Darius Kuciauskas

List of Publications by Year in descending order

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175 papers	7,697 citations	65103 42 h-index	55701 84 g-index
182 all docs	182 docs citations	182 times ranked	7322 citing authors

#	Article	IF	Citations
1	Surface reaction for efficient and stable inverted perovskite solar cells. Nature, 2022, 611, 278-283.	36.2	585
2	Co-evaporated Cu2ZnSnSe4 films and devices. Solar Energy Materials and Solar Cells, 2012, 101, 154-159.	6.3	584
3	Photoinduced Charge Separation and Charge Recombination to a Triplet State in a Caroteneâ^'Porphyrinâ^'Fullerene Triad. Journal of the American Chemical Society, 1997, 119, 1400-1405.	14.6	360
4	Energy and Photoinduced Electron Transfer in Porphyrinâ^'Fullerene Dyads. The Journal of Physical Chemistry, 1996, 100, 15926-15932.	2.9	340
5	An Artificial Photosynthetic Antenna-Reaction Center Complex. Journal of the American Chemical Society, 1999, 121, 8604-8614.	14.6	337
6	CdTe solar cells with open-circuit voltage breaking the 1â€‰V barrier. Nature Energy, 2016, 1, .	29.7	316
7	Electron Transfer Dynamics in Nanocrystalline Titanium Dioxide Solar Cells Sensitized with Ruthenium or Osmium Polypyridyl Complexes. Journal of Physical Chemistry B, 2001, 105, 392-403.	2.7	278
8	Exceeding 20% efficiency with in situ group V doping in polycrystalline CdTe solar cells. Nature Energy, 2019, 4, 837-845.	29.7	258
9	Transient Absorption Spectroscopy of Ruthenium and Osmium Polypyridyl Complexes Adsorbed onto Nanocrystalline TiO2 Photoelectrodes. Journal of Physical Chemistry B, 2002, 106, 9347-9358.	2.7	194
10	EPR Investigation of Photoinduced Radical Pair Formation and Decay to a Triplet State in a Caroteneâ^'Porphyrinâ^'Fullerene Triad. Journal of the American Chemical Society, 1998, 120, 4398-4405.	14.6	184
11	Photoinduced Electron Transfer in Carotenoporphyrinâ^'Fullerene Triads:Â Temperature and Solvent Effects. Journal of Physical Chemistry B, 2000, 104, 4307-4321.	2.7	171
12	Carrier control in Snâ€“Pb perovskites via 2D cation engineering for all-perovskite tandem solar cells with improved efficiency and stability. Nature Energy, 2022, 7, 642-651.	29.7	159
13	A recombination analysis of Cu(In,Ga)Se2 solar cells with low and high Ga compositions. Solar Energy Materials and Solar Cells, 2014, 124, 143-149.	6.3	132
14	Dependence of the Minority-Carrier Lifetime on the Stoichiometry of CdTe Using Time-Resolved Photoluminescence and First-Principles Calculations. Physical Review Letters, 2013, 111, 067402.	8.0	126
15	Effects of sodium incorporation in Co-evaporated Cu2ZnSnSe4 thin-film solar cells. Applied Physics Letters, 2013, 102, .	3.2	126
16	Magnetic Switching of Charge Separation Lifetimes in Artificial Photosynthetic Reaction Centers. Journal of the American Chemical Society, 1998, 120, 10880-10886.	14.6	115
17	Intrinsic surface passivation of CdTe. Journal of Applied Physics, 2015, 118, .	2.3	112
18	Co-deposition of hole-selective contact and absorber for improving the processability of perovskite solar cells. Nature Energy, 2023, 8, 462-472.	29.7	95

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19	Research strategies toward improving thin-film CdTe photovoltaic devices beyond 20% conversion efficiency. Solar Energy Materials and Solar Cells, 2013, 119, 149-155.	6.3	93
20	Sputter-Deposited Oxides for Interface Passivation of CdTe Photovoltaics. IEEE Journal of Photovoltaics, 2018, 8, 587-593.	2.7	93
21	Minority Carrier Lifetime Analysis in the Bulk of Thin-Film Absorbers Using Subbandgap (Two-Photon) Excitation. IEEE Journal of Photovoltaics, 2013, 3, 1319-1324.	2.7	91
