Benjamin Chu

List of Publications by Year
in descending order

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127	7,089	57631	58464
papers	citations	44 h-index	82 g-index

129	129	129	7149
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Cost-effective polymer-based membranes for drinking water purification. Giant, 2022, 10, 100099.	2.5	26
2	Static and Dynamic Light Scattering. World Scientific Series in Nanoscience and Nanotechnology, 2019, , 335-374.	0.1	0
3	Synthesis and characterization of poly(ethylene oxide)/polylactide/polylysine triâ€arm star copolymers for gene delivery. Journal of Polymer Science Part A, 2018, 56, 635-644.	2.5	6
4	Adsorption dynamics of tannin on deacetylated electrospun Konjac glucomannan fabric. Soft Matter, 2018, 14, 2712-2723.	1.2	7
5	Characterization of Nanocellulose Using Small-Angle Neutron, X-ray, and Dynamic Light Scattering Techniques. Journal of Physical Chemistry B, 2017, 121, 1340-1351.	1.2	112
6	Thin-film nanofibrous composite reverse osmosis membranes for desalination. Desalination, 2017, 420, 91-98.	4.0	69
7	Fabrication of cellulose nanofiberâ€based ultrafiltration membranes by spray coating approach. Journal of Applied Polymer Science, 2017, 134, .	1.3	20
8	Super-hydrophobic polyurethane sponges for oil absorption. Separation Science and Technology, 2017, 52, 221-227.	1.3	24
9	The supramolecular structure of bone: X-ray scattering analysis and lateral structure modeling. Acta Crystallographica Section D: Structural Biology, 2016, 72, 986-996.	1.1	5
10	Instrumentation on Multi-Scaled Scattering of Bio-Macromolecular Solutions. International Journal of Molecular Sciences, 2015, 16, 10016-10037.	1.8	2
11	Morphological and property investigations of carboxylated cellulose nanofibers extracted from different biological species. Cellulose, 2015, 22, 3127-3135.	2.4	20
12	Exploring the Nature of Cellulose Microfibrils. Biomacromolecules, 2015, 16, 1201-1209.	2.6	48
13	High-performance nanofibrous membrane for removal of Cr(VI) from contaminated water. Journal of Plastic Film and Sheeting, 2015, 31, 379-400.	1.3	25
14	Functionalized electrospun nanofibrous microfiltration membranes for removal of bacteria and viruses. Journal of Membrane Science, 2014, 452, 446-452.	4.1	142
15	Nanofiltration membranes prepared by interfacial polymerization on thin-film nanofibrous composite scaffold. Polymer, 2014, 55, 1358-1366.	1.8	109
16	Nanofiltration membranes based on thin-film nanofibrous composites. Journal of Membrane Science, 2014, 469, 188-197.	4.1	80
17	Fabrication and characterization of cellulose nanofiber based thin-film nanofibrous composite membranes. Journal of Membrane Science, 2014, 454, 272-282.	4.1	150
18	High flux ethanol dehydration using nanofibrous membranes containing graphene oxide barrier layers. Journal of Materials Chemistry A, 2013, 1, 12998.	5.2	84

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19	Nanofibrous Microfiltration Membrane Based on Cellulose Nanowhiskers. Biomacromolecules, 2012, 13, 180-186.	2.6	201
20	Highly Permeable Polymer Membranes Containing Directed Channels for Water Purification. ACS Macro Letters, 2012, 1, 723-726.	2.3	154
21	Ultrafine Cellulose Nanofibers as Efficient Adsorbents for Removal of UO₂²⁺ in Water. ACS Macro Letters, 2012, 1, 213-216.	2.3	187
22	Ultrafine Polysaccharide Nanofibrous Membranes for Water Purification. Biomacromolecules, 2011, 12, 970-976.	2.6	212
