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Solution coating of large-area organic semiconductor thin films with aligned single-crystalline domains

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#	Paper	IF	Citations
833	Solution-Processable Quinoidal Dithioalkylterthiophene-Based Small Molecules Pseudo-Pentathienoacenes via an Intramolecular SS Lock for High-Performance nType Organic Field-Effect Transistors.		
832	Organic semiconductors: Made to order. <i>Nature Materials</i> , 2013 , 12, 598-600	27	79
831	Control of charge transport in a semiconducting copolymer by solvent-induced long-range order. 2013 , 3, 3425		113
830	Overcoming tradeoff between mobility and bias stability in organic field-effect transistors according to the self-assembled monolayer chain lengths. 2014 , 104, 173301		31
829	P-21: n-type Organic Thin Film Transistors with High Operational Stability. 2014 , 45, 1021-1023		
828	Thermal diffusivities of functionalized pentacene semiconductors. 2014 , 105, 073302		15
827	Understanding polymorphism in organic semiconductor thin films through nanoconfinement. 2014 , 136, 17046-57		155
826	Strongly correlated alignment of fluorinated 5,11-bis(triethylgermylethynyl)anthradithiophene crystallites in solution-processed field-effect transistors. 2014 , 15, 2913-6		16
825	Crystalline film growth of TIPS-pentacene by double-shot inkjet printing technique. 2014 , 53, 05HC10		14
824	High-performance organic transistors for printed circuits. 2014 ,		
823	Facile fabrication of aligned arrays of ultralong CoOEP nanowires for high-performance optoelectronic devices. 2014 , 1, 016303		1
822	Recent advances in organic field effect transistors. 2014 , 38, 497-508		4
821	Selective solution shearing deposition of high performance TIPS-pentacene polymorphs through chemical patterning. 2014 , 29, 2615-2624		12
820	Mesoscale control of organic crystalline thin films: Effects of film morphology on the performance of organic transistors. 2014 , 65, 496-501		1
819	Pathway Complexity in EConjugated Materials. 2014 , 26, 576-586		193
818	25th anniversary article: organic field-effect transistors: the path beyond amorphous silicon. 2014 , 26, 1319-35		1758
817	High-Mobility Organic Transistors with Wet-Etch-Patterned Top Electrodes: A Novel Patterning Method for Fine-Pitch Integration of Organic Devices. 2014 , 1, 1300124		38

816	Effect of Non-Chlorinated Mixed Solvents on Charge Transport and Morphology of Solution-Processed Polymer Field-Effect Transistors. 2014 , 24, 3524-3534	73
815	25th anniversary article: organic electronics marries photochromism: generation of multifunctional interfaces, materials, and devices. 2014 , 26, 1827-45	226
814	One-dimensional self-confinement promotes polymorph selection in large-area organic semiconductor thin films. 2014 , 5, 3573	116
813	High-mobility field-effect transistors fabricated with macroscopic aligned semiconducting polymers. 2014 , 26, 2993-8	481
812	What Currently Limits Charge Carrier Mobility in Crystals of Molecular Semiconductors?. 2014 , 54, 595-620	81
811	Prediction and Calculation of Crystal Structures. 2014 ,	11
810	The Large-Area, Solution-Based Deposition of Single-Crystal Organic Semiconductors. 2014 , 54, 496-512	22
809	Epitaxial growth of molecular crystals on van der waals substrates for high-performance organic electronics. 2014 , 26, 2812-7	103
808	High-mobility, aligned crystalline domains of TIPS-pentacene with metastable polymorphs through lateral confinement of crystal growth. 2014 , 26, 487-93	161
807	Face-on stacking and enhanced out-of-plane hole mobility in graphene-templated copper phthalocyanine. 2014 , 50, 5319-21	48
806	Ultra-high mobility transparent organic thin film transistors grown by an off-centre spin-coating method. 2014 , 5, 3005	975
805	Synthesis and photoreactivity of diketone-type precursors of acenes and their use in organic-device fabrication. 2014 , 18, 50-70	53
804	Patterning technology for solution-processed organic crystal field-effect transistors. 2014 , 15, 024203	33
803	Prediction and theoretical characterization of p-type organic semiconductor crystals for field-effect transistor applications. 2014 , 345, 95-138	23
802	Template-guided solution-shearing method for enhanced charge carrier mobility in diketopyrrolopyrrole-based polymer field-effect transistors. 2014 , 26, 6031-5	54
801	Self-assembled monolayers of cyclohexyl-terminated phosphonic acids as a general dielectric surface for high-performance organic thin-film transistors. 2014 , 26, 7190-6	75
800	Solution processable colloidal nanoplates as building blocks for high-performance electronic thin films on flexible substrates. 2014 , 14, 6547-53	60
799	Photophysical, amplified spontaneous emission and charge transport properties of oligofluorene derivatives in thin films. 2014 , 16, 16941-56	43

- 798 A high molecular weight triisopropylsilylethynyl (TIPS)-benzodithiophene and diketopyrrolopyrrole-based copolymer for high performance organic photovoltaic cells. **2014**, 2, 6348 56
- 797 Solution-sheared ultrathin films for highly-sensitive ammonia detection using organic thin-film transistors. **2014**, 2, 1264 56
- 796 Probing the interfacial molecular packing in TIPS-pentacene organic semiconductors by surface enhanced Raman scattering. **2014**, 2, 2985-2991 25
- 795 Solution-cast self-assembled films of perchlorate-doped oligo(3-methoxythiophene) showing a gold-like luster. **2014**, 4, 24053 10
- 794 Printed diodes operating at mobile phone frequencies. **2014**, 111, 11917-8 17
- 793 Elucidating the nanoscale origins of organic electronic function by conductive atomic force microscopy. **2014**, 2, 3118-3128 40
- 792 Order, viscoelastic, and dielectric properties of symmetric and asymmetric alkyl[1]benzothieno[3,2-b][1]benzothiophenes. **2014**, 118, 1443-51 24
- 791 Sensitive Characterization of the Influence of Substrate Interfaces on Supported Thin Films. **2014**, 47, 6365-6372 40
- 790 High performance transistors based on the controlled growth of triisopropylsilylethynyl-pentacene crystals via non-isotropic solvent evaporation. **2014**, 4, 20804-20813 22
- 789 Uniaxial macroscopic alignment of conjugated polymer systems by directional crystallization during blade coating. **2014**, 2, 3303-3310 36
- 788 Tuning polymorphism and orientation in organic semiconductor thin films via post-deposition processing. **2014**, 136, 15749-56 74
- 787 Organic semiconducting single crystals as solid-state sensors for ionizing radiation. **2014**, 174, 219-34 35
- 786 Asymmetric fused thiophenes for field-effect transistors: crystal structure and film microstructure-transistor performance correlations. **2014**, 2, 8892-8902 36
- 785 Late stage crystallization and healing during spin-coating enhance carrier transport in small-molecule organic semiconductors. **2014**, 2, 5681-5689 51
- 784 Functionalized benzothieno[3,2 b]thiophenes (BTTs) for high performance organic thin-film transistors (OTFTs). **2014**, 2, 7599 14
- 783 Influence of graphene-substrate interactions on configurations of organic molecules on graphene: Pentacene/epitaxial graphene/SiC. **2014**, 105, 071606 7
- 782 Highly oriented polymer semiconductor films compressed at the surface of ionic liquids for high-performance polymeric organic field-effect transistors. **2014**, 26, 6430-5 60
- 781 High-speed, inkjet-printed carbon nanotube/zinc tin oxide hybrid complementary ring oscillators. **2014**, 14, 3683-7 122

780	Modulation of surface solubility and wettability for high-performance inkjet-printed organic transistors. 2014 , 15, 3101-3110		9
779	Imide- and amide-functionalized polymer semiconductors. 2014 , 114, 8943-9021		721
778	Solution-processed organic crystals written directly with a rollerball pen for field-effect transistors. 2014 , 15, 2234-2239		18
777	Highly-sensitive solution-processed 2,8-difluoro-5,11-bis(triethylsilylethynyl) anthradithiophene (diF-TESADT) phototransistors for optical sensing applications. 2014 , 15, 2099-2106		31
776	Mapping orientational order in a bulk heterojunction solar cell with polarization-dependent photoconductive atomic force microscopy. 2014 , 8, 8141-51		35
775	Inverse methods for material design. 2014 , 60, 2732-2740		65
774	Directed self-assembly of organic semiconductors via confined evaporative capillary flows for use in organic field-effect transistors. 2014 , 15, 2322-2327		8
773	Microstructural Control of Charge Transport in Organic Blend Thin-Film Transistors. 2014 , 24, 5969-5976		53
772	Scaling relations and optimization of excitonic energy transfer rates between one-dimensional molecular aggregates. 2014 , 118, 7827-34		14
771	Volatilize-controlled oriented growth of the single-crystal layer for organic field-effect transistors. 2014 , 30, 12082-8		7
770	Template-mediated nano-crystallite networks in semiconducting polymers. 2014 , 5, 4183		25
769	Organic electronics: addressing challenges. <i>Nature Materials</i> , 2014 , 13, 773-5	27	76
768	Solution-processed barium salts as charge injection layers for high performance N-channel organic field-effect transistors. 2014 , 6, 9614-21		35
767	Understanding Lattice Strain-Controlled Charge Transport in Organic Semiconductors: A Computational Study. 2014 , 24, 5531-5540		25
766	Robust excitons inhabit soft supramolecular nanotubes. 2014 , 111, E3367-75		80
765	High-speed operation in printed organic inverter circuits with short channel length. 2014 , 15, 2696-2701		29
764	Bis(triisopropylsilylethynyl)pentacene/Au(111) Interface: Coupling, Molecular Orientation, and Thermal Stability. 2014 , 118, 22522-22532		10
763	Characteristics and evaluation criteria of substrate-based manufacturing. Is roll-to-roll the best solution for printed electronics?. 2014 , 15, 1631-1640		40

762 Organische Chemie 2013. **2014**, 62, 264-301

- 761 Large-scale organic single-crystal thin films and transistor arrays via the evaporation-controlled fluidic channel method. **2014**, 6, 7133-40 21
- 760 Morphology control strategies for solution-processed organic semiconductor thin films. **2014**, 7, 2145-2159 426
- 759 All-printed flexible organic transistors enabled by surface tension-guided blade coating. **2014**, 26, 5722-7 178
- 758 Enhancing charge transport in copper phthalocyanine thin film by elevating pressure of deposition chamber. **2014**, 15, 1799-1804 7
- 757 Effect of the Interface Mixing Layer on the Thermal Boundary Conductance of Metal-Organic Semiconductor Thin Film—Numerical Study by Lattice Boltzmann Method. **2014**, 2, 100001 4
- 756 De Gruyter. **2014**, 2, 100001 4
- 755 Charge-Transport Anisotropy in a Uniaxially Aligned Diketopyrrolopyrrole-Based Copolymer. **2015**, 27, 7356-64 110
- 754 Modifying the thermal conductivity of small molecule organic semiconductor thin films with metal nanoparticles. **2015**, 5, 16095 27
- 753 Molecular orientation within thin films of isomorphous molecular semiconductors. **2015**, 5, 89144-89148 8
- 752 Quick Fabrication of Large-area Organic Semiconductor Single Crystal Arrays with a Rapid Annealing Self-Solution-Shearing Method. **2015**, 5, 13195 31
- 751 Spin Exchange Interaction in Substituted Copper Phthalocyanine Crystalline Thin Films. **2015**, 5, 16536 6
- 750 Single crystal growth in spin-coated films of polymorphic phthalocyanine derivative under solvent vapor. **2015**, 3, 126107 6
- 749 Frequency-dependent photothermal measurement of transverse thermal diffusivity of organic semiconductors. **2015**, 118, 235501 6
- 748 Solvent and Steric Hindrance Effects of Bulky Poly(9,9-diarylfuorene)s on Conformation, Gelation, Morphology, and Electroluminescence. **2015**, 216, 1043-1054 20
- 747 The Density of States and the Transport Effective Mass in a Highly Oriented Semiconducting Polymer: Electronic Delocalization in 1D. **2015**, 27, 7759-65 46
- 746 Large Modulation of Charge Transport Anisotropy by Controlling the Alignment of π -Stacks in Diketopyrrolopyrrole-Based Polymers. **2015**, 2, 1500153 8
- 745 Reverse-Offset Printing Optimized for Scalable Organic Thin-Film Transistors with Submicrometer Channel Lengths. **2015**, 1, 1500145 53

744	Laser-Assisted Wet-Chemical Doping of Sintered Si and Ge Nanoparticle Films. 2015 , 1, 1400029	5
743	Diperfluorophenyl Fused Thiophene Semiconductors for n-Type Organic Thin Film Transistors (OTFTs). 2015 , 1, 1500098	33
742	Influence of Processing Parameters and Molecular Weight on the Morphology and Properties of High-Performance PffBT4T-2OD:PC71BM Organic Solar Cells. 2015 , 5, 1501400	149
741	A Facile PDMS-Assisted Crystallization for the Crystal-Engineering of C60 Single-Crystal Organic Field-Effect Transistors. 2015 , 27, 4371-6	43
740	Polymer blend effects on fundamental properties of mesogenic phthalocyanine films fabricated by heated spin-coating method. 2015 , 54, 04DK08	1
739	Analysis of dynamic cantilever behavior in tapping mode atomic force microscopy. 2015 , 78, 935-46	6
738	Controlling the Chromaticity of Small-Molecule Light-Emitting Electrochemical Cells Based on TIPS-Pentacene. 2015 , 25, 5066-5074	58
737	Effective Controlling of Film Texture and Carrier Transport of a High-Performance Polymeric Semiconductor by Magnetic Alignment. 2015 , 25, 5126-5133	30
736	Few-Volt Operation of Printed Organic Ferroelectric Capacitor. 2015 , 27, 6475-81	35
735	Tetrabenzo[a,f,j,o]perylene: a polycyclic aromatic hydrocarbon with an open-shell singlet biradical ground state. 2015 , 54, 12442-6	90
734	Single-Crystal-Like Organic Thin-Film Transistors Fabricated from Dinaphtho[2,3-b:2',3'-f]thieno[3,2-b]thiophene (DNNT) Precursor-Polystyrene Blends. 2015 , 27, 6606-11	40
733	Wafer-Scale Precise Patterning of Organic Single-Crystal Nanowire Arrays via a Photolithography-Assisted Spin-Coating Method. 2015 , 27, 7305-12	76
732	Supramolecular Approaches to Nanoscale Morphological Control in Organic Solar Cells. 2015 , 16, 13381-406	22
731	Flexible Electronics: Integration Processes for Organic and Inorganic Semiconductor-Based Thin-Film Transistors. 2015 , 4, 480-506	30
730	Crystallization of rubrene on a nanopillar-templated surface by the melt-recrystallization process and its application in field-effect transistors. 2015 , 51, 603-6	6
729	Switching of Transfer Characteristics of an Organic Field-Effect Transistor by Phase Transitions: Sensitive Response to Molecular Dynamics and Charge Fluctuation. 2015 , 27, 4441-4449	22
728	Controlling Conjugation and Solubility of Donor-Acceptor Semiconducting Copolymers for High-Performance Organic Field-Effect Transistors. 2015 , 7, 12781-8	16
727	Unidirectional coating technology for organic field-effect transistors: materials and methods. 2015 , 30, 054001	30