22	The role of drift, diffusion, and recombination in timeâ€resolved photoluminescence of CdTe solar cells determined through numerical simulation. Progress in Photovoltaics: Research and Applications, 2014, 22, 1138-1146.	5.3	90
23	Excited-State Dynamics of Spiropyran-Derived Merocyanine Isomers. Journal of Physical Chemistry B, 2005, 109, 22186-22191.	2.7	82
24	Kesterite Successes, Ongoing Work, and Challenges: A Perspective From Vacuum Deposition. IEEE Journal of Photovoltaics, 2013, 3, 439-445.	2.7	79
25	Effects of Internal Luminescence and Internal Optics on $V_{f oc}$ and $J_{f sc}$ of III–V Solar Cells. IEEE Journal of Photovoltaics, 2013, 3, 1437-1442.	2.7	79
26	Structural Effects on Photoinduced Electron Transfer in Carotenoidâ'Porphyrinâ'Quinone Triads. Journal of Physical Chemistry B, 1997, 101, 429-440.	2.7	78
27	Indications of short minority-carrier lifetime in kesterite solar cells. Journal of Applied Physics, 2013, 114, .	2.3	75
28	Beneficial effect of post-deposition treatment in high-efficiency Cu(In,Ga)Se2 solar cells through reduced potential fluctuations. Journal of Applied Physics, 2016, 120, .	2.3	75
29	Recombination and bandgap engineering in CdSeTe/CdTe solar cells. APL Materials, 2019, 7, .	4.8	75
30	Mimicry of carotenoid photoprotection in artificial photosynthetic reaction centers: triplet-triplet energy transfer by a relay mechanism. Journal of Photochemistry and Photobiology B: Biology, 1998, 43, 209-216.	3.9	70
31	Effects of Bridging Ligands on the Currentâ'Potential Behavior and Interfacial Kinetics of Ruthenium-Sensitized Nanocrystalline TiO2Photoelectrodesâ€. Journal of Physical Chemistry A, 2003, 107, 3379-3383.	2.6	63
32	Self-compensation in arsenic doping of CdTe. Scientific Reports, 2017, 7, 4563.	3.4	63
33	Charge Transfer Enhances Two-Photon Absorption in Transition Metal Porphyrins. Journal of the American Chemical Society, 2006, 128, 3902-3903.	14.6	57
34	Carrier density and lifetime for different dopants in single-crystal and polycrystalline CdTe. APL Materials, 2016, 4, .	4.8	54
35	Charge-Transfer States Determine Iron Porphyrin Film Third-Order Nonlinear Optical Properties in the near-IR Spectral Region. Journal of Physical Chemistry B, 2004, 108, 12016-12023.	2.7	52
36	Minority-Carrier Lifetime and Surface Recombination Velocity in Single-Crystal CdTe. IEEE Journal of Photovoltaics, 2015, 5, 366-371.	2.7	52

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37	Solar energy conversion properties and defect physics of ZnSiP₂. Energy and Environmental Science, 2016, 9, 1031-1041.	32.2	51
38	Characterization of the Giant Transient Dipole Generated by Photoinduced Electron Transfer in a Caroteneâ^'Porphyrinâ^'Fullerene Molecular Triad. Journal of Physical Chemistry A, 2003, 107, 7567-7573.	2.6	48
39	Recombination velocity less than 100â€‰cm/s at polycrystalline Al2O3/CdSeTe interfaces. Applied Physics Letters, 2018, 112, .	3.2	47
40	Ultrafast Energy Transfer from a Carotenoid to a Chlorin in a Simple Artificial Photosynthetic Antenna. Journal of Physical Chemistry B, 2002, 106, 9424-9433.	2.7	46
41	Self-Assembly of Peptideâ^'Porphyrin Complexes Leads to pH-dependent Excitonic Coupling. Journal of Physical Chemistry B, 2009, 113, 14439-14447.	2.7	44
42	Investigation of combinatorial coevaporated thin film Cu2ZnSnS4. I. Temperature effect, crystalline phases, morphology, and photoluminescence. Journal of Applied Physics, 2014, 115, .	2.3	44
43	Recombination Analysis in Cadmium Telluride Photovoltaic Solar Cells With Photoluminescence Spectroscopy. IEEE Journal of Photovoltaics, 2016, 6, 313-318.	2.7	43
44	Dynamics of Photoinduced Electron Transfer in a Carotenoidâ^'Porphyrinâ^'Dinitronaphthalenedicarboximide Molecular Triad. Journal of Physical Chemistry B, 1997, 101, 5214-5223.	2.7	42
45	Single-crystal CdTe solar cells with Voc greater than 900â€‰mV. Applied Physics Letters, 2014, 105, .	3.2	42
