Susheel Kalia

List of Publications by Year
in descending order

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92 papers	7,602 citations	109321 35 h-index	54911 84 g-index
126 all docs	126 docs citations	126 times ranked	9121 citing authors

#	Article	IF	Citations
1	Surface modification of inorganic nanoparticles for development of organicâ€“inorganic nanocompositesâ€”A review. Progress in Polymer Science, 2013, 38, 1232-1261.	24.7	1,760
2	Pretreatments of natural fibers and their application as reinforcing material in polymer compositesâ€”A review. Polymer Engineering and Science, 2009, 49, 1253-1272.	3.1	1,097
3	Cellulose-Based Bio- and Nanocomposites: A Review. International Journal of Polymer Science, 2011, 2011, 1-35.	2.7	499
4	Nanofibrillated cellulose: surface modification and potential applications. Colloid and Polymer Science, 2014, 292, 5-31.	2.1	363
5	Magnetic polymer nanocomposites for environmental and biomedical applications. Colloid and Polymer Science, 2014, 292, 2025-2052.	2.1	228
6	Surface modification of plant fibers using environment friendly methods for their application in polymer composites, textile industry and antimicrobial activities: A review. Journal of Environmental Chemical Engineering, 2013, 1, 97-112.	6.7	225
7	Fabrication and characterization of chitosan-crosslinked-poly(alginic acid) nanohydrogel for adsorptive removal of Cr(VI) metal ion from aqueous medium. International Journal of Biological Macromolecules, 2017, 95, 484-493.	7.5	217
8	Facile hetero-assembly of superparamagnetic Fe3O4/BiVO4 stacked on biochar for solar photo-degradation of methyl paraben and pesticide removal from soil. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 337, 118-131.	3.9	158
9	Biodegradable and conducting hydrogels based on Guar gum polysaccharide for antibacterial and dye removal applications. Journal of Environmental Management, 2015, 162, 37-45.	7.8	117
10	Magnetically recoverable ZrO₂/Fe₃O₄/chitosan nanomaterials for enhanced sunlight driven photoreduction of carcinogenic Cr(<scp>vi</scp>) and dechlorination & mineralization of 4-chlorophenol from simulated waste water. RSC Advances, 2016, 6, 13251-13263.	3.6	115
11	Polyacrylamide/Ni_{0.02}Zn_{0.98}O Nanocomposite with High Solar Light Photocatalytic Activity and Efficient Adsorption Capacity for Toxic Dye Removal. Industrial & Engineering Chemistry Research, 2014, 53, 15549-15560.	3.7	113
12	Cryogenic Processing: A Study of Materials at Low Temperatures. Journal of Low Temperature Physics, 2010, 158, 934-945.	1.4	101
13	Water retention and dye adsorption behavior of Gg-cl-poly(acrylic acid-aniline) based conductive hydrogels. Geoderma, 2014, 232-234, 45-55.	5.1	100
14	Synthesis and properties of poly(acrylamide-aniline)-grafted gum ghatti based nanospikes. RSC Advances, 2013, 3, 25830.	3.6	80
15	Pectin-c rosslinked -guar gum/SPION nanocomposite hydrogel for adsorption of m-cresol and o-chlorophenol. Sustainable Chemistry and Pharmacy, 2017, 6, 96-106.	3.3	78
16	Response surface methodology and optimized synthesis of guar gum-based hydrogels with enhanced swelling capacity. RSC Advances, 2014, 4, 40339-40344.	3.6	70
17	Guar gum based biodegradable, antibacterial and electrically conductive hydrogels. International Journal of Biological Macromolecules, 2015, 75, 266-275.	7.5	70
18	Synthesis and biodegradation studies of gamma irradiated electrically conductive hydrogels. Polymer Degradation and Stability, 2014, 107, 166-177.	5.8	67