726	Thin film field-effect transistors of 2,6-diphenyl anthracene (DPA). 2015 , 51, 11777-9	78
725	Versatile organic transistors by solution processing. 2015 , 16, 1118-32	45
724	Mechanics of curvilinear electronics and optoelectronics. 2015 , 19, 171-189	33
723	N,N'-Dihydrotetraazapentacenes (DHTA) in thin film transistors. 2015 , 3, 1604-1609	20
722	Tuning Local Molecular Orientation-Composition Correlations in Binary Organic Thin Films by Solution Shearing. 2015 , 25, 3131-3137	25
721	Solution-printed organic semiconductor blends exhibiting transport properties on par with single crystals. 2015 , 6, 8598	188
720	Macroscopically aligned molecular stacking structures in mesogenic phthalocyanine derivative films fabricated by heated spin-coating method. 2015 , 594, 1-4	8
719	Improved alignment and crystallinity of TIPS-Pentacene thin films by off-center spin coating. 2015 ,	
718	Wafer-scale and environmentally-friendly deposition methodology for extremely uniform, high-performance transistor arrays with an ultra-low amount of polymer semiconductors. 2015 , 3, 2817-2822	10
717	Light Controls Polymorphism in Thin Films of Sexithiophene. 2015 , 15, 1319-1324	23
716	Process optimization for inkjet printing of triisopropylsilylethynyl pentacene with single-solvent solutions. 2015 , 578, 11-19	13
715	Large-scale roll-to-roll fabrication of ordered mesoporous materials using resol-assisted cooperative assembly. 2015 , 7, 4306-10	34
714	Solution-processed n-type fullerene field-effect transistors prepared using CVD-grown graphene electrodes: improving performance with thermal annealing. 2015 , 17, 6635-43	11
713	Organic Single-Crystalline Semiconductors for Flexible Electronics Applications. 2015 , 133-162	
712	Pentacene-Based Photodetector in Visible Region With Vertical Field-Effect Transistor Configuration. 2015 , 27, 233-236	26
711	Fabrication of highly oriented large-scale TIPS pentacene crystals and transistors by the Marangoni effect-controlled growth method. 2015 , 17, 6274-9	31
710	Ambipolar charge transport of TIPS-pentacene single-crystals grown from non-polar solvents. 2015 , 2, 344-349	53
709	Difluorinated 6,13-Bis(triisopropylsilylethynyl)pentacene: Synthesis, Crystallinity, and Charge-Transport Properties. 2015 , 16, 1251-7	11

708	Exciton dynamics reveal aggregates with intermolecular order at hidden interfaces in solution-cast organic semiconducting films. 2015 , 6, 5946	45
707	Single-crystal field-effect transistors of new ClENDI polymorph processed by sublimation in air. 2015 , 6, 5954	125
706	Electrospray-processed soluble acenes toward the realization of high-performance field-effect transistors. 2015 , 7, 6496-504	17
705	o-Carborane functionalized pentacenes: synthesis, molecular packing and ambipolar organic thin-film transistors. 2015 , 51, 12004-7	98
704	Controlling crystallization to improve charge mobilities in transistors based on 2,7-dioctyl[1]benzothieno[3,2-b][1]benzothiophene. 2015 , 3, 8799-8803	9
703	Discerning Variable Extents of Interdomain Orientational and Structural Heterogeneity in Solution-Cast Polycrystalline Organic Semiconducting Thin Films. 2015 , 6, 3155-3162	16
702	Boosting Photon Harvesting in Organic Solar Cells with Highly Oriented Molecular Crystals via Graphene-Organic Heterointerface. 2015 , 9, 8206-19	64
701	Microfluidic Crystal Engineering of EConjugated Polymers. 2015 , 9, 8220-30	94
700	Quantum-dot-in-perovskite solids. 2015 , 523, 324-8	382
699	High-performance polymer field-effect transistors fabricated with low-bandgap DPP-based semiconducting materials. 2015 , 6, 6457-6464	19
698	Large-scale fabrication of field-effect transistors based on solution-grown organic single crystals. 2015 , 60, 1122-1127	16
697	Spray-combustion synthesis: efficient solution route to high-performance oxide transistors. 2015 , 112, 3217-22	151
696	High mobility organic semiconductors for field-effect transistors. 2015 , 58, 947-968	118
695	Printed Organic Transistors with Uniform Electrical Performance and Their Application to Amplifiers in Biosensors. 2015 , 1, 1400052	59
694	Solution-based 5,6,11,12-tetrachlorotetracene crystal growth for high-performance organic thin film transistors. 2015 , 22, 191-196	41
693	Effect of alkyl substituents: 5,15-bis(trimethylsilylethynyl)- vs. 5,15-bis(triisopropylsilylethynyl)-tetrabenzoporphyrins and their metal complexes. 2015 , 19, 465-478	8
692	Controllable fabrication of copper phthalocyanine nanostructure crystals. 2015 , 26, 225601	12
691	Enhanced performance in isoindigo based organic small molecule field-effect transistors through solvent additives. 2015 , 3, 5951-5957	12

690	Directional solidification of C8-BTBT films induced by temperature gradients and its application for transistors. 2015 ,	1
689	Development of high-performance printed organic field-effect transistors and integrated circuits. 2015 , 17, 26553-74	90
688	Scalable fabrication of efficient organolead trihalide perovskite solar cells with doctor-bladed active layers. 2015 , 8, 1544-1550	522
687	Macroscopic Molecular Ordering and Exciton Delocalization in Crystalline Phthalocyanine Thin Films. 2015 , 6, 1834-40	14
686	Large-area formation of self-aligned crystalline domains of organic semiconductors on transistor channels using CONNECT. 2015 , 112, 5561-6	55
685	Self-Aligned Megahertz Organic Transistors Solution-Processed on Plastic. 2015 , 1, 1500024	19
684	Study of triisopropylsilyl pentacene thin film and its interfacial properties for device applications. 2015 , 584, 359-362	4
683	Flow Effects on the Controlled Growth of Nanostructured Networks at Microcapillary Walls for Applications in Continuous Flow Reactions. 2015 , 7, 21580-8	10
682	Polarization-resolved spectroscopy imaging of grain boundaries and optical excitations in crystalline organic thin films. 2015 , 6, 8201	13
681	Material witness: Materials touch across the void. <i>Nature Materials</i> , 2015 , 14, 1078	27
680	Ultrahigh electrical conductivity in solution-sheared polymeric transparent films. 2015 , 112, 14138-43	179
679	Flow-enhanced solution printing of all-polymer solar cells. 2015 , 6, 7955	191
678	Tetrabenzo[a,f,j,o]perylene: A Polycyclic Aromatic Hydrocarbon With An Open-Shell Singlet Biradical Ground State. 2015 , 127, 12619-12623	36
677	Electronic and Morphological Studies of Conjugated Polymers Incorporating a Disk-Shaped Polycyclic Aromatic Hydrocarbon Unit. 2015 , 7, 20034-45	8
676	Low-Bandgap Near-IR Conjugated Polymers/Molecules for Organic Electronics. 2015 , 115, 12633-65	863
675	Graphene-Assisted Solution Growth of Vertically Oriented Organic Semiconducting Single Crystals. 2015 , 9, 9486-96	37
674	Organic electronics: Something out of nothing. <i>Nature Materials</i> , 2015 , 14, 1077-8	27 17
673	Alignment Control of Patterned Organic Semiconductor Crystals in Short-Channel Transistor Using Unidirectional Solvent Evaporation Process. 2015 , 62, 2306-2312	5

672	Low-resistance contacts of electroless-plated metals with high-mobility organic semiconductors: Novel organic field-effect transistors with solution-processed electrodes. 2015 , 27, 53-58	
671	Impact of Molecular Organization on Exciton Diffusion in Photosensitive Single-Crystal Halogenated Perylenediimides Charge Transfer Interfaces. 2015 , 7, 27720-9	6
670	High-Performance Organic Field-Effect Transistors with Directionally Aligned Conjugated Polymer Film Deposited from Pre-Aggregated Solution. 2015 , 27, 8345-8353	127
669	Separating the impact of oxygen and water on the long-term stability of n-channel perylene diimide thin-film transistors. 2015 , 26, 340-344	22
668	A Robust Highly Aligned DNA Nanowire Array-Enabled Lithography for Graphene Nanoribbon Transistors. 2015 , 15, 7913-20	50
667	Controlled Assembly of Poly(3-hexylthiophene): Managing the Disorder to Order Transition on the Nano- through Meso-Scales. 2015 , 25, 920-927	58
666	Liquid Transfer in Printing Processes: Liquid Bridges with Moving Contact Lines. 2015 , 47, 67-94	110
665	Self-assembly of functional molecules into 1D crystalline nanostructures. 2015 , 27, 985-1013	114
664	Mechanical degradation and stability of organic solar cells: molecular and microstructural determinants. 2015 , 8, 55-80	172
663	Cyano substituted benzothiadiazole: a novel acceptor inducing n-type behaviour in conjugated polymers. 2015 , 3, 265-275	71
662	A General Method for Growing Two-Dimensional Crystals of Organic Semiconductors by Solution Epitaxy 2016 , 128, 9671-9675	22
661	Single Crystal-Like Performance in Solution-Coated Thin-Film Organic Field-Effect Transistors. 2016 , 26, 2379-2386	78
660	Self-Assembled Organic Single Crystalline Nanosheet for Solution Processed High-Performance n-Channel Field-Effect Transistors. 2016 , 28, 6011-5	28
659	P-99: Pneumatic Nozzle Printing as a Versatile Approach to Crystal Growth Management and Patterning of Printed Organic Thin Film Transistors. 2016 , 47, 1502-1505	2
658	Understanding Polymorph Transformations in Core-Chlorinated Naphthalene Diimides and their Impact on Thin-Film Transistor Performance. 2016 , 26, 2357-2364	41
657	Design, Synthesis, and Versatile Processing of Indolo[3,2-b]indole-Based Conjugated Molecules for High-Performance Organic Field-Effect Transistors. 2016 , 26, 2966-2973	41
656	2D Single-Crystalline Molecular Semiconductors with Precise Layer Definition Achieved by Floating-Coffee-Ring-Driven Assembly. 2016 , 26, 3191-3198	113
655	Alignment and Patterning of Ordered Small-Molecule Organic Semiconductor Micro-/Nanocrystals for Device Applications. 2016 , 28, 2475-503	108

654	Recent Progress in Materials and Devices toward Printable and Flexible Sensors. 2016 , 28, 4415-40	487
653	A General Method for Growing Two-Dimensional Crystals of Organic Semiconductors by "Solution Epitaxy". 2016 , 55, 9519-23	125
652	A Rapid, Low-Cost, and Scalable Technique for Printing State-of-the-Art Organic Field-Effect Transistors. 2016 , 1, 1600090	65
651	Alignment and patterning of organic single crystals for field-effect transistors. 2016 , 27, 1421-1428	25
650	Charge Transport in Organic and Polymeric Semiconductors for Flexible and Stretchable Devices. 2016 , 28, 4513-23	147
649	A Lattice-Strained Organic Single-Crystal Nanowire Array Fabricated via Solution-Phase Nanograting-Assisted Pattern Transfer for Use in High-Mobility Organic Field-Effect Transistors. 2016 , 28, 3209-15	42
648	Direct Laser Writing-Based Programmable Transfer Printing via Bioinspired Shape Memory Reversible Adhesive. 2016 , 8, 35628-35633	71
647	Flow-Directed Crystallization for Printed Electronics. 2016 , 49, 2756-2764	70
646	Morphological Transformation between Nanocoils and Nanoribbons via Defragmentation Structural Rearrangement or Fragmentation-recombination Mechanism. 2016 , 6, 27335	9
645	High performing solution-coated electrolyte-gated organic field-effect transistors for aqueous media operation. 2016 , 6, 39623	41
644	Direct imaging of defect formation in strained organic flexible electronics by Scanning Kelvin Probe Microscopy. 2016 , 6, 38203	26
643	Alignment and Charge Transport of One-Dimensional Conjugated Polymer Nanowires in Insulating Polymer Blends. 2016 , 49, 9449-9456	50
642	Direct Uniaxial Alignment of a Donor-Acceptor Semiconducting Polymer Using Single-Step Solution Shearing. 2016 , 8, 9285-96	71
641	On the Extraction of Charge Carrier Mobility in High-Mobility Organic Transistors. 2016 , 28, 151-5	163
640	Thickness dependent optical dispersion and nonlinear optical properties of nanocrystalline fluorescein dye thin films for optoelectronic applications. 2016 , 127, 6601-6609	13
639	Isomeric indacenedibenzothiophenes: synthesis, photoelectric properties and ambipolar semiconductivity. 2016 , 4, 5202-5206	16
638	A facile method for fabrication of highly integrated organic field-effect transistors on photoresist-unwettable insulators with remarkable stability. 2016 , 34, 104-110	4
637	Performance enhancement in mechanically stable flexible organic-field effect transistors with TIPS-pentacene:polymer blend. 2016 , 34, 284-288	29

- 636 Macroscopic Alignment of One-Dimensional Conjugated Polymer Nanocrystallites for High-Mobility Organic Field-Effect Transistors. **2016**, 8, 13484-91 48
- 635 Stretchable and Transparent Organic Semiconducting Thin Film with Conjugated Polymer Nanowires Embedded in an Elastomeric Matrix. **2016**, 2, 1500250 121
- 634 A Super Stretchable Organic Thin-Film Diodes Network That Can Be Embedded Into Carbon Fiber Composite Materials for Sensor Network Applications. **2016**, 25, 524-532 9
- 633 Substrate-Induced and Thin-Film Phases: Polymorphism of Organic Materials on Surfaces. **2016**, 26, 2233-2255 181
- 632 On the relationship between the structure of self-assembled carboxylic acid monolayers on alumina and the organization and electrical properties of a pentacene thin film. **2016**, 365, 364-375 5
- 631 Requirements for Forming Efficient 3-D Charge Transport Pathway in Diketopyrrolopyrrole-Based Copolymers: Film Morphology vs Molecular Packing. **2016**, 8, 12307-15 19
- 630 From stretchable to reconfigurable inorganic electronics. **2016**, 9, 245-268 38
- 629 Theoretical insights on morphology and charge transport properties of two-dimensional N,N'-ditridecylperylene-3,4,9,10-tetra carboxylic diimide aggregates. **2016**, 6, 40724-40730 9
- 628 Charge transport, doping and luminescence in solution-processed, phosphorescent, air-stable tellurophene thin films. **2016**, 39, 153-162 10
- 627 Dicyanomethylene-quinoid vs. dicyanovinyl-benzenoid organic semiconductors: Understanding structure-property correlations in mesomerism-like forms. **2016**, 37, 402-410 12
- 626 High Performance and Electro-Mechanical Stability in Small Molecule: Polymer Blend Flexible Organic Field-Effect Transistors. **2016**, 37, 1215-1218 17
- 625 Predicting the optimal process window for the coating of single-crystalline organic films with mobilities exceeding $7 \text{ cm}^2/\text{Vs}$.. **2016**, 3
- 624 Graphene Ink as a Conductive Templating Interlayer for Enhanced Charge Transport of C-Based Devices. **2016**, 8, 29594-29599 3
- 623 Organic transistors based on airbrushed small molecule-insulating polymer blends with mobilities exceeding $1 \text{ cm}^2 \text{ V}^{-1} \text{ s}^{-1}$. **2016**, 6, 97077-97083 13
- 622 Phase separation induced high mobility and electrical stability in organic field-effect transistors. **2016**, 221, 186-191 22
- 621 Morphology-dependent optical anisotropies in the n-type polymer P(NDI2OD-T2). **2016**, 94, 12
- 620 Controlling carrier trapping and relaxation with a dipole field in an organic field-effect device. **2016**, 6, 77735-77744 8
- 619 Optimization of electrohydrodynamic-printed organic electrodes for bottom-contact organic thin film transistors. **2016**, 38, 48-54 18