46	Exciton photoluminescence and benign defect complex formation in zinc tin nitride. Materials Horizons, 2018, 5, 823-830.	12.8	42
47	Charge-carrier transport and recombination in heteroepitaxial CdTe. Journal of Applied Physics, 2014, 116, .	2.3	39
48	High p-type doping, mobility, and photocarrier lifetime in arsenic-doped CdTe single crystals. Applied Physics Letters, 2018, 112, .	3.2	38
49	Understanding what limits the voltage of polycrystalline CdSeTe solar cells. Nature Energy, 2022, 7, 400-408.	29.7	38
50	Charge carrier dynamics and recombination in graded band gap CuIn1â^'xGaxSe2 polycrystalline thin-film photovoltaic solar cell absorbers. Journal of Applied Physics, 2013, 114, .	2.3	37
51	The impact of Cu on recombination in high voltage CdTe solar cells. Applied Physics Letters, 2015, 107, .	3.2	37
52	Spectrally and time resolved photoluminescence analysis of the CdS/CdTe interface in thin-film photovoltaic solar cells. Applied Physics Letters, 2013, 102, .	3.2	36
53	Excitation-dependent carrier lifetime and diffusion length in bulk CdTe determined by time-resolved optical pump-probe techniques. Journal of Applied Physics, 2018, 123, .	2.3	36
54	Singletâ^'Singlet Annihilation and Local Heating in FMO Complexes. The Journal of Physical Chemistry, 1996, 100, 17950-17956.	2.9	34

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55	Relationship of Open-Circuit Voltage to CdTe Hole Concentration and Lifetime. IEEE Journal of Photovoltaics, 2016, 6, 1641-1644.	2.7	33
56	Identification of the limiting factors for high-temperature GaAs, GaInP, and AlGaInP solar cells from device and carrier lifetime analysis. Journal of Applied Physics, 2017, 122, .	2.3	32
57	Effects of deposition termination on Cu2ZnSnSe4 device characteristics. Thin Solid Films, 2015, 582, 184-187.	1.9	29
58	Doping properties of cadmium-rich arsenic-doped CdTe single crystals: Evidence of metastable AX behavior. Applied Physics Letters, 2017, 111, .	3.2	29
59	Isomerization Dynamics of Photochromic Spiropyran Molecular Switches in Phospholipid Bilayers. Journal of Physical Chemistry B, 2005, 109, 21893-21899.	2.7	28
60	CdTe solar cell with industrial Al:ZnO on soda-lime glass. Thin Solid Films, 2011, 519, 7142-7145.	1.9	28
61	Electrical Characterization of Cu Composition Effects in CdS/CdTe Thin-Film Solar Cells With a ZnTe:Cu Back Contact. IEEE Journal of Photovoltaics, 2013, 3, 1095-1099.	2.7	28
62	Radiative Efficiency and Chargeâ€€Carrier Lifetimes and Diffusion Length in Polycrystalline CdSeTe Heterostructures. Physica Status Solidi - Rapid Research Letters, 2020, 14, 1900606.	2.5	28
63	Luminescence methodology to determine grain-boundary, grain-interior, and surface recombination in thin-film solar cells. Journal of Applied Physics, 2018, 124, .	2.3	26
64	Exciton Annihilation and Energy Transfer in Self-Assembled Peptideâ^'Porphyrin Complexes Depends on Peptide Secondary Structure. Journal of Physical Chemistry B, 2010, 114, 16029-16035.	2.7	25
65	Observation of band alignment transition in InAs/GaAsSb quantum dots by photoluminescence. Journal of Applied Physics, 2012, 111, .	2.3	25
66	Cathodoluminescence Analysis of Grain Boundaries and Grain Interiors in Thin-Film CdTe. IEEE Journal of Photovoltaics, 2014, 4, 1671-1679.	2.7	25
67	Cd-rich and Te-rich low-temperature photoluminescence in cadmium telluride. Applied Physics Letters, 2014, 104, 092109.	3.2	25
68	Simultaneous Measurement of Minority-Carrier Lifetime in Single-Crystal CdTe Using Three Transient Decay Techniques. IEEE Journal of Photovoltaics, 2014, 4, 1295-1300.	2.7	25
69	Photoinduced electron transfer in a symmetrical diporphyrinâ€“fullerene triad. Physical Chemistry Chemical Physics, 2004, 6, 5509-5515.	2.9	23
