Yu-Cheng Chiu

List of Publications by Year in Descending Order

99 papers	3,822 citations	31 h-index	59 g-index
103 ext. papers	4,495 ext. citations	9.2 avg, IF	5.44 L-index

#	Paper	IF	Citations
99	Stabilization of Lead-Reduced Metal Halide Perovskite Nanocrystals by High-Entropy Alloying.. *Journal of the American Chemical Society*, **2022**,	16.4	2
98	Anisotropic nanocrystal superlattices overcoming intrinsic light outcoupling efficiency limit in perovskite quantum dot light-emitting diodes.. *Nature Communications*, **2022**, 13, 2106	17.4	6
97	Molecular Origin of Strain-Induced Chain Alignment in PDPP-Based Semiconducting Polymeric Thin Films. *Advanced Functional Materials*, **2021**, 31, 2100161	15.6	14
96	Novel Authentic and Ultrafast Organic Photorecorders Enhanced by AIE-Active Polymer Electrets via Interlayer Charge Recombination. *Advanced Functional Materials*, **2021**, 31, 2101288	15.6	8
95	Conception of a Smart Artificial Retina Based on a Dual-Mode Organic Sensing Inverter. *Advanced Science*, **2021**, 8, e2100742	13.6	11
94	Novel stretchable light-emitting diodes based on conjugated-rod block elastic-coil copolymers. *Polymer International*, **2021**, 70, 426-431	3.3	7
93	Intrinsically stretchable polymer semiconductors: molecular design, processing and device applications. *Journal of Materials Chemistry C*, **2021**, 9, 2660-2684	7.1	13
92	Luminescence Behavior and Acceptor Effects of Ambipolar Polymeric Electret on Photorecoverable Organic Field-Effect Transistor Memory. *Advanced Electronic Materials*, **2021**, 7, 2001076	6.4	7
91	The Impacts of Polyisoprene Physical Interactions on Sorting of Single-Wall Carbon Nanotubes. *Macromolecular Rapid Communications*, **2021**, 42, e2100327	4.8	2
90	Unveiling the Photoinduced Recovery Mystery in Conjugated Polymer-Based Transistor Memory. *ACS Applied Materials & Interfaces*, **2021**, 13, 44656-44662	9.5	7
89	Why triage materials with low luminescence quantum efficiency: the use of 35Cbz4BzCN as a universal host for organic light emitting diodes through effective triplet energy transfer. *Journal of Materials Chemistry C*, **2021**, 9, 2381-2391	7.1	2
88	Indacenodithiophene-based N-type conjugated polymers provide highly thermally stable ternary organic photovoltaics displaying a performance of 17.5%. *Journal of Materials Chemistry A*, **2021**, 9, 9780-9790	13	11
87	Synergistic Effect in a Graphene Quantum Dot-Enabled Luminescent Skinlike Copolymer for Long-Term pH Detection.. *ACS Applied Materials & Interfaces*, **2021**, 13, 60413-60424	9.5	0
86	Design of Self-Cross-Linkable Poly(n-butyl acrylate)-co-poly[N-(hydroxymethyl)acrylamide] Amphiphilic Copolymers toward Elastic and Self-Healing Properties. *ACS Applied Polymer Materials*, **2020**, 2, 5432-5443	4.3	6
85	Iron-coordinating □conjugated semiconducting polymer: morphology and charge transport in organic field-effect transistors. *Journal of Materials Chemistry C*, **2020**, 8, 8213-8223	7.1	9
84	Tacky Elastomers to Enable Tear-Resistant and Autonomous Self-Healing Semiconductor Composites. *Advanced Functional Materials*, **2020**, 30, 2000663	15.6	36
83	Synthetic Concept of Intrinsically Elastic Luminescent Polyfluorene-Based Copolymers via RAFT Polymerization. *Macromolecules*, **2020**, 53, 4030-4037	5.5	10

82	Morphology and properties of PEDOT:PSS/soft polymer blends through hydrogen bonding interaction and their pressure sensor application. *Journal of Materials Chemistry C*, **2020**, 8, 6013-6024	7.1	24
81	Donor-Acceptor Effect of Carbazole-Based Conjugated Polymer Electrets on Photoresponsive Flash Organic Field-Effect Transistor Memories. *ACS Applied Materials & Interfaces*, **2020**, 12, 6144-6150	9.5	28
