Richard Friend

List of Publications by Citations

686	118,633	159	332
papers	citations	h-index	g-index
730	128,555	13.1	8.3
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
686	Light-emitting diodes based on conjugated polymers. *Nature*, **1990**, 347, 539-541	50.4	9967
685	Electroluminescence in conjugated polymers. *Nature*, **1999**, 397, 121-128	50.4	5245
684	Two-dimensional charge transport in self-organized, high-mobility conjugated polymers. *Nature*, **1999**, 401, 685-688	50.4	3980
683	Bright light-emitting diodes based on organometal halide perovskite. *Nature Nanotechnology*, **2014** , 9, 687-92	28.7	2958
682	Efficient photodiodes from interpenetrating polymer networks. *Nature*, **1995**, 376, 498-500	50.4	2859
681	High-resolution inkjet printing of all-polymer transistor circuits. *Science*, **2000**, 290, 2123-6	33.3	2847
680	Integrated optoelectronic devices based on conjugated polymers. *Science*, **1998**, 280, 1741-4	33.3	2436
679	Self-organized discotic liquid crystals for high-efficiency organic photovoltaics. *Science*, **2001**, 293, 1119-22	33.3	2132
678	General observation of n-type field-effect behaviour in organic semiconductors. *Nature*, **2005**, 434, 194-9	50.4	2032
677	Overcoming the electroluminescence efficiency limitations of perovskite light-emitting diodes. *Science*, **2015**, 350, 1222-5	33.3	1963
676	Organic solar cells based on non-fullerene acceptors. *Nature Materials*, **2018**, 17, 119-128	27	1743
675	An improved experimental determination of external photoluminescence quantum efficiency. *Advanced Materials*, **1997**, 9, 230-232	24	1591
674	Efficient light-emitting diodes based on polymers with high electron affinities. *Nature*, **1993**, 365, 628-630	50.4	1520
673	High Photoluminescence Efficiency and Optically Pumped Lasing in Solution-Processed Mixed Halide Perovskite Semiconductors. *Journal of Physical Chemistry Letters*, **2014**, 5, 1421-6	6.4	1292
672	Perovskite light-emitting diodes based on solution-processed self-organized multiple quantum wells. *Nature Photonics*, **2016**, 10, 699-704	33.9	1206
671	Lasing from conjugated-polymer microcavities. *Nature*, **1996**, 382, 695-697	50.4	1179
670	Laminated fabrication of polymeric photovoltaic diodes. *Nature*, **1998**, 395, 257-260	50.4	1145

669	Maximizing and stabilizing luminescence from halide perovskites with potassium passivation. *Nature*, **2018**, 555, 497-501	50.4	975
668	Enhanced photovoltage for inverted planar heterojunction perovskite solar cells. *Science*, **2018**, 360, 1442-1446	33.3	915
667	The role of driving energy and delocalized States for charge separation in organic semiconductors. *Science*, **2012**, 335, 1340-4	33.3	905
666	Effect of interchain interactions on the absorption and emission of poly(3-hexylthiophene). *Physical Review B*, **2003**, 67,	3.3	767
665	Role of intermolecular coupling in the photophysics of disordered organic semiconductors: aggregate emission in regioregular polythiophene. *Physical Review Letters*, **2007**, 98, 206406	7.4	731
664	Exciton diffusion and dissociation in a poly(p-phenylenevinylene)/C60 heterojunction photovoltaic cell. *Applied Physics Letters*, **1996**, 68, 3120-3122	3.4	714
663	Mobility enhancement in conjugated polymer field-effect transistors through chain alignment in a liquid-crystalline phase. *Applied Physics Letters*, **2000**, 77, 406-408	3.4	706
662	Molecular-scale interface engineering for polymer light-emitting diodes. *Nature*, **2000**, 404, 481-4	50.4	704
661	Ultrafast long-range charge separation in organic semiconductor photovoltaic diodes. *Science*, **2014** , 343, 512-6	33.3	698
660	Ultrasmooth organic-inorganic perovskite thin-film formation and crystallization for efficient planar heterojunction solar cells. *Nature Communications*, **2015**, 6, 6142	17.4	695
659	Chemical tuning of electroluminescent copolymers to improve emission efficiencies and allow patterning. *Nature*, **1992**, 356, 47-49	50.4	673
658	Highly Efficient Perovskite Nanocrystal Light-Emitting Diodes Enabled by a Universal Crosslinking Method. *Advanced Materials*, **2016**, 28, 3528-34	24	651
657	Poly(p-phenylenevinylene) light-emitting diodes: Enhanced electroluminescent efficiency through charge carrier confinement. *Applied Physics Letters*, **1992**, 61, 2793-2795	3.4	613
656	Chemically diverse and multifunctional hybrid organic□inorganic perovskites. *Nature Reviews Materials*, **2017**, 2,	73.3	608
655	Synthesis and Optical Properties of Lead-Free Cesium Tin Halide Perovskite Nanocrystals. *Journal of the American Chemical Society*, **2016**, 138, 2941-4	16.4	587
654	New semiconductor device physics in polymer diodes and transistors. *Nature*, **1988**, 335, 137-141	50.4	586
653	Efficient light-emitting diodes based on nanocrystalline perovskite in a dielectric polymer matrix. *Nano Letters*, **2015**, 15, 2640-4	11.5	565
652	Interfacial control toward efficient and low-voltage perovskite light-emitting diodes. *Advanced Materials*, **2015**, 27, 2311-6	24	559

651	Indium tin oxide treatments for single- and double-layer polymeric light-emitting diodes: The relation between the anode physical, chemical, and morphological properties and the device performance. *Journal of Applied Physics*, **1998**, 84, 6859-6870	2.5	559
650	Heterojunction modification for highly efficient organic-inorganic perovskite solar cells. *ACS Nano*, **2014**, 8, 12701-9	16.7	546
649	Angular Dependence of the Emission from a Conjugated Polymer Light-Emitting Diode: Implications for efficiency calculations. *Advanced Materials*, **1994**, 6, 491-494	24	524
648	High-efficiency perovskite–polymer bulk heterostructure light-emitting diodes. *Nature Photonics*, **2018**, 12, 783-789	33.9	511
647	Photon recycling in lead iodide perovskite solar cells. *Science*, **2016**, 351, 1430-3	33.3	501
646	Enhanced optoelectronic quality of perovskite thin films with hypophosphorous acid for planar heterojunction solar cells. *Nature Communications*, **2015**, 6, 10030	17.4	492
645	Self-aligned, vertical-channel, polymer field-effect transistors. *Science*, **2003**, 299, 1881-4	33.3	482
644	Spatial control of the recombination zone in an ambipolar light-emitting organic transistor. *Nature Materials*, **2006**, 5, 69-74	27	480
643	Close look at charge carrier injection in polymer field-effect transistors. *Journal of Applied Physics*, **2003**, 94, 6129-6137	2.5	458
642	Built-in field electroabsorption spectroscopy of polymer light-emitting diodes incorporating a doped poly(3,4-ethylene dioxythiophene) hole injection layer. *Applied Physics Letters*, **1999**, 75, 1679-1681	3.4	451
641	Efficient Visible Quasi-2D Perovskite Light-Emitting Diodes. *Advanced Materials*, **2016**, 28, 7515-20	24	451
640	Determining exciton bandwidth and film microstructure in polythiophene films using linear absorption spectroscopy. *Applied Physics Letters*, **2009**, 94, 163306	3.4	442
639	Spin-dependent exciton formation in pi-conjugated compounds. *Nature*, **2001**, 413, 828-31	50.4	420
638	Cyclodextrin-threaded conjugated polyrotaxanes as insulated molecular wires with reduced interstrand interactions. *Nature Materials*, **2002**, 1, 160-4	27	419
637	Attaching perylene dyes to polyfluorene: three simple, efficient methods for facile color tuning of light-emitting polymers. *Journal of the American Chemical Society*, **2003**, 125, 437-43	16.4	418
636	The energy gap law for triplet states in Pt-containing conjugated polymers and monomers. *Journal of the American Chemical Society*, **2001**, 123, 9412-7	16.4	415
635	Perovskites for Next-Generation Optical Sources. *Chemical Reviews*, **2019**, 119, 7444-7477	68.1	391
634	The role of spin in the kinetic control of recombination in organic photovoltaics. *Nature*, **2013**, 500, 435-9	50.4	379

633	Electroluminescence emission pattern of organic light-emitting diodes: Implications for device efficiency calculations. *Journal of Applied Physics*, **2000**, 88, 1073-1081	2.5	379
632	Exciton regeneration at polymeric semiconductor heterojunctions. *Physical Review Letters*, **2004**, 92, 247402	7.4	375
631	Hot-carrier cooling and photoinduced refractive index changes in organic-inorganic lead halide perovskites. *Nature Communications*, **2015**, 6, 8420	17.4	373
630	Singlet exciton fission in solution. *Nature Chemistry*, **2013**, 5, 1019-24	17.6	371
629	Blue-Green Color Tunable Solution Processable Organolead Chloride-Bromide Mixed Halide Perovskites for Optoelectronic Applications. *Nano Letters*, **2015**, 15, 6095-101	11.5	369
628	Giant broadband nonlinear optical absorption response in dispersed graphene single sheets. *Nature Photonics*, **2011**, 5, 554-560	33.9	354
627	Efficiency enhancements in solid-state hybrid solar cells via reduced charge recombination and increased light capture. *Nano Letters*, **2007**, 7, 3372-6	11.5	350
626	Photovoltaic Performance and Morphology of Polyfluorene Blends: A Combined Microscopic and Photovoltaic Investigation. *Macromolecules*, **2001**, 34, 6005-6013	5.5	350
625	A transferable model for singlet-fission kinetics. *Nature Chemistry*, **2014**, 6, 492-7	17.6	349
624	Electron Trapping in Dye/Polymer Blend Photovoltaic Cells. *Advanced Materials*, **2000**, 12, 1270-1274	24	349
623	Preparation of Single-Phase Films of CH3NH3Pb(I1-xBrx)3 with Sharp Optical Band Edges. *Journal of Physical Chemistry Letters*, **2014**, 5, 2501-5	6.4	347
622	Intermolecular interactions in the molecular ferromagnetic NH4Ni(mnt)2□H2O. *Nature*, **1996**, 380, 144-146	36.4	342
621	Optical properties and limiting photocurrent of thin-film perovskite solar cells. *Energy and Environmental Science*, **2015**, 8, 602-609	35.4	335
620	Ultrafast dynamics of exciton fission in polycrystalline pentacene. *Journal of the American Chemical Society*, **2011**, 133, 11830-3	16.4	331
619	Enhancing photoluminescence yields in lead halide perovskites by photon recycling and light out-coupling. *Nature Communications*, **2016**, 7, 13941	17.4	331
618	Interchain vs. intrachain energy transfer in acceptor-capped conjugated polymers. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 10982-7	11.5	328
617	Perovskite Crystals for Tunable White Light Emission. *Chemistry of Materials*, **2015**, 27, 8066-8075	9.6	327
616	Metal halide perovskites for light-emitting diodes. *Nature Materials*, **2021**, 20, 10-21	27	322

615	Understanding Energy Loss in Organic Solar Cells: Toward a New Efficiency Regime. *Joule*, **2018**, 2, 25-35	27.8	319
614	An Organic Electronics Primer. *Physics Today*, **2005**, 58, 53-58	0.9	316
613	Harvesting Singlet and Triplet Energy in Polymer LEDs. *Advanced Materials*, **1999**, 11, 285-288	24	316
612	Efficient blue light-emitting diodes based on quantum-confined bromide perovskite nanostructures. *Nature Photonics*, **2019**, 13, 760-764	33.9	313
611	Inkjet Printed Via-Hole Interconnections and Resistors for All-Polymer Transistor Circuits. *Advanced Materials*, **2001**, 13, 1601-1605	24	312
610	Defect-Assisted Photoinduced Halide Segregation in Mixed-Halide Perovskite Thin Films. *ACS Energy Letters*, **2017**, 2, 1416-1424	20.1	307
609	Noncontact potentiometry of polymer field-effect transistors. *Applied Physics Letters*, **2002**, 80, 2913-2915	3.4	306
608	High-performance light-emitting diodes based on carbene-metal-amides. *Science*, **2017**, 356, 159-163	33.3	303
607	Ionic space-charge effects in polymer light-emitting diodes. *Physical Review B*, **1998**, 57, 12951-12963	3.3	301
606	Charge separation in localized and delocalized electronic states in polymeric semiconductors. *Nature*, **1998**, 392, 903-906	50.4	299
605	Photo-excitation in conjugated polymers. *Journal Physics D: Applied Physics*, **1987**, 20, 1367-1384	3	299
604	Dye-sensitized solar cell based on a three-dimensional photonic crystal. *Nano Letters*, **2010**, 10, 2303-9	11.5	295
603	Performance and Stability Enhancement of Dye-Sensitized and Perovskite Solar Cells by Al Doping of TiO2. *Advanced Functional Materials*, **2014**, 24, 6046-6055	15.6	294
602	Effects of packing structure on the optoelectronic and charge transport properties in poly(9,9-di-n-octylfluorene-alt-benzothiadiazole). *Journal of the American Chemical Society*, **2005**, 127, 12890-9	16.4	293
601	Understanding charge transport in lead iodide perovskite thin-film field-effect transistors. *Science Advances*, **2017**, 3, e1601935	14.3	284
600	Solution-processible conjugated electrophosphorescent polymers. *Journal of the American Chemical Society*, **2004**, 126, 7041-8	16.4	271
599	Band-like Transport in Surface-Functionalized Highly Solution-Processable Graphene Nanosheets. *Advanced Materials*, **2008**, 20, 3440-3446	24	270
598	Lithography-Free, Self-Aligned Inkjet Printing with Sub-Hundred-Nanometer Resolution. *Advanced Materials*, **2005**, 17, 997-1001	24	268

