

# Tamilselvan Mohan

## List of Publications by Year in descending order

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Version: 2024-02-01

67  
papers

1,618  
citations

236833

25  
h-index

330025

37  
g-index

67  
all docs

67  
docs citations

67  
times ranked

1837  
citing authors

#	ARTICLE	IF	CITATIONS
1	Functional wound dressing materials with highly tunable drug release properties. RSC Advances, 2015, 5, 77873-77884.	1.7	101
2	Wettability and surface composition of partly and fully regenerated cellulose thin films from trimethylsilyl cellulose. Journal of Colloid and Interface Science, 2011, 358, 604-610.	5.0	98
3	Adsorption of Carboxymethyl Cellulose on Polymer Surfaces: Evidence of a Specific Interaction with Cellulose. Langmuir, 2012, 28, 11440-11447.	1.6	86
4	Exploring the rearrangement of amorphous cellulose model thin films upon heat treatment. Soft Matter, 2012, 8, 9807.	1.2	76
5	Antifouling coating of cellulose acetate thin films with polysaccharide multilayers. Carbohydrate Polymers, 2015, 116, 149-158.	5.1	61
6	Functional Patterning of Biopolymer Thin Films Using Enzymes and Lithographic Methods. Advanced Functional Materials, 2013, 23, 308-315.	7.8	53
7	Triggering Protein Adsorption on Tailored Cationic Cellulose Surfaces. Biomacromolecules, 2014, 15, 3931-3941.	2.6	50
8	Preparation of PDMS ultrathin films and patterned surface modification with cellulose. RSC Advances, 2014, 4, 11955-11961.	1.7	45
9	Generic Method for Designing Self-Standing and Dual Porous 3D Bioscaffolds from Cellulosic Nanomaterials for Tissue Engineering Applications. ACS Applied Bio Materials, 2020, 3, 1197-1209.	2.3	42
10	Watching cellulose grow – Kinetic investigations on cellulose thin film formation at the gas–solid interface using a quartz crystal microbalance with dissipation (QCM-D). Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 400, 67-72.	2.3	39
11	Design of anticoagulant surfaces based on cellulose nanocrystals. Chemical Communications, 2014, 50, 13070-13072.	2.2	39
12	Designing Hydrophobically Modified Polysaccharide Derivatives for Highly Efficient Enzyme Immobilization. Biomacromolecules, 2015, 16, 2403-2411.	2.6	39
13	Surface-Sensitive Approach to Interpreting Supramolecular Rearrangements in Cellulose by Synchrotron Grazing Incidence Small-Angle X-ray Scattering. ACS Macro Letters, 2015, 4, 713-716.	2.3	38
14	Enzymatic digestion of partially and fully regenerated cellulose model films from trimethylsilyl cellulose. Carbohydrate Polymers, 2013, 93, 191-198.	5.1	37
15	Development of multifunctional 3D printed bioscaffolds from polysaccharides and NiCu nanoparticles and their application. Applied Surface Science, 2019, 488, 836-852.	3.1	35
16	Protein-repellent and antimicrobial nanoparticle coatings from hyaluronic acid and a lysine-derived biocompatible surfactant. Journal of Materials Chemistry B, 2017, 5, 3888-3897.	2.9	32
17	Exploring Nonspecific Protein Adsorption on Lignocellulosic Amphiphilic Bicomponent Films. Biomacromolecules, 2016, 17, 1083-1092.	2.6	30
18	Chitosan–Cellulose Multifunctional Hydrogel Beads: Design, Characterization and Evaluation of Cytocompatibility with Breast Adenocarcinoma and Osteoblast Cells. Bioengineering, 2018, 5, 3.	1.6	30

