Antonio Facchetti

List of Publications by Year in Descending Order

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

528	52,739	116	216
papers	citations	h-index	g-index
568	57,319 ext. citations	13.2	8.11
ext. papers		avg, IF	L-index

#	Paper	IF	Citations
528	ProcessingBtructurePerformance Relationship in Organic Transistors: Experiments and Model. <i>Electronics (Switzerland)</i> , 2022 , 11, 197	2.6	O
527	Paper-based substrates for sustainable (opto)electronic devices 2022 , 339-390		O
526	Low-Temperature Thin-Film Combustion Synthesis of Metal-Oxide Semiconductors: Science and Technology 2022 , 159-184		
525	Transition metal-catalysed molecular n-doping of organic semiconductors. <i>Nature</i> , 2021 , 599, 67-73	50.4	40
524	Vertically Stacked Full Color Quantum Dots Phototransistor Arrays for High-Resolution and Enhanced Color-Selective Imaging. <i>Advanced Materials</i> , 2021 , e2106215	24	4
523	Flexible complementary circuits operating at sub-0.5 V via hybrid organic-inorganic electrolyte-gated transistors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	4
522	Recent Advances in Multi-Layer Light-Emitting Heterostructure Transistors. <i>Small</i> , 2021 , 17, e2007661	11	7
521	A facile approach for significantly enhancing fluorescent gas sensing by oxygen plasma treatments. <i>Sensors and Actuators B: Chemical</i> , 2021 , 331, 129397	8.5	1
52 0	Porous Semiconducting Polymers Enable High-Performance Electrochemical Transistors. <i>Advanced Materials</i> , 2021 , 33, e2007041	24	23
519	Self-Assembled Nanodielectrics for Solution-Processed Top-Gate Amorphous IGZO Thin-Film Transistors. <i>ACS Applied Materials & Amp; Interfaces</i> , 2021 , 13, 15399-15408	9.5	8
518	Systematic Merging of Nonfullerene Acceptor Extension and Tetrafluorination Strategies Affords Polymer Solar Cells with >16% Efficiency. <i>Journal of the American Chemical Society</i> , 2021 , 143, 6123-613	39 ^{16.4}	34
517	Molecular conformation-induced interfacial stress at the origin of the instability of organic transistors. <i>Science China Chemistry</i> , 2021 , 64, 1437-1438	7.9	
516	Doping Indium Oxide Films with Amino-Polymers of Varying Nitrogen Content Markedly Affects Charge Transport and Mechanical Flexibility. <i>Advanced Functional Materials</i> , 2021 , 31, 2100451	15.6	3
515	A Solution Processable Dithioalkyl Dithienothiophene (DSDTT) Based Small Molecule and Its Blends for High Performance Organic Field Effect Transistors. <i>ACS Nano</i> , 2021 , 15, 727-738	16.7	11
514	Ultraviolet Light-Densified Oxide-Organic Self-Assembled Dielectrics: Processing Thin-Film Transistors at Room Temperature. <i>ACS Applied Materials & Dielectrics</i> , 2021, 13, 3445-3453	9.5	4
513	22.1: Invited Paper: Active and Passive Organic Materials for Mechanically Flexible and Stable Transistors for Backplane Applications. <i>Digest of Technical Papers SID International Symposium</i> , 2021 , 52, 143-143	0.5	
512	Processable High Electron Mobility ECopolymers via Mesoscale Backbone Conformational Ordering. <i>Advanced Functional Materials</i> , 2021 , 31, 2009359	15.6	4

(2020-2021)

