Alex Jen

List of Publications by Year in Descending Order

768 papers	59,847 citations	125 h-index	210 g-index
819 ext. papers	65,996 ext. citations	11 avg, IF	8.09 L-index

#	Paper	IF	Citations
768	Highly efficient and stable perovskite solar cells enabled by low-dimensional perovskitoids.. *Science Advances*, **2022**, 8, eabk2722	14.3	14
767	Enabling high-performance, centimeter-scale organic solar cells through three-dimensional charge transport. *Cell Reports Physical Science*, **2022**, 100761	6.1	0
766	The synergistic effects of central core size and end group engineering on performance of narrow bandgap nonfullerene acceptors. *Chemical Engineering Journal*, **2022**, 435, 135020	14.7	0
765	Near-infrared absorbing polymer acceptors enabled by selenophene-fused core and halogenated end-group for binary all-polymer solar cells with efficiency over 16%. *Nano Energy*, **2022**, 92, 106718	17.1	15
764	An effective and economical encapsulation method for trapping lead leakage in rigid and flexible perovskite photovoltaics. *Nano Energy*, **2022**, 93, 106853	17.1	15
763	Interface Engineering in Solution-Processed Thin-Film Solar Cells. *Accounts of Materials Research*, **2022**, 3, 272-282	7.5	0
762	Self-assembled Monolayer Enabling Improved Buried Interfaces in Blade-coated Perovskite Solar Cells for High Efficiency and Stability **2022**, 4		10
761	The molecular ordering and double channel carrier generation of non-fullerene photovoltaics within multi-length-scale morphology.. *Advanced Materials*, **2022**, e2108317	24	16
760	Side-Chain Substituents on Benzotriazole-Based Polymer Acceptors Affecting the Performance of All-Polymer Solar Cells.. *Macromolecular Rapid Communications*, **2022**, e2200062	4.8	1
759	16.3% Efficiency binary all-polymer solar cells enabled by a novel polymer acceptor with an asymmetrical selenophene-fused backbone. *Science China Chemistry*, **2022**, 65, 309-317	7.9	12
758	Sulfonated Graphene Aerogels Enable Safe-to-Use Flexible Perovskite Solar Modules. *Advanced Energy Materials*, **2022**, 12, 2103236	21.8	17
757	Harvesting the Triplet Excitons of Quasi-Two-Dimensional Perovskite toward Highly Efficient White Light-Emitting Diodes.. *Journal of Physical Chemistry Letters*, **2022**, 3674-3681	6.4	
756	Efficient and stable Cs2AgBiBr6 double perovskite solar cells through in-situ surface modulation. *Chemical Engineering Journal*, **2022**, 446, 137144	14.7	5
755	The evolution and future of metal halide perovskite-based optoelectronic devices. *Matter*, **2021**, 4, 3814-3834	17.3	6
754	Designs from single junctions, heterojunctions to multijunctions for high-performance perovskite solar cells. *Chemical Society Reviews*, **2021**, 50, 13090-13128	58.5	23
753	Enabling High Efficiency of Hydrocarbon-Solvent Processed Organic Solar Cells through Balanced Charge Generation and Non-Radiative Loss. *Advanced Energy Materials*, **2021**, 11, 2101768	21.8	18
752	Selenium-Containing Organic Photovoltaic Materials. *Accounts of Chemical Research*, **2021**, 54, 3906-3916	24.3	15

751	Low-Bandgap Organic Bulk-Heterojunction Enabled Efficient and Flexible Perovskite Solar Cells. *Advanced Materials*, **2021**, 33, e2105539	24	27
750	Plasmon-induced trap filling at grain boundaries in perovskite solar cells. *Light: Science and Applications*, **2021**, 10, 219	16.7	5
749	Technical Challenges and Perspectives for the Commercialization of Solution-Processable Solar Cells. *Advanced Materials Technologies*, **2021**, 6, 2000960	6.8	18
748	Regulating the Aggregation of Unfused Non-Fullerene Acceptors via Molecular Engineering towards Efficient Polymer Solar Cells. *ChemSusChem*, **2021**, 14, 3579-3589	8.3	8
747	Multi-Selenophene-Containing Narrow Bandgap Polymer Acceptors for All-Polymer Solar Cells with over 15 % Efficiency and High Reproducibility. *Angewandte Chemie*, **2021**, 133, 16071-16079	3.6	0
746	Multi-Selenophene-Containing Narrow Bandgap Polymer Acceptors for All-Polymer Solar Cells with over 15 % Efficiency and High Reproducibility. *Angewandte Chemie - International Edition*, **2021**, 60, 15935-15943	16.4	54
745	Over 16% Efficiency of Thick-Film Organic Photovoltaics with Symmetric and Asymmetric Non-Fullerene Materials as Alloyed Acceptor. *Solar Rrl*, **2021**, 5, 2100365	7.1	6
744	Asymmetric Isomer Effects in Benzo[c][1,2,5]thiadiazole-Fused Nonacyclic Acceptors: Dielectric Constant and Molecular Crystallinity Control for Significant Photovoltaic Performance Enhancement. *Advanced Functional Materials*, **2021**, 31, 2104369	15.6	15
743	All-Inorganic CsPbI3 Quantum Dot Solar Cells with Efficiency over 16% by Defect Control. *Advanced Functional Materials*, **2021**, 31, 2005930	15.6	42
742	Over 17% Efficiency Binary Organic Solar Cells with Photoresponses Reaching 1000 nm Enabled by Selenophene-Fused Nonfullerene Acceptors. *ACS Energy Letters*, **2021**, 6, 9-15	20.1	79
741	Dopant-free dicyanofluoranthene-based hole transporting material with low cost enables efficient flexible perovskite solar cells. *Nano Energy*, **2021**, 82, 105701	17.1	35
740	Asymmetric Acceptors Enabling Organic Solar Cells to Achieve an over 17% Efficiency: Conformation Effects on Regulating Molecular Properties and Suppressing Nonradiative Energy Loss. *Advanced Energy Materials*, **2021**, 11, 2003177	21.8	61
739	Organic Semiconductors at the University of Washington: Advancements in Materials Design and Synthesis and toward Industrial Scale Production. *Advanced Materials*, **2021**, 33, e1904239	24	18
738	Improved stability and efficiency of perovskite/organic tandem solar cells with an all-inorganic perovskite layer. *Journal of Materials Chemistry A*, **2021**, 9, 19778-19787	13	13
737	Pseudo-bilayer architecture enables high-performance organic solar cells with enhanced exciton diffusion length. *Nature Communications*, **2021**, 12, 468	17.4	61
736	The coupling and competition of crystallization and phase separation, correlating thermodynamics and kinetics in OPV morphology and performances. *Nature Communications*, **2021**, 12, 332	17.4	64
735	Modifying Surface Termination of CsPbI3 Grain Boundaries by 2D Perovskite Layer for Efficient and Stable Photovoltaics. *Advanced Functional Materials*, **2021**, 31, 2009515	15.6	24
734	High-Efficiency Quasi-2D Perovskite Solar Cells Incorporating 2,2?-Biimidazolium Cation. *Solar Rrl*, **2021**, 5, 2000700	7.1	3

733	Efficient Inverted Perovskite Solar Cells with Low Voltage Loss Achieved by a Pyridine-Based Dopant-Free Polymer Semiconductor. *Angewandte Chemie - International Edition*, **2021**, 60, 7227-7233	16.4	42
732	Efficient Inverted Perovskite Solar Cells with Low Voltage Loss Achieved by a Pyridine-Based Dopant-Free Polymer Semiconductor. *Angewandte Chemie*, **2021**, 133, 7303-7309	3.6	8
731	High Efficiency (15.8%) All-Polymer Solar Cells Enabled by a Regioregular Narrow Bandgap Polymer Acceptor. *Journal of the American Chemical Society*, **2021**, 143, 2665-2670	16.4	112
730	Synergistical Dipole□Dipole Interaction Induced Self-Assembly of Phenoxazine-Based Hole-Transporting Materials for Efficient and Stable Inverted Perovskite Solar Cells. *Angewandte Chemie*, **2021**, 133, 20600-20605	3.6	1
729	Flexibility of Room-Temperature-Synthesized Amorphous CdO-InO Alloy Films and Their Application as Transparent Conductors in Solar Cells. *ACS Applied Materials & Interfaces*, **2021**, 13, 43795-43805	9.5	1
728	Synergistical Dipole-Dipole Interaction Induced Self-Assembly of Phenoxazine-Based Hole-Transporting Materials for Efficient and Stable Inverted Perovskite Solar Cells. *Angewandte Chemie - International Edition*, **2021**, 60, 20437-20442	16.4	13
727	Design of Superhydrophobic Surfaces for Stable Perovskite Solar Cells with Reducing Lead Leakage. *Advanced Energy Materials*, **2021**, 11, 2102281	21.8	15
726	Highly efficient and stable perovskite solar cells enabled by a fluoro-functionalized TiO2 inorganic interlayer. *Matter*, **2021**,	12.7	8
725	Regiospecific -alkyl substitution tunes the molecular packing of high-performance non-fullerene acceptors. *Materials Horizons*, **2021**,	14.4	5
724	Dilution effect for highly efficient multiple-component organic solar cells. *Nature Nanotechnology*, **2021**,	28.7	16
723	Narrow Bandpass and Efficient Semitransparent Organic Solar Cells Based on Bioinspired Spectrally Selective Electrodes. *ACS Nano*, **2020**, 14, 5998-6006	16.7	22
722	Highly Stable and Efficient Perovskite Solar Cells with 22.0% Efficiency Based on Inorganic□Organic Dopant-Free Double Hole Transporting Layers. *Advanced Functional Materials*, **2020**, 30, 1908462	15.6	36
721	Interfacial Modification through a Multifunctional Molecule for Inorganic Perovskite Solar Cells with over 18% Efficiency. *Solar Rrl*, **2020**, 4, 2000205	7.1	22
720	Dopant-Free Crossconjugated Hole-Transporting Polymers for Highly Efficient Perovskite Solar Cells. *Advanced Science*, **2020**, 7, 1903331	13.6	29
719	Hybrid Quantum Dot/Organic Heterojunction: A Route to Improve Open-Circuit Voltage in PbS Colloidal Quantum Dot Solar Cells. *ACS Energy Letters*, **2020**, 5, 2335-2342	20.1	33
718	Biomimetic Electrodes for Flexible Organic Solar Cells with Efficiencies over 16%. *Advanced Optical Materials*, **2020**, 8, 2000669	8.1	25
717	Hybrid Perovskite-Organic Flexible Tandem Solar Cell Enabling Highly Efficient Electrocatalysis Overall Water Splitting. *Advanced Energy Materials*, **2020**, 10, 2000361	21.8	37
716	Synthesis of a side-chain hole transporting polymer through Mitsunobu post-functionalization for efficient inverted perovskite solar cells. *Polymer Chemistry*, **2020**, 11, 2883-2888	4.9	3

715	The role of dipole moment in two fused-ring electron acceptor and one polymer donor based ternary organic solar cells. *Materials Chemistry Frontiers*, **2020**, 4, 1507-1518	7.8	13
714	Water-resistant perovskite nanodots enable robust two-photon lasing in aqueous environment. *Nature Communications*, **2020**, 11, 1192	17.4	65
713	Low-Bandgap Porphyrins for Highly Efficient Organic Solar Cells: Materials, Morphology, and Applications. *Advanced Materials*, **2020**, 32, e1906129	24	78
712	Coordination Engineering of Single-Crystal Precursor for Phase Control in Ruddlesden□Popper Perovskite Solar Cells. *Advanced Energy Materials*, **2020**, 10, 1904050	21.8	30
711	As-Cast Ternary Organic Solar Cells Based on an Asymmetric Side-Chains Featured Acceptor with Reduced Voltage Loss and 14.0% Efficiency. *Advanced Functional Materials*, **2020**, 30, 1909535	15.6	33
710	2D Perovskites: Coordination Engineering of Single-Crystal Precursor for Phase Control in Ruddlesden□Popper Perovskite Solar Cells (Adv. Energy Mater. 16/2020). *Advanced Energy Materials*, **2020**, 10, 2070072	21.8	0
709	A silicon-organic hybrid platform for quantum microwave-to-optical transduction. *Quantum Science and Technology*, **2020**, 5, 034004	5.5	15
708	Highly efficient all-inorganic perovskite solar cells with suppressed non-radiative recombination by a Lewis base. *Nature Communications*, **2020**, 11, 177	17.4	200
707	Vertical Orientated Dion□Jacobson Quasi-2D Perovskite Film with Improved Photovoltaic Performance and Stability. *Small Methods*, **2020**, 4, 1900831	12.8	52
706	Boosting Efficiency of Near-Infrared Organic Light-Emitting Diodes with Os(II)-Based Pyrazinyl Azolate Emitters. *Advanced Functional Materials*, **2020**, 30, 1906738	15.6	33
705	Roles of Ancillary Chelates and Overall Charges of Bis-tridentate Ir(III) Phosphors for OLED Applications. *ACS Applied Materials & Interfaces*, **2020**, 12, 1084-1093	9.5	20
704	High-performance organic second- and third-order nonlinear optical materials for ultrafast information processing. *Journal of Materials Chemistry C*, **2020**, 8, 15009-15026	7.1	34
703	Minimized surface deficiency on wide-bandgap perovskite for efficient indoor photovoltaics. *Nano Energy*, **2020**, 78, 105377	17.1	32
702	Regulating Surface Termination for Efficient Inverted Perovskite Solar Cells with Greater Than 23% Efficiency. *Journal of the American Chemical Society*, **2020**, 142, 20134-20142	16.4	185
701	Adding a Third Component with Reduced Miscibility and Higher LUMO Level Enables Efficient Ternary Organic Solar Cells. *ACS Energy Letters*, **2020**, 5, 2711-2720	20.1	137
700	Methoxy-substituted bis-tridentate iridium(III) phosphors and fabrication of blue organic light emitting diodes. *Journal of Materials Chemistry C*, **2020**, 8, 13590-13602	7.1	9
699	2D metal-organic framework for stable perovskite solar cells with minimized lead leakage. *Nature Nanotechnology*, **2020**, 15, 934-940	28.7	119
698	Approaching 16% Efficiency in All-Small-Molecule Organic Solar Cells Based on Ternary Strategy with a Highly Crystalline Acceptor. *Joule*, **2020**, 4, 2223-2236	27.8	93

697	A Non-fullerene Acceptor with Enhanced Intermolecular π-Core Interaction for High-Performance Organic Solar Cells. *Journal of the American Chemical Society*, **2020**, 142, 15246-15251	16.4	138
696	A Generally Applicable Approach Using Sequential Deposition to Enable Highly Efficient Organic Solar Cells. *Small Methods*, **2020**, 4, 2000687	12.8	56
695	Asymmetrical side-chain engineering of small-molecule acceptors enable high-performance nonfullerene organic solar cells. *Nano Energy*, **2020**, 67, 104209	17.1	22
694	Cationic Polyelectrolyte for Anionic Cyanines: An Efficient Way To Translate Molecular Properties into Material Properties. *Journal of the American Chemical Society*, **2019**, 141, 17331-17336	16.4	3
693	Magnetic Field Modulation of Recombination Processes in Organic Photovoltaics. *IEEE Journal of Photovoltaics*, **2019**, 9, 460-463	3.7	5
692	On understanding bandgap bowing and optoelectronic quality in Pb–Sn alloy hybrid perovskites. *Journal of Materials Chemistry A*, **2019**, 7, 16285-16293	13	39
691	Enhanced stability and photovoltage for inverted perovskite solar cells via precursor engineering. *Journal of Materials Chemistry A*, **2019**, 7, 15880-15886	13	13
690	Fused selenophene-thieno[3,2-b]thiophene-selenophene (ST)-based narrow-bandgap electron acceptor for efficient organic solar cells with small voltage loss. *Chemical Communications*, **2019**, 55, 8258-8261	5.8	34
689	A multi-functional interface derived from thiol-modified mesoporous carbon in lithium–sulfur batteries. *Journal of Materials Chemistry A*, **2019**, 7, 13372-13381	13	11
688	Tailoring the Functionality of Organic Spacer Cations for Efficient and Stable Quasi-2D Perovskite Solar Cells. *Advanced Functional Materials*, **2019**, 29, 1900221	15.6	94
687	Random copolymerization realized high efficient polymer solar cells with a record fill factor near 80%. *Nano Energy*, **2019**, 61, 228-235	17.1	23
686	Plasmonic Metal Nanoparticles with Core-Bishell Structure for High-Performance Organic and Perovskite Solar Cells. *ACS Nano*, **2019**, 13, 5397-5409	16.7	61
685	Functional Pyrimidinyl Pyrazolate Pt(II) Complexes: Role of Nitrogen Atom in Tuning the Solid-State Stacking and Photophysics. *Advanced Functional Materials*, **2019**, 29, 1900923	15.6	38
684	Photoinduced Charge Transfer in Single-Molecule p-n Junctions. *Journal of Physical Chemistry Letters*, **2019**, 10, 2175-2181	6.4	8
683	Efficient large guanidinium mixed perovskite solar cells with enhanced photovoltage and low energy losses. *Chemical Communications*, **2019**, 55, 4315-4318	5.8	85
682	Over 12% Efficiency Nonfullerene All-Small-Molecule Organic Solar Cells with Sequentially Evolved Multilength Scale Morphologies. *Advanced Materials*, **2019**, 31, e1807842	24	228
681	Tuning self-healing properties of stiff, ion-conductive polymers. *Journal of Materials Chemistry A*, **2019**, 7, 6773-6783	13	19
680	Regio-Specific Selenium Substitution in Non-Fullerene Acceptors for Efficient Organic Solar Cells. *Chemistry of Materials*, **2019**, 31, 6770-6778	9.6	41