70	Optical susceptibilities of supported indium tin oxide thin films. Journal of Applied Physics, 2006, 100, 113123.	2.3	23
71	Probing the Origin of the Open Circuit Voltage in Perovskite Quantum Dot Photovoltaics. ACS Nano, 2021, 15, 19334-19344.	15.3	23
72	Optical-fiber-based, time-resolved photoluminescence spectrometer for thin-film absorber characterization and analysis of TRPL data for CdS/CdTe interface. , 2012, , .		22

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73	Two dimensional numerical simulations of carrier dynamics during time-resolved photoluminescence decays in two-photon microscopy measurements in semiconductors. Journal of Applied Physics, 2015, 118, .	2.3	20
74	Reducing interface recombination for Cu(In,Ga)Se2 by atomic layer deposited buffer layers. Applied Physics Letters, 2015, 107, .	3.2	20
75	Ultrafast Degenerate Four Wave Mixing Studies of Third-Order Nonlinearities in Conjugated Organic Polymers Containing Azo Groups and Alkynyl Linkages in the Polymer Backbone. Journal of Physical Chemistry B, 2003, 107, 1559-1566.	2.7	19
76	Second Hyperpolarizability of Ethynyl-Linked Azobenzene Molecular Wires. Journal of Physical Chemistry B, 2005, 109, 21496-21498.	2.7	19
77	Fiber-fed time-resolved photoluminescence for reduced process feedback time on thin-film photovoltaics. Review of Scientific Instruments, 2015, 86, 013907.	1.4	19
78	Interfaces Between C<roman>d</roman>T<roman>e</roman> and ALD A<roman>l</roman>₂O₃. IEEE Journal of Photovoltaics, 2018, 8, 1858-1861.	2.7	19
79	Phospholipid Bilayer Free Volume Analysis Employing the Thermal Ring-Closing Reaction of Merocyanine Molecular Switches. Journal of Physical Chemistry B, 2006, 110, 22796-22803.	2.7	18
80	Time-resolved correlative optical microscopy of charge-carrier transport, recombination, and space-charge fields in CdTe heterostructures. Applied Physics Letters, 2017, 110, .	3.2	18
81	Optically induced metastability in Cu(In,Ga)Se2. Scientific Reports, 2017, 7, 13788.	3.4	18
82	Identification of Recombination Losses in CdSe/CdTe Solar Cells from Spectroscopic and Microscopic Timeâ€Resolved Photoluminescence. Solar Rrl, 2021, 5, 2000775.	6.0	18
83	Impact of interface recombination on time resolved photoluminescence (TRPL) decays in CdTe solar cells (numerical simulation analysis). , 2012, , .		17
84	Impact of extended defects on recombination in CdTe heterostructures grown by molecular beam epitaxy. Applied Physics Letters, 2016, 109, .	3.2	17
85	Mechanisms for long carrier lifetime in Cd(Se)Te double heterostructures. Applied Physics Letters, 2021, 118, .	3.2	16
86	Pathways toward higher performance CdS/CdTe devices: Te exposure of CdTe surface before ZnTe:Cu/Ti contacting. Thin Solid Films, 2013, 535, 237-240.	1.9	15
87	Surface Passivation of CdTe Single Crystals. IEEE Journal of Photovoltaics, 2015, 5, 382-385.	2.7	15
88	Charge-carrier dynamics in polycrystalline thin-film CuIn1â^'xGaxSe2 photovoltaic devices after pulsed laser excitation: Interface and space-charge region analysis. Journal of Applied Physics, 2015, 117, .	2.3	15
89	Defect-mediated metastability and carrier lifetimes in polycrystalline (Ag,Cu)(In,Ga)Se2 absorber materials. Journal of Applied Physics, 2020, 127, .	2.3	15
90	CdTeâ€Based Solar Cells with Variations in Mg Concentration in the MgZnO Emitter. Solar Rrl, 2021, 5, 2100126.	6.0	15

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91	Separating grain-boundary and bulk recombination with time-resolved photoluminescence microscopy. Applied Physics Letters, 2017, 111, .	3.2	14
92	Contrasting Fe(III) Tetrakis(4-hydroxyphenyl)porphyrin Excited State Dynamics in Solution and Solid States. Journal of Physical Chemistry C, 2008, 112, 1700-1704.	3.3	13