511	Foundry-compatible high-resolution patterning of vertically phase-separated semiconducting films for ultraflexible organic electronics. <i>Nature Communications</i> , 2021 , 12, 4937	17.4	4
510	New Opportunities for High-Performance Source-Gated Transistors Using Unconventional Materials. <i>Advanced Science</i> , 2021 , 8, e2101473	13.6	5
509	50.2: Invited Paper: Organic Materials for High-Performance and Flexible TFT Backplanes. <i>Digest of Technical Papers SID International Symposium</i> , 2021 , 52, 608-608	0.5	O
508	Molecular Encapsulation of Naphthalene Diimide (NDI) Based £Conjugated Polymers: A Tool for Understanding Photoluminescence. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 25005-25012	16.4	3
507	High-Efficiency All-Polymer Solar Cells with Poly-Small-Molecule Acceptors Having Extended Units with Broad Near-IR Absorption. <i>ACS Energy Letters</i> , 2021 , 6, 728-738	20.1	35
506	Dielectric materials for electrolyte gated transistor applications. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 9348-9376	7.1	6
505	3D versus 2D ElectrolyteBemiconductor Interfaces in Rylenediimide-Based Electron-Transporting Water-Gated Organic Field-Effect Transistors. <i>Advanced Electronic Materials</i> , 2020 , 6, 2000638	6.4	1
504	Fluorinating Extended Molecular Acceptors Yields Highly Connected Crystal Structures and Low Reorganization Energies for Efficient Solar Cells. <i>Advanced Energy Materials</i> , 2020 , 10, 2000635	21.8	45
503	Readily Accessible Benzo[d]thiazole Polymers for Nonfullerene Solar Cells with >16% Efficiency and Potential Pitfalls. <i>ACS Energy Letters</i> , 2020 , 5, 1780-1787	20.1	31
502	Flexible and stretchable metal oxide nanofiber networks for multimodal and monolithically integrated wearable electronics. <i>Nature Communications</i> , 2020 , 11, 2405	17.4	73
501	High-Performance n-Type Polymer Semiconductors: Applications, Recent Development, and Challenges. <i>CheM</i> , 2020 , 6, 1310-1326	16.2	120
500	Frequency-Agile Low-Temperature Solution-Processed Alumina Dielectrics for Inorganic and Organic Electronics Enhanced by Fluoride Doping. <i>Journal of the American Chemical Society</i> , 2020 , 142, 12440-12452	16.4	14
499	Materials and Processes for Stretchable and Wearable e-Textile Devices 2020 , 305-334		1
498	Green solvents for organic thin-film transistor processing. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 5786	5, 5794	1 18
497	Breath figure-derived porous semiconducting films for organic electronics. <i>Science Advances</i> , 2020 , 6, eaaz1042	14.3	33
496	Cross-Plane Thermal Conductance of Phosphonate-Based Self-Assembled Monolayers and Self-Assembled Nanodielectrics. <i>ACS Applied Materials & Amp; Interfaces</i> , 2020 , 12, 34901-34909	9.5	1
495	Mixed-flow design for microfluidic printing of two-component polymer semiconductor systems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 17551-17557	11.5	12
494	Molecular-Scale Characterization of Photoinduced Charge Separation in Mixed-Dimensional InSe-Organic van der Waals Heterostructures. <i>ACS Nano</i> , 2020 , 14, 3509-3518	16.7	12

