Ashwini K Agrawal

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7132570/publications.pdf

Version: 2024-02-01

98	2,794	172386	197736
papers	citations	29 h-index	49 g-index

100	100	100	2770
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Effect of fiber morphology on the capacitance of stretchable supercapacitors based on silver nanowireâ€polyurethane hollow fibers. International Journal of Energy Research, 2022, 46, 124-136.	2.2	5
2	Kinetic studies of photocatalytic degradation of an Azo dye by titania nanoparticles. Research Journal of Textile and Apparel, 2022, 26, 500-514.	0.6	3
3	Unfolding the effects of decontamination treatments on the structural and functional integrity of N95 respirators via numerical simulations. Scientific Reports, 2022, 12, 4191.	1.6	3
4	Synergistic Effect of Polyurethane in Polyurethaneâ€“Poly(vinylidene fluoride) Nanofiber-Based Stretchable Piezoelectric Nanogenerators (S-PENGs). ACS Applied Polymer Materials, 2022, 4, 4751-4764.	2.0	11
5	A facile method for the phosphorylation of cellulosic fabric via atmospheric pressure plasma. Carbohydrate Polymers, 2021, 256, 117531.	5.1	10
6	Hydrophobic functionalization of cellulosic substrate by tetrafluoroethane dielectric barrier discharge plasma at atmospheric pressure. Carbohydrate Polymers, 2021, 253, 117272.	5.1	18
7	Durable functionalization of polyethylene terephthalate fabrics using metal oxides nanoparticles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 615, 126223.	2.3	8
8	Metal-organic frameworks functionalized smart textiles for adsorptive removal of hazardous aromatic pollutants from ambient air. Journal of Hazardous Materials, 2021, 411, 125056.	6.5	31
9	Nano surface modification of poly(ethylene terephthalate) fabrics for enhanced comfort properties for activewear. Journal of Industrial and Engineering Chemistry, 2021, 98, 217-230.	2.9	7
10	Graphene nanofiber composites for enhanced neuronal differentiation of human mesenchymal stem cells. Nanomedicine, 2021, 16, 1963-1982.	1.7	12
11	Experimental evaluation of safety and efficacy of plasma-treated poly-Îµ-caprolactone membrane as a substitute for human amniotic membrane in treating corneal epithelial defects in rabbit eyes. Indian Journal of Ophthalmology, 2021, 69, 2412.	0.5	0
12	In Situ Functionalization of Cellulose with Zinc Pyrithione for Antimicrobial Applications. ACS Applied Materials & Interfaces, 2021, 13, 47382-47393.	4.0	15
13	Highly conducting silver nanowireâ€polyacrylonitrile hollow fibres for flexible supercapacitors. International Journal of Energy Research, 2020, 44, 1284-1293.	2.2	3
14	Stabilizer-free low-acid rapid synthesis of highly stable transparent aqueous titania nano sol and its photocatalytic activity. Journal of Molecular Liquids, 2020, 305, 112842.	2.3	5
15	Free standing flexible conductive PVA nanoweb with well aligned silver nanowires. Composites Science and Technology, 2019, 182, 107766.	3.8	8
16	Atypical rheology and spinning behavior of poly(vinyl alcohol) in a nonaqueous solvent. Polymer Journal, 2019, 51, 883-894.	1.3	8
17	Solution properties and electrospinning of poly(galacturonic acid) nanofibers. Carbohydrate Polymers, 2019, 212, 102-111.	5.1	13
18	Internally coated highly conductive and stretchable AgNW-PU hollow fibers. Polymer, 2019, 169, 46-51.	1.8	9

