

# Yun-xuan Weng

## List of Publications by Year in descending order

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107  
papers

3,898  
citations

182225

30  
h-index

162838

57  
g-index

115  
all docs

115  
docs citations

115  
times ranked

3863  
citing authors

#	ARTICLE	IF	CITATIONS
1	Preparation of poly(lactic acid)-based shape memory polymers with low response temperature utilizing composite plasticizers. <i>Polymer Bulletin</i> , 2022, 79, 4761-4781.	1.7	4
2	Reinforcing and Toughening Modification of PPC/PBS Blends Compatibilized with Epoxy Terminated Hyperbranched Polymers. <i>Journal of Polymers and the Environment</i> , 2022, 30, 461-471.	2.4	11
3	Effect of oligomers from epoxidized soybean oil and sebacic acid on the toughness of poly(lactic acid)/bamboo fiber composites. <i>Journal of Applied Polymer Science</i> , 2022, 139, 51583.	1.3	5
4	Toughening of poly( $\epsilon$ -hydroxybutyrate-co- $\epsilon$ -hydroxyvalerate) by phenyl terminated hyperbranched polyesters with higher thermal stability. <i>Journal of Applied Polymer Science</i> , 2022, 139, 51551.	1.3	3
5	Compatibilization and Toughening of Biodegradable Polylactic Acid/Cellulose Acetate Films by Polyamide Amine Dendrimers. <i>Journal of Polymers and the Environment</i> , 2022, 30, 1758-1771.	2.4	6
6	Fluorescence-activated droplet sorting of PET degrading microorganisms. <i>Journal of Hazardous Materials</i> , 2022, 424, 127417.	6.5	31
7	Designing high performance polymer nanocomposites by incorporating robustness-controlled polymeric nanoparticles: insights from molecular dynamics. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 2813-2825.	1.3	4
8	Kinetic analysis of PGA/PBAT plastic films for strawberry fruit preservation quality and enzyme activity. <i>Journal of Food Composition and Analysis</i> , 2022, 108, 104439.	1.9	20
9	Properties and Degradability of Poly(Butylene Adipate-Co-Terephthalate)/Calcium Carbonate Films Modified by Polyethylene Glycol. <i>Polymers</i> , 2022, 14, 484.	2.0	16
10	Adopting Intrinsic Hydrophilic Thermoplastic Starch Composites to Fabricate Antifogging Sustainable Films with High Antibiosis and Transparency. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 3661-3672.	3.2	14
11	Progress in the Development of Graphene-Based Biomaterials for Tissue Engineering and Regeneration. <i>Materials</i> , 2022, 15, 2164.	1.3	20
12	Sidechain Metallopolymers with Precisely Controlled Structures: Synthesis and Application in Catalysis. <i>Polymers</i> , 2022, 14, 1128.	2.0	6
13	Fabrication and Characterization of Gelatin/Polyvinyl Alcohol Composite Scaffold. <i>Polymers</i> , 2022, 14, 1400.	2.0	17
14	Biodegradation Behavior of Degradable Mulch with Poly (Butylene Adipate-co-Terephthalate) (PBAT) and Poly (Butylene Succinate) (PBS) in Simulation Marine Environment. <i>Polymers</i> , 2022, 14, 1515.	2.0	21
15	Morphological control and interfacial compatibilization of fully biobased PLA/ENR blends via partial crosslinking ENR with sebacic acid. <i>Industrial Crops and Products</i> , 2022, 180, 114707.	2.5	15
16	Promotion Strategy of Ideological and Political Education Management in Colleges and Universities Using Clustering Techniques. <i>Mobile Information Systems</i> , 2022, 2022, 1-9.	0.4	1
17	<i>In Situ</i> Formation of Microfibrillar PBAT in PGA Films: An Effective Way to Robust Barrier and Mechanical Properties for Fully Biodegradable Packaging Films. <i>ACS Omega</i> , 2022, 7, 21280-21290.	1.6	17
18	Biodegradable-Renewable Vitrimer Fabrication by Epoxidized Natural Rubber and Oxidized Starch with Robust Ductility and Elastic Recovery. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 7942-7953.	3.2	23

