Wei Chen

List of Publications by Year
in descending order

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88	2,471	236925 25	223800 46
papers	citations	h-index	g-index

89	89	89	2981
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Controllable Modular Growth of Hierarchical MOFâ€onâ€MOF Architectures. Angewandte Chemie - International Edition, 2017, 56, 15658-15662.	13.8	246
2	Porous Fe3O4/carbon composite electrode material prepared from metal-organic framework template and effect of temperature on its capacitance. Nano Energy, 2014, 8, 133-140.	16.0	232
3	A General Method for Growing Twoâ€Dimensional Crystals of Organic Semiconductors by â€œSolution Epitaxyâ€• Angewandte Chemie - International Edition, 2016, 55, 9519-9523.	13.8	153
4	The Tough Journey of Polymer Crystallization: Battling with Chain Flexibility and Connectivity. Macromolecules, 2019, 52, 3575-3591.	4.8	147
5	Green synthesis and evaluation of an iron-based metalâ€“organic framework MIL-88B for efficient decontamination of arsenate from water. Dalton Transactions, 2018, 47, 2222-2231.	3.3	119
6	Simultaneously Toughening and Stiffening Elastomers with Octuple Hydrogen Bonding. Advanced Materials, 2021, 33, e2008523.	21.0	92
7	Stabilization of Atactic-Polyacrylonitrile under Nitrogen and Air As Studied by Solid-State NMR. Macromolecules, 2015, 48, 5300-5309.	4.8	57
8	Conformational Ordering in Growing Spherulites of Isotactic Polypropylene. Macromolecules, 2010, 43, 9859-9864.	4.8	56
9	Accelerating crystalâ€“crystal transition in poly(1-butene) with two-step crystallization: An in-situ microscopic infrared imaging and microbeam X-ray diffraction study. Polymer, 2013, 54, 3408-3416.	3.8	56
10	Elucidation of the hierarchical structure of natural eumelanins. Journal of the Royal Society Interface, 2018, 15, 20180045.	3.4	47
11	Chain Trajectory of Semicrystalline Polymers As Revealed by Solid-State NMR Spectroscopy. ACS Macro Letters, 2016, 5, 355-358.	4.8	45
12	Frustrating Strain-Induced Crystallization of Natural Rubber with Biaxial Stretch. ACS Applied Materials & Interfaces, 2019, 11, 47535-47544.	8.0	43
13	A novel carboxylated polyacrylonitrile nanofibrous membrane with high adsorption capacity for fluoride removal from water. Journal of Hazardous Materials, 2021, 411, 125113.	12.4	37
14	Stretch-induced structural evolution of poly (vinyl alcohol) film in water at different temperatures: An in-situ synchrotron radiation small- and wide-angle X-ray scattering study. Polymer, 2018, 142, 233-243.	3.8	34
15	Intramolecular and Intermolecular Packing in Polymer Crystallization. Macromolecules, 2019, 52, 4739-4748.	4.8	33
16	Conformational Ordering on the Growth Front of Isotactic Polypropylene Spherulite. Macromolecules, 2012, 45, 8674-8680.	4.8	32
17	Molecular Structural Basis for Stereocomplex Formation of Polylactide Enantiomers in Dilute Solution. ACS Macro Letters, 2015, 4, 1264-1267.	4.8	32
18	Construction of Hierarchical Fe₃O₄@HKUST-1/MIL-100(Fe) Microparticles with Large Surface Area through Layer-by-Layer Deposition and Epitaxial Growth Methods. Inorganic Chemistry, 2019, 58, 3564-3568.	4.0	32