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19	Mercerization of Flax Fiber Improves the Mechanical Properties of Fiber-Reinforced Composites. International Journal of Polymeric Materials and Polymeric Biomaterials, 2008, 57, 54-72.	3.4	65
20	Synthesis of Biodegradable Gum ghatti Based Poly(methacrylic acid-aniline) Conducting IPN Hydrogel for Controlled Release of Amoxicillin Trihydrate. Industrial & Engineering Chemistry Research, 2015, 54, 1982-1991.	3.7	64
21	Application of biodegradable superabsorbent hydrogel composite based on Gum ghatti-co-poly(acrylic) Tj ETQq1 1 0.784314 rgBT /Ov	5.8	63
22	Combined sorptionalâ€“photocatalytic remediation of dyes by polyaniline Zr(IV) selenotungstophosphate nanocomposite. Toxicological and Environmental Chemistry, 2015, 97, 526-537.	1.2	62
23	Synthesis and Characterization of Graft Co-Polymers of Flax Fiber with Binary Vinyl Monomers. International Journal of Polymer Analysis and Characterization, 2007, 12, 401-412.	1.9	60
24	Synthesis, characterization and water retention study of biodegradable Gum ghatti-poly(acrylic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 54	5.8	60
25	Preparation of poly(acrylamide-co-acrylic acid)-grafted gum and its flocculation and biodegradation studies. Carbohydrate Polymers, 2013, 98, 397-404.	10.2	59
26	A novel nanocomposite of polyaniline and Fe0.01Ni0.01Zn0.98O: Photocatalytic, electrical and antibacterial properties. Journal of Alloys and Compounds, 2013, 578, 249-256.	5.5	56
27	Evaluation of the retting process as a pre-treatment of vegetable fibers for the preparation of high-performance polymer biocomposites. Industrial Crops and Products, 2016, 81, 56-65.	5.2	55
28	Graft copolymerization of MMA onto flax under different reaction conditions: a comparative study. EXPRESS Polymer Letters, 2008, 2, 93-100.	2.1	52
29	Effect of Benzoylation and Graft Copolymerization on Morphology, Thermal Stability, and Crystallinity of Sisal Fibers. Journal of Natural Fibers, 2011, 8, 27-38.	3.1	49
30	Fabrication and characterization of gum ghatti-polymethacrylic acid based electrically conductive hydrogels. Synthetic Metals, 2014, 187, 61-67.	3.9	48
31	A study of the biodegradation behaviour of poly(methacrylic acid/aniline)-grafted gum ghatti by a soil burial method. RSC Advances, 2014, 4, 25637.	3.6	46
32	Photocatalytic dye degradation efficiency and reusability of Cu-substituted Zn-Mg spinel nanoferrites for wastewater remediation. Journal of Water Process Engineering, 2022, 48, 102865.	5.6	44
33	Laccase-assisted surface functionalization of lignocellulosics. Journal of Molecular Catalysis B: Enzymatic, 2014, 102, 48-58.	1.8	43
34	Robust and sustainable Mg1-xCexNiyFe2-yO4 magnetic nanophotocatalysts with improved photocatalytic performance towards photodegradation of crystal violet and rhodamine B pollutants. Chemosphere, 2022, 294, 133706.	8.2	43
35	Grafting of Flax Fiber (Linum usitatissimum) with Vinyl Monomers for Enhancement of Properties of Flax-Phenolic Composites. Polymer Journal, 2007, 39, 1319-1327.	2.7	42
36	Sustainable kenaf/bamboo fibers/clay hybrid nanocomposites: properties, environmental aspects and applications. Journal of Cleaner Production, 2022, 330, 129938.	9.3	40

