

Akbar Shojaei

List of Publications by Year in descending order

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113
papers

4,694
citations

76196

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114278

63
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116
all docs

116
docs citations

116
times ranked

4505
citing authors

#	ARTICLE	IF	CITATIONS
1	Oxygen Scavenging Hybrid Nanostructure: Localization of Different Iron Nanoparticles on Montmorillonite Clays Host. ACS Omega, 2022, 7, 16391-16401.	1.6	3
2	Tire tread performance of silica-filled SBR/BR rubber composites incorporated with nanodiamond and nanodiamond/nano-SiO ₂ hybrid nanoparticle. Diamond and Related Materials, 2022, 126, 109068.	1.8	13
3	Efficient removal of heavy metal ions from aqueous media by unmodified and modified nanodiamonds. Journal of Environmental Management, 2022, 316, 115214.	3.8	31
4	Developing tough terpolymer hydrogel with outstanding swelling ability by hydrophobic association cross-linking. Polymer, 2022, 254, 125037.	1.8	19
5	Synthesis of high-reinforcing-silica@nanodiamond nanohybrids as efficient particles for enhancement of mechanical, thermal, and rolling resistance of styrene-butadiene rubber. Polymer, 2022, 255, 125122.	1.8	9
6	Self-healing and self-sensing smart polymer composites. , 2021, , 307-357.		1
7	Efficient inductively heated shape memory polyurethane acrylate network with silane modified nanodiamond@Fe ₃ O ₄ superparamagnetic nanohybrid. European Polymer Journal, 2021, 159, 110735.	2.6	10
8	A review on the features, performance and potential applications of hydrogel-based wearable strain/pressure sensors. Advances in Colloid and Interface Science, 2021, 298, 102553.	7.0	82
9	Synthesis and characterization of polyaniline/nanodiamond hybrid nanostructures with various morphologies to enhance the corrosion protection performance of epoxy coating. Diamond and Related Materials, 2021, 120, 108672.	1.8	18
10	Effect of reactive diluent on gas separation behavior of photocurable acrylated polyurethane composite membranes. Journal of Applied Polymer Science, 2020, 137, 48293.	1.3	7
11	Enhanced adsorption removal performance of UiO-66 by rational hybridization with nanodiamond. Microporous and Mesoporous Materials, 2020, 296, 110008.	2.2	44
12	Nanodiamond loaded with corrosion inhibitor as efficient nanocarrier to improve anticorrosion behavior of epoxy coating. Journal of Industrial and Engineering Chemistry, 2020, 83, 153-163.	2.9	29
13	Highly biocompatible multifunctional hybrid nanoparticles based on Fe ₃ O ₄ decorated nanodiamond with superior superparamagnetic behaviors and photoluminescent properties. Materials Science and Engineering C, 2020, 114, 110993.	3.8	22
14	Chitosan interphase around nanodiamond: Insight from equilibrium molecular dynamics. Diamond and Related Materials, 2020, 104, 107737.	1.8	1
15	Ultrafast and simultaneous removal of anionic and cationic dyes by nanodiamond/UiO-66 hybrid nanocomposite. Chemosphere, 2020, 247, 125882.	4.2	56
16	High-performance styrene-butadiene rubber nanocomposites based on carbon nanotube/nanodiamond hybrid with synergistic thermal conduction characteristics and electrically insulating properties. Polymer, 2020, 196, 122470.	1.8	24
17	Effects of hybrid carbon-aramid fiber on performance of non-asbestos organic brake friction composites. Wear, 2020, 452-453, 203280.	1.5	46
18	Bio-based UV curable polyurethane acrylate: Morphology and shape memory behaviors. European Polymer Journal, 2019, 118, 514-527.	2.6	34