23	Ultra-fine cellulose nanofibers: new nano-scale materials for water purification. Journal of Materials Chemistry, 2011, 21, 7507.	6.7	250
24	Thin-film nanofibrous composite membranes containing cellulose or chitin barrier layers fabricated by ionic liquids. Polymer, 2011, 52, 2594-2599.	1.8	84
25	Fabrication of thin-film nanofibrous composite membranes by interfacial polymerization using ionic liquids as additives. Journal of Membrane Science, 2010, 365, 52-58.	4.1	98
26	Aligned and molecularly oriented semihollow ultrafine polymer fiber yarns by a facile method. Journal of Polymer Science, Part B: Polymer Physics, 2010, 48, 1118-1125.	2.4	25
27	Thin-Film Nanofibrous Composite Ultrafiltration Membranes Based on Polyvinyl Alcohol Barrier Layer Containing Directional Water Channels. Industrial & Engineering Chemistry Research, 2010, 49, 11978-11984.	1.8	47
28	Preferred Orientation in Polymer Fiber Scattering. Polymer Reviews, 2010, 50, 91-111.	5.3	42
29	High-flux thin-film nanofibrous composite ultrafiltration membranes containing cellulose barrier layer. Journal of Materials Chemistry, 2010, 20, 4692.	6.7	125
30	Design and fabrication of electrospun polyethersulfone nanofibrous scaffold for highâ€flux nanofiltration membranes. Journal of Polymer Science, Part B: Polymer Physics, 2009, 47, 2288-2300.	2.4	84
31	The role of polymers in breakthrough technologies for water purification. Journal of Polymer Science, Part B: Polymer Physics, 2009, 47, 2431-2435.	2.4	45
32	High flux nanofiltration membranes based on interfacially polymerized polyamide barrier layer on polyacrylonitrile nanofibrous scaffolds. Journal of Membrane Science, 2009, 326, 484-492.	4.1	237
33	Enhanced Mechanical Performance of Selfâ€Bundled Electrospun Fiber Yarns via Postâ€Treatments. Macromolecular Rapid Communications, 2008, 29, 826-831.	2.0	87
34	Dynamic Self-Assembly Induced Rapid Dissolution of Cellulose at Low Temperatures. Macromolecules, 2008, 41, 9345-9351.	2.2	368
35	Functional nanofibers for environmental applications. Journal of Materials Chemistry, 2008, 18, 5326.	6.7	388
36	New Insights into Lamellar Structure Development and SAXS/WAXD Sequence Appearance during Uniaxial Stretching of Amorphous Poly(ethylene terephthalate) above Glass Transition Temperature. Macromolecules, 2008, 41, 2859-2867.	2.2	58

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37	Lamellar nanostructure in 'Somasif'-based organoclays. Clays and Clay Minerals, 2007, 55, 140-150.	0.6	20
38	Characterization of a Reversible Thermoresponsive Gel and Its Application to Oligonucleotide Separation. Macromolecules, 2007, 40, 5537-5544.	2.2	14
39	Shearâ€Induced Orientation and Structure Development in Isotactic Polypropylene Melt Containing Modified Carbon Nanofibers. Journal of Macromolecular Science - Physics, 2006, 45, 247-261.	0.4	31
40	NANOFIBROUS MATERIALS AND THEIR APPLICATIONS. Annual Review of Materials Research, 2006, 36, 333-368.	4.3	573
41	In-Situ X-ray Deformation Study of Fluorinated Multiwalled Carbon Nanotube and Fluorinated Ethyleneâ"Propylene Nanocomposite Fibers. Macromolecules, 2006, 39, 5427-5437.	2.2	40
42	Development of Multiple-Jet Electrospinning Technology. ACS Symposium Series, 2006, , 91-105.	0.5	12
43	Electrospinning of Hyaluronic Acid (HA) and HA/Gelatin Blends. Macromolecular Rapid Communications, 2006, 27, 114-120.	2.0	134