679	Highly Efficient Semitransparent Solar Cells with Selective Absorption and Tandem Architecture. *Advanced Materials*, **2019**, 31, e1901683	24	61
678	A new type of solid-state luminescent 2-phenylbenzo[g]furo[2,3-b]quinoxaline derivative: synthesis, photophysical characterization and transporting properties. *Journal of Materials Chemistry C*, **2019**, 7, 9690-9697	7.1	10
677	Realization of Highly Efficient Red Phosphorescence from Bis-Tridentate Iridium(III) Phosphors. *Inorganic Chemistry*, **2019**, 58, 10944-10954	5.1	24
676	Side-Chain Engineering on Dopant-Free Hole-Transporting Polymers toward Highly Efficient Perovskite Solar Cells (20.19%). *Advanced Functional Materials*, **2019**, 29, 1904856	15.6	48
675	Trihydrazine Dihydriodide-Assisted Fabrication of Efficient Formamidinium Tin Iodide Perovskite Solar Cells. *Solar Rrl*, **2019**, 3, 1900285	7.1	25
674	Boosting the Performance of Environmentally Friendly Quantum Dot-Sensitized Solar Cells over 13% Efficiency by Dual Sensitizers with Cascade Energy Structure. *Advanced Materials*, **2019**, 31, e1903696	24	37
673	A 0D/3D Heterostructured All-Inorganic Halide Perovskite Solar Cell with High Performance and Enhanced Phase Stability. *Advanced Materials*, **2019**, 31, e1904735	24	77
672	A Dopant-Free Polymeric Hole-Transporting Material Enabled High Fill Factor Over 81% for Highly Efficient Perovskite Solar Cells. *Advanced Energy Materials*, **2019**, 9, 1902600	21.8	52
671	Recent advances in molecular design of functional conjugated polymers for high-performance polymer solar cells. *Progress in Polymer Science*, **2019**, 99, 101175	29.6	83
670	Nonlinear refraction and absorption measurements of thin films by the dual-arm Z-scan method. *Applied Optics*, **2019**, 58, D28-D33	1.7	3
669	Boosting Photovoltaic Performance for Lead Halide Perovskites Solar Cells with BF_4^- Anion Substitutions. *Advanced Functional Materials*, **2019**, 29, 1808833	15.6	62
668	Improved Efficiency and Stability of Pb/Sn Binary Perovskite Solar Cells Fabricated by Galvanic Displacement Reaction. *Advanced Energy Materials*, **2019**, 9, 1802774	21.8	48
667	Bioinspired Controllable Electro-Chemomechanical Coloration Films. *Advanced Functional Materials*, **2019**, 29, 1806383	15.6	21
666	Phenyl- and Pyrazolyl-Functionalized Pyrimidine: Versatile Chromophore of Bis-Tridentate Ir(III) Phosphors for Organic Light-Emitting Diodes. *Chemistry of Materials*, **2019**, 31, 6453-6464	9.6	29
665	A1-A2 Type Wide Bandgap Polymers for High-Performance Polymer Solar Cells: Energy Loss and Morphology. *Solar Rrl*, **2019**, 3, 1800291	7.1	15
664	Fullerene-Anchored Core-Shell ZnO Nanoparticles for Efficient and Stable Dual-Sensitized Perovskite Solar Cells. *Joule*, **2019**, 3, 417-431	27.8	44
663	Reducing Surface Recombination Velocities at the Electrical Contacts Will Improve Perovskite Photovoltaics. *ACS Energy Letters*, **2019**, 4, 222-227	20.1	96
662	Nonhalogen Solvent-Processed Asymmetric Wide-Bandgap Polymers for Nonfullerene Organic Solar Cells with Over 10% Efficiency. *Advanced Functional Materials*, **2018**, 28, 1706517	15.6	57

661	Design, synthesis, and properties of nonlinear optical chromophores based on a verbenone bridge with a novel dendritic acceptor. *Journal of Materials Chemistry C*, **2018**, 6, 2840-2847	7.1	21
660	Silicon-Organic Hybrid (SOH) Mach-Zehnder Modulators for 100 Gbit/s on-off Keying. *Scientific Reports*, **2018**, 8, 2598	4.9	50
659	Non-fullerene acceptors for organic solar cells. *Nature Reviews Materials*, **2018**, 3,	73.3	1634
658	Dithienopicenocarbazole-Based Acceptors for Efficient Organic Solar Cells with Optoelectronic Response Over 1000 nm and an Extremely Low Energy Loss. *Journal of the American Chemical Society*, **2018**, 140, 2054-2057	16.4	322
657	Terthieno[3,2-b]Thiophene (6T) Based Low Bandgap Fused-Ring Electron Acceptor for Highly Efficient Solar Cells with a High Short-Circuit Current Density and Low Open-Circuit Voltage Loss. *Advanced Energy Materials*, **2018**, 8, 1702831	21.8	82
656	Tunable Band Gap and Long Carrier Recombination Lifetime of Stable Mixed CH3NH3PbxSn1−xBr3 Single Crystals. *Chemistry of Materials*, **2018**, 30, 1556-1565	9.6	63
655	Low-Temperature Solution-Processed CuCrO2 Hole-Transporting Layer for Efficient and Photostable Perovskite Solar Cells. *Advanced Energy Materials*, **2018**, 8, 1702762	21.8	100
654	Realizing Efficient Lead-Free Formamidinium Tin Triiodide Perovskite Solar Cells via a Sequential Deposition Route. *Advanced Materials*, **2018**, 30, 1703800	24	151
653	Perovskite Photovoltaics: Pseudohalide-Induced Recrystallization Engineering for CH3NH3PbI3 Film and Its Application in Highly Efficient Inverted Planar Heterojunction Perovskite Solar Cells (Adv. Funct. Mater. 2/2018). *Advanced Functional Materials*, **2018**, 28, 1870013	15.6	5
652	Enhancing Defect Tolerance and Phase Stability of High-Bandgap Perovskites via Guanidinium Alloying. *ACS Energy Letters*, **2018**, 3, 1261-1268	20.1	78
651	All-Inorganic Hetero-Structured Cesium Tin Halide Perovskite Light-Emitting Diodes With Current Density Over 900 A cm−2 and Its Amplified Spontaneous Emission Behaviors. *Physica Status Solidi - Rapid Research Letters*, **2018**, 12, 1800090	2.5	38
650	Ultra-efficient and stable electro-optic dendrimers containing supramolecular homodimers of semifluorinated dipolar aromatics. *Materials Chemistry Frontiers*, **2018**, 2, 901-909	7.8	37
649	Photochemical changes in absorption and fluorescence of DDM-containing epoxies. *Polymer*, **2018**, 142, 11-22	3.9	4
648	Mechanochemical changes in absorption and fluorescence of DDM-containing epoxies. *Polymer*, **2018**, 142, 132-143	3.9	6
647	Tackling Energy Loss for High-Efficiency Organic Solar Cells with Integrated Multiple Strategies. *Advanced Materials*, **2018**, 30, e1706816	24	75
646	Enhanced crystallization and performance of formamidinium lead triiodide perovskite solar cells through PbI2-SrCl2 modulation. *Materials Today Energy*, **2018**, 7, 239-245	7	9
645	Enhancing efficiency of perovskite solar cells by reducing defects through imidazolium cation incorporation. *Materials Today Energy*, **2018**, 7, 161-168	7	31
644	An Electron Acceptor with Broad Visible–NIR Absorption and Unique Solid State Packing for As-Cast High Performance Binary Organic Solar Cells. *Advanced Functional Materials*, **2018**, 28, 1802324	15.6	99

643	Bis-Tridentate Iridium(III) Phosphors with Very High Photostability and Fabrication of Blue-Emitting OLEDs. *Advanced Science*, **2018**, 5, 1800846	13.6	50
642	Tuning H- and J-Aggregate Behavior in □Conjugated Polymers via Noncovalent Interactions. *Journal of Physical Chemistry C*, **2018**, 122, 18860-18869	3.8	23
641	Solution-Processed Low-Bandgap CuIn(S,Se)2 Absorbers for High-Efficiency Single-Junction and Monolithic Chalcopyrite-Perovskite Tandem Solar Cells. *Advanced Energy Materials*, **2018**, 8, 1801254	21.8	37
640	Ternary non-fullerene polymer solar cells with 13.51% efficiency and a record-high fill factor of 78.13%. *Energy and Environmental Science*, **2018**, 11, 3392-3399	35.4	122
639	Highly Efficient Organic Solar Cells Based on S,N-Heteroacene Non-Fullerene Acceptors. *Chemistry of Materials*, **2018**, 30, 5429-5434	9.6	158
638	Thermochromic Polymer Film Sensors for Detection of Incipient Thermal Damage in Carbon Fiber?Epoxy Composites. *Sensors*, **2018**, 18,	3.8	4
637	Long-Lived, Non-Geminate, Radiative Recombination of Photogenerated Charges in a Polymer/Small-Molecule Acceptor Photovoltaic Blend. *Journal of the American Chemical Society*, **2018**, 140, 9996-10008	16.4	61
636	Inorganic CsPb1□SnxIBr2 for Efficient Wide-Bandgap Perovskite Solar Cells. *Advanced Energy Materials*, **2018**, 8, 1800525	21.8	154
635	Overcoming the Photovoltage Plateau in Large Bandgap Perovskite Photovoltaics. *Nano Letters*, **2018**, 18, 3985-3993	11.5	72
634	Achieving Fully Blade-Coated Ambient-Processed Perovskite Solar Cells by Controlling the Blade-Coater Temperature. *IEEE Journal of Photovoltaics*, **2018**, 8, 1662-1669	3.7	10
633	Two-Dimensional Perovskite Solar Cells with 14.1% Power Conversion Efficiency and 0.68% External Radiative Efficiency. *ACS Energy Letters*, **2018**, 3, 2086-2093	20.1	180
632	Intensive Exposure of Functional Rings of a Polymeric Hole-Transporting Material Enables Efficient Perovskite Solar Cells. *Advanced Materials*, **2018**, 30, e1804028	24	77
631	Photoluminescence and Photoconductivity to Assess Maximum Open-Circuit Voltage and Carrier Transport in Hybrid Perovskites and Other Photovoltaic Materials. *Journal of Physical Chemistry Letters*, **2018**, 9, 3779-3792	6.4	14
630	Realization of a Highly Oriented MAPbBr3 Perovskite Thin Film via Ion Exchange for Ultrahigh Color Purity Green Light Emission. *ACS Energy Letters*, **2018**, 3, 1662-1669	20.1	28
629	Pseudohalide-Induced Recrystallization Engineering for CH3NH3PbI3 Film and Its Application in Highly Efficient Inverted Planar Heterojunction Perovskite Solar Cells. *Advanced Functional Materials*, **2018**, 28, 1704836	15.6	92
628	Highly Efficient and Stable Perovskite Solar Cells Enabled by All-Crosslinked Charge-Transporting Layers. *Joule*, **2018**, 2, 168-183	27.8	84
627	Quantifying Efficiency Loss of Perovskite Solar Cells by a Modified Detailed Balance Model. *Advanced Energy Materials*, **2018**, 8, 1701586	21.8	64
626	Designing solvate ionogel electrolytes with very high room-temperature conductivity and lithium transference number. *Journal of Materials Chemistry A*, **2018**, 6, 24100-24106	13	9

625	Thick TiO2-Based Top Electron Transport Layer on Perovskite for Highly Efficient and Stable Solar Cells. *ACS Energy Letters*, **2018**, 3, 2891-2898	20.1	55
624	Bandwidth Optimization for Mach□Zehnder Polymer/Sol□Gel Modulators. *Journal of Lightwave Technology*, **2018**, 36, 4181-4189	4	12
623	Near-Infrared Electron Acceptors with Fluorinated Regioisomeric Backbone for Highly Efficient Polymer Solar Cells. *Advanced Materials*, **2018**, 30, e1803769	24	102
622	Unexpectedly Slow Yet Efficient Picosecond to Nanosecond Photoinduced Hole-Transfer Occurs in a Polymer/Nonfullerene Acceptor Organic Photovoltaic Blend. *ACS Energy Letters*, **2018**, 3, 2396-2403	20.1	49
621	Blue-emitting bis-tridentate Ir(III) phosphors: OLED performances vs. substituent effects. *Journal of Materials Chemistry C*, **2018**, 6, 10486-10496	7.1	14
620	Possible interfacial ion/charge accumulation in thin-film perovskite/fullerene surfactant planar heterojunction solar cells. *Journal Physics D: Applied Physics*, **2018**, 51, 504001	3	3
619	Di-Spiro-Based Hole-Transporting Materials for Highly Efficient Perovskite Solar Cells. *Advanced Energy Materials*, **2018**, 8, 1800809	21.8	67
618	Mapping Nonfullerene Acceptors with a Novel Wide Bandgap Polymer for High Performance Polymer Solar Cells. *Advanced Energy Materials*, **2018**, 8, 1801214	21.8	40
617	Iridium(III) Complexes Bearing Tridentate Chromophoric Chelate: Phosphorescence Fine-Tuned by Phosphine and Hydride Ancillary. *Inorganic Chemistry*, **2018**, 57, 8287-8298	5.1	16
616	Toward Perovskite Solar Cell Commercialization: A Perspective and Research Roadmap Based on Interfacial Engineering. *Advanced Materials*, **2018**, 30, e1800455	24	244
615	Toward All Room-Temperature, Solution-Processed, High-Performance Planar Perovskite Solar Cells: A New Scheme of Pyridine-Promoted Perovskite Formation. *Advanced Materials*, **2017**, 29, 1604695	24	142
614	Solution-processed chalcopyrite□perovskite tandem solar cells in bandgap-matched two- and four-terminal architectures. *Journal of Materials Chemistry A*, **2017**, 5, 3214-3220	13	19
613	Ascorbic acid as an effective antioxidant additive to enhance the efficiency and stability of Pb/Sn-based binary perovskite solar cells. *Nano Energy*, **2017**, 34, 392-398	17.1	120
612	SrCl Derived Perovskite Facilitating a High Efficiency of 16% in Hole-Conductor-Free Fully Printable Mesoscopic Perovskite Solar Cells. *Advanced Materials*, **2017**, 29, 1606608	24	119
611	New push□pull polyene chromophores containing a Michler's base donor and a tricyanofuran acceptor: multicomponent condensation, allopolar isomerism and large optical nonlinearity. *Journal of Materials Chemistry C*, **2017**, 5, 2230-2234	7.1	22
610	Low-temperature electrodeposited crystalline SnO2 as an efficient electron-transporting layer for conventional perovskite solar cells. *Solar Energy Materials and Solar Cells*, **2017**, 164, 47-55	6.4	57
609	Molecular Engineered Hole-Extraction Materials to Enable Dopant-Free, Efficient p-i-n Perovskite Solar Cells. *Advanced Energy Materials*, **2017**, 7, 1700012	21.8	159
608	Tailor-Making Low-Cost Spiro[fluorene-9,9?-xanthene]-Based 3D Oligomers for Perovskite Solar Cells. *CheM*, **2017**, 2, 676-687	16.2	176

607	High-Performance Near-IR Photodetector Using Low-Bandgap MA0.5FA0.5Pb0.5Sn0.5I3 Perovskite. *Advanced Functional Materials*, **2017**, 27, 1701053	15.6	77
606	A regioregular conjugated polymer for high performance thick-film organic solar cells without processing additive. *Journal of Materials Chemistry A*, **2017**, 5, 10517-10525	13	38
605	Spiro-Phenylpyrazole-9,9?-Thioxanthene Analogues as Hole-Transporting Materials for Efficient Planar Perovskite Solar Cells. *Advanced Energy Materials*, **2017**, 7, 1700823	21.8	58
604	Perovskite Films: Toward All Room-Temperature, Solution-Processed, High-Performance Planar Perovskite Solar Cells: A New Scheme of Pyridine-Promoted Perovskite Formation (Adv. Mater. 13/2017). *Advanced Materials*, **2017**, 29,	24	3
603	Ag-Incorporated Organic-Inorganic Perovskite Films and Planar Heterojunction Solar Cells. *Nano Letters*, **2017**, 17, 3231-3237	11.5	127
602	Increased electro-optic effect in a guest–host electro-optic polymer by adding PEDOT:PSS as an interfacial barrier layer. *Journal of Optics (United Kingdom)*, **2017**, 19, 045503	1.7	
601	Mechanochromic fluorescence in epoxy as a detection method for barely visible impact damage in CFRP composites. *Composites Science and Technology*, **2017**, 139, 74-82	8.6	23
600	Room temperature formation of organic–inorganic lead halide perovskites: design of nanostructured and highly reactive intermediates. *Journal of Materials Chemistry A*, **2017**, 5, 3599-3608	13	36
599	CuGaO : A Promising Inorganic Hole-Transporting Material for Highly Efficient and Stable Perovskite Solar Cells. *Advanced Materials*, **2017**, 29, 1604984	24	222
598	Doping Versatile n-Type Organic Semiconductors via Room Temperature Solution-Processable Anionic Dopants. *ACS Applied Materials & Interfaces*, **2017**, 9, 1136-1144	9.5	28
597	Defect Passivation via a Graded Fullerene Heterojunction in Low-Bandgap PbSn Binary Perovskite Photovoltaics. *ACS Energy Letters*, **2017**, 2, 2531-2539	20.1	90
596	Design of a Highly Crystalline Low-Band Gap Fused-Ring Electron Acceptor for High-Efficiency Solar Cells with Low Energy Loss. *Chemistry of Materials*, **2017**, 29, 8369-8376	9.6	156
595	Effects of Self-Assembled Monolayer Modification of Nickel Oxide Nanoparticles Layer on the Performance and Application of Inverted Perovskite Solar Cells. *ChemSusChem*, **2017**, 10, 3794-3803	8.3	116
594	Enhanced Moisture Stability of Cesium-Containing Compositional Perovskites by a Feasible Interfacial Engineering. *Advanced Materials Interfaces*, **2017**, 4, 1700598	4.6	49
593	Boosting performance of inverted organic solar cells by using a planar coronene based electron-transporting layer. *Nano Energy*, **2017**, 39, 454-460	17.1	33
592	Current-Induced Phase Segregation in Mixed Halide Hybrid Perovskites and its Impact on Two-Terminal Tandem Solar Cell Design. *ACS Energy Letters*, **2017**, 2, 1841-1847	20.1	135
591	Highly Efficient Perovskite-Perovskite Tandem Solar Cells Reaching 80% of the Theoretical Limit in Photovoltage. *Advanced Materials*, **2017**, 29, 1702140	24	210
590	High-Efficiency Nonfullerene Organic Solar Cells with a Parallel Tandem Configuration. *Advanced Materials*, **2017**, 29, 1702547	24	64