80	Capabilities of time-resolved X-ray excited optical luminescence of the Taiwan Photon Source 23A X-ray nanoprobe beamline. *Journal of Synchrotron Radiation*, **2020**, 27, 217-221	2.4	10
79	Scalable photonic sources using two-dimensional lead halide perovskite superlattices. *Nature Communications*, **2020**, 11, 387	17.4	19
78	Electrospinning-induced elastomeric properties of conjugated polymers for extremely stretchable nanofibers and rubbery optoelectronics. *Journal of Materials Chemistry C*, **2020**, 8, 873-882	7.1	20
77	Organic-Inorganic Nanocomposite Film for High-Performance Stretchable Resistive Memory Device. *Macromolecular Rapid Communications*, **2020**, 41, e1900542	4.8	16
76	Improving the Lifetime of CsPbBr Perovskite in Water Using Self-Healing and Transparent Elastic Polymer Matrix. *Frontiers in Chemistry*, **2020**, 8, 766	5	1
75	Elucidating the impact of molecular weight on morphology, charge transport, photophysics and performance of all-polymer solar cells. *Journal of Materials Chemistry A*, **2020**, 8, 21070-21083	13	11
74	Influence of Different Molecular Weights and Concentrations of Poly(glycidyl methacrylate) on Recycled Poly(ethylene terephthalate): A Thermal, Mechanical, and Rheological Study. *Journal of Polymers and the Environment*, **2020**, 28, 2880-2892	4.5	3
73	High-Performance Nonvolatile Organic Photonic Transistor Memory Devices using Conjugated Rod-Coil Materials as a Floating Gate. *Advanced Materials*, **2020**, 32, e2002638	24	34
72	Morphology and Electronic Properties of Semiconducting Polymer and Branched Polyethylene Blends. *ACS Applied Materials & Interfaces*, **2019**, 11, 12723-12732	9.5	20
71	The Critical Role of Electron-Donating Thiophene Groups on the Mechanical and Thermal Properties of Donor–Acceptor Semiconducting Polymers. *Advanced Electronic Materials*, **2019**, 5, 1800899	6.4	52
70	Novel Photoinduced Recovery of OFET Memories Based on Ambipolar Polymer Electret for Photorecorder Application. *Advanced Functional Materials*, **2019**, 29, 1902991	15.6	32
69	Exploitation of Thermoresponsive Switching Organic Field-Effect Transistors. *ACS Omega*, **2019**, 4, 22082-22088	3.7	9
68	Amide-Containing Alkyl Chains in Conjugated Polymers: Effect on Self-Assembly and Electronic Properties. *Macromolecules*, **2018**, 51, 1336-1344	5.5	60
67	Self-assembled oligosaccharide-based block copolymers as charge-storage materials for memory devices. *Polymer Journal*, **2018**, 50, 649-658	2.7	10
66	Morphology and optoelectronic characteristics of organic field-effect transistors based on blends of polylactic acid and poly(3-hexylthiophene). *Polymer Journal*, **2018**, 50, 975-987	2.7	11
65	Control over Molecular Architectures of Carbohydrate-Based Block Copolymers for Stretchable Electrical Memory Devices. *Macromolecules*, **2018**, 51, 4966-4975	5.5	23

64	Influence of amide-containing side chains on the mechanical properties of diketopyrrolopyrrole-based polymers. *Polymer Chemistry*, **2018**, 9, 5531-5542	4.9	38
63	Developing the XEOL and TR-XEOL at the X-ray Nanoprobe at Taiwan Photon Source. *Microscopy and Microanalysis*, **2018**, 24, 200-201	0.5	2
62	An Elastic Interfacial Transistor Enabled by Superhydrophobicity. *Small*, **2018**, 14, e1804006	11	5
61	Interfacial Field-Effect Transistors: An Elastic Interfacial Transistor Enabled by Superhydrophobicity (Small 51/2018). *Small*, **2018**, 14, 1870247	11	
60	Enhanced Charge Transport and Stability Conferred by Iron(III)-Coordination in a Conjugated Polymer Thin-Film Transistors. *Advanced Electronic Materials*, **2018**, 4, 1800239	6.4	9
59	Unraveling the stress effects on the optical properties of stretchable rod-coil polyfluorene-poly(n-butyl acrylate) block copolymer thin films. *Polymer Chemistry*, **2018**, 9, 3820-3831	4.9	19
