

Baoyang Lu

List of Publications by Year in descending order

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101543

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docs citations

111
times ranked

5704
citing authors

#	ARTICLE	IF	CITATIONS
1	Robust PEDOT:PSS-based hydrogel for highly efficient interfacial solar water purification. <i>Chemical Engineering Journal</i> , 2022, 442, 136284.	12.7	66
2	3D Printing of Stretchable, Adhesive and Conductive Ti3C2Tx-Polyacrylic Acid Hydrogels. <i>Polymers</i> , 2022, 14, 1992.	4.5	11
3	Highly Stretchability, Ultralow Hysteresis Conducting Polymer Hydrogel Strain Sensors for Soft Machines. <i>Advanced Materials</i> , 2022, 34, .	21.0	209
4	Stretchable Anti-Fogging Tapes for Diverse Transparent Materials. <i>Advanced Functional Materials</i> , 2021, 31, 2103551.	14.9	25
5	Stable low-bandgap isoindigo-bisEDOT copolymer with superior electrochromic performance in NIR window. <i>Electrochimica Acta</i> , 2021, 399, 139418.	5.2	17
6	Structural Design and Applications of Stereoregular Fused Thiophenes and Their Oligomers and Polymers. <i>Polymer Reviews</i> , 2020, 60, 318-358.	10.9	27
7	Nanostructured conducting polymers and their composites: synthesis methodologies, morphologies and applications. <i>Journal of Materials Chemistry C</i> , 2020, 8, 10136-10159.	5.5	53
8	Design of twisted conjugated molecular systems towards stable multi-colored electrochromic polymers. <i>Dyes and Pigments</i> , 2020, 183, 108648.	3.7	16
9	Pyrazine-EDOT D-A-D type Hybrid Polymer for Patterned Flexible Electrochromic Devices. <i>Electrochimica Acta</i> , 2020, 357, 136859.	5.2	20
10	Stepwise enhancement on optoelectronic performances of polyselenophene via electropolymerization of mono-, bi-, and tri-selenophene. <i>Electrochimica Acta</i> , 2020, 340, 135974.	5.2	11
11	Strong adhesion of wet conducting polymers on diverse substrates. <i>Science Advances</i> , 2020, 6, eaay5394.	10.3	141
12	3D printing of conducting polymers. <i>Nature Communications</i> , 2020, 11, 1604.	12.8	568
13	Tuning optoelectronic performances for 3-methylselenophene-EDOT hybrid polymer. <i>Materials Chemistry and Physics</i> , 2020, 244, 122699.	4.0	10
14	PEDOT-Based Conducting Polymer Actuators. <i>Frontiers in Robotics and AI</i> , 2019, 6, 114.	3.2	89
15	Hydrogel bioelectronics. <i>Chemical Society Reviews</i> , 2019, 48, 1642-1667.	38.1	1,267
16	A universal respiration sensing platform utilizing surface water condensation. <i>Journal of Materials Chemistry C</i> , 2019, 7, 2853-2864.	5.5	10
17	Pure PEDOT:PSS hydrogels. <i>Nature Communications</i> , 2019, 10, 1043.	12.8	528
18	Highly fluorescent triazolopyridine-thiophene D-A-D oligomers for efficient pH sensing both in solution and in the solid state. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 7174-7182.	2.8	26