597	Efficient radical-based light-emitting diodes with doublet emission. *Nature*, **2018**, 563, 536-540	50.4	265
596	Exciton fission and charge generation via triplet excitons in pentacene/C60 bilayers. *Journal of the American Chemical Society*, **2010**, 132, 12698-703	16.4	263
595	Photoexcited states in poly(p-phenylene vinylene): Comparison with trans,trans-distyrylbenzene, a model oligomer. *Physical Review B*, **1990**, 42, 11670-11681	3.3	263
594	The photovoltaic response in poly(p-phenylene vinylene) thin-film devices. *Journal of Physics Condensed Matter*, **1994**, 6, 1379-1394	1.8	260
593	Effect of annealing on P3HT:PCBM charge transfer and nanoscale morphology probed by ultrafast spectroscopy. *Nano Letters*, **2010**, 10, 923-30	11.5	259
592	Exciton dissociation mechanisms in the polymeric semiconductors poly(9,9-dioctylfluorene) and poly(9,9-dioctylfluorene-co-benzothiadiazole). *Physical Review B*, **2001**, 63,	3.3	258
591	Comprehensive defect suppression in perovskite nanocrystals for high-efficiency light-emitting diodes. *Nature Photonics*, **2021**, 15, 148-155	33.9	257
590	Low-Temperature Solution-Grown CsPbBr3 Single Crystals and Their Characterization. *Crystal Growth and Design*, **2016**, 16, 5717-5725	3.5	256
589	Spin-cast thin semiconducting polymer interlayer for improving device efficiency of polymer light-emitting diodes. *Applied Physics Letters*, **2005**, 87, 023506	3.4	256
588	Enhanced performance in fluorene-free organometal halide perovskite light-emitting diodes using tunable, low electron affinity oxide electron injectors. *Advanced Materials*, **2015**, 27, 1414-9	24	255
587	Photodiodes Based on Polyfluorene Composites: Influence of Morphology. *Advanced Materials*, **2000**, 12, 498-502	24	255
586	All-polymer optoelectronic devices. *Science*, **1999**, 285, 233-6	33.3	255
585	Charge- and energy-transfer processes at polymer/polymer interfaces: A joint experimental and theoretical study. *Physical Review B*, **1999**, 60, 5721-5727	3.3	254
584	Minimising efficiency roll-off in high-brightness perovskite light-emitting diodes. *Nature Communications*, **2018**, 9, 608	17.4	248
583	Formation of nanopatterned polymer blends in photovoltaic devices. *Nano Letters*, **2010**, 10, 1302-7	11.5	236
582	Optical spectroscopy of field-induced charge in self-organized high mobility poly(3-hexylthiophene). *Physical Review B*, **2001**, 63,	3.3	236
581	Efficient Polythiophene/Polyfluorene Copolymer Bulk Heterojunction Photovoltaic Devices: Device Physics and Annealing Effects. *Advanced Functional Materials*, **2008**, 18, 2309-2321	15.6	235
580	Highly Efficient Light-Emitting Diodes of Colloidal Metal-Halide Perovskite Nanocrystals beyond Quantum Size. *ACS Nano*, **2017**, 11, 6586-6593	16.7	233

579	Effect of metal films on the photoluminescence and electroluminescence of conjugated polymers. *Physical Review B*, **1997**, 56, 1893-1905	3.3	233
578	Controlling Electrical Properties of Conjugated Polymers via a Solution-Based p-Type Doping. *Advanced Materials*, **2008**, 20, 3319-3324	24	232
577	Efficient single-layer polymer light-emitting diodes. *Advanced Materials*, **2010**, 22, 3194-8	24	225
576	Inkjet printing of polymer thin film transistors. *Thin Solid Films*, **2003**, 438-439, 279-287	2.2	225
575	Unequal partnership: asymmetric roles of polymeric donor and fullerene acceptor in generating free charge. *Journal of the American Chemical Society*, **2014**, 136, 2876-84	16.4	222
574	Metal Halide Perovskite Polycrystalline Films Exhibiting Properties of Single Crystals. *Joule*, **2017**, 1, 155-167	27.7	222
573	Transient electroluminescence of polymer light emitting diodes using electrical pulses. *Journal of Applied Physics*, **1999**, 86, 5116-5130	2.5	218
572	Phase Separation in Polyfluorene-Based Conjugated Polymer Blends: Lateral and Vertical Analysis of Blend Spin-Cast Thin Films. *Macromolecules*, **2004**, 37, 2861-2871	5.5	217
571	Determining exciton coherence from the photoluminescence spectral line shape in poly(3-hexylthiophene) thin films. *Journal of Chemical Physics*, **2009**, 130, 074904	3.9	216
570	Triplet energy back transfer in conjugated polymers with pendant phosphorescent iridium complexes. *Journal of the American Chemical Society*, **2006**, 128, 6647-56	16.4	214
569	Lattice strain causes non-radiative losses in halide perovskites. *Energy and Environmental Science*, **2019**, 12, 596-606	35.4	211
568	Evolution of lowest singlet and triplet excited states with number of thienyl rings in platinum poly-ynes. *Journal of Chemical Physics*, **1999**, 110, 4963-4970	3.9	211
567	Stable Light-Emitting Diodes Using Phase-Pure Ruddlesden-Popper Layered Perovskites. *Advanced Materials*, **2018**, 30, 1704217	24	210
566	Optical spectroscopy of highly ordered poly(p-phenylene vinylene). *Journal of Physics Condensed Matter*, **1993**, 5, 7155-7172	1.8	209
565	Resonant energy transfer of triplet excitons from pentacene to PbSe nanocrystals. *Nature Materials* , **2014**, 13, 1033-8	27	208
564	High-performance polymer semiconducting heterostructure devices by nitrene-mediated photocrosslinking of alkyl side chains. *Nature Materials*, **2010**, 9, 152-8	27	208
563	Dual electron donor/electron acceptor character of a conjugated polymer in efficient photovoltaic diodes. *Applied Physics Letters*, **2007**, 90, 193506	3.4	208
562	Effects of Layer Thickness and Annealing of PEDOT:PSS Layers in Organic Photodetectors. *Macromolecules*, **2009**, 42, 6741-6747	5.5	207

561	Charge Generation Kinetics and Transport Mechanisms in Blended Polyfluorene Photovoltaic Devices. *Nano Letters*, **2002**, 2, 1353-1357	11.5	205
560	Blue-phase templated fabrication of three-dimensional nanostructures for photonic applications. *Nature Materials*, **2012**, 11, 599-603	27	204
559	Optical spectroscopy of field-induced charge in poly(3-hexyl thienylene) metal-insulator-semiconductor structures: Evidence for polarons. *Physical Review Letters*, **1991**, 66, 2231-2234	7.4	203
558	The origin of the open-circuit voltage in polyfluorene-based photovoltaic devices. *Journal of Applied Physics*, **2002**, 92, 4266-4270	2.5	202
557	Influence of Nanoscale Phase Separation on the Charge Generation Dynamics and Photovoltaic Performance of Conjugated Polymer Blends: Balancing Charge Generation and Separation. *Journal of Physical Chemistry C*, **2007**, 111, 19153-19160	3.8	201
556	Harnessing singlet exciton fission to break the Shockley□Queisser limit. *Nature Reviews Materials*, **2017**, 2,	73.3	199
555	Charge recombination in organic photovoltaic devices with high open-circuit voltages. *Journal of the American Chemical Society*, **2008**, 130, 13653-8	16.4	196
554	High-stability ultrathin spin-on benzocyclobutene gate dielectric for polymer field-effect transistors. *Applied Physics Letters*, **2004**, 84, 3400-3402	3.4	195
553	Bimolecular recombination in organic photovoltaics. *Annual Review of Physical Chemistry*, **2014**, 65, 557-81	15.7	192
552	Improved operational stability of polyfluorene-based organic light-emitting diodes with plasma-treated indium□tin□oxide anodes. *Applied Physics Letters*, **1999**, 74, 3084-3086	3.4	192
551	Singlet exciton fission in polycrystalline pentacene: from photophysics toward devices. *Accounts of Chemical Research*, **2013**, 46, 1330-8	24.3	191
550	Polymer Blend Solar Cells Based on a High-Mobility Naphthalenediimide-Based Polymer Acceptor: Device Physics, Photophysics and Morphology. *Advanced Energy Materials*, **2011**, 1, 230-240	21.8	190
549	Fine-Tuning the Energy Levels of a Nonfullerene Small-Molecule Acceptor to Achieve a High Short-Circuit Current and a Power Conversion Efficiency over 12% in Organic Solar Cells. *Advanced Materials*, **2018**, 30, 1704904	24	190
548	Vertically segregated polymer-blend photovoltaic thin-film structures through surface-mediated solution processing. *Applied Physics Letters*, **2002**, 80, 1695-1697	3.4	186
547	Highly efficient luminescence from space-confined charge-transfer emitters. *Nature Materials*, **2020** , 19, 1332-1338	27	182
546	Amine-Based Passivating Materials for Enhanced Optical Properties and Performance of Organic-Inorganic Perovskites in Light-Emitting Diodes. *Journal of Physical Chemistry Letters*, **2017**, 8, 1784-1792	6.4	180
545	Singlet exciton fission-sensitized infrared quantum dot solar cells. *Nano Letters*, **2012**, 12, 1053-7	11.5	177
544	Harvesting the Full Potential of Photons with Organic Solar Cells. *Advanced Materials*, **2016**, 28, 1482-8	24	177

543	Electronic structures of interfacial states formed at polymeric semiconductor heterojunctions. *Nature Materials*, **2008**, 7, 483-9	27	175
542	Long-range exciton transport in conjugated polymer nanofibers prepared by seeded growth. *Science*, **2018**, 360, 897-900	33.3	175
541	Conjugated zwitterionic polyelectrolyte as the charge injection layer for high-performance polymer light-emitting diodes. *Journal of the American Chemical Society*, **2011**, 133, 683-5	16.4	174
540	Ligand-engineered bandgap stability in mixed-halide perovskite LEDs. *Nature*, **2021**, 591, 72-77	50.4	172
539	Impact of Monovalent Cation Halide Additives on the Structural and Optoelectronic Properties of CH3NH3PbI3 Perovskite. *Advanced Energy Materials*, **2016**, 6, 1502472	21.8	171
538	Uniaxial alignment of liquid-crystalline conjugated polymers by nanoconfinement. *Nano Letters*, **2007**, 7, 987-92	11.5	167
537	High Open-Circuit Voltages in Tin-Rich Low-Bandgap Perovskite-Based Planar Heterojunction Photovoltaics. *Advanced Materials*, **2017**, 29, 1604744	24	166
536	Singlet Intrachain Exciton Generation and Decay in Poly (p-phenylenevinylene). *Physical Review Letters*, **1996**, 77, 1881-1884	7.4	165
535	On the role of single regiodefects and polydispersity in regioregular poly(3-hexylthiophene): defect distribution, synthesis of defect-free chains, and a simple model for the determination of crystallinity. *Journal of the American Chemical Society*, **2012**, 134, 4790-805	16.4	163
534	Ultrathin Self-Assembled Layers at the ITO Interface to Control Charge Injection and Electroluminescence Efficiency in Polymer Light-Emitting Diodes. *Advanced Materials*, **1998**, 10, 769-774	24	163
533	Observation of Field-Effect Transistor Behavior at Self-Organized Interfaces. *Advanced Materials*, **2004**, 16, 1609-1615	24	163
532	Temperature-independent singlet exciton fission in tetracene. *Journal of the American Chemical Society*, **2013**, 135, 16680-8	16.4	162
531	Theoretical investigation of the lowest singlet and triplet states in poly(paraphenylene vinylene)oligomers. *Journal of Chemical Physics*, **1995**, 102, 2042-2049	3.9	161
530	On the energetic dependence of charge separation in low-band-gap polymer/fullerene blends. *Journal of the American Chemical Society*, **2012**, 134, 18189-92	16.4	160
529	Synthesis and Electronic Structure of Platinum-Containing Poly-ynes with Aromatic and Heteroaromatic Rings. *Macromolecules*, **1998**, 31, 722-727	5.5	160
528	Correlation between surface photovoltage and blend morphology in polyfluorene-based photodiodes. *Nano Letters*, **2005**, 5, 559-63	11.5	160
527	3d transition-metal intercalates of the niobium and tantalum dichalcogenides. I. Magnetic properties. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1980**, 41, 65-93		159
526	Spatial extent of the singlet and triplet excitons in transition metal-containing poly-ynes. *Journal of Chemical Physics*, **1996**, 105, 3868-3877	3.9	157

525	High Peak Brightness Polymer Light-Emitting Diodes. *Advanced Materials*, **1998**, 10, 64-68	24	156
524	Tuneable Singlet Exciton Fission and Triplet–Triplet Annihilation in an Orthogonal Pentacene Dimer. *Advanced Functional Materials*, **2015**, 25, 5452-5461	15.6	155
523	What Controls the Rate of Ultrafast Charge Transfer and Charge Separation Efficiency in Organic Photovoltaic Blends. *Journal of the American Chemical Society*, **2016**, 138, 11672-9	16.4	154
522	Fast spin-flip enables efficient and stable organic electroluminescence from charge-transfer states. *Nature Photonics*, **2020**, 14, 636-642	33.9	154
521	In situ measurement of exciton energy in hybrid singlet-fission solar cells. *Nature Communications*, **2012**, 3, 1019	17.4	153
520	Atmospheric influence upon crystallization and electronic disorder and its impact on the photophysical properties of organic-inorganic perovskite solar cells. *ACS Nano*, **2015**, 9, 2311-20	16.7	152
519	New Strategies for Defect Passivation in High-Efficiency Perovskite Solar Cells. *Advanced Energy Materials*, **2020**, 10, 1903090	21.8	152
518	Vibronically coherent ultrafast triplet-pair formation and subsequent thermally activated dissociation control efficient endothermic singlet fission. *Nature Chemistry*, **2017**, 9, 1205-1212	17.6	151
517	Identification of a triplet pair intermediate in singlet exciton fission in solution. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 7656-61	11.5	151
516	A molecular metal with ion-conducting channels. *Nature*, **1998**, 394, 159-162	50.4	150
515	Synthesis, Electrochemistry, and Spectroscopy of Blue Platinum(II) Polyynes and Diynes. *Angewandte Chemie - International Edition*, **1998**, 37, 3036-3039	16.4	150
514	Ultrathin Regioregular Poly(3-hexyl thiophene) Field-Effect Transistors. *Langmuir*, **2002**, 18, 10176-10182	4	148
513	Solvent additive control of morphology and crystallization in semiconducting polymer blends. *Advanced Materials*, **2012**, 24, 669-74	24	145
512	The singlet–triplet energy gap in organic and Pt-containing phenylene ethynylene polymers and monomers. *Journal of Chemical Physics*, **2002**, 116, 9457-9463	3.9	144
511	Self-organization of nanocrystals in polymer brushes. Application in heterojunction photovoltaic diodes. *Nano Letters*, **2005**, 5, 1653-7	11.5	139
510	Optical Signature of Delocalized Polarons in Conjugated Polymers. *Advanced Functional Materials*, **2001**, 11, 229-234	15.6	139
509	LiF/Al cathodes and the effect of LiF thickness on the device characteristics and built-in potential of polymer light-emitting diodes. *Applied Physics Letters*, **2000**, 77, 3096-3098	3.4	139
508	Size-Dependent Photon Emission from Organometal Halide Perovskite Nanocrystals Embedded in an Organic Matrix. *Journal of Physical Chemistry Letters*, **2015**, 6, 446-50	6.4	137