93	Development of substrate structure CdTe photovoltaic devices with performance exceeding 10%. , 2012, , .		12
94	Diverse simulations of time-resolved photoluminescence in thin-film solar cells: A SnO2/CdSeyTe1â^'y case study. Journal of Applied Physics, 2021, 130, .	2.3	12
95	Fabrication of single-crystal solar cells from phosphorous-doped CdTe wafer. , 2015, , .		11
96	Time-resolved recombination analysis in kesterite polycrystalline thin films and photovoltaic devices with one-photon and two-photon excitation. Solar Energy Materials and Solar Cells, 2015, 136, 100-105.	6.3	11
97	Wild band edges: The role of bandgap grading and band-edge fluctuations in high-efficiency chalcogenide devices. , 2016, , .		11
98	Nonlinear Optical Spectroscopic Studies of Energy Transfer in Phospholipid Bilayer Liposomes Embedded with Porphyrin Sensitizers. Journal of Physical Chemistry B, 2004, 108, 15376-15384.	2.7	10
99	Driving Force and Electronic Coupling Effects on Photoinduced Electron Transfer in a Fullerene-based Molecular TriadÂ¶. Photochemistry and Photobiology, 2007, 72, 598-611.	2.6	10
100	The effect of CdTe growth temperature and ZnTe:Cu contacting conditions on CdTe device performance. , 2012, , .		10
101	Interface Characterization of Single-Crystal CdTe Solar Cells With VOC > 950 mV. IEEE Journal of Photovoltaics, 2016, 6, 1650-1653.	2.7	10
102	Spectroscopic and Microscopic Defect and Carrier-Lifetime Analysis in Cadmium Telluride. IEEE Journal of Photovoltaics, 2018, 8, 1754-1760.	2.7	10
103	Numerical simulation of high-efficiency, scalable, all-back-contact Cd(Se,Te) solar cells. Journal of Applied Physics, 2020, 127, .	2.3	10
104	CdS_xTe₁-_x Alloying in CdS/CdTe Solar Cells. Materials Research Society Symposia Proceedings, 2011, 1324, 63.	0.1	8
105	Optoelectronic Investigation of Sb-Doped Cu(In,Ga)Se₂. IEEE Journal of Photovoltaics, 2015, 5, 1769-1774.	2.7	8
106	Voltage Loss Comparison in CdSe/CdTe Solar Cells and Polycrystalline CdSeTe Heterostructures. IEEE Journal of Photovoltaics, 2022, 12, 6-10.	2.7	8
107	Comparison of minority carrier lifetime measurements in superstrate and substrate CdTe PV devices. , 2011, , .		7
108	Oxygen incorporation during fabrication of substrate CdTe photovoltaic devices. , 2012, , .		7

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109	Arsenic doped Cd-rich CdTe: equilibrium doping limit and long lifetime for high open-circuit voltage solar cells greater than 900 mV. Applied Physics Express, 2019, 12, 081002.	2.4	7
110	Microsecond Carrier Lifetimes in Polycrystalline CdSeTe Heterostructures and in CdSeTe Thin Film Solar Cells. , 2020, , .		7
111	II-VI Material Integration With Silicon for Detector and PV Applications. MRS Advances, 2016, 1, 3391-3402.	1.0	6
112	Analysis of Recombination in CdTe Heterostructures With Time-Resolved Two-Photon Excitation Microscopy. IEEE Journal of Photovoltaics, 2016, 6, 1581-1586.	2.7	6
113	Largeâ€Area (Ag,Cu)(In,Ga)Se₂ Thinâ€Film Solar Cells with Increased Bandgap and Reduced Voltage Losses Realized with Bulk Defect Reduction and Frontâ€Grading of the Absorber Bandgap. Solar Rrl, 2022, 6, .	6.0	6
114	Band Bending at CdTe Solar Cell Contacts: Correlating Electroâ€Optical and Xâ€Ray Photoelectron Spectroscopy Analyses of Thin Film Solar Cells. Solar Rrl, 2023, 7, .	6.0	6
115	Combinatorial study of thin-film Cu<inf>2</inf>ZnSnS<inf>4</inf> synthesis via metal precursor sulfurization. , 2010, , .		5
116	Dual-sensor technique for characterization of carrier lifetime decay transients in semiconductors. Journal of Applied Physics, 2014, 116, 214510.	2.3	5
117	Single crystal growth and phase stability of photovoltaic grade ZnSiP2 by flux technique. , 2015, , .		5