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19	Helical Jump Motions of Poly(<scp>l</scp>-Lactic Acid) Chains in the Î± Phase As Revealed by Solid-State NMR. Journal of Physical Chemistry B, 2015, 119, 4552-4563.	2.6	29
20	Unfolding of Isotactic Polypropylene under Uniaxial Stretching. ACS Macro Letters, 2016, 5, 65-68.	4.8	29
21	Recent advances in post-stretching processing of polymer films with in situ synchrotron radiation X-ray scattering. Soft Matter, 2020, 16, 3599-3612.	2.7	29
22	Intracrystalline Jump Motion in Poly(ethylene oxide) Lamellae of Variable Thickness: A Comparison of NMR Methods. Macromolecules, 2017, 50, 3890-3902.	4.8	28
23	The effect of water absorption on stretch-induced crystallization of poly(ethylene terephthalate): An in-situ synchrotron radiation wide angle X-ray scattering study. Polymer, 2019, 162, 91-99.	3.8	28
24	In situ characterization of strain-induced crystallization of natural rubber by synchrotron radiation wide-angle X-ray diffraction: construction of a crystal network at low temperatures. Soft Matter, 2019, 15, 734-743.	2.7	27
25	Stretch-Induced Crystallization through Single Molecular Force Generating Mechanism. Macromolecules, 2011, 44, 5878-5882.	4.8	26
26	Structural Unit of Polymer Crystallization in Dilute Solution As Studied by Solid-State NMR and ¹³C Isotope Labeling. Macromolecules, 2018, 51, 8729-8737.	4.8	26
27	Solid-State NMR Study of the Chain Trajectory and Crystallization Mechanism of Poly(<scp>l</scp>-lactic acid) in Dilute Solution. Macromolecules, 2017, 50, 6404-6414.	4.8	25
28	Stretch-Induced Crystallization and Phase Transitions of Poly(dimethylsiloxane) at Low Temperatures: An in Situ Synchrotron Radiation Wide-Angle X-ray Scattering Study. Macromolecules, 2018, 51, 8424-8434.	4.8	25
29	Stoichiometry and Packing Structure of Poly(lactic acid) Stereocomplex as Revealed by Solid-State NMR and ¹³C Isotope Labeling. ACS Macro Letters, 2018, 7, 667-671.	4.8	25
30	Flow-induced density fluctuation assisted nucleation in polyethylene. Journal of Chemical Physics, 2018, 149, 224901.	3.0	24
31	Deformation mechanism of hard elastic polyethylene film during uniaxial stretching: Effect of stretching speed. Polymer, 2019, 178, 121579.	3.8	23
32	Stretch-Induced Intermediate Structures and Crystallization of Poly(dimethylsiloxane): The Effect of Filler Content. Macromolecules, 2020, 53, 719-730.	4.8	23
33	Biaxial Stretch-Induced Crystallization of Polymers: A Molecular Dynamics Simulation Study. Macromolecules, 2021, 54, 9794-9803.	4.8	23
34	Synergistic and Competitive Effects of Temperature and Flow on Crystallization of Polyethylene during Film Blowing. ACS Applied Polymer Materials, 2019, 1, 1590-1603.	4.4	22
35	In-situ tracking polymer crystallization during film blowing by synchrotron radiation X-ray scattering: The critical role of network. Polymer, 2020, 198, 122492.	3.8	22
36	Characterization of the Slow Molecular Dynamics of Poly(<scp>l</scp>â€Lactic Acid) in Î± and Î±â€² Phases, in a Glassy State, and in a Complex with Poly(<scp>d</scp>â€Lactic Acid) by Solidâ€State NMR. Macromolecular Chemistry and Physics, 2018, 219, 1700451.	2.2	21