507	Triplet states in a series of Pt-containing ethynylenes. *Journal of Chemical Physics*, **2000**, 113, 7627-7634	3.9	137
506	The Physics of Light Emission in Halide Perovskite Devices. *Advanced Materials*, **2019**, 31, e1803336	24	137
505	Ag-nanowire films coated with ZnO nanoparticles as a transparent electrode for solar cells. *Applied Physics Letters*, **2011**, 99, 183307	3.4	136
504	Surface energy and polarity of treated indium tin oxide anodes for polymer light-emitting diodes studied by contact-angle measurements. *Journal of Applied Physics*, **1999**, 86, 2774-2778	2.5	136
503	Large electric field effect in electrolyte-gated manganites. *Physical Review Letters*, **2009**, 102, 136402	7.4	135
502	Electronic line-up in light-emitting diodes with alkali-halide/metal cathodes. *Journal of Applied Physics*, **2003**, 93, 6159-6172	2.5	135
501	High Circular Polarization of Electroluminescence Achieved via Self-Assembly of a Light-Emitting Chiral Conjugated Polymer into Multidomain Cholesteric Films. *ACS Nano*, **2017**, 11, 12713-12722	16.7	134
500	Perylene Tetracarboxydiimide as an Electron Acceptor in Organic Solar Cells: A Study of Charge Generation and Recombination. *Journal of Physical Chemistry C*, **2009**, 113, 21225-21232	3.8	134
499	Efficient electron injection in blue-emitting polymer light-emitting diodes with LiF/Ca/Al cathodes. *Applied Physics Letters*, **2001**, 79, 174-176	3.4	134
498	Ultrafast carrier thermalization in lead iodide perovskite probed with two-dimensional electronic spectroscopy. *Nature Communications*, **2017**, 8, 376	17.4	131
497	Triplet dynamics in fluorescent polymer light-emitting diodes. *Physical Review B*, **2012**, 85,	3.3	131
496	The nature of singlet exciton fission in carotenoid aggregates. *Journal of the American Chemical Society*, **2015**, 137, 5130-9	16.4	130
495	Strongly exchange-coupled triplet pairs in an organic semiconductor. *Nature Physics*, **2017**, 13, 176-181	16.2	130
494	High Efficiency Composite Metal Oxide-Polymer Electroluminescent Devices: A Morphological and Material Based Investigation. *Advanced Materials*, **2008**, 20, 3447-3452	24	129
493	Highly efficient single-layer polymer ambipolar light-emitting field-effect transistors. *Advanced Materials*, **2012**, 24, 2728-34	24	128
492	Metal-encapsulated organolead halide perovskite photocathode for solar-driven hydrogen evolution in water. *Nature Communications*, **2016**, 7, 12555	17.4	126
491	Crystallization-Induced 10-nm Structure Formation in P3HT/PCBM Blends. *Macromolecules*, **2013**, 46, 4002-4013	5.5	126
490	Near-infrared electroluminescence of polymer light-emitting diodes doped with a lissamine-sensitized Nd3+ complex. *Applied Physics Letters*, **2001**, 78, 2122-2124	3.4	126

489	Anomalous energy transfer dynamics due to torsional relaxation in a conjugated polymer. *Physical Review Letters*, **2006**, 97, 166804	7.4	125
488	Direct measurement of electric field-assisted charge separation in polymer:fullerene photovoltaic diodes. *Advanced Materials*, **2010**, 22, 3672-6	24	123
487	Periodic lattice distortions and charge density waves in one- and two-dimensional metals. *Journal of Physics C: Solid State Physics*, **1979**, 12, 1441-1477		123
486	Excitonic versus electronic couplings in molecular assemblies: The importance of non-nearest neighbor interactions. *Journal of Chemical Physics*, **2009**, 130, 044105	3.9	122
485	Morphological and electronic consequences of modifications to the polymer anode PEDOT:PSS *Polymer*, **2005**, 46, 2573-2578	3.9	122
484	Activated singlet exciton fission in a semiconducting polymer. *Journal of the American Chemical Society*, **2013**, 135, 12747-54	16.4	119
483	Mixed halide perovskites for spectrally stable and high-efficiency blue light-emitting diodes. *Nature Communications*, **2021**, 12, 361	17.4	119
482	The Binding Energy of Charge-Transfer Excitons Localized at Polymeric Semiconductor Heterojunctions. *Journal of Physical Chemistry C*, **2011**, 115, 7114-7119	3.8	117
481	Electroluminescence-detected magnetic-resonance study of polyparaphenylenevinylene (PPV)-based light-emitting diodes. *Physical Review B*, **1992**, 46, 15072-15077	3.3	117
480	Pressure Dependence of the Phase Transitions in Tetrathiafulvalene-Tetracyanoquinodimethane (TTF-TCNQ): Evidence for a Longitudinal Lockin at 20 kbar. *Physical Review Letters*, **1978**, 40, 1048-1051	7.4	117
479	Efficient Nonfullerene Organic Solar Cells with Small Driving Forces for Both Hole and Electron Transfer. *Advanced Materials*, **2018**, 30, e1804215	24	116
478	Highly efficient inverted polymer light-emitting diodes using surface modifications of ZnO layer. *Nature Communications*, **2014**, 5, 4840	17.4	115
477	Efficient Conjugated-Polymer Optoelectronic Devices Fabricated by Thin-Film Transfer-Printing Technique. *Advanced Functional Materials*, **2008**, 18, 1012-1019	15.6	115
476	The Origin of Collected Charge and Open-Circuit Voltage in Blended Polyfluorene Photovoltaic Devices. *Advanced Materials*, **2004**, 16, 1640-1645	24	115
475	Metallic photonic crystals based on solution-processible gold nanoparticles. *Nano Letters*, **2006**, 6, 651-5	11.5	114
474	Fundamental Carrier Lifetime Exceeding 1 μs in Cs2AgBiBr6 Double Perovskite. *Advanced Materials Interfaces*, **2018**, 5, 1800464	4.6	114
473	Factors Influencing Stimulated Emission from Poly(p-phenylenevinylene). *Physical Review Letters*, **1997**, 78, 733-736	7.4	113
472	Optical spectroscopy of platinum and palladium containing poly-ynes. *Journal of Chemical Physics*, **1994**, 101, 2693-2698	3.9	113

471	Spectral narrowing in optically pumped poly (p-phenylenevinylene) Films. *Advanced Materials*, **1997**, 9, 547-551	24	112
470	Perylene-Based Covalent Organic Frameworks for Acid Vapor Sensing. *Journal of the American Chemical Society*, **2019**, 141, 15693-15699	16.4	110
469	Charge-Transfer State Dynamics Following Hole and Electron Transfer in Organic Photovoltaic Devices. *Journal of Physical Chemistry Letters*, **2013**, 4, 209-15	6.4	110
468	Solution-processable singlet fission photovoltaic devices. *Nano Letters*, **2015**, 15, 354-8	11.5	109
467	Efficient Triplet Exciton Fusion in Molecularly Doped Polymer Light-Emitting Diodes. *Advanced Materials*, **2017**, 29, 1605987	24	106
466	Doping of Organic Semiconductors Using Molybdenum Trioxide: a Quantitative Time-Dependent Electrical and Spectroscopic Study. *Advanced Functional Materials*, **2011**, 21, 1432-1441	15.6	106
465	All-aromatic liquid crystal triphenylamine-based poly(azomethine)s as hole transport materials for opto-electronic applications. *Journal of Materials Chemistry*, **2010**, 20, 937-944		106
464	Surface-directed spinodal decomposition in poly[3-hexylthiophene] and C□butyric acid methyl ester blends. *ACS Nano*, **2011**, 5, 329-36	16.7	105
463	Stoichiometry dependence of the transport properties of TiS2. *Journal of Physics C: Solid State Physics*, **1981**, 14, 4067-4081		105
462	Identification of a quenching species in ruthenium tris-bipyridine electroluminescent devices. *Journal of the American Chemical Society*, **2006**, 128, 7761-4	16.4	102
461	Opportunities and Challenges in Perovskite Light-Emitting Devices. *ACS Photonics*, **2018**, 5, 3866-3875	6.3	102
460	Transfer Processes in Semiconducting Polymer-Porphyrin Blends. *Advanced Materials*, **2001**, 13, 44-47	24	101
459	Solution-processed anodes from layer-structure materials for high-efficiency polymer light-emitting diodes. *Journal of the American Chemical Society*, **2003**, 125, 5998-6007	16.4	100
458	Improving the Stability and Performance of Perovskite Light-Emitting Diodes by Thermal Annealing Treatment. *Advanced Materials*, **2016**, 28, 6906-13	24	100
457	Solvatochromic covalent organic frameworks. *Nature Communications*, **2018**, 9, 3802	17.4	100
456	Exciton migration in a polythiophene: probing the spatial and energy domain by line-dipole Forster-type energy transfer. *Journal of Chemical Physics*, **2005**, 122, 094903	3.9	99
455	Doped conducting-polymer□semiconducting-polymer interfaces: Their use in organic photovoltaic devices. *Physical Review B*, **1999**, 60, 1854-1860	3.3	99
454	Improved efficiency of light-emitting diodes based on polyfluorene blends upon insertion of a poly(p-phenylene vinylene) electron- confinement layer. *Applied Physics Letters*, **2002**, 80, 2436-2438	3.4	98

453	Synthesis and optical spectroscopy of linear long-chain di-terminal alkynes and their Pt□acetylide polymeric complexes. *Journal of Materials Chemistry*, **1994**, 4, 1227-1232		98
452	Improved photoinduced charge carriers separation in organic-inorganic hybrid photovoltaic devices. *Applied Physics Letters*, **2010**, 97, 033309	3.4	97
451	Photophysics of pentacene thin films: The role of exciton fission and heating effects. *Physical Review B*, **2011**, 84,	3.3	96
450	A novel RGB multicolor light-emitting polymer display. *Synthetic Metals*, **2000**, 111-112, 125-128	3.6	96
449	Light-induced luminescence quenching in precursor-route poly(p-phenylene vinylene). *Journal of Physics Condensed Matter*, **1989**, 1, 3671-3678	1.8	96
448	Suppression of Green Emission in a New Class of Blue-Emitting Polyfluorene Copolymers with Twisted Biphenyl Moieties. *Advanced Functional Materials*, **2005**, 15, 981-988	15.6	95
447	Efficient energy transfer in mixed columnar stacks of hydrogen-bonded oligo(p-phenylene vinylene)s in solution. *Angewandte Chemie - International Edition*, **2004**, 43, 1976-9	16.4	94
446	Efficient exciton dissociation via two-step photoexcitation in polymeric semiconductors. *Physical Review B*, **2001**, 64,	3.3	94
445	Electrical and magnetic properties of some first row transition metal intercalates of niobium disulphide. *Philosophical Magazine and Journal*, **1977**, 35, 1269-1287		94
444	Scalable Triple Cation Mixed Halide Perovskite□BiVO4 Tandems for Bias-Free Water Splitting. *Advanced Energy Materials*, **2018**, 8, 1801403	21.8	93
443	Blue-to-green electrophosphorescence of iridium-based cyclometallated materials. *Chemical Communications*, **2005**, 4708-10	5.8	93
442	Exciton-Charge Annihilation in Organic Semiconductor Films. *Advanced Functional Materials*, **2012**, 22, 1567-1577	15.6	91
441	Tunable Ultrafast Optical Switching via Waveguided Gold Nanowires. *Advanced Materials*, **2008**, 20, 4455-4459	24	91
440	Increased efficiency in vertically segregated thin-film conjugated polymer blends for light-emitting diodes. *Applied Physics Letters*, **2003**, 82, 299-301	3.4	91
439	Influence of the Molecular Weight on the Thermotropic Alignment of Thin Liquid Crystalline Polyfluorene Copolymer Films. *Macromolecules*, **2003**, 36, 2838-2844	5.5	90
438	Current heating in polymer light emitting diodes. *Applied Physics Letters*, **1998**, 73, 732-734	3.4	89
437	Growth of Nanosized Single Crystals for Efficient Perovskite Light-Emitting Diodes. *ACS Nano*, **2018**, 12, 3417-3423	16.7	88
436	A unified description of current-voltage characteristics in organic and hybrid photovoltaics under low light intensity. *Nano Letters*, **2008**, 8, 1393-8	11.5	88

435	Potassium- and Rubidium-Passivated Alloyed Perovskite Films: Optoelectronic Properties and Moisture Stability. *ACS Energy Letters*, **2018**, 3, 2671-2678	20.1	88
434	Order enables efficient electron-hole separation at an organic heterojunction with a small energy loss. *Nature Communications*, **2018**, 9, 277	17.4	87
433	Intrinsic and Extrinsic Stability of Formamidinium Lead Bromide Perovskite Solar Cells Yielding High Photovoltage. *Nano Letters*, **2016**, 16, 7155-7162	11.5	87
432	Enhancement of charge-transport characteristics in polymeric films using polymer brushes. *Nano Letters*, **2006**, 6, 573-8	11.5	87
431	Semiconductor Device Physics of Conjugated Polymers. *Solid State Physics*, **1996**, 49, 1-149	2	87
430	Inorganic solution-processed hole-injecting and electron-blocking layers in polymer light-emitting diodes. *Journal of Applied Physics*, **2002**, 92, 7556-7563	2.5	86
429	Photoinduced absorption and photoluminescence in poly(2,5-dimethoxy-p-phenylene vinylene). *Physical Review B*, **1992**, 46, 7379-7389	3.3	86
428	Photoluminescence of poly(p-phenylenevinylene)–silica nanocomposites: Evidence for dual emission by Franck–Condon analysis. *Journal of Chemical Physics*, **2001**, 115, 2709-2720	3.9	85
427	Charge extraction via graded doping of hole transport layers gives highly luminescent and stable metal halide perovskite devices. *Science Advances*, **2019**, 5, eaav2012	14.3	85
426	High-Efficiency Polycrystalline Perovskite Light-Emitting Diodes Based on Mixed Cations. *ACS Nano*, **2018**, 12, 2883-2892	16.7	84
425	Optical spectroscopy of a polyfluorene copolymer at high pressure: intra- and intermolecular interactions. *Physical Review Letters*, **2007**, 99, 167401	7.4	84
424	Morphology dependence of the triplet excited state formation and absorption in polyfluorene. *Physical Review B*, **2005**, 71,	3.3	84
423	Intermolecular Interactions of Perylene diimides in Photovoltaic Blends of Fluorene Copolymers: Disorder Effects on Photophysical Properties, Film Morphology and Device Efficiency. *Advanced Functional Materials*, **2008**, 18, 3189-3202	15.6	83
422	Facile Synthesis of Stable and Highly Luminescent Methylammonium Lead Halide Nanocrystals for Efficient Light Emitting Devices. *Journal of the American Chemical Society*, **2019**, 141, 1269-1279	16.4	83
421	Improved Open- Circuit Voltage in ZnO-PbSe Quantum Dot Solar Cells by Understanding and Reducing Losses Arising from the ZnO Conduction Band Tail. *Advanced Energy Materials*, **2014**, 4, 1301544	21.8	82
420	Stoichiometry effects in angle -resolved photoemission and transport studies of Ti1+xS2. *Journal of Physics C: Solid State Physics*, **1983**, 16, 393-402		82
419	Semiconductor to semimetal transition in TiS2at 40 kbar. *Journal of Physics C: Solid State Physics*, **1984**, 17, 2713-2734		82
418	Tunable Near-Infrared Luminescence in Tin Halide Perovskite Devices. *Journal of Physical Chemistry Letters*, **2016**, 7, 2653-8	6.4	81

