

CITATION REPORT

List of articles citing

Critical Role of Side-Chain Attachment Density on the Order and Device Performance of Polythiophenes

DOI: 10.1021/ma0709001

Macromolecules, 2007, 40, 7960-7965.

Source: <https://exaly.com/paper-pdf/43029197/citation-report.pdf>

Version: 2024-04-27

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
311	Thermally Activated in Situ Doping Enables Solid-State Processing of Conducting Polymers.		
310	Simultaneous Use of Small- and Wide-Angle X-ray Techniques to Analyze Nanometerscale Phase Separation in Polymer Heterojunction Solar Cells. 2008 , 20, 2573-2578		221
309	Molecular chimeras: New strategies in the design of functional materials. 2008 , 3, 481-493		4
308	New Didecyloxyphenylene-Acceptor Alternating Conjugated Copolymers: Synthesis, Properties, and Optoelectronic Device Applications. <i>Macromolecules</i> , 2008 , 41, 6952-6959	5.5	69
307	Synthesis, characterization, and transistor response of semiconducting silole polymers with substantial hole mobility and air stability. Experiment and theory. 2008 , 130, 7670-85		326
306	Characterization of semiconducting polymers for thin film transistors. 2008 , 26, 445		17
305	Conjugation Effects on Carrier Mobilities of Polythiophenes Probed by Time-Resolved Terahertz Spectroscopy. 2008 , 112, 10587-10590		17
304	In Situ Conjugated Polyelectrolyte Formation. <i>Macromolecules</i> , 2008 , 41, 9146-9155	5.5	23
303	Small Bandgap Polymers for Organic Solar Cells (Polymer Material Development in the Last 5 Years). 2008 , 48, 531-582		586
302	Molecular Basis of Mesophase Ordering in a Thiophene-Based Copolymer. <i>Macromolecules</i> , 2008 , 41, 5709-5715	5.5	97
301	Synthesis, Properties, and Tunable Supramolecular Architecture of Regioregular Poly(3-alkylthiophene)s with Alternating Alkyl and Semifluoroalkyl Substituents. <i>Macromolecules</i> , 2008 , 41, 5156-5165	5.5	54
300	Transition from Solution to the Solid State in Polymer Solar Cells Cast from Mixed Solvents. <i>Macromolecules</i> , 2008 , 41, 8655-8659	5.5	122
299	Bithiophene-Perfluorobenzene Copolymers. <i>Macromolecules</i> , 2008 , 41, 8643-8647	5.5	24
298	Novel copolymers incorporating dithieno[3,2-b:2',3'-d]thiophene moieties for air-stable and high performance organic field-effect transistors. 2008 , 18, 3426		47
297	Thin Film Microstructure of a Solution Processable Pyrene-Based Organic Semiconductor. 2008 , 20, 5743-5749	44	
296	n-channel polymers by design: optimizing the interplay of solubilizing substituents, crystal packing, and field-effect transistor characteristics in polymeric bithiophene-imide semiconductors. 2008 , 130, 9679-94		267
295	Effect of Polymer Nanoparticle Formation on the Efficiency of Polythiophene Based Bulk-Heterojunction Solar Cells. 2008 , 112, 12583-12589		57

294	Correlating the microstructure of thin films of poly[5,5-bis(3-dodecyl-2-thienyl)-2,2-bithiophene] with charge transport: Effect of dielectric surface energy and thermal annealing. 2008 , 78,	66
293	Theoretical and experimental investigations of a polyalkylated-thieno[3,2-b]thiophene semiconductor. 2008 , 104, 083705	8
292	Local charge trapping in conjugated polymers resolved by scanning Kelvin probe microscopy. 2009 , 103, 256803	56
291	Enhancement of Carrier Mobilities of Organic Semiconductors on Sol-gel Dielectrics: Investigations of Molecular Organization and Interfacial Chemistry Effects. 2009 , 19, 378-385	12
290	Bimolecular Crystals of Fullerenes in Conjugated Polymers and the Implications of Molecular Mixing for Solar Cells. 2009 , 19, 1173-1179	373
289	Semiconducting Thienothiophene Copolymers: Design, Synthesis, Morphology, and Performance in Thin-Film Organic Transistors. 2009 , 21, 1091-1109	382
288	Toward the Development of Printable Nanowire Electronics and Sensors. 2009 , 21, 3730-3743	336
287	Unexpectedly high field-effect mobility of a soluble, low molecular weight oligoquaterthiophene fraction with low polydispersity. 2009 , 95, 67-72	35
286	An ad hoc tight binding method to study the electronic structure of semiconducting polymers. 2009 , 480, 210-214	29
285	Alkylsubstituted thienothiophene semiconducting materials: structure-property relationships. 2009 , 131, 11930-8	115
284	Computational study of the structure and charge-transfer parameters in low-molecular-mass P3HT. 2009 , 113, 9393-401	93
283	Synthesis of conjugated polymers for organic solar cell applications. 2009 , 109, 5868-923	3432
282	Side-Chain Dynamics and Crystallization in a Series of Regiorandom Poly(3-alkylthiophenes). <i>Macromolecules</i> , 2009 , 42, 716-724	5-5 73
281	Determination of the electron escape depth for NEXAFS spectroscopy. 2009 , 25, 6341-8	50
280	A realistic description of the charge carrier wave function in microcrystalline polymer semiconductors. 2009 , 131, 11179-86	63
279	Controlling Poly(3-hexylthiophene) Crystal Dimension: Nanowhiskers and Nanoribbons. <i>Macromolecules</i> , 2009 , 42, 9390-9393	5-5 211
278	Electrical and Thermoelectric Properties of Poly(2,7-Carbazole) Derivatives. 2009 , 21, 751-757	155
277	Thienothiophene Copolymers in Field Effect Transistors. 647-672	1

