Changhee Lee

List of Publications by Year in Descending Order

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

9,811 86 407 43 h-index g-index citations papers 6.22 438 10,941 4.9 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
407	Mitigation on self-discharge behaviors via morphological control of hierarchical Ni-sulfides/Ni-oxides electrodes for long-life-supercapacitors. <i>Journal of Materials Science and Technology</i> , 2022 , 113, 217-228	9.1	3
406	Hierarchical formation of Ni sulfide single walled carbon nanotubes heterostructure on tin-sulfide scaffolds via mediated SILAR process: Application towards long cycle-life solid-state supercapacitors. <i>Ceramics International</i> , 2022 , 48, 16656-16656	5.1	1
405	Physically Detachable and Operationally Stable Cs SnI Photodetector Arrays Integrated with ELEDs for Broadband Flexible Optical System <i>Advanced Materials</i> , 2022 , e2109673	24	2
404	Discrimination of Degradation Mechanisms for Organic Light-Emitting Diodes by In Situ, Layer-Specific Spectroscopic Analysis. <i>ACS Photonics</i> , 2022 , 9, 82-89	6.3	0
403	Thickness dependent resistive switching behaviors in Ta2O5 layer at low temperature: Towards flexible, invisible, cryo-electronic applications in aerospace. <i>Materials Letters</i> , 2022 , 319, 132272	3.3	
402	All inkjet-printed 6.95? 217 ppi active matrix QD-LED display with RGB Cd-free QDs in the top-emission device structure. <i>Journal of the Society for Information Display</i> , 2022 , 30, 433-440	2.1	1
401	A transient, closed-loop network of wireless, body-integrated devices for autonomous electrotherapy. <i>Science</i> , 2022 , 376, 1006-1012	33.3	17
400	Nanosilver-Particles Integrated Ni Sn S -CoS Composite as an Advanced Electrode for High Energy Density Hybrid Cell <i>Small Methods</i> , 2021 , 5, e2100907	12.8	2
399	Interface polarization in heterovalent core-shell nanocrystals. Nature Materials, 2021,	27	11
398	Enhanced Performance of Pixelated Quantum Dot Light-Emitting Diodes by Inkjet Printing of Quantum Dot P olymer Composites. <i>Advanced Optical Materials</i> , 2021 , 9, 2002129	8.1	12
397	Evolution of hierarchically formed petal-like 3 dimensional layer structures for SnS2 via ratio control of Sn/thiourea and their electrochemical charge storage behavior. <i>Ceramics International</i> , 2021 ,	5.1	2
396	Self-discharge and voltage-holding in symmetric supercapacitors for energy storage based on branch-like MoS2 nanomaterial electrodes. <i>Ceramics International</i> , 2021 , 47, 11231-11239	5.1	5
395	Reversible and controllable threshold voltage modulation for n-channel MoS2 and p-channel MoTe2 field-effect transistors via multiple counter doping with ODTS/poly-L-lysine charge enhancers. <i>Nano Research</i> , 2021 , 14, 3214-3227	10	3
394	Scalable and selective N-type conversion for carbon nanotube transistors via patternable polyvinyl alcohol stacked with hydrophobic layers and their application to complementary logic circuits. Journal of Materials Research and Technology, 2021, 12, 243-256	5.5	1
393	65-2: Red Electroluminescence Quantum Dot Devices (EL-QD) with Improved Efficiency and Lifetime. <i>Digest of Technical Papers SID International Symposium</i> , 2021 , 52, 949-952	0.5	
392	Flexible Light-to-Frequency Conversion Circuits Built with Si-Based Frequency-to-Digital Converters via Complementary Photosensitive Ring Oscillators with p-Type SWNT and n-Type a-IGZO Thin Film Transistors. <i>Small</i> , 2021 , 17, e2008131	11	3
391	Enhancement of Photodetective Properties on Multilayered MoS Thin Film Transistors via Self-Assembled Poly-L-Lysine Treatment and Their Potential Application in Optical Sensors. <i>Nanomaterials</i> , 2021 , 11,	5.4	1

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390	Cu2FeSnS4 decorated Ni-TiO2 nanorods heterostructured photoanode for enhancing water splitting performance. <i>Applied Surface Science</i> , 2021 , 551, 149377	6.7	3
389	Progress in light-to-frequency conversion circuits based on low dimensional semiconductors. <i>Nano Research</i> , 2021 , 14, 2938-2964	10	1
388	Polarized Electroluminescence Emission in High-Performance Quantum Rod Light-Emitting Diodes via the Langmuir-Blodgett Technique. <i>Small</i> , 2021 , 17, e2101204	11	4
387	Flexible Photodetectors: Flexible Light-to-Frequency Conversion Circuits Built with Si-Based Frequency-to-Digital Converters via Complementary Photosensitive Ring Oscillators with p-Type SWNT and n-Type a-IGZO Thin Film Transistors (Small 26/2021). Small, 2021, 17, 2170134	11	
386	Highly Efficient, Surface Ligand Modified Quantum Dot Light-Emitting Diodes Driven by Type-Controllable MoTe2 Thin Film Transistors via Electron Charge Enhancer. <i>Advanced Electronic Materials</i> , 2021 , 7, 2100535	6.4	4
385	Recent advances and challenges in solar photovoltaic and energy storage materials: future directions in Indian perspective. <i>JPhys Energy</i> , 2021 , 3, 034018	4.9	O
384	Temperature-Time profile effects on evolution of physical and electronic properties in visible light Cu2CoSnS4 photodetectors. <i>Materials Science in Semiconductor Processing</i> , 2021 , 121, 105443	4.3	6
383	Effect of Alkyl Chain Lengths of Highly Crystalline Nonfullerene Acceptors on Open-Circuit Voltage of All-Small-Molecule Organic Solar Cells. <i>ACS Applied Energy Materials</i> , 2021 , 4, 259-267	6.1	2
382	. IEEE Access, 2021 , 9, 73090-73102	3.5	2
381	Analysis of the improved thermal stability of Al-doped ZnO-adopted organic solar cells. <i>Applied Physics Letters</i> , 2021 , 118, 023302	3.4	3
380	Study on the Enhanced Shelf Lifetime of CYTOP-Encapsulated Organic Solar Cells. <i>Energies</i> , 2021 , 14, 3993	3.1	3
379	Effect of Solvent on the Interfacial Crystallinity in Sequentially Processed Organic Solar Cells. <i>Advanced Materials Interfaces</i> , 2021 , 8, 2100029	4.6	1
378	Polarized Electroluminescence Emission in High-Performance Quantum Rod Light-Emitting Diodes via the Langmuir-Blodgett Technique (Small 32/2021). <i>Small</i> , 2021 , 17, 2170165	11	
377	Photovoltaic characterizing method of degradation of polymer light-emitting diodes based on ideality factor and density of states. <i>Applied Physics Letters</i> , 2021 , 119, 123301	3.4	
376	Photo-Detectivity Modulation in Complementary Light-to-Frequency Conversion Circuits via Oxygen Vacancy Controlled Amorphous Indium Lilium Linc Oxide Films. <i>IEEE Electron Device Letters</i> , 2021 , 42, 1315-1318	4.4	O
375	Hierarchically-formed nickel sulfide heterostructure via SILAR on hydrothermally grown cobalt oxide scaffolds: Role of number of over-coating and evolution of electrochemical performance in supercapacitor electrodes. <i>Applied Surface Science</i> , 2021 , 564, 150436	6.7	2
374	Synthesis process dependent physico-chemical and opto-electronic properties of Cu2FeSnS4 nanoparticle films. <i>Ceramics International</i> , 2021 , 47, 27898-27907	5.1	
373	Analysis of the effect of solvents on the performance of solution-processed organic light-emitting diodes based on Fourier-transform infrared spectroscopy. <i>Organic Electronics</i> , 2021 , 97, 106264	3.5	

372	Thickness dependent photodetection properties of solution-processed CuI films: Towards cost-effective flexible visible photodetectors. <i>Materials Letters</i> , 2021 , 305, 130815	3.3	1
371	Solution-processed CuI films towards flexible visible-photodetectors: Role of annealing temperature on Cu/I ratio and photodetective properties. <i>Journal of Alloys and Compounds</i> , 2021 , 887, 161326	5.7	2
370	Bias stress instability in multilayered MoTe2 field effect transistors under DC and pulse-mode operation. <i>Electronics Letters</i> , 2021 , 57, 193-195	1.1	1
369	Study on graphene oxide as a hole extraction layer for stable organic solar cells <i>RSC Advances</i> , 2021 , 11, 27199-27206	3.7	1
368	Directly grown two dimensional InS nanoflakes via one-step solvothermal method: Material properties on InS and performance data for supercapacitors. <i>Data in Brief</i> , 2020 , 32, 106272	1.2	1
367	72-2: Highly Efficient Cadmium-Free Quantum Dot Light-Emitting Diodes Employing Top-Emitting Architecture. <i>Digest of Technical Papers SID International Symposium</i> , 2020 , 51, 1075-1077	0.5	2
366	Perovskite Solar Cells: Universal Elaboration of Al-Doped TiO2 as an Electron Extraction Layer in Inorganic Drganic Hybrid Perovskite and Organic Solar Cells (Adv. Mater. Interfaces 10/2020). <i>Advanced Materials Interfaces</i> , 2020 , 7, 2070057	4.6	
365	Influence of air atmosphere on electrical characteristics of p-type MoTe2 FETs under DC and pulsed mode operation. <i>Microelectronics Reliability</i> , 2020 , 111, 113680	1.2	2
364	Self-assembled nis-sns heterostructure via facile successive adsorption and reaction method for high-performance solid-state asymmetric supercapacitors. <i>Thin Solid Films</i> , 2020 , 709, 138138	2.2	7
363	High-resolution patterning of colloidal quantum dots via non-destructive, light-driven ligand crosslinking. <i>Nature Communications</i> , 2020 , 11, 2874	17.4	42
363 362		17.4 2.9	42
	crosslinking. <i>Nature Communications</i> , 2020 , 11, 2874 Bias Stress Instability in Multilayered MoS2 Field-Effect Transistors Under Pulse-Mode Operation.		
362	Crosslinking. Nature Communications, 2020, 11, 2874 Bias Stress Instability in Multilayered MoS2 Field-Effect Transistors Under Pulse-Mode Operation. IEEE Transactions on Electron Devices, 2020, 67, 1864-1872 Universal Elaboration of Al-Doped TiO2 as an Electron Extraction Layer in Inorganic@rganic Hybrid	2.9	8
362 361	Colloidal quantum dot light-emitting diodes employing solution-processable tin dioxide	2.9 4.6	8
362 361 360	Bias Stress Instability in Multilayered MoS2 Field-Effect Transistors Under Pulse-Mode Operation. IEEE Transactions on Electron Devices, 2020, 67, 1864-1872 Universal Elaboration of Al-Doped TiO2 as an Electron Extraction Layer in Inorganic Drganic Hybrid Perovskite and Organic Solar Cells. Advanced Materials Interfaces, 2020, 7, 1902003 Colloidal quantum dot light-emitting diodes employing solution-processable tin dioxide nanoparticles in an electron transport layer RSC Advances, 2020, 10, 8261-8265 Direct Observation of Crystal Engineering in Perovskite Solar Cells in a Moisture-Free Environment Using Conductive Atomic Force Microscopy and Friction Force Microscopy. Journal of Physical	2.9 4.6 3.7	8 13 9
362 361 360 359	Bias Stress Instability in Multilayered MoS2 Field-Effect Transistors Under Pulse-Mode Operation. IEEE Transactions on Electron Devices, 2020, 67, 1864-1872 Universal Elaboration of Al-Doped TiO2 as an Electron Extraction Layer in Inorganic Drganic Hybrid Perovskite and Organic Solar Cells. Advanced Materials Interfaces, 2020, 7, 1902003 Colloidal quantum dot light-emitting diodes employing solution-processable tin dioxide nanoparticles in an electron transport layer RSC Advances, 2020, 10, 8261-8265 Direct Observation of Crystal Engineering in Perovskite Solar Cells in a Moisture-Free Environment Using Conductive Atomic Force Microscopy and Friction Force Microscopy. Journal of Physical Chemistry C, 2020, 124, 4946-4952 Surface Engineered Colloidal Quantum Dots for Complete Green Process. ACS Applied Materials	2.9 4.6 3.7 3.8	8 13 9
362 361 360 359 358	Bias Stress Instability in Multilayered MoS2 Field-Effect Transistors Under Pulse-Mode Operation. IEEE Transactions on Electron Devices, 2020, 67, 1864-1872 Universal Elaboration of Al-Doped TiO2 as an Electron Extraction Layer in Inorganic@rganic Hybrid Perovskite and Organic Solar Cells. Advanced Materials Interfaces, 2020, 7, 1902003 Colloidal quantum dot light-emitting diodes employing solution-processable tin dioxide nanoparticles in an electron transport layer RSC Advances, 2020, 10, 8261-8265 Direct Observation of Crystal Engineering in Perovskite Solar Cells in a Moisture-Free Environment Using Conductive Atomic Force Microscopy and Friction Force Microscopy. Journal of Physical Chemistry C, 2020, 124, 4946-4952 Surface Engineered Colloidal Quantum Dots for Complete Green Process. ACS Applied Materials & Amp; Interfaces, 2020, 12, 10563-10570 Degradation of electrical characteristics in low-bandgap polymer solar cells associated with	2.9 4.6 3.7 3.8 9.5	8 13 9 4 5

