

Jeremy D Zimmerman

List of Publications by Year in descending order

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76
papers

2,470
citations

159585

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197818

49
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76
all docs

76
docs citations

76
times ranked

3638
citing authors

#	ARTICLE	IF	CITATIONS
1	Broad Spectral Response Using Carbon Nanotube/Organic Semiconductor/C ₆₀ Photodetectors. Nano Letters, 2009, 9, 3354-3358.	9.1	223
2	Porphyrimetal-Organic Photodetectors with 6.5% External Quantum Efficiency in the Near Infrared. Advanced Materials, 2010, 22, 2780-2783.	21.0	137
3	Independent Control of Bulk and Interfacial Morphologies of Small Molecular Weight Organic Heterojunction Solar Cells. Nano Letters, 2012, 12, 4366-4371.	9.1	114
4	High-Efficiency, Vacuum-Deposited, Small-Molecule Organic Tandem and Triple-Junction Photovoltaic Cells. Advanced Energy Materials, 2014, 4, 1400568.	19.5	103
5	A hybrid planar-mixed tetraphenylidibenzoperiflanthene/C70 photovoltaic cell. Applied Physics Letters, 2013, 102, .	3.3	98
6	Small-Molecule Photovoltaics Based on Functionalized Squaraine Donor Blends. Advanced Materials, 2012, 24, 1956-1960.	21.0	96
7	Fused Pyrene-Diporphyrins: Shifting Near-Infrared Absorption to 1.5-1.7 μm and Beyond. Angewandte Chemie - International Edition, 2010, 49, 5523-5526.	13.8	87
8	Increased efficiency in multijunction solar cells through the incorporation of semimetallic ErAs nanoparticles into the tunnel junction. Applied Physics Letters, 2006, 88, 162103.	3.3	86
9	Arylamine-Based Squaraine Donors for Use in Organic Solar Cells. Nano Letters, 2011, 11, 4261-4264.	9.1	84
10	Porphyrimetal Fused with Unactivated Polycyclic Aromatic Hydrocarbons. Journal of Organic Chemistry, 2012, 77, 143-159.	3.2	72
11	Organic photovoltaics incorporating electron conducting exciton blocking layers. Applied Physics Letters, 2011, 98, 243307.	3.3	70
12	Reuse of GaAs substrates for epitaxial lift-off by employing protection layers. Journal of Applied Physics, 2012, 111, .	2.5	65
13	Non-Destructive Wafer Recycling for Low-Cost Thin-Film Flexible Optoelectronics. Advanced Functional Materials, 2014, 24, 4284-4291.	14.9	61
14	Tandem organic photovoltaics using both solution and vacuum deposited small molecules. Applied Physics Letters, 2012, 101, 063303.	3.3	60
15	Control of Interface Order by Inverse Quasi-Epitaxial Growth of Squaraine/Fullerene Thin Film Photovoltaics. ACS Nano, 2013, 7, 9268-9275.	14.6	59
16	Ultralow resistance in situ Ohmic contacts to InGaAs/InP. Applied Physics Letters, 2008, 93, 183502.	3.3	55
17	Small-Molecule Planar-Mixed Heterojunction Photovoltaic Cells with Fullerene-Based Electron Filtering Buffers. Advanced Energy Materials, 2014, 4, 1301557.	19.5	54
18	Hyperfine-phonon spin relaxation in a single-electron GaAs quantum dot. Nature Communications, 2018, 9, 3454.	12.8	53