58	Conception of Stretchable Resistive Memory Devices Based on Nanostructure-Controlled Carbohydrate-block-Polyisoprene Block Copolymers. *Advanced Functional Materials*, **2017**, 27, 1606161	15.6	55
57	Nonvolatile Perovskite-Based Photomemory with a Multilevel Memory Behavior. *Advanced Materials*, **2017**, 29, 1702217	24	87
56	Effects of Molecular Structure and Packing Order on the Stretchability of Semicrystalline Conjugated Poly(Tetrathienoacene-diketopyrrolopyrrole) Polymers. *Advanced Electronic Materials*, **2017**, 3, 1600311	6.4	66
55	Taming Charge Transport in Semiconducting Polymers with Branched Alkyl Side Chains. *Advanced Functional Materials*, **2017**, 27, 1701973	15.6	59
54	Ultrapure Green Light-Emitting Diodes Using Two-Dimensional Formamidinium Perovskites: Achieving Recommendation 2020 Color Coordinates. *Nano Letters*, **2017**, 17, 5277-5284	11.5	166
53	Renewable polymeric materials for electronic applications. *Polymer Journal*, **2017**, 49, 61-73	2.7	28
52	Aggregation-induced emission in lamellar solids of colloidal perovskite quantum wells. *Science Advances*, **2017**, 3, eaaq0208	14.3	51
51	Intrinsically stretchable and healable semiconducting polymer for organic transistors. *Nature*, **2016**, 539, 411-415	50.4	779
50	Crosslinkable high dielectric constant polymer dielectrics for low voltage organic field-effect transistor memory devices. *Journal of Polymer Science Part A*, **2016**, 54, 3224-3236	2.5	9
49	High Performance Transparent Transistor Memory Devices Using Nano-Floating Gate of Polymer/ZnO Nanocomposites. *Scientific Reports*, **2016**, 6, 20129	4.9	60
48	Non-Conjugated Flexible Linkers in Semiconducting Polymers: A Pathway to Improved Processability without Compromising Device Performance. *Advanced Electronic Materials*, **2016**, 2, 1600104	6.4	54
47	Novel highly sensitive and reversible electrospun nanofibrous chemosensor-filters composed of poly(HEMA-co-MNA) and bpy-F-bpy with metal-ion-modulated multicolor fluorescence emission. *Polymer Journal*, **2016**, 48, 439-449	2.7	15

46	Synthesis, morphology, and electrical memory application of oligosaccharide-based block copolymers with π-conjugated pyrene moieties and their supramolecules. *Polymer Chemistry*, **2016**, 7, 1249-1263	4.9	12
45	Donor–Acceptor Poly(3-hexylthiophene)-block-Pendent Poly(isoindigo) with Dual Roles of Charge Transporting and Storage Layer for High-Performance Transistor-Type Memory Applications. *Advanced Functional Materials*, **2016**, 26, 2695-2705	15.6	45
44	Impact of Polystyrene Oligomer Side Chains on Naphthalene Diimide–Bithiophene Polymers as n-Type Semiconductors for Organic Field-Effect Transistors. *Advanced Functional Materials*, **2016**, 26, 1261-1270	15.6	29
43	Controllable electrical performance of spray-coated semiconducting small molecule/insulating polymer blend thin film for organic field effect transistors application. *Reactive and Functional Polymers*, **2016**, 108, 130-136	4.6	12
42	Stretchable Self-Healing Polymeric Dielectrics Cross-Linked Through Metal-Ligand Coordination. *Journal of the American Chemical Society*, **2016**, 138, 6020-7	16.4	341
41	Efficient Blue Electroluminescence Using Quantum-Confined Two-Dimensional Perovskites. *ACS Nano*, **2016**, 10, 9720-9729	16.7	239
40	Electrospun Poly(3-hexylthiophene) Nanofibers with Highly Extended and Oriented Chains Through Secondary Electric Field for High-Performance Field-Effect Transistors. *Advanced Electronic Materials*, **2015**, 1, 1400028	6.4	24
39	Nonvolatile memories using the electrets of conjugated rod-coil block copolymer and its nanocomposite with single wall carbon nanotubes. *Journal of Materials Chemistry C*, **2015**, 3, 551-558	7.1	20