276	High-lamellar ordering and amorphous-like pi-network in short-chain thiazolothiazole-thiophene copolymers lead to high mobilities. 2009 , 131, 2521-9		248
275	Bimodal Temperature Behavior of Structure and Mobility in High Molecular Weight P3HT Thin Films. <i>Macromolecules</i> , 2009 , 42, 4651-4660	5.5	89
274	Highly Coplanar Polythiophenes with π -CR Side Chains: Self-Assembly, Linear and Nonlinear Optical Properties, and Piezochromism. 2009 , 82, 896-909		36
273	A comparative MD study of the local structure of polymer semiconductors P3HT and PBTTT. 2010 , 12, 14735-9		61
272	Packing structure of poly(3-hexylthiophene) crystal: ab initio and molecular dynamics studies. 2010 , 114, 5997-6000		76
271	Molecular dynamics of regioregular poly(3-hexylthiophene) investigated by NMR relaxation and an interpretation of temperature dependent optical absorption. 2010 , 114, 1241-8		52
270	Organic semiconductors: impact of disorder at different timescales. 2010 , 11, 2067-74		72
269	Sensing of Alkylating Agents Using Organic Field-Effect Transistors. 2010 , 20, 105-110		22
268	Temperature-Resolved Local and Macroscopic Charge Carrier Transport in Thin P3HT Layers. 2010 , 20, 2286-2295		115
267	Microstructural origin of high mobility in high-performance poly(thieno-thiophene) thin-film transistors. 2010 , 22, 697-701		69
266	Microstructural characterization and charge transport in thin films of conjugated polymers. 2010 , 22, 3812-38		414
265	Advanced Functional Regioregular Polythiophenes. 2010 , 91-145		11
264	Low band gap polymers based on 1,4-dialkoxybenzene, thiophene, bithiophene donors and the benzothiadiazole acceptor. 2010 , 94, 774-780		45
263	Polymer semiconductor crystals. 2010 , 13, 14-24		191
262	Ultrafast Photoinduced Carrier Dynamics of Organic Semiconductors Measured by Time-Resolved Terahertz Spectroscopy. 2010 , 241-254		1
261	Coarse-Grained Computer Simulations of Polymer/Fullerene Bulk Heterojunctions for Organic Photovoltaic Applications. 2010 , 6, 526-37		148
260	Importance of C(2) symmetry for the device performance of a newly synthesized family of fused-ring thiophenes. 2010 , 22, 2770-2779		33
259	Correlations between mechanical and electrical properties of polythiophenes. 2010 , 4, 7538-44		178

258	High-mobility semiconducting naphthodithiophene copolymers. 2010 , 132, 5000-1		178
257	High Crystallinity and Nature of Crystal-Crystal Phase Transformations in Regioregular Poly(3-hexylthiophene). <i>Macromolecules</i> , 2010 , 43, 9401-9410	5.5	118
256	Photoinduced Charge Carrier Generation in Blends of Poly(Thienothiophene) Derivatives and [6,6]-Phenyl-C61-butyric Acid Methyl Ester: Phase Segregation versus Intercalation. 2010 , 114, 15116-15120		33
255	Vertical Stratification and Interfacial Structure in P3HT:PCBM Organic Solar Cells. 2010 , 114, 15797-15805		123
254	Confined dynamics and crystallization in self-assembled alkyl nanodomains. 2010 , 114, 15459-65		46
253	Synthesis and Electropolymerization of Hexadecyl Functionalized Bithiophene and Thieno[3,2-b]thiophene End-Capped with EDOT and EDTT Units. 2010 , 22, 3000-3008		35
252	Temperature and Molecular Weight Dependent Hierarchical Equilibrium Structures in Semiconducting Poly(3-hexylthiophene). <i>Macromolecules</i> , 2010 , 43, 4646-4653	5.5	183
251	Structural Model of Regioregular Poly(3-hexylthiophene) Obtained by Electron Diffraction Analysis. <i>Macromolecules</i> , 2010 , 43, 4961-4967	5.5	181
250	Thiophene-rich fused-aromatic thienopyrazine acceptor for donor-acceptor low band-gap polymers for OTFT and polymer solar cell applications. 2010 , 20, 5823		76
249	Materials and applications for large area electronics: solution-based approaches. 2010 , 110, 3-24		1510
248	Crystalline Random Conjugated Copolymers with Multiple Side Chains: Tunable Intermolecular Interactions and Enhanced Charge Transport and Photovoltaic Properties. <i>Macromolecules</i> , 2010 , 43, 3306-3313	5.5	78
247	Long-term behavior and side chain crystallization of poly(3-alkyl thiophenes). 2010 , 6, 3506		28
246	Control of mesoscale and nanoscale ordering of organic semiconductors at the gate dielectric/semiconductor interface for organic transistors. 2010 , 20, 2549		93
245	Well-defined, high molecular weight poly(3-alkylthiophene)s in thin-film transistors: side chain invariance in field-effect mobility. 2010 , 20, 3195		45
244	Solution processed organic field-effect transistors and their application in printed logic circuits. 2010 , 20, 7059		73
243	Temperature/time-dependent crystallization of polythiophene: fullerene bulk heterojunction films for polymer solar cells. 2010 , 2, 2384-9		28
242	Controlling side-chain density of electron donating polymers for improving their packing structure and photovoltaic performance. 2011 , 47, 3577-9		39
241	Role of Borderline Solvents to Induce Pronounced Extended-Chain Lamellar Order in π -Stackable Polymers. <i>Macromolecules</i> , 2011 , 44, 9692-9702	5.5	39