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19	Interface atomic structure of epitaxial ErAs layers on (001) In _{0.53} Ga _{0.47} As and GaAs. Applied Physics Letters, 2005, 86, 241901.	3.3	50
20	Use of additives in porphyrin-tape/C60 near-infrared photodetectors. Organic Electronics, 2011, 12, 869-873.	2.6	49
21	Coupled whispering gallery mode resonators in the Terahertz frequency range. Optics Express, 2008, 16, 7336.	3.4	48
22	Low resistance, nonalloyed Ohmic contacts to InGaAs. Applied Physics Letters, 2007, 91, .	3.3	47
23	Multiple growths of epitaxial lift-off solar cells from a single InP substrate. Applied Physics Letters, 2010, 97, 101107.	3.3	42
24	A Fullerene-Based Organic Exciton Blocking Layer with High Electron Conductivity. Nano Letters, 2013, 13, 3315-3320.	9.1	42
25	GaAs Quantum Dot Thermometry Using Direct Transport and Charge Sensing. Journal of Low Temperature Physics, 2014, 175, 784-798.	1.4	42
26	Tunable all epitaxial semimetal-semiconductor Schottky diode system: ErAs on InAlGaAs. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 1929.	1.6	37
27	Ultrathin film, high specific power InP solar cells on flexible plastic substrates. Applied Physics Letters, 2009, 95, 223503.	3.3	34
28	Advances in schottky rectifier performance. IEEE Microwave Magazine, 2007, 8, 54-59.	0.8	33
29	Silver-epoxy microwave filters and thermalizers for millikelvin experiments. Applied Physics Letters, 2014, 104, 211106.	3.3	33
30	Semimetal-semiconductor rectifiers for sensitive room-temperature microwave detectors. Applied Physics Letters, 2005, 87, 163506.	3.3	32
31	Snow cleaning of substrates increases yield of large-area organic photovoltaics. Applied Physics Letters, 2012, 101, 133901.	3.3	29
32	Room temperature terahertz detection based on bulk plasmons in antenna-coupled GaAs field effect transistors. Applied Physics Letters, 2008, 92, .	3.3	27
33	Photoconductivity in donor-acceptor heterojunction organic photovoltaics. Physical Review B, 2012, 86, .	3.2	27
34	Ultra sensitive ErAs/InAlGaAs direct detectors for millimeter wave and THz imaging applications. IEEE MTT-S International Microwave Symposium Digest IEEE MTT-S International Microwave Symposium, 2007, , .	0.0	25
35	Effect of Mixed Layer Crystallinity on the Performance of Mixed Heterojunction Organic Photovoltaic Cells. Advanced Materials, 2014, 26, 2914-2918.	21.0	23
36	Controlling electronic properties of epitaxial nanocomposites of dissimilar materials. Journal of Crystal Growth, 2007, 301-302, 4-9.	1.5	22

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37	Electrophoretic deposition applied to thick metal-ceramic coatings. Surface and Coatings Technology, 2002, 157, 267-273.	4.8	20
38	Perspective: Fundamentals of coalescence-related dislocations, applied to selective-area growth and other epitaxial films. APL Materials, 2018, 6, .	5.1	18
39	Effect of Diels-Alder Reaction in C ₆₀ -Tetracene Photovoltaic Devices. Nano Letters, 2016, 16, 6086-6091.	9.1	17
40	Tandem organic photovoltaics incorporating two solution-processed small molecule donor layers. Applied Physics Letters, 2013, 103, .	3.3	15
41	Subpicosecond photocarrier lifetimes in GaSb/ErSb nanoparticle superlattices at 1.55 μm. Applied Physics Letters, 2004, 85, 3110-3112.	3.3	14
42	1/f noise in all-epitaxial metal-semiconductor diodes. Applied Physics Letters, 2006, 88, 073518.	3.3	13
43	Exciton-blocking phosphonic acid-treated anode buffer layers for organic photovoltaics. Applied Physics Letters, 2013, 103, .	3.3	13
44	Intrinsic Metastabilities in the Charge Configuration of a Double Quantum Dot. Physical Review Letters, 2015, 115, 106804.	7.8	12
45	Spectroscopy of Quantum Dot Orbitals with In-Plane Magnetic Fields. Physical Review Letters, 2019, 122, 207701.	7.8	12
46	Epitaxial lift-off of GaAs thin-film solar cells followed by substrate reuse. , 2012, , .		11
47	ErAs epitaxial Ohmic contacts to InGaAs/InP. Applied Physics Letters, 2009, 94, .	3.3	10
48	Atom Probe Tomography of Molecular Organic Materials: Sub-Dalton Nanometer-Scale Quantification. Chemistry of Materials, 2019, 31, 2241-2247.	6.7	10
49	High-Temperature Nucleation of GaP on V-Grooved Si. Crystal Growth and Design, 2020, 20, 6745-6751.	3.0	10
50	Interference between two coherently driven monochromatic terahertz sources. Applied Physics Letters, 2008, 92, 221107.	3.3	9
51	Nonideal Diode Behavior and Bandgap Renormalization in Carbon Nanotube p-n Junctions. IEEE Nanotechnology Magazine, 2014, 13, 41-45.	2.0	9
52	Control of exciton transport using quantum interference. Physical Review B, 2015, 92, .	3.2	8
53	High-sensitivity, quasi-optically-coupled semimetal-semiconductor detectors at 104 GHz. , 2006, 6212, 217.		7
54	Low-frequency noise in epitaxially grown Schottky junctions. Journal of Applied Physics, 2007, 101, 084509.	2.5	6

