	34
21	Tensile, fracture and impact behavior of transparent Interpenetrating Polymer Networks with polyurethane-poly(methyl methacrylate). Polymer Testing, 2013, 32, 889-900.	2.3	33
22	Seed-Mediated Growth of Gold Nanorods: Limits of Length to Diameter Ratio Control. Journal of Nanomaterials, 2014, 2014, 1-7.	1.5	33
23	Shape memory segmented polyurethanes: dependence of behavior on nanocellulose addition and testing conditions. Polymer International, 2012, 61, 321-327.	1.6	32
24	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
25	Moisture-induced changes in the mechanical behavior of 3D printed polymers. Composites Part C: Open Access, 2022, 7, 100243.	1.5	30
26	Liquefaction and substitution of switchgrass (Panicum virgatum) based bio-oil into epoxy resins. Industrial Crops and Products, 2014, 57, 116-123.	2.5	28
27	Modeling the compressive properties of glass fiber reinforced epoxy foam using the analysis of variance approach. Composites Science and Technology, 2006, 66, 2126-2134.	3.8	26
28	Renewable thermoset copolymers from tung oil and natural terpenes. Journal of Applied Polymer Science, 2014, 131, .	1.3	25
29	Curing kinetics of divinyl ester resins with styrene. Journal of Applied Polymer Science, 1999, 74, 1044-1053.	1.3	22
30	Photocurrent Generation from Porphyrin/Fullerene Complexes Assembled in a Tethered Lipid Bilayer. Langmuir, 2010, 26, 15671-15679.	1.6	22
31	Synthesis and characterization of epoxy resins from fast pyrolysis bio-oil. Green Materials, 2018, 6, 76-84.	1.1	21
32	Shear-Induced Alignment of Smectic Side Group Liquid Crystalline Polymers. Macromolecules, 2007, 40, 6624-6630.	2.2	20
33	Functionalization of carbon nanotubes and carbon nanofibers used in epoxy/amine matrices that avoid partitioning of the monomers at the fiber interface. Polymer Engineering and Science, 2010, 50, 183-190.	1.5	19
34	The effect of ethanol on hydroxyl and carbonyl groups in biopolyol produced by hydrothermal liquefaction of loblolly pine: 31P-NMR and 19F-NMR analysis. Bioresource Technology, 2016, 214, 37-44.	4.8	19
35	Preparation and Characterization of Epoxy Resin Cross-Linked with High Wood Pyrolysis Bio-Oil Substitution by Acetone Pretreatment. Polymers, 2017, 9, 106.	2.0	19
36	Pyrolysis oil substituted epoxy resin: Improved ratio optimization and crosslinking efficiency. Journal of Applied Polymer Science, 2015, 132, .	1.3	17

#	Article	IF	Citations
37	Preparation of slow release encapsulated insecticide and fertilizer based on superabsorbent polysaccharide microbeads. Journal of Applied Polymer Science, 2020, 137, 49177.	1.3	17
38	Model Lignin Oligomer Pyrolysis: Coupled Conformational and Thermodynamic Analysis of Î²-O-4â€² Bond Cleavage. Energy & Fuels, 2020, 34, 9709-9724.	2.5	16
39	Morphology of rubber-modified vinyl ester resins cured at different temperatures. Journal of Applied Polymer Science, 2003, 89, 274-283.	1.3	15
40	Molecular orientation of a commercial thermotropic liquid crystalline polymer in simple shear and complex flow. Rheologica Acta, 2005, 44, 446-456.	1.1	15
41	Effect of Mesophase Order on the Dynamics of Side Group Liquid Crystalline Polymers. Macromolecules, 2005, 38, 6946-6953.	2.2	15
42	Development of antimicrobialâ€loaded polyurethane films for drugâ€eluting catheters. Journal of Applied Polymer Science, 2018, 135, 46467.	1.3	15
43	Synthesis of Biobased Novolac Phenolâ€“Formaldehyde Wood Adhesives from Biorefinery-Derived Lignocellulosic Biomass. ACS Sustainable Chemistry and Engineering, 2021, 9, 10990-11002.	3.2	15
44	Thermodynamic, morphological, mechanical and fracture properties of poly(methyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 Td (metha	1.8	14
45	Study of nanoreinforced shape memory polymers processed by casting and extrusion. Polymer Composites, 2011, 32, 455-463.	2.3	14
46	Mechanical performance of vinyl esterâ€”polyurethane interpenetrating polymer network composites. Journal of Applied Polymer Science, 2021, 138, 50411.	1.3	14
47	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
48	Fast pyrolysis bioâ€oil as precursor of thermosetting epoxy resins. Polymer Engineering and Science, 2018, 58, 1296-1307.	1.5	13
49	Mechanical characterization and modeling stress relaxation behavior of acrylicâ€“polyurethaneâ€based ‹scp›graftâ€interpenetrating‹/scp› polymer networks. Polymer Engineering and Science, 2021, 61, 1299-1309.	1.5	13
50	Graft Semi-Interpenetrating Polymer Network Phase Change Materials for Thermal Energy Storage. ACS Applied Polymer Materials, 2021, 3, 1785-1794.	2.0	13
51	Flexible acrylic-polyurethane based graft-interpenetrating polymer networks for high impact structural applications. European Polymer Journal, 2021, 148, 110338.	2.6	13
52	Quasi-static and dynamic mechanical behavior of transparent graft-interpenetrating polymer networks (graft-IPNs). Polymer Testing, 2018, 70, 348-362.	2.3	12
53	Synthesis and characterization of chemically crosslinked gelatin and chitosan to produce hydrogels for biomedical applications. Polymers for Advanced Technologies, 2021, 32, 2229-2239.	1.6	12
54	Material Design for Enhancing Properties of 3D Printed Polymer Composites for Target Applications. Technologies, 2022, 10, 45.	3.0	11