618	Crosslinked polymer-mixture gate insulator for high-performance organic thin-film transistors. 2016 , 36, 171-176	13
617	Conjugated Polymer Alignment: Synergisms Derived from Microfluidic Shear Design and UV Irradiation. 2016 , 8, 24761-72	20
616	A simulation-assisted solution-processing method for a large-area, high-performance C10-DNTT organic semiconductor crystal. 2016 , 4, 8628-8633	45
615	Unified film patterning and annealing of an organic semiconductor with micro-grooved wet stamps. 2016 , 4, 6996-7003	21
614	Design of Heterogeneous Nuclei for Lateral Crystallization via Uniaxial Assembly of Cellulose Nanocrystals. 2016 , 16, 4620-4626	9
613	Toward Precision Control of Nanofiber Orientation in Conjugated Polymer Thin Films: Impact on Charge Transport. 2016 , 28, 9099-9109	60
612	Spray printing of organic semiconducting single crystals. 2016 , 7, 13531	49
611	Surpassing the Exciton Diffusion Limit in Single-Walled Carbon Nanotube Sensitized Solar Cells. 2016 , 10, 11258-11265	21
610	Remarkable enhancement of charge carrier mobility of conjugated polymer field-effect transistors upon incorporating an ionic additive. 2016 , 2, e1600076	115
609	Effect of packing motifs on the energy ranking and electronic properties of putative crystal structures of tricyano-1,4-dithiino[c]-isothiazole. 2016 , 72, 562-70	14
608	Enhancement of charge transport properties of small molecule semiconductors by controlling fluorine substitution and effects on photovoltaic properties of organic solar cells and perovskite solar cells. 2016 , 7, 6649-6661	47
607	Facile Synthetic Approach to a Large Variety of Soluble Diarenoperylene. 2016 , 22, 14840-14845	42
606	Vertical Single-Crystalline Organic Nanowires on Graphene: Solution-Phase Epitaxy and Optical Microcavities. 2016 , 16, 4754-62	20
605	Identification of dipole disorder in low temperature solution processed oxides: its utility and suppression for transparent high performance solution-processed hybrid electronics. 2016 , 7, 6337-6346	34
604	Low-Temperature Band Transport and Impact of Contact Resistance in Organic Field-Effect Transistors Based on Single-Crystal Films of Ph-BTBT-C10. 2016 , 5,	19
603	Small Molecule/Polymer Blend Organic Transistors with Hole Mobility Exceeding $13 \text{ cm}^2 \text{ V}^{-1} \text{ s}^{-1}$. 2016 , 28, 7791-8	141
602	Predictive Model for the Meniscus-Guided Coating of High-Quality Organic Single-Crystalline Thin Films. 2016 , 28, 8007-8013	86
601	Determination of crystal orientation in organic thin films using optical microscopy. 2016 , 37, 100-107	15

600	Sub-10 fs Time-Resolved Vibronic Optical Microscopy. 2016 , 7, 4854-4859	39
599	Additive manufacturing of micrometric crystallization vessels and single crystals. 2016 , 6, 36786	3
598	Nucleation and strain-stabilization during organic semiconductor thin film deposition. 2016 , 6, 32620	18
597	Influences of Out-Of-Plane Lattice Alignment on the OFET Performance of TIPS-PEN Crystal Arrays. 2016 , 16, 6160-6166	17
596	Importance of the inherent and the relative surface energies in generating patterned layer in a solution process. 2016 , 68, 786-791	2
595	Tuning the aggregation structure and electrical property of 2.6-diphenyl-anthracene by the density of octadecyltrichlorosilane. 2016 , 59, 1645-1650	4
594	Suppressing molecular vibrations in organic semiconductors by inducing strain. 2016 , 7, 11156	79
593	Unencapsulated Air-stable Organic Field Effect Transistor by All Solution Processes for Low Power Vapor Sensing. 2016 , 6, 20671	88
592	Direct X-ray photoconversion in flexible organic thin film devices operated below 1 V. 2016 , 7, 13063	80
591	3D Dewetting for Crystal Patterning: Toward Regular Single-Crystalline Belt Arrays and Their Functionality. 2016 , 28, 2266-73	53
590	Contact-Induced Nucleation in High-Performance Bottom-Contact Organic Thin Film Transistors Manufactured by Large-Area Compatible Solution Processing. 2016 , 26, 2371-2378	60
589	Organic Semiconductors based on Dyes and Color Pigments. 2016 , 28, 3615-45	298
588	Surface Energy-Mediated Self-Patterning for High Performance Spray-Deposited Organic Field Effect Transistors. 2016 , 3, 1500714	6
587	Controlled Growth of Ultrathin Film of Organic Semiconductors by Balancing the Competitive Processes in Dip-Coating for Organic Transistors. 2016 , 32, 6246-54	39
586	Benzo[4,5]cyclohepta[1,2-]fluorene: an isomeric motif for pentacene containing linearly fused five-, six- and seven-membered rings. 2016 , 7, 6176-6181	33
585	The impact of regiochemistry of conjugated molecules on the performance of organic electronic devices. 2016 , 27, 1357-1366	9
584	Arrays of Pentacene Single Crystals by Stencil Evaporation. 2016 , 16, 4694-4700	3
583	Photorefractive Organic Materials and Applications. 2016 ,	5

582	Synthesis and characterization of solution-processable diketopyrrolopyrrole (DPP) and tetrathienothiophene (TTA)-based small molecules for organic thin film transistors and organic photovoltaic cells. 2016 , 133, 280-291	18
581	Characterization of β and γ -RDX Polymorphs in Crystalline Deposits on Stainless Steel Substrates. 2016 , 16, 3631-3638	17
580	Electron transport in solution-grown TIPS-pentacene single crystals: Effects of gate dielectrics and polar impurities. 2016 , 27, 1781-1787	11
579	Hybrid Organic/Photochromic Approaches to Generate Multifunctional Materials, Interfaces, and Devices. 2016 , 243-280	
578	Molecular Materials That Can Both Emit Light and Conduct Charges: Strategies and Perspectives. 2016 , 22, 462-71	38
577	Fluorine substitution influence on benzo[2,1,3]thiadiazole based polymers for field-effect transistor applications. 2016 , 52, 3207-10	48
576	Identifying orthogonal solvents for solution processed organic transistors. 2016 , 30, 18-29	69
575	The effect of tuning the microstructure of TIPS-tetraazapentacene on the performance of solution processed thin film transistors. 2016 , 4, 1194-1200	39
574	Tuning the Morphology of Solution-Sheared P3HT:PCBM Films. 2016 , 8, 1742-51	47
573	Influence of substrate temperature and overlap condition on the evaporation behavior of inkjet-printed semiconductor layers in organic thin film transistors. 2016 , 598, 219-225	4
572	Brush-controlled oriented growth of TCNQ microwire arrays for field-effect transistors. 2016 , 4, 433-439	13
571	Influence of heteroatoms on the charge mobility of anthracene derivatives. 2016 , 4, 3517-3522	29
570	Current saturation effect for pentacene-based static induction transistor under negative drain-source and gate voltages. 2016 , 31, 273-277	3
569	Side-group engineering: The influence of norbornadienyl substituents on the properties of ethynylated pentacene and tetraazapentacene. 2016 , 33, 102-109	18
568	Precisely Patterned Growth of Ultra-Long Single-Crystalline Organic Microwire Arrays for Near-Infrared Photodetectors. 2016 , 8, 7912-8	22
567	Crystallinity and performance improvement in solution processed organic field-effect transistors due to structural dissimilarity of the additive solvent. 2016 , 215, 1-6	19
566	Elastomer/Polymer Semiconductor Blends for High-Performance Stretchable Charge Transport Networks. 2016 , 28, 1196-1204	96
565	Flexible organic field-effect transistors with TIPS-Pentacene crystals exhibiting high electrical stability upon bending. 2016 , 31, 177-182	47

564	Mechanics and thermal management of stretchable inorganic electronics. 2016 , 3, 128-143	92
563	Growth directions of C8-BTBT thin films during drop-casting. 2016 ,	3
562	A simple process based on NH ₂ - and CH ₃ -terminated monolayers for low contact resistance and adherent Au electrode in bottom-contact OTFTs. 2016 , 12, 197-204	2
561	Solution-grown aligned crystals of diketopyrrolopyrroles (DPP)-based small molecules: Rough surfaces and relatively low charge mobility. 2016 , 27, 523-526	15
560	Functionalized soluble triethylsilylethynyl anthradithiophenes (TESADTs) for organic electronic devices. 2016 , 126, 261-269	3
559	Boosting the electron mobility of solution-grown organic single crystals via reducing the amount of polar solvent residues. 2016 , 3, 119-123	56
558	The synthesis, characterization and flexible OFET application of three (Z)-1,2-bis(4-(tert-butyl)phenyl)ethane based copolymers. 2016 , 7, 538-545	3
557	Noncovalent Intermolecular Interactions in Organic Electronic Materials: Implications for the Molecular Packing vs Electronic Properties of Acenes. 2016 , 28, 3-16	179
556	A nanogroove-guided slot-die coating technique for highly ordered polymer films and high-mobility transistors. 2016 , 52, 358-61	22
555	Lanthanum Halide and Cerium Bromide Scintillators. 2017 , 261-284	2
554	Molecular dynamics study of thermal transport in a dinaphtho[2,3-b:2',3'-f]thieno[3,2-b]thiophene (DNNT) organic semiconductor. 2017 , 9, 2262-2271	27
553	Single crystalline growth of a soluble organic semiconductor in a parallel aligned liquid crystal solvent using rubbing-treated polyimide films. 2017 , 56, 011601	3
552	Development of battery-free neural interface and modulated control of tibialis anterior muscle via common peroneal nerve based on triboelectric nanogenerators (TENGs). 2017 , 33, 1-11	85
551	Electric Field Tuning Molecular Packing and Electrical Properties of Solution-Shearing Coated Organic Semiconducting Thin Films. 2017 , 27, 1605503	41
550	Flexible-Blade Coating of Small Molecule Organic Semiconductor for Low Voltage Organic Field Effect Transistor. 2017 , 38, 338-340	21
549	Surface Polarity and Self-Structured Nanogrooves Collaboratively Oriented Molecular Packing for High Crystallinity toward Efficient Charge Transport. 2017 , 139, 2734-2740	57
548	Controlled formation of large-area single-crystalline TIPS-pentacene arrays through superhydrophobic micropillar flow-coating. 2017 , 5, 2702-2707	20
547	High-Mobility Pentacene Organic Thin-Film Transistor with La _x Nb(1-x)O _y Gate Dielectric Fabricated on Vacuum Tape. 2017 , 64, 1716-1722	13

- 546 Preparation of Single-Crystalline Heterojunctions for Organic Electronics. **2017**, 29, 1606101 65
- 545 Influence of orientation mismatch on charge transport across grain boundaries in tri-isopropylsilylethynyl (TIPS) pentacene thin films. **2017**, 19, 10854-10862 21
- 544 Universal Compact Model for Thin-Film Transistors and Circuit Simulation for Low-Cost Flexible Large Area Electronics. **2017**, 64, 2030-2037 22
- 543 Nucleation, Growth, and Alignment of Poly(3-hexylthiophene) Nanofibers for High-Performance OFETs. **2017**, 50, 932-942 88
- 542 Spatially Uniform Thin-Film Formation of Polymeric Organic Semiconductors on Lyophobic Gate Insulator Surfaces by Self-Assisted Flow-Coating. **2017**, 9, 6237-6245 7
- 541 Ultralow bandgap molecular semiconductors for ambient-stable and solution-processable ambipolar organic field-effect transistors and inverters. **2017**, 5, 2368-2379 39
- 540 Flexible Electronics. **2017**, 1-10
- 539 Engineering Thin Films of a Tetrabenzoporphyrin toward Efficient Charge-Carrier Transport: Selective Formation of a Brickwork Motif. **2017**, 9, 8211-8218 11
- 538 All Polymer FETs Direct-Written on Flexible Substrates Achieving MHz Operation Regime. **2017**, 64, 1960-1967 5
- 537 Chemical Vapor-Deposited Hexagonal Boron Nitride as a Scalable Template for High-Performance Organic Field-Effect Transistors. **2017**, 29, 2341-2347 46
- 536 Combining inkjet printing and chemical vapor deposition for fabricating low voltage, organic field-effect transistors on flexible substrates. **2017**, 631, 124-131 10
- 535 Alkynyl-Functionalized Head-to-Head Linkage Containing Bithiophene as a Weak Donor Unit for High-Performance Polymer Semiconductors. **2017**, 29, 4109-4121 27
- 534 Roles of 3-Ethylrhodanine in Attaining Highly Ordered Crystal Arrays of Ambipolar Diketopyrrolopyrrole Oligomers. **2017**, 9, 14967-14973 19
- 533 Engineering the self-assembly of diketopyrrolopyrrole-based molecular semiconductors via an aliphatic linker strategy. **2017**, 5, 10526-10536 7
- 532 Solution Coating of Superior Large-Area Flexible Perovskite Thin Films with Controlled Crystal Packing. **2017**, 5, 1700102 31
- 531 Unidirectionally Crystallized Stable n-Type Organic Thin-Film Transistors Based on Solution-Processable Donor-Acceptor Compounds. **2017**, 3, 1700097 9
- 530 Photo-Response of Low Voltage Flexible TIPS-Pentacene Organic Field-Effect Transistors. **2017**, 17, 3689-3697 7
- 529 Macroscopic Domains within an Oriented TQ1 Film Visualized Using 2D Polarization Imaging. **2017**, 2, 32-40 9

