Payam Zarrintaj

List of Publications by Year
in descending order

135 papers	6,278 citations	57719 44 h-index	79644 73 g-index
136 all docs	136 docs citations	136 times ranked	5044 citing authors

#	Article	IF	Citations
1	Agarose-based biomaterials for tissue engineering. Carbohydrate Polymers, 2018, 187, 66-84.	5.1	454
2	Thermo-sensitive polymers in medicine: A review. European Polymer Journal, 2019, 117, 402-423.	2.6	206
3	Poloxamer: A versatile tri-block copolymer for biomedical applications. Acta Biomaterialia, 2020, 110, 37-67.	4.1	188
4	Chitosan in Biomedical Engineering: A Critical Review. Current Stem Cell Research and Therapy, 2019, 14, 93-116.	0.6	165
5	Can regenerative medicine and nanotechnology combine to heal wounds? The search for the ideal wound dressing. Nanomedicine, 2017, 12, 2403-2422.	1.7	160
6	Electrically Conductive Materials: Opportunities and Challenges in Tissue Engineering. Biomolecules, 2019, 9, 448.	1.8	142
7	Epoxy/PAMAM dendrimer-modified graphene oxide nanocomposite coatings: Nonisothermal cure kinetics study. Progress in Organic Coatings, 2018, 114, 233-243.	1.9	135
8	Agarose-based biomaterials for advanced drug delivery. Journal of Controlled Release, 2020, 326, 523-543.	4.8	134
9	A Novel Electroactive Agarose-Aniline Pentamer Platform as a Potential Candidate for Neural Tissue Engineering. Scientific Reports, 2017, 7, 17187.	1.6	133
10	Tissue engineering; strategies, tissues, and biomaterials. Biotechnology and Genetic Engineering Reviews, 2017, 33, 144-172.	2.4	133
11	Agarose-Based Biomaterials: Opportunities and Challenges in Cartilage Tissue Engineering. Polymers, 2020, 12, 1150.	2.0	120
12	Oligoaniline-based conductive biomaterials for tissue engineering. Acta Biomaterialia, 2018, 72, 16-34.	4.1	119
13	Zeolites in drug delivery: Progress, challenges and opportunities. Drug Discovery Today, 2020, 25, 642-656.	3.2	113
14	Conductive hydrogels based on agarose/alginate/chitosan for neural disorder therapy. Carbohydrate Polymers, 2019, 224, 115161.	5.1	109
15	A novel bio electro active alginate-aniline tetramer/ agarose scaffold for tissue engineering: synthesis, characterization, drug release and cell culture study. Journal of Biomaterials Science, Polymer Edition, 2017, 28, 1617-1638.	1.9	108
16	Antibacterial glass-ionomer cement restorative materials: A critical review on the current status of extended release formulations. Journal of Controlled Release, 2017, 262, 317-328.	4.8	104
17	Conductive polymers in water treatment: A review. Journal of Molecular Liquids, 2020, 312, 113447.	2.3	104
18	Highly curable self-healing vitrimer-like cellulose-modified halloysite nanotube/epoxy nanocomposite coatings. Chemical Engineering Journal, 2020, 396, 125196.	6.6	103

