

# Aldo Di Carlo

## 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.

616  
papers

17,433  
citations

64  
h-index

109  
g-index

740  
ext. papers

20,145  
ext. citations

5.6  
avg, IF

6.86  
L-index

#	Paper	IF	Citations
616	A universal co-solvent dilution strategy enables facile and cost-effective fabrication of perovskite photovoltaics.. <i>Nature Communications</i> , <b>2022</b> , 13, 89	17.4	14
615	The Golden Fig: A Plasmonic Effect Study of Organic-Based Solar Cells.. <i>Nanomaterials</i> , <b>2022</b> , 12,	5.4	2
614	2D materials for organic and perovskite photovoltaics. <i>Nano Energy</i> , <b>2022</b> , 94, 106833	17.1	1
613	Synergic use of two-dimensional materials to tailor interfaces in large area perovskite modules. <i>Nano Energy</i> , <b>2022</b> , 95, 107019	17.1	2
612	Neutron irradiated perovskite films and solar cells on PET substrates. <i>Nano Energy</i> , <b>2022</b> , 93, 106879	17.1	1
611	Reverse-Bias and Temperature Behaviors of Perovskite Solar Cells at Extended Voltage Range.. <i>ACS Applied Energy Materials</i> , <b>2022</b> , 5, 1378-1384	6.1	4
610	Reverse bias breakdown and photocurrent gain in CH <sub>3</sub> NH <sub>3</sub> PbBr <sub>3</sub> films. <i>Applied Physics Letters</i> , <b>2022</b> , 120, 113505	3.4	3
609	Low-Temperature-Processed Stable Perovskite Solar Cells and Modules: A Comprehensive Review. <i>Advanced Energy Materials</i> , <b>2022</b> , 12, 2103534	21.8	4
608	Zero-Waste Scalable BladeSpin Coating as Universal Approach for Layer-by-Layer Deposition of 3D/2D Perovskite Films in High-Efficiency Perovskite Solar Modules. <i>Solar Rrl</i> , <b>2022</b> , 6, 2100637	7.1	2
607	Role of Phase Nanosegregation in the Photoluminescence Spectra of Halide Perovskites. <i>Journal of Physical Chemistry Letters</i> , <b>2021</b> , 12, 11659-11665	6.4	
606	Interfacial Passivation Engineering of Perovskite Solar Cells with Fill Factor over 82% and Outstanding Operational Stability on n-i-p Architecture. <i>ACS Energy Letters</i> , <b>2021</b> , 6, 3916-3923	20.1	35
605	Stable Semi-Transparent Dye-Sensitized Solar Modules and Panels for Greenhouse Application. <i>Energies</i> , <b>2021</b> , 14, 6393	3.1	8
604	Graphene-Based Interconnects for Stable Dye-Sensitized Solar Modules. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 98-110	6.1	5
603	Roadmap on organicInorganic hybrid perovskite semiconductors and devices. <i>APL Materials</i> , <b>2021</b> , 9, 109202	5.7	28
602	Optical design of InGaN/GaN nanoLED arrays on a chip: toward: highly resolved illumination. <i>Nanotechnology</i> , <b>2021</b> , 32, 105203	3.4	6
601	Systematic approach to the study of the photoluminescence of MAPbI <sub>3</sub> . <i>Physical Review Materials</i> , <b>2021</b> , 5,	3.2	2
600	On the relation between mobile ion kinetics, device design, and doping in double-cation perovskite solar cells. <i>Applied Physics Letters</i> , <b>2021</b> , 118, 093501	3.4	1

599	Air-Processed Infrared-Annealed Printed Methylammonium-Free Perovskite Solar Cells and Modules Incorporating Potassium-Doped Graphene Oxide as an Interlayer. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 11741-11754	9.5	17
598	Crystal Engineering Approach for Fabrication of Inverted Perovskite Solar Cell in Ambient Conditions. <i>Energies</i> , <b>2021</b> , 14, 1751	3.1	3
597	Transition metal carbides (MXenes) for efficient NiO-based inverted perovskite solar cells. <i>Nano Energy</i> , <b>2021</b> , 82, 105771	17.1	32
596	Impact of P3HT Regioregularity and Molecular Weight on the Efficiency and Stability of Perovskite Solar Cells. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2021</b> , 9, 5061-5073	8.3	14
595	Ambient Air Blade-Coating Fabrication of Stable Triple-Cation Perovskite Solar Modules by Green Solvent Quenching. <i>Solar Rrl</i> , <b>2021</b> , 5, 2100073	7.1	10
594	Laser-Scribing Optimization for Sprayed SnO-Based Perovskite Solar Modules on Flexible Plastic Substrates. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 4507-4518	6.1	11
593	A Novel Approach for a Chip-Sized Scanning Optical Microscope. <i>Micromachines</i> , <b>2021</b> , 12,	3.3	1
592	Low-Temperature Graphene-Based Paste for Large-Area Carbon Perovskite Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 22368-22380	9.5	14
591	Modified P3HT materials as hole transport layers for flexible perovskite solar cells. <i>Journal of Power Sources</i> , <b>2021</b> , 494, 229735	8.9	10
590	Pursuing the Diffraction Limit with Nano-LED Scanning Transmission Optical Microscopy. <i>Sensors</i> , <b>2021</b> , 21,	3.8	1
589	Light-Stable Methylammonium-Free Inverted Flexible Perovskite Solar Modules on PET Exceeding 10.5% on a 15.7 cm Active Area. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> ,	9.5	9
588	Methylamine Gas Treatment Affords Improving Semitransparency, Efficiency, and Stability of CH <sub>3</sub> NH <sub>3</sub> PbBr <sub>3</sub> -Based Perovskite Solar Cells. <i>Solar Rrl</i> , <b>2021</b> , 5, 2100277	7.1	5
587	Beyond 17% stable perovskite solar module via polaron arrangement of tuned polymeric hole transport layer. <i>Nano Energy</i> , <b>2021</b> , 82, 105685	17.1	15
586	Solution-processed two-dimensional materials for next-generation photovoltaics. <i>Chemical Society Reviews</i> , <b>2021</b> , 50, 11870-11965	58.5	21
585	Laser Processing Optimization for Large-Area Perovskite Solar Modules. <i>Energies</i> , <b>2021</b> , 14, 1069	3.1	4
584	Mixed Cation Halide Perovskite under Environmental and Physical Stress. <i>Materials</i> , <b>2021</b> , 14,	3.5	2
583	Individually Switchable InGaN/GaN Nano-LED Arrays as Highly Resolved Illumination Engines. <i>Electronics (Switzerland)</i> , <b>2021</b> , 10, 1829	2.6	2
582	Single source chemical vapor deposition (ssCVD) for highly luminescent inorganic halide perovskite films. <i>Applied Physics Letters</i> , <b>2021</b> , 119, 071901	3.4	2

581	Hysteresis-free perovskite solar cells with compact and nanoparticle NiO for indoor application. <i>Solar Energy Materials and Solar Cells</i> , <b>2021</b> , 227, 111095	6.4	10
580	Efficient and Stable Perovskite Large Area Cells by Low-Cost Fluorene-Xantene-Based Hole Transporting Layer. <i>Energies</i> , <b>2021</b> , 14, 6081	3.1	1
579	Electromechanical field effects in InAs/GaAs quantum dots based on continuum k-p-band atomistic tight-binding methods. <i>Computational Materials Science</i> , <b>2021</b> , 197, 110678	3.2	2
578	Practical development of efficient thermoelectric [Photovoltaic hybrid systems based on wide-gap solar cells. <i>Applied Energy</i> , <b>2021</b> , 300, 117343	10.7	8
577	Mie-resonant mesoporous electron transport layer for highly efficient perovskite solar cells. <i>Nano Energy</i> , <b>2021</b> , 89, 106484	17.1	5
576	Effects of Crystal Morphology on the Hot-Carrier Dynamics in Mixed-Cation Hybrid Lead Halide Perovskites. <i>Energies</i> , <b>2021</b> , 14, 708	3.1	3
575	Spin Coating Immobilisation of C-N-TiO <sub>2</sub> Co-Doped Nano Catalyst on Glass and Application for Photocatalysis or as Electron Transporting Layer for Perovskite Solar Cells. <i>Coatings</i> , <b>2020</b> , 10, 1029	2.9	4
574	An Interlaboratory Study on the Stability of All-Printable Hole Transport Material-Free Perovskite Solar Cells. <i>Energy Technology</i> , <b>2020</b> , 8, 2000134	3.5	8
573	Analysis of the Efficiency Losses in Hybrid Perovskite/PTAA Solar Cells with Different Molecular Weights: Morphology versus Kinetics. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 6853-6859	6.1	13
572	[1]Benzothieno[3,2-b][1]benzothiophene-Phthalocyanine Derivatives: A Subclass of Solution-Processable Electron-Rich Hole Transport Materials. <i>ChemPlusChem</i> , <b>2020</b> , 85, 2376-2386	2.8	7
571	Ion Migration-Induced Amorphization and Phase Segregation as a Degradation Mechanism in Planar Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2000310	21.8	56
570	Improved Stability of Inverted and Flexible Perovskite Solar Cells with Carbon Electrode. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 5126-5134	6.1	55
569	Fabrication of high efficiency, low-temperature planar perovskite solar cells via scalable double-step crystal engineering deposition method fully out of glove box. <i>Solar Energy</i> , <b>2020</b> , 206, 181-187	6.8	4
568	Two-dimensional materials in perovskite solar cells. <i>JPhys Energy</i> , <b>2020</b> , 2, 031003	4.9	13
567	The Molecular Weight Dependence of Thermoelectric Properties of Poly (3-Hexylthiophene). <i>Materials</i> , <b>2020</b> , 13,	3.5	11
566	Easy Strategy to Enhance Thermal Stability of Planar PSCs by Perovskite Defect Passivation and Low-Temperature Carbon-Based Electrode. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 32536-32547	9.5	15
565	Automated Scalable Spray Coating of SnO <sub>2</sub> for the Fabrication of Low-Temperature Perovskite Solar Cells and Modules. <i>Energy Technology</i> , <b>2020</b> , 8, 1901284	3.5	21
564	Thiazolo[5,4-d]thiazole-based organic sensitizers with improved spectral properties for application in greenhouse-integrated dye-sensitized solar cells. <i>Sustainable Energy and Fuels</i> , <b>2020</b> , 4, 2309-2321	5.8	17

563	Performance assessment of BIPV/T double-skin façade for various climate zones in Australia: Effects on energy consumption. <i>Solar Energy</i> , <b>2020</b> , 199, 377-399	6.8	26
562	Mechanically Stacked, Two-Terminal Graphene-Based Perovskite/Silicon Tandem Solar Cell with Efficiency over 26%. <i>Joule</i> , <b>2020</b> , 4, 865-881	27.8	76
561	Synthesis and characterization of PEDOT-PEGDA blends for bioelectronic applications: surface properties and effects on cell morphology. <i>Flexible and Printed Electronics</i> , <b>2020</b> , 5, 014012	3.1	2
560	Dye-Sensitized Solar Cell <b>2020</b> , 287-333		
559	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. <i>Nature Energy</i> , <b>2020</b> , 5, 35-49	62.3	369
558	Perovskite solar cell improvement by gold nanoparticles prepared by laser ablation in liquid. <i>Journal of Physics: Conference Series</i> , <b>2020</b> , 1461, 012043	0.3	
557	Polymer/Inorganic Hole Transport Layer for Low-Temperature-Processed Perovskite Solar Cells. <i>Energies</i> , <b>2020</b> , 13, 2059	3.1	7
556	Ion Dynamics in Single and Multi-Cation Perovskite. <i>ECS Journal of Solid State Science and Technology</i> , <b>2020</b> , 9, 065015	2	3
555	Nano illumination microscopy: a technique based on scanning with an array of individually addressable nanoLEDs. <i>Optics Express</i> , <b>2020</b> , 28, 19044-19057	3.3	7
554	Semi-transparent triple cation Perovskite solar module exceeding 8% efficiency for BIPV applications <b>2020</b> ,		1
553	Giant Enhancement of Radiative Recombination in Perovskite Light-Emitting Diodes with Plasmonic Core-Shell Nanoparticles. <i>Nanomaterials</i> , <b>2020</b> , 11,	5.4	6
552	Photovoltaics. <i>EPJ Web of Conferences</i> , <b>2020</b> , 246, 00005	0.3	5
551	Metal-semiconductor transition in thin film MAPbI <sub>3</sub> perovskite. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 261903	3.4	2
550	Anodically electrodeposited NiO nanoflakes as hole selective contact in efficient air processed p-i-n perovskite solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2020</b> , 205, 110288	6.4	16
549	Perovskite solar cells <b>2020</b> , 163-228		5
548	Engineering the Charge Transport Properties of Resonant Silicon Nanoparticles in Perovskite Solar Cells. <i>Energy Technology</i> , <b>2020</b> , 8, 1900877	3.5	7
547	Prospective life cycle assessment of third-generation photovoltaics at the pre-industrial scale: A long-term scenario approach. <i>Renewable and Sustainable Energy Reviews</i> , <b>2020</b> , 121, 109703	16.2	37
546	Solution-based heteroepitaxial growth of stable mixed cation/anion hybrid perovskite thin film under ambient condition via a scalable crystal engineering approach. <i>Nano Energy</i> , <b>2020</b> , 69, 104441	17.1	23