#	Article	IF	Citations
55	Cross-Linked Acrylic Polymers from the Aqueous Phase of Biomass Pyrolysis Oil and Acrylated Epoxidized Soybean Oil. ACS Sustainable Chemistry and Engineering, 2019, 7, 2216-2224.	3.2	10
56	Effect of SWCNT dispersion on epoxy nanocomposite properties. Polymer Composites, 2012, 33, 582-588.	2.3	9
57	Sustainable products from bio-oils. MRS Bulletin, 2017, 42, 365-370.	1.7	9
58	Synthesis and characterization of photopolymerizable hydrogels based on poly (ethylene glycol) for biomedical applications. Journal of Applied Polymer Science, 2021, 138, 50489.	1.3	9
59	Fabrication and Characterization of Cross-Linked Phenyl-Acrylate-Based Ion Exchange Membranes and Performance in a Direct Urea Fuel Cell. Industrial & Engineering Chemistry Research, 2021, 60, 14856-14867.	1.8	8
60	Barrier properties for short-fiber-reinforced epoxy foams. Journal of Applied Polymer Science, 2006, 102, 3266-3272.	1.3	7
61	Synthesis and Characterization of High Performance Interpenetrating Polymer Networks With Polyurethane and Poly(methyl methacrylate). , 2019, , 243-255.		7
62	Detecting insect infestation using a polymer based sensor array. Sensors and Actuators B: Chemical, 2012, 174, 506-512.	4.0	6
63	Fast pyrolysis bio-oil from lignocellulosic biomass for the development of bio-based cyanate esters and cross-linked networks. High Performance Polymers, 2019, 31, 1140-1152.	0.8	6
64	Highâ€fractureâ€toughness acrylicâ€“polyurethaneâ€based graftâ€interpenetrating polymer networks for transparent applications. Polymer International, 2021, 70, 636-647.	1.6	6
65	Isolating key reaction energetics and thermodynamic properties during hardwood model lignin pyrolysis. Physical Chemistry Chemical Physics, 2021, 23, 20919-20935.	1.3	6
66	Synthesis and Characterization of Interpenetrating Polymer Networks (IPNs) from Acrylated Soybean Oil Î±-Resorcylic Acid: Part 2. Thermo-Mechanical Properties and Linear Fracture Mechanics. Journal of Renewable Materials, 2017, 5, 241-250.	1.1	6
67	Simple functionalization of cellulose beads with pre-propargylated chitosan for clickable scaffold substrates. Cellulose, 2021, 28, 6073.	2.4	5
68	Fast Pyrolysis Bio-Oil-Based Epoxy as an Adhesive in Oriented Strand Board Production. Polymers, 2022, 14, 1244.	2.0	5
69	Synthesis and Characterization of Interpenetrating Polymer Networks (IPNs) from Acrylated Soybean Oil and Î±-Resorcylic Acid: Part 1. Kinetics of Network Formation. Journal of Renewable Materials, 2017, 5, 231-240.	1.1	4
70	Efficacy of Gold Photothermal-Activated Shape Memory Polyurethane. Journal of Nanomaterials, 2020, 2020, 1-8.	1.5	4
71	Analysis of a styreneâ€“divinylester copolymerization: reaction heats, double bond conversions and average sequence lengths. Polymer, 2000, 41, 3317-3329.	1.8	3
72	Effect of Active Layer Morphology on Poly3-Hexylthiophene Phytochemical Chemiresistor Sensor Performance. IEEE Sensors Journal, 2012, 12, 3062-3068.	2.4	3

#	Article	IF	Citations
73	Effects of Surface Phage Coverage on the Performance of Wireless Phage-Immobilized Magnetoelastic Biosensors. ECS Transactions, 2010, 33, 41-48.	0.3	2
74	Responsive Nanocellulose Composites. Materials and Energy, 2014, , 181-199.	2.5	2
75	PIT MEMBRANES OF EPHEDRA RESEMBLE GYMNOSPERMS MORE THAN ANGIOSPERMS. IAWA Journal, 2014, 35, 217-235.	2.7	2
76	Pit membranes and their evolution in the Oleinae of the Oleaceae. IAWA Journal, 2017, 38, 201-219.	2.7	2
77	20 kHz unipolar pulsed field surface flashover characteristics of polymer nanocomposites in subatmospheric pressure helium. , 2014, , .		1
78	Synthesis and Characterization of Chanar Gum Films. Colloids and Interfaces, 2022, 6, 10.	0.9	1
79	Temperature, conversion, and phase separation profiles during mold cure of a modified vinylâ€ester resin. Polymer Engineering and Science, 2008, 48, 52-61.	1.5	0
80	Comparative Study of the Effects of Cellulose Nanowhiskers and Microcrystalline Cellulose Addition as Reinforcement in Flexible Films Based on Biopolymer Blends. , 2016, , 409-416.		0
81	Formulation of the Polymeric Double Networks (DNs) for Biomedical Applications with Physicochemical Properties to Resemble a Biological Tissue. Sustainable Chemistry, 2022, 3, 248-258.	2.2	0