Qibing Pei

List of Publications by Citations

281 papers	24,679 citations	74 h-index	153 g-index
314 ext. papers	27,350 ext. citations	9.8 avg, IF	7.18 L-index

#	Paper	IF	Citations
281	High-speed electrically actuated elastomers with strain greater than 100%. *Science*, **2000**, 287, 836-9	33.3	2430
280	Polymer light-emitting electrochemical cells. *Science*, **1995**, 269, 1086-8	33.3	1403
279	Advances in dielectric elastomers for actuators and artificial muscles. *Macromolecular Rapid Communications*, **2010**, 31, 10-36	4.8	1075
278	Elastomeric polymer light-emitting devices and displays. *Nature Photonics*, **2013**, 7, 817-824	33.9	747
277	Semiconducting Polymers: A New Class of Solid-State Laser Materials. *Science*, **1996**, 273, 1833-1836	33.3	744
276	Efficient Photoluminescence and Electroluminescence from a Soluble Polyfluorene. *Journal of the American Chemical Society*, **1996**, 118, 7416-7417	16.4	722
275	Electrochromic and highly stable poly(3,4-ethylenedioxythiophene) switches between opaque blue-black and transparent sky blue. *Polymer*, **1994**, 35, 1347-1351	3.9	590
274	Highly flexible silver nanowire electrodes for shape-memory polymer light-emitting diodes. *Advanced Materials*, **2011**, 23, 664-8	24	569
273	Polymer Light-Emitting Electrochemical Cells: In Situ Formation of a Light-Emitting p-n Junction. *Journal of the American Chemical Society*, **1996**, 118, 3922-9	16.4	540
272	High-field deformation of elastomeric dielectrics for actuators. *Materials Science and Engineering C*, **2000**, 11, 89-100	8.3	519
271	Silver nanowire percolation network soldered with graphene oxide at room temperature and its application for fully stretchable polymer light-emitting diodes. *ACS Nano*, **2014**, 8, 1590-600	16.7	516
270	Intrinsically stretchable polymer light-emitting devices using carbon nanotube-polymer composite electrodes. *Advanced Materials*, **2011**, 23, 3989-94	24	428
269	Emulsion Synthesis of Size-Tunable CH3NH3PbBr3 Quantum Dots: An Alternative Route toward Efficient Light-Emitting Diodes. *ACS Applied Materials & Interfaces*, **2015**, 7, 28128-33	9.5	361
268	Electrochemical applications of the bending beam method. 1. Mass transport and volume changes in polypyrrole during redox. *The Journal of Physical Chemistry*, **1992**, 96, 10507-10514		337
267	A Water-Based Silver-Nanowire Screen-Print Ink for the Fabrication of Stretchable Conductors and Wearable Thin-Film Transistors. *Advanced Materials*, **2016**, 28, 5986-96	24	323
266	Electronic Muscles and Skins: A Review of Soft Sensors and Actuators. *Chemical Reviews*, **2017**, 117, 11238-11268	38.1	304
265	Silver nanowire-polymer composite electrodes for efficient polymer solar cells. *Advanced Materials*, **2011**, 23, 4453-7	24	288

264	Efficient blue polymer light-emitting diodes from a series of soluble poly(paraphenylene)s. *Journal of Applied Physics*, **1996**, 79, 934	2.5	274
263	A colour-tunable, weavable fibre-shaped polymer light-emitting electrochemical cell. *Nature Photonics*, **2015**, 9, 233-238	33.9	271
262	Regioregular copolymers of 3-alkoxythiophene and their photovoltaic application. *Journal of the American Chemical Society*, **2006**, 128, 8980-6	16.4	264
261	Interpenetrating Polymer Networks for High-Performance Electroelastomer Artificial Muscles. *Advanced Materials*, **2006**, 18, 887-891	24	228
260	Dielectric elastomers: generator mode fundamentals and applications **2001**,		226
259	Intrinsically stretchable and transparent thin-film transistors based on printable silver nanowires, carbon nanotubes and an elastomeric dielectric. *Nature Communications*, **2015**, 6, 7647	17.4	225
258	Elastomeric transparent capacitive sensors based on an interpenetrating composite of silver nanowires and polyurethane. *Applied Physics Letters*, **2013**, 102, 083303	3.4	220
257	Efficient blue-green and white light-emitting electrochemical cells based on poly[9,9-bis(3,6-dioxaheptyl)-fluorene-2,7-diyl]. *Journal of Applied Physics*, **1997**, 81, 3294-3298	2.5	217
256	Highly efficient electrocaloric cooling with electrostatic actuation. *Science*, **2017**, 357, 1130-1134	33.3	206
255	Recent Advances in Stretchable and Transparent Electronic Materials. *Advanced Electronic Materials* , **2016**, 2, 1500407	6.4	201
254	Standards for dielectric elastomer transducers. *Smart Materials and Structures*, **2015**, 24, 105025	3.4	180
253	Compliant silver nanowire-polymer composite electrodes for bistable large strain actuation. *Advanced Materials*, **2012**, 24, 1321-7	24	177
252	Large-area display textiles integrated with functional systems. *Nature*, **2021**, 591, 240-245	50.4	177
251	Fault-Tolerant Dielectric Elastomer Actuators using Single-Walled Carbon Nanotube Electrodes. *Advanced Materials*, **2008**, 20, 621-625	24	176
250	Multiple-degrees-of-freedom electroelastomer roll actuators. *Smart Materials and Structures*, **2004**, 13, N86-N92	3.4	172
249	Efficient blue electroluminescence from a fluorinated polyquinoline. *Applied Physics Letters*, **1994**, 65, 1272-1274	3.4	172
248	Efficient flexible phosphorescent polymer light-emitting diodes based on silver nanowire-polymer composite electrode. *Advanced Materials*, **2011**, 23, 5563-7	24	170
247	Electrochemical applications of the bending beam method. 2. Electroshrinking and slow relaxation in polypyrrole. *The Journal of Physical Chemistry*, **1993**, 97, 6034-6041		168

