# Nir Tessler

List of Publications by Year
in descending order

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| 230 | 13,658 | 38660 50 | 22102 113 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 234 | 234 | 234 | 11410 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Integrated Optoelectronic Devices Based on Conjugated Polymers. Science, 1998, 280, 1741-1744. | 6.0 | 2,627 |
| 2 | Lasing from conjugated-polymer microcavities. Nature, 1996, 382, 695-697. | 13.7 | 1,316 |
| 3 | Efficient Near-Infrared Polymer Nanocrystal Light-Emitting Diodes. Science, 2002, 295, 1506-1508. | 6.0 | 1,296 |
| 4 | Charge Transport in Disordered Organic Materials and Its Relevance to Thinâ€Film Devices: A Tutorial Review. Advanced Materials, 2009, 21, 2741-2761. | 11.1 | 394 |
| 5 | Lasers Based on Semiconducting Organic Materials. Advanced Materials, 1999, 11, 363-370. | 11.1 | 392 |
| 6 | Harvesting Singlet and Triplet Energy in Polymer LEDs. Advanced Materials, 1999, 11, 285-288. | 11.1 | 347 |
| 7 | Ionic space-charge effects in polymer light-emitting diodes. Physical Review B, 1998, 57, 12951-12963. | 1.1 | 326 |
| 8 | All-Polymer Optoelectronic Devices. Science, 1999, 285, 233-236. | 6.0 | 286 |
| 9 | Generalized Einstein relation for disordered semiconductorsâ€"implications for device performance. Applied Physics Letters, 2002, 80, 1948-1950. | 1.5 | 264 |
| 10 | Transient electroluminescence of polymer light emitting diodes using electrical pulses. Journal of Applied Physics, 1999, 86, 5116-5130. | 1.1 | 237 |
| 11 | Hybrid nanocomposite materials with organic and inorganic components for opto-electronic devices. Journal of Materials Chemistry, 2008, 18, 1064. | 6.7 | 183 |
| 12 | High Peak Brightness Polymer Light-Emitting Diodes. Advanced Materials, 1998, 10, 64-68. | 11.1 | 178 |
| 13 | Small Molecule/Polymer Blend Organic Transistors with Hole Mobility Exceeding 13 cm<sup>2</sup> V<sup>â^'1</sup> s<sup>â^'1</sup>. Advanced Materials, 2016, 28, 7791-7798. | 11.1 | 166 |
| 14 | Integrated, high-mobility polymer field-effect transistors driving polymer light-emitting diodes. Synthetic Metals, 1999, 102, 857-860. | 2.1 | 163 |
| 15 | Tuning Energetic Levels in Nanocrystal Quantum Dots through Surface Manipulations. Nano Letters, 2008, 8, 678-684. | 4.5 | 159 |
| 16 | PbSe/PbS and PbSe/PbSexS1-x Core/Shell Nanocrystals. Advanced Functional Materials, 2005, 15, 1111-1116. | 7.8 | 152 |
| 17 | On carrier injection and gain dynamics in quantum well lasers. IEEE Journal of Quantum Electronics, 1993, 29, 1586-1595. | 1.0 | 148 |
| 18 | Direct Determination of the Hole Density of States in Undoped and Doped Amorphous Organic Films with High Lateral Resolution. Physical Review Letters, 2005, 95, 256405. | 2.9 | 146 |

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| 19 | Factors Influencing Stimulated Emission from Poly(p-phenylenevinylene). Physical Review Letters, 1997, 78, 733-736. | 2.9 | 121 |
| 20 | Spectral narrowing in optically pumped poly (p-phenylenevinylene) Films. Advanced Materials, 1997, 9, 547-551. | 11.1 | 116 |
| 21 | Transfer Processes in Semiconducting Polymer-Porphyrin Blends. Advanced Materials, 2001, 13, 44-47. | 11.1 | 105 |
| 22 | Current heating in polymer light emitting diodes. Applied Physics Letters, 1998, 73, 732-734. | 1.5 | 99 |
| 23 | Cyanoâ€Substituted Oligo(pâ€phenylene vinylene) Single Crystals: A Promising Laser Material. Advanced Functional Materials, 2011, 21, 3770-3777. | 7.8 | 98 |
