

# Gnanamani Arumugam

## List of Publications by Year in descending order

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86  
papers

1,950  
citations

257450

24  
h-index

289244

40  
g-index

90  
all docs

90  
docs citations

90  
times ranked

3327  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrospinning of type I collagen and PCL nanofibers using acetic acid. <i>Journal of Applied Polymer Science</i> , 2012, 125, 3221-3227.	2.6	133
2	Recovery and utilization of proteinous wastes of leather making: a review. <i>Reviews in Environmental Science and Biotechnology</i> , 2011, 10, 151-163.	8.1	104
3	Collagen coated electrospun polycaprolactone (PCL) with titanium dioxide (TiO <sub>2</sub> ) from an environmentally benign solvent: preliminary physico-chemical studies for skin substitute. <i>Journal of Polymer Research</i> , 2014, 21, 1.	2.4	84
4	Potential use of curcumin loaded carboxymethylated guar gum grafted gelatin film for biomedical applications. <i>International Journal of Biological Macromolecules</i> , 2015, 75, 437-446.	7.5	76
5	Preparation of guar gum scaffold film grafted with ethylenediamine and fish scale collagen, cross-linked with ceftazidime for wound healing application. <i>Carbohydrate Polymers</i> , 2016, 153, 573-581.	10.2	73
6	pH and redox sensitive albumin hydrogel: A self-derived biomaterial. <i>Scientific Reports</i> , 2015, 5, 15977.	3.3	67
7	Microbial products (biosurfactant and extracellular chromate reductase) of marine microorganism are the potential agents reduce the oxidative stress induced by toxic heavy metals. <i>Colloids and Surfaces B: Biointerfaces</i> , 2010, 79, 334-339.	5.0	65
8	Curcumin loaded nano graphene oxide reinforced fish scale collagen " a 3D scaffold biomaterial for wound healing applications. <i>RSC Advances</i> , 2015, 5, 98653-98665.	3.6	63
9	Organically modified clay supported chitosan/hydroxyapatite-zinc oxide nanocomposites with enhanced mechanical and biological properties for the application in bone tissue engineering. <i>International Journal of Biological Macromolecules</i> , 2018, 106, 11-19.	7.5	60
10	Microbial surfactant mediated degradation of anthracene in aqueous phase by marine <i>Bacillus licheniformis</i> MTCC 5514. <i>Biotechnology Reports (Amsterdam, Netherlands)</i> , 2014, 4, 161-170.	4.4	59
11	Preparation and characterization of a thermostable and biodegradable biopolymers using natural cross-linker. <i>International Journal of Biological Macromolecules</i> , 2011, 48, 276-285.	7.5	51
12	Multifunctional zirconium oxide doped chitosan based hybrid nanocomposites as bone tissue engineering materials. <i>Carbohydrate Polymers</i> , 2016, 151, 879-888.	10.2	49
13	Surface active gold nanoparticles biosynthesis by new approach for bionanocatalytic activity. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2018, 179, 119-125.	3.8	48
14	Development of bone-like zirconium oxide nanoceramic modified chitosan based porous nanocomposites for biomedical application. <i>International Journal of Biological Macromolecules</i> , 2017, 95, 348-356.	7.5	45
15	Efficacy of free and encapsulated <i>Bacillus licheniformis</i> strain SL10 on degradation of phenol: A comparative study of degradation kinetics. <i>Journal of Environmental Management</i> , 2017, 197, 373-383.	7.8	40
16	Rejoining of cut wounds by engineered gelatin"keratin glue. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2013, 1830, 4030-4039.	2.4	31
17	Development of porous and antimicrobial CTS"PEG"HAP"ZnO nano-composites for bone tissue engineering. <i>RSC Advances</i> , 2015, 5, 99385-99393.	3.6	30
18	In vitro and in vivo assessments of a 3-(3,4-dihydroxyphenyl)-2-propenoic acid bioconjugated gelatin-based injectable hydrogel for biomedical applications. <i>Journal of Materials Chemistry B</i> , 2015, 3, 1230-1244.	5.8	30