246	Solution-processed DPP-based small molecule that gives high photovoltaic efficiency with judicious device optimization. *ACS Applied Materials & Interfaces*, **2013**, 5, 2033-9	9.5	163
245	Dielectric elastomer artificial muscle actuators: toward biomimetic motion **2002**, 4695, 126		160
244	A healable, semitransparent silver nanowire-polymer composite conductor. *Advanced Materials*, **2013**, 25, 4186-91	24	159
243	Conjugated polymers and the bending cantilever method: Electrical muscles and smart devices. *Advanced Materials*, **1992**, 4, 277-278	24	151
242	Intrinsically stretchable transparent electrodes based on silver-nanowire-crosslinked-polyacrylate composites. *Nanotechnology*, **2012**, 23, 344002	3.4	145
241	Healable capacitive touch screen sensors based on transparent composite electrodes comprising silver nanowires and a furan/maleimide diels-alder cycloaddition polymer. *ACS Nano*, **2014**, 8, 12874-82	16.7	142
240	Highly stretchable, conductive, and transparent nanotube thin films. *Applied Physics Letters*, **2009**, 94, 161108	3.4	142
239	Protonation and deprotonation of polypyrrole chain in aqueous solutions. *Synthetic Metals*, **1991**, 45, 35-48	3.6	142
238	Plastic lasers: Semiconducting polymers as a new class of solid-state laser materials. *Synthetic Metals*, **1997**, 84, 455-462	3.6	138
237	Thermally Stable Silver Nanowire–Polyimide Transparent Electrode Based on Atomic Layer Deposition of Zinc Oxide on Silver Nanowires. *Advanced Functional Materials*, **2015**, 25, 7512-7520	15.6	134
236	Electroelastomers: applications of dielectric elastomer transducers for actuation, generation, and smart structures **2002**,		132
235	Electroelastomer rolls and their application for biomimetic walking robots. *Synthetic Metals*, **2003**, 135-136, 129-131	3.6	125
234	Imaging the structure of the p-n junction in polymer light-emitting electrochemical cells. *Advanced Materials*, **1996**, 8, 985-987	24	124
233	Polymer Light-Emitting Electrochemical Cells for High-Efficiency Low-Voltage Electroluminescent Devices. *Journal of Display Technology*, **2007**, 3, 211-224		123
232	A Flexible and Transparent Thin Film Heater Based on a Silver Nanowire/Heat-resistant Polymer Composite. *Macromolecular Materials and Engineering*, **2014**, 299, 1403-1409	3.9	122
231	Charge-carrier dynamics in hybrid plasmonic organic solar cells with Ag nanoparticles. *Applied Physics Letters*, **2011**, 98, 253302	3.4	121
230	1,3,4-Oxadiazole-Containing Polymers as Electron-Injection and Blue Electroluminescent Materials in Polymer Light-Emitting Diodes. *Chemistry of Materials*, **1995**, 7, 1568-1575	9.6	114
229	Stretchable Light-Emitting Diodes with Organometal-Halide-Perovskite-Polymer Composite Emitters. *Advanced Materials*, **2017**, 29, 1607053	24	113

228	Dielectric Elastomer Artificial Muscle: Materials Innovations and Device Explorations. *Accounts of Chemical Research*, **2019**, 52, 316-325	24.3	113
227	An elastomeric transparent composite electrode based on copper nanowires and polyurethane. *Journal of Materials Chemistry C*, **2014**, 2, 1298-1305	7.1	104
226	Electrochemical muscles: Micromachining fingers and corkscrews. *Advanced Materials*, **1993**, 5, 630-632	24	104
225	Effects of C70 derivative in low band gap polymer photovoltaic devices: Spectral complementation and morphology optimization. *Applied Physics Letters*, **2006**, 89, 153507	3.4	103
224	Controllable and reversible tuning of material rigidity for robot applications. *Materials Today*, **2018**, 21, 563-576	21.8	101
223	Voltage controlled two color light-emitting electrochemical cells. *Applied Physics Letters*, **1996**, 68, 2708-2710	3.4	100
222	Macrofibers with High Mechanical Performance Based on Aligned Bacterial Cellulose Nanofibers. *ACS Applied Materials & Interfaces*, **2017**, 9, 20330-20339	9.5	93
221	A solution processed flexible nanocomposite electrode with efficient light extraction for organic light emitting diodes. *Scientific Reports*, **2014**, 4, 4307	4.9	89
220	Electrochemical applications of the bending beam method; a novel way to study ion transport in electroactive polymers. *Solid State Ionics*, **1993**, 60, 161-166	3.3	89
219	An electrically-conductive composite prepared by electrochemical polymerization of pyrrole into polyurethane. *Synthetic Metals*, **1987**, 22, 145-156	3.6	88
218	Morphological/nanostructural control toward intrinsically stretchable organic electronics. *Chemical Society Reviews*, **2019**, 48, 1741-1786	58.5	87
217	Large-strain, rigid-to-rigid deformation of bistable electroactive polymers. *Applied Physics Letters*, **2009**, 95, 192904	3.4	84
216	Electrochemical muscles: Bending strips built from conjugated polymers. *Synthetic Metals*, **1993**, 57, 3718-3723	3.6	83
215	Synthesizing a new dielectric elastomer exhibiting large actuation strain and suppressed electromechanical instability without prestretching. *Journal of Polymer Science, Part B: Polymer Physics*, **2013**, 51, 197-206	2.6	82
214	Stabilizing the Dynamic pi Junction in Polymer Light-Emitting Electrochemical Cells. *Journal of Physical Chemistry Letters*, **2011**, 2, 367-372	6.4	82
213	Ultrahigh strain response of field-actuated elastomeric polymers **2000**,		82
212	Bending bilayer strips built from polyaniline for artificial electrochemical muscles. *Smart Materials and Structures*, **1993**, 2, 1-6	3.4	80
211	Improving the mechanical properties of cellulose diacetate fibers via using an ionic liquid as processing solvent. *RSC Advances*, **2016**, 6, 1-7	3.7	79

