

Rasoul Esmaeely

List of Publications by Year in descending order

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92
papers

3,992
citations

101384

36
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133063

59
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all docs

93
docs citations

93
times ranked

3348
citing authors

#	ARTICLE	IF	CITATIONS
1	Wound dressings: Current advances and future directions. <i>Journal of Applied Polymer Science</i> , 2019, 136, 47738.	1.3	463
2	Fatigue behaviour of FDM-3D printed polymers, polymeric composites and architected cellular materials. <i>International Journal of Fatigue</i> , 2021, 143, 106007.	2.8	176
3	The mechanical testing and performance analysis of polymer-fibre composites prepared through the additive manufacturing. <i>Polymer Testing</i> , 2021, 93, 106925.	2.3	162
4	Recent advances in core/shell bicomponent fibers and nanofibers: A review. <i>Journal of Applied Polymer Science</i> , 2018, 135, 46265.	1.3	131
5	The need for fully bio-based facemasks to counter coronavirus outbreaks: A perspective. <i>Science of the Total Environment</i> , 2020, 736, 139611.	3.9	131
6	Effects of water absorption on the mechanical properties of hybrid natural fibre/phenol formaldehyde composites. <i>Scientific Reports</i> , 2021, 11, 13385.	1.6	124
7	A review of dental composites: Challenges, chemistry aspects, filler influences, and future insights. <i>Composites Part B: Engineering</i> , 2021, 216, 108852.	5.9	97
8	Polymer Recycling in Additive Manufacturing: an Opportunity for the Circular Economy. <i>Materials Circular Economy</i> , 2020, 2, 1.	1.6	95
9	Encapsulation of epoxy and amine curing agent in PAN nanofibers by coaxial electrospinning for self-healing purposes. <i>RSC Advances</i> , 2016, 6, 70056-70063.	1.7	88
10	The Life Cycle Assessment for Polylactic Acid (PLA) to Make It a Low-Carbon Material. <i>Polymers</i> , 2021, 13, 1854.	2.0	88
11	Single microcapsules containing epoxy healing agent used for development in the fabrication of cost efficient self-healing epoxy coating. <i>Progress in Organic Coatings</i> , 2018, 114, 40-46.	1.9	87
12	Fabrication and characterization of two-layered nanofibrous membrane for guided bone and tissue regeneration application. <i>Materials Science and Engineering C</i> , 2017, 80, 75-87.	3.8	84
13	A Review of the Synthesis, Properties, and Applications of 2D Materials. <i>Particle and Particle Systems Characterization</i> , 2022, 39, .	1.2	81
14	Circular economy in biocomposite development: State-of-the-art, challenges and emerging trends. <i>Composites Part C: Open Access</i> , 2021, 5, 100138.	1.5	79
15	Towards the development of self-healing carbon/epoxy composites with improved potential provided by efficient encapsulation of healing agents in core-shell nanofibers. <i>Polymer Testing</i> , 2017, 62, 79-87.	2.3	73
16	Self-healing and interfacially toughened carbon fibre/epoxy composites based on electrospun core-shell nanofibres. <i>Journal of Applied Polymer Science</i> , 2017, 134, 44956.	1.3	72
17	Fabrication and characterization of silicon carbide/epoxy nanocomposite using silicon carbide nanowhisker and nanoparticle reinforcements. <i>Journal of Composite Materials</i> , 2016, 50, 435-446.	1.2	71
18	Biofriendly vegetable oil healing agents used for developing self-healing coatings: A review. <i>Progress in Organic Coatings</i> , 2019, 129, 77-95.	1.9	70

