

Mingxian Liu

List of Publications by Year in descending order

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121
papers

7,497
citations

43973

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123
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docs citations

123
times ranked

6187
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent advance in research on halloysite nanotubes-polymer nanocomposite. <i>Progress in Polymer Science</i> , 2014, 39, 1498-1525.	11.8	758
2	Chitosan-halloysite nanotubes nanocomposite scaffolds for tissue engineering. <i>Journal of Materials Chemistry B</i> , 2013, 1, 2078.	2.9	325
3	Chitosan/halloysite nanotubes bionanocomposites: Structure, mechanical properties and biocompatibility. <i>International Journal of Biological Macromolecules</i> , 2012, 51, 566-575.	3.6	271
4	Properties of halloysite nanotube-epoxy resin hybrids and the interfacial reactions in the systems. <i>Nanotechnology</i> , 2007, 18, 455703.	1.3	253
5	Carboxylated butadiene-styrene rubber/halloysite nanotube nanocomposites: Interfacial interaction and performance. <i>Polymer</i> , 2008, 49, 4871-4876.	1.8	221
6	Halloysite nanotubes as a novel β -nucleating agent for isotactic polypropylene. <i>Polymer</i> , 2009, 50, 3022-3030.	1.8	206
7	Adsorption of dyes in aqueous solutions by chitosan-halloysite nanotubes composite hydrogel beads. <i>Microporous and Mesoporous Materials</i> , 2015, 201, 190-201.	2.2	205
8	Functionalized halloysite nanotube by chitosan grafting for drug delivery of curcumin to achieve enhanced anticancer efficacy. <i>Journal of Materials Chemistry B</i> , 2016, 4, 2253-2263.	2.9	184
9	Nanocomposites of halloysite and polylactide. <i>Applied Clay Science</i> , 2013, 75-76, 52-59.	2.6	179
10	Drying induced aggregation of halloysite nanotubes in polyvinyl alcohol/halloysite nanotubes solution and its effect on properties of composite film. <i>Applied Physics A: Materials Science and Processing</i> , 2007, 88, 391-395.	1.1	147
11	In vitro evaluation of alginate/halloysite nanotube composite scaffolds for tissue engineering. <i>Materials Science and Engineering C</i> , 2015, 49, 700-712.	3.8	143
12	Enhanced Therapeutic Efficacy of Doxorubicin for Breast Cancer Using Chitosan Oligosaccharide-Modified Halloysite Nanotubes. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 26578-26590.	4.0	143
13	Natural inorganic nanotubes reinforced epoxy resin nanocomposites. <i>Journal of Polymer Research</i> , 2008, 15, 205-212.	1.2	140
14	Fabrication of high performance superhydrophobic coatings by spray-coating of polysiloxane modified halloysite nanotubes. <i>Chemical Engineering Journal</i> , 2018, 331, 744-754.	6.6	136
15	The improvement of hemostatic and wound healing property of chitosan by halloysite nanotubes. <i>RSC Advances</i> , 2014, 4, 23540-23553.	1.7	130
16	Superhydrophobic Polyurethane Foam Coated with Polysiloxane-Modified Clay Nanotubes for Efficient and Recyclable Oil Absorption. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 25445-25456.	4.0	128
17	Crystallization behavior of polyamide 6/halloysite nanotubes nanocomposites. <i>Thermochimica Acta</i> , 2009, 484, 48-56.	1.2	125
18	Interactions between halloysite nanotubes and 2,5-bis(2-benzoxazolyl) thiophene and their effects on reinforcement of polypropylene/halloysite nanocomposites. <i>Nanotechnology</i> , 2008, 19, 205709.	1.3	114