| 24 | Role of optical properties of metallic mirrors in microcavity structures. Journal of Applied Physics, 1997, 81, 2825-2829. | 1.1 | 90 |
| 25 | Photoluminescence of poly(p-phenylenevinylene)â€“silica nanocomposites: Evidence for dual emission by Franckâ€“Condon analysis. Journal of Chemical Physics, 2001, 115, 2709-2720. | 1.2 | 89 |
| 26 | Molecular control of quantum-dot internal electric field and its application to CdSe-based solar cells. Nature Materials, 2011, 10, 974-979. | 13.3 | 84 |
| 27 | 1,3-Di(2-pyrrolyl)azulene: An Efficient Luminescent Probe for Fluoride. European Journal of Organic Chemistry, 2005, 2005, 2207-2212. | 1.2 | 81 |
| 28 | Short-lived charge-transfer excitons in organic photovoltaic cells studied by high-field magneto-photocurrent. Nature Communications, 2014, 5, 4529. | 5.8 | 79 |
| 29 | Analysis and modeling of organic devices. Physica Status Solidi A, 2004, 201, 1246-1262. | 1.7 | 78 |
| 30 | Patterned electrode vertical field effect transistor fabricated using block copolymer nanotemplates. Applied Physics Letters, 2009, 95, . | 1.5 | 78 |
| 31 | Unraveling the Physics of Vertical Organic Field Effect Transistors through Nanoscale Engineering of a Self-Assembled Transparent Electrode. Nano Letters, 2012, 12, 4729-4733. | 4.5 | 74 |
| 32 | Small grains as recombination hot spots in perovskite solar cells. Matter, 2021, 4, 1683-1701. | 5.0 | 73 |
| 33 | Two-dimensional simulation of polymer field-effect transistor. Applied Physics Letters, 2001, 79, 2987-2989. | 1.5 | 71 |
| 34 | Charge Density and Film Morphology Dependence of Charge Mobility in Polymer Field-Effect Transistors. Advanced Materials, 2003, 15, 913-916. | 11.1 | 71 |
| 35 | Structures of polymer field-effect transistor: Experimental and numerical analyses. Applied Physics Letters, 2002, 80, 151-153. | 1.5 | 70 |
| 36 | Electronic excitations in luminescent conjugated polymers. Solid State Communications, 1997, 102, 249-258. | 0.9 | 69 |

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| 37 | Insights from Device Modeling of Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 1260-1270. | 8.8 | 68 |
| 38 | Electric Field Distribution in Polymer Light-Emitting Electrochemical Cells. Physical Review Letters, 2000, 85, 421-424. | 2.9 | 67 |
| 39 | Structure dependent modulation responses in quantum-well lasers. IEEE Journal of Quantum Electronics, 1992, 28, 2242-2250. | 1.0 | 64 |
| 40 | The Impact of Molecular pâ€Doping on Charge Transport in Highâ€Mobility Smallâ€Molecule/Polymer Blend Organic Transistors. Advanced Electronic Materials, 2018, 4, 1700464. | 2.6 | 63 |
| 41 | Patterned electrode vertical field effect transistor: Theory and experiment. Journal of Applied Physics, 2011, 110, . | 1.1 | 61 |
| 42 | Distributed nature of quantumâ€well lasers. Applied Physics Letters, 1993, 62, 10-12. | 1.5 | 60 |
| 43 | Controlling absorption enhancement in organic photovoltaic cells by patterning Au nano disks within the active layer. Optics Express, 2011, 19, A64. | 1.7 | 60 |
| 44 | Amorphous organic molecule/polymer diodes and transistorsâ€”Comparison between predictions based on Gaussian or exponential density of states. Organic Electronics, 2005, 6, 200-210. | 1.4 | 59 |
| 45 | Lasing characteristics of PPV microcavities. Synthetic Metals, 1997, 84, 475-476. | 2.1 | 58 |
| 46 | Shockleyâ€“Readâ€“Hall recombination in P3HT:PCBM solar cells as observed under ultralow light intensities. Journal of Applied Physics, 2011, 109, 064501. | 1.1 | 58 |
