Chunyu Chang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4086527/publications.pdf

Version: 2024-02-01

68	7,162	76196	98622
papers	citations	40 h-index	67 g-index

71	71	71	7516
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Cellulose-based hydrogels: Present status and application prospects. Carbohydrate Polymers, 2011, 84, 40-53.	5.1	872
2	Superabsorbent hydrogels based on cellulose for smart swelling and controllable delivery. European Polymer Journal, 2010, 46, 92-100.	2.6	668
3	Highly Efficient Selfâ€Healable and Dual Responsive Celluloseâ€Based Hydrogels for Controlled Release and 3D Cell Culture. Advanced Functional Materials, 2017, 27, 1703174.	7.8	325
4	Superabsorbent Celluloseâ€“Clay Nanocomposite Hydrogels for Highly Efficient Removal of Dye in Water. ACS Sustainable Chemistry and Engineering, 2016, 4, 7217-7224.	3.2	278
5	Structure and properties of hydrogels prepared from cellulose in NaOH/urea aqueous solutions. Carbohydrate Polymers, 2010, 82, 122-127.	5.1	239
6	Swelling Behaviors of pH- and Salt-Responsive Cellulose-Based Hydrogels. Macromolecules, 2011, 44, 1642-1648.	2.2	237
7	Properties and applications of biodegradable transparent and photoluminescent cellulose films prepared via a green process. Green Chemistry, 2009, 11, 177-184.	4.6	217
8	Effects of Crosslinking Methods on Structure and Properties of Cellulose/PVA Hydrogels. Macromolecular Chemistry and Physics, 2008, 209, 1266-1273.	1.1	206
9	Effects of temperature and molecular weight on dissolution of cellulose in NaOH/urea aqueous solution. Cellulose, 2008, 15, 779-787.	2.4	200
10	Facile fabrication of superhydrophilic membranes consisted of fibrous tunicate cellulose nanocrystals for highly efficient oil/water separation. Journal of Membrane Science, 2017, 525, 1-8.	4.1	199
11	Novel hydrogels prepared via direct dissolution of chitin at low temperature: structure and biocompatibility. Journal of Materials Chemistry, 2011, 21, 3865.	6.7	192
12	Ultrahigh Tough, Super Clear, and Highly Anisotropic Nanofiber-Structured Regenerated Cellulose Films. ACS Nano, 2019, 13, 4843-4853.	7.3	174
13	Hydrogen-Bond-Induced Inclusion Complex in Aqueous Cellulose/LiOH/Urea Solution at Low Temperature. ChemPhysChem, 2007, 8, 1572-1579.	1.0	172
14	Hydrogels Prepared from Unsubstituted Cellulose in NaOH/Urea Aqueous Solution. Macromolecular Bioscience, 2007, 7, 804-809.	2.1	168
15	Biocompatible cellulose-based superabsorbent hydrogels with antimicrobial activity. Carbohydrate Polymers, 2016, 137, 59-64.	5.1	155
16	Fabrication and characterization of novel macroporous celluloseâ€“alginate hydrogels. Polymer, 2009, 50, 5467-5473.	1.8	154
17	Strongly fluorescent hydrogels with quantum dots embedded in cellulose matrices. Journal of Materials Chemistry, 2009, 19, 7771.	6.7	146
18	High strength films with gas-barrier fabricated from chitin solution dissolved at low temperature. Journal of Materials Chemistry A, 2013, 1, 1867-1874.	5.2	144