(2019-2020)

354	Impact of CsI concentration, relative humidity, and annealing temperature on lead-free Cs2SnI6 perovskites: Toward visible light photodetectors application. <i>Materials Letters</i> , 2020 , 269, 127675	3.3	9
353	Solution-processed Ga-TiO2 electron transport layer for efficient inverted organic solar cells. <i>Materials Letters</i> , 2020 , 274, 128003	3.3	3
352	Versatile use of ZnO interlayer in hybrid solar cells for self-powered near infra-red photo-detecting application. <i>Journal of Alloys and Compounds</i> , 2020 , 813, 152202	5.7	13
351	Improved electrical performance and transparency of bottom-gate, bottom-contact single-walled carbon nanotube transistors using graphene source/drain electrodes. <i>Journal of Industrial and Engineering Chemistry</i> , 2020 , 81, 488-495	6.3	5
350	Hydrophobic Polymer Encapsulation Effects on Subgap Density of States in Multilayered Molybdenum Disulfide Field-Effect Transistors. <i>Physica Status Solidi - Rapid Research Letters</i> , 2020 , 14, 1900492	2.5	3
349	Two dimensional, bi-layered SnS2@Co3S4 heterostructure formation via SILAR method: Toward high performance supercapacitors with superior electrodes. <i>Materials Letters</i> , 2020 , 262, 127173	3.3	9
348	Towards the commercialization of colloidal quantum dot solar cells: perspectives on device structures and manufacturing. <i>Energy and Environmental Science</i> , 2020 , 13, 404-431	35.4	43
347	Physical and electrical properties of CuCoSnS nanoparticles synthesized by hydrothermal growth at different reaction time and copper concentration. <i>Data in Brief</i> , 2020 , 32, 106103	1.2	O
346	Environmentally friendly quantum-dot color filters for ultra-high-definition liquid crystal displays. <i>Scientific Reports</i> , 2020 , 10, 15817	4.9	8
345	Photosensitive Complementary Inverters Composed of n-Channel ReS2 and p-Channel Single-Walled Carbon Nanotube Field-Effect Transistors. <i>Physica Status Solidi - Rapid Research Letters</i> , 2020 , 14, 2000420	2.5	5
344	Photo-cleavable perfluoroalkylated copolymers for tailoring quantum dot thin films. <i>Polymer Chemistry</i> , 2020 , 11, 6624-6631	4.9	1
343	Two dimensional, sponge-like In2S3 nanoflakes aligned on nickel foam via one-pot solvothermal growth and their application toward high performance supercapacitors. <i>Materials Letters</i> , 2020 , 279, 128467	3.3	5
342	Cu/(Co+Sn) ratio effects on physical and photodetective properties for visible light absorbing Cu2CoSnS4 nanoparticles via a one-pot hydrothermal process. <i>Journal of Alloys and Compounds</i> , 2020 , 847, 156174	5.7	7
341	Germinant ZnO nanorods as a charge-selective layer in organic solar cells. <i>Journal of Materials Science and Technology</i> , 2020 , 55, 89-94	9.1	5
340	Origin of Off-State Current in Multilayered MoTe2 Field-Effect Transistors: Gate-Induced Drain Leakage and PooleBrenkel Conduction. <i>Physica Status Solidi - Rapid Research Letters</i> , 2020 , 14, 2000158	2.5	
339	Haptic Soft-Keyboard for Tablet-Sized Touchscreens. <i>Applied Sciences (Switzerland)</i> , 2019 , 9, 3080	2.6	1
338	High-density quantum dots composites and its photolithographic patterning applications. <i>Polymers for Advanced Technologies</i> , 2019 , 30, 749-754	3.2	14
337	Influence of Electrical Traps on the Current Density Degradation of Inverted Perovskite Solar Cells. Materials, 2019 , 12,	3.5	12

336	Sulphur precursor dependent crystallinity and optical properties of solution grown Cu2FeSnS4 particles. <i>Materials Research Express</i> , 2019 , 6, 085099	1.7	7
335	Low-Frequency Noise Characteristics in Multi-Layer WSelField Effect Transistors with Different Contact Metals. <i>Journal of Nanoscience and Nanotechnology</i> , 2019 , 19, 6422-6428	1.3	2
334	Optical and electrical effects of nanobump structure combined with an undulated active layer on plasmonic organic solar cells. <i>Organic Electronics</i> , 2019 , 71, 136-142	3.5	3
333	Emergent Anisotropic Non-Fermi Liquid at a Topological Phase Transition in Three Dimensions. <i>Physical Review Letters</i> , 2019 , 122, 187601	7.4	13
332	An Ultrastretchable and Self-Healable Nanocomposite Conductor Enabled by Autonomously Percolative Electrical Pathways. <i>ACS Nano</i> , 2019 , 13, 6531-6539	16.7	66
331	Environmentally benign nanocrystals: challenges and future directions. <i>Journal of Information Display</i> , 2019 , 20, 61-72	4.1	13
330	Degradation mechanism of blue thermally activated delayed fluorescent organic light-emitting diodes under electrical stress. <i>Organic Electronics</i> , 2019 , 70, 286-291	3.5	17
329	Direct Evidence of Ion-Migration-Induced Degradation of Ultrabright Perovskite Light-Emitting Diodes. <i>ACS Applied Materials & Diodes amp; Interfaces</i> , 2019 , 11, 11667-11673	9.5	44
328	Highly crystalline, large grain Cu2CoSnS4 films with reproducible stoichiometry via direct solution spin coating for optoelectronic device application. <i>Ceramics International</i> , 2019 , 45, 12399-12405	5.1	7
327	Design Principle for Bright, Robust, and Color-Pure InP/ZnSexS1☑/ZnS Heterostructures. <i>Chemistry of Materials</i> , 2019 , 31, 3476-3484	9.6	74
326	Highly Stable Organic Transistors on Paper Enabled by a Simple and Universal Surface Planarization Method. <i>Advanced Materials Interfaces</i> , 2019 , 6, 1801731	4.6	5
325	Field-Effect Transistors: Threshold Voltage Control of Multilayered MoS2 Field-Effect Transistors via Octadecyltrichlorosilane and their Applications to Active Matrixed Quantum Dot Displays Driven by Enhancement-Mode Logic Gates (Small 7/2019). <i>Small</i> , 2019 , 15, 1970037	11	
324	Bias Temperature Stress Instability of Multilayered MoS2 Field-Effect Transistors With CYTOP Passivation. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 2208-2213	2.9	9
323	Photosensitive Complementary Inverters Based on n-Channel MoS2 and p-Channel MoTe2 Transistors for Light-to-Frequency Conversion Circuits. <i>Physica Status Solidi - Rapid Research Letters</i> , 2019 , 13, 1900317	2.5	11
322	Role of monoethanolamine concentration for physical properties of Cu2CoSnS4 nanoparticles via one-pot hydrothermal synthesis: Toward low temperature, high performance nanocrystalline CCTS photodetectors by hybrid UV-vacuum annealing. <i>Materials Letters</i> , 2019 , 254, 9-12	3.3	9
321	Investigation of Improved Performance for Organic Rectifying Diodes via Electrical Annealing. <i>IEEE Access</i> , 2019 , 7, 84082-84090	3.5	1
320	"Positive Incentive" Approach To Enhance the Operational Stability of Quantum Dot-Based Light-Emitting Diodes. <i>ACS Applied Materials & Diodes</i> , 11, 40252-40259	9.5	12
319	Highly Efficient and Bright Inverted Top-Emitting InP Quantum Dot Light-Emitting Diodes Introducing a Hole-Suppressing Interlayer. <i>Small</i> , 2019 , 15, e1905162	11	25

(2018-2019)