38	Organic Electronics: Conjugated Polymer Nanoparticles as Nano Floating Gate Electrets for High Performance Nonvolatile Organic Transistor Memory Devices (Adv. Funct. Mater. 10/2015). *Advanced Functional Materials*, **2015**, 25, 1611-1611	15.6	1
37	Partially-Screened Field Effect and Selective Carrier Injection at Organic Semiconductor/Graphene Heterointerface. *Nano Letters*, **2015**, 15, 7587-95	11.5	49
36	Field-Effect Transistors: Oligosaccharide Carbohydrate Dielectrics toward High-Performance Non-volatile Transistor Memory Devices (Adv. Mater. 40/2015). *Advanced Materials*, **2015**, 27, 6256-6256	24	
35	Oligosaccharide Carbohydrate Dielectrics toward High-Performance Non-volatile Transistor Memory Devices. *Advanced Materials*, **2015**, 27, 6257-64	24	49
34	Non-volatile organic transistor memory devices using the poly(4-vinylpyridine)-based supramolecular electrets. *Chemical Communications*, **2015**, 51, 2562-4	5.8	17
33	Electrospun nanofibers with dual plasmonic-enhanced luminescent solar concentrator effects for high-performance organic photovoltaic cells. *Journal of Materials Chemistry A*, **2015**, 3, 15039-15048	13	26
32	Synthesis of Oligosaccharide-Based Block Copolymers with Pendent π-Conjugated Oligofluorene Moieties and Their Electrical Device Applications. *Macromolecules*, **2015**, 48, 3907-3917	5.5	24
31	Synthesis of multifunctional poly(1-pyrenemethyl methacrylate)-b-poly(N-isopropylacrylamide)-b-poly(N-methylolacrylamide)s and their electrospun nanofibers for metal ion sensory applications. *Polymer Chemistry*, **2015**, 6, 2327-2336	4.9	16
30	Conjugated Polymer Nanoparticles as Nano Floating Gate Electrets for High Performance Nonvolatile Organic Transistor Memory Devices. *Advanced Functional Materials*, **2015**, 25, 1511-1519	15.6	132
29	High performance nonvolatile transistor memories of pentacene using the electrets of star-branched p-type polymers and their donor–acceptor blends. *Journal of Materials Chemistry C*, **2014**, 2, 1436	7.1	38

28	Plasmon-Enhanced Polymer Photovoltaic Device Performance Using Different Patterned Ag/PVP Electrospun Nanofibers. *Advanced Energy Materials*, **2014**, 4, 1301665	21.8	40
27	Syntheses of Biaxially Extended Octithiophene-Based Conjugated Copolymers for High-Open-Circuit-Voltage Photovoltaic-Cell Applications. *Macromolecular Chemistry and Physics*, **2014**, 215, 638-647	2.6	6
26	High-Performance Nonvolatile Transistor Memories of Pentacence Using the Green Electrets of Sugar-based Block Copolymers and Their Supramolecules. *Advanced Functional Materials*, **2014**, 24, 4240-4249	15.6	76
25	Ultra metal ions and pH sensing characteristics of thermoresponsive luminescent electrospun nanofibers prepared from poly(HPBO-co-NIPAAm-co-SA). *RSC Advances*, **2014**, 4, 45345-45353	3.7	31
24	Ambipolar field-effect transistors using conjugated polymers with structures of bilayer, binary blends, and paralleled nanofibers. *Journal of Materials Chemistry C*, **2014**, 2, 7489-7493	7.1	8
23	High-k polymer-graphene oxide dielectrics for low-voltage flexible nonvolatile transistor memory devices. *Chemical Communications*, **2014**, 50, 3217-9	5.8	41
22	Using a single electrospun polymer nanofiber to enhance carrier mobility in organic field-effect transistors toward nonvolatile memory. *ACS Applied Materials & Interfaces*, **2014**, 6, 5506-15	9.5	17
21	Multilevel nonvolatile flexible organic field-effect transistor memories employing polyimide electrets with different charge-transfer effects. *Macromolecular Rapid Communications*, **2014**, 35, 1039-45	4.8	28