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19	Chitosan composite hydrogels reinforced with natural clay nanotubes. Carbohydrate Polymers, 2017, 175, 689-698.	5.1	100
20	Chitosan-chitin nanocrystal composite scaffolds for tissue engineering. Carbohydrate Polymers, 2016, 152, 832-840.	5.1	99
21	Effects of halloysite nanotubes on physical properties and cytocompatibility of alginate composite hydrogels. Materials Science and Engineering C, 2017, 70, 303-310.	3.8	97
22	Folate-Conjugated Halloysite Nanotubes, an Efficient Drug Carrier, Deliver Doxorubicin for Targeted Therapy of Breast Cancer. ACS Applied Nano Materials, 2018, 1, 595-608.	2.4	97
23	Novel polymer nanocomposite hydrogel with natural clay nanotubes. Colloid and Polymer Science, 2012, 290, 895-905.	1.0	93
24	<i>In vitro</i> and <i>in vivo</i> toxicity evaluation of halloysite nanotubes. Journal of Materials Chemistry B, 2018, 6, 7204-7216.	2.9	89
25	Tubule Nanoclay-Organic Heterostructures for Biomedical Applications. Macromolecular Bioscience, 2019, 19, e1800419.	2.1	87
26	Liquid Crystalline Behaviors of Chitin Nanocrystals and Their Reinforcing Effect on Natural Rubber. ACS Sustainable Chemistry and Engineering, 2018, 6, 325-336.	3.2	79
27	Tailoring the wettability of polypropylene surfaces with halloysite nanotubes. Journal of Colloid and Interface Science, 2010, 350, 186-193.	5.0	78
28	Free-Standing Graphene Oxide-Chitin Nanocrystal Composite Membrane for Dye Adsorption and Oil/Water Separation. ACS Sustainable Chemistry and Engineering, 2019, 7, 13379-13390.	3.2	76
29	Halloysite nanotubes coated 3D printed PLA pattern for guiding human mesenchymal stem cells (hMSCs) orientation. Chemical Engineering Journal, 2019, 359, 672-683.	6.6	74
30	Cellulose-halloysite nanotube composite hydrogels for curcumin delivery. Cellulose, 2017, 24, 2861-2875.	2.4	72
31	Poly(vinyl alcohol)/halloysite nanotubes bionanocomposite films: Properties and <i>in vitro</i> osteoblasts and fibroblasts response. Journal of Biomedical Materials Research - Part A, 2010, 93A, 1574-1587.	2.1	71
32	Polyethyleneimine grafted short halloysite nanotubes for gene delivery. Materials Science and Engineering C, 2017, 81, 224-235.	3.8	70
33	The improvement of mechanical performance and water-response of carboxylated SBR by chitin nanocrystals. European Polymer Journal, 2015, 68, 190-206.	2.6	68
34	Stripe-like Clay Nanotubes Patterns in Glass Capillary Tubes for Capture of Tumor Cells. ACS Applied Materials & Interfaces, 2016, 8, 7709-7719.	4.0	68
35	Chitin-natural clay nanotubes hybrid hydrogel. International Journal of Biological Macromolecules, 2013, 58, 23-30.	3.6	62
36	Antibacterial activity and cytocompatibility of chitoooligosaccharide-modified polyurethane membrane via polydopamine adhesive layer. Carbohydrate Polymers, 2017, 156, 235-243.	5.1	61

