Wei Yu

List of Publications by Year
in descending order

126	3,240	172457	189892
papers	citations	29 h-index	50 g-index

130	130	130	2461
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Contribution of the Initially Entangled State and Particle Size to the Sintering Kinetics of UHMWPE. Macromolecules, 2022, 55, 1310-1320.	4.8	17
2	Mechanically interlocked networks cross-linked by a molecular necklace. Nature Communications, 2022, 13, 1393.	12.8	52
3	Mechanically Interlocked Vitrimers. Journal of the American Chemical Society, 2022, 144, 872-882.	13.7	89
4	Molecular Dynamics of Azobenzene Polymer with Photoreversible Glass Transition. Macromolecules, 2022, 55, 3711-3722.	4.8	13
5	Stretchable Poly[2]rotaxane Elastomers. Fundamental Research, 2022, , .	3.3	5
6	Adsorption-desorption effect on physical aging in PMMA-silica nanocomposites. Polymer, 2022, 255, 125124.	3.8	1
7	Muscle-Mimetic Synergistic Covalent and Supramolecular Polymers: Phototriggered Formation Leads to Mechanical Performance Boost. Journal of the American Chemical Society, 2021, 143, 902-911.	13.7	71
8	Decoupling hydrodynamic and entanglement effects on the modulus reinforcement of grafted silica filled nanocomposites through Thermal and rheological features. Polymer, 2021, 213, 123323.	3.8	12
9	Mechanism of Mechanical Reinforcement for Weakly Attractive Nanocomposites in Glassy and Rubbery States. Macromolecules, 2021, 54, 824-834.	4.8	31
10	Modeling of nonlinear extensional and shear rheology of lowâ€viscosity polymer melts. Polymer Engineering and Science, 2021, 61, 1077-1086.	3.1	6
11	Functionalized Graphene Oxideâ€Reinforced Chitosan Hydrogel as Biomimetic Dressing for Wound Healing. Macromolecular Bioscience, 2021, 21, e2000432.	4.1	21
12	Characteristic Rheological Behaviors in Startup Shear of Entangled Polymer Melts. Nihon Reoroji Gakkaishi, 2021, 49, 1-5.	1.0	4
13	Weak Shear-Induced Slowdown in Crystallization of Less-Entangled Poly(Îµ-caprolactone). Macromolecules, 2021, 54, 3347-3357.	4.8	12
14	An orientation-stretch coupled model for entangled comb polymers. Journal of Rheology, 2021, 65, 113-128.	2.6	4
15	Symmetry breakdown in the sol-gel transition of a Guar gum transient physical network. Carbohydrate Polymers, 2021, 258, 117689.	10.2	5
16	Recyclable ethylene-vinyl acetate copolymer vitrimer foams. Polymer, 2021, 222, 123662.	3.8	27
17	Shear-induced breakdown and agglomeration in nanoparticles filled polymer: The shift of phase boundary and kinetics. Journal of Rheology, 2021, 65, 291-309.	2.6	12
18	Nonequilibrium Structure Diagram of Pendular Suspensions under Large-Amplitude Oscillatory Shear. Langmuir, 2021, 37, 6208-6218.	3.5	8