545	Improving the Performance of Printable Carbon Electrodes by Femtosecond Laser Treatment. <i>Journal of Carbon Research</i> , <b>2020</b> , 6, 48	3.3	1
544	Light-induced improvement of dopant-free PTAA on performance of inverted perovskite solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2020</b> , 215, 110606	6.4	13
543	Drift-Diffusion Study of the IQE Roll-Off in Blue Thermally Activated Delayed Fluorescence OLEDs. <i>Advanced Electronic Materials</i> , <b>2020</b> , 6, 2000245	6.4	4
542	Simulating random alloy effects in III-nitride light emitting diodes. <i>Journal of Applied Physics</i> , <b>2020</b> , 128, 041102	2.5	9
541	Effect of Calcination Time on the Physicochemical Properties and Photocatalytic Performance of Carbon and Nitrogen Co-Doped TiO <sub>2</sub> Nanoparticles. <i>Catalysts</i> , <b>2020</b> , 10, 847	4	6
540	Copper-Based Corrole as Thermally Stable Hole Transporting Material for Perovskite Photovoltaics. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2003790	15.6	13
539	New Fullerene Derivative as an n-Type Material for Highly Efficient, Flexible Perovskite Solar Cells of a p-i-n Configuration. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2004357	15.6	25
538	Colour-sensitive conjugated polymer inkjet-printed pixelated artificial retina model studied via a bio-hybrid photovoltaic device. <i>Scientific Reports</i> , <b>2020</b> , 10, 21457	4.9	5
537	Upscaling Inverted Perovskite Solar Cells: Optimization of Laser Scribing for Highly Efficient Mini-Modules. <i>Micromachines</i> , <b>2020</b> , 11,	3.3	15
536	Nonlinear Work Function Tuning of Lead-Halide Perovskites by MXenes with Mixed Terminations. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1909028	15.6	28
535	Titanium-carbide MXenes for work function and interface engineering in perovskite solar cells. <i>Nature Materials</i> , <b>2019</b> , 18, 1228-1234	27	199
534	Graphene-Induced Improvements of Perovskite Solar Cell Stability: Effects on Hot-Carriers. <i>Nano Letters</i> , <b>2019</b> , 19, 684-691	11.5	53
533	Fabrication and Morphological Characterization of High-Efficiency Blade-Coated Perovskite Solar Modules. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 25195-25204	9.5	37
532	Two-Dimensional Material Interface Engineering for Efficient Perovskite Large-Area Modules. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 1862-1871	20.1	84
531	Analytic approximations for solar cell open circuit voltage, short circuit current and fill factor. <i>Solar Energy</i> , <b>2019</b> , 187, 358-367	6.8	5
530	Characterization of non-uniform InGaN alloys: spatial localization of carriers and optical properties. <i>Japanese Journal of Applied Physics</i> , <b>2019</b> , 58, SCCC03	1.4	2
529	Nanocomposites of Nickel Oxide and Zirconia for the Preparation of Photocathodes with Improved Performance in p-Type Dye-Sensitized Solar Cells. <i>Journal of the Electrochemical Society</i> , <b>2019</b> , 166, D2903-D3008	3.8	8
528	A Multiparticle Drift-Diffusion Model and its Application to Organic and Inorganic Electronic Device Simulation. <i>IEEE Transactions on Electron Devices</i> , <b>2019</b> , 66, 2715-2722	2.9	8

527	Copper Iodide Interlayer for Improved Charge Extraction and Stability of Inverted Perovskite Solar Cells. <i>Materials</i> , <b>2019</b> , 12,	3.5	22
526	The effect of water in Carbon-Perovskite Solar Cells with optimized alumina spacer. <i>Solar Energy Materials and Solar Cells</i> , <b>2019</b> , 197, 76-83	6.4	16
525	CVD-graphene/graphene flakes dual-films as advanced DSSC counter electrodes. <i>2D Materials</i> , <b>2019</b> , 6, 035007	5.9	20
524	Hybrid Perovskites Depth Profiling with Variable-Size Argon Clusters and Monatomic Ions Beams. <i>Materials</i> , <b>2019</b> , 12,	3.5	27
523	Perovskite photo-detectors (PVSK-PDs) for visible light communication. <i>Organic Electronics</i> , <b>2019</b> , 69, 220-226	3.5	20
522	Nanostructured TiO <sub>2</sub> Grown by Low-Temperature Reactive Sputtering for Planar Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 6218-6229	6.1	18
521	Impact of Compositional Nonuniformity in (In,Ga)N-Based Light-Emitting Diodes. <i>Physical Review Applied</i> , <b>2019</b> , 12,	4.3	7
520	Stability and Dark Hysteresis Correlate in NiO-Based Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1901642	21.8	41
519	Energetic disorder in perovskite/polymer solar cells and its relationship with the interfacial carrier losses. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2019</b> , 377, 20180315	3	4
518	From Bulk to Surface: Sodium Treatment Reduces Recombination at the Nickel Oxide/Perovskite Interface. <i>Advanced Materials Interfaces</i> , <b>2019</b> , 6, 1900789	4.6	29
517	Doping Strategy for Efficient and Stable Triple Cation Hybrid Perovskite Solar Cells and Module Based on Poly(3-hexylthiophene) Hole Transport Layer. <i>Small</i> , <b>2019</b> , 15, e1904399	11	38
516	Scaling-up of Dye Sensitized Solar Modules. <i>World Scientific Series in Nanoscience and Nanotechnology</i> , <b>2019</b> , 423-485	0.1	4
515	Low temperature process of homogeneous and pinhole free Perovskite layers for fully coated photovoltaic devices up to 256 cm <sup>2</sup> area at ambient condition <b>2019</b> ,		1
514	Large area perovskite solar modules with improved efficiency and stability <b>2019</b> ,		5
513	Slot-Die-Printed Two-Dimensional ZrS Charge Transport Layer for Perovskite Light-Emitting Diodes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 48021-48028	9.5	10
512	A PdPt decorated SnO <sub>2</sub> -rGO nanohybrid for high-performance resistive sensing of methane. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , <b>2019</b> , 95, 438-451	5.3	18
511	Indium Tin Oxide Based Fully Spray-Coated Inverted Solar Cells with Nontoxic Solvents: The Role of Buffer Layer Interface on Low-Bandgap Photoactive Layer Performance. <i>Energy Technology</i> , <b>2019</b> , 7, 1800627	3.5	4
510	Graphene Oxide for DSSC, OPV and Perovskite Stability <b>2018</b> , 503-531		2

509	On the importance of ferroelectric domains for the performance of perovskite solar cells. <i>Nano Energy</i> , <b>2018</b> , 48, 20-26	17.1	39
508	Thermal Model of High-Power Amplifiers Based on Time-Dependent Temperature Profiles Measured by Photoconductance. <i>IEEE Transactions on Electron Devices</i> , <b>2018</b> , 65, 1739-1744	2.9	1
507	Closing the Cell-to-Module Efficiency Gap: A Fully Laser Scribed Perovskite Minimodule With 16% Steady-State Aperture Area Efficiency. <i>IEEE Journal of Photovoltaics</i> , <b>2018</b> , 8, 151-155	3.7	24
506	Facile synthesis of a SnO@rGO nanohybrid and optimization of its methane-sensing parameters. <i>Talanta</i> , <b>2018</b> , 181, 422-430	6.2	48
505	Aging effects in interface-engineered perovskite solar cells with 2D nanomaterials: A depth profile analysis. <i>Materials Today Energy</i> , <b>2018</b> , 9, 1-10	7	38
504	Photoelectrochemical and spectrophotometric studies on dye-sensitized solar cells (DSCs) and stable modules (DSCMs) based on natural apocarotenoids pigments. <i>Dyes and Pigments</i> , <b>2018</b> , 155, 75-83	4.6	30
503	Bulk heterojunction polymer solar cell and perovskite solar cell: Concepts, materials, current status, and opto-electronic properties. <i>Solar Energy</i> , <b>2018</b> , 173, 407-424	6.8	40
502	Replacing noble metals with alternative metals in MID-IR frequency: A theoretical approach <b>2018</b> ,		2
501	Inverted perovskite solar cells with transparent hole transporting layer based on semiconducting nickel oxide <b>2018</b> ,		7
500	Thermal and Electrical Characterization of a Semi-Transparent Dye-Sensitized Photovoltaic Module under Real Operating Conditions. <i>Energies</i> , <b>2018</b> , 11, 155	3.1	14
499	New pyran-based dyes as efficient sensitizers of p-type dye-sensitized solar cells. <i>Solar Energy</i> , <b>2018</b> , 169, 237-241	6.8	16
498	Tris(ethylene diamine) nickel acetate as a promising precursor for hole transport layer in planar structured perovskite solar cells. <i>Journal of Materials Chemistry C</i> , <b>2018</b> , 6, 6179-6186	7.1	20
497	Graphene-engineered automated sprayed mesoscopic structure for perovskite device scaling-up. <i>2D Materials</i> , <b>2018</b> , 5, 045034	5.9	22
496	Fabrication and characterization of a sensitive, room temperature methane sensor based on SnO <sub>2</sub> @reduced graphene oxide-polyaniline ternary nanohybrid. <i>Materials Science in Semiconductor Processing</i> , <b>2018</b> , 88, 139-147	4.3	26
495	XPS depth profiles of organo lead halide layers and full perovskite solar cells by variable-size argon clusters <b>2018</b> ,		2
494	Efficient fully laser-patterned flexible perovskite modules and solar cells based on low-temperature solution-processed SnO <sub>2</sub> /mesoporous-TiO <sub>2</sub> electron transport layers. <i>Nano Research</i> , <b>2018</b> , 11, 2669-2681	10	90
493	A crystal engineering approach for scalable perovskite solar cells and module fabrication: a full out of glove box procedure. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 659-671	13	40
492	Sprayed organic photovoltaic cells and mini-modules based on chemical vapor deposited graphene as transparent conductive electrode. <i>Carbon</i> , <b>2018</b> , 129, 878-883	10.4	30



491	InGaN/GaN nanoLED Arrays as a Novel Illumination Source for Biomedical Imaging and Sensing Applications. <i>Proceedings (mdpi)</i> , <b>2018</b> , 2, 892	0.3	7
490	Unveiling the Chemical Composition of Halide Perovskite Films Using Multivariate Statistical Analyses. <i>ACS Applied Energy Materials</i> , <b>2018</b> , 1, 7174-7181	6.1	19
489	Perovskite-Polymer Blends Influencing Microstructures, Nonradiative Recombination Pathways, and Photovoltaic Performance of Perovskite Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 42542-42551	9.5	38
488	Trap states in multication mesoscopic perovskite solar cells: A deep levels transient spectroscopy investigation. <i>Applied Physics Letters</i> , <b>2018</b> , 113, 263501	3.4	24
487	A novel class of dye-sensitized solar modules. Glass-plastic structure for mechanically stable devices <b>2018</b> ,		2
486	MoS Quantum Dot/Graphene Hybrids for Advanced Interface Engineering of a CHNHPPbI Perovskite Solar Cell with an Efficiency of over 20. <i>ACS Nano</i> , <b>2018</b> , 12, 10736-10754	16.7	138
485	Study of the Influence of the I-Based Electrolyte Composition on the Photoconversion Properties of p-Type Dye-Sensitized Solar Cells. <i>Journal of the Electrochemical Society</i> , <b>2018</b> , 165, H889-H896	3.9	11
484	Anthocyanic pigments from elicited in vitro grown shoot cultures of <i>Vaccinium corymbosum</i> L., cv. Brigitta Blue, as photosensitizer in natural dye-sensitized solar cells (NDSSC). <i>Journal of Photochemistry and Photobiology B: Biology</i> , <b>2018</b> , 188, 69-76	6.7	13
483	Resonant Silicon Nanoparticles for Enhanced Light Harvesting in Halide Perovskite Solar Cells. <i>Advanced Optical Materials</i> , <b>2018</b> , 6, 1800576	8.1	28
482	Low temperature, solution-processed perovskite solar cells and modules with an aperture area efficiency of 11%. <i>Solar Energy Materials and Solar Cells</i> , <b>2018</b> , 185, 136-144	6.4	39
481	Graphene nanosheet/polyaniline composite for transparent hole transporting layer. <i>Journal of Industrial and Engineering Chemistry</i> , <b>2018</b> , 65, 309-317	6.3	11
480	Electrochemical and Photoelectrochemical Properties of Screen-Printed Nickel Oxide Thin Films Obtained from Precursor Pastes with Different Compositions. <i>Journal of the Electrochemical Society</i> , <b>2017</b> , 164, H137-H147	3.9	35
479	Integration of dye-sensitized solar cells (DSC) on photobioreactors for improved photoconversion efficiency in microalgal cultivation. <i>Renewable Energy</i> , <b>2017</b> , 109, 13-21	8.1	11
478	KuQuinones as sensitizers for NiO based p-type dye-sensitized solar cells. <i>New Journal of Chemistry</i> , <b>2017</b> , 41, 2769-2779	3.6	22
477	Low-Cost Synthesis of Hole Transporting Materials for Efficient Perovskite Solar Cells. <i>Chem</i> , <b>2017</b> , 2, 612-613	16.2	6
476	Effect of Alkyl Chain Length on the Sensitizing Action of Substituted Non-Symmetric Squaraines for p-Type Dye-Sensitized Solar Cells. <i>ChemElectroChem</i> , <b>2017</b> , 4, 2385-2397	4.3	14
475	Limits on the use of cobalt sulfide as anode of p-type dye-sensitized solar cells. <i>Journal Physics D: Applied Physics</i> , <b>2017</b> , 50, 215501	3	7
474	Pigments for natural dye-sensitized solar cells from in vitro grown shoot cultures. <i>Journal of Photonics for Energy</i> , <b>2017</b> , 7, 025503	1.2	3