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19	Polymer/nanodiamond composites - a comprehensive review from synthesis and fabrication to properties and applications. <i>Advances in Colloid and Interface Science</i> , 2019, 269, 122-151.	7.0	106
20	Experimental Study on the Influence of Initial pH, Ionic Strength, and Temperature on the Selective Adsorption of Dyes onto Nanodiamonds. <i>Journal of Chemical & Engineering Data</i> , 2019, 64, 1508-1514.	1.0	42
21	Mixed-Matrix Composite Membranes Based on UiO-66-Derived MOFs for CO ₂ Separation. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 9448-9461.	4.0	70
22	Effect of short carbon fiber on thermal, mechanical and tribological behavior of phenolic-based brake friction materials. <i>Composites Part B: Engineering</i> , 2019, 168, 98-105.	5.9	92
23	Frictional behavior of resin-based brake composites: Effect of carbon fibre reinforcement. <i>Wear</i> , 2019, 420-421, 108-115.	1.5	37
24	Thermally Oxidized Nanodiamond: An Effective Sorbent for Separation of Methotrexate from Aqueous Media: Synthesis, Characterization, In Vivo and In Vitro Biocompatibility Study. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2019, 29, 701-709.	1.9	19
25	Evaluation of UiO-66 metal organic framework as an effective sorbent for Curcumin's overdose. <i>Applied Organometallic Chemistry</i> , 2018, 32, e4221.	1.7	93
26	Improving mixed-matrix membrane performance <i>via</i> PMMA grafting from functionalized NH ₂ -UiO-66. <i>Journal of Materials Chemistry A</i> , 2018, 6, 2775-2791.	5.2	117
27	Nanodiamond-filled chitosan as an efficient adsorbent for anionic dye removal from aqueous solutions. <i>Journal of Environmental Chemical Engineering</i> , 2018, 6, 3283-3294.	3.3	62
28	Ethylenediamine Grafting to Functionalized NH ₂ -UiO-66 Using Green Aza-Michael Addition Reaction to Improve CO ₂ /CH ₄ Adsorption Selectivity. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 7030-7039.	1.8	52
29	Rapid and tunable selective adsorption of dyes using thermally oxidized nanodiamond. <i>Journal of Colloid and Interface Science</i> , 2018, 524, 52-64.	5.0	99
30	Selective dye adsorption by highly water stable metal-organic framework: Long term stability analysis in aqueous media. <i>Applied Surface Science</i> , 2018, 445, 424-436.	3.1	240
31	<i>In situ</i> preparation and characterization of biocompatible acrylate-terminated polyurethane containing chemically modified multiwalled carbon nanotube. <i>Polymer Composites</i> , 2018, 39, E297.	2.3	10
32	Fabrication and Properties of Polycaprolactone Composites Containing Calcium Phosphate-Based Ceramics and Bioactive Glasses in Bone Tissue Engineering: A Review. <i>Polymer Reviews</i> , 2018, 58, 164-207.	5.3	179
33	Enhancing CO ₂ /N ₂ adsorption selectivity via post-synthetic modification of NH ₂ -UiO-66(Zr). <i>Microporous and Mesoporous Materials</i> , 2018, 257, 193-201.	2.2	170
34	Preparation of Metal-Organic Frameworks UiO-66 for Adsorptive Removal of Methotrexate from Aqueous Solution. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2018, 28, 177-186.	1.9	129
35	Bare and functionalized nanodiamonds in aqueous media: A theoretical study. <i>Diamond and Related Materials</i> , 2018, 89, 301-311.	1.8	6
36	Photo-curable acrylate polyurethane as efficient composite membrane for CO ₂ separation. <i>Polymer</i> , 2018, 149, 178-191.	1.8	20