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55	Selective area growth of GaAs on Si patterned using nanoimprint lithography. , 2016, , .		6
56	Enabling low-cost III-V/Si integration through nucleation of GaP on v-grooved Si substrates. , 2018, , .		6
57	Three dimensional cluster analysis for atom probe tomography using Ripley's K-function and machine learning. Ultramicroscopy, 2021, 220, 113151.	1.9	6
58	First MMW characterization of ErAs/InAlGaAs/InP semimetal-semiconductor-Schottky diode (S3) detectors for passive millimeter-wave and infrared imaging. , 2005, , .		5
59	ErAs island-stacking growth technique for engineering textured Schottky interfaces. Journal of Vacuum Science & Technology B, 2006, 24, 1483.	1.3	4
60	Application of templated vapor-liquid-solid growth to heteroepitaxy of InP on Si. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, 013404.	2.1	4
61	Terahertz emission by quantum beating in a modulation doped parabolic quantum well. Applied Physics Letters, 2008, 92, 142108.	3.3	3
62	Isotropic and Anisotropic $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">g \rangle$ -Factor Corrections in GaAs Quantum Dots. Physical Review Letters, 2021, 127, 057701.	7.8	2
63	Towards a III-V solar cell with a metamorphic graded buffer directly grown on v-groove Si substrates. , 2021, , .		1
64	Semimetal-Semiconductor Junctions for Low Noise Zero-Bias Rectifiers. , 0, , .		0
65	Efficient CW terahertz generation with n-i-pn-i-p photomixers. , 2007, , .		0
66	Photonic molecules in the Terahertz - mode splitting in coupled dielectric whispering gallery mode resonators. , 2008, , .		0
67	Room temperature terahertz detection based on plasma resonance of electrons in an Antenna-Coupled GaAs MESFET. , 2008, , .		0
68	Characterizing Relaxation Dynamics in Multi-Chiral Carbon Nanotube Ensembles. , 2013, , .		0
69	High efficiency tandem organic photovoltaics incorporating small molecule blended squaraine donors and a fullerene acceptor. , 2013, , .		0
70	Characterization of heteroepitaxial GaAs films grown on Si using selective area nucleation. , 2017, , .		0
71	19 th : Invited Paper: Atom Probe Tomography for Understanding OLED Morphology. Digest of Technical Papers SID International Symposium, 2019, 50, 248-251.	0.3	0
72	Understanding Fragmentation of Organic Small Molecules in Atom Probe Tomography. Journal of Physical Chemistry Letters, 2021, 12, 10437-10443.	4.6	0

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73	Interference between monochromatic Terahertz sources. , 2008, , .		0
74	Room temperature terahertz detection based on electron plasma resonance in an Antenna-Coupled GaAs MESFET. , 2008, , .		0
75	Templated Liquid-Phase Epitaxy of InP Structures on Si. , 2021, , .		0
76	Invited Paper: Effects of Guest Clustering Morphology in Phosphorescent OLEDs. Digest of Technical Papers SID International Symposium, 2022, 53, 334-336.	0.3	0