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37	Functionalization of Halloysite Nanotubes via Grafting of Dendrimer for Efficient Intracellular Delivery of siRNA. <i>Bioconjugate Chemistry</i> , 2018, 29, 2606-2618.	1.8	60
38	Hydrophobically modified chitin/halloysite nanotubes composite sponges for high efficiency oil-water separation. <i>International Journal of Biological Macromolecules</i> , 2019, 132, 406-415.	3.6	60
39	Systematic studies on blood coagulation mechanisms of halloysite nanotubes-coated PET dressing as superior topical hemostatic agent. <i>Chemical Engineering Journal</i> , 2022, 428, 132049.	6.6	60
40	Preparation and Characterization of Polypropylene Grafted Halloysite and Their Compatibility Effect to Polypropylene/Halloysite Composite. <i>Polymer Journal</i> , 2006, 38, 1198-1204.	1.3	59
41	Tough and highly stretchable polyacrylamide nanocomposite hydrogels with chitin nanocrystals. <i>International Journal of Biological Macromolecules</i> , 2015, 78, 23-31.	3.6	58
42	Conductive carboxylated styrene butadiene rubber composites by incorporation of polypyrrole-wrapped halloysite nanotubes. <i>Composites Science and Technology</i> , 2017, 143, 56-66.	3.8	58
43	Rod in Tube: A Novel Nanoplatfrom for Highly Effective Chemo-Photothermal Combination Therapy toward Breast Cancer. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 3690-3703.	4.0	57
44	Enhanced mechanical properties and cytocompatibility of electrospun poly(L-lactide) composite fiber membranes assisted by polydopamine-coated halloysite nanotubes. <i>Applied Surface Science</i> , 2016, 369, 82-91.	3.1	56
45	Emerging role of nanoclays in cancer research, diagnosis, and therapy. <i>Coordination Chemistry Reviews</i> , 2021, 440, 213956.	9.5	56
46	Electrospun composite nanofiber membrane of poly(L-lactide) and surface grafted chitin whiskers: Fabrication, mechanical properties and cytocompatibility. <i>Carbohydrate Polymers</i> , 2016, 147, 216-225.	5.1	55
47	The design, fabrication and evaluation of 3D printed gHNTs/gMgO whiskers/PLLA composite scaffold with honeycomb microstructure for bone tissue engineering. <i>Composites Part B: Engineering</i> , 2020, 192, 108001.	5.9	55
48	High performance strain sensors based on chitosan/carbon black composite sponges. <i>Materials and Design</i> , 2018, 141, 276-285.	3.3	51
49	Halloysite nanotubes@polydopamine reinforced polyacrylamide-gelatin hydrogels with NIR light triggered shape memory and self-healing capability. <i>Composites Science and Technology</i> , 2020, 191, 108071.	3.8	51
50	Self-assembled structures of halloysite nanotubes: towards the development of high-performance biomedical materials. <i>Journal of Materials Chemistry B</i> , 2020, 8, 838-851.	2.9	50
51	Superamphiphobic Surfaces with Self-Cleaning and Antifouling Properties by Functionalized Chitin Nanocrystals. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 6690-6699.	3.2	47
52	Benzo-thiazole sulfide compatibilized polypropylene/halloysite nanotubes composites. <i>Applied Surface Science</i> , 2009, 255, 4961-4969.	3.1	45
53	Halloysite Nanotube-Modified Plasmonic Interface for Highly Sensitive Refractive Index Sensing. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 5933-5940.	4.0	44
54	High-Performance Strain Sensors Based on Spirally Structured Composites with Carbon Black, Chitin Nanocrystals, and Natural Rubber. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 10595-10605.	3.2	42