528	Control of Polymorphism and Morphology in Solution Sheared Organic Field-Effect Transistors. 2017 , 27, 1700526	73
527	GrapheneOrganic hybrid electronics. 2017 , 5, 4598-4613	64
526	Synthesis of diketopyrrolopyrrole based conjugated polymers containing thieno[3,2-b]thiophene flanking groups for high performance thin film transistors. 2017 , 8, 3431-3437	11
525	Direct Photoalignment and Optical Patterning of Molecular Thin Films. 2017 , 29, 1604382	6
524	To improve alignment of isoindigo-based conjugated polymer film by controlling contact line receding velocity. 2017 , 28, 1663-1669	3
523	Thread-Like CMOS Logic Circuits Enabled by Reel-Processed Single-Walled Carbon Nanotube Transistors via Selective Doping. 2017 , 29, 1701822	30
522	High performance solution-processable tetrathienoacene (TTAR) based small molecules for organic field effect transistors (OFETs). 2017 , 53, 5898-5901	24
521	Ethanol-Processable, Highly Crystalline Conjugated Polymers for Eco-Friendly Fabrication of Organic Transistors and Solar Cells. 2017 , 50, 4415-4424	49
520	Macroscopically aligned nanowire arrays of conjugated polymers via shear-enhanced crystallization. 2017 , 5, 5128-5134	15
519	Reductive Aromatization/De aromatization and Elimination Reactions to Access Conjugated Polycyclic Hydrocarbons, Heteroacenes, and Cumulenes. 2017 , 82, 967-1001	49
518	Angle-Dependent Photoluminescence Spectroscopy of Solution-Processed Organic Semiconducting Nanobelts. 2017 , 121, 12441-12446	2
517	Enhancing the Properties of Conductive Polymer Hydrogels by Freeze-Thaw Cycles for High-Performance Flexible Supercapacitors. 2017 , 9, 20142-20149	82
516	Solution-grown unidirectionally oriented crystalline thin films of a U-shaped thienoacene-based semiconductor for high-performance organic field-effect transistors. 2017 , 5, 5872-5876	16
515	Solution Processing with a Good Solvent Additive for Highly Reliable Organic Thin-Film Transistors. 2017 , 121, 13930-13937	27
514	Solution-Processable Dithienothiophenoquinoid (DTTQ) Structures for Ambient-Stable n-Channel Organic Field Effect Transistors. 2017 , 27, 1606761	44
513	Curved fractal structures of pyridine-substituted β -diketone crystals. 2017 , 19, 2283-2287	1
512	Structural, linear and third order nonlinear optical properties of drop casting deposited high quality nanocrystalline phenol red thin films. 2017 , 28, 10573-10581	45
511	Interface-Mediated Self-Assembly in Inkjet Printing of Single-Crystal Organic Semiconductor Films. 2017 , 121, 8796-8803	17

510	Multifunctional Organic-Semiconductor Interfacial Layers for Solution-Processed Oxide-Semiconductor Thin-Film Transistor. 2017 , 29, 1607055	35
509	Comparable charge transport property based on S π S interactions with that of π -stacking in a bis-fused tetrathiafulvalene compound. 2017 , 60, 510-515	6
508	Microstructure engineering of polymer semiconductor thin films for high-performance field-effect transistors using a bi-component processing solution. 2017 , 5, 3568-3578	12
507	Carrier transport of carbon nanotube embedded organic semiconductor composite. 2017 , 90, 232-236	4
506	Generating one-dimensional micro- or nano-structures with in-plane alignment by vapor-driven wetting kinetics. 2017 , 4, 259-267	8
505	Enhanced and Anisotropic Charge Transport in Polymer-Based Thin-Film Transistors by Guiding Polymer Growth. 2017 , 17, 629-636	5
504	Effects of a highly lipophilic substituent on the environmental stability of naphthalene tetracarboxylic diimide-based n-channel thin-film transistors. 2017 , 5, 848-853	12
503	High-Performance Near-Infrared Phototransistor Based on n-Type Small-Molecular Organic Semiconductor. 2017 , 3, 1600430	52
502	High-Yield, Highly Uniform Solution-Processed Organic Transistors Integrated into Flexible Organic Circuits. 2017 , 3, 1600410	27
501	Direct Writing and Aligning of Small-Molecule Organic Semiconductor Crystals via "Dragging Mode" Electrohydrodynamic Jet Printing for Flexible Organic Field-Effect Transistor Arrays. 2017 , 8, 5492-5500	38
500	Highly Crystalline C8-BTBT Thin-Film Transistors by Lateral Homo-Epitaxial Growth on Printed Templates. 2017 , 29, 1703864	59
499	Ambipolar Organic Field-Effect Transistors Based on a Dual-Function, Ultrathin and Highly Crystalline 2,9-didecyldinaphtho[2,3-b:2',3'-f]thieno[3,2-b]thiophene (C10-DNTT) Layer. 2017 , 3, 1700268	13
498	Aligned Growth of Methylene Blue Films on TiO ₂ Single Crystals. 2017 , 121, 22004-22009	0
497	Asymmetric Conjugated Molecules Based on [1]Benzo[thieno[3,2-b][1]benzothiophene for High-Mobility Organic Thin-Film Transistors: Influence of Alkyl Chain Length. 2017 , 9, 35427-35436	44
496	Long-range ordering of composites for organic electronics: TIPS-pentacene single crystals with incorporated nano-fibers. 2017 , 28, 2121-2124	17
495	Orientation Control of Solution-Processed Organic Semiconductor Crystals To Improve Out-of-Plane Charge Mobility. 2017 , 29, 7571-7578	13
494	Photo-switchable field-effect transistors based on two-dimensional stilbene oligomer crystals. 2017 , 5, 9597-9601	17
493	Three polymorphs of one luminogen: how the molecular packing affects the RTP and AIE properties?. 2017 , 5, 9242-9246	123

492	Evaluation of (E)-1,2-di(furan-2-yl)ethene as building unit in diketopyrrolopyrrole alternating copolymers for transistors. 2017 , 8, 6181-6187	17
491	Ultra-high mobility and efficient charge injection in monolayer organic thin-film transistors on boron nitride. 2017 , 3, e1701186	115
490	Two Regioisomeric π -Conjugated Small Molecules: Synthesis, Photophysical, Packing, and Optoelectronic Properties. 2017 , 27, 1701942	23
489	Intramolecular Locked Dithioalkylbithiophene-Based Semiconductors for High-Performance Organic Field-Effect Transistors. 2017 , 29, 1702414	31
488	Homogeneous dewetting on large-scale microdroplet arrays for solution-processed electronics. 2017 , 9, e409-e409	26
487	Capillary-Bridge Mediated Assembly of Conjugated Polymer Arrays toward Organic Photodetectors. 2017 , 27, 1701347	43
486	Marangoni-Effect-Assisted Bar-Coating Method for High-Quality Organic Crystals with Compressive and Tensile Strains. 2017 , 27, 1703443	98
485	Controlled Growth of Large-Area Aligned Single-Crystalline Organic Nanoribbon Arrays for Transistors and Light-Emitting Diodes Driving. 2017 , 9, 52	17
484	Tunneling and Origin of Large Access Resistance in Layered-Crystal Organic Transistors. 2017 , 8,	35
483	Ultra-high charge carrier mobility in nanotube encapsulated coronene stack. 2017 , 96,	10
482	Three-dimensional molecular and nanoparticle crystallization by DNA nanotechnology. 2017 , 42, 904-912	20
481	Controlled Molecular Orientation of Inkjet Printed Semiconducting Polymer Fibers by Crystallization Templating. 2017 , 29, 10150-10158	10
480	Role of Vapor Mass Transfer in Flow Coating of Colloidal Dispersions in the Evaporative Regime. 2017 , 33, 14078-14086	5
479	Aggregation control in natural brush-printed conjugated polymer films and implications for enhancing charge transport. 2017 , 114, E10066-E10073	97
478	Linear Conjugated Polymer Backbones Improve Alignment in Nanogroove-Assisted Organic Field-Effect Transistors. 2017 , 139, 17624-17631	52
477	Manipulation of Chain Conformation for Optimum Charge-Transport Pathways in Conjugated Polymers. 2017 , 9, 22757-22763	13
476	Uniaxial orientation of P3HT film prepared by soft friction transfer method. 2017 , 7, 5141	20
475	Meniscus-assisted solution printing of large-grained perovskite films for high-efficiency solar cells. 2017 , 8, 16045	292

474	Simultaneous improvement of on- and off-current features in organic transistors via dual-targeted hydrophobic adhesion. 2017 , 49, 94-99	
473	Strain induced polymorphism and band structure modulation in low-temperature 2,7-dioctyl[1]benzothieno[3,2-b][1]benzothiophene single crystal. 2017 , 60, 275-283	3
472	N-Phenylated N-Heteroacenes: Synthesis, Structures, and Properties. 2017 , 82, 1034-1038	7
471	Photochemical Molecular Tailoring for Efficient Diffusion and Reorganization of Organic Nanocrystals for Ultra-Flexible Organic Semiconductor Arrays. 2017 , 13, 1602467	10
470	Recent Progress in the Development of Printed Thin-Film Transistors and Circuits with High-Resolution Printing Technology. 2017 , 29, 1602736	191
469	Tuning domain size and crystallinity in isoindigo/PCBM organic solar cells via solution shearing. 2017 , 40, 79-87	15
468	Theory-Driven Insight into the Crystal Packing of Trialkylsilylethynyl Pentacenes. 2017 , 29, 2502-2512	25
467	Heterogeneous Monolithic Integration of Single-Crystal Organic Materials. 2017 , 29, 1603285	19
466	Nanofluidic/nanoelectronic study on solvent-processed nanoscale organic transistors. 2017 , 35, 06G801	
465	320-nm Flexible Solution-Processed 2,7-dioctyl[1] benzothieno[3,2-b]benzothiophene Transistors. 2017 , 10,	10
464	Control of Molecular Ordering, Alignment, and Charge Transport in Solution-Processed Conjugated Polymer Thin Films. 2017 , 9,	49
463	Noncovalent Interactions in Organic Electronic Materials. 2017 , 277-302	4
462	Topographic characterization of thin film field-effect transistors of 2,6-diphenyl anthracene (DPA) by fractal and AFM analysis. 2018 , 79, 144-152	15
461	Low-Voltage Organic Single-Crystal Field-Effect Transistor with Steep Subthreshold Slope. 2018 , 10, 25871-25877	31
460	Solution Coating of Pharmaceutical Nanothin Films and Multilayer Nanocomposites with Controlled Morphology and Polymorphism. 2018 , 10, 10480-10489	11
459	Large-Scale Direct-Writing of Aligned Nanofibers for Flexible Electronics. 2018 , 14, e1703521	84
458	Bistetracene Thin Film Polymorphic Control to Unravel the Effect of Molecular Packing on Charge Transport. 2018 , 5, 1701607	10
457	Electrical Double-Slope Nonideality in Organic Field-Effect Transistors. 2018 , 28, 1707221	45

456	Role of Polymorphism and Thin-Film Morphology in Organic Semiconductors Processed by Solution Shearing. 2018 , 3, 2329-2339	58
455	Directed Assembly of Hybrid Nanomaterials and Nanocomposites. 2018 , 30, e1705794	52
454	Space-Confined Strategy toward Large-Area Two-Dimensional Single Crystals of Molecular Materials. 2018 , 140, 5339-5342	101
453	GAtor: A First-Principles Genetic Algorithm for Molecular Crystal Structure Prediction. 2018 , 14, 2246-2264	51
452	Data Mining for Parameters Affecting Polymorph Selection in Contorted Hexabenzocoronene Derivatives. 2018 , 30, 3330-3337	7
451	Semiconductive Single Molecular Bilayers Realized Using Geometrical Frustration. 2018 , 30, e1707256	60
450	Manipulation of Colloidal Particles in Three Dimensions via Microfluid Engineering. 2018 , 30, e1707291	21
449	Soft 2D nanoarchitectonics. 2018 , 10, 90-106	105
448	Influence of the Surface Treatment on the Solution Coating of Single-Crystalline Organic Thin-Films. 2018 , 5, 1800147	14
447	Self-Healing Electronic Materials for a Smart and Sustainable Future. 2018 , 10, 15331-15345	122
446	The synergistic role of azeotropic solvent mixtures and atactic polystyrene on the morphology, crystallization and field effect mobility of thin film 6,13-bis(triisopropylsilylethynyl)-pentacene based semiconductors. 2018 , 29, 9804-9813	4
445	Synthesis and physical properties of brominated hexacene and hole-transfer properties of thin-film transistors.. 2018 , 8, 13259-13265	6
444	Circular electrodes to reduce the current variation of OTFTs with the drop-casted semiconducting layer. 2018 , 144, 49-53	2
443	(Semi)ladder-Type Bithiophene Imide-Based All-Acceptor Semiconductors: Synthesis, Structure-Property Correlations, and Unipolar n-Type Transistor Performance. 2018 , 140, 6095-6108	123
442	Semiconductor:polymer blend ratio dependent performance and stability in low voltage flexible organic field-effect transistors. 2018 , 236, 54-60	13
441	Advancing the frontiers of silk fibroin protein-based materials for futuristic electronics and clinical wound-healing (Invited review). 2018 , 86, 151-172	70
440	Preparation of sub-square-meter-sized organic semiconductor films for photovoltaics applications. 2018 , 46, 11-19	3
439	Improvement of photovoltaic performance of polymer and fullerene based bulk heterojunction solar cells prepared by the combination of directional solidification and convective deposition techniques. 2018 , 56, 16-26	6

438	Effect of methyl substitution on the diketopyrrolopyrrole-based semiconducting polymers for organic thin film transistors. 2018 , 56, 129-138	9
437	Fundamentals. 2018 , 5-37	
436	Rotator side chains trigger cooperative transition for shape and function memory effect in organic semiconductors. 2018 , 9, 278	60
435	ZnO Thin-Film Transistors for Cost-Efficient Flexible Electronics. 2018 ,	1
434	Solution-based Sulfur-Polymer Coating on Nanofibrillar Films for Immobilization of Aqueous Mercury Ions. 2018 , 39, 84-89	4
433	The Impact of Molecular p-Doping on Charge Transport in High-Mobility Small-Molecule/Polymer Blend Organic Transistors. 2018 , 4, 1700464	52
432	Microspacing In-Air Sublimation Growth of Organic Crystals. 2018 , 30, 412-420	49
431	Regular Aligned 1D Single-Crystalline Supramolecular Arrays for Photodetectors. 2018 , 14, 1701861	13
430	Solution-processed high performance organic thin film transistors enabled by roll-to-roll slot die coating technique. 2018 , 54, 80-88	31
429	Tuning charge carrier transport and optical birefringence in liquid-crystalline thin films: A new design space for organic light-emitting diodes. 2018 , 8, 699	22
428	Solvent Effect on Morphology and Optical Properties of Poly(3-hexylthiophene):TIPS-Pentacene Blends. 2018 , 47, 1353-1361	6
427	Polymer single crystal dielectrics for organic field-effect transistors. 2018 , 137, 255-260	14
426	A selection rule of solvent for highly aligned diketopyrrolopyrrole-based conjugated polymer film for high performance organic field-effect transistors. 2018 , 55, 6-14	26
425	Photocrosslinkable zinc diacrylate-based gate insulators for reliable operation of organic thin film transistors. 2018 , 59, 49-55	3
424	Employing Pneumatic Nozzle Printing for Controlling the Crystal Growth of Small Molecule Organic Semiconductor for Field-Effect Transistors. 2018 , 4, 1700534	12
423	Asymmetric conjugated oligomers based on polycyclic aromatics as high mobility semiconductors: The influence of chalcogens. 2018 , 57, 359-366	4
422	Ambient Degradation of Perylene Diimide-Based Organic Transistors: Hidden Role of Ozone and External Electric Field. 2018 , 122, 7067-7074	1
421	Capillary assembly as a tool for the heterogeneous integration of micro- and nanoscale objects. 2018 , 14, 2978-2995	52

