Martin Heeney

List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/899397/martin-heeney-publications-by-year.pdf

Version: 2024-04-10

This document has been generated based on the publications and citations recorded by exaly.com. 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.

337	25,793	84	152
papers	citations	h-index	g-index
375 ext. papers	27,831 ext. citations	11.1 avg, IF	6.8 L-index

#	Paper	IF	Citations
337	Triplet Generation Dynamics in Si- and Ge-Bridged Conjugated Copolymers. <i>Journal of Physical Chemistry C</i> , 2022 , 126, 1036-1045	3.8	O
336	14IGHz Schottky Diodes using a p-Doped Organic Polymer Advanced Materials, 2022, e2108524	24	1
335	Reconciling models of interfacial state kinetics and device performance in organic solar cells: impact of the energy offsets on the power conversion efficiency <i>Energy and Environmental Science</i> , 2022 , 15, 1256-1270	35.4	5
334	N-type polymer semiconductors incorporating para, meta, and ortho-carborane in the conjugated backbone. <i>Polymer</i> , 2022 , 240, 124481	3.9	2
333	Infrared Organic Photodetectors Employing Ultralow Bandgap Polymer and Non-Fullerene Acceptors for Biometric Monitoring <i>Small</i> , 2022 , e2200580	11	3
332	Near-IR Absorbing Molecular Semiconductors Incorporating Cyanated Benzothiadiazole Acceptors for High-Performance Semitransparent n-Type Organic Field-Effect Transistors 2022 , 4, 165-174		3
331	Vinylene Flanked Naphtho[1,2-c:5,6-c?]bis[1,2,5]thiadiazole Polymer for Low-Crystallinity Ambipolar Transistors. <i>Macromolecules</i> , 2022 , 55, 331-337	5.5	О
330	Charge transport and recombination in wide-bandgap Y6 derivatives-based organic solar cells. <i>Advances in Natural Sciences: Nanoscience and Nanotechnology</i> , 2022 , 13, 025001	1.6	
329	A Tri-Channel Oxide Transistor Concept for the Rapid Detection of Biomolecules Including the SARS-CoV-2 Spike Protein. <i>Advanced Materials</i> , 2021 , e2104608	24	6
328	Doping Approaches for Organic Semiconductors. Chemical Reviews, 2021,	68.1	26
327	High Current-density Organic Electrochemical Diodes Enabled by Asymmetric Active Layer Design. <i>Advanced Materials</i> , 2021 , e2107355	24	1
326	Tetradiketone macrocycle for divalent aluminium ion batteries. <i>Nature Communications</i> , 2021 , 12, 2386	17.4	28
325	Highly Deformed o-Carborane Functionalised Non-linear Polycyclic Aromatics with Exceptionally Long C-C Bonds. <i>Chemistry - A European Journal</i> , 2021 , 27, 1970-1975	4.8	3
324	One-Step Sixfold Cyanation of Benzothiadiazole Acceptor Units for Air-Stable High-Performance n-Type Organic Field-Effect Transistors. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 5970-5977	16.4	10
323	One-Step Sixfold Cyanation of Benzothiadiazole Acceptor Units for Air-Stable High-Performance n-Type Organic Field-Effect Transistors. <i>Angewandte Chemie</i> , 2021 , 133, 6035-6042	3.6	O
322	The influence of alkyl group regiochemistry and backbone fluorination on the packing and transistor performance of N-cyanoimine functionalised indacenodithiophenes. <i>Materials Advances</i> , 2021 , 2, 1706-1714	3.3	4
321	N-Doping improves charge transport and morphology in the organic non-fullerene acceptor O-IDTBR. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 4486-4495	7.1	5

(2020-2021)

320	Predicting the photocurrentdomposition dependence in organic solar cells. <i>Energy and Environmental Science</i> , 2021 , 14, 986-994	35.4	12
319	Influence of synthetic pathway, molecular weight and side chains on properties of indacenodithiophene-benzothiadiazole copolymers made by direct arylation polycondensation. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 4597-4606	7.1	1
318	Influence of Backbone Curvature on the Organic Electrochemical Transistor Performance of Glycolated Donor-Acceptor Conjugated Polymers. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 19679-19684	16.4	9
317	Transition-Metal-Free Homopolymerization of Pyrrolo[2,3-:5,4-¶bisthiazoles via Nucleophilic Aromatic Substitution. <i>ACS Applied Materials & amp; Interfaces</i> , 2021 , 13, 41094-41101	9.5	0
316	Influence of Backbone Curvature on the Organic Electrochemical Transistor Performance of Glycolated Donor Acceptor Conjugated Polymers. <i>Angewandte Chemie</i> , 2021 , 133, 19831-19836	3.6	1
315	Design of experiment optimization of aligned polymer thermoelectrics doped by ion-exchange. <i>Applied Physics Letters</i> , 2021 , 119, 111903	3.4	3
314	Functional group introduction and aromatic unit variation in a set of Econjugated macrocycles: revealing the central role of local and global aromaticity. <i>Organic Chemistry Frontiers</i> , 2021 , 8, 4730-474	5 ^{.2}	4
313	Switching between Local and Global Aromaticity in a Conjugated Macrocycle for High-Performance Organic Sodium-Ion Battery Anodes. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 12958-12964	16.4	22
312	Correlating the Structural and Photophysical Properties of Ortho, Meta, and Para-Carboranyl Anthracene Dyads. <i>Advanced Electronic Materials</i> , 2020 , 6, 2000312	6.4	7
311	Naphthalene diimide based near-infrared luminogens with aggregation-induced emission characteristics for biological imaging and high mobility ambipolar transistors. <i>Science China Chemistry</i> , 2020 , 63, 1198-1207	7.9	11
310	Core Fluorination Enhances Solubility and Ambient Stability of an IDT-Based n-Type Semiconductor in Transistor Devices. <i>Advanced Functional Materials</i> , 2020 , 30, 2000325	15.6	11
309	Crucial Role of Fluorine in Fully Alkylated Ladder-Type Carbazole-Based Nonfullerene Organic Solar Cells. <i>ACS Applied Materials & Description</i> (2008) 12, 9555-9562	9.5	20
308	Double Ring-Closing Approach for the Synthesis of 2,3,6,7-Substituted Anthracene Derivatives. Journal of Organic Chemistry, 2020 , 85, 8240-8244	4.2	3
307	A novel low-bandgap pyridazine thiadiazole-based conjugated polymer with deep molecular orbital levels. <i>Polymer Chemistry</i> , 2020 , 11, 581-585	4.9	11
306	Novel wide-bandgap non-fullerene acceptors for efficient tandem organic solar cells. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 1164-1175	13	28
305	Polymer Light-Emitting Transistors With Charge-Carrier Mobilities Exceeding 1 cm2 V I s I . <i>Advanced Electronic Materials</i> , 2020 , 6, 1901132	6.4	6
304	A Structurally Simple but High-Performing Donor Acceptor Polymer for Field-Effect Transistor Applications. <i>Advanced Electronic Materials</i> , 2020 , 6, 2000490	6.4	4
303	Functional 4H-Dithieno[3,2-b:2?,3?-d]pyrrole Derivatives in Base-Dopable Conjugated Polymers and Oligomers. <i>Macromolecules</i> , 2020 , 53, 6649-6655	5.5	1