240	Regioregularity and Single Polythiophene Chain Conformation. 2011 , 2, 1400-1404		95
239	Impact of isomeric structures on transistor performances in naphthodithiophene semiconducting polymers. 2011 , 133, 6852-60		194
238	Relation between Microstructure and Charge Transport in Polymers of Different Regioregularity. 2011 , 115, 19386-19393		77
237	Dynamics of Crystallization and Disorder during Annealing of P3HT/PCBM Bulk Heterojunctions. <i>Macromolecules</i> , 2011 , 44, 2725-2734	5.5	171
236	Drastic Control of Texture in a High Performance n-Type Polymeric Semiconductor and Implications for Charge Transport. <i>Macromolecules</i> , 2011 , 44, 5246-5255	5.5	250
235	Mobility and photovoltaic performance studies on polymer blends: effects of side chains volume fraction. 2011 , 21, 2594-2600		40
234	Polymorphism and Structural Transition around 54 °C in Regioregular Poly(3-hexylthiophene) with High Crystallinity As Revealed by Infrared Spectroscopy. <i>Macromolecules</i> , 2011 , 44, 9341-9350	5.5	87
233	Chemically treating poly(3-hexylthiophene) defects to improve bulk heterojunction photovoltaics. 2011 , 3, 2042-50		22
232	Molecular packing of high-mobility diketo pyrrolo-pyrrole polymer semiconductors with branched alkyl side chains. 2011 , 133, 15073-84		353
231	Observations of PDDTT subject to thermal treatment: correlation between performance and order. 2011 , 133, 19602-5		16
230	Photoinduced carrier generation and decay dynamics in intercalated and non-intercalated polymer:fullerene bulk heterojunctions. 2011 , 5, 5635-46		61
229	Calibrated NEXAFS spectra of common conjugated polymers. 2011 , 134, 024702		95
228	Real-Time Observation of Poly(3-alkylthiophene) Crystallization and Correlation with Transient Optoelectronic Properties. <i>Macromolecules</i> , 2011 , 44, 6653-6658	5.5	92
227	Dynamic Structure of Poly(3-alkylthiophene)s and Its Relation with Conjugation Length. 2011 , 68, 11-23		0
226	Structural variability and dynamics of the P3HT/PCBM interface and its effects on the electronic structure and the charge-transfer rates in solar cells. 2011 , 13, 21461-70		88
225	Structure and X-ray spectrum of crystalline poly(3-hexylthiophene) from DFT-van der Waals calculations. 2011 , 248, 1360-1368		58
224	Effects of thermal annealing upon the nanomorphology of poly(3-hexylselenophene)-PCBM blends. 2011 , 32, 1454-60		15
223	Molecular characterization of organic electronic films. 2011 , 23, 319-37		190

222	Bulky side-chain density effect on the photophysical, electrochemical and photovoltaic properties of polythiophene derivatives. 2011 , 52, 326-338		30
221	Improvement of morphological and electrical properties in poly (3-hexylthiophene-2, 5-diyl) Films Formed by Thermal Annealing in the presence of electric field during the solvent drying step. 2012 ,		1
220	Synthesis, Structures, and Hydroboration of Oligo- and Poly(3-alkynylthiophene)s. <i>Macromolecules</i> , 2012 , 45, 6333-6343	5.5	24
219	Importance of Solubilizing Group and Backbone Planarity in Low Band Gap Polymers for High Performance Ambipolar field-effect Transistors. 2012 , 24, 1316-1323		158
218	Effects of structure-manipulated molecular stacking on solid-state optical properties and device performances. 2012 , 3, 2832		40
217	Effects of side-chain interdigitation on stability: an environmentally, electrically, and thermally stable semiconducting polymer. 2012 , 4, 702-6		13
216	Quantitative determination of organic semiconductor microstructure from the molecular to device scale. 2012 , 112, 5488-519		922
215	Influence of alkyl chain branching positions on the hole mobilities of polymer thin-film transistors. 2012 , 24, 6457-61		493
214	Factors Governing Intercalation of Fullerenes and Other Small Molecules Between the Side Chains of Semiconducting Polymers Used in Solar Cells. 2012 , 2, 1208-1217		90
213	Spectroscopic study of side-chain melting and crystallization of regioregular poly(3-dodecylthiophene). 2012 , 3, 861		22
212	Conducting Polymers: Applications in Electronics and Photovoltaics. 2012 ,		1
211	Polymer blends with semiconducting nanowires for organic electronics. 2012 , 22, 4244		66
210	Conformations and torsional potentials of poly(3-hexylthiophene) oligomers: Density functional calculations up to the dodecamer. 2012 , 995, 36-42		33
209	p/n Switching of Ambipolar BithiazoleBenzothiadiazole-Based Polymers in Photovoltaic Cells. <i>Macromolecules</i> , 2012 , 45, 2709-2719	5.5	42
208	Microstructure of polycrystalline PBTTT films: domain mapping and structure formation. 2012 , 6, 1849-64		93
207	Multi-Scale Modeling of Bulk Heterojunctions for Organic Photovoltaic Applications. 2012 ,		2
206	The influence of solid-state microstructure on the origin and yield of long-lived photogenerated charge in neat semiconducting polymers. 2012 , 50, 27-37		93
205	Influence of the Ethylhexyl Side-Chain Content on the Open-Circuit Voltage in rr-Poly(3-hexylthiophene-co-3-(2-ethylhexyl)thiophene) Copolymers. <i>Macromolecules</i> , 2012 , 45, 3740-3748	5.5	113