420	Structure Evolution and Drying Dynamics in Sliding Cholesteric Cellulose Nanocrystals. 2018 , 9, 1845-1851	22
419	Printed ion-gel transistor using electrohydrodynamic (EHD) jet printing process. 2018 , 52, 123-129	26
418	Solvent-dependent performance of solution-processed small-molecule organic field-effect transistors. 2018 , 52, 184-189	19
417	Poly(tetrafluoroethylene) is Unique for Orienting Molecules. 2018 , 47, 55-58	2
416	Organic Electronics in a Nutshell. 2018 , 1-11	1
415	High-Mobility, Ultrathin Organic Semiconducting Films Realized by Surface-Mediated Crystallization. 2018 , 18, 9-14	53
414	Critical Role of Surface Energy in Guiding Crystallization of Solution-Coated Conjugated Polymer Thin Films. 2018 , 34, 1109-1122	44
413	2D Organic Materials for Optoelectronic Applications. 2018 , 30, 1702415	201
412	Organic semiconductor crystals. 2018 , 47, 422-500	429
411	Direct printing of soluble acene crystal stripes by a programmed dip-coating process for organic field-effect transistor applications. 2018 , 6, 799-807	19
410	Writable and patternable organic solar cells and modules inspired by an old Chinese calligraphy tradition. 2018 , 5, 123-130	34
409	Multiscale assembly of solution-processed organic electronics: the critical roles of confinement, fluid flow, and interfaces. 2018 , 29, 044004	50
408	Improving the performance of TIPS-pentacene thin film transistors via interface modification. 2018 , 34, 151-154	4
407	Uniaxial Alignment of Conjugated Polymer Films for High-Performance Organic Field-Effect Transistors. 2018 , 30, e1705463	118
406	Hexagonal Boron Nitride: A Material Odyssey for the High Performance of OTFTs. 2018 ,	0
405	Unidirectional and crystalline organic semiconductor microwire arrays by solvent vapor annealing with PMMA as the assisting layer. 2018 , 6, 12479-12483	10
404	A Nanoconfinement Effect Imposed by the Limited End-to-End Distance of the Grafted Chains on a Molecular Aggregation of Polymer Brushes with Crystalline Side Groups. 2018 , 51, 9192-9202	7
403	Conformationally averaged iterative Brownian dynamics simulations of semidilute polymer solutions. 2018 , 149, 174904	6

402	In Situ Characterization of the Triphase Contact Line in a Brush-Coating Process: Toward the Enhanced Efficiency of Polymer Solar Cells. 2018 , 10, 39448-39454	12
401	Understanding Film-To-Stripe Transition of Conjugated Polymers Driven by Meniscus Instability. 2018 , 10, 40692-40701	14
400	Sub-50 picosecond to microsecond carrier transport dynamics in pentacene thin films. 2018 , 113, 183509	3
399	Prospects of colour selective organic photodiodes. 2018 , 6, 13084-13100	24
398	Electrical characterization of two analogous Schottky contacts produced from N-substituted 1,8-naphthalimide. 2018 , 20, 30502-30513	2
397	Semiconducting Langmuir-Blodgett Films of Porphyrin Paddle-Wheel Frameworks for Photoelectric Conversion. 2018 , 34, 15689-15699	15
396	Introductory Chapter: The Impression of Light-Emitting Diodes in Space-Age Advancements and Its Effect of Blue LED Irradiation. 2018 ,	
395	Energy barriers at grain boundaries dominate charge carrier transport in an electron-conductive organic semiconductor. 2018 , 8, 14868	41
394	Synthesis and opto-electronic properties of functionalized pyrimidine-based conjugated polymers. 2018 , 56, 2547-2553	1
393	Optical and microelectronic analysis of rhodamine B-based organic Schottky diode: a new trend application. 2018 , 124, 1	2
392	Imide-Functionalized Thiazole-Based Polymer Semiconductors: Synthesis, StructureProperty Correlations, Charge Carrier Polarity, and Thin-Film Transistor Performance. 2018 , 30, 7988-8001	59
391	Solution-Processed Rad-Hard Amorphous Metal-Oxide Thin-Film Transistors. 2018 , 28, 1802717	28
390	Highly Reliable Superhydrophobic Protection for Organic Field-Effect Transistors by Fluoroalkylsilane-Coated TiO Nanoparticles. 2018 , 12, 11062-11069	20
389	Development of Organic Field-effect Transistors for Operation at High Frequency. 2018 , 71-94	7
388	Highly Oriented Liquid Crystal Semiconductor for Organic Field-Effect Transistors. 2018 , 4, 1495-1502	20
387	Quasi-One-Dimensional Charge Transport Can Lead to Nonlinear Current Characteristics in Organic Field-Effect Transistors. 2018 , 9, 6550-6555	12
386	Crystallization Control of Organic Semiconductors during Meniscus-Guided Coating by Blending with Polymer Binder. 2018 , 28, 1805594	27
385	Gelatin Hydrogel-Based Organic Electrochemical Transistors and Their Integrated Logic Circuits. 2018 , 10, 39083-39090	48

384	Structure control of a zinc tetraphenylporphyrin thin film by vapor annealing using fluorine containing solvent. 2018 , 665, 85-90	5
383	Inorganic Polymer Micropillar-Based Solution Shearing of Large-Area Organic Semiconductor Thin Films with Pillar-Size-Dependent Crystal Size. 2018 , 30, e1800647	20
382	Precise Patterning of Laterally Stacked Organic Microbelt Heterojunction Arrays by Surface-Energy-Controlled Stepwise Crystallization for Ambipolar Organic Field-Effect Transistors. 2018 , 30, e1800187	51
381	Conjugated polymer nanowires: advances and perspectives toward effective commercial implementation. 2018 , 50, 659-669	19
380	Enhancing the Thermal Stability of Organic Field-Effect Transistors by Electrostatically Interlocked 2D Molecular Packing. 2018 , 30, 3638-3642	16
379	High-performance organic circuits based on precisely aligned single-crystal arrays. 2018 , 8, 17417-17420	0
378	Solution Coating of Small Molecule/Polymer Blends Enabling Ultralow Voltage and High-Mobility Organic Transistors. 2018 , 4, 1800141	45
377	1D versus 2D Growth of Soluble Acene Crystals from Soluble Acene/Polymer Blends Governed by a Residual Solvent Reservoir in a Phase-Separated Polymer Matrix. 2018 , 28, 1802875	14
376	Polymorphic Behavior of Perylene and Its Influences on OFET Performances. 2018 , 122, 16242-16248	14
375	Organic 2D Optoelectronic Crystals: Charge Transport, Emerging Functions, and Their Design Perspective. 2018 , 30, e1704759	113
374	A general printing approach for scalable growth of perovskite single-crystal films. 2018 , 4, eaat2390	101
373	Solution-crystallized n-type organic thin-film transistors: An impact of branched alkyl chain on high electron mobility and thermal durability. 2018 , 62, 548-553	10
372	High-Performance, Ultrathin, Ultraflexible Organic Thin-Film Transistor Array Via Solution Process. 2018 , 14, e1801020	52
371	Organic Field-Effect Transistor for Energy-Related Applications: Low-Power-Consumption Devices, Near-Infrared Phototransistors, and Organic Thermoelectric Devices. 2018 , 8, 1801003	73
370	Effects of tunneling-based access resistance in layered single-crystalline organic transistors. 2018 , 33, 2350-2363	9
369	Interfacial effects on solution-sheared thin-film transistors. 2018 , 6, 12006-12015	11
368	Surface engineering of ferroelectric polymer for the enhanced electrical performance of organic transistor memory. 2018 , 57, 05GC03	
367	Sonocrystallization of conjugated polymers with ultrasound fields. 2018 , 14, 4963-4976	13

366	A small-angle scattering environment for in situ ultrasound studies. 2018 , 14, 5283-5293	9
365	High-Mobility, Solution-Processed Organic Field-Effect Transistors from C8-BTBT:Polystyrene Blends. 2018 , 4, 1800076	74
364	Copolymer dielectrics with balanced chain-packing density and surface polarity for high-performance flexible organic electronics. 2018 , 9, 2339	52
363	Interfacial Flat-Lying Molecular Monolayers for Performance Enhancement in Organic Field-Effect Transistors. 2018 , 10, 22513-22519	14
362	Regulated Dewetting for Patterning Organic Single Crystals with Pure Crystallographic Orientation toward High Performance Field-Effect Transistors. 2018 , 28, 1800470	34
361	Epitaxial growth of horizontally aligned single-crystal arrays of perovskite. 2019 , 62, 59-64	3
360	Layer-Defining Strategy to Grow Two-Dimensional Molecular Crystals on a Liquid Surface down to the Monolayer Limit. 2019 , 58, 16082-16086	31
359	Tuning conformation, assembly, and charge transport properties of conjugated polymers by printing flow. 2019 , 5, eaaw7757	63
358	Highly stable flexible organic field-effect transistors with Parylene-C gate dielectrics on a flexible substrate. 2019 , 75, 105391	14
357	Interfaces in organic electronics. 2019 , 4, 627-650	129
356	Influence of Solute Concentration on Meniscus-Guided Coating of Highly Crystalline Organic Thin Films. 2019 , 6, 1900614	14
355	Relation Between Charge Transport and the Number of Interconnected Lamellar Poly(3-Hexylthiophene) Crystals. 2019 , 52, 6088-6096	8
354	Gas Blow Coating: A Deposition Technique To Control the Crystal Morphology in Thin Films of Organic Semiconductors. 2019 , 4, 11657-11662	5
353	Polymer additive controlled morphology for high performance organic thin film transistors. 2019 , 15, 5790-5803	30
352	Importance of Blade-Coating Temperature for Diketopyrrolopyrrole-based Thin-Film Transistors. 2019 , 9, 346	4
351	Long-range crystal alignment with polymer additive for organic thin film transistors. 2019 , 26, 1	16
350	Large-area single-crystal organic patterned thin films by vertically confined lateral crystal growth via capillary force lithography. 2019 , 494, 1023-1029	5
349	Highly-ordered Triptycene Modifier Layer Based on Blade Coating for Ultraflexible Organic Transistors. 2019 , 9, 9200	12

348	Programmed Design of Highly Crystalline Organic Semiconductor Patterns with Uniaxial Alignment via Blade Coating for High-Performance Organic Field-Effect Transistors. 2019 , 11, 42403-42411	17
347	Impact of the Ink Formulation and Coating Speed on the Polymorphism and Morphology of a Solution-Sheared Thin Film of a Blended Organic Semiconductor. 2019 , 6, 1900950	15
346	Processing-Friendly Slot-Die-Cast Nonfullerene Organic Solar Cells with Optimized Morphology. 2019 , 11, 42392-42402	21
345	Layer-Defining Strategy to Grow Two-Dimensional Molecular Crystals on a Liquid Surface down to the Monolayer Limit. 2019 , 131, 16228-16232	2
344	Boron-based stepwise dioxygen activation with 1,4,2,5-diazadiborinine. 2019 , 10, 2088-2092	21
343	Quantitative Image Analysis of Fractal-Like Thin Films of Organic Semiconductors. 2019 , 57, 1622-1634	7
342	Scalable Fabrication of Organic Single-Crystalline Wafers for Reproducible TFT Arrays. 2019 , 9, 15897	25
341	Effect of Extensional Flow on the Evaporative Assembly of a Donor-Acceptor Semiconducting Polymer. 2019 , 1, 2445-2454	1
340	Operationally Stable Organic FETs With Bilayer Dielectrics on Low-Cost Flexible Polyimide Substrate. 2019 , 66, 4915-4920	6
339	Influence of bank geometry on the electrical characteristics of printed organic field-effect transistors. 2019 , 4, 042001	2
338	Small-molecule additives for organic thin film transistors. 2019 , 30, 20899-20913	18
337	Meniscus-Guided Control of Supersaturation for the Crystallization of High Quality Metal Organic Framework Thin Films. 2019 , 31, 7377-7385	19
336	Molecular Technology for Organic Semiconductors Toward Printed and Flexible Electronics. 2019 , 57-79	
335	Small-Molecule-Based Organic Field-Effect Transistor for Nonvolatile Memory and Artificial Synapse. 2019 , 29, 1904602	102
334	Integration of highly crystalline C8-BTBT thin-films into simple logic gates and circuits. 2019 , 67, 64-71	17
333	Tailoring the crystallinity of solution-processed 6,13-bis(triisopropylsilylethynyl)pentacene via controlled solidification. 2019 , 15, 7369-7373	6
332	Recent advances in the orientation of conjugated polymers for organic field-effect transistors. 2019 , 7, 13323-13351	65
331	Flexible Ultralow-Power Sensor Interfaces for E-Skin. 2019 , 107, 2084-2105	27