302	Tunable Control of the Hydrophilicity and Wettability of Conjugated Polymers by a Postpolymerization Modification Approach. <i>Macromolecular Bioscience</i> , 2020 , 20, e2000087	5.5	3
301	Ring fusion in tetrathienylethene cored perylene diimide tetramers affords acceptors with strong and broad absorption in the near-UV to visible region. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 17237-	1 7 2 ¹ 44	6
300	A Simple n-Dopant Derived from Diquat Boosts the Efficiency of Organic Solar Cells to 18.3%. <i>ACS Energy Letters</i> , 2020 , 5, 3663-3671	20.1	175
299	Impact of p-type doping on charge transport in blade-coated small-molecule:polymer blend transistors. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 15368-15376	7.1	14
298	Origin of Open-Circuit Voltage Turnover in Organic Solar Cells at Low Temperature. <i>Solar Rrl</i> , 2020 , 4, 2000375	7.1	4
297	Multibranched aliphatic side chains for Eonjugated polymers with a high density of @nshieldedO aromatics. <i>Chemical Communications</i> , 2020 , 56, 12138-12141	5.8	1
296	Understanding Charge Transport in High-Mobility p-Doped Multicomponent Blend Organic Transistors. <i>Advanced Electronic Materials</i> , 2020 , 6, 2000539	6.4	9
295	Hall Effect in Polycrystalline Organic Semiconductors: The Effect of Grain Boundaries. <i>Advanced Functional Materials</i> , 2020 , 30, 1903617	15.6	21
294	Switching between Local and Global Aromaticity in a Conjugated Macrocycle for High-Performance Organic Sodium-Ion Battery Anodes. <i>Angewandte Chemie</i> , 2020 , 132, 13058-13064	3.6	7
293	Deciphering photocarrier dynamics for tuneable high-performance perovskite-organic semiconductor heterojunction phototransistors. <i>Nature Communications</i> , 2019 , 10, 4475	17.4	31
292	Thioalkyl- and sulfone-substituted poly(p-phenylene vinylene)s. <i>Polymer Chemistry</i> , 2019 , 10, 738-750	4.9	5
291	Highly-efficient semi-transparent organic solar cells utilising non-fullerene acceptors with optimised multilayer MoO3/Ag/MoO3 electrodes. <i>Materials Chemistry Frontiers</i> , 2019 , 3, 450-455	7.8	27
290	Introducing a Nonvolatile N-Type Dopant Drastically Improves Electron Transport in Polymer and Small-Molecule Organic Transistors. <i>Advanced Functional Materials</i> , 2019 , 29, 1902784	15.6	29
289	Addition of the Lewis Acid Zn(C F) Enables Organic Transistors with a Maximum Hole Mobility in Excess of 20 cm V s. <i>Advanced Materials</i> , 2019 , 31, e1900871	24	48
288	Dithieno[3,2-b:2@0d]arsole-containing conjugated polymers in organic photovoltaic devices. <i>Dalton Transactions</i> , 2019 , 48, 6676-6679	4.3	7
287	Diseleno[3,2-:2@@selenophene-Containing High-Mobility Conjugated Polymer for Organic Field-Effect Transistors. <i>Advanced Science</i> , 2019 , 6, 1900245	13.6	18
286	Fast and Selective Post-polymerization Modification of Conjugated Polymers Using Dimethyldioxirane. <i>Frontiers in Chemistry</i> , 2019 , 7, 123	5	3
285	Hybridization of Local Exciton and Charge-Transfer States Reduces Nonradiative Voltage Losses in Organic Solar Cells. <i>Journal of the American Chemical Society</i> , 2019 , 141, 6362-6374	16.4	188

(2018-2019)

284	Sequential Deposition of Organic Films with Eco-Compatible Solvents Improves Performance and Enables Over 12%-Efficiency Nonfullerene Solar Cells. <i>Advanced Materials</i> , 2019 , 31, e1808153	24	80
283	Impact of the Gate Dielectric on Contact Resistance in High-Mobility Organic Transistors. <i>Advanced Electronic Materials</i> , 2019 , 5, 1800723	6.4	31
282	A versatile star-shaped organic semiconductor based on benzodithiophene and diketopyrrolopyrrole. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 6622-6629	7.1	10
281	Fused Cyclopentadithienothiophene Acceptor Enables Ultrahigh Short-Circuit Current and High Efficiency >11% in As-Cast Organic Solar Cells. <i>Advanced Functional Materials</i> , 2019 , 29, 1904956	15.6	18
2 80	Visualizing the Vertical Energetic Landscape in Organic Photovoltaics. <i>Joule</i> , 2019 , 3, 2513-2534	27.8	16
279	p-Doping of organic hole transport layers in pll perovskite solar cells: correlating open-circuit voltage and photoluminescence quenching. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 18971-18979	13	34
278	Diseleno[3,2-b:2?,3?-d]selenophenes: Diseleno[3,2-b:2?,3?-d]selenophene-Containing High-Mobility Conjugated Polymer for Organic Field-Effect Transistors (Adv. Sci. 13/2019). <i>Advanced Science</i> , 2019 , 6, 1970080	13.6	78
277	Heavy-atom effects on intramolecular singlet fission in a conjugated polymer. <i>Journal of Chemical Physics</i> , 2019 , 151, 044902	3.9	14
276	Tail state limited photocurrent collection of thick photoactive layers in organic solar cells. <i>Nature Communications</i> , 2019 , 10, 5159	17.4	41
275	Flow Synthesis: A Better Way to Conjugated Polymers? 2019 , 613-652		1
²⁷⁵	Flow Synthesis: A Better Way to Conjugated Polymers? 2019 , 613-652 #Unsubstituted meso-positioning thienyl BODIPY: a promising electron deficient building block for the development of near infrared (NIR) p-type donor@cceptor (DA) conjugated polymers. Journal of Materials Chemistry C, 2018 , 6, 4030-4040	7.1	17
	即Unsubstituted meso-positioning thienyl BODIPY: a promising electron deficient building block for the development of near infrared (NIR) p-type donor目cceptor (DA) conjugated polymers.	7.1	17
274	田Jnsubstituted meso-positioning thienyl BODIPY: a promising electron deficient building block for the development of near infrared (NIR) p-type donor目cceptor (DA) conjugated polymers. Journal of Materials Chemistry C, 2018, 6, 4030-4040 Anion-induced N-doping of naphthalenediimide polymer semiconductor in organic thin-film	,	17
²⁷⁴ ²⁷³	即Unsubstituted meso-positioning thienyl BODIPY: a promising electron deficient building block for the development of near infrared (NIR) p-type donor目cceptor (DA) conjugated polymers. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 4030-4040 Anion-induced N-doping of naphthalenediimide polymer semiconductor in organic thin-film transistors. <i>Npj Flexible Electronics</i> , 2018 , 2, Resolving Anomalous Heavy Atom Effects from Discrete Triplet Mediated Photochemistry Events	10.7	17
274 273 272	即Unsubstituted meso-positioning thienyl BODIPY: a promising electron deficient building block for the development of near infrared (NIR) p-type donor目cceptor (DA) conjugated polymers. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 4030-4040 Anion-induced N-doping of naphthalenediimide polymer semiconductor in organic thin-film transistors. <i>Npj Flexible Electronics</i> , 2018 , 2, Resolving Anomalous Heavy Atom Effects from Discrete Triplet Mediated Photochemistry Events on Single Conjugated Polymer Chains. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 9718-9725 Alkylated indacenodithieno[3,2-b]thiophene-based all donor ladder-type conjugated polymers for	3.8	17 26 3
274 273 272 271	田Jnsubstituted meso-positioning thienyl BODIPY: a promising electron deficient building block for the development of near infrared (NIR) p-type donor日cceptor (DA) conjugated polymers. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 4030-4040 Anion-induced N-doping of naphthalenediimide polymer semiconductor in organic thin-film transistors. <i>Npj Flexible Electronics</i> , 2018 , 2, Resolving Anomalous Heavy Atom Effects from Discrete Triplet Mediated Photochemistry Events on Single Conjugated Polymer Chains. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 9718-9725 Alkylated indacenodithieno[3,2-b]thiophene-based all donor ladder-type conjugated polymers for organic thin film transistors. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 2004-2009 Copper (I) Selenocyanate (CuSeCN) as a Novel Hole-Transport Layer for Transistors, Organic Solar	10.7 3.8 7.1	17 26 3
274 273 272 271 270	Anion-induced N-doping of naphthalenediimide polymer semiconductor in organic thin-film transistors. Npj Flexible Electronics, 2018, 2, Resolving Anomalous Heavy Atom Effects from Discrete Triplet Mediated Photochemistry Events on Single Conjugated Polymer Chains. Journal of Physical Chemistry C, 2018, 122, 9718-9725 Alkylated indacenodithieno[3,2-b]thiophene-based all donor ladder-type conjugated polymers for organic thin film transistors. Journal of Materials Chemistry C, 2018, 6, 2004-2009 Copper (I) Selenocyanate (CuSeCN) as a Novel Hole-Transport Layer for Transistors, Organic Solar Cells, and Light-Emitting Diodes. Advanced Functional Materials, 2018, 28, 1707319 The Impact of Molecular p-Doping on Charge Transport in High-Mobility Small-Molecule/Polymer	10.7 3.8 7.1 15.6	17 26 3 15