| 47 | Self-Assembled Metallic Nanowire-Based Vertical Organic Field-Effect Transistor. ACS Applied Materials & Interfaces, 2015, 7, 2149-2152. | 4.0 | 58 |
| 48 | Suppressed angular color dispersion in planar microcavities. Applied Physics Letters, 1997, 70, 556-558. | 1.5 | 56 |
| 49 | Investigation of C60F36 as low-volatility p-dopant in organic optoelectronic devices. Journal of Applied Physics, 2011, 109, . | 1.1 | 55 |
| 50 | Electronic Processes of Conjugated Polymers in Semiconductor Device Structures. Synthetic Metals, 1997, 84, 463-470. | 2.1 | 52 |
| 51 | Pulsed excitation of low-mobility light-emitting diodes: Implication for organic lasers. Applied Physics Letters, 1999, 74, 2764-2766. | 1.5 | 52 |
| 52 | Low dark leakage current in organic planar heterojunction photodiodes. Applied Physics Letters, 2017, 111, . | 1.5 | 50 |
| 53 | pâ€Doping of Copper(I) Thiocyanate (CuSCN) Holeâ€Transport Layers for Highâ€Performance Transistors and Organic Solar Cells. Advanced Functional Materials, 2018, 28, 1802055. | 7.8 | 50 |
| 54 | Properties of light emitting organic materials within the context of future electrically pumped lasers. Synthetic Metals, 2000, 115, 57-62. | 2.1 | 48 |

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| 55 | High-mobility conjugated polymer field-effect transistors. , 1999, , 101-110. | | 46 |
| 56 | Charge transport in conjugated polymers -- The influence of charge concentration. Synthetic Metals, 2003, 135-136, 443-444. | 2.1 | 45 |
| 57 | Solution-processed ambipolar vertical organic field effect transistor. Applied Physics Letters, 2012, 100, 263306. | 1.5 | 45 |
| 58 | Coupling between barrier and quantum well energy states in a multiple quantum well optical amplifier. Applied Physics Letters, 1992, 60, 665-667. | 1.5 | 42 |
| 59 | Analysis of the turn-off dynamics in polymer light-emitting diodes. Applied Physics Letters, 2000, 76, 1137-1139. | 1.5 | 42 |
| 60 | Groundâ€State Interaction and Electrical Doping of Fluorinated C<sub>60</sub> in Conjugated Polymers. Advanced Materials, 2009, 21, 4456-4460. | 11.1 | 41 |
| 61 | Thermoelectricity in Disordered Organic Semiconductors under the Premise of the Gaussian Disorder Model and Its Variants. Journal of Physical Chemistry Letters, 2014, 5, 3247-3253. | 2.1 | 41 |
| 62 | The Mechanism of Operation of Lateral and Vertical Organic Field Effect Transistors. Israel Journal of Chemistry, 2014, 54, 568-585. | 1.0 | 40 |
| 63 | Drift and Diffusion in Disordered Organic Semiconductors: The Role of Charge Density and Charge Energy Transport. Journal of Physical Chemistry C, 2013, 117, 3287-3293. | 1.5 | 39 |
| 64 | Hall Effect in Polycrystalline Organic Semiconductors: The Effect of Grain Boundaries. Advanced Functional Materials, 2020, 30, 1903617. | 7.8 | 37 |
| 65 | Carrier heating in disordered organic semiconductors. Physical Review B, 2006, 74, . | 1.1 | 36 |
| 66 | Self-consistent analysis of the contact phenomena in low-mobility semiconductors. Journal of Applied Physics, 2003, 93, 2059-2064. | 1.1 | 35 |
| 67 | Preventing Hysteresis in Perovskite Solar Cells by Undoped Charge Blocking Layers. ACS Applied Energy Materials, 2018, 1, 676-683. | 2.5 | 35 |
| 68 | Optical response of conjugated polymers excited at high intensity. Synthetic Metals, 1999, 102, 1008-1009. | 2.1 | 34 |
| 69 | Detection and Identification of Alkylating Agents by Using a Bioinspired â€œChemical Noseâ€• Chemistry - A European Journal, 2009, 15, 10380-10386. | 1.7 | 33 |
| 70 | Reaching saturation in patterned source vertical organic field effect transistors. Journal of Applied Physics, 2017, 121, . | 1.1 | 31 |
