Giuseppe Palmese

List of Publications by Year
in descending order

135 papers	5,887 citations	70961 41 h-index	79541 73 g-index
139 all docs	139 docs citations	139 times ranked	5494 citing authors

#	Article	IF	Citations
1	Dynamic fracture of glass fiber-reinforced ductile polymer matrix composites and loading rate effect. Composites Part B: Engineering, 2022, 235, 109754.	5.9	7
2	The effect of network topology on material properties in vinyl-ester/styrene thermoset polymers using molecular dynamics simulations and timeâ€“temperature superposition. Computational Materials Science, 2022, 207, 111264.	1.4	1
3	A method for characterization of multiple dynamic constitutive parameters of FRCs. Composites Science and Technology, 2021, 203, 108607.	3.8	4
4	Ductile high-T_g epoxy systems via incorporation of partially reacted substructures. Journal of Materials Chemistry A, 2021, 9, 1014-1024.	5.2	7
5	Highly ductile glassy epoxy systems obtained by network topology modification using partially reacted substructures. Polymer, 2021, 212, 123260.	1.8	5
6	Epoxidized soybean oil modified using fatty acids as tougheners for thermosetting epoxy resins: Part 1. Journal of Applied Polymer Science, 2021, 138, 50570.	1.3	8
7	Real-time damage characterization for GFRCs using high-speed synchrotron X-ray phase contrast imaging. Composites Part B: Engineering, 2021, 207, 108565.	5.9	14
8	Epoxidized soybean oil modified using fatty acids as tougheners for thermosetting epoxy resins: Part 2â€”Effect of curing agent and epoxy molecular weight. Journal of Applied Polymer Science, 2021, 138, 50579.	1.3	6
9	Resin, cure, and polymer properties of photopolymerizable resins containing <scp>bioâ€derived</scp> isosorbide. Journal of Applied Polymer Science, 2021, 138, app50574.	1.3	16
10	The effect of resin-rich layers on mechanical properties of 3D printed woven fiber-reinforced composites. Composites Part A: Applied Science and Manufacturing, 2021, 144, 106339.	3.8	19
11	Transverse impact by RCCs on S-glass and KevlarÂ® FRC strips. Composites Part A: Applied Science and Manufacturing, 2021, 146, 106425.	3.8	5
12	Electrospun rubber/thermoplastic hybrid nanofibers for localized toughening effects in epoxy resins. Journal of Applied Polymer Science, 2020, 137, 48501.	1.3	6
13	Epoxidation of Cardanolâ€™s Terminal Double Bond. Polymers, 2020, 12, 2104.	2.0	10
14	Waste to high performance materials: Self-assembly of short carbon fiber polymer composites. Applied Materials Today, 2020, 20, 100786.	2.3	2
15	Synthesis and Characterization of Low-Viscosity Bio-Based Styrene Alternatives for Bisphenol A Vinyl Ester Thermosetting Resins. ACS Sustainable Chemistry and Engineering, 2020, 8, 17234-17244.	3.2	14
16	Influence of Epoxidized Cardanol Functionality and Reactivity on Network Formation and Properties. Polymers, 2020, 12, 1956.	2.0	17
17	Formulation of a Model Resin System for Benchmarking Processing-Property Relationships in High-Performance Photo 3D Printing Applications. Materials, 2020, 13, 4109.	1.3	21
18	Direct measure of crystalline domain size, distribution, and orientation in polyethylene fibers. Polymer, 2020, 202, 122589.	1.8	7

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19	Synthesis and Swelling Behavior of Highly Porous Epoxy Polymers. ACS Omega, 2020, 5, 31011-31018.	1.6	5
20	Effect of Microcapsule Content on Diels-Alder Room Temperature Self-Healing Thermosets. Polymers, 2020, 12, 3064.	2.0	3
21	Water Transport and Thermomechanical Properties of Ti₃C₂T_z MXene Epoxy Nanocomposites. ACS Applied Materials & Interfaces, 2019, 11, 39143-39149.	4.0	40