266	Implicit and explicit host effects on excitons in pentacene derivatives. <i>Journal of Chemical Physics</i> , 2018 , 148, 104108	3.9	8
265	Remarkable Enhancement of the Hole Mobility in Several Organic Small-Molecules, Polymers, and Small-Molecule:Polymer Blend Transistors by Simple Admixing of the Lewis Acid p-Dopant B(CF). <i>Advanced Science</i> , 2018 , 5, 1700290	13.6	104
264	Carborane-Induced Excimer Emission of Severely Twisted Bis-o-Carboranyl Chrysene. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 10640-10645	16.4	57
263	Carborane-Induced Excimer Emission of Severely Twisted Bis-o-Carboranyl Chrysene. <i>Angewandte Chemie</i> , 2018 , 130, 10800-10805	3.6	19
262	Measurement of Cohesion and Adhesion of Semiconducting Polymers by Scratch Testing: Effect of Side-Chain Length and Degree of Polymerization. <i>ACS Macro Letters</i> , 2018 , 7, 1003-1009	6.6	9
261	Chalcogen Bridged Thieno- and Selenopheno[2,3-d:5,4-d?]bisthiazole and Their Diketopyrrolopyrrole Based Low-Bandgap Copolymers. <i>Macromolecules</i> , 2018 , 51, 6076-6084	5.5	9
260	Characterization of Interfacial Structure in Polymer-Fullerene Bulk Heterojunctions via ^{13}C {^{2}H} Rotational Echo Double Resonance NMR. <i>Physical Review Letters</i> , 2018 , 121, 026101	7.4	7
259	Recent Progress in High-Mobility Organic Transistors: A Reality Check. <i>Advanced Materials</i> , 2018 , 30, e1801079	24	358
258	Post-polymerisation functionalisation of conjugated polymer backbones and its application in multi-functional emissive nanoparticles. <i>Nature Communications</i> , 2018 , 9, 3237	17.4	26
257	Toward Stretchable Self-Powered Sensors Based on the Thermoelectric Response of PEDOT:PSS/Polyurethane Blends. <i>Advanced Functional Materials</i> , 2018 , 28, 1704285	15.6	119
257 256		15.6	119
	PEDOT:PSS/Polyurethane Blends. <i>Advanced Functional Materials</i> , 2018 , 28, 1704285 Terahertz short-range mobilities in neat and intermixed regions of polymer:fullerene blends with		
256	PEDOT:PSS/Polyurethane Blends. <i>Advanced Functional Materials</i> , 2018 , 28, 1704285 Terahertz short-range mobilities in neat and intermixed regions of polymer:fullerene blends with controlled phase morphology. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 22301-22309 The Influence of Backbone Fluorination on the Dielectric Constant of Conjugated Polythiophenes.	13	8
256 255	PEDOT:PSS/Polyurethane Blends. Advanced Functional Materials, 2018, 28, 1704285 Terahertz short-range mobilities in neat and intermixed regions of polymer:fullerene blends with controlled phase morphology. Journal of Materials Chemistry A, 2018, 6, 22301-22309 The Influence of Backbone Fluorination on the Dielectric Constant of Conjugated Polythiophenes. Advanced Electronic Materials, 2018, 4, 1700375 Synthesis of low band gap polymers based on pyrrolo[3,2-d:4,5-d?]bisthiazole (PBTz) and thienylenevinylene (TV) for organic thin-film transistors (OTFTs). Journal of Materials Chemistry C,	13	8
256255254	PEDOT:PSS/Polyurethane Blends. <i>Advanced Functional Materials</i> , 2018 , 28, 1704285 Terahertz short-range mobilities in neat and intermixed regions of polymer:fullerene blends with controlled phase morphology. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 22301-22309 The Influence of Backbone Fluorination on the Dielectric Constant of Conjugated Polythiophenes. <i>Advanced Electronic Materials</i> , 2018 , 4, 1700375 Synthesis of low band gap polymers based on pyrrolo[3,2-d:4,5-d?]bisthiazole (PBTz) and thienylenevinylene (TV) for organic thin-film transistors (OTFTs). <i>Journal of Materials Chemistry C</i> , 2017 , 5, 2247-2258 Comparison of Methods for Determining the Mechanical Properties of Semiconducting Polymer	13 6.4 7.1	8 9 19
256255254253	PEDOT:PSS/Polyurethane Blends. Advanced Functional Materials, 2018, 28, 1704285 Terahertz short-range mobilities in neat and intermixed regions of polymer:fullerene blends with controlled phase morphology. Journal of Materials Chemistry A, 2018, 6, 22301-22309 The Influence of Backbone Fluorination on the Dielectric Constant of Conjugated Polythiophenes. Advanced Electronic Materials, 2018, 4, 1700375 Synthesis of low band gap polymers based on pyrrolo[3,2-d:4,5-d?]bisthiazole (PBTz) and thienylenevinylene (TV) for organic thin-film transistors (OTFTs). Journal of Materials Chemistry C, 2017, 5, 2247-2258 Comparison of Methods for Determining the Mechanical Properties of Semiconducting Polymer Films for Stretchable Electronics. ACS Applied Materials & Samp; Interfaces, 2017, 9, 8855-8862 Cyano substituted benzotriazole based polymers for use in organic solar cells. Journal of Materials	13 6.4 7.1 9.5	8 9 19 90 21
256255254253252	Terahertz short-range mobilities in neat and intermixed regions of polymer:fullerene blends with controlled phase morphology. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 22301-22309 The Influence of Backbone Fluorination on the Dielectric Constant of Conjugated Polythiophenes. <i>Advanced Electronic Materials</i> , 2018 , 4, 1700375 Synthesis of low band gap polymers based on pyrrolo[3,2-d:4,5-d?]bisthiazole (PBTz) and thienylenevinylene (TV) for organic thin-film transistors (OTFTs). <i>Journal of Materials Chemistry C</i> , 2017 , 5, 2247-2258 Comparison of Methods for Determining the Mechanical Properties of Semiconducting Polymer Films for Stretchable Electronics. <i>ACS Applied Materials & Dournal of Materials Chemistry A</i> , 2017 , 9, 8855-8862 Cyano substituted benzotriazole based polymers for use in organic solar cells. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 6465-6470 Impact of backbone fluorination on nanoscale morphology and excitonic coupling in polythiophenes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> ,	13 6.4 7.1 9.5	8 9 19 90 21

248	Template-Synthesis of Conjugated Poly(3-Hexylselenophene) (P3HS) Nanofibers Using Femtosecond Laser Machined Fused Silica Templates. <i>MRS Advances</i> , 2017 , 2, 2957-2960	0.7	3
247	Systematic Tuning of 2,1,3-Benzothiadiazole Acceptor Strength by Monofunctionalization with Alkylamine, Thioalkyl, or Alkoxy Groups in Carbazole Donor Acceptor Polymers. <i>Macromolecules</i> , 2017 , 50, 2736-2746	5.5	20
246	Pentafluorobenzene end-group as a versatile handle for fluoro "click" functionalization of polythiophenes. <i>Chemical Science</i> , 2017 , 8, 2215-2225	9.4	27
245	Effect of a heavy heteroatom on triplet formation and interactions in single conjugated polymer molecules and aggregates. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 28239-28248	3.6	11
244	Impact of Fullerene Intercalation on Structural and Thermal Properties of Organic Photovoltaic Blends. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 20976-20985	3.8	5
243	Copper(I) Thiocyanate (CuSCN) Hole-Transport Layers Processed from Aqueous Precursor Solutions and Their Application in Thin-Film Transistors and Highly Efficient Organic and Organometal Halide Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2017 , 27, 1701818	15.6	159
242	Synthesis of a Luminescent Arsolo[2,3-d:5,4-d?]bis(thiazole) Building Block and Comparison to Its Phosphole Analogue. <i>Organometallics</i> , 2017 , 36, 2632-2636	3.8	25
241	Conjugated Copolymers of Vinylene Flanked Naphthalene Diimide. <i>Macromolecules</i> , 2016 , 49, 6384-639	935.5	42
240	Small Molecule/Polymer Blend Organic Transistors with Hole Mobility Exceeding 13 cm(2) V(-1) s(-1). <i>Advanced Materials</i> , 2016 , 28, 7791-8	24	141
239	The influence of polymer purification on the efficiency of poly(3-hexylthiophene):fullerene organic solar cells. <i>Scientific Reports</i> , 2016 , 6, 23651	4.9	40
238	Vinylene-Linked Oligothiophene-Difluorobenzothiadiazole Copolymer for Transistor Applications. <i>ACS Applied Materials & Difference (Company)</i> Action 10 (2016) 10 (2016) 11 (2016) 12 (201	9.5	13
237	Optical Acetone Vapor Sensors Based on Chiral Nematic Liquid Crystals and Reactive Chiral Dopants. <i>Advanced Optical Materials</i> , 2016 , 4, 592-596	8.1	22
236	An Air-Stable Semiconducting Polymer Containing Dithieno[3,2-b:2?,3?-d]arsole. <i>Angewandte Chemie</i> , 2016 , 128, 7264-7267	3.6	14
235	Influence of the heteroatom on the optoelectronic properties and transistor performance of soluble thiophene-, selenophene- and tellurophene-vinylene copolymers. <i>Chemical Science</i> , 2016 , 7, 10	9 3-1 09	9 ⁷²
234	Comparing blends and blocks: Synthesis of partially fluorinated diblock polythiophene copolymers to investigate the thermal stability of optical and morphological properties. <i>Beilstein Journal of Organic Chemistry</i> , 2016 , 12, 2150-2163	2.5	4
233	Singlet Exciton Lifetimes in Conjugated Polymer Films for Organic Solar Cells. <i>Polymers</i> , 2016 , 8,	4.5	81
232	Effect of Systematically Tuning Conjugated Donor Polymer Lowest Unoccupied Molecular Orbital Levels via Cyano Substitution on Organic Photovoltaic Device Performance. <i>Chemistry of Materials</i> , 2016 , 28, 5110-5120	9.6	91
231	Real-Time Investigation of Intercalation and Structure Evolution in Printed Polymer:Fullerene Bulk Heterojunction Thin Films. <i>Advanced Energy Materials</i> , 2016 , 6, 1502025	21.8	15

