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List of Publications by Citations

174 papers	4,927 citations	41 h-index	62 g-index
185 ext. papers	5,658 ext. citations	8.9 avg, IF	5.76 L-index

#	Paper	IF	Citations
174	Direct monolithic integration of organic photovoltaic circuits on unmodified paper. *Advanced Materials*, **2011**, 23, 3499-3505	24	221
173	Oxidative Chemical Vapor Deposition of Electrically Conducting Poly(3,4-ethylenedioxythiophene) Films. *Macromolecules*, **2006**, 39, 5326-5329	5.5	190
172	Synthesis of ultrathin polymer insulating layers by initiated chemical vapour deposition for low-power soft electronics. *Nature Materials*, **2015**, 14, 628-35	27	184
171	Systematic Control of the Electrical Conductivity of Poly(3,4-ethylenedioxythiophene) via Oxidative Chemical Vapor Deposition. *Macromolecules*, **2007**, 40, 6552-6556	5.5	176
170	Initiated and oxidative chemical vapor deposition: a scalable method for conformal and functional polymer films on real substrates. *Physical Chemistry Chemical Physics*, **2009**, 11, 5227-40	3.6	117
169	Multiscale, hierarchically patterned topography for directing human neural stem cells into functional neurons. *ACS Nano*, **2014**, 8, 7809-22	16.7	113
168	A Low-Temperature Thin-Film Encapsulation for Enhanced Stability of a Highly Efficient Perovskite Solar Cell. *Advanced Energy Materials*, **2018**, 8, 1701928	21.8	98
167	BMP-2 peptide-functionalized nanopatterned substrates for enhanced osteogenic differentiation of human mesenchymal stem cells. *Biomaterials*, **2013**, 34, 7236-46	15.6	97
166	One-Step Synthesis of Cross-Linked Ionic Polymer Thin Films in Vapor Phase and Its Application to an Oil/Water Separation Membrane. *Journal of the American Chemical Society*, **2017**, 139, 2329-2337	16.4	91
165	Conformal coverage of poly(3,4-ethylenedioxythiophene) films with tunable nanoporosity via oxidative chemical vapor deposition. *ACS Nano*, **2008**, 2, 1959-67	16.7	87
164	A stacked polymer film for robust superhydrophobic fabrics. *Polymer Chemistry*, **2013**, 4, 1664	4.9	86
163	Paper-based bioactive scaffolds for stem cell-mediated bone tissue engineering. *Biomaterials*, **2014** , 35, 9811-9823	15.6	85
162	A conformal nano-adhesive via initiated chemical vapor deposition for microfluidic devices. *Lab on A Chip*, **2009**, 9, 411-6	7.2	84
161	Patterning nanodomains with orthogonal functionalities: solventless synthesis of self-sorting surfaces. *Journal of the American Chemical Society*, **2008**, 130, 14424-5	16.4	84
160	Polymer Analog Memristive Synapse with Atomic-Scale Conductive Filament for Flexible Neuromorphic Computing System. *Nano Letters*, **2019**, 19, 839-849	11.5	84
159	Chondroitin Sulfate-Based Biomineralizing Surface Hydrogels for Bone Tissue Engineering. *ACS Applied Materials & Interfaces*, **2017**, 9, 21639-21650	9.5	78
158	Neuron–Muscle Interfaces: Matrix Topography Regulates Synaptic Transmission at the Neuromuscular Junction (Adv. Sci. 6/2019). *Advanced Science*, **2019**, 6, 1970032	13.6	78

157	Hydrogel-laden paper scaffold system for origami-based tissue engineering. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 15426-31	11.5	74
156	Photolithography-Based Patterning of Liquid Metal Interconnects for Monolithically Integrated Stretchable Circuits. *ACS Applied Materials & Interfaces*, **2016**, 8, 15459-65	9.5	72
155	Electrochemical investigation of PEDOT films deposited via CVD for electrochromic applications. *Synthetic Metals*, **2007**, 157, 894-898	3.6	70