#	Article	IF	Citations
19	Rapid functionalization of cellulosic substrate via pulsed He/dodecyl acrylate plasma modulated at high power. Applied Surface Science, 2019, 470, 1075-1084.	3.1	1
20	TiO2â€“SiO2 Janus particles for photocatalytic self-cleaning of cotton fabric. Cellulose, 2018, 25, 2711-2720.	2.4	15
21	Readily dispersible antimicrobial Agâ€“SiO2 Janus particles and their application on cellulosic fabric. Carbohydrate Polymers, 2018, 187, 43-50.	5.1	12
22	Surfactant-free nanoencapsulation using reactive oligomers obtained by reversible addition fragmentation chain transfer polymerization of styrene and maleic anhydride. Applied Nanoscience (Switzerland), 2018, 8, 1701-1710.	1.6	2
23	TiO 2 â€“SiO 2 Janus particles treated cotton fabric for thermal regulation. Surface and Coatings Technology, 2017, 309, 897-903.	2.2	23
24	Atmospheric pressure plasma-assisted green synthesis of amphiphilic SiO 2 Janus particles. Particuology, 2017, 33, 50-54.	2.0	10
25	Agâ€“SiO 2 Janus particles based highly active SERS macroscopic substrates. Applied Surface Science, 2017, 411, 368-373.	3.1	15
26	Chitosan as a potential stabilizing agent for titania nanoparticle dispersions for preparation of multifunctional cotton fabric. Carbohydrate Polymers, 2016, 154, 167-175.	5.1	17
27	TiO₂â€“SiO₂ Janus particles with highly enhanced photocatalytic activity. RSC Advances, 2016, 6, 92754-92764.	1.7	35
28	The electrospinning behavior of poly(vinyl alcohol) in DMSOâ€“water binary solvent mixtures. RSC Advances, 2016, 6, 102947-102955.	1.7	30
29	In situ atmospheric pressure plasma treatment of cotton with monocarboxylic acids to impart crease-resistant functionality. Cellulose, 2016, 23, 993-1002.	2.4	13
30	Zinc oxide nanorod assisted rapid single-step process for the conversion of electrospun poly(acrylonitrile) nanofibers to carbon nanofibers with a high graphitic content. Nanoscale, 2016, 8, 4360-4372.	2.8	23
31	Long-term preservation of donor corneas in glycerol for keratoplasty: exploring new protocols. British Journal of Ophthalmology, 2016, 100, 284-290.	2.1	27
32	Electrospinning of Poly(vinyl alcohol)-Based Boger Fluids To Understand the Role of Elasticity on Morphology of Nanofibers. Industrial & Engineering Chemistry Research, 2015, 54, 1547-1554.	1.8	16
33	Electrospun composite nanofibres of PVA loaded with nanoencapsulated n-octadecane. RSC Advances, 2015, 5, 34377-34382.	1.7	26
34	Influence of Precursor Functionality on In Situ Reaction Dynamics in Atmospheric Pressure Plasma. Plasma Chemistry and Plasma Processing, 2015, 35, 677-695.	1.1	9
35	Aligned ZnO nanorods as effective reinforcing material for obtaining high performance polyamide fibers. Composites Science and Technology, 2015, 120, 58-65.	3.8	8
36	In situ synthesis of Agâ€“SiO2 Janus particles with epoxy functionality for textile applications. Particuology, 2015, 19, 107-112.	2.0	73

#	Article	IF	Citations
37	Shear Reversible Alumina Gels for Direct Writing. Journal of the American Ceramic Society, 2014, 97, 4031-4036.	1.9	3
38	Surface-Modified Electrospun Poly(Îµ-Caprolactone) Scaffold With Improved Optical Transparency and Bioactivity for Damaged Ocular Surface Reconstruction. , 2014, 55, 899.		53
39	Role of elasticity in control of diameter of electrospun PAN nanofibers. Fibers and Polymers, 2013, 14, 950-956.	1.1	17
40	Polymeric nanofiber composites with aligned ZnO nanorods. Composites Science and Technology, 2013, 86, 9-17.	3.8	15
41	Functionalization of cellulosic substrate using He/dodecyl acrylate plasma at atmospheric pressure. Surface and Coatings Technology, 2013, 225, 97-105.	2.2	16
42	Dispersion Stabilization of Titania Nanoparticles for Textile: Aggregation Behavior and Self-Cleaning Activity. Journal of Dispersion Science and Technology, 2013, 34, 611-622.	1.3	13
43	Effect of bipolar configuration on morphology of electrospun webs. Journal of the Textile Institute, 2013, 104, 1071-1079.	1.0	2
44	Concept of minimum electrospinning voltage (MEV) in electrospinning of PANâ€“DMF system: effect of distance. Journal of the Textile Institute, 2013, 104, 158-163.	1.0	11
45	Bi-Layer Composite Dressing of Gelatin Nanofibrous Mat and Poly Vinyl Alcohol Hydrogel for Drug Delivery and Wound Healing Application:<I>In-Vitro</I> and <I>In-Vivo</I> Studies. Journal of Biomedical Nanotechnology, 2013, 9, 1495-1508.	0.5	48
46	Comparative Analysis of Selected Fluorocarbon-Based Oil and Water-Repellent Finishes on Textiles. Research Journal of Textile and Apparel, 2013, 17, 20-28.	0.6	3
47	Study of hydrophobic finishing of cellulosic substrate using He/1,3-butadiene plasma at atmospheric pressure. Surface and Coatings Technology, 2012, 213, 65-76.	2.2	43
48	Effect of atmospheric pressure helium plasma on felting and low temperature dyeing of wool. Journal of Applied Polymer Science, 2012, 124, 4289-4297.	1.3	35
49	Phase behavior and mechanism of formation of protofiber morphology of solution spun poly(acrylonitrile) copolymers in DMFâ€“water system. Journal of Applied Polymer Science, 2011, 119, 837-854.	1.3	5
50	A novel route for synthesis of temperature responsive nanoparticles. Journal of Applied Polymer Science, 2011, 120, 335-344.	1.3	5
51	Concept of minimum electrospinning voltage in electrospinning of polyacrylonitrile N,Nâ€dimethylformamide system. Journal of Applied Polymer Science, 2011, 122, 856-866.	1.3	21
52	Atmospheric pressure plasma polymerization of 1,3-butadiene for hydrophobic finishing of textile substrates. Journal of Physics: Conference Series, 2010, 208, 012098.	0.3	13
53	Antistatic effect of atmospheric pressure glow discharge cold plasma treatment on textile substrates. Fibers and Polymers, 2010, 11, 431-437.	1.1	39
54	The effect of distribution of monomer moiety on the pH response and mechanical properties of poly(acrylonitrile-co-acrylic acid) copolymers. Smart Materials and Structures, 2010, 19, 025015.	1.8	4

