Jem-Kun Chen

List of Publications by Year
in descending order

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		201674	345221
93	2,019	27	36
papers	citations	h-index	g-index

95	95	95	1723
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Using Solvent Immersion to Fabricate Variably Patterned Poly(methyl methacrylate) Brushes on Silicon Surfaces. Macromolecules, 2008, 41, 8729-8736.	4.8	70
2	Liquid Lenses and Driving Mechanisms: A Review. Journal of Adhesion Science and Technology, 2012, 26, 1773-1788.	2.6	67
3	Dual-functionalized cellulose nanofibrils prepared through TEMPO-mediated oxidation and surface-initiated ATRP. Polymer, 2015, 72, 395-405.	3.8	65
4	A chiral carbazole based sensor for sequential â€œon-off-onâ€•fluorescence detection of Fe3+ and tryptophan/histidine. Sensors and Actuators B: Chemical, 2021, 328, 129084.	7.8	58
5	Characterization of patterned poly(methyl methacrylate) brushes under various structures upon solvent immersion. Journal of Colloid and Interface Science, 2009, 338, 428-434.	9.4	47
6	Highly efficient drug delivery systems based on functional supramolecular polymers: In vitro evaluation. Acta Biomaterialia, 2016, 33, 194-202.	8.3	45
7	Fabrication of DNA extraction device with tethered poly(N-isopropylacrylamide) brushes on silicon surface for a specific DNA detection. Sensors and Actuators B: Chemical, 2010, 150, 314-320.	7.8	44
8	Low-surface-free-energy polybenzoxazine/polyacrylonitrile fibers for biononfouling membrane. Polymer, 2013, 54, 258-268.	3.8	43
9	Fabrication of a Highly Dense Line Patterned Polystyrene Brush on Silicon Surfaces Using Very Large Scale Integration Processing. Journal of Physical Chemistry C, 2010, 114, 11801-11809.	3.1	42
10	Fabrication of ordered metallic glass nanotube arrays for label-free biosensing with diffractive reflectance. Biosensors and Bioelectronics, 2018, 102, 129-135.	10.1	40
11	Reversible Hydrophobic/Hydrophilic Adhesive of PS-b-PNIPAAm Copolymer Brush Nanopillar Arrays for Mimicking the Climbing Aptitude of Geckos. Journal of Physical Chemistry C, 2012, 116, 6980-6992.	3.1	39
12	Self-Assembled pH-Responsive Polymeric Micelles for Highly Efficient, Noncytotoxic Delivery of Doxorubicin Chemotherapy To Inhibit Macrophage Activation: In Vitro Investigation. Biomacromolecules, 2018, 19, 2772-2781.	5.4	39
13	Patterned Poly(2-hydroxyethyl methacrylate) Brushes on Silicon Surfaces Behave as â€œTentaclesâ€•To Capture Ferritin from Aqueous Solution. ACS Applied Materials & Interfaces, 2009, 1, 1525-1532.	8.0	38
14	Dual Stimuli-Responsive Nucleobase-Functionalized Polymeric Systems as Efficient Tools for Manipulating Micellar Self-Assembly Behavior. Macromolecules, 2018, 51, 1189-1197.	4.8	37
15	Electrorheological Operation of Low-/High-Permittivity Core/Shell SiO₂/Au Nanoparticle Microspheres for Display Media. ACS Applied Materials & Interfaces, 2012, 4, 5650-5661.	8.0	36
16	pH-Switchable Optical Properties of the One-Dimensional Periodic Grating of Tethered Poly(2-dimethylaminoethyl methacrylate) Brushes on a Silicon Surface. Journal of Physical Chemistry C, 2011, 115, 21341-21350.	3.1	34
17	pH-Responsive One-Dimensional Periodic Relief Grating of Polymer Brushâ€“Gold Nanoassemblies on Silicon Surface. ACS Applied Materials & Interfaces, 2012, 4, 1935-1947.	8.0	34
18	Two-Dimensional Periodic Relief Grating as a Versatile Platform for Selective Immunosorbent Assay and Visualizing of Antigens. ACS Applied Materials & Interfaces, 2013, 5, 3348-3355.	8.0	34