493	Solution Processable Pseudo n-Thienoacenes via Intramolecular SIIIS Lock for High Performance Organic Field Effect Transistors. <i>Chemistry of Materials</i> , 2020 , 32, 1422-1429	9.6	24
492	Engineering Intrinsic Flexibility in Polycrystalline Molecular Semiconductor Films by Grain Boundary Plasticization. <i>Journal of the American Chemical Society</i> , 2020 , 142, 5487-5492	16.4	15
491	Solution-Processable Quinoidal Dithioalkylterthiophene-Based Small Molecules Pseudo-Pentathienoacenes an Intramolecular SIIIS Lock for High-Performance n-Type Organic Field-Effect Transistors. ACS Applied Materials & Company Compa	9.5	16
490	Over 14% Efficiency Folding-Flexible ITO-free Organic Solar Cells Enabled by Eco-friendly Acid-Processed Electrodes. <i>IScience</i> , 2020 , 23, 100981	6.1	24
489	Extended Naphthalene Diimide Derivatives for n-Type Semiconducting Polymers. <i>Chemistry of Materials</i> , 2020 , 32, 5317-5326	9.6	16
488	Processing Strategies for an Organic Photovoltaic Module with over 10% Efficiency. <i>Joule</i> , 2020 , 4, 189-	- 2:0 ;68	87
487	Structure Tharge Transport Relationships in Fluoride-Doped Amorphous Semiconducting Indium Oxide: Combined Experimental and Theoretical Analysis. <i>Chemistry of Materials</i> , 2020 , 32, 805-820	9.6	9
486	Crystallography, Morphology, Electronic Structure, and Transport in Non-Fullerene/Non-Indacenodithienothiophene Polymer:Y6 Solar Cells. <i>Journal of the American Chemical Society</i> , 2020 , 142, 14532-14547	16.4	120
485	Hole (donor) and electron (acceptor) transporting organic semiconductors for bulk-heterojunction solar cells. <i>EnergyChem</i> , 2020 , 2, 100042	36.9	25
484	Experimental and theoretical evidence for hydrogen doping in polymer solution-processed indium gallium oxide. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 18231-18239	11.5	16
483	Teaching an Old Anchoring Group New Tricks: Enabling Low-Cost, Eco-Friendly Hole-Transporting Materials for Efficient and Stable Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2020 , 142, 16632-16643	16.4	74
482	Printable Organic-Inorganic Nanoscale Multilayer Gate Dielectrics for Thin-Film Transistors Enabled by a Polymeric Organic Interlayer. <i>Advanced Functional Materials</i> , 2020 , 30, 2005069	15.6	7
481	Host-Free Deep-Blue Organic Light-Emitting Transistors Based on a Novel Fluorescent Emitter. <i>ACS Applied Materials & Description of the Materials & Descri</i>	9.5	7
480	The journey of conducting polymers from discovery to application. <i>Nature Materials</i> , 2020 , 19, 922-928	27	124
479	Thienoisoindigo (TII)-Based Quinoidal Small Molecules for High-Performance n-Type Organic Field Effect Transistors. <i>Advanced Science</i> , 2020 , 8, 2002930	13.6	12
478	Building Blocks for High-Efficiency Organic Photovoltaics: Interplay of Molecular, Crystal, and Electronic Properties in Post-Fullerene ITIC Ensembles. <i>ChemPhysChem</i> , 2019 , 20, 2608-2626	3.2	29
477	Facile organic surfactant removal of various dimensionality nanomaterials using low-temperature photochemical treatment <i>RSC Advances</i> , 2019 , 9, 730-737	3.7	3
476	New Benzo[1,2-d:4,5-d?]bis([1,2,3]thiadiazole) (iso-BBT)-Based Polymers for Application in Transistors and Solar Cells. <i>Chemistry of Materials</i> , 2019 , 31, 6519-6529	9.6	14

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475	Fluorination Effects on Indacenodithienothiophene Acceptor Packing and Electronic Structure, End-Group Redistribution, and Solar Cell Photovoltaic Response. <i>Journal of the American Chemical Society</i> , 2019 , 141, 3274-3287	16.4	226
474	High Electron Mobility in [1]Benzothieno[3,2-b][1]benzothiophene-Based Field-Effect Transistors: Toward n-Type BTBTs. <i>Chemistry of Materials</i> , 2019 , 31, 5254-5263	9.6	37
473	Recent Advances in Squaraine Dyes for Bulk-Heterojunction Organic Solar Cells. <i>Organic Photonics and Photovoltaics</i> , 2019 , 6, 1-16	5	7
472	Stable Postfullerene Solar Cells via Direct CH Arylation Polymerization. MorphologyPerformance Relationships. <i>Chemistry of Materials</i> , 2019 , 31, 4313-4321	9.6	24
471	Mechanically Flexible Conductors for Stretchable and Wearable E-Skin and E-Textile Devices. <i>Advanced Materials</i> , 2019 , 31, e1901408	24	193
470	Expeditious, scalable solution growth of metal oxide films by combustion blade coating for flexible electronics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 9230-9238	11.5	25
469	Nano Pt-decorated transparent solution-processed oxide semiconductor sensor with ppm detection capability <i>RSC Advances</i> , 2019 , 9, 6193-6198	3.7	1
468	Effect of Backbone Regiochemistry on Conductivity, Charge Density, and Polaron Structure of n-Doped Donor-Acceptor Polymers. <i>Chemistry of Materials</i> , 2019 , 31, 3395-3406	9.6	31
467	Facial synthesis of highly active polymer vanadium molybdate nanocomposite: Improved thermoelectric and antimicrobial studies. <i>Journal of Physics and Chemistry of Solids</i> , 2019 , 131, 148-155	3.9	13
466	Combustion Synthesized Zinc Oxide Electron-Transport Layers for Efficient and Stable Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2019 , 29, 1900265	15.6	92
465	Ultrahigh Vacuum Self-Assembly of Rotationally Commensurate C8-BTBT/MoS2/Graphene Mixed-Dimensional Heterostructures. <i>Chemistry of Materials</i> , 2019 , 31, 1761-1766	9.6	13
464	Cinnamate-Functionalized Natural Carbohydrates as Photopatternable Gate Dielectrics for Organic Transistors. <i>Chemistry of Materials</i> , 2019 , 31, 7608-7617	9.6	14
463	Simultaneous Bottom-Up Interfacial and Bulk Defect Passivation in Highly Efficient Planar Perovskite Solar Cells using Nonconjugated Small-Molecule Electrolytes. <i>Advanced Materials</i> , 2019 , 31, e1903239	24	59
462	Photovoltaic Blend Microstructure for High Efficiency Post-Fullerene Solar Cells. To Tilt or Not To Tilt?. <i>Journal of the American Chemical Society</i> , 2019 , 141, 13410-13420	16.4	30
461	Marked Cofuel Tuning of Combustion Synthesis Pathways for Metal Oxide Semiconductor Films. <i>Advanced Electronic Materials</i> , 2019 , 5, 1900540	6.4	11
460	Controllable growth of LiMn2O4 by carbohydrate-assisted combustion synthesis for high performance Li-ion batteries. <i>Nano Energy</i> , 2019 , 64, 103936	17.1	28
459	Perovskite Solar Cells: Simultaneous Bottom-Up Interfacial and Bulk Defect Passivation in Highly Efficient Planar Perovskite Solar Cells using Nonconjugated Small-Molecule Electrolytes (Adv. Mater. 40/2019). <i>Advanced Materials</i> , 2019 , 31, 1970283	24	
458	Fluorine Tuning of Morphology, Energy Loss, and Carrier Dynamics in Perylenediimide Polymer Solar Cells. <i>ACS Energy Letters</i> , 2019 ,	20.1	6