154	Springtail-inspired superomniphobic surface with extreme pressure resistance. *Science Advances*, **2018**, 4, eaat4978	14.3	69
153	Organic flash memory on various flexible substrates for foldable and disposable electronics. *Nature Communications*, **2017**, 8, 725	17.4	62
152	Umbilical-cord-blood-derived mesenchymal stem cells seeded onto fibronectin-immobilized polycaprolactone nanofiber improve cardiac function. *Acta Biomaterialia*, **2014**, 10, 3007-17	10.8	61
151	Doping level and work function control in oxidative chemical vapor deposited poly (3,4-ethylenedioxythiophene). *Applied Physics Letters*, **2007**, 90, 152112	3.4	61
150	Initiated Chemical Vapor Deposition: A Versatile Tool for Various Device Applications. *Advanced Engineering Materials*, **2018**, 20, 1700622	3.5	54
149	An effective, cost-efficient extraction method of biomass from wet microalgae with a functional polymeric membrane. *Green Chemistry*, **2014**, 16, 312-319	10	52
148	Electroconductive Nanopatterned Substrates for Enhanced Myogenic Differentiation and Maturation. *Advanced Healthcare Materials*, **2016**, 5, 137-45	10.1	52
147	Prevention of Bacterial Colonization on Catheters by a One-Step Coating Process Involving an Antibiofouling Polymer in Water. *ACS Applied Materials & Interfaces*, **2017**, 9, 19736-19745	9.5	49
146	Flexible Nonvolatile Polymer Memory Array on Plastic Substrate via Initiated Chemical Vapor Deposition. *ACS Applied Materials & Interfaces*, **2016**, 8, 12951-8	9.5	49
145	Electroconductive nanoscale topography for enhanced neuronal differentiation and electrophysiological maturation of human neural stem cells. *Nanoscale*, **2017**, 9, 18737-18752	7.7	48
144	A Surface Tailoring Method of Ultrathin Polymer Gate Dielectrics for Organic Transistors: Improved Device Performance and the Thermal Stability Thereof. *Advanced Functional Materials*, **2015**, 25, 4462-4469	15.6	48
143	PDMS-based turbulent microfluidic mixer. *Lab on A Chip*, **2015**, 15, 1727-35	7.2	48
142	Series of Liquid Separation System Made of Homogeneous Copolymer Films with Controlled Surface Wettability. *Chemistry of Materials*, **2015**, 27, 3441-3449	9.6	47
141	Initiated chemical vapor deposition of thermoresponsive poly(N-vinylcaprolactam) thin films for cell sheet engineering. *Acta Biomaterialia*, **2013**, 9, 7691-8	10.8	47
140	A doubly cross-linked nano-adhesive for the reliable sealing of flexible microfluidic devices. *Lab on A Chip*, **2013**, 13, 1266-72	7.2	47

139	Functional Circuitry on Commercial Fabric via Textile-Compatible Nanoscale Film Coating Process for Fibertronics. *Nano Letters*, **2017**, 17, 6443-6452	11.5	47
138	Chondrogenic priming adipose-mesenchymal stem cells for cartilage tissue regeneration. *Pharmaceutical Research*, **2011**, 28, 1395-405	4.5	45
137	Simple and reliable method to incorporate the Janus property onto arbitrary porous substrates. *ACS Applied Materials & Interfaces*, **2014**, 6, 4005-10	9.5	44
136	Flexible, Low-Power Thin-Film Transistors Made of Vapor-Phase Synthesized High-k, Ultrathin Polymer Gate Dielectrics. *ACS Applied Materials & Interfaces*, **2017**, 9, 20808-20817	9.5	44
135	Solvent-free modification of surfaces with polymers: The case for initiated and oxidative chemical vapor deposition (CVD). *AICHE Journal*, **2011**, 57, 276-285	3.6	42
134	Systematic control of the electrical conductivity of poly (3,4-ethylenedioxythiophene) via oxidative chemical vapor deposition (oCVD). *Surface and Coatings Technology*, **2007**, 201, 9406-9412	4.4	42