22	High Throughput Carbon Fiber Surface Modification. , 2019, , .		0
23	Controlled Topology Toughening Epoxy Via Incorporation of Partially Reacted Substructures. , 2019, , .		0
24	Multiscale Approaches to Formation of Thermoplastic Prepreg Short Carbon Fiber. , 2019, , .		0
25	Toughening Anhydride-Cured Epoxy Resins Using Fatty Alkyl-Anhydride-Grafted Epoxidized Soybean Oil. ACS Omega, 2018, 3, 2641-2651.	1.6	15
26	Hydrolytic degradation kinetics of bisphenol E cyanate ester resin and composite. Polymer Degradation and Stability, 2018, 151, 1-11.	2.7	4
27	The effect of alkyl chain length on mechanical properties of fatty-acid-functionalized amidoamine-epoxy systems. Computational Materials Science, 2018, 150, 70-76.	1.4	10
28	Recent advances in plant-based vinyl ester resins and reactive diluents. European Polymer Journal, 2018, 98, 199-215.	2.6	53
29	The evolution of crystalline structures during gel spinning of ultra-high molecular weight polyethylene fibers. Soft Matter, 2018, 14, 8974-8985.	1.2	8
30	The effect of alkyl chain length on material properties of fatty-acid-functionalized amidoamine-epoxy systems. European Polymer Journal, 2017, 89, 1-12.	2.6	14
31	Preparation and Characterization of Highly Bioâ€Based Epoxy Amine Thermosets Derived from Lignocellulosics. Macromolecular Chemistry and Physics, 2017, 218, 1700013.	1.1	43
32	Thin film initiation of cracks for fracture toughness measurements in epoxy resins. Journal of Applied Polymer Science, 2017, 134, .	1.3	2
33	Synthesis and characterization of fatty acid modified amines with improved water barrier properties. European Polymer Journal, 2017, 97, 112-119.	2.6	1
34	Non-additive impacts of covalent cross-linking on the viscoelastic nanomechanics of ionic polyelectrolyte complexes. RSC Advances, 2017, 7, 53334-53345.	1.7	6
35	The effect of pendant alkyl chain length on the barrier properties of epoxy/amine crosslinked networks. Polymer, 2017, 132, 133-142.	1.8	15
36	Experimental Data Extraction and in Silico Prediction of the Estrogenic Activity of Renewable Replacements for Bisphenol A. International Journal of Environmental Research and Public Health, 2016, 13, 705.	1.2	73

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37	Acceleration of cyanate ester trimerization by dicyanamide RTILs. Polymer, 2016, 91, 7-13.	1.8	22
38	Recent advances in bioâ€based epoxy resins and bioâ€based epoxy curing agents. Journal of Applied Polymer Science, 2016, 133, .	1.3	287
39	Dynamic viscosity of maleate poly(vinyl alcohol) and its copolymer measured by rheometer. Polymer Testing, 2016, 56, 387-393.	2.3	6
40	Toughness enhancement of thermosetting polymers using a novel partially reacted substructure curing protocol: A combined molecular simulation and experimental study. Polymer, 2016, 90, 249-255.	1.8	9
41	Preparation and Characterization of Fully Furanâ€Based Renewable Thermosetting Epoxyâ€Amine Systems. Macromolecular Chemistry and Physics, 2015, 216, 1441-1446.	1.1	66
42	Unsaturated polyester resins for thermoset applications using renewable isosorbide as a component for property improvement. Journal of Applied Polymer Science, 2015, 132, .	1.3	30
43	DMA testing of epoxy resins: The importance of dimensions. Polymer Engineering and Science, 2015, 55, 2761-2774.	1.5	67
44	Influence of Furanyl Building Blocks on the Cure Kinetics of a Renewable Epoxy-Amine System. ACS Symposium Series, 2015, , 387-399.	0.5	3