457	A Narrow-Bandgap n-Type Polymer Semiconductor Enabling Efficient All-Polymer Solar Cells. <i>Advanced Materials</i> , 2019 , 31, e1905161	24	76
456	A skin-like two-dimensionally pixelized full-color quantum dot photodetector. <i>Science Advances</i> , 2019 , 5, eaax8801	14.3	46
455	Molecular engineering of organic semiconductors enables noble metal-comparable SERS enhancement and sensitivity. <i>Nature Communications</i> , 2019 , 10, 5502	17.4	47
454	Polymersolarzellen: Fortschritt, Herausforderungen und Perspektiven. <i>Angewandte Chemie</i> , 2019 , 131, 4173-4186	3.6	24
453	All-Polymer Solar Cells: Recent Progress, Challenges, and Prospects. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 4129-4142	16.4	305
452	Oxide-Polymer Heterojunction Diodes with a Nanoscopic Phase-Separated Insulating Layer. <i>Nano Letters</i> , 2019 , 19, 471-476	11.5	7
451	Polymer Doping Enables a Two-Dimensional Electron Gas for High-Performance Homojunction Oxide Thin-Film Transistors. <i>Advanced Materials</i> , 2019 , 31, e1805082	24	31
450	Organic Thin-Film Transistors: Thiazole Imide-Based All-Acceptor Homopolymer: Achieving High-Performance Unipolar Electron Transport in Organic Thin-Film Transistors (Adv. Mater. 10/2018). Advanced Materials, 2018 , 30, 1870071	24	3
449	Direct Printing of Graphene Electrodes for High-Performance Organic Inverters. <i>ACS Applied Materials & Direct Action & Direct Action & Direct Actio</i>	9.5	11
448	Metal Composition and Polyethylenimine Doping Capacity Effects on Semiconducting Metal Oxide-Polymer Blend Charge Transport. <i>Journal of the American Chemical Society</i> , 2018 , 140, 5457-5473	3 16.4	29
447	Probing the density of trap states in the middle of the bandgap using ambipolar organic field-effect transistors. <i>Journal of Applied Physics</i> , 2018 , 123, 161574	2.5	1
446	Measuring Dipole Inversion in Self-Assembled Nano-Dielectric Molecular Layers. <i>ACS Applied Materials & Dipole Inverfaces</i> , 2018 , 10, 6484-6490	9.5	4
445	Thiazole Imide-Based All-Acceptor Homopolymer: Achieving High-Performance Unipolar Electron Transport in Organic Thin-Film Transistors. <i>Advanced Materials</i> , 2018 , 30, 1705745	24	121
444	On the Molecular Origin of Charge Separation at the Donor Acceptor Interface. <i>Advanced Energy Materials</i> , 2018 , 8, 1702232	21.8	45
443	Photoactive Blend Morphology Engineering through Systematically Tuning Aggregation in All-Polymer Solar Cells. <i>Advanced Energy Materials</i> , 2018 , 8, 1702173	21.8	50
442	Novel unsymmetrical squaraine-based small molecules for organic solar cells. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 847-854	7.1	18
441	Nitroacetylacetone as a Cofuel for the Combustion Synthesis of High-Performance Indium allium inc Oxide Transistors. <i>Chemistry of Materials</i> , 2018 , 30, 3323-3329	9.6	28
440	Naphthalenediimide (NDI) polymers for all-polymer photovoltaics. <i>Materials Today</i> , 2018 , 21, 377-390	21.8	118