473	Effects of thermal stress on hybrid perovskite solar cells with different encapsulation techniques <b>2017</b> ,		3
472	High-Efficiency Perovskite Solar Cell Based on Poly(3-Hexylthiophene): Influence of Molecular Weight and Mesoscopic Scaffold Layer. <i>ChemSusChem</i> , <b>2017</b> , 10, 3854-3860	8.3	85
471	On the Role of PTB7-Th:[70]PCBM Blend Concentration in ortho-Xylene on Polymer Solar-Cell Performance. <i>Energy Technology</i> , <b>2017</b> , 5, 2168-2174	3.5	8
470	Planar Perovskite Solar Cells: Local Structure and Stability Issues. <i>Solar Rrl</i> , <b>2017</b> , 1, 1700066	7.1	8
469	Carrier transport and emission efficiency in InGaN quantum-dot based light-emitting diodes. <i>Nanotechnology</i> , <b>2017</b> , 28, 275201	3.4	5
468	Gold and iodine diffusion in large area perovskite solar cells under illumination. <i>Nanoscale</i> , <b>2017</b> , 9, 4700-4706	10.3	
467	Graphene Interface Engineering for Perovskite Solar Modules: 12.6% Power Conversion Efficiency over 50 cm <sup>2</sup> Active Area. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 279-287	20.1	162
466	Synthesis and field emission characteristics of W 5 O 14 nanowires film. <i>Microelectronic Engineering</i> , <b>2017</b> , 170, 44-48	2.5	4
465	Stability issues pertaining large area perovskite and dye-sensitized solar cells and modules. <i>Journal Physics D: Applied Physics</i> , <b>2017</b> , 50, 033001	3	30
464	Influence of electromechanical coupling on optical properties of InGaN quantum-dot based light-emitting diodes. <i>Nanotechnology</i> , <b>2017</b> , 28, 015701	3.4	7
463	Application of nitrogen-doped TiO <sub>2</sub> nano-tubes in dye-sensitized solar cells. <i>Applied Surface Science</i> , <b>2017</b> , 399, 515-522	6.7	50
462	First Examples of Pyran Based Colorants as Sensitizing Agents of p-Type Dye-Sensitized Solar Cells. <i>Journal of the Electrochemical Society</i> , <b>2017</b> , 164, F1412-F1418	3.9	11
461	Graphene-Based Electron Transport Layers in Perovskite Solar Cells: A Step-Up for an Efficient Carrier Collection. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1701349	21.8	60
460	A bioinspired dye sensitized solar cell based on a rhodamine-functionalized peptide immobilized on nanocrystalline TiO <sub>2</sub> . <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2017</b> , 347, 227-234	4.7	4
459	Stability of dye-sensitized solar cells under extended thermal stress. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 22546-22554	3.6	23
458	Laser-Patterning Engineering for Perovskite Solar Modules With 95% Aperture Ratio. <i>IEEE Journal of Photovoltaics</i> , <b>2017</b> , 7, 1674-1680	3.7	83
457	Influence of the Conditions of Sensitization on the Characteristics of p-DSCs Sensitized with Asymmetric Squaraines. <i>Journal of the Electrochemical Society</i> , <b>2017</b> , 164, H1099-H1111	3.9	5
456	Gas sensors for sustainable and safe integrated gasification-FC system. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 29606-29619	6.7	5

455	Laser-patterned functionalized CVD-graphene as highly transparent conductive electrodes for polymer solar cells. <i>Nanoscale</i> , <b>2017</b> , 9, 62-69	7.7	45
454	Graphene and related 2D materials for high efficient and stable perovskite solar cells <b>2017</b> ,		6
453	Sensitivity of the Drift-Diffusion Approach in Estimating the Power Conversion Efficiency of Bulk Heterojunction Polymer Solar Cells. <i>Energies</i> , <b>2017</b> , 10, 285	3.1	1
452	Nano Energy Harvesting with Plasmonic Nano-Antennas: A review of MID-IR Rectenna and Application. <i>Advanced Electromagnetics</i> , <b>2017</b> , 6, 1	1.2	9
451	High efficiency photovoltaic module based on mesoscopic organometal halide perovskite. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2016</b> , 24, 436-445	6.8	99
450	Solar Cells: Few-Layer MoS <sub>2</sub> Flakes as Active Buffer Layer for Stable Perovskite Solar Cells (Adv. Energy Mater. 16/2016). <i>Advanced Energy Materials</i> , <b>2016</b> , 6,	21.8	2
449	Hybrid perovskite as substituent of indium and gallium in light emitting diodes. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2016</b> , 13, 958-961		5
448	Graphene-Perovskite Solar Cells Exceed 18 % Efficiency: A Stability Study. <i>ChemSusChem</i> , <b>2016</b> , 9, 2609-2619	26.19	133
447	Elemental Mapping of Perovskite Solar Cells by Using Multivariate Analysis: An Insight into Degradation Processes. <i>ChemSusChem</i> , <b>2016</b> , 9, 2673-2678	8.3	19
446	Electron-collecting oxide layers in inverted polymer solar cells via oxidation of thermally evaporated titanium. <i>Semiconductor Science and Technology</i> , <b>2016</b> , 31, 105003	1.8	
445	Boosting Perovskite Solar Cells Performance and Stability through Doping a Poly-3(hexylthiophene) Hole Transporting Material with Organic Functionalized Carbon Nanostructures. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 7443-7453	15.6	72
444	Few-Layer MoS <sub>2</sub> Flakes as Active Buffer Layer for Stable Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1600920	21.8	135
443	Efficiency Drop in Green InGaN/GaN Light Emitting Diodes: The Role of Random Alloy Fluctuations. <i>Physical Review Letters</i> , <b>2016</b> , 116, 027401	7.4	244
442	In situ observation of heat-induced degradation of perovskite solar cells. <i>Nature Energy</i> , <b>2016</b> , 1,	62.3	484
441	Mesoporous perovskite solar cells and the role of nanoscale compact layers for remarkable all-round high efficiency under both indoor and outdoor illumination. <i>Nano Energy</i> , <b>2016</b> , 30, 460-469	17.1	82
440	Novel pyran based dyes for application in dye sensitized solar cells. <i>Dyes and Pigments</i> , <b>2016</b> , 133, 395-405	4.56	18
439	Statistic Determination of Storage Capacity for Photovoltaic Energy Imbalance Mitigation. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , <b>2016</b> , 138,	2.3	1
438	. <i>IEEE Nanotechnology Magazine</i> , <b>2016</b> , 15, 255-260	2.6	24

437	Tuning optical absorption in pyran derivatives for DSSC. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2016</b> , 321, 79-89	4.7	19
436	Reduced graphene oxide as efficient and stable hole transporting material in mesoscopic perovskite solar cells. <i>Nano Energy</i> , <b>2016</b> , 22, 349-360	17.1	142
435	Organic Photovoltaics for Energy Efficiency in Buildings <b>2016</b> , 321-355		1
434	Graphene-based large area dye-sensitized solar cell modules. <i>Nanoscale</i> , <b>2016</b> , 8, 5368-78	7.7	114
433	Stability of dye-sensitized solar cell under reverse bias condition: Resonance Raman spectroscopy combined with spectrally resolved analysis by transmittance and efficiency mapping. <i>Vibrational Spectroscopy</i> , <b>2016</b> , 84, 106-117	2.1	17
432	Photonic Flash Sintering of Ink-Jet-Printed Back Electrodes for Organic Photovoltaic Applications. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 2325-35	9.5	20
431	Influence of TiO <sub>2</sub> electronic structure and strong metal-support interaction on plasmonic Au photocatalytic oxidations. <i>Catalysis Science and Technology</i> , <b>2016</b> , 6, 3220-3229	5.5	38
430	Role of Ferroelectric Nanodomains in the Transport Properties of Perovskite Solar Cells. <i>Nano Letters</i> , <b>2016</b> , 16, 988-92	11.5	64
429	Modeling of Filamentary Conduction in Organic Thin Film Memories and Comparison With Experimental Data. <i>IEEE Nanotechnology Magazine</i> , <b>2016</b> , 15, 60-69	2.6	3
428	Systematic Study of the PCE and Device Operation of Organic Tandem Solar Cells. <i>IEEE Journal of Photovoltaics</i> , <b>2016</b> , 6, 202-210	3.7	10
427	Role of pH and pigment concentration for natural dye-sensitized solar cells treated with anthocyanin extracts of common fruits. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , <b>2016</b> , 316, 24-30	4.7	52
426	In situ observation of heat-induced degradation of perovskite solar cells <b>2016</b> , 191-192		
425	Diffusion Length Mapping for Dye-Sensitized Solar Cells. <i>Energies</i> , <b>2016</b> , 9, 686	3.1	4
424	Elemental mapping of perovskite solar cells using STEM and multivariate analysis <b>2016</b> , 812-813		
423	Beneficial Effect of Electron-Withdrawing Groups on the Sensitizing Action of Squaraines for p-Type Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 16340-16353	3.8	41
422	Efficiency and Stability Enhancement in Perovskite Solar Cells by Inserting Lithium-Neutralized Graphene Oxide as Electron Transporting Layer. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 2686-2694	15.6	154
421	Geometric conductive filament confinement by nanotips for resistive switching of HfO <sub>2</sub> -RRAM devices with high performance. <i>Scientific Reports</i> , <b>2016</b> , 6, 25757	4.9	50
420	Research Update: Large-area deposition, coating, printing, and processing techniques for the upscaling of perovskite solar cell technology. <i>APL Materials</i> , <b>2016</b> , 4, 091508	5.7	150

419	Laser Processing in the Manufacture of Dye-Sensitized and Perovskite Solar Cell Technologies. <i>ChemElectroChem</i> , <b>2016</b> , 3, 9-30	4.3	48
418	A benchmark study of commercially available copper nanoparticle inks for application in organic electronic devices. <i>Organic Electronics</i> , <b>2016</b> , 34, 130-138	3.5	20
417	An optical absorption model including absorber saturation. <i>Journal of Computational Electronics</i> , <b>2016</b> , 15, 1064-1070	1.8	1
416	Mesoscopic Perovskite Light-Emitting Diodes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 26989-26997	3.7	38
415	Encapsulation for long-term stability enhancement of perovskite solar cells. <i>Nano Energy</i> , <b>2016</b> , 30, 162-172	17.2	200
414	Analytic approximations for solar cell open circuit voltage, short circuit current and fill factor <b>2016</b> ,		1
413	Cobalt Sulfide as Counter Electrode in p-Type Dye-Sensitized Solar Cells. <i>ChemistrySelect</i> , <b>2016</b> , 1, 2808-2815	15	16
412	Inkjet-Printed Resistive Switching Memory Based on Organic Dielectric Materials: From Single Elements to Array Technology. <i>Advanced Electronic Materials</i> , <b>2015</b> , 1, 1400003	6.4	17
411	Influence of the interface material layers and semiconductor energetic disorder on the open circuit voltage in polymer solar cells. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2015</b> , 53, 690-699	2.6	31
410	Vertical TiO <sub>2</sub> Nanorods as a Medium for Stable and High-Efficiency Perovskite Solar Modules. <i>ACS Nano</i> , <b>2015</b> , 9, 8420-9	16.7	158
409	A Drift-Diffusion Study on Charge Unbalancing Effects in Dye-Sensitized Solar Cells. <i>Journal of the Electrochemical Society</i> , <b>2015</b> , 162, H753-H758	3.9	6
408	A multifinger microtriode with carbon nanotubes field emission cathode operating at GHz frequency. <i>Nanotechnology</i> , <b>2015</b> , 26, 215204	3.4	6
407	TCO-free flexible organo metal trihalide perovskite planar-heterojunction solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2015</b> , 140, 150-157	6.4	60
406	Proton induced tautomeric switching in N-rich aromatics with tunable acid-base character. <i>Journal of Molecular Structure</i> , <b>2015</b> , 1093, 119-124	3.4	11
405	Spray Coating for Polymer Solar Cells: An Up-to-Date Overview. <i>Energy Technology</i> , <b>2015</b> , 3, 385-406	3.5	54
404	Vegetable-based dye-sensitized solar cells. <i>Chemical Society Reviews</i> , <b>2015</b> , 44, 3244-94	58.5	241
403	A comprehensive study of popular eigenvalue methods employed for quantum calculation of energy eigenstates in nanostructures using GPUs. <i>Journal of Computational Electronics</i> , <b>2015</b> , 14, 593-603	1.8	5
402	The role of printing techniques for large-area dye sensitized solar cells. <i>Semiconductor Science and Technology</i> , <b>2015</b> , 30, 104003	1.8	65