318	Simulation for forming uniform inkjet-printed quantum dot layer. <i>Journal of Applied Physics</i> , 2019 , 125, 065304	2.5	5	
317	Photosensitive Complementary Inverters Based on n-Channel MoS2 and p-Channel MoTe2 Transistors for Light-to-Frequency Conversion Circuits. <i>Physica Status Solidi - Rapid Research Letters</i> , 2019 , 13, 1970042	2.5	1	
310	Low-Frequency Noise Characteristics in Multilayer MoTe2 FETs With Hydrophobic Amorphous Fluoropolymers. <i>IEEE Electron Device Letters</i> , 2019 , 40, 251-254	4.4	11	
31	CdSe tetrapod interfacial layer for improving electron extraction in planar heterojunction perovskite solar cells. <i>Nanotechnology</i> , 2019 , 30, 065401	3.4	4	
314	Threshold Voltage Control of Multilayered MoS Field-Effect Transistors via Octadecyltrichlorosilane and their Applications to Active Matrixed Quantum Dot Displays Driven by Enhancement-Mode Logic Gates. <i>Small</i> , 2019 , 15, e1803852	11	14	
313	Vertical-slate-like MoS2 nanostructures on 3D-Ni-foam for binder-free, low-cost, and scalable solid-state symmetric supercapacitors. <i>Current Applied Physics</i> , 2019 , 19, 1-7	2.6	16	
31:	Annealing temperature and stabilizer effects on morphological evolution of Cu2CoSnS4 films on thermally oxidized Si wafers via direct spin-coating. <i>Journal of Alloys and Compounds</i> , 2019 , 781, 1091-1	150	12	
31:	Binder-free, scalable hierarchical MoS2 as electrode materials in symmetric supercapacitors for energy harvesting applications. <i>Materials Letters</i> , 2019 , 236, 167-170	3.3	25	
310	Phase Transitions of the Polariton Condensate in 2D Dirac Materials. <i>Physical Review Letters</i> , 2018 , 120, 157601	7.4	3	
30	Novel two-dimensional In2O3 nanodiscs for high-rate performance of solid-state symmetric supercapacitors. <i>Materials Letters</i> , 2018 , 218, 131-134	3.3	10	
30	Highly loaded PbS/Mn-doped CdS quantum dots for dual application in solar-to-electrical and solar-to-chemical energy conversion. <i>Applied Catalysis B: Environmental</i> , 2018 , 227, 409-417	21.8	45	
30	Analysis of Ion-Diffusion-Induced Interface Degradation in Inverted Perovskite Solar Cells via Restoration of the Ag Electrode. <i>Advanced Energy Materials</i> , 2018 , 8, 1702197	21.8	38	
30	Petal-like MoS 2 nanostructures with metallic 1 th phase for high performance supercapacitors. Current Applied Physics, 2018 , 18, 345-352	2.6	15	
30	Highly efficient solution-processed inverted polymer light emitting diodes with uniformly coated poly(3,4-ethylenedioxythiophene):poly(styrene-sulfonate) layers on a hydrophobic emission layer using a dilution method. <i>Thin Solid Films</i> , 2018 , 660, 782-788	2.2	3	
30.	Enhanced light out-coupling in OLED employing thermal-assisted, self-aggregated silver nano particles. <i>Organic Electronics</i> , 2018 , 52, 230-236	3.5	23	
30	Multi-layer WSe 2 field effect transistor with improved carrier-injection contact by using oxygen plasma treatment. <i>Solid-State Electronics</i> , 2018 , 140, 2-7	1.7	25	
30.	Tunable Electron and Hole Injection Enabled by Atomically Thin Tunneling Layer for Improved Contact Resistance and Dual Channel Transport in MoS/WSe van der Waals Heterostructure. ACS Applied Materials & Contact Resistance and Dual Channel Transport in MoS/WSe van der Waals Heterostructure. ACS Applied Materials & Contact Resistance and Dual Channel Transport in MoS/WSe van der Waals Heterostructure.	9.5	7	
30:	Simultaneous Enhancement of Electrical Conductivity and Seebeck Coefficient of [6,6]-Phenyl-C71 Butyric Acid Methyl Ester (PC70BM) by Adding Co-Solvents. <i>Crystals</i> , 2018 , 8, 237	2.3	3	

300	A new strategy for integrating semiconducting SWCNTs into pseudo-cubic In2O3 heterostructures for solid-state symmetric supercapacitors with a superior stability and specific-capacitance. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 15253-15264	13	10
299	Enhanced Lifetime and Efficiency of Red Quantum Dot Light-Emitting Diodes with Y-Doped ZnO Sol L el Electron-Transport Layers by Reducing Excess Electron Injection. <i>Advanced Quantum Technologies</i> , 2018 , 1, 1700006	4.3	25
298	Ligand-Asymmetric Janus Quantum Dots for Efficient Blue-Quantum Dot Light-Emitting Diodes. <i>ACS Applied Materials & Diversary (Naterials & Diversary)</i> 10, 22453-22459	9.5	25
297	Significance of Polymeric Nanowire-Network Structures for Stable and Efficient Organic Solar Cells. <i>Macromolecular Research</i> , 2018 , 26, 623-629	1.9	8
296	Light-Shield Layers Free Photosensitive Inverters Comprising GaN-Drivers and Multi-Layered MoS2-Loads. <i>IEEE Electron Device Letters</i> , 2018 , 1-1	4.4	2
295	Perovskite photovoltaic cells with ultra-thin buffer layers for tandem applications. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 102303	1.4	2
294	Unraveling the Origin of Operational Instability of Quantum Dot Based Light-Emitting Diodes. <i>ACS Nano</i> , 2018 , 12, 10231-10239	16.7	68
293	Spray-coated single walled carbon nanotubes as source and drain electrodes in SnO thin-film transistors. <i>Semiconductor Science and Technology</i> , 2018 , 33, 075013	1.8	О
292	Comparison of trapped charges and hysteresis behavior in hBN encapsulated single MoS flake based field effect transistors on SiO and hBN substrates. <i>Nanotechnology</i> , 2018 , 29, 335202	3.4	44
291	A circuit mechanism of time-to-space conversion for perception. <i>Hearing Research</i> , 2018 , 366, 32-37	3.9	2
290	Low-temperature solution-processed zinc oxide field effect transistor by blending zinc hydroxide and zinc oxide nanoparticle in aqueous solutions. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 05GD04	1.4	4
289	P-111: Black Photoresist Bank for Inkjet-Printed Quantum Dot Light-Emitting Diodes. <i>Digest of Technical Papers SID International Symposium</i> , 2018 , 49, 1629-1631	0.5	2
288	P-115: Effect of Solvents and Pressure on the Performance of Quantum Dot light Emitting Diodes Fabricated with Soft-Contact Transfer Printing. <i>Digest of Technical Papers SID International Symposium</i> , 2018 , 49, 1643-1646	0.5	2
287	P-184: The Effect of Exciplex-Type Co-Host Emitting Layer Structure in the Lifetime of Organic Light-Emitting Diodes. <i>Digest of Technical Papers SID International Symposium</i> , 2018 , 49, 1850-1852	0.5	
286	Vertical organic light-emitting transistor showing a high current on/off ratio through dielectric encapsulation for the effective charge pathway. <i>Journal of Applied Physics</i> , 2017 , 121, 024502	2.5	17
285	A dual-scale metal nanowire network transparent conductor for highly efficient and flexible organic light emitting diodes. <i>Nanoscale</i> , 2017 , 9, 1978-1985	7.7	85
284	Crystallinity dependent thermal degradation in organic solar cell. <i>Applied Physics Letters</i> , 2017 , 110, 053	304	7
283	High-Density Reconfigurable Devices With Programmable Bottom-Gate Array. <i>IEEE Electron Device Letters</i> , 2017 , 38, 564-567	4.4	8

282	Injection-modulated polarity conversion by charge carrier density control via a self-assembled monolayer for all-solution-processed organic field-effect transistors. <i>Scientific Reports</i> , 2017 , 7, 46365	4.9	22
281	Simultaneous Detection of Dopamine and Uric Acid on Indium Tin Oxides Modified with Cost-effective Gas-phase Synthesized Single Walled Carbon Nanotubes. <i>Electroanalysis</i> , 2017 , 29, 1925-	13933	6
280	13-1: Invited Paper: White Quantum Dot Light-Emitting Diodes With Improved Efficiency and Color Stability. <i>Digest of Technical Papers SID International Symposium</i> , 2017 , 48, 153-156	0.5	3
279	P-32: Light Shielding Layers Enabled Full Swing Multi-Layer MoS2 Inverters For the Application of Photodetectors. <i>Digest of Technical Papers SID International Symposium</i> , 2017 , 48, 1346-1349	0.5	
278	Multifunctional Organic-Semiconductor Interfacial Layers for Solution-Processed Oxide-Semiconductor Thin-Film Transistor. <i>Advanced Materials</i> , 2017 , 29, 1607055	24	35
277	Highly soluble fluorous alkyl ether-tagged imaging materials for the photo-patterning of organic light-emitting devices. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 926-930	7.1	6
276	Photosensitive Full-Swing Multi-Layer MoS2 Inverters With Light Shielding Layers. <i>IEEE Electron Device Letters</i> , 2017 , 38, 67-70	4.4	15
275	Multifunctional Dendrimer Ligands for High-Efficiency, Solution-Processed Quantum Dot Light-Emitting Diodes. <i>ACS Nano</i> , 2017 , 11, 684-692	16.7	59
274	Analysis of Photovoltaic Properties of a Perovskite Solar Cell: Impact of Recombination, Space Charge, Exciton, and Disorder. <i>IEEE Journal of Photovoltaics</i> , 2017 , 7, 1681-1686	3.7	6
273	Non-interlayer hybrid white organic light-emitting diodes via a bipolar mixed host for the blue-fluorescent-emitting layer. <i>Journal of Information Display</i> , 2017 , 18, 153-157	4.1	5
272	One-step solvothermal synthesis of carnation flower-like SnS 2 as superior electrodes for supercapacitor applications. <i>Applied Surface Science</i> , 2017 , 425, 923-931	6.7	50
271	Structure-Property Correlation in Luminescent Indolo[3,2-b]indole (IDID) Derivatives: Unraveling the Mechanism of High Efficiency Thermally Activated Delayed Fluorescence (TADF). <i>ACS Applied Materials & Amp; Interfaces</i> , 2017 , 9, 41413-41420	9.5	43
270	Hole Injection in N-Type Organic Semiconductors by Tuning Metal Work Function with Functional Self-Assembled Monolayers. <i>Journal of Nanoscience and Nanotechnology</i> , 2017 , 17, 3378-3381	1.3	2
269	Improved electron injection in all-solution-processed n-type organic field-effect transistors with an inkjet-printed ZnO electron injection layer. <i>Applied Surface Science</i> , 2017 , 420, 100-104	6.7	12
268	Analysis of Interfacial Layer-Induced Open-Circuit Voltage Burn-In Loss in Polymer Solar Cells on the Basis of Electroluminescence and Impedance Spectroscopy. <i>ACS Applied Materials & amp; Interfaces</i> , 2017 , 9, 24052-24060	9.5	9
267	Ternary bulk heterojunction for wide spectral range organic photodetectors. <i>Journal of the Korean Physical Society</i> , 2017 , 71, 196-202	0.6	10
266	High-frequency organic rectifiers through interface engineering. MRS Communications, 2017, 7, 755-769	2.7	9
265	Light out-coupling efficiency enhancement in organic light-emitting diodes using a multilayer stacked electrode with sol-gel processed TaO. <i>Optics Express</i> , 2017 , 25, 27886-27895	3.3	4