| 71 | Enhancing the Openâ€Circuit Voltage of Perovskite Solar Cells by up to 120 mV Using ï€â€Extended Phosphoniumfluorene Electrolytes as Hole Blocking Layers. Advanced Energy Materials, 2019, 9, 1901257. | 10.2 | 31 |
| 72 | The interplay between space charge and recombination in conjugated polymer/molecule photocells. Journal of Applied Physics, 2005, 98, 033714. | 1.1 | 30 |

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| 73 | Combining Ligand-Induced Quantum-Confined Stark Effect with Type II Heterojunction Bilayer Structure in CdTe and CdSe Nanocrystal-Based Solar Cells. ACS Nano, 2012, 6, 3128-3133. | 7.3 | 30 |
| 74 | Enhancing the Open-Circuit Voltage of Perovskite Solar Cells by Embedding Molecular Dipoles within Their Hole-Blocking Layer. ACS Applied Materials & Interfaces, 2020, 12, 3572-3579. | 4.0 | 30 |
| 75 | Excitation density dependence of photocurrent efficiency in low mobility semiconductors. Journal of Applied Physics, 2004, 96, 1083-1087. | 1.1 | 29 |
| 76 | Low-Temperature Molecular Vapor Deposition of Ultrathin Metal Oxide Dielectric for Low-Voltage Vertical Organic Field Effect Transistors. ACS Applied Materials & Interfaces, 2013, 5, 2462-2468. | 4.0 | 29 |
| 77 | Optoelectronic properties of polymer-nanocrystal composites active at near-infrared wavelengths. Journal of Applied Physics, 2005, 98, 074310. | 1.1 | 28 |
| 78 | Exciton annihilation as bimolecular loss in organic solar cells. Journal of Applied Physics, 2013, 114, 154514. | 1.1 | 28 |
| 79 | Temperature dependent loss and overflow effects in quantum well lasers. IEEE Photonics Technology Letters, 1994, 6, 1293-1296. | 1.3 | 27 |
| 80 | Electronic Formulationsâ€"Photopatterning of Luminescent Conjugated Polymers. Advanced Functional Materials, 2006, 16, 2095-2102. | 7.8 | 27 |
| 81 | The mobility spatial distribution function: Turn-on dynamics of polymer photocells. Journal of Applied Physics, 2006, 99, 064507. | 1.1 | 27 |
| 82 | Sensing of Alkylating Agents Using Organic Fieldâ€Effect Transistors. Advanced Functional Materials, 2010, 20, 105-110. | 7.8 | 27 |
| 83 | Adding 0.2â€‰V to the open circuit voltage of organic solar cells by enhancing the built-in potential. Journal of Applied Physics, 2015, 118, . | 1.1 | 26 |
| 84 | Assessment of the Factors Influencing Chargeâ€Carrier Mobility Measurements in Organic Fieldâ€Effect Transistors. Advanced Functional Materials, 2018, 28, 1803096. | 7.8 | 26 |
| 85 | Ionic space-charge assisted current injection in organic light emitting diodes. Synthetic Metals, 1997, 85, 1277-1278. | 2.1 | 25 |
| 86 | Threshold voltage as a measure of molecular level shift in organic thin-film transistors. Applied Physics Letters, 2006, 88, 043509. | 1.5 | 25 |
| 87 | Effect of Injection Layer Sub-Bandgap States on Electron Injection in Organic Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2017, 9, 6220-6227. | 4.0 | 25 |
| 88 | p -type doping in organic light emitting diodes based on fluorinated C60. Journal of Applied Physics, 2008, 104, . | 1.1 | 24 |
| 89 | Fast switching characteristics in vertical organic field effect transistors. Applied Physics Letters, 2013, 103, 073502. | 1.5 | 24 |
| 90 | Hybrid complementary circuits based on p-channel organic and n-channel metal oxide transistors with balanced carrier mobilities of up to 10â€‰cm2/Vs. Applied Physics Letters, 2016, 109, . | 1.5 | 24 |