589	4-Tert-butylpyridine Free Organic Hole Transporting Materials for Stable and Efficient Planar Perovskite Solar Cells. *Advanced Energy Materials*, **2017**, 7, 1700683	21.8	91
588	CsPbBr3 Perovskite Quantum Dot Vertical Cavity Lasers with Low Threshold and High Stability. *ACS Photonics*, **2017**, 4, 2281-2289	6.3	157
587	A copper-doped nickel oxide bilayer for enhancing efficiency and stability of hysteresis-free inverted mesoporous perovskite solar cells. *Nano Energy*, **2017**, 40, 155-162	17.1	112
586	Ideal Bandgap Organic-Inorganic Hybrid Perovskite Solar Cells. *Advanced Materials*, **2017**, 29, 1704418	24	103
585	Highly Efficient Porphyrin-Based OPV/Perovskite Hybrid Solar Cells with Extended Photoresponse and High Fill Factor. *Advanced Materials*, **2017**, 29, 1703980	24	148
584	Mixed Cation FAxPEA1−xPbI3 with Enhanced Phase and Ambient Stability toward High-Performance Perovskite Solar Cells. *Advanced Energy Materials*, **2017**, 7, 1601307	21.8	237
583	Effect of Molecular Orientation of Donor Polymers on Charge Generation and Photovoltaic Properties in Bulk Heterojunction All-Polymer Solar Cells. *Advanced Energy Materials*, **2017**, 7, 1601365	21.8	48
582	Highly sensitive thermal damage sensors for polymer composites: time temperature indicator based on thermochromic fluorescence turn-on response. *Smart Materials and Structures*, **2017**, 26, 085039	3.4	12
581	Silicon-organic hybrid (SOH) modulators for intensity-modulation / direct-detection links with line rates of up to 120 Gbit/s. *Optics Express*, **2017**, 25, 23784-23800	3.3	32
580	Efficient wafer-scale poling of electro-optic polymer thin films on soda-lime glass substrates: large second-order nonlinear coefficients and exceptional homogeneity of optical birefringence. *Optical Materials Express*, **2017**, 7, 1909	2.6	7
579	Feature issue introduction: organic and polymeric materials for photonic applications. *Optical Materials Express*, **2017**, 7, 2691	2.6	
578	RF photonic downconversion of vector modulated signals based on a millimeter-wave coupled electrooptic nonlinear polymer phase-modulator. *Optics Express*, **2017**, 25, 29885-29895	3.3	11
577	Ultra-Broadband Mach-Zehnder Hybrid Electro-Optic Polymer/Sol-Gel Silica Waveguide Modulators **2017**,		1
576	Highly crystalline Zn2SnO4 nanoparticles as efficient electron-transporting layers toward stable inverted and flexible conventional perovskite solar cells. *Journal of Materials Chemistry A*, **2016**, 4, 15294-15301	13	70
575	Stable Low-Bandgap Pb-Sn Binary Perovskites for Tandem Solar Cells. *Advanced Materials*, **2016**, 28, 8990-8997	24	254
574	Rational Design of Dipolar Chromophore as an Efficient Dopant-Free Hole-Transporting Material for Perovskite Solar Cells. *Journal of the American Chemical Society*, **2016**, 138, 11833-9	16.4	150
573	Improved Ambient-Stable Perovskite Solar Cells Enabled by a Hybrid Polymeric Electron-Transporting Layer. *ChemSusChem*, **2016**, 9, 2586-2591	8.3	24
572	Stabilized Wide Bandgap Perovskite Solar Cells by Tin Substitution. *Nano Letters*, **2016**, 16, 7739-7747	11.5	155

571	A Low-Temperature, Solution-Processable Organic Electron-Transporting Layer Based on Planar Coronene for High-performance Conventional Perovskite Solar Cells. *Advanced Materials*, **2016**, 28, 10786-10793	24	91
570	Modulation of PEDOT:PSS pH for Efficient Inverted Perovskite Solar Cells with Reduced Potential Loss and Enhanced Stability. *ACS Applied Materials & Interfaces*, **2016**, 8, 32068-32076	9.5	132
569	Fluoroalkyl-substituted fullerene/perovskite heterojunction for efficient and ambient stable perovskite solar cells. *Nano Energy*, **2016**, 30, 417-425	17.1	61
568	Improved efficiency and stability of PbSn binary perovskite solar cells by Cs substitution. *Journal of Materials Chemistry A*, **2016**, 4, 17939-17945	13	115
567	Rigidifying Nonplanar Perylene Diimides by Ring Fusion Toward Geometry-Tunable Acceptors for High-Performance Fullerene-Free Solar Cells. *Advanced Materials*, **2016**, 28, 951-8	24	222
566	A Low-Temperature, Solution Processable Tin Oxide Electron-Transporting Layer Prepared by the Dual-Fuel Combustion Method for Efficient Perovskite Solar Cells. *Advanced Materials Interfaces*, **2016**, 3, 1600122	4.6	94
565	Highly Efficient Organic Solar Cells with Improved Vertical Donor-Acceptor Compositional Gradient Via an Inverted Off-Center Spinning Method. *Advanced Materials*, **2016**, 28, 967-74	24	240
564	High Performance Optical Modulator Based on Electro-Optic Polymer Filled Silicon Slot Photonic Crystal Waveguide. *Journal of Lightwave Technology*, **2016**, 34, 2941-2951	4	63
563	Manipulation of optical field distribution in ITO-free micro-cavity polymer tandem solar cells via the out-of-cell capping layer for high photovoltaic performance. *Journal of Materials Chemistry A*, **2016**, 4, 961-968	13	14
562	Dopant-Free Hole-Transporting Material with a C3h Symmetrical Truxene Core for Highly Efficient Perovskite Solar Cells. *Journal of the American Chemical Society*, **2016**, 138, 2528-31	16.4	395
561	Current Challenges and Prospective Research for Upscaling Hybrid Perovskite Photovoltaics. *Journal of Physical Chemistry Letters*, **2016**, 7, 811-9	6.4	165
560	Effects of formamidinium and bromide ion substitution in methylammonium lead triiodide toward high-performance perovskite solar cells. *Nano Energy*, **2016**, 22, 328-337	17.1	152
559	Abnormal Current-Voltage Hysteresis Induced by Reverse Bias in Organic-Inorganic Hybrid Perovskite Photovoltaics. *Journal of Physical Chemistry Letters*, **2016**, 7, 995-1003	6.4	32
558	Design rules for the broad application of fast (. *RSC Advances*, **2016**, 6, 27475-27484	3.7	35
557	Pinhole-Free and Surface-Nanostructured NiOx Film by Room-Temperature Solution Process for High-Performance Flexible Perovskite Solar Cells with Good Stability and Reproducibility. *ACS Nano* , **2016**, 10, 1503-11	16.7	390
556	Modulate Organic-Metal Oxide Heterojunction via [1,6] Azafulleroid for Highly Efficient Organic Solar Cells. *Advanced Materials*, **2016**, 28, 7269-75	24	34
555	Highly Sensitive Built-In Strain Sensors for Polymer Composites: Fluorescence Turn-On Response through Mechanochemical Activation. *Advanced Materials*, **2016**, 28, 6592-7	24	48
554	Enhanced Efficiency and Stability of Inverted Perovskite Solar Cells Using Highly Crystalline SnO2 Nanocrystals as the Robust Electron-Transporting Layer. *Advanced Materials*, **2016**, 28, 6478-84	24	382

553	Hexaazatrinaphthylene Derivatives: Efficient Electron-Transporting Materials with Tunable Energy Levels for Inverted Perovskite Solar Cells. *Angewandte Chemie - International Edition*, **2016**, 55, 8999-9003	16.4	94
552	Zwitterionic Cyanine□yanine Salt: Structure and Optical Properties. *Journal of Physical Chemistry C* , **2016**, 120, 15378-15384	3.8	14
551	Optical Enhancement via Electrode Designs for High-Performance Polymer Solar Cells. *Advanced Functional Materials*, **2016**, 26, 321-340	15.6	44
550	Development of Self-Doped Conjugated Polyelectrolytes with Controlled Work Functions and Application to Hole Transport Layer Materials for High-Performance Organic Solar Cells. *Advanced Materials Interfaces*, **2016**, 3, 1500703	4.6	34
549	Large Grained Perovskite Solar Cells Derived from Single-Crystal Perovskite Powders with Enhanced Ambient Stability. *ACS Applied Materials & Interfaces*, **2016**, 8, 14513-20	9.5	54
548	Towards a fully packaged high-performance RF sensor featuring slotted photonic crystal waveguides **2016**,		1
547	Effects of Counterions with Multiple Charges on the Linear and Nonlinear Optical Properties of Polymethine Salts. *Chemistry of Materials*, **2016**, 28, 3115-3121	9.6	21
546	Quasi-three-level model applied to measured spectra of nonlinear absorption and refraction in organic molecules. *Journal of the Optical Society of America B: Optical Physics*, **2016**, 33, 780	1.7	16
545	Defect Passivation of Organic□norganic Hybrid Perovskites by Diammonium Iodide toward High-Performance Photovoltaic Devices. *ACS Energy Letters*, **2016**, 1, 757-763	20.1	237
544	PCBM-doped electro-optic materials: investigation of dielectric, optical and electro-optic properties for highly efficient poling. *Journal of Materials Chemistry C*, **2016**, 4, 10286-10292	7.1	33
543	A Room-Temperature Processable PDI-Based Electron-Transporting Layer for Enhanced Performance in PDI-Based Non-Fullerene Solar Cells. *Advanced Materials Interfaces*, **2016**, 3, 1600476	4.6	25
542	Facile Incorporation of Pd(PPh3)2Hal Substituents into Polymethines, Merocyanines, and Perylene Diimides as a Means of Suppressing Intermolecular Interactions. *Journal of the American Chemical Society*, **2016**, 138, 10112-5	16.4	20
541	Facile Thiol-Ene Thermal Crosslinking Reaction Facilitated Hole-Transporting Layer for Highly Efficient and Stable Perovskite Solar Cells. *Advanced Energy Materials*, **2016**, 6, 1601165	21.8	50
540	Enhanced Ambient Stability of Efficient Perovskite Solar Cells by Employing a Modified Fullerene Cathode Interlayer. *Advanced Science*, **2016**, 3, 1600027	13.6	74
539	Conjugated Polycyanines: A New Class of Materials with Large Third-Order Optical Nonlinearities. *Advanced Optical Materials*, **2015**, 3, 900-906	8.1	30
538	Roles of Fullerene-Based Interlayers in Enhancing the Performance of Organometal Perovskite Thin-Film Solar Cells. *Advanced Energy Materials*, **2015**, 5, 1402321	21.8	255
537	Navigating Organo-Lead Halide Perovskite Phase Space via Nucleation Kinetics toward a Deeper Understanding of Perovskite Phase Transformations and Structure-Property Relationships. *Small*, **2015**, 11, 3088-96	11	47
536	Photovoltaic performance of ladder-type indacenodithieno[3,2-b]thiophene-based polymers with alkoxyphenyl side chains. *RSC Advances*, **2015**, 5, 26680-26685	3.7	7

535	High-Performance Fully Printable Perovskite Solar Cells via Blade-Coating Technique under the Ambient Condition. *Advanced Energy Materials*, **2015**, 5, 1500328	21.8	257
534	Fluoro-Substituted n-Type Conjugated Polymers for Additive-Free All-Polymer Bulk Heterojunction Solar Cells with High Power Conversion Efficiency of 6.71. *Advanced Materials*, **2015**, 27, 3310-7	24	400
533	High-performance hole-transporting layer-free conventional perovskite/fullerene heterojunction thin-film solar cells. *Journal of Materials Chemistry A*, **2015**, 3, 9128-9132	13	48
532	Design of a versatile interconnecting layer for highly efficient series-connected polymer tandem solar cells. *Energy and Environmental Science*, **2015**, 8, 1712-1718	35.4	97
531	Surface-normal plasmonic modulator using sub-wavelength metal grating on electro-optic polymer thin film. *Optics Communications*, **2015**, 352, 116-120	2	19
530	A conductive liquid crystal via facile doping of an n-type benzodifurandione derivative. *Journal of Materials Chemistry A*, **2015**, 3, 6929-6934	13	14
529	Modulation of hybrid organic□perovskite photovoltaic performance by controlling the excited dynamics of fullerenes. *Materials Horizons*, **2015**, 2, 414-419	14.4	22
528	Room-temperature, solution-processable organic electron extraction layer for high-performance planar heterojunction perovskite solar cells. *Nanoscale*, **2015**, 7, 17343-9	7.7	62
527	Mechanism that governs the electro-optic response of second-order nonlinear polymers on silicon substrates. *Optical Materials Express*, **2015**, 5, 1653	2.6	4
526	Corrections to □A Silicon-Polymer Hybrid Modulator□Design, Simulation, and Proof of Principle□ [Dec 13 4067-4072]. *Journal of Lightwave Technology*, **2015**, 33, 3358-3358	4	
525	Side chain structure affects the molecular packing and photovoltaic performance of oligothiophene-based solution-processable small molecules. *RSC Advances*, **2015**, 5, 67718-67726	3.7	18
524	Open-Circuit Voltage Losses in Selenium-Substituted Organic Photovoltaic Devices from Increased Density of Charge-Transfer States. *Chemistry of Materials*, **2015**, 27, 6583-6591	9.6	37
523	Supramolecular Assembly of Complementary Cyanine Salt J-Aggregates. *Journal of the American Chemical Society*, **2015**, 137, 11920-3	16.4	38
522	Three-dimensional molecular donors combined with polymeric acceptors for high performance fullerene-free organic photovoltaic devices. *Journal of Materials Chemistry A*, **2015**, 3, 22162-22169	13	28
521	Enhanced Light-Harvesting by Integrating Synergetic Microcavity and Plasmonic Effects for High-Performance ITO-Free Flexible Polymer Solar Cells. *Advanced Functional Materials*, **2015**, 25, 567-574	15.6	43
520	High-performance and environmentally stable planar heterojunction perovskite solar cells based on a solution-processed copper-doped nickel oxide hole-transporting layer. *Advanced Materials*, **2015**, 27, 695-701	24	655
519	Enhanced Environmental Stability of Planar Heterojunction Perovskite Solar Cells Based on Blade-Coating. *Advanced Energy Materials*, **2015**, 5, 1401229	21.8	278
518	The roles of alkyl halide additives in enhancing perovskite solar cell performance. *Journal of Materials Chemistry A*, **2015**, 3, 9058-9062	13	135

517	High-Performance Planar-Heterojunction Solar Cells Based on Ternary Halide Large-Band-Gap Perovskites. *Advanced Energy Materials*, **2015**, 5, 1400960	21.8	108
516	Panchromatic quasi-solid-state squaraine dye sensitized solar cells enhanced by Förster resonance energy transfer of DCM-pyran. *Dyes and Pigments*, **2015**, 113, 675-681	4.6	10
515	Perovskites: Navigating Organo-Lead Halide Perovskite Phase Space via Nucleation Kinetics toward a Deeper Understanding of Perovskite Phase Transformations and Structure–Property Relationships (Small 26/2015). *Small*, **2015**, 11, 3087-3087	11	4
514	Photovoltaics: A Tetraperylene Diimides Based 3D Nonfullerene Acceptor for Efficient Organic Photovoltaics (Adv. Sci. 4/2015). *Advanced Science*, **2015**, 2,	13.6	1
513	Influence of Molecular Geometry of Perylene Diimide Dimers and Polymers on Bulk Heterojunction Morphology Toward High-Performance Nonfullerene Polymer Solar Cells. *Advanced Functional Materials*, **2015**, 25, 5326-5332	15.6	106
512	High-Performance Semitransparent Perovskite Solar Cells with 10% Power Conversion Efficiency and 25% Average Visible Transmittance Based on Transparent CuSCN as the Hole-Transporting Material. *Advanced Energy Materials*, **2015**, 5, 1500486	21.8	181
511	Enhanced Performance of Self-Assembled Monolayer Field-Effect Transistors with Top-Contact Geometry through Molecular Tailoring, Heated Assembly, and Thermal Annealing. *Advanced Functional Materials*, **2015**, 25, 5376-5383	15.6	6
510	Enhanced Performance of Organic Solar Cells with Increased End Group Dipole Moment in Indacenodithieno[3,2-b]thiophene-Based Molecules. *Advanced Functional Materials*, **2015**, 25, 4889-4897	15.6	54
509	A Low-Temperature, Solution-Processable, Cu-Doped Nickel Oxide Hole-Transporting Layer via the Combustion Method for High-Performance Thin-Film Perovskite Solar Cells. *Advanced Materials*, **2015**, 27, 7874-80	24	348
508	10.4% Power Conversion Efficiency of ITO-Free Organic Photovoltaics Through Enhanced Light Trapping Configuration. *Advanced Energy Materials*, **2015**, 5, 1500406	21.8	150
507	Poling efficiency enhancement of tethered binary nonlinear optical chromophores for achieving an ultrahigh n3r33 figure-of-merit of 2601 pm V⁻¹. *Journal of Materials Chemistry C*, **2015**, 3, 6737-6744	7.1	28
506	Enhanced crystalline morphology of a ladder-type polymer bulk-heterojunction device by blade-coating. *Nanoscale*, **2015**, 7, 10936-9	7.7	9
505	A Tetraperylene Diimides Based 3D Nonfullerene Acceptor for Efficient Organic Photovoltaics. *Advanced Science*, **2015**, 2, 1500014	13.6	73
504	Influence of Regio- and Chemoselectivity on the Properties of Fluoro-Substituted Thienothiophene and Benzodithiophene Copolymers. *Journal of the American Chemical Society*, **2015**, 137, 7616-9	16.4	73
503	C60 as an Efficient n-Type Compact Layer in Perovskite Solar Cells. *Journal of Physical Chemistry Letters*, **2015**, 6, 2399-405	6.4	271
502	Recent progress and perspective in solution-processed Interfacial materials for efficient and stable polymer and organometal perovskite solar cells. *Energy and Environmental Science*, **2015**, 8, 1160-1189	35.4	637
501	Crystalline co-assemblies of functional fullerenes in methanol with enhanced charge transport. *Journal of the American Chemical Society*, **2015**, 137, 2167-70	16.4	23
500	Influence of self-assembled monolayer binding group on graphene transistors. *Applied Physics Letters*, **2015**, 106, 021603	3.4	12