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37	A Flat Polymeric Membrane Sensor for Carbon Dioxide/Nitrogen Gas Mixture. <i>Chemical Engineering Communications</i> , 2017, 204, 445-452.	1.5	0
38	Morphology development and mechanical properties of unsaturated polyester resin containing nanodiamonds. <i>Polymer International</i> , 2017, 66, 950-959.	1.6	11
39	Network structure and mechanical properties of polydimethylsiloxane filled with nanodiamond "Effect of degree of silanization of nanodiamond. <i>Composites Science and Technology</i> , 2017, 142, 227-234.	3.8	32
40	Amino functionalized hierarchically produced porous polyacrylamide microspheres for the removal of chromium(VI) from aqueous solution. <i>Journal of Porous Materials</i> , 2017, 24, 1705-1715.	1.3	6
41	Enhanced mechanical properties of chitosan/nanodiamond composites by improving interphase using thermal oxidation of nanodiamond. <i>Carbohydrate Polymers</i> , 2017, 167, 219-228.	5.1	33
42	Morphological and mechanical properties of polyamide 6/nanodiamond composites prepared by melt mixing: effect of surface functionality of nanodiamond. <i>Polymer International</i> , 2017, 66, 557-565.	1.6	23
43	Improvement of dry sliding tribological properties of polyamide 6 using diamond nanoparticles. <i>Tribology International</i> , 2017, 115, 370-377.	3.0	46
44	pH-Responsive Nanostructured Polyaniline Capsules for Self-Healing Corrosion Protection: The Influence of Capsule Concentration. <i>Scientia Iranica</i> , 2017, .	0.3	2
45	Inhibitor-loaded conducting polymer capsules for active corrosion protection of coating defects. <i>Corrosion Science</i> , 2016, 112, 138-149.	3.0	123
46	Vulcanization kinetics and reversion behavior of natural rubber/styrene-butadiene rubber blend filled with nanodiamond "the role of sulfur curing system. <i>European Polymer Journal</i> , 2016, 81, 98-113.	2.6	88
47	Silane functionalization of nanodiamond for polymer nanocomposites-effect of degree of silanization. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2016, 506, 254-263.	2.3	53
48	pH responsive Ce(III) loaded polyaniline nanofibers for self-healing corrosion protection of AA2024-T3. <i>Progress in Organic Coatings</i> , 2016, 99, 197-209.	1.9	81
49	Biodegradable polyurethane acrylate/HEMA-grafted nanodiamond composites with bone regenerative potential applications: structure, mechanical properties and biocompatibility. <i>RSC Advances</i> , 2016, 6, 8743-8755.	1.7	40
50	Reinforcing mechanisms of carbon nanotubes and high structure carbon black in natural rubber/styrene-butadiene rubber blend prepared by mechanical mixing"effect of bound rubber. <i>Polymer International</i> , 2015, 64, 1627-1638.	1.6	35
51	Modeling and optimization of friction materials based on genetic programming and experimental frictional data. <i>Journal of Reinforced Plastics and Composites</i> , 2015, 34, 581-590.	1.6	3
52	Characterization of polyamide 6/carbon nanotube composites prepared by melt mixing-effect of matrix molecular weight and structure. <i>Composites Part B: Engineering</i> , 2015, 78, 50-64.	5.9	42
53	Cure Kinetics of Nanodiamond-Filled Epoxy Resin: Influence of Nanodiamond Surface Functionality. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 8954-8962.	1.8	49
54	Mechanical properties and structure of solvent processed novolac resin/layered silicate: development of interphase region. <i>RSC Advances</i> , 2015, 5, 80875-80883.	1.7	38

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55	Morphology transition control of polyaniline from nanotubes to nanospheres in a soft template method. <i>Polymer International</i> , 2015, 64, 88-95.	1.6	14
56	Chemically modified organic/inorganic nanoporous composite particles for the adsorption of reactive black 5 from aqueous solution. <i>Reactive and Functional Polymers</i> , 2015, 86, 7-15.	2.0	44
57	An investigation on the structural characteristics and reinforcement of melt processed polyamide 66/multiwalled carbon nanotube composites. <i>Polymers for Advanced Technologies</i> , 2014, 25, 406-417.	1.6	14
58	Effect of alumina nanoparticle on the tribological performance of automotive brake friction materials. <i>Journal of Reinforced Plastics and Composites</i> , 2014, 33, 166-178.	1.6	19
59	Effect of nanoclays on the mechanical properties and durability of novolac phenolic resin/woven glass fiber composite at various chemical environments. <i>Composites Part A: Applied Science and Manufacturing</i> , 2014, 63, 149-158.	3.8	52
60	Estimating the Connected Volume of Hydrocarbon During Early Reservoir Life by Percolation Theory. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2014, 36, 301-308.	1.2	4
61	Characterization of reinforcing effect of alumina nanoparticles on the novolac phenolic resin. <i>Polymer Composites</i> , 2014, 35, 1285-1293.	2.3	21
62	Nanodiamond gels in nonpolar media: Colloidal and rheological properties. <i>Journal of Rheology</i> , 2014, 58, 1599-1614.	1.3	40
63	A mathematical method for XRD pattern interpretation in clay containing nano composites. <i>Applied Surface Science</i> , 2014, 318, 90-94.	3.1	10
64	Synthesis and characterization of biodegradable acrylated polyurethane based on poly(ϵ -caprolactone) and 1,6-hexamethylene diisocyanate. <i>Materials Science and Engineering C</i> , 2014, 42, 763-773.	3.8	44
65	Controlled growth of hollow polyaniline structures: From nanotubes to microspheres. <i>Polymer</i> , 2013, 54, 5586-5594.	1.8	34
66	Cure kinetic and network structure of NR/SBR composites reinforced by multiwalled carbon nanotube and carbon blacks. <i>Thermochimica Acta</i> , 2013, 566, 238-248.	1.2	55
67	Molecularly imprinted polydopamine nano-layer on the pore surface of porous particles for protein capture in HPLC column. <i>Journal of Colloid and Interface Science</i> , 2013, 404, 117-126.	5.0	68
68	Column study of Cr (VI) adsorption onto modified silica-polyacrylamide microspheres composite. <i>Chemical Engineering Journal</i> , 2012, 210, 280-288.	6.6	91
69	Prediction and optimization of cure cycle of thick fiber-reinforced composite parts using dynamic artificial neural networks. <i>Journal of Reinforced Plastics and Composites</i> , 2012, 31, 1201-1215.	1.6	37
70	Anticorrosion properties of smart coating based on polyaniline nanoparticles/epoxy-ester system. <i>Progress in Organic Coatings</i> , 2012, 75, 502-508.	1.9	94
71	Effect of carbon-based nanoparticles on the cure characteristics and network structure of styrene-butadiene rubber vulcanizate. <i>Polymer International</i> , 2012, 61, 664-672.	1.6	43
72	Submicron nanoporous polyacrylamide beads with tunable size for verapamil imprinting. <i>Journal of Applied Polymer Science</i> , 2012, 125, 189-199.	1.3	38