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37	Photocatalytic degradation of malachite green pollutant using novel dysprosium modified Znâ€“Mg photocatalysts for wastewater remediation. Ceramics International, 2022, 48, 29111-29120.	4.8	38
38	Polysaccharide Based Graft Copolymers. , 2013, , .		37
39	Gum ghatti based novel electrically conductive biomaterials: A study of conductivity and surface morphology. EXPRESS Polymer Letters, 2014, 8, 267-281.	2.1	35
40	Surface functionalization of coconut fibers by enzymatic biografting of syringaldehyde for the development of biocomposites. RSC Advances, 2015, 5, 76844-76851.	3.6	35
41	Evaluation of a conducting interpenetrating network based on gum ghatti-g-poly(acrylic acid-aniline) as a colon-specific delivery system for amoxicillin trihydrate and paracetamol. New Journal of Chemistry, 2015, 39, 3021-3034.	2.8	35
42	Surface Modification of Sisal Fibers (Agave sisalana) Using Bacterial Cellulase and Methyl Methacrylate. Journal of Polymers and the Environment, 2012, 20, 142-151.	5.0	34
43	Guaran-based biodegradable and conducting interpenetrating polymer network composite hydrogels for adsorptive removal of methylene blue dye. Polymer Degradation and Stability, 2015, 122, 52-65.	5.8	34
44	Mechanical properties of flax-g-poly(methyl acrylate) reinforced phenolic composites. Fibers and Polymers, 2008, 9, 416-422.	2.1	32
45	Preparation of microwave radiation induced graft copolymers and their applications as reinforcing material in phenolic composites. Polymer Composites, 2008, 29, 791-797.	4.6	31
46	Sunn Hemp Cellulose Graft Copolymers Polyhydroxybutyrate Composites: Morphological And Mechanical Studies. Advanced Materials Letters, 2011, 2, 17-25.	0.6	31
47	Recent advances in silver bromide-based Z-scheme photocatalytic systems for environmental and energy applications: A review. Journal of Environmental Chemical Engineering, 2021, 9, 105157.	6.7	31
48	Natural Fibers, Bio- and Nanocomposites. International Journal of Polymer Science, 2011, 2011, 1-2.	2.7	29
49	A new route of valorization of rice endosperm by-product: Production of polymeric biocomposites. Composites Part B: Engineering, 2018, 139, 195-202.	12.0	29
50	A study of magnetic properties of Yâ€“Niâ€“Mn substituted Co2Z-type nanohexaferrites via vibrating sample magnetometry. Journal of Sol-Gel Science and Technology, 2021, 97, 373-381.	2.4	28
51	Preparation of gum acacia-poly(acrylamide-IPN-acrylic acid) based nanocomposite hydrogels via polymerization methods for antimicrobial applications. Journal of Molecular Structure, 2020, 1215, 128298.	3.6	27
52	Nickel ions modified Co Mg nanophotocatalysts for solar light-driven degradation of antimicrobial pharmaceutical effluents. Journal of Water Process Engineering, 2022, 47, 102785.	5.6	27
53	Modification of Ramie Fibers Using Microwave-Assisted Grafting and Cellulase Enzymeâ€“Assisted Biopolishing: A Comparative Study of Morphology, Thermal Stability, and Crystallinity. International Journal of Polymer Analysis and Characterization, 2011, 16, 307-318.	1.9	26
54	The development of antibacterial and hydrophobic functionalities in natural fibers for fiber-reinforced composite materials. Journal of Environmental Chemical Engineering, 2016, 4, 1743-1752.	6.7	25

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55	Surface functionalization of lignin constituent of coconut fibers via laccase-catalyzed biografting for development of antibacterial and hydrophobic properties. Journal of Cleaner Production, 2016, 113, 176-182.	9.3	25
56	Graft Copolymerization Of Acrylic Acid Onto Gelatinized Patato Starch For Removal Of Metal Ions And Organic Dyes From Aqueous System. Advanced Materials Letters, 2012, 3, 259-264.	0.6	25
57	Polymers at Cryogenic Temperatures. , 2013, , .		24
58	Effects of swift heavy ion beam irradiation on the structural and morphological properties of poly(methacrylic acid) cross-linked gum ghatti films. Vacuum, 2014, 101, 166-170.	3.5	24
59	Fabrication of Ni2+ and Dy3+ substituted Y-Type nanohexaferrites: A study of structural and magnetic properties. Physica B: Condensed Matter, 2020, 595, 412378.	2.7	24
60	Improving photocatalytic efficiency of MnFe2O4 ferrites via doping with Zn2+/La3+ ions: photocatalytic dye degradation for water remediation. Environmental Science and Pollution Research, 2023, 30, 71527-71542.	5.3	21
61	Synthesis of guar gum-acrylic acid graft copolymers based biodegradable adsorbents for cationic dye removal. International Journal of Plastics Technology, 2016, 20, 294-314.	3.1	20
62	Enzymatically treated curaua fibers in poly(butylene succinate)-based biocomposites. Journal of Environmental Chemical Engineering, 2018, 6, 4452-4458.	6.7	20
63	Use of Flax-g-poly(MMA) as Reinforcing Material for Enhancement of Properties of Phenol Formaldehyde Composites. International Journal of Polymer Analysis and Characterization, 2008, 13, 341-352.	1.9	18
64	Gum ghatti-based biodegradable and conductive carriers for colon-specific drug delivery. Colloid and Polymer Science, 2015, 293, 1181-1190.	2.1	17
65	Organic-Inorganic Hybrid Nanomaterials. Advances in Polymer Science, 2015, , .	0.8	17
66	Laccase-mediated biografting of p -coumaric acid for development of antibacterial and hydrophobic properties in coconut fibers. Journal of Molecular Catalysis B: Enzymatic, 2015, 122, 289-295.	1.8	16
67	Ab initio study of gas phase and water-assisted tautomerization of maleimide and formamide. Journal of Chemical Sciences, 2007, 119, 617-624.	1.5	14
68	Microwave Enhanced Synthesis of Flax-g-poly(MMA) for Use in Phenolic Composites as Reinforcement. E-Journal of Chemistry, 2008, 5, 163-168.	0.5	12
69	A comparative study of the effect of Ni9+ and Au8+ ion beams on the properties of poly(methacrylic) Tj ETQq1 1 0.784314 rgBT /Ove	2.8	12
70	Ggum-poly(Itaconic Acid) Based Superabsorbents Via Two-Step Free-Radical Aqueous Polymerization for Environmental and Antibacterial Applications. Journal of Polymers and the Environment, 2017, 25, 176-191.	5.0	12
71	Prospects of Biosensors Based on Functionalized and Nanostructured Solitary Materials: Detection of Viral Infections and Other Risks. ACS Omega, 2022, 7, 22073-22088.	3.5	12
72	Surface Modification of Sunn Hemp Fibers Using Acrylation, Peroxide and Permanganate Treatments: A Study of Morphology, Thermal Stability and Crystallinity. Polymer-Plastics Technology and Engineering, 2013, 52, 24-29.	1.9	11