44	A Rapid Process for Producing Cellulose Multi-Filament Fibers from a NaOH/Thiourea Solvent System. Macromolecular Rapid Communications, 2006, 27, 1495-1500.	2.0	55
45	Manipulation of Polymer Chain Entanglement and Self-Assembly for DNA Capillary Electrophoresis. Macromolecular Symposia, 2005, 227, 77-88.	0.4	4
46	In Vitro Mineralization of Collagen in Demineralized Fish Bone. Macromolecular Chemistry and Physics, 2005, 206, 43-51.	1.1	43
47	In vitro non-viral gene delivery with nanofibrous scaffolds. Nucleic Acids Research, 2005, 33, e170-e170.	6.5	102
48	Association Behavior of PDMA-g-PMMA in Mixed Solvents and Its Application as a DNA Separation Medium. Macromolecules, 2005, 38, 1936-1943.	2.2	10
49	In situ synchrotron SAXS/WAXD studies during melt spinning of modified carbon nanofiber and isotactic polypropylene nanocomposite. Colloid and Polymer Science, 2004, 282, 802-809.	1.0	19
50	Effects of organoclays on morphology and thermal and rheological properties of polystyrene and poly(methyl methacrylate) blends. Journal of Polymer Science, Part B: Polymer Physics, 2003, 41, 44-54.	2.4	250
51	Structure Changes during Uniaxial Deformation of Ethylene-Based Semicrystalline Ethyleneâ"Propylene Copolymer. 1. SAXS Study. Macromolecules, 2003, 36, 1920-1929.	2.2	66
52	Uniaxial Deformation of Nylon 6â€"Clay Nanocomposites by In-Situ Synchrotron X-Ray Measurements. Journal of Macromolecular Science - Physics, 2003, 42, 201-214.	0.4	12
53	Combined techniques of Raman spectroscopy and synchrotron two-dimensional x-ray diffraction forin situstudy of anisotropic system: Example of polymer fibers under deformation. Review of Scientific Instruments, 2003, 74, 3087-3092.	0.6	22
54	Time-resolved structural studies in fiber processing. Macromolecular Symposia, 2003, 195, 297-302.	0.4	3

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55	A Synchrotron WAXD Study on the Early Stages of Coagulation during PBO Fiber Spinning. Macromolecules, 2002, 35, 9851-9853.	2.2	12
56	Mesophase as the Precursor for Strain-Induced Crystallization in Amorphous Poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702 Tc	2.2	131
57	Copolymer solutions as separation media for DNA capillary electrophoresis. Journal of Chromatography A, 2002, 966, 1-13.	1.8	47
58	Spatial open-network formed by mixed triblock copolymers as a new medium for double-stranded DNA separation by capillary electrophoresis. Electrophoresis, 2001, 22, 449-458.	1.3	20
59	DNA sequencing by capillary electrophoresis using copolymers of acrylamide andN,N-dimethyl-acrylamide. Electrophoresis, 2001, 22, 729-736.	1.3	35
60	Fast DNA sequencing up to 1000 bases by capillary electrophoresis using poly(N,N-dimethylacrylamide) as a separation medium. Electrophoresis, 2001, 22, 1987-1996.	1.3	35
61	Clay-enhanced DNA separation in low-molecular-weight poly(N,N-dimethylacrylamide) solution by capillary electrophoresis. Electrophoresis, 2001, 22, 1997-2003.	1.3	20
62	Separation of double-stranded DNA fragments by capillary electrophoresis in interpenetrating networks of polyacrylamide and polyvinylpyrrolidone. Electrophoresis, 2001, 22, 3688-3698.	1.3	35
63	Title is missing!. Journal of Materials Science, 2001, 36, 3071-3077.	1.7	31
64	Formation of concentration gradient and its application to DNA capillary electrophoresis. Electrophoresis, 2000, 21, 3600-3608.	1.3	10