210	High-Z Sensitized Plastic Scintillators: A Review. *Advanced Materials*, **2018**, 30, e1706956	24	78
209	Cohesively Enhanced Conductivity and Adhesion of Flexible Silver Nanowire Networks by Biocompatible Polymer Sol–Gel Transition. *Advanced Functional Materials*, **2015**, 25, 1581-1587	15.6	78
208	Operating mechanism of light-emitting electrochemical cells. *Nature Materials*, **2008**, 7, 167; author reply 168	27	76
207	Efficient blue light-emitting diodes from a soluble poly (para-phenylene) internal field emission measurement of the energy gap in semiconducting polymers. *Synthetic Metals*, **1996**, 78, 263-267	3.6	74
206	Electron injection polymer for polymer light-emitting diodes. *Journal of Applied Physics*, **1995**, 77, 4807-4809	2.5	72
205	Applications of dielectric elastomer actuators **2001**, 4329, 335		70
204	Light-Emitting Electrochemical Cells with Crown Ether as Solid Electrolyte. *Journal of the Electrochemical Society*, **1997**, 144, L317-L320	3.9	69
203	Transparent Ultra-High-Loading Quantum Dot/Polymer Nanocomposite Monolith for Gamma Scintillation. *ACS Nano*, **2017**, 11, 6422-6430	16.7	66
202	An aluminum nanoparticle–acrylate copolymer nanocomposite as a dielectric elastomer with a high dielectric constant. *Journal of Materials Chemistry C*, **2014**, 2, 1658	7.1	66
201	Interpenetrating networks of elastomers exhibiting 300% electrically-induced area strain. *Smart Materials and Structures*, **2007**, 16, S280-S287	3.4	66
200	Electrode potentials of electronically conducting polymer polypyrrole. *Electrochimica Acta*, **1992**, 37, 1075-1081	6.7	66
199	Highly flexible organometal halide perovskite quantum dot based light-emitting diodes on a silver nanowire–polymer composite electrode. *Journal of Materials Chemistry C*, **2017**, 5, 531-538	7.1	62
198	High-field electrostriction of elastomeric polymer dielectrics for actuation **1999**,		61
197	Preparation of Solution-Processable Reduced Graphene Oxide/Polybenzoxazole Nanocomposites with Improved Dielectric Properties. *Macromolecules*, **2015**, 48, 365-372	5.5	59
196	Bright blue electroluminescence from an oxadiazole-containing copolymer. *Advanced Materials*, **1995**, 7, 559-561	24	58
195	Bistable large-strain actuation of interpenetrating polymer networks. *Advanced Materials*, **2012**, 24, 6513-9	24	57
194	Poly[3-(4-octylphenyl)thiophene], a new processible conducting polymer. *Macromolecules*, **1992**, 25, 4297-4301	5.5	56
193	Fully Solution-Based Fabrication of Flexible Light-Emitting Device at Ambient Conditions. *Journal of Physical Chemistry C*, **2013**, 117, 16632-16639	3.8	54

192	Fully bendable polymer light emitting devices with carbon nanotubes as cathode and anode. *Applied Physics Letters*, **2009**, 95, 203304	3.4	54
191	A Fluorene□Oxadiazole Copolymer for White Light-Emitting Electrochemical Cells. *Macromolecules*, **2010**, 43, 1714-1718	5.5	54
190	Phosphorescent light-emitting electrochemical cell. *Applied Physics Letters*, **2002**, 81, 4278-4280	3.4	54
189	Measurement of the energy gap in semiconducting polymers using the light-emitting electrochemical cell. *Chemical Physics Letters*, **1996**, 259, 465-468	2.5	54
188	Efficient white polymer light-emitting electrochemical cells. *Materials Horizons*, **2015**, 2, 338-343	14.4	50
187	Long lifetime, fault-tolerant freestanding actuators based on a silicone dielectric elastomer and self-clearing carbon nanotube compliant electrodes. *RSC Advances*, **2013**, 3, 2272	3.7	50
186	The role of H+ ions in the electrochemical polymerization of pyrrole. *Die Makromolekulare Chemie*, **1991**, 192, 1263-1273		50
185	Silver Nanowire-Bacterial Cellulose Composite Fiber-Based Sensor for Highly Sensitive Detection of Pressure and Proximity. *ACS Nano*, **2020**, 14, 15428-15439	16.7	50
184	Bistable and Reconfigurable Photonic Crystals□Electroactive Shape Memory Polymer Nanocomposite for Ink-Free Rewritable Paper. *Advanced Functional Materials*, **2018**, 28, 1802430	15.6	50
183	Synthesizing a Healable Stretchable Transparent Conductor. *ACS Applied Materials & Interfaces* , **2015**, 7, 14140-9	9.5	49
182	Monolithically Integrated Self-Charging Power Pack Consisting of a Silicon Nanowire Array/Conductive Polymer Hybrid Solar Cell and a Laser-Scribed Graphene Supercapacitor. *ACS Applied Materials & Interfaces*, **2018**, 10, 15609-15615	9.5	49
181	Synthesis of bulk-size transparent gadolinium oxide-polymer nanocomposites for gamma ray spectroscopy. *Journal of Materials Chemistry C*, **2013**, 1, 1970-1976	7.1	47
180	Polymer solution light-emitting devices. *Applied Physics Letters*, **1999**, 74, 2081-2083	3.4	47
179	Conjugated polymers as smart materials, gas sensors and actuators using bending beams. *Synthetic Metals*, **1993**, 57, 3730-3735	3.6	47
178	Hierarchically Structured Stretchable Conductive Hydrogels for High-Performance Wearable Strain Sensors and Supercapacitors. *Matter*, **2020**, 3, 1196-1210	12.7	46
177	Mechanically robust reduced graphene oxide/bacterial cellulose film obtained via biosynthesis for flexible supercapacitor. *Chemical Engineering Journal*, **2019**, 360, 829-837	14.7	46
176	Facile Single-Precursor Synthesis and Surface Modification of Hafnium Oxide Nanoparticles for Nanocomposite □Ray Scintillators. *Advanced Functional Materials*, **2015**, 25, 4607-4616	15.6	45
175	Electrochemical formation of stable p-i-n junction in conjugated polymer thin films. *Journal of Physical Chemistry B*, **2009**, 113, 8481-6	3.4	45