118	In-situ curvature monitoring and X-ray diffraction study of InGaAsP/InGaP quantum wells. Journal of Crystal Growth, 2017, 475, 171-177.	1.6	5
119	Effect of Diode Field on Time-Resolved Photoluminescence of CdTe-Based Solar Cells. IEEE Journal of Photovoltaics, 2022, 12, 501-511.	2.7	5
120	Kesterite successes, ongoing work, and challenges: A perspective from vacuum deposition. , 2012, , .		4
121	Advances in control of doping and lifetime in single-crystal and polycrystalline CdTe. , 2014, , .		4
122	Development of Two-photon excitation time-resolved photoluminescence microscopy for lifetime and defect imaging in thin film photovoltaic materials and devices. , 2015, , .		4
123	Optoelectronic Characterization of Emerging Solar Absorber Cu₃AsS₄. , 2019, , .		4
124	Electro-optical characterization of arsenic-doped CdSeTe and CdTe solar cell absorbers doped in-situ during close space sublimation. Solar Energy Materials and Solar Cells, 2023, 251, 112110.	6.3	4
125	Why Increased CdSeTe Charge Carrier Lifetimes and Radiative EfficienciesÂdidÂnot Result in Voltage Boost for CdTe Solar Cells. Advanced Energy Materials, 2023, 13, .	22.2	4
126	2.0–2.1 eV Ga<inf>x</inf>In<inf>1−x</inf>P solar cells grown on relaxed GaAsP step grades. , 2010, , .		3

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127	Determination of a Sb composition in InAs/GaAsSb for negligible valence band offset. , 2010, , .		3
128	Development of CdTe on Si Heteroepilayers for Controlled PV Material and Device Studies. Materials Research Society Symposia Proceedings, 2013, 1538, 243-248.	0.1	3
129	Arsenic Doping of Polycrystalline CdSeTe Devices for Microsecond Life-times with High Carrier Concentrations. , 2020, , .		3
130	Time-resolved photoluminescence characterization of polycrystalline thin-film solar cells. , 2020, , 191-222.		3
131	CdS/CdTe solar cells containing directly-deposited CdS<inf>x</inf>Te<inf>1−x</inf> alloy layers. , 2011, , .		2
132	Influence of damp heat on the electrical, optical, and morphological properties of encapsulated CuInGaSe<inf>2</inf> devices. , 2011, , .		2
133	Doping-dependent device functionality of InP/InAlGaAs long-wavelength light-emitting transistors. Applied Physics Letters, 2011, 99, 103502.	3.2	2
134	Electrical characterization of Cu composition effects in CdS/CdTe thin-film solar cells with a ZnTe:Cu back contact. , 2012, , .		2
135	CdTe single-crystal heterojunction photovoltaic cells. , 2014, , .		2
136	Effect of silicon delta-doping density on optical properties of type-II InAs/GaAsSb quantum dots. Journal of Crystal Growth, 2014, 406, 68-71.	1.6	2
137	Quantitative determination of grain boundary recombination velocity in CdTe by combination of cathodoluminescence measurements and numerical simulations. , 2015, , .		2
138	Energy conversion properties of ZnSiP<inf>2</inf>, a lattice-matched material for silicon-based tandem photovoltaics. , 2016, , .		2
139	Field Effect in CdSeTe/CdTe Solar Cells with Biased Spectroscopy. , 2019, , .		2
140	Sputtered Aluminum Oxide and p⁺ Amorphous Silicon Back-Contact for Improved Hole Extraction in Polycrystalline CdSe_xTe_{1-x} and CdTe Photovoltaics. , 2019, , .		2
141	Doping CdSe_xTe_{1-x}/CdTe Graded Absorber Films with Arsenic for Thin-Film Photovoltaics. , 2019, , .		2
142	Growth and Characterization of Arsenic-Doped CdTe1â^'xSex Single Crystals Grown by the Cd-Solvent Traveling Heater Method. Journal of Electronic Materials, 2020, 49, 6971-6976.	2.2	2
143	Sub-bandgap features in CdSeTe solar cells: Parsing the roles of material properties and cell optics. , 2021, , .		2
144	Charge Carrier Lifetime Determination in Graded Absorber Solar Cells Using Timeâ€Resolved Photoluminescence Simulations and Measurements. Solar Rrl, 2023, 7, .	6.0	2