264	Solvent-Dependent Thermoelectric Properties of PTB7 and Effect of 1,8-Diiodooctane Additive. <i>Crystals</i> , 2017 , 7, 292	2.3	9
263	Electron Clouding Effect for Improvement of Electron Injection in a Solution-Processed Organic Diode with Dipolar Self-Assembled Monolayers. <i>Journal of Nanoscience and Nanotechnology</i> , 2017 , 17, 7275-7279	1.3	
262	Side-chain conjugated polymers for use in the active layers of hybrid semiconducting polymer/quantum dot light emitting diodes. <i>Polymer Chemistry</i> , 2016 , 7, 101-112	4.9	21
261	Surface coverage enhancement of a mixed halide perovskite film by using an UV-ozone treatment. Journal of the Korean Physical Society, 2016 , 69, 406-411	0.6	14
2 60	Influence of External Pressure on the Performance of Quantum Dot Solar Cells. <i>ACS Applied Materials & Dot Solar Cells.</i> 8, 23947-52	9.5	3
259	Polymer Interfacial Layer with High Glass Transition Temperature for the Improvement of Bias Stability in Organic Field-Effect Transistors. <i>Journal of Nanoscience and Nanotechnology</i> , 2016 , 16, 1032	5 ¹ 1033	30 ²
258	Zero-line modes at stacking faulted domain walls in multilayer graphene. <i>Physical Review B</i> , 2016 , 94,	3.3	14
257	The Role of Emission Layer Morphology on the Enhanced Performance of Light-Emitting Diodes Based on Quantum Dot-Semiconducting Polymer Hybrids. <i>Advanced Materials Interfaces</i> , 2016 , 3, 16002	2 <i>1</i> 96	25
256	High-gain complementary metal-oxide-semiconductor inverter based on multi-layer WSe2field effect transistors without doping. <i>Semiconductor Science and Technology</i> , 2016 , 31, 105001	1.8	6
255	Organic complementary ring oscillators using a functional polymer interfacial layer for highly improved oscillation frequency. <i>Polymer Bulletin</i> , 2016 , 73, 2531-2537	2.4	3
254	Efficiency Improvement of Organic Photovoltaics Adopting Li- and Cd-Doped ZnO Electron Extraction Layers. <i>IEEE Journal of Photovoltaics</i> , 2016 , 6, 930-933	3.7	7
253	Negligible hysteresis of molybdenum disulfide field-effect transistors through thermal annealing. Journal of Information Display, 2016 , 17, 103-108	4.1	8
252	P-109: Reduced Contact Resistance with MoOx Injection Layer for Thin Film Transistors Based on Organic Semiconductors with Deep HOMO Level. <i>Digest of Technical Papers SID International Symposium</i> , 2016 , 47, 1535-1538	0.5	
251	Degradation of organic light emitting diode: Heat related issues and solutions. <i>Synthetic Metals</i> , 2016 , 216, 40-50	3.6	31
250	A Low Temperature, Solution-Processed Poly(4-vinylphenol), YO(x) Nanoparticle Composite/Polysilazane Bi-Layer Gate Insulator for ZnO Thin Film Transistor. <i>Journal of Nanoscience and Nanotechnology</i> , 2016 , 16, 2632-6	1.3	2
249	Design of highly efficient RGB top-emitting organic light-emitting diodes using finite element method simulations. <i>Optics Express</i> , 2016 , 24, 24018-24031	3.3	4
248	Plasmon-induced slow aging of exciton generation and dissociation for stable organic solar cells. <i>Optica</i> , 2016 , 3, 1115	8.6	1
247	1 GHz Pentacene Diode Rectifiers Enabled by Controlled Film Deposition on SAM-Treated Au Anodes. <i>Advanced Electronic Materials</i> , 2016 , 2, 1500282	6.4	39

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246	P-59: Toward High Resolution Inkjet-Printed Quantum Dot Light-Emitting Diodes for Next Generation Display. <i>Digest of Technical Papers SID International Symposium</i> , 2016 , 47, 1354-1357	0.5	3
245	P-154: Improved Stability and Low Driving Voltage of Organic Light-Emitting Diodes Using Exciplex Forming Host Structure. <i>Digest of Technical Papers SID International Symposium</i> , 2016 , 47, 1706-1709	0.5	
244	Effect of solvent additives on bulk heterojunction morphology of organic photovoltaics and their impact on device performance. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016 , 54, 128-134	2.6	10
243	Controlled Mutual Diffusion between Fullerene and Conjugated Polymer Nanopillars in Ordered Heterojunction Solar Cells. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1600264	4.6	11
242	Direct Optical Probing of Transverse Electric Mode in Graphene. Scientific Reports, 2016, 6, 21523	4.9	21
241	Increased light extraction efficiency from top-emitting organic light-emitting diodes employing a mask-free plasma-etched stochastic polymer surface. <i>Journal of Applied Physics</i> , 2016 , 119, 095502	2.5	5
240	Toward high-resolution, inkjet-printed, quantum dot light-emitting diodes for next-generation displays. <i>Journal of the Society for Information Display</i> , 2016 , 24, 545-551	2.1	37
239	Enhanced light outcoupling of polymer light-emitting diodes with a solution-processed, -flattening photonic-crystal underlayer. <i>Journal of Information Display</i> , 2016 , 17, 143-150	4.1	6
238	Fluorous solvent-soluble imaging materials containing anthracene moieties. <i>Journal of Polymer Science Part A</i> , 2015 , 53, 1252-1259	2.5	8
237	Nanostructured Electron-Selective Interlayer for Efficient Inverted Organic Solar Cells. <i>ACS Applied Materials & Amp; Interfaces</i> , 2015 , 7, 18460-6	9.5	4
236	Enhancement mode p-channel SnO thin-film transistors with dual-gate structures. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , 2015 , 33, 041203	1.3	6
235	Hydroiodic acid treated PEDOT:PSS thin film as transparent electrode: an approach towards ITO free organic photovoltaics. <i>RSC Advances</i> , 2015 , 5, 52019-52025	3.7	26
234	High-Power Genuine Ultraviolet Light-Emitting Diodes Based On Colloidal Nanocrystal Quantum Dots. <i>Nano Letters</i> , 2015 , 15, 3793-9	11.5	88
233	Water-soluble thin film transistors and circuits based on amorphous indium-gallium-zinc oxide. <i>ACS Applied Materials & Discounty in terfaces</i> , 2015 , 7, 8268-74	9.5	98
232	Semiconductor nanocrystals in fluorous liquids for the construction of light-emitting diodes. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 2759-2762	7.1	4
231	Soft contact transplanted nanocrystal quantum dots for light-emitting diodes: effect of surface energy on device performance. <i>ACS Applied Materials & Empty Interfaces</i> , 2015 , 7, 10828-33	9.5	22
230	Trap-level-engineered common red layer for fabricating red, green, and blue subpixels of full-color organic light-emitting diode displays. <i>Optics Express</i> , 2015 , 23, 11424-35	3.3	13
229	Improved photovoltaic performance of inverted polymer solar cells through a sol-gel processed Al-doped ZnO electron extraction layer. <i>Optics Express</i> , 2015 , 23, A1334-41	3.3	9

228	Low frequency noise characteristics in multilayer WSe2 field effect transistor. <i>Applied Physics Letters</i> , 2015 , 106, 023504	3.4	23
227	Highly enhanced phosphorescent organic light-emitting diodes with cesium fluoride doped electron injection layer 2015 ,		2
226	Enhanced Light Trapping and Power Conversion Efficiency in Ultrathin Plasmonic Organic Solar Cells: A Coupled Optical-Electrical Multiphysics Study on the Effect of Nanoparticle Geometry. <i>ACS Photonics</i> , 2015 , 2, 78-85	6.3	45
225	Vapor-phase-processed fluorinated self-assembled monolayer for organic thin-film transistors. Journal of the Korean Physical Society, 2015 , 67, 941-945	0.6	4
224	Bi-Assisted CdTe/CdS Hierarchical Nanostructure Growth for Photoconductive Applications. Nanoscale Research Letters, 2015 , 10, 1037	5	7
223	P-139: Improved Power Efficiency of Organic Light-Emitting Diodes using Solution-Processed CuSCN Hole Injection Layer. <i>Digest of Technical Papers SID International Symposium</i> , 2015 , 46, 1684-1686	5 ^{0.5}	1
222	P-175L: Late-News Poster: High Efficiency Light Extraction from Top-Emitting Organic Light-Emitting Diodes Employing Mask-Free Plasma Etched Stochastic Polymer Surface. <i>Digest of Technical Papers SID International Symposium</i> , 2015 , 46, 1707-1709	0.5	
221	46.1: Invited Paper: Recent Progress of Light-Emitting Diodes Based on Colloidal Quantum Dots. Digest of Technical Papers SID International Symposium, 2015 , 46, 685-687	0.5	5
220	Fluorinated CYTOP passivation effects on the electrical reliability of multilayer MoSIField-effect transistors. <i>Nanotechnology</i> , 2015 , 26, 455201	3.4	34
219	P-81: Non-Quasi Static Measurement in Random Network Carbon Nanotube Thin-Film Transistors for Next-Generation Displays. <i>Digest of Technical Papers SID International Symposium</i> , 2015 , 46, 1456-14	58 5	
218	The influence of sequential ligand exchange and elimination on the performance of P3HT: CdSe quantum dot hybrid solar cells. <i>Nanotechnology</i> , 2015 , 26, 465401	3.4	5
217	Purification of Single-Walled Carbon Nanotubes Based on Thermocapillary Flow. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2015 , 82,	2.7	4
216	Selectively modulated inkjet printing of highly conductive and transparent foldable polymer electrodes for flexible polymer light-emitting diode applications. <i>Organic Electronics</i> , 2015 , 19, 147-156	3.5	25
215	Cross-stacked single-crystal organic nanowire p-n nanojunction arrays by nanotransfer printing. <i>Nano Letters</i> , 2015 , 15, 289-93	11.5	34
214	Charge Injection-Assisted Current Efficiency Improvement in Roll-Off Characteristic of OLEDs by Device Modeling. <i>Journal of Nanoelectronics and Optoelectronics</i> , 2015 , 10, 578-581	1.3	2
213	Composite film of poly(3,4-ethylenedioxythiophene):poly(styrenesulfonate) and MoO3 as an efficient hole injection layer for polymer light-emitting diodes. <i>Organic Electronics</i> , 2014 , 15, 1083-1087	3.5	11
212	Modular Fabrication of Hybrid Bulk Heterojunction Solar Cells Based on Breakwater-like CdSe Tetrapod Nanocrystal Network Infused with P3HT. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 3942-3957	2 ^{3.8}	20
211	Effect of Temperature and Electric Field on Degradation in Amorphous InGaZnO TFTs Under Positive Gate and Drain Bias Stress. <i>IEEE Electron Device Letters</i> , 2014 , 35, 458-460	4.4	23