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19	Preparation and characterization of malonic acid cross-linked chitosan and collagen 3D scaffolds: an approach on non-covalent interactions. <i>Journal of Materials Science: Materials in Medicine</i> , 2012, 23, 1309-1321.	3.6	29
20	A Facile Synthesis of Ferrocene Functionalized Graphene Oxide Nanocomposite for Electrochemical Sensing of Lead. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2018, 28, 1021-1028.	3.7	29
21	Could glutaric acid (GA) replace glutaraldehyde in the preparation of biocompatible biopolymers with high mechanical and thermal properties?. <i>Journal of Chemical Sciences</i> , 2014, 126, 127-140.	1.5	28
22	Preparation, characterization and reusability efficacy of amine-functionalized graphene oxide-polyphenol oxidase complex for removal of phenol from aqueous phase. <i>RSC Advances</i> , 2018, 8, 38416-38424.	3.6	28
23	Dysregulation of miR-146a by periodontal pathogens: A risk for acute coronary syndrome. <i>Journal of Periodontology</i> , 2019, 90, 756-765.	3.4	27
24	Preparation, characterization and stability assessment of keratin and albumin functionalized gold nanoparticles for biomedical applications. <i>Applied Nanoscience (Switzerland)</i> , 2020, 10, 1879-1892.	3.1	27
25	Engineering of chitosan and collagen macromolecules using sebacic acid for clinical applications. <i>Progress in Biomaterials</i> , 2013, 2, 11.	4.5	25
26	Enhanced production of <i>Aspergillus tamarii</i> lipase for recovery of fat from tannery fleshings. <i>Brazilian Journal of Microbiology</i> , 2013, 44, 1089-1095.	2.0	24
27	Fabrication and characterization of herbal drug enriched Guar galactomannan based nanofibrous mats seeded with GMSC's for wound healing applications. <i>International Journal of Biological Macromolecules</i> , 2020, 148, 737-749.	7.5	24
28	Mechanical and biological investigations of chitosan-polyvinyl alcohol based ZrO <sub>2</sub> doped porous hybrid composites for bone tissue engineering applications. <i>New Journal of Chemistry</i> , 2017, 41, 7524-7530.	2.8	23
29	Identification and Discrimination of Methicillin Resistant <i>Staphylococcus aureus</i> Strains Isolated from Burn Wound Sites Using PCR and Authentication with MALDI-TOF MS. <i>Indian Journal of Microbiology</i> , 2012, 52, 337-345.	2.7	22
30	Synthesis of a carboxymethylated guar gum grafted polyethyleneimine copolymer as an efficient gene delivery vehicle. <i>RSC Advances</i> , 2016, 6, 13730-13741.	3.6	22
31	Chromium-assisted immobilization of N-isopropylacrylamide-based methacrylic acid copolymers on collagen and leather surfaces: thermo-responsive behaviour. <i>RSC Advances</i> , 2013, 3, 16626.	3.6	21
32	<i>In vitro</i> profiling of antimethicillin-resistant <i>Staphylococcus aureus</i> activity of thymoquinone against selected type and clinical strains. <i>Letters in Applied Microbiology</i> , 2016, 62, 283-289.	2.2	21
33	Differentiation of human gingival mesenchymal stem cells into neuronal lineages in 3D bioconjugated injectable protein hydrogel construct for the management of neuronal disorder. <i>Experimental and Molecular Medicine</i> , 2016, 48, e209-e209.	7.7	21
34	Preparation, Characterization and Application of Leather Particulate-Polymer Composites (LPPCs). <i>Journal of Polymers and the Environment</i> , 2009, 17, 181-186.	5.0	20
35	<i>In vitro</i> antibacterial activity of plumbagin isolated from <i>Plumbago zeylanica</i> L. against methicillin-resistant <i>Staphylococcus aureus</i> . <i>Letters in Applied Microbiology</i> , 2019, 69, 41-49.	2.2	20
36	Di-carboxylic acid cross-linking interactions improves thermal stability and mechanical strength of reconstituted type I collagen. <i>Journal of Thermal Analysis and Calorimetry</i> , 2011, 105, 325-330.	3.6	19