65	A synchrotron SAXS study of miscible blends of semicrystalline poly(vinylidenefluoride) and semicrystalline poly(1,4-butylene adipate). II. Crystallization, morphology, and PBA inclusion in PVF2 spherulites. Journal of Polymer Science, Part B: Polymer Physics, 2000, 38, 2296-2308.	2.4	20
66	SAXS study on complexes formed by anionic poly(sodium methacrylate-co-N-isopropylacrylamide) gels with cationic surfactants. Polymers for Advanced Technologies, 2000, 11, 235-241.	1.6	10
67	Characterization of Nanoparticles by Scattering Techniques. Journal of Nanoparticle Research, 2000, 2, 29-41.	0.8	130
68	Amphiphilic Polyoxyalkylene Triblock Copolymers: Self-Assembly, Phase Behaviors, and New Applications. ACS Symposium Series, 2000, , 2-20.	0.5	9
69	Highly Ordered Supramolecular Structures from Self-Assembly of Ionic Surfactants in Oppositely Charged Polyelectrolyte Gels. ACS Symposium Series, 1999, , 244-260.	0.5	2
70	Hair test results at the advanced polymers beamline (X27C) at the NSLS. Synchrotron Radiation News, 1999, 12, 36-36.	0.2	11
71	Separation of double-stranded DNA fragments in plastic capillary electrophoresis chips by using E99P69E99 as separation medium. Electrophoresis, 1999, 20, 2847-2855.	1.3	41
72	Poly(N-isopropylacrylamide)-g-poly(ethyleneoxide) for high resolution and high speed separation of DNA by capillary electrophoresis. Electrophoresis, 1999, 20, 2856-2863.	1.3	69

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73	Crystalline structure and morphology of microphases in compatible mixtures of poly(tetrahydrofuran-methyl methacrylate) diblock copolymer and polytetrahydrofuran. Journal of Polymer Science, Part B: Polymer Physics, 1999, 37, 779-792.	2.4	13
74	Nanostructures of polyelectrolyte gel-surfactant complexes. Journal of Polymer Science, Part B: Polymer Physics, 1999, 37, 2165-2172.	2.4	24
75	Effect of miscible polymer diluents on the development of lamellar morphology in poly(oxymethylene) blends. Journal of Polymer Science, Part B: Polymer Physics, 1999, 37, 3115-3122.	2.4	29
76	Copolymers of Poly(N-isopropylacrylamide) Densely Grafted with Poly(ethylene oxide) as High-Performance Separation Matrix of DNA. Macromolecules, 1999, 32, 6326-6332.	2.2	73
77	Synchrotron SAXS and Laser Light Scattering Studies of Aggregation Behavior of Poly(1,1-dihydroperfluorooctyl acrylate-b-vinyl acetate) Diblock Copolymer in Supercritical Carbon Dioxide. Macromolecules, 1999, 32, 5836-5845.	2.2	24
78	Effect of miscible polymer diluents on the development of lamellar morphology in poly(oxymethylene) blends. , 1999, 37, 3115.		1
79	Viscosity-adjustable block copolymer for DNA separation by capillary electrophoresis. Electrophoresis, 1998, 19, 231-241.	1.3	107
80	High speed separation of DNA fragments by capillary electrophoresis in poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 Td (oxi	1.3	63
81	Water-induced micellar structure change in Pluronic P103/water/o-xylene ternary system. Journal of Polymer Science, Part B: Polymer Physics, 1998, 36, 889-900.	2.4	13
82	Dominant Factors on the Micellization of BnEmBn-Type Triblock Copolymers in Aqueous Solution. Journal of Physical Chemistry B, 1998, 102, 2875-2882.	1.2	63
83	Structure Studies of Poly(diallyldimethylammonium chloride-co-acrylamide) Gels/Sodium Dodecyl Sulfate Complex. Langmuir, 1998, 14, 4350-4358.	1.6	40
84	Laser Light Scattering Study of Pressure-Induced Micellization of a Diblock Copolymer of Poly(1,1-dihydroperfluorooctylacrylate) and Poly(vinyl acetate) in Supercritical Carbon Dioxide. Macromolecules, 1998, 31, 5300-5308.	2.2	53