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19	Fabrication of sustainable and durable superwetting cotton fabrics with plant polyphenol for on-demand oil/water separation. <i>Industrial Crops and Products</i> , 2022, 186, 115264.	2.5	17
20	Degradation of poly(butylene adipate-co-terephthalate) by <i>Stenotrophomonas</i> sp. YCJ1 isolated from farmland soil. <i>Journal of Environmental Sciences</i> , 2021, 103, 50-58.	3.2	47
21	Enhancing gas barrier performance of polylactic acid/lignin composite films through cooperative effect of compatibilization and nucleation. <i>Journal of Applied Polymer Science</i> , 2021, 138, 50199.	1.3	33
22	Multifunctional cotton non-woven fabrics coated with silver nanoparticles and polymers for antibacterial, superhydrophobic and high performance microwave shielding. <i>Journal of Colloid and Interface Science</i> , 2021, 582, 112-123.	5.0	189
23	Effect of chain extender and light stabilizer on the weathering resistance of PBAT/PLA blend films prepared by extrusion blowing. <i>Polymer Degradation and Stability</i> , 2021, 183, 109455.	2.7	57
24	Enhancing the Crystallization Performance of Poly(L-lactide) by Intramolecular Hybridizing with Tunable Self-assembly-type Oxalamide Segments. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2021, 39, 122-132.	2.0	9
25	Malleable and thermally recyclable polyurethane foam. <i>Green Chemistry</i> , 2021, 23, 307-313.	4.6	51
26	Enhanced Extracellular Production of <i>Isi</i> PETase in <i>Escherichia coli</i> via Engineering of the pelB Signal Peptide. <i>Journal of Agricultural and Food Chemistry</i> , 2021, 69, 2245-2252.	2.4	56
27	Degradation of polylactic acid/polybutylene adipate-co-terephthalate by coculture of <i>Pseudomonas mendocina</i> and <i>Actinomucor elegans</i> . <i>Journal of Hazardous Materials</i> , 2021, 403, 123679.	6.5	38
28	A Review: Research Progress in Modification of Poly (Lactic Acid) by Lignin and Cellulose. <i>Polymers</i> , 2021, 13, 776.	2.0	19
29	Biobased High-Performance Epoxy Vitrimer with UV Shielding for Recyclable Carbon Fiber Reinforced Composites. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 4638-4647.	3.2	133
30	Enhancement of Mechanical and Barrier Property of Hemicellulose Film via Crosslinking with Sodium Trimetaphosphate. <i>Polymers</i> , 2021, 13, 927.	2.0	12
31	Unprecedented Cell Structure Variation in Multilayered Alternating PS/PS-SiO <sub>2</sub> Foams. <i>ACS Applied Polymer Materials</i> , 2021, 3, 2687-2693.	2.0	5
32	Improved properties of poly(butylene adipate-co-terephthalate)/calcium carbonate films through silane modification. <i>Journal of Applied Polymer Science</i> , 2021, 138, 50970.	1.3	16
33	High-toughening modification of polylactic acid by long-chain hyperbranched polymers. <i>Journal of Applied Polymer Science</i> , 2021, 138, 51295.	1.3	10
34	Enhanced crystallization and storage stability of mechanical properties of biosynthesized poly(3-hydroxybutyrate-co-3-hydroxyhexanate) induced by self-nucleation. <i>International Journal of Biological Macromolecules</i> , 2021, 184, 797-803.	3.6	7
35	Study on ultralight and flexible Fe <sub>3</sub> O <sub>4</sub> /melamine derived carbon foam composites for high-efficiency microwave absorption. <i>Chemical Physics Letters</i> , 2021, 779, 138873.	1.2	20
36	Fabrication of recyclable nucleating agent and its effect on crystallization, gas barrier, thermal, and mechanical performance of Poly(-lactide). <i>Polymer</i> , 2021, 231, 124121.	1.8	13