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19	Synthesis and electrochromic performances of donor-acceptor-type polymers from chalcogenodiazolo [3,4-c]pyridine and alkyl ProDOTs. <i>Electrochimica Acta</i> , 2018, 266, 263-275.	5.2	42
20	Isoidigo as an electron-deficient unit for high-performance polymeric electrochromics. <i>Electrochimica Acta</i> , 2018, 260, 772-782.	5.2	62
21	A reusable fluorescent sensor from electrosynthesized water-soluble oligo(1-pyrenesulfonic acid) for effective detection of Fe ³⁺ . <i>New Journal of Chemistry</i> , 2018, 42, 19450-19457.	2.8	10
22	Free-standing oligo(oxyethylene)-functionalized polythiophene with the 3,4-ethylenedioxythiophene building block: electrosynthesis, electrochromic and thermoelectric properties. <i>Electrochimica Acta</i> , 2017, 228, 361-370.	5.2	23
23	Thermoelectric Properties of Poly(selenophene-co-3, 4-ethylenedioxythiophene) via Electropolymerization. <i>Journal of Electronic Materials</i> , 2017, 46, 3124-3130.	2.2	9
24	Hybrid π -conjugated polymers from dibenzo pentacyclic centers: precursor design, electrosynthesis and electrochromics. <i>Science China Chemistry</i> , 2017, 60, 38-53.	8.2	54
25	High fluorescent ethyl acrylate modified PEDOT- MeNH_2 with enhanced electrochromic performance. <i>Journal of Polymer Science Part A</i> , 2016, 54, 2081-2091.	2.3	4
26	Furan and pyridinechalcogenodiazole-based π -conjugated systems via a donor-acceptor approach. <i>Journal of Solid State Electrochemistry</i> , 2016, 20, 2337-2349.	2.5	12
27	Blue to light gray electrochromic polymers from dodecyl-derivatized thiophene $\langle i \rangle$ Bis- $\langle /i \rangle$ substituted dibenzothiophene/dibenzofuran. <i>Journal of Polymer Science Part A</i> , 2016, 54, 1468-1478.	2.3	17
28	[1,2,5]Chalcogenodiazolo[3,4-c]pyridine and selenophene based donor-acceptor donor electrochromic polymers electrosynthesized from high fluorescent precursors. <i>New Journal of Chemistry</i> , 2016, 40, 8316-8323.	2.8	18
29	Facile one-pot preparation of Pd-Au/PEDOT/graphene nanocomposites and their high electrochemical sensing performance for caffeic acid detection. <i>RSC Advances</i> , 2016, 6, 89157-89166.	3.6	35
30	Fluorescent and electrochromic poly(5-(benzo[d][1,3]dioxol-5-yl)-2,3-dihydrothieno[3,4-b][1,4]dioxin). <i>Synthetic Metals</i> , 2016, 220, 202-207.	3.9	5
31	Solvent effects on the synthesis, characterization and electrochromic properties of acetic acid modified polyterthiophene. <i>Electrochimica Acta</i> , 2016, 220, 122-129.	5.2	7
32	Capacitive performance of electrodeposited PEDOS and a comparative study with PEDOT. <i>Electrochimica Acta</i> , 2016, 220, 340-346.	5.2	25
33	Electrochemical Treatment for Effectively Tuning Thermoelectric Properties of Free-Standing Poly(3-methylthiophene) Films. <i>ChemPhysChem</i> , 2016, 17, 2256-2262.	2.1	25
34	Electrosynthesis and electrochemical capacitive behavior of a new nitrogen PEDOT analogue-based polymer electrode. <i>New Journal of Chemistry</i> , 2016, 40, 2304-2314.	2.8	16
35	Dibenzothiophene-thiophene hybrid electrochromic polymer: effect of media on electrosynthesis and optical properties. <i>Journal of Solid State Electrochemistry</i> , 2016, 20, 1369-1376.	2.5	4
36	Novel highly selective fluorescent sensor based on electrosynthesized poly(9-fluorene-carboxylic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 6 Actuators B: Chemical, 2016, 230, 123-129.	7.8	30