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55	High-strength and physical cross-linked nanocomposite hydrogel with clay nanotubes for strain sensor and dye adsorption application. <i>Composites Science and Technology</i> , 2019, 181, 107701.	3.8	42
56	Formation of Reinforcing Inorganic Network in Polymer via Hydrogen Bonding Self-Assembly Process. <i>Polymer Journal</i> , 2007, 39, 208-212.	1.3	41
57	Large-area assembly of halloysite nanotubes for enhancing the capture of tumor cells. <i>Journal of Materials Chemistry B</i> , 2017, 5, 1712-1723.	2.9	41
58	Theory of dynamical electron channeling contrast images of near-surface crystal defects. <i>Ultramicroscopy</i> , 2014, 146, 71-78.	0.8	38
59	Self-Assembling Halloysite Nanotubes into Concentric Ring Patterns in a Sphere-on-Flat Geometry. <i>Langmuir</i> , 2017, 33, 3088-3098.	1.6	38
60	Toxicity Evaluation of One-Dimensional Nanoparticles Using <i>Caenorhabditis elegans</i> : A Comparative Study of Halloysite Nanotubes and Chitin Nanocrystals. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 18965-18975.	3.2	38
61	Reinforcing thermoplastics with hydrogen bonding bridged inorganics. <i>Physica B: Condensed Matter</i> , 2010, 405, 655-662.	1.3	37
62	Dispersion strategies for low-dimensional nanomaterials and their application in biopolymer implants. <i>Materials Today Nano</i> , 2021, 15, 100127.	2.3	37
63	Mechanical properties and osteogenic activity of poly(L-lactide) fibrous membrane synergistically enhanced by chitosan nanofibers and polydopamine layer. <i>Materials Science and Engineering C</i> , 2017, 81, 280-290.	3.8	36
64	Strengthening and toughening of poly(L-lactide) composites by surface modified MgO whiskers. <i>Applied Surface Science</i> , 2015, 332, 215-223.	3.1	35
65	Nanocomposites of poly(L-lactide) and surface-modified chitin whiskers with improved mechanical properties and cytocompatibility. <i>European Polymer Journal</i> , 2016, 81, 266-283.	2.6	35
66	Photoluminescent hybrid nanomaterials from modified halloysite nanotubes. <i>Journal of Materials Chemistry C</i> , 2018, 6, 7377-7384.	2.7	35
67	Multifunctional HNT@Fe ₃ O ₄ @PPy@DOX Nanoplatform for Effective Chemo-Photothermal Combination Therapy of Breast Cancer with MR Imaging. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 3361-3374.	2.6	32
68	Injectable halloysite-g-chitosan hydrogels as drug carriers to inhibit breast cancer recurrence. <i>Composites Part B: Engineering</i> , 2021, 221, 109031.	5.9	31
69	Thermal Decomposition and Oxidation Ageing Behaviour of Polypropylene/Halloysite Nanotube Nanocomposites. <i>Polymers and Polymer Composites</i> , 2007, 15, 321-328.	1.0	30
70	The Role of Interactions between Halloysite Nanotubes and 2,2'-(1,2-Ethenediyl)di-4,1-phenylene) Bisbenzoxazole in Halloysite Reinforced Polypropylene Composites. <i>Polymer Journal</i> , 2008, 40, 1087-1093.	1.3	30
71	Polysaccharide-halloysite nanotube composites for biomedical applications: a review. <i>Clay Minerals</i> , 2016, 51, 457-467.	0.2	30
72	Clay Nanotubes Aligned with Shear Forces for Mesenchymal Stem Cell Patterning. <i>Small</i> , 2019, 15, e1900357.	5.2	30