45	Direct Preparation of Few Layer Graphene Epoxy Nanocomposites from Untreated Flake Graphite. ACS Applied Materials & Interfaces, 2015, 7, 14870-14877.	4.0	25
46	Processing-structureâ€“property relationships of SWNTâ€“epoxy composites prepared using ionic liquids. Composites Part A: Applied Science and Manufacturing, 2015, 73, 269-276.	3.8	19
47	Epoxy Polymer Networks with Improved Thermal and Mechanical Properties via Controlled Dispersion of Reactive Toughening Agents. Macromolecules, 2015, 48, 7495-7502.	2.2	50
48	Preparation and characterization of novel vinyl ester formulations derived from cardanol. European Polymer Journal, 2015, 72, 129-147.	2.6	33
49	Epoxyâ€amine networks with varying epoxy polydispersity. Journal of Applied Polymer Science, 2015, 132, .	1.3	6
50	Ultralow percolation threshold of single walled carbon nanotube-epoxy composites synthesized via an ionic liquid dispersant/initiator. Materials Research Express, 2014, 1, 035013.	0.8	11
51	Isosorbide as the structural component of bio-based unsaturated polyesters for use as thermosetting resins. Carbohydrate Polymers, 2014, 100, 97-106.	5.1	60
52	Hydrolytic degradation of highly crosslinked polyaromatic cyanate ester resins. Polymer Degradation and Stability, 2014, 104, 104-111.	2.7	21
53	Synthesis and Characterization of Thermosetting Furan-Based Epoxy Systems. Macromolecules, 2014, 47, 3332-3342.	2.2	165
54	Toughened epoxy polymers via rearrangement of network topology. Journal of Materials Chemistry A, 2014, 2, 16071-16082.	5.2	52

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55	Interfacial optimization of fiber-reinforced hydrogel composites for soft fibrous tissue applications. Acta Biomaterialia, 2014, 10, 3581-3589.	4.1	41
56	Crosslink network rearrangement via reactive encapsulation of solvent in epoxy curing: A combined molecular simulation and experimental study. Polymer, 2014, 55, 3859-3868.	1.8	26
57	Room temperature ionic liquids for epoxy nanocomposite synthesis: Direct dispersion and cure. Composites Science and Technology, 2013, 86, 38-44.	3.8	42
58	Reaction Kinetics and Thermodynamic Aspects of Thermoreversibly Crossâ€Linked Polymer Networks. Macromolecular Chemistry and Physics, 2013, 214, 1798-1805.	1.1	10
59	Room Temperature Self-Healing Thermoset Based on the Dielsâ€“Alder Reaction. ACS Applied Materials & Interfaces, 2013, 5, 12425-12431.	4.0	133
60	Isosorbide-methacrylate as a bio-based low viscosity resin for high performance thermosetting applications. Journal of Materials Chemistry A, 2013, 1, 12579.	5.2	89
61	The role of crystallization and phase separation in the formation of physically cross-linked PVA hydrogels. Soft Matter, 2013, 9, 826-833.	1.2	233
62	Aging behavior of PVA hydrogels for soft tissue applications after in vitro swelling using osmotic pressure solutions. Acta Biomaterialia, 2013, 9, 5013-5021.	4.1	29
63	Kinetic Considerations for Strength Recovery at the Fiberâ€“Matrix Interface Based on the Dielsâ€“Alder Reaction. ACS Applied Materials & Interfaces, 2013, 5, 815-821.	4.0	25
64	The role of maleimide structure in the healing of furan-functionalized epoxyâ€“amine thermosets. Polymer Chemistry, 2013, 4, 5000.	1.9	41
65	Chemical grafting for improved interfacial shear strength in UHMWPE/PVA-hydrogel fiber-based composites used as soft fibrous tissue replacements. Composites Science and Technology, 2013, 85, 118-125.	3.8	64
66	Characterization of epoxies cured with bimodal blends of polyetheramines. Journal of Applied Polymer Science, 2013, 130, 1621-1631.	1.3	28