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73	Effect of rubber component on the performance of brake friction materials. <i>Wear</i> , 2012, 274-275, 286-297.	1.5	65
74	Field Scale Characterization of Geological Formations Using Percolation Theory. <i>Transport in Porous Media</i> , 2012, 92, 357-372.	1.2	16
75	A Reservoir Conductivity Evaluation Using Percolation Theory. <i>Petroleum Science and Technology</i> , 2011, 29, 1041-1053.	0.7	13
76	Utilization of percolation approach to evaluate reservoir connectivity and effective permeability: A case study on North Pars gas field. <i>Scientia Iranica</i> , 2011, 18, 1391-1396.	0.3	15
77	Optimization of industrial CSTR for vinyl acetate polymerization using novel shuffled frog leaping based hybrid algorithms and dynamic modeling. <i>Computers and Chemical Engineering</i> , 2011, 35, 2351-2365.	2.0	13
78	High Capacity Hierarchically Imprinted Polymer Beads for Protein Recognition and Capture. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 495-498.	7.2	156
79	Studies on the friction and wear characteristics of rubber-based friction materials containing carbon and cellulose fibers. <i>Journal of Materials Science</i> , 2011, 46, 1890-1901.	1.7	13
80	Tribological Characteristics of Rubber-Based Friction Materials. <i>Tribology Letters</i> , 2011, 41, 325-336.	1.2	11
81	Mechanical performance of styrene-butadiene-rubber filled with carbon nanoparticles prepared by mechanical mixing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 7161-7172.	2.6	36
82	Effect of chemical treatment of Teflon powder on the properties of polyamide 66/Teflon composites prepared by melt mixing. <i>Macromolecular Research</i> , 2011, 19, 613-621.	1.0	13
83	Binary and ternary blends of high density polyethylene with poly(ethylene terephthalate) and polystyrene based on recycled materials. <i>Polymers for Advanced Technologies</i> , 2011, 22, 690-702.	1.6	7
84	Effect of organoclay loading and electron beam irradiation on the physico-mechanical properties of low density polyethylene/ethylene vinyl acetate blend. <i>Polymers for Advanced Technologies</i> , 2011, 22, 2352-2359.	1.6	6
85	Thermal, mechanical and acoustic damping properties of flexible open cell polyurethane/multi-walled carbon nanotube foams: effect of surface functionality of nanotubes. <i>Polymer International</i> , 2011, 60, 475-482.	1.6	98
86	Physico-mechanical properties and thermal stability of thermoset nanocomposites based on styrene-butadiene rubber/phenolic resin blend. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010, 527, 917-926.	2.6	32
87	Theoretical and experimental analysis of the thermal, fade and wear characteristics of rubber-based composite friction materials. <i>Wear</i> , 2010, 269, 145-151.	1.5	41
88	Analysis of structure-properties relationship in nitrile-butadiene rubber/phenolic resin/organoclay ternary nanocomposites using simple model system. <i>Polymers for Advanced Technologies</i> , 2010, 21, 356-364.	1.6	9
89	Rheological and mechanical characteristics of low density polyethylene/ethylene vinyl acetate/organoclay nanocomposites. <i>Polymer Engineering and Science</i> , 2010, 50, 1315-1325.	1.5	40
90	Effect of anisotropy on the scaling of connectivity and conductivity in continuum percolation theory. <i>Physical Review E</i> , 2010, 81, 061119.	0.8	14