133	A vapor-phase deposited polymer film to improve the adhesion of electroless-deposited copper layer onto various kinds of substrates. *Langmuir*, **2014**, 30, 916-21	4	40
132	Hoop stress-assisted three-dimensional particle focusing under viscoelastic flow. *Rheologica Acta*, **2014**, 53, 927-933	2.3	38
131	Nanothin Coculture Membranes with Tunable Pore Architecture and Thermoresponsive Functionality for Transfer-Printable Stem Cell-Derived Cardiac Sheets. *ACS Nano*, **2015**, 9, 10186-202	16.7	37
130	Memristive Logic-in-Memory Integrated Circuits for Energy-Efficient Flexible Electronics. *Advanced Functional Materials*, **2018**, 28, 1704725	15.6	37
129	Oxidative chemical vapor deposition (oCVD) of patterned and functional grafted conducting polymer nanostructures. *Journal of Materials Chemistry*, **2010**, 20, 3968		35
128	Scalable nanopillar arrays with layer-by-layer patterned overt and covert images. *Advanced Materials*, **2014**, 26, 6119-24	24	34
127	Paper Electronics: Direct Monolithic Integration of Organic Photovoltaic Circuits on Unmodified Paper (Adv. Mater. 31/2011). *Advanced Materials*, **2011**, 23, 3499-3499	24	34
126	A Directly Patternable, Click-Active Polymer Film via Initiated Chemical Vapor Deposition. *Macromolecular Rapid Communications*, **2008**, 29, 1648-1654	4.8	34
125	A Highly Sensitive Molecular Detection Platform for Robust and Facile Diagnosis of Middle East Respiratory Syndrome (MERS) Corona Virus. *Advanced Healthcare Materials*, **2016**, 5, 2168-73	10.1	34
124	Conformal phase masks made of polyurethane acrylate with optimized elastic modulus for 3D nanopatterning. *Journal of Materials Chemistry C*, **2014**, 2, 2316	7.1	33
123	Hydrogel Functionalized Janus Membrane for Skin Regeneration. *Advanced Healthcare Materials*, **2017**, 6, 1600795	10.1	32
122	Zero-static-power nonvolatile logic-in-memory circuits for flexible electronics. *Nano Research*, **2017**, 10, 2459-2470	10	31

121	Vapor-Phase Deposited Ultrathin Polymer Gate Dielectrics for High-Performance Organic Thin Film Transistors. *Advanced Electronic Materials*, **2016**, 2, 1500209	6.4	31
120	One-step vapor-phase synthesis of transparent high refractive index sulfur-containing polymers. *Science Advances*, **2020**, 6, eabb5320	14.3	30
119	Synthesis of Ultrathin, Homogeneous Copolymer Dielectrics to Control the Threshold Voltage of Organic Thin-Film Transistors. *Advanced Functional Materials*, **2016**, 26, 6574-6582	15.6	30
118	Engineering the xylose-catabolizing Dahms pathway for production of poly(d-lactate-co-glycolate) and poly(d-lactate-co-glycolate-co-d-2-hydroxybutyrate) in Escherichia coli. *Microbial Biotechnology*, **2017**, 10, 1353-1364	6.3	29
117	Low-Power Nonvolatile Charge Storage Memory Based on MoS2 and an Ultrathin Polymer Tunneling Dielectric. *Advanced Functional Materials*, **2017**, 27, 1703545	15.6	29
116	Total integrated slidable and valveless solid phase extraction-polymerase chain reaction-capillary electrophoresis microdevice for mini Y chromosome short tandem repeat genotyping. *Biosensors and Bioelectronics*, **2016**, 78, 489-496	11.8	28
115	Organic/inorganic multilayer thin film encapsulation via initiated chemical vapor deposition and atomic layer deposition for its application to organic solar cells. *Korean Journal of Chemical Engineering*, **2017**, 34, 892-897	2.8	27
114	Biofunctionalized titanium with anti-fouling resistance by grafting thermo-responsive polymer brushes for the prevention of peri-implantitis. *Journal of Materials Chemistry B*, **2015**, 3, 5161-5165	7.3	26
