Canek Fuentes-Hernandez

List of Publications by Year
in descending order

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136	6,580	81900 39	64796 79
papers	citations	h-index	g-index

138	138	138	9067
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Flexible computational photodetectors for self-powered activity sensing. Npj Flexible Electronics, 2022, 6, .	10.7	14
2	Efficient Electrical Doping of Organic Semiconductors Via an Orthogonal Liquidâ€Liquid Contact. Advanced Functional Materials, 2021, 31, 2009660.	14.9	10
3	Organic photodetector with built-in amplification for the detection of visible light with low optical power. Organic Electronics, 2021, 90, 106064.	2.6	4
4	Increasing Volume in Conjugated Polymers to Facilitate Electrical Doping with Phosphomolybdic Acid. ACS Applied Materials & Interfaces, 2021, 13, 23260-23267.	8.0	5
5	Benzocyclobutene polymer as an additive for a benzocyclobutene-fullerene: application in stable pâ€“iâ€“n perovskite solar cells. Journal of Materials Chemistry A, 2021, 9, 9347-9353.	10.3	6
6	A New Assessment of the Performance of Low-noise Organic Photodetectors. , 2021, , .		0
7	Extraction of intrinsic contact resistance in organic thin-film transistors with single channel length and high capacitance density. Applied Physics Letters, 2021, 119, 263301.	3.3	1
8	Skin-like low-noise elastomeric organic photodiodes. Science Advances, 2021, 7, eabj6565.	10.3	30
9	Organic Thin-Film Transistors with a Bottom Bilayer Gate Dielectric Having a Low Operating Voltage and High Operational Stability. ACS Applied Electronic Materials, 2020, 2, 2813-2818.	4.3	15
10	Thermally Activated Delayed Fluorescence Sensitization for Highly Efficient Blue Fluorescent Emitters. Advanced Functional Materials, 2020, 30, 2005898.	14.9	25
11	Large-area low-noise flexible organic photodiodes for detecting faint visible light. Science, 2020, 370, 698-701.	12.6	235
12	Effects of particle inclusions on cracking in ultrathin barrier films. Thin Solid Films, 2020, 714, 138387.	1.8	4
13	Impact of interface materials on side permeation in indirect encapsulation of organic electronics. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, 033203.	2.1	2
14	OptoSense. , 2020, 4, 1-27.		15
15	Low-noise large-area organic photodiodes. , 2020, , .		1
16	On the Characterization and Modeling of the Current Characteristics of Organic Photodiodes. , 2019, , .		0
17	Morphology of Organic Semiconductors Electrically Doped from Solution Using Phosphomolybdic Acid. Chemistry of Materials, 2019, 31, 6677-6683.	6.7	4
18	Optimizing Crack Onset Strain for Silicon Nitride/Fluoropolymer Nanolaminate Barrier Films. ACS Applied Nano Materials, 2019, 2, 2525-2532.	5.0	16