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19	The journey of multifunctional bone scaffolds fabricated from traditional toward modern techniques. <i>Bio-Design and Manufacturing</i> , 2020, 3, 281-306.	3.9	69
20	Microencapsulation of a coconut oil-based alkyd resin into poly(melamine-urea-formaldehyde) as shell for self-healing purposes. <i>Progress in Organic Coatings</i> , 2017, 111, 99-106.	1.9	65
21	Natural and industrial wastes for sustainable and renewable polymer composites. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 158, 112054.	8.2	65
22	Design and characterization of dexamethasone-loaded poly (glycerol sebacate)-poly caprolactone/gelatin scaffold by coaxial electro spinning for soft tissue engineering. <i>Materials Science and Engineering C</i> , 2017, 78, 47-58.	3.8	64
23	Facile strategy toward fabrication of highly responsive self-healing carbon/epoxy composites via incorporation of healing agents encapsulated in poly(methylmethacrylate) nanofiber shell. <i>Journal of Industrial and Engineering Chemistry</i> , 2018, 59, 456-466.	2.9	62
24	Future of additive manufacturing in healthcare. <i>Current Opinion in Biomedical Engineering</i> , 2021, 17, 100255.	1.8	60
25	Improving Mechanical Properties of Carbon/Epoxy Composite by Incorporating Functionalized Electrospun Polyacrylonitrile Nanofibers. <i>Macromolecular Materials and Engineering</i> , 2017, 302, 1600551.	1.7	59
26	Self-healing performance of an epoxy coating containing microencapsulated alkyd resin based on coconut oil. <i>Progress in Organic Coatings</i> , 2018, 120, 160-166.	1.9	55
27	A Review on the Flammability Properties of Carbon-Based Polymeric Composites: State-of-the-Art and Future Trends. <i>Polymers</i> , 2020, 12, 1518.	2.0	53
28	A Review of Recent Advances in Nanoengineered Polymer Composites. <i>Polymers</i> , 2019, 11, 644.	2.0	48
29	Interfacial toughening of carbon/epoxy composite by incorporating styrene acrylonitrile nanofibers. <i>Theoretical and Applied Fracture Mechanics</i> , 2018, 95, 242-247.	2.1	46
30	The Flame Retardancy of Polyethylene Composites: From Fundamental Concepts to Nanocomposites. <i>Molecules</i> , 2020, 25, 5157.	1.7	46
31	Multilayered Bio-Based Electrospun Membranes: A Potential Porous Media for Filtration Applications. <i>Frontiers in Materials</i> , 2020, 7, .	1.2	46
32	Biodegradable Elastomers and Gels for Elastic Electronics. <i>Advanced Science</i> , 2022, 9, e2105146.	5.6	45
33	Fracture assessment of polyacrylonitrile nanofiber-reinforced epoxy adhesive. <i>Theoretical and Applied Fracture Mechanics</i> , 2018, 97, 448-453.	2.1	43
34	Development of a Highly Proliferated Bilayer Coating on 316L Stainless Steel Implants. <i>Polymers</i> , 2020, 12, 1022.	2.0	41
35	Nanofibrous Scaffolds with Biomimetic Composition for Skin Regeneration. <i>Applied Biochemistry and Biotechnology</i> , 2019, 187, 1193-1203.	1.4	40
36	Toward the development of polyethylene photocatalytic degradation. <i>Journal of Polymer Engineering</i> , 2020, 40, 181-191.	0.6	39

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37	Insight Into the Current Directions in Functionalized Nanocomposite Hydrogels. <i>Frontiers in Materials</i> , 2020, 7, .	1.2	38
38	Advanced Hydrogels for Cartilage Tissue Engineering: Recent Progress and Future Directions. <i>Polymers</i> , 2021, 13, 4199.	2.0	38
39	A ternary nanofibrous scaffold potential for central nerve system tissue engineering. <i>Journal of Biomedical Materials Research - Part A</i> , 2018, 106, 2394-2401.	2.1	35
40	A review of sustainable and environment-friendly flame retardants used in plastics. <i>Polymer Testing</i> , 2022, 108, 107511.	2.3	32
41	Synthesis and characterization of TiO ₂ /acrylic acid-co-2-acrylamido-2-methyl propane sulfonic acid nanogel composite and investigation its self-healing performance in the epoxy coatings. <i>Colloid and Polymer Science</i> , 2020, 298, 213-223.	1.0	31
42	Effect of neat and reinforced polyacrylonitrile nanofibers incorporation on interlaminar fracture toughness of carbon/epoxy composite. <i>Theoretical and Applied Mechanics Letters</i> , 2018, 8, 126-131.	1.3	30
43	Electrospun nanofiber interleaving in fiber reinforced composites”Recent trends. <i>Material Design and Processing Communications</i> , 2019, 1, e24.	0.5	28
44	A Review of Dental Composites: Methods of Characterizations. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 3713-3744.	2.6	28
45	Polyurethane-Nanolignin Composite Foam Coated with Propolis as a Platform for Wound Dressing: Synthesis and Characterization. <i>Polymers</i> , 2021, 13, 3191.	2.0	28
46	Supertough spontaneously self-healing polymer based on septuple dynamic bonds integrated in one chemical group. <i>Science China Chemistry</i> , 2022, 65, 363-372.	4.2	28
47	Regeneration of the peripheral nerve via multifunctional electrospun scaffolds. <i>Journal of Biomedical Materials Research - Part A</i> , 2021, 109, 437-452.	2.1	27
48	Low-pressure plasma surface modification of polyurethane films with chitosan and collagen biomolecules. <i>Journal of Applied Polymer Science</i> , 2019, 136, 47567.	1.3	26
49	Effect of nanofiller incorporation on thermomechanical and toughness of poly (vinyl alcohol)-based electrospun nanofibrous bionanocomposites. <i>Theoretical and Applied Fracture Mechanics</i> , 2019, 99, 44-50.	2.1	26
50	Nanofibrous scaffolds with biomimetic structure. <i>Journal of Biomedical Materials Research - Part A</i> , 2018, 106, 370-376.	2.1	25
51	Advances in electrospinning of aligned nanofiber scaffolds used for wound dressings. <i>Current Opinion in Biomedical Engineering</i> , 2022, 22, 100393.	1.8	25
52	Development of an epoxy self-healing coating through the incorporation of acrylic acid-co-acrylamide copolymeric gel. <i>Progress in Organic Coatings</i> , 2020, 149, 105948.	1.9	24
53	A bilayer GO/nanofibrous biocomposite coating to enhance 316L stainless steel corrosion performance. <i>Materials Research Express</i> , 2019, 6, 086470.	0.8	21
54	The influence of size and healing content on the performance of extrinsic self-healing coatings. <i>Journal of Applied Polymer Science</i> , 2021, 138, 49964.	1.3	21