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19	Highly Protein Repellent and Antiadhesive Polysaccharide Biomaterial Coating for Urinary Catheter Applications. ACS Biomaterials Science and Engineering, 2019, 5, 5825-5832.	2.6	29
20	Cationically rendered biopolymer surfaces for high protein affinity support matrices. Chemical Communications, 2013, 49, 11530.	2.2	28
21	Polysaccharide stabilized nanoparticles for deacidification and strengthening of paper. RSC Advances, 2015, 5, 32950-32961.	1.7	28
22	Interaction of Tissue Engineering Substrates with Serum Proteins and Its Influence on Human Primary Endothelial Cells. Biomacromolecules, 2017, 18, 413-421.	2.6	28
23	Polysaccharide Thin Solid Films for Analgesic Drug Delivery and Growth of Human Skin Cells. Frontiers in Chemistry, 2019, 7, 217.	1.8	28
24	Interactions of a cationic cellulose derivative with an ultrathin cellulose support. Carbohydrate Polymers, 2013, 92, 1046-1053.	5.1	27
25	Functional Polysaccharide Conjugates for the Preparation of Microarrays. ACS Applied Materials & Interfaces, 2012, 4, 2743-2751.	4.0	26
26	Novel Chitosan-Mg(OH) <sub>2</sub> -Based Nanocomposite Membranes for Direct Alkaline Ethanol Fuel Cells. ACS Sustainable Chemistry and Engineering, 2019, 7, 19356-19368.	3.2	26
27	A study on the interaction of cationized chitosan with cellulose surfaces. Cellulose, 2014, 21, 2315-2325.	2.4	24
28	Multilayered Polysaccharide Nanofilms for Controlled Delivery of Pentoxifylline and Possible Treatment of Chronic Venous Ulceration. Biomacromolecules, 2017, 18, 2732-2746.	2.6	22
29	Cellulose-based biogenic supports, remarkably friendly biomaterials for proteins and biomolecules. Biosensors and Bioelectronics, 2021, 182, 113170.	5.3	22
30	Generalized Indirect Fourier Transformation as a Valuable Tool for the Structural Characterization of Aqueous Nanocrystalline Cellulose Suspensions by Small Angle X-ray Scattering. Langmuir, 2013, 29, 3740-3748.	1.6	21
31	Nano- and Micropatterned Polycaprolactone Cellulose Composite Surfaces with Tunable Protein Adsorption, Fibrin Clot Formation, and Endothelial Cellular Response. Biomacromolecules, 2019, 20, 2327-2337.	2.6	21
32	One-Step Noncovalent Surface Functionalization of PDMS with Chitosan-Based Bioparticles and Their Protein-Repellent Properties. Advanced Materials Interfaces, 2017, 4, 1700416.	1.9	19
33	Strengthening of paper by treatment with a suspension of alkaline nanoparticles stabilized by trimethylsilyl cellulose. Nano Structures Nano Objects, 2018, 16, 363-370.	1.9	19
34	Selective immobilization and detection of DNA on biopolymer supports for the design of microarrays. Biosensors and Bioelectronics, 2015, 68, 437-441.	5.3	18
35	A green approach to obtain stable and hydrophilic cellulose-based electrospun nanofibrous substrates for sustained release of therapeutic molecules. RSC Advances, 2019, 9, 21288-21301.	1.7	18
36	3D bioprinting of polysaccharides and their derivatives: From characterization to application. , 2018, , 105-141.		17