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19	Host-Free Yellow-Green Organic Light-Emitting Diodes with External Quantum Efficiency over 20% Based on a Compound Exhibiting Thermally Activated Delayed Fluorescence. ACS Applied Materials & Interfaces, 2019, 11, 12693-12698.	8.0	24
20	Balancing aging mechanisms in organic field-effect transistors. , 2019, , .		0
21	Measurements of the field-effect electron mobility of the acceptor ITIC. Organic Electronics, 2018, 58, 290-293.	2.6	16
22	Stable organic thin-film transistors. Science Advances, 2018, 4, eaao1705.	10.3	107
23	Langmuirâ€“Blodgett Thin Films of Diketopyrrolopyrrole-Based Amphiphiles. ACS Applied Materials & Interfaces, 2018, 10, 11995-12004.	8.0	17
24	Control of Singlet Emission Energy in a Diphenyloxadiazole Containing Fluorophore Leading To Thermally Activated Delayed Fluorescence. ACS Omega, 2018, 3, 14918-14923.	3.5	5
25	Effect of the Number and Substitution Pattern of Carbazole Donors on the Singlet and Triplet State Energies in a Series of Carbazole-Oxadiazole Derivatives Exhibiting Thermally Activated Delayed Fluorescence. Chemistry of Materials, 2018, 30, 6389-6399.	6.7	17
26	Stable solvent for solution-based electrical doping of semiconducting polymer films and its application to organic solar cells. Energy and Environmental Science, 2018, 11, 2216-2224.	30.8	32
27	High performance blue-emitting organic light-emitting diodes from thermally activated delayed fluorescence: A guest/host ratio study. Journal of Applied Physics, 2018, 124, .	2.5	25
28	Near room-temperature direct encapsulation of organic photovoltaics by plasma-based deposition techniques. Journal Physics D: Applied Physics, 2017, 50, 024003.	2.8	12
29	Flexible large-area organic tandem solar cells with high defect tolerance and device yield. Journal of Materials Chemistry A, 2017, 5, 3186-3192.	10.3	51
30	Reduction of the Work Function of Gold by N-Heterocyclic Carbenes. Chemistry of Materials, 2017, 29, 3403-3411.	6.7	76
31	Solution-based electrical doping of semiconducting polymer films over a limited depth. Nature Materials, 2017, 16, 474-480.	27.5	121
32	Top-gate organic field-effect transistors fabricated on paper with high operational stability. Organic Electronics, 2017, 41, 340-344.	2.6	35
33	Experimental investigation of defect-assisted and intrinsic water vapor permeation through ultrabarrier films. Review of Scientific Instruments, 2016, 87, 033902.	1.3	13
34	A Study on Reducing Contact Resistance in Solution-Processed Organic Field-Effect Transistors. ACS Applied Materials & Interfaces, 2016, 8, 24744-24752.	8.0	77
35	Semiconductor Polymer/Top Electrode Interface Generated by Two Deposition Methods and Its Influence on Organic Solar Cell Performance. ACS Applied Materials & Interfaces, 2016, 8, 28763-28770.	8.0	17
36	Self-forming electrode modification in organic field-effect transistors. Journal of Materials Chemistry C, 2016, 4, 8297-8303.	5.5	14

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37	Efficient Colorful Perovskite Solar Cells Using a Top Polymer Electrode Simultaneously as Spectrally Selective Antireflection Coating. Nano Letters, 2016, 16, 7829-7835.	9.1	123
38	Recent advances in the science and engineering of organic light-emitting diodes (Conference) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702		0
39	Organic Field-Effect Transistors with a Bilayer Gate Dielectric Comprising an Oxide Nanolaminate Grown by Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2016, 8, 29872-29876.	8.0	23
40	Flexible all-solution-processed all-plastic multijunction solar cells for powering electronic devices. Materials Horizons, 2016, 3, 452-459.	12.2	73
41	Simultaneous cross-linking and p-doping of a polymeric semiconductor film by immersion into a phosphomolybdic acid solution for use in organic solar cells. Chemical Communications, 2016, 52, 3825-3827.	4.1	17
42	Charge Transport and Photogeneration in Organic Semiconductors: Photorefractives and Beyond. Springer Series in Materials Science, 2016, , 65-127.	0.6	4
43	Energy Storage: Bilayer Structure with Ultrahigh Energy/Power Density Using Hybrid Solâ€“Gel Dielectric and Chargeâ€Blocking Monolayer (Adv. Energy Mater. 19/2015). Advanced Energy Materials, 2015, 5, .	19.5	1
44	Engineering the mechanical properties of ultrabarrier films grown by atomic layer deposition for the encapsulation of printed electronics. Journal of Applied Physics, 2015, 118, .	2.5	42
45	Bilayer Structure with Ultrahigh Energy/Power Density Using Hybrid Solâ€“Gel Dielectric and Chargeâ€Blocking Monolayer. Advanced Energy Materials, 2015, 5, 1500767.	19.5	33
46	ITO-free large-area flexible organic solar cells with an embedded metal grid. Organic Electronics, 2015, 17, 349-354.	2.6	52
47	Stable Low-Voltage Operation Top-Gate Organic Field-Effect Transistors on Cellulose Nanocrystal Substrates. ACS Applied Materials & Interfaces, 2015, 7, 4804-4808.	8.0	55
48	Organometallic Dimers: Application to Work-Function Reduction of Conducting Oxides. ACS Applied Materials & Interfaces, 2015, 7, 4320-4326.	8.0	25
49	Organic light-emitting diodes on shape memory polymer substrates for wearable electronics. Organic Electronics, 2015, 25, 151-155.	2.6	38
50	Molecular Engineering of Nonhalogenated Solution-Processable Bithiazole-Based Electron-Transport Polymeric Semiconductors. Chemistry of Materials, 2015, 27, 2928-2937.	6.7	79
51	Top-gate organic field-effect transistors fabricated on shape-memory polymer substrates. , 2015, , .		2
52	Highly efficient Organic Light-Emitting Diodes from thermally activated delayed fluorescence using a sulfoneâ€“carbazole host material. Organic Electronics, 2015, 16, 109-112.	2.6	58
53	Efficient organic light-emitting diodes fabricated on cellulose nanocrystal substrates. Applied Physics Letters, 2014, 105, .	3.3	32
54	Organic field-effect transistor circuits using atomic layer deposited gate dielectrics patterned by reverse stamping. Organic Electronics, 2014, 15, 3780-3786.	2.6	5