174	Flexible and stretchable electrodes for next generation polymer electronics: a review. *Science China Chemistry*, **2016**, 59, 659-671	7.9	44
173	Removable Large-Area Ultrasmooth Silver Nanowire Transparent Composite Electrode. *ACS Applied Materials & Interfaces*, **2017**, 9, 4733-4741	9.5	43
172	Stretchable Organometal-Halide-Perovskite Quantum-Dot Light-Emitting Diodes. *Advanced Materials*, **2019**, 31, e1807516	24	43
171	A rotary joint for a flapping wing actuated by dielectric elastomers: design and experiment. *Meccanica*, **2015**, 50, 2815-2824	2.1	43
170	Multifunctional electroelastomer roll actuators and their application for biomimetic walking robots **2003**,		43
169	Spatial exciton allocation strategy with reduced energy loss for high-efficiency fluorescent/phosphorescent hybrid white organic light-emitting diodes. *Materials Horizons*, **2017**, 4, 641-648	14.4	42
168	Phenomena of nonlinear oscillation and special resonance of a dielectric elastomer minimum energy structure rotary joint. *Applied Physics Letters*, **2015**, 106, 133504	3.4	42
167	New Dielectric Elastomers with Variable Moduli. *Advanced Functional Materials*, **2015**, 25, 4827-4836	15.6	42
166	Nonlinear intermodulation distortion suppression in coherent analog fiber optic link using electro-optic polymeric dual parallel Mach-Zehnder modulator. *Optics Express*, **2011**, 19, 7865-71	3.3	42
165	Poly(m-phenylene): Conjugated Polymer Host with High Triplet Energy for Efficient Blue Electrophosphorescence. *Macromolecules*, **2010**, 43, 9608-9612	5.5	42
164	Mitigation of Electrical Failure of Silver Nanowires under Current Flow and the Application for Long Lifetime Organic Light-Emitting Diodes. *Advanced Electronic Materials*, **2016**, 2, 1600167	6.4	41
163	Polymer light-emitting electrochemical cells: Recent developments to stabilize the p-i-n junction and explore novel device applications. *Science China Chemistry*, **2013**, 56, 1075-1086	7.9	41
162	Coupled nonlinear oscillation and stability evolution of viscoelastic dielectric elastomers. *Soft Matter*, **2015**, 11, 7483-93	3.6	40
161	Effects of structure-manipulated molecular stacking on solid-state optical properties and device performances. *Polymer Chemistry*, **2012**, 3, 2832	4.9	40
160	Conjugated Polymer as Host for High Efficiency Blue and White Electrophosphorescence. *Macromolecules*, **2011**, 44, 2451-2456	5.5	40
159	E-beam deposited Ag-nanoparticles plasmonic organic solar cell and its absorption enhancement analysis using FDTD-based cylindrical nano-particle optical model. *Optics Express*, **2012**, 20, 12649-57	3.3	39
158	Highly flexible polymer light-emitting devices using carbon nanotubes as both anodes and cathodes. *Journal of Photonics for Energy*, **2011**, 1, 011003	1.2	39
157	Solid state polymer light-emitting electrochemical cells: Recent developments. *Synthetic Metals*, **1997**, 85, 1229-1232	3.6	39