499	Highly Efficient Polymer Tandem Cells and Semitransparent Cells for Solar Energy. *Advanced Energy Materials*, **2014**, 4, 1301645	21.8	65
498	Highly Efficient Inverted Organic Solar Cells Through Material and Interfacial Engineering of Indacenodithieno[3,2-b]thiophene-Based Polymers and Devices. *Advanced Functional Materials*, **2014**, 24, 1465-1473	15.6	120
497	A General Route to Enhance Polymer Solar Cell Performance using Plasmonic Nanoprisms. *Advanced Energy Materials*, **2014**, 4, 1400206	21.8	106
496	Additive enhanced crystallization of solution-processed perovskite for highly efficient planar-heterojunction solar cells. *Advanced Materials*, **2014**, 26, 3748-54	24	1242
495	High-Dielectric Constant Side-Chain Polymers Show Reduced Non-Geminate Recombination in Heterojunction Solar Cells. *Advanced Energy Materials*, **2014**, 4, 1301857	21.8	93
494	Metal Oxide Interlayers for Polymer Solar Cells **2014**, 319-342		0
493	Integrated Photonic Electromagnetic Field Sensor Based on Broadband Bowtie Antenna Coupled Silicon Organic Hybrid Modulator. *Journal of Lightwave Technology*, **2014**, 32, 3774-3784	4	85
492	Pyrene and diketopyrrolopyrrole-based oligomers synthesized via direct arylation for OSC applications. *ACS Applied Materials & Interfaces*, **2014**, 6, 6765-75	9.5	65
491	Efficient all polymer solar cells from layer-evolved processing of a bilayer inverted structure. *Journal of Materials Chemistry C*, **2014**, 2, 416-420	7.1	33
490	Role of self-assembled tetraoctylammonium bromide on various conjugated polymers in polymer light-emitting diodes. *Journal of Materials Chemistry C*, **2014**, 2, 272-276	7.1	6
489	In situ doping and crosslinking of fullerenes to form efficient and robust electron-transporting layers for polymer solar cells. *Energy and Environmental Science*, **2014**, 7, 638-643	35.4	45
488	Tetrathienodibenzocarbazole Based Donor–Acceptor Type Wide Band-Gap Copolymers for Polymer Solar Cell Applications. *Macromolecules*, **2014**, 47, 7407-7415	5.5	17
487	Heterojunction modification for highly efficient organic-inorganic perovskite solar cells. *ACS Nano*, **2014**, 8, 12701-9	16.7	546
486	Significance of ions with an ordered arrangement for enhancing the electron injection/extraction in polymer optoelectronic devices. *Journal of Materials Chemistry C*, **2014**, 2, 4805-4811	7.1	8
485	Low-temperature processed high-performance flexible perovskite solar cells via rationally optimized solvent washing treatments. *RSC Advances*, **2014**, 4, 62971-62977	3.7	160
484	Silica/Electro-Optic Polymer Optical Modulator With Integrated Antenna for Microwave Receiving. *Journal of Lightwave Technology*, **2014**, 32, 3861-3867	4	20
483	Modification of a Teng-Man technique to measure both r33 and r13 electro-optic coefficients. *Applied Physics Letters*, **2014**, 105, 113302	3.4	3
482	Eleven-Membered Fused-Ring Low Band-Gap Polymer with Enhanced Charge Carrier Mobility and Photovoltaic Performance. *Advanced Functional Materials*, **2014**, 24, 3631-3638	15.6	94

481	Role of chloride in the morphological evolution of organo-lead halide perovskite thin films. *ACS Nano*, **2014**, 8, 10640-54	16.7	328
480	Microcavity-enhanced light-trapping for highly efficient organic parallel tandem solar cells. *Advanced Materials*, **2014**, 26, 6778-84	24	81
479	Low operational voltage and high performance organic field effect memory transistor with solution processed graphene oxide charge storage media. *Organic Electronics*, **2014**, 15, 2775-2782	3.5	12
478	Binary-metal perovskites toward high-performance planar-heterojunction hybrid solar cells. *Advanced Materials*, **2014**, 26, 6454-60	24	259
477	Suppressed charge recombination in inverted organic photovoltaics via enhanced charge extraction by using a conductive fullerene electron transport layer. *Advanced Materials*, **2014**, 26, 6262-7	24	198
476	Performance limits of plasmon-enhanced organic photovoltaics. *Applied Physics Letters*, **2014**, 105, 033304	3.4	16
475	Systematic Doping Control of CVD Graphene Transistors with Functionalized Aromatic Self-Assembled Monolayers. *Advanced Functional Materials*, **2014**, 24, 3464-3470	15.6	36
474	Interfacial engineering of ultrathin metal film transparent electrode for flexible organic photovoltaic cells. *Advanced Materials*, **2014**, 26, 3618-23	24	159
473	Integrated molecular, interfacial, and device engineering towards high-performance non-fullerene based organic solar cells. *Advanced Materials*, **2014**, 26, 5708-14	24	366
472	Long-pulsed luminescence for the measurement of dissolved oxygen. *Applied Spectroscopy*, **2014**, 68, 315-23	3.1	1
471	Broadband Low-power Optical Modulator Based on Electro-optic Polymer Infiltrated Silicon Slot Photonic Crystal Waveguide **2014**,		3
470	Spontaneously poling of electro-optic polymer thin films across a 1.1-mm thick glass substrate by pyroelectric crystals. *Applied Physics Letters*, **2014**, 105, 183305	3.4	5
469	Mesoporous sol-gel silica cladding for hybrid TiO2/electro-optic polymer waveguide modulators. *Optics Express*, **2014**, 22, 16418-23	3.3	9
468	Enhanced third harmonic generation by organic materials on high-Q plasmonic photonic crystals. *Optics Express*, **2014**, 22, 20292-7	3.3	4
467	Enhanced conductivity of sol-gel silica cladding for efficient poling in electro-optic polymer/TiO2 vertical slot waveguide modulators. *Optics Express*, **2014**, 22, 30191-9	3.3	11
466	Hybrid silicon-electro-optic-polymer integrated high-performance optical modulator **2014**,		4
465	Strong photocurrent enhancements in highly efficient flexible organic solar cells by adopting a microcavity configuration. *Advanced Materials*, **2014**, 26, 3349-54	24	61
464	Electric Field Detection Using an Electro-optic Polymer Refilled Silicon Slot Photonic Crystal Waveguide **2014**,		3

463	Wideband Electromagnetic Wave Sensing Using Electro-optic Polymer Infiltrated Silicon Slot Photonic Crystal Waveguide **2014**,		1
462	Molecular Weight Effect on the Absorption, Charge Carrier Mobility, and Photovoltaic Performance of an Indacenodiselenophene-Based Ladder-Type Polymer. *Chemistry of Materials*, **2013**, 25, 3188-3195	9.6	137
461	The role of spin in the kinetic control of recombination in organic photovoltaics. *Nature*, **2013**, 500, 435-9	50.4	379
460	Spontaneous thermal crosslinking of a sydnone-containing side-chain polymer with maleimides through a convergent [3 + 2] dual cycloaddition/cycloreversion process for electro-optics. *Polymer Chemistry*, **2013**, 4, 5760	4.9	13
459	Side-Chain Effect on Cyclopentadithiophene/Fluorobenzothiadiazole-Based Low Band Gap Polymers and Their Applications for Polymer Solar Cells. *Macromolecules*, **2013**, 46, 5497-5503	5.5	89
458	Photo-induced denitrogenation of triazoline moieties for efficient photo-assisted poling of electro-optic polymers. *Polymer Chemistry*, **2013**, 4, 4434	4.9	10
457	A Versatile Fluoro-Containing Low-Bandgap Polymer for Efficient Semitransparent and Tandem Polymer Solar Cells. *Advanced Functional Materials*, **2013**, 23, 5084-5090	15.6	98
456	Non-halogenated solvents for environmentally friendly processing of high-performance bulk-heterojunction polymer solar cells. *Energy and Environmental Science*, **2013**, 6, 3241	35.4	160
455	Flexible and twistable non-volatile memory cell array with all-organic one diode-one resistor architecture. *Nature Communications*, **2013**, 4, 2707	17.4	141
454	Highly Efficient Organic Electrooptic Materials and Their Hybrid Systems for Advanced Photonic Devices. *IEEE Journal of Selected Topics in Quantum Electronics*, **2013**, 19, 42-53	3.8	29
453	Configurable silicon photonic crystal waveguides. *Applied Physics Letters*, **2013**, 103, 261112	3.4	2
452	The effect of thieno[3,2-b]thiophene on the absorption, charge mobility and photovoltaic performance of diketopyrrolopyrrole-based low bandgap conjugated polymers. *Journal of Materials Chemistry C*, **2013**, 1, 7526	7.1	34
451	A Silicon-Polymer Hybrid Modulator□Design, Simulation and Proof of Principle. *Journal of Lightwave Technology*, **2013**, 31, 4067-4072	4	29
450	Reducing cross-sensitivity of TiO2-(B) nanowires to humidity using ultraviolet illumination for trace explosive detection. *Physical Chemistry Chemical Physics*, **2013**, 15, 5017-21	3.6	29
449	Effects of self-assembled monolayer structural order, surface homogeneity and surface energy on pentacene morphology and thin film transistor device performance. *Journal of Materials Chemistry C*, **2013**, 1, 101-113	7.1	59
448	Optical and electrical effects of plasmonic nanoparticles in high-efficiency hybrid solar cells. *Physical Chemistry Chemical Physics*, **2013**, 15, 17105-11	3.6	17
447	C□H activation: making diketopyrrolopyrrole derivatives easily accessible. *Journal of Materials Chemistry A*, **2013**, 1, 2795	13	108
446	Enhanced performance of polymer solar cells using solution-processed tetra-n-alkyl ammonium bromides as electron extraction layers. *Journal of Materials Chemistry A*, **2013**, 1, 2582	13	34

445	pH-dependent, thermosensitive polymeric nanocarriers for drug delivery to solid tumors. *Biomaterials*, **2013**, 34, 4501-9	15.6	123
444	Toward High-Performance Semi-Transparent Polymer Solar Cells: Optimization of Ultra-Thin Light Absorbing Layer and Transparent Cathode Architecture. *Advanced Energy Materials*, **2013**, 3, 417-423	21.8	123
443	Enhancing the hole injection ability of indium tin oxide via ammonium salts in polymer light-emitting diodes. *Journal of Materials Chemistry C*, **2013**, 1, 531-535	7.1	7
442	High-performance perovskite-polymer hybrid solar cells via electronic coupling with fullerene monolayers. *Nano Letters*, **2013**, 13, 3124-8	11.5	545
441	Morphology evolution by controlling solvent-solute interactions using a binary solvent in bulk heterojunction solar cells. *Applied Physics Letters*, **2013**, 102, 233903	3.4	9
440	Doping of fullerenes via anion-induced electron transfer and its implication for surfactant facilitated high performance polymer solar cells. *Advanced Materials*, **2013**, 25, 4425-30	24	220
439	Indacenodithieno[3,2-b]thiophene-based broad bandgap polymers for high efficiency polymer solar cells. *Polymer Chemistry*, **2013**, 4, 5220	4.9	42
438	Solution-processible highly conducting fullerenes. *Advanced Materials*, **2013**, 25, 2457-61	24	113
437	Solvent-dispersed benzothiadiazole-tetrathiafulvalene single-crystal nanowires and their application in field-effect transistors. *ACS Applied Materials & Interfaces*, **2013**, 5, 2320-4	9.5	22
436	High-Efficiency Polymer Solar Cells Achieved by Doping Plasmonic Metallic Nanoparticles into Dual Charge Selecting Interfacial Layers to Enhance Light Trapping. *Advanced Energy Materials*, **2013**, 3, 666-673	21.8	109
435	Rational Design of Advanced Thermoelectric Materials. *Advanced Energy Materials*, **2013**, 3, 549-565	21.8	225
434	Cascading Retro-Diels-Alder Cycloreversion and Sydnone-Maleimide Based Double 1,3-Dipolar Cycloaddition for Quantitative Thermal Cross-Linking of an Amorphous Polymer Solid.. *ACS Macro Letters*, **2013**, 2, 256-259	6.6	8
433	Wide optical spectrum range, subvolt, compact modulator based on an electro-optic polymer refilled silicon slot photonic crystal waveguide. *Optics Letters*, **2013**, 38, 4931-4	3	81
432	Demonstration of Effective In-device r33 over 1000 pm/V in Electro-optic Polymer Refilled Silicon Slot Photonic Crystal Waveguide Modulator **2013**,		3
431	Fully visible-light-harvesting conjugated polymers with pendant donor-□acceptor chromophores for photovoltaic applications. *Solar Energy Materials and Solar Cells*, **2012**, 97, 50-58	6.4	16
430	Spin cast self-assembled monolayer field effect transistors. *Organic Electronics*, **2012**, 13, 464-468	3.5	28
429	Efficient poling of electro-optic polymers in thin films and silicon slot waveguides by detachable pyroelectric crystals. *Advanced Materials*, **2012**, 24, OP42-7	24	26
428	All-organic photopatterned one diode-one resistor cell array for advanced organic nonvolatile memory applications. *Advanced Materials*, **2012**, 24, 828-33	24	66

427	All-Organic Photopatterned One Diode-One Resistor Cell Array for Advanced Organic Nonvolatile Memory Applications (Adv. Mater. 6/2012). *Advanced Materials*, **2012**, 24, 827-827	24	2
426	Electro-optical Materials: Efficient Poling of Electro-Optic Polymers in Thin Films and Silicon Slot Waveguides by Detachable Pyroelectric Crystals (Adv. Mater. 10/2012). *Advanced Materials*, **2012**, 24, OP1-OP1	24	4
425	Enhanced Open-Circuit Voltage in High Performance Polymer/Fullerene Bulk-Heterojunction Solar Cells by Cathode Modification with a C60 Surfactant. *Advanced Energy Materials*, **2012**, 2, 82-86	21.8	180
424	Semi-transparent polymer solar cells with 6% PCE, 25% average visible transmittance and a color rendering index close to 100 for power generating window applications. *Energy and Environmental Science*, **2012**, 5, 9551	35.4	278
423	Polymer triplet energy levels need not limit photocurrent collection in organic solar cells. *Journal of the American Chemical Society*, **2012**, 134, 19661-8	16.4	56
422	Halogen-free solvent processing for sustainable development of high efficiency organic solar cells. *Organic Electronics*, **2012**, 13, 2870-2878	3.5	80
421	Enhanced temporal stability of a highly efficient guest–host electro-optic polymer through a barrier layer assisted poling process. *Journal of Materials Chemistry*, **2012**, 22, 20353		21
420	Evaluation of structure–property relationships of solution-processible fullerene acceptors and their n-channel field-effect transistor performance. *Journal of Materials Chemistry*, **2012**, 22, 14976		42
419	UV-Sensitive Self-Assembled Monolayer Photoresist for the Selective Deposition of Carbon Nanotubes. *Chemistry of Materials*, **2012**, 24, 2017-2021	9.6	12
418	Dipolar Chromophore Facilitated Huisgen Cross-Linking Reactions for Highly Efficient and Thermally Stable Electrooptic Polymers. *ACS Macro Letters*, **2012**, 1, 793-796	6.6	21
417	Significant Improved Performance of Photovoltaic Cells Made from a Partially Fluorinated Cyclopentadithiophene/Benzothiadiazole Conjugated Polymer. *Macromolecules*, **2012**, 45, 5427-5435	5.5	173
416	Surface-enhanced Raman spectroscopy to probe photoreaction pathways and kinetics of isolated reactants on surfaces: flat versus curved substrates. *Nano Letters*, **2012**, 12, 5362-8	11.5	38
415	Multifunctional phosphonic acid self-assembled monolayers on metal oxides as dielectrics, interface modification layers and semiconductors for low-voltage high-performance organic field-effect transistors. *Physical Chemistry Chemical Physics*, **2012**, 14, 14110-26	3.6	121
414	Effective interfacial layer to enhance efficiency of polymer solar cells via solution-processed fullerene-surfactants. *Journal of Materials Chemistry*, **2012**, 22, 8574		149
413	Optical design of transparent thin metal electrodes to enhance in-coupling and trapping of light in flexible polymer solar cells. *Advanced Materials*, **2012**, 24, 6362-7	24	115
412	Improved charge transport and absorption coefficient in indacenodithieno[3,2-b]thiophene-based ladder-type polymer leading to highly efficient polymer solar cells. *Advanced Materials*, **2012**, 24, 6356-61	24	319
411	Achieving excellent electro-optic activity and thermal stability in poled polymers through an expeditious crosslinking process. *Journal of Materials Chemistry*, **2012**, 22, 951-959		36
410	Solid-State Densification of Spun-Cast Self-Assembled Monolayers for Use in Ultra-Thin Hybrid Dielectrics. *Applied Surface Science*, **2012**, 261, 908-908	6.7	12