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73	Chitin Nanocrystals as an Eco-friendly and Strong Anisotropic Adhesive. ACS Applied Materials & Interfaces, 2021, 13, 11356-11368.	4.0	30
74	Fabrication and evaluation of a chitin whisker/poly(L-lactide) composite scaffold by the direct trisolvant-ink writing method for bone tissue engineering. Nanoscale, 2020, 12, 18225-18239.	2.8	29
75	Nano-biocomposite films fabricated from cellulose fibers and halloysite nanotubes. Applied Clay Science, 2020, 190, 105565.	2.6	27
76	Chemically Cross-Linked Chitin Nanocrystal Scaffolds for Drug Delivery. ACS Applied Nano Materials, 2018, 1, 6790-6799.	2.4	26
77	Green detergent made of halloysite nanotubes. Chemical Engineering Journal, 2021, 425, 130623.	6.6	26
78	Preparation of bioactive hydroxyapatite@halloysite and its effect on MC3T3-E1 osteogenic differentiation of chitosan film. Materials Science and Engineering C, 2019, 105, 110072.	3.8	25
79	Synergistic reinforcing and toughening of poly(L-lactide) composites with surface-modified MgO and chitin whiskers. Composites Science and Technology, 2016, 133, 128-135.	3.8	23
80	Simple fabrication of rough halloysite nanotubes coatings by thermal spraying for high performance tumor cells capture. Materials Science and Engineering C, 2018, 85, 170-181.	3.8	22
81	Two in One: Modified Polyurethane Foams by Dip-Coating of Halloysite Nanotubes with Acceptable Flame Retardancy and Absorbency. Macromolecular Materials and Engineering, 2019, 304, 1900213.	1.7	22
82	Liquid crystalline and rheological properties of chitin whiskers with different chemical structures and chargeability. International Journal of Biological Macromolecules, 2020, 157, 24-35.	3.6	22
83	Hyaluronic Acid Modified Halloysite Nanotubes Decorated with ZIF-8 Nanoparticles as Dual Chemo- and Photothermal Anticancer Agents. ACS Applied Nano Materials, 2022, 5, 5813-5825.	2.4	21
84	Preparation of HAp whiskers with or without Mg ions and their effects on the mechanical properties and osteogenic activity of poly(L-lactide). Composites Part B: Engineering, 2020, 196, 108137.	5.9	20
85	Chinese ink coated melamine foam with Joule heating and photothermal effect for strain sensor and seawater desalination. Composites Part A: Applied Science and Manufacturing, 2021, 149, 106535.	3.8	19
86	The liquid crystalline order, rheology and their correlation in chitin whiskers suspensions. Carbohydrate Polymers, 2019, 209, 92-100.	5.1	18
87	High-Performance Sensors Based on Chinese Ink and Water-Based Glue for Detection of Strain, Temperature, and Humidity. ACS Sustainable Chemistry and Engineering, 2022, 10, 1847-1856.	3.2	18
88	Polyethylene glycol grafted chitin nanocrystals enhanced, stretchable, freezing-tolerant ionic conductive organohydrogel for strain sensors. Composites Part A: Applied Science and Manufacturing, 2022, 155, 106813.	3.8	18
89	Crosslinked carboxylated SBR composites reinforced with chitin nanocrystals. Journal of Polymer Research, 2016, 23, 1.	1.2	17
90	Morphology and optical absorption change of Ag/SiO ₂ core-shell nanoparticles under thermal annealing. Applied Physics Letters, 2012, 101, 083903.	1.5	16

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91	Hydrothermal synthesis of halloysite nanotubes @carbon nanocomposites with good biocompatibility. <i>Microporous and Mesoporous Materials</i> , 2018, 266, 155-163.	2.2	15
92	Facile fabrication of hydrophobic paper by HDTMS modified chitin nanocrystals coating for food packaging. <i>Food Hydrocolloids</i> , 2022, 133, 107915.	5.6	15
93	Preparation of monoPEGylated Cyanovirin-Nâ€™s derivative and its anti-influenza A virus bioactivity <i>in vitro</i> and <i>in vivo</i> . <i>Journal of Biochemistry</i> , 2015, 157, 539-548.	0.9	14
94	Surface modification of halloysite nanotubes with ϵ -lactide: An effective route to high-performance poly(ϵ -lactide) composites. <i>Journal of Applied Polymer Science</i> , 2015, 132, .	1.3	14
95	Molecular Dynamics Simulations of the High-Pressure Phase Transitions in BaFCl. <i>Physica Status Solidi (B): Basic Research</i> , 2001, 225, R20-R21.	0.7	13
96	Preparation and characterization of chitosan hollow nanospheres for anticancer drug curcumin delivery. <i>Materials Letters</i> , 2015, 150, 114-117.	1.3	13
97	Conductive halloysite clay nanotubes for high performance sodium ion battery cathode. <i>Applied Clay Science</i> , 2021, 213, 106265.	2.6	13
98	Anisotropic and robust hydrogels combined osteogenic and angiogenic activity as artificial periosteum. <i>Composites Part B: Engineering</i> , 2022, 233, 109627.	5.9	13
99	The influence of aminophylline on the nanostructure and nanomechanics of T lymphocytes: an AFM study. <i>Nanoscale Research Letters</i> , 2014, 9, 518.	3.1	11
100	Creating Ultrastrong and Osteogenic Chitin Nanocomposite Hydrogels via Chitin Whiskers with Different Surface Chemistries. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 17487-17499.	3.2	11
101	Cell Membrane-Coated Halloysite Nanotubes for Target-Specific Nanocarrier for Cancer Phototherapy. <i>Molecules</i> , 2021, 26, 4483.	1.7	11
102	Bio-inspired liquid crystal gel with adjustable viscoelasticity to modulate cell behaviors and fate. <i>Composites Part B: Engineering</i> , 2022, 234, 109704.	5.9	11
103	Morphology and properties of halloysite nanotubes reinforced polypropylene nanocomposites. <i>E-Polymers</i> , 2008, 8, .	1.3	10
104	Cellular response of freshwater algae to halloysite nanotubes: alteration of oxidative stress and membrane function. <i>Environmental Science: Nano</i> , 2021, 8, 3262-3272.	2.2	9
105	Dual-Cross-linked Liquid Crystal Hydrogels with Controllable Viscoelasticity for Regulating Cell Behaviors. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 21966-21977.	4.0	9
106	Phytotoxicity of halloysite nanotubes using wheat as a model: seed germination and growth. <i>Environmental Science: Nano</i> , 2021, 8, 3015-3027.	2.2	8
107	Influence of hybrid fibrils of 2,5-bis(2-benzoxazolyl) thiophene and halloysite nanotubes on the crystallization behaviour of polypropylene. <i>Journal Physics D: Applied Physics</i> , 2009, 42, 075306.	1.3	7
108	Halloysite-Based Polymer Nanocomposites. , 2019, , 589-626.		7