210	Enhanced photovoltaic performance of inverted organic solar cells with In-doped ZnO as an electron extraction layer. <i>Renewable Energy</i> , 2014 , 66, 433-442	8.1	32
209	Fundamental effects in nanoscale thermocapillary flow. <i>Journal of Applied Physics</i> , 2014 , 115, 054315	2.5	8
208	Blue electroluminescence from polyhedral oligomeric silsesquioxane containing spirobifluorene trimers. <i>Synthetic Metals</i> , 2014 , 188, 46-52	3.6	1
207	Controlled host mixture and doping profile for ideal electrophosphorescent devices. <i>Synthetic Metals</i> , 2014 , 189, 1-6	3.6	3
206	Rosa centifolia sensitized ZnO nanorods for photoelectrochemical solar cell applications. <i>Solar Energy</i> , 2014 , 106, 143-150	6.8	14
205	Nanocrystalline Ga-doped ZnO thin films for inverted polymer solar cells. <i>Solar Energy</i> , 2014 , 106, 95-10	01 6.8	20
204	Thermally curable organic/inorganic hybrid polymers as gate dielectrics for organic thin-film transistors. <i>Journal of Polymer Science Part A</i> , 2014 , 52, 3260-3268	2.5	10
203	Effects of the active layers deposition temperature on the electrical performance of p-type SnO thin-film Transistors. <i>Journal of the Korean Physical Society</i> , 2014 , 65, 286-290	0.6	7
202	Microwave purification of large-area horizontally aligned arrays of single-walled carbon nanotubes. <i>Nature Communications</i> , 2014 , 5, 5332	17.4	37
201	Thermally curable polymers consisting of alcohol-functionalized cyclotetrasiloxane and melamine derivatives for use as insulators in OTFTs. <i>Organic Electronics</i> , 2014 , 15, 3666-3673	3.5	5
200	Reduced efficiency roll-off in light-emitting diodes enabled by quantum dotflonducting polymer nanohybrids. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 4974-4979	7.1	33
199	Enhanced power conversion efficiency of inverted organic solar cells by using solution processed Sn-doped TiO2 as an electron transport layer. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 11426	13	17
198	Modeling of thermocapillary flow to purify single-walled carbon nanotubes. RSC Advances, 2014, 4, 424	-5 <u>4</u> -7424	1 <i>6</i> 81
197	High-efficiency inverted organic solar cells with polyethylene oxide-modified Zn-doped TiO2 as an interfacial electron transport layer. <i>Nanoscale</i> , 2014 , 6, 8585-9	7.7	27
196	R/G/B/natural white light thin colloidal quantum dot-based light-emitting devices. <i>Advanced Materials</i> , 2014 , 26, 6387-93	24	164
195	Thin Film Receiver Materials for Deterministic Assembly by Transfer Printing. <i>Chemistry of Materials</i> , 2014 , 26, 3502-3507	9.6	32
194	Enhanced performances in inverted bottom-emission organic light-emitting diodes with KBH4-doped electron-injection layer. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2014 , 211, 1807-1811	1.6	3
193	Plasmonic organic solar cells employing nanobump assembly via aerosol-derived nanoparticles. <i>ACS Nano</i> , 2014 , 8, 2590-601	16.7	79

192	Effects of insertion of hole injection layers on pentacene rectifying diodes. <i>Journal of Nanoscience and Nanotechnology</i> , 2014 , 14, 5301-3	1.3	2
191	Improvement of Long-Term Durability and Bias Stress Stability in p-Type SnO Thin-Film Transistors Using a SU-8 Passivation Layer. <i>IEEE Electron Device Letters</i> , 2014 , 35, 1260-1262	4.4	41
190	P-86: Improved Performance of Quantum Dot Light Emitting Diodes by Using Charge Blocking Layer. <i>Digest of Technical Papers SID International Symposium</i> , 2014 , 45, 1309-1311	0.5	1
189	Improvement in the efficiency of organic solar cells using a low-temperature evaporable optical spacer. <i>Japanese Journal of Applied Physics</i> , 2014 , 53, 08NJ04	1.4	
188	Effect of traps on transient bit-line current behavior in word-line stacked nand flash memory with poly-Si body 2014 ,		12
187	Improvement of Current Efficiency at High Field Regime Via Description of Roll-off Characteristic in Model Device of OLEDs. <i>Molecular Crystals and Liquid Crystals</i> , 2014 , 599, 79-85	0.5	2
186	Fabrication of transparent Al:LiF composite/MoO3 interconnecting layers for tandem white organic light emitting devices. <i>Journal of Nanoscience and Nanotechnology</i> , 2014 , 14, 5898-902	1.3	5
185	Light outcoupling enhancement from top-emitting organic light-emitting diodes made on a nano-sized stochastic texture surface. <i>Optics Express</i> , 2014 , 22 Suppl 7, A1687-94	3.3	15
184	Influence of shell thickness on the performance of light-emitting devices based on CdSe/Zn1-X CdX S core/shell heterostructured quantum dots. <i>Advanced Materials</i> , 2014 , 26, 8034-40	24	211
183	Overcoming tradeoff between mobility and bias stability in organic field-effect transistors according to the self-assembled monolayer chain lengths. <i>Applied Physics Letters</i> , 2014 , 104, 173301	3.4	31
182	P-21: n-type Organic Thin Film Transistors with High Operational Stability. <i>Digest of Technical Papers SID International Symposium</i> , 2014 , 45, 1021-1023	0.5	
181	Thermoreflectance microscopy analysis on self-heating effect of short-channel amorphous In-Ga-Zn-O thin film transistors. <i>Applied Physics Letters</i> , 2014 , 105, 043501	3.4	7
180	Push-Pull Design of Bis(tridentate) Ruthenium(II) Polypyridine Chromophores as Deep Red Light Emitters in Light-Emitting Electrochemical Cells. <i>European Journal of Inorganic Chemistry</i> , 2014 , 2014, 288-295	2.3	35
179	Solution-processed single-walled carbon nanotube field effect transistors and bootstrapped inverters for disintegratable, transient electronics. <i>Applied Physics Letters</i> , 2014 , 105, 013506	3.4	42
178	P-158: Improved Electron Injection in Organic Light-Emitting Diodes Using Samarium Doped Electron Transport Layer. <i>Digest of Technical Papers SID International Symposium</i> , 2014 , 45, 1574-1576	0.5	
177	High-performance polymer light emitting diodes with interface-engineered graphene anodes. <i>Organic Electronics</i> , 2013 , 14, 2324-2330	3.5	28
176	Deterministic assembly of releasable single crystal silicon-metal oxide field-effect devices formed from bulk wafers. <i>Applied Physics Letters</i> , 2013 , 102, 182104	3.4	29
175	Electrostatic dimension of aligned-array carbon nanotube field-effect transistors. <i>ACS Nano</i> , 2013 , 7, 1299-308	16.7	15

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174	Direct topflown fabrication of nanoscale electrodes for organic semiconductors using fluoropolymer resists. <i>Applied Physics A: Materials Science and Processing</i> , 2013 , 111, 1051-1056	2.6	7
173	The effect of band gap alignment on the hole transport from semiconducting block copolymers to quantum dots. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 1722	7.1	29
172	High performance inverted organic solar cells with solution processed Ga-doped ZnO as an interfacial electron transport layer. <i>Journal of Materials Chemistry C</i> , 2013 , 1, 8161	7.1	42
171	Controlling the influence of Auger recombination on the performance of quantum-dot light-emitting diodes. <i>Nature Communications</i> , 2013 , 4, 2661	17.4	483
170	Photocurable propyl-cinnamate-functionalized polyhedral oligomeric silsesquioxane as a gate dielectric for organic thin film transistors. <i>Organic Electronics</i> , 2013 , 14, 2315-2323	3.5	18
169	Quantum confinement effects in Gd-doped CdS nanoparticles prepared by chemical precipitation technique. <i>Journal of Materials Science: Materials in Electronics</i> , 2013 , 24, 4535-4541	2.1	24
168	Highly efficient cadmium-free quantum dot light-emitting diodes enabled by the direct formation of excitons within InP@ZnSeS quantum dots. <i>ACS Nano</i> , 2013 , 7, 9019-26	16.7	276
167	Synthesis and characterization of flower like ZnO nanorods for dye-sensitized solar cells. <i>Journal of Materials Science: Materials in Electronics</i> , 2013 , 24, 2367-2371	2.1	16
166	Acetylene-bridged DAD type small molecule comprising pyrene and diketopyrrolopyrrole for high efficiency organic solar cells. <i>Organic Electronics</i> , 2013 , 14, 2341-2347	3.5	29
165	Chemical bath deposition of ZnO nanorods for dye sensitized solar cell applications. <i>Journal of Materials Science: Materials in Electronics</i> , 2013 , 24, 1921-1926	2.1	16
164	Multifunctional epidermal electronics printed directly onto the skin. <i>Advanced Materials</i> , 2013 , 25, 2773	5- 8 4	590
163	Improved efficiency of inverted organic light-emitting diodes using tin dioxide nanoparticles as an electron injection layer. <i>ACS Applied Materials & amp; Interfaces</i> , 2013 , 5, 1977-81	9.5	52
162	High-mobility pyrene-based semiconductor for organic thin-film transistors. <i>ACS Applied Materials & ACS Applied Materials</i>	9.5	40
161	Using nanoscale thermocapillary flows to create arrays of purely semiconducting single-walled carbon nanotubes. <i>Nature Nanotechnology</i> , 2013 , 8, 347-55	28.7	144
160	Multi-Functional Electronics: Multifunctional Epidermal Electronics Printed Directly Onto the Skin (Adv. Mater. 20/2013). <i>Advanced Materials</i> , 2013 , 25, 2772-2772	24	13
159	Synthesis of garland like ZnO nanorods and their application in dye sensitized solar cells. <i>Materials Letters</i> , 2013 , 92, 104-107	3.3	35
158	Analysis of annealing process on P3HT:PCBM-based polymer solar cells using optical and impedance spectroscopy. <i>Journal of Nanoscience and Nanotechnology</i> , 2013 , 13, 3360-4	1.3	10
157	19.1: Efficiency Enhancement of Indium Phosphide (InP) Based Quantum Dot Light-Emitting Diodes by Shell Thickness Tuning. <i>Digest of Technical Papers SID International Symposium</i> , 2013 , 44, 207-209	0.5	2