409	Bottom-contact small-molecule n-type organic field effect transistors achieved via simultaneous modification of electrode and dielectric surfaces. *Organic Electronics*, **2012**, 13, 3226-3233	3.5	16
408	Surface-initiated synthesis of poly(3-methylthiophene) from indium tin oxide and its electrochemical properties. *Langmuir*, **2012**, 28, 1900-8	4	56
407	Improved thin film morphology and bulk-heterojunction solar cell performance through systematic tuning of the surface energy of conjugated polymers. *Journal of Materials Chemistry*, **2012**, 22, 5587		68
406	Chemiresistive response of silicon nanowires to trace vapor of nitro explosives. *Nanoscale*, **2012**, 4, 2628-32	7.7	23
405	Tunable light-harvesting polymers containing embedded dipolar chromophores for polymer solar cell applications. *Journal of Polymer Science Part A*, **2012**, 50, 1362-1373	2.5	17
404	Recent advances in solution-processed interfacial materials for efficient and stable polymer solar cells. *Energy and Environmental Science*, **2012**, 5, 5994	35.4	903
403	Functional fullerenes for organic photovoltaics. *Journal of Materials Chemistry*, **2012**, 22, 4161		417
402	Boosting Infrared Light Harvesting by Molecular Functionalization of Metal Oxide/Polymer Interfaces in Efficient Hybrid Solar Cells. *Advanced Functional Materials*, **2012**, 22, 2160-2166	15.6	46
401	High-Performance Inverted Polymer Solar Cells: Device Characterization, Optical Modeling, and Hole-Transporting Modifications. *Advanced Functional Materials*, **2012**, 22, 2804-2811	15.6	56
400	High-optical-quality blends of anionic polymethine salts and polycarbonate with enhanced third-order non-linearities for silicon-organic hybrid devices. *Advanced Materials*, **2012**, 24, OP326-30	24	21
399	Push–pull tetraene chromophores derived from dialkylaminophenyl, tetrahydroquinolinyl and julolidinyl moieties: optimization of second-order optical nonlinearity by fine-tuning the strength of electron-donating groups. *Journal of Materials Chemistry*, **2012**, 22, 16390		65
398	Trimming of high-Q-factor silicon ring resonators by electron beam bleaching. *Optics Letters*, **2012**, 37, 3114-6	3	32
397	Materials for Loss-Based Switching in Silicon-Organic Hybrid Devices **2012**,		1
396	Towards a low-loss, ultra-low drive voltage silicon-polymer hybrid electro-optic modulator **2011**,		1
395	Chemically Doped and Cross-linked Hole-Transporting Materials as an Efficient Anode Buffer Layer for Polymer Solar Cells. *Chemistry of Materials*, **2011**, 23, 5006-5015	9.6	63
394	High-mobility low-bandgap conjugated copolymers based on indacenodithiophene and thiadiazolo[3,4-c]pyridine units for thin film transistor and photovoltaic applications. *Journal of Materials Chemistry*, **2011**, 21, 13247		94
393	n-Doping of thermally polymerizable fullerenes as an electron transporting layer for inverted polymer solar cells. *Journal of Materials Chemistry*, **2011**, 21, 6956		57
392	Conjugated polymers based on C, Si and N-bridged dithiophene and thienopyrroledione units: synthesis, field-effect transistors and bulk heterojunction polymer solar cells. *Journal of Materials Chemistry*, **2011**, 21, 3895		105

391	Indacenodithiophene and Quinoxaline-Based Conjugated Polymers for Highly Efficient Polymer Solar Cells. *Chemistry of Materials*, **2011**, 23, 2289-2291	9.6	303
390	Increased open circuit voltage in fluorinated benzothiadiazole-based alternating conjugated polymers. *Chemical Communications*, **2011**, 47, 11026-8	5.8	225
389	Systematic Nanoengineering of Soft Matter Organic Electro-optic Materials *Chemistry of Materials* , **2011**, 23, 430-445	9.6	111
388	Synthesis, Characterization, Charge Transport, and Photovoltaic Properties of Dithienobenzoquinoxaline- and Dithienobenzopyridopyrazine-Based Conjugated Polymers. *Macromolecules*, **2011**, 44, 4752-4758	5.5	106
387	. *IEEE Photonics Technology Letters*, **2011**, 23, 1508-1510	2.2	7
386	Broadband terahertz characterization of the refractive index and absorption of some important polymeric and organic electro-optic materials. *Journal of Applied Physics*, **2011**, 109, 043505-043505-5	2.5	269
385	Facile synthesis of a 56 electron 1,2-dihydromethano-[60]PCBM and its application for thermally stable polymer solar cells. *Chemical Communications*, **2011**, 47, 10082-4	5.8	86
384	Sensitivity of titania(B) nanowires to nitroaromatic and nitroamino explosives at room temperature via surface hydroxyl groups. *Journal of Materials Chemistry*, **2011**, 21, 7269		38
383	. *Journal of Lightwave Technology*, **2011**, 29, 1112-1117	4	34
382	Electric-field sensors utilizing coupling between a D-fiber and an electro-optic polymer slab. *Applied Optics*, **2011**, 50, 3505-12	0.2	18
381	Silicon-polymer hybrid slot waveguide ring-resonator modulator. *Optics Express*, **2011**, 19, 3952-61	3.3	91
380	Electro-optic polymer spatial light modulator based on a Fabry-Perot interferometer configuration. *Optics Express*, **2011**, 19, 12750-8	3.3	8
379	Effective in-device r33 of 735 pm/V on electro-optic polymer infiltrated silicon photonic crystal slot waveguides. *Optics Letters*, **2011**, 36, 882-4	3	96
378	In-situ Crosslinking and n-Doping of Semiconducting Polymers and Their Application as Efficient Electron-Transporting Materials in Inverted Polymer Solar Cells. *Advanced Energy Materials*, **2011**, 1, 1148-1153	21.8	72
377	High speed electro-optic polymer phase modulator using an in-plane slotline RF waveguide **2011**,		3
376	A Triptycene-Containing Chromophore for Improved Temporal Stability of Highly Efficient Guest Host Electrooptic Polymers. *Macromolecules*, **2011**, 44, 1261-1265	5.5	20
375	Simultaneous Modification of Bottom-Contact Electrode and Dielectric Surfaces for Organic Thin-Film Transistors Through Single-Component Spin-Cast Monolayers. *Advanced Functional Materials*, **2011**, 21, 1476-1488	15.6	67
374	Spin-cast and patterned organophosphonate self-assembled monolayer dielectrics on metal-oxide-activated Si. *Advanced Materials*, **2011**, 23, 1899-902	24	58

373	Surface doping of conjugated polymers by graphene oxide and its application for organic electronic devices. *Advanced Materials*, **2011**, 23, 1903-8	24	190
372	The effect of dipole moment and electron deficiency of analytes on the chemiresistive response of TiO2(B) nanowires. *Analyst, The*, **2011**, 136, 4179-82	5	5
371	Facile structure and property tuning through alteration of ring structures in conformationally locked phenyltetraene nonlinear optical chromophores. *Journal of Materials Chemistry*, **2011**, 21, 4437		49
370	Tailored Organic Electro-optic Materials and Their Hybrid Systems for Device Applications *Chemistry of Materials*, **2011**, 23, 544-553	9.6	104
369	Surface characterization of polythiophene:fullerene blends on different electrodes using near edge X-ray absorption fine structure. *ACS Applied Materials & Interfaces*, **2011**, 3, 726-32	9.5	37
368	Steric Effects of the Initiator Substituent Position on the Externally Initiated Polymerization of 2-Bromo-5-iodo-3-hexylthiophene. *Macromolecules*, **2011**, 44, 512-520	5.5	56
367	Benzobis(silolothiophene)-Based Low Bandgap Polymers for Efficient Polymer Solar Cells *Chemistry of Materials*, **2011**, 23, 765-767	9.6	98
366	Highly efficient indacenodithiophene-based polymeric solar cells in conventional and inverted device configurations. *Organic Electronics*, **2011**, 12, 794-801	3.5	38
365	Optimization of organic NLO materials for integration with silicon photonic, plasmonic (metal optics), and metamaterial devices **2011**,		2
364	Solvent-vapor annealing-induced growth, alignment, and patterning of conjugated supramolecular nanowires. *Journal of Materials Research*, **2011**, 26, 311-321	2.5	10
363	Creating favorable geometries for directing organic photoreactions in alkanethiolate monolayers. *Science*, **2011**, 331, 1312-5	33.3	79
362	Simplified Reflection Fabry-Perot Method for Determination of Electro-Optic Coefficients of Poled Polymer Thin Films. *Polymers*, **2011**, 3, 1310-1324	4.5	7
361	Solution processed inverted tandem polymer solar cells with self-assembled monolayer modified interfacial layers. *Applied Physics Letters*, **2010**, 97, 253307	3.4	41
360	Solution-processed cross-linkable hole selective layer for polymer solar cells in the inverted structure. *Applied Physics Letters*, **2010**, 97, 193310	3.4	30
359	Threshold voltage control in organic thin film transistors with dielectric layer modified by a genetically engineered polypeptide. *Applied Physics Letters*, **2010**, 97, 013307	3.4	34
358	Molecular Design and Supramolecular Organization of Highly Efficient Nonlinear Optical Chromophores for Exceptional Electro-Optic Properties. *ACS Symposium Series*, **2010**, 51-66	0.4	2
357	Ultrathin Self-Assembled Organophosphonic Acid Monolayers/Metal Oxides Hybrid Dielectrics for Low-Voltage Field-Effect Transistors. *ACS Symposium Series*, **2010**, 229-239	0.4	
356	A low V modulator with GHz bandwidth based on an electro-optic polymer-clad silicon slot waveguide **2010**,		1

355	2,1,3-Benzothiadiazole (BTD)-moiety-containing red emitter conjugated amphiphilic poly(ethylene glycol)-block-poly(epsilon-caprolactone) copolymers for bioimaging. *Journal of Materials Chemistry*, **2010**, 20, 1728-1736		28
354	Using micro-patterned sensors and cell self-assembly for measuring the oxygen consumption rate of single cells. *Journal of Micromechanics and Microengineering*, **2010**, 20, 095017	2	16
353	Anode modification of inverted polymer solar cells using graphene oxide. *Applied Physics Letters*, **2010**, 97, 203306	3.4	104
352	Highly efficient electro-optic polymers through improved poling using a thin TiO2-modified transparent electrode. *Applied Physics Letters*, **2010**, 96, 243311	3.4	50
351	Organic Electro-Optic Materials. *ACS Symposium Series*, **2010**, 13-33	0.4	7
350	Ultra-compact silicon nanophotonic modulator based on electro-optic polymer infiltrated slot photonic crystal waveguide **2010**,		1
349	Effect of Chemical Modification of Fullerene-Based Self-Assembled Monolayers on the Performance of Inverted Polymer Solar Cells. *ACS Applied Materials & Interfaces*, **2010**, 2, 1892-1902	9.5	157
348	Synthesis, Characterization, and Photovoltaic Properties of Carbazole-Based Two-Dimensional Conjugated Polymers with Donor-Bridge-Acceptor Side Chains. *Chemistry of Materials*, **2010**, 22, 6444-6452	9.6	90
347	Electro-optic polymer infiltrated silicon photonic crystal slot waveguide modulator with 23 dB slow light enhancement. *Applied Physics Letters*, **2010**, 97, 093304	3.4	79
346	Surface plasmon enhanced fluorescence of cationic conjugated polymer on periodic nanoarrays. *ACS Applied Materials & Interfaces*, **2010**, 2, 3153-9	9.5	13
345	Metal grid/conducting polymer hybrid transparent electrode for inverted polymer solar cells. *Applied Physics Letters*, **2010**, 96, 203301	3.4	254
344	Synthesis, Nanostructure, Functionality, and Application of Polyfluorene-block-poly(N-isopropylacrylamide)s. *Macromolecules*, **2010**, 43, 282-291	5.5	50
343	Mach-Zehnder interferometry method for decoupling electro-optic and piezoelectric effects in poled polymer films. *Applied Physics Letters*, **2010**, 97, 041109	3.4	22
342	Dielectric surface-controlled low-voltage organic transistors via n-alkyl phosphonic acid self-assembled monolayers on high-k metal oxide. *ACS Applied Materials & Interfaces*, **2010**, 2, 511-20	9.5	93
341	Field-induced guiding optical devices made from electro-optic polymers. *Applied Optics*, **2010**, 49, 892-6	0.2	4
340	Electro-optic modulator with exceptional power-size performance enabled by transparent conducting electrodes. *Optics Express*, **2010**, 18, 6779-96	3.3	12
339	Alignment-free fabrication of a hybrid electro-optic polymer/ion-exchange glass coplanar modulator. *Optics Express*, **2010**, 18, 21038-46	3.3	9
338	40 GHz electro-optic modulation in hybrid silicon-organic slotted photonic crystal waveguides. *Optics Letters*, **2010**, 35, 2753-5	3	51

337	A Review on the Development of the Inverted Polymer Solar Cell Architecture. *Polymer Reviews*, **2010**, 50, 474-510	14	262
336	Semiconducting polymer photodetectors with electron and hole blocking layers: high detectivity in the near-infrared. *Sensors*, **2010**, 10, 6488-96	3.8	82
335	Graphene oxide nanosheets based organic field effect transistor for nonvolatile memory applications. *Applied Physics Letters*, **2010**, 97, 023310	3.4	89
334	Rational Design Using Dewar Rules for Enhancing the First Hyperpolarizability of Nonlinear Optical Chromophores. *Journal of Physical Chemistry C*, **2010**, 114, 22284-22288	3.8	24
333	Efficient Polymer Solar Cells Based on the Copolymers of Benzodithiophene and Thienopyrroledione. *Chemistry of Materials*, **2010**, 22, 2696-2698	9.6	334
332	Tuning the Kinetics and Energetics of Diels Alder Cycloaddition Reactions to Improve Poling Efficiency and Thermal Stability of High-Temperature Cross-Linked Electro-Optic Polymers. *Chemistry of Materials*, **2010**, 22, 5601-5608	9.6	43
331	Utilization of micelles formed from poly(ethylene glycol)-block-poly(epsilon-caprolactone) block copolymers as nanocarriers to enable hydrophobic red two-photon absorbing emitters for cells imaging. *Journal of Biomedical Materials Research - Part A*, **2010**, 93, 1068-79	5.4	12
330	Hybrid silicon-organic racetrack resonator designs for electro-optical modulation **2010**,		1
329	Tracking bacterial infection of macrophages using a novel red-emission pH sensor. *Analytical and Bioanalytical Chemistry*, **2010**, 398, 1375-84	4.4	22
328	Optimization of Active Layer and Anode Electrode for High-Performance Inverted Bulk-Heterojunction Solar Cells. *IEEE Journal of Selected Topics in Quantum Electronics*, **2010**, 16, 1665-1675	3.8	26
327	Using end groups to tune the linear and nonlinear optical properties of bis(dioxaborine)-terminated polymethine dyes. *ChemPhysChem*, **2010**, 11, 130-8	3.2	26
326	Enhancement of Aggregation-Induced Emission in Dye-Encapsulating Polymeric Micelles for Bioimaging. *Advanced Functional Materials*, **2010**, 20, 1413-1423	15.6	198
325	Interface Engineering for Organic Electronics. *Advanced Functional Materials*, **2010**, 20, 1371-1388	15.6	806
324	Cooperative Near-Field Surface Plasmon Enhanced Quantum Dot Nanoarrays. *Advanced Functional Materials*, **2010**, 20, 2675-2682	15.6	24
323	Effect of the phenyl ring orientation in the polystyrene buffer layer on the performance of pentacene thin-film transistors. *Organic Electronics*, **2010**, 11, 1066-1073	3.5	27
322	Dually Fluorescent Sensing of pH and Dissolved Oxygen Using a Membrane Made from Polymerizable Sensing Monomers. *Sensors and Actuators B: Chemical*, **2010**, 147, 714-722	8.5	40
321	Biofunctionalization of materials for implants using engineered peptides. *Acta Biomaterialia*, **2010**, 6, 4634-41	10.8	67
320	Highly-efficient fabrication of nanoscrolls from functionalized graphene oxide by Langmuir Blodgett method. *Carbon*, **2010**, 48, 4475-4482	10.4	81

319	Low-voltage high-performance organic thin film transistors with a thermally annealed polystyrene/hafnium oxide dielectric. *Applied Physics Letters*, **2009**, 95, 243302	3.4	22
318	Hybrid electro-optic polymer/sol-gel waveguide directional coupler switches. *Applied Physics Letters*, **2009**, 94, 213513	3.4	42
317	Modeling the optical behavior of complex organic media: from molecules to materials. *Journal of Physical Chemistry B*, **2009**, 113, 15581-8	3.4	20
316	Electro-optic polymer prism beam deflector. *Optical Engineering*, **2009**, 48, 114601	1.1	1
315	Electron-Rich Alcohol-Soluble Neutral Conjugated Polymers as Highly Efficient Electron-Injecting Materials for Polymer Light-Emitting Diodes. *Advanced Functional Materials*, **2009**, 19, 2457-2466	15.6	96
314	Supramolecular Self-Assembled Dendritic Nonlinear Optical Chromophores: Fine-Tuning of Arene–Perfluoroarene Interactions for Ultralarge Electro-Optic Activity and Enhanced Thermal Stability. *Advanced Materials*, **2009**, 21, 1976-1981	24	92
313	Highly Efficient Polymer White-Light-Emitting Diodes Based on Lithium Salts Doped Electron Transporting Layer. *Advanced Materials*, **2009**, 21, 361-365	24	150
312	Long-Lifetime Polymer Light-Emitting Electrochemical Cells Fabricated with Crosslinked Hole-Transport Layers. *Advanced Materials*, **2009**, 21, 1972-1975	24	65
311	The Effects of Binding Ligand Variation on the Nickel Catalyzed Externally Initiated Polymerization of 2-Bromo-3-hexyl-5-iodothiophene. *Macromolecular Chemistry and Physics*, **2009**, 210, 1966-1972	2.6	43
310	Directed self-immobilization of alkaline phosphatase on micro-patterned substrates via genetically fused metal-binding peptide. *Biotechnology and Bioengineering*, **2009**, 103, 696-705	4.9	80
309	Interface-tailored and nanoengineered polymeric materials for (opto)electronic devices. *Polymer International*, **2009**, 58, 594-619	3.3	25
308	Spraycoating of silver nanoparticle electrodes for inverted polymer solar cells. *Organic Electronics*, **2009**, 10, 719-723	3.5	90
307	Indium tin oxide-free semi-transparent inverted polymer solar cells using conducting polymer as both bottom and top electrodes. *Organic Electronics*, **2009**, 10, 1401-1407	3.5	239
306	Electro-optic (E-O) molecular glasses. *Chemistry - an Asian Journal*, **2009**, 4, 20-31	4.5	27
305	Single-cell patterning and adhesion on chemically engineered poly(dimethylsiloxane) surface. *Langmuir*, **2009**, 25, 4615-20	4	25
304	Charge carrier dynamics in metalated polymers investigated by optical-pump terahertz-probe spectroscopy. *Journal of Physical Chemistry B*, **2009**, 113, 15427-32	3.4	21
303	Surface-plasmon-enhanced fluorescence from periodic quantum dot arrays through distance control using biomolecular linkers. *Nanotechnology*, **2009**, 20, 015305	3.4	36
302	Steric Stabilization Effects in Nickel-Catalyzed Regioregular Poly(3-hexylthiophene) Synthesis. *Macromolecules*, **2009**, 42, 9387-9389	5.5	63