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37	The Effect of Pimelic Acid Interaction on the Mechanical and Thermal Properties of Chitosan and Collagen. International Journal of Polymeric Materials and Polymeric Biomaterials, 2013, 62, 572-582.	3.4	18
38	Haematological and biochemical effects of polyphenolics in animal models. Chemosphere, 2008, 72, 1321-1326.	8.2	17
39	Synthesis, characterization and biological profile of metal and azo-metal complexes of embelin. Complex Metals: an Open Access Journal, 2014, 1, 69-79.	0.6	17
40	Cross-linking with acid chlorides improves thermal and mechanical properties of collagen based biopolymer material. Thermochimica Acta, 2011, 525, 50-55.	2.7	16
41	Inhibition of UVB-induced oxidative damage and apoptotic biochemical changes in human lymphocytes by 2,5-dihydroxy-3-undecyl-1,4-benzoquinone (embelin). International Journal of Radiation Biology, 2012, 88, 575-582.	1.8	16
42	Development of biomimetic nanocomposites as bone extracellular matrix for human osteoblastic cells. Carbohydrate Polymers, 2016, 141, 82-91.	10.2	16
43	A study on pectinases from <i>Aspergillus tamarii</i> : Toward greener approach for cotton bioscouring and phytopigments processing. Biocatalysis and Agricultural Biotechnology, 2018, 15, 295-303.	3.1	16
44	Adipic acid interaction enhances the mechanical and thermal stability of natural polymers. Journal of Applied Polymer Science, 2012, 125, E490.	2.6	14
45	Dynamic heat flux measurement for advanced insulation materials. Fibers and Polymers, 2016, 17, 925-931.	2.1	14
46	Handling and managing bleeding wounds using tissue adhesive hydrogel: a comparative assessment on two different hydrogels. RSC Advances, 2016, 6, 19973-19981.	3.6	14
47	Engineered fish scale gelatin: An alternative and suitable biomaterial for tissue engineering. Journal of Bioactive and Compatible Polymers, 2018, 33, 332-346.	2.1	14
48	Exploring the UVB-protective efficacy of melanin precursor extracted from marine imperfect fungus: Featuring characterization and application studies under in vitro conditions. International Microbiology, 2018, 21, 59-71.	2.4	14
49	Bioinformatics in crosslinking chemistry of collagen with selective cross linkers. BMC Research Notes, 2011, 4, 399.	1.4	13
50	Redox responsive albumin autogenic nanoparticles for the delivery of cancer drugs. Colloids and Surfaces B: Biointerfaces, 2017, 152, 393-405.	5.0	13
51	Marine fungal DHICA as a UVB protectant: Assessment under in vitro and in vivo conditions. Journal of Photochemistry and Photobiology B: Biology, 2018, 179, 139-148.	3.8	13
52	Elucidation of 2, 4-Dichlorophenol degradation by <i>Bacillus licheniformis</i> strain SL10. Environmental Technology (United Kingdom), 2020, 41, 366-377.	2.2	13
53	Human gingival derived neuronal cells in the optimized caffeic acid hydrogel for hemitranssection spinal cord injury model. Journal of Cellular Biochemistry, 2020, 121, 2077-2088.	2.6	13
54	Plasma Sprayed Hydroxyapatite Bioceramic Coatings from Coprecipitation Synthesized Powder: Preparation, Characterization and in vitro Studies. Transactions of the Indian Ceramic Society, 2018, 77, 90-99.	1.0	12

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55	Fabrication of porous magnetic nanocomposites for bone tissue engineering. <i>New Journal of Chemistry</i> , 2017, 41, 190-197.	2.8	11
56	Towards sustainable system configuration for the treatment of fish processing wastewater using bioreactors. <i>Environmental Science and Pollution Research</i> , 2020, 27, 353-365.	5.3	11
57	Detailed studies on microbial adhesion and degradation of polystyrene foam wastes (PSFW) for clean environment. <i>Environmental Science and Pollution Research</i> , 2020, 27, 44257-44266.	5.3	11
58	Bonding interactions and stability assessment of biopolymer material prepared using type III collagen of avian intestine and anionic polysaccharides. <i>Journal of Materials Science: Materials in Medicine</i> , 2011, 22, 1419-1429.	3.6	10
59	Antimicrobial activity of secondary metabolite from marine isolate, <i>Pseudomonas</i> sp. against Gram positive and negative bacteria including MRSA. <i>Indian Journal of Experimental Biology</i> , 2009, 47, 964-8.	0.0	10
60	Phylogenetic Framework and Biosurfactant Gene Expression Analysis of Marine <i>Bacillus</i> spp. of Eastern Coastal Plain of Tamil Nadu. <i>International Journal of Bacteriology</i> , 2014, 2014, 1-10.	1.0	9
61	Biopolymer from microbial assisted in situ hydrolysis of triglycerides and dimerization of fatty acids. <i>Bioresource Technology</i> , 2010, 101, 337-343.	9.6	8
62	Encapsulated enhanced silver nanoparticles biosynthesis by modified new route for nano-biocatalytic activity. <i>Biocatalysis and Agricultural Biotechnology</i> , 2019, 18, 101045.	3.1	8
63	Vesicle formation in hydrocarbons assisted with microbial hydrolases and biosurfactants. <i>Colloids and Surfaces B: Biointerfaces</i> , 2008, 67, 192-198.	5.0	7
64	Application of silver nanoparticles to industrial sewing threads: Effects on physico-functional properties & seam efficiency. <i>Fibers and Polymers</i> , 2014, 15, 510-518.	2.1	7
65	Inhibition of Angiogenesis and Nitric Oxide Synthase (NOS), by Embelin & Vilangin Using in vitro, in vivo & in Silico Studies. <i>Advanced Pharmaceutical Bulletin</i> , 2014, 4, 543-8.	1.4	7
66	Suberic Acid Acts as a Dissolving Agent as Well as a Crosslinker for Natural Polymers (Carbohydrate) <i>Tj ETQqO O O rgBT /Overlock 10 Tf 5</i> <i>Macromolecular Science - Pure and Applied Chemistry</i> , 2012, 49, 619-629.	2.2	6
67	Microbial biosurfactants and hydrolytic enzymes mediates in situ development of stable supra-molecular assemblies in fatty acids released from triglycerides. <i>Colloids and Surfaces B: Biointerfaces</i> , 2010, 78, 200-207.	5.0	5
68	Exploring the dual role of $\alpha$ , $\omega$ -di-carboxylic acids in the preparation of collagen based biomaterial. <i>Journal of Porous Materials</i> , 2013, 20, 647-661.	2.6	5
69	A molecular technique to explore the relationship between <i>Porphyromonas gingivalis</i> and severity of chronic periodontitis: A clinical approach. <i>Anaerobe</i> , 2018, 49, 1-4.	2.1	4
70	Pre-treatment of extracellular water soluble pigmented secondary metabolites of marine imperfect fungus protects HDF cells from UVB induced oxidative stress. <i>Photochemical and Photobiological Sciences</i> , 2018, 17, 1229-1238.	2.9	4
71	Aspergillone pretreatment protects HaCaT cells from UVB irradiation induced oxidative damages: Assessment under in vitro and in vivo conditions and at molecular level. <i>Journal of Cellular Biochemistry</i> , 2019, 120, 10715-10725.	2.6	3
72	Exploring the styrene metabolism by aerobic bacterial isolates for the effective management of leachates in an aqueous system. <i>RSC Advances</i> , 2020, 10, 26535-26545.	3.6	3