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37	Stretch-Induced Reverse Brill Transition in Polyamide 46. Macromolecules, 2020, 53, 11153-11165.	4.8	21
38	Isoexergonic Conformations of Surface-Bound Citrate Regulated Bioinspired Apatite Nanocrystal Growth. ACS Applied Materials & Interfaces, 2016, 8, 28116-28123.	8.0	20
39	Elucidation of the relationships of structure-process-property for different ethylene/Î±-olefin copolymers during film blowing: An in-situ synchrotron radiation X-ray scattering study. Polymer Testing, 2020, 85, 106439.	4.8	19
40	Structural evolution and phase transition of uniaxially stretched poly(butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 Td (adipate-<i> small and wide angle X-ray scattering. CrystEngComm, 2019, 21, 118-127.	2.6	18
41	Multiscale characterization of semicrystalline polymeric materials by synchrotron radiation Xâ€ray and neutron scattering. Polymer Crystallization, 2019, 2, 10043.	0.8	17
42	Stretch-induced structural evolution of pre-oriented isotactic polypropylene films: An in-situ synchrotron radiation SAXS/WAXS study. Polymer, 2021, 214, 123234.	3.8	17
43	Manipulation of Chain Entanglement and Crystal Networks of Biodegradable Poly(butylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5 Extender: An In Situ Synchrotron Radiation X-ray Scattering Study. Biomacromolecules, 2019, 20, 3895-3907.	5.4	16
44	Reconstructing the mechanical response of polybutadiene rubber based on micro-structural evolution in strain-temperature space: entropic elasticity and strain-induced crystallization as the bridges. Soft Matter, 2020, 16, 447-455.	2.7	16
45	Polyvinyl alcohol (PVA) based super-hydrophilic anti-fogging layer assisted by plasma spraying for low density polyethylene (LDPE) greenhouse films. Progress in Organic Coatings, 2021, 159, 106412.	3.9	16
46	Structural evolution of hard-elastic polyethylene cast film in temperature-strain space: An in-situ SAXS and WAXS study. Polymer, 2019, 184, 121930.	3.8	15
47	Understanding the brittle-ductile transition of glass polymer on mesoscopic scale by in-situ small angle X-ray scattering. Polymer, 2020, 209, 122985.	3.8	15
48	Stretch-induced structural transition of linear low-density polyethylene during uniaxial stretching under different strain rates. Polymer, 2021, 226, 123795.	3.8	15
49	Common but differentiated flexible MIL-53(Al): role of metal sources in synthetic protocol for tuning the adsorption characteristics. Journal of Materials Science, 2019, 54, 6174-6185.	3.7	14
50	A Unified Thermodynamic Model of Flow-induced Crystallization of Polymer. Chinese Journal of Polymer Science (English Edition), 2021, 39, 1489-1495.	3.8	14
51	The recovery of nano-sized carbon black filler structure and its contribution to stress recovery in rubber nanocomposites. Nanoscale, 2020, 12, 24527-24542.	5.6	14
52	Strain-Rate-Dependent Phase Transition Mechanism in Polybutene-1 during Uniaxial Stretching: From Quasi-Static to Dynamic Loading Conditions. Macromolecules, 2022, 55, 2333-2344.	4.8	14
53	The strong interaction between poly(vinyl chloride) and a new eco-friendly plasticizer: A combined experiment and calculation study. Polymer, 2014, 55, 2831-2840.	3.8	13
54	Preparation of Polyethylene and Ethylene/Methacrylic Acid Copolymer Blend Films with Tunable Surface Properties through Manipulating Processing Parameters during Film Blowing. Polymers, 2019, 11, 1565.	4.5	13

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55	Strain Rate Dependence of Stretch-Induced Crystallization and Crystal Transition of Poly(dimethylsiloxane). Macromolecules, 2021, 54, 9204-9216.	4.8	13
56	Structural evolution of cellulose triacetate film during stretching deformation: An in-situ synchrotron radiation wide-angle X-Ray scattering study. Polymer, 2019, 182, 121815.	3.8	12
57	In situ observation of void evolution in 1,3,5-triamino-2,4,6-trinitrobenzene under compression by synchrotron radiation X-ray nano-computed tomography. Journal of Synchrotron Radiation, 2020, 27, 127-133.	2.4	12
58	Polymer crystallization under external flow. Reports on Progress in Physics, 2022, 85, 036601.	20.1	12
59	Origin of gypsum growth habit difference as revealed by molecular conformations of surface-bound citrate and tartrate. CrystEngComm, 2018, 20, 3581-3589.	2.6	11
60	Structural origin for the strain rate dependence of mechanical response of fluoroelastomer F2314. Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 607-620.	2.1	11
61	Abnormal brittle-ductile transition for glassy polymers after free and constrained melt stretching: The role of molecular alignment. Polymer, 2021, 233, 124199.	3.8	11
62	Review: Current progresses of small-angle neutron scattering on soft-matters investigation. , 2022, 1, 100011.		11
63	Strain-induced crystal growth and molecular orientation of poly(isobutylene-isoprene) rubber at low temperatures. Soft Matter, 2019, 15, 4363-4370.	2.7	10
64	How the Aggregates Determine Bound Rubber Models in Silicone Rubber? A Contrast Matching Neutron Scattering Study. Chinese Journal of Polymer Science (English Edition), 2021, 39, 365-376.	3.8	10
65	Controlling the enthalpyâ€“entropy competition in supramolecular fullerene liquid crystals by tuning the flexible chain length. Chemical Communications, 2017, 53, 8336-8339.	4.1	9
66	Retardation behavior of hydration of calcium sulfate hemihydrate (bassanite) induced by sodium trimetaphosphate (STMP). CrystEngComm, 2018, 20, 1662-1668.	2.6	9
67	Molecular and thermodynamics descriptions of flow-induced crystallization in semi-crystalline polymers. Journal of Applied Physics, 2020, 127, .	2.5	9
68	Stretch-induced structural evolution of dichromatic substance with poly (vinyl alcohol) at different concentrations of boric acid: An in-situ synchrotron radiation small- and wide-angle X-ray scattering study. Polymer, 2021, 212, 123297.	3.8	9
69	Strain Softening of Bimodal Isoprene Rubber Vulcanizates. Macromolecular Materials and Engineering, 2021, 306, 2000802.	3.6	9
70	Chain Trajectory, Chain Packing, and Molecular Dynamics of Semicrystalline Polymers as Studied by Solid-State NMR. Polymers, 2018, 10, 775.	4.5	7
71	Stretch-induced structural evolution of poly (vinyl alcohol) at different concentrations of boric acid: An in-situ synchrotron radiation small- and wide- angle X-ray scattering study. Polymer Testing, 2019, 77, 105913.	4.8	7
72	Adsorption of arsenite by coreâ€“shell K-OMS-2@UiO-66 microspheres: performance and mechanism. New Journal of Chemistry, 2020, 44, 14389-14400.	2.8	7