204	Three-dimensional packing structure and electronic properties of biaxially oriented poly(2,5-bis(3-alkylthiophene-2-yl)thieno[3,2-b]thiophene) films. 2012 , 134, 6177-90		93
203	Design of semiconducting indacenodithiophene polymers for high performance transistors and solar cells. 2012 , 45, 714-22		229
202	Photocrosslinkable liquid-crystalline polymers for stable photovoltaics by adjusting side-chains spacing and fullerene size to control intercalation. 2012 , 13, 1443-1455		18
201	Amphiphilic block copolymer surface composition: Effects of spin coating versus spray coating. 2012 , 53, 1321-1327		13
200	Influence of the regioregularity on the chiral supramolecular organization of poly(3-alkylsulfanylthiophene)s. 2013 , 3, 3342		17
199	Improved force field for molecular modeling of poly(3-hexylthiophene). 2013 , 117, 10035-45		43
198	A general relationship between disorder, aggregation and charge transport in conjugated polymers. 2013 , 12, 1038-44		1435
197	Photocurrent enhancement from diketopyrrolopyrrole polymer solar cells through alkyl-chain branching point manipulation. 2013 , 135, 11537-40		248
196	Directed assembly of P3HT:PCBM blend films using a chemical template with sub-300 nm features. 2013 , 7, 1990-9		8
195	Characterization of the morphology of solution-processed bulk heterojunction organic photovoltaics. 2013 , 38, 1990-2052		237
194	Relating chemical structure to device performance via morphology control in diketopyrrolopyrrole-based low band gap polymers. 2013 , 135, 19248-59		109
193	Effects of Molecular Weight on Microstructure and Carrier Transport in a Semicrystalline Poly(thieno)thiophene. <i>Macromolecules</i> , 2013 , 46, 9349-9358	5-5	45
192	Polymers for electronics and spintronics. 2013 , 42, 8895-999		315
191	Perylene diimide functionalized polynorbornene: a macromolecular scaffold for supramolecular self-assembly. 2013 , 1, 8060		6
190	Fibrillar morphology of derivatives of poly(3-alkylthiophene)s by solvent vapor annealing: effects of conformational transition and conjugate length. 2013 , 117, 5996-6006		19
189	All-Atom Molecular Dynamics Simulation of Temperature Effects on the Structural, Thermodynamic, and Packing Properties of the Pure Amorphous and Pure Crystalline Phases of Regioregular P3HT. <i>Macromolecules</i> , 2013 , 46, 2450-2467	5-5	71
188	Analytical electron microscopy for characterization of fluid or semi-solid multiphase systems containing nanoparticulate material. 2013 , 5, 115-26		4
187	Moderate doping leads to high performance of semiconductor/insulator polymer blend transistors. 2013 , 4, 1588		217

186	Thieno[3,4-c]pyrrole-4,6-dione Containing Copolymers for High Performance Field-Effect Transistors. <i>Macromolecules</i> , 2013 , 46, 3887-3894	5.5	64
185	Boosting the ambipolar performance of solution-processable polymer semiconductors via hybrid side-chain engineering. 2013 , 135, 9540-7		422
184	Formation of photoconductive nanowires of tetracene derivative in composite thin film. 2013 , 5, 1937-42		13
183	Alkyl Side Chain Length Modulates the Electronic Structure and Electrical Characteristics of Poly(3-alkylthiophene) Thin Films. 2013 , 117, 11764-11769		16
182	Nano-fibrils formation of pBTTT via adding alkylthiol into solutions: Control of morphology and crystalline structure. 2013 , 54, 948-957		12
181	Critical role of alkyl chain branching of organic semiconductors in enabling solution-processed N-channel organic thin-film transistors with mobility of up to 3.50 cm ² V ⁻¹ s ⁻¹ . 2013 , 135, 2338-49		344
180	Solution-processed small molecules using different electron linkers for high-performance solar cells. 2013 , 25, 4657-62		92
179	Scanning tunneling microscopy investigation of self-assembled poly(3-hexylthiophene) monolayer. 2013 , 139, 014701		15
178	Synthesis, electronic structure, molecular packing/morphology evolution, and carrier mobilities of pure oligo-/poly(alkylthiophenes). 2013 , 135, 844-54		84
177	Effect of the side-chain-distribution density on the single-conjugated-polymer-chain conformation. 2013 , 14, 4143-8		23
176	A Study on the Correlation Between Structure and Hole Transport in Semi-Crystalline Regioregular P3HT. 2013 , 3, 263-270		46
175	Structure and Morphology Control in Thin Films of Conjugated Polymers for an Improved Charge Transport. 2013 , 5, 1272-1324		67
174	Structural, electronic, and linear optical properties of organic photovoltaic PBTTT-C14 crystal. 2013 , 138, 164503		7
173	Charge carrier mobility in amorphous organic semiconductors. 2013 , 192-234		3
172	Poly-(3)hexylthiophene nanowire networks for versatile fabrication of bulk heterojunctions with increased active volume. 2013 , 31, 031209		4
171	Alkyl Chain Orientations in Dicyanomethylene-Substituted 2,5-Di(thiophen-2-yl)thieno-[3,2-b]thienoquinoid: Impact on Solid-State and Thin-Film Transistor Performance. 2013 , 23, 2277-2284		56
170	Alkyl side-chain branching point effects in thieno[3,4-c]pyrrole-4,6-dione copolymers. 2013 , 1, 30-35		7
169	The role of additive in diketopyrrolopyrrole-based small molecular bulk heterojunction solar cells. 2013 , 25, 6519-25		57

- 168 Tuning polarity and improving charge transport in organic semiconductors. **2013**,
- 167 Electronic and optical properties at organic/organic interfaces in organic solar cells. **2014**, 352, 103-50 5
- 166 The good host: formation of discrete one-dimensional fullerene "channels" in well-ordered poly(2,5-bis(3-alkylthiophen-2-yl)thieno[3,2-b]thiophene) oligomers. **2014**, 136, 18120-30 36
- 165 Melting Behavior of Poly(3-(2-ethyl)hexylthiophene). *Macromolecules*, **2014**, 47, 8305-8310 5.5 15
- 164 Control of thermal and optoelectronic properties in conjugated poly (3-alkylthiophenes). **2014**, 4, 45-50 5
- 163 Advances in Charge Carrier Mobilities of Semiconducting Polymers Used in Organic Transistors. **2014**, 26, 647-663 335
- 162 Effect of Non-Chlorinated Mixed Solvents on Charge Transport and Morphology of Solution-Processed Polymer Field-Effect Transistors. **2014**, 24, 3524-3534 73
- 161 One dimensional main-chain crystallization kinetics of poly(3-octylthiophenes) investigated by infrared spectroscopy. **2014**, 71, 1-5 2
- 160 Thiophene-Based High-Performance Donor Polymers for Organic Solar Cells. **2014**, 27-60
- 159 Increase in hole mobility in poly (3-hexylthiophene-2,5-diyl) films annealed under electric field during the solvent drying step. **2014**, 15, 1387-1395 28
- 158 Photocurrent enhancement in diketopyrrolopyrrole solar cells by manipulating dipolar anchoring terminals on alkyl-chain spacers. **2014**, 9, 883-92 17
- 157 Benzotrithiophene Copolymers: Influence of Molecular Packing and Energy Levels on Charge Carrier Mobility. *Macromolecules*, **2014**, 47, 2883-2890 5.5 21
- 156 Contrasting Effect of Alkylation on the Ordering Structure in Isomeric Naphthodithiophene-Based Polymers. *Macromolecules*, **2014**, 47, 3502-3510 5.5 30
- 155 Important thermodynamic characteristics of poly(3-hexyl thiophene). **2014**, 55, 4-7 32
- 154 On the inter-ring torsion potential of regioregular P3HT: a first principles reexamination with explicit side chains. **2014**, 16, 3983-94 23
- 153 Phase Transitions and Anisotropic Thermal Expansion in High Mobility Core-expanded Naphthalene Diimide Thin Film Transistors. **2014**, 24, n/a-n/a 11
- 152 Emergent Properties in Locally Ordered Molecular Materials. **2014**, 54, 454-466 1
- 151 Influence of alkyl chain length on the solid-state properties and transistor performance of BN-substituted tetrathienonaphthalenes. **2014**, 2, 8152-8161 74