417	Low-temperature control of nanoscale morphology for high performance polymer photovoltaics. *Nano Letters*, **2008**, 8, 3942-7	11.5	81
416	Semimetallic character of TiSe2and semiconductor character of TiS2under pressure. *Journal of Physics C: Solid State Physics*, **1977**, 10, L705-L708		81
415	Identifying and Reducing Interfacial Losses to Enhance Color-Pure Electroluminescence in Blue-Emitting Perovskite Nanoplatelet Light-Emitting Diodes. *ACS Energy Letters*, **2019**, 4, 1181-1188	20.1	80
414	High stability and luminescence efficiency in donor-acceptor neutral radicals not following the Aufbau principle. *Nature Materials*, **2019**, 18, 977-984	27	80
413	Mechanically tunable conjugated polymer distributed feedback lasers. *Applied Physics Letters*, **2010**, 97, 193303	3.4	80
412	Efficient ZnO Nanowire Solid-State Dye-Sensitized Solar Cells Using Organic Dyes and Core□hell Nanostructures. *Journal of Physical Chemistry C*, **2009**, 113, 18515-18522	3.8	80
411	Surface conditioning of indium-tin oxide anodes for organic light-emitting diodes. *Thin Solid Films*, **2003**, 445, 358-366	2.2	80
410	Photophysical properties of solid films of fullerene, C60. *Journal of Physics Condensed Matter*, **1991**, 3, 9259-9270	1.8	79
409	Visualizing excitations at buried heterojunctions in organic semiconductor blends. *Nature Materials*, **2017**, 16, 551-557	27	78
408	Control of morphology in efficient photovoltaic diodes from discotic liquid crystals. *Journal of Chemical Physics*, **2006**, 124, 174704	3.9	78
407	Supramolecular Complexes of Conjugated Polyelectrolytes with Poly(ethylene oxide): Multifunctional Luminescent Semiconductors Exhibiting Electronic and Ionic Transport. *Advanced Materials*, **2005**, 17, 2659-2663	24	78
406	3d transition-metal intercalates of the niobium and tantalum dichalcogenides. II. Transport properties. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1980**, 41, 95-112		78
405	Excitation migration along oligophenylenevinylene-based chiral stacks: delocalization effects on transport dynamics. *Journal of Physical Chemistry B*, **2005**, 109, 10594-604	3.4	77
404	Quantitative bimolecular recombination in organic photovoltaics through triplet exciton formation. *Journal of the American Chemical Society*, **2014**, 136, 3424-9	16.4	76
403	Formation of Well-Ordered Heterojunctions in Polymer:PCBM Photovoltaic Devices. *Advanced Functional Materials*, **2011**, 21, 139-146	15.6	76
402	Subnanosecond geminate charge recombination in polymer-polymer photovoltaic devices. *Physical Review Letters*, **2010**, 104, 177701	7.4	76
401	Emission enhancement in single-layer conjugated polymer microcavities. *Journal of Applied Physics*, **1996**, 80, 207-215	2.5	76
400	Impact of a Mesoporous Titania-Perovskite Interface on the Performance of Hybrid Organic-Inorganic Perovskite Solar Cells. *Journal of Physical Chemistry Letters*, **2016**, 7, 3264-9	6.4	75

399	A microscopic view of charge transport in polymer transistors. *Synthetic Metals*, **2004**, 146, 297-309	3.6	75
398	Improved Performance of Perylene-Based Photovoltaic Cells Using Polyisocyanopeptide Arrays. *Macromolecules*, **2009**, 42, 2023-2030	5.5	74
397	Ion-induced formation of charge-transfer states in conjugated polyelectrolytes. *Journal of the American Chemical Society*, **2009**, 131, 8913-21	16.4	74
396	Solution-Processed Zinc Oxide as High-Performance Air-Stable Electron Injector in Organic Ambipolar Light-Emitting Field-Effect Transistors. *Advanced Functional Materials*, **2010**, 20, 3457-3465	15.6	74
395	The Dependence of Device Dark Current on the Active-Layer Morphology of Solution-Processed Organic Photodetectors. *Advanced Functional Materials*, **2010**, 20, 3895-3903	15.6	74
394	Charge transport polymers for light emitting diodes*. *Advanced Materials*, **1995**, 7, 898-900	24	74
393	A general approach for hysteresis-free, operationally stable metal halide perovskite field-effect transistors. *Science Advances*, **2020**, 6, eaaz4948	14.3	73
392	Quantum efficiency of ambipolar light-emitting polymer field-effect transistors. *Journal of Applied Physics*, **2008**, 103, 064517	2.5	73
391	Dedoping of Lead Halide Perovskites Incorporating Monovalent Cations. *ACS Nano*, **2018**, 12, 7301-7311	16.7	73
390	High-performance electron-transporting polymers derived from a heteroaryl bis(trifluoroborate). *Journal of the American Chemical Society*, **2011**, 133, 9949-51	16.4	72
389	Optoelectronic and charge transport properties at organic-organic semiconductor interfaces: comparison between polyfluorene-based polymer blend and copolymer. *Journal of the American Chemical Society*, **2008**, 130, 13120-31	16.4	72
388	Structural characterisation of a series of acetylide-functionalised oligopyridines and the synthesis, characterisation and optical spectroscopy of platinum di-ynes and poly-ynes containing oligopyridyl linker groups in the backbone. *Dalton Transactions RSC*, **2002**, 1358-1368		72
387	Correlation between conjugation length and non-radiative relaxation rate in poly(p-phenylene vinylene): a picosecond photoluminescence study. *Journal of Physics C: Solid State Physics*, **1987**, 20, L187-L194		72
386	Synthesis and Exciton Dynamics of Donor-Orthogonal Acceptor Conjugated Polymers: Reducing the Singlet-Triplet Energy Gap. *Journal of the American Chemical Society*, **2017**, 139, 11073-11080	16.4	71
385	The role of photon recycling in perovskite light-emitting diodes. *Nature Communications*, **2020**, 11, 611	17.4	71
384	Barium Hydroxide as an Interlayer Between Zinc Oxide and a Luminescent Conjugated Polymer for Light-Emitting Diodes. *Advanced Functional Materials*, **2012**, 22, 4165-4171	15.6	71
383	Site-selective fluorescence studies of poly(p-phenylene vinylene) and its derivatives. *Physical Review B*, **1996**, 53, 15815-15822	3.3	71
382	Efficient Ruddlesden–Popper Perovskite Light-Emitting Diodes with Randomly Oriented Nanocrystals. *Advanced Functional Materials*, **2019**, 29, 1901225	15.6	70

381	Temperature- and voltage-induced ligand rearrangement of a dynamic electroluminescent metallopolymer. *Angewandte Chemie - International Edition*, **2014**, 53, 8388-91	16.4	70
380	Optical excitations in poly(2,5-thienylene vinylene). *Physical Review B*, **1990**, 41, 10586-10594	3.3	70
379	Electronic Transport Properties of Ensembles of Perylene-Substituted Poly-isocyanopeptide Arrays. *Advanced Functional Materials*, **2008**, 18, 3947-3955	15.6	68
378	The role of bulk and interfacial morphology in charge generation, recombination, and extraction in non-fullerene acceptor organic solar cells. *Energy and Environmental Science*, **2020**, 13, 3679-3692	35.4	68
377	In situ simultaneous photovoltaic and structural evolution of perovskite solar cells during film formation. *Energy and Environmental Science*, **2018**, 11, 383-393	35.4	67
376	High internal quantum efficiency in fullerene solar cells based on crosslinked polymer donor networks. *Nature Communications*, **2012**, 3, 1321	17.4	67
375	Efficient light-emitting diodes from mixed-dimensional perovskites on a fluoride interface. *Nature Electronics*, **2020**, 3, 704-710	28.4	67
374	Fast exciton diffusion in chiral stacks of conjugated p-phenylene vinylene oligomers. *Physical Review B*, **2003**, 68,	3.3	66
373	Charge-Carrier Balance and Color Purity in Polyfluorene Polymer Blends for Blue Light-Emitting Diodes. *Advanced Functional Materials*, **2012**, 22, 144-150	15.6	65
372	Light-Emitting Diodes Based on Conjugated Polymers: Control of Colour and Efficiency. *Materials Research Society Symposia Proceedings*, **1992**, 247, 647		65
371	Limits for Recombination in a Low Energy Loss Organic Heterojunction. *ACS Nano*, **2016**, 10, 10736-10744	16.7	64
370	Comparison of the performance of photonic band-edge liquid crystal lasers using different dyes as the gain medium. *Journal of Applied Physics*, **2010**, 107, 043101	2.5	64
369	Charge recombination and exciton annihilation reactions in conjugated polymer blends. *Journal of the American Chemical Society*, **2010**, 132, 328-35	16.4	63
368	Efficient blue LEDs from a partially conjugated Si-containing PPV copolymer in a double-layer configuration. *Advanced Materials*, **1997**, 9, 127-131	24	63
367	Influence of copolymer interface orientation on the optical emission of polymeric semiconductor heterojunctions. *Physical Review Letters*, **2006**, 96, 117403	7.4	63
366	De-mixing of Polyfluorene-Based Blends by Contact with Acetone: Electro- and Photo-luminescence Probes. *Advanced Materials*, **2001**, 13, 810-814	24	63
365	Efficient green electroluminescent diodes based on poly (2-dimethyloctylsilyl-1,4-phenylenevinylene). *Advanced Materials*, **1996**, 8, 979-982	24	63
364	Photoexcited states in poly(3-alkyl thienylenes). *Journal of Physics Condensed Matter*, **1990**, 2, 5465-5477	1.8	63

363	Synthesis and optical spectroscopy of platinum-metal-containing di- and tri-acetylenic polymers. *Journal of Materials Chemistry*, **1991**, 1, 485		63
362	"Helter-skelter-like" perylene polyisocyanopeptides. *Chemistry - A European Journal*, **2009**, 15, 2536-47	4.8	62
361	Control of Interface Defects for Efficient and Stable Quasi-2D Perovskite Light-Emitting Diodes Using Nickel Oxide Hole Injection Layer. *Advanced Science*, **2018**, 5, 1801350	13.6	62
360	A Silicon-Singlet Fission Tandem Solar Cell Exceeding 100% External Quantum Efficiency with High Spectral Stability. *ACS Energy Letters*, **2017**, 2, 476-480	20.1	61
359	Optically Switchable Smart Windows with Integrated Photovoltaic Devices. *Advanced Energy Materials*, **2015**, 5, 1401347	21.8	61
358	Electric field distribution in polymer light-emitting electrochemical cells. *Physical Review Letters*, **2000**, 85, 421-4	7.4	61
357	Photoexcitation in Durham-route polyacetylene: Self-localization and charge transport. *Physical Review B*, **1989**, 40, 3112-3120	3.3	61
356	Improved performance of perovskite light-emitting diodes using a PEDOT:PSS and MoO3 composite layer. *Journal of Materials Chemistry C*, **2016**, 4, 8161-8165	7.1	61
355	All-solution based device engineering of multilayer polymeric photodiodes: Minimizing dark current. *Applied Physics Letters*, **2009**, 94, 173303	3.4	60
354	Photodoping through local charge carrier accumulation in alloyed hybrid perovskites for highly efficient luminescence. *Nature Photonics*, **2020**, 14, 123-128	33.9	60
353	Ultrafast Long-Range Charge Separation in Nonfullerene Organic Solar Cells. *ACS Nano*, **2017**, 11, 12473-12481	16.7	59
352	Synthesis and photophysics of fully □conjugated heterobis-functionalized polymeric molecular wires via Suzuki chain-growth polymerization. *Journal of the American Chemical Society*, **2012**, 134, 17769-77	16.4	59
351	Aqueous self-assembly of an electroluminescent double-helical metallopolymer. *Journal of the American Chemical Society*, **2012**, 134, 19170-8	16.4	59
350	Direct observation of photoinduced bound charge-pair states at an organic-inorganic semiconductor interface. *Physical Review Letters*, **2012**, 108, 246605	7.4	59
349	Electrical degradation of triarylamine-based light-emitting polymer diodes monitored by micro-Raman spectroscopy. *Chemical Physics Letters*, **2004**, 386, 2-7	2.5	59
348	The magnetic susceptibility and EPR of the organic conductors □(BEDT-TTF)2X, X=AuBr2, CuCl2and Ag(CN)2. *Journal of Physics Condensed Matter*, **1989**, 1, 5671-5680	1.8	59
347	Triplet energy transfer in conjugated polymers. I. Experimental investigation of a weakly disordered compound. *Physical Review B*, **2008**, 78,	3.3	58
346	X-ray stability and response of polymeric photodiodes for imaging applications. *Applied Physics Letters*, **2008**, 92, 023304	3.4	58