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19	Decoupled Polymer Dynamics in Weakly Attractive Poly(methyl methacrylate)/Silica Nanocomposites. Macromolecules, 2021, 54, 5484-5497.	4.8	23
20	Molecular constitutive equation for unentangled branch copolymers. Rheologica Acta, 2021, 60, 439-455.	2.4	3
21	Vitrimer bead foams: Cell density control by cell splitting in weld-compression molding. Polymer, 2021, 232, 124159.	3.8	8
22	A biomimetic skin-like sensor with multiple sensory capabilities based on hybrid ionogel. Sensors and Actuators A: Physical, 2021, 330, 112855.	4.1	8
23	Wall effect on the rheology of short-fiber suspensions under shear. Journal of Rheology, 2021, 65, 1169-1185.	2.6	9
24	Biomimetic Impact Protective Supramolecular Polymeric Materials Enabled by Quadruple H-Bonding. Journal of the American Chemical Society, 2021, 143, 1162-1170.	13.7	85
25	Viscoelastic characterization of compatibilized polymer blends. , 2020, , 435-452.		3
26	Horizontal extensional rheometry (HER) for low viscosity polymer melts. Journal of Rheology, 2020, 64, 177-190.	2.6	10
27	Simultaneously improved strength and toughness in Î¹-carrageenan/polyacrylamide double network hydrogel via synergistic interaction. Carbohydrate Polymers, 2020, 230, 115596.	10.2	27
28	A Self-Cross-Linking Supramolecular Polymer Network Enabled by Crown-Ether-Based Molecular Recognition. Journal of the American Chemical Society, 2020, 142, 2051-2058.	13.7	108
29	Linear and nonlinear rheology of oil in liquid crystal emulsions. Rheologica Acta, 2020, 59, 783-795.	2.4	3
30	Bioinspired Anisotropic Chitosan Hybrid Hydrogel. ACS Applied Bio Materials, 2020, 3, 6959-6966.	4.6	19
31	Correlation between linear and nonlinear material functions under large amplitude oscillatory shear. Physics of Fluids, 2020, 32, .	4.0	8
32	Role of Chain Dynamics in the Melt Memory Effect of Crystallization. Macromolecules, 2020, 53, 7887-7898.	4.8	25
33	Selfâ€Contained Focusâ€Tunable Lenses Based on Transparent and Conductive Gels. Macromolecular Materials and Engineering, 2020, 305, 2000393.	3.6	6
34	Synergistic Covalent and Supramolecular Polymers for Mechanically Robust but Dynamic Materials. Angewandte Chemie, 2020, 132, 12237-12244.	2.0	10
35	Shear-induced crystallization of olefin multiblock copolymers: Role of mesophase separation and hard-block content. Polymer, 2020, 198, 122535.	3.8	4
36	Highly Stretchable and Self-Healing Strain Sensor Based on Gellan Gum Hybrid Hydrogel for Human Motion Monitoring. ACS Applied Polymer Materials, 2020, 2, 1325-1334.	4.4	47

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37	Dielectric Relaxation of Type-A Rouse Chains Undergoing Reversible End-Adsorption and Desorption. Nihon Reoroji Gakkaishi, 2020, 48, 27-35.	1.0	0
38	On-demand Direct Design of Polymeric Thermal Actuator by Machine Learning Algorithm. Chinese Journal of Polymer Science (English Edition), 2020, 38, 908-914.	3.8	3
39	Synergistic Covalent and Supramolecular Polymers for Mechanically Robust but Dynamic Materials. Angewandte Chemie - International Edition, 2020, 59, 12139-12146.	13.8	63
40	A New Solid-like State for Liquid/Liquid/Particle Mixtures with Bicontinuous Morphology of Concentrated Emulsion and Concentrated Suspension. Langmuir, 2019, 35, 9529-9537.	3.5	3
41	Key factors in mechanical reinforcement by double percolation network: Particle migration and shear stability of filler network. Polymer, 2019, 182, 121820.	3.8	5
42	Slow Linear Viscoelastic Relaxation of Polymer Nanocomposites: Contribution from Confined Diffusion of Nanoparticles. Macromolecules, 2019, 52, 9094-9104.	4.8	26
43	Agglomeration of Crystals during Crystallization of Semicrystalline Polymers: A Suspension-Based Rheological Study. Macromolecules, 2019, 52, 1042-1054.	4.8	10
44	Stability of flow-induced precursors in poly-1-butene and copolymer of 1-butene and ethylene. Journal of Rheology, 2018, 62, 725-737.	2.6	14
45	Abnormal crystallization behavior of high impact polypropylene under shear. Polymer, 2018, 136, 17-26.	3.8	4
46	Control of the dispersed-to-continuous transition in polymer blends by viscoelastic asymmetry. Polymer, 2018, 134, 254-262.	3.8	31
47	Stress bifurcation in large amplitude oscillatory shear of yield stress fluids. Journal of Rheology, 2018, 62, 89-106.	2.6	24
48	Simultaneous Slowdown of Segmental and Terminal Relaxation of Both Components in Dynamically Asymmetric Poly(Îµ-caprolactone)/Poly(styrene-co-acrylonitrile) Blends. Macromolecules, 2018, 51, 7338-7349.	4.8	6
49	Onset Reduction and Stabilization of Cocontinuous Morphology in Immiscible Polymer Blends by Snowmanlike Janus Nanoparticles. Langmuir, 2018, 34, 11092-11100.	3.5	31
50	Influence of Phase Separation on Performance of Graft Acrylic Pressure-Sensitive Adhesives with Various Copolyester Side Chains. ACS Omega, 2018, 3, 6945-6954.	3.5	13
51	Mechanical reinforcement in poly(propylene carbonate) nanocomposites using double percolation networks by dual volume exclusions. Composites Science and Technology, 2018, 167, 364-370.	7.8	23
52	Cluster size distribution of spherical nanoparticles in polymer nanocomposites: rheological quantification and evidence of phase separation. Soft Matter, 2017, 13, 4088-4098.	2.7	21
53	Dynamic wall slip behavior of yield stress fluids under large amplitude oscillatory shear. Journal of Rheology, 2017, 61, 627-641.	2.6	23
54	Strain accelerated mesophase separation during nonlinear stress relaxation of olefin multiblock copolymer. Polymer, 2017, 115, 232-238.	3.8	4