113	Initiated Chemical Vapor Deposition (iCVD) of Highly Cross-Linked Polymer Films for Advanced Lithium-Ion Battery Separators. *ACS Applied Materials & Interfaces*, **2015**, 7, 18849-55	9.5	26
112	Generation of functionalized polymer nanolayer on implant surface via initiated chemical vapor deposition (iCVD). *Journal of Colloid and Interface Science*, **2015**, 439, 34-41	9.3	26
111	Thermosensitive, Stretchable, and Piezoelectric Substrate for Generation of Myogenic Cell Sheet Fragments from Human Mesenchymal Stem Cells for Skeletal Muscle Regeneration. *Advanced Functional Materials*, **2017**, 27, 1703853	15.6	24
110	A Low-Voltage Organic Complementary Inverter with High Operation Stability and Flexibility Using an Ultrathin iCVD Polymer Dielectric and a Hybrid Encapsulation Layer. *Advanced Electronic Materials*, **2016**, 2, 1500385	6.4	24
109	Logic circuits composed of flexible carbon nanotube thin-film transistor and ultra-thin polymer gate dielectric. *Scientific Reports*, **2016**, 6, 26121	4.9	24
108	Spontaneous Generation of a Molecular Thin Hydrophobic Skin Layer on a Sub-20 nm, High-Polymer Dielectric for Extremely Stable Organic Thin-Film Transistor Operation. *ACS Applied Materials & Interfaces*, **2019**, 11, 29113-29123	9.5	23
107	A Superamphiphobic Sponge with Mechanical Durability and a Self-Cleaning Effect. *Scientific Reports*, **2016**, 6, 29993	4.9	22
106	Control of Reversible Self-Bending Behavior in Responsive Janus Microstrips. *ACS Applied Materials & Interfaces*, **2016**, 8, 8782-8	9.5	22
105	Simple and facile preparation of recombinant human bone morphogenetic protein-2 immobilized titanium implant via initiated chemical vapor deposition technique to promote osteogenesis for bone tissue engineering application. *Materials Science and Engineering C*, **2019**, 100, 949-958	8.3	21
104	Robust Thin Film Surface with a Selective Antibacterial Property Enabled via a Cross-Linked Ionic Polymer Coating for Infection-Resistant Medical Applications. *ACS Biomaterials Science and Engineering*, **2018**, 4, 2614-2622	5.5	21

103	Effects of interfacial layer wettability and thickness on the coating morphology and sirolimus release for drug-eluting stent. *Journal of Colloid and Interface Science*, **2015**, 460, 189-99	9.3	20
102	Site-specific immobilization of proteins on non-conventional substrates via solvent-free initiated chemical vapour deposition (iCVD) process. *Polymer Chemistry*, **2014**, 5, 4459	4.9	20
101	A Simple, Cost-Efficient Method to Separate Microalgal Lipids from Wet Biomass Using Surface Energy-Modified Membranes. *ACS Applied Materials & Interfaces*, **2016**, 8, 600-8	9.5	20
100	A Single-Chamber System of Initiated Chemical Vapor Deposition and Atomic Layer Deposition for Fabrication of Organic/Inorganic Multilayer Films . *Advanced Engineering Materials*, **2017**, 19, 1600819	3.5	19
99	Highly stacked 3D organic integrated circuits with via-hole-less multilevel metal interconnects. *Nature Communications*, **2019**, 10, 2424	17.4	19
98	Low-Power, Flexible Nonvolatile Organic Transistor Memory Based on an Ultrathin Bilayer Dielectric Stack. *Advanced Electronic Materials*, **2019**, 5, 1800799	6.4	19
97	A Surface-Tailoring Method for Rapid Non-Thermosensitive Cell-Sheet Engineering via Functional Polymer Coatings. *Advanced Materials*, **2020**, 32, e1907225	24	18
96	A Sub-minute Curable Nanoadhesive with High Transparency, Strong Adhesion, and Excellent Flexibility. *Macromolecules*, **2018**, 51, 992-1001	5.5	18