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19	Highly efficient self-cleaning of heavy polyelectrolyte coated electrospun polyacrylonitrile nanofibrous membrane for separation of oil/water emulsions with intermittent pressure. Separation and Purification Technology, 2020, 234, 116106.	7.9	32
20	Controlled antibody orientation on Fe3O4 nanoparticles and CdTe quantum dots enhanced sensitivity of a sandwich-structured electrogenerated chemiluminescence immunosensor for the determination of human serum albumin. Sensors and Actuators B: Chemical, 2021, 336, 129710.	7.8	31
21	Fabrication of high-aspect-ratio poly(2-hydroxyethyl methacrylate) brushes patterned on silica surfaces by very-large-scale integration process. Journal of Colloid and Interface Science, 2011, 355, 359-367.	9.4	30
22	A Dynamic Hanging-Drop System for Mesenchymal Stem Cell Culture. International Journal of Molecular Sciences, 2020, 21, 4298.	4.1	30
23	Label-free DNA detection using two-dimensional periodic relief grating as a visualized platform for diagnosis of breast cancer recurrence after surgery. Biosensors and Bioelectronics, 2014, 54, 35-41.	10.1	29
24	Fabrication of two-dimensional photonic crystals of tethered polyvinyltetrazole on silicon surfaces for visualization in Cu 2+ ion sensing. Dyes and Pigments, 2017, 139, 300-309.	3.7	29
25	Metallic glass nanotube arrays: Preparation and surface characterizations. Materials Today, 2018, 21, 178-185.	14.2	29
26	Detection of specific DNA using a microfluidic device featuring tethered poly(N-isopropylacrylamide) on a silicon substrate. Applied Physics Letters, 2010, 97, .	3.3	28
27	Reversibly Thermoswitchable Two-Dimensional Periodic Gratings Prepared from Tethered Poly(N-isopropylacrylamide) on Silicon Surfaces. ACS Applied Materials & Interfaces, 2013, 5, 2959-2966.	8.0	28
28	High-efficiency self-healing materials based on supramolecular polymer networks. RSC Advances, 2015, 5, 101148-101154.	3.6	28
29	Association of poly(N-isopropylacrylamide) containing nucleobase multiple hydrogen bonding of adenine for DNA recognition. Applied Surface Science, 2013, 271, 60-69.	6.1	27
30	Electrorheological Sensor Encapsulating Microsphere Media for Plague Diagnosis with Rapid Visualization. ACS Sensors, 2020, 5, 665-673.	7.8	26
31	Using colloid lithography to fabricate silicon nanopillar arrays on silicon substrates. Journal of Colloid and Interface Science, 2012, 367, 40-48.	9.4	25
32	Fabrication of sandwich structured devices encapsulating core/shell SiO2/Fe3O4 nanoparticle microspheres as media for magneto-responsive transmittance. Sensors and Actuators B: Chemical, 2015, 210, 46-55.	7.8	25
33	Polyacrylonitrile microscaffolds assembled from mesh structures of aligned electrospun nanofibers as high-efficiency particulate air filters. Aerosol Science and Technology, 2016, 50, 615-625.	3.1	25
34	Visualization platform of one-dimensional gratings of tethered polyvinyltetrazole brushes on silicon surfaces for sensing of Cr(III). Mikrochimica Acta, 2017, 184, 2723-2730.	5.0	25
35	Pillar arrays of tethered polyvinyltetrazole on silicon as a visualization platform for sensing of lead ions. Sensors and Actuators B: Chemical, 2017, 243, 234-243.	7.8	25
36	Using coaxial electrospinning to fabricate core/shell-structured polyacrylonitrileâ€“polybenzoxazine fibers as nonfouling membranes. RSC Advances, 2015, 5, 58760-58771.	3.6	24