230	An Air-Stable Semiconducting Polymer Containing Dithieno[3,2-b:2@@d]arsole. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 7148-51	16.4	48
229	Hybrid complementary circuits based on p-channel organic and n-channel metal oxide transistors with balanced carrier mobilities of up to 10 cm2/Vs. <i>Applied Physics Letters</i> , 2016 , 109, 263301	3.4	19
228	A Novel Alkylated Indacenodithieno[3,2-b]thiophene-Based Polymer for High-Performance Field-Effect Transistors. <i>Advanced Materials</i> , 2016 , 28, 3922-7	24	100
227	2D coherent charge transport in highly ordered©conducting polymers doped by solid state©diffusion. <i>Nature Materials</i> , 2016 , 15, 896-902	27	268
226	Rapid flow-based synthesis of poly(3-hexylthiophene) using 2-methyltetrahydrofuran as a bio-derived reaction solvent. <i>European Polymer Journal</i> , 2016 , 80, 240-246	5.2	13
225	Doping of Large Ionization Potential Indenopyrazine Polymers via Lewis Acid Complexation with Tris(pentafluorophenyl)borane: A Simple Method for Improving the Performance of Organic Thin-Film Transistors. <i>Chemistry of Materials</i> , 2016 , 28, 8016-8024	9.6	44
224	The impact of thienothiophene isomeric structures on the optoelectronic properties and photovoltaic performance in quinoxaline based donor ceptor copolymers. <i>Polymer Chemistry</i> , 2015 , 6, 3098-3109	4.9	21
223	The effect of phase morphology on the nature of long-lived charges in semiconductor polymer:fullerene systems. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 3722-3729	7.1	20
222	Natures of optical absorption transitions and excitation energy dependent photostability of diketopyrrolopyrrole (DPP)-based photovoltaic copolymers. <i>Energy and Environmental Science</i> , 2015 , 8, 3222-3232	35.4	68
221	Synthesis and Exciton Dynamics of Triplet Sensitized Conjugated Polymers. <i>Journal of the American Chemical Society</i> , 2015 , 137, 10383-90	16.4	38
220	Entanglements in marginal solutions: a means of tuning pre-aggregation of conjugated polymers with positive implications for charge transport. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 7394-7404	7.1	56
219	Direct Correlation of Charge Transfer Absorption with Molecular Donor: Acceptor Interfacial Area via Photothermal Deflection Spectroscopy. <i>Journal of the American Chemical Society</i> , 2015 , 137, 5256-9	16.4	36
218	Enabling high-mobility, ambipolar charge-transport in a DPP-benzotriazole copolymer by side-chain engineering. <i>Chemical Science</i> , 2015 , 6, 6949-6960	9.4	81
217	Novel soluble thieno[3,2-b]thiophene fused porphyrazine. <i>RSC Advances</i> , 2015 , 5, 90645-90650	3.7	3
216	Fused Ring Cyclopentadithienothiophenes as Novel Building Blocks for High Field Effect Mobility Conjugated Polymers. <i>Macromolecules</i> , 2015 , 48, 5605-5613	5.5	11
215	Using the Stark effect to understand charge generation in organic solar cells 2015 ,		1
214	Controlled integration of oligo- and polythiophenes at the molecular scale. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 26525-9	3.6	3
213	Diselenogermole as a novel donor monomer for low band gap polymers. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 1986-1994	13	14

212	Investigation of Radical and Cationic Cross-Linking in High-Efficiency, Low Band Gap Solar Cell Polymers. <i>Advanced Energy Materials</i> , 2015 , 5, 1401228	21.8	26
211	Cyano substituted benzothiadiazole: a novel acceptor inducing n-type behaviour in conjugated polymers. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 265-275	7.1	71
2 10	High-Efficiency Organic Photovoltaic Cells Based on the Solution-Processable Hole Transporting Interlayer Copper Thiocyanate (CuSCN) as a Replacement for PEDOT:PSS. <i>Advanced Energy Materials</i> , 2015 , 5, 1401529	21.8	115
209	Indacenodithiophene-benzothiadiazole organic field-effect transistors with gravure-printed semiconductor and dielectric on plastic. <i>MRS Communications</i> , 2015 , 5, 599-603	2.7	5
208	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). <i>Advanced Functional Materials</i> , 2015 , 25, 7038-7048	15.6	47
207	Classification of semiconducting polymeric mesophases to optimize device postprocessing. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2015 , 53, 1641-1653	2.6	19
206	Influence of Backbone Fluorination in Regioregular Poly(3-alkyl-4-fluoro)thiophenes. <i>Journal of the American Chemical Society</i> , 2015 , 137, 6866-79	16.4	166
205	Increased Exciton Dipole Moment Translates into Charge-Transfer Excitons in Thiophene-Fluorinated Low-Bandgap Polymers for Organic Photovoltaic Applications. <i>Chemistry of Materials</i> , 2015 , 27, 7934-7944	9.6	39
204	Oriented Liquid Crystalline Polymer Semiconductor Films with Large Ordered Domains. <i>ACS Applied Materials & Domains and Section 19</i> , 7, 26726-34	9.5	31
203	A close look at charge generation in polymer:fullerene blends with microstructure control. <i>Journal of the American Chemical Society</i> , 2015 , 137, 2908-18	16.4	68
202	Conjugated polymer-porphyrin complexes for organic electronics. <i>ChemPhysChem</i> , 2015 , 16, 1223-30	3.2	10
201	ZnO hybrid photovoltaics with variable side-chain lengths of thienothiophene polymer. <i>Thin Solid Films</i> , 2015 , 576, 38-41	2.2	5
200	Control of polythiophene film microstructure and charge carrier dynamics through crystallization temperature. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2014 , 52, 700-707	2.6	12
199	Domain Compositions and Fullerene Aggregation Govern Charge Photogeneration in Polymer/Fullerene Solar Cells. <i>Advanced Energy Materials</i> , 2014 , 4, 1400116	21.8	70
198	Thioalkyl-Substituted Benzothiadiazole Acceptors: Copolymerization with Carbazole Affords Polymers with Large Stokes Shifts and High Solar Cell Voltages. <i>Macromolecules</i> , 2014 , 47, 2279-2288	5.5	57
197	Incorporation of benzocarborane into conjugated polymer systems: synthesis, characterisation and optoelectronic properties. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 232-239	7.1	20
196	Benzocarborano[2,1-b:3,4-b?]dithiophene Containing Conjugated Polymers: Synthesis, Characterization, and Optoelectronic Properties. <i>Macromolecules</i> , 2014 , 47, 89-96	5.5	18
195	Additive-assisted supramolecular manipulation of polymer:fullerene blend phase morphologies and its influence on photophysical processes. <i>Materials Horizons</i> , 2014 , 1, 270-279	14.4	53