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73	Semiconductorâ€“Polymer Hybrid Materials. Advances in Polymer Science, 2014, , 283-311.	0.8	11
74	Structural, magnetic and MÃ¶ssbauer analysis of lanthanum and nickel doped Co2Y-type hexaferrite nanomaterial matrix synthesized by sol-gel auto-combustion technique. Journal of Molecular Structure, 2020, 1205, 127623.	3.6	10
75	Surface Modification Of Ramie Fibers Using Microwave Assisted Graft Copolymerization Followed By Brevibacillus Parabrevis Pretreatment. Advanced Materials Letters, 2013, 4, 742-748.	0.6	10
76	Mechanical Properties of Phenolic Composites Reinforced with Flax-g-copolymers Prepared under Different Reaction Conditions - A Comparative Study. E-Journal of Chemistry, 2008, 5, 177-184.	0.5	9
77	Polymer Grafting: A Versatile Means to Modify the Polysaccharides. , 2013, , 1-14.		9
78	Polysaccharide Hydrogels: Synthesis, Characterization, and Applications. , 2013, , 271-290.		9
79	Surface Functionalization of Sisal Fibers Using Peroxide Treatment Followed by Grafting of Poly(ethyl acrylate) and Copolymers. International Journal of Polymer Analysis and Characterization, 2013, 18, 596-607.	1.9	9
80	Enzymatic modification of ramie fibers and its influence on the performance of ramie-poly(butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	3.1	9
81	Well-defined quantum dots and broadening of optical phonon line from hydrothermal method. RSC Advances, 2016, 6, 102010-102014.	3.6	8
82	SYNTHESIS OF FLAX-G-COPOLYMERS UNDER PRESSURE FOR USE IN PHENOLIC COMPOSITES AS REINFORCEMENT. Journal of the Chilean Chemical Society, 2009, 54, .	1.2	7
83	Environment Benevolent Biodegradable Polymers: Synthesis, Biodegradability, and Applications. , 2011, , 425-451.		7
84	Eicosyl ammoniums elicited thermal reduction alleyway towards gold nanoparticles and their chemo-sensor aptitude. Analyst, The, 2016, 141, 2208-2217.	3.5	5
85	Conducting Polymer Hydrogels and Their Applications. Springer Series on Polymer and Composite Materials, 2017, , 193-221.	0.7	5
86	Surface Modification of Sisal Fibers Using Cellulase and Microwave-Assisted Grafting: A Study of Morphology, Crystallinity, and Thermal Stability. International Journal of Polymeric Materials and Polymeric Biomaterials, 2012, 61, 1130-1141.	3.4	4
87	Chitosan and Starch-Based Hydrogels Via Graft Copolymerization. Springer Series on Polymer and Composite Materials, 2016, , 189-234.	0.7	4
88	Influence of Hoâ€“Niâ€“Mn substitution on the structural and magnetic behavior of Baâ€“Sr Co2Z-type nanohexaferrites extension up to Mossbauer investigations. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	2.3	4
89	Cryogenic Processing: State of the Art, Advantages and Applications. , 2013, , 1-7.		3
90	A Study of Crystallinity of Graft Copolymers of Flax Fiber with Binary Vinyl Monomers. E-Polymers, 2008, 8, .	3.0	2

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91	Peroxide Treatment of Soy Protein Fibers Followed by Grafting of Poly(methyl acrylate) and Copolymers. Journal of Renewable Materials, 2013, 1, 302-310.	2.2	1
92	MORPHOLOGICAL AND MECHANICAL STUDIES OF POLYHYDROXYBUTYRATE COMPOSITES REINFORCED WITH FLAX-g-POLY(MA), FLAX-g-POLY(MA-co-AAc), and FLAX-g-POLY(MA-co-VA). Composites: Mechanics, Computations, Applications, 2012, 3, 263-274.	0.3	0