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| 91 | Length dependence of the saturation characteristics in 1.5- mu m multiple quantum well optical amplifiers. IEEE Photonics Technology Letters, 1990, 2, 790-791. | 1.3 | 23 |
| 92 | Nonequilibrium effects in quantum well lasers. Applied Physics Letters, 1992, 61, 2383-2385. | 1.5 | 23 |
| 93 | High finesse organic microcavities. Optical Materials, 1998, 9, 18-24. | 1.7 | 23 |
| 94 | Material and device related properties in the context of the possible making of electrically pumped polymer laser. Thin Solid Films, 2000, 363, 64-67. | 0.8 | 23 |
| 95 | Interface Modifications of InAs Quantumâ€Dots Solids and their Effects on FET Performance. Advanced Functional Materials, 2010, 20, 1005-1010. | 7.8 | 23 |
| 96 | Hybrid image sensor of small molecule organic photodiode on CMOS â€“ Integration and characterization. Scientific Reports, 2020, 10, 7594. | 1.6 | 23 |
| 97 | Spatially dispersive transport: A mesoscopic phenomenon in disordered organic semiconductors. Physical Review B, 2007, 76, . | 1.1 | 22 |
| 98 | Complementary inverter from patterned source electrode vertical organic field effect transistors. Applied Physics Letters, 2016, 108, . | 1.5 | 22 |
| 99 | Modelling carrier dynamics and small-signal modulation response in quantum-well lasers. Optical and Quantum Electronics, 1994, 26, S767-S787. | 1.5 | 21 |
| 100 | Transport and optical modeling of organic light-emitting diodes. Applied Physics Letters, 2000, 77, 1897. | 1.5 | 21 |
| 101 | The Relation Between Molecular Packing or Morphology and Chemical Structure or Processing Conditions: the Effect on Electronic Properties. Advanced Functional Materials, 2014, 24, 2530-2536. | 7.8 | 21 |
| 102 | Distributed Bragg reflector active optical filters. IEEE Journal of Quantum Electronics, 1991, 27, 2016-2024. | 1.0 | 20 |
| 103 | Low gain threshold of the cavity mode close to the cutoff wavelength in a three-slab asymmetric conjugated polymer-based waveguide structure. Journal of Applied Physics, 2006, 99, 013101. | 1.1 | 20 |
| 104 | Role of Charge Transfer States in P3HT-Fullerene Solar Cells. Journal of Physical Chemistry C, 2014, 118, 27681-27689. | 1.5 | 20 |
| 105 | Measurements of the barrierâ€well injection bottleneck in a multiple quantum well optical amplifier. Applied Physics Letters, 1992, 60, 1788-1790. | 1.5 | 17 |
| 106 | Wide band gap cross-linkable semiconducting polymer LED. Synthetic Metals, 2007, 157, 841-845. | 2.1 | 17 |
| 107 | InAs Nanocrystals with Robust pâ€Type Doping. Advanced Functional Materials, 2021, 31, 2007456. | 7.8 | 17 |
| 108 | Amorphous organic devicesÂdegenerate semiconductors. Journal of Physics Condensed Matter, 2002, 14, 9913-9924. | 0.7 | 16 |

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| 109 | Measurements of the Einstein relation in doped and undoped molecular thin films. Physical Review B, 2008, 77, . | 1.1 | 16 |
| 110 | Current voltage relation of amorphous materials based pn diodesâ€"the effect of degeneracy in organic polymers/molecules. Journal of Applied Physics, 2009, 106, . | 1.1 | 16 |
| 111 | Coating and Enhanced Photocurrent of Vertically Aligned Zinc Oxide Nanowire Arrays with Metal Sulfide Materials. ACS Applied Materials & Interfaces, 2014, 6, 13594-13599. | 4.0 | 16 |
| 112 | Accelerated weathering of carbonate rocks following the 2010 wildfire on Mount Carmel, Israel. International Journal of Wildland Fire, 2015, 24, 1154. | 1.0 | 16 |
| 113 | Doped Organic Hole Extraction Layers in Efficient PbS and AgBiS<sub>2</sub> Quantum Dot Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 18750-18757. | 4.0 | 16 |