#	Article	IF	Citations
55	Highly stable hexamethylolmelamine microcapsules containing nâ€octadecane prepared by in situ encapsulation. Journal of Applied Polymer Science, 2009, 114, 2997-3002.	1.3	38
56	Improvement in water and oil absorbency of textile substrate by atmospheric pressure cold plasma treatment. Surface and Coatings Technology, 2009, 203, 1336-1342.	2.2	99
57	Heat release and burning behaviour of foam and foam/Basofil fabric combination. Polymer Testing, 2009, 28, 511-520.	2.3	4
58	Improved dispersion of carbon nanotubes in chitosan. Fibers and Polymers, 2008, 9, 410-415.	1.1	15
59	pHâ€responsive fibers based on acrylonitrile acrylic acid block copolymers: Effect of spinning conditions and postspinning operations on response and mechanical properties. Journal of Applied Polymer Science, 2008, 109, 3792-3803.	1.3	7
60	Electrospun selfâ€assembled nanofiber yarns. Journal of Applied Polymer Science, 2008, 110, 603-607.	1.3	22
61	pH and electrical actuation of single walled carbon nanotube/chitosan composite fibers. Smart Materials and Structures, 2008, 17, 055016.	1.8	20
62	Water-proof Breathable Coatings Based on Poly(vinyl alcohol) for Cellulosic Fabric. Journal of Industrial Textiles, 2008, 38, 151-166.	1.1	10
63	Manufacture of polyamide fibres. , 2008, , 97-139.		6
64	Discovery of a unique dual response in acrylonitrile copolymers. Smart Materials and Structures, 2007, 16, 1843-1848.	1.8	4
65	Study of Fabric Assemblies used by Combat Paratrooper in the Cone Calorimeter. Journal of Industrial Textiles, 2007, 37, 123-138.	1.1	1
66	Functional Finishing of Cotton Using Titanium Dioxide and Zinc Oxide Nanoparticles. Research Journal of Textile and Apparel, 2007, 11, 1-10.	0.6	35
67	Effect of diacid stabilizers on kinetics of hydrolytic polymerization of Îµ-caprolactam in industrial reactors. Journal of Applied Polymer Science, 2007, 104, 2065-2075.	1.3	5
68	Melt spun thermoresponsive shape memory fibers based on polyurethanes: Effect of drawing and heat-setting on fiber morphology and properties. Journal of Applied Polymer Science, 2007, 103, 2172-2182.	1.3	49
69	Core content and stability ofn-octadecane-containing polyurea microencapsules produced by interfacial polymerization. Journal of Applied Polymer Science, 2007, 106, 786-792.	1.3	58
70	Influence of the copolymer architecture and composition on the response and mechanical properties of pH-sensitive fibers. Journal of Applied Polymer Science, 2007, 105, 3171-3182.	1.3	9
71	Effect of copolymer architecture on the response of pH sensitive fibers based on acrylonitrile and acrylic acid. European Polymer Journal, 2007, 43, 1065-1076.	2.6	32
72	Evaluation of Commercial Flame Retardant Polyester Curtain Fabrics in the Cone Calorimeter. Journal of Industrial Textiles, 2006, 36, 47-58.	1.1	18

#	Article	IF	Citations
73	Stimuli Sensitive Behaviour of Modified Polyacrylonitrile Fibres. Research Journal of Textile and Apparel, 2006, 10, 58-68.	0.6	5
74	Effect of heat flux on the burning behaviour of foam and foam/Nomex III fabric combination in the cone calorimeter. Polymer Testing, 2006, 25, 744-757.	2.3	19
75	Post-extrusion solid-state polymerization of fully drawn polyester yarns. Journal of Applied Polymer Science, 2006, 102, 5113-5122.	1.3	4
76	Stimuli sensitive copolymer poly(N-tert-butylacrylamide-ran-acrylamide): Synthesis and characterization. Journal of Applied Polymer Science, 2005, 95, 672-680.	1.3	29
77	Temperature responsive fibers with anisotropic transitional behavior. Journal of Applied Polymer Science, 2005, 95, 681-688.	1.3	15
78	Smart Breathable Fabric. Journal of Industrial Textiles, 2005, 34, 139-155.	1.1	34
79	Effect of hydroperoxide decomposer and slipping agent on recycling of polypropylene. Journal of Applied Polymer Science, 2004, 92, 3247-3251.	1.3	4
80	Stimuli sensitive copolymer poly(N-tert-butylacrylamide-ran-acrylamide): processing into thin films and their transitional behaviour. Polymer, 2003, 44, 7979-7988.	1.8	24
81	Advances in the Production of Poly(Lactic Acid) Fibers. A Review. Journal of Macromolecular Science - Reviews in Macromolecular Chemistry and Physics, 2003, 43, 479-503.	2.2	66
82	Polyacrylamide Based Breathable Coating for Cotton Fabric. Journal of Industrial Textiles, 2002, 32, 119-138.	1.1	30
83	Simulation of Hydrolytic Polymerization of Nylon-6 in Industrial Reactors:Â Part I. Mono-Acid-Stabilized Systems in VK Tube Reactors. Industrial & Engineering Chemistry Research, 2001, 40, 2563-2572.	1.8	18
84	Flame Retardation of Acrylic Fibers: An Overview. Journal of Macromolecular Science - Reviews in Macromolecular Chemistry and Physics, 2000, 40, 309-337.	2.2	32
85	Electrochemical Properties and Electronic Structures of Conjugated Polyquinolines and Polyanthrazolines. Chemistry of Materials, 1996, 8, 579-589.	3.2	325
86	Crystal structure and thin film morphology of BBL ladder polymer. Synthetic Metals, 1995, 69, 533-535.	2.1	33
87	Synthesis and processing of heterocyclic polymers as electronic, optoelectronic, and nonlinear optical materials. 3. New conjugated polyquinolines with electron-donor or -acceptor side groups. Chemistry of Materials, 1993, 5, 633-640.	3.2	78
88	Synthesis and processing of heterocyclic polymers as electronic, optoelectronic, and nonlinear optical materials. 2. New series of conjugated rigid-rod polyquinolines and polyanthrazolines. Macromolecules, 1993, 26, 895-905.	2.2	154
89	Waveguiding in substrate supported and freestanding films of insoluble conjugated polymers. Applied Physics Letters, 1993, 62, 115-117.	1.5	65
90	Third-order nonlinear optical properties of conjugated rigid-rod polyquinolines. The Journal of Physical Chemistry, 1992, 96, 2837-2843.	2.9	75

#	Article	IF	Citations
91	Third-Order Nonlinear Optical Properties of a Series of Systematically Designed Conjugated Rigid-Rod Polyquinolines. Materials Research Society Symposia Proceedings, 1992, 247, 253.	0.1	49
92	Thin-film processing and optical properties of conjugated rigid-rod polyquinolines for nonlinear optical applications. Chemistry of Materials, 1992, 4, 95-104.	3.2	70
93	Photoconductivity in conjugated rigid-rod polyquinolines. Solid State Communications, 1992, 83, 937-941.	0.9	21
94	Third-order optical nonlinearities and their wavelength dispersion in thin films of conjugated rigid-rod polyquinolines and a random copolymer. Chemistry of Materials, 1991, 3, 765-768.	3.2	69
95	New conjugated polyanthrazolines containing thiophene moieties in the main chain. Macromolecules, 1991, 24, 6806-6808.	2.2	160
96	Nonlinear Optical Properties of Ladder Polymers and Their Model Compound. Materials Research Society Symposia Proceedings, 1990, 214, 55.	0.1	15
97	Solubilization, solutions, and processing of aromatic heterocyclic rigid rod polymers in aprotic organic solvents: poly(p-phenylene-2,6-benzobisthiazolediyl) (PBT). Macromolecules, 1989, 22, 3216-3222.	2.2	83
98	Low-surface-energy materials based on polybenzoxazines for surface modification of textiles. Journal of the Textile Institute, 0, , 1-9.	1.0	5