156	P.118: Improvement of the Quantum Efficiency in OLEDs Using Stochastic Metallic Nanostructure. Digest of Technical Papers SID International Symposium, 2013 , 44, 1428-1430	0.5	1
155	P.119: High-Performance Polymer Light-Emitting Diodes with a Conjugated Polyelectrolyte. <i>Digest of Technical Papers SID International Symposium</i> , 2013 , 44, 1431-1433	0.5	3
154	P.120: P-doped Di-[4-(N,N-ditolyl-amino)-phenyl]cyclohexane for Improving Power Efficiency of Organic Light-Emitting Diodes. <i>Digest of Technical Papers SID International Symposium</i> , 2013 , 44, 1434-	-1437	
153	Air stability of PTCDI-C13-based n-OFETs on polymer interfacial layers. <i>Physica Status Solidi - Rapid Research Letters</i> , 2013 , 7, 469-472	2.5	13
152	P.64: WITHDRAWN: P.65: The Effect of Surface Polarity of Gate Dielectric Buffer Layer on Operational Stability in Organic Thin Film Transistors. <i>Digest of Technical Papers SID International Symposium</i> , 2013 , 44, 1236-1238	0.5	
151	Origin of the mixing ratio dependence of power conversion efficiency in bulk heterojunction organic solar cells with low donor concentration. <i>Journal of Nanoscience and Nanotechnology</i> , 2013 , 13, 7982-7	1.3	3
150	Synthesis of ZnO nanorods and their application in quantum dot sensitized solar cells. <i>Journal of Sol-Gel Science and Technology</i> , 2012 , 64, 750-755	2.3	20
149	Comparison of the carrier mobility, unipolar conduction, and light emitting characteristics of phosphorescent hostdopant system. <i>Synthetic Metals</i> , 2012 , 162, 2355-2360	3.6	10
148	Aligned networks of cadmium sulfide nanowires for highly flexible photodetectors with improved photoconductive responses. <i>Journal of Materials Chemistry</i> , 2012 , 22, 2173-2179		77
147	Polymer-nanoparticle hybrid solar cell 2012 ,		1
147 146	Polymer-nanoparticle hybrid solar cell 2012, Parallel Pool Analysis of Transient Spectroscopy Reveals Origins of and Perspectives for ZnO Hybrid Solar Cell Performance Enhancement Using Semiconducting Surfactants. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 2665-70	6.4	6
	Parallel Pool Analysis of Transient Spectroscopy Reveals Origins of and Perspectives for ZnO Hybrid Solar Cell Performance Enhancement Using Semiconducting Surfactants. <i>Journal of Physical</i>	6.4 3.6	,
146	Parallel Pool Analysis of Transient Spectroscopy Reveals Origins of and Perspectives for ZnO Hybrid Solar Cell Performance Enhancement Using Semiconducting Surfactants. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 2665-70 Highly efficient yellow and white phosphorescent organic light-emitting diodes using a	·	6
146	Parallel Pool Analysis of Transient Spectroscopy Reveals Origins of and Perspectives for ZnO Hybrid Solar Cell Performance Enhancement Using Semiconducting Surfactants. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 2665-70 Highly efficient yellow and white phosphorescent organic light-emitting diodes using a benzothiazole-liganded new iridium complex. <i>Synthetic Metals</i> , 2012 , 162, 1421-1428 Hole transport materials with high glass transition temperatures for highly stable organic	3.6	6
146 145 144	Parallel Pool Analysis of Transient Spectroscopy Reveals Origins of and Perspectives for ZnO Hybrid Solar Cell Performance Enhancement Using Semiconducting Surfactants. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 2665-70 Highly efficient yellow and white phosphorescent organic light-emitting diodes using a benzothiazole-liganded new iridium complex. <i>Synthetic Metals</i> , 2012 , 162, 1421-1428 Hole transport materials with high glass transition temperatures for highly stable organic light-emitting diodes. <i>Thin Solid Films</i> , 2012 , 520, 7157-7163 Pyrene end-capped oligothiophene derivatives for organic thin-film transistors and organic solar	3.6 2.2 3.6	6 18 20
146 145 144	Parallel Pool Analysis of Transient Spectroscopy Reveals Origins of and Perspectives for ZnO Hybrid Solar Cell Performance Enhancement Using Semiconducting Surfactants. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 2665-70 Highly efficient yellow and white phosphorescent organic light-emitting diodes using a benzothiazole-liganded new iridium complex. <i>Synthetic Metals</i> , 2012 , 162, 1421-1428 Hole transport materials with high glass transition temperatures for highly stable organic light-emitting diodes. <i>Thin Solid Films</i> , 2012 , 520, 7157-7163 Pyrene end-capped oligothiophene derivatives for organic thin-film transistors and organic solar cells. <i>New Journal of Chemistry</i> , 2012 , 36, 1813 P-72: Efficient Red, Green, and Blue QD-LEDs Fabricated with the QD Transplanting Process on a	3.6 2.2 3.6	6 18 20
146 145 144 143	Parallel Pool Analysis of Transient Spectroscopy Reveals Origins of and Perspectives for ZnO Hybrid Solar Cell Performance Enhancement Using Semiconducting Surfactants. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 2665-70 Highly efficient yellow and white phosphorescent organic light-emitting diodes using a benzothiazole-liganded new iridium complex. <i>Synthetic Metals</i> , 2012 , 162, 1421-1428 Hole transport materials with high glass transition temperatures for highly stable organic light-emitting diodes. <i>Thin Solid Films</i> , 2012 , 520, 7157-7163 Pyrene end-capped oligothiophene derivatives for organic thin-film transistors and organic solar cells. <i>New Journal of Chemistry</i> , 2012 , 36, 1813 P-72: Efficient Red, Green, and Blue QD-LEDs Fabricated with the QD Transplanting Process on a Common Hole Transport Layer. <i>Digest of Technical Papers SID International Symposium</i> , 2012 , 43, 1330 P-111: Improved Performances in Phosphorescent Organic Light-emitting Diodes using Solution-processed Vanadium Pentoxide as a Hole Injection Layer. <i>Digest of Technical Papers SID</i>	3.6 2.2 3.6	6 18 20 31

138	Efficient inverted bottom-emission blue phosphorescent organic light-emitting diodes with a ytterbium-doped electron injection layer. <i>Journal of the Korean Physical Society</i> , 2012 , 61, 1536-1540	0.6	4
137	Grapheneflanowire hybrid structures for high-performance photoconductive devices. <i>Journal of Materials Chemistry</i> , 2012 , 22, 8372		40
136	Organic thin-film transistors using photocurable acryl-fuctionalized polyhedral oligomeric silsesquioxanes as gate dielectrics. <i>Synthetic Metals</i> , 2012 , 162, 1798-1803	3.6	5
135	Role of tunneling layer in graphene-oxide based organic nonvolatile memory transistors. <i>Organic Electronics</i> , 2012 , 13, 2887-2892	3.5	19
134	Improved performances in organic and polymer light-emitting diodes using solution-processed vanadium pentoxide as a hole injection layer. <i>Journal of the Society for Information Display</i> , 2012 , 20, 640-645	2.1	12
133	Contact Resistance of Inkjet-Printed Silver SourceDrain Electrodes in Bottom-Contact OTFTs. <i>Journal of Display Technology</i> , 2012 , 8, 48-53		27
132	Solution processed polymer light-emitting diodes with single layer graphene anode 2012,		2
131	New carbazole-based host material for low-voltage and highly efficient red phosphorescent organic light-emitting diodes. <i>Journal of Materials Chemistry</i> , 2012 , 22, 6351		36
130	High-performance photoconductive channels based on (carbon nanotube)-(CdS nanowire) hybrid nanostructures. <i>Small</i> , 2012 , 8, 1650-6	11	12
129	Bright and efficient full-color colloidal quantum dot light-emitting diodes using an inverted device structure. <i>Nano Letters</i> , 2012 , 12, 2362-6	11.5	688
128	Sources of Hysteresis in Carbon Nanotube Field-Effect Transistors and Their Elimination Via Methylsiloxane Encapsulants and Optimized Growth Procedures. <i>Advanced Functional Materials</i> , 2012 , 22, 2276-2284	15.6	93
127	Improvement of Power Efficiency in Phosphorescent White Organic Light-Emitting Diodes Using p-Doped Hole Transport Layer. <i>International Journal of Photoenergy</i> , 2012 , 2012, 1-8	2.1	5
126	Perspective on synthesis, device structures, and printing processes for quantum dot displays. <i>Optical Materials Express</i> , 2012 , 2, 594	2.6	104
125	Solvent effect of the fibrillar morphology on the power conversion efficiency of a polymer photovoltaic cell in a diffusive heterojunction. <i>Semiconductor Science and Technology</i> , 2012 , 27, 125018	1.8	7
124	Synthesis and characterization of polystyrene brushes for organic thin film transistors. <i>Journal of Nanoscience and Nanotechnology</i> , 2012 , 12, 4137-41	1.3	8
123	Effect of variations in diameter and density on the statistics of aligned array carbon-nanotube field effect transistors. <i>Journal of Applied Physics</i> , 2012 , 111, 054511	2.5	20
122	Charge transport in amorphous low bandgap conjugated polymer/fullerene films. <i>Journal of Applied Physics</i> , 2012 , 111, 043710	2.5	8
121	Enhanced performance of SubPC/C60 solar cells by annealing and modifying surface morphology. Journal of Nanoscience and Nanotechnology, 2012 , 12, 5724-7	1.3	4

120	Effect of Soltel-Derived ZnO Interfacial Layer on the Photovoltaic Properties of Polymer Solar Cells. <i>Japanese Journal of Applied Physics</i> , 2012 , 51, 10NE29	1.4	1
119	All-Inkjet-Printed Organic Thin-Film Transistor Inverter on Flexible Plastic Substrate. <i>IEEE Electron Device Letters</i> , 2011 , 32, 1134-1136	4.4	137
118	[email[protected], [email[protected] Gradient Shell Quantum Dots with Enhanced Stability. <i>Chemistry of Materials</i> , 2011 , 23, 4459-4463	9.6	190
117	38.4: Full-Color Patterning of Quantum Dot (QD) Light-Emitting Diodes using QD Transplanting Techniques. <i>Digest of Technical Papers SID International Symposium</i> , 2011 , 42, 526-528	0.5	3
116	Organic complementary inverter and ring oscillator on a flexible substrate. <i>Journal of Information Display</i> , 2011 , 12, 1-4	4.1	1
115	56.2: Analysis and Interpretation of Degradation Mechanism of OLED with p-doping Layer. <i>Digest of Technical Papers SID International Symposium</i> , 2011 , 42, 822-824	0.5	2
114	Holography and plasma oxidation for uniform nanoscale two dimensional channel formation of vertical organic field-effect transistors with suppressed gate leakage current. <i>Organic Electronics</i> , 2011 , 12, 1841-1845	3.5	6
113	Electrical-Stress-Induced Threshold Voltage Instability in Solution-Processed ZnO Thin-Film Transistors: An Experimental and Simulation Study. <i>IEEE Transactions on Electron Devices</i> , 2011 , 58, 199	95 ⁻² 2002	2 ³²
112	Liquid crystalline mesophases based on symmetric tetrathiafulvalene derivatives. <i>Journal of Materials Chemistry</i> , 2011 , 21, 60-64		20
111	Transparent electrode with ZnO nanoparticles in tandem organic solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2011 , 95, 365-368	6.4	39
110	Improvement of efficiency in inverted bottom-emission white OLEDs by doping the hole transport layer 2011 ,		1
109	Effect of main ligands on organic photovoltaic performance of Ir(III) complexes. <i>New Journal of Chemistry</i> , 2011 , 35, 2557	3.6	40
108	Effect of nanoscale SubPc interfacial layer on the performance of inverted polymer solar cells based on P3HT/PC71BM. <i>ACS Applied Materials & Dased on P3HT/PC71BM.</i> ACS Applied Materials & Dased on P3HT/PC71BM.	9.5	16
107	Enhanced photovoltaic performance of ZnO nanoparticle/poly(phenylene vinylene) hybrid photovoltaic cells by semiconducting surfactant. <i>Organic Electronics</i> , 2011 , 12, 424-428	3.5	23
106	Device characteristics of blue phosphorescent organic light-emitting diodes depending on the electron transport materials. <i>Journal of Information Display</i> , 2011 , 12, 219-222	4.1	17
105	Solution-processable zinc oxide for the polymer solar cell based on P3HT:PCBM. <i>Journal of Nanoscience and Nanotechnology</i> , 2011 , 11, 5995-6000	1.3	13
104	Study of the Cesium Carbonate (Cs2CO3) Inter Layer Fabricated by Solution Process on P3HT:PCBM Solar Cells. <i>Molecular Crystals and Liquid Crystals</i> , 2011 , 538, 20-27	0.5	14
103	All-Inkjet-Printed Organic Thin-Film Transistors with Silver Gate, Source/Drain Electrodes. <i>Japanese Journal of Applied Physics</i> , 2011 , 50, 03CB05	1.4	16