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19	Epoxy/starch-modified nano-zinc oxide transparent nanocomposite coatings: A showcase of superior curing behavior. Progress in Organic Coatings, 2018, 115, 143-150.	1.9	99
20	Chitosan-based blends for biomedical applications. International Journal of Biological Macromolecules, 2021, 183, 1818-1850.	3.6	97
21	Skin care and rejuvenation by cosmeceutical facial mask. Journal of Cosmetic Dermatology, 2018, 17, 693-702.	0.8	95
22	Soft and hard sections from cellulose-reinforced poly(lactic acid)-based food packaging films: A critical review. Food Packaging and Shelf Life, 2020, 23, 100429.	3.3	93
23	A facile route to the synthesis of anilinic electroactive colloidal hydrogels for neural tissue engineering applications. Journal of Colloid and Interface Science, 2018, 516, 57-66.	5.0	92
24	Polyacrylic Acid Nanoplatforms: Antimicrobial, Tissue Engineering, and Cancer Theranostic Applications. Polymers, 2022, 14, 1259.	2.0	90
25	Conductive hydrogel based on chitosan-aniline pentamer/gelatin/agarose significantly promoted motor neuron-like cells differentiation of human olfactory ecto-mesenchymal stem cells. Materials Science and Engineering C, 2019, 101, 243-253.	3.8	85
26	Hyperbranched poly(ethyleneimine) physically attached to silica nanoparticles to facilitate curing of epoxy nanocomposite coatings. Progress in Organic Coatings, 2018, 120, 100-109.	1.9	83
27	Development and curing potential of epoxy/starch-functionalized graphene oxide nanocomposite coatings. Progress in Organic Coatings, 2018, 119, 194-202.	1.9	83
28	Natural Polymers Decorated MOF-MXene Nanocarriers for Co-delivery of Doxorubicin/pCRISPR. ACS Applied Bio Materials, 2021, 4, 5106-5121.	2.3	78
29	Transparent nanocomposite coatings based on epoxy and layered double hydroxide: Nonisothermal cure kinetics and viscoelastic behavior assessments. Progress in Organic Coatings, 2017, 113, 126-135.	1.9	76
30	Chitosan-based inks for 3D printing and bioprinting. Green Chemistry, 2022, 24, 62-101.	4.6	76
31	Tissue engineering with electrospun electro-responsive chitosan-aniline oligomer/polyvinyl alcohol. International Journal of Biological Macromolecules, 2020, 147, 160-169.	3.6	75
32	Self-gelling electroactive hydrogels based on chitosanâ€"aniline oligomers/agarose for neural tissue engineering with on-demand drug release. Colloids and Surfaces B: Biointerfaces, 2019, 184, 110549.	2.5	74
33	Silk fibroin scaffolds for common cartilage injuries: Possibilities for future clinical applications. European Polymer Journal, 2019, 115, 251-267.	2.6	71
34	Electroactive bio-epoxy incorporated chitosan-oligoaniline as an advanced hydrogel coating for neural interfaces. Progress in Organic Coatings, 2019, 131, 389-396.	1.9	70
35	Diamond-like carbon thin films prepared by pulsed-DC PE-CVD for biomedical applications. Surface Innovations, 2018, 6, 167-175.	1.4	58
36	Magnetron-sputtered TixNy thin films applied on titanium-based alloys for biomedical applications: Composition-microstructure-property relationships. Surface and Coatings Technology, 2018, 349, 251-259.	2.2	56

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37	From microporous to mesoporous mineral frameworks: An alliance between zeolite and chitosan. Carbohydrate Research, 2020, 489, 107930.	1.1	55
38	Poloxamer-based stimuli-responsive biomaterials. Materials Today: Proceedings, 2018, 5, 15516-15523.	0.9	54
39	Biomaterials selection for neuroprosthetics. Current Opinion in Biomedical Engineering, 2018, 6, 99-109.	1.8	53
40	Zeolite in tissue engineering: Opportunities and challenges. MedComm, 2020, 1, 5-34.	3.1	51
41	Electroactive poly (p-phenylene sulfide)/r-graphene oxide/chitosan as a novel potential candidate for tissue engineering. International Journal of Biological Macromolecules, 2020, 154, 18-24.	3.6	51
42	Chitosan/polyvinyl alcohol nanofibrous membranes: towards green super-adsorbents for toxic gases. Heliyon, 2019, 5, e01527.	1.4	49
43	Mesenchymal Stem Cell Spheroids Embedded in an Injectable Thermosensitive Hydrogel: An In Situ Drug Formation Platform for Accelerated Wound Healing. ACS Biomaterials Science and Engineering, 2020, 6, 5096-5109.	2.6	48
44	NaA zeolite-coated meshes with tunable hydrophilicity for oil-water separation. Separation and Purification Technology, 2020, 240, 116630.	3.9	48
45	Anti-fouling and permeable polyvinyl chloride nanofiltration membranes embedded by hydrophilic graphene quantum dots for dye wastewater treatment. Journal of Water Process Engineering, 2020, 38, 101652.	2.6	47
46	Diamond-like carbon-deposited films: a new class of biocorrosion protective coatings. Surface Innovations, 2018, 6, 266-276.	1.4	46
47	A new direction in design of bioâ€based flame retardants for poly(lactic acid). Fire and Materials, 2018, 42, 914-924.	0.9	45
48	Conductive biomaterials as nerve conduits: Recent advances and future challenges. Applied Materials Today, 2020, 20, 100784.	2.3	45
49	Zeolites for theranostic applications. Journal of Materials Chemistry B, 2020, 8, 5992-6012.	2.9	45
50	An attempt to mechanistically explain the viscoelastic behavior of transparent epoxy/starch-modified ZnO nanocomposite coatings. Progress in Organic Coatings, 2018, 119, 171-182.	1.9	41
51	Crystalline polysaccharides: A review. Carbohydrate Polymers, 2022, 275, 118624.	5.1	41
52	Dye-sensitized solar cells based on natural photosensitizers: A green view from Iran. Journal of Alloys and Compounds, 2020, 828, 154329.	2.8	40
53	Polyaniline in retrospect and prospect. Materials Today: Proceedings, 2018, 5, 15852-15860.	0.9	39
54	Fabricating an electroactive injectable hydrogel based on pluronic-chitosan/aniline-pentamer containing angiogenic factor for functional repair of the hippocampus ischemia rat model. Materials Science and Engineering C, 2020, 117, 111328.	3.8	39