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55	Organic field-effect transistor circuits with electrode interconnections using reverse stamping. Proceedings of SPIE, 2014, , .	0.8	0
56	Inverted Tandem Polymer Solar Cells with Polyethylenimineâ€Modified MoO_X/Al₂O₃:ZnO Nanolaminate as the Charge Recombination Layers. Advanced Energy Materials, 2014, 4, 1400048.	19.5	21
57	Systematic Reliability Study of Top-Gate p- and n-Channel Organic Field-Effect Transistors. ACS Applied Materials & Interfaces, 2014, 6, 3378-3386.	8.0	45
58	Stable Organic Field-Effect Transistors for Continuous and Nondestructive Sensing of Chemical and Biologically Relevant Molecules in Aqueous Environment. ACS Applied Materials & Interfaces, 2014, 6, 1616-1622.	8.0	38
59	Enhanced Chargeâ€Carrier Injection and Collection Via Lamination of Doped Polymer Layers pâ€Doped with a Solutionâ€Processible Molybdenum Complex. Advanced Functional Materials, 2014, 24, 2197-2204.	14.9	77
60	All-plastic solar cells with a high photovoltaic dynamic range. Journal of Materials Chemistry A, 2014, 2, 3492.	10.3	97
61	Efficient recyclable organic solar cells on cellulose nanocrystal substrates with a conducting polymer top electrode deposited by film-transfer lamination. Organic Electronics, 2014, 15, 661-666.	2.6	108
62	Tetracyano isoindigo small molecules and their use in n-channel organic field-effect transistors. Physical Chemistry Chemical Physics, 2014, 16, 19345-19350.	2.8	17
63	Organic Photovoltaic Cells with Stable Top Metal Electrodes Modified with Polyethylenimine. ACS Applied Materials & Interfaces, 2014, 6, 6202-6207.	8.0	39
64	Inverted organic solar cells with polymer-modified fluorine-doped tin oxide as the electron-collecting electrode. Thin Solid Films, 2014, 554, 54-57.	1.8	11
65	Stacked inverted top-emitting green electrophosphorescent organic light-emitting diodes on glass and flexible glass substrates. Organic Electronics, 2013, 14, 2418-2423.	2.6	29
66	Polymer solar cells with NiO hole-collecting interlayers processed by atomic layer deposition. Organic Electronics, 2013, 14, 2802-2808.	2.6	40
67	Indium tin oxide modified by titanium dioxide nanoparticles dispersed in poly(N-vinylpyrrolidone) for use as an electron-collecting layer in organic solar cells with an inverted structure. Journal of Materials Research, 2013, 28, 535-540.	2.6	4
68	Recyclable organic solar cells on cellulose nanocrystal substrates. Scientific Reports, 2013, 3, 1536.	3.3	270
69	Nonlinear refraction measurements of thin films by the dual-arm Z-scan method. , 2013, , .		1
70	Ultrafast nonlinear mirrors with broad spectral and angular bandwidths in the visible spectral range. Optics Express, 2013, 21, 3573.	3.4	7
71	Stacked inverted top-emitting white organic light-emitting diodes composed of orange and blue light-emitting units. Applied Physics Letters, 2013, 103, 193303.	3.3	6
72	Reduction of contact resistance by selective contact doping in fullerene n-channel organic field-effect transistors. Applied Physics Letters, 2013, 102, .	3.3	51