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37	Solvent effects on electrosynthesis, morphological and electrochromic properties of a nitrogen analog of PEDOT. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 5129-5138.	2.8	28
38	Novel chiral PEDOTs for selective recognition of 3,4-dihydroxyphenylalanine enantiomers: Synthesis and characterization. <i>Journal of Polymer Science Part A</i> , 2015, 53, 2238-2251.	2.3	19
39	Poly(thieno[3,4- <i>b</i>]-1,4-oxathiane) and poly(3,4-ethylenedioxythiophene-co-thieno[3,4- <i>b</i>]-1,4-oxathiane)/poly(styrene sulfonic) Tj ETQq1 1 0.784314 rgBT /Overl Part A, 2015, 53, 2285-2297.	2.3	17
40	Three novel electrochemical electrodes for the fabrication of conducting polymer/SWCNTs layered nanostructures and their thermoelectric performance. <i>Nanotechnology</i> , 2015, 26, 245401.	2.6	16
41	Low-potential electrosynthesis of a novel nitrogen analog of PEDOT in an ionic liquid and its optoelectronic properties. <i>Electrochimica Acta</i> , 2015, 160, 160-168.	5.2	30
42	PEDOT:PSS film: a novel flexible organic electrode for facile electrodeposition of dendritic tellurium nanostructures. <i>Journal of Materials Science</i> , 2015, 50, 4813-4821.	3.7	11
43	Thiadiazolo[3,4- <i>c</i>]pyridine as an Acceptor toward Fast-Switching Green Donor-acceptor-Type Electrochromic Polymer with Low Bandgap. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 11089-11098.	8.0	135
44	Molecular design of DBT/DBF hybrid thiophenes π -conjugated systems and comparative study of their electropolymerization and optoelectronic properties: from comonomers to electrochromic polymers. <i>Polymer Chemistry</i> , 2015, 6, 4575-4587.	3.9	48
45	Chalcogenodiazolo[3,4- <i>c</i>]pyridine based donor-acceptor donor polymers for green and near-infrared electrochromics. <i>Polymer Chemistry</i> , 2015, 6, 8248-8258.	3.9	68
46	Effect of electrolytes on the electropolymerization and optoelectronic properties of poly(3-methylselenophene). <i>RSC Advances</i> , 2015, 5, 70649-70660.	3.6	13
47	Electrosynthesis of electroactive and fluorescent polyphenanthrenes via electropolymerization in BmimPF ₆ . <i>Synthetic Metals</i> , 2015, 209, 447-454.	3.9	3
48	Synthesis and electro-optical properties of new conjugated hybrid polymers from EDOT end-capped dibenzothiophene and dibenzofuran. <i>New Journal of Chemistry</i> , 2015, 39, 2096-2105.	2.8	24
49	One-step template-free electrodeposition of novel poly(indole-7-carboxylic acid) nanowires and their high capacitance properties. <i>RSC Advances</i> , 2015, 5, 3215-3223.	3.6	30
50	Thermoelectric Performance of Donor-acceptor Donor Conjugated Polymers Based on Benzothiadiazole Derivatives. <i>Journal of Electronic Materials</i> , 2015, 44, 1606-1613.	2.2	13
51	Paper: An effective substrate for the enhancement of thermoelectric properties in PEDOT:PSS. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2014, 52, 737-742.	2.1	54
52	Poly(thieno[3,4- <i>b</i>]-1,4-oxathiane): Medium Effect on Electropolymerization and Electrochromic Performance. <i>Langmuir</i> , 2014, 30, 15581-15589.	3.5	49
53	Electrochemical synthesis and capacitance properties of a novel poly(3,4-ethylenedioxythiophene) Tj ETQq1 1 0.784314 rgBT /Overl 3.2 36	3.2	36
54	A novel solution-processable amino-group-substituted oligopyrene: Synthesis, electropolymerization, properties, and application in fluorescent chemosensor. <i>Synthetic Metals</i> , 2014, 198, 155-160.	3.9	16