401	Interface and Composition Analysis on Perovskite Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 26176-83	9.5	99
400	Carbon nanotubes field emission enhancement using a laser post treatment. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2015</b> , 33, 022203	1.3	1
399	Opportunities of Atomic Layer Deposition for Perovskite Solar Cells. <i>ECS Transactions</i> , <b>2015</b> , 69, 15-22	1	3
398	Photoelectrochemical characterization of squaraine-sensitized nickel oxide cathodes deposited via screen-printing for p-type dye-sensitized solar cells. <i>Applied Surface Science</i> , <b>2015</b> , 356, 911-920	6.7	36
397	Performance analysis and SOH (state of health) evaluation of lithium polymer batteries through electrochemical impedance spectroscopy. <i>Energy</i> , <b>2015</b> , 89, 678-686	7.9	147
396	A simple approach for the fabrication of perovskite solar cells in air. <i>Journal of Power Sources</i> , <b>2015</b> , 297, 504-510	8.9	55
395	A novel and large area suitable water-based ink for the deposition of cobalt sulfide films for solar energy conversion with iodine-free electrolytes. <i>Solar Energy</i> , <b>2015</b> , 122, 87-96	6.8	11
394	Solid state perovskite solar modules by vacuum-vapor assisted sequential deposition on Nd:YVO <sub>4</sub> laser patterned rutile TiO <sub>2</sub> nanorods. <i>Nanotechnology</i> , <b>2015</b> , 26, 494002	3.4	23
393	Comparison of the photoelectrochemical properties of RDS NiO thin films for p-type DSCs with different organic and organometallic dye-sensitizers and evidence of a direct correlation between cell efficiency and charge recombination. <i>Journal of Solid State Electrochemistry</i> , <b>2015</b> , 19, 975-986	2.6	40
392	8.7% Power conversion efficiency polymer solar cell realized with non-chlorinated solvents. <i>Solar Energy Materials and Solar Cells</i> , <b>2015</b> , 134, 194-198	6.4	37
391	Perovskite solar cells and large area modules (100 cm <sup>2</sup> ) based on an air flow-assisted Pbl <sub>2</sub> blade coating deposition process. <i>Journal of Power Sources</i> , <b>2015</b> , 277, 286-291	8.9	285
390	The real TiO <sub>2</sub> /HTM interface of solid-state dye solar cells: role of trapped states from a multiscale modelling perspective. <i>Nanoscale</i> , <b>2015</b> , 7, 1136-44	7.7	24
389	Comparative analysis of the outdoor performance of a dye solar cell mini-panel for building integrated photovoltaics applications. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2015</b> , 23, 215-225	6.8	32
388	Influence of random alloy fluctuations in InGa <sub>N</sub> /Ga <sub>N</sub> quantum wells on LED efficiency <b>2015</b> ,		3
387	Inverted Bulk-Heterojunction Solar Cells using Polyethylenimine-Ethoxylated Processed from a Fully Aqueous Dispersion as Electron-Transport Layer. <i>Energy Technology</i> , <b>2015</b> , 3, 1152-1158	3.5	3
386	Molecular Ordering at the Interface Between Liquid Water and Rutile TiO <sub>2</sub> (110). <i>Advanced Materials Interfaces</i> , <b>2015</b> , 2, 1500246	4.6	61
385	Thin-Film Photovoltaics 2014. <i>International Journal of Photoenergy</i> , <b>2015</b> , 2015, 1-3	2.1	
384	Thiazolo[5,4-d]thiazole-based organic sensitizers with strong visible light absorption for transparent, efficient and stable dye-sensitized solar cells. <i>RSC Advances</i> , <b>2015</b> , 5, 32657-32668	3.7	33

383	Degradation mechanisms of dye-sensitized solar cells: Light, bias and temperature effects <b>2015</b> ,		2
382	Charge transport modelling in organic semiconductors: From diodes to transistors, memories and energy harvesters <b>2015</b> ,		2
381	Polyiodides formation in solvent based Dye Sensitized Solar Cells under reverse bias stress. <i>Journal of Power Sources</i> , <b>2015</b> , 287, 87-95	8.9	23
380	High efficient perovskite solar cells by employing zinc-phthalocyanine as hole transporting layer <b>2015</b> ,		2
379	Spray deposition of exfoliated MoS2 flakes as hole transport layer in perovskite-based photovoltaics <b>2015</b> ,		3
378	Atomistic simulation of GaAs/AlGaAs quantum dot/ring nanostructures <b>2015</b> ,		1
377	Perovskite solar cells stabilized by carbon nanostructure-P3HT blends <b>2015</b> ,		3
376	Two New Dyes with Carboxypyridinium Regioisomers as Anchoring Groups for Dye-Sensitized Solar Cells. <i>Synlett</i> , <b>2015</b> , 26, 2389-2394	2.2	2
375	Synthetic methods for the evaluation of the State of Health (SOH) of nickel-metal hydride (NiMH) batteries. <i>Energy Conversion and Management</i> , <b>2015</b> , 92, 1-9	10.6	22
374	Flexible Perovskite Photovoltaic Modules and Solar Cells Based on Atomic Layer Deposited Compact Layers and UV-Irradiated TiO2 Scaffolds on Plastic Substrates. <i>Advanced Energy Materials</i> , <b>2015</b> , 5, 1401808	21.8	216
373	3-D Simulation and Optimization of Organic Solar Cell With Periodic Back Contact Grating Electrode. <i>IEEE Journal of Photovoltaics</i> , <b>2015</b> , 5, 591-596	3.7	12
372	The relevance of correct injection model to simulate electrical properties of organic semiconductors. <i>Organic Electronics</i> , <b>2014</b> , 15, 1557-1570	3.5	16
371	Taking Temperature Processing Out of Dye-Sensitized Solar Cell Fabrication: Fully Laser-Manufactured Devices. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1400421	21.8	25
370	High efficiency CH3NH3PbI3/Clx perovskite solar cells with poly(3-hexylthiophene) hole transport layer. <i>Journal of Power Sources</i> , <b>2014</b> , 251, 152-156	8.9	164
369	Multi-wall carbon nanotube coating of fluorine-doped tin oxide as an electrode surface modifier for polymer solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2014</b> , 122, 297-302	6.4	23
368	Solid-state solar modules based on mesoscopic organometal halide perovskite: a route towards the up-scaling process. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 3918-23	3.6	145
367	Multiscale simulation of solid state dye sensitized solar cells including morphology effects <b>2014</b> ,		1
366	Spray-Coated Polymer Solar Cells based on Low-Band-Gap Donors Processed with ortho-Xylene. <i>Energy Technology</i> , <b>2014</b> , 2, 786-791	3.5	10

365	Progress in flexible dye solar cell materials, processes and devices. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 10788-10817	13	121
364	Atomistic simulations of InGaN/GaN random alloy quantum well LEDs. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2014</b> , 11, 632-634		11
363	Electrostatic Beam Focusing of Carbon Nanotubes Electron Source. <i>IEEE Transactions on Electron Devices</i> , <b>2014</b> , 61, 2558-2563	2.9	8
362	Optoelectronic simulation and thickness optimization of energetically disordered organic solar cells. <i>Journal of Computational Electronics</i> , <b>2014</b> , 13, 933-942	1.8	22
361	Estimation of Energy Production of Dye-Sensitized Solar Cell Modules for Building-Integrated Photovoltaic Applications. <i>Energy Technology</i> , <b>2014</b> , 2, 531-541	3.5	31
360	Micro-Raman analysis of reverse bias stressed dye-sensitized solar cells. <i>RSC Advances</i> , <b>2014</b> , 4, 12366	3.7	20
359	Bragg grating nanostructuring of the TiO <sub>2</sub> layer in dye sensitized solar cells: an efficient method to enhance light harvesting. <i>RSC Advances</i> , <b>2014</b> , 4, 43828-43833	3.7	2
358	Charge trapping models of resistance switching in organic bistable devices with embedded nanoparticles. <i>Organic Electronics</i> , <b>2014</b> , 15, 2792-2801	3.5	3
357	Organic dyes with intense light absorption especially suitable for application in thin-layer dye-sensitized solar cells. <i>Chemical Communications</i> , <b>2014</b> , 50, 13952-5	5.8	57
356	Influence of encapsulation materials on the optical properties and conversion efficiency of heat-sealed flexible polymer solar cells. <i>Surface and Coatings Technology</i> , <b>2014</b> , 255, 69-73	4.4	12
355	Accelerating atomistic calculations of quantum energy eigenstates on graphic cards. <i>Computer Physics Communications</i> , <b>2014</b> , 185, 2510-2518	4.2	6
354	A comparison of carboxypyridine isomers as sensitizers for dye-sensitized solar cells: assessment of device efficiency and stability. <i>Tetrahedron</i> , <b>2014</b> , 70, 6285-6295	2.4	22
353	Trap-assisted tunneling in InGaN/GaN single-quantum-well light-emitting diodes. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 133504	3.4	59
352	Electrodeposited cobalt sulfide hole collecting layer for polymer solar cells. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 063304	3.4	3
351	Diagnostic methods for the evaluation of the state of health (SOH) of NiMH batteries through electrochemical impedance spectroscopy <b>2014</b> ,		3
350	Modeling and simulation of energetically disordered organic solar cells. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 184502	2.5	25
349	Effect of alloy fluctuations in InGaN/GaN quantum wells on optical emission strength <b>2014</b> ,		3
348	Electrodeposited ZnO with squaraine sensitizers as photoactive anode of DSCs. <i>Materials Research Express</i> , <b>2014</b> , 1, 015040	1.7	36



347	Mesoscopic perovskite solar cells and modules <b>2014</b> ,		2
346	Large-Area Electrodeposition of Counterelectrodes Utilizing the Same Integrated Conductive Grid for Fabrication of Parallel Flexible Dye Solar Cell Modules. <i>IEEE Journal of Photovoltaics</i> , <b>2014</b> , 4, 1552-1559	3.7	10
345	Mimicking nature: a novel peptide-based bio-inspired approach for solar energy conversion. <i>ChemPhysChem</i> , <b>2014</b> , 15, 64-8	3.2	27
344	Degradation of electrical properties of small molecule organic solar cells under oxygen and moisture. <i>Materials Research Society Symposia Proceedings</i> , <b>2014</b> , 1695, 9		1
343	Laser processing of TiO <sub>2</sub> films for dye solar cells: a thermal, sintering, throughput and embodied energy investigation. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2014</b> , 22, 308-317	6.8	30
342	Outdoor and diurnal performance of large conformal flexible metal/plastic dye solar cells. <i>Applied Energy</i> , <b>2014</b> , 113, 1155-1161	10.7	21
341	Solid state dye solar cell modules. <i>Journal of Power Sources</i> , <b>2014</b> , 246, 361-364	8.9	15
340	Realization of high performance large area Z-series-interconnected opaque dye solar cell modules. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2013</b> , 21, 1653-1658	6.8	33
339	Introduction to the OQE special issue on numerical simulation of optoelectronic devices NUSOD12. <i>Optical and Quantum Electronics</i> , <b>2013</b> , 45, 571-571	2.4	
338	Blending CoS and Pt for amelioration of electrodeposited transparent counterelectrodes and the efficiency of back-illuminated dye solar cells. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 12941	13	33
337	Strain evolution in GaN nanowires: From free-surface objects to coalesced templates. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 084307	2.5	50
336	Integrated tandem dye solar cells. <i>RSC Advances</i> , <b>2013</b> , 3, 20273	3.7	19
335	AlGa <sub>N</sub> /Ga <sub>N</sub> HEMT Degradation: An Electro-Thermo-Mechanical Simulation. <i>IEEE Transactions on Electron Devices</i> , <b>2013</b> , 60, 3142-3148	2.9	9
334	Angular refractive path for optical enhancement and evaluation of dye solar cells. <i>Solar Energy</i> , <b>2013</b> , 98, 553-560	6.8	3
333	Acceleration factor for ageing measurement of dye solar cells. <i>Microelectronics Reliability</i> , <b>2013</b> , 53, 279-281	2.8	11
332	Design and Realization Aspects of 1-THz Cascade Backward Wave Amplifier Based on Double Corrugated Waveguide. <i>IEEE Transactions on Electron Devices</i> , <b>2013</b> , 60, 1236-1243	2.9	64
331	Fabrication of Fully-Spray-Processed Organic Photovoltaic Modules by using an Automated Process in Air. <i>Energy Technology</i> , <b>2013</b> , 1, 757-762	3.5	24
330	Coupling atomistic and continuous media models for electronic device simulation. <i>Journal of Computational Electronics</i> , <b>2013</b> , 12, 553-562	1.8	9