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55	Nonlinear rheological behavior of multiblock copolymers under large amplitude oscillatory shear. Journal of Rheology, 2016, 60, 1161-1179.	2.6	16
56	Two dimensional mechanical correlation analysis on nonlinear oscillatory shear flow of yield stress fluids. Korea Australia Rheology Journal, 2016, 28, 175-180.	1.7	4
57	Elongational rheology of glass fiber-filled polymer composites. Rheologica Acta, 2016, 55, 833-845.	2.4	8
58	Structure and linear viscoelasticity of polymer nanocomposites with agglomerated particles. Polymer, 2016, 98, 190-200.	3.8	51
59	Linear and nonlinear viscoelasticity of polymer/silica nanocomposites: an understanding from modulus decomposition. Rheologica Acta, 2016, 55, 37-50.	2.4	33
60	Liquidâ€“solid transition in mesophase separated olefin multiblock copolymers during crystallization. RSC Advances, 2015, 5, 40607-40619.	3.6	8
61	Non-isothermal crystallization behavior of dynamically vulcanized long chain branched polypropylene/ethylene-propylene-diene monomer blends. Journal of Polymer Research, 2015, 22, 1.	2.4	9
62	Selectivity of shear flow on chains for the degradation reaction of melt polyolefin elastomer with dicumyl peroxide. Colloid and Polymer Science, 2014, 292, 3261-3269.	2.1	0
63	Study on the Thermal Degradation Kinetics of Biodegradable Poly(propylene carbonate) during Melt Processing by Population Balance Model and Rheology. Industrial & Engineering Chemistry Research, 2014, 53, 18411-18419.	3.7	17
64	Liquidâ€“liquid phase separation and its effect on the crystallization in polylactic acid/poly(ethylene glycol) blends. RSC Advances, 2014, 4, 55435-55444.	3.6	21
65	Comparison of Various Solvents for Poly(Phenylene Sulfide) Microporous Membrane Preparation via Thermally Induced Phase Separation. Journal of Macromolecular Science - Physics, 2014, 53, 1477-1496.	1.0	9
66	Mesophase Separation and Rheology of Olefin Multiblock Copolymers. Macromolecules, 2014, 47, 807-820.	4.8	55
67	The preparation and crystallization of long chain branching polylactide made by melt radicals reaction. Journal of Applied Polymer Science, 2013, 129, 1959-1970.	2.6	66
68	A geometric average interpretation on the nonlinear oscillatory shear. Journal of Rheology, 2013, 57, 1147-1175.	2.6	16
69	Solvents effects in the formation and viscoelasticity of DBS organogels. Soft Matter, 2013, 9, 864-874.	2.7	64
70	Influence of catalyst on transesterification between poly(lactic acid) andÂpolycarbonate under flow field. Polymer, 2013, 54, 310-319.	3.8	49
71	Effect of thermally reduced graphite oxide (TrGO) on the polymerization kinetics of poly(butylene) Tj ETQq1 1 0.784314 rgBT /Overlo butylene terephthalate. Polymer, 2013, 54, 1603-1611.	3.8	32
72	Shear induced phase inversion of dilute smectic liquid crystal/polymer blends. Soft Matter, 2012, 8, 2992.	2.7	11