95	Application of monodirectional Janus patch to oromucosal delivery system. *Advanced Healthcare Materials*, **2015**, 4, 2229-36	10.1	18
94	Ultra-low power, highly uniform polymer memory by inserted multilayer graphene electrode. *2D Materials*, **2015**, 2, 044013	5.9	18
93	Distinct Mechanosensing of Human Neural Stem Cells on Extremely Limited Anisotropic Cellular Contact. *ACS Applied Materials & Interfaces*, **2018**, 10, 33891-33900	9.5	18
92	Synthesis of single-walled carbon nanotube-incorporated polymer hydrogels via click chemistry. *Polymer Chemistry*, **2012**, 3, 2451	4.9	17
91	Novel Vapor-Phase Synthesis of Flexible, Homogeneous Organic-Inorganic Hybrid Gate Dielectric with sub 5 nm Equivalent Oxide Thickness. *ACS Applied Materials & Interfaces*, **2018**, 10, 37326-37334	9.5	17
90	Rollable Microfluidic Systems with Microscale Bending Radius and Tuning of Device Function with Reconfigurable 3D Channel Geometry. *ACS Applied Materials & Interfaces*, **2017**, 9, 11156-11166	9.5	16
89	Large-Scale, Low-Power Nonvolatile Memory Based on Few-Layer MoS2 and Ultrathin Polymer Dielectrics. *Advanced Electronic Materials*, **2019**, 5, 1800688	6.4	16
88	Ultrathin ZrO-Organic Hybrid Dielectric (EOT 3.2 nm) via Initiated Chemical Vapor Deposition for High-Performance Flexible Electronics. *ACS Applied Materials & Interfaces*, **2019**, 11, 44513-44520	9.5	16
87	High-performance thin H:SiON OLED encapsulation layer deposited by PECVD at low temperature.. *RSC Advances*, **2018**, 9, 58-64	3.7	15
86	Matrix Topography Regulates Synaptic Transmission at the Neuromuscular Junction. *Advanced Science*, **2019**, 6, 1801521	13.6	15

85	Surface-Localized Sealing of Porous Ultralow-k Dielectric Films with Ultrathin (. *ACS Nano*, **2017**, 11, 7841-7847	15.7	15
84	Direct Solvent-Free Modification of the Inner Wall of the Microchip for Rapid DNA Extraction with Enhanced Capturing Efficiency. *Macromolecular Research*, **2020**, 28, 249-256	1.9	15
83	Facilitated embedding of silver nanowires into conformally-coated iCVD polymer films deposited on cloth for robust wearable electronics. *Nanoscale*, **2017**, 9, 3399-3407	7.7	14
82	Facile Fabrication of High-Definition Hierarchical Wrinkle Structures for Investigating the Geometry-Sensitive Fate Commitment of Human Neural Stem Cells. *ACS Applied Materials & Interfaces*, **2019**, 11, 17247-17255	9.5	14
81	reliable Synthesis of Monodisperse Microparticles: Prevention of Oxygen Diffusion and Organic Solvents Using Conformal Polymeric Coating onto Poly(dimethylsiloxane) Micromold. *Langmuir*, **2013**, 29, 3474-81	4	14
80	Graphene electrode with tunable charge transport in thin-film transistors. *Nano Research*, **2018**, 11, 274-286	10	14
79	Vapor-phase synthesis of sub-15 nm hybrid gate dielectrics for organic thin film transistors. *Journal of Materials Chemistry C*, **2017**, 5, 4463-4470	7.1	13
78	Prior acquired resistance to paclitaxel relays diverse EGFR-targeted therapy persistence mechanisms. *Science Advances*, **2020**, 6, eaav7416	14.3	13
77	Polymer Thin Films with Tunable Acetylcholine-like Functionality Enable Long-Term Culture of Primary Hippocampal Neurons. *ACS Nano*, **2016**, 10, 9909-9918	16.7	13
76	Influence of adjusting the inlet channel confluence angle on mixing behaviour in inertial microfluidic mixers. *Microfluidics and Nanofluidics*, **2017**, 21, 1	2.8	13
75	A directly patternable click-active polymer film via initiated chemical vapor deposition (iCVD). *Thin Solid Films*, **2009**, 517, 3606-3611	2.2	13