102	Temperature and Light Intensity Dependence of Polymer Solar Cells with MoO3 and PEDOT:PSS as a Buffer Layer. <i>Journal of the Korean Physical Society</i> , 2011 , 59, 362-366	0.6	10
101	Organic Rectifier with Transfer-printed Metal as a Top Electrode. <i>Journal of the Korean Physical Society</i> , 2011 , 59, 470-473	0.6	6
100	All-Inkjet-Printed Organic Thin-Film Transistors with Silver Gate, Source/Drain Electrodes. <i>Japanese Journal of Applied Physics</i> , 2011 , 50, 03CB05	1.4	24
99	Studies of Electroluminescent Characteristics of Quantum Well Green Organic Light Emitting Diodes. <i>Molecular Crystals and Liquid Crystals</i> , 2010 , 520, 273/[549]-278/[554]	0.5	1
98	Microstructured elastomeric surfaces with reversible adhesion and examples of their use in deterministic assembly by transfer printing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 17095-100	11.5	280
97	Improvement of electron injection in inverted bottom-emission blue phosphorescent organic light emitting diodes using zinc oxide nanoparticles. <i>Applied Physics Letters</i> , 2010 , 96, 153306	3.4	73
96	Frequency Performance Optimization of Flexible Pentacene Rectifier by Varying the Thickness of Active Layer. <i>Japanese Journal of Applied Physics</i> , 2010 , 49, 05EB07	1.4	3
95	Organic Thin-Film Transistors with Transfer-Printed Au Electrodes on Flexible Substrates. <i>Japanese Journal of Applied Physics</i> , 2010 , 49, 05EB08	1.4	5
94	Study of buffer layer thickness on bulk heterojunction solar cell. <i>Journal of Nanoscience and Nanotechnology</i> , 2010 , 10, 6815-8	1.3	17
93	P-160: Highly Efficient Inverted Bottom-Emission OLEDs with ZnO Nanoparticles as an Electron-Injection Layer. <i>Digest of Technical Papers SID International Symposium</i> , 2010 , 41, 1849	0.5	
93 92		o.5 5·5	60
	Electron-Injection Layer. <i>Digest of Technical Papers SID International Symposium</i> , 2010 , 41, 1849 Single Chain White-Light-Emitting Polyfluorene Copolymers Containing Iridium Complex		
92	Electron-Injection Layer. <i>Digest of Technical Papers SID International Symposium</i> , 2010 , 41, 1849 Single Chain White-Light-Emitting Polyfluorene Copolymers Containing Iridium Complex Coordinated on the Main Chain. <i>Macromolecules</i> , 2010 , 43, 1379-1386 Multicolored light-emitting diodes based on all-quantum-dot multilayer films using layer-by-layer	5.5	
92 91	Single Chain White-Light-Emitting Polyfluorene Copolymers Containing Iridium Complex Coordinated on the Main Chain. <i>Macromolecules</i> , 2010 , 43, 1379-1386 Multicolored light-emitting diodes based on all-quantum-dot multilayer films using layer-by-layer assembly method. <i>Nano Letters</i> , 2010 , 10, 2368-73 Solution processable donor materials based on thiophene and triphenylamine for bulk	5.5	189
92 91 90	Single Chain White-Light-Emitting Polyfluorene Copolymers Containing Iridium Complex Coordinated on the Main Chain. <i>Macromolecules</i> , 2010 , 43, 1379-1386 Multicolored light-emitting diodes based on all-quantum-dot multilayer films using layer-by-layer assembly method. <i>Nano Letters</i> , 2010 , 10, 2368-73 Solution processable donor materials based on thiophene and triphenylamine for bulk heterojunction solar cells. <i>New Journal of Chemistry</i> , 2010 , 34, 744	5.5	189
92 91 90 89	Single Chain White-Light-Emitting Polyfluorene Copolymers Containing Iridium Complex Coordinated on the Main Chain. <i>Macromolecules</i> , 2010, 43, 1379-1386 Multicolored light-emitting diodes based on all-quantum-dot multilayer films using layer-by-layer assembly method. <i>Nano Letters</i> , 2010, 10, 2368-73 Solution processable donor materials based on thiophene and triphenylamine for bulk heterojunction solar cells. <i>New Journal of Chemistry</i> , 2010, 34, 744 The thickness of active layer dependence of polymer solar cells 2010, P-153: Color-Saturated LEDs Based on Colloidal Quantum-Dot by Improving Charge Injection and	5.5 11.5 3.6	189 20 1
92 91 90 89 88	Single Chain White-Light-Emitting Polyfluorene Copolymers Containing Iridium Complex Coordinated on the Main Chain. <i>Macromolecules</i> , 2010 , 43, 1379-1386 Multicolored light-emitting diodes based on all-quantum-dot multilayer films using layer-by-layer assembly method. <i>Nano Letters</i> , 2010 , 10, 2368-73 Solution processable donor materials based on thiophene and triphenylamine for bulk heterojunction solar cells. <i>New Journal of Chemistry</i> , 2010 , 34, 744 The thickness of active layer dependence of polymer solar cells 2010 , P-153: Color-Saturated LEDs Based on Colloidal Quantum-Dot by Improving Charge Injection and Transport Layers. <i>Digest of Technical Papers SID International Symposium</i> , 2010 , 41, 1824 Fluorescent white OLEDs with a high color-rendering index using a silicon-cored anthracene	5.5 11.5 3.6	189 20 1

84	Temperature dependent transport properties in molybdenum oxide doped ENPD. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2010 , 166, 147-151	3.1	23
83	Naphtho[2,3,a]pyrene as an efficient multifunctional organic semiconductor for organic solar cells, organic light-emitting diodes, and organic thin-film transistors. <i>Organic Electronics</i> , 2010 , 11, 1103-1110	3.5	21
82	Photo-curable epoxy functionalized cyclotetrasiloxane as a gate dielectric for organic thin film transistors. <i>Current Applied Physics</i> , 2010 , 10, 1132-1136	2.6	5
81	Surface treatment of molybdenum oxide for performance improvement of organic light emitting diodes. <i>Displays</i> , 2010 , 31, 139-142	3.4	10
80	Performance of top-gate thin film transistors with solution processed ZnO channel layer and PVP gate dielectric. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010 , 207, 1664-1667	1.6	9
79	Organic Tandem Solar Cell Using a Semi-transparent Top Electrode for Both-side Light Absorption. Journal of the Korean Physical Society, 2010 , 57, 1852-1855	0.6	6
78	Characteristics of Inverters Using Pentacene Organic Thin Film Transistors with Printed Ag Electrodes. <i>Molecular Crystals and Liquid Crystals</i> , 2009 , 513, 262-267	0.5	3
77	Effects of Li doping on the performance and environmental stability of solution processed ZnO thin film transistors. <i>Applied Physics Letters</i> , 2009 , 95, 193503	3.4	59
76	Effect of Electrode Area on High Speed Characteristics over 1 MHz of Poly(3-hexylthiophene-2,5-diyl) Diode with Inkjet-Printed Ag Electrode. <i>Molecular Crystals and Liquid Crystals</i> , 2009 , 513, 256-261	0.5	6
75	Effect of the plasma-assisted patterning of the organic layers on the performance of organic light-emitting diodes. <i>Journal of Information Display</i> , 2009 , 10, 111-116	4.1	1
74	Low frequency noise in amorphous silicon thin film transistors with SiNx gate dielectric. <i>Journal of Applied Physics</i> , 2009 , 105, 124504	2.5	2
73	Highly Efficient Red Phosphorescent OLEDs based on Non-Conjugated Silicon-Cored Spirobifluorene Derivative Doped with Ir-Complexes. <i>Advanced Functional Materials</i> , 2009 , 19, 420-427	15.6	133
72	Highly Efficient Green-Light-Emitting Diodes Based on CdSe@ZnS Quantum Dots with a Chemical-Composition Gradient. <i>Advanced Materials</i> , 2009 , 21, 1690-1694	24	236
71	Characterization of quantum dot/conducting polymer hybrid films and their application to light-emitting diodes. <i>Advanced Materials</i> , 2009 , 21, 5022-5026	24	79
70	Surface coatings based on polysilsesquioxanes: solution-processible smooth hole-injection layers for optoelectronic applications. <i>Macromolecular Rapid Communications</i> , 2009 , 30, 1238-42	4.8	20
69	Drain bias dependent bias temperature stress instability in a-Si:H TFT. <i>Solid-State Electronics</i> , 2009 , 53, 225-233	1.7	8
68	AC impedance spectroscopic studies of transport properties in metal oxide doped ENPD. <i>Current Applied Physics</i> , 2009 , 9, 978-984	2.6	17
67	Partitioning of the organic layers for the fabrication of high efficiency organic photovoltaic devices. <i>Organic Electronics</i> , 2009 , 10, 1091-1096	3.5	7

(2008-2009)