194	Controlled synthesis of conjugated random copolymers in a droplet-based microreactor. <i>Materials Horizons</i> , 2014 , 1, 214-218	14.4	17
193	A general mechanism for controlling thin film structures in all-conjugated block copolymer:fullerene blends. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 14711-14719	13	13
192	Polythiophenes with vinylene linked ortho, meta and para-carborane sidechains. <i>Polymer Chemistry</i> , 2014 , 5, 6190-6199	4.9	21
191	A gentle introduction to the noble art of flow chemistry. <i>Materials Horizons</i> , 2014 , 1, 373	14.4	30
190	Role of Molecular Weight Distribution on Charge Transport in Semiconducting Polymers. <i>Macromolecules</i> , 2014 , 47, 7151-7157	5.5	82
189	Influence of side-chain regiochemistry on the transistor performance of high-mobility, all-donor polymers. <i>Journal of the American Chemical Society</i> , 2014 , 136, 15154-7	16.4	88
188	The influence of microstructure on charge separation dynamics in organic bulk heterojunction materials for solar cell applications. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 6218-6230	13	46
187	Germanium- and Silicon-Substituted DonorAcceptor Type Copolymers: Effect of the Bridging Heteroatom on Molecular Packing and Photovoltaic Device Performance. <i>Advanced Energy Materials</i> , 2014 , 4, 1400527	21.8	41
186	Thermoelectric Materials: A Brief Historical Survey from Metal Junctions and Inorganic Semiconductors to Organic Polymers. <i>Israel Journal of Chemistry</i> , 2014 , 54, 534-552	3.4	30
185	Material Crystallinity as a Determinant of Triplet Dynamics and Oxygen Quenching in Donor Polymers for Organic Photovoltaic Devices. <i>Advanced Functional Materials</i> , 2014 , 24, 1474-1482	15.6	56
184	Alternating Copolymers Incorporating Dithienogemolodithiophene for Field-Effect Transistor Applications. <i>Macromolecules</i> , 2014 , 47, 8602-8610	5.5	22
183	Influence of the Electron Deficient Co-Monomer on the Optoelectronic Properties and Photovoltaic Performance of Dithienogermole-based Co-Polymers. <i>Advanced Functional Materials</i> , 2014 , 24, 678-687	15.6	54
182	Solar Cells: Domain Compositions and Fullerene Aggregation Govern Charge Photogeneration in Polymer/Fullerene Solar Cells (Adv. Energy Mater. 11/2014). <i>Advanced Energy Materials</i> , 2014 , 4, n/a-n/a	21.8	2
181	Alkyl Chain Extension as a Route to Novel Thieno[3,2-b]thiophene Flanked Diketopyrrolopyrrole Polymers for Use in Organic Solar Cells and Field Effect Transistors. <i>Macromolecules</i> , 2013 , 46, 5961-596	5 7 ·5	67
180	Molecular origin of high field-effect mobility in an indacenodithiophene-benzothiadiazole copolymer. <i>Nature Communications</i> , 2013 , 4, 2238	17.4	384
179	On the role of intermixed phases in organic photovoltaic blends. <i>Energy and Environmental Science</i> , 2013 , 6, 2756	35.4	150
178	Near Infrared Absorbing Soluble Poly(cyclopenta[2,1-b:3,4-b?]dithiophen-4-one)vinylene Polymers Exhibiting High Hole and Electron Mobilities in Ambient Air. <i>Chemistry of Materials</i> , 2013 , 25, 59-68	9.6	31
177	Activated singlet exciton fission in a semiconducting polymer. <i>Journal of the American Chemical Society</i> , 2013 , 135, 12747-54	16.4	119

(2012-2013)

176	Thermal and structural characteristics of oligo(3-hexylthiophene)s (3HT)n, $n = 4-36$. <i>Journal of the American Chemical Society</i> , 2013 , 135, 13699-709	16.4	88
175	"Fibonacci@route" to regioregular oligo(3-hexylthiophene)s. <i>Journal of the American Chemical Society</i> , 2013 , 135, 13695-8	16.4	73
174	Low band gap dithienogermolodithiophene copolymers with tunable acceptors and side-chains for organic solar cells. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 14973	13	27
173	The impact of molecular weight on microstructure and charge transport in semicrystalline polymer semiconductorspoly(3-hexylthiophene), a model study. <i>Progress in Polymer Science</i> , 2013 , 38, 1978-198	3 9 29.6	219
172	Importance of spin-orbit interaction for the electron spin relaxation in organic semiconductors. <i>Physical Review Letters</i> , 2013 , 110, 216602	7.4	50
171	Synthesis of tetraselenophenoporphyrazine and its application in transistor devices. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 6198	7.1	8
170	Fused dithienogermolodithiophene low band gap polymers for high-performance organic solar cells without processing additives. <i>Journal of the American Chemical Society</i> , 2013 , 135, 2040-3	16.4	135
169	Continuous Synthesis of Device-Grade Semiconducting Polymers in Droplet-Based Microreactors. <i>Advanced Functional Materials</i> , 2013 , 23, 2123-2129	15.6	67
168	Effects of Confinement on Microstructure and Charge Transport in High Performance Semicrystalline Polymer Semiconductors. <i>Advanced Functional Materials</i> , 2013 , 23, 2091-2098	15.6	68
167	Novel BODIPY-based conjugated polymers donors for organic photovoltaic applications. <i>RSC Advances</i> , 2013 , 3, 10221	3.7	30
166	High mobility field-effect transistors with versatile processing from a small-molecule organic semiconductor. <i>Advanced Materials</i> , 2013 , 25, 4352-7	24	116
165	Routes to some 3,6-disubstituted phthalonitriles and examples of phthalocyanines derived therefrom: An overview. <i>Journal of Porphyrins and Phthalocyanines</i> , 2013 , 17, 649-664	1.8	8
164	Electrooptical Spectroscopy of Uniaxially Aligned Polythiophene Films in Field-Effect Transistors. <i>Chemistry of Materials</i> , 2013 , 25, 2075-2082	9.6	19
163	In-situ monitoring of molecular vibrations of two organic semiconductors in photovoltaic blends and their impact on thin film morphology. <i>Applied Physics Letters</i> , 2013 , 102, 173302	3.4	20
162	Fused pyrrolo[3,2-d:4,5-d?]bisthiazole-containing polymers for using in high-performance organic bulk heterojunction solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2012 , 96, 112-116	6.4	14
161	Photoconductivity anisotropy study in uniaxially aligned polymer based planar photodiodes. <i>Organic Electronics</i> , 2012 , 13, 36-42	3.5	14
160	High-performance ambipolar diketopyrrolopyrrole-thieno[3,2-b]thiophene copolymer field-effect transistors with balanced hole and electron mobilities. <i>Advanced Materials</i> , 2012 , 24, 647-52	24	488
159	A selenophene-based low-bandgap donor-acceptor polymer leading to fast ambipolar logic. <i>Advanced Materials</i> , 2012 , 24, 1558-65	24	288

158	Thiophene fluorination to enhance photovoltaic performance in low band gap donor-acceptor polymers. <i>Chemical Communications</i> , 2012 , 48, 11130-2	5.8	60
157	Germaindacenodithiophene based low band gap polymers for organic solar cells. <i>Chemical Communications</i> , 2012 , 48, 2955-7	5.8	49
156	Effects of a heavy atom on molecular order and morphology in conjugated polymer:fullerene photovoltaic blend thin films and devices. <i>ACS Nano</i> , 2012 , 6, 9646-56	16.7	61
155	Spectroscopic and morphological investigation of conjugated photopolymerisable quinquethiophene liquid crystals. <i>Current Applied Physics</i> , 2012 , 12, e59-e66	2.6	4
154	Use of X-ray diffraction, molecular simulations, and spectroscopy to determine the molecular packing in a polymer-fullerene bimolecular crystal. <i>Advanced Materials</i> , 2012 , 24, 6071-9	24	113
153	Factors Governing Intercalation of Fullerenes and Other Small Molecules Between the Side Chains of Semiconducting Polymers Used in Solar Cells. <i>Advanced Energy Materials</i> , 2012 , 2, 1208-1217	21.8	90
152	Low band gap selenophenediketopyrrolopyrrole polymers exhibiting high and balanced ambipolar performance in bottom-gate transistors. <i>Chemical Science</i> , 2012 , 3, 181-185	9.4	158
151	Organic Semiconductor Materials for Transistors 2012 , 1-26		5
150	Fullerene crystallisation as a key driver of charge separation in polymer/fullerene bulk heterojunction solar cells. <i>Chemical Science</i> , 2012 , 3, 485-492	9.4	391
149	Charge photogeneration in donor/acceptor organic solar cells. <i>Journal of Photonics for Energy</i> , 2012 , 2, 021001	1.2	10
148	The Synthesis of Conjugated Polythiophenes by Kumada Cross-Coupling 2012 , 155-198		
147	Polymer-fullerene miscibility: a metric for screening new materials for high-performance organic solar cells. <i>Journal of the American Chemical Society</i> , 2012 , 134, 15869-79	16.4	183
146	Carrier-density dependence of the hole mobility in doped and undoped regioregular poly(3-hexylthiophene). <i>Physica Status Solidi (B): Basic Research</i> , 2012 , 249, 138-141	1.3	12
145	Comparative Optoelectronic Study between Copolymers of Peripherally Alkylated Dithienosilole and Dithienogermole. <i>Macromolecules</i> , 2012 , 45, 735-742	5.5	39
144	A comparison between dithienosilole and dithienogermole donor ceptor type co-polymers for organic bulk heterojunction photovoltaic devices. <i>Journal of Materials Chemistry</i> , 2012 , 22, 9975		22
143	Photovoltaic and field effect transistor performance of selenophene and thiophene diketopyrrolopyrrole co-polymers with dithienothiophene. <i>Journal of Materials Chemistry</i> , 2012 , 22, 128	317	90
142	Solution-processed small molecule-polymer blend organic thin-film transistors with hole mobility greater than 5 cm2/Vs. <i>Advanced Materials</i> , 2012 , 24, 2441-6	24	202
141	Air-stable and high-mobility n-channel organic transistors based on small-molecule/polymer semiconducting blends. <i>Advanced Materials</i> , 2012 , 24, 3205-11	24	116