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73	Preparation, characterization and cell response studies on bioconjugated 3D protein hydrogels with wide-range stiffness: An approach on cell therapy and cell storage. <i>Colloids and Surfaces B: Biointerfaces</i> , 2021, 205, 111843.	5.0	3
74	Synthesis and Properties of a New Chitosan-Based Shape Memory Polymer and its Composites. <i>ChemistrySelect</i> , 2021, 6, 808-819.	1.5	3
75	Microbial mediated dimerization of fattyacids of sunflower oil: An effective role of lipase and biosurfactant. <i>Journal of Applied Polymer Science</i> , 2014, 131, .	2.6	2
76	Induced oxidative stress management in wounds through phenolic acids engineered fibrous protein: An in vitro assessment using polymorphonuclear (PMN) cells. <i>International Journal of Biological Macromolecules</i> , 2017, 96, 485-493.	7.5	2
77	Gap closure of different shape wounds: <i>in vitro</i> and <i>in vivo</i> experimental models in the presence of engineered protein adhesive hydrogel. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2019, 13, 174-178.	2.7	2
78	Polymyxins resistance among Gram-negative pathogens in India. <i>Lancet Infectious Diseases</i> , The, 2020, 20, 1362-1363.	9.1	2
79	Editorial: Plastic to Bioplastic (P2BP): A Green Technology for Circular Bioeconomy. <i>Frontiers in Microbiology</i> , 2022, 13, 851045.	3.5	2
80	Wealth from waste: Recovery of the commercially important waxy ester from enzymatic dehaired sheep wool. <i>Biocatalysis and Agricultural Biotechnology</i> , 2019, 20, 101255.	3.1	1
81	Aspergillone prevents HDF cells from UVB irradiation damages: An elaborated study. <i>Journal of Cellular Biochemistry</i> , 2019, 120, 7560-7572.	2.6	1
82	Bioinformatic insights into the biochemical efficacy of a fungal metabolite: aspergillone. <i>New Journal of Chemistry</i> , 0, , .	2.8	1
83	Biotransformation of soybean oil to a self-healing biopolymer. <i>Biocatalysis and Biotransformation</i> , 2015, 33, 29-37.	2.0	0
84	Engineered protein hydrogel for open wound management in Canines. <i>Wound Medicine</i> , 2018, 22, 32-36.	2.7	0
85	Pharmacological evaluation of embelin - chitosan nanoparticles as an antidiabetic agent.. <i>Indian Journal of Pharmacology</i> , 2022, 54, 126-130.	0.7	0
86	Fibrous protein composite scaffolds (3D) for tissue regeneration: An in vitro study on skeletal muscle regeneration. <i>Colloids and Surfaces B: Biointerfaces</i> , 2022, 217, 112656.	5.0	0