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91	Effect of system of initiators on the process cycle of nonisothermal resin transfer molding â€œ Numerical investigation. <i>Composites Part A: Applied Science and Manufacturing</i> , 2010, 41, 138-145.	3.8	8
92	Taguchi analysis of extrusion variables and composition effects on the morphology and mechanical properties of EPR-g-MA toughened polyamide 6 and its composite with short glass fiber. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 506, 45-57.	2.6	13
93	Properties of alumina nanoparticleâ€filled nitrileâ€butadieneâ€rubber/phenolicâ€resin blend prepared by melt mixing. <i>Polymer Composites</i> , 2009, 30, 1290-1298.	2.3	16
94	Effects of rubber curing ingredients and phenolicâ€resin on mechanical, thermal, and morphological characteristics of rubber/phenolicâ€resin blends. <i>Journal of Applied Polymer Science</i> , 2008, 108, 3808-3821.	1.3	40
95	Performance characterization of composite materials based on recycled high-density polyethylene and ground tire rubber reinforced with short glass fibers for structural applications. <i>Journal of Applied Polymer Science</i> , 2007, 104, 1-8.	1.3	20
96	Adhesion modification of polyethylenes for metallization using radiation-induced grafting of vinyl monomers. <i>Surface and Coatings Technology</i> , 2007, 201, 7519-7529.	2.2	26
97	Thermally conductive rubber-based composite friction materials for railroad brakes â€œ Thermal conduction characteristics. <i>Composites Science and Technology</i> , 2007, 67, 2665-2674.	3.8	57
98	Theoretical and Experimental Study on the Adsorption and Desorption of Methane by Granular Activated Carbon at 25Â°C. <i>Journal of Natural Gas Chemistry</i> , 2007, 16, 415-422.	1.8	26
99	Numerical simulation of three-dimensional flow and analysis of filling process in compression resin transfer moulding. <i>Composites Part A: Applied Science and Manufacturing</i> , 2006, 37, 1434-1450.	3.8	52
100	A numerical study of filling process through multilayer preforms in resin injection/compression molding. <i>Composites Science and Technology</i> , 2006, 66, 1546-1557.	3.8	35
101	Analysis of the sedimentation process in reactive polymeric suspensions. <i>Chemical Engineering Science</i> , 2006, 61, 7565-7578.	1.9	17
102	On the viscosity of composite suspensions of aluminum and ammonium perchlorate particles dispersed in hydroxyl terminated polybutadieneâ€New empirical model. <i>Journal of Colloid and Interface Science</i> , 2006, 299, 962-971.	5.0	24
103	Cure kinetics of a polymer-based composite friction material. <i>Journal of Applied Polymer Science</i> , 2006, 100, 9-17.	1.3	12
104	A Numerical Investigation on the Cure Cycle of Composite Brake Blocks. <i>International Polymer Processing</i> , 2006, 21, 421-431.	0.3	5
105	Wear and thermal effects in low modulus polymer-based composite friction materials. <i>Journal of Applied Polymer Science</i> , 2005, 95, 1181-1188.	1.3	15
106	Simulation of Three-dimensional Flow in Compression Resin Transfer Molding by the Control Volume/Finite Element Method. , 2004, , 357-362.		1
107	An Experimental Study of Saturated and Unsaturated Permeabilities in Resin Transfer Molding Based on Unidirectional Flow Measurements. <i>Journal of Reinforced Plastics and Composites</i> , 2004, 23, 1515-1536.	1.6	31
108	Three-dimensional process cycle simulation of composite parts manufactured by resin transfer molding. <i>Composite Structures</i> , 2004, 65, 381-390.	3.1	51

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109	A Numerical Approach to Analyze the Curing Process of Railroad Composite Brake Shoe. , 2004, , 811-816.		0
110	Simulation of the three-dimensional non-isothermal mold filling process in resin transfer molding. Composites Science and Technology, 2003, 63, 1931-1948.	3.8	41
111	Modeling and simulation approaches in the resin transfer molding process: A review. Polymer Composites, 2003, 24, 525-544.	2.3	68
112	Numerical simulation of three-dimensional mold filling process in resin transfer molding using quasi-steady state and partial saturation formulations. Composites Science and Technology, 2002, 62, 861-879.	3.8	43
113	Thermal interaction between polymer-based composite friction materials and counterfaces. Journal of Applied Polymer Science, 2001, 81, 364-369.	1.3	13