66	Frequency analysis on poly(3-hexylthiopene) rectifier using impedance spectroscopy. <i>Thin Solid Films</i> , 2009 , 518, 889-892	2.2	22
65	Effect of solution processed salt layers on the device performances of polymer solar cells. <i>Thin Solid Films</i> , 2009 , 518, 541-544	2.2	3
64	Effect of type-II quantum well of m-MTDATA/ENPD on the performance of green organic light-emitting diodes. <i>Microelectronics Journal</i> , 2009 , 40, 63-65	1.8	9
63	Stable green light-emission from poly[9,9-bis(4?-n-octyloxyphenyl)fluorenyl-2,7-vinylene] synthesized via the Gilch polymerization route. <i>Current Applied Physics</i> , 2009 , 9, 441-447	2.6	3
62	Effect of cadmium arachidate layers on the growth of pentacene and the performance of pentacene-based thin film transistors. <i>Langmuir</i> , 2009 , 25, 6565-9	4	12
61	Synthesis and Electroluminescence of New Polyfluorene Copolymers Containing Iridium Complex Coordinated on the Main Chain. <i>Macromolecules</i> , 2009 , 42, 5551-5557	5.5	26
60	Spin-coated Ga-doped ZnO transparent conducting thin films for organic light-emitting diodes. Journal Physics D: Applied Physics, 2009 , 42, 035102	3	146
59	Spin-coated Ga-doped ZnO transparent conducting thin films for organic light-emitting diodes. Journal Physics D: Applied Physics, 2009 , 42, 139801-139801	3	18
58	All-solution-processed bottom-gate organic thin-film transistor with improved subthreshold behaviour using functionalized pentacene active layer. <i>Journal Physics D: Applied Physics</i> , 2009 , 42, 115	1ਉ7	50
57	Carrier conduction mechanism for phosphorescent material doped organic semiconductor. <i>Journal of Applied Physics</i> , 2009 , 105, 033709	2.5	42
56	Photosensitive Inverter and Ring Oscillator With Pseudodepletion Mode Load for LCD Applications. <i>IEEE Electron Device Letters</i> , 2009 , 30, 943-945	4.4	7
55	Quantum dot-block copolymer hybrids with improved properties and their application to quantum dot light-emitting devices. <i>ACS Nano</i> , 2009 , 3, 1063-8	16.7	127
54	Deep blue light-emitting diodes based on Cd1-xZnx S @ ZnS quantum dots. <i>Nanotechnology</i> , 2009 , 20, 075202	3.4	57
53	High efficiency phosphorescent OLEDs based on the heterostructured light emission and charge injection layers 2009 ,		5
52	Improvement of device efficiency by phosphorescent materials in polymers bulk heterojunction solar cells. <i>Journal of Nanoscience and Nanotechnology</i> , 2009 , 9, 7167-70	1.3	1
51	Organic thin film transistors using a polyhedral oligomeric silsesquioxane-based photo-patternable insulating material. <i>Journal of Nanoscience and Nanotechnology</i> , 2009 , 9, 6923-7	1.3	2
50	Inkjet-Printed Silver Gate Electrode and Organic Dielectric Materials for Bottom-Gate Pentacene Thin-Film Transistors. <i>Journal of the Korean Physical Society</i> , 2009 , 54, 518-522	0.6	20
49	Organic white light-emitting diodes using a new DCM derivative as an orange-red doping molecule. <i>Synthetic Metals</i> , 2008 , 158, 802-809	3.6	8

48	Three white organic light-emitting diodes with blue-green fluorescent and red phosphorescent dyes. <i>Journal of Information Display</i> , 2008 , 9, 23-27	4.1	1
47	High-performance organic semiconductors for thin-film transistors based on 2,7-divinyl[1]benzothieno[3,2-b]benzothiophene. <i>Journal of Materials Chemistry</i> , 2008 , 18, 4698		26
46	Electroluminescence characteristics of n-type matrix materials doped with iridium-based green and red phosphorescent emitters. <i>Journal of Applied Physics</i> , 2008 , 103, 054510	2.5	29
45	Simple white organic light emitting diodes with improved color stability and efficiency using phosphorescent and fluorescent emitters. <i>Journal of Applied Physics</i> , 2008 , 103, 124504	2.5	14
44	Optimization of white OLEDs based on charge carrier conduction properties of phosphorescent emitting layers 2008 ,		4
43	Thermal and electrical properties of nanocomposites based on acrylic copolymers and multiwalled carbon nanotube. <i>Journal of Nanoscience and Nanotechnology</i> , 2008 , 8, 5076-9	1.3	5
42	Thin-Films of Poly-Triarylamines for Electro-Optic Applications. <i>Polymer Bulletin</i> , 2008 , 59, 795-803	2.4	6
41	Silicon-cored anthracene derivatives as host materials for highly efficient blue organic light-emitting devices. <i>Advanced Materials</i> , 2008 , 20, 2720-9	24	151
40	Electrical and rheological properties of polycarbonate/multiwalled carbon nanotube nanocomposites. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2008 , 313-314, 242-2	.45 ¹	40
39	Investigation into the Thermal Annealing Effect on the Photovoltaic Properties of Organic Solar Cells based on CuPc/C60 Heterojunctions. <i>Journal of the Korean Physical Society</i> , 2008 , 53, 1551-1555	0.6	8
38	Low-Driving-Voltage, Long-Lifetime Organic Light-Emitting Diodes with Molybdenum-Oxide (MoO3)-Doped Hole Transport Layers. <i>Journal of the Korean Physical Society</i> , 2008 , 53, 1660-1664	0.6	16
37	Electrical Impedance Studies of the Effect of a Buffer Layer on Organic Bulk Hetrojunction Solar Cells. <i>Journal of the Korean Physical Society</i> , 2008 , 53, 3278-3282	0.6	7
36	Effect of host materials on eelectrophosphorescence properties of PtOEP-doped organic light-emitting diodes. <i>Journal of Information Display</i> , 2007 , 8, 15-19	4.1	2
35	Structural origin of the mobility enhancement in a pentacene thin-film transistor with a photocrosslinking insulator. <i>Journal of Applied Physics</i> , 2007 , 102, 063508	2.5	21
34	Multilayer white organic light emitting diode with optimum emitting layer sequence 2007,		1
33	P-27: Anomalous Increased Drain Current Characteristics of a-Si:H TFTs with Long Channel Width. Digest of Technical Papers SID International Symposium, 2007 , 38, 268-271	0.5	1
32	Poly(arylenevinylene) blends for white light emitting diodes. Current Applied Physics, 2006, 6, 756-759	2.6	12
31	Polypropylene/clay nanocomposites prepared with masterbatches of polypropylene ionomer and organoclay. <i>Composite Interfaces</i> , 2006 , 13, 299-310	2.3	8

(2004-2006)

Dendritic Iridium(III)-Encapsulated Complexes for Organic Light Emitting Diodes. Materials Research 30 Society Symposia Proceedings, 2006, 965, 1 Hysteresis mechanism and reduction method in the bottom-contact pentacene thin-film transistors 76 29 3.4 with cross-linked poly(vinyl alcohol) gate insulator. Applied Physics Letters, 2006, 88, 252102 Effect of Charge Mobility for Organic Photovoltaic Devices. Molecular Crystals and Liquid Crystals, 28 0.5 1 2006, 444, 67-71 Grain size effects on contact resistance of top-contact pentacene TFTs. Synthetic Metals, 2006, 156, 196-201 27 34 Full-swing pentacene organic inverter with enhancement-mode driver and depletion-mode load. 26 1.7 23 Solid-State Electronics, 2006, 50, 1216-1218 Pentacene-based thin film transistors with improved mobility characteristics using hybrid gate 6 25 4.1 insulator. Journal of Information Display, 2005, 6, 16-18 The effect of a buffer layer on the photovoltaic properties of solar cells with P3OT:fullerene 3.6 24 25 composites. Synthetic Metals, 2005, 153, 97-100 White LEDs using conjugated polymer blends. Synthetic Metals, 2005, 152, 205-208 23 3.6 25 P-18: Performance Improvement of Scaled-down Top-contact OTFTs by Two-Step-Deposition of 22 0.5 1 Pentacene. Digest of Technical Papers SID International Symposium, 2005, 36, 292 Organic light-emitting diode using a new DCM derivative as an efficient orange ed doping 2.6 14 molecule. Current Applied Physics, 2005, 5, 244-248 Mobility of electrons and holes in an n-type organic semiconductor perylene diimide thin film. 20 2.6 14 Current Applied Physics, **2005**, 5, 615-618 The photovoltaic effect of the pl heterojunction organic photovoltaic device using a nano 2.6 19 21 template method. Current Applied Physics, 2005, 5, 55-58 Performance improvement of scaled-down top-contact OTFTs by two-step-deposition of 18 4.4 10 pentacene. IEEE Electron Device Letters, 2005, 26, 903-905 Fabrication of a high-aspect-ratio stainless steel shadow mask and its application to pentacene 2 17 thin-film transistors. Journal of Micromechanics and Microengineering, 2005, 15, 263-269 Characterization of white electroluminescent devices fabricated using conjugated polymer blends. 16 2.5 19 Journal of Materials Research, 2004, 19, 2081-2086 Efficient white organic electroluminescent devices consisting of blue- and red-emitting layers. 8.3 15 11 Materials Science and Engineering C, 2004, 24, 233-235 Comparison of the electroluminescence of a red fluorescent dye doped into the Alq3 and 14 8.3 22 Alq3:rubrene mixed host. Materials Science and Engineering C, 2004, 24, 229-232 Synthesis and light-emitting properties of polyfluorene copolymers containing a hydrazone 3.6 13 12 derivative as a comonomer. Synthetic Metals, 2004, 146, 145-150

12	A high voltage NMOSFET fabricated by using a standard CMOS logic process as a pixel-driving transistor for the OLED on the silicon substrate. <i>Journal of Information Display</i> , 2004 , 5, 28-33	4.1	2
11	Efficient blue electroluminescence from 9,10-diphenylanthracene 2003 , 4800, 208		2
10	Efficient white organic light emission by single emitting layer. Thin Solid Films, 2003, 426, 246-249	2.2	54
9	Efficient white organic light-emitting device by utilizing a blue-emitter doped with a Red Fluorescent Dopant. <i>Journal of Information Display</i> , 2003 , 4, 13-18	4.1	1
8	Control of resonant wavelength from organic light-emitting materials by use of a Fabry-Perot microcavity structure. <i>Applied Optics</i> , 2002 , 41, 3312-8	1.7	19
7	Effect of molar mass on electroluminescence of poly(p-phenylene). Synthetic Metals, 2002, 130, 9-16	3.6	19
6	Electroluminescence of bilayer light-emitting diodes of poly(vinylcarbazole) and vacuum-deposited poly(p-phenylene) thin films 2001 , 4105, 362		1
5	A formation of cobalt silicide on silicon field emitter arrays by electrical stress. <i>IEEE Electron Device Letters</i> , 2001 , 22, 173-175	4.4	2
4	Mo and Co Silicide FEAs. Materials Research Society Symposia Proceedings, 2000, 621, 411		2
3	Organic light-emitting devices based on vacuum-deposited poly(p-phenylene) thin film. <i>Synthetic Metals</i> , 2000 , 114, 355-359	3.6	17
2	Preparation of light-emitting devices with poly(p-phenylenevinylene): effects of thermal elimination conditions and polymer layer thickness on device performance 1998 , 3281, 173		1
1	Top-Gate Field-Effect Transistor as a Testbed for Evaluating the Photostability of Organic Photovoltaic Polymers. <i>Solar Rrl</i> ,2100962	7.1	