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55	Application of compatibilized polymer blends in biomedical fields. , 2020, , 511-537.		38
56	Polyhedral oligomeric silsesquioxane/epoxy coatings: a review. Surface Innovations, 2021, 9, 3-16.	1.4	35
57	Towards advanced flame retardant organic coatings: Expecting a new function from polyaniline. Progress in Organic Coatings, 2019, 130, 144-148.	1.9	33
58	Copper-enriched diamond-like carbon coatings promote regeneration at the boneâ€"implant interface. Heliyon, 2020, 6, e03798.	1.4	33
59	Synthesis of nanoparticles using microorganisms and their applications: a review. Environmental Chemistry Letters, 2022, 20, 3153-3197.	8.3	33
60	Engineering the niche for hair regeneration â€" A critical review. Nanomedicine: Nanotechnology, Biology, and Medicine, 2019, 15, 70-85.	1.7	32
61	Injectable Cell-Laden Hydrogels for Tissue Engineering: Recent Advances and Future Opportunities. Tissue Engineering - Part A, 2021, 27, 821-843.	1.6	32
62	The Taste of Waste: The Edge of Eggshell Over Calcium Carbonate in Acrylonitrile Butadiene Rubber. Journal of Polymers and the Environment, 2019, 27, 2478-2489.	2.4	31
63	Theranostic Platforms Proposed for Cancerous Stem Cells: A Review. Current Stem Cell Research and Therapy, 2019, 14, 137-145.	0.6	31
64	Nanotechnology-assisted microfluidic systems: from bench to bedside. Nanomedicine, 2021, 16, 237-258.	1.7	30
65	Curing epoxy with electrochemically synthesized Gd Fe3-O4 magnetic nanoparticles. Progress in Organic Coatings, 2019, 136, 105245.	1.9	29
66	Lanthanide complexes as anticancer agents: A review. Polyhedron, 2021, 207, 115387.	1.0	29
67	Polylysine for skin regeneration: A review of recent advances and future perspectives. Bioengineering and Translational Medicine, 2022, 7, e10261.	3.9	29
68	Electrically conductive carbonâ€based (bio)â€nanomaterials for cardiac tissue engineering. Bioengineering and Translational Medicine, 2023, 8, .	3.9	29
69	Microemulsion-based synthesis of a visible-light-responsive Si-doped TiO2 photocatalyst and its photodegradation efficiency potential. Materials Chemistry and Physics, 2018, 220, 374-382.	2.0	26
70	Advanced Delivery Systems Based on Lysine or Lysine Polymers. Molecular Pharmaceutics, 2021, 18, 3652-3670.	2.3	26
71	Green products from herbal medicine wastes by subcritical water treatment. Journal of Hazardous Materials, 2022, 424, 127294.	6.5	26
72	Green Polymer Nanocomposites for Skin Tissue Engineering. ACS Applied Bio Materials, 2022, 5, 2107-2121.	2.3	26