150	Controlled regioregularity in oligo(2-methoxy-5-(2'-ethylhexyloxy)-1,4-phenylenevinylenes. 2014 , 79, 7093-102		4
149	Improving mobility and electrochemical stability of a water-gated polymer field-effect transistor. 2014 , 15, 2126-2134		34
148	Measuring Order in Regioregular Poly(3-hexylthiophene) with Solid-State C CPMAS NMR.. 2014 , 3, 130-135		28
147	Multiscale Modelling of Organic and Hybrid Photovoltaics. 2014 ,		12
146	Determination and Control of Microstructure in Organic Photovoltaic Devices. 2014 , 827-860		
145	Effects of Annealing and Residual Solvents on Amorphous P3HT and PBTTT Films. 2014 , 118, 8641-8655		27
144	Controlling the Morphology of Model Conjugated Thiophene Oligomers through Alkyl Side Chain Length, Placement, and Interactions. <i>Macromolecules</i> , 2014 , 47, 2736-2747	5-5	30
143	Controlling conjugated polymer morphology and charge carrier transport with a flexible-linker approach. 2014 , 5, 4922-4927		35
142	The Crucial Influence of Fullerene Phases on Photogeneration in Organic Bulk Heterojunction Solar Cells. 2014 , 4, 1400922		48
141	Bulk heterojunction solar cells: morphology and performance relationships. 2014 , 114, 7006-43		983
140	Oligothiophene semiconductors: synthesis, characterization, and applications for organic devices. 2014 , 6, 5327-43		165
139	Analysis of Molecular Orientation and Conformation of Poly(3-hexylthiophene) Thin Films on Silicon by Infrared p-Polarized Multiple-angle Incidence Resolution Spectrometry. 2014 , 43, 1198-1200		9
138	Using Molecular Design to Increase Hole Transport: Backbone Fluorination in the Benchmark Material Poly(2,5-bis(3-alkylthiophen-2-yl)thieno[3,2-b]-thiophene (pBTTT). 2015 , 25, 7038-7048		47
137	Effects of alkyl chain positioning on conjugated polymer microstructure and field-effect mobilities. 2015 , 5, 435-440		2
136	Angular-Shaped 4,9-Dialkyl 1,2,5-Naphthodithiophene-Based Donor-Acceptor Copolymers: Investigation of Isomeric Structural Effects on Molecular Properties and Performance of Field-Effect Transistors and Photovoltaics. 2015 , 25, 6131-6143		46
135	Classification of semiconducting polymeric mesophases to optimize device postprocessing. 2015 , 53, 1641-1653		19
134	Optimizing Light-Harvesting Polymers via Side Chain Engineering. 2015 , 25, 6458-6469		32
133	Absence of Structural Impact of Noble Nanoparticles on P3HT:PCBM Blends for Plasmon-Enhanced Bulk-Heterojunction Organic Solar Cells Probed by Synchrotron GI-XRD. 2015 , 5, 10633		12

132	Thiophene-Based Conjugated Polymers with Photolabile Solubilizing Side Chains. <i>Macromolecules</i> , 2015 , 48, 959-966	5.5	45
131	Backbone orientation in semiconducting polymers. 2015 , 59, A1-A15		127
130	A molecular nematic liquid crystalline material for high-performance organic photovoltaics. 2015 , 6, 6013		455
129	Spectroscopic Signature of Two Distinct H-Aggregate Species in Poly(3-hexylthiophene). <i>Macromolecules</i> , 2015 , 48, 1543-1553	5.5	68
128	Light-Controlled Molecular Zippers Based on Azobenzene Main Chain Polymers. <i>Macromolecules</i> , 2015 , 48, 1531-1537	5.5	36
127	Precipitation and sol formation from poly(p-phenylene)s solutions by spectroscopic study. 2015 , 70, 221-231		8
126	Film shrinkage inducing strong chain entanglement in fluorinated polyimide. 2015 , 68, 293-301		8
125	Morphological and charge transport properties of amorphous and crystalline P3HT and PBTTT: insights from theory. 2015 , 17, 18742-50		39
124	Thiophene-Diketopyrrolopyrrole-Based Quinoidal Small Molecules as Solution-Processable and Air-Stable Organic Semiconductors: Tuning of the Length and Branching Position of the Alkyl Side Chain toward a High-Performance n-Channel Organic Field-Effect Transistor. 2015 , 7, 15978-87		80
123	Nonvolatile memories using the electrets of conjugated rod-coil block copolymer and its nanocomposite with single wall carbon nanotubes. 2015 , 3, 551-558		20
122	Role of Side-Chain Branching on Thin-Film Structure and Electronic Properties of Polythiophenes. 2015 , 25, 2616-2624		59
121	Effect of Solution Shearing Method on Packing and Disorder of Organic Semiconductor Polymers. 2015 , 27, 2350-2359		81
120	Donor-acceptor small molecules for organic photovoltaics: single-atom substitution (Se or S). 2015 , 7, 8188-99		31
119	Electronic and Optical Processes of Organic Semiconductors. 2015 , 193-305		4
118	A highly planar fluorinated benzothiadiazole-based conjugated polymer for high-performance organic thin-film transistors. 2015 , 27, 3045-52		143
117	End-Group-Mediated Aggregation of Poly(3-hexylthiophene). <i>Macromolecules</i> , 2015 , 48, 6224-6232	5.5	14
116	Controlled integration of oligo- and polythiophenes at the molecular scale. 2015 , 17, 26525-9		3
115	Effects of intra/inter-molecular potential parameters, length and grafting density of side-chains on the self-assembling behavior of poly(3?-alkylthiophene)s in the ordered state. 2015 , 77, 189-198		4