67	Electron beam and UV cationic polymerization of glycidyl ethers PART II: Reaction of diglycidyl ether of bisphenol A. Journal of Applied Polymer Science, 2013, 130, 487-495.	1.3	4
68	Electron beam and UV cationic polymerization of glycidyl ethers â€“ PART I: Reaction of monofunctional phenyl glycidyl ether. Journal of Applied Polymer Science, 2013, 130, 479-486.	1.3	4
69	Synthesis and water sorption of standard and end-capped polylactides: the effect of morphology. Polymer Chemistry, 2012, 3, 718.	1.9	10
70	Maximizing Young's modulus of aminated nanodiamond-epoxy composites measured in compression. Polymer, 2012, 53, 5965-5971.	1.8	54
71	Synthesis and Characterization of Ionic Polymer Networks in a Room-Temperature Ionic Liquid. ACS Applied Materials & Interfaces, 2012, 4, 6142-6150.	4.0	25
72	Investigation of interpenetrating polymer networks for self-healing applications. Composites Science and Technology, 2012, 72, 330-336.	3.8	49

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73	Moisture management of polylactides: The effect of heat treatment. Polymer, 2012, 53, 1115-1123.	1.8	11
74	Diffusion and Reaction Phenomena in Solutionâ€Based Healing of Polymer Coatings Using the Dielsâ€“Alder Reaction. Macromolecular Chemistry and Physics, 2012, 213, 173-181.	1.1	34
75	Synthesis and Characterization of a Novel Bio-Based Reactive Diluent as a Styrene Replacement. Journal of Biobased Materials and Bioenergy, 2012, 6, 86-93.	0.1	23
76	Covalent Incorporation of Aminated Nanodiamond into an Epoxy Polymer Network. ACS Nano, 2011, 5, 7494-7502.	7.3	262
77	Thermoreversible and remendable glassâ€“polymer interface for fiber-reinforced composites. Composites Science and Technology, 2011, 71, 586-592.	3.8	91
78	Synthesis of polylactide with varying molecular weight and aliphatic content: Effect on moisture sorption. Journal of Applied Polymer Science, 2011, 120, 2543-2549.	1.3	7
79	Mechanical properties of epoxy composites with high contents of nanodiamond. Composites Science and Technology, 2011, 71, 710-716.	3.8	174
80	Analysis of the in vitro swelling behavior of poly(vinyl alcohol) hydrogels in osmotic pressure solution for soft tissue replacement. Acta Biomaterialia, 2011, 7, 2477-2482.	4.1	67
81	Toughening vinyl ester networks with polypropylene meso-fibers: Interface modification and composite properties. Polymer, 2011, 52, 510-518.	1.8	11
82	Mechanical evaluation of poly(vinyl alcohol)-based fibrous composites as biomaterials for meniscal tissue replacement. Acta Biomaterialia, 2010, 6, 4716-4724.	4.1	103
83	Kinetic and thermomechanical analysis of hydrophobicâ€“hydrophilic copolymer thermosets synthesized via freeâ€radical polymerization. Journal of Applied Polymer Science, 2010, 115, 1419-1427.	1.3	2
84	Nanoporous and proton conductive hydrophobicâ€“hydrophilic copolymer thermoset membranes. Journal of Polymer Science, Part B: Polymer Physics, 2010, 48, 1245-1255.	2.4	5
85	Room-Temperature Healing of a Thermosetting Polymer Using the Dielsâ^'Alder Reaction. ACS Applied Materials & Interfaces, 2010, 2, 1141-1149.	4.0	177
86	Crackâ€healing behavior of epoxyâ€“amine thermosets. Journal of Applied Polymer Science, 2009, 113, 2191-2201.	1.3	53
87	Emission modeling of styrene from vinyl ester resins with low hazardous air pollutant contents. Clean Technologies and Environmental Policy, 2009, 11, 283-292.	2.1	4
88	Polymer-Polymer Nanocomposite Membranes as Breathable Barriers with Electro-Sensitive Permeability. ACS Symposium Series, 2009, , 307-322.	0.5	4
89	Room Temperature Ionic Liquids as Thermally Latent Initiators for Polymerization of Epoxy Resins. Macromolecules, 2009, 42, 3219-3221.	2.2	121