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73	Noble metal nonlinear optical mirrors with adjustable spectral and angular bandwidths for all-optical controls at visible wavelengths. , 2013, , .		0
74	Polyvinylpyrrolidone-modified indium tin oxide as an electron-collecting electrode for inverted polymer solar cells. Applied Physics Letters, 2012, 101, 073303.	3.3	26
75	Linear and nonlinear optical properties of Ag/Au bilayer thin films. Optics Express, 2012, 20, 8629.	3.4	21
76	Highly efficient inverted top-emitting green phosphorescent organic light-emitting diodes on glass and flexible substrates. Applied Physics Letters, 2012, 101, 023304.	3.3	25
77	Recent advances in printable OLED materials and devices. , 2012, , .		0
78	Studies of the optimization of recombination layers for inverted tandem polymer solar cells. Solar Energy Materials and Solar Cells, 2012, 107, 51-55.	6.2	34
79	Direct correlation between work function of indium-tin-oxide electrodes and solar cell performance influenced by ultraviolet irradiation and air exposure. Physical Chemistry Chemical Physics, 2012, 14, 12014.	2.8	98
80	High performance polymeric charge recombination layer for organic tandem solar cells. Energy and Environmental Science, 2012, 5, 9827.	30.8	183
81	Solvent and polymer matrix effects on TIPS-pentacene/polymer blend organic field-effect transistors. Journal of Materials Chemistry, 2012, 22, 5531.	6.7	109
82	A Universal Method to Produce Lowâ€“Work Function Electrodes for Organic Electronics. Science, 2012, 336, 327-332.	12.6	1,878
83	Oriented Growth of Al₂O₃:ZnO Nanolaminates for Use as Electronâ€Selective Electrodes in Inverted Polymer Solar Cells. Advanced Functional Materials, 2012, 22, 1531-1538.	14.9	47
84	Stable Solutionâ€Processed Molecular nâ€Channel Organic Fieldâ€Effect Transistors. Advanced Materials, 2012, 24, 4445-4450.	21.0	67
85	Top-gate hybrid complementary inverters using pentacene and amorphous InGaZnO thin-film transistors with high operational stability. AIP Advances, 2012, 2, 012134.	1.3	2
86	Metal-oxide complementary inverters with a vertical geometry fabricated on flexible substrates. Applied Physics Letters, 2011, 99, .	3.3	39
87	Roles of thermally-induced vertical phase segregation and crystallization on the photovoltaic performance of bulk heterojunction inverted polymer solar cells. Energy and Environmental Science, 2011, 4, 3456.	30.8	34
88	ITO-free large-area organic light-emitting diodes with an integrated metal grid. Optics Express, 2011, 19, A793.	3.4	40
89	The Ultrafast Nonlinear Optical Properties of Induced Transmission Filters. , 2011, , .		1
90	Topâ€Gate Organic Fieldâ€Effect Transistors with High Environmental and Operational Stability. Advanced Materials, 2011, 23, 1293-1298.	21.0	158

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91	Vertically stacked hybrid organicâ€“inorganic complementary inverters with low operating voltage on flexible substrates. Organic Electronics, 2011, 12, 45-50.	2.6	26
92	Optimization of a polymer top electrode for inverted semitransparent organic solar cells. Organic Electronics, 2011, 12, 827-831.	2.6	59
93	Flexible and stable solution-processed organic field-effect transistors. Organic Electronics, 2011, 12, 1108-1113.	2.6	80
94	Vertically stacked complementary inverters with solution-processed organic semiconductors. Organic Electronics, 2011, 12, 1132-1136.	2.6	35
95	Efficient green and blue electrophosphorescent light-emitting diodes using a combination of solution- and vacuum-processed materials. , 2011, , .		0
96	The nonlinear optical response of transparent silver/gold multi-metal layers. , 2010, , .		0
97	A comprehensive study of the contributions to the nonlinear optical properties of thin Ag films. , 2010, , .		0
98	Flexible hybrid complementary inverters with high gain and balanced noise margins using pentacene and amorphous InGaZnO thin-film transistors. Organic Electronics, 2010, 11, 1074-1078.	2.6	39
99	Ambipolar thin-film transistors with a co-planar channel geometry. Organic Electronics, 2010, 11, 1351-1356.	2.6	4
100	A comprehensive analysis of the contributions to the nonlinear optical properties of thin Ag films. Journal of Applied Physics, 2010, 107, .	2.5	33
101	Nonlinear optical properties of induced transmission filters. Optics Express, 2010, 18, 19101.	3.4	11
102	Inverted polymer solar cells with amorphous indium zinc oxide as the electron-collecting electrode. Optics Express, 2010, 18, A506.	3.4	19
103	Electrical and Optical Properties of ZnO Processed by Atomic Layer Deposition in Inverted Polymer Solar Cells. Journal of Physical Chemistry C, 2010, 114, 20713-20718.	3.1	116
104	Indium tin oxide-free and metal-free semitransparent organic solar cells. Applied Physics Letters, 2010, 97, .	3.3	135
105	Inverted organic solar cells with ITO electrodes modified with an ultrathin Al2O3 buffer layer deposited by atomic layer deposition. Journal of Materials Chemistry, 2010, 20, 6189.	6.7	93
106	Nonlinear Optical Properties of Layered Multi-Metal Nanostructures. , 2010, , .		0
107	Low-voltage InGaZnO thin-film transistors with Al2O3 gate insulator grown by atomic layer deposition. Applied Physics Letters, 2009, 94, .	3.3	128
108	The nonlinear optical response of transparent metal-dielectric multilayer structures. , 2009, , .		0