329	Study of the effects of UV-exposure on dye-sensitized solar cells <b>2013</b> ,		3
328	. <i>IEEE Journal of Photovoltaics</i> , <b>2013</b> , 3, 1004-1011	3-7	19
327	Influence of polar surface properties on InGaN/GaN core-shell nanorod LED properties. <i>Optical and Quantum Electronics</i> , <b>2013</b> , 45, 617-622	2-4	2
326	Fluoro-functionalization of vinylene units in a polyarylenevinylene for polymer solar cells. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 715-727	13	22
325	Comparison between positive and negative constant current stress on dye-sensitized solar cells. <i>Microelectronics Reliability</i> , <b>2013</b> , 53, 1804-1808	1-2	4
324	Interferometric study of microchamber in large area dye solar cells. <i>Solar Energy</i> , <b>2013</b> , 95, 246-254	6-8	4
323	Carbon Nanotube Cathodes for Electron Gun. <i>IEEE Electron Device Letters</i> , <b>2013</b> , 34, 698-700	4-4	15
322	A Parametric Study of InGaN/GaN Nanorod Core-Shell LEDs. <i>IEEE Transactions on Electron Devices</i> , <b>2013</b> , 60, 171-177	2-9	7
321	Model of a GaAs Quantum Dot Embedded in a Polymorph AlGaAs Nanowire. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2013</b> , 19, 1-9	3-8	10
320	Blocking layer optimisation of poly(3-hexylthiophene) based Solid State Dye Sensitized Solar Cells. <i>Organic Electronics</i> , <b>2013</b> , 14, 1882-1890	3-5	34
319	Formulations and processing of nanocrystalline TiO <sub>2</sub> films for the different requirements of plastic, metal and glass dye solar cell applications. <i>Nanotechnology</i> , <b>2013</b> , 24, 255401	3-4	15
318	Fully Plastic Dye Solar Cell Devices by Low-Temperature UV-Irradiation of both the Mesoporous TiO <sub>2</sub> Photo- and Platinized Counter-Electrodes. <i>Advanced Energy Materials</i> , <b>2013</b> , 3, 1292-1298	21-8	60
317	Emission spectra and transient photovoltage in dye-sensitized solar cells under stress tests. <i>Journal of Applied Electrochemistry</i> , <b>2013</b> , 43, 209-215	2-6	11
316	Interplay between transparency and efficiency in dye sensitized solar cells. <i>Optics Express</i> , <b>2013</b> , 21, 3235-42	3-4	28
315	Particle tracing simulation of a vacuum electron gun for THz application <b>2013</b> ,		2
314	Reliability Study of Ruthenium-Based Dye-Sensitized Solar Cells (DSCs). <i>IEEE Journal of Photovoltaics</i> , <b>2012</b> , 2, 27-34	3-7	14
313	Electro-thermo-mechanical simulation of AlGaN/GaN HEMTs <b>2012</b> ,		1
312	Charge Transport in Solid-State Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 23882-23889	3-8	14

311	Reverse bias degradation in dye solar cells. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 123302	3.4	22
310	Generalization of thermodynamic potentials including information. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2012</b> , 391, 6337-6346	3.3	2
309	1-THz cascade backward wave amplifier <b>2012</b> ,		5
308	Cross-Bar Design of Nano-Vacuum Triode for High-Frequency Applications. <i>IEEE Electron Device Letters</i> , <b>2012</b> , 33, 1318-1320	4.4	4
307	Simulation of space charge limited organic non volatile memory elements. <i>Materials Research Society Symposia Proceedings</i> , <b>2012</b> , 1430, 7		
306	Correlation between Cell Performance and Physical Transport Parameters in Dye Solar Cells. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 1151-1157	3.8	23
305	Physical and electrochemical analysis of an indoor-outdoor ageing test of large-area dye solar cell devices. <i>ChemPhysChem</i> , <b>2012</b> , 13, 2925-36	3.2	47
304	. <i>IEEE Transactions on Electron Devices</i> , <b>2012</b> , 59, 2979-2987	2.9	16
303	Time resolved temperature profiles of high power HEMTs by photocurrent spectral analysis. <i>Microelectronics Reliability</i> , <b>2012</b> , 52, 2077-2080	1.2	4
302	Reliability study of dye-sensitized solar cells by means of solar simulator and white LED. <i>Microelectronics Reliability</i> , <b>2012</b> , 52, 2495-2499	1.2	10
301	Fabrication and reliability of dye solar cells: A resonance Raman scattering study. <i>Microelectronics Reliability</i> , <b>2012</b> , 52, 2487-2489	1.2	12
300	Introducing structural colour in DSCs by using photonic crystals: interplay between conversion efficiency and optical properties. <i>Energy and Environmental Science</i> , <b>2012</b> , 5, 8238	35.4	45
299	Low-temperature synthesis of carbon nanotubes on indium tin oxide electrodes for organic solar cells. <i>Beilstein Journal of Nanotechnology</i> , <b>2012</b> , 3, 524-52	3	14
298	Optoelectronic properties of nanocolumnar InGaN/GaN quantum disk LEDs. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2012</b> , 9, 1315-1319		
297	It's not easy being green: Strategies for all-nitrides, all-colour solid state lighting. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2012</b> , 6, 49-52	2.5	50
296	Dye solar cells efficiency maps: a parametric study. <i>Optical and Quantum Electronics</i> , <b>2012</b> , 44, 155-160	2.4	4
295	Innovative structure for dye solar cells. <i>Optical and Quantum Electronics</i> , <b>2012</b> , 44, 141-147	2.4	4
294	Electrochemistry in reverse biased dye solar cells and dye/electrolyte degradation mechanisms. <i>ChemPhysChem</i> , <b>2012</b> , 13, 2964-75	3.2	30

293	Mesoscale modeling of phononic thermal conductivity of porous Si: interplay between porosity, morphology and surface roughness. <i>Journal of Computational Electronics</i> , <b>2012</b> , 11, 8-13	1.8	29
292	Band gap engineering approaches to increase InGaN/GaN LED efficiency. <i>Optical and Quantum Electronics</i> , <b>2012</b> , 44, 83-88	2.4	16
291	Atomistic simulation of InGaN/GaN quantum disk LEDs. <i>Optical and Quantum Electronics</i> , <b>2012</b> , 44, 89-94	2.4	5
290	Introduction to the OQE special issue on Numerical Simulation of Optoelectronic Devices (NUSOD11). <i>Optical and Quantum Electronics</i> , <b>2012</b> , 44, 65-65	2.4	
289	Airbrush Spray Coating of Amorphous Titanium Dioxide for Inverted Polymer Solar Cells. <i>International Journal of Photoenergy</i> , <b>2012</b> , 2012, 1-5	2.1	12
288	Effect of dielectric Bragg grating nanostructuring on dye sensitized solar cells. <i>Optics Express</i> , <b>2012</b> , 20 Suppl 6, A888-97	3.3	19
287	Efficient Cosensitization Strategy for Dye-Sensitized Solar Cells. <i>Applied Physics Express</i> , <b>2012</b> , 5, 022303	2.4	17
286	Reverse Bias Degradation in Shadowed Devices in TiO <sub>2</sub> Dye-Sensitized Solar Cell Modules. <i>Materials Research Society Symposia Proceedings</i> , <b>2012</b> , 1442, 40		
285	Raster Scanning Laser and UV Processing of nanocrystalline TiO <sub>2</sub> Films for Sintering in Dye Solar Cells: Device Performance, Throughput and Embodied Energy. <i>Materials Research Society Symposia Proceedings</i> , <b>2012</b> , 1447, 33		
284	Synthesis of a novel unsymmetrical Zn(II) phthalocyanine bearing a phenyl ethynyl moiety as sensitizer for dye-sensitized solar cells. <i>Dalton Transactions</i> , <b>2011</b> , 40, 38-40	4.3	15
283	Thermal stress effects on Dye-Sensitized Solar Cells (DSSCs). <i>Microelectronics Reliability</i> , <b>2011</b> , 51, 1762-1766	2.6	31
282	Theoretical Investigation of a Dye Solar Cell Wrapped Around an Optical Fiber. <i>IEEE Journal of Quantum Electronics</i> , <b>2011</b> , 47, 1214-1221	2	21
281	. <i>IEEE Transactions on Electron Devices</i> , <b>2011</b> , 58, 1425-1432	2.9	70
280	. <i>IEEE Transactions on Electron Devices</i> , <b>2011</b> , 58, 2759-2764	2.9	42
279	. <i>IEEE Transactions on Electron Devices</i> , <b>2011</b> , 58, 3200-3204	2.9	16
278	. <i>IEEE Transactions on Electron Devices</i> , <b>2011</b> , 58, 3179-3188	2.9	19
277	The OPTHER project: Progress toward the THz amplifier <b>2011</b> ,		5
276	PSPIICE models for Dye solar cells and modules <b>2011</b> ,		1

275	Simulation of dye solar cells: through and beyond one dimension. <i>Journal of Computational Electronics</i> , <b>2011</b> , 10, 424-436	1.8	21
274	Physics based simulation of dye solar cells. <i>Optical and Quantum Electronics</i> , <b>2011</b> , 42, 809-815	2.4	1
273	Substrates for flexible electronics: A practical investigation on the electrical, film flexibility, optical, temperature, and solvent resistance properties. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2011</b> , 49, 638-648	2.6	370
272	. <i>IEEE Nanotechnology Magazine</i> , <b>2011</b> , 10, 1285-1292	2.6	8
271	Piezoelectric potential in vertically aligned nanowires for high output nanogenerators. <i>Nanotechnology</i> , <b>2011</b> , 22, 465401	3.4	132
270	Airbrush spray-coating of polymer bulk-heterojunction solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2011</b> , 95, 1775-1778	6.4	98
269	Angular response of dye solar cells to solar and spectrally resolved light. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 213301	3.4	24
268	Hybrid thermal-field emission of ZnO nanowires. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 243108	3.4	9
267	Comparison of continuum and atomistic methods for the analysis of InAs/GaAs quantum dots <b>2011</b> ,		1
266	New Components for Dye-Sensitized Solar Cells. <i>International Journal of Photoenergy</i> , <b>2010</b> , 2010, 1-16	2.1	36
265	Bridged Phthalocyanine Systems for Sensitization of Nanocrystalline TiO <sub>2</sub> Films. <i>International Journal of Photoenergy</i> , <b>2010</b> , 2010, 1-11	2.1	11
264	Heating and cooling mechanisms in single-molecule junctions. <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	34
263	Efficient dye-sensitized solar cells using red turnip and purple wild sicilian prickly pear fruits. <i>International Journal of Molecular Sciences</i> , <b>2010</b> , 11, 254-67	6.3	190
262	Analytical Design Method for Corrugated Rectangular Waveguide SWS THz Vacuum Tubes. <i>Journal of Electromagnetic Waves and Applications</i> , <b>2010</b> , 24, 2479-2494	1.3	14
261	Optimization of nanostructured titania photoanodes for dye-sensitized solar cells: Study and experimentation of TiCl <sub>4</sub> treatment. <i>Journal of Non-Crystalline Solids</i> , <b>2010</b> , 356, 1958-1961	3.9	81
260	Stability of dye-sensitized solar cells under light soaking test. <i>Journal of Non-Crystalline Solids</i> , <b>2010</b> , 356, 2049-2052	3.9	19
259	Angular and prism coupling refractive enhancement in dye solar cells. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 103302	3.4	19
258	Optoelectronic and transport properties of nanocolumnar InGaN/GaN quantum disk LEDs <b>2010</b> ,		2

257	Thermal activation of mass transport and charge transfer at Pt in the I(3)(-)/I(-) electrolyte of a dye-sensitized solar cell. <i>Physical Chemistry Chemical Physics</i> , <b>2010</b> , 12, 10786-92	3.6	10
256	Handshaking multiscale thermal model of nanostructured devices <b>2010</b> ,		1
255	Carbon nanotubes/polydimethylsiloxanes systems for thermal management of miniaturized electronic components. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2010</b> , 10, 8336-40	1.3	3
254	European research on THz vacuum amplifiers <b>2010</b> ,		1
253	Simulation of Inelastic Scattering in Molecular Junctions: Application to Inelastic Electron Tunneling Spectroscopy and Dissipation Effects. <i>Journal of Computational and Theoretical Nanoscience</i> , <b>2010</b> , 7, 2512-2526	0.3	2
252	Photocurrent enhancement of dye solar cells by efficient light management. <i>Superlattices and Microstructures</i> , <b>2010</b> , 47, 197-201	2.8	6
251	Concurrent multiscale simulation of electronic devices. <i>Journal of Computational Electronics</i> , <b>2010</b> , 9, 262-268	1.8	1
250	Multiscale Modeling of Dye Solar Cells and Comparison With Experimental Data. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2010</b> , 16, 1611-1618	3.8	21
249	Calculation of optical properties of a quantum dot embedded in a GaN/AlGaIn nanocolumn. <i>Superlattices and Microstructures</i> , <b>2010</b> , 47, 123-128	2.8	3
248	Analysis and simulation of incident photon to current efficiency in dye sensitized solar cells. <i>Superlattices and Microstructures</i> , <b>2010</b> , 47, 192-196	2.8	11
247	Enhancement of carrier focusing GaN based vertical cavity surface emitting lasers and polariton lasers. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 091105	3.4	1
246	Theory of an electrically injected bulk polariton laser. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 011110	3.4	14
245	Efficient sintering of nanocrystalline titanium dioxide films for dye solar cells via raster scanning laser. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 103312	3.4	48
244	Piezoresistive behaviour of flexible PEDOT:PSS based sensors. <i>Sensors and Actuators B: Chemical</i> , <b>2009</b> , 139, 304-309	8.5	124
243	Using EIS for diagnosis of dye-sensitized solar cells performance. <i>Journal of Applied Electrochemistry</i> , <b>2009</b> , 39, 2291-2295	2.6	73
242	Modeling of Dye sensitized solar cells using a finite element method. <i>Journal of Computational Electronics</i> , <b>2009</b> , 8, 398-409	1.8	27
241	Coupling atomistic and finite element approaches for the simulation of optoelectronic devices. <i>Optical and Quantum Electronics</i> , <b>2009</b> , 41, 671-679	2.4	7
240	Quantum confinement dependence of the energy splitting and recombination dynamics of A and B excitons in a GaN/AlGaIn quantum well. <i>Physical Review B</i> , <b>2009</b> , 79,	3.3	6