301	Study on the formation of self-assembled monolayers on sol-gel processed hafnium oxide as dielectric layers. *Langmuir*, **2009**, 25, 2140-7	4	49
300	Bias-free electro-optic polymer-based two-section Y-branch waveguide modulator with 22 dB linearity enhancement. *Optics Letters*, **2009**, 34, 3277-9	3	12
299	High Deltan strip-loaded electro-optic polymer waveguide modulator with low insertion loss. *Optics Express*, **2009**, 17, 3316-21	3.3	26
298	Photo-Stability Measurement of Electro-Optic Polymer Waveguides With High Intensity at 1550-nm Wavelength. *Journal of Lightwave Technology*, **2009**, 27, 1045-1050	4	10
297	Electro-optic modulation in slotted resonant photonic crystal heterostructures. *Applied Physics Letters*, **2009**, 94, 241107	3.4	66
296	A Simple and Effective Way of Achieving Highly Efficient and Thermally Stable Bulk-Heterojunction Polymer Solar Cells Using Amorphous Fullerene Derivatives as Electron Acceptor. *Chemistry of Materials*, **2009**, 21, 2598-2600	9.6	185
295	Effect of Initiators on the Kumada Catalyst-Transfer Polycondensation Reaction. *Macromolecules*, **2009**, 42, 7670-7677	5.5	84
294	Molecular mobility in self-assembled dendritic chromophore glasses. *Journal of Physical Chemistry B* , **2009**, 113, 14180-8	3.4	12
293	Phosphonic acid organic monolayer amorphous sol gel hafnium oxide hybrid dielectric for low-voltage organic transistors on plastic. *Journal of Materials Chemistry*, **2009**, 19, 7929		29
292	Controlled Diels Alder Reactions Used To Incorporate Highly Efficient Polyenic Chromophores into Maleimide-Containing Side-Chain Polymers for Electro-Optics. *Macromolecules*, **2009**, 42, 2438-2445	5.5	37
291	Development of new conjugated polymers with donor-pi-bridge-acceptor side chains for high performance solar cells. *Journal of the American Chemical Society*, **2009**, 131, 13886-7	16.4	310
290	Phosphonic acid self-assembled monolayer and amorphous hafnium oxide hybrid dielectric for high performance polymer thin film transistors on plastic substrates. *Applied Physics Letters*, **2009**, 95, 113305	3.4	30
289	Rational molecular design and supramolecular assembly of highly efficient organic electro-optic materials. *Journal of Materials Chemistry*, **2009**, 19, 7410		122
288	Quantitative Determination of the Chromophore Alignment Induced by Electrode Contact Poling in Self-Assembled NLO Materials. *Bulletin of the Korean Chemical Society*, **2009**, 30, 882-886	1.2	8
287	Materials and Interface Engineering in Organic Light-Emitting Diodes **2009**, 243-261		
286	Microring Resonators Made in Poled and Unpoled Chromophore-Containing Polymers for Optical Communication and Sensors. *IEEE Journal of Selected Topics in Quantum Electronics*, **2008**, 14, 1281-1288	3.8	9
285	Binary Chromophore Systems in Nonlinear Optical Dendrimers and Polymers for Large Electrooptic Activities. *Journal of Physical Chemistry C*, **2008**, 112, 8091-8098	3.8	108
284	A cellular isolation system for real-time single-cell oxygen consumption monitoring. *Journal of the Royal Society Interface*, **2008**, 5 Suppl 2, S151-9	4.1	28

283	Controlled assembly of large pi-conjugated aromatic thiols on Au(111). *Nanotechnology*, **2008**, 19, 135605	3.4	12
282	Air-stable inverted flexible polymer solar cells using zinc oxide nanoparticles as an electron selective layer. *Applied Physics Letters*, **2008**, 92, 253301	3.4	737
281	Thermally Cross-Linkable Hole-Transporting Materials for Improving Hole Injection in Multilayer Blue-Emitting Phosphorescent Polymer Light-Emitting Diodes. *Macromolecules*, **2008**, 41, 9570-9580	5.5	87
280	High performance ambient processed inverted polymer solar cells through interfacial modification with a fullerene self-assembled monolayer. *Applied Physics Letters*, **2008**, 93, 233304	3.4	271
279	Electrooptic Polymer Modulator With Single-Mode to Multimode Waveguide Transitions. *IEEE Photonics Technology Letters*, **2008**, 20, 1051-1053	2.2	15
278	Crosslinkable hole-transporting materials for solution processed polymer light-emitting diodes. *Journal of Materials Chemistry*, **2008**, 18, 4495		147
277	Thermally Cross-Linkable Hole-Transporting Materials on Conducting Polymer: Synthesis, Characterization, and Applications for Polymer Light-Emitting Devices. *Chemistry of Materials*, **2008**, 20, 413-422	9.6	104
276	Reinforced Site Isolation Leading to Remarkable Thermal Stability and High Electrooptic Activities in Cross-Linked Nonlinear Optical Dendrimers. *Chemistry of Materials*, **2008**, 20, 6372-6377	9.6	66
275	Interfacial modification to improve inverted polymer solar cells. *Journal of Materials Chemistry*, **2008**, 18, 5113		323
274	High Performance Amorphous Metallated Conjugated Polymers for Field-Effect Transistors and Polymer Solar Cells. *Chemistry of Materials*, **2008**, 20, 5734-5736	9.6	175
273	Polarization selective electro-optic polymer waveguide devices by direct electron beam writing. *Optics Express*, **2008**, 16, 8472-9	3.3	3
272	Electro-optic polymer cladding ring resonator modulators. *Optics Express*, **2008**, 16, 18326-33	3.3	55
271	Donor Acceptor Thiolated Polyenic Chromophores Exhibiting Large Optical Nonlinearity and Excellent Photostability. *Chemistry of Materials*, **2008**, 20, 5047-5054	9.6	141
270	Transversely tapered hybrid electro-optic polymer/sol-gel Mach Zehnder waveguide modulators. *Applied Physics Letters*, **2008**, 92, 193508	3.4	11
269	Directed assembly of single-walled carbon nanotubes via drop-casting onto a UV-patterned photosensitive monolayer. *Journal of the American Chemical Society*, **2008**, 130, 7226-7	16.4	55
268	Deprotecting thioacetyl-terminated terphenyldithiol for assembly on gallium arsenide. *Langmuir*, **2008**, 24, 851-6	4	16
267	Mesoscale dynamics and cooperativity of networking dendronized nonlinear optical molecular glasses. *Nano Letters*, **2008**, 8, 754-9	11.5	48
266	Site-Isolated Electro-optic Chromophores Based on Substituted 2,2?-Bis(3,4-propylenedioxythiophene) Conjugated Bridges. *Chemistry of Materials*, **2008**, 20, 3425-3434	9.6	90

265	Guest–Host Cooperativity in Organic Materials Greatly Enhances the Nonlinear Optical Response. *Journal of Physical Chemistry C*, **2008**, 112, 4355-4363	3.8	105
264	Modeling Photobleaching of Optical Chromophores: Light-Intensity Effects in Precise Trimming of Integrated Polymer Devices. *Journal of Physical Chemistry C*, **2008**, 112, 8051-8060	3.8	22
263	Chromophore-Containing Polymers for Trace Explosive Sensors. *Journal of Physical Chemistry C*, **2008**, 112, 8072-8078	3.8	23
262	High-efficiency and solution processible multilayer white polymer light-emitting diodes using neutral conjugated surfactant as an electron injection layer. *Applied Physics Letters*, **2008**, 92, 063303	3.4	33
261	Nonlinear polymer-clad silicon slot waveguide modulator with a half wave voltage of 0.25V. *Applied Physics Letters*, **2008**, 92, 163303	3.4	150
260	Stability and flexibility of self-assembled monolayers of thiols consisting of a horizontal large π-system and a vertical spacer. *Journal of Physics Condensed Matter*, **2008**, 20, 315012	1.8	2
259	Low-voltage organic thin-film transistors with π-phosphonic acid molecular dielectric monolayers. *Applied Physics Letters*, **2008**, 92, 113303	3.4	73
258	Wideband 15THz response using organic electro-optic polymer emitter-sensor pairs at telecommunication wavelengths. *Applied Physics Letters*, **2008**, 92, 151107	3.4	91
257	Self-assembled monolayer modified ZnO/metal bilayer cathodes for polymer/fullerene bulk-heterojunction solar cells. *Applied Physics Letters*, **2008**, 92, 193313	3.4	153
256	Lithium salt doped conjugated polymers as electron transporting materials for highly efficient blue polymer light-emitting diodes. *Applied Physics Letters*, **2008**, 93, 243302	3.4	30
255	Low-voltage high-performance C60 thin film transistors via low-surface-energy phosphonic acid monolayer/hafnium oxide hybrid dielectric. *Applied Physics Letters*, **2008**, 93, 083302	3.4	25
254	Colloidal CdSe quantum dot electroluminescence: ligands and light-emitting diodes. *Mikrochimica Acta*, **2008**, 160, 345-350	5.8	31
253	Order of Magnitude Effects of Thiazole Regioisomerism on the Near-IR Two-Photon Cross-Sections of Dipolar Chromophores. *Advanced Functional Materials*, **2008**, 18, 794-801	15.6	8
252	Self-assembled Electroactive Phosphonic Acids on ITO: Maximizing Hole-Injection in Polymer Light-Emitting Diodes. *Advanced Functional Materials*, **2008**, 18, 3964-3971	15.6	85
251	Highly Efficient White Polymer Light-Emitting Diodes Based on Nanometer-Scale Control of the Electron Injection Layer Morphology through Solvent Processing. *Advanced Materials*, **2008**, 20, 1565-1570	24	95
250	Polymer Solar Cells That Use Self-Assembled-Monolayer- Modified ZnO/Metals as Cathodes. *Advanced Materials*, **2008**, 20, 2376-2382	24	446
249	π-Phosphonic Acid Organic Monolayer/Sol–Gel Hafnium Oxide Hybrid Dielectrics for Low-Voltage Organic Transistors. *Advanced Materials*, **2008**, 20, 3697-3701	24	129
248	2-(2?-Hydroxyphenyl)benzoxazole-Containing Two-Photon-Absorbing Chromophores as Sensors for Zinc and Hydroxide Ions. *Chemistry of Materials*, **2008**, 20, 1977-1987	9.6	90

247	Peptide-mediated surface-immobilized quantum dot hybrid nanoassemblies with controlled photoluminescence. *Journal of Materials Chemistry*, **2007**, 17, 866-872		25
246	Ultralarge and thermally stable electro-optic activities from supramolecular self-assembled molecular glasses. *Journal of the American Chemical Society*, **2007**, 129, 488-9	16.4	266
245	Direct surface functionalization of indium tin oxide via electrochemically induced assembly. *Journal of Materials Chemistry*, **2007**, 17, 3489		22
244	Phenyltetraene-based nonlinear optical chromophores with enhanced chemical stability and electrooptic activity. *Organic Letters*, **2007**, 9, 4471-4	6.2	78
243	Cross-Conjugated Polymers with Large Two-Photon Absorption Cross-Sections for Metal Ion Sensing. *Journal of Physical Chemistry C*, **2007**, 111, 10673-10681	3.8	36
242	Nanostructured Functional Block Copolymers for Electrooptic Devices. *Macromolecules*, **2007**, 40, 97-104	5.5	28
241	Atomic force microcopy study of the mechanical and electrical properties of monolayer films of molecules with aromatic end groups. *Langmuir*, **2007**, 23, 11522-5	4	23
240	Two-photon absorbing block copolymer as a nanocarrier for porphyrin: energy transfer and singlet oxygen generation in micellar aqueous solution. *Journal of the American Chemical Society*, **2007**, 129, 7220-1	16.4	71
239	Theory-guided design and synthesis of multichromophore dendrimers: an analysis of the electro-optic effect. *Journal of the American Chemical Society*, **2007**, 129, 7523-30	16.4	132
238	Experimental Demonstration of a Linearized Polymeric Directional Coupler Modulator. *IEEE Photonics Technology Letters*, **2007**, 19, 1762-1764	2.2	9
237	Large Electro-optic Activity and Enhanced Thermal Stability from Diarylaminophenyl-Containing High-β Nonlinear Optical Chromophores. *Chemistry of Materials*, **2007**, 19, 1154-1163	9.6	147
236	Ultrafast Spectroscopic Study of Photoinduced Electron Transfer in an Oligo(thienylenevinylene):Fullerene Composite. *Advanced Functional Materials*, **2007**, 17, 563-568	15.6	45
235	Highly Efficient Diels–Alder Crosslinkable Electro-Optic Dendrimers for Electric-Field Sensors. *Advanced Functional Materials*, **2007**, 17, 2557-2563	15.6	59
234	Hydrophobic Chromophores in Aqueous Micellar Solution Showing Large Two-Photon Absorption Cross Sections. *Advanced Functional Materials*, **2007**, 17, 1691-1697	15.6	64
233	High-Efficiency and Color Stable Blue-Light-Emitting Polymers and Devices. *Advanced Functional Materials*, **2007**, 17, 3808-3815	15.6	69
232	Crosslinkable Hole-Transport Layer on Conducting Polymer for High-Efficiency White Polymer Light-Emitting Diodes. *Advanced Materials*, **2007**, 19, 300-304	24	158
231	Improved Performance from Multilayer Quantum Dot Light-Emitting Diodes via Thermal Annealing of the Quantum Dot Layer. *Advanced Materials*, **2007**, 19, 3371-3376	24	115
230	A Conjugated, Neutral Surfactant as Electron-Injection Material for High-Efficiency Polymer Light-Emitting Diodes. *Advanced Materials*, **2007**, 19, 2010-2014	24	130

229	A Novel Benzoxazole-Containing Poly(N-isopropylacrylamide) Copolymer as a Multifunctional Sensing Material. *Macromolecular Rapid Communications*, **2007**, 28, 894-899	4.8	40
228	Hybrid polymer/sol–gel waveguide modulators with exceptionally large electro-optic coefficients. *Nature Photonics*, **2007**, 1, 180-185	33.9	267
227	Electrooptic Polymer Ring Resonator Modulation up to 165 GHz. *IEEE Journal of Selected Topics in Quantum Electronics*, **2007**, 13, 104-110	3.8	66
226	Two-Photon Absorption in Quadrupolar Bis(acceptor)-Terminated Chromophores with Electron-Rich Bis(heterocycle)vinylene Bridges. *Chemistry of Materials*, **2007**, 19, 432-442	9.6	62
225	Theoretical and experimental studies on the surface structures of conjugated rod-coil block copolymer brushes. *Langmuir*, **2007**, 23, 2805-14	4	37
224	Direct nanofabrication and transmission electron microscopy on a suite of easy-to-prepare ultrathin film substrates. *Thin Solid Films*, **2007**, 515, 5341-5347	2.2	3
223	Controlled assembly of large π-conjugated n-type molecules on Au(111). *Nanotechnology*, **2007**, 18, 335302	3.4	8
222	Molecular mobility and transitions in complex organic systems studied by shear force microscopy. *Nanotechnology*, **2007**, 18, 044009	3.4	15
221	Two-Photon Lithography of Platinum-Porphyrin Oxygen Sensors. *IEEE Sensors Journal*, **2007**, 7, 931-936	4	3
220	Demonstration of Polymer-based Directional Coupler Modulator with High Linearity **2007**,		2
219	Optical micro-resonator chemical sensor **2007**, 6556, 308		4
218	Plasmon resonant structures with unique topographic characteristics and tunable optical properties for surface-enhanced Raman scattering. *Nanotechnology*, **2007**, 18, 455301	3.4	11
217	Assembly of nanomaterials through highly ordered self-assembled monolayers and peptide-organic hybrid conjugates as templates. *Journal of Nanoscience and Nanotechnology*, **2007**, 7, 2549-66	1.3	17
216	All-Dielectric Electrooptic Sensor Based on a Polymer Microresonator Coupled Side-Polished Optical Fiber. *IEEE Sensors Journal*, **2007**, 7, 515-524	4	27
215	Efficient acceptor groups for NLO chromophores: competing inductive and resonance contributions in heterocyclic acceptors derived from 2-dicyanomethylidene-3-cyano-4,5,5-trimethyl-2,5-dihydrofuran. *Journal of Materials Chemistry*, **2007**, 17, 2944-2949		35
214	Highly Efficient UV-Violet Light-Emitting Polymers Derived from Fluorene and Tetraphenylsilane Derivatives: Molecular Design toward Enhanced Electroluminescent Performance. *Macromolecules*, **2007**, 40, 3015-3020	5.5	42
213	Metal-slotted polymer optical waveguide device. *Applied Physics Letters*, **2007**, 90, 243507	3.4	6
212	Efficient photocurrent generation through a self-assembled monolayer of C60-mercaptophenylanthrylacetylene. *Journal of Power Sources*, **2006**, 160, 711-715	8.9	9