85	Charge Density Effect of Polyelectrolyte Chains on the Nanostructures of Polyelectrolyteâ"Surfactant Complexes. Macromolecules, 1998, 31, 8157-8163.	2.2	77
86	Laser Light Scattering Study of a Rigid-Rod Polyelectrolyte. Macromolecules, 1998, 31, 6119-6128.	2.2	36
87	A time-resolved synchrotron SAXS study of crystallization in a miscible blend of poly(vinylidenefluoride) and poly(1,4-butylene adipate). Journal of Macromolecular Science - Physics, 1998, 37, 485-499.	0.4	8
88	Cloud-Point Temperatures of BnEmBnand PnEmPnType Triblock Copolymers in Aqueous Solution. Journal of Physical Chemistry B, 1997, 101, 8074-8078.	1.2	39
89	Single-Chain Expansion from the Collapsed Globule of Polystyrene in Cyclohexane to the Ï‘ Coil. Macromolecules, 1996, 29, 1824-1826.	2.2	32
90	Association of a Triblock Ethylene Oxide (E) and Butylene Oxide (B) Copolymer (B12E260B12) in Aqueous Solution. Macromolecules, 1996, 29, 8357-8361.	2.2	69

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91	Association Behavior of a Triblock Copolymer of Oxyethylene (E) and Oxybutylene (B). A Study of B5E91B5in Aqueous Solution. Langmuir, 1996, 12, 5016-5021.	1.6	45
92	Synchrotron SAXS Study of Crystallization and Microphase Separation in Compatible Mixtures of Tetrahydrofuranâ"Methyl Methacrylate Diblock Copolymer and Poly(tetrahydrofuran). Macromolecules, 1996, 29, 5336-5345.	2.2	53
93	Polyacrylamide solutions for DNA sequencing by capillary electrophoresis: Mesh sizes, separation and dispersion. Electrophoresis, 1996, 17, 1103-1109.	1.3	85
94	Structure and dynamics of copoly(oxyethyleneâ€oxypropyleneâ€oxyethylene) in oâ€xylene/water mixtures. Macromolecular Symposia, 1995, 90, 251-265.	0.4	4
95	Polyethyleneâ€based polyurethane copolymers and block copolymers. Macromolecular Symposia, 1995, 91, 1-26.	0.4	3
96	Chain architecture and self-assembly of block copolymers in solution. Journal of Polymer Science, Part B: Polymer Physics, 1994, 32, 2135-2137.	2.4	7
97	A scattering study on intermicellar interactions and structures of polymeric micelles. Journal of Polymer Science, Part B: Polymer Physics, 1994, 32, 2605-2614.	2.4	19
98	Solution behavior of buckminsterfullerene (C60) in benzene. Journal of Chemical Physics, 1994, 101, 2665-2672.	1.2	87
99	Supramolecular formation of triblock copolymers in polar/nonpolar solvents. Macromolecular Symposia, 1994, 87, 55-67.	0.4	16
100	Fast determination of polymer melt viscosity by optical falling needle viscometer. Journal of Applied Polymer Science, 1993, 49, 97-101.	1.3	5
101	Multiphase structure of segmented polyurethanes: Its relation with spherulite structure. Journal of Polymer Science, Part B: Polymer Physics, 1993, 31, 853-867.	2.4	28
102	Scattering experiments on polymer solutions. Journal of Polymer Science, Part B: Polymer Physics, 1993, 31, 2019-2026.	2.4	5
103	Water-induced micellar structures of block copoly(oxyethylene-oxypropylene-oxyethylene) in o-xylene. Journal of Polymer Science, Part B: Polymer Physics, 1993, 31, 2035-2047.	2.4	17
104	An economical xâ€ray area detector based on an intensified CCD unit. Review of Scientific Instruments, 1993, 64, 390-396.	0.6	8
105	A highâ€temperature Bonseâ€"Hart ultrasmallâ€angle xâ€ray scattering instrument. Review of Scientific Instruments, 1993, 64, 1510-1514.	0.6	10