239	Plasmon polaritons in the near infrared on fluorine doped tin oxide films. <i>Optics Express</i> , <b>2009</b> , 17, 10155-10167	5.7	51
238	The European project OPTHER for the development of a THz tube amplifier <b>2009</b> ,		6
237	Design of an electron gun with FEA cathode for THz devices <b>2009</b> ,		1
236	Design of Submillimeter Schottky Mixers Under Flat-Band Conditions Using an Improved Drift-Diffusion Model. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2009</b> , 19, 167-169	2.6	5
235	Nanotechnology radar thermal management. <i>IEEE Aerospace and Electronic Systems Magazine</i> , <b>2009</b> , 24, 11-16	2.4	1
234	Simulations of Optical Properties of a GaN Quantum Dot Embedded in a AlGaN Nanocolumn within a Mixed FEM/atomistic Method <b>2009</b> ,		1
233	On the effect of Al <sub>2</sub> O <sub>3</sub> blocking layer on the performance of dye solar cells with cobalt based electrolytes. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 173113	3.4	34
232	Corrugated waveguide slow-wave structure for THz travelling wave tube <b>2009</b> ,		4
231	Electron-phonon scattering in molecular electronics: from inelastic electron tunnelling spectroscopy to heating effects. <i>New Journal of Physics</i> , <b>2008</b> , 10, 065020	2.9	23
230	Electronic and transport properties of contacts between molybdenum sulfide nanowires and gold electrodes. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 083115	3.4	9
229	Electronic structure and optical properties of freestanding [0001] oriented GaN nanowires and nanotubes. <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 073718	2.5	11
228	Field emission vacuum triode: THz waveguide solutions for the transmission lines <b>2008</b> ,		1
227	Resonant electron heating and molecular phonon cooling in single C60 junctions. <i>Physical Review Letters</i> , <b>2008</b> , 100, 136801	7.4	108
226	Preparation and Thermal Characterization of Carbon Nanotubes-Based Composites for Applications in Electronics Packaging <b>2008</b> ,		1
225	Non-equilibrium Green's functions in density functional tight binding: method and applications. <i>New Journal of Physics</i> , <b>2008</b> , 10, 065022	2.9	87
224	TiberCAD: Towards multiscale simulation of optoelectronic devices <b>2008</b> ,		1
223	Smart Materials and Concepts for Photovoltaics: Dye Sensitized Solar Cells. <i>NATO Science for Peace and Security Series B: Physics and Biophysics</i> , <b>2008</b> , 97-126	0.2	5
222	The impact of outdoor meteorological parameters on the performance of dye-sensitized solar cells. <i>Conference Record of the IEEE Photovoltaic Specialists Conference</i> , <b>2008</b> ,		1

221	The influence of mobility unbalance on GaN based vertical cavity surface emitting lasers. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 151116	3.4	6
220	Flip-Cathode Design for Carbon Nanotube-Based Vacuum Triodes. <i>IEEE Electron Device Letters</i> , <b>2008</b> , 29, 111-113	4.4	7
219	TiberCAD: towards multiscale simulation of optoelectronic devices. <i>Optical and Quantum Electronics</i> , <b>2008</b> , 40, 1077-1083	2.4	22
218	Multiscale simulation of MOS systems based on high- $\kappa$ oxides. <i>Journal of Computational Electronics</i> , <b>2008</b> , 7, 398-402	1.8	9
217	Joule heating in molecular tunnel junctions: application to C60. <i>Journal of Computational Electronics</i> , <b>2008</b> , 7, 384-389	1.8	6
216	DFT Modeling of Bulk-Modulated Carbon Nanotube Field-Effect Transistors. <i>IEEE Nanotechnology Magazine</i> , <b>2007</b> , 6, 13-21	2.6	11
215	Carbon nanotubes for gas detection: materials preparation and device assembly. <i>Journal of Physics Condensed Matter</i> , <b>2007</b> , 19, 225004	1.8	18
214	Field emission from silicon nanowires: Conditioning and stability. <i>Journal of Applied Physics</i> , <b>2007</b> , 102, 054906	2.5	11
213	The Green's function density functional tight-binding (gDFTB) method for molecular electronic conduction. <i>Journal of Physical Chemistry A</i> , <b>2007</b> , 111, 5692-702	2.8	28
212	Simulation of exciton formation and transport in electrically driven polariton laser structures. <i>Superlattices and Microstructures</i> , <b>2007</b> , 41, 364-367	2.8	1
211	Thermal Maps of GaAs P-HEMT: A Novel System Based on the Photocurrent Spectral Analysis. <i>IEEE Transactions on Electron Devices</i> , <b>2007</b> , 54, 879-882	2.9	6
210	Influence of the Source-Drain Distance on the AlGaIn/GaN HEMT Performance. <i>IEEE Transactions on Electron Devices</i> , <b>2007</b> , 54, 1071-1075	2.9	48
209	Full-Band Tunneling in High- $\kappa$ Oxide MOS Structures. <i>IEEE Transactions on Electron Devices</i> , <b>2007</b> , 54, 3168-3176	2.9	16
208	Atomistic Modeling of Gate-All-Around Si-Nanowire Field-Effect Transistors. <i>IEEE Transactions on Electron Devices</i> , <b>2007</b> , 54, 3159-3167	2.9	14
207	The simulation of molecular and organic devices: a critical review and look at future developments. <i>Applied Physics A: Materials Science and Processing</i> , <b>2007</b> , 87, 593-598	2.6	6
206	Simulation of piezoresistivity effect in FETs. <i>Journal of Computational Electronics</i> , <b>2007</b> , 5, 323-326	1.8	
205	Quasiparticle correction for electronic transport in molecular wires. <i>Journal of Computational Electronics</i> , <b>2007</b> , 6, 345-348	1.8	6
204	Heat dissipation and non-equilibrium phonon distributions in molecular devices. <i>Journal of Computational Electronics</i> , <b>2007</b> , 6, 335-339	1.8	1



203	Electronic and transport properties of silicon nanowires. <i>Journal of Computational Electronics</i> , <b>2007</b> , 6, 329-333	1.8	25
202	TiberCAD: A new multiscale simulator for electronic and optoelectronic devices. <i>Superlattices and Microstructures</i> , <b>2007</b> , 41, 381-385	2.8	6
201	Full-band tunneling in high- $\epsilon$ dielectric MOS structures. <i>Microelectronics Reliability</i> , <b>2007</b> , 47, 694-696	1.2	2
200	Coupling of molecular vibrons with contact phonon reservoirs. <i>Journal of Physics Condensed Matter</i> , <b>2007</b> , 19, 215207	1.8	13
199	Theory of heat dissipation in molecular electronics. <i>Physical Review B</i> , <b>2007</b> , 75,	3.3	80
198	A priori method for propensity rules for inelastic electron tunneling spectroscopy of single-molecule conduction. <i>Physical Review B</i> , <b>2007</b> , 75,	3.3	77
197	Role of Charge Interaction in the Behavior of Organic Thin Film Transistors. <i>Materials Research Society Symposia Proceedings</i> , <b>2007</b> , 1003, 1		
196	Chapter 8 The gDFTB tool for molecular electronics. <i>Theoretical and Computational Chemistry</i> , <b>2007</b> , 17, 205-232		2
195	Effects of power converters on dye-sensitized solar cells <b>2007</b> ,		1
194	Tunneling Properties of MOS Systems Based on High-k Oxides <b>2007</b> , 153-156		1
193	Multiscale Simulation of Electronic and Optoelectronic Devices with TiberCAD <b>2007</b> , 245-248		2
192	Efficient Green's Function Algorithms for Atomistic Modeling of Si Nanowire FETs <b>2007</b> , 325-328		1
191	Optimization of a NO <sub>x</sub> gas sensor based on single walled carbon nanotubes. <i>Sensors and Actuators B: Chemical</i> , <b>2006</b> , 118, 226-231	8.5	59
190	Experimental validation of GaN HEMTs thermal management by using photocurrent measurements. <i>IEEE Transactions on Electron Devices</i> , <b>2006</b> , 53, 182-188	2.9	31
189	The symmetry of single-molecule conduction. <i>Journal of Chemical Physics</i> , <b>2006</b> , 125, 184702	3.9	33
188	Understanding the inelastic electron-tunneling spectra of alkanedithiols on gold. <i>Journal of Chemical Physics</i> , <b>2006</b> , 124, 94704	3.9	96
187	Nanocomposites for organic and hybrid organic-inorganic solar cells <b>2006</b> , 6334, 139		2
186	Nonequilibrium phonon generation in coupled Wannier-Stark ladders from a semiconductor superlattice in a three-terminal device. <i>Journal of Applied Physics</i> , <b>2006</b> , 99, 124504	2.5	2

185	Elasticity theory of pseudomorphic heterostructures grown on substrates of arbitrary thickness. <i>Journal of Applied Physics</i> , <b>2006</b> , 100, 063514	2.5	36
184	Molecular origins of conduction channels observed in shot-noise measurements. <i>Nano Letters</i> , <b>2006</b> , 6, 2431-7	11.5	38
183	Tight-Binding DFT for Molecular Electronics (gDFTB) <b>2006</b> , 153-184		5
182	Incoherent tunneling and heat dissipation in molecular bridges. <i>Journal of Physics: Conference Series</i> , <b>2006</b> , 35, 349-356	0.3	
181	Modeling of carbon nanotube-based devices: from nanoFETs to THz emitters <b>2006</b> ,		4
180	One-dimensional screening effects in bulk-modulated carbon nanotube transistors. <i>Journal of Computational Electronics</i> , <b>2006</b> , 5, 97-101	1.8	3
179	Scaling effects in AlGaIn/GaN HEMTs: Comparison between Monte Carlo simulations and experimental data. <i>Journal of Computational Electronics</i> , <b>2006</b> , 5, 109-113	1.8	2
178	Strain effects in SiN-passivated GaN-based HEMT devices. <i>Journal of Computational Electronics</i> , <b>2006</b> , 5, 115-118	1.8	4
177	Simulations of Inelastic Tunnelling in Molecular Bridges. <i>Springer Proceedings in Physics</i> , <b>2006</b> , 183-186	0.2	2
176	Carbon Nanotubes Films for Sensing Applications: From Piezoresistive Sensor to Gas Sensing. <i>Springer Proceedings in Physics</i> , <b>2006</b> , 191-194	0.2	1
175	SWCNT aggregates for gas sensing applications <b>2005</b> , 5838, 69		0
174	Influence of grain sizes on the mobility of organic thin-film transistors. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 263501	3.4	185
173	Negative quantum capacitance of gated carbon nanotubes. <i>Physical Review B</i> , <b>2005</b> , 72,	3.3	25
172	Carbon nanotubes dispersions in polymer matrix for strain sensing applications <b>2005</b> ,		1
171	Vibrational effects in the linear conductance of carbon nanotubes. <i>Europhysics Letters</i> , <b>2005</b> , 71, 438-444.	1.6	34
170	Gas sensing using single wall carbon nanotubes ordered with dielectrophoresis. <i>Sensors and Actuators B: Chemical</i> , <b>2005</b> , 111-112, 181-186	8.5	40
169	Quantum Capacitance Effects in Carbon Nanotube Field-Effect Devices. <i>Journal of Computational Electronics</i> , <b>2005</b> , 4, 51-55	1.8	5
168	Atomistic Simulation of the Electronic Transport in Organic Nanostructures: Electron-Phonon and Electron-Electron Interactions. <i>Journal of Computational Electronics</i> , <b>2005</b> , 4, 79-82	1.8	8

167	Investigation of the recombination dynamics in low In-content InGaN MQWs by means of cathodoluminescence and photoluminescence excitation. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2005</b> , 2, 817-821		1
166	Strain effects in freestanding three-dimensional nitride nanostructures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2005</b> , 2, 3891-3894		15
165	GaN/AlGaIn nanocavities with AlN/GaN Bragg reflectors grown in AlGaIn nanocolumns by plasma assisted MBE. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2005</b> , 202, 367-371	1.6	14
164	Thermal resistance measurement of GaAs MESFETs by means of photocurrent spectrum analysis and comparison with simulations. <i>Semiconductor Science and Technology</i> , <b>2005</b> , 20, 135-139	1.8	7
163	Quasiparticle energies for large molecules: A tight-binding-based Green's-function approach. <i>Physical Review A</i> , <b>2005</b> , 71,	2.6	46
162	Carrier-confinement effects in nanocolumnar GaN <sub>1-x</sub> Ga <sub>1-x</sub> N quantum disks grown by molecular-beam epitaxy. <i>Physical Review B</i> , <b>2005</b> , 72,	3.3	49
161	Exciton interaction with piezoelectric and polar optical phonons in bulk wurtzite GaN. <i>Semiconductor Science and Technology</i> , <b>2004</b> , 19, S460-S462	1.8	1
160	Non-equilibrium electronic distribution within one period of InP-based quantum cascade lasers. <i>Semiconductor Science and Technology</i> , <b>2004</b> , 19, S342-S344	1.8	9
159	Dynamical nonlinearity in strained InGaAs (311)A sidewall quantum wires. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 786-788	3.4	5
158	Tuning the piezoelectric fields in quantum dots: microscopic description of dots grown on (N11) surfaces. <i>IEEE Nanotechnology Magazine</i> , <b>2004</b> , 3, 124-128	2.6	4
157	Electronic transport in molecular devices: the role of coherent and incoherent electron-phonon scattering. <i>Semiconductor Science and Technology</i> , <b>2004</b> , 19, S357-S361	1.8	5
156	Charge transport in pentacene and porphyrin-based organic thin film transistors. <i>Semiconductor Science and Technology</i> , <b>2004</b> , 19, S354-S356	1.8	11
155	Full band approach to tunneling in MOS structures. <i>IEEE Transactions on Electron Devices</i> , <b>2004</b> , 51, 741-748	2.9	21
154	Effects of grain boundaries, field-dependent mobility, and interface trap States on the electrical Characteristics of pentacene TFT. <i>IEEE Transactions on Electron Devices</i> , <b>2004</b> , 51, 1997-2003	2.9	143
153	Atomistic theory of transport in organic and inorganic nanostructures. <i>Reports on Progress in Physics</i> , <b>2004</b> , 67, 1497-1561	14.4	246
152	Synthesis and characterization of fused porphyrin-BODIPY dyads. <i>Tetrahedron</i> , <b>2004</b> , 60, 1099-1106	2.4	69
151	Recombination dynamics in InGaIn/GaN quantum wells: role of the piezoelectric field versus carrier localization. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2004</b> , 1, 1397-1402		2
150	Electronic and optical properties of [N11] grown nanostructures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2004</b> , 1, 1511-1521		11