#	Article	IF	Citations
19	Robust Anisotropic Cellulose Hydrogels Fabricated via Strong Self-aggregation Forces for Cardiomyocytes Unidirectional Growth. Chemistry of Materials, 2018, 30, 5175-5183.	3.2	137
20	Fabrication and properties of chitin/hydroxyapatite hybrid hydrogels as scaffold nano-materials. Carbohydrate Polymers, 2013, 91, 7-13.	5.1	121
21	Dual Physically Cross-Linked Nanocomposite Hydrogels Reinforced by Tunicate Cellulose Nanocrystals with High Toughness and Good Self-Recoverability. ACS Applied Materials & Interfaces, 2017, 9, 24230-24237.	4.0	118
22	Efficient adsorption of Hg2+ ions on chitin/cellulose composite membranes prepared via environmentally friendly pathway. Chemical Engineering Journal, 2011, 173, 689-697.	6.6	107
23	High-Strength and Tough Cellulose Hydrogels Chemically Dual Cross-Linked by Using Low- and High-Molecular-Weight Cross-Linkers. Biomacromolecules, 2019, 20, 1989-1995.	2.6	106
24	Bioinspired Shape Memory Hydrogel Artificial Muscles Driven by Solvents. ACS Nano, 2021, 15, 13712-13720.	7.3	99
25	Deformation Drives Alignment of Nanofibers in Framework for Inducing Anisotropic Cellulose Hydrogels with High Toughness. ACS Applied Materials & Interfaces, 2017, 9, 43154-43162.	4.0	96
26	UV-induced self-cleanable TiO2/nanocellulose membrane for selective separation of oil/water emulsion. Carbohydrate Polymers, 2018, 201, 464-470.	5.1	91
27	Construction of cellulose/nanosilver sponge materials and their antibacterial activities for infected wounds healing. Cellulose, 2016, 23, 749-763.	2.4	89
28	Recent developments and prospective food-related applications of cellulose nanocrystals: a review. Cellulose, 2020, 27, 2991-3011.	2.4	89
29	Controlled Arrangement of Nanocellulose in Polymeric Matrix: From Reinforcement to Functionality. ACS Nano, 2020, 14, 16169-16179.	7.3	87
30	Construction of Transparent Cellulose-Based Nanocomposite Papers and Potential Application in Flexible Solar Cells. ACS Sustainable Chemistry and Engineering, 2018, 6, 8040-8047.	3.2	86
31	Tunicate cellulose nanocrystals modified commercial filter paper for efficient oil/water separation. Journal of Membrane Science, 2019, 591, 117362.	4.1	83
32	Chitin/clay microspheres with hierarchical architecture for highly efficient removal of organic dyes. Carbohydrate Polymers, 2018, 188, 143-150.	5.1	77
33	Primarily Industrialized Trial of Novel Fibers Spun from Cellulose Dope in NaOH/Urea Aqueous Solution. Industrial & Engineering Chemistry Research, 2010, 49, 11380-11384.	1.8	65
34	Robust Tunicate Cellulose Nanocrystal/Palygorskite Nanorod Membranes for Multifunctional Oil/Water Emulsion Separation. ACS Sustainable Chemistry and Engineering, 2018, 6, 10833-10840.	3.2	65
35	Tunicate cellulose nanocrystals reinforced nanocomposite hydrogels comprised by hybrid cross-linked networks. Carbohydrate Polymers, 2017, 169, 139-148.	5.1	63
36	Ultrahigh strength nanocomposite hydrogels designed by locking oriented tunicate cellulose nanocrystals in polymeric networks. Composites Part B: Engineering, 2020, 197, 108118.	5.9	60