330	Repurposing DNA-binding agents as H-bonded organic semiconductors. 2019 , 10, 4217	22
329	Morphology and Ferroelectric Properties of Semiconducting/Ferroelectric Polymer Bilayers. 2019 , 52, 7396-7402	7
328	Rapid large-grain (>100 nm) formation of organic-inorganic perovskite thin films via shear deposition for photovoltaic application. 2019 , 191, 629-636	6
327	Controllable Self-Assembly of PTCDI-C8 for High Mobility Low-Dimensional Organic Field-Effect Transistors. 2019 , 1, 2030-2036	11
326	Polycrystalline transistor with multiple thresholds. 2019 , 83, 126-130	0
325	Remarkably Distinct Mechanical Flexibility in Three Structurally Similar Semiconducting Organic Crystals Studied by Nanoindentation and Molecular Dynamics. 2019 , 31, 1391-1402	50
324	Fabrication of Two-Dimensional Crystalline Organic Films by Tilted Spin Coating for High-Performance Organic Field-Effect Transistors. 2019 , 11, 7226-7234	16
323	Nanoscale Ion-Doped Polymer Transistors. 2019 , 19, 1712-1718	15
322	Solution-shearing-processed flexible polymer solar mini sub-modules fabricated on an embedded silver-grid substrate. 2019 , 193, 169-177	3
321	Enhanced charge injection in 6, 13-bis(triisopropylsilylethynyl)-pentacene field-effect transistors with a rhenium oxide buffer layer. 2019 , 34, 035008	1
320	Organic crystalline materials in flexible electronics. 2019 , 48, 1492-1530	202
319	Thermal-assisted self-assembly: a self-adaptive strategy towards large-area uniaxial organic single-crystalline microribbon arrays. 2019 , 11, 12781-12787	10
318	Crystallization of high aspect ratio HKUST-1 thin films in nanoconfined channels for selective small molecule uptake. 2019 , 1, 2946-2952	7
317	Review Article: Crystal alignment for high performance organic electronics devices. 2019 , 37, 040801	34
316	A Generalized Crystallization Protocol for Scalable Deposition of High-Quality Perovskite Thin Films for Photovoltaic Applications. 2019 , 6, 1901067	71
315	Efficient combination of Roll-to-Roll compatible techniques towards the large area deposition of a polymer dielectric film and the solution-processing of an organic semiconductor for the field-effect transistors fabrication on plastic substrate. 2019 , 73, 231-239	15
314	Polysubstituted Hexa-cata-hexabenzocoronenes: Syntheses, Characterization, and Their Potential as Semiconducting Materials in Transistor Applications. 2019 , 84, 8562-8570	9
313	Fluorescence of a Natural Fluorophore as a Key to Improve Fingerprint Contrast Image. 2019 , 64, 1867-1872	3

312	Influences of Structural Modification of S, N-Hexacenes on the Morphology and OFET Characteristics. 2019 , 11, 21756-21765	9
311	Parylene copolymer gate dielectrics for organic field-effect transistors. 2019 , 7, 6251-6256	10
310	Directing Solution-Phase Nucleation To Form Organic Semiconductor Vertical Crystal Arrays. 2019 , 19, 3461-3468	12
309	Effect of lateral confinement on crystallization behavior of a small-molecule semiconductor during capillary force lithography for use in high-performance OFETs. 2019 , 75, 187-193	12
308	Impact of Atomistic Substitution on Thin-Film Structure and Charge Transport in a Germanyl-ethynyl Functionalized Pentacene. 2019 , 31, 6615-6623	19
307	Material patterning on substrates by manipulation of fluidic behavior. 2019 , 6, 758-766	7
306	Liquid bridge induced assembly (LBIA) strategy: Controllable one-dimensional patterning from small molecules to macromolecules and nanomaterials. 2019 , 25, 13-26	10
305	Heterojunctions Derived by Integrating Arylene-Ethynylene Nanobelts and N-Doped Graphene for Molecular Sensing. 2019 , 2, 2336-2346	2
304	Optoelectrical anisotropy in graphene oxide supported polythiophene thin films fabricated by floating film transfer. 2019 , 147, 252-261	6
303	Advances in solution processing of organic materials for devices. 2019 , 551-577	2
302	Advances in device fabrication scale-up methods. 2019 , 579-597	2
301	Scalable Fabrication of Highly Crystalline Organic Semiconductor Thin Film by Channel-Restricted Screen Printing toward the Low-Cost Fabrication of High-Performance Transistor Arrays. 2019 , 31, e1807975	59
300	Recent Progress in Inkjet-Printed Thin-Film Transistors. 2019 , 6, 1801445	109
299	Synthesis and photophysical properties of dinaphtho[2,3-b:2',3'-i]dihydrophenazine derivatives. 2019 , 60, 1113-1116	7
298	Dielectric Selection for Solution-Processed High-Mobility TIPS-Pentacene Microwire Field-Effect Transistors. 2019 , 6, 1801984	9
297	Solution Shearing of a High-Capacitance Polymer Dielectric for Low-Voltage Organic Transistors. 2019 , 5, 1900067	12
296	The Motivation for and Challenges to Scaling Down Organic Field-Effect Transistors. 2019 , 5, 1900029	14
295	Optically pumped lasing of cyano-substituted thiophene/phenylene co-oligomer microcrystals fabricated by the slide boat method. 2019 , 58, SBBG05	

294	Homo/hetero-epitaxial growth in tetrabenzotriazaporphyrin derivative thin film fabricated by contact freezing method with seed crystal. 2019 , 12, 051011	0
293	Solution and solid state photochromism in a family of shape persistent azobenzene tetramers functionalized with alkyloxy substituents. 2019 , 18, 2281-2286	2
292	Nanostructure Control of Crystalline Organic Thin Films by Solution Processes. 2019 , 253-292	1
291	Unconventional Nanofabrication for Supramolecular Electronics. 2019 , 31, e1900599	24
290	Overestimation of Carrier Mobility in Organic Thin Film Transistors Due to Unaccounted Fringe Currents. 2019 , 1, 379-388	49
289	Recent Progress in Aromatic Polyimide Dielectrics for Organic Electronic Devices and Circuits. 2019 , 31, e1806070	85
288	Hexyl substitution of pentathienoacene toward a significant improvement in charge transport. 2019 , 30, 903-905	2
287	Influence of solvent additives on the morphology and electrical properties of diF-TES ADT organic field-effect transistors. 2019 , 68, 205-211	11
286	2D positional profiling of orientation and thickness uniformity in the semiconducting polymers thin films. 2019 , 68, 221-229	6
285	Enhanced photoelectrical response of thermodynamically epitaxial organic crystals at the two-dimensional limit. 2019 , 10, 756	47
284	Manipulation of Supramolecular Columnar Structures of H-Bonded Donor-Acceptor Units through Geometrical Nanoconfinement. 2019 , 20, 890-897	4
283	Engineering Asymmetric Charge Injection/Extraction to Optimize Organic Transistor Performances. 2019 , 11, 10108-10117	16
282	Controlled deposition of large-area and highly-ordered thin films: effect of dip-coating-induced morphological evolution on resistive memory performance. 2019 , 7, 3512-3521	32
281	Full-color laser displays based on organic printed microlaser arrays. 2019 , 10, 870	89
280	Synergistic Effects of Processing Additives and Thermal Annealing on Nanomorphology and Hole Mobility of Poly(3-hexylthiophene) Thin Films. 2019 , 11,	12
279	Electrical performance of flexible OTFTs based on slot-die printed dielectric films with different thicknesses. 2019 , 19, 58-64	4
278	Highly aligned and crystalline poly(3-hexylthiophene) thin films by off-center spin coating for high performance organic field-effect transistors. 2019 , 258, 116221	12
277	Intrinsically distinct hole and electron transport in conjugated polymers controlled by intra and intermolecular interactions. 2019 , 10, 5226	24

276	Diketopyrrolopyrrole-based small molecules for solution-processed n-channel organic thin film transistors. 2019 , 7, 13939-13946	11
275	Low surface energy interface-derived low-temperature recrystallization behavior of organic thin films for boosting carrier mobility. 2019 , 7, 13778-13785	3
274	Multifunctional molecular charge-transfer thin films. 2019 , 11, 22585-22589	
273	Balancing the electrical conductivity and Seebeck coefficient by controlled interfacial doping towards high performance benzothienobenzothiophene-based organic thermoelectric materials. 2019 , 7, 24982-24991	23
272	The effect of side-chain length on the microstructure and processing window of zone-cast naphthalene-based bispentalenes. 2019 , 7, 13493-13501	8
271	Enhancing the solubility of n-type diketopyrrolopyrrole-dicyanovinyl molecules with hybrid siloxane group for solution-processable organic field-effect transistor. 2019 ,	
270	Simulation of semidilute polymer solutions in planar extensional flow via conformationally averaged Brownian noise. 2019 , 151, 124907	9
269	Suppression of Interfacial Disorders in Solution-Processed Metal Oxide Thin-Film Transistors by Mg Doping. 2019 , 11, 48054-48061	7
268	Scalable Processing of Low Voltage Organic Field Effect Transistors With a Facile Soft-Contact Coating Approach. 2019 , 40, 1945-1948	14
267	Solution-processable small molecules for bulk heterojunction ambipolar thin-film transistors and complementary-like inverters. 2019 , 163, 725-733	13
266	Investigation of hydrogen-bonding mediated molecular packing of diketopyrrolopyrrole based donor-acceptor oligomers in the solid state. 2019 , 160, 238-245	10
265	Solution-processed thin films of semiconducting carbon nanotubes and their application to soft electronics. 2019 , 30, 132001	26
264	Solution-Processed 2D Molecular Crystals: Fabrication Techniques, Transistor Applications, and Physics. 2019 , 4, 1800182	36
263	Das Aufkommen der organischen Einkristallelektronik. 2020 , 132, 1424-1445	10
262	The Emergence of Organic Single-Crystal Electronics. 2020 , 59, 1408-1428	98
261	Understanding, Optimizing, and Utilizing Nonideal Transistors Based on Organic or Organic Hybrid Semiconductors. 2020 , 30, 1903889	38
260	Printable Semiconductors for Backplane TFTs of Flexible OLED Displays. 2020 , 30, 1904588	82
259	Dramatically improved electron transport performance by a deep triangular potential well in organic field-effect transistors. 2020 , 53, 01LT01	1

258	Contact line curvature-induced molecular misorientation of a surface energy patterned organic semiconductor in meniscus-guided coating. 2020 , 504, 144362	7
257	Understanding the Meniscus-Guided Coating Parameters in Organic Field-Effect-Transistor Fabrications. 2020 , 30, 1905963	27
256	Solution processed uniaxially oriented thin film of tert-butyl-substituted phthalocyanine. 2020 , 59, SDDA05	3
255	2D positional mapping of casting condition driven microstructural distribution in organic thin films. 2020 , 59, SCCA06	1
254	Enhanced Gas Sensing Performance of Organic Field-Effect Transistors by Modulating the Dimensions of Triethylsilylethynyl-Anthradithiophene Microcrystal Arrays. 2020 , 7, 1901696	18
253	In-plane aligned assemblies of 1D-nanoobjects: recent approaches and applications. 2020 , 49, 509-553	32
252	Highly Oriented and Ordered Water-Soluble Semiconducting Polymers in a DNA Matrix. 2020 , 32, 688-696	8
251	Structure-Independent Conductance of Thiophene-Based Single-Stacking Junctions. 2020 , 132, 3306-3312	2
250	Structure-Independent Conductance of Thiophene-Based Single-Stacking Junctions. 2020 , 59, 3280-3286	20
249	Scalable fabrication of organic solar cells based on non-fullerene acceptors. 2020 , 5, 014004	50
248	n-Type Thin-Film Transistors Based on Diketopyrrolopyrrole Derivatives: Role of Siloxane Side Chains and Electron-Withdrawing Substituents. 2020 , 12, 1169-1178	7
247	Low-power-consumption organic field-effect transistors. 2020 , 3, 014009	9
246	Large-scale patterning of π -conjugated materials by meniscus guided coating methods. 2020 , 275, 102080	14
245	Role of surfactant in controlling the deposition pattern of a particle-laden droplet: Fundamentals and strategies. 2020 , 275, 102049	20
244	Relieving the Photosensitivity of Organic Field-Effect Transistors. 2020 , 32, e1906122	34
243	Insights into the Control of Optoelectronic Properties in Mixed-Stacking Charge-Transfer Complexes. 2020 , 26, 3578-3585	20
242	Novel Conjugated Polymers Containing 3-(2-Octyldodecyl)thieno[3,2-]thiophene as a π -Bridge for Organic Photovoltaic Applications. 2020 , 12,	0
241	Green solvent-processed organic electronic devices. 2020 , 8, 15027-15047	14

240	Numerical Simulations and In Situ Optical Microscopy Connecting Flow Pattern, Crystallization, and Thin-Film Properties for Organic Transistors with Superior Device-to-Device Uniformity. 2020 , 32, e2004864	8
239	Organic Semiconductor-DNA Hybrid Assemblies. 2020 , 32, e2002213	8
238	Correlation between the static and dynamic responses of organic single-crystal field-effect transistors. 2020 , 11, 4839	13
237	Organic-based inverters: basic concepts, materials, novel architectures and applications. 2020 , 49, 7627-7670	23
236	Environment-Resilient Graphene Vibrotactile Sensitive Sensors for Machine Intelligence. 2020 , 2, 986-992	12
235	Role of interface properties in organic solar cells: from substrate engineering to bulk-heterojunction interfacial morphology. 2020 , 4, 2863-2880	32
234	Switching from Electron to Hole Transport in Solution-Processed Organic Blend Field-Effect Transistors. 2020 , 12,	5
233	High performance single-crystalline organic field-effect transistors based on molecular-modified dibenzo[a,e]pentalenes derivatives. 2020 , 44, 17552-17557	4
232	Microstructured Ultrathin Organic Semiconductor Film via Dip-Coating: Precise Assembly and Diverse Applications. 2020 , 1, 201-212	4
231	Eutectic friction transfer lithography: a facile solid-state route for highly crystalline semiconducting polymers. 2020 , 12, 23514-23520	
230	Crystal Engineering of Molecular Solids as Temporary Adhesives. 2020 , 32, 9882-9896	7
229	Electroless-Plated Gold Contacts for High-Performance, Low Contact Resistance Organic Thin Film Transistors. 2020 , 30, 2003977	7
228	Thienoquinolinone as a new building block for wide bandgap semiconducting polymer donors for organic solar cells. 2020 , 8, 12265-12271	1
227	Ink-Based Additive Nanomanufacturing of Functional Materials for Human-Integrated Smart Wearables. 2020 , 2, 2000117	9
226	High-resolution patterning of organic semiconductor single crystal arrays for high-integration organic field-effect transistors. 2020 , 40, 82-90	27
225	Polymer mask-weakening grain-boundary effect: towards high-performance organic thin-film transistors with mobility closing to $20 \text{ cm}^2 \text{ V}^{-1} \text{ s}^{-1}$. 2020 , 4, 2990-2994	4
224	Physical Modeling and Simulation of the Cooling-Down of Fused-Cast Refractories. 2020 , 996, 142-150	1
223	Improvement of Electrical Conductivity in Conjugated Polymers through Cascade Doping with Small-Molecular Dopants. 2020 , 32, e2005129	17