156	Enhanced dielectric performance of PDMS-based three-phase percolative nanocomposite films incorporating a high dielectric constant ceramic and conductive multi-walled carbon nanotubes. *Journal of Materials Chemistry C*, **2018**, 6, 10829-10837	7.1	39
155	A Solid-State Intrinsically Stretchable Polymer Solar Cell. *ACS Applied Materials & Interfaces*, **2017**, 9, 40523-40532	9.5	38
154	Efficient white polymer light-emitting diodes employing a silver nanowire-polymer composite electrode. *Physical Chemistry Chemical Physics*, **2012**, 14, 14249-54	3.6	38
153	Dielectric oil coated single-walled carbon nanotube electrodes for stable, large-strain actuation with dielectric elastomers. *Sensors and Actuators A: Physical*, **2009**, 155, 278-284	3.9	38
152	Light-emitting electrochemical cells from a blend of p- and n-type luminescent conjugated polymers. *Applied Physics Letters*, **1997**, 70, 1926-1928	3.4	38
151	Recent progress on electroelastomer artificial muscles and their application for biomimetic robots **2004**, 5385, 41		37
150	A cascade electrocaloric cooling device for large temperature lift. *Nature Energy*, **2020**, 5, 996-1002	62.3	36
149	Planar light-emitting devices fabricated with luminescent electrochemical polyblends. *Applied Physics Letters*, **1997**, 70, 934-936	3.4	35
148	Electrochemical preparation of electrically conducting polyurethane/polyaniline composite. *Journal of Applied Polymer Science*, **1989**, 38, 1819-1828	2.9	35
147	Elastomeric Light Emitting Polymer Enhanced by Interpenetrating Networks. *ACS Applied Materials & Interfaces*, **2016**, 8, 32504-32511	9.5	34
146	All-silicone prestrain-locked interpenetrating polymer network elastomers: free-standing silicone artificial muscles with improved performance and robustness. *Smart Materials and Structures*, **2013**, 22, 055022	3.4	34
145	Electrochemical polymerization of pyrrole in aqueous buffer solutions. *Journal of Electroanalytical Chemistry*, **1992**, 322, 153-166	4.1	34
144	Multifunctional electroelastomer rolls and their application for biomimetic walking robots **2002**, 4698, 246		33
143	Reduced polyaniline decorated reduced graphene oxide/polyimide nanocomposite films with enhanced dielectric properties and thermostability. *Composites Part A: Applied Science and Manufacturing*, **2018**, 109, 578-584	8.4	32
142	Efficient One-Pot Synthesis of Colloidal Zirconium Oxide Nanoparticles for High-Refractive-Index Nanocomposites. *ACS Applied Materials & Interfaces*, **2016**, 8, 4795-802	9.5	32
141	Tubular dielectric elastomer actuator for active fluidic control. *Smart Materials and Structures*, **2015** , 24, 105016	3.4	32
140	Viscoelastic creep elimination in dielectric elastomer actuation by preprogrammed voltage. *Applied Physics Letters*, **2014**, 105, 212904	3.4	32
139	Interpenetrating polymer networks based on acrylic elastomers and plasticizers with improved actuation temperature range. *Polymer International*, **2010**, 59, 384-390	3.3	32

138	Efficient Light Extraction of Organic Light-Emitting Diodes on a Fully Solution-Processed Flexible Substrate. *Advanced Optical Materials*, **2017**, 5, 1700307	8.1	31
137	Refreshable Tactile Display Based on a Bistable Electroactive Polymer and a Stretchable Serpentine Joule Heating Electrode. *ACS Applied Materials & Interfaces*, **2018**, 10, 24807-24815	9.5	30
136	Solid-state polymer light-emitting electrochemical cells. *Synthetic Metals*, **1996**, 80, 131-136	3.6	30
135	A general gelation strategy for 1D nanowires: dynamically stable functional gels for 3D printing flexible electronics. *Nanoscale*, **2018**, 10, 20096-20107	7.7	30
134	Synthesis of soluble poly(alkylthiophenes) which are thermally stable in the doped state. *Synthetic Metals*, **1993**, 55, 1227-1231	3.6	29
133	Multi-Colored Light-Emitting Electrochemical Cells Based on Thermal Activated Delayed Fluorescence Host. *Scientific Reports*, **2017**, 7, 1524	4.9	28
132	Electro-adaptive microfluidics for active tuning of channel geometry using polymer actuators. *Microfluidics and Nanofluidics*, **2013**, 14, 345-358	2.8	28
131	Transparent Perovskite Light-Emitting Touch-Responsive Device. *ACS Nano*, **2017**, 11, 11368-11375	16.7	28
130	Dielectric elastomer transducers with enhanced force output and work density. *Applied Physics Letters*, **2012**, 100, 262902	3.4	28
129	Wide band gap copolymers based on phthalimide: synthesis, characterization, and photovoltaic properties with 3.70% efficiency. *Polymer Chemistry*, **2013**, 4, 2174	4.9	27
128	Rollerball-Pen-Drawing Technology for Extremely Foldable Paper-Based Electronics. *Advanced Electronic Materials*, **2017**, 3, 1700098	6.4	26
127	Proton doping of reduced polypyrrole. *Synthetic Metals*, **1993**, 61, 275-278	3.6	26
126	Capacitive Energy Harvesting Using Highly Stretchable Silicone–Carbon Nanotube Composite Electrodes. *Advanced Energy Materials*, **2014**, 4, 1300659	21.8	25
125	The routes towards processible and stable conducting poly(thiophene)s. *Synthetic Metals*, **1993**, 55, 1221-1226	3.6	25
124	Phase-Changing Bistable Electroactive Polymer Exhibiting Sharp Rigid-to-Rubbery Transition. *Macromolecules*, **2016**, 49, 134-140	5.5	24
123	Synthesis and charge-transporting properties of electron-deficient CN2–fluorene based D–A copolymers. *Polymer Chemistry*, **2012**, 3, 2170	4.9	24
122	Electrochemical Synthesis and Photovoltaic Property of Cadmium Sulfide–Polybithiophene Interdigitated Nanohybrid Thin Films. *Journal of Physical Chemistry C*, **2008**, 112, 19765-19769	3.8	24
121	Electrolyte Gated Polymer Light-Emitting Transistor. *Advanced Materials Technologies*, **2016**, 1, 1600103	6.8	23