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73	Structural Origin of Double Yielding: The Critical Role of Crystallite Aggregate Heterogeneity. Macromolecules, 2021, 54, 8381-8392.	4.8	6
74	Nanoparticle deposition pattern during colloidal droplet evaporation as in-situ investigated by Low-Field NMR: The critical role of bound water. Journal of Colloid and Interface Science, 2022, 613, 709-719.	9.4	6
75	Unique Molecular Dynamics of Structural Elements in an Asymmetric Janus Bisamide Supramolecule Characterized by Solid-State NMR. Journal of Physical Chemistry B, 2013, 117, 13698-13709.	2.6	5
76	Hierarchical Structure and Molecular Dynamics of Metal-Organic Framework as Characterized by Solid State NMR. Journal of Chemistry, 2016, 2016, 1-11.	1.9	5
77	Hierarchical Structure with an Unusual Honeycomb Fullerene Scaffold by a Fullereneâ€“Triphenylene Shape Amphiphile. Macromolecules, 2020, 53, 6056-6062.	4.8	5
78	Network structure of swollen iodine-doped poly(vinyl alcohol) amorphous domain as characterized by low field NMR. Soft Matter, 2021, 17, 8973-8981.	2.7	5
79	Chain dynamics and crystalline network structure of poly[R-3-hydroxybutyrate-co-4-hydroxybutyrate] as revealed by solid-state NMR. Soft Matter, 2021, 17, 4195-4203.	2.7	5
80	An in situ stretching instrument combined with low field nuclear magnetic resonance (NMR): Rheo-Spin NMR. Review of Scientific Instruments, 2022, 93, 033905.	1.3	5
81	Liquid Crystal-Based Organosilicone Elastomers with Supreme Mechanical Adaptability. Polymers, 2022, 14, 789.	4.5	4
82	The formation of crystal cross-linked network in sequential biaxial stretching of poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382	4.8	3
83	Stress-Induced Crystallization of the Metastable Î²-Form of Poly((R)-3-hydroxybutyrate-co-4-hydroxybutyrate). ACS Applied Polymer Materials, 2021, 3, 4109-4117.	4.4	3
84	Microstructural Origin of the Double Yield Points of the Metallocene Linear Low-Density Polyethylene (mLLDPE) Precursor Film under Uniaxial Tensile Deformation. Polymers, 2021, 13, 126.	4.5	3
85	Structural Evolution of LLDPE-LMW/HMW Blend during Uniaxial Deformation as Revealed by In Situ Synchrotron Radiation X-ray Scattering. Chinese Journal of Polymer Science (English Edition), 2021, 39, 102-112.	3.8	2
86	Chain Trajectory of Semicrystalline Polymers as Revealed by 13C-13C Double Quantum NMR. , 2018, , 783-791.		0
87	Chain Trajectory of Semicrystalline Polymers as Revealed by 13C-13C Double Quantum NMR. , 2017, , 1-9.		0
88	A cryo-bulge apparatus for in situ weather balloon crystallization capturing during blowing by synchrotron radiation x-ray scattering. Review of Scientific Instruments, 2022, 93, 053901.	1.3	0