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37	Effects of CaCO <sub>3</sub> surface modification and water spraying on the weathering properties of PBAT/CaCO <sub>3</sub> films. <i>Polymer Testing</i> , 2021, 102, 107334.	2.3	23
38	Preparation and properties of modified aluminum diethylphosphinate flame retardant for low-density polyethylene. <i>Journal of Applied Polymer Science</i> , 2021, 138, 50393.	1.3	11
39	Fabrication of UV- and Heat-Resistant PDLA/PLLA-Lignin Composite Films by Constructing Interfacial Stereocomplex Crystallites. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 15875-15883.	3.2	14
40	Design of Novel PLA/OMMT Films with Improved Gas Barrier and Mechanical Properties by Intercalating OMMT Interlayer with High Gas Barrier Polymers. <i>Polymers</i> , 2021, 13, 3962.	2.0	6
41	Catalytic Scenarios Over Metal-Carbon Interaction Interface. <i>Frontiers in Chemistry</i> , 2021, 9, 810147.	1.8	2
42	Safety Risks of Plant Fiber/Plastic Composites (PPCs) Intended for Food Contact: A Review of Potential Hazards and Risk Management Measures. <i>Toxics</i> , 2021, 9, 343.	1.6	4
43	Achieving highly crystalline rate and crystallinity in Poly(L-lactide) via in-situ melting reaction with diisocyanate and benzohydrazine to form nucleating agents. <i>Polymer Testing</i> , 2020, 81, 106216.	2.3	9
44	Poly(lactic acid)/lignin films with enhanced toughness and anti-oxidation performance for active food packaging. <i>International Journal of Biological Macromolecules</i> , 2020, 144, 102-110.	3.6	119
45	Achieving Slope-Reigned Na-Ion Storage in Carbon Nanofibers by Constructing Defect-Rich Texture by a Cu-Activation Strategy. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 2407-2416.	4.0	4
46	Barrier Film of Etherified Hemicellulose from Single-Step Synthesis. <i>Polymers</i> , 2020, 12, 2199.	2.0	6
47	Enhancement of Gas Barrier Properties of Graphene Oxide/Poly (Lactic Acid) Films Using a Solvent-free Method. <i>Materials</i> , 2020, 13, 3024.	1.3	17
48	Improvement of the Gas Barrier Properties of PLA/OMMT Films by Regulating the Interlayer Spacing of OMMT and the Crystallinity of PLA. <i>ACS Omega</i> , 2020, 5, 18675-18684.	1.6	50
49	Hemicellulose-Based Film: Potential Green Films for Food Packaging. <i>Polymers</i> , 2020, 12, 1775.	2.0	53
50	Biodegradation Behavior of Poly(Butylene Adipate-Co-Terephthalate) (PBAT), Poly(Lactic Acid) (PLA), and Their Blend in Freshwater with Sediment. <i>Molecules</i> , 2020, 25, 3946.	1.7	94
51	Effects of microencapsulated abamectin on the mechanical, cross-linking, and release properties of PBS. <i>Colloids and Surfaces B: Biointerfaces</i> , 2020, 196, 111290.	2.5	1
52	Sustainable Epoxy Vitrimers from Epoxidized Soybean Oil and Vanillin. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 15020-15029.	3.2	140
53	Highly toughened and heat resistant poly(L-lactide)/poly( $\epsilon$ -caprolactone) blends via engineering balance between kinetics and thermodynamics of phasic morphology with stereocomplex crystallite. <i>Composites Part B: Engineering</i> , 2020, 197, 108155.	5.9	27
54	Controllable synthesis and microwave absorption properties of Fe <sub>3</sub> O <sub>4</sub> @f-GNPs nanocomposites. <i>Composites Communications</i> , 2020, 20, 100363.	3.3	28