114	Highly functionalisable polythiophene phenylenes. 2015 , 6, 7618-7629		25
113	The Next Breakthrough for Organic Photovoltaics?. 2015 , 6, 77-84		113
112	The backbone rigidity and its influence on the morphology and charge mobility of FBT based conjugated polymers. 2015 , 6, 1309-1315		18
111	Novel Air Stable Organic Radical Semiconductor of Dimers of Dithienothiophene, Single Crystals, and Field-Effect Transistors. 2016 , 28, 7466-71		33
110	2D coherent charge transport in highly ordered conducting polymers doped by solid state diffusion. 2016 , 15, 896-902		268
109	Thermal reorganization of alkyl-substituted thienothiophene semiconductors. 2016 , 4, 5255-5262		4
108	Requirements for Forming Efficient 3-D Charge Transport Pathway in Diketopyrrolopyrrole-Based Copolymers: Film Morphology vs Molecular Packing. 2016 , 8, 12307-15		19
107	Highly Oriented and Crystalline Films of a Phenyl-Substituted Polythiophene Prepared by Epitaxy: Structural Model and Influence of Molecular Weight. <i>Macromolecules</i> , 2016 , 49, 3452-3462	5.5	32
106	Signatures of Intracrystallite and Intercrystallite Limitations of Charge Transport in Polythiophenes. <i>Macromolecules</i> , 2016 , 49, 7359-7369	5.5	38
105	About different packing states of alkyl groups in comb-like polymers with rigid backbones. 2016 , 12, 8093-8097		15
104	Packing Principles for Donor-Acceptor Oligomers from Analysis of Single Crystals. 2016 , 28, 5175-5190		31
103	Influence of alkyl chain branching point on the electron transport properties of di(perylene diimides) thin film transistors. 2016 , 6, 55946-55952		8
102	An ultra-narrow bandgap derived from thienoisoindigo polymers: structural influence on reducing the bandgap and self-organization. 2016 , 7, 1181-1190		34
101	Chemically Driven Interfacial Coupling in Charge-Transfer Mediated Functional Superstructures. 2016 , 16, 2851-9		11
100	Synthesis and Isomeric Effects of Ladder-Type Alkylated Terbenzodithiophene Derivatives. 2016 , 81, 2534-42		14
99	High performance thin film transistors based on bi-thieno[3,4-c]pyrrole-4,6-dione-containing copolymers: tuning the face-on and edge-on packing orientations. 2016 , 7, 807-815		12
98	Influence of side chains on the self-alignment capability of electroluminescent polyfluorenes. 2016 , 12, 1983-8		1
97	Insight into thin-film stacking modes of expanded quinoidal molecules on charge transport property via side-chain engineering. 2017 , 5, 1935-1943		20

96	Precise Side-Chain Engineering of Thienylenevinylene-Benzotriazole-Based Conjugated Polymers with Coplanar Backbone for Organic Field Effect Transistors and CMOS-like Inverters. 2017 , 9, 2758-2766		34
95	Semiconducting/insulating polymer blends with dual phase separation for organic field-effect transistors. 2017 , 7, 7526-7530		14
94	Synthesis of polythiophene derivative bearing methoxy and pyridine groups at the β -position and formation of an intramolecular hydrogen bonding through the polymer reaction. 2017 , 114, 221-230		1
93	Identifying Atomic Scale Structure in Undoped/Doped Semicrystalline P3HT Using Inelastic Neutron Scattering. <i>Macromolecules</i> , 2017 , 50, 2424-2435	5-5	39
92	Interrelations Between Side Chain and Main Chain Packing in Different Crystal Modifications of Alkoxyated Polyesters. 2017 , 121, 4583-4591		15
91	High-Performance Furan-Containing Conjugated Polymer for Environmentally Benign Solution Processing. 2017 , 9, 15652-15661		39
90	Systematic evaluation of structure-property relationships in heteroacene β -diketopyrrolopyrrole molecular donors for organic solar cells. 2017 , 5, 9217-9232		26
89	Thiophene and diketopyrrolopyrrole based conjugated polymers as efficient alternatives to spiro-OMeTAD in perovskite solar cells as hole transporting layers. 2017 , 5, 5193-5198		28
88	Molecular weight effect on surface and bulk structure of poly(3-hexylthiophene) thin films. 2017 , 119, 76-82		11
87	Effects of Molecular Structure and Packing Order on the Stretchability of Semicrystalline Conjugated Poly(Tetrathienoacene-diketopyrrolopyrrole) Polymers. 2017 , 3, 1600311		66
86	Nanoscale Morphology from Donor-Acceptor Block Copolymers: Formation and Functions. 2017 , 157-191		4
85	Temperature Induced Order-Disorder Transition in Solutions of Conjugated Polymers Probed by Optical Spectroscopy. 2017 , 8, 114-125		105
84	A Complex Interrelationship between Temperature-Dependent Polyquaterthiophene (PQT) Structural and Electrical Properties. 2017 , 121, 23149-23157		1
83	Correlating Crack Onset Strain and Cohesive Fracture Energy in Polymer Semiconductor Films. <i>Macromolecules</i> , 2017 , 50, 8611-8618	5-5	39
82	Directly Photopatternable Polythiophene as Dual-Tone Photoresist. <i>Macromolecules</i> , 2017 , 50, 7258-7267	5-5	6
81	Solvent-Regulated Mesoscale Aggregation Properties of Dilute PBTTT-C14 Solutions. <i>Macromolecules</i> , 2017 , 50, 5498-5509	5-5	18
80	Structural Effects of Gating Poly(3-hexylthiophene) through an Ionic Liquid. 2017 , 27, 1701791		48
79	Intramolecular Locked Dithioalkylbithiophene-Based Semiconductors for High-Performance Organic Field-Effect Transistors. 2017 , 29, 1702414		31