345	Electrical resistivity anomaly in MoTe2(metallic behaviour). *Journal of Physics C: Solid State Physics*, **1978**, 11, L103-L105		58
344	Understanding the luminescent nature of organic radicals for efficient doublet emitters and pure-red light-emitting diodes. *Nature Materials*, **2020**, 19, 1224-1229	27	57
343	Nanosecond intersystem crossing times in fullerene acceptors: implications for organic photovoltaic diodes. *Advanced Materials*, **2014**, 26, 4851-4	24	57
342	Triplet dynamics in pentacene crystals: applications to fission-sensitized photovoltaics. *Advanced Materials*, **2014**, 26, 919-24	24	56
341	Excited-State Dynamics in Fully Conjugated 2D Covalent Organic Frameworks. *Journal of the American Chemical Society*, **2019**, 141, 11565-11571	16.4	55
340	Electroluminescence from Organometallic Lead Halide Perovskite-Conjugated Polymer Diodes. *Advanced Electronic Materials*, **2015**, 1, 1500008	6.4	55
339	Exploiting Excited-State Aromaticity To Design Highly Stable Singlet Fission Materials. *Journal of the American Chemical Society*, **2019**, 141, 13867-13876	16.4	55
338	Improved Exciton Dissociation at Semiconducting Polymer:ZnO Donor:Acceptor Interfaces via Nitrogen Doping of ZnO. *Advanced Functional Materials*, **2014**, 24, 3562-3570	15.6	55
337	Triplet diffusion in singlet exciton fission sensitized pentacene solar cells. *Applied Physics Letters*, **2013**, 103, 153302	3.4	55
336	Probing the morphology and energy landscape of blends of conjugated polymers with sub-10 nm resolution. *Physical Review Letters*, **2008**, 101, 016102	7.4	55
335	Collective osmotic shock in ordered materials. *Nature Materials*, **2011**, 11, 53-7	27	54
334	Suppressing recombination in polymer photovoltaic devices via energy-level cascades. *Advanced Materials*, **2013**, 25, 4131-8	24	54
333	Exciton trapping at heterojunctions in polymer blends. *Journal of Chemical Physics*, **2005**, 122, 244906	3.9	53
332	The pressure dependence of the transport properties of YBa2Cu3O7- *Journal of Physics C: Solid State Physics*, **1988**, 21, L345-L352		53
331	The Path to 20% Power Conversion Efficiencies in Nonfullerene Acceptor Organic Solar Cells. *Advanced Energy Materials*, **2021**, 11, 2003441	21.8	53
330	Perovskite-molecule composite thin films for efficient and stable light-emitting diodes. *Nature Communications*, **2020**, 11, 891	17.4	52
329	Proton-transfer-induced 3D/2D hybrid perovskites suppress ion migration and reduce luminance overshoot. *Nature Communications*, **2020**, 11, 3378	17.4	51
328	Thin-film ZnO/Cu2O solar cells incorporating an organic buffer layer. *Solar Energy Materials and Solar Cells*, **2012**, 96, 148-154	6.4	51

327	Endothermic exciplex–exciton energy-transfer in a blue-emitting polymeric heterojunction system. *Chemical Physics Letters*, **2004**, 391, 81-84	2.5	51
326	Formation of the accumulation layer in polymer field-effect transistors. *Applied Physics Letters*, **2003**, 82, 1482-1484	3.4	51
325	Long-Range Charge Extraction in Back-Contact Perovskite Architectures via Suppressed Recombination. *Joule*, **2019**, 3, 1301-1313	27.8	50
324	First Principles Calculations of Charge Transfer Excitations in Polymer–Fullerene Complexes: Influence of Excess Energy. *Advanced Functional Materials*, **2015**, 25, 1972-1984	15.6	50
323	Optically-Pumped Lasing in Hybrid Organic–Inorganic Light-Emitting Diodes. *Advanced Functional Materials*, **2009**, 19, 2130-2136	15.6	50
322	The relationship between nanoscale architecture and charge transport in conjugated nanocrystals bridged by multichromophoric Polymers. *Journal of the American Chemical Society*, **2009**, 131, 7055-63	16.4	50
321	Controlled Phase Separation of Polyfluorene Blends via Inkjet Printing. *Macromolecules*, **2005**, 38, 6466-6471	5.5	50
320	Efficient light harvesting in a photovoltaic diode composed of a semiconductor conjugated copolymer blend. *Applied Physics Letters*, **2002**, 80, 2204-2206	3.4	50
319	Förster energy transfer and control of the luminescence in blends of an orange-emitting poly(p-phenylenevinylene) and a red-emitting tetraphenylporphyrin. *Journal of Materials Chemistry*, **2001**, 11, 278-283		49
318	Light-emitting devices based on a poly(p-phenylene vinylene) derivative with ion-coordinating side groups. *Journal of Applied Physics*, **1999**, 86, 6392-6395	2.5	49
317	Interfacial disorder in efficient polymer solar cells: the impact of donor molecular structure and solvent additives. *Journal of Materials Chemistry A*, **2017**, 5, 24749-24757	13	48
316	Synthesis and characterisation of new acetylide-functionalised aromatic and hetero-aromatic ligands and their dinuclear platinum complexes. *Dalton Transactions*, **2003**, 65-73	4.3	48
315	Organic Thin Film Photovoltaic Devices from Discotic Materials. *Molecular Crystals and Liquid Crystals*, **2003**, 396, 73-90	0.5	48
314	The role of charge recombination to triplet excitons in organic solar cells. *Nature*, **2021**, 597, 666-671	50.4	48
313	Enhancing Phase Separation and Photovoltaic Performance of All-Conjugated Donor–Acceptor Block Copolymers with Semifluorinated Alkyl Side Chains. *Macromolecules*, **2015**, 48, 7851-7860	5.5	47
312	Local Versus Long-Range Diffusion Effects of Photoexcited States on Radiative Recombination in Organic-Inorganic Lead Halide Perovskites. *Advanced Science*, **2015**, 2, 1500136	13.6	47
311	Increased T(c) in electrolyte-gated cuprates. *Advanced Materials*, **2010**, 22, 2529-33	24	47
310	Synthesis and optical characterisation of platinum(II) poly-yne polymers incorporating substituted 1,4-diethynylbenzene derivatives and an investigation of the intermolecular interactions in the diethynylbenzene molecular precursors. *New Journal of Chemistry*, **2003**, 27, 140-149	3.6	47

309	Vibrationally Assisted Intersystem Crossing in Benchmark Thermally Activated Delayed Fluorescence Molecules. *Journal of Physical Chemistry Letters*, **2018**, 9, 4053-4058	6.4	47
308	Unifying Charge Generation, Recombination, and Extraction in Low-Offset Non-Fullerene Acceptor Organic Solar Cells. *Advanced Energy Materials*, **2020**, 10, 2001203	21.8	46
307	Control of intrachain charge transfer in model systems for block copolymer photovoltaic materials. *Journal of the American Chemical Society*, **2013**, 135, 5074-83	16.4	46
306	Donor□cceptor interface modification by zwitterionic conjugated polyelectrolytes in polymer photovoltaics. *Energy and Environmental Science*, **2013**, 6, 1589	35.4	46
305	Enhanced photoresponse in solid-state excitonic solar cells via resonant energy transfer and cascaded charge transfer from a secondary absorber. *Nano Letters*, **2010**, 10, 4981-8	11.5	46
304	Control of Rapid Formation of Interchain Excited States in Sugar-Threaded Supramolecular Wires. *Advanced Materials*, **2008**, 20, 3218-3223	24	46
303	Critical Assessment of the Use of Excess Lead Iodide in Lead Halide Perovskite Solar Cells. *Journal of Physical Chemistry Letters*, **2020**, 11, 6505-6512	6.4	46
302	Unraveling Mechanisms of Chiral Induction in Double-Helical Metallopolymers. *Journal of the American Chemical Society*, **2018**, 140, 10344-10353	16.4	45
301	Regioisomer effects of [70]fullerene mono-adduct acceptors in bulk heterojunction polymer solar cells. *Chemical Science*, **2017**, 8, 181-188	9.4	45
300	Hybrid pentacene/a-silicon solar cells utilizing multiple carrier generation via singlet exciton fission. *Applied Physics Letters*, **2012**, 101, 153507	3.4	45
299	Influence of the Casting Solvent on the Thermotropic Alignment of Thin Liquid Crystalline Polyfluorene Copolymer Films. *Macromolecules*, **2004**, 37, 6079-6085	5.5	45
298	Conjugated Polymer Light-emitting Diodes **1993**, 87-106		45
297	Circularly Polarized Photoluminescence from Chiral Perovskite Thin Films at Room Temperature. *ACS Nano*, **2020**, 14, 7610-7616	16.7	44
296	Excitation Energy Delocalization and Transfer to Guests within ML Cage Frameworks. *Journal of the American Chemical Society*, **2017**, 139, 12050-12059	16.4	44
295	Self-Organized Photonic Structures in Polymer Light-Emitting Diodes. *Advanced Materials*, **2004**, 16, 1908-1912	24	44
294	Effects of aggregation on the excitation transfer in perylene-end-capped polyindenofluorene studied by time-resolved photoluminescence spectroscopy. *Physical Review B*, **2001**, 64,	3.3	44
293	Synthesis, characterisation and electronic properties of a series of platinum(II) poly-ynes containing novel thienyl-pyridine linker groups. *Dalton Transactions RSC*, **2002**, 2441-2448		44
292	Deciphering exciton-generation processes in quantum-dot electroluminescence. *Nature Communications*, **2020**, 11, 2309	17.4	42

291	High-mobility conjugated polymer field-effect transistors **1999**, 101-110		42
290	Localized phonons associated with solitons in polyacetylene: Coupling to the nonuniform mode. *Physical Review B*, **1987**, 36, 7537-7541	3.3	42
289	Amplified Spontaneous Emission of Poly(ladder-type phenylene)s The Influence of Photophysical Properties on ASE Thresholds. *Advanced Functional Materials*, **2008**, 18, 3265-3275	15.6	41
288	Device Performance of Small-Molecule Azomethine-Based Bulk Heterojunction Solar Cells. *Chemistry of Materials*, **2015**, 27, 2990-2997	9.6	40
287	Anisotropic optical properties in electroluminescent conjugated polymers based on grazing angle photoluminescence measurements. *Journal of Chemical Physics*, **2006**, 124, 184706	3.9	40
286	Effect of temperature and chain length on the bimodal emission properties of single polyfluorene copolymer molecules. *Journal of Physical Chemistry B*, **2006**, 110, 18898-903	3.4	40
285	Photovoltaic Performance and Morphology of Polyfluorene Blends:The Influence of Phase Separation Evolution. *Macromolecules*, **2006**, 39, 5393-5399	5.5	40
284	Efficient green light-emitting diodes from a phenylated derivative of poly(p-phenylenevinylene). *Applied Physics Letters*, **1996**, 69, 3794-3796	3.4	40
283	Structural and electronic properties of Cs(Pd(dmit)2)2. *Journal of Physics Condensed Matter*, **1991**, 3, 933-954	1.8	40
282	Degradation Kinetics of Inverted Perovskite Solar Cells. *Scientific Reports*, **2018**, 8, 5977	4.9	39
281	A Highly Emissive Surface Layer in Mixed-Halide Multication Perovskites. *Advanced Materials*, **2019**, 31, e1902374	24	39
280	Surface-Directed Phase Separation of Conjugated Polymer Blends for Efficient Light-Emitting Diodes. *Advanced Functional Materials*, **2008**, 18, 2897-2904	15.6	39
279	Analysis of the turn-off dynamics in polymer light-emitting diodes. *Applied Physics Letters*, **2000**, 76, 1137-1139	3.4	39
278	On the Effect of Prevalent Carbazole Homocoupling Defects on the Photovoltaic Performance of PCDTBT:PC71BM Solar Cells. *Advanced Energy Materials*, **2016**, 6, 1601232	21.8	39
277	Long-lived and disorder-free charge transfer states enable endothermic charge separation in efficient non-fullerene organic solar cells. *Nature Communications*, **2020**, 11, 5617	17.4	38
276	Stable Hexylphosphonate-Capped Blue-Emitting Quantum-Confined CsPbBr Nanoplatelets. *ACS Energy Letters*, **2020**, 5, 1900-1907	20.1	38
275	Correlation of Heterojunction Luminescence Quenching and Photocurrent in Polymer-Blend Photovoltaic Diodes. *Advanced Materials*, **2009**, 21, 3924-3927	24	38
274	Conjugated Polyelectrolytes as Efficient Hole Transport Layers in Perovskite Light-Emitting Diodes. *ACS Nano*, **2018**, 12, 5826-5833	16.7	38

273	Triple-Cation-Based Perovskite Photocathodes with AZO Protective Layer for Hydrogen Production Applications. *ACS Applied Materials & Interfaces*, **2019**, 11, 23198-23206	9.5	37
272	Time-evolution of poly(3-hexylthiophene) as an energy relay dye in dye-sensitized solar cells. *Nano Letters*, **2012**, 12, 634-9	11.5	37
271	Phase-separated thin film structures for efficient polymer blend light-emitting diodes. *Nano Letters* , **2010**, 10, 385-92	11.5	37
270	Exciton and polaron dynamics in a step-ladder polymeric semiconductor: the influence of interchain order. *Journal of Physics Condensed Matter*, **2002**, 14, 9803-9824	1.8	37
269	Electronic and electrical transport properties of conjugated polymer nanocomposites: Poly(p-phenylenevinylene) with homogeneously dispersed silica nanoparticles. *Journal of Chemical Physics*, **2002**, 116, 6782-6794	3.9	37
268	Compatibilization of All-Conjugated Polymer Blends for Organic Photovoltaics. *ACS Nano*, **2016**, 10, 8087-96	13.9	37
267	Improved Performance of ZnO/Polymer Hybrid Photovoltaic Devices by Combining Metal Oxide Doping and Interfacial Modification. *Journal of Physical Chemistry C*, **2014**, 118, 18945-18950	3.8	36
266	Measurement of thermal modulation of optical absorption in pump-probe spectroscopy of semiconducting polymers. *Applied Physics Letters*, **2011**, 98, 223304	3.4	36
265	Improved electron injection in poly(9,9?-dioctylfluorene)- co-benzothiodiazole via cesium carbonate by means of coannealing. *Applied Physics Letters*, **2011**, 98, 113306	3.4	36
264	Infra-red studies of TiSe2: IR phonons and free carriers. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1979**, 39, 133-146		36
263	Efficient non-fullerene organic solar cells employing sequentially deposited donor–acceptor layers. *Journal of Materials Chemistry A*, **2018**, 6, 18225-18233	13	36
262	Structure formation in P3HT/F8TBT blends. *Energy and Environmental Science*, **2014**, 7, 1725-1736	35.4	35
261	Excitons and charges at organic semiconductor heterojunctions. *Faraday Discussions*, **2012**, 155, 339-48; discussion 349-56	3.6	35
260	Tunable charge transport using supramolecular self-assembly of nanostructured crystalline block copolymers. *ACS Nano*, **2011**, 5, 3506-15	16.7	35
259	Influence of Side Chains on Geminate and Bimolecular Recombination in Organic Solar Cells. *Journal of Physical Chemistry C*, **2011**, 115, 25046-25055	3.8	35
258	Investigation into the Phosphorescence of a Series of Regioisomeric Iridium(III) Complexes. *Organometallics*, **2008**, 27, 2980-2989	3.8	35
257	In situ identification of a luminescence quencher in an organic light-emitting device. *Journal of Materials Chemistry*, **2007**, 17, 76-81		35
256	Trap-assisted hole injection and quantum efficiency enhancement in poly(9,9? dioctylfluorene-alt-benzothiadiazole) polymer light-emitting diodes. *Journal of Applied Physics*, **2004**, 96, 7643-7649	2.5	35