90	Reversibly Cross-Linked Polymer Gels as Healing Agents for Epoxyâ^'Amine Thermosets. ACS Applied Materials & Interfaces, 2009, 1, 992-995.	4.0	99

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91	Composites based on bimodal vinyl ester resins with low hazardous air pollutant contents. Composites Science and Technology, 2008, 68, 1869-1876.	3.8	19
92	Molecular relaxation behavior of fatty acidâ€based vinyl ester resins. Journal of Applied Polymer Science, 2008, 108, 3495-3506.	1.3	2
93	Functionalization of Polymers using N₂ Pulsed Dielectric Barrier Dicharge. , 2007, , .		0
94	Plasma-aided template synthesis of inorganic nanotubes and nanorods. Journal of Materials Chemistry, 2007, 17, 1593.	6.7	17
95	Electrosensitive Permeability of Membranes with Oriented Polyelectrolyte Nanodomains. Macromolecules, 2007, 40, 781-782.	2.2	43
96	The synthesis of 9-10 Dibromo stearic acid glycidyl methacrylate and its use in vinyl ester resins. Journal of Applied Polymer Science, 2007, 106, 3833-3842.	1.3	20
97	Plasma assisted synthesis of hollow nanofibers using electrospun sacrificial templates. Nuclear Instruments & Methods in Physics Research B, 2007, 265, 23-30.	0.6	8
98	Electron beam modification and functionalization of MWNT for covalent dispersion into polymeric systems. Nuclear Instruments & Methods in Physics Research B, 2007, 265, 352-355.	0.6	11
99	Emission modeling of styrene from vinyl ester resins. Clean Technologies and Environmental Policy, 2007, 9, 265-279.	2.1	14
100	Membranes with Oriented Polyelectrolyte Nanodomains. Chemistry of Materials, 2006, 18, 4875-4881.	3.2	54
101	Solid particle erosion resistance of thermally sprayed functionally graded coatings for polymer matrix composites. Surface and Coatings Technology, 2006, 200, 5145-5151.	2.2	72
102	Viscoelastic properties of alkoxy silane-epoxy interpenetrating networks. International Journal of Adhesion and Adhesives, 2006, 26, 103-115.	1.4	43
103	Cure behavior of DGEBA vinyl esterâ€“styrene resins near silane-treated interfaces. Journal of Applied Polymer Science, 2006, 101, 2784-2792.	1.3	9
104	Nanoporous Polymers â€” Design and Applications. , 2006, , .		0
105	The use of bimodal blends of vinyl ester monomers to improve resin processing and toughen polymer properties. Polymer, 2005, 46, 2908-2921.	1.8	59
106	Adhesive/Cohesive Properties of Thermally Sprayed Functionally Graded Coatings for Polymer Matrix Composites. Journal of Thermal Spray Technology, 2005, 14, 45-51.	1.6	57
107	Electron-beam curing of epoxy resins: Effect of alcohols on cationic polymerization. Bulletin of Materials Science, 2005, 28, 603-607.	0.8	30
108	Influence of Tetrahydrofuran on Epoxyâ€'Amine Polymerization. Macromolecules, 2005, 38, 6923-6930.	2.2	33

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109	Nanoporous Thermosetting Polymers. Langmuir, 2005, 21, 1539-1546.	1.6	29
110	Enhancement of phenolic polymer properties by use of ethylene glycol as diluent. Journal of Applied Polymer Science, 2004, 91, 3096-3106.	1.3	16
111	Network formation during cocure of phenolic resins with vinyl-ester and epoxy-amine systems for use in multifunctional composites. Journal of Applied Polymer Science, 2004, 91, 3107-3119.	1.3	4
112	Toughening of vinyl ester resin using butadiene-acrylonitrile rubber modifiers. Polymer, 2004, 45, 6143-6154.	1.8	68
113	Fatty acid-based monomers as styrene replacements for liquid molding resins. Polymer, 2004, 45, 7729-7737.	1.8	157