#	Article	IF	Citations
37	Structure and properties of hydroxyapatite/cellulose nanocomposite films. Carbohydrate Polymers, 2012, 87, 2512-2518.	5.1	57
38	Facile construction of carbon dots via acid catalytic hydrothermal method and their application for target imaging of cancer cells. Nano Research, 2016, 9, 214-223.	5.8	51
39	Structure and properties of cellulose/poly(Nâ€isopropylacrylamide) hydrogels prepared by IPN strategy. Polymers for Advanced Technologies, 2011, 22, 1329-1334.	1.6	45
40	Additive Printed All-Cellulose Membranes with Hierarchical Structure for Highly Efficient Separation of Oil/Water Nanoemulsions. ACS Applied Materials & Interfaces, 2019, 11, 44375-44382.	4.0	43
41	Effects of Freezing/Thawing Cycles and Cellulose Nanowhiskers on Structure and Properties of Biocompatible Starch/PVA Sponges. Macromolecular Materials and Engineering, 2010, 295, 137-145.	1.7	42
42	Construction of Î²-FeOOH@tunicate cellulose nanocomposite hydrogels and their highly efficient photocatalytic properties. Carbohydrate Polymers, 2020, 229, 115470.	5.1	39
43	Direct current electric field induced gradient hydrogel actuators with rapid thermo-responsive performance as soft manipulators. Journal of Materials Chemistry C, 2020, 8, 2756-2763.	2.7	35
44	A simple strategy to design 3-layered Au-TiO2 dual nanoparticles immobilized cellulose membranes with enhanced photocatalytic activity. Carbohydrate Polymers, 2020, 231, 115694.	5.1	34
45	Biocompatible cellulose-based supramolecular nanoparticles driven by hostâ€“guest interactions for drug delivery. Carbohydrate Polymers, 2020, 237, 116114.	5.1	34
46	Injectable chitin hydrogels with self-healing property and biodegradability as stem cell carriers. Carbohydrate Polymers, 2021, 256, 117574.	5.1	32
47	Antibacterial nanocellulose membranes coated with silver nanoparticles for oil/water emulsions separation. Carbohydrate Polymers, 2022, 278, 118929.	5.1	30
48	Phase transition identification of cellulose nanocrystal suspensions derived from various raw materials. Journal of Applied Polymer Science, 2018, 135, 45702.	1.3	29
49	Shear-aligned tunicate-cellulose-nanocrystal-reinforced hydrogels with mechano-thermo-chromic properties. Journal of Materials Chemistry C, 0, , .	2.7	28
50	Self-supported nanoporous lysozyme/nanocellulose membranes for multifunctional wastewater purification. Journal of Membrane Science, 2021, 635, 119537.	4.1	27
51	X-ray shielding structural and properties design for the porous transparent BaSO4/cellulose nanocomposite membranes. International Journal of Biological Macromolecules, 2019, 139, 793-800.	3.6	26
52	Self-healable hydrophobic films fabricated by incorporating natural wax into cellulose matrix. Chemical Engineering Journal, 2022, 446, 136791.	6.6	20
53	Tunicate cellulose nanocrystal reinforced polyacrylamide hydrogels with tunable mechanical performance. Cellulose, 2018, 25, 6561-6570.	2.4	19
54	The digital printing of chromatic pattern with a single cellulose nanocrystal ink. Chemical Engineering Journal, 2022, 439, 135670.	6.6	19

#	Article	IF	Citations
55	Fluorescent probe with aggregation-induced emission characteristics for targeted labelling and imaging of cancer cells. RSC Advances, 2017, 7, 11282-11285.	1.7	18
56	Bioinspired gradient hydrogel actuators with rewritable patterns and programmable shape deformation. Journal of Materials Chemistry C, 2021, 9, 10295-10302.	2.7	18
57	Magnetic field assisted fabrication of asymmetric hydrogels for complex shape deformable actuators. Journal of Materials Chemistry C, 2022, 10, 549-556.	2.7	18
58	Surface engineering of cellulose film with myristic acid for high strength, self-cleaning and biodegradable packaging materials. Carbohydrate Polymers, 2021, 269, 118315.	5.1	17
59	Additive printing of recyclable anti-counterfeiting patterns with solâ€“gel cellulose nanocrystal inks. Nanoscale, 2021, 13, 11808-11816.	2.8	16
60	Structure and properties of films fabricated from chitin solution by coagulating with heating. Journal of Applied Polymer Science, 2014, 131, .	1.3	13
61	The conversion of nanocellulose into solvent-free nanoscale liquid crystals by attaching long side-arms for multi-responsive optical materials. Journal of Materials Chemistry C, 2020, 8, 11022-11031.	2.7	13
62	Top-down fabrication of biodegradable multilayer tunicate cellulose films with controlled mechanical properties. Cellulose, 2021, 28, 10415.	2.4	9
63	Coagulation/anticoagulation-regulable and tough extracellular matrix hydrogels. Composites Part B: Engineering, 2022, 239, 109938.	5.9	8
64	Tough all-polysaccharide hydrogels with uniaxially/planarly oriented structure. Carbohydrate Polymers, 2022, 288, 119376.	5.1	7
65	Synthesis of Oâ€(2,3â€dihydroxypropyl) cellulose in NaOH/urea aqueous solution: As a precursor for introducing â€œnecklaceâ€likeâ€•structure. Journal of Polymer Science Part A, 2013, 51, 3590-3597.	2.5	6
66	High performance films of cellulose butyral derivative having a necklace-like annular structure in the side chains. Polymer, 2014, 55, 3944-3950.	1.8	6
67	Progress in tunicate cellulose based advanced functional materials. Scientia Sinica Chimica, 2016, 46, 438-451.	0.2	6
68	Enzymatic Crosslinked Silk Fibroin Hydrogel for Biodegradable Electronic Skin and Pulse Waveform Measurements. Biomacromolecules, 2022, 23, 3429-3438.	2.6	3