74	All-Solid-State Ion Synaptic Transistor for Wafer-Scale Integration with Electrolyte of a Nanoscale Thickness. *Advanced Functional Materials*, **2021**, 31, 2010971	15.6	13
73	A hydrogel-coated membrane for highly efficient separation of microalgal bio-lipid. *Korean Journal of Chemical Engineering*, **2018**, 35, 1319-1327	2.8	13
72	An efficient isolation of foodborne pathogen using surface-modified porous sponge. *Food Chemistry*, **2019**, 270, 445-451	8.5	12
71	Heavily Crosslinked, High-k Ultrathin Polymer Dielectrics for Flexible, Low-Power Organic Thin-Film Transistors (OTFTs). *Advanced Electronic Materials*, **2020**, 6, 2000314	6.4	12
70	Solvent-Free Deposition of Ultrathin Copolymer Films with Tunable Viscoelasticity for Application to Pressure-Sensitive Adhesives. *ACS Applied Materials & Interfaces*, **2018**, 10, 32668-32677	9.5	12
69	A monolithic integration of robust, water-/oil-repellent layer onto multilayer encapsulation films for organic electronic devices. *RSC Advances*, **2015**, 5, 68485-68492	3.7	11
68	Electrothermal soft manipulator enabling safe transport and handling of thin cell/tissue sheets and bioelectronic devices. *Science Advances*, **2020**, 6,	14.3	11

67	Polymer Thin Film-Induced Tumor Spheroids Acquire Cancer Stem Cell-like Properties. *Cancer Research*, **2018**, 78, 6890-6902	10.1	11
66	Efficient organic photomemory with photography-ready programming speed. *Scientific Reports*, **2016**, 6, 30536	4.9	10
65	Conformal 3D Nanopatterning by Block Copolymer Lithography with Vapor-Phase Deposited Neutral Adlayer. *ACS Nano*, **2019**, 13, 13092-13099	16.7	10
64	A thin film encapsulation layer fabricated via initiated chemical vapor deposition and atomic layer deposition. *Journal of Applied Polymer Science*, **2014**, 131, n/a-n/a	2.9	10
63	Surface-Modified Mesh Filter for Direct Nucleic Acid Extraction and its Application to Gene Expression Analysis. *Advanced Healthcare Materials*, **2017**, 6, 1700642	10.1	10
62	Coating of an antimicrobial peptide on solid substrate via initiated chemical vapor deposition. *Journal of Industrial and Engineering Chemistry*, **2018**, 58, 51-56	6.3	9
61	Tuning the electrode work function via a vapor-phase deposited ultrathin polymer film. *Journal of Materials Chemistry C*, **2016**, 4, 831-839	7.1	9
60	Extracellular matrix-immobilized nanotopographical substrates for enhanced myogenic differentiation. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2015**, 103, 1258-66	3.5	9
59	Antibacterial Nanopillar Array for an Implantable Intraocular Lens. *Advanced Healthcare Materials*, **2020**, 9, e2000447	10.1	9
58	Stretchable active matrix of oxide thin-film transistors with monolithic liquid metal interconnects. *Applied Physics Express*, **2018**, 11, 126501	2.4	9
57	Synthesis of a series of biodegradable poly(butylene carbonate-co-isophthalate) random copolymers derived from CO2-based comonomers for sustainable packaging. *Green Chemistry*, **2020**, 22, 4570-4580	10	8
56	A High-Performance Top-Gated Graphene Field-Effect Transistor with Excellent Flexibility Enabled by an iCVD Copolymer Gate Dielectric. *Small*, **2018**, 14, 1703035	11	8
55	Systematic Control of Negative Transconductance in Organic Heterojunction Transistor for High-Performance, Low-Power Flexible Ternary Logic Circuits. *Small*, **2021**, 17, e2103365	11	8
54	Vapor-phase deposition of the fluorinated copolymer gate insulator for the p-type organic thin-film transistor. *Journal of Information Display*, **2016**, 17, 43-49	4.1	8