78	Controlling open-shell loading in norbornene-based radical polymers modulates the solid-state charge transport exponentially. 2017 , 55, 1516-1525	16
77	Structure-Property Relationships of Semiconducting Polymers for Flexible and Durable Polymer Field-Effect Transistors. 2017 , 9, 40503-40515	27
76	Photoluminescence Properties of Polymorphic Modifications of Low Molecular Weight Poly(3-hexylthiophene). 2017 , 12, 368	2
75	A new photocrosslinkable oligothiophene for organic solar cells with enhanced stability. 2017 , 186, 98-107	5
74	Blade Coating Aligned, High-Performance, Semiconducting-Polymer Transistors. 2018 , 30, 1924-1936	43
73	Unsubstituted meso-positioning thienyl BODIPY: a promising electron deficient building block for the development of near infrared (NIR) p-type donor-acceptor (D/A) conjugated polymers. 2018 , 6, 4030-4040	17
72	Diketopyrrolopyrrole based organic semiconductors with different numbers of thiophene units: symmetry tuning effect on electronic devices. 2018 , 42, 4017-4028	18
71	Rapid Formation and Macroscopic Self-Assembly of Liquid-Crystalline, High-Mobility, Semiconducting Thienothiophene. 2018 , 5, 1700875	29
70	PBTTT-C sol-gel transition by hierarchical colloidal bridging. 2018 , 14, 1270-1280	5
69	Improving Charge Carrier Mobility of Polymer Blend Field Effect Transistors with Majority Insulating Polymer Phase. 2018 , 122, 2918-2930	11
68	Effects of alkyl side chains positioning and presence of fused aromatic units in the backbone of low-bandgap diketopyrrolopyrrole copolymers on the optoelectronic properties of organic solar cells. 2018 , 56, 138-146	8
67	Novel conjugated polymers based on bis-dithieno[3,2-b;2',3'-d]pyrrole vinylene donor and diketopyrrolopyrrole acceptor: side chain engineering in organic field effect transistors. 2018 , 9, 28-37	11
66	Effect of the incorporation of an Ag nanoparticle interlayer on the photovoltaic performance of green bulk heterojunction water-soluble polythiophene solar cells. 2018 , 149, 273-285	13
65	Recent Progress in High-Mobility Organic Transistors: A Reality Check. 2018 , 30, e1801079	358
64	Interfacial effects on solution-sheared thin-film transistors. 2018 , 6, 12006-12015	11
63	Transformation from Nanofibers to Nanoribbons in Poly(3-hexylthiophene) Solution by Adding Alkylthiols. 2018 , 39, e1800048	7
62	Highly-soluble multi-alkylated polymer semiconductors and applications in high-performance field-effect transistors. 2019 , 7, 9591-9598	7
61	Influence of alkyl side-chain type and length on the thin film microstructure and OFET performance of naphthalene diimide-based organic semiconductors. 2019 , 75, 105378	19

60	Liquid Crystal Ordering on Conjugated Polymers Film Morphology for High Performance. 2019 , 57, 1572-1591	14
59	The Effects of Side Chains on the Charge Mobilities and Functionalities of Semiconducting Conjugated Polymers beyond Solubilities. 2019 , 31, e1903104	92
58	Recent advances in the orientation of conjugated polymers for organic field-effect transistors. 2019 , 7, 13323-13351	65
57	PBTTT-C sol-gel transition by rod associations and networking. 2019 , 15, 8022-8031	2
56	Grazing-incidence X-ray scattering of lamellar thin films. 2019 , 52, 247-251	6
55	Glass Transition Phenomenon for Conjugated Polymers. 2019 , 220, 1900062	40
54	Effect of Alkyl Side Chains on Intercrystallite Ordering in Semiconducting Polymers. <i>Macromolecules</i> , 2019 , 52, 2853-2862	5.5 13
53	Emerging efficient charge-transport landscape based on short-range order in conjugated polymers. 2019 , 251, 104-119	9
52	Liquid-Crystalline Order and Film Thickness Determine the Semicrystalline Morphology in Diketopyrrolopyrrole-Based Copolymers. 2019 , 8, 1611-1616	2
51	Structural Transition and Interdigitation of Alkyl Side Chains in the Conjugated Polymer Poly(3-hexylthiophene) and Their Effects on the Device Performance of the Associated Organic Field-Effect Transistor. 2020 , 12, 1142-1150	5
50	Controlled steric selectivity in molecular doping towards closest-packed supramolecular conductors. 2020 , 1,	5
49	Beyond Stretchability: Strength, Toughness, and Elastic Range in Semiconducting Polymers. 2020 , 32, 7582-7601	35
48	Elucidating the Influence of Side-Chain Circular Distribution on the Crack Onset Strain and Hole Mobility of Near-Amorphous Indacenodithiophene Copolymers. <i>Macromolecules</i> , 2020 , 53, 7511-7518	5.5 11
47	Unravelling the Correlation between Microphase Separation and Cocrystallization in Thiophene-Selenophene Block Copolymers for Organic Field-Effect Transistors. <i>Macromolecules</i> , 2020 , 53, 10245-10255	5.5 5
46	Anisotropy of Charge Transport in a Uniaxially Aligned Fused Electron-Deficient Polymer Processed by Solution Shear Coating. 2020 , 32, e2000063	18
45	Bimolecular crystal instability and morphology of bulk heterojunction blends in organic and perovskite solar cells. 2020 , 8, 11695-11703	1
44	Structure and Conformation of a Crystalline P3HT Film Adsorbed on an Alkanethiol Self-Assembled Monolayer Deposited on Gold. 2020 , 29, 2000010	3
43	Supramolecular Energy Materials. 2020 , 32, e1907247	52