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439	Low-Loss Near-Infrared Hyperbolic Metamaterials with Epitaxial ITO-In2O3 Multilayers. <i>ACS Photonics</i> , 2018 , 5, 2000-2007	6.3	10
438	Enhancing Polymer Photovoltaic Performance via Optimized Intramolecular Ester-Based Noncovalent Sulfur Oxygen Interactions. <i>Macromolecules</i> , 2018 , 51, 3874-3885	5.5	41
437	Corrugated Heterojunction Metal-Oxide Thin-Film Transistors with High Electron Mobility via Vertical Interface Manipulation. <i>Advanced Materials</i> , 2018 , 30, e1804120	24	47
436	Epitaxial Growth of にyclodextrin-Containing Metal-Organic Frameworks Based on a Host-Guest Strategy. <i>Journal of the American Chemical Society</i> , 2018 , 140, 11402-11407	16.4	27
435	Closely packed, low reorganization energy Eextended postfullerene acceptors for efficient polymer solar cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, E8341-E8348	11.5	85
434	Material insights and challenges for non-fullerene organic solar cells based on small molecular acceptors. <i>Nature Energy</i> , 2018 , 3, 720-731	62.3	580
433	Suppressing Defect Formation Pathways in the Direct Cℍ Arylation Polymerization of Photovoltaic Copolymers. <i>Macromolecules</i> , 2018 , 51, 9140-9155	5.5	30
432	Imide-Functionalized Thiazole-Based Polymer Semiconductors: Synthesis, Structure P roperty Correlations, Charge Carrier Polarity, and Thin-Film Transistor Performance. <i>Chemistry of Materials</i> , 2018 , 30, 7988-8001	9.6	59
431	Organic Semiconductors for Transparent Electronics 2018 , 13-49		6
	Across the Beard, Astonia Facebatti, Chamburcham 2010, 11, 2020, 2022		
430	Across the Board: Antonio Facchetti. <i>ChemSusChem</i> , 2018 , 11, 3829-3833	8.3	1
430	Synergistic Boron Doping of Semiconductor and Dielectric Layers for High-Performance Metal Oxide Transistors: Interplay of Experiment and Theory. <i>Journal of the American Chemical Society</i> , 2018 , 140, 12501-12510	16.4	29
	Synergistic Boron Doping of Semiconductor and Dielectric Layers for High-Performance Metal Oxide Transistors: Interplay of Experiment and Theory. <i>Journal of the American Chemical Society</i> ,		
429	Synergistic Boron Doping of Semiconductor and Dielectric Layers for High-Performance Metal Oxide Transistors: Interplay of Experiment and Theory. <i>Journal of the American Chemical Society</i> , 2018 , 140, 12501-12510 A Chemically Doped Naphthalenediimide-Bithiazole Polymer for n-Type Organic Thermoelectrics.	16.4	29
429 428	Synergistic Boron Doping of Semiconductor and Dielectric Layers for High-Performance Metal Oxide Transistors: Interplay of Experiment and Theory. <i>Journal of the American Chemical Society</i> , 2018 , 140, 12501-12510 A Chemically Doped Naphthalenediimide-Bithiazole Polymer for n-Type Organic Thermoelectrics. <i>Advanced Materials</i> , 2018 , 30, e1801898 Hyperbolic Dispersion Arising from Anisotropic Excitons in Two-Dimensional Perovskites. <i>Physical</i>	16.4 24	29
429 428 427	Synergistic Boron Doping of Semiconductor and Dielectric Layers for High-Performance Metal Oxide Transistors: Interplay of Experiment and Theory. <i>Journal of the American Chemical Society</i> , 2018 , 140, 12501-12510 A Chemically Doped Naphthalenediimide-Bithiazole Polymer for n-Type Organic Thermoelectrics. <i>Advanced Materials</i> , 2018 , 30, e1801898 Hyperbolic Dispersion Arising from Anisotropic Excitons in Two-Dimensional Perovskites. <i>Physical Review Letters</i> , 2018 , 121, 127401 High-Quality Solution-Processed Metal-Oxide Gate Dielectrics Realized With a Photo-Activated	16.4 24 7.4	29 123 35
429 428 427 426	Synergistic Boron Doping of Semiconductor and Dielectric Layers for High-Performance Metal Oxide Transistors: Interplay of Experiment and Theory. <i>Journal of the American Chemical Society</i> , 2018 , 140, 12501-12510 A Chemically Doped Naphthalenediimide-Bithiazole Polymer for n-Type Organic Thermoelectrics. <i>Advanced Materials</i> , 2018 , 30, e1801898 Hyperbolic Dispersion Arising from Anisotropic Excitons in Two-Dimensional Perovskites. <i>Physical Review Letters</i> , 2018 , 121, 127401 High-Quality Solution-Processed Metal-Oxide Gate Dielectrics Realized With a Photo-Activated Metal-Oxide Nanocluster Precursor. <i>IEEE Electron Device Letters</i> , 2018 , 39, 1668-1671 Performance, Morphology, and Charge Recombination Correlations in Ternary Squaraine Solar	16.4 24 7.4 4.4	29 123 35 3
429 428 427 426 425	Synergistic Boron Doping of Semiconductor and Dielectric Layers for High-Performance Metal Oxide Transistors: Interplay of Experiment and Theory. <i>Journal of the American Chemical Society</i> , 2018 , 140, 12501-12510 A Chemically Doped Naphthalenediimide-Bithiazole Polymer for n-Type Organic Thermoelectrics. <i>Advanced Materials</i> , 2018 , 30, e1801898 Hyperbolic Dispersion Arising from Anisotropic Excitons in Two-Dimensional Perovskites. <i>Physical Review Letters</i> , 2018 , 121, 127401 High-Quality Solution-Processed Metal-Oxide Gate Dielectrics Realized With a Photo-Activated Metal-Oxide Nanocluster Precursor. <i>IEEE Electron Device Letters</i> , 2018 , 39, 1668-1671 Performance, Morphology, and Charge Recombination Correlations in Ternary Squaraine Solar Cells. <i>Chemistry of Materials</i> , 2018 , 30, 6810-6820 High-performance organic circuits based on precisely aligned single-crystal arrays <i>RSC Advances</i> ,	16.4 24 7.4 4.4 9.6	29 123 35 3