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37	Ferritin immobilization on patterned poly(2-hydroxyethyl methacrylate) brushes on silicon surfaces from colloid system. Colloid and Polymer Science, 2011, 289, 433-445.	2.1	23
38	Label-free detection of DNA hybridization using nanopillar arrays based optical biosensor. Sensors and Actuators B: Chemical, 2014, 194, 10-18.	7.8	23
39	Nucleobaseâ€Functionalized Supramolecular Micelles with Tunable Physical Properties for Efficient Controlled Drug Release. Macromolecular Bioscience, 2016, 16, 1415-1421.	4.1	23
40	Synthesis of tethered poly(N-isopropylacrylamide) for detection of breast cancer recurrence DNA. Journal of Colloid and Interface Science, 2011, 358, 454-461.	9.4	22
41	Bifunctional superparamagneticâ€“luminescent coreâ€“shellâ€“satellite structured microspheres: preparation, characterization, and magnetodisplay application. Journal of Materials Chemistry C, 2015, 3, 4603-4615.	5.5	22
42	Diagnosis of breast cancer recurrence after surgery by using poly(2-dimethylaminoethyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 547 Td (n 1011-1019.	7.8	21
43	Real-time multicolor antigen detection with chemoresponsive diffraction gratings of silicon oxide nanopillar arrays. Sensors and Actuators B: Chemical, 2013, 186, 802-810.	7.8	21
44	Characterization of poly(N-isopropylacrylamide)â€“nucleobase supramolecular complexes featuring bio-multiple hydrogen bonds. Soft Matter, 2014, 10, 8330-8340.	2.7	21
45	Diagnosis of breast cancer recurrence using a microfluidic device featuring tethered cationic polymers. Applied Physics Letters, 2011, 99, .	3.3	19
46	Patterned 3D assembly of Au nanoparticle on silicon substrate by colloid lithography. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	19
47	Polarity-indicative two-dimensional periodic relief gratings of tethered poly(methyl methacrylate) on silicon surfaces for visualization in volatile organic compound sensing. Applied Physics Letters, 2013, 102, .	3.3	19
48	Fabrication of metamaterial absorber using polymer brush â€“ gold nanoassemblies for visualizing the reversible pH-responsiveness. Journal of Materials Chemistry C, 2014, 2, 8226-8234.	5.5	19
49	Synthesis of Poly(N-vinylpyrrolidone)-Based Polymer Bottlebrushes by ATRPA and RAFT Polymerization: Toward Drug Delivery Application. Polymers, 2019, 11, 1079.	4.5	18
50	Preparations of Tough and Conductive PAMPS/PAA Double Network Hydrogels Containing Cellulose Nanofibers and Polypyrroles. Polymers, 2020, 12, 2835.	4.5	18
51	Poly(N-isopropylacrylamide)-gelatin hydrogel membranes with thermo-tunable pores for water flux gating and protein separation. Journal of Membrane Science, 2021, 618, 118732.	8.2	18
52	Protein valves prepared by click reaction grafting of poly(N-isopropylacrylamide) to electrospun poly(vinyl chloride) fibrous membranes. Applied Surface Science, 2018, 439, 313-322.	6.1	17
53	Sandwich-structured displays encapsulating polystyrene microspheres coated with Fe3O4 nanoparticles for label-free biosensing for electrorheological operation. Sensors and Actuators B: Chemical, 2020, 302, 127185.	7.8	17
54	Reversibly photoswitchable gratings prepared from azobenzene-modified tethered poly(methacrylic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	7.8	17

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55	Polarity-indicative two-dimensional periodic concave gratings of tethered polystyrene on silicon surfaces for visualization in VOC sensing. Sensors and Actuators B: Chemical, 2013, 188, 1123-1131.	7.8	16