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55	Electrochromic enhancement of poly(3,4-ethylenedioxythiophene) films functionalized with hydroxymethyl and ethylene oxide. <i>Journal of Polymer Science Part A</i> , 2014, 52, 1989-1999.	2.3	29
56	Novel functionalized conjugated polypyrrene with polyacrylate: synthesis, electrochemistry, luminescence, and chemical sensing properties. <i>RSC Advances</i> , 2014, 4, 28368.	3.6	14
57	Synthesis of novel chiral-leucine grafted PEDOT derivatives with excellent electrochromic performances. <i>RSC Advances</i> , 2014, 4, 35597-35608.	3.6	36
58	Tuning the optoelectronic properties of polyfuran by design of furan-EDOT monomers and free-standing films with enhanced redox stability and electrochromic performances. <i>Electrochimica Acta</i> , 2014, 146, 666-678.	5.2	49
59	Highly stable hybrid selenophene-3,4-ethylenedioxythiophene as electrically conducting and electrochromic polymers. <i>Polymer Chemistry</i> , 2014, 5, 4896-4908.	3.9	92
60	Alkyl chain engineering in the hybrid bithiophene-3,4-ethylenedioxythiophene: Synthesis, electronic properties, and electropolymerization. <i>Synthetic Metals</i> , 2014, 198, 19-30.	3.9	18
61	Electrochemical fabrication of a porous network MnO ₂ /poly(5-cyanoindole) composite and its capacitance performance. <i>Electrochimica Acta</i> , 2014, 138, 270-277.	5.2	42
62	Poly(mono-, bi- or trifuran): effect of oligomer chain length on the electropolymerization performances and polymer properties. <i>RSC Advances</i> , 2014, 4, 14001-14012.	3.6	32
63	Efficient Fluorescent Recognition of Carboxylates in Aqueous Media Using Facilely Electrosynthesized Poly(9-Amino fluorene). <i>Journal of Fluorescence</i> , 2013, 23, 1053-1063.	2.5	15
64	Improved thermoelectric performance of PEDOT:PSS films prepared by polar-solvent vapor annealing method. <i>Journal of Materials Science: Materials in Electronics</i> , 2013, 24, 4240-4246.	2.2	48
65	Improved Thermoelectric Performance of Free-Standing PEDOT:PSS/Bi ₂ Te ₃ Films with Low Thermal Conductivity. <i>Journal of Electronic Materials</i> , 2013, 42, 1268-1274.	2.2	92
66	Thermoelectric Performances of Different Types of Polyselenophene and its Copolymers with 3-Methylthiophene via Electropolymerization. <i>Synthetic Metals</i> , 2013, 183, 8-15.	3.9	25
67	A cost-effective and practical polybenzanthrone-based fluorescent sensor for efficient determination of palladium (II) ion and its application in agricultural crops and environment. <i>Analytica Chimica Acta</i> , 2013, 805, 87-94.	5.4	27
68	Preparation and characterization of aqueous dispersions of poly(3,4-ethylenedithiathophene-co-3,4-ethylenedioxythiophene)/poly(styrene sulfonate) and their conducting films. <i>Journal of Applied Polymer Science</i> , 2013, 129, 1717-1725.	2.6	12
69	Electrosynthesis of poly(3,4-ethylenedithiathophene) in an ionic liquid and its electrochemistry and electrochromic properties. <i>Electrochimica Acta</i> , 2013, 106, 201-208.	5.2	41
70	Low-potential electrosynthesis of novel electroactive poly(9-fluorene methanol) and its electrochromic and blue-light-emitting properties. <i>Electrochimica Acta</i> , 2013, 90, 452-460.	5.2	6
71	Low-potential electrosynthesis of conducting and electroactive oligocatecholborane with blue light-emitting properties. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2013, 31, 159-170.	3.8	1
72	Facile Fabrication of PEDOT:PSS/Polythiophenes Bilayered Nanofilms on Pure Organic Electrodes and Their Thermoelectric Performance. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 12811-12819.	8.0	87