421	Solution-Processed High-Performance Tetrathienothiophene-Based Small Molecular Blends for Ambipolar Charge Transport. <i>Advanced Functional Materials</i> , 2018 , 28, 1801025	15.6	21
420	Self-Assembled Photochromic Molecular Dipoles for High-Performance Polymer Thin-Film Transistors. <i>ACS Applied Materials & Dipoles (2018)</i> , 10, 21492-21498	9.5	11
419	A Circuits and Systems Perspective of Organic/Printed Electronics: Review, Challenges, and Contemporary and Emerging Design Approaches. <i>IEEE Journal on Emerging and Selected Topics in Circuits and Systems</i> , 2017 , 7, 7-26	5.2	152
418	Electron Transport and Nanomorphology in Solution-Processed Polymeric Semiconductor n-Doped with an Air-Stable Organometallic Dimer. <i>Advanced Electronic Materials</i> , 2017 , 3, 1600546	6.4	13
417	Buta-1,3-diyne-Based Econjugated Polymers for Organic Transistors and Solar Cells. <i>Macromolecules</i> , 2017 , 50, 1430-1441	5.5	37
416	New donor polymer with tetrafluorinated blocks for enhanced performance in perylenediimide-based solar cells. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 5351-5361	13	24
415	Ultrahigh Mobility in Solution-Processed Solid-State Electrolyte-Gated Transistors. <i>Advanced Materials</i> , 2017 , 29, 1605685	24	73
414	Alkynyl-Functionalized Head-to-Head Linkage Containing Bithiophene as a Weak Donor Unit for High-Performance Polymer Semiconductors. <i>Chemistry of Materials</i> , 2017 , 29, 4109-4121	9.6	27
413	Systematic evaluation of structure property relationships in heteroacene diketopyrrolopyrrole molecular donors for organic solar cells. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 9217-9232	13	26
412	Small Molecule Acceptor and Polymer Donor Crystallinity and Aggregation Effects on Microstructure Templating: Understanding Photovoltaic Response in Fullerene-Free Solar Cells. <i>Chemistry of Materials</i> , 2017 , 29, 4432-4444	9.6	58
411	Universal quinone electrodes for long cycle life aqueous rechargeable batteries. <i>Nature Materials</i> , 2017 , 16, 841-848	27	432
410	UV-Ozone Interfacial Modification in Organic Transistors for High-Sensitivity NO Detection. <i>Advanced Materials</i> , 2017 , 29, 1701706	24	92
409	Insights Into Interface Treatments in p-Channel Organic Thin-Film Transistors Based on a Novel Molecular Semiconductor. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 2338-2344	2.9	7
408	Solution-Processable Dithienothiophenoquinoid (DTTQ) Structures for Ambient-Stable n-Channel Organic Field Effect Transistors. <i>Advanced Functional Materials</i> , 2017 , 27, 1606761	15.6	44
407	Guest Editorial Organic/Printed Electronics: A Circuits and Systems Perspective. <i>IEEE Journal on Emerging and Selected Topics in Circuits and Systems</i> , 2017 , 7, 1-6	5.2	8
406	Enhanced Efficiency of Hot-Cast Large-Area Planar Perovskite Solar Cells/Modules Having Controlled Chloride Incorporation. <i>Advanced Energy Materials</i> , 2017 , 7, 1601660	21.8	164
405	Lead Halide Perovskites as Charge Generation Layers for Electron Mobility Measurement in Organic Semiconductors. <i>ACS Applied Materials & District Semiconductors</i> , 9, 42011-42019	9.5	4
404	Naphthalene Bis(4,8-diamino-1,5-dicarboxyl)amide Building Block for Semiconducting Polymers. <i>Journal of the American Chemical Society</i> , 2017 , 139, 14356-14359	16.4	30