149	Effect of self-consistency and electron correlation on the spatial extension of bipolaronic defects. <i>Organic Electronics</i> , <b>2004</b> , 5, 167-174	3.5	5
148	Polarization field effects on the recombination dynamics in low-In-content InGaN multi-quantum wells. <i>Superlattices and Microstructures</i> , <b>2004</b> , 36, 615-624	2.8	7
147	Full-band approaches to the electronic properties of nanometer-scale MOS structures. <i>Solid-State Electronics</i> , <b>2004</b> , 48, 575-580	1.7	6
146	Organic/metal interfaces: an ab initio study of their structural and electronic properties. <i>Surface Science</i> , <b>2004</b> , 566-568, 628-632	1.8	7
145	Carrier recombination kinetics in (311)A InGaAs sidewall quantum wires. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2004</b> , 23, 449-454	3	4
144	Telethermography with thermostimulus in the study of temporal arteritis. <i>Infrared Physics and Technology</i> , <b>2004</b> , 46, 57-61	2.7	3
143	Förster energy transfer from poly(aryleneethynylene)s to an erbiumporphyrin complex. <i>Chemical Physics</i> , <b>2004</b> , 300, 217-225	2.3	23
142	Barrier heights of organic modified Schottky contacts: theory and experiment. <i>Applied Surface Science</i> , <b>2004</b> , 234, 313-320	6.7	22
141	The influence of thermal fluctuations on the electronic transport of alkeno-thiolates. <i>IEEE Nanotechnology Magazine</i> , <b>2004</b> , 3, 353-357	2.6	4
140	Non-linear optical properties of InGaAs/AlGaAs nanostructures grown on (N11) surfaces. <i>Semiconductor Science and Technology</i> , <b>2004</b> , 19, S351-S353	1.8	0
139	Incoherent Electron-Phonon Scattering in Octanethiols. <i>Nano Letters</i> , <b>2004</b> , 4, 2109-2114	11.5	100
138	Single wall carbon nanotube based aggregates and their electrical characterization. <i>Synthetic Metals</i> , <b>2004</b> , 145, 171-176	3.6	9
137	Optical far-IR wave generation - state-of-the-art and advanced device structures <b>2004</b> ,		3
136	Current collapse associated with surface states in GaN-based HEMTs. Theoretical/experimental investigations <b>2004</b> , 81-84		2
135	RFID: Ideas for Future Development. <i>Springer Proceedings in Physics</i> , <b>2004</b> , 255-262	0.2	1
134	Comprehensive description of the dynamical screening of the internal electric fields of AlGaIn/GaN quantum wells in time-resolved photoluminescence experiments. <i>Journal of Applied Physics</i> , <b>2003</b> , 93, 400-409	2.5	33
133	Coherent Phonon Scattering in Molecular Devices. <i>Journal of Computational Electronics</i> , <b>2003</b> , 2, 251-256	1.8	3
132	Microscopic Description of Nanostructures Grown on (N11) Surfaces. <i>Journal of Computational Electronics</i> , <b>2003</b> , 2, 275-279	1.8	

131	Influence of Carrier Mobility and Interface Trap States on the Transfer and Output Characteristics of Organic Thin Film Transistors. <i>Journal of Computational Electronics</i> , <b>2003</b> , 2, 297-300	1.8	6
130	Schottky Barrier Height at Organic/Metal Junctions from First-Principles. <i>Journal of Computational Electronics</i> , <b>2003</b> , 2, 407-411	1.8	2
129	Monte Carlo Simulations of THz Quantum-Cascade Lasers. <i>Journal of Computational Electronics</i> , <b>2003</b> , 2, 433-437	1.8	5
128	Full-Band Tunneling Currents in Nanometer-Scale MOS Structures. <i>Journal of Computational Electronics</i> , <b>2003</b> , 2, 439-442	1.8	
127	Microscopic theory of nanostructured semiconductor devices: beyond the envelope-function approximation. <i>Semiconductor Science and Technology</i> , <b>2003</b> , 18, R1-R31	1.8	90
126	. <i>IEEE Transactions on Electron Devices</i> , <b>2003</b> , 50, 2009-2014	2.9	7
125	Electronic transport properties of molecular devices. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2003</b> , 19, 139-144	3	9
124	Exciton relaxation in bulk wurtzite GaN: the role of piezoelectric interaction. <i>Physica Status Solidi A</i> , <b>2003</b> , 195, 618-627		11
123	Piezoelectric effects in sidewall quantum wires grown on patterned (311)A GaAs substrate. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2003</b> , 1433-1436		2
122	Tight-Binding Simulation of an InGaN/GaN Quantum Well with indium Concentration Fluctuation. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2003</b> , 298-301		1
121	Improvement of the Extended One-Pot (EOP) Procedure To Form Poly(aryleneethynylene)s and Investigation of Their Electrical and Optical Properties. <i>Macromolecules</i> , <b>2003</b> , 36, 2215-2223	5.5	32
120	Tailorable acceptor C(60-n)B(n) and donor C(60-m)N(m) pairs for molecular electronics. <i>Physical Review Letters</i> , <b>2003</b> , 90, 206602	7.4	69
119	Channel temperature measurement of PHEMT by means of optical probes. <i>Electronics Letters</i> , <b>2003</b> , 39, 247	1.1	7
118	Charge injection and transport in tetra-phenyl-porphyrin. <i>Synthetic Metals</i> , <b>2003</b> , 138, 255-260	3.6	3
117	Tetra-phenyl porphyrin based thin film transistors. <i>Synthetic Metals</i> , <b>2003</b> , 138, 261-266	3.6	51
116	Modulation of the electronic transport properties of carbon nanotubes with adsorbed molecules. <i>Synthetic Metals</i> , <b>2003</b> , 138, 89-93	3.6	11
115	Large drift-diffusion and Monte Carlo modeling of organic semiconductor devices. <i>Synthetic Metals</i> , <b>2003</b> , 138, 95-100	3.6	15
114	Experimental investigation and simulation of hybrid organic/inorganic Schottky diodes. <i>Journal of Physics Condensed Matter</i> , <b>2003</b> , 15, S2719-S2728	1.8	61

113	Schottky barrier height at an organic/metal junction: A first-principles study of PTCDA/X (X=Al,Ag) contacts. <i>Physical Review B</i> , <b>2003</b> , 68,	3-3	41
112	Role of thermal vibrations in molecular wire conduction. <i>Physical Review B</i> , <b>2003</b> , 68,	3-3	26
111	Monte Carlo simulation of tunable mid-infrared emission from coupled Wannier-Stark ladders in semiconductor superlattices. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 4029-4031	3-4	5
110	Enhancement of the effective tunnel mass in ultrathin silicon dioxide layers. <i>Journal of Applied Physics</i> , <b>2003</b> , 93, 2681-2690	2-5	50
109	Organic and Inorganic Nanostructures: An Atomistic Point of View. <i>Physica Status Solidi (B): Basic Research</i> , <b>2002</b> , 232, 5-12	1-3	
108	Coupled Free-Carrier and Exciton Dynamics in Bulk Wurtzite GaN. <i>Physica Status Solidi (B): Basic Research</i> , <b>2002</b> , 234, 901-905	1-3	2
107	Monte Carlo Description of Exciton Dynamics in GaN. <i>Physica Status Solidi A</i> , <b>2002</b> , 190, 141-147		3
106	Electron Acceleration by Light in Semiconductor Microcavities. <i>Physica Status Solidi A</i> , <b>2002</b> , 190, 175-179		
105	Polariton Lasing Due to the Exciton-Electron Scattering in Semiconductor Microcavities. <i>Physica Status Solidi A</i> , <b>2002</b> , 190, 181-186		1
104	Modeling of GaN-Based Resonant Tunneling Diodes: Influence of Polarization Fields. <i>Physica Status Solidi A</i> , <b>2002</b> , 190, 295-299		23
103	Dynamic Screening in AlGaIn/GaN Multi Quantum Wells. <i>Physica Status Solidi A</i> , <b>2002</b> , 190, 81-86		6
102	Resonant and Non-Resonant Dynamics of Excitons and Free Carriers in GaN/AlGaIn Quantum Wells. <i>Physica Status Solidi A</i> , <b>2002</b> , 190, 87-92		5
101	Exciton-Electron Scattering in Semiconductor Microcavities: Tool for Polariton Lasing. <i>Physica Status Solidi A</i> , <b>2002</b> , 190, 725-730		1
100	Static and dynamic screening of the polarization fields in nitride nanostructures: a theoretical and experimental study. <i>Physica B: Condensed Matter</i> , <b>2002</b> , 314, 35-38	2-8	3
99	Full-band approaches for the quantum treatment of nanometer-scale MOS structures. <i>Physica B: Condensed Matter</i> , <b>2002</b> , 314, 345-349	2-8	3
98	Theoretical tools for transport in molecular nanostructures. <i>Physica B: Condensed Matter</i> , <b>2002</b> , 314, 86-90	2-8	63
97	Hot electrons and hot phonons in quantum cascade lasers. <i>Physica B: Condensed Matter</i> , <b>2002</b> , 314, 336-340		12
96	Tight-binding methods for transport and optical properties in realistic nanostructures. <i>Physica B: Condensed Matter</i> , <b>2002</b> , 314, 211-219	2-8	20

95	GaN-based modulation doped FETs and UV detectors. <i>Solid-State Electronics</i> , <b>2002</b> , 46, 157-202	1.7	137
94	Molecular Devices Simulations Based on Density Functional Tight-Binding. <i>Journal of Computational Electronics</i> , <b>2002</b> , 1, 109-112	1.8	6
93	Resonant effect of Zener tunneling current. <i>Physical Review B</i> , <b>2002</b> , 65,	3.3	5
92	Influence of carrier mobility and contact barrier height on the electrical characteristics of organic transistors. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 4646-4648	3.4	75
91	Transition from strong to weak coupling and the onset of lasing in semiconductor microcavities. <i>Physical Review B</i> , <b>2002</b> , 65,	3.3	83
90	Polariton lasing by exciton-electron scattering in semiconductor microcavities. <i>Physical Review B</i> , <b>2002</b> , 65,	3.3	144
89	Room-temperature polariton lasers based on GaN microcavities. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 412-414	3.4	156
88	Atomistic simulations of complex materials: ground-state and excited-state properties. <i>Journal of Physics Condensed Matter</i> , <b>2002</b> , 14, 3015-3047	1.8	384
87	Electron-optical-phonon interaction in the In <sub>1-x</sub> Ga <sub>x</sub> As/In <sub>1-y</sub> Al <sub>y</sub> As superlattice. <i>Physical Review B</i> , <b>2002</b> , 65,	3.3	12
86	Monte Carlo simulation of electron dynamics in superlattice quantum cascade lasers. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 920-922	3.4	29
85	Charge Screening of Polarization Fields in Nitride Nanostructures. <i>Physica Status Solidi (B): Basic Research</i> , <b>2001</b> , 228, 553-558	1.3	4
84	Optical and Electronic Properties of GaN Based Heterostructures: A Self-Consistent Time-Dependent Approach. <i>Physica Status Solidi A</i> , <b>2001</b> , 183, 121-124		7
83	Tuning Optical Properties of GaN-Based Nanostructures by Charge Screening. <i>Physica Status Solidi A</i> , <b>2001</b> , 183, 81-85		13
82	Quasi Two-Dimensional Modeling of GaN-Based MODFETs. <i>Physica Status Solidi A</i> , <b>2001</b> , 188, 251-254		1
81	Recombination Dynamics in GaN/AlGa <sub>N</sub> Quantum Wells: The Role of Built-in Fields. <i>Physica Status Solidi A</i> , <b>2001</b> , 188, 851-855		6
80	Charge storage and screening of the internal field in GaN/AlGa <sub>N</sub> quantum wells. <i>Journal of Crystal Growth</i> , <b>2001</b> , 230, 492-496	1.6	9
79	Spontaneous and piezoelectric polarization effects on the output characteristics of AlGa <sub>N</sub> /Ga <sub>N</sub> heterojunction modulation doped FETs. <i>IEEE Transactions on Electron Devices</i> , <b>2001</b> , 48, 450-457	2.9	69
78	Breakdown quenching in high electron mobility transistor by using body contact. <i>IEEE Transactions on Electron Devices</i> , <b>2001</b> , 48, 2188-2191	2.9	10