53	Ultrathin and Bifunctional Polymer-Nanolayer-Embedded Separator to Simultaneously Alleviate Li Dendrite Growth and Polysulfide Crossover in Li-S Batteries. *ACS Applied Energy Materials*, **2021**, 4, 611-622	6.1	8
52	Long-Term Retention of Low-Power, Nonvolatile Organic Transistor Memory Based on Ultrathin, Trilayered Dielectric Containing Charge Trapping Functionality. *Advanced Functional Materials*, **2020**, 30, 2004665	15.6	7
51	Foldable and washable textile-based OLEDs with a multi-functional near-room-temperature encapsulation layer for smart e-textiles. *Npj Flexible Electronics*, **2021**, 5,	10.7	7
50	Initiated Chemical Vapor Deposition of Polymer Films at High Process Temperature for the Fabrication of Organic/Inorganic Multilayer Thin Film Encapsulation . *Advanced Engineering Materials*, **2017**, 19, 1600870	3.5	6

49	Stimulus-Responsive Anti-Oxidizing Drug Crystals and their Ecological Implication. *Small*, **2019**, 15, e1900765	11	6
48	Three-dimensional clustering of Janus cylinders by convex curvature and hydrophobic interactions. *Soft Matter*, **2015**, 11, 4952-61	3.6	6
47	Synthesis of a Stretchable but Superhydrophobic Polymer Thin Film with Conformal Coverage and Optical Transparency. *Chemistry of Materials*, **2021**, 33, 1314-1320	9.6	6
46	Three-Dimensional Spheroid Culture on Polymer-Coated Surface Potentiate Stem Cell Functions via Enhanced Cell-Extracellular Matrix Interactions. *ACS Biomaterials Science and Engineering*, **2020**, 6, 2240-2250	5.5	5
45	A biofunctionalized viral delivery patch for spatially defined transfection. *Chemical Communications* , **2019**, 55, 2317-2320	5.8	4
44	Nanoadhesive layer to prevent protein absorption in a poly(dimethylsiloxane) microfluidic device. *BioTechniques*, **2020**, 69, 404-409	2.5	4
43	High-Fidelity, Sub-5 nm Patterns from High- Block Copolymer Films with Vapor-Deposited Ultrathin, Cross-Linked Surface-Modification Layers. *Macromolecular Rapid Communications*, **2020**, 41, e1900514	4.8	4
42	A Versatile Surface Modification Method via Vapor-phase Deposited Functional Polymer Films for Biomedical Device Applications. *Biotechnology and Bioprocess Engineering*, **2021**, 26, 1-14	3.1	4
41	Thermally Fast-Curable, "Sticky" Nanoadhesive for Strong Adhesion on Arbitrary Substrates. *ACS Applied Materials & Interfaces*, **2017**, 9, 40868-40877	9.5	3
40	Parylene based thin-film microfluidic lens array fabricated by iCVD nano-adhesive bonding. *Polymer* , **2019**, 181, 121763	3.9	3
39	Polymer-Coated Surface as an Enzyme-Free Culture Platform to Improve Human Mesenchymal Stem Cell (hMSC) Characteristics in Extended Passaging.. *ACS Applied Bio Materials*, **2020**, 3, 7654-7665	4.1	3
38	Remodeling of Adhesion Network within Cancer Spheroids via Cell-Polymer Interaction. *ACS Biomaterials Science and Engineering*, **2020**, 6, 5632-5644	5.5	3
37	Multi-Stage Organic Logic Circuits Using Via-Hole-Less Metal Interconnects. *IEEE Electron Device Letters*, **2020**, 41, 1685-1687	4.4	3
36	Large-Area, Conformal, and Uniform Synthesis of Hybrid Polymeric Film via Initiated Chemical Vapor Deposition. *Macromolecular Materials and Engineering*, **2021**, 306, 2000608	3.9	3
35	A Sub-Micron-Thick stretchable adhesive layer for the lamination of arbitrary elastomeric substrates with enhanced adhesion stability. *Chemical Engineering Journal*, **2022**, 429, 132250	14.7	3
34	Multifunctional Printable Micropattern Array for Digital Nucleic Acid Assay for Microbial Pathogen Detection. *ACS Applied Materials & Interfaces*, **2021**, 13, 3098-3108	9.5	3
33	Transparent, Ultrahigh-Refractive Index Polymer Film (~1.97) with Minimal Birefringence (*ACS Applied Materials & Interfaces*, **2021**, 13, 61629-61637	9.5	3