(2016-2017)

403	Enhanced Fill Factor through Chalcogen Side-Chain Manipulation in Small-Molecule Photovoltaics. <i>ACS Energy Letters</i> , 2017 , 2, 2415-2421	20.1	15
402	Dithienylbenzodiimide: a new electron-deficient unit for n-type polymer semiconductors. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 9559-9569	7.1	18
401	Low-Temperature Postfunctionalization of Highly Conductive Oxide Thin-Films toward Solution-Based Large-Scale Electronics. <i>ACS Applied Materials & District Materials & District</i>	9.5	22
400	Noncovalent Sello Conformational Locks for Constructing High-Performing Optoelectronic Conjugated Polymers. <i>Advanced Materials</i> , 2017 , 29, 1606025	24	65
399	Synthesis and Properties of New N-Heteroheptacenes for Solution-Based Organic Field Effect Transistors. <i>Chemistry - A European Journal</i> , 2017 , 23, 12542-12549	4.8	13
398	Intramolecular Locked Dithioalkylbithiophene-Based Semiconductors for High-Performance Organic Field-Effect Transistors. <i>Advanced Materials</i> , 2017 , 29, 1702414	24	31
397	Nanostructured organic semiconductor films for molecular detection with surface-enhanced Raman spectroscopy. <i>Nature Materials</i> , 2017 , 16, 918-924	27	149
396	Even and odd oligothiophene-bridged bis-naphthalimides for n-type and ambipolar organic field effect transistors. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 9439-9450	7.1	5
395	The Dipole Moment Inversion Effects in Self-Assembled Nanodielectrics for Organic Transistors. <i>Chemistry of Materials</i> , 2017 , 29, 9974-9980	9.6	15
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246245		6 ⁻ 8 ⁻ 4 9.6	46
	for low-voltage-operating complementary circuits. <i>ACS Applied Materials & Description</i> (alk-1-yn-1-yl) (alk-1-yn-1-yl) (bloophene) for Organic (bloophene) for Organic (bloophene) (bloop	9.6	
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