140	A Systematic Approach to the Design Optimization of Light-Absorbing Indenofluorene Polymers for Organic Photovoltaics. <i>Advanced Energy Materials</i> , 2012 , 2, 260-265	21.8	47
139	High-mobility ambipolar polymer transistors: properties and function 2012,		1
138	Facile infiltration of semiconducting polymer into mesoporous electrodes for hybrid solar cells. Energy and Environmental Science, 2011 , 4, 3051	35.4	65
137	Importance of intramolecular electron spin relaxation in small molecule semiconductors. <i>Physical Review B</i> , 2011 , 84,	3.3	17
136	Silaindacenodithiophene Semiconducting Polymers for Efficient Solar Cells and High-Mobility Ambipolar Transistors <i>Chemistry of Materials</i> , 2011 , 23, 768-770	9.6	120
135	Molecular packing of high-mobility diketo pyrrolo-pyrrole polymer semiconductors with branched alkyl side chains. <i>Journal of the American Chemical Society</i> , 2011 , 133, 15073-84	16.4	353
134	Photoinduced carrier generation and decay dynamics in intercalated and non-intercalated polymer:fullerene bulk heterojunctions. <i>ACS Nano</i> , 2011 , 5, 5635-46	16.7	61
133	The effect of deuteration on organic magnetoresistance. <i>Synthetic Metals</i> , 2011 , 161, 608-612	3.6	9
132	Influence of blend microstructure on bulk heterojunction organic photovoltaic performance. <i>Chemical Society Reviews</i> , 2011 , 40, 1185-99	58.5	463
131	Transient Optoelectronic Analysis of Charge Carrier Losses in a Selenophene/Fullerene Blend Solar Cell. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 5947-5957	3.8	141
130	Electron spin relaxation in organic semiconductors probed through BR. <i>Journal of Physics:</i> Conference Series, 2011 , 292, 012004	0.3	6
129	A low band gap co-polymer of dithienogermole and 2,1,3-benzothiadiazole by Suzuki polycondensation and its application in transistor and photovoltaic cells. <i>Journal of Materials Chemistry</i> , 2011 , 21, 16257		81
128	Thieno[3,2-b]thiophene-diketopyrrolopyrrole-containing polymers for high-performance organic field-effect transistors and organic photovoltaic devices. <i>Journal of the American Chemical Society</i> , 2011 , 133, 3272-5	16.4	809
127	The phase behavior of a polymer-fullerene bulk heterojunction system that contains bimolecular crystals. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2011 , 49, 499-503	2.6	70
126	Effects of thermal annealing upon the nanomorphology of poly(3-hexylselenophene)-PCBM blends. <i>Macromolecular Rapid Communications</i> , 2011 , 32, 1454-60	4.8	15
125	Anisotropy of Charge Transport in a Uniaxially Aligned and Chain-Extended, High-Mobility, Conjugated Polymer Semiconductor. <i>Advanced Functional Materials</i> , 2011 , 21, 932-940	15.6	150
124	Influence of Phase Segregation on Recombination Dynamics in Organic Bulk-Heterojunction Solar Cells. <i>Advanced Functional Materials</i> , 2011 , 21, 1687-1692	15.6	82
123	Influence of Ion Induced Local Coulomb Field and Polarity on Charge Generation and Efficiency in Poly(3-Hexylthiophene)-Based Solid-State Dye-Sensitized Solar Cells. <i>Advanced Functional Materials</i> , 2011, 2571-2579	15.6	61

122	Room-temperature fabrication of ultrathin oxide gate dielectrics for low-voltage operation of organic field-effect transistors. <i>Advanced Materials</i> , 2011 , 23, 971-4	24	131
121	Observation of bi-polarons in blends of conjugated copolymers and fullerene derivatives. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 16579-84	3.6	9
120	Origin of the different transport properties of electron and hole polarons in an ambipolar polyselenophene-based conjugated polymer. <i>Physical Review B</i> , 2011 , 84,	3.3	36
119	Synthesis, Characterization, and Field Effect Transistor Properties of Regioregular Poly(3-alkyl-2,5-selenylenevinylene). <i>Macromolecules</i> , 2011 , 44, 5194-5199	5.5	41
118	Hybrid Polymer Solar Cells from Zinc Oxide and Poly(3-hexylselenophene). <i>Journal of Physical Chemistry C</i> , 2011 , 115, 18901-18908	3.8	18
117	Indacenodithiophene-co-benzothiadiazole Copolymers for High Performance Solar Cells or Transistors via Alkyl Chain Optimization. <i>Macromolecules</i> , 2011 , 44, 6649-6652	5.5	152
116	Percolation behaviour in high mobility p-channel polymer/small-molecule blend organic field-effect transistors. <i>Organic Electronics</i> , 2011 , 12, 143-147	3.5	39
115	Correlations between mechanical and electrical properties of polythiophenes. ACS Nano, 2010, 4, 7538-	44 6.7	178
114	Bulk charge transport in liquid-crystalline polymer semiconductors based on poly(2,5-bis(3-alkylthiophen-2-yl)thieno[3,2-b]thiophene). <i>Polymer Chemistry</i> , 2010 , 1, 1448	4.9	8
113	Photoinduced Charge Carrier Generation in Blends of Poly(Thienothiophene) Derivatives and [6,6]-Phenyl-C61-butyric Acid Methyl Ester: Phase Segregation versus Intercalation. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 15116-15120	3.8	33
112	Charge Photogeneration in Low Band Gap Polyselenophene/Fullerene Blend Films. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 8068-8075	3.8	55
111	Synthesis and characterization of fused pyrrolo[3,2-d:4,5-d\$bisthiazole-containing polymers. <i>Organic Letters</i> , 2010 , 12, 5478-81	6.2	38
110	Understanding the Influence of Morphology on Poly(3-hexylselenothiophene):PCBM Solar Cells. <i>Macromolecules</i> , 2010 , 43, 1169-1174	5.5	86
109	Acceptor energy level control of charge photogeneration in organic donor/acceptor blends. <i>Journal of the American Chemical Society</i> , 2010 , 132, 12919-26	16.4	119
108	Solution-processed organic transistors based on semiconducting blends. <i>Journal of Materials Chemistry</i> , 2010 , 20, 2562		181
107	Ink-jet printed p-type polymer electronics based on liquid-crystalline polymer semiconductors. Journal of Materials Chemistry, 2010 , 20, 1927		37
106	Indacenodithiophene semiconducting polymers for high-performance, air-stable transistors. <i>Journal of the American Chemical Society</i> , 2010 , 132, 11437-9	16.4	463
105	The Influence of Film Morphology in High-Mobility Small-Molecule:Polymer Blend Organic Transistors. <i>Advanced Functional Materials</i> , 2010 , 20, 2330-2337	15.6	110

(2009-2010)