255	Morphological dependence of charge generation and transport in blended polyfluorene photovoltaic devices. *Thin Solid Films*, **2004**, 451-452, 567-571	2.2	35
254	High-pressure transport measurements of -BEDT-TTF salts. *Journal of Physics Condensed Matter*, **1989**, 1, 5681-5688	1.8	35
253	Mechanism for photogeneration of metastable charged solitons in polyacetylene. *Physical Review B* , **1988**, 38, 3960-3965	3.3	35
252	Increase in chain conjugation length in highly oriented Durham-route polyacetylene. *Journal of Physics C: Solid State Physics*, **1985**, 18, L283-L289		35
251	Electrical conductivity and charge density wave formation in 4HbTaS2under pressure. *Journal of Physics C: Solid State Physics*, **1977**, 10, 1013-1025		35
250	Interface-Dependent Radiative and Nonradiative Recombination in Perovskite Solar Cells. *Journal of Physical Chemistry C*, **2018**, 122, 10691-10698	3.8	34
249	Electron spin resonance and electron nuclear double resonance of photogenerated polarons in polyfluorene and its fullerene composite. *Physical Review B*, **2009**, 79,	3.3	34
248	Electric field-induced transition from heterojunction to bulk charge recombination in bilayer polymer light-emitting diodes. *Applied Physics Letters*, **2005**, 86, 163501	3.4	34
247	Luminescence properties of poly(p-phenylenevinylene): Role of the conversion temperature on the photoluminescence and electroluminescence efficiencies. *Journal of Applied Physics*, **1999**, 85, 1784-1791	2.5	34
246	Synthesis and material and electronic properties of conjugated polymers. *Journal of Materials Science*, **1990**, 25, 3796-3805	4.3	34
245	High-pressure transport properties of TiS2and TiSe2. *Journal of Physics C: Solid State Physics*, **1982**, 15, 2183-2192		34
244	A new low-dimensional metal, Cs[Pd(SC(CN))]0.5 HO. *Nature*, **1986**, 324, 547-549	50.4	33
243	Interface limited charge extraction and recombination in organic photovoltaics. *Energy and Environmental Science*, **2014**, 7, 2227	35.4	32
242	In-Situ Switching from Barrier-Limited to Ohmic Anodes for Efficient Organic Optoelectronics. *Advanced Functional Materials*, **2014**, 24, 3051-3058	15.6	32
241	Charge-transfer character of excitons in poly[2,7-(9,9-di-n-octylfluorene)(1-x)-co-4,7-(2,1,3-benzothiadiazole)(x)]. *Journal of Chemical Physics*, **2009**, 131, 035104	3.9	32
240	Tuning the electronic coupling in a low-bandgap donor-acceptor copolymer via the placement of side-chains. *Journal of Chemical Physics*, **2011**, 134, 114901	3.9	32
239	Large-area two-dimensional photonic crystals of metallic nanocylinders based on colloidal gold nanoparticles. *Applied Physics Letters*, **2007**, 90, 133114	3.4	32
238	Crystal Structure and Magnetism of (BEDT-TTF)2MCl4 (BEDT-TTF = Bis(ethylenedithio)tetrathiafulvalene; M = Ga, Fe). *Inorganic Chemistry*, **1996**, 35, 4719-4726	5.1	32

237	Polarization dependence of transient photoconductivity in trans-polyacetylene. *Physical Review B*, **1987**, 36, 4296-4300	3.3	32
236	Air-Stable n-channel Diketopyrrolopyrrole-Diketopyrrolopyrrole Oligomers for High Performance Ambipolar Organic Transistors. *ACS Applied Materials & Interfaces*, **2016**, 8, 25415-27	9.5	32
235	Correlation between Photovoltaic Performance and Interchain Ordering Induced Delocalization of Electronics States in Conjugated Polymer Blends. *ACS Applied Materials & Interfaces*, **2016**, 8, 20243-50	9.5	31
234	How disorder controls the kinetics of triplet charge recombination in semiconducting organic polymer photovoltaics. *Physical Chemistry Chemical Physics*, **2014**, 16, 20321-8	3.6	31
233	High Quality Hybrid Perovskite Semiconductor Thin Films with Remarkably Enhanced Luminescence and Defect Suppression via Quaternary Alkyl Ammonium Salt Based Treatment. *Advanced Materials Interfaces*, **2017**, 4, 1700562	4.6	31
232	To branch or not to branch: C–H selectivity of thiophene-based donor–acceptor–donor monomers in direct arylation polycondensation exemplified by PCDTBT. *Polymer Chemistry*, **2017**, 8, 4738-4745	4.9	31
231	Stabilisation of the metallic state at low temperatures in HMTTF-TCNQ under pressure. *Journal of Physics C: Solid State Physics*, **1978**, 11, 263-275		31
230	Tuning interchain and intrachain interactions in polyfluorene copolymers. *Physical Review B*, **2011**, 84,	3.3	30
229	Nonlithographic patterning through inkjet printing via holes. *Applied Physics Letters*, **2007**, 90, 253513	3.4	30
228	Crystal and electronic structures and electrical, magnetic, and optical properties of two copper tetrahalide salts of bis(ethylenedithio)-tetrathiafulvalene. *Physical Review B*, **1994**, 50, 2118-2127	3.3	30
227	Transport properties of LixTiS2(O. *Journal of Physics C: Solid State Physics*, **1987**, 20, 4169-4179		30
226	Role of delta-hole-doped interfaces at Ohmic contacts to organic semiconductors. *Physical Review Letters*, **2009**, 103, 036601	7.4	29
225	Spin signatures of exchange-coupled triplet pairs formed by singlet fission. *Physical Review B*, **2016**, 94,	3.3	29
224	In Situ Atmospheric Deposition of Ultrasmooth Nickel Oxide for Efficient Perovskite Solar Cells. *ACS Applied Materials & Interfaces*, **2018**, 10, 41849-41854	9.5	29
223	Direct evidence for the role of the madelung potential in determining the work function of doped organic semiconductors. *Physical Review Letters*, **2009**, 102, 096602	7.4	28
222	Poly(9,9-dioctylfluorene)-based conjugated polyelectrolyte: extended pi-electron conjugation induced by complexation with a surfactant zwitterion. *Advanced Materials*, **2010**, 22, 2073-7	24	28
221	Polymer bilayer structure via inkjet printing. *Applied Physics Letters*, **2006**, 88, 163508	3.4	28
220	Fluorescence scanning near-field optical microscopy of polyfluorene composites. *Journal of Microscopy*, **2001**, 202, 433-8	1.9	28

219	Excited-state absorption in luminescent conjugated polymer thin films: ultrafast studies of processable polyindenofluorene derivatives. *Chemical Physics Letters*, **2000**, 319, 494-500	2.5	28
218	Förster Resonance Energy Transfer Drives Higher Efficiency in Ternary Blend Organic Solar Cells. *ACS Applied Energy Materials*, **2018**, 1, 4874-4882	6.1	27
217	Polymer crystallization as a tool to pattern hybrid nanostructures: growth of 12 nm ZnO arrays in poly(3-hexylthiophene). *Nano Letters*, **2013**, 13, 4499-504	11.5	27
216	Synthesis and characterization of low bandgap conjugated donor–acceptor polymers for polymer:PCBM solar cells. *Journal of Materials Chemistry*, **2010**, 20, 9231		27
215	Tuning the wavelength of lasing emission in organic semiconducting laser by the orientation of liquid crystalline conjugated polymer. *Journal of Applied Physics*, **2008**, 104, 033107	2.5	27
214	Polarization anisotropy dynamics for thin films of a conjugated polymer aligned by nanoimprinting. *Physical Review B*, **2008**, 77,	3.3	27
213	Vertical Cavity Biexciton Lasing in 2D Dodecylammonium Lead Iodide Perovskites. *Advanced Optical Materials*, **2018**, 6, 1800616	8.1	27
212	White-light bias external quantum efficiency measurements of standard and inverted P3HT : PCBM photovoltaic cells. *Journal Physics D: Applied Physics*, **2012**, 45, 415101	3	26
211	Compositional and Morphological Studies of Polythiophene/Polyflorene Blends in Inverted Architecture Hybrid Solar Cells. *Advanced Functional Materials*, **2012**, 22, 2418-2424	15.6	26
210	Recombination dynamics of charge pairs in a push-pull polyfluorene-derivative. *Journal of Physical Chemistry B*, **2013**, 117, 4649-53	3.4	26
209	Dielectric switching of the nature of excited singlet state in a donor-acceptor-type polyfluorene copolymer. *Physical Review B*, **2010**, 81,	3.3	26
208	Bandgap lowering in mixed alloys of Cs2Ag(SbxBi1−x)Br6 double perovskite thin films. *Journal of Materials Chemistry A*, **2020**, 8, 21780-21788	13	26
207	Liquid crystalline chromophores for photonic band-edge laser devices. *Optical Materials*, **2013**, 35, 837-842	3.3	25
206	Organic double-gate field-effect transistors: Logic-AND operation. *Applied Physics Letters*, **2005**, 87, 253512	3.4	25
205	An optical study of the arsenic pentafluoride doping of poly(p-phenylene sulphide): polaron and bipolaron transitions. *Journal of the Chemical Society Chemical Communications*, **1984**, 1101		25
204	A new blue light emitting and electrochromic polyfluorene derivative for display applications. *Organic Electronics*, **2014**, 15, 500-508	3.5	24
203	Morphology-dependent charge photogeneration in donor-acceptor block copolymer films based on poly(3-hexylthiophene)-block-poly(perylene bisimide acrylate). *Journal of Physical Chemistry B*, **2012**, 116, 10070-8	3.4	24
202	Oligoethyleneoxide functionalised sexithiophene organic field effect transistors. *Synthetic Metals*, **2003**, 137, 885-886	3.6	24

201	Ultrafast charge photogeneration in conjugated polymer thin films. *Synthetic Metals*, **2001**, 116, 9-13	3.6	24
200	Spin-dependent recombination probed through the dielectric polarizability. *Nature Communications* , **2015**, 6, 8534	17.4	23
199	Site-selective measurement of coupled spin pairs in an organic semiconductor. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 5077-5082	11.5	23
198	Engineering Schottky contacts in open-air fabricated heterojunction solar cells to enable high performance and ohmic charge transport. *ACS Applied Materials & Interfaces*, **2014**, 6, 22192-8	9.5	23
197	A nanoimprinted, optically tuneable organic laser. *Applied Physics Letters*, **2012**, 100, 173301	3.4	23
196	Grazing emitted light from films of derivative polymer of polyfluorene. *Synthetic Metals*, **2000**, 111-112, 583-586	3.6	23
195	Pressure dependence of the transport properties of the molecular superconductor, Ð(BEDT TTF)2Cu(NCS)2. *Journal of Physics Condensed Matter*, **1989**, 1, 4479-4484	1.8	23
194	Transport and magnetic properties of Ag1/3TiS2. *Journal of Physics C: Solid State Physics*, **1987**, 20, 271-276		23
193	Ligand Shell Structure in Lead Sulfide-Oleic Acid Colloidal Quantum Dots Revealed by Small-Angle Scattering. *Journal of Physical Chemistry Letters*, **2019**, 10, 4713-4719	6.4	22
192	Sequentially Deposited versus Conventional Nonfullerene Organic Solar Cells: Interfacial Trap States, Vertical Stratification, and Exciton Dissociation. *Advanced Energy Materials*, **2019**, 9, 1902145	21.8	22
191	Improved fill factors in solution-processed ZnO/Cu2O photovoltaics. *Thin Solid Films*, **2013**, 536, 280-285	2.2	22
190	Multichromophoric phthalocyanine-(perylenediimide)(8) molecules: a photophysical study. *Chemistry - A European Journal*, **2010**, 16, 10021-9	4.8	22
189	Mapping Morphological and Structural Properties of Lead Halide Perovskites by Scanning Nanofocus XRD. *Advanced Functional Materials*, **2016**, 26, 8221-8230	15.6	22
188	Is the Chemical Strategy for Imbuing "Polyene" Character in Diketopyrrolopyrrole-Based Chromophores Sufficient for Singlet Fission?. *Journal of Physical Chemistry Letters*, **2017**, 8, 984-991	6.4	21
187	The Influence of Side-Chain Position on the Optoelectronic Properties of a Red-Emitting Conjugated Polymer. *Macromolecular Chemistry and Physics*, **2013**, 214, 967-974	2.6	21
186	Tuning interfacial charge-transfer excitons at polymer-polymer heterojunctions under hydrostatic pressure. *Physical Review Letters*, **2008**, 100, 157401	7.4	21
185	Electronic properties of HfTe2. *Journal of Physics C: Solid State Physics*, **1986**, 19, 4953-4963		21
184	Femtosecond visualization of oxygen vacancies in metal oxides. *Science Advances*, **2020**, 6, eaax9427	14.3	20

183	(BEDT-TTF)2CuCl2, a new conducting charge transfer salt. *Synthetic Metals*, **1988**, 22, 415-418	3.6	20
182	Halide Homogenization for High-Performance Blue Perovskite Electroluminescence. *Research*, **2020**, 2020, 9017871	7.8	20
181	Minimizing the Trade-Off between Photocurrent and Photovoltage in Triple-Cation Mixed-Halide Perovskite Solar Cells. *Journal of Physical Chemistry Letters*, **2020**, 11, 10188-10195	6.4	20
180	PCDTBT: From Polymer Photovoltaics to Light-Emitting Diodes by Side-Chain-Controlled Luminescence. *Macromolecules*, **2016**, 49, 9382-9387	5.5	20
179	Extrinsic Electron Concentration in SnO2 Electron Extracting Contact in Lead Halide Perovskite Solar Cells. *Advanced Materials Interfaces*, **2019**, 6, 1801788	4.6	20
178	FRET-mediated near infrared whispering gallery modes: studies on the relevance of intracavity energy transfer with Q-factors. *Materials Chemistry Frontiers*, **2018**, 2, 270-274	7.8	20
177	Efficient energy transport in an organic semiconductor mediated by transient exciton delocalization. *Science Advances*, **2021**, 7,	14.3	20
176	On the energetics of bound charge-transfer states in organic photovoltaics. *Journal of Materials Chemistry A*, **2017**, 5, 11949-11959	13	19
175	Effective work functions for the evaporated metal/organic semiconductor contacts from in-situ diode flatband potential measurements. *Applied Physics Letters*, **2012**, 101, 013501	3.4	19
174	Efficient blue–green light emitting poly(1,4-phenylene vinylene) copolymers. *Chemical Communications*, **2000**, 291-292	5.8	19
173	Conformational defects in Durham polyacetylene: photo-induced IR absorption. *Journal of Physics C: Solid State Physics*, **1987**, 20, 6013-6023		19
172	Transport and Raman studies of the group IV layered compounds and their lithium intercalates: LixTiS2, LixTiSe2, LixZrS2, LixZrSe2, LixHfS2 and LixHfSe2. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1987**, 56, 531-559		19
171	Electro-Optic Properties of Precursor Route Poly(arylene vinylene) Polymers. *Springer Series in Solid-state Sciences*, **1992**, 304-309	0.4	19
170	Influence of an Inorganic Interlayer on Exciton Separation in Hybrid Solar Cells. *ACS Nano*, **2015**, 9, 11863–11871	16.7	18
169	Polarization of singlet and triplet excited states in a platinum-containing conjugated polymer. *Physical Review B*, **2003**, 67,	3.3	18
168	Neutral photo-excitations in oriented polyacetylene. *Journal of Physics C: Solid State Physics*, **1987**, 20, 4221-4228		18
167	Efficient and Spectrally Stable Blue Perovskite Light-Emitting Diodes Employing a Cationic π-Conjugated Polymer. *Advanced Materials*, **2021**, 33, e2103640	24	18
166	Efficient and Tunable Electroluminescence from In Situ Synthesized Perovskite Quantum Dots. *Small*, **2019**, 15, e1804947	11	17