211	Ultralarge and Thermally Stable Electro-optic Activities from Diels–Alder Crosslinkable Polymers Containing Binary Chromophore Systems. *Advanced Materials*, **2006**, 18, 3038-3042	24	88
210	Interfacial-shear strength of the perfluorocyclobutane films on silicon. *Journal of Materials Research*, **2006**, 21, 1759-1769	2.5	2
209	Material and Interface Engineering for Highly Efficient Polymer Light Emitting Diodes. *Journal of Macromolecular Science - Reviews in Macromolecular Chemistry and Physics*, **2006**, 46, 7-26		9
208	Thermally crosslinked hole-transporting layers for cascade hole-injection and effective electron-blocking/exciton-confinement in phosphorescent polymer light-emitting diodes. *Applied Physics Letters*, **2006**, 88, 093505	3.4	70
207	Pockels coefficient enhancement of poled electro-optic polymers with a hybrid organic-inorganic sol-gel cladding layer. *Applied Physics Letters*, **2006**, 89, 131102	3.4	36
206	Gated lateral charge transport in self-assembled 1-pyrylphosphonic acid molecular multilayers. *Applied Physics Letters*, **2006**, 88, 223112	3.4	1
205	Low drive voltage Fabry-Pérot Étalon device tunable filters using poled hybrid sol-gel materials. *Applied Physics Letters*, **2006**, 89, 041127	3.4	20
204	Third-order nonlinearity contribution to electro-optic activity in polymer materials in a constant bias field. *Applied Physics Letters*, **2006**, 88, 041115	3.4	3
203	Time resolved photoluminescence spectroscopy of surface-plasmon-enhanced light emission from conjugate polymers. *Applied Physics Letters*, **2006**, 89, 221106	3.4	30
202	Hybrid Fabry-Pérot Étalon using an electro-optic polymer for optical modulation. *Applied Physics Letters*, **2006**, 89, 141113	3.4	13
201	Diels–Alder "Click Chemistry" for Highly Efficient Electrooptic Polymers. *Macromolecules*, **2006**, 39, 1676-1689	5.9	116
200	Facile synthesis of highly efficient phenyltetraene-based nonlinear optical chromophores for electrooptics. *Organic Letters*, **2006**, 8, 1387-90	6.2	80
199	Pyrroline Chromophores for Electro-Optics. *Chemistry of Materials*, **2006**, 18, 2982-2988	9.6	103
198	Broadband electric field sensor with electro-optic polymer micro-ring resonator on side-polished optical fiber **2006**,		2
197	Low-voltage electro-optic polymer modulators **2006**,		2
196	Low half-wave voltage and high electro-optic effect in hybrid polymer/sol-gel waveguide modulators. *Applied Physics Letters*, **2006**, 89, 143506	3.4	32
195	Photobleaching Fabrication of Microring Resonator in a Chromophore-Containing Polymer. *IEEE Photonics Technology Letters*, **2006**, 18, 2221-2223	2.2	15
194	Bonding and Molecular Environment Effects on Near-Infrared Optical Absorption Behavior in Nonlinear Optical Monoazo Chromophore–Polymer Materials. *Macromolecules*, **2006**, 39, 7566-7577	5.5	18

193	Efficient ultraviolet-blue polymer light-emitting diodes based on a fluorene-based non-conjugated polymer. *Applied Physics Letters*, **2006**, 89, 081104	3.4	25
192	Two-dimensional self-assembly of 1-pyrylphosphonic acid: transfer of stacks on structured surface. *Journal of the American Chemical Society*, **2006**, 128, 5672-9	16.4	28
191	Self-assembled monolayers of aromatic thiols stabilized by parallel-displaced pi-pi stacking interactions. *Langmuir*, **2006**, 22, 3049-56	4	62
190	Arrays of covalently bonded single gold nanoparticles on thiolated molecular assemblies. *Langmuir*, **2006**, 22, 6346-51	4	11
189	High-sensitivity transmission IR spectroscopy for the chemical identification and structural analysis of conjugated molecules on gallium arsenide surfaces. *Langmuir*, **2006**, 22, 9491-4	4	7
188	High-efficiency polymer light-emitting diodes using neutral surfactant modified aluminum cathode. *Journal of Physical Chemistry B*, **2006**, 110, 6010-4	3.4	23
187	Linear and nonlinear optical properties of a macrocyclic trichromophore bundle with parallel-aligned dipole moments. *Journal of Physical Chemistry B*, **2006**, 110, 5434-8	3.4	37
186	Patterning of robust self-assembled n-type hexaazatrinaphthylene-based nanorods and nanowires by microcontact printing. *Journal of the American Chemical Society*, **2006**, 128, 13042-3	16.4	53
185	Ring resonator-based electrooptic polymer traveling-wave modulator. *Journal of Lightwave Technology*, **2006**, 24, 3514-3519	4	64
184	Efficient CdSe/CdS quantum dot light-emitting diodes using a thermally polymerized hole transport layer. *Nano Letters*, **2006**, 6, 463-7	11.5	448
183	Second- and Third- Order Nonlinear Optical Materials **2006**, 7-1-7-126		
182	P-187: Crosslinkable Hole-Transporting Polymers for High Efficiency Blue and White Phosphorescent Light-Emitting Diodes. *Digest of Technical Papers SID International Symposium*, **2006**, 37, 931	0.5	
181	New environmentally responsive fluorescent N-isopropylacrylamide copolymer and its application to DNA sensing. *Journal of Polymer Science Part A*, **2006**, 44, 5495-5504	2.5	43
180	Terahertz all-optical modulation in a silicon-polymer hybrid system. *Nature Materials*, **2006**, 5, 703-9	27	225
179	A highly electroluminescent molecular square. *Chemical Communications*, **2005**, 1002-4	5.8	43
178	Thiol-Linked Anthraquinone Anthryl Acetylene Molecule: Synthesis, Self-assembly, and Photoelectrochemical Properties. *Chemistry of Materials*, **2005**, 17, 2896-2903	9.6	14
177	Highly efficient red-electrophosphorescent devices based on polyfluorene copolymers containing charge-transporting pendant units. *Journal of Physical Chemistry B*, **2005**, 109, 14000-5	3.4	46
176	Highly Efficient Electrophosphorescent Devices with Saturated Red Emission from a Neutral Osmium Complex. *Chemistry of Materials*, **2005**, 17, 3532-3536	9.6	87

175	Solvent-dependent assembly of terphenyl- and quaterphenyldithiol on gold and gallium arsenide. *Langmuir*, **2005**, 21, 5887-93	4	50
174	Optical modulation and detection in slotted Silicon waveguides. *Optics Express*, **2005**, 13, 5216-26	3.3	219
173	Organic electro-optic modulator using transparent conducting oxides as electrodes. *Optics Express*, **2005**, 13, 7380-5	3.3	56
172	Electro-optic properties of hybrid solgel doped with a nonlinear chromophore with large hyperpolarizability. *Optics Letters*, **2005**, 30, 117-9	3	11
171	Microring resonators on side-polished optical fiber. *IEEE Photonics Technology Letters*, **2005**, 17, 2107-2109	2.2	17
170	High-efficiency light-emitting diodes using neutral surfactants and aluminum cathode. *Applied Physics Letters*, **2005**, 86, 083504	3.4	74
169	Very large electro-optic coefficients from in situ generated side-chain nonlinear optical polymers. *Applied Physics Letters*, **2005**, 87, 071109	3.4	20
168	Systematic study of the structure-property relationship of a series of ferrocenyl nonlinear optical chromophores. *Journal of the American Chemical Society*, **2005**, 127, 2758-66	16.4	155
167	Optimizing electro-optic activity in chromophore/polymer composites and in organic chromophore glasses **2005**,		1
166	Acentric lattice electro-optic materials by rational design **2005**,		1
165	Feasibility study of integration of electro-optic polymer waveguide device with MOSFET circuitry on silicon **2005**,		3
164	Assembly of gold nanoparticles using genetically engineered polypeptides. *Small*, **2005**, 1, 698-702	11	35
163	Exceptional electro-optic properties through molecular design and controlled self-assembly **2005**, 5935, 49		11
162	Low temperature relaxations and effects on poling efficiencies of dendronized nonlinear optical side-chain polymers. *Applied Physics Letters*, **2005**, 86, 211908	3.4	12
161	Electro-optic coefficients of 500 pm/V and beyond for organic materials **2005**,		13
160	Wavelength dependence of first molecular hyperpolarizability of a dendrimer in solution. *Journal of Chemical Physics*, **2004**, 121, 6086-92	3.9	18
159	Resonance enhanced THz generation in electro-optic polymers near the absorption maximum. *Applied Physics Letters*, **2004**, 85, 5827-5829	3.4	72
158	Efficient and stable blue light-emitting diodes based on an anthracene derivative doped poly(N-vinylcarbazole). *Applied Physics Letters*, **2004**, 85, 5433-5435	3.4	22

157	Highly efficient red electrophosphorescent devices based on an iridium complex with trifluoromethyl-substituted pyrimidine ligand. *Applied Physics Letters*, **2004**, 85, 1619-1621	3.4	44
156	Bright white light electroluminescent devices based on a dye-dispersed polyfluorene derivative. *Applied Physics Letters*, **2004**, 85, 1116-1118	3.4	81
155	One-, two-, and three-photon absorption induced fluorescence of a novel chromophore in chloroform solution. *Journal of Chemical Physics*, **2004**, 121, 7901-7	3.9	10
154	Platinum-Functionalized Chiral Molecular Squares as Light-Emitting Materials. *Materials Research Society Symposia Proceedings*, **2004**, 846, DD3.6.1		
153	Highly Ordered Pseudo-Discotic Chromophore Systems for Electro-Optic Materials and Devices. *Materials Research Society Symposia Proceedings*, **2004**, 846, DD6.2.1		
152	Synthesis of Dendridic NLO Chromophores for the Improvement of Order in Electro-optics. *Materials Research Society Symposia Proceedings*, **2004**, 846, DD6.3.1		
151	A Side-Chain Dendronized Nonlinear Optical Polyimide with Large and Thermally Stable Electrooptic Activity. *Macromolecules*, **2004**, 37, 248-250	5.5	97
150	Ordered self-assembly and electronic behavior of C60-anthrylphenylacetylene hybrid. *Angewandte Chemie - International Edition*, **2004**, 43, 1512-6	16.4	25
149	Ordered Self-Assembly and Electronic Behavior of C60–Anthrylphenylacetylene Hybrid. *Angewandte Chemie*, **2004**, 116, 1538-1542	3.6	2
148	Highly Fluorinated and Crosslinkable Dendritic Polymer for Photonic Applications. *Macromolecular Rapid Communications*, **2004**, 25, 1667-1673	4.8	37
147	Replica-molded electro-optic polymer Mach–Zehnder modulator. *Applied Physics Letters*, **2004**, 85, 1662-1664	3.4	55
146	Efficient green polymer light-emitting diodes with microcavity effect in electroluminescence spectrum but constant quantum efficiency. *Journal of Applied Physics*, **2004**, 96, 3553-3555	2.5	5
145	Nanoscale Architectural Control and Macromolecular Engineering of Nonlinear Optical Dendrimers and Polymers for Electro-Optics. *Journal of Physical Chemistry B*, **2004**, 108, 8523-8530	3.4	146
144	Trends in Optical Nonlinearity and Thermal Stability in Electrooptic Chromophores Based upon the 3-(Dicyanomethylene)-2,3-dihydrobenzothiophene-1, 1-dioxide Acceptor. *Journal of Physical Chemistry B*, **2004**, 108, 8626-8630	3.4	48
143	A Novel Lattice-Hardening Process To Achieve Highly Efficient and Thermally Stable Nonlinear Optical Polymers. *Macromolecules*, **2004**, 37, 688-690	5.5	69
142	Synthesis and Optoelectronic Properties of Starlike Polyfluorenes with a Silsesquioxane Core. *Macromolecules*, **2004**, 37, 2335-2341	5.5	172
141	Highly Efficient Photocurrent Generation from a Self-Assembled Monolayer Film of a Novel C60-Tethered 2,5-Dithienylpyrrole Triad. *Chemistry of Materials*, **2004**, 16, 5058-5062	9.6	37
140	Investigation of Polymers and Marine-Derived DNA in Optoelectronics. *Journal of Physical Chemistry B*, **2004**, 108, 8584-8591	3.4	91

139	Perfluorocyclobutane-Based Polyester(arylene ether)s for Applications in Integrated Optics. *Macromolecules*, **2004**, 37, 5578-5585	5.5	30
138	Poly(fluorene- co -benzothiadiazole)s: Effect of structure, molecular weight and polydispersity on their performance in polymer light-emitting diodes **2003**, 4800, 138		
137	Development of efficient electron-transporting polymers for light-emitting diodes **2003**, 4800, 130		
136	Novel Divalent Osmium Complexes: Synthesis, Characterization, Tuning of Emission, and use in Organic Light Emitting Diodes. *Materials Research Society Symposia Proceedings*, **2003**, 771, 10341		2
135	Absorption and Luminescence Properties of Sequentially Random- and Defined Copolymers Based on Poly(fluorene-benzothiadiazole). *Materials Research Society Symposia Proceedings*, **2003**, 771, 10311		
134	Focused Microwave-assisted Synthesis of 2,5-Dihydrofuran Derivatives as Electron Acceptors for Highly Efficient Nonlinear Optical Chromophores. *Materials Research Society Symposia Proceedings*, **2003**, 771, 10481		
133	Nanostructured functional dendrimers and polymers for photonics. *Comptes Rendus Chimie*, **2003**, 6, 895-902	2.7	7
132	Focused Microwave-Assisted Synthesis of 2,5-Dihydrofuran Derivatives as Electron Acceptors for Highly Efficient Nonlinear Optical Chromophores. *Advanced Materials*, **2003**, 15, 603-607	24	124
131	Highly Efficient and Thermally Stable Electro-optic Polymer from a Smartly Controlled Crosslinking Process. *Advanced Materials*, **2003**, 15, 1635-1638	24	65
130	Electrophosphorescence from a Conjugated Copolymer Doped with an Iridium Complex: High Brightness and Improved Operational Stability. *Advanced Materials*, **2003**, 15, 45-49	24	191
129	Systematic development of high bandwidth, low drive voltage organic electro-optic devices and their applications. *Optical Materials*, **2003**, 21, 19-28	3.3	62
128	Novel fluorine-containing second-order NLO polymers with high glass transition temperature. *Optical Materials*, **2003**, 21, 61-65	3.3	7
127	Molecular biomimetics: nanotechnology through biology. *Nature Materials*, **2003**, 2, 577-85	27	1353
126	Efficient Green-Light-Emitting Diodes from Silole-Containing Copolymers. *Chemistry of Materials*, **2003**, 15, 3496-3500	9.6	121
125	Controlled Assembly of Conducting Monomers for Molecular Electronics. *Nano Letters*, **2003**, 3, 139-142	11.5	42
124	Highly Efficient Blue-Light-Emitting Diodes from Polyfluorene Containing Bipolar Pendant Groups. *Macromolecules*, **2003**, 36, 6698-6703	5.5	243
123	Novel Oxadiazole-Containing Polyfluorene with Efficient Blue Electroluminescence. *Chemistry of Materials*, **2003**, 15, 269-274	9.6	170
122	Polarization-insensitive transition between sol-gel waveguide and electrooptic polymer and intensity modulation for all-optical networks. *Journal of Lightwave Technology*, **2003**, 21, 2053-2060	4	15

121	Highly Fluorinated Trifluorovinyl Aryl Ether Monomers and Perfluorocyclobutane Aromatic Ether Polymers for Optical Waveguide Applications. *Macromolecules*, **2003**, 36, 8001-8007	5.5	67
120	A Hyperbranched Aromatic Fluoropolyester for Photonic Applications. *Macromolecules*, **2003**, 36, 4355-4359	5.5	61
119	High-performance polymer light-emitting diodes fabricated with a polymer hole injection layer. *Applied Physics Letters*, **2003**, 83, 183-185	3.4	104
118	Hybrid electro-optic polymer/sol□gel waveguide modulator fabricated by all-wet etching process. *Applied Physics Letters*, **2003**, 83, 4692-4694	3.4	20
117	Hybrid electro-optic polymer and selectively buried sol-gel waveguides. *Applied Physics Letters*, **2003**, 82, 490-492	3.4	32
116	Bright red-emitting electrophosphorescent device using osmium complex as a triplet emitter. *Applied Physics Letters*, **2003**, 83, 776-778	3.4	84
115	Hyper-Rayleigh scattering and frequency dependence of the first molecular hyperpolarizability of a strong charge-transfer chromophore. *Journal of Chemical Physics*, **2003**, 119, 6237-6244	3.9	13
114	Nanorheological approach for characterization of electroluminescent polymer thin films. *Applied Physics Letters*, **2003**, 83, 2563-2565	3.4	15
113	Efficient Two-Photon Absorbing Chromophores with Fine-Tuned □-Bridges. *Materials Research Society Symposia Proceedings*, **2002**, 725, 1		1
112	Novel europium and osmium complexes for pure red light emitting diode applications. *Macromolecular Symposia*, **2002**, 186, 171-176	0.8	6
111	A Binaphthyl□bithiophene Copolymer for Light-Emitting Devices. *Macromolecular Chemistry and Physics*, **2002**, 203, 37-40	2.6	15
110	Polymer-Based Optical Waveguides: Materials, Processing, and Devices. *Advanced Materials*, **2002**, 14, 1339-1365	24	1018
109	Design, Synthesis, and Properties of Highly Efficient Side-Chain Dendronized Nonlinear Optical Polymers for Electro-Optics. *Advanced Materials*, **2002**, 14, 1763-1768	24	117
108	Perfluorocyclobutane-Based Arylamine Hole-Transporting Materials for Organic and Polymer Light-Emitting Diodes. *Advanced Functional Materials*, **2002**, 12, 745-751	15.6	97
107	Highly Efficient and Thermally Stable Electro-Optical Dendrimers for Photonics. *Advanced Functional Materials*, **2002**, 12, 565-574	15.6	200
106	Efficient emission from a europium complex containing dendron-substituted diketone ligands. *Thin Solid Films*, **2002**, 416, 212-217	2.2	22
105	Red electrophosphorescence from osmium complexes. *Applied Physics Letters*, **2002**, 80, 713-715	3.4	65
104	Bright and efficient exciplex emission from light-emitting diodes based on hole-transporting amine derivatives and electron-transporting polyfluorenes. *Journal of Applied Physics*, **2002**, 91, 10147	2.5	25