#	ARTICLE	IF	CITATIONS
37	Polysaccharide peptide conjugates: Chemistry, properties and applications. Carbohydrate Polymers, 2022, 280, 118875.	5.1	17
38	Bioactive Functional Nanolayers of Chitosan-Lysine Surfactant with Single- and Mixed-Protein-Repellent and Antibiofilm Properties for Medical Implants. ACS Applied Materials & Interfaces, 2021, 13, 23352-23368.	4.0	16
39	Interaction and enrichment of protein on cationic polysaccharide surfaces. Colloids and Surfaces B: Biointerfaces, 2014, 123, 533-541.	2.5	15
40	Cellulose thin films from ionic liquid solutions. Nordic Pulp and Paper Research Journal, 2015, 30, 6-13.	0.3	15
41	Consolidation of cellulose nanofibrils with lignosulphonate bio-waste into excellent flame retardant and UV blocking membranes. Carbohydrate Polymers, 2021, 251, 117126.	5.1	15
42	A 300µm Organotypic Bone Slice Culture Model for Temporal Investigation of Endochondral Osteogenesis. Tissue Engineering - Part C: Methods, 2019, 25, 197-212.	1.1	13
43	Comparison of Trimethylsilyl Cellulose-Stabilized Carbonate and Hydroxide Nanoparticles for Deacidification and Strengthening of Cellulose-Based Cultural Heritage. ACS Omega, 2020, 5, 29243-29256.	1.6	13
44	Influence of Charge and Heat on the Mechanical Properties of Scaffolds from Ionic Complexation of Chitosan and Carboxymethyl Cellulose. ACS Biomaterials Science and Engineering, 2021, 7, 3618-3632.	2.6	12
45	Organic acid cross-linked 3D printed cellulose nanocomposite bioscaffolds with controlled porosity, mechanical strength, and biocompatibility. IScience, 2022, 25, 104263.	1.9	12
46	Chemical modification and characterization of poly(ethylene terephthalate) surfaces for collagen immobilization. Open Chemistry, 2013, 11, 1786-1798.	1.0	11
47	The Cellulose Source Matters-Hollow Semi Spheres or Fibers by Needleless Electrospinning. Macromolecular Materials and Engineering, 2016, 301, 42-47.	1.7	11
48	Modification of cellulose thin films with lysine moieties: a promising approach to achieve antifouling performance. Cellulose, 2018, 25, 537-547.	2.4	11
49	One-Step Fabrication of Hollow Spherical Cellulose Beads: Application in pH-Responsive Therapeutic Delivery. ACS Applied Materials & Interfaces, 2022, 14, 3726-3739.	4.0	11
50	High oxygen barrier chitosan films neutralized by alkaline nanoparticles. Cellulose, 2021, 28, 10457-10475.	2.4	10
51	Design of stable and new polysaccharide nanoparticles composite and their interaction with solid cellulose surfaces. Nano Structures Nano Objects, 2020, 24, 100564.	1.9	10
52	Water-based carbodiimide mediated synthesis of polysaccharide-amino acid conjugates: Deprotection, charge and structural analysis. Carbohydrate Polymers, 2021, 267, 118226.	5.1	9
53	Humidity Response of Cellulose Thin Films. Biomacromolecules, 2022, 23, 1148-1157.	2.6	9
54	Surface modification of Magnesium and its alloy as orthopedic biomaterials with biopolymers. , 2018, , 197-210.		8

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55	Protein repellent anti-coagulative mixed-charged cellulose derivative coatings. Carbohydrate Polymers, 2021, 254, 117437.	5.1	8
56	Affinity of Serum Albumin and Fibrinogen to Cellulose, Its Hydrophobic Derivatives and Blends. Frontiers in Chemistry, 2019, 7, 581.	1.8	7
57	Cellulose surface modification for improved attachment of carbon nanotubes. Cellulose, 2022, 29, 6057-6076.	2.4	7
58	Anticoagulant Activity of Cellulose Nanocrystals from Isora Plant Fibers Assembled on Cellulose and SiO <sub>2</sub> Substrates via a Layer-by-Layer Approach. Polymers, 2021, 13, 939.	2.0	6
59	Solid Phase Peptide Synthesis on Chitosan Thin Films. Biomacromolecules, 2022, 23, 731-742.	2.6	6
60	Cellulose and Other Polysaccharides Surface Properties and Their Characterisation. , 2012, , 215-251.		5
61	Nanocellulosic Materials in Tissue Engineering Applications. , 0, , .		4
62	Non-Equilibrium Plasma Methods for Tailoring Surface Properties of Polyvinylidene Fluoride: Review and Challenges. Polymers, 2021, 13, 4243.	2.0	3
63	Rapid Functionalization of Polytetrafluorethylene (PTFE) Surfaces with Nitrogen Functional Groups. Polymers, 2021, 13, 4301.	2.0	2
64	Cationic Polysaccharides in Regenerative Medicine: Challenges and Perspectives. RSC Polymer Chemistry Series, 2014, , 178-196.	0.1	0
65	Back Cover: Macromol. Mater. Eng. 1/2016. Macromolecular Materials and Engineering, 2016, 301, 110-110.	1.7	0
66	Design, Characterisation and Applications of Cellulose-Based Thin Films, Nanofibers and 3D Printed Structures: A Laboratory Manual. , 0, , .		0
67	Organic Acid Crosslinked 3D Printed Cellulose Nanocomposite Bioscaffolds With Controlled Porosity, Mechanical Strength and Biocompatibility. SSRN Electronic Journal, 0, , .	0.4	0