77	Experimental and Monte Carlo analysis of near-breakdown phenomena in GaAs-based heterostructure FETs. <i>Semiconductor Science and Technology</i> , <b>2001</b> , 16, 315-319	1.8	3
76	Scanning tunneling current-voltage spectroscopy on poly(p-phenylene vinylene) films: A nanoscale probe for the electronic conduction. <i>Physical Review B</i> , <b>2001</b> , 63,	3.3	24
75	Tuning the optical properties of thiophene oligomers toward infrared emission: A theoretical study. <i>Journal of Chemical Physics</i> , <b>2001</b> , 115, 4919-4923	3.9	15
74	Mesoscopic-capacitor effect in GaN/AlxGa1-xN quantum wells: Effects on the electronic states. <i>Physical Review B</i> , <b>2001</b> , 63,	3.3	21
73	Photoluminescence Efficiency of Substituted Quaterthiophene Crystals. <i>Physical Review Letters</i> , <b>2001</b> , 86, 167-170	7.4	44
72	Electronic band structure and intermolecular interaction in substituted thiophene polymorphs. <i>Physical Review B</i> , <b>2001</b> , 63,	3.3	14
71	Theory of photon Bloch oscillations in photonic crystals. <i>Physical Review B</i> , <b>2001</b> , 63,	3.3	44
70	Gain dynamics in traveling-wave semiconductor optical amplifiers. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2001</b> , 7, 293-299	3.8	21
69	Efficient self-consistent pseudopotential calculation of nanostructured devices. <i>Physical Review B</i> , <b>2001</b> , 64,	3.3	19
68	Simulation of Optoelectronic Devices. <i>VLSI Design</i> , <b>2001</b> , 13, 23-36		
67	Microscopic Modeling of GaN-based Heterostructures. <i>VLSI Design</i> , <b>2001</b> , 13, 387-391		
66	Self-consistent Full-band Modeling of Quantum Semiconductor Nanostructures. <i>VLSI Design</i> , <b>2001</b> , 13, 91-95		1
65	Density-functional Based Tight-binding Calculations on Thiophene Polymorphism. <i>VLSI Design</i> , <b>2001</b> , 13, 393-397		
64	Bloch oscillations of light in laterally confined Bragg mirrors and multiple coupled microcavities. <i>Springer Proceedings in Physics</i> , <b>2001</b> , 689-690	0.2	
63	Propagation and Scattering of Exciton-Polaritons in Nitride-Based Multiple Quantum Wells. <i>Materials Research Society Symposia Proceedings</i> , <b>2000</b> , 639, 991		
62	Semiconductor Nanostructures. <i>Physica Status Solidi (B): Basic Research</i> , <b>2000</b> , 217, 703-722	1.3	15
61	Polarization Grating in Semiconductor Films Induced by Exciton Polaritons. <i>Physica Status Solidi A</i> , <b>2000</b> , 178, 581-585		
60	Optical and Transport Properties of GaN/Al0.15Ga0.85N Quantum Wells. <i>Physica Status Solidi A</i> , <b>2000</b> , 178, 73-78		2



59	Effects of the spontaneous polarization and piezoelectric fields on the luminescence spectra of GaN/Al <sub>0.15</sub> Ga <sub>0.85</sub> N quantum wells. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2000</b> , 7, 929-933	3	7
58	Theoretical study, modeling and simulation of SL quantum cascade lasers. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2000</b> , 7, 20-24	3	13
57	Exciton dynamics and valence band mixing in tensile-strained semiconductor quantum wells. <i>Semiconductor Science and Technology</i> , <b>2000</b> , 15, 189-196	1.8	4
56	Doping screening of polarization fields in nitride heterostructures. <i>Applied Physics Letters</i> , <b>2000</b> , 76, 3950-3952	3.4	26
55	Photonic Bloch oscillations in laterally confined Bragg mirrors. <i>Physical Review B</i> , <b>2000</b> , 61, 4413-4416	3.3	44
54	Well-width dependence of the ground level emission of GaN/AlGaN quantum wells. <i>Journal of Applied Physics</i> , <b>2000</b> , 87, 2289-2292	2.5	38
53	Monte Carlo study of the dynamic breakdown effects in HEMT's. <i>IEEE Electron Device Letters</i> , <b>2000</b> , 21, 149-151	4.4	22
52	Spontaneous polarization and piezoelectric field in GaN/Al <sub>0.15</sub> Ga <sub>0.85</sub> N quantum wells: Impact on the optical spectra. <i>Physical Review B</i> , <b>2000</b> , 61, 2711-2715	3.3	158
51	Fused Oligoporphyrins: A Novel Approach to a New Type of Extended Aromatic System. <i>Journal of the American Chemical Society</i> , <b>2000</b> , 122, 11295-11302	16.4	59
50	Many-body effects on excitons properties in GaN/AlGaN quantum wells. <i>Applied Physics Letters</i> , <b>2000</b> , 76, 1042-1044	3.4	26
49	Influence of Internal Electric Fields on the Ground Level Emission of GaN/AlGaN Multi-Quantum Wells. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , <b>2000</b> , 5, 970-976		
48	Free-carrier screening of polarization fields in wurtzite GaN/InGaN laser structures. <i>Applied Physics Letters</i> , <b>1999</b> , 74, 2002-2004	3.4	233
47	Optical polarization grating in semiconductors induced by exciton polaritons. <i>Physical Review B</i> , <b>1999</b> , 60, 15554-15557	3.3	8
46	AlN and GaN epitaxial heterojunctions on 6H-BiC(0001): Valence band offsets and polarization fields. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1999</b> , 17, 1674		44
45	Theoretical study and simulation of electron dynamics in quantum cascade lasers. <i>Physica B: Condensed Matter</i> , <b>1999</b> , 272, 219-222	2.8	9
44	Carrier screening and polarization fields in nitride-based heterostructure devices. <i>Physica B: Condensed Matter</i> , <b>1999</b> , 272, 397-401	2.8	3
43	Quantum effects in nanometer MOS structures. <i>Physica B: Condensed Matter</i> , <b>1999</b> , 272, 546-549	2.8	4
42	Modelling of semiconductor nanostructured devices within the tight-binding approach. <i>Journal of Physics Condensed Matter</i> , <b>1999</b> , 11, 6035-6043	1.8	2

41	Study of gain compression mechanisms in multiple-quantum-well In/sub 1-x/Ga/sub x/As semiconductor optical amplifiers. <i>IEEE Journal of Quantum Electronics</i> , <b>1999</b> , 35, 1697-1703	2	13
40	Effects of macroscopic polarization in III-V nitride multiple quantum wells. <i>Physical Review B</i> , <b>1999</b> , 60, 8849-8858	3-3	43 <sup>2</sup>
39	Influence of Internal Electric Fields on the Ground Level Emission of GaN/AlGaN Multi-Quantum Wells. <i>Materials Research Society Symposia Proceedings</i> , <b>1999</b> , 595, 1		
38	Polarization-independent /spl delta/-strained semiconductor optical amplifiers: a tight-binding study. <i>IEEE Journal of Quantum Electronics</i> , <b>1998</b> , 34, 1730-1739	2	21
37	Microscopic Theory of Quantum-Transport Phenomena in Mesoscopic Systems: A Monte Carlo Approach. <i>Physical Review Letters</i> , <b>1998</b> , 80, 3348-3351	7-4	44
36	. <i>Semiconductor Science and Technology</i> , <b>1998</b> , 13, 858-863	1.8	4
35	Off-resonance $\pi$ mixing in semiconductor quantum wires. <i>Physical Review B</i> , <b>1998</b> , 57, 9770-9779	3-3	8
34	Relationship between optical and structural properties in substituted quaterthiophene crystals. <i>Applied Physics Letters</i> , <b>1998</b> , 73, 2414-2416	3-4	25
33	Non Local Impact Ionization Effects in Semiconductor Devices. <i>VLSI Design</i> , <b>1998</b> , 6, 291-297		1
32	A Generalized Monte Carlo Approach for the Analysis of Quantum-Transport Phenomena in Mesoscopic Systems: Interplay Between Coherence and Relaxation. <i>VLSI Design</i> , <b>1998</b> , 8, 197-202		
31	Optical and Electronic Properties of Semiconductor 2D Nanosystems: Self-consistent Tight-binding Calculations. <i>VLSI Design</i> , <b>1998</b> , 8, 469-473		
30	Conduction-band mixing in T- and V-shaped quantum wires. <i>Physical Review B</i> , <b>1997</b> , 56, R1668-R1671	3-3	30
29	Self-Consistent Tight-Binding Methods Applied to Semiconductor Nanostructures. <i>Materials Research Society Symposia Proceedings</i> , <b>1997</b> , 491, 389		4
28	Enhanced Zener tunneling in silicon. <i>Solid State Communications</i> , <b>1997</b> , 101, 921-923	1.6	8
27	$\pi$ Mixing in T- and V-Shaped Quantum Wires. <i>Physica Status Solidi (B): Basic Research</i> , <b>1997</b> , 204, 275-278	1.3	1
26	Analysis of Quantum-Transport Phenomena in Mesoscopic Systems: A Monte Carlo Approach. <i>Physica Status Solidi (B): Basic Research</i> , <b>1997</b> , 204, 339-342	1.3	6
25	Wannier-Stark Resonance of Zener Current through a Superlattice in a p-i-n Diode. <i>Physica Status Solidi (B): Basic Research</i> , <b>1997</b> , 204, 368-373	1.3	5
24	Enhanced Coherent Zener Tunneling in Indirect Gap Semiconductors. <i>Physica Status Solidi (B): Basic Research</i> , <b>1997</b> , 204, 420-422	1.3	1

23	Experimental and Monte Carlo analysis of impact-ionization in AlGaAs/GaAs HBT's. <i>IEEE Transactions on Electron Devices</i> , <b>1996</b> , 43, 1769-1777	2.9	17
22	Self-consistent tight-binding calculations of electronic and optical properties of semiconductor nanostructures. <i>Solid State Communications</i> , <b>1996</b> , 98, 803-806	1.6	36
21	Wannier-Stark oscillations in Zener tunneling currents. <i>Solid-State Electronics</i> , <b>1996</b> , 40, 245-247	1.7	6
20	Stark-ladder transition in a (GaAs) <sub>5</sub> /(AlAs) <sub>2</sub> Zener tunneling diode. <i>Physica B: Condensed Matter</i> , <b>1996</b> , 227, 206-209	2.8	3
19	Wannier-Stark Resonances in DC Transport and Electrically Driven Bloch Oscillations <b>1996</b> , 143-146		
18	Valley mixing in resonant tunnelling diodes with applied hydrostatic pressure. <i>Semiconductor Science and Technology</i> , <b>1995</b> , 10, 1673-1679	1.8	16
17	Wannier-Stark Localization in Superlattices. <i>Japanese Journal of Applied Physics</i> , <b>1995</b> , 34, 4519-4521	1.4	12
16	Thermography and the possibilities for its applications in clinical and experimental dermatology. <i>Clinics in Dermatology</i> , <b>1995</b> , 13, 329-36	3	82
15	Theory of Zener tunnelling and Stark ladders in semiconductors. <i>Semiconductor Science and Technology</i> , <b>1994</b> , 9, 497-499	1.8	3
14	Monte Carlo simulation of minority carrier transport and light emission phenomena in GaAs devices. <i>Semiconductor Science and Technology</i> , <b>1994</b> , 9, 666-670	1.8	4
13	Theory of Zener tunneling and Wannier-Stark states in semiconductors. <i>Physical Review B</i> , <b>1994</b> , 50, 8358-8377	3.9	91
12	. <i>IEEE Electron Device Letters</i> , <b>1993</b> , 14, 103-106	4.4	22
11	. <i>IEEE Electron Device Letters</i> , <b>1993</b> , 14, 77-79	4.4	17
10	Study of surface field in n-type GaAs before and after surface doping with H <sub>2</sub> . <i>Applied Surface Science</i> , <b>1992</b> , 56-58, 356-362	6.7	6
9	Simulation of a THz Vacuum Triode Using Carbon-Nanotube Emitter		1
8	Carbon nanotube/conducting polymer composites for electronic application: materials preparation and devices assembling		1
7	Controlled growth of ordered SWCNTs for the realization of multielectrode field emitter devices		1
6	Atomistic tight-binding calculations for the investigation of transport in extremely scaled SOI transistors		1

5	Characterization of hole transport phenomena in AlGaAs-InGaAs HEMT's biased in impact-ionization regime		3
4	Spectral Changes by Dye Sensitized Solar Modules Influence the Pigment Composition and Productivity of <i>Arthrospira maxima</i> and Increase the Overall Energy Efficiency. <i>Advanced Sustainable Systems</i> ,2100346	5.9	2
3	Reducing Losses in Perovskite Large Area Solar Technology: Laser Design Optimization for Highly Efficient Modules and Minipanel. <i>Advanced Energy Materials</i> ,2103420	21.8	5
2	All-Slot-Die-Coated Inverted Perovskite Solar Cells in Ambient Conditions with Chlorine Additives. <i>Solar Rrl</i> ,2100807	7.1	6
1	Nanophotonics for Perovskite Solar Cells. <i>Advanced Photonics Research</i> ,2100326	1.9	3