165	Pressure-induced delocalization of photoexcited states in a semiconducting polymer. *Physical Review Letters*, **2010**, 105, 195501	7.4	17
164	New luminescent polymers for leds and LECS. *Macromolecular Symposia*, **1998**, 125, 111-120	0.8	17
163	Transport and optical properties of the hydrazine intercalation complexes of TiS2, TiSe2and ZrS2. *Journal of Physics C: Solid State Physics*, **1987**, 20, 4181-4200		17
162	The transport properties of hydrazine-intercalated TiSe2. *Journal of Physics C: Solid State Physics*, **1982**, 15, 4367-4378		17
161	Electrical conductivity in polymeric sulphur nitride at high pressures. *Journal of Physics C: Solid State Physics*, **1977**, 10, 1001-1012		17
160	Toward Stable and Efficient Perovskite Light-Emitting Diodes. *Advanced Functional Materials*,2109495	15.6	17
159	Degradation mechanisms of perovskite solar cells under vacuum and one atmosphere of nitrogen. *Nature Energy*, **2021**, 6, 977-986	62.3	17
158	Charge Carrier Localization in Doped Perovskite Nanocrystals Enhances Radiative Recombination. *Journal of the American Chemical Society*, **2021**, 143, 8647-8653	16.4	17
157	Role of PbSe Structural Stabilization in Photovoltaic Cells. *Advanced Functional Materials*, **2015**, 25, 928-935	13.6	16
156	Visualizing the Vertical Energetic Landscape in Organic Photovoltaics. *Joule*, **2019**, 3, 2513-2534	27.8	16
155	Singlet exciton fission via an intermolecular charge transfer state in coevaporated pentacene-perfluoropentacene thin films. *Journal of Chemical Physics*, **2019**, 151, 164706	3.9	16
154	Efficiency limitations in a low band-gap diketopyrrolopyrrole-based polymer solar cell. *Physical Chemistry Chemical Physics*, **2014**, 16, 6743-52	3.6	16
153	Recent Advances in Hybrid Optoelectronics. *Israel Journal of Chemistry*, **2012**, 52, 496-517	3.4	16
152	Sequential energy and electron transfer in polyisocyanopeptide-based multichromophoric arrays. *Journal of Physical Chemistry B*, **2011**, 115, 1590-600	3.4	16
151	Temperature measurement in high pressure cells using a rhodium +0.5% iron-chromel thermocouple pair. *Journal of Physics E: Scientific Instruments*, **1986**, 19, 430-433		16
150	Design of an alternating current source for resistivity and Hall effect measurements. *Journal of Physics E: Scientific Instruments*, **1980**, 13, 294-297		16
149	Elucidating and Mitigating Degradation Processes in Perovskite Light-Emitting Diodes. *Advanced Energy Materials*, **2020**, 10, 2002676	21.8	16
148	Highly Absorbing Lead-Free Semiconductor CuAgBiI for Photovoltaic Applications from the Quaternary CuI-AgI-BiI Phase Space. *Journal of the American Chemical Society*, **2021**, 143, 3983-3992	16.4	16

147	Direct Bandgap Behavior in Rashba-Type Metal Halide Perovskites. *Advanced Materials*, **2018**, 30, e1803379	27.4	16
146	Kinetic Control of Perovskite Thin-Film Morphology and Application in Printable Light-Emitting Diodes. *ACS Energy Letters*, **2017**, 2, 81-87	20.1	15
145	Room-Temperature Phase Demixing in Bulk Heterojunction Layers of Solution-Processed Organic Photodetectors: the Effect of Active Layer Ageing on the Device Electro-optical Properties. *Advanced Functional Materials*, **2011**, 21, 1355-1363	15.6	15
144	Probing thin-film morphology of conjugated polymers by Raman spectroscopy. *Journal of Applied Physics*, **2010**, 107, 024902	2.5	15
143	Direct evidence for delocalization of charge carriers at the Fermi level in a doped conducting polymer. *Physical Review Letters*, **2008**, 100, 186601	7.4	15
142	Solution-processed niobium diselenide as conductor and anode for polymer light-emitting diodes. *Applied Physics Letters*, **2003**, 82, 1123-1125	3.4	15
141	The effects of supramolecular assembly on exciton decay rates in organic semiconductors. *Journal of Chemical Physics*, **2005**, 123, 084902	3.9	15
140	Synthesis of porphyrin-PPV copolymers for application in LEDs. *Journal of Materials Science: Materials in Electronics*, **2000**, 11, 97-103	2.1	15
139	Beyond 17% stable perovskite solar module via polaron arrangement of tuned polymeric hole transport layer. *Nano Energy*, **2021**, 82, 105685	17.1	15
138	Excimer Formation in Carboxylic Acid-Functionalized Perylene Diimides Attached to Silicon Dioxide Nanoparticles. *Journal of Physical Chemistry C*, **2019**, 123, 3433-3440	3.8	14
137	Ultrafast Dynamics of Polariton Cooling and Renormalization in an Organic Single-Crystal Microcavity under Nonresonant Pumping. *ACS Photonics*, **2018**, 5, 2182-2188	6.3	14
136	Charge recombination in distributed heterostructures of semiconductor discotic and polymeric materials.. *Journal of Applied Physics*, **2008**, 103, 124510	2.5	14
135	Sequential absorption processes in two-photon-excitation transient absorption spectroscopy in a semiconductor polymer. *Physical Review B*, **2006**, 73,	3.3	14
134	Highly-efficient broadband waveguide outcoupling in light-emitting diodes with self-organized polymer blends. *Applied Physics Letters*, **2004**, 85, 2965-2967	3.4	14
133	Magnetic properties of the organic superconductor (BEDT-TTF)2AuI2. *Journal of Physics C: Solid State Physics*, **1986**, 19, L383-L388		14
132	Transport and optical properties of the hydrazine intercalation complexes of 1T-TaS2. *Journal of Physics C: Solid State Physics*, **1982**, 15, 477-493		14
131	Efficient Energy Funneling in Spatially Tailored Segmented Conjugated Block Copolymer Nanofiber-Quantum Dot or Rod Conjugates. *Journal of the American Chemical Society*, **2021**, 143, 7032-7041	16.4	14
130	Negative Correlation between Intermolecular vs Intramolecular Disorder in Bulk-Heterojunction Organic Solar Cells. *ACS Applied Materials & Interfaces*, **2018**, 10, 44576-44582	9.5	14

129	A facile low temperature route to deposit a TiO2 scattering layer for efficient dye-sensitized solar cells. *RSC Advances*, **2016**, 6, 70895-70901	3.7	13
128	Control of luminescence in conjugated polymers through control of chain microstructure. *Journal of Materials Chemistry*, **2007**, 17, 907-912		13
127	Monte Carlo Simulation of Exciton Bimolecular Annihilation Dynamics in Supramolecular Semiconductor Architectures *Journal of Physical Chemistry C*, **2007**, 111, 19111-19119	3.8	13
126	The use of electrical pulses to study the physics of bilayer organic light-emitting diodes. *Journal of Applied Physics*, **2005**, 97, 014504	2.5	13
125	The effect of irradiation of polymeric sulphur nitride with neutrons and heavy ions. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1978**, 37, 321-328		13
124	Impact of exciton delocalization on exciton-vibration interactions in organic semiconductors. *Physical Review B*, **2020**, 102,	3.3	13
123	Zinc tin oxide thin film transistors produced by a high rate reactive sputtering: Effect of tin composition and annealing temperatures. *Physica Status Solidi (A) Applications and Materials Science* , **2017**, 214, 1600470	1.6	12
122	A first-principles study of the vibrational properties of crystalline tetracene under pressure. *Journal of Physics Condensed Matter*, **2015**, 27, 375402	1.8	12
121	Low thresholds for a nonconventional polymer blend Amplified spontaneous emission and lasing in F81 :SYx system. *Journal of Polymer Science, Part B: Polymer Physics*, **2016**, 54, 15-21	2.6	12
120	Monovalent Cation Doping of CH3NH3PbI3 for Efficient Perovskite Solar Cells. *Journal of Visualized Experiments*, **2017**,	1.6	12
119	A nano-patterned photonic crystal laser with a dye-doped liquid crystal. *Applied Physics Letters*, **2013**, 103, 051101	3.4	12
118	Recent developments in the controlled synthesis and manipulation of electroactive organic polymers. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **1997** , 355, 707-714	3	12
117	Exciplex emission from electroluminescent ladder-type pentaphenylene oligomers bearing both electron- and hole-accepting substituents. *Journal of Chemical Physics*, **2008**, 128, 044703	3.9	12
116	34.1: Active Matrix Displays Made with Printed Polymer Thin Film Transistors. *Digest of Technical Papers SID International Symposium*, **2003**, 34, 1084	0.5	12
115	Femtosecond optical absorption in poly(3-alkyl thienylene)s. *Physical Review B*, **1991**, 44, 9731-9734	3.3	12
114	Metallic properties of lithium-intercalated ZrS2. *Journal of Physics C: Solid State Physics*, **1987**, 20, 4105-4114		12
113	Molecular aggregation method for perovskite ullerene bulk heterostructure solar cells. *Journal of Materials Chemistry A*, **2020**, 8, 1326-1334	13	12
112	Dark Subgap States in Metal-Halide Perovskites Revealed by Coherent Multidimensional Spectroscopy. *Journal of the American Chemical Society*, **2020**, 142, 777-782	16.4	12

111	Low-temperature transport properties of photogenerated charges in organic materials. *Physical Review Letters*, **2014**, 112, 126802	7.4	11
110	Synthesis and Properties of Novel High-Electron-Affinity Polymers for Electroluminescent Devices. *ACS Symposium Series*, **1997**, 322-344	0.4	11
109	Multiphoton excited photoconductivity in polyfluorene. *Physical Review B*, **2007**, 75,	3.3	11
108	Electro-optical Polythiophene Devices **1998**, 405-458		11
107	The Hall effect and resistivity of amorphous copper-titanium alloys. *Journal of Physics F: Metal Physics*, **1987**, 17, 1739-1749		11
106	Red-shifted delayed fluorescence at the expense of photoluminescence quantum efficiency - an intramolecular charge-transfer molecule based on a benzodithiophene-4,8-dione acceptor. *Physical Chemistry Chemical Physics*, **2019**, 21, 10580-10586	3.6	10
105	Bright and efficient blue polymer light emitting diodes with reduced operating voltages processed entirely at low-temperature. *Journal of Materials Chemistry C*, **2015**, 3, 9327-9336	7.1	10
104	Femtosecond Transient Absorption Microscopy of Singlet Exciton Motion in Side-Chain Engineered Perylene-Diimide Thin Films. *Journal of Physical Chemistry A*, **2020**, 124, 2721-2730	2.8	10
103	Oligomeric Compatibilizers for Control of phase Separation in Conjugated Polymer Blend Films. *Macromolecules*, **2012**, 45, 1468-1475	5.5	10
102	New Luminescent PPV Derivatives for Led Applications. *Materials Research Society Symposia Proceedings*, **1997**, 488, 87		10
101	Singlet exciton fission in a modified acene with improved stability and high photoluminescence yield. *Nature Communications*, **2021**, 12, 1527	17.4	10
100	How Exciton Interactions Control Spin-Depolarization in Layered Hybrid Perovskites. *Nano Letters*, **2020**, 20, 5678-5685	11.5	9
99	Control of Geminate Recombination by the Material Composition and Processing Conditions in Novel Polymer: Nonfullerene Acceptor Photovoltaic Devices. *Journal of Physical Chemistry A*, **2018**, 122, 1253-1260	2.8	9
98	Temperature- and Voltage-Induced Ligand Rearrangement of a Dynamic Electroluminescent Metallopolymer. *Angewandte Chemie*, **2014**, 126, 8528-8531	3.6	9
97	Thick polymer light-emitting diodes with very high power efficiency using Ohmic charge-injection layers. *Semiconductor Science and Technology*, **2014**, 29, 025005	1.8	9
96	Synthesis, characterization and comparative OFET behaviour of indenofluorene–bithiophene and terthiophene alternating copolymers. *Synthetic Metals*, **2010**, 160, 468-474	3.6	9
95	Photovoltaic devices fabricated from an aqueous dispersion of polyfluorene nanoparticles using an electroplating method. *Synthetic Metals*, **2004**, 147, 105-109	3.6	9
94	Temperature dependence of the unit cell of (TMTSF)2ReO4through the metal-insulator transition. *Journal of Physics C: Solid State Physics*, **1983**, 16, 691-698		9

