Cheng Li

List of Publications by Year
in descending order

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99	4,647	159358 30	98622 67
papers	citations	h-index	g-index

101	101	101	7164
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Multiple-quantum-well perovskite for hole-transport-layer-free light-emitting diodes. Chinese Chemical Letters, 2022, 33, 1017-1020.	4.8	6
2	Tuning crystal orientation and charge transport of quasi-2D perovskites via halogen-substituted benzylammonium for efficient solar cells. Journal of Energy Chemistry, 2022, 66, 205-209.	7.1	10
3	Manipulating Ion Migration and Interfacial Carrier Dynamics via Amino Acid Treatment in Planar Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2022, 14, 15840-15848.	4.0	20
4	Ga₂O₃/GaN Heterostructural Ultraviolet Photodetectors with Exciton-Dominated Ultranarrow Response. ACS Applied Electronic Materials, 2022, 4, 188-196.	2.0	19
5	Mn-doped SiGe thin films grown by UHV/CVD with room-temperature ferromagnetism and high hole mobility. Science China Materials, 2022, 65, 2826-2832.	3.5	6
6	Development of structure and tuning ability of the luminescence of lead-free halide perovskite nanocrystals (NCs). Chemical Engineering Journal, 2021, 420, 127603.	6.6	18
7	Reducing Openâ€Circuit Voltage Deficit in Perovskite Solar Cells via Surface Passivation with Phenylhydroxylammonium Halide Salts. Small Methods, 2021, 5, e2000441.	4.6	15
8	Study on crystallization mechanism of GeSn interlayer for low temperature Ge/Si bonding. Journal of Materials Science: Materials in Electronics, 2021, 32, 10835-10842.	1.1	1
9	Electrodeâ€Dependent Electrical Properties of Detectionâ€Band Tunable Ultraviolet Photodetectors Based on Ga 2 O 3 /GaN Heterostructures. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2100166.	0.8	1
10	Integration of Colloidal Quantum Dots with Photonic Structures for Optoelectronic and Optical Devices. Advanced Science, