Thanikaivelan Palanisamy

List of Publications by Year
in descending order

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86 papers	3,202 citations	172457 29 h-index	161849 54 g-index
86 all docs	86 docs citations	86 times ranked	3736 citing authors

#	Article	IF	Citations
1	In vitro probing of oxidized inulin cross-linked collagen-ZrO2 hybrid scaffolds for tissue engineering applications. Carbohydrate Polymers, 2022, 289, 119458.	10.2	15
2	Elastic compliance and adsorption profiles of Bovine serum albumin at fluid/solid interface in the presence of electrolytes. Biophysical Chemistry, 2021, 269, 106523.	2.8	1
3	Physico-chemical studies of elastic compliance and adsorption of DOPC vesicles and its mixture with charged lipids at fluid/solid interface. Colloids and Surfaces B: Biointerfaces, 2021, 199, 111544.	5.0	2
4	Bimetallic Copperâ€“Iron Oxide Nanoparticle-Coated Leathers for Lighting Applications. ACS Applied Nano Materials, 2021, 4, 4055-4069.	5.0	10
5	Bio-hybrid hydrogel comprising collagen-capped silver nanoparticles and melatonin for accelerated tissue regeneration in skin defects. Materials Science and Engineering C, 2021, 128, 112328.	7.3	25
6	Upcycling sawdust into colorant: Ecofriendly natural dyeing of fabrics with ultrasound assisted dye extract of Pterocarpus indicus Willd.. Industrial Crops and Products, 2021, 171, 113969.	5.2	27
7	Visible-light active collagen-TiO2 nanobio-sponge for water remediation: A sustainable approach. Cleaner Materials, 2021, 1, 100011.	5.1	8
8	Silica microsphereâ€“resorcinol composite embedded collagen scaffolds impart scar-less healing of chronic infected burns in type-I diabetic and non-diabetic rats. Biomaterials Science, 2020, 8, 1622-1637.	5.4	7
9	Synthesis of magnetic Feâ€“Cr bimetallic nanoparticles from industrial effluents for smart material applications. Materials Chemistry and Physics, 2020, 253, 123405.	4.0	13
10	Bioengineered Hybrid Collagen Scaffold Tethered with Silverâ€Catechin Nanocomposite Modulates Angiogenesis and TGFâ€I² Toward Scarless Healing in Chronic Deep Second Degree Infected Burns. Advanced Healthcare Materials, 2020, 9, e2000247.	7.6	27
11	Non-aqueous green solvents improve alpha-amylase induced fiber opening in leather processing. Scientific Reports, 2020, 10, 22274.	3.3	2
12	Cool garment leathers for hot environment. Journal of Thermal Analysis and Calorimetry, 2019, 135, 3289-3295.	3.6	2
13	A ZnOâ€“curcumin nanocomposite embedded hybrid collagen scaffold for effective scarless skin regeneration in acute burn injury. Journal of Materials Chemistry B, 2019, 7, 5873-5886.	5.8	22
14	A Facile Approach to Fabricate Dual Purpose Hybrid Materials for Tissue Engineering and Water Remediation. Scientific Reports, 2019, 9, 1040.	3.3	20
15	Probing visible light induced photochemical stabilization of collagen in green solvent medium. International Journal of Biological Macromolecules, 2019, 131, 779-786.	7.5	14
16	Prodigiosinâ€“Iron-Oxideâ€“Carbon Matrix for Efficient Antibiotic-Resistant Bacterial Disinfection of Contaminated Water. ACS Sustainable Chemistry and Engineering, 2019, 7, 3164-3175.	6.7	7
17	Bi-functional iron embedded carbon nanostructures from collagen waste for photocatalysis and Li-ion battery applications: A waste to wealth approach. Journal of Cleaner Production, 2019, 210, 190-199.	9.3	18
18	Bifunctional Hybrid Composites from Collagen Biowastes for Heterogeneous Applications. ACS Omega, 2017, 2, 5260-5270.	3.5	17

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19	Hybrid composites using natural polymer blends and carbon nanostructures. , 2017, , 57-74.		0
20	Highly clean and efficient enzymatic dehairing in green solvents. Journal of Cleaner Production, 2017, 140, 1578-1586.	9.3	9
21	Biomimetic hybrid porous scaffolds immobilized with platelet derived growth factorâ€<scp>BB</scp> promote cellularization and vascularization in tissue engineering. Journal of Biomedical Materials Research - Part A, 2016, 104, 388-396.	4.0	18
22	Melatonin in functionalized biomimetic constructs promotes rapid tissue regeneration in Wistar albino rats. Journal of Materials Chemistry B, 2016, 4, 5850-5862.	5.8	17
23	Conducting collagen-polypyrrole hybrid aerogels made from animal skin waste. RSC Advances, 2016, 6, 63071-63077.	3.6	13
24	Glycine functionalized alumina nanoparticles stabilize collagen in ethanol medium. Bulletin of Materials Science, 2016, 39, 223-228.	1.7	4
25	Magnetic leathers. RSC Advances, 2016, 6, 6496-6503.	3.6	8
26	Highly biocompatible collagenâ€“ Delonix regia seed polysaccharide hybrid scaffolds for antimicrobial wound dressing. Carbohydrate Polymers, 2016, 137, 584-593.	10.2	35
27	Bionic, porous, functionalized hybrid scaffolds with vascular endothelial growth factor promote rapid wound healing in Wistar albino rats. RSC Advances, 2016, 6, 19252-19264.	3.6	14
28	Concurrent genesis of color and electrical conductivity in leathers through inâ€situ polymerization of aniline for smart product applications. Polymers for Advanced Technologies, 2015, 26, 521-527.	3.2	9
29	Nanobiocomposite from Collagen Waste Using Iron Oxide Nanoparticles and Its Conversion Into Magnetic Nanocarbonâ€. Journal of Nanoscience and Nanotechnology, 2015, 15, 4504-4509.	0.9	5
30	Magnetic collagen fibers stabilized using functional iron oxide nanoparticles in non-aqueous medium. RSC Advances, 2015, 5, 20939-20944.	3.6	13
31	Waterless tanning: chrome tanning in ethanol and its derivatives. RSC Advances, 2015, 5, 66815-66823.	3.6	17
32	Electrically conducting nanobiocomposites using carbon nanotubes and collagen waste fibers. Materials Chemistry and Physics, 2015, 157, 8-15.	4.0	15
33	Delimiting water in the chromium-induced stabilization of collagen. Journal of Cleaner Production, 2015, 87, 567-572.	9.3	4
34	Conducting Leathers for Smart Product Applications. Industrial & Engineering Chemistry Research, 2014, 53, 18209-18215.	3.7	30
35	Thermoresponsive magnetic nanoparticle â€“ Aminated guar gum hydrogel system for sustained release of doxorubicin hydrochloride. Carbohydrate Polymers, 2014, 110, 440-445.	10.2	72
36	Collagenâ€“poly(dialdehyde) guar gum based porous 3D scaffolds immobilized with growth factor for tissue engineering applications. Carbohydrate Polymers, 2014, 114, 399-406.	10.2	75

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37	Green synthesis of copper nanoparticles and conducting nanobiocomposites using plant and animal sources. RSC Advances, 2014, 4, 19507.	3.6	146
38	Green Synthesis and Characterization of Hybrid Collagenâ€“Celluloseâ€“Albumin Biofibers from Skin Waste. Applied Biochemistry and Biotechnology, 2013, 171, 1500-1512.	2.9	8
39	Conversion of Industrial Bio-Waste into Useful Nanomaterials. ACS Sustainable Chemistry and Engineering, 2013, 1, 619-626.	6.7	30
40	Synthesis and Characterization of Hybrid Biodegradable Films From Bovine Hide Collagen and Cellulose Derivatives for Biomedical Applications. Soft Materials, 2013, 11, 181-194.	1.7	31
41	Collagenâ€“chitosan biocomposites produced using nanocarbons derived from goatskin waste. Carbon, 2012, 50, 5574-5582.	10.3	28
42	Investigations on Structural, Mechanical, and Thermal Properties of Pineapple Leaf Fiber-Based Fabrics and Cow Softy Leathers: An Approach Toward Making Amalgamated Leather Products. Journal of Natural Fibers, 2012, 9, 37-50.	3.1	13
43	Transforming collagen wastes into doped nanocarbons for sustainable energy applications. Green Chemistry, 2012, 14, 1689.	9.0	65
44	Eco-benign enzymatic dehairing of goatskins utilizing a protease from a Pseudomonas fluorescens species isolated from fish visceral waste. Journal of Cleaner Production, 2012, 25, 27-33.	9.3	46
45	Optical Bifunctionality of Europium-Complexed Luminescent Graphene Nanosheets. Nano Letters, 2011, 11, 5227-5233.	9.1	88
46	Modulating Chromium Containing Leather Wastes into Improved Composite Sheets Using Polydimethylsiloxane. Polymers and Polymer Composites, 2011, 19, 497-504.	1.9	2
47	Structural and Thermal Investigations of Biomimetically Grown Caseinâ€“Soy Hybrid Protein Fibers. Applied Biochemistry and Biotechnology, 2011, 163, 247-257.	2.9	16
48	Hybrid Biodegradable Films from Collagenous Wastes and Natural Polymers for Biomedical Applications. Waste and Biomass Valorization, 2011, 2, 323-335.	3.4	32
49	Transforming chromium containing collagen wastes into flexible composite sheets using cellulose derivatives: Structural, thermal, and mechanical investigations. Polymer Composites, 2011, 32, 1009-1017.	4.6	13
50	Probing a Bifunctional Luminomagnetic Nanophosphor for Biological Applications: a Photoluminescence and Timeâ€Resolved Spectroscopic Study. Small, 2011, 7, 1767-1773.	10.0	48
51	Sulfonated poly(ether ether ketone)â€induced porous poly(ether sulfone) blend membranes for the separation of proteins and metal ions. Journal of Applied Polymer Science, 2010, 116, 995-1004.	2.6	3
52	Preparation and Characterization of Composite Sheets from Collagenous and Chromiumâ€“Collagen Complex Wastes Using Polyvinylpyrrolidone: Two Problems, One Solution. Waste and Biomass Valorization, 2010, 1, 347-355.	3.4	11
53	Fabrication of cellulose acetateâ€“zirconia hybrid membranes for ultrafiltration applications: Performance, structure and fouling analysis. Separation and Purification Technology, 2010, 74, 230-235.	7.9	101
54	Comfort, chemical, mechanical, and structural properties of natural and synthetic leathers used for apparel. Journal of Applied Polymer Science, 2009, 114, 1761-1767.	2.6	32

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55	Chemical degradation of melanin in enzyme based dehairing and fiber opening of buff calfskins. Clean Technologies and Environmental Policy, 2009, 11, 299-306.	4.1	5
56	Preparation and characterization of poly (methyl methacrylate) and sulfonated poly (ether ether) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 7 Engineering C, 2009, 29, 246-252.	7.3	10
57	Development of formaldehyde-free leathers in the perspective of retanning: part II. Combination of formaldehyde-free retanning syntans. Clean Technologies and Environmental Policy, 2008, 10, 287-294.	4.1	13
58	Fabrication and Characterization of CA/PSf/SPEEK Ternary Blend Ultrafiltration Membranes. Industrial & Engineering Chemistry Research, 2008, 47, 1488-1494.	3.7	23
59	Sodium Metasilicate Based Fiber Opening for Greener Leather Processing. Environmental Science & Technology, 2008, 42, 1731-1739.	10.0	12
60	Studies on Permeation, Rejection, and Transport of Aqueous Poly(ethylene Glycol) Solutions using Ultrafiltration Membranes. Separation Science and Technology, 2007, 42, 963-978.	2.5	5
61	Performance characterization of cellulose acetate and poly(vinylpyrrolidone) blend membranes. Journal of Applied Polymer Science, 2007, 104, 3042-3049.	2.6	24
62	Removal of chromium from aqueous solution using cellulose acetate and sulfonated poly(ether) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 46	12.4	68
63	A chemo-enzymatic pathway leads towards zero discharge tanning. Journal of Cleaner Production, 2007, 15, 1217-1227.	9.3	33
64	Integrated hair removal and fiber opening process using mixed enzymes. Clean Technologies and Environmental Policy, 2007, 9, 61-68.	4.1	9
65	Factors influencing activity of enzymes and their kinetics. Applied Biochemistry and Biotechnology, 2007, 136, 265-278.	2.9	3
66	Metal ion separation and protein removal from aqueous solutions using modified cellulose acetate membranes: Role of polymeric additives. Separation and Purification Technology, 2007, 55, 8-15.	7.9	34
67	Reversing the Conventional Leather Processing Sequence for Cleaner Leather Production. Environmental Science & Technology, 2006, 40, 1069-1075.	10.0	31
68	Gauge length effect on the tensile properties of leather. Journal of Applied Polymer Science, 2006, 101, 1202-1209.	2.6	6
69	A one-bath chrome tanning together with wet-finishing process for reduced water usage and discharge. Clean Technologies and Environmental Policy, 2005, 7, 168-176.	4.1	6
70	Silicate Enhanced Enzymatic Dehairing:Â A New Lime-Sulfide-Free Process for Cowhides. Environmental Science & Technology, 2005, 39, 3776-3783.	10.0	17
71	Recent Trends in Leather Making: Processes, Problems, and Pathways. Critical Reviews in Environmental Science and Technology, 2005, 35, 37-79.	12.8	124
72	Progress and recent trends in biotechnological methods for leather processing. Trends in Biotechnology, 2004, 22, 181-188.	9.3	189

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73	Pickle-free chrome tanning using a polymeric synthetic tanning agent for cleaner leather processing. Clean Technologies and Environmental Policy, 2004, 6, 243.	4.1	19
74	A source reduction approach: Integrated bio-based tanning methods and the role of enzymes in dehairing and fibre opening. Clean Technologies and Environmental Policy, 2004, 7, 3-14.	4.1	29
75	Synthesis, characterization and thermal studies on cellulose acetate membranes with additive. European Polymer Journal, 2004, 40, 2153-2159.	5.4	199
76	Natural Leathers from Natural Materials:Â Progressing toward a New Arena in Leather Processing. Environmental Science & Technology, 2004, 38, 871-879.	10.0	321
77	Approach towards zero discharge tanning: role of concentration on the development of eco-friendly limingâ€“reliming processes. Journal of Cleaner Production, 2003, 11, 79-90.	9.3	37
78	Biointervention Makes Leather Processing Greener:Â An Integrated Cleansing and Tanning System. Environmental Science & Technology, 2003, 37, 2609-2617.	10.0	25
79	Green solution for tannery pollution: effect of enzyme based lime-free unhairing and fibre opening in combination with pickle-free chrome tanning. Green Chemistry, 2003, 5, 707.	9.0	58
80	Zero Discharge Tanning:Â A Shift from Chemical to Biocatalytic Leather Processing. Environmental Science & Technology, 2002, 36, 4187-4194.	10.0	54
81	Green Route for the Utilization of Chrome Shavings (Chromium-Containing Solid Waste) in Tanning Industry. Environmental Science & Technology, 2002, 36, 1372-1376.	10.0	91
82	Chemical reactivity and selectivity using Fukui functions: basis set and population scheme dependence in the framework of B3LYP theory. Theoretical Chemistry Accounts, 2002, 107, 326-335.	1.4	64
83	An eco-friendly option for less-chrome and dye-free leather processing: in situ generation of natural colours in leathers tanned with Crâ€“Fe complex. Clean Technologies and Environmental Policy, 2002, 4, 115-121.	4.1	16
84	An improved product-process for cleaner chrome tanning in leather processing. Journal of Cleaner Production, 2001, 9, 483-491.	9.3	87
85	Molecular mechanics and dynamics studies on the interaction of gallic acid with collagen-like peptides. Chemical Physics Letters, 2001, 346, 334-340.	2.6	40
86	Application of quantum chemical descriptor in quantitative structure activity and structure property relationship. Chemical Physics Letters, 2000, 323, 59-70.	2.6	242