93	Magnetic properties of the hydrazine intercalation complexes of 1T-TaS2. *Journal of Physics C: Solid State Physics*, **1982**, 15, L1245-L1249		9
92	Efficient singlet exciton fission in pentacene prepared from a soluble precursor. *APL Materials*, **2016**, 4, 116112	5.7	9
91	Highly Efficient Energy Transfer in Light Emissive Poly(9,9-dioctylfluorene) and Poly(p-phenylenevinylene) Blend System. *ACS Photonics*, **2018**, 5, 607-613	6.3	9
90	Role of Morphology and Förster Resonance Energy Transfer in Ternary Blend Organic Solar Cells. *ACS Applied Energy Materials*, **2020**, 3, 12025-12036	6.1	8
89	Cyano-Derivatives of Poly(P-Phenylene Vinylene) For use in Thin-Film Light-Emitting Diodes. *Materials Research Society Symposia Proceedings*, **1993**, 328, 351		8
88	Transport properties of VSe2intercalated with hydrazine. *Journal of Physics C: Solid State Physics*, **1981**, 14, L1055-L1060		8
87	Multi-Functional Transparent Luminescent Configuration for Advanced Photovoltaics. *Advanced Energy Materials*, **2016**, 6, 1502404	21.8	8
86	Perovskite Light-Emitting Diodes: Efficient Visible Quasi-2D Perovskite Light-Emitting Diodes (Adv. Mater. 34/2016). *Advanced Materials*, **2016**, 28, 7550-7550	24	8
85	Understanding the Role of Grain Boundaries on Charge-Carrier and Ion Transport in Cs2AgBiBr6 Thin Films. *Advanced Functional Materials*,2104981	15.6	8
84	Wavelength-Dependent Charge Carrier Dynamics for Single Pixel Color Sensing Using Graded Perovskite Structures. *Nano Letters*, **2019**, 19, 6577-6584	11.5	7
83	In situ synthesis, crystallisation, and thin-film processing of single crystals of trans-[Ru(SO2)(NH3)4(H2O)][p-TolSO3]2 bearing SO2 linkage photo-isomers: towards optical device applications. *CrystEngComm*, **2015**, 17, 5026-5031	3.3	7
82	Field-enhanced recombination at low temperatures in an organic photovoltaic blend. *Physical Review B*, **2015**, 92,	3.3	7
81	Ultrafast endothermic transfer of non-radiative exciplex state to radiative excitons in polyfluorene random copolymer for blue electroluminescence. *Applied Physics Letters*, **2018**, 112, 163301	3.4	7
80	A study of tin oxide as an election injection layer in hybrid polymer light-emitting diodes. *Semiconductor Science and Technology*, **2014**, 29, 125002	1.8	7
79	Modeling the effect of the structure of polymer photocells on their absorption spectrum. *Journal of Applied Physics*, **2007**, 102, 013105	2.5	7
78	Electronic Processes at Semiconductor Polymer Heterojunctions **2005**, 35-94		7
77	Use of multiple electrical pulses to study charge transport in polymer light-emitting diodes. *Applied Physics Letters*, **2000**, 77, 1493-1495	3.4	7
76	Polymer Light Emitting Diodes with Doublet Emission. *Journal of Physical Chemistry Letters*, **2020**, 11, 5638-5642	6.4	6

75	In situ optical measurement of charge transport dynamics in organic photovoltaics. *Nano Letters*, **2015**, 15, 931-5	11.5	6
74	Effects of Polymer Packing Structure on Photoinduced Triplet Generation and Dynamics. *Journal of Physical Chemistry C*, **2012**, 116, 11298-11305	3.8	6
73	The copolymer route to new luminescent materials for LEDs. *Macromolecular Symposia*, **2000**, 154, 177-186	0.6	6
72	Optical spectroscopy of photoinduced and field-induced excitations in polyacetylene prepared by the Durham 'photoisomer' route. *Journal of Physics Condensed Matter*, **1991**, 3, 3007-3021	1.8	6
71	Photo-emission and transport studies of HfxTi1-xSe2alloys. *Journal of Physics C: Solid State Physics*, **1987**, 20, 1483-1493		6
70	Localization in the Peierls gap. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1985**, 52, 611-642		6
69	Magnetic susceptibility of hydrazine intercalated TiSe2. *Journal of Physics C: Solid State Physics*, **1982**, 15, L1251-L1255		6
68	Suppressing aggregation induced quenching in anthracene based conjugated polymers. *Polymer Chemistry*, **2021**, 12, 1830-1836	4.9	6
67	Thickness-Attuned CsPbBr Nanosheets with Enhanced -Type Field Effect Mobility. *Journal of Physical Chemistry Letters*, **2021**, 12, 1560-1566	6.4	6
66	Phenothiazine-Based D-A-□A Dyes for Highly Efficient Dye-Sensitized Solar Cells: Effect of Internal Acceptor and Non-Conjugated □Spacer on Device Performance. *ChemPlusChem*, **2017**, 82, 280-286	2.8	5
65	6.1: Invited Paper: All-Polymer Thin Film Transistors Fabricated by High-Resolution Ink-jet Printing. *Digest of Technical Papers SID International Symposium*, **2001**, 32, 40	0.5	5
64	L-4: Late-New Paper: Active-Matrix Operation of Electrophoretic Devices with Inkjet-Printed Polymer Thin Film Transistors. *Digest of Technical Papers SID International Symposium*, **2002**, 33, 1017	0.5	5
63	Role of indium chloride on the luminescence properties of PPV. *Synthetic Metals*, **2000**, 111-112, 549-552	3.6	5
62	Preparation and solid-state characterization of the 7,7,8,8-tetracyano-p-quinodimethanide salt of the bis(triphenylphosphoranylidinium) cation: (PPN)2(TCNQ)3(MeCN)2. *Journal of the Chemical Society Perkin Transactions II*, **1988**, 1151		5
61	Transport and magnetic measurements on Bi2+xCa1-xSr2Cu2O8+□*Journal of Physics C: Solid State Physics*, **1988**, 21, L529-L534		5
60	Spontaneous exciton dissociation enables spin state interconversion in delayed fluorescence organic semiconductors. *Nature Communications*, **2021**, 12, 6640	17.4	5
59	Microcavity-like exciton-polaritons can be the primary photoexcitation in bare organic semiconductors. *Nature Communications*, **2021**, 12, 6519	17.4	5
58	Semiconductor Device Physics in Conjugated Polymers **1990**, 221-245		5

57	Electrically Induced Mixed Valence Increases the Conductivity of Copper Helical Metallopolymers. *Advanced Materials*, **2021**, 33, e2100403	24	5
56	Benzoyl side-chains push the open-circuit voltage of PCDTBT/PCBM solar cells beyond 1 V. *Organic Electronics*, **2017**, 49, 142-151	3.5	4
55	Inter-ligand energy transfer in dye chromophores attached to high bandgap SiO nanoparticles. *Chemical Communications*, **2019**, 55, 8804-8807	5.8	4
54	Chemical reversability of the electrical dedoping of conducting polymers: An organic chemically erasable programmable read-only memory. *Applied Physics Letters*, **2008**, 93, 033314	3.4	4
53	Single-photon pumping and two-photon probing spectroscopy for the determination of absorption cross-sections in an organic semiconductor. *Optics Express*, **2005**, 13, 10873-81	3.3	4
52	ESR Observation of Optically-Generated Polarons in Conjugated Electroluminescent Polymers. *Molecular Crystals and Liquid Crystals*, **2001**, 371, 159-162		4
51	Model for the impurity-induced stabilization of the intermediate phase in Ti4O7. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **1980**, 42, 479-484		4
50	Back-Contact Perovskite Solar Cells **2019**, 1, 1-10		4
49	Direct Probing of Gap States and Their Passivation in Halide Perovskites by High-Sensitivity, Variable Energy Ultraviolet Photoelectron Spectroscopy. *Journal of Physical Chemistry C*, **2021**, 125, 5217-5225	3.8	4
48	Impact of Orientational Glass Formation and Local Strain on Photo-Induced Halide Segregation in Hybrid Metal-Halide Perovskites. *Journal of Physical Chemistry C*, **2021**, 125, 15025-15034	3.8	4
47	Tailored Local Bandgap Modulation as a Strategy to Maximize Luminescence Yields in Mixed-Halide Perovskites. *Advanced Optical Materials*, **2021**, 9, 2100635	8.1	4
46	Energy Landscape of Vertically Anisotropic Polymer Blend Films toward Highly Efficient Polymer Light-Emitting Diodes (PLEDs). *Advanced Functional Materials*, **2018**, 28, 1705903	15.6	3
45	Ultrafast Pump-Push Photocurrent Spectroscopy of Organic Photoconversion Systems. *EPJ Web of Conferences*, **2013**, 41, 05020	0.3	3
44	Does interchain stacking morphology contribute to the singlet–triplet interconversion dynamics in polymer heterojunctions?. *Chemical Physics*, **2009**, 357, 159-162	2.3	3
43	Optical Applications516-558		3
42	Organic Materials for Large Area Electronics. *Materials Science Forum*, **2008**, 608, 159-179	0.4	3
41	Precision and control in polymer synthesis why it's important and some recent examples of how to do it. *Macromolecular Symposia*, **1999**, 143, 81-93	0.8	3
40	Perovskite LEDs **2019**, 1, 1-5		3

39	Resonance Raman Spectroscopy of Accumulation Layers in Durham-Route Polyacetylene. *Springer Series in Solid-state Sciences*, **1989**, 127-131	0.4	3
38	Optical and Electronic Properties of a Highly Disordered Form of Polyacetylene Distinguishing Between Localized Defects and Conformational Disorder. *Springer Series in Solid-state Sciences*, **1992**, 238-241	0.4	3
37	Transport and Raman Investigation of the Group IV Layered Compounds and their Lithium Intercalates **1984**, 549-559		3
36	Optical and Electronic Properties of Colloidal CdSe Quantum Rings. *ACS Nano*, **2020**, 14, 14740-14760	16.7	3
35	Microcavity-Like Exciton-Polaritons can be the Primary Photoexcitation in Bare Organic Semiconductors		3
34	Novel optoelectronic technique for direct tracking of ultrafast triplet excitons in polymeric semiconductor. *Applied Physics Reviews*, **2021**, 8, 031415	17.3	3
33	Geminate and Nongeminate Pathways for Triplet Exciton Formation in Organic Solar Cells. *Advanced Energy Materials*,2103944	21.8	3
32	Singlet and triplet to doublet energy transfer: improving organic light-emitting diodes with radicals.. *Nature Communications*, **2022**, 13, 2744	17.4	3
31	Graphene-passivated nickel as an efficient hole-injecting electrode for large area organic semiconductor devices. *Applied Physics Letters*, **2020**, 116, 163301	3.4	2
30	Room temperature magneto-optic effect in silicon light-emitting diodes. *Nature Communications*, **2018**, 9, 398	17.4	2
29	Electroluminescence from Solution-Processed Pinhole-Free Nanometer-Thickness Layers of Conjugated Polymers. *Nano Letters*, **2018**, 18, 5382-5388	11.5	2
28	Ultrafast carrier cooling and thermalization in lead iodide perovskite probed with two-dimensional electronic spectroscopy **2017**,		2
27	Jim Feast: a career in polymer science. *Polymer*, **2005**, 46, 1427-1438	3.9	2
26	The transport properties of vanadium-doped TiSe2under pressure. *Journal of Physics C: Solid State Physics*, **1982**, 15, L871-L874		2
25	The effect of pressure on the charge density wave transitions in 4H b TaS2. *Societa Italiana Di Fisica Nuovo Cimento B-General Physics, Relativity Astronomy and Mathematical Physics and Methods*, **1977**, 38, 554-561		2
24	Femtosecond Optical Absorption in Conjugated Polymers. *Springer Series in Solid-state Sciences*, **1992**, 162-166	0.4	2
23	Insights into the Structure and Self-Assembly of Organic-Semiconductor/Quantum-Dot Blends. *Advanced Functional Materials*, **2022**, 32, 2109252	15.6	2
22	Nanoscale investigation of organic inorganic halide perovskites. *Journal of Physics: Conference Series*, **2015**, 644, 012024	0.3	1

21	Optical Processes in Conjugated Polyelectrolytes Dependence on Chain Conformation and Film Morphology **2013**, 389-410		1
20	Charge Transfer and Charge Separation in Conjugated Polymer Solar Cells **2010**, 531-562		1
19	Spatial control of the recombination zone in ambipolar light-emitting polymer transistors **2006**,		1
18	Cathodes incorporating thin fluoride layers for efficient injection in blue polymer light-emitting diodes **2002**,		1
17	Photoexcitations in Poly(2,5-Thienylene Vinylene). *Materials Research Society Symposia Proceedings*, **1989**, 173, 637		1
16	Hopping Conductivity in The Peierls Gap In Hydrazine Intercalated TaS2. *Molecular Crystals and Liquid Crystals*, **1985**, 121, 153-156		1
15	Controlling the structures of organic semiconductor-quantum dot nanocomposites through ligand shell chemistry. *Soft Matter*, **2020**, 16, 7970-7981	3.6	1
14	Scan Strategies for Electron Energy Loss Spectroscopy at Optical and Vibrational Energies in Perylene Diimide Nanobelts. *Microscopy and Microanalysis*, **2019**, 25, 1738-1739	0.5	0
13	Solar power. Preface. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2013**, 371, 20130130	3	0
12	Transport evidence for new phase changes in 1T-TaS2after intercalation with hydrazine. *Journal of Physics Condensed Matter*, **1994**, 6, 3533-3538	1.8	0
11	New Light Emitting Polymers and High Energy Hosts for Triplet Emission. *Materials Research Society Symposia Proceedings*, **2004**, 846, DD7.7.1		
10	Charge transport and efficiency in photovoltaic devices based on polyfluorene blends **2004**, 5520, 26		
9	Design of Luminescent Polymers for Leds. *Materials Research Society Symposia Proceedings*, **2001**, 708, 521		
8	Versatile Syntheses of Various Homo- and Copolymers of Poly(1,4-Arylene Vinylene)S. *Materials Research Society Symposia Proceedings*, **1999**, 598, 118		
7	Properties of low-Dimensional metals at high pressure. *High Pressure Research*, **1992**, 8, 391-395	1.6	
6	Synthesis of New Building Blocks for Light Emitting Polymers. *Materials Research Society Symposia Proceedings*, **2000**, 660, 1		
5	Ultrafast investigation of exciton dissociation processes in polymeric semiconductors at high pump fluence. *Springer Series in Chemical Physics*, **2003**, 377-379	0.3	
4	Characterisation of Poly(P-Phenylene Vinylene) [PPV] Prepared by Different Precursor Routes. *NATO ASI Series Series B: Physics*, **1990**, 393-399		

3	Pressure Dependence of the Transport Properties of κ-(BEDT-TTF)2Cu(NCS)2. *Springer Proceedings in Physics*, **1990**, 272-275	0.2
2	Ultrafast Optical Control of Charge Dynamics in Organic and Hybrid Electronic Nanodevices. *Springer Proceedings in Physics*, **2015**, 675-678	0.2
1	Periodic Lattice Distortions and Charge Density Waves in One- and Two-Dimensional Systems. *Springer Series in Solid-state Sciences*, **1978**, 199-215	0.4