103	Synthesis and Characterization of Novel Conjugated Light-Emitting Polymers. *Materials Research Society Symposia Proceedings*, **2002**, 725, 1		
102	Highly Efficient Fluorene- and Benzothiadiazole-Based Conjugated Copolymers for Polymer Light-Emitting Diodes. *Macromolecules*, **2002**, 35, 6094-6100	5.5	214
101	Divalent osmium complexes: synthesis, characterization, strong red phosphorescence, and electrophosphorescence. *Journal of the American Chemical Society*, **2002**, 124, 14162-72	16.4	200
100	Large electro-optic activity and low optical loss derived from a highly fluorinated dendritic nonlinear optical chromophore. *Chemical Communications*, **2002**, 888-9	5.8	96
99	Effect of Cyano Substituents on Electron Affinity and Electron-Transporting Properties of Conjugated Polymers. *Macromolecules*, **2002**, 35, 3532-3538	5.5	132
98	Red-emitting electroluminescent devices based on osmium-complexes-doped blend of poly(vinylnaphthalene) and 1,3,4-oxadiazole derivative. *Applied Physics Letters*, **2002**, 81, 3125-3127	3.4	55
97	A Novel Bipolar Electroluminescent Poly(arylene ethynylene) Consisting of Carbazole and Diethynylthiophene Units. *Macromolecular Chemistry and Physics*, **2001**, 202, 2341-2345	2.6	16
96	Dispersion of the first molecular hyperpolarizability of charge-transfer chromophores studied by hyper-Rayleigh scattering. *Chemical Physics*, **2001**, 271, 137-143	2.3	27
95	Synthesis and characterization of processible electroluminescent poly[(2,7-diethynyl-9,9-di-2-ethylhexylfluorene)- alt - co -(2,5-thienylene)]. *Synthetic Metals*, **2001**, 124, 323-327	3.6	6
94	The effect of ligand conjugation length on europium complex performance in light-emitting diodes. *Synthetic Metals*, **2001**, 125, 331-336	3.6	30
93	Synthesis and characterization of quinoline-based copolymers for light emitting diodes. *Journal of Materials Chemistry*, **2001**, 11, 1800-1804		10
92	Efficient Cyano-Containing Electron-Transporting Polymers for Light-Emitting Diodes. *Chemistry of Materials*, **2001**, 13, 3820-3822	9.6	44
91	Highly efficient and thermally stable nonlinear optical dendrimer for electrooptics. *Journal of the American Chemical Society*, **2001**, 123, 986-7	16.4	207
90	Rational Design of Organic Electro-Optic Materials. *Materials Research Society Symposia Proceedings* , **2001**, 708, 411		
89	Measurements of the first hyperpolarizabilities of thiophene-based charge-transfer chromophores with hyper-Rayleigh scattering at 1064 and 1907 nm. *Chemical Physics*, **2000**, 262, 475-487	2.3	19
88	Organic light-emitting diodes using an in situ thermally polymerized hole transporting layer. *Applied Physics Letters*, **2000**, 76, 2985-2987	3.4	38
87	Poling of soda-lime glass for hybrid glass/polymer electro-optic modulators. *Applied Physics Letters*, **2000**, 76, 1086-1088	3.4	21
86	High-performance blue light-emitting diode based on a binaphthyl-containing polyfluorene. *Applied Physics Letters*, **2000**, 76, 1813-1815	3.4	76

85	A Binaphthyl-Based Conjugated Polymer for Light-Emitting Diodes. *Chemistry of Materials*, **2000**, 12, 13-15	9.6	69
84	A Novel Class of High-Performance Perfluorocyclobutane-Containing Polymers for Second-Order Nonlinear Optics. *Chemistry of Materials*, **2000**, 12, 1187-1189	9.6	48
83	Triarylamine-Containing Poly(perfluorocyclobutane) as Hole-Transporting Material for Polymer Light-Emitting Diodes. *Macromolecules*, **2000**, 33, 3514-3517	5.5	128
82	Efficient light-emitting diodes based on a binaphthalene-containing polymer. *Applied Physics Letters*, **1999**, 75, 3745-3747	3.4	41
81	The molecular and supramolecular engineering of polymeric electro-optic materials. *Chemical Physics*, **1999**, 245, 35-50	2.3	225
80	Synthesis and Characterization of Highly Efficient, Chemically and Thermally Stable Chromophores with Chromone-Containing Electron Acceptors for NLO Applications. *Advanced Materials*, **1999**, 11, 452-455	24	66
79	Synthesis and Characterization of Nonlinear Optical Chromophores with Conformationally Locked Polyenes Possessing Enhanced Thermal Stability. *Chemistry of Materials*, **1999**, 11, 1628-1632	9.6	40
78	From molecules to opto-chips: organic electro-optic materials. *Journal of Materials Chemistry*, **1999**, 9, 1905-1920		362
77	Highly efficient, thermally and chemically stable nonlinear optical chromophores based on the perfluoroaryldicyanovinyl electron acceptors. *Chemical Communications*, **1999**, 2391-2392	5.8	22
76	Synthesis and characterization of polyquinolines for light-emitting diodes. *Journal of Materials Chemistry*, **1999**, 9, 2201-2204		27
75	Synthesis, Properties, and Application of New Luminescent Polymers with Both Hole and Electron Injection Abilities for Light-Emitting Devices. *Chemistry of Materials*, **1999**, 11, 1568-1575	9.6	79
74	A Convenient Modular Approach of Functionalizing Aromatic Polyquinolines for Electrooptic Devices. *Chemistry of Materials*, **1999**, 11, 2218-2225	9.6	44
73	Synthesis and Characterization of a Bipolar Light-Emitting Copolymer Consisting of Tetraphenyldiaminobiphenyl and Bis-Quinoline Units. *Chemistry of Materials*, **1999**, 11, 27-29	9.6	53
72	Highly Efficient, Thermally and Chemically Stable Second Order Nonlinear Optical Chromophores Containing a 2-Phenyl-tetracyanobutadienyl Acceptor. *Journal of the American Chemical Society*, **1999**, 121, 472-473	16.4	98
71	Recent development of highly efficient chromophores and polymers for electro-optic device applications **1999**, 3623, 112		12
70	Polyquinolines: Multifunctional Polymers for Electro-Optic and Light-Emitting Applications. *Materials Research Society Symposia Proceedings*, **1999**, 558, 469		
69	Design and Synthesis of Highly Efficient Nonlinear Optical Chromophores. *Materials Research Society Symposia Proceedings*, **1999**, 598, 60		
68	Poly(Binaphthalenevinylene-alt-Phenylenevinylene) Derivatives: Novel Luminescent Polymers for Light-Emitting Devices. *Materials Research Society Symposia Proceedings*, **1999**, 598, 125		

67	Realization of Polymeric Electro-Optic Modulators with Less Than One Volt Drive Voltage Requirement. *Materials Research Society Symposia Proceedings*, **1999**, 598, 378		1
66	High Performance Side-Chain Polyquinolines and Perfluorocyclobutane-Containing Thermoset Polymers for Electro-Optic Applications. *Materials Research Society Symposia Proceedings*, **1999**, 598, 399		1
65	Synthesis and Characterization of Highly Efficient, Chemically and Thermally Stable Chromophores with Chromone-Containing Electron Acceptors for NLO Applications **1999**, 11, 452		2
64	Nonlinear Optical Chromophores with Configuration-Locked Polyenes Possessing Enhanced Thermal Stability and Chemical Stability. *Chemistry of Materials*, **1998**, 10, 3284-3286	9.6	44
63	Synthesis and characterization of a novel bipolar polymer for light-emitting diodes. *Chemical Communications*, **1998**, 2747-2748	5.8	25
62	High-Performance Polyquinolines with Pendent High-Temperature Chromophores for Second-Order Nonlinear Optics. *Chemistry of Materials*, **1998**, 10, 471-473	9.6	49
61	Versatile Synthetic Approach to Nonlinear Optical Side-Chain Aromatic Polyquinolines with Large Second-Order Nonlinearity and Thermal Stability. *Macromolecules*, **1998**, 31, 4049-4052	5.5	29
60	Synthesis and Characterization of a Novel Light-Emitting Polymer Containing Highly Efficient Hole-Transporting Aromatic Diamine. *Chemistry of Materials*, **1998**, 10, 3301-3304	9.6	74
59	Recent Progress of Electro-optic Polymers for Device Applications. *Materials Research Society Symposia Proceedings*, **1997**, 488, 193		1
58	Charge transfer interactions in polymers and the fabrication of high frequency electro-optic modulators. *Macromolecular Symposia*, **1997**, 116, 135-142	0.8	1
57	Design and synthesis of chromophores and polymers for electro-optic and photorefractive applications. *Nature*, **1997**, 388, 845-851	50.4	896
56	Synthesis and characterization of highly efficient and thermally stable diphenylamino-substituted thiophene stilbene chromophores for nonlinear optical applications. *Advanced Materials*, **1997**, 9, 132-135	24	119
55	Synthesis and Relative Thermal Stabilities of Diphenylamino- vs Piperidinyl-Substituted Bithiophene Chromophores for Nonlinear Optical Materials. *Journal of Organic Chemistry*, **1996**, 61, 2242-2246	4.2	95
54	The Important Role of Heteroaromatics in the Design of Efficient Second-Order Nonlinear Optical Molecules: Theoretical Investigation on Push-Pull Heteroaromatic Stilbenes. *Journal of the American Chemical Society*, **1996**, 118, 12443-12448	16.4	255
53	Two-Step Synthesis of Side-Chain Aromatic Polyimides for Second-Order Nonlinear Optics. *Macromolecules*, **1996**, 29, 535-539	5.5	126
52	Poling Dynamics and Effects of Trapped Charge in Poled Polymer Films for Nonlinear Optical Applications. *Macromolecules*, **1996**, 29, 7064-7074	5.5	12
51	A Novel Class of Nonlinear Optical Side-Chain Polymer: Polyquinolines with Large Second-Order Nonlinearity and Thermal Stability. *Chemistry of Materials*, **1996**, 8, 607-609	9.6	45
50	Synthesis of second-order nonlinear optical chromophores with enhanced thermal stability and nonlinearity: a conformation-locked trans-polyene approach. *Chemical Communications*, **1996**, 2279	5.8	48

49	Achieving excellent tradeoffs among optical, chemical and thermal properties in second-order nonlinear optical chromophores. *Chemical Communications*, **1996**, 1237	5.8	28
48	Surface-EnhancedRaman Spectroscopic Studies of Tricyanovinylthiophene in Silver Colloid Solution. *Journal of Raman Spectroscopy*, **1996**, 27, 685-690	2.3	3
47	A new synthetic approach for nonlinear optical chromophores possessing enhanced thermal stability. *Tetrahedron Letters*, **1996**, 37, 7055-7058	2	46
46	Determination of first hyperpolarizability of nonlinear optical chromophores by second harmonic scattering using an external reference. *Journal of Chemical Physics*, **1996**, 104, 7821-7829	3.9	61
45	Experimental studies of the second-order nonlinear optical response of a novel class of tricyanovinylated thiophene compounds. *Applied Physics B: Lasers and Optics*, **1995**, 61, 191-194	1.9	8
44	The use of sodium salts as nucleation agents for polyethylene terephthalate with minimal molecular weight reduction. *Polymer Engineering and Science*, **1995**, 35, 1407-1412	2.3	11
43	Techniques of Ultrastructure Synthesis Relevant to the Fabrication of Electrooptic Modulators. *ACS Symposium Series*, **1995**, 158-171	0.4	1
42	Thermally stable poled polyquinoline thin film with very large electro-optic response. *Applied Physics Letters*, **1995**, 67, 299-301	3.4	51
41	Hyper-Rayleigh scattering studies of first order hyperpolarizability of tricyanovinylthiophene derivatives in solution. *Journal of Chemical Physics*, **1995**, 102, 6400-6405	3.9	31
40	Facile Approach to Nonlinear Optical Side-Chain Aromatic Polyimides with Large Second-Order Nonlinearity and Thermal Stability. *Journal of the American Chemical Society*, **1995**, 117, 7295-7296	16.4	126
39	Synthesis and Processing of Improved Organic Second-Order Nonlinear Optical Materials for Applications in Photonics. *Chemistry of Materials*, **1995**, 7, 1060-1081	9.6	416
38	Highly Active and Thermally Stable Ctlromophores and Polymers for Electro-Optic Applications. *Materials Research Society Symposia Proceedings*, **1995**, 392, 33		6
37	New Developments in Thermally and Chemically Stable Nonlinear Optical Chromophores for E-O Device Applications. *Materials Research Society Symposia Proceedings*, **1995**, 413, 185		2
36	Thermally stable poled polyimides using heteroaromatic chromophores. *Journal of Applied Physics*, **1994**, 75, 3308-3310	2.5	28
35	Theoretical and experimental studies of the molecular second order nonlinear optical responses of heteroaromatic compounds. *Journal of Chemical Physics*, **1994**, 100, 6818-6825	3.9	52
34	Experimental studies of the length dependence of second-order nonlinear optical responses of conjugated molecules. *Physical Review A*, **1994**, 49, 3077-3080	2.6	16
33	Rhodanine-methine as electron acceptor in second-order nonlinear optical chromophores. *Tetrahedron Letters*, **1994**, 35, 3849-3852	2	18
32	Large and Stable Nonlinear Optical Effects Observed for a Polyimide Covalently Incorporating a Nonlinear Optical Chromophore. *Chemistry of Materials*, **1994**, 6, 104-106	9.6	86

31	Thermally stable poled polymers: Highly efficient heteroaromatic chromophores in high temperature polymides. *Journal of Electronic Materials*, **1994**, 23, 653-657	1.9	10
30	Synthesis of Diarylthiobarbituric acid Chromophores with Enhanced Second-order Optical Nonlinearities and Thermal Stability. *Chemistry of Materials*, **1994**, 6, 1603-1604	9.6	75
29	Optimization of thermal stability and second-order nonlinear optical properties of thiophene derived chromophores. *Journal of the Chemical Society Chemical Communications*, **1994**, 2057		52
28	A new synthetic approach for the incorporation of highly efficient second-order nonlinear optical chromophores containing tricyanovinyl electron acceptors into methacrylate polymers. *Journal of the Chemical Society Chemical Communications*, **1994**, 369		19
27	Ketene dithioacetal as a □electron donor in second-order nonlinear optical chromophores. *Journal of the Chemical Society Chemical Communications*, **1994**, 1689-1690		71
26	Thermally stable nonlinear optical polyimides: synthesis and electro-optic properties. *Journal of the Chemical Society Chemical Communications*, **1994**, 965		29
25	Design and synthesis of thermally stable side-chain polyimides for second-order nonlinear optical applications. *Journal of the Chemical Society Chemical Communications*, **1994**, 2711		29
24	Functionalized Fused Thiophenes: A New Class of Thermally Stable and Efficient Second-Order Nonlinear Optical Chromophores. *Chemistry of Materials*, **1994**, 6, 2210-2212	9.6	45
23	Dramatically enhanced second-order nonlinear optical susceptibilities in tricyanovinylthiophene derivatives. *Journal of the Chemical Society Chemical Communications*, **1993**, 1118		122
22	Functionalized thiophenes: second-order nonlinear optical materials. *Journal of the Chemical Society Chemical Communications*, **1993**, 90		153
21	Functionalized heteroaromatics for second-order nonlinear optical applications **1993**,		9
20	Experimental and theoretical studies of heterocyclic nonlinear optical materials **1993**,		3
19	Optimization of second-order nonlinear optical properties of push-pull conjugated chromophores using heteroaromatics **1993**,		2
18	Thermally Stable Poled Polymers: Highly Efficient Heteroaromatic Chromophores in High Temperature Polyimides. *Materials Research Society Symposia Proceedings*, **1993**, 328, 413		6
17	Second-Order Nonlinear Optical Properties Of Thiophene Containing Chromophores with Extended Conjugation. *Materials Research Society Symposia Proceedings*, **1993**, 328, 485		4
16	Novel push-pull thiophenes for second order nonlinear optical applications. *Tetrahedron Letters*, **1993**, 34, 1747-1750	2	140
15	Heteroaromatics: Exceptional Materials for Second Order Nonlinear Optical Applications. *Materials Research Society Symposia Proceedings*, **1992**, 247, 59		7
14	Micro Resonators on Side-Polished Fiber - A Potential Fiber Optic Sensor Platform		1

13	Homogeneous Grain Boundary Passivation in Wide-Bandgap Perovskite Films Enables Fabrication of Monolithic Perovskite/Organic Tandem Solar Cells with over 21% Efficiency. *Advanced Functional Materials*,2112126	15.6	8
12	Near-Infrared Absorbing Nonfullerene Acceptors for Organic Solar Cells. *Solar Rrl*,2100868	7.1	1
11	Tailoring Phase Purity in the 2D/3D Perovskite Heterostructures Using Lattice Mismatch. *ACS Energy Letters*,550-559	20.1	6
10	Interfacial Engineering of Wide-Bandgap Perovskites for Efficient Perovskite/CZTSSe Tandem Solar Cells. *Advanced Functional Materials*,2107359	15.6	10
9	Multifunctional Molecular Design of a New Fulleropyrrolidine Electron Transport Material Family Engenders High Performance of Perovskite Solar Cells. *Advanced Functional Materials*,2107695	15.6	4
8	Formation of Vitrified Solid Solution Enables Simultaneously Efficient and Stable Organic Solar Cells. *ACS Energy Letters*,3522-3529	20.1	9
7	Development and Challenges of Metal Halide Perovskite Solar Modules. *Solar Rrl*,2100545	7.1	10
6	Interface Engineering for All-Inorganic CsPbIBr2 Perovskite Solar Cells with Enhanced Power Conversion Efficiency over 11%. *Energy Technology*,2100562	3.5	5
5	Unprecedented Electro-Optic Properties in Polymers and Dendrimers Enabled by Click Chemistry Based on the Diels–Alder Reactions379-398		1
4	A radically different path to high-performance Sn perovskite solar cells. *Science China Chemistry*,1	7.9	
3	Selenium: A Unique Member in the Chalcogen Family for Conjugated Materials Employed in Perovskite and Organic Solar Cells. *Solar Rrl*,	7.1	4
2	Plasmonic Local Heating Induced Strain Modulation for Enhanced Efficiency and Stability of Perovskite Solar Cells. *Advanced Energy Materials*,2200186	21.8	1
1	Non-Fullerene Acceptor Doped Block Copolymer for Efficient and Stable Organic Solar Cells. *ACS Energy Letters*,2196-2202	20.1	5