32	Floating gate memory based on MoS2 channel and iCVD polymer tunneling dielectric **2016**,		2

31	In situ solvent recovery by using hydrophobic/oleophilic filter during wet lipid extraction from microalgae. *Bioprocess and Biosystems Engineering*, **2019**, 42, 1447-1455	3.7	2
30	Laminated film composites of multilayered plastic film and inorganic polymer binder as an alternative to transparent and hard glass. *Polymer Journal*, **2013**, 45, 685-689	2.7	2
29	A Conformal Vapor-Phase Deposition of Poly(2-(perfluorohexyl)ethyl methacrylate) and the Hydrophobic Properties Thereof. *Nanoscience and Nanotechnology Letters*, **2015**, 7, 45-49	0.8	2
28	Surface-Modified Filter-Based Continuous Recovery of Microalgal Lipid-in-Solvent with High Recovery Efficiency, Long-Term Stability, and Cost Competitiveness.. *ACS Applied Bio Materials*, **2020**, 3, 263-272	4.1	2
27	Hf- and Ti-Based Organic/Inorganic Hybrid Dielectrics Synthesized via Chemical Vapor Phase for Advanced Gate Stack in Flexible Electronic Devices. *Advanced Electronic Materials*, **2021**, 7, 2001197	6.4	2
26	Surface Hydrophobicity Modulates the Key Characteristics of Cancer Spheroids through the Interaction with the Adsorbed Proteins. *Advanced Functional Materials*, **2021**, 31, 2100775	15.6	2
25	Hybrid Gate Dielectric of MoS2 Transistors for Enhanced Photo-Electronic Stability. *Advanced Materials Interfaces*, **2021**, 8, 2100599	4.6	2
24	Highly Pure, Length-Sorted Boron Nitride Nanotubes by Gel Column Chromatography. *Chemistry of Materials*, **2021**, 33, 4723-4732	9.6	2
23	Microfluidics-Based Pathogen Detection: A Highly Sensitive Molecular Detection Platform for Robust and Facile Diagnosis of Middle East Respiratory Syndrome (MERS) Corona Virus (Adv. Healthcare Mater. 17/2016). *Advanced Healthcare Materials*, **2016**, 5, 2146-2146	10.1	2
22	Heparin-mediated electrostatic immobilization of bFGF functional polymer films for enhanced self-renewal of human neural stem cells. *Journal of Materials Chemistry B*, **2021**, 9, 2084-2091	7.3	2
21	Multi-functional logic circuits composed of ultra-thin electrolyte-gated transistors with wafer-scale integration. *Journal of Materials Chemistry C*, **2021**, 9, 7222-7227	7.1	2
20	Conformal, Wafer-Scale and Controlled Nanoscale Doping of Semiconductors Via the iCVD Process **2018**,		2
19	Highly Reliable Charge Trap-Type Organic Non-Volatile Memory Device Using Advanced Band-Engineered Organic-Inorganic Hybrid Dielectric Stacks. *Advanced Functional Materials*, **2021**, 31, 2103291	15.6	2
18	Vertically stacked, low-voltage organic ternary logic circuits including nonvolatile floating-gate memory transistors.. *Nature Communications*, **2022**, 13, 2305	17.4	2
17	3D Hierarchical Polyaniline-Metal Hybrid Nanopillars: Morphological Control and Its Antibacterial Application. *Nanomaterials*, **2021**, 11,	5.4	1
16	Organic Device Fabrication and Integration with CVD Polymers365-389		1
15	All-in-One DNA Extraction Tube for Facilitated Real-Time Detection of Infectious Pathogens. *Advanced Healthcare Materials*, **2021**, 10, e2100430	10.1	1
14	Triboelectric energy harvester with an ultra-thin tribo-dielectric layer by initiated CVD and investigation of underlying physics in the triboelectricity **2016**,		1

13	Short-chain fluorocarbon-based polymeric coating with excellent nonwetting ability against chemical warfare agents.. *RSC Advances*, **2022**, 12, 7773-7779	3.7	1
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