222	Polymer Electret Improves the Performance of the Oxygen-Doped Organic Field-Effect Transistors. 2020 , 41, 1665-1668	0
221	Anisotropic Triplet Exciton Diffusion in Crystalline Functionalized Pentacene. 2020 , 124, 23541-23550	3
220	Supramolecular Assembly and Chirality of Synthetic Carbohydrate Materials. 2020 , 59, 22577-22583	8
219	Impact of p-type doping on charge transport in blade-coated small-molecule:polymer blend transistors. 2020 , 8, 15368-15376	14
218	A Low-Temperature Solution-Process High-k Dielectric for High-Performance Flexible Organic Field-Effect Transistors. 2020 , 7,	5
217	Tuning Organic Semiconductor Alignment and Aggregation via Nanoconfinement. 2020 , 124, 22799-22807	4
216	Selection of the two enantiotropic polymorphs of diF-TES-ADT in solution sheared thin film transistors. 2020 , 8, 15361-15367	7
215	Brush-Painted Solar Cells from Pre-Crystallized Components in a Nonhalogenated Solvent System Prepared by a Simple Stirring Technique. 2020 , 53, 8276-8285	0
214	Molecular doped organic semiconductor crystals for optoelectronic device applications. 2020 , 8, 14996-15008	11
213	Graphene assisting magnetic alignment of a high-performance semiconducting polymer for improved carrier transport. 2020 , 117, 063301	1
212	Supramolecular Assembly and Chirality of Synthetic Carbohydrate Materials. 2020 , 132, 22766-22772	5
211	Microspacing In-Air Sublimation Growth of Ultrathin Organic Single Crystals. 2020 , 32, 7618-7629	10
210	Patterning 2D Organic Crystalline Semiconductors via Thermally Induced Self-Assembly. 2020 , 6, 2000438	6
209	Solvent-Assisted Friction Transfer Method for Fabricating Large-Area Thin Films of Semiconducting Polymers with Edge-On Oriented Extended Backbones. 2020 , 12, 55033-55043	4
208	Nanocluster-Based Ultralow-Temperature Driven Oxide Gate Dielectrics for High-Performance Organic Electronic Devices. 2020 , 13,	1
207	Numerical Study of Sub-Gap Density of States Dependent Electrical Characteristics in Amorphous In-Ga-Zn-O Thin-Film Transistors. 2020 , 9, 1652	4
206	Anisotropy of Charge Transport in a Uniaxially Aligned Fused Electron-Deficient Polymer Processed by Solution Shear Coating. 2020 , 32, e2000063	18
205	Oriented crystal growth of phenylalanine and a dipeptide by solution shearing. 2020 , 8, 8585-8591	2

204	Effect of High-Speed Blade Coating on Electrical Characteristics in Polymer Based Transistors. 2020 , 20, 5486-5490	2
203	Highly efficient modulation of the electronic properties of organic semiconductors by surface doping with 2D molecular crystals. 2020 , 63, 973-979	3
202	Solution-Processed, Large-Area, Two-Dimensional Crystals of Organic Semiconductors for Field-Effect Transistors and Phototransistors. 2020 , 6, 636-652	30
201	Electronic biopolymers: From molecular engineering to functional devices. 2020 , 397, 125499	31
200	Organic Thin Film Transistors Fabricated by a Solution Process Using Direct Patterned Single-Layer Graphene Electrodes. 2020 , 20, 6435-6440	0
199	Phase segregation controlled semiconductor crystallization for organic thin film transistors. 2020 , 5, 151-163	12
198	Scalable Ultrahigh-Speed Fabrication of Uniform Polycrystalline Thin Films for Organic Transistors. 2020 , 12, 29497-29504	9
197	Graphoepitaxy-Directed Assembly of Organic Semiconductor Single Crystals into Trellis Structures. 2020 , 2, 721-726	2
196	Solution-Processed Transparent Superhydrophobic Protection Layers for Enhancing the Device Reliability of Flexible Organic Optoelectronics. 2020 , 5, 2000449	3
195	Damage-free Metal Electrode Transfer to Monolayer Organic Single Crystalline Thin Films. 2020 , 10, 4702	6
194	Medical Applications of Tissue-Equivalent, Organic-Based Flexible Direct X-Ray Detectors. 2020 , 8,	15
193	Non-lithographic direct patterning of carbon nanomaterial electrodes via electrohydrodynamic-printed wettability patterns by polymer brush for fabrication of organic field-effect transistor. 2020 , 515, 145989	15
192	Magnetic-field guided solvent vapor annealing for enhanced molecular alignment and carrier mobility of a semiconducting diketopyrrolopyrrole-based polymer. 2020 , 8, 4477-4485	10
191	Green solvents for organic thin-film transistor processing. 2020 , 8, 5786-5794	18
190	A Microchannel-Confined Crystallization Strategy Enables Blade Coating of Perovskite Single Crystal Arrays for Device Integration. 2020 , 32, e1908340	39
189	Shear-Enhanced Stretchable Polymer Semiconducting Blends for Polymer-based Field-Effect Transistors. 2020 , 28, 660-669	6
188	Mixed-flow design for microfluidic printing of two-component polymer semiconductor systems. 2020 , 117, 17551-17557	12
187	Meniscus-guided coating of organic crystalline thin films for high-performance organic field-effect transistors. 2020 , 8, 9133-9146	24

186	Control of polymorphism in solution-processed organic thin film transistors by self-assembled monolayers. 2020 , 63, 1221-1229	5
185	Controlled 2D growth of organic semiconductor crystals by suppressing coffee-ring effect. 2020 , 13, 2478-2484	9
184	Nanoparticles for organic electronics applications. 2020 , 7, 012004	31
183	Controlling the Coffee Ring Effect on Graphene and Polymer by Cations. 2020 , 37, 028103	5
182	Strain-Sensitive Fluorescence from Two-Dimensional Organic Crystal. 2020 , 11, 1909-1914	5
181	Enhanced Performance of Organic Field-Effect Transistor Memory by Hole-Barrier Modulation with an N-Type Organic Buffer Layer between Pentacene and Polymer Electret. 2020 , 6, 1901184	7
180	Solution Processable Pseudo n-Thienoacenes via Intramolecular S ₀ /S ₁ Lock for High Performance Organic Field Effect Transistors. 2020 , 32, 1422-1429	24
179	Solution-Processed Centimeter-Scale Highly Aligned Organic Crystalline Arrays for High-Performance Organic Field-Effect Transistors. 2020 , 32, e1908388	62
178	The Role of Tie Chains on the Mechano-Electrical Properties of Semiconducting Polymer Films. 2020 , 6, 1901070	13
177	Sol-gel based zirconium dioxide dielectrics by oxygen-annealing at low temperature for highly stable and robust flexible resistive random access memory. 2020 , 825, 154086	8
176	Understanding the Role of Bulky Side Chains on Polymorphism of BTBT-Based Organic Semiconductors. 2020 , 20, 1646-1654	11
175	High-performance, semiconducting membrane composed of ultrathin, single-crystal organic semiconductors. 2020 , 117, 80-85	14
174	Photocontrolled Hierarchical Self-Assembly of Anisotropic Micropatterns of Nanofibers onto Isotropic Surfaces. 2020 , 16, e1906723	3
173	Enhanced Vertical Charge Transport of Homo- and Blended Semiconducting Polymers by Nanoconfinement. 2020 , 32, e1908087	14
172	High Performance Flexible Organic Field-Effect Transistors with Barium Strontium Titanate Gate Dielectric Deposited at Room Temperature. 2020 , 2, 529-536	5
171	Microfluidic solution-processed organic and perovskite nanowires fabricated for field-effect transistors and photodetectors. 2020 , 8, 2353-2362	9
170	Semiconducting small molecule/polymer blends for organic transistors. 2020 , 191, 122208	20
169	Molecular Semiconductors for Logic Operations: Dead-End or Bright Future?. 2020 , 32, e1905909	75

168	Benzoselenadiazole-Based Conjugated Molecules: Active Switching Layers with Nanofibrous Morphology for Nonvolatile Organic Resistive Memory Devices. 2020 , 85, 910-920	5
167	Key role of the meniscus shape in crystallization of organic semiconductors during meniscus-guided coating. 2020 , 7, 1631-1640	16
166	Semiconductor/dielectric interface in organic field-effect transistors: charge transport, interfacial effects, and perspectives with 2D molecular crystals. 2020 , 5, 1747945	4
165	A High Mobility of Up to 13 cm ² /Vs in Dinaphtho-Thieno-Thiophene Single-Crystal Field-Effect Transistors via Self-Assembled Monolayer Selection. 2020 , 41, 757-760	5
164	Bent-Shaped -Type Small-Molecule Organic Semiconductors: A Molecular Design Strategy for Next-Generation Practical Applications. 2020 , 142, 9083-9096	54
163	A Transfer Method for High-Mobility, Bias-Stable, and Flexible Organic Field-Effect Transistors. 2020 , 5, 2000169	7
162	Developing molecular-level models for organic field-effect transistors.. 2021 , 8, nwa167	7
161	Directional crystallization of C8-BTBT-C8 thin films in a temperature gradient. 2021 , 5, 249-258	11
160	Recent progress in the development of backplane thin film transistors for information displays. 2021 , 22, 1-11	29
159	Water-Surface Drag Coating: A New Route Toward High-Quality Conjugated Small-Molecule Thin Films with Enhanced Charge Transport Properties. 2021 , 33, e2005915	23
158	The evaluation of surface topography changes in nanoscaled 2,6-diphenyl anthracene thin films by atomic force microscopy. 2021 , 84, 89-100	1
157	Nanoconfining solution-processed organic semiconductors for emerging optoelectronics. 2021 , 50, 9375-9390	3
156	Alkyl-substituted bis(4-((9H-fluoren-9-ylidene)methyl)phenyl)thiophenes: weakening of intermolecular interactions and additive-assisted crystallization. 2021 , 23, 2654-2664	1
155	Insights into the device structure, processing and material design for an organic thin-film transistor towards functional circuit integration. 2021 , 5, 6760-6778	4
154	Isothermal crystallization and time-temperature-transformation diagram of the organic semiconductor 5,11-bis(triethylsilylethynyl)anthradithiophene. 2021 , 9, 11745-11752	0
153	Solution-processed organic semiconductor crystals for field-effect transistors: from crystallization mechanism towards morphology control. 2021 , 9, 1126-1149	17
152	One-Pot Heterointerfacial Metamorphosis for Synthesis and Control of Widely Varying Heterostructured Nanoparticles. 2021 , 143, 3383-3392	2
151	Mobility anisotropy in the herringbone structure of asymmetric Ph-BTBT-10 in solution sheared thin film transistors. 2021 , 9, 7186-7193	8

150	Monitoring of Crystallization Process in Solution-Processed Pentacene Thin Films by Chemical Conversion Reactions. 2021 , 125, 2437-2445	1
149	Wafer-scale single crystals: crystal growth mechanisms, fabrication methods, and functional applications.	2
148	Observation of Stepwise Ultrafast Crystallization Kinetics of Donor-Acceptor Conjugated Polymers and Correlation with Field Effect Mobility. 2021 , 33, 1637-1647	7
147	Molecular Orientation Control of Liquid Crystal Organic Semiconductor for High-Performance Organic Field-Effect Transistors. 2021 , 13, 11125-11133	7
146	Molecular Mechanisms of Superelasticity and Ferroelasticity in Organic Semiconductor Crystals. 2021 , 33, 1883-1892	3
145	Conductive, Large-Area, and Continuous 7,7,8,8-Tetracyanoquinodimethane@HKUST-1 Thin Films Fabricated Using Solution Shearing. 2021 , 13, 10202-10209	6
144	Understanding Photocapacitive and Photofaradaic Processes in Organic Semiconductor Photoelectrodes for Optobioelectronics. 2021 , 31, 2010116	8
143	Chrysenodithiophene-Based Conjugated Polymer: An Elongated Fused π -Electronic Backbone with a Unique Orbital Structure Toward Efficient Intermolecular Carrier Transport. 2021 , 54, 2113-2123	1
142	Enhancement of Memory Properties of Pentacene Field-Effect Transistor by the Reconstruction of an Inner Vertical Electric Field with an n-Type Semiconductor Interlayer. 2021 , 13, 13452-13458	3
141	Patterned Blade Coating Strategy Enables the Enhanced Device Reproducibility and Optimized Morphology of Organic Solar Cells. 2021 , 11, 2100098	16
140	Probing Molecular Assembly of Small Organic Molecules during Meniscus-Guided Coating Using Experimental and Molecular Dynamics Approaches. 2021 , 125, 6269-6277	2
139	Patterning Liquid Crystalline Organic Semiconductors via Inkjet Printing for High-Performance Transistor Arrays and Circuits. 2021 , 31, 2100237	22
138	Effects of MEH-PPV Molecular Ordering in the Emitting Layer on the Luminescence Efficiency of Organic Light-Emitting Diodes. 2021 , 26,	1
137	High-mobility pentacene organic thin-film transistors achieved by reducing remote phonon scattering and surface-roughness scattering. 2021 , 544, 148656	4
136	Optimizing Morphology to Trade Off Charge Transport and Mechanical Properties of Stretchable Conjugated Polymer Films. 2021 , 54, 3907-3926	19
135	Understanding the influence of contact resistances on short-channel high-mobility organic transistors in linear and saturation regimes. 2021 , 14, 041010	1
134	Floating solid-state thin films with dynamic structural colour. 2021 , 16, 795-801	22
133	Out-of-Plane Alignment of Conjugated Semiconducting Polymers by Horizontal Rotation in a High Magnetic Field. 2021 , 12, 3476-3484	3

132	2D organic single crystals: Synthesis, novel physics, high-performance optoelectronic devices and integration. 2021 , 50, 442-442	7
131	Analyzing Dynamical Disorder for Charge Transport in Organic Semiconductors via Machine Learning. 2021 , 17, 3750-3759	5
130	Ultraviolet-Light-Induced Growth of 6,13-Bis(triisopropylsilylethynyl)pentacene Spherulites. 2021 , 125, 10835-10839	
129	3-3: Invited Paper: Development of Organic TFT Technology for Active-Matrix Display Backplane. 2021 , 52, 9-12	3
128	Recent advances in non-fullerene organic photovoltaics enabled by green solvent processing. 2021 , 33,	4
127	Relation between Spherulitic Growth, Molecular Organization, and Charge Carrier Transport in Meniscus-Guided Coated Organic Semiconducting Films. 2021 , 7, 2100397	3
126	Multilayer Integration for Organic Thin-Film Transistors. 1-22	
125	Epitaxial etching of organic single crystals. 2021 , 33, 533-533	1
124	Pattern-Potential-Guided Growth of Textured Macromolecular Films on Graphene/High-Index Copper. 2021 , 33, e2006836	1
123	A Bio-Inspired Molecular Design Strategy toward 2D Organic Semiconductor Crystals with Superior Integrated Optoelectronic Properties. 2021 , 17, e2102060	4
122	Few-layered organic single-crystalline heterojunctions for high-performance phototransistors. 1	5
121	Lignin-Derived Carbon-Coated Functional Paper for Printed Electronics. 2021 , 3, 3904-3914	10
120	Flexible High-Temperature Polycrystalline Silicon Thin Film Transistor on Metal Foil With S/D Doped by Diffusion. 2021 , 68, 3857-3862	0
119	Assisted alignment of conjugated polymers in floating film transfer method using polymer blend. 2021 , 734, 138814	5
118	Mobility enhancement of DNTT and BTBT derivative organic thin-film transistors by triptycene molecule modification. 2021 , 96, 106219	4
117	Folding-induced in-plane birefringence in homeotropically aligned graphene-oxide liquid crystal films formed by solution shear. 1-11	1
116	Additive-free organic solar cells with enhanced efficiency enabled by unidirectional printing flow of high shear rate. 2021 , 97, 106274	4
115	Fused Aromatic Network with Exceptionally High Carrier Mobility. 2021 , 33, e2004707	6