20	High-performance nonvolatile organic transistor memory devices using the electrets of semiconducting blends. *ACS Applied Materials & Interfaces*, **2014**, 6, 12780-8	9.5	64
19	Multifunctional Electrospun Nanofibers Prepared from Poly((N-isopropylacrylamide)-co-(N-hydroxymethylacrylamide)) and Their Blends with 1,2-Diaminoanthraquinone for NO Gas Detection. *Macromolecular Chemistry and Physics*, **2014**, 215, 286-294	2.6	28
18	Memory: High-Performance Nonvolatile Transistor Memories of Pentacence Using the Green Electrets of Sugar-based Block Copolymers and Their Supramolecules (Adv. Funct. Mater. 27/2014). *Advanced Functional Materials*, **2014**, 24, 4198-4198	15.6	1
17	Semi-conjugated acceptor-based polyimides as electrets for nonvolatile transistor memory devices. *Polymer Chemistry*, **2014**, 5, 6834-6846	4.9	14
16	Tunable dielectric constant of polyimide–barium titanate nanocomposite materials as the gate dielectrics for organic thin film transistor applications. *RSC Advances*, **2014**, 4, 62132-62139	3.7	15
15	Electrospun Fibers as a Solid-State Real-Time Zinc Ion Sensor with High Sensitivity and Cell Medium Compatibility. *Advanced Functional Materials*, **2013**, 23, 1566-1574	15.6	29
14	Multilevel nonvolatile transistor memories using a star-shaped poly((4-diphenylamino)benzyl methacrylate) gate electret. *NPG Asia Materials*, **2013**, 5, e35-e35	10.3	61
13	pH-responsive Dendritic Gelators. *Chemistry Letters*, **2012**, 41, 92-94	1.7	2
12	Biaxially Extended Quaterthiophene- and Octithiophene-Vinylene Conjugated Polymers for High Performance Field Effect Transistors and Photovoltaic Cells. *Macromolecules*, **2012**, 45, 3047-3056	5.5	26
11	Synthesis, morphology, and sensory applications of multifunctional rod-coil-coil triblock copolymers and their electrospun nanofibers. *ACS Applied Materials & Interfaces*, **2012**, 4, 3387-95	9.5	61

10	Morphology and field-effect transistor characteristics of semicrystalline poly(3-hexylthiophene) and poly(stearyl acrylate) blend nanowires. *Journal of Materials Chemistry*, **2012**, 22, 14682		19
9	Design and synthesis of new cationic water-soluble pyrene containing dendrons for DNA sensory applications. *Journal of Polymer Science Part A*, **2012**, 50, 297-305	2.5	6
8	Poly[2,7-(9,9-dihexylfluorene)]-block-Poly(2-vinylpyridine) Rod□Coil Star-block Copolymers: Synthesis, Micellar Structures, and Photophysical Properties. *Macromolecular Chemistry and Physics*, **2011**, 212, 297-304	2.6	6
7	Highly ordered luminescent microporous films prepared from crystalline conjugated rod-coil diblock copolymers of PF-b-PSA and their superhydrophobic characteristics. *Soft Matter*, **2011**, 7, 9350	3.6	35
6	Thermoresponsive luminescent electrospun fibers prepared from poly(DMAEMA-co-SA-co-StFl) multifunctional random copolymers. *ACS Applied Materials & Interfaces*, **2010**, 2, 3340-7	9.5	36
5	Synthesis of New Star-Shaped Polymers with Styrene□luorene Conjugated Moieties and Their Multicolor Luminescent Ordered Microporous Films. *Macromolecules*, **2010**, 43, 7151-7158	5.5	30
4	New Thermoresponsive Luminescent Electrospun Nanofibers Prepared from Poly[2,7-(9,9-dihexylfluorene)]-block-poly(N-isopropylacrylamide)/PMMA Blends. *Macromolecular Chemistry and Physics*, **2010**, 211, 1408-1416	2.6	27
3	Conjugated Polymer-Wrapped Single-Wall Carbon Nanotubes for High-Mobility Photonic/Electrical Fully Modulated Synaptic Transistor. *Advanced Materials Technologies*,2101506	6.8	3
2	Precise Control of Noncovalent Interactions in Semiconducting Polymers for High-Performance Organic Field-Effect Transistors. *Chemistry of Materials*,	9.6	5
1	Tunneling-Effect-Boosted Interfacial Charge Trapping toward Photo-Organic Transistor Memory. *Advanced Electronic Materials*,2101349	6.4	2