56	pH-Sensitive Micelles Based on Star Copolymer Ad-(PCL-b-PDEAEMA-b-PPEGMA)4 for Controlled Drug Delivery. Polymers, 2018, 10, 443.	4.5	15
57	Patterning nanocluster polystyrene brushes grafted from initiator cores on silicon surfaces by lithography processing. Colloid and Polymer Science, 2011, 289, 1283-1294.	2.1	14
58	Fabrication of two-dimensional periodic relief grating of tethered polystyrene on silicon surface as solvent sensors. Sensors and Actuators B: Chemical, 2013, 177, 833-840.	7.8	14
59	Self-assembled supramolecular polymers with tailorable properties that enhance cell attachment and proliferation. Acta Biomaterialia, 2017, 50, 476-483.	8.3	14
60	Supramolecular polymer micelles as universal tools for constructing high-performance fluorescent nanoparticles. Dyes and Pigments, 2017, 137, 284-292.	3.7	14
61	Binary-blend fibber-based capture assay of circulating tumor cells for clinical diagnosis of colorectal cancer. Journal of Nanobiotechnology, 2018, 16, 4.	9.1	14
62	Optical assay of trypsin using a one-dimensional plasmonic grating of gelatin-modified poly(methacrylic acid). Mikrochimica Acta, 2020, 187, 280.	5.0	14
63	Fabrication of an artificial nanosucker device with a large area nanotube array of metallic glass. Nanoscale, 2018, 10, 1366-1375.	5.6	13
64	Fabrication of biomimetic device with PS-b-PNIPAAm copolymer pillars mimicking a gecko foot pad. Sensors and Actuators B: Chemical, 2012, 174, 332-341.	7.8	12
65	Degradable coronas comprising polyelectrolyte complexes of PDMAEMA and gelatin for pH-triggered antibiotic release. Polymer, 2014, 55, 2678-2687.	3.8	12
66	Protein valves formed through click-reaction grafting of poly(N-isopropylacrylamide) onto electrospun poly(2,6-dimethyl-1,4-phenylene oxide) fibrous membranes. Journal of Membrane Science, 2018, 551, 103-112.	8.2	12
67	Biodegradable Redox-Sensitive Star Polymer Nanomicelles for Enhancing Doxorubicin Delivery. Nanomaterials, 2019, 9, 547.	4.1	12
68	Multifunctional adenine-functionalized supramolecular micelles for highly selective and effective cancer chemotherapy. Polymer Chemistry, 2020, 11, 849-856.	3.9	12
69	Naked-eye colorimetric and turn-on fluorescent Schiff base sensor for cyanide and aluminum (III) detection in food samples and cell imaging applications. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 262, 120139.	3.9	12
70	A dimedone-phenylalanine-based fluorescent sensor for the detection of iron (III), copper (II), L-cysteine, and L-tryptophan in solution and pharmaceutical samples. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 274, 121108.	3.9	11
71	Using nanopillars of silicon oxide as a versatile platform for visualizing a selective immunosorbent. Applied Physics Letters, 2013, 102, 251903.	3.3	10
72	Manipulation of ferrofluids encapsulated in sandwich structures using alternating magnetic field for high contrast in transmittance. Microfluidics and Nanofluidics, 2015, 19, 1441-1453.	2.2	10

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73	Surface lattice resonance of line array of poly (glycidyl methacrylate) with CdS quantum dots for label-free biosensing. Colloids and Surfaces B: Biointerfaces, 2019, 179, 199-207.	5.0	10
74	Nanowires of 3-D cross-linked gold nanoparticle assemblies behave as thermosensors on silicon substrates. Colloid and Polymer Science, 2011, 289, 1829-1837.	2.1	9
75	Thermally switchable adhesions of polystyrene-block-poly(n-isopropylacrylamide) copolymer pillar array mimicking climb attitude of geckos. Applied Physics Letters, 2012, 101, 123701.	3.3	9