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55	Characterization of gelatin/cellulose acetate nanofibrous scaffolds: Prediction and optimization by response surface methodology and artificial neural networks. <i>Polymer Science - Series A</i> , 2016, 58, 399-408.	0.4	20
56	Facile strategy toward the development of a self-healing coating by electrospray method. <i>Materials Research Express</i> , 2019, 6, 116444.	0.8	19
57	A highly responsive healing agent for the autonomous repair of anti-corrosion coatings on wet surfaces. In operando assessment of the self-healing process. <i>Journal of Materials Science</i> , 2021, 56, 1794-1813.	1.7	19
58	Preparation and Characterization of Electrosprayed Nanocapsules Containing Coconut-Oil-Based Alkyd Resin for the Fabrication of Self-Healing Epoxy Coatings. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 3171.	1.3	17
59	Alumina reinforced nanofibers used for exceeding improvement in mechanical properties of the laminated carbon/epoxy composite. <i>Theoretical and Applied Fracture Mechanics</i> , 2018, 96, 193-201.	2.1	16
60	Core-shell nanofibers of poly(ϵ -caprolactone) and Polyvinylpyrrolidone for drug delivery system. <i>Materials Research Express</i> , 2019, 6, 115015.	0.8	16
61	Cooperative Chemical Coupling and Physical Lubrication Effects Construct Highly Dynamic Ionic Covalent Adaptable Network for High-Performance Wearable Electronics. <i>CCS Chemistry</i> , 2023, 5, 1096-1107.	4.6	16
62	Melt-spun PLA liquid-filled fibers: physical, morphological, and thermal properties. <i>Journal of the Textile Institute</i> , 2019, 110, 89-99.	1.0	15
63	Influence of microfluidic flow rates on the propagation of nano/microcracks in liquid core and hollow fibers. <i>Theoretical and Applied Fracture Mechanics</i> , 2018, 96, 83-89.	2.1	14
64	The Effect of Carbon Black on the Properties of Plasticised Wheat Gluten Biopolymer. <i>Molecules</i> , 2020, 25, 2279.	1.7	14
65	Mesoporous silica aerogel reinforced dental composite: Effects of microstructure and surface modification. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2022, 125, 104947.	1.5	14
66	A review on combustion and mechanical behaviour of pyrolysis biochar. <i>Materials Today Communications</i> , 2022, 31, 103629.	0.9	14
67	Encapsulation of Cerium Nitrate within Poly(urea-formaldehyde) Microcapsules for the Development of Self-Healing Epoxy-Based Coating. <i>ACS Omega</i> , 2021, 6, 31147-31153.	1.6	12
68	Investigation of thermal and dielectric properties of Fe ₃ O ₄ /high-density polyethylene nanocomposites. <i>Journal of Composite Materials</i> , 2017, 51, 3923-3929.	1.2	11
69	Efficient Improvement in Fracture Toughness of Laminated Composite by Interleaving Functionalized Nanofibers. <i>Polymers</i> , 2021, 13, 2509.	2.0	11
70	Grafted ZnO nanoparticles used for development in photocatalytic degradation performance of polyethylene. <i>Polymer Bulletin</i> , 2019, 76, 3593-3606.	1.7	10
71	A fluorine-rich phenolic polyurethane elastomer with excellent self-healability and reprocessability and its applications for wearable electronics. <i>Science China Materials</i> , 2022, 65, 2553-2564.	3.5	10
72	Wound dressing application of castor oil- and CAPA-based polyurethane membranes. <i>Polymer Bulletin</i> , 2020, 77, 2945-2964.	1.7	9