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109	Optical properties of one-dimensional metalâ€“dielectric photonic band-gap structures with low index dielectrics. Thin Solid Films, 2009, 517, 2736-2741.	1.8	13
110	Third-harmonic generation and its applications in optical image processing. Journal of Materials Chemistry, 2009, 19, 7394.	6.7	31
111	Enhanced Nonlinear Absorption in Low-Finesse Metal-Dielectric Fabry-Perot Resonators. , 2009, , .		1
112	Thick Opticalâ€Quality Films of Substituted Polyacetylenes with Large, Ultrafast Thirdâ€Order Nonlinearities and Application to Image Correlation. Advanced Materials, 2008, 20, 3199-3203.	21.0	18
113	High-performance InGaZnO thin-film transistors with high-k amorphous Ba0.5Sr0.5TiO3 gate insulator. Applied Physics Letters, 2008, 93, .	3.3	62
114	Linear and nonlinear optical properties of highly transmissive one-dimensional metal-organic photonic bandgap structures. , 2008, , .		2
115	Third-harmonic generation in organic thin films as an alternative to degenerate four-wave mixing ultrafast optical image processing. , 2008, , .		0
116	Nonlinear refraction and absorption in highly transmissive one-dimensional metal-organic photonic bandgap structures. , 2008, , .		0
117	Ultrafast optical image processing through non-collinear third-harmonic generation in thin organic films. , 2007, , PDP_A6.		0
118	Aperiodic metal-dielectric optical filters. Proceedings of SPIE, 2007, , .	0.8	0
119	Compact and self-aligned all-optical image correlator based on third-harmonic generation. Optics Letters, 2007, 32, 2599.	3.3	5
120	Variable splitting ratio 2 Ã— 2 MMI couplers using multimode waveguide holograms. Optics Express, 2007, 15, 9015.	3.4	40
121	Ultrafast optical image processing based on third-harmonic generation in organic thin films. Applied Physics Letters, 2007, 91, 131110.	3.3	8
122	Synthesis and optical properties of a series of chromophore functionalized polysilanes. Journal of Materials Chemistry, 2005, 15, 778.	6.7	23
123	High-performance photorefractive polymers sensitized by cadmium selenide nanoparticles. Applied Physics Letters, 2004, 85, 534-536.	3.3	49
124	Video-rate compatible photorefractive polymers with stable dynamic properties under continuous operation. Applied Physics Letters, 2004, 85, 1877-1879.	3.3	18
125	Bistriarylamine Polymer-Based Composites for Photorefractive Applications. Advanced Materials, 2004, 16, 2032-2036.	21.0	62
126	Trapping mechanisms and dynamics in bis-triarylamine-based photorefractive polymer composites. , 2004, , .		1

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127	Effect of Substitution on the Hole Mobility of Bis(diarylamino)biphenyl Derivatives Doped in Poly(Styrene). Chemistry of Materials, 2003, 15, 994-999.	6.7	37
128	Photorefractive polymers based on bis-triarylamine side-chain polymers. , 2003, 5216, 83.		2
129	Efficient photorefractive polymers sensitized by CdSe nanoparticles. , 2003, , .		2
130	Photorefractive polymer composites fabricated by injection molding. Applied Physics Letters, 2002, 80, 1156-1158.	3.3	7
131	Effect of aryl substitution on the hole mobility of bis-diarylaminobiphenyl-doped polymer composites. , 2002, , .		0
132	Photorefractive polymers sensitized by two-photon absorption. Optics Letters, 2002, 27, 19.	3.3	31
133	Photorefractive Polymers with Non-Destructive Readout. Advanced Functional Materials, 2002, 12, 615-620.	14.9	17
134	Optimization of photorefractive polymers doped with styrene-based chromophores. , 2001, , .		0
135	Photorefractive properties of polymer composites fabricated by injection molding. , 2001, , .		0
136	Stabilization of the response time in photorefractive polymers. Applied Physics Letters, 2000, 77, 2292-2294.	3.3	39