76	Supermolecules of poly(N-isopropylacrylamide) complexating Herring sperm DNA with bio-multiple hydrogen bonding. Colloids and Surfaces B: Biointerfaces, 2016, 148, 422-430.	5.0	9
77	Antigen detection with thermosensitive hydrophilicity of poly(N-isopropylacrylamide)-grafted poly(vinyl chloride) fibrous mats. Journal of Materials Chemistry B, 2018, 6, 3486-3496.	5.8	9
78	Performance enhancement by particle gradient assembly patterning of electrochemiluminescence immunosensor formed using magnetolithgraphy in determination of human serum albumin. Biosensors and Bioelectronics, 2021, 183, 113240.	10.1	9
79	CO₂-Responsive Water-Soluble Conjugated Polymers for In Vitro and In Vivo Biological Imaging. Biomacromolecules, 2020, 21, 5282-5291.	5.4	8
80	Preparation of biofiltration membranes by coating electrospun polyacrylonitrile fiber membranes with layer-by-layer supermolecular polyelectrolyte films. Colloids and Surfaces B: Biointerfaces, 2020, 190, 110953.	5.0	8
81	Immobilization of antibody conjugated ZnS quantum dots onto poly(2,6-dimethyl-1,4-phenylene oxide) nanofibers with Poly(N-isopropylacrylamide) grafts as reversibly fluorescence immunoassay. Dyes and Pigments, 2018, 159, 198-208.	3.7	7
82	Cr(VI) visualization via transmittance of electrorheological display medium with core/shell polystyrene/polyvinyltetrazole microspheres. Science of the Total Environment, 2020, 743, 140676.	8.0	7
83	Self-assembled nanoparticles formed via complementary nucleobase pair interactions between drugs and nanocarriers for highly efficient tumor-selective chemotherapy. Materials Chemistry Frontiers, 2021, 5, 5442-5451.	5.9	6
84	Isolation and label-free detection of circulating tumour cells by fluidic diffraction chips with a reflective laser beam system. Chemical Engineering Journal, 2022, 436, 135206.	12.7	6
85	Detection of heavy metal ion using photonic crystals of polymer brushes with reflective laser beam system. Applied Surface Science, 2022, 585, 152718.	6.1	6
86	SI ATRP for the Surface Modifications of Optically Transparent Paper Films Made by TEMPO-Oxidized Cellulose Nanofibers. Polymers, 2022, 14, 946.	4.5	5
87	Identification of DNA single-base mismatches by resistivity of poly(N-isopropylacrylamide)-block-ssDNA copolymer brush films at dual temperatures. RSC Advances, 2017, 7, 22777-22787.	3.6	4
88	Thermo-Tunable Pores and Antibiotic Gating Properties of Bovine Skin Gelatin Gels Prepared with Poly(n-isopropylacrylamide) Network. Polymers, 2020, 12, 2156.	4.5	4
89	Fabrication of device with poly(N-isopropylacrylamide)-b-ssDNA copolymer brush for resistivity study. Journal of Nanobiotechnology, 2017, 15, 68.	9.1	3
90	One-dimensional diffraction sensors with high sensitivity for on-site rapid label-free plague diagnosis with a reflective laser detection system. Sensors and Actuators B: Chemical, 2022, 353, 131080.	7.8	2

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91	Coordination between Surface Lattice Resonances of Poly(glycidyl Methacrylate) Line Array and Surface Plasmon Resonances of CdS Quantum on Silicon Surface. Polymers, 2019, 11, 558.	4.5	1
92	Facile Molecular Weight Determination of Polymer Brushes Grafted from One-Dimensional Diffraction Grating by SI-ATRP Using Reflective Laser System. Polymers, 2021, 13, 4270.	4.5	1
93	Rapid label-free detection of Pseudomonas aeruginosa using a fluidic grating chip with a reflective laser system. Biosensors and Bioelectronics: X, 2022, 10, 100138.	1.7	0