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73	Polydopamine Biomaterials for Skin Regeneration. ACS Biomaterials Science and Engineering, 2022, 8, 2196-2219.	2.6	26
74	Thermally stable antibacterial wool fabrics surface-decorated by TiON and TiON/Cu thin films. Surface Innovations, 2018, 6, 258-265.	1.4	24
75	Niobium-Treated Titanium Implants with Improved Cellular and Molecular Activities at the Tissueâ€“Implant Interface. Materials, 2019, 12, 3861.	1.3	24
76	Development of a multifunctional system based on CoFe₂O₄@polyacrylic acid NPs conjugated to folic acid and loaded with doxorubicin for cancer theranostics. Nanotechnology, 2021, 32, 305101.	1.3	24
77	Nonisothermal cure kinetics of epoxy/Zn Fe3-O4 nanocomposites. Progress in Organic Coatings, 2019, 136, 105290.	1.9	23
78	Polysaccharide-based electroconductive hydrogels: Structure, properties and biomedical applications. Carbohydrate Polymers, 2022, 278, 118998.	5.1	22
79	Insight into the Self-Insertion of a Protein Inside the Boron Nitride Nanotube. ACS Omega, 2020, 5, 32051-32058.	1.6	21
80	Human Organsâ€onâ€Chips: A Review of the Stateâ€ofâ€theâ€Art, Current Prospects, and Future Challenges. Advanced Biology, 2022, 6, e2000526.	1.4	21
81	Crystallization kinetics study of dynamically vulcanized PA6/NBR/HNTs nanocomposites by nonisothermal differential scanning calorimetry. Journal of Applied Polymer Science, 2018, 135, 46488.	1.3	20
82	Curing epoxy with polyethylene glycol (PEG) surface-functionalized Gd Fe3-O4 magnetic nanoparticles. Progress in Organic Coatings, 2019, 137, 105283.	1.9	20
83	Biomaterials in Valvular Heart Diseases. Frontiers in Bioengineering and Biotechnology, 2020, 8, 529244.	2.0	20
84	Boron Nitride Nanotube as an Antimicrobial Peptide Carrier: A Theoretical Insight. International Journal of Nanomedicine, 2021, Volume 16, 1837-1847.	3.3	20
85	Epoxy/Zn-Al-CO3 LDH nanocomposites: Curability assessment. Progress in Organic Coatings, 2020, 138, 105355.	1.9	19
86	Piezoelectric Performance of Microcellular Polypropylene Foams Fabricated Using Foam Injection Molding as a Potential Scaffold for Bone Tissue Engineering. Journal of Macromolecular Science - Physics, 2020, 59, 376-389.	0.4	19
87	Zeolite-based catalysts for exergy efficiency enhancement: The insights gained from nanotechnology. Materials Today: Proceedings, 2018, 5, 15868-15876.	0.9	18
88	Application of polyaniline and its derivatives. , 2019, , 259-272.		17
89	A Green Composite Based on Gelatin/Agarose/Zeolite as a Potential Scaffold for Tissue Engineering Applications. Journal of Composites Science, 2021, 5, 125.	1.4	17
90	Zirconium-based hybrid coatings: A versatile strategy for biomedical engineering applications. Materials Today: Proceedings, 2018, 5, 15524-15531.	0.9	16

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91	Biodegradable zwitterionic poly(carboxybetaine) microgel for sustained delivery of antibodies with extended stability and preserved function. Soft Matter, 2021, 17, 5349-5361.	1.2	16
92	Fracture fingerprint of polycrystalline C3N nanosheets: Theoretical basis. Journal of Molecular Graphics and Modelling, 2021, 106, 107899.	1.3	16
93	Photosensitizers in medicine: Does nanotechnology make a difference?. Materials Today: Proceedings, 2018, 5, 15836-15844.	0.9	15
94	In-Out Surface Modification of Halloysite Nanotubes (HNTs) for Excellent Cure of Epoxy: Chemistry and Kinetics Modeling. Nanomaterials, 2021, 11, 3078.	1.9	15
95	Tripleâ€faced polypropylene: Fire retardant, thermally stable, and antioxidative. Journal of Vinyl and Additive Technology, 2019, 25, 366-376.	1.8	13
96	Thermal-Resistant Polyurethane/Nanoclay Powder Coatings: Degradation Kinetics Study. Coatings, 2020, 10, 871.	1.2	13
97	Correlation between surface topological defects and fracture mechanism of Î³-graphyne-like boron nitride nanosheets. Computational Materials Science, 2021, 188, 110152.	1.4	13
98	Synthesis of Cost-Effective Hierarchical MFI-Type Mesoporous Zeolite: Introducing Diatomite as Silica Source. Silicon, 2021, 13, 3461-3472.	1.8	12
99	Sustained delivery of olanzapine from sunflower oilâ€based polyolâ€urethane nanoparticles synthesised through a cyclic carbonate ringâ€opening reaction. IET Nanobiotechnology, 2019, 13, 703-711.	1.9	12
100	Hopes Beyond PET Recycling: Environmentally Clean and Engineeringly Applicable. Journal of Polymers and the Environment, 2019, 27, 2490-2508.	2.4	11
101	Zwitterionic poly(carboxybetaine) microgels for enzyme (chymotrypsin) covalent immobilization with extended stability and activity. Journal of Applied Polymer Science, 2021, 138, 50545.	1.3	11
102	Bilayer Scaffolds for Interface Tissue Engineering and Regenerative Medicine: A Systematic Reviews. Advances in Experimental Medicine and Biology, 2021, , 1.	0.8	11
103	Block copolymers for nanoscale drug and gene delivery. , 2020, , 181-200.		10
104	Polyaniline/metal oxides nanocomposites. , 2019, , 131-141.		9
105	PANI-CNT nanocomposites. , 2019, , 143-163.		9
106	Nanotechnology-based biosensors in drug delivery. , 2020, , 767-779.		9
107	Promoting motor functions in a spinal cord injury model of rats using transplantation of differentiated human olfactory stem cells: A step towards future therapy. Behavioural Brain Research, 2021, 405, 113205.	1.2	9
108	Î±-Helical Antimicrobial Peptide Encapsulation and Release from Boron Nitride Nanotubes: A Computational Study. International Journal of Nanomedicine, 2021, Volume 16, 4277-4288.	3.3	9