42	Solution-Processable Anion-doped Conjugated Polymer for Nonvolatile Organic Transistor Memory with Synaptic Behaviors. 2020 , 12, 33968-33978		18
41	Effect of Block Sequence in All-Conjugated Triblock Copoly(3-alkylthiophene)s on Control of the Crystallization and Field-Effect Mobility. <i>Macromolecules</i> , 2020 , 53, 5775-5786	5.5	5
40	Spherulitic Crystallization in Langmuir-Blodgett Films of the Ditetradecyldimethylammonium-Au(dmit) Salt. 2020 , 36, 554-562		2
39	Development of conjugated polymers for organic flexible electronics. 2021 , 27-70		1
38	A review of experimental and computational attempts to remedy stability issues of perovskite solar cells. 2021 , 7, e06211		4
37	Exploring Isomeric Effects on Optical and Electrochemical Properties of Red/Orange Electrochromic Polymers. <i>Macromolecules</i> , 2021 , 54, 1677-1692	5.5	1
36	Cost-Effective, Flexible, and Colorful Dynamic Displays: Removing Underlying Conducting Layers from Polymer-Based Electrochromic Devices. 2021 , 13, 16732-16743		7
35	Anisotropic Coarse-Grained Model for Conjugated Polymers: Investigations into Solution Morphologies. <i>Macromolecules</i> , 2021 , 54, 3780-3789	5.5	8
34	Regiochemistry-Driven Organic Electrochemical Transistor Performance Enhancement in Ethylene Glycol-Functionalized Polythiophenes. 2021 , 143, 11007-11018		22
33	Extreme Orientational Uniformity in Large-Area Floating Films of Semiconducting Polymers for Their Application in Flexible Electronics. 2021 , 13, 38534-38543		6
32	High-Efficiency Ion-Exchange Doping of Conducting Polymers. 2021 , e2102988		16
31	Backbone flexibility on conjugated polymer's crystallization behavior and thin film mechanical stability.		1
30	When Assembly Meets Processing: Tuning Multiscale Morphology of Printed Conjugated Polymers for Controlled Charge Transport. 2021 , 33, 469-498		12
29	Efficient and thermally stable BHJ solar cells based on a soluble hydroxy-functionalized regioregular polydodecylthiophene. 2021 , 158, 104803		1
28	Influence of side-chain isomerization on the isothermal crystallization kinetics of poly(3-alkylthiophenes). 2021 , 36, 191-202		3
27	Thienoisindigo (TII)-Based Quinoidal Small Molecules for High-Performance n-Type Organic Field Effect Transistors. 2020 , 8, 2002930		12
26	Effects of Polymer-Packing Orientation on the Performances of Thin Film Transistors and Photovoltaic Cells. 2017 , 607-633		1
25	Cocrystallization-Promoted Charge Mobility in All-Conjugated Diblock Copolymers for High-Performance Field-Effect Transistors. 2020 , 12, 58094-58104		5

24	Development of Polymer Semiconductors for Field-Effect Transistor Devices in Displays. 2009 , 393-429		1
23	Unraveling the Unconventional Order of a High-Mobility Indacenodithiophene-Benzothiadiazole Copolymer.. 2021 , 10, 1306-1314		2
22	Semiconducting Polythiophenes for Field-Effect Transistor Devices in Flexible Electronics: Synthesis and Structure Property Relationships. 2009 , 261-296		
21	Influence of side-chain isomerization on the isothermal crystallization kinetics of poly(3-alkylthiophenes). 2021 , 36, 1-12		1
20	Superior transport behavior of gold nanoparticles/P3HT blends by tuning optical and structural properties. 2022 , 283, 116973		1
19	Understanding, quantifying, and controlling the molecular ordering of semiconducting polymers: from novices to experts and amorphous to perfect crystals. 2021 ,		29
18	Delicately Controlled Polymer Orientation for High-Performance Non-Fullerene Solar Cells with Halogen-Free Solvent Processing. 2021 , 13, 57654-57663		3
17	Structural and Optical Identification of Planar Side-Chain Stacking P3HT Nanowires. <i>Macromolecules</i> ,	5:5	3
16	Chain Conformation and Liquid-Crystalline Structures of a Poly(thieno)thiophene. <i>Macromolecules</i> ,	5:5	2
15	Comparative Study of Charge-Transport Behavior of Edge-on- and Face-on-Oriented Diketopyrrolopyrrole-Based Conjugated Copolymers Bearing Chalcogenophene Units. 2022 , 34, 314-324		0
14	Progress of Conjugated Polymers as Emerging Thermoelectric Materials. 2022 , 101548		12
13	Tailoring the charge transport characteristics in ordered small-molecule organic semiconductors by side-chain engineering and fluorine substitution.		0
12	Fused thiophene based materials for organic thin-film transistors.		1
11	Impact of Side Chain Hydrophilicity on Packing, Swelling and Ion Interactions in Oxy-bithiophene Semiconductors. 2204258		0
10	Regulating Competitive Doping in Solution-Mixed Conjugated Polymers for Dramatically Improving Thermoelectric Properties. 2207413		2
9	Improving crystallinity and ordering of PBTBT by inhibiting nematic to smectic phase transition via rapid cooling. 2022 , 256, 125178		
8	Influence of Side Chain Interdigitation on Strain and Charge Mobility of Planar Indacenodithiophene Copolymers.		0
7	Highly stable and isomorphous donor-acceptor stacking in a family of n-type organic semiconductors of BTBT/CNQ derivatives.		0

6	The Effect of Glycol Side Chains on the Assembly and Microstructure of Conjugated Polymers.	1
5	Interrogating Polymorphism in Conjugated Poly(thieno)thiophene Thin Films for Field-Effect Transistors.	0
4	Designing for Softness in Semiconducting Conjugated Polymers.	0
3	Small Molecule versus Polymer Semiconductors. 2023 , 95-107	0
2	Dynamics of Poly(3-hexylthiophene) Monolayers at Solution/Graphite Interfaces. 2023 , 12, 274-280	0
1	Physical Aging Behavior of the Side Chain of a Conjugated Polymer PBTTT. 2023 , 15, 794	0