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145	Removal of stacking faults in Ge grown on Si through nanoscale openings in chemical SiO2. Thin Solid Films, 2011, 519, 7664-7671.	1.9	1
146	Response of CdS/CdTe devices to Te exposure of back contact. , 2012, , .		1
147	Optoelectronic investigation of Sb-doped Cu(In,Ga)Se2. , 2015, , .		1
148	Opto-electronic characterization of CdTe solar cells from TCO to back contact with nano-scale CL probe. , 2015, , .		1
149	Impact of delta-doping position on photoluminescence in type-II InAs/GaAsSb quantum dots. Semiconductor Science and Technology, 2015, 30, 035006.	2.1	1
150	Simulation App for Time-Resolved Photoluminescence in Thin-Film Solar Cells. , 2021, , .		1
151	Simulating the Effect of p-n Junction Fields on TRPL Transients of Thin-Film CdTe Solar Cells. , 2020, , .		1
152	$ext{CdSe}_{mathrm{x}}ext{Te}_{1-mathrm{x}}/ext{CdTe}$ Devices with Reduced Interface Recombination Through Novel Back Contacts and Group-V Doping. , 2020, , .		1
153	Calculation of the thermodynamic voltage limit of CdSeTe solar cells. , 2020, , .		1
154	Detection of the third transition of InAs/GaAsSb quantum dots. , 2011, , .		0
155	The role of Sb compositions on the properties of InAs/GaAsSb quantum dots (QDs). Proceedings of SPIE, 2012, , .	1.0	0
156	Electrical characterization of Cu composition effects in CdS/CdTe thin-film solar cells with a ZnTe:Cu back contact. , 2013, , .		0
157	Kesterite successes, ongoing work, and challenges: A perspective from vacuum deposition. , 2013, , .		0
158	Minority carrier lifetimes in 1.0-eV p-In<inf>0.27</inf>Ga<inf>0.73</inf>As layers grown on GaAs substrates. , 2014, , .		0
159	Dual sensor technique for the advanced characterization of recombination parameters in photovoltaic materials. , 2014, , .		0
160	Structural and optical properties of multi-stack InAs/GaAsSb quantum dots with different Sb composition. , 2014, , .		0
161	Effects of stoichiometry in undoped CdTe heteroepilayers on Si. , 2015, , .		0
162	Photoluminescence of Crystalline cDtE double heterostructures grown by MBE. , 2015, , .		0

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163	Defect states in copper indium gallium selenide solar cells from two-wavelength excitation photoluminescence spectroscopy. , 2016, , .		0
164	Investigation of carrier dynamics in InAs/GaAsSb quantum dots with different silicon delta-doping levels. Semiconductor Science and Technology, 2016, 31, 125010.	2.1	0
165	Notice of Removal Interface characterization of single-crystal CdTe solar cells with Voc > 950mV. , 2017, , .		0
166	Group-V doping impact on Cd-rich CdTe single crystals grown by traveling-heater method. , 2017, , .		0
167	Notice of Removal Relationship of open-circuit voltage, bulk CdTe properties, and dopant type. , 2017, , .		0
168	Doping properties of cadmium-rich arsenic-doped CdTe for application of single crystal solar cell. , 2018, , .		0
169	Transparent MgO for back-contact passivation of CdTe-based solar cells. , 2021, , .		0
170	Numerical Analysis of Time Resolved Photoluminescence for Alumina/Cd(Se,Te) Double Heterostructures. , 2021, , .		0
171	Buried interface and luminescent coupling analysis with time-resolved two-photon excitation microscopy in II-VI and III-V semiconductor heterostructures. , 2019, , .		0
172	Synthesis of CdSeCdSe_xTe_{1-x}/CdTe for graded solar cells. , 2019, , .		0
173	Optical Characterization of Defects in High-efficiency (Ag,Cu)(In,Ga)Se2. , 2020, , .		0
174	Optical Characterization of Defects in High-efficiency (Ag, Cu)(In, Ga)Se2. , 2020, , .		0
175	Band Bending at CdTe Solar Cell Contacts: Correlating Electroâ€Optical and Xâ€Ray Photoelectron Spectroscopy Analyses of Thin Film Solar Cells. Solar Rrl, 2023, 7, .	6.0	0