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73	Synthesis and electrochromic properties of polyacrylate functionalized poly(3,4-ethylenedioxythiophene) network films. <i>Journal of Materials Chemistry</i> , 2012, 22, 18345.	6.7	57
74	Facile fabrication of a cost-effective, water-soluble, and electrosynthesized poly(9-aminofluorene) fluorescent sensor for the selective and sensitive detection of Fe(III) and inorganic phosphates. <i>Sensors and Actuators B: Chemical</i> , 2012, 171-172, 786-794.	7.8	59
75	Systematic study on chemical oxidative and solid-state polymerization of poly(3,4-ethylenedithiathophene). <i>Journal of Polymer Science Part A</i> , 2012, 50, 1967-1978.	2.3	40
76	Novel redox-active polycarbazole-functionalized polycatechol network films produced by controlled electropolymerization. <i>Journal of Applied Polymer Science</i> , 2012, 126, 1613-1622.	2.6	6
77	Soluble and Green-light-emitting Oligo(9-fluorenylideneacetic acid): Electrosynthesis and Characterization. <i>Chinese Journal of Chemistry</i> , 2012, 30, 1177-1184.	4.9	3
78	Simultaneous Increases in Electrical Conductivity and Seebeck Coefficient of PEDOT:PSS Films by Adding Ionic Liquids into a Polymer Solution. <i>Journal of Electronic Materials</i> , 2012, 41, 639-645.	2.2	74
79	Electrosynthesis of blue-light-emitting oligo(1-bromopyrene) with favorable solubility. <i>Journal of Solid State Electrochemistry</i> , 2012, 16, 1907-1915.	2.5	1
80	Novel cross-linking poly(ethylene oxide) grafted poly(1-hydroxy-2-methoxyphenol) copolymers by secondary polymerization. <i>Electrochimica Acta</i> , 2012, 77, 163-170.	5.2	4
81	Novel poly-bridged naphthalene with blue-light-emitting property via electropolymerization. <i>Journal of Applied Polymer Science</i> , 2012, 123, 2706-2714.	2.6	7
82	Electrosynthesis and characterization of a polyfluorene derivative with green-light-emitting property. <i>Journal of Materials Science</i> , 2012, 47, 315-322.	3.7	10
83	Synthesis, characterization, and thermoelectric properties of a conducting copolymer of 1,12-bis(carbazolyl)dodecane and thieno[3,2-b]thiophene. <i>Journal of Solid State Electrochemistry</i> , 2012, 16, 117-126.	2.5	30
84	Electrochemistry, morphology, thermoelectric and thermal degradation behaviors of free-standing copolymer films made from 1,12-bis(carbazolyl)dodecane and 3,4-ethylenedioxythiophene. <i>Polymer Journal</i> , 2011, 43, 531-539.	2.7	30
85	Conducting polynaphthalenes from 1,1'-binaphthyl and 1,1'-bi-2-naphthol via electropolymerization. <i>Synthetic Metals</i> , 2011, 161, 188-195.	3.9	27
86	Facile electrosynthesis and thermoelectric performance of electroactive free-standing polythieno[3,2-b]thiophene films. <i>Journal of Solid State Electrochemistry</i> , 2011, 15, 539-548.	2.5	28
87	Free-Standing PEDOT-PSS/Ca ₃ Co ₄ O ₉ Composite Films as Novel Thermoelectric Materials. <i>Journal of Electronic Materials</i> , 2011, 40, 948-952.	2.2	64
88	Thermoelectric Performance of Poly(3,4-Ethylenedioxy-thiophene)/Poly(Styrenesulfonate) Pellets and Films. <i>Journal of Electronic Materials</i> , 2011, 40, 648-651.	2.2	47
89	Electrochemical immobilization of ascorbate oxidase in poly(3,4-ethylenedioxythiophene)/multiwalled carbon nanotubes composite films. <i>Journal of Applied Polymer Science</i> , 2011, 122, 1142-1151.	2.6	21
90	Effect of oxidants on chemical synthesis and properties of poly(3,4-ethylenedithiathophene). , 2011, , .		0