| 114 | Transient carrier dynamics and photon-assisted transport in multiple-quantum-well lasers. IEEE Photonics Technology Letters, 1993, 5, 291-293. | 1.3 | 15 |
| 115 | Understanding Charge Transport in Highâ€Mobility pâ€Doped Multicomponent Blend Organic Transistors. Advanced Electronic Materials, 2020, 6, 2000539. | 2.6 | 15 |
| 116 | The use of electrical pulses to study the physics of bilayer organic light-emitting diodes. Journal of Applied Physics, 2005, 97, 014504. | 1.1 | 14 |
| 117 | Loss of photocurrent efficiency in low mobility semiconductors: Analytic approach to space charge effects. Applied Physics Letters, 2006, 89, 013504. | 1.5 | 14 |
| 118 | Experimental techniques and the underlying device physics. Journal of Polymer Science, Part B: Polymer Physics, 2014, 52, 1119-1152. | 2.4 | 14 |
| 119 | A Comprehensive study of the Effects of Chain Morphology on the Transport Properties of Amorphous Polymer Films. Scientific Reports, 2016, 6, 29092. | 1.6 | 14 |
| 120 | Moving the recombination zone in two layer polymer LEDs using high voltage pulses. Synthetic Metals, 1999, 102, 1108-1109. | 2.1 | 13 |
| 121 | Magnetophotocurrent in Organic Bulk Heterojunction Photovoltaic Cells at Low Temperatures and High Magnetic Fields. Physical Review Applied, 2016, 5, . | 1.5 | 13 |
| 122 | On electrode pinning and charge blocking layers in organic solar cells. Journal of Applied Physics, 2017, 121, 195502. | 1.1 | 13 |
| 123 | Nanoparticulate Metal Oxide Top Electrode Interface Modification Improves the Thermal Stability of Inverted Perovskite Photovoltaics. Nanomaterials, 2019, 9, 1616. | 1.9 | 13 |
| 124 | Double Beneficial Role of Fluorinated Fullerene Dopants on Organic Thin-Film Transistors: Structural Stability and Improved Performance. ACS Applied Materials & Interfaces, 2020, 12, 28416-28425. | 4.0 | 13 |
| 125 | Peak current density and brightness from poly(p-phenylenevinylene) based light-emitting diodes. Optical Materials, 1998, 9, 178-182. | 1.7 | 12 |
| 126 | Mobility spatial distribution function: Comparative method for conjugated polymers/molecules. Applied Physics Letters, 2006, 89, 252117. | 1.5 | 12 |

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| 127 | Analytical extraction of the recombination zone location in organic light-emitting diodes from emission pattern extrema. Optics Letters, 2010, 35, 3366. | 1.7 | 12 |
| 128 | Patterned electrode vertical OFET: analytical description, switching mechanisms, and optimization rules. Proceedings of SPIE, 2011, , . | 0.8 | 12 |
| 129 | Sequenceâ€Independent Synthesis of Ïâ€conjugated Arylenevinylene Oligomers using Bifunctional Thiophene Monomers. Advanced Functional Materials, 2012, 22, 1489-1501. | 7.8 | 12 |
| 130 | Removing the current-limit of vertical organic field effect transistors. Journal of Applied Physics, 2017, 122, . | 1.1 | 12 |
| 131 | The Impact of Spectral and Spatial Exciton Distributions on Optical Emission From Thin-Film Weak-Microcavity Organic Light-Emitting Diodes. IEEE Journal of Quantum Electronics, 2010, 46, 1388-1395. | 1.0 | 11 |
| 132 | Exciton formation as a rate limiting step for charge recombination in disordered organic molecules or polymers. Journal of Applied Physics, 2011, 109, 013701. | 1.1 | 11 |
| 133 | Low cost, nanometer scale nanoimprinting â€“ Application to organic solar cells optimization. Organic Electronics, 2011, 12, 1241-1246. | 1.4 | 11 |