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73	Entropicallyâ€driven ringâ€opening polymerization of cyclic butylene terephthalate: Rheology and kinetics. Polymer Engineering and Science, 2012, 52, 91-101.	3.1	13
74	Modeling of flowâ€induced crystallization in blends of isotactic polypropylene and poly(ethyleneâ€coâ€octene). Polymer International, 2012, 61, 1389-1393.	3.1	10
75	Rheology of miscible polymer blends with viscoelastic asymmetry and concentration fluctuation. Polymer, 2012, 53, 881-890.	3.8	15
76	Phase separation of poly (methyl methacrylate) / poly (styrene-co-acrylonitrile) blends in the presence of silica nanoparticles. Polymer, 2012, 53, 1772-1782.	3.8	67
77	Correlations between local flow mechanism and macroscopic rheology in concentrated suspensions under oscillatory shear. Soft Matter, 2011, 7, 2433.	2.7	22
78	Polymer chain topological map as determined by linear viscoelasticity. Journal of Rheology, 2011, 55, 545-570.	2.6	32
79	Dynamics of droplet with viscoelastic interface. Soft Matter, 2011, 7, 6337.	2.7	18
80	Abnormal rotation of a deformed liquid crystal droplet immersed in an isotropic fluid after transient flow. Rheologica Acta, 2011, 50, 601-611.	2.4	0
81	Dynamic rheological properties of wood polymer composites: from linear to nonlinear behaviors. Polymer Bulletin, 2011, 66, 683-701.	3.3	26
82	Isothermal Crystallization Kinetics of Highly Filled Wood Plastic Composites: Effect of Wood Particles Content and Compatibilizer. Journal of Macromolecular Science - Physics, 2011, 50, 2271-2289.	1.0	15
83	Linear viscoelasticity of polymer blends with co-continuous morphology. Polymer, 2010, 51, 2091-2098.	3.8	76
84	Long chain branching polylactide: Structures and properties. Polymer, 2010, 51, 5186-5197.	3.8	175
85	Studies on the melt spinning process of noncircular fiber by numerical and experimental methods. Polymer Engineering and Science, 2010, 50, 1935-1944.	3.1	7
86	Liquid-to-solid transition of concentrated suspensions under complex transient shear histories. Physical Review E, 2009, 80, 061404.	2.1	6
87	Control on the topological structure of polyolefin elastomer by reactive processing. Polymer, 2009, 50, 547-552.	3.8	27
88	General stress decomposition in nonlinear oscillatory shear flow. Journal of Rheology, 2009, 53, 215-238.	2.6	77
89	Rheological properties of immiscible polymer blends under parallel superposition shear flow. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 431-440.	2.1	17
90	The formation of Î³â€crystal in longâ€chain branched polypropylene under supercritical carbon dioxide. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 441-451.	2.1	13

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91	The effect of interfacial viscosity on the droplet dynamics under flow field. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 1505-1514.	2.1	7
92	Quick Profile Die Balancing of Automotive Rubber Seal Extrusion by CAE Technology. Journal of Macromolecular Science - Pure and Applied Chemistry, 2008, 45, 1028-1036.	2.2	6
93	Morphology and Rheology of Polymerâˆ•Liquid Crystal Blends. AIP Conference Proceedings, 2008, , .	0.4	0
94	Component Chain Dynamics in a Miscible Blend of Low-M Poly(p-t-butyl styrene) and Polyisoprene. Nihon Reoroji Gakkaishi, 2008, 36, 35-42.	1.0	6
95	Investigation of Phase Separation in a Partially Miscible Polymer Blend by Rheology. Journal of Macromolecular Science - Physics, 2007, 46, 1051-1062.	1.0	19
96	A simple constitutive equation for immiscible blends. Journal of Rheology, 2007, 51, 179-194.	2.6	23
97	Computerâ€Aided Optimization of the Extrusion Process of Automobile Rubber Seal. Journal of Macromolecular Science - Pure and Applied Chemistry, 2007, 44, 509-516.	2.2	5
98	Viscoelastic and Dielectric Behavior of a Polyisoprene/Poly(4-tert-butyl styrene) Miscible Blend. Macromolecules, 2007, 40, 5389-5399.	4.8	27
99	Isothermal cold crystallization kinetics of polylactide/nucleating agents. Journal of Applied Polymer Science, 2007, 104, 310-317.	2.6	177
100	Rheology and relaxation processes in a melting thermotropic liquidâ€“crystalline polymer. Journal of Applied Polymer Science, 2007, 104, 3780-3787.	2.6	15
101	Crystallization behaviors of linear and long chain branched polypropylene. Journal of Applied Polymer Science, 2007, 104, 3592-3600.	2.6	80
102	Thermal oxidation of metallocene-catalyzed poly(ethylene octene) by a rheological method. Journal of Applied Polymer Science, 2007, 105, 846-852.	2.6	5
103	Coalescence of droplets in viscoelastic matrix with diffuse interface under simple shear flow. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 1856-1869.	2.1	17
104	Three dimensional simulation of viscoelastic polymer melts flow in a cast film process. Fibers and Polymers, 2007, 8, 50-59.	2.1	6
105	Numerical Simulation of the Melt Spinning Process of Noncircular Fibers Incorporating Surface Tension. Journal of Macromolecular Science - Physics, 2006, 45, 1099-1108.	1.0	4
106	Rheological Characterization of Dropletâ€Matrix versus Coâ€Continuous Morphology. Journal of Macromolecular Science - Physics, 2006, 45, 889-898.	1.0	70
107	Crystallization Kinetics of Linear and Longâ€Chain Branched Polypropylene. Journal of Macromolecular Science - Physics, 2006, 45, 969-985.	1.0	57
108	Three-Dimensional Simulation of the Non-Isothermal Cast Film Process of Polymer Melts. Journal of Polymer Research, 2006, 13, 433-440.	2.4	17