114	Design and characterization of nanoporous polymeric materials via reactive encapsulation of a chemically inert solvent. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2004, 241, 119-125.	2.3	21
115	Real time in situ spectroscopic characterization of radiation induced cationic polymerization of glycidyl ethers. Nuclear Instruments & Methods in Physics Research B, 2003, 208, 353-357.	0.6	19
116	Nanoporous thermosets via Reactive Encapsulation of a Chemically Inert Solvent versus Free Radically Polymerized and Phase Separating Systems. Materials Research Society Symposia Proceedings, 2003, 788, 11551.	0.1	1
117	Carbon-Fiber Reinforced Thermoplastic Materials for Rigidizable Space Systems. Journal of Thermoplastic Composite Materials, 2003, 16, 139-170.	2.6	12
118	Erosion/Oxidation Resistant Coatings for High Temperature Polymer Composites. High Performance Polymers, 2003, 15, 503-517.	0.8	1
119	Environmental issues for polymer matrix composites and structural adhesives. Clean Technologies and Environmental Policy, 2001, 2, 0228-0235.	2.1	35
120	Dynamic stress/strain response of the interphase in polymer matrix composites. Polymer Composites, 2001, 22, 621-635.	2.3	15
121	Development and application of triglyceride-based polymers and composites. Journal of Applied Polymer Science, 2001, 82, 703-723.	1.3	590
122	Investigation of properties of fiber/matrix interphase formed due to the glass fiber sizings. Journal of Materials Science, 2001, 36, 3041-3053.	1.7	34
123	An investigation of vinyl-ester?styrene bulk copolymerization cure kinetics using Fourier transform infrared spectroscopy. Journal of Applied Polymer Science, 2000, 76, 1572-1582.	1.3	79
124	Copolymerization kinetics of styrene/vinyl-ester systms: Low temperature reactions. Polymer Composites, 1999, 20, 379-391.	2.3	45
125	Effects of temperature on cure kinetics and mechanical properties of vinyl-ester resins. Journal of Polymer Science, Part B: Polymer Physics, 1999, 37, 725-744.	2.4	145
126	Nanoscale Indentation of Polymer Systems Using the Atomic Force Microscope. Journal of Adhesion, 1997, 64, 31-59.	1.8	146

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127	Relating elastic modulus to indentation response using atomic force microscopy. Journal of Materials Science Letters, 1997, 16, 117-119.	0.5	68
128	Sizing related kinetic and flow considerations in the resin infusion of composites. Journal of Materials Science, 1997, 32, 5761-5774.	1.7	23
129	Relating Polymer Indentation Behavior to Elastic Modulus Using Atomic Force Microscopy. Materials Research Society Symposia Proceedings, 1996, 440, 195.	0.1	7
130	Characterization of Interphase Regions Using Atomic Force Microscopy. Materials Research Society Symposia Proceedings, 1996, 458, 313.	0.1	15
131	Effects of sizings on microscopic flow in resin transfer molding. Polymer Composites, 1995, 16, 313-318.	2.3	27
132	Relationship Between Interphase Composition, Material Properties, and Residual Thermal Stresses in Composite Materials. Journal of Adhesion, 1995, 52, 101-113.	1.8	24
133	Kinetic and Thermodynamic Considerations Regarding Interphase Formation in Thermosetting Composite Systems. Journal of Adhesion, 1994, 44, 29-49.	1.8	53
134	Effect of epoxyâ€“amine stoichiometry on cured resin material properties. Journal of Applied Polymer Science, 1992, 46, 1863-1873.	1.3	160
135	Timeâ€“temperatureâ€“transformation (TTT) cure diagrams: Relationship between Tg and the temperature and time of cure for a polyamic acid/polyimide system. Journal of Applied Polymer Science, 1987, 34, 1925-1939.	1.3	35