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109	Facile Method to Create Poly(D,L-lactide) Composite Membranes with Sequential Chitin Whisker Layers for Tunable Strength and Cell Adhesion. ACS Sustainable Chemistry and Engineering, 2021, 9, 4440-4452.	3.2	7
110	Hydrophobic Halloysite Nanotubes via Ball Milling for Stable Pickering Emulsions: Implications for Food Preservation. ACS Applied Nano Materials, 2022, 5, 11289-11301.	2.4	7
111	Solid-phase preparation method of silica-supported 2,2'-methylenebis(6-tert-butyl-4-methylphenol) and its antioxidative behavior in styrene-butadiene rubber. Journal of Applied Polymer Science, 2016, 133, .	1.3	6
112	Tunable coffee-ring formation of halloysite nanotubes by evaporating sessile drops. Soft Matter, 2021, 17, 9514-9527.	1.2	6
113	Superhydrophobic surfaces with nanofibers or nanorods based on thiophene derivatives. Applied Physics Letters, 2010, 96, .	1.5	4
114	Transcrystallization at the surface of graphene-modified chitosan fibers. Journal Physics D: Applied Physics, 2016, 49, 265305.	1.3	3
115	Clay Materials: Clay Nanotubes Aligned with Shear Forces for Mesenchymal Stem Cell Patterning (Small 21/2019). Small, 2019, 15, 1970110.	5.2	3
116	Formation of Regular Wormlike Patterns by Dewetting Aqueous Dispersions of Halloysite Nanotubes. Journal of Physical Chemistry C, 2020, 124, 8034-8040.	1.5	3
117	Molecular dynamics simulation of the pressure-induced phase transition in BaFCl. Radiation Effects and Defects in Solids, 2002, 157, 799-803.	0.4	2
118	Synthesis of supramolecular gels based on electron-transfer reactions between clay nanotubes and styrene. Chemical Communications, 2019, 55, 10756-10759.	2.2	2
119	Label-free Detection of Breast Cancer Cells Using a Fiber-optic Grating Sensor Functionalized with Halloysite Nanotubes. , 2019, , .		1
120	Modeling of halloysite-nanotube modified surface plasmon resonance sensor. , 2017, , .		0
121	EXPERIMENTAL EVIDENCE FOR THE AGGREGATION OF THE NEAR-IR BANDS IN BAFBR: EU ²⁺ SINGLE CRYSTALS. , 2001, , .		0