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55	Investigation on compatibility of PLA/PBAT blends modified by epoxy-terminated branched polymers through chemical micro-crosslinking. <i>E-Polymers</i> , 2020, 20, 39-54.	1.3	36
56	Effect of Diisocyanates as Compatibilizer on the Properties of BF/PBAT Composites by In Situ Reactive Compatibilization, Crosslinking and Chain Extension. <i>Materials</i> , 2020, 13, 806.	1.3	21
57	Synthesis of PLA-based thermoplastic elastomer and study on preparation and properties of PLA-based shape memory polymers. <i>Materials Research Express</i> , 2020, 7, 015315.	0.8	16
58	A Review on the Contemporary Development of Composite Materials Comprising Graphene/Graphene Derivatives. <i>Advances in Materials Science and Engineering</i> , 2020, 2020, 1-16.	1.0	11
59	Improving Interfacial Adhesion of PLA/Lignin Composites by One-Step Solvent-Free Modification Method. <i>Journal of Renewable Materials</i> , 2020, 8, 1139-1147.	1.1	20
60	Fully Sustainable, Nanoparticle-Free, Fluorine-Free, and Robust Superhydrophobic Cotton Fabric Fabricated via an Eco-Friendly Method for Efficient Oil/Water Separation. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 15696-15705.	3.2	86
61	Malleable and Sustainable Poly(ester amide) Networks Synthesized via Melt Condensation Polymerization. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 15147-15153.	3.2	66
62	Fully biobased polylactide/epoxidized soybean oil resin blends with balanced stiffness and toughness by dynamic vulcanization. <i>Polymer Testing</i> , 2019, 78, 105981.	2.3	13
63	Effect of organic solvent on enzymatic degradation of cyclic PBS-based polymers by lipase N435. <i>International Journal of Biological Macromolecules</i> , 2019, 137, 215-223.	3.6	6
64	Toward durable and robust superhydrophobic cotton fabric through hydrothermal growth of ZnO for oil/water separation. <i>Cellulose</i> , 2019, 26, 8121-8133.	2.4	32
65	Biodegradable PLA/PBAT mulch on microbial community structure in different soils. <i>International Biodeterioration and Biodegradation</i> , 2019, 145, 104817.	1.9	43
66	Adjusting Distribution of Multiwall Carbon Nanotubes in Poly(L-lactide)/Poly(oxymethylene) Blends via Constructing Stereocomplex Crystallites: Toward Conductive and Microwave Shielding Enhancement. <i>Journal of Physical Chemistry C</i> , 2019, 123, 27884-27895.	1.5	22
67	Robust and nanoparticle-free superhydrophobic cotton fabric fabricated from all biological resources for oil/water separation. <i>International Journal of Biological Macromolecules</i> , 2019, 140, 1175-1182.	3.6	21
68	Biodegradation Behavior of Poly (Lactic Acid) (PLA), Poly (Butylene Adipate-Co-Terephthalate) (PBAT), and Their Blends Under Digested Sludge Conditions. <i>Journal of Polymers and the Environment</i> , 2019, 27, 2784-2792.	2.4	41
69	Structure-property relationship in fully biobased epoxidized soybean oil thermosets cured by dicarboxyl terminated polyamide 1010 oligomer with different carboxyl/epoxy ratios. <i>Polymer Testing</i> , 2019, 79, 106057.	2.3	17
70	Fabrication and Application of Carboxymethyl Cellulose-Carbon Nanotube Aerogels. <i>Materials</i> , 2019, 12, 1867.	1.3	11
71	Thermo-sensitive micelles based on amphiphilic poly(butylene 2-methylsuccinate)-poly(ethylene glycol) multi-block copolyesters as the pesticide carriers. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019, 575, 84-93.	2.3	16
72	Effects of Sodium Montmorillonite on the Preparation and Properties of Cellulose Aerogels. <i>Polymers</i> , 2019, 11, 415.	2.0	19

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73	BTBUFood-60: Dataset for Object Detection in Food Field. , 2019, , .		10
74	Preparation and Gas Separation Properties of Triptycene-Based Microporous Polyimide. <i>Macromolecular Chemistry and Physics</i> , 2019, 220, 1900047.	1.1	19
75	Preparation and properties of PLA/PHBV/PBAT blends 3D printing filament. <i>Materials Research Express</i> , 2019, 6, 065401.	0.8	12
76	Localization control of carbon nanotubes in immiscible polymer blends through dynamic vulcanization. <i>Composites Part B: Engineering</i> , 2019, 167, 683-689.	5.9	37
77	Silicone Rubber Composites with High Breakdown Strength and Low Dielectric Loss Based on Polydopamine Coated Mica. <i>Polymers</i> , 2019, 11, 2030.	2.0	31
78	Achieving high dielectric permittivity, high breakdown strength and high efficiency by cross-linking of poly(vinylidene fluoride)/BaTiO <sub>3</sub> nanocomposites. <i>Composites Science and Technology</i> , 2019, 169, 142-150.	3.8	42
79	Manufacture of a hydrophobic CaO/polylactic acid composite. <i>Materials and Manufacturing Processes</i> , 2019, 34, 303-311.	2.7	11
80	Simultaneously reinforcing and toughening of poly(propylene carbonate) by epoxy-terminated hyperbranched polymer(EHBP) through micro-crosslinking. <i>Polymer Bulletin</i> , 2019, 76, 5733-5749.	1.7	11
81	Relating Chemical Structure to Toughness via Morphology Control in Fully Sustainable Sebacic Acid Cured Epoxidized Soybean Oil Toughened Polylactide Blends. <i>Macromolecules</i> , 2018, 51, 2027-2037.	2.2	141
82	Improved dielectric and energy storage properties of poly(vinyl alcohol) nanocomposites by strengthening interfacial hydrogen-bonding interaction. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2018, 548, 179-190.	2.3	21
83	An investigation of the impact of an amino-ended hyperbranched polymer as a new type of modifier on the compatibility of PLA/PBAT blends. <i>Journal of Polymer Engineering</i> , 2018, 38, 223-229.	0.6	5
84	Influence of ether bond on degradation property of PBS-based copolymers at molecular level using molecular simulations. <i>Journal of Polymer Research</i> , 2018, 25, 1.	1.2	4
85	Influence of ether linkage on the enzymatic degradation of PBS copolymers: Comparative study on poly (butylene succinate-co-diethylene glycol succinate) and poly (butylene succinate-co-butylene) Tj ETQq1 1 0.78414 rgBT4 Overlo		
86	Cellulose Aerogels: Synthesis, Applications, and Prospects. <i>Polymers</i> , 2018, 10, 623.	2.0	311
87	Poly(lactic acid)/biobased polyurethane blends with balanced mechanical strength and toughness. <i>Polymer Testing</i> , 2018, 69, 9-15.	2.3	28
88	The Investigation of the Toughening Mechanism of PHBV/PBAT with a Novel Hyperbranched Ethylenediamine Triazine Polymer Based Modifier: The Formation of the Transition Layer and the Microcrosslinking Structure. <i>Journal of Polymers and the Environment</i> , 2018, 26, 4158-4167.	2.4	12
89	Design of a self-healing cross-linked polyurea with dynamic cross-links based on disulfide bonds and hydrogen bonding. <i>European Polymer Journal</i> , 2018, 107, 249-257.	2.6	97
90	Optimization of the preparation process of biodegradable masterbatches and characterization of their rheological and application properties. <i>Polymer Testing</i> , 2018, 70, 526-532.	2.3	6