104	In-Plane Liquid Crystalline Texture of High-Performance Thienothiophene Copolymer Thin Films. <i>Advanced Functional Materials</i> , 2010 , 20, 4098-4106	15.6	55
103	Microstructural origin of high mobility in high-performance poly(thieno-thiophene) thin-film transistors. <i>Advanced Materials</i> , 2010 , 22, 697-701	24	69
102	n-Type organic semiconductors in organic electronics. <i>Advanced Materials</i> , 2010 , 22, 3876-92	24	963
101	High mobility ambipolar charge transport in polyselenophene conjugated polymers. <i>Advanced Materials</i> , 2010 , 22, 2371-5	24	172
100	Solid-state processing of organic semiconductors. <i>Advanced Materials</i> , 2010 , 22, 3942-7	24	41
99	Air-stable solution-processed hybrid transistors with hole and electron mobilities exceeding 2 cm2 V-1 s-1. <i>Advanced Materials</i> , 2010 , 22, 3598-602	24	52
98	Analysis of charge photogeneration as a key determinant of photocurrent density in polymer: fullerene solar cells. <i>Advanced Materials</i> , 2010 , 22, 5287-91	24	54
97	Polyterthiophenes Incorporating 3,4-Difluorothiophene Units: Application in Organic Field-Effect Transistors. <i>Macromolecular Chemistry and Physics</i> , 2010 , 211, 2642-2648	2.6	10
96	Elucidating the role of hyperfine interactions on organic magnetoresistance using deuterated aluminium tris(8-hydroxyquinoline). <i>Physical Review B</i> , 2009 , 80,	3.3	49
95	Local charge trapping in conjugated polymers resolved by scanning Kelvin probe microscopy. <i>Physical Review Letters</i> , 2009 , 103, 256803	7.4	56
94	Separate charge transport pathways determined by the time of flight method in bimodal polytriarylamine. <i>Journal of Applied Physics</i> , 2009 , 105, 013701	2.5	28
93	Solution processed low-voltage organic transistors and complementary inverters. <i>Applied Physics Letters</i> , 2009 , 95, 103310	3.4	28
92	Bimolecular Crystals of Fullerenes in Conjugated Polymers and the Implications of Molecular Mixing for Solar Cells. <i>Advanced Functional Materials</i> , 2009 , 19, 1173-1179	15.6	373
91	Doping of Conjugated Polythiophenes with Alkyl Silanes. Advanced Functional Materials, 2009, 19, 1906	- 19 .161	98
90	Semiconducting Thienothiophene Copolymers: Design, Synthesis, Morphology, and Performance in Thin-Film Organic Transistors. <i>Advanced Materials</i> , 2009 , 21, 1091-1109	24	382
89	High-Performance Polymer-Small Molecule Blend Organic Transistors. <i>Advanced Materials</i> , 2009 , 21, 1166-1171	24	326
88	Charge-Transport Anisotropy Due to Grain Boundaries in Directionally Crystallized Thin Films of Regioregular Poly(3-hexylthiophene). <i>Advanced Materials</i> , 2009 , 21, 1568-1572	24	286
87	Polaron Localization at Interfaces in High-Mobility Microcrystalline Conjugated Polymers. <i>Advanced Materials</i> , 2009 , 21, 3759-3763	24	92

86	The effects of metal impurities in poly[(2,5-bis(3-decylthiophen-2-yl)thieno[2,3-b]thiophene] on field-effect transistor properties. <i>Organic Electronics</i> , 2009 , 10, 215-221	3.5	6
85	Systematic improvement in charge carrier mobility of air stable triarylamine copolymers. <i>Journal of the American Chemical Society</i> , 2009 , 131, 10814-5	16.4	148
84	Distorted asymmetric cubic nanostructure of soluble fullerene crystals in efficient polymer:fullerene solar cells. <i>ACS Nano</i> , 2009 , 3, 2557-62	16.7	53
83	Controlling the orientation of terraced nanoscale "ribbons" of a poly(thiophene) semiconductor. <i>ACS Nano</i> , 2009 , 3, 780-7	16.7	145
82	High mobility p-channel organic field effect transistors on flexible substrates using a polymer-small molecule blend. <i>Synthetic Metals</i> , 2009 , 159, 2365-2367	3.6	55
81	Charge photogeneration in polythiophene-perylene diimide blend films. <i>Chemical Communications</i> , 2009 , 5445-7	5.8	62
80	Tuning the properties of polymer bulk heterojunction solar cells by adjusting fullerene size to control intercalation. <i>Nano Letters</i> , 2009 , 9, 4153-7	11.5	235
79	Influence of Molecular Weight Distribution on the Gelation of P3HT and Its Impact on the Photovoltaic Performance. <i>Macromolecules</i> , 2009 , 42, 4661-4666	5.5	145
78	Development of Polymer Semiconductors for Field-Effect Transistor Devices in Displays 2009 , 393-429		1
77	Semiconducting Polythiophenes for Field-Effect Transistor Devices in Flexible Electronics: Synthesis and Structure Property Relationships. <i>Kluwer International Series in Electronic Materials: Science and Technology</i> , 2009 , 261-296		
76	Organic field-effect transistors of poly(2,5-bis(3-dodecylthiophen-2-yl)thieno[2,3-b]thiophene) deposited on five different silane self-assembled monolayers. <i>Chemical Communications</i> , 2008 , 871-3	5.8	16
75	Influence of polymer ionization potential on the open-circuit voltage of hybrid polymer/TiO2 solar cells. <i>Applied Physics Letters</i> , 2008 , 92, 053308	3.4	34
74	Charge carrier formation in polythiophene/fullerene blend films studied by transient absorption spectroscopy. <i>Journal of the American Chemical Society</i> , 2008 , 130, 3030-42	16.4	576
73	An alignable fluorene thienothiophene copolymer with deep-blue electroluminescent emission at 410 nm. <i>Chemical Communications</i> , 2008 , 1079-81	5.8	44
72	Bulk Heterojunction Materials Composed of Poly(2,5-bis(3-tetradecylthiophen-2-yl)thieno[3,2-b]thiophene): Ultrafast Electron Transfer and Carrier Recombination <i>Journal of Physical Chemistry C</i> , 2008 , 112, 7853-7857	3.8	42
71	Molecular Basis of Mesophase Ordering in a Thiophene-Based Copolymer. <i>Macromolecules</i> , 2008 , 41, 5709-5715	5.5	97
70	Electrical Properties of Reactive Liquid Crystal Semiconductors. <i>Japanese Journal of Applied Physics</i> , 2008 , 47, 488-491	1.4	19
69	The Impact of the Dielectric/Semiconductor Interface on Microstructure and Charge Carrier Transport in High-Performance Polythiophene Transistors. <i>ECS Transactions</i> , 2008 , 13, 113-122	1	1

68	Synthetic Aspects of Organic Semiconductors. MRS Bulletin, 2008, 33, 698-705	3.2	30
67	High-performance organic integrated circuits based on solution processable polymer-small molecule blends. <i>Applied Physics Letters</i> , 2008 , 93, 253301	3.4	67
66	Organic bulk heterojunction solar cells using poly(2,5-bis(3-tetradecyllthiophen-2-yl)thieno[3,2,-b]thiophene). <i>Applied Physics Letters</i> , 2008 , 92, 1133	0 ³ 9 ⁴	106
65	Theoretical and experimental investigations of a polyalkylated-thieno[3,2-b]thiophene semiconductor. <i>Journal of Applied Physics</i> , 2008 , 104, 083705	2.5	8
64	Polymer thin film transistor without surface pretreatment on silicon nitride gate dielectric. <i>Applied Physics Letters</i> , 2008 , 93, 073305	3.4	6
63	Hexyl-Substituted Oligoselenophenes with Central Tetrafluorophenylene Units: Synthesis, Characterisation and Application in Organic Field Effect Transistors. <i>Macromolecular Rapid Communications</i> , 2008 , 29, 1839-1843	4.8	22
62	The Effect of Interfacial Roughness on the Thin Film Morphology and Charge Transport of High-Performance Polythiophenes. <i>Advanced Functional Materials</i> , 2008 , 18, 742-750	15.6	107
61	The Effect of Poly(3-hexylthiophene) Molecular Weight on Charge Transport and the Performance of Polymer:Fullerene Solar Cells. <i>Advanced Functional Materials</i> , 2008 , 18, 2373-2380	15.6	233
60	Highly Efficient Patterning of Organic Single-Crystal Transistors from the Solution Phase. <i>Advanced Materials</i> , 2008 , 20, 4044-4048	24	93
59	Relationship between Film Morphology, Optical, and Conductive Properties of Poly(thienothiophene): [6,6]-Phenyl C-61-Butyric Acid Methyl Ester Bulk Heterojunctions. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 15973-15979	3.8	16
58	Regioregular poly(3-hexyl)selenophene: a low band gap organic hole transporting polymer. <i>Chemical Communications</i> , 2007 , 5061-3	5.8	298
57	Effect of the End Group of Regioregular Poly(3-hexylthiophene) Polymers on the Performance of Polymer/Fullerene Solar Cells. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 8137-8141	3.8	87
56	Structural and Electronic Effects of 1,3,4-Thiadiazole Units Incorporated into Polythiophene Chains. <i>Macromolecules</i> , 2007 , 40, 6585-6593	5.5	42
55	Polyterthiophenes as Donors for Polymer Solar Cells. <i>Advanced Functional Materials</i> , 2007 , 17, 1371-13	76 5.6	86
54	High Carrier Mobility Polythiophene Thin Films: Structure Determination by Experiment and Theory. <i>Advanced Materials</i> , 2007 , 19, 833-837	24	254
53	Studies of Highly Regioregular Poly(3-hexylselenophene) for Photovoltaic Applications. <i>Advanced Materials</i> , 2007 , 19, 4544-4547	24	147
52	Critical Role of Side-Chain Attachment Density on the Order and Device Performance of Polythiophenes. <i>Macromolecules</i> , 2007 , 40, 7960-7965	5.5	297
51	X-ray scattering study of thin films of poly(2,5-bis(3-alkylthiophen-2-yl)thieno[3,2-b]thiophene). <i>Journal of the American Chemical Society</i> , 2007 , 129, 3226-37	16.4	317