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91	ELECTROCHEMICAL POLYMERIZATION OF FLUORENE IN MIXED PROTON ELECTROLYTE OF ACETIC ACID CONTAINING BORON TRIFLUORIDE DIETHYL ETHERATE. <i>Acta Polymerica Sinica</i> , 2011, 011, 327-334.	0.0	5
92	Electrochemical copolymerization of 9,10-dihydrophenanthrene and 3-methylthiophene and characterization of their copolymer with tunable fluorescence properties. <i>Journal of Solid State Electrochemistry</i> , 2010, 14, 1153-1161.	2.5	6
93	Synthesis and electrochemical polymerization of 9,9-bis(carbazolylalkyl)fluorene and characterization of its conducting polymer film with high tensile strength. <i>Journal of Materials Science</i> , 2010, 45, 1963-1971.	3.7	4
94	Electrochemical copolymerization of dibenzo-18-crown-6 and carbazole and characterization of their copolymer. <i>Journal of Materials Science</i> , 2010, 45, 5769-5777.	3.7	5
95	Electrodeposition of free-standing poly(1,4-dihydroxybenzene-3-methylthiophene) films with tunable fluorescence properties. <i>Journal of Applied Polymer Science</i> , 2010, 115, 3273-3281.	2.6	4
96	Electropolymerization study of benzothiophenes and characterization of novel poly(dibenzothiophene-S,S-dioxide). <i>Journal of Electroanalytical Chemistry</i> , 2010, 643, 67-76.	3.8	35
97	Facile electrosynthesis of novel free-standing electroactive poly((S)-(1,1'-bi-2-naphthol dimethyl) Tj ETQq1 1 0,784314,rgBT /Over 5,2 26	5.2	26
98	Thermoelectric Performances of Free-Standing Polythiophene and Poly(3-Methylthiophene) Nanofilms. <i>Chinese Physics Letters</i> , 2010, 27, 057201.	3.3	61
99	Novel Electroactive Proton-Doped Conducting Poly(aromatic ethers) with Good Fluorescence Properties via Electropolymerization. <i>Macromolecules</i> , 2010, 43, 4599-4608.	4.8	75
100	Highly conducting free-standing poly(3,4-ethylenedioxythiophene)/poly(styrenesulfonate) films with improved thermoelectric performances. <i>Synthetic Metals</i> , 2010, 160, 2481-2485.	3.9	107
101	ELECTROCHEMICAL OXIDATION CROSS-LINKING REACTION OF POLY(FLUORENYLACRYLATE) AND ITS CHARACTERIZATION. <i>Acta Polymerica Sinica</i> , 2010, 010, 714-720.	0.0	3
102	Electrochemical copolymerization of benzanthrone and 3-methylthiophene and characterization of their fluorescent copolymer. <i>Journal of Materials Science</i> , 2009, 44, 5909-5918.	3.7	26
103	Electrosynthesis of highly conducting poly(1,5-dihydroxynaphthalene) in BF ₃ ·Et ₂ O. <i>European Polymer Journal</i> , 2009, 45, 2279-2287.	5.4	39
104	Electrochemical polymerization of 3,4-ethylenedioxythiophene in aqueous micellar solution containing biocompatible amino acid-based surfactant. <i>Journal of Electroanalytical Chemistry</i> , 2009, 634, 49-58.	3.8	55
105	Electrosyntheses and characterization of poly(9-bromophenanthrene) in boron trifluoride diethyl etherate. <i>European Polymer Journal</i> , 2009, 45, 418-425.	5.4	12
106	Electrochemical Polymerization of Benzanthrone and Characterization of its Excellent Green-light-emitting Polymer. <i>Journal of Physical Chemistry B</i> , 2009, 113, 37-48.	2.6	45
107	Polyfluorene Derivatives with Hydroxyl and Carboxyl Substitution: Electrosynthesis and Characterization. <i>Journal of Physical Chemistry C</i> , 2009, 113, 9900-9910.	3.1	25
108	Facile electrosynthesis of nitro-group-substituted oligopyrene with bicolored emission. <i>Electrochimica Acta</i> , 2008, 54, 334-340.	5.2	54

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109	Thermoelectric Performance of Poly(3,4-ethylenedioxythiophene): Poly(styrenesulfonate). Chinese Physics Letters, 2008, 25, 2202-2205.	3.3	168