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91	Extracting compressive stress-strain curve based on stick-slip shear banding process in bulk metallic glasses. <i>Journal of Iron and Steel Research International</i> , 2017, 24, 372-377.	1.4	1
92	Effect of Bamboo Flour Grafted Lactide on the Interfacial Compatibility of Polylactic Acid/Bamboo Flour Composites. <i>Polymers</i> , 2017, 9, 323.	2.0	17
93	Special topic on bio-based and biodegradable polymers. <i>Science China Chemistry</i> , 2016, 59, 1353-1354.	4.2	0
94	Modification of poly(propylene carbonate) with chain extender ADR-4368 to improve its thermal, barrier, and mechanical properties. <i>Polymer Testing</i> , 2016, 54, 301-307.	2.3	30
95	Preparation and characterization of biodegradable blends of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) and poly(butylene adipate-co-terephthalate). <i>Journal of Polymer Engineering</i> , 2016, 36, 473-480.	0.6	11
96	Modeling and Simulation of a Co-current Rotary Dryer. <i>International Journal of Food Engineering</i> , 2016, 12, 189-194.	0.7	2
97	Chain extension and modification of polypropylene carbonate using diphenylmethane diisocyanate. <i>Polymer International</i> , 2015, 64, 1491-1496.	1.6	8
98	Characterization of the effect of REC on the compatibility of PHBH and PLA. <i>Polymer Testing</i> , 2015, 42, 17-25.	2.3	25
99	Modeling the Total Residence Time in a Rotary Dryer. <i>International Journal of Food Engineering</i> , 2015, 11, 405-410.	0.7	7
100	Effect of blending with polyamidoamine (PAMAM) dendrimer on the toughness of poly(hydroxybutyrate-co-hydroxyvalerate) (PHBV). <i>Journal of Materials Science</i> , 2015, 50, 794-800.	1.7	5
101	Heat resistance, crystallization behavior, and mechanical properties of polylactide/nucleating agent composites. <i>Materials &amp; Design</i> , 2015, 66, 7-15.	5.1	86
102	The Development and Commercialization of Biobased, Biodegradable Plastics in China. <i>Industrial Biotechnology</i> , 2014, 10, 73-78.	0.5	1
103	Characterization of interfacial compatibility of polylactic acid and bamboo flour (PLA/BF) in biocomposites. <i>Polymer Testing</i> , 2014, 36, 119-125.	2.3	108
104	Biodegradation behavior of poly(butylene adipate-co-terephthalate) (PBAT), poly(lactic acid) (PLA), and their blend under soil conditions. <i>Polymer Testing</i> , 2013, 32, 918-926.	2.3	375
105	Biodegradation behavior of P(3HB,4HB)/PLA blends in real soil environments. <i>Polymer Testing</i> , 2013, 32, 60-70.	2.3	109
106	Biodegradation behavior of PHAs with different chemical structures under controlled composting conditions. <i>Polymer Testing</i> , 2011, 30, 372-380.	2.3	140
107	Biodegradation behavior of PHBV films in a pilot-scale composting condition. <i>Polymer Testing</i> , 2010, 29, 579-587.	2.3	90