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109	Synthesis, characterization and performance enhancement of dry polyaniline-coated neuroelectrodes for electroencephalography measurement. Current Applied Physics, 2021, 27, 43-50.	1.1	9
110	Bio - Conductive Scaffold Based on Agarose - Polyaniline for Tissue Engineering. Journal of Skin and Stem Cell, 2017, In Press, .	0.1	9
111	Comparative review of piezoelectric biomaterials approach for bone tissue engineering. Journal of Biomaterials Science, Polymer Edition, 2022, 33, 1555-1594.	1.9	9
112	COVID-19: insights into virusâ€“receptor interactions. Molecular Biomedicine, 2021, 2, 10.	1.7	8
113	Polyaniline/graphene-based nanocomposites. , 2019, , 165-175.		7
114	Protein and peptide-based delivery systems. , 2020, , 145-161.		7
115	Synthesis and characterization of chitosan pyridyl imine palladium (CPIP) complex as green catalyst for organic transformations. Chemical Papers, 2021, 75, 2835-2850.	1.0	7
116	Ionically Gelled Polysaccharide-Based Interpenetrating Polymer Network Systems for Drug Delivery. Gels Horizons: From Science To Smart Materials, 2021, , 121-133.	0.3	6
117	Ionically Gelled Carboxymethyl Polysaccharides for Drug Delivery. Gels Horizons: From Science To Smart Materials, 2021, , 93-103.	0.3	6
118	Adsorption onto zeolites: molecular perspective. Chemical Papers, 2021, 75, 6217-6239.	1.0	6
119	Propane Dehydrogenation Reaction in a High-Pressure Zeolite Membrane Reactor. Energy & Fuels, 2021, 35, 19362-19373.	2.5	5
120	Synthetic route of polyaniline (I): Conventional oxidative polymerization. , 2019, , 17-41.		4
121	PANI-based nanostructures. , 2019, , 121-130.		4
122	Synthetic route of polyaniline (IV): Irradiation path. , 2019, , 91-103.		4
123	Impression materials for dental prosthesis. , 2019, , 197-215.		4
124	Nanoemulsions for intravenous drug delivery. , 2020, , 581-601.		4
125	Experimental procedures for assessing electrical and thermal conductivity of polyaniline. , 2019, , 227-258.		3
126	Effect of Nickel Doping on the Cure Kinetics of Epoxy/Fe3O4 Nanocomposites. Journal of Composites Science, 2020, 4, 102.	1.4	3

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127	Nanocomposite biomaterials made by 3D printing: Achievements and challenges. , 2021, , 675-685.		3
128	Whole Tooth Engineering. , 2020, , 443-462.		3
129	Preparation and characterization of TiO₂â€coated polymerization of methyl methacrylate (PMMA) for biomedical applications: In vitro study. Asia-Pacific Journal of Chemical Engineering, 2022, 17, .	0.8	3
130	Thermal Analysis of Crosslinking Reactions in Epoxy Nanocomposites Containing Polyvinyl Chloride (PVC)-Functionalized Nickel-Doped Nano-Fe3O4. Journal of Composites Science, 2020, 4, 107.	1.4	2
131	Editorial: Bioengineered Nanoparticles in Cancer Therapy. Frontiers in Molecular Biosciences, 2021, 8, 706277.	1.6	2
132	Controlled/localized release and nanotechnology. , 2020, , 27-36.		1
133	Magnetic nanoparticles in cancer therapy. , 2021, , 425-445.		1
134	Elastomeric and Plastomeric Materials. , 2021, , 193-207.		1
135	Polyaniline-Graphene Nanocomposite Based Supercapacitors. , 2020, , .		1