106	A Bonseâ€"Hart ultrasmall angle xâ€ray scattering instrument employing synchrotron and conventional xâ€ray sources. Review of Scientific Instruments, 1992, 63, 4128-4133.	0.6	30
107	Magnet enhanced optical falling needle/sphere rheometer. Review of Scientific Instruments, 1992, 63, 2315-2321.	0.6	4
108	Economical xâ€ray area detector for focusing and alignment purposes. Review of Scientific Instruments, 1992, 63, 4000-4002.	0.6	4

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109	Movement of fluorescence pattern after photobleaching: An accelerated procedure for DNA electrophoretic mobility analysis. Electrophoresis, 1992, 13, 536-541.	1.3	2
110	Solution behavior of random copolymers of styrene with sodium-2-acrylamido-2-methylpropane sulfonate. Journal of Polymer Science, Part B: Polymer Physics, 1991, 29, 1361-1371.	2.4	1
111	A modified centrifugal apparatus for coexistence curve measurementsâˆ'Polystyrene in methylcyclohexane. Review of Scientific Instruments, 1991, 62, 2252-2256.	0.6	9
112	Electrophoresis and movements of fluorescence pattern after photobleaching of large DNA fragments in agarose gels. Biopolymers, 1990, 29, 491-500.	1.2	10
113	Study of large DNA fragments in agarose gels by transient electric birefringence. Biopolymers, 1990, 29, 737-750.	1.2	6
114	An area xâ€ray detector system based on a commercially available CCDâ€unit. Review of Scientific Instruments, 1990, 61, 712-716.	0.6	19
115	Application of a lowâ€frequencyâ€pass filter in exponentially decaying signals. Review of Scientific Instruments, 1989, 60, 910-913.	0.6	1
116	High temperature magnetic sphere/needle rheometer. Review of Scientific Instruments, 1989, 60, 3828-3829.	0.6	3
117	Magnetic needle rheometer. Review of Scientific Instruments, 1989, 60, 3047-3050.	0.6	5
118	Measurement of electrophoretic mobility of dye-labeled large DNA fragments in agarose gels by movement of fluorescence pattern after photobleaching. Biopolymers, 1989, 28, 1491-1494.	1.2	10
119	Applications of Prism-Cell Light-Scattering Spectrometer to Particle Sizing in Polymer Solutions. Particle and Particle Systems Characterization, 1989, 6, 34-38.	1.2	3
120	Synchrotron X-ray diffraction of a single filament and a bundle of poly (p-phenylene terephthalamide) filaments. Journal of Polymer Science, Part C: Polymer Letters, 1989, 28, 227-232.	0.7	7
121	A fiberâ€optic lightâ€scattering spectrometer. Review of Scientific Instruments, 1989, 60, 845-853.	0.6	53
122	Low-Field transient electric birefringence of DNA in agarose gels. Biopolymers, 1988, 27, 2005-2009.	1.2	14
123	Time-Resolved Small Angle X-Ray Scattering and Dynamic Light Scattering Studies of Sol-Gel Transition in Gelatin. Materials Research Society Symposia Proceedings, 1988, 143, 203.	0.1	2
124	Kratky blockâ€collimation smallâ€angle xâ€ray diffractometer for synchrotron radiation. Review of Scientific Instruments, 1987, 58, 1158-1163.	0.6	29
125	Timeâ€ofâ€arrival photoelectron correlator. Review of Scientific Instruments, 1987, 58, 1445-1449.	0.6	10
126	Photon Correlation Spectroscopy, Transient Electric Birefringence, and Characterization of Particle Size Distributions in Colloidal Suspensions. ACS Symposium Series, 1987, , 115-132.	0.5	8

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127	Preparation of electro-spun konjac glucomannan fabric with entrapped DNA and dynamics of adsorption of acridine orange for carcinogen removal application. Adsorption, 0, , 1.	1.4	1