| 134 | Role of Contact Injection, Exciton Dissociation, and Recombination, Revealed through Voltage and Intensity Mapping of the Quantum Efficiency of Polymer:Fullerene Solar Cells. Journal of Physical Chemistry C, 2016, 120, 10146-10155. | 1.5 | 11 |
| 135 | Electron/hole blocking layers as ionic blocking layers in perovskite solar cells. Journal of Materials Chemistry C, 2021, 9, 1888-1894. | 2.7 | 11 |
| 136 | Vertical carrier transport in InGaAsP multiple-quantum-well laser structures: effect of p-doping. IEEE Journal of Selected Topics in Quantum Electronics, 1997, 3, 315-319. | 1.9 | 10 |
| 137 | Semiconductor device model applied to electrically pulsed polymer LEDs. Synthetic Metals, 2000, 111-112, 269-272. | 2.1 | 10 |
| 138 | NEAR INFRARED POLYMER NANOCRYSTAL LEDS. Synthetic Metals, 2003, 137, 1047-1048. | 2.1 | 10 |
| 139 | Photopatternable self-assembled monolayers as micron scale templates for polymer based field effect transistors. Applied Physics Letters, 2009, 94, . | 1.5 | 10 |
| 140 | Harnessing â€œClickâ€â€Type Chemistry for the Preparation of Novel Electronic Materials. Advanced Functional Materials, 2011, 21, 634-643. | 7.8 | 10 |
| 141 | The Topology of Hopping in the Energy Domain of Systems with Rapidly Decaying Density of States. Journal of Physical Chemistry C, 2013, 117, 24740-24745. | 1.5 | 10 |
| 142 | Electronic-ionic coupling in perovskite based solar cells: Implications for device stability. Applied Physics Letters, 2020, 117, . | 1.5 | 10 |
| 143 | Field dependent thermoelectric properties of organic semiconductorsâ€”A tool to determine the nature of charge transport in materials exhibiting thermally activated transport. Journal of Applied Physics, 2015, 117, 105502. | 1.1 | 9 |
| 144 | 14ÂGHz Schottky Diodes Using a pâ€Doped Organic Polymer. Advanced Materials, 2022, 34, e2108524. | 11.1 | 9 |

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| 145 | Frequency-modulation mode locking of a semiconductor laser. Optics Letters, 1991, 16, 1750. | 1.7 | 8 |
| 146 | Bistability and optical control of a distributed-Bragg-reflector laser. Optics Letters, 1993, 18, 610. | 1.7 | 8 |
| 147 | Broadband femtosecond pumpâ€probe setup operating at 1300 and 1550 nm. Applied Physics Letters, 1994, 64, 1899-1901. | 1.5 | 8 |
| 148 | Time-resolved transport in conjugated polymers. Synthetic Metals, 2000, 111-112, 257-261. | 2.1 | 8 |
| 149 | Charge carrier mobility in field effect transistors: analysis of capacitanceâ€“conductance measurements. Semiconductor Science and Technology, 2005, 20, 90-94. | 1.0 | 8 |
| 150 | Photopatternability of poly(vinylcarbazole) bearing cinnamate pendants and its blends with a soluble poly(p-phenylene vinylene) derivative. Macromolecular Research, 2007, 15, 142-146. | 1.0 | 8 |
| 151 | Towards an omnipotent â€œArtificial Noseâ€• detection and identification of alkylating agents using an optical sensor array. Journal of Physical Organic Chemistry, 2010, 23, 1108-1113. | 0.9 | 8 |
| 152 | Translating local binding energy to a device effective one. Sustainable Energy and Fuels, 2020, 4, 760-771. | 2.5 | 8 |
| 153 | Structureâ€“Property Relation in Organicâ€“Metal Oxide Hybrid Phototransistors. ACS Applied Materials & Interfaces, 2020, 12, 15430-15438. | 4.0 | 8 |
| 154 | Dipolar hole-blocking layers for inverted perovskite solar cells: effects of aggregation and electron transport levels. JPhys Materials, 2020, 3, 025002. | 1.8 | 8 |
| 155 | Illuminationâ€Ðriven Energy Level Realignment at Buried Interfaces between Organic Charge Transport Layers and a Lead Halide Perovskite. Solar Rrl, 2022, 6, . | 3.1 | 8 |