114	Tactile sensors based on organic field-effect transistors. 2021 , 53-66	
113	Solvent-Free Coating of Organic Semiconductor Membranes with Centimetric Crystalline Domains. 2021 , 7, 2000792	6
112	Single crystal field-effect transistor of tetrabenzoporphyrin with a one-dimensionally extended columnar packing motif exhibiting efficient charge transport properties.	0
111	Thienoisindigo (TII)-Based Quinoidal Small Molecules for High-Performance n-Type Organic Field Effect Transistors. 2020 , 8, 2002930	12
110	High-Performance and Uniform 1 cm ² Polymer Solar Cells with D1-A-D2-A-Type Random Terpolymers. 2018 , 8, 1701405	33
109	Charge Transport and Photogeneration in Organic Semiconductors: Photorefractives and Beyond. 2016 , 65-127	3
108	Scaling Up Principles for Solution-Processed Organic Single-Crystalline Heterojunctions. 2021 , 33, 19-38	9
107	Electric field directed formation of aligned conjugated polymer fibers. 2017 , 13, 3894-3908	27
106	Liquid-phase electron microscopy imaging of cellular and biomolecular systems. 2020 , 8, 8490-8506	9
105	Enhancement of charge transfer in thermally-expanded and strain-stabilized TIPS-pentacene thin films. 2020 , 2,	3
104	Ultrathin solution-processed single crystals of thiophene-phenylene co-oligomers for organic field-effect devices. 2017 ,	2
103	Organic Thin-Film Transistors as Gas Sensors: A Review. 2020 , 14,	5
102	Solvent Vapor Annealing Effects in Contact Resistances of Zone-cast Benzothienobenzothiophene (C8-BTBT) Transistors. 2016 , 53, 411-416	3
101	Improving the charge transport performance of solution-processed organic field-effect transistors using green solvent additives.	1
100	Structural characterization of PBDH6T monolayer films grown at the liquid-liquid interface. 2021 , 17, 9765-9771	0
99	Effects of stretching on the molecular packing structure of conjugated polymers with hydrogen bonding. 2021 , 9, 15132-15140	1
98	Green solvent-processed complementary-like inverters based on ambipolar organic thin-film transistors. 2021 ,	1
97	Organic semiconductor nanostructures: Optoelectronic properties, Modification strategy, and Photocatalytic Applications. 2021 ,	1

96	Investigation of the Effect of 3D Meniscus Geometry on Fluid Dynamics and Crystallization via In Situ Optical Microscopy-Assisted Mathematical Modeling. 2021 , e2105035	3
95	Optimized Charge Transport in Molecular Semiconductors by Control of Fluid Dynamics and Crystallization in Meniscus-Guided Coating. 2107976	3
94	Growth and carrier transport properties of highly oriented films of the semiconducting polymers via solution dip-casting. 2017 , 66, 156801	
93	Crystallization from Thin Films on a Hot Plate: A New Approach of Solid Surface Patterning. 2019 , 07, 9-18	
92	Lateral confinement effect on crystallization behavior of a small molecule semiconductor during capillary force lithography for use in OFETs. 2019 ,	
91	Quasi-Self-Aligned Organic Thin-Film Transistors in Coplanar Top-Gate Configuration.	0
90	Solution-processed crystalline organic integrated circuits. 2021 , 4, 3415-3443	2
89	Manipulation and statistical analysis of the fluid flow of polymer semiconductor solutions during meniscus-guided coating. 1-14	
88	Strain-induced Carrier Mobility Modulation in Organic Semiconductors. 2021 ,	
87	Capillary Confinement Crystallization for Monolayer Molecular Crystal Arrays. 2021 , e2107574	6
86	Ultrasooth Organic Films Via Efficient Aggregation Suppression by a Low-Vacuum Physical Vapor Deposition. 2021 , 14,	
85	Improvement of charge transport in organic TIPS semiconductor device using crystal alignment eco-friendly plastic cellulose nano-whisker. 2021 , 79, 966-972	0
84	Vapor-induced marangoni coating for organic functional films. 2021 , 9, 17518-17525	2
83	Precrystalline P3HT nanowires: growth-controllable solution processing and effective molecular packing transfer to thin-film.	2
82	Microfluidic Screening-Assisted Machine Learning to Investigate Vertical Phase Separation of Small Molecule:Polymer Blend. 2021 , e2107596	3
81	Reduced electrical hysteresis of organic thin-film transistors based on small molecule semiconductor through an insulating polymer binder. 2022 , 39, 499	1
80	Scalable Growth of Organic Single-Crystal Films via Orientation Filter Funnel for High-Performance Transistors with Excellent Uniformity.. 2022 , e2109818	6
79	Effects of Fluid Behavior on the Electrical Characteristics of Inkjet-Printed Thin-Film Transistors.	1

78	Long-Range-Ordered Assembly of Micro-/Nanostructures at Superwetting Interfaces.. 2021 , e2106857	8
77	Single-Crystalline Organic One-Dimensional Microarrays toward High-Performing Phototransistors. 2101134	2
76	Poly(β -methyl styrene) polymer additive for organic thin film transistors. 2022 , 33, 1101-1122	1
75	Manipulate organic crystal morphology and charge transport. 2022 , 106448	5
74	Soft template-assisted self-assembly: a general strategy toward two-dimensional molecular crystals for high-performance organic field-effect transistors.	1
73	Fabrication of Wafer-Scale Organic Single-Crystal Films with Uniform In-Plane Orientation via Wetting-Assisted In-Air Sublimation for High-Performance Transistor Arrays. 2022 , 34, 1030-1040	4
72	Molecularly aligned films of [1]benzothieno[3,2-b][1]benzothiophene derivatives by solution shearing : Effect of alkyl substitution on morphology and charge transporting property.	1
71	Fabrication of solution-processable OFET memory using a nano-floating gate based on a phthalocyanine-cored star-shaped polymer.	3
70	Scalable printing of two-dimensional single crystals of organic semiconductors towards high-end device applications. 2022 , 15, 030101	3
69	Transport in Twisted Crystalline Charge Transfer Complexes.	3
68	Molecular engineering of benzothiadiazole-based polymers: balancing charge transport and stretchability in organic field-effect transistors. 2022 , 10, 4236-4246	2
67	Challenges in Materials and Devices of Electronic Skin. 2022 , 4, 577-599	6
66	What Next for Singlet Fission in Photovoltaics? The Fate of Triplet and Triplet-Pair Excitons. 2022 , 126, 5369-5377	4
65	A Direct Writing Approach for Organic Semiconductor Single-Crystal Patterns with Unique Orientation.. 2022 , e2200928	3
64	Exploring the Preparation Dependence of Crystalline 2D-Extended Ultrathin C8-BTBT-C8 Films.. 2022 ,	1
63	Flow-Enhanced Flexible Microcomb Printing of Organic Solar Cells.. 2022 ,	2
62	Precise orientation control of a liquid crystal organic semiconductor via anisotropic surface treatment. 2022 , 14,	1
61	Editorial: Organic Electronics: Future Trends in Materials, Fabrication Techniques and Applications. 2022 , 10,	0

60	Effects of alkyl chain on the liquid crystalline properties of [1]benzothieno[3,2-b][1]benzothiophene-based organic semiconductors. 2022 , 105, 106508	1
59	Growing two-dimensional single crystals of organic semiconductors on liquid surfaces. 2021 , 119, 210501	1
58	Crystallization from a Droplet: Single-Crystalline Arrays and Heterojunctions for Organic Electronics. 2021 ,	2
57	Wafer-scale integration of stretchable semiconducting polymer microstructures via capillary gradient. 2021 , 12, 7038	4
56	Transition Dipole Moments of One-Dimensional Excitons in Soluble Phthalocyanine Thin Films. 2021 , 125, 27966-27974	0
55	Chiral Optoelectronic Functionalities the DNA-Organic Semiconductor Complex. 2021 ,	1
54	Progress of Conjugated Polymers as Emerging Thermoelectric Materials. 2022 , 101548	12
53	Image_1.JPEG. 2020 ,	
52	Image_2.JPEG. 2020 ,	
51	Vertical Phase Separation Structure for High-Performance Organic Thin-Film Transistors: Mechanism, Optimization Strategy, and Large-Area Fabrication toward Flexible and Stretchable Electronics. 2202071	2
50	Ferris-wheel-assisted parylene-C dielectric deposition for improving organic thin-film transistor uniformity.	
49	Organic ultrathin nanostructure arrays: materials, methods and applications.	
48	Ultrafast Singlet Fission and Efficient Carrier Transport in a Lamellar Assembly of Bis[(trialkoxypheyl)ethynyl]pentacene.	1
47	Novel benzo[b]thieno[2,3-d]thiophene derivatives with an additional alkyl-thiophene core: synthesis, characterization, and p-type thin film transistor performance.	1
46	Two-dimensional molecular crystalline semiconductors towards advanced organic optoelectronics.	0
45	Organic Heteroepitaxy Growth of High-Performance Responsive Thin Films with Solution Shearing Crystals as Templates. 1314-1321	
44	Synthetic approach for the control of self-doping in luminescent organic semiconductors.	
43	Ultrahigh On-Current Density of Organic Field-Effect Transistors Facilitated by Molecular Monolayer Crystals. 2202632	1

- 42 New Opportunities for Organic Semiconducting Polymers in Biomedical Applications. **2022**, 14, 2960 1
- 41 Spreading of complex fluids with a soft blade. **2022**, 7, 1
- 40 Polyazaacene and Cyclazaacene Precursors Synthesized by Dehydration Condensation from a Versatile Bis- β -diketone Unit Having an Anthracene Skeleton. 1
- 39 Regulating Crystal Packing by Terminal Tert-butylation toward Enhanced Solid-State Emission and Efficacious Charge Transport in an Anthracene-based Molecular Crystal. 1
- 38 Chapter 5. Organic Anisotropic 2D Materials for Next-generation Optoelectronics. **2022**, 126-167 0
- 37 An enhanced couette flow printing strategy to recover efficiency losses by area and substrate differences in perovskite solar cells. 2
- 36 Ambipolar Organic Field-Effect Transistors and Complementary Circuits Based on Single Crystals with Alcohol Treatment. 2200557 0
- 35 Low-Dimensional Organic Crystals: From Precise Synthesis to Advanced Applications. 2203961 1
- 34 Organic Single-Crystalline Microwire Arrays toward High-Performance Flexible Near-Infrared Phototransistors. 2203429 1
- 33 Radiation-Tolerant Electronic Devices Using Wide Bandgap Semiconductors. 2200539 1
- 32 Regulating Crystal Packing by Terminal tert -Butylation for Enhanced Solid-State Emission and Efficacious Charge Transport in an Anthracene-Based Molecular Crystal. 1
- 31 Solvent Exchange in Controlling Semiconductor Morphology. 0
- 30 Organic Semiconductor Single-Crystal Light-Emitting Transistors. 2201644 1
- 29 Field-induced modification of the electronic structure in BTBT-based organic thin films observed by NEXAFS spectroscopy. **2022**, 121, 183503 0
- 28 Flexible Electronics and Bioelectronics Devices. **2023**, 959-1018 0
- 27 Effects of asymmetric source-drain electrodes and their modifications on the operation of organic phototransistors. **2022**, 1-1 0
- 26 Stretchable conductors for stretchable field-effect transistors and functional circuits. 0
- 25 Influence of the cooling rate in annealing post-treatment on small molecule with siloxane side chains for solution-processed organic field-effect transistors. **2023**, 210, 111040 0

- 24 Controlling fabrication temperature of TIPS-pentacene to improve carrier properties. ○
- 23 Topology-mediated molecule nucleation anchoring enables high-throughput printing of organic semiconducting single crystals. ○
- 22 High-performance and multifunctional organic field-effect transistors. **2022**, 108094 ○
- 21 Research Progress in n-type Organic Semiconducting Materials Based on Amides or Imides. **2022**, 80, 1600 ○
- 20 Flexible Electronics Based on Organic Semiconductors: from Patterned Assembly to Integrated Applications. 2206938 ○
- 19 A General Vapor-Induced Coating Approach for Layer-controlled Organic Single Crystals. 2212158 ○
- 18 Polymer-Assisted Compressed Flux Growth: A Universal and High-Yield Method for Dimension-Controlled Single Crystals. 2210685 ○
- 17 Synthesis and properties of 10,20-bis(triisopropylsilylethynyl)-tetrabenzo-5,15-diazaporphine. A-I ○
- 16 Single-Crystal Organic Semiconductors. **2023**, ○
- 15 High-speed hybrid complementary ring oscillators based on solution-processed organic and amorphous metal oxide semiconductors. **2023**, 4, ○
- 14 Small Molecule versus Polymer Semiconductors. **2023**, 95-107 ○
- 13 Machine learning based charge mobility prediction for organic semiconductors. **2023**, 158, 094102 ○
- 12 Review Charge Carrier Mobility of Organic Thin Film Transistor: Intrinsic and Extrinsic Influencing Factors Based on Organic Semiconducting Materials. **2023**, 12, 044002 ○
- 11 TCAD simulation of organic field-effect transistors based on spray-coated small molecule organic semiconductor with an insulating polymer blend. **2023**, 119, 106812 ○
- 10 Step-Edge-Induced Patterning and Orientation Control of Crystalline Organic Semiconductor Films. **2023**, 10, 2201780 ○
- 9 Complementary Inverter Based on n-Type and p-Type OFETs with the Same Ambipolar Organic Semiconductor and ITO S/D Electrodes. 2201288 ○
- 8 Meniscus-Guided Deposition of Organic Semiconductor Thin Films: Materials, Mechanism, and Application in Organic Field-Effect Transistors. 2300151 ○
- 7 Twisted Crystalline Organic Semiconductor Photodetectors. 2212531 ○

- 6 Additive-Assisted Perylene Polymorphism Controlled via Secondary Bonding Interactions. **2023**, 23, 2710-2720 ○
- 5 Matrix Effect on Polydiarylfluorenes Electrospun Hybrid Microfibers: From Morphology Tuning to High Explosive Detection Efficiency. ○
- 4 Printing-Induced Alignment Network Design of Polymer Matrix for Stretchable Perovskite Solar Cells with Over 20% Efficiency. 2301043 ○
- 3 Organic Semiconductor Single Crystal Arrays: Preparation and Applications. ○
- 2 Research progress in the deposition pattern of evaporating polymer solution. **2023**, 53, 747-761 ○
- 1 The Synergistic Effect of Processing Solvents on Magnetic Manipulation of Orientational Order and Carrier Transport of the Semiconducting Polymers. ○