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73	Corrosion Resistance Evaluation of Self-Healing Epoxy Coating Based on Dual-Component Capsules Containing Resin and Curing Agent. <i>International Journal of Polymer Science</i> , 2021, 2021, 1-13.	1.2	9
74	Synthesis of Cloisite 30B-acrylamide/acrylic acid nanogel composite for self-healing purposes. <i>Applied Clay Science</i> , 2021, 210, 106174.	2.6	9
75	Flammability and mechanical properties of biochars made in different pyrolysis reactors. <i>Biomass and Bioenergy</i> , 2021, 152, 106197.	2.9	8
76	The influence of the healing agent characteristics on the healing performance of epoxy coatings: Assessment of the repair process by EIS technique. <i>Progress in Organic Coatings</i> , 2021, 159, 106431.	1.9	8
77	Cytocompatibility and Antibacterial Properties of Coaxial Electrospun Nanofibers Containing Ciprofloxacin and Indomethacin Drugs. <i>Polymers</i> , 2022, 14, 2565.	2.0	8
78	Theoretical crosslink density of the nanofibrous scaffolds. <i>Material Design and Processing Communications</i> , 2019, 1, e22.	0.5	7
79	Experimental Investigation of Thrust Force, Delamination and Surface Roughness in Drilling Hybrid Structural Composites. <i>Materials</i> , 2021, 14, 4468.	1.3	7
80	A chemically durable superhydrophobic aluminum surface coated with silicon carbide nanoparticles and perfluoro acrylic copolymer. <i>Theoretical and Applied Fracture Mechanics</i> , 2018, 94, 181-185.	2.1	6
81	Development of an Electrospun Scaffold for Retinal Tissue Engineering. <i>Polymer Science - Series B</i> , 2020, 62, 290-298.	0.3	6
82	Synthesis of TiO ₂ nanogel composite for highly efficient self-healing epoxy coating. <i>Journal of Advanced Research</i> , 2023, 43, 137-146.	4.4	6
83	Testing bioplastic containing functionalised biochar. <i>Polymer Testing</i> , 2022, 113, 107657.	2.3	6
84	Improving mechanical and thermal properties of high-density polyethylene/wood flour nanocomposites. <i>Journal of Thermal Analysis and Calorimetry</i> , 2019, 137, 175-183.	2.0	5
85	Synthesis and characterization of modified resorcinol formaldehyde aerogel as a novel absorbent to remove oxytetracycline and chlortetracycline antibiotics from wastewater. <i>Polymer Bulletin</i> , 2022, 79, 6309-6341.	1.7	5
86	Preparation of an acrylic acid-based superabsorbent composite: investigation of synthesis parameters. <i>Chemical Papers</i> , 2020, 74, 939-949.	1.0	4
87	Core-shell nanofibers for developing self-healing materials: Recent progress and future directions. <i>Material Design and Processing Communications</i> , 2021, 3, e90.	0.5	3
88	Characterization of self-healing polymeric materials. , 2020, , 123-140.		3
89	Hollow fiber reinforced polymer composites. , 2021, , 461-477.		3
90	Development of smart epoxy coating through click reaction using a vegetable oil. <i>Progress in Organic Coatings</i> , 2022, 170, 106985.	1.9	2

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91	Core-shell nanofibers of poly (glycerol sebacate) and poly (1,8 octanediol citrate) for retinal regeneration. Polymer Bulletin, 0, , 1.	1.7	1
92	Enhancing In-plane Mechanical Properties of Carbon/Epoxy Composite Using Poly(methyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702 Td		