50	Significant dependence of morphology and charge carrier mobility on substrate surface chemistry in high performance polythiophene semiconductor films. <i>Applied Physics Letters</i> , 2007 , 90, 062117	3.4	125
49	Influence of source-drain electric field on mobility and charge transport in organic field-effect transistors. <i>Journal of Applied Physics</i> , 2007 , 102, 044503	2.5	44
48	A comprehensive study of the effect of reactive end groups on the charge carrier transport within polymerized and nonpolymerized liquid crystals. <i>Journal of Applied Physics</i> , 2007 , 101, 023713	2.5	20
47	Effects of the surface roughness of plastic-compatible inorganic dielectrics on polymeric thin film transistors. <i>Applied Physics Letters</i> , 2007 , 90, 233508	3.4	63
46	Undoped polythiophene field-effect transistors with mobility of 1cm2VIsI. <i>Applied Physics Letters</i> , 2007 , 91, 243512	3.4	210
45	Relative importance of polaron activation and disorder on charge transport in high-mobility conjugated polymer field-effect transistors. <i>Physical Review B</i> , 2007 , 76,	3.3	78
44	Reliable Suzuki Chemistry for Functionalised Polythiophene Synthesis. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 1003, 1		
43	Distinguishing between nonlinear channel transport and contact effects in organic FETs 2007,		3
42	A study of the effects metal residues in poly(9,9-dioctylfluorene) have on field-effect transistor device characteristics. <i>Synthetic Metals</i> , 2007 , 157, 872-875	3.6	16
41	Electrochemical doping in electrolyte-gated polymer transistors. <i>Journal of the American Chemical Society</i> , 2007 , 129, 14367-71	16.4	131
40	Electronic Structure and Charge-Transport Properties of Polythiophene Chains Containing Thienothiophene Units: A Joint Experimental and Theoretical Study. <i>Chemistry of Materials</i> , 2007 , 19, 4949-4956	9.6	60
39	Combinatorial screening of the effect of temperature on the microstructure and mobility of a high performance polythiophene semiconductor. <i>Applied Physics Letters</i> , 2007 , 90, 012112	3.4	27
38	Polymer chain/nanocrystal ordering in thin films of regioregular poly(3-hexylthiophene) and blends with a soluble fullerene. <i>Soft Matter</i> , 2006 , 3, 117-121	3.6	35
37	Direct measurement of carrier drift velocity and mobility in a polymer field-effect transistor. <i>Applied Physics Letters</i> , 2006 , 89, 242104	3.4	17
36	TOF mobility measurements in pristine films of P3HT: control of hole injection and influence of film thickness 2006 , 6334, 16		8
35	Beyond the metal-insulator transition in polymer electrolyte gated polymer field-effect transistors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 11834-7	11.5	155
34	Molecular-weight dependence of interchain polaron delocalization and exciton bandwidth in high-mobility conjugated polymers. <i>Physical Review B</i> , 2006 , 74,	3.3	244
33	The influence of molecular weight on the microstructure and thin film transistor characteristics of pBTTT polymers. 2006 ,		8

(2004-2006)

32	Designing solution-processable air-stable liquid crystalline crosslinkable semiconductors. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2006, 364, 2779-87	3	9
31	Liquid-crystalline semiconducting polymers with high charge-carrier mobility. <i>Nature Materials</i> , 2006 , 5, 328-33	27	1836
30	Suzuki route to regioregular polyalkylthiophenes using Ir-catalysed borylation to make the monomer, and Pd complexes of bulky phosphanes as coupling catalysts for polymerisation. <i>Tetrahedron Letters</i> , 2006 , 47, 5143-5146	2	53
29	Radical ion pair mediated triplet formation in polymer-fullerene blend films. <i>Chemical Communications</i> , 2006 , 3939-41	5.8	50
28	Influence of Molecular Design on the Field-Effect Transistor Characteristics of Terthiophene Polymers. <i>Chemistry of Materials</i> , 2005 , 17, 1381-1385	9.6	110
27	Microwave-assisted synthesis of polythiophenes via the Stille coupling. Synthetic Metals, 2005 , 148, 195	5-3.98	104
26	Thiophene and Selenophene Copolymers Incorporating Fluorinated Phenylene Units in the Main Chain: Synthesis, Characterization, and Application in Organic Field-Effect Transistors. <i>Chemistry of Materials</i> , 2005 , 17, 6567-6578	9.6	145
25	Stable polythiophene semiconductors incorporating thieno[2,3-b]thiophene. <i>Journal of the American Chemical Society</i> , 2005 , 127, 1078-9	16.4	321
24	A capping methodology for the synthesis of lower mu-oxo-phthalocyaninato silicon oligomers. Journal of the American Chemical Society, 2005 , 127, 16382-3	16.4	21
23	Hexyl-substituted oligothiophenes with a central tetrafluorophenylene unit: crystal engineering of planar structures for p-type organic semiconductors. <i>Chemical Communications</i> , 2005 , 1465-7	5.8	58
22	Stable semiconducting thiophene polymers and their field effect transistor characteristics 2005,		2
21	Effects of semiconductor-dielectric interfaces on polymeric thin-film transistors 2005 ,		3
20	Ambipolar Field-Effect Transistors Based on Solution-Processable Blends of Thieno[2,3-b]thiophene Terthiophene Polymer and Methanofullerenes. <i>Advanced Materials</i> , 2005 , 17, 2608-2612	24	89
19	High mobility ambipolar charge transport in a cross-linked reactive mesogen at room temperature. <i>Applied Physics Letters</i> , 2005 , 87, 172110	3.4	31
18	Stability in OTFT Gas Sensors. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 871, 1		3
17	Lamination method for the study of interfaces in polymeric thin film transistors. <i>Journal of the American Chemical Society</i> , 2004 , 126, 13928-9	16.4	96
16	Electronic structure of a novel alkylidene fluorene polymer in the pristine state. <i>Chemical Physics Letters</i> , 2004 , 385, 184-188	2.5	5
15	Alkylidene Fluorene Liquid Crystalline Semiconducting Polymers for Organic Field Effect Transistor Devices. <i>Macromolecules</i> , 2004 , 37, 5250-5256	5.5	75

14	4-Hexylbithieno[3,2-b:2 B Pe]pyridine: An Efficient Electron-Accepting Unit in Fluorene and Indenofluorene Copolymers for Light-Emitting Devices. <i>Macromolecules</i> , 2004 , 37, 709-715	5.5	53
13	Self-assembled liquid crystalline solution processable semiconductors 2004,		1
12	New liquid crystalline solution processible organic semiconductors and their performance in field effect transistors 2003 ,		4
11	Polymerisable liquid crystalline organic semiconductors and their fabrication in organic field effect transistors. <i>Journal of Materials Chemistry</i> , 2003 , 13, 2436		92
10	Structural characterisation of a red phthalocyanine. Chemical Communications, 2003, 2064-5	5.8	70
9	New Liquid Crystalline Semiconductors And Their Fabrication in Organic Field Effect Transistor Devices. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 771, 831		1
8	Phthalocyaninodehydroannulenes. Chemistry - A European Journal, 2000, 6, 3958-67	4.8	52
7	A diphthalocyanino-dehydro[12]annulene. <i>Chemical Communications</i> , 2000 , 969-970	5.8	18
6	Octaalkyl- and Octaalkoxy-2,3-naphthalocyanines 1997 , 01, 77-86		27
5	Thienothiophene Copolymers in Field Effect Transistors647-672		1
4	The synthesis and application of novel benzodithiophene based reactive mesogens with negative wavelength dispersion birefringence. <i>Journal of Materials Chemistry C</i> ,	7.1	1
3	Reconciling the Driving Force and the Barrier to Charge Separation in DonorNonfullerene Acceptor Films. <i>ACS Energy Letters</i> ,3572-3581	20.1	1
2	[2.2.2.2]Paracyclophanetetraenes (PCTs): cyclic structural analogues of poly(p-phenylene vinylene)s (PPVs). <i>Open Research Europe</i> ,1, 111		1
1	[2.2.2.2]Paracyclophanetetraenes (PCTs): cyclic structural analogues of poly(p-phenylene vinylene)s (PPVs). <i>Open Research Europe</i> ,1, 111		O