120	Dissipative performance of dielectric elastomers under various voltage waveforms. *Soft Matter*, **2016**, 12, 2348-56	3.6	23
119	Homogeneous Freestanding Luminescent Perovskite Organogel with Superior Water Stability. *Advanced Materials*, **2019**, 31, e1902928	24	23
118	Synthesis and characterization of a main-chain-type conjugated copolymer containing rare earth with photocrosslinkable group. *Journal of Polymer Science Part A*, **2007**, 45, 388-394	2.5	22
117	Electroelastomers: Conjugated poly(3-octylthiophene) gels with controlled crosslinking. *Synthetic Metals*, **1993**, 57, 3724-3729	3.6	22
116	Optimizing the Output of a Human-Powered Energy Harvesting System With Miniaturization and Integrated Control. *IEEE Sensors Journal*, **2014**, 14, 2084-2091	4	21
115	Photoluminescence quenching of conjugated polymer nanocomposites for gamma ray detection. *Nanotechnology*, **2008**, 19, 505503	3.4	21
114	Fundamentals of Materials Selection for Light-Emitting Electrochemical Cells. *Advanced Functional Materials*, **2020**, 30, 1909102	15.6	20
113	A Solution Processed Flexible Nanocomposite Substrate with Efficient Light Extraction via Periodic Wrinkles for White Organic Light-Emitting Diodes. *Advanced Optical Materials*, **2018**, 6, 1801015	8.1	19
112	Solution-Processed Warm White Organic Light-Emitting Diodes Based on a Blue Thermally Activated Delayed Fluorescence Dendrimer. *ChemPlusChem*, **2018**, 83, 274-278	2.8	18
111	Preparation of multiblock copolymers step-wise addition of l-lactide and trimethylene carbonate. *Chemical Science*, **2018**, 9, 2168-2178	9.4	18
110	Tactile feedback display with spatial and temporal resolutions. *Scientific Reports*, **2013**, 3, 2521	4.9	18
109	Fluorescence resonance energy transfer in conjugated polymer composites for radiation detection. *Physical Chemistry Chemical Physics*, **2008**, 10, 1848-51	3.6	18
108	Poly(3-octylthiophene-co-3-methylthiophene), a processible and stable conducting copolymer. *Synthetic Metals*, **1992**, 46, 353-357	3.6	17
107	Pulse shape discrimination properties of plastic scintillators incorporating a rationally designed highly soluble and polymerizable derivative of 9,10-diphenylanthracene. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2016**, 825, 40-50	1.2	16
106	Improvement on output torque of dielectric elastomer minimum energy structures. *Applied Physics Letters*, **2015**, 107, 063505	3.4	16
105	Gram-Scale Synthesis of Blue-Emitting CHNHPbBr Quantum Dots Through Phase Transfer Strategy. *Frontiers in Chemistry*, **2018**, 6, 444	5	16
104	Dielectric Elastomers for Actuators and Artificial Muscles **2012**, 1-56		16
103	Gate-Tunable Electron Injection Based Organic Light-Emitting Diodes for Low-Cost and Low-Voltage Active Matrix Displays. *ACS Applied Materials & Interfaces*, **2017**, 9, 16750-16755	9.5	15

102	Electromechanical instabilities of thermoplastics: Theory and in situ observation. *Applied Physics Letters*, **2012**, 101, 141911	3.4	14
101	Electrically conducting copolymers from 3-octylthiophene and 3-methylthiophene. *Polymer*, **1993**, 34, 247-252	3.9	14
100	Stable and High-Strain Dielectric Elastomer Actuators Based on a Carbon Nanotube-Polymer Bilayer Electrode. *Advanced Functional Materials*, **2021**, 31, 2008321	15.6	14
99	Partial ligand exchange as a critical approach to the synthesis of transparent ytterbium fluoride–polymer nanocomposite monoliths for gamma ray scintillation. *Journal of Materials Chemistry C*, **2016**, 4, 3654-3660	7.1	13
98	A new bistable electroactive polymer for prolonged cycle lifetime of refreshable Braille displays **2014**,		13
97	High electromechanical performance of electroelastomers based on interpenetrating polymer networks **2008**,		13
96	Spectroscopic evidence for asymmetric polaron states in poly[3-(4-octylphenyl)-thiophene].. *Solid State Communications*, **1993**, 87, 265-267	1.6	13
95	Skin temperature-triggered, debonding-on-demand sticker for a self-powered mechanosensitive communication system. *Matter*, **2021**, 4, 1962-1974	12.7	13
94	Electrolyte-Gated Red, Green, and Blue Organic Light-Emitting Diodes. *ACS Applied Materials & Interfaces*, **2017**, 9, 12647-12653	9.5	12
93	Self-Actuating Electrocaloric Cooling Fibers. *Advanced Energy Materials*, **2020**, 10, 1903902	21.8	12
92	Realization of Large-Scale Polymer Solar Cells Using Ultrasonic Spray Technique Via Solvent Engineering. *Solar Rrl*, **2018**, 2, 1800064	7.1	12
91	Variable Stiffness Materials. *Soft Robotics*, **2016**, 3, 1-2	9.2	12
90	Dielectric elastomer actuators for active microfluidic control **2013**,		12
89	Fault-tolerant silicone dielectric elastomers. *International Journal of Smart and Nano Materials*, **2010**, 1, 40-52	3.6	12
88	Conjugated polymers for radiation detection. *Annual Reports on the Progress of Chemistry Section C*, **2011**, 107, 298		12
87	Bistable electroactive polymer for refreshable Braille display with improved actuation stability **2012**,		12
86	Study on core free rolled actuator based on soft dielectric EAP **2008**,		12
85	Ultra-High Strain Response of Elastomeric Polymer Dielectrics. *Materials Research Society Symposia Proceedings*, **1999**, 600, 119		12

84	Flexible graphene composites with high thermal conductivity as efficient heat sinks in high-power LEDs. *Journal Physics D: Applied Physics*, **2019**, 52, 025103	3	12
83	The Feasibility of Healable Electronics and Mechanical Behavior of Silver Nanowire (AgNW)/Healable Polymer Composite. *Advanced Materials Technologies*, **2018**, 3, 1700364	6.8	11
82	Factors influencing the performance of dielectric elastomer energy harvesters **2010**,		11
81	Self-clearable carbon nanotube electrodes for improved performance of dielectric elastomer actuators **2008**,		11
80	Intensification of Vertical Phase Separation for Efficient Polymer Solar Cell via Piecewise Spray Assisted by a Solvent Driving Force. *Solar Rrl*, **2020**, 4, 1900458	7.1	11
79	Electrolyte-gated light-emitting transistors: working principle and applications. *Materials Chemistry Frontiers*, **2018**, 2, 253-263	7.8	11
78	Study of White Electroluminescence from a Single-Component Polymer Using an Electrolyte-Gated Diode. *Journal of Physical Chemistry C*, **2017**, 121, 10112-10118	3.8	10
77	An ambipolar poly(meta-phenylene) copolymer with high triplet energy to host blue and green electrophosphorescence. *Journal of Materials Chemistry*, **2011**, 21, 9772		10
76	Refreshable tactile displays based on bistable electroactive polymer **2011**,		10
75	Electrophosphorescent Polymers for High-Efficiency Light-Emitting Diodes. *Current Organic Chemistry*, **2010**, 14, 2133-2144	1.7	10
74	Polyaniline nanofibers as a novel electrode material for fault-tolerant dielectric elastomer actuators **2008**,		10
73	Characterization of electroelastomers based on interpenetrating polymer networks **2007**,		10
72	New electrode materials for dielectric elastomer actuators **2007**,		10
71	Intrinsically stretchable field-effect transistors. *MRS Bulletin*, **2017**, 42, 131-137	3.2	9
70	Atmospheric and Aqueous Deposition of Polycrystalline Metal Oxides Using Mist-CVD for Highly Efficient Inverted Polymer Solar Cells. *Nano Letters*, **2015**, 15, 4948-54	11.5	9
69	Long lifetime dielectric elastomer actuators under continuous high strain actuation **2009**,		9
68	Raman studies of optical phonons in vertical cadmium sulfide nanorod arrays. *Journal of Materials Research*, **2006**, 21, 2911-2915	2.5	9
67	Stackable Resistive Memory Device Using Photo Cross-linkable Copolymer **2007**,		9

66	Synthesis of new processable 3-substituted polythiophenes. *Synthetic Metals*, **1993**, 55, 1260-1265	3.6	9
65	A unimorph nanocomposite dielectric elastomer for large out-of-plane actuation.. *Science Advances*, **2022**, 8, eabm6200	14.3	9
64	Purified polar polyfluorene for light-emitting diodes and light-emitting electrochemical cells. *Chinese Journal of Polymer Science (English Edition)*, **2012**, 30, 503-510	3.5	8
63	Polymer Optical Waveguide Switch Using Thermo-Optic Total-Internal-Reflection and Strain-Effect. *IEEE Photonics Technology Letters*, **2010**, 22, 197-199	2.2	8
62	Highly efficient blue phosphorescent polymer light-emitting diodes by using interfacial modification. *Applied Physics Letters*, **2011**, 98, 201110	3.4	8
61	A facile route to bulk high-Z polymer composites for gamma ray scintillation. *Chemical Communications*, **2008**, 6008-10	5.8	8
60	Conductive liquid metal elastomer thin films with multifunctional electro-mechanical properties. *Multifunctional Materials*, **2020**, 3, 044001	5.2	8
59	Morphological study of an intrinsically stretchable photovoltaic bulk heterojunction. *Journal of Polymer Science, Part B: Polymer Physics*, **2018**, 56, 814-820	2.6	7
58	Fluorene-Benzothiadiazole Copolymer for Single Component Green Light-Emitting Electrochemical Cells. *Journal of Display Technology*, **2013**, 9, 476-482		7
57	Bistable electroactive polymers (BSEP): large-strain actuation of rigid polymers **2010**,		7
56	In situpreparation of free-standing nanoporous alumina template for polybithiophene nanotube arrays with a concourse base. *Nanotechnology*, **2007**, 18, 095602	3.4	7
55	Electro-oxidative polymerization of aniline on platinum anodes coated with polyurethane film. *Synthetic Metals*, **1989**, 30, 351-358	3.6	7
54	Dielectric elastomers: past, present, and potential future **2018**,		7
53	Electrocaloric cooling over high device temperature span. *Joule*, **2021**, 5, 780-793	27.8	7
52	Plastic scintillators based on thermally activated delayed fluorescence dyes. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2019**, 940, 185-198	1.2	6
51	Stretchable Transparent Wireless Charging Coil Fabricated by Negative Transfer Printing. *ACS Applied Materials & Interfaces*, **2019**, 11, 40677-40684	9.5	6
50	Tunable active vibration attenuation using highly deformable dielectric elastomers. *Smart Materials and Structures*, **2015**, 24, 115033	3.4	6
49	Dielectric Elastomers for Direct Wind-to-Electricity Power Generation **2009**,		6

48	Metal-slotted polymer optical waveguide device. *Applied Physics Letters*, **2007**, 90, 243507	3.4	6
47	Structures and Materials in Stretchable Electroluminescent Devices. *Advanced Materials*, **2021**, e2106184	24	6
46	A Phase-Changing Polymer Film for Broadband Smart Window Applications. *Macromolecular Rapid Communications*, **2020**, 41, e2000290	4.8	6
45	A Self-Conformable Smart Skin with Sensing and Variable Stiffness Functions. *Advanced Intelligent Systems*, **2019**, 1, 1900054	6	5
44	Photoassisted Corona Poled YLD-124/DR1-co-PMMA Electrooptic Device Using Photoisomerization. *IEEE Photonics Technology Letters*, **2011**, 23, 845-847	2.2	5
43	New high-performance electroelastomer based on interpenetrating polymer networks **2006**, 6168, 70		5
42	Highly conjugated polypyrrole on multiwalled carbon nanotube templates analyzed by Raman spectroscopy **2007**,		5
41	Multifunctional Electroelastomer Roll Actuators and Their Application for Biomimetic Walking Robots **2003**,		5
40	Dual-Stimuli-Responsive Polymer Composite with Ultrawide Tunable Stiffness Range Triggered by Water and Temperature. *ACS Applied Polymer Materials*, **2020**, 2, 2008-2015	4.3	5
39	A Plastic Scintillator Based on an Efficient Thermally Activated Delayed Fluorescence Emitter 9-(4-(4,6-diphenyl-1,3,5-triazin-2-yl)-2-methylphenyl)-3,6-dioctyl-9H-carbazole for Pulse Shape Discrimination Measurement. *Advanced Optical Materials*, **2021**, 9, 2001975	8.1	5
38	Synthesis and electromechanical characterization of a new acrylic dielectric elastomer with high actuation strain and dielectric strength **2013**,		4
37	Electric lithography by electrochemical polymerization. *Applied Physics Letters*, **2005**, 87, 124106	3.4	4
36	Automatically Modulated Thermoresponsive Film Based on a Phase-Changing Copolymer. *Chemistry of Materials*, **2021**, 33, 7232-7241	9.6	4
35	(Invited) Intrinsically-Stretchable, Transparent Thin Film Transistors. *ECS Transactions*, **2016**, 75, 205-212	1	3
34	Optimizing the configuration and control of a novel human-powered energy harvesting system **2013**,		3
33	Applications of fluorene moiety containing polymers for improved scintillation light yield. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2017**, 868, 59-65	1.2	3
32	Driving low-power wearable systems with an adaptively-controlled foot-strike scavenging platform **2013**,		3
31	Multilayer stack actuator made from new prestrain-free dielectric elastomers **2013**,		3

30	MULTIPLE-DEGREES-OF-FREEDOM ROLL ACTUATORS **2008**, 91-102		3
29	Ytterbium fluoride loaded plastic scintillators for γ-ray spectroscopy **2016**,		3
28	Scintillation Liquids Loaded with Hafnium Oxide Nanoparticles for Spectral Resolution of γ-Rays. *ACS Applied Nano Materials*, **2021**, 4, 1220-1227	5.6	3
27	12-1: Invited Paper: Stretchable Transparent Electrodes Based on Silver Nanowires. *Digest of Technical Papers SID International Symposium*, **2017**, 48, 139-142	0.5	2
26	Quantum Dot LEDs: Stretchable Organometal-Halide-Perovskite Quantum-Dot Light-Emitting Diodes (Adv. Mater. 22/2019). *Advanced Materials*, **2019**, 31, 1970157	24	2
25	Single-Layer White Polymer Phosphorescent Light-Emitting Diodes Employing Poly(Ethylene Glycol) Dimethyl Ether Blended in the Emissive Layer as Functional Interlayer. *Journal of Display Technology*, **2013**, 9, 483-489		2
24	Energy conversion efficiency of dielectric elastomer energy harvesters under pure shear strain conditions **2012**,		2
23	Poly(1,4-phenylene-1,2-diphenylvinylene) and tris(8-quinolinolato)aluminum bilayer light-emitting diodes. *Polymers for Advanced Technologies*, **1997**, 8, 431-436	3.2	2
22	Stiffness variable polymers comprising phase-changing side-chains: material syntheses and application explorations.. *Advanced Materials*, **2022**, e2109798	24	2
21	Highly transparent and conductive metal oxide/metal/polymer composite electrodes for high-efficiency flexible organic light-emitting devices. *Nanophotonics*, **2020**, 9, 3567-3573	6.3	2
20	Bioinspired four-dimensional polymeric aerogel with programmable temporal-spatial multiscale structure and functionality. *Composites Science and Technology*, **2021**, 206, 108677	8.6	2
19	Formation of unique three-dimensional interpenetrating network structure with a ternary composite. *Journal of Materials Science: Materials in Electronics*, **2018**, 29, 18699-18707	2.1	2
18	Synthesis of transparent nanocomposite monoliths for gamma scintillation **2015**,		1
17	Dielectric Elastomers as EAPs: Applications **2016**, 739-765		1
16	Dielectric Elastomers as EAPs: Applications **2016**, 1-27		1
15	Multifunctional Fiber Solar Cell Based on TiO2 Composite Materials. *Materials Research Society Symposia Proceedings*, **2011**, 1325, 85		1
14	Acrylic interpenetrating polymer network dielectric elastomers for energy harvesting **2011**,		1
13	INTERPENETRATING POLYMER NETWORKS AS HIGH PERFORMANCE DIELECTRIC ELASTOMERS **2008**, 43-50		1

12	Polymer Composites for Radiation Detection: Diiodobenzene and light emitting polymer molecular solutions for gamma detection. *Materials Research Society Symposia Proceedings*, **2007**, 1038, 1		1
11	Blue Light Emitting Polymers and Devices. *ACS Symposium Series*, **2004**, 201-210	0.4	1
10	Bistable electroactive polymers for refreshable tactile displays **2019**,		1
9	Ultrastretchable Polyaniline-Based Conductive Organogel with High Strain Sensitivity1477-1483		1
8	Electrocaloric effects in ferroelectric polymers **2022**, 535-570		0
7	Iontronic Electroluminescence Devices: Comparing Halide Perovskites and Conjugated Polymers. *ACS Applied Electronic Materials*,	4	0
6	Stable Junction Polymer Light-Emitting Electrochemical Cells. *Nano-optics and Nanophotonics*, **2015** , 87-117	0	
5	Dielectric Elastomers (DEs) as EAPs: Materials **2016**, 1-28		
4	Intrinsically Elastomeric Polymer Light-Emitting Devices. *Information Display*, **2014**, 30, 12-18	0.8	
3	Artificial muscles based on synthetic dielectric elastomers. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2009**, 2009, 6826-9	0.9	
2	Light-Emitting Conjugated Polymers: Fundamentals of Materials Selection for Light-Emitting Electrochemical Cells (Adv. Funct. Mater. 33/2020). *Advanced Functional Materials*, **2020**, 30, 2070220	15.6	
1	Dielectric Elastomers (DEs) as EAPs: Materials **2016**, 687-714		