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109	Phase Behavior and its Viscoelastic Responses of Poly(methyl methacrylate) and Poly(styrene-co-maleic anhydride) Blend Systems. Polymer Bulletin, 2006, 56, 455-466.	3.3	99
110	Selectivity of shear rate on chains in polymer combination reaction. Journal of Applied Polymer Science, 2006, 100, 839-842.	2.6	8
111	Dynamic interfacial tension between a thermotropic liquid-crystalline polymer and a flexible polymer. Journal of Applied Polymer Science, 2006, 101, 3114-3120.	2.6	0
112	Synthesis and properties of polystyrene-clay nanocomposites viain situ intercalative polymerization. Journal of Applied Polymer Science, 2005, 97, 201-207.	2.6	23
113	Dynamic rheology of the immiscible blends of liquid crystalline polymers and flexible chain polymers. Rheologica Acta, 2005, 45, 105-115.	2.4	11
114	Rheology of concentrated blends with immiscible components. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 2534-2540.	2.1	10
115	Effect of flocculated structure on rheology of poly(butylene terephthalate)/clay nanocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 2807-2818.	2.1	47
116	Rheokinetics of the cross-linking of melt polyethylene initiated by peroxide. Polymer Engineering and Science, 2005, 45, 560-567.	3.1	21
117	Dynamics and rheology of immiscible polymer-liquid-crystal systems. Journal of Chemical Physics, 2005, 123, 014906.	3.0	5
118	Determination of interfacial tension by the retraction method of highly deformed drop. Rheologica Acta, 2004, 43, 342.	2.4	16
119	Dynamic interfacial properties between a flexible-chain polymer and a thermotropic liquid crystalline polymer investigated by an ellipsoidal drop retraction method. Journal of Applied Polymer Science, 2004, 94, 1404-1410.	2.6	9
120	A Rheological Model for the Interface of Immiscible Polymer Melt in Blending Process. Canadian Journal of Chemical Engineering, 2003, 81, 1067-1074.	1.7	4
121	Modeling of oscillatory shear flow of emulsions under small and large deformation fields. Journal of Rheology, 2002, 46, 1401-1418.	2.6	93
122	Quantitative relationship between rheology and morphology in emulsions. Journal of Rheology, 2002, 46, 1381-1399.	2.6	86
123	Effects of vibration blending on the subsequent crystallization behavior of polycarbonate/polypropylene blends. Journal of Applied Polymer Science, 2002, 85, 92-103.	2.6	6
124	A coalescence mechanism for the coarsening behavior of polymer blends during a quiescent annealing process. I. Monodispersed particle system. Journal of Polymer Science, Part B: Polymer Physics, 2000, 38, 2378-2389.	2.1	31
125	A coalescence mechanism for the coarsening behavior of polymer blends during a quiescent annealing process. II. Polydispersed particle system. Journal of Polymer Science, Part B: Polymer Physics, 2000, 38, 2390-2399.	2.1	14
126	A coalescence mechanism for the coarsening behavior of polymer blends during a quiescent annealing process. I. Monodispersed particle system. Journal of Polymer Science, Part B: Polymer Physics, 2000, 38, 2378-2389.	2.1	2