| 156 | High excitation density in light-emitting polymers. Synthetic Metals, 1997, 91, 61-64. | 2.1 | 7 |
| 157 | Long lived photo- and electroluminescence from a side-chain polymer/porphyrin blend. Synthetic Metals, 1999, 102, 939-940. | 2.1 | 7 |
| 158 | Use of multiple electrical pulses to study charge transport in polymer light-emitting diodes. Applied Physics Letters, 2000, 77, 1493-1495. | 1.5 | 7 |
| 159 | Curvature effects on optical emission of flexible organic light-emitting diodes. Optics Express, 2012, 20, 7929. | 1.7 | 7 |
| 160 | Charge blocking layers in thin-film/amorphous photovoltaics. Journal of Applied Physics, 2016, 120, 194502. | 1.1 | 7 |
| 161 | The band-gap enhanced photovoltaic structure. Applied Physics Letters, 2016, 108, 183503. | 1.5 | 7 |
| 162 | Effect of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>g</mml:mi></mml:math> -factor anisotropy in the magnetoresponse of organic light-emitting diodes at high magnetic fields. Physical Review B, 2018, 98, . | 1.1 | 7 |

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| 163 | Surface Versus Impurity-Doping Contributions in InAs Nanocrystal Field Effect Transistor Performance. Journal of Physical Chemistry C, 2019, 123, 18717-18725. | 1.5 | 7 |
| 164 | Doping induced performance enhancement in inverted small molecule organic photodiodes operating below 1V reverse bias - Towards compatibility with CMOS for imaging applications. Organic Electronics, 2019, 67, 1-9. | 1.4 | 7 |
| 165 | Effect of the Organic Semiconductor Side Groups on the Structural and Electronic Properties of Their Interface with Dopants. ACS Applied Materials & Interfaces, 2020, 12, 57578-57586. | 4.0 | 7 |
| 166 | Gain dynamics in quantum well lasers and optical amplifiers: An experimental comparison. Applied Physics Letters, 1994, 64, 2050-2052. | 1.5 | 6 |
| 167 | Schottky barrier height switching in thin metal oxide films studied in diode and solar cell device configurations. Journal of Applied Physics, 2015, 118, . | 1.1 | 6 |
| 168 | Thickness dependent charge transfer states and dark carriers density in vacuum deposited small molecule organic photocell. Journal of Applied Physics, 2016, 120, . | 1.1 | 6 |
| 169 | Benchmarking the Electronic Processes at the Planar Organic Heterojunction Solar Cells. Journal of Physical Chemistry C, 2018, 122, 23271-23279. | 1.5 | 6 |
| 170 | 15% enhancement of the photocurrent at the maximum power point of a thin film solar cell. Sustainable Energy and Fuels, 2020, 4, 5618-5627. | 2.5 | 6 |
| 171 | Modification of modal gain in InGaAs-GaAs quantum-well lasers due to barrier-state carriers. IEEE Journal of Selected Topics in Quantum Electronics, 1997, 3, 142-147. | 1.9 | 5 |
| 172 | Towards solution-processible semiconducting polymer-based photonic devices. Synthetic Metals, 1999, 102, 1020. | 2.1 | 5 |
| 173 | Polymer leds as laser media ?. Synthetic Metals, 1999, 102, 1122-1123. | 2.1 | 5 |
| 174 | Optoelectronic devices based on hybrid organicâ€“inorganic structures. Optical Materials, 2001, 17, 155-160. | 1.7 | 5 |
| 175 | Analytical estimation of emission zone mean position and width in organic light-emitting diodes from emission pattern image-source interference fringes. Journal of Applied Physics, 2014, 115, 223101. | 1.1 | 5 |
| 176 | Light-induced trap emptying revealed by intensity-dependent quantum efficiency of organic solar cells. Journal of Applied Physics, 2022, 131, 135501. | 1.1 | 5 |
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