David C Martin

List of Publications by Year
in descending order

231 papers	17,266 citations	13854 67 h-index	15249 126 g-index
233 all docs	233 docs citations	233 times ranked	14495 citing authors

#	Article	IF	Citations
1	Conducting-Polymer Nanotubes for Controlled Drug Release. Advanced Materials, 2006, 18, 405-409.	11.1	801
2	Neuronal cell loss accompanies the brain tissue response to chronically implanted silicon microelectrode arrays. Experimental Neurology, 2005, 195, 115-126.	2.0	759
3	Biphasic Janus particles with nanoscale anisotropy. Nature Materials, 2005, 4, 759-763.	13.3	676
4	Processing and microstructural characterization of porous biocompatible protein polymer thin films. Polymer, 1999, 40, 7397-7407.	1.8	637
5	Chronic neural recordings using silicon microelectrode arrays electrochemically deposited with a poly(3,4-ethylenedioxythiophene) (PEDOT) film. Journal of Neural Engineering, 2006, 3, 59-70.	1.8	570
6	Electrochemical deposition and characterization of poly(3,4-ethylenedioxythiophene) on neural microelectrode arrays. Sensors and Actuators B: Chemical, 2003, 89, 92-102.	4.0	491
7	In vivo studies of polypyrrole/peptide coated neural probes. Biomaterials, 2003, 24, 777-787.	5.7	466
8	Polymerization of the conducting polymer poly(3,4-ethylenedioxythiophene) (PEDOT) around living neural cells. Biomaterials, 2007, 28, 1539-1552.	5.7	460
9	Surface modification of neural recording electrodes with conducting polymer/biomolecule blends. Journal of Biomedical Materials Research Part B, 2001, 56, 261-272.	3.0	454
10	Sustained release of dexamethasone from hydrophilic matrices using PLGA nanoparticles for neural drug delivery. Biomaterials, 2006, 27, 3031-3037.	5.7	386
11	Multifunctional Nanobiomaterials for Neural Interfaces. Advanced Functional Materials, 2009, 19, 573-585.	7.8	367
12	Ordered bicontinuous double-diamond structure of star block copolymers: a new equilibrium microdomain morphology. Macromolecules, 1986, 19, 2197-2202.	2.2	365
13	Conductingâ€Polymer Nanotubes Improve Electrical Properties, Mechanical Adhesion, Neural Attachment, and Neurite Outgrowth of Neural Electrodes. Small, 2010, 6, 421-429.	5.2	362
14	Aligned electrospun nanofibers specify the direction of dorsal root ganglia neurite growth. Journal of Biomedical Materials Research - Part A, 2007, 83A, 636-645.	2.1	330
15	A finite-element model of the mechanical effects of implantable microelectrodes in the cerebral cortex. Journal of Neural Engineering, 2005, 2, 103-113.	1.8	317
16	Electrochemical deposition and characterization of conducting polymer polypyrrole/PSS on multichannel neural probes. Sensors and Actuators A: Physical, 2001, 93, 8-18.	2.0	310
17	Experimental and theoretical characterization of implantable neural microelectrodes modified with conducting polymer nanotubes. Biomaterials, 2008, 29, 1273-1283.	5.7	305
18	The brain tissue response to implanted silicon microelectrode arrays is increased when the device is tethered to the skull. Journal of Biomedical Materials Research - Part A, 2007, 82A, 169-178.	2.1	296

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19	Effect of Immobilized Nerve Growth Factor on Conductive Polymers: Electrical Properties and Cellular Response. Advanced Functional Materials, 2007, 17, 79-86.	7.8	259
20	In Vitro and In Vivo Evaluation of PEDOT Microelectrodes for Neural Stimulation and Recording. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2011, 19, 307-316.	2.7	258
21	Conducting polymers grown in hydrogel scaffolds coated on neural prosthetic devices. Journal of Biomedical Materials Research Part B, 2004, 71A, 577-585.	3.0	250
22	Interfacing Conducting Polymer Nanotubes with the Central Nervous System: Chronic Neural Recording using Poly(3,4â€ethylenedioxythiophene) Nanotubes. Advanced Materials, 2009, 21, 3764-3770.	11.1	246
23	Conducting polymers on hydrogel-coated neural electrode provide sensitive neural recordings in auditory cortex. Acta Biomaterialia, 2010, 6, 57-62.	4.1	186
24	Microstructural Characterization ofBombyx moriSilk Fibers. Macromolecules, 1998, 31, 8857-8864.	2.2	179
25	Electrochemical polymerization of conducting polymers in living neural tissue. Journal of Neural Engineering, 2007, 4, L6-L13.	1.8	172
26	Poly(3,4-ethylene dioxythiophene) (PEDOT) as a micro-neural interface material for electrostimulation. Frontiers in Neuroengineering, 2009, 2, 7.	4.8	158
27	The Morphology of Poly(3,4-Ethylenedioxythiophene). Polymer Reviews, 2010, 50, 340-384.	5.3	157
28	Fuzzy gold electrodes for lowering impedance and improving adhesion with electrodeposited conducting polymer films. Sensors and Actuators A: Physical, 2003, 103, 384-394.	2.0	146
29	Triphasic Nanocolloids. Journal of the American Chemical Society, 2006, 128, 6796-6797.	6.6	143
30	The design of electrospun PLLA nanofiber scaffolds compatible with serum-free growth of primary motor and sensory neurons. Acta Biomaterialia, 2008, 4, 863-875.	4.1	142
31	Tailoring PEDOT properties for applications in bioelectronics. Materials Science and Engineering Reports, 2020, 140, 100546.	14.8	140
32	Regenerative Peripheral Nerve Interface Viability and Signal Transduction with an Implanted Electrode. Plastic and Reconstructive Surgery, 2014, 133, 1380-1394.	0.7	133
33	Enhanced PEDOT adhesion on solid substrates with electrografted P(EDOT-NH ₂). Science Advances, 2017, 3, e1600448.	4.7	128
34	Thickness-Driven Orthorhombic to Triclinic Phase Transformation in Pentacene Thin Films. Advanced Materials, 2005, 17, 903-907.	11.1	127
35	Ordered surfactant-templated poly(3,4-ethylenedioxythiophene) (PEDOT) conducting polymer on microfabricated neural probes. Acta Biomaterialia, 2005, 1, 125-136.	4.1	127
36	Electrochemical polymerization of poly(hydroxymethylated-3,4-ethylenedioxythiophene) (PEDOT-MeOH) on multichannel neural probes. Sensors and Actuators B: Chemical, 2004, 99, 437-443.	4.0	125

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37	The use of a dual PEDOT and RGD-functionalized alginate hydrogel coating to provide sustained drug delivery and improved cochlear implant function. Biomaterials, 2012, 33, 1982-1990.	5.7	117
38	Layered Carbon Nanotube-Polyelectrolyte Electrodes Outperform Traditional Neural Interface Materials. Nano Letters, 2009, 9, 4012-4018.	4.5	116
39	Thermally Induced Solid-State Phase Transition of Bis(triisopropylsilylethynyl) Pentacene Crystals. Journal of Physical Chemistry B, 2006, 110, 16397-16403.	1.2	113
40	Grain-boundary-limited charge transport in solution-processed 6,13 bis(tri-isopropylsilylethynyl) pentacene thin film transistors. Journal of Applied Physics, 2008, 103, .	1.1	106
41	Surface characterization of porous, biocompatible protein polymer thin films. Biomaterials, 2001, 22, 1289-1300.	5.7	105
42	Polymer-Induced Microstructure Variation in Zinc Oxide Crystals Precipitated from Aqueous Solution. Journal of Physical Chemistry B, 2003, 107, 2660-2666.	1.2	102
43	Controlled solution deposition and systematic study of charge-transport anisotropy in single crystal and single-crystal textured TIPS pentacene thin films. Organic Electronics, 2009, 10, 696-703.	1.4	102
44	Ultrastructure of poly(p-phenylenebenzobisoxazole) fibers. Macromolecules, 1991, 24, 2450-2460.	2.2	99
45	Morphological and Dimensional Control via Hierarchical Assembly of Doped Oligoaniline Single Crystals. Journal of the American Chemical Society, 2012, 134, 9251-9262.	6.6	99
46	Low-voltage electron microscopy of polymer and organic molecular thin films. Ultramicroscopy, 2004, 99, 247-256.	0.8	98
47	Poly(alkylbithiazoles): A New Class of Variable-Bandgap, Conjugated Polymer. Chemistry of Materials, 1995, 7, 2232-2234.	3.2	96
48	Microporous conducting polymers on neural microelectrode arrays. Sensors and Actuators A: Physical, 2004, 113, 204-211.	2.0	94
49	Significant Enhancement of PEDOT Thin Film Adhesion to Inorganic Solid Substrates with EDOT-Acid. ACS Applied Materials & Interfaces, 2015, 7, 15388-15394.	4.0	94
50	The influence of side chains on the structures and properties of functionalized pentacenes. Journal of Materials Chemistry, 2008, 18, 1961.	6.7	92
51	Morphology and molecular orientation of thin-film bis(triisopropylsilylethynyl) pentacene. Journal of Materials Research, 2007, 22, 1701-1709.	1.2	89
52	Microporous conducting polymers on neural microelectrode arrays. Sensors and Actuators B: Chemical, 2004, 101, 133-142.	4.0	85
53	X-ray Photoelectron Spectroscopy Study of Counterion Incorporation in Poly(3,4-ethylenedioxythiophene). Journal of Physical Chemistry C, 2009, 113, 5585-5592.	1.5	82
54	Experimental high-resolution electron microscopy of polymers. Polymer, 1995, 36, 1743-1759.	1.8	81

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55	Electrochemical polymerization and properties of PEDOT/S-EDOT on neural microelectrode arrays. Journal of Electroanalytical Chemistry, 2004, 573, 43-48.	1.9	81
56	Impedance Spectroscopy of Spinâ€Cast and Electrochemically Deposited PEDOT:PSS Films on Microfabricated Electrodes with Various Areas. ChemElectroChem, 2017, 4, 2321-2327.	1.7	81
57	Morphology and primary crystal structure of a silk-like protein polymer synthesized by genetically engineeredEscherichia coli bacteria. Biopolymers, 1994, 34, 1049-1058.	1.2	80
58	Surface Modification of Neural Probes With Conducting Polymer Poly(hydroxymethylated-3,4-) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62 117-130.	1.4	77
59	Structural, chemical and electrochemical characterization of poly(3,4-Ethylenedioxythiophene) (PEDOT) prepared with various counter-ions and heat treatments. Polymer, 2011, 52, 1302-1308.	1.8	77
60	<i>In Situ</i> Polymerization of a Conductive Polymer in Acellular Muscle Tissue Constructs. Tissue Engineering - Part A, 2008, 14, 423-432.	1.6	75
61	Accelerated neuritogenesis and maturation of primary spinal motor neurons in response to nanofibers. Developmental Neurobiology, 2010, 70, 589-603.	1.5	75
62	Chronic Recording of Regenerating VIIIth Nerve Axons With a Sieve Electrode. Journal of Neurophysiology, 2000, 83, 611-615.	0.9	74
63	Biofunctionalization of polydioxythiophene derivatives for biomedical applications. Journal of Materials Chemistry B, 2016, 4, 4952-4968.	2.9	74
64	Molecular Orientation in Electrospun Poly(vinylidene fluoride) Fibers. ACS Macro Letters, 2012, 1, 428-431.	2.3	73
65	Highly aligned poly(3,4-ethylene dioxythiophene) (PEDOT) nano- and microscale fibers and tubes. Polymer, 2013, 54, 702-708.	1.8	73
66	Synthesis, copolymerization and peptide-modification of carboxylic acid-functionalized 3,4-ethylenedioxythiophene (EDOTacid) for neural electrode interfaces. Biochimica Et Biophysica Acta - General Subjects, 2013, 1830, 4288-4293.	1.1	72
67	Development of a Regenerative Peripheral Nerve Interface for Control of a Neuroprosthetic Limb. BioMed Research International, 2016, 2016, 1-8.	0.9	72
68	Discovery of Î²-Form Crystal Structure in Electrospun Poly[(<i>R</i>)-3-hydroxybutyrate-<i>co</i>-(<i>R</i>)-3-hydroxyhexanoate] (PHBHx) Nanofibers: From Fiber Mats to Single Fibers. Macromolecules, 2015, 48, 6197-6205.	2.2	68
69	Molecular design, synthesis, and characterization of conjugated polymers for interfacing electronic biomedical devices with living tissue. MRS Communications, 2015, 5, 131-152.	0.8	64
70	Quantitative characterization of surface deformation in polymer composites using digital image analysis. Polymer Engineering and Science, 1996, 36, 298-304.	1.5	62
71	X-ray Photoelectron Spectroscopy Study of Counterion Incorporation in Poly(3,4-ethylenedioxythiophene) (PEDOT) 2: Polyanion Effect, Toluenesulfonate, and Small Anions. Journal of Physical Chemistry C, 2010, 114, 14992-14997.	1.5	62
72	Impedance spectroscopy and nanoindentation of conducting poly(3,4-ethylenedioxythiophene) coatings on microfabricated neural prosthetic devices. Journal of Materials Research, 2006, 21, 1124-1132.	1.2	60

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73	Localized cell and drug delivery for auditory prostheses. Hearing Research, 2008, 242, 117-131.	0.9	60
74	Post-polymerization functionalization of poly(3,4-propylenedioxythiophene) (PProDOT) via thiolâ€“ene â€œclickâ€•chemistry. Journal of Materials Chemistry B, 2015, 3, 5028-5034.	2.9	60
75	Thermal and mechanical cracking in bis(triisopropylsilylethnyl) pentacene thin films. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 3631-3641.	2.4	58
76	Finite strain response, microstructural evolution and Î²â†’Î± phase transformation of crystalline isotactic polypropylene. Polymer, 2005, 46, 455-470.	1.8	57
77	Electrically conducting polymers for bio-interfacing electronics: From neural and cardiac interfaces to bone and artificial tissue biomaterials. Biosensors and Bioelectronics, 2020, 170, 112620.	5.3	57
78	<i>In vivo</i>polymerization of poly(3,4-ethylenedioxythiophene) in the living rat hippocampus does not cause a significant loss of performance in a delayed alternation task. Journal of Neural Engineering, 2014, 11, 026005.	1.8	55
79	Interfacing Electronic and Ionic Charge Transport in Bioelectronics. ChemElectroChem, 2016, 3, 686-688.	1.7	55
80	Hexagonal Packing of Oligo(m-phenylene ethynylene)s in the Solid State:Â Helical Nanotubules. Journal of the American Chemical Society, 2000, 122, 6134-6135.	6.6	53
81	Solution-processed polycrystalline copper tetrabenzoporphyrin thin-film transistors. Synthetic Metals, 2007, 157, 190-197.	2.1	53
82	Stiffness, strength and adhesion characterization of electrochemically deposited conjugated polymer films. Acta Biomaterialia, 2016, 31, 114-121.	4.1	53
83	High resolution electron microscopy of ordered polymers and organic molecular crystals: Recent developments and future possibilities. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 1749-1778.	2.4	51
84	Synthesis and Characterization of Conjugated, n-Dopable, Bithiazole-Containing Polymers. Chemistry of Materials, 1998, 10, 1713-1719.	3.2	50
85	Crystal morphology in pristine and doped films of poly (p-phenylene vinylene). Journal of Materials Science, 1990, 25, 311-320.	1.7	49
86	Poly[3,4-ethylene dioxythiophene (EDOT)-co-1,3,5-tri[2-(3,4-ethylene dioxythienyl)]-benzene (EPh)] copolymers (PEDOT-co-EPh): optical, electrochemical and mechanical properties. Journal of Materials Chemistry B, 2015, 3, 5010-5020.	2.9	48
87	Imaging of Crystal Morphology and Molecular Simulations of Surface Energies in Pentacene Thin Films. Journal of Physical Chemistry B, 2006, 110, 6066-6071.	1.2	43
88	Molecular Packing and Morphology of Oligo(m-phenylene ethynylene) Foldamers. Journal of the American Chemical Society, 2002, 124, 8605-8610.	6.6	42
89	Impedimetric Biosensors for Detecting Vascular Endothelial Growth Factor (VEGF) Based on Poly(3,4-ethylene dioxythiophene) (PEDOT)/Gold Nanoparticle (Au NP) Composites. Frontiers in Chemistry, 2019, 7, 234.	1.8	41
90	Title is missing!. Journal of Materials Science, 2003, 38, 803-815.	1.7	40

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91	Direct laser interference patterning of poly(3,4-ethylene dioxythiophene)-poly(styrene sulfonate) (PEDOT-PSS) thin films. Applied Surface Science, 2009, 255, 9186-9192.	3.1	40
92	Structural Characterization of Electrooptically Active Poly(nonylbithiazole). Macromolecules, 1999, 32, 4558-4565.	2.2	39
93	Nanoarchitecturing of Natural Melanin Nanospheres by Layer-by-Layer Assembly: Macroscale Anti-inflammatory Conductive Coatings with Optoelectronic Tunability. Biomacromolecules, 2017, 18, 1908-1917.	2.6	39
94	High-resolution microscopy of PMDA-ODA polyimide single crystals. Macromolecules, 1993, 26, 6557-6565.	2.2	38
95	Mechanical properties of biocompatible protein polymer thin films. Journal of Materials Research, 2000, 15, 231-242.	1.2	36
96	In-Situ Synchrotron WAXD/SAXS Studies of Structural Development during PBO/PPA Solution Spinning. Macromolecules, 2002, 35, 433-439.	2.2	35
97	Electrochemical fabrication of conducting polymer poly(3,4-ethylenedioxythiophene) (PEDOT) nanofibrils on microfabricated neural prosthetic devices. Journal of Biomaterials Science, Polymer Edition, 2007, 18, 1075-1089.	1.9	35
98	Shear-Induced Solution Crystallization of Poly(3-hexylthiophene) (P3HT). Macromolecules, 2014, 47, 3343-3349.	2.2	35
99	Direct Imaging of the Electrochemical Deposition of Poly(3,4-ethylenedioxythiophene) by Transmission Electron Microscopy. ACS Macro Letters, 2015, 4, 897-900.	2.3	35
100	Defect-mediated curvature and twisting in polymer crystals. Journal of Physical Organic Chemistry, 2000, 13, 816-829.	0.9	34
101	Biofunctionalization of PEDOT films with laminin-derived peptides. Acta Biomaterialia, 2016, 41, 235-246.	4.1	34
102	Micromechanisms of kinking in rigid-rod polymer fibres. Journal of Materials Science, 1991, 26, 5171-5183.	1.7	31
103	Cross-linkable copolymers of poly(p-phenyleneterephthalamide). Chemistry of Materials, 1993, 5, 248-250.	3.2	31
104	A Comparison of Structures and Optoelectronic Properties of Oxygen- and Sulfur-Containing Heterocycles:Â Conjugated Nonylbisoxazole and Nonylbithiazole Oligomers. Chemistry of Materials, 1999, 11, 2274-2284.	3.2	31
105	Grain boundaries in extended-chain polymers: Theory and experiment. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1991, 64, 903-922.	0.7	30
106	Processing and Characterization of Thermally Cross-Linkable Poly[p-phenyleneterephthalamide-co-p-1,2-dihydrocyclobutaphenyleneterephthalamide] (PPTA-co-XTA) Copolymer Fibers. Macromolecules, 1995, 28, 3301-3312.	2.2	29
107	Self-Lubricating Nano-Ball-Bearings. Advanced Materials, 2007, 19, 82-86.	11.1	29
108	Direct Imaging of Defect Structures in Pentacene Nanocrystals. Advanced Materials, 2002, 14, 54-57.	11.1	28

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109	Polymers manipulate cells. Nature Materials, 2007, 6, 626-627.	13.3	28
110	Single electrospun PLLA and PCL polymer nanofibers: Increased molecular orientation with decreased fiber diameter. Polymer, 2017, 118, 143-149.	1.8	28
111	Naturally Derived Melanin Nanoparticle Composites with High Electrical Conductivity and Biodegradability. Particle and Particle Systems Characterization, 2019, 36, 1900166.	1.2	28
112	Crosslinking chemistry for high-performance polymer networks. Polymer, 1994, 35, 5012-5017.	1.8	27
113	Impedance spectroscopy of protein polymer modified silicon micromachined probes. Sensors and Actuators A: Physical, 1999, 72, 203-216.	2.0	27
114	Influence of the molecular weight and size distribution of PSS on mixed ionic-electronic transport in PEDOT:PSS. Polymer Chemistry, 2022, 13, 2764-2775.	1.9	27
115	Poly(nonylbisoxazole):â€‰ A Member of a New Class of Conjugated Polymer. Chemistry of Materials, 2000, 12, 2798-2804.	3.2	26
116	Super-Helically Twisted Strands of Poly(m-phenylene isophthalamide) (MPDI). Macromolecules, 2001, 34, 9053-9058.	2.2	26
117	Mechanical properties of polyurethane/montmorillonite nanocomposite prepared by melt mixing. Journal of Applied Polymer Science, 2007, 106, 712-721.	1.3	26
118	Synthesis and characterization of bicontinuous cubic poly(3,4-ethylene dioxythiophene) gyroid (PEDOT GYR) gels. Physical Chemistry Chemical Physics, 2015, 17, 5115-5123.	1.3	26
119	Electrochemical deposition and characterization of carboxylic acid functionalized PEDOT copolymers. Journal of Materials Research, 2014, 29, 2835-2844.	1.2	25
120	Physical and chemical evolution of PMDA-ODA during thermal imidization. Journal of Polymer Science, Part B: Polymer Physics, 1995, 33, 559-569.	2.4	24
121	N-Methylated Poly(nonylbithiazole):Â A New n-Dopable, Conjugated Poly(ionomer). Chemistry of Materials, 1998, 10, 13-16.	3.2	24
122	In Vivo Electrical Conductivity across Critical Nerve Gaps Using Poly(3,4-ethylenedioxythiophene)-Coated Neural Interfaces. Plastic and Reconstructive Surgery, 2010, 126, 1865-1873.	0.7	24
123	Direct Imaging of the Diacetylene Solid-State Monomer-Polymer Phase Transformation. Science, 1993, 260, 1489-1491.	6.0	23
124	Dislocation mediated lattice bending in 1,6-di (N-carbazolyl)-2,4 hexadiyne (DCHD) polydiacetylene droplets. Journal of Materials Research, 1992, 7, 3150-3158.	1.2	22
125	Dissolution of poorly crystalline apatite crystals by osteoclasts determined on artificial thin-film apatite. Journal of Biomedical Materials Research Part B, 2001, 56, 250-256.	3.0	21
126	Controlled local organization of lyotropic liquid crystalline polymer thin films with electric fields. Polymer, 2002, 43, 4421-4436.	1.8	21

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127	Poly(5,6-dimethoxyindole-2-carboxylic acid) (PDMICA): A Melanin-Like Polymer with Unique Electrochromic and Structural Properties. Macromolecules, 2010, 43, 3770-3774.	2.2	21
128	Polymorphic Distribution in Individual Electrospun Poly[(R)-3-hydroxybutyrate-co-(R)-3-hydroxyhexanoate] (PHBHx) Nanofibers. Macromolecules, 2017, 50, 5510-5517.	2.2	21
129	In situ electrochemical polymerization of poly(3,4-ethylenedioxythiophene) (PEDOT) for peripheral nerve interfaces. MRS Communications, 2018, 8, 1043-1049.	0.8	21
130	Molecular stress and strain in an oriented extended-chain polymer of finite molecular length. Macromolecules, 1995, 28, 6161-6174.	2.2	20
131	Direct fabrication of periodic patterns with hierarchical sub-wavelength structures on poly(3,4-ethylene dioxythiophene)â€"poly(styrene sulfonate) thin films using femtosecond laser interference patterning. Applied Surface Science, 2010, 256, 1708-1713.	3.1	19
132	In vivo polymerization of poly(3,4-ethylenedioxythiophene) (PEDOT) in rodent cerebral cortex. , 2011, 2011, 5412-5.		19
133	Femtosecond pulsed laser patterning of poly(3,4-ethylene dioxythiophene)-poly(styrenesulfonate) thin films on gold/palladium substrates. Journal of Applied Physics, 2007, 102, 013107.	1.1	18
134	Quantitative measurement of adhesion between polypropylene blends and paints by tensile mechanical testing. Polymer Engineering and Science, 2001, 41, 440-448.	1.5	17
135	Microstructural studies of interfacial deformation in painted thermoplastic polyolefins (TPOs). Journal of Materials Science, 2002, 37, 4783-4791.	1.7	17
136	In-vivo Evaluation of Chronically Implanted Neural Microelectrode Arrays Modified with Poly (3,4-ethylenedioxythiophene) Nanotubes. , 2007, , .		17
137	Novel Organotypic Cultures of Human Skin Explants with an Implant-tissue Biomaterial Interface. Annals of Biomedical Engineering, 2009, 37, 401-409.	1.3	17
138	Intermolecular twist defects in extended-chain polymers. Macromolecules, 1992, 25, 5171-5177.	2.2	16
139	Thermally crosslinkable thermoplastic PET-co-XTA copolyesters. Polymer, 1999, 40, 53-64.	1.8	16
140	Functional Conducting Polymers via Thiol-ene Chemistry. Biosensors, 2012, 2, 305-317.	2.3	16
141	Structural evolution of a model poly(imide): organization near surfaces. Macromolecules, 1991, 24, 3921-3928.	2.2	15
142	Influence of structural variations on high-resolution electron microscopy images of poly[1,6-di(N-carbazolyl)2,4-hexadiyne] nanocrystals. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2001, 81, 1651-1673.	0.7	15
143	A scanning tunneling microscope study of single crystal polyethylene. Journal of Polymer Science, Part C: Polymer Letters, 1990, 28, 399-410.	0.7	14
144	Construction and Characterization of [1,6-Di(N-carbazolyl)-2,4-hexadiyne] Diacetylene Polymer Bicrystals. Macromolecules, 1996, 29, 568-580.	2.2	14

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145	PEDOT coated microelectrode arrays for chronic neural recording and stimulation. , 2009, , .		14
146	Patterning of periodic nano-cavities on PEDOTâ€“PSS using nanosphere-assisted near-field optical enhancement and laser interference lithography. Nanotechnology, 2012, 23, 015304.	1.3	14
147	POSS-ProDOT crosslinking of PEDOT. Journal of Materials Chemistry B, 2017, 5, 5019-5026.	2.9	14
148	Direct Observation of Liquid-to-Solid Phase Transformations during the Electrochemical Deposition of Poly(3,4-ethylenedioxythiophene) (PEDOT) by Liquid-Phase Transmission Electron Microscopy (LPTEM). Macromolecules, 2021, 54, 6956-6967.	2.2	14
149	Fatigue fracture of reaction injection molded (RIM) nylon composites. Journal of Applied Polymer Science, 1989, 37, 3029-3056.	1.3	13
150	The effect of collector gap width on the extent of molecular orientation in polymer nanofibers. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 617-623.	2.4	13
151	Soft, Fuzzy, and Bioactive Conducting Polymers for Improving the Chronic Performance of Neural Prosthetic Devices. Frontiers in Neuroengineering Series, 2007, , 177-219.	0.4	13
152	Observation of Defects in Crystalline Polymers by HREM. MRS Bulletin, 1987, 12, 27-35.	1.7	12
153	Analysis of Displacement Fields near Dislocation Cores in Ordered Polymers. Macromolecules, 2001, 34, 7416-7426.	2.2	12
154	Improved Preservation of the Tissue Surrounding Percutaneous Devices by Hyaluronic Acid and Dermatan Sulfate in a Human Skin Explant Model. Annals of Biomedical Engineering, 2010, 38, 1098-1110.	1.3	12
155	Direct local polymerization of poly(3,4-ethylenedioxythiophene) in rat cortex. Progress in Brain Research, 2011, 194, 263-271.	0.9	12
156	Growth of anisotropic single crystals of a random copolymer, poly[(R)-3-hydroxybutyrate-co-(R)-3-hydroxyhexanoate] driven by cooperative â€“CHÂ·Â·Â·O H-bonding. Polymer, 2018, 154, 111-118.	1.8	12
157	Durability of Poly(3,4-ethylenedioxythiophene) (PEDOT) films on metallic substrates for bioelectronics and the dominant role of relative shear strength. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 100, 103376.	1.5	12
158	Maximum-entropy data restoration using both real- and Fourier-space analysis. Acta Crystallographica Section A: Foundations and Advances, 1989, 45, 686-698.	0.3	10
159	Electric Field Mediated Deposition of Bioactive Polypeptides on Neural Prosthetic Devices. Materials Research Society Symposia Proceedings, 1995, 414, 23.	0.1	10
160	Thermally crosslinkable thermotropic copolyesters: synthesis, characterization, and processing. Polymer, 1997, 38, 6009-6022.	1.8	10
161	Synthesis and structure of Î±-substituted pentathienoacenes. Journal of Materials Chemistry C, 2013, 1, 3686.	2.7	10
162	Ecoâ€Degradable and Flexible Solidâ€State Ionic Conductors by Clayâ€Nanoconfined DMSO Composites. Advanced Sustainable Systems, 2020, 4, 1900134.	2.7	10

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163	Functionalized Polythiophene Copolymers for Electronic Biomedical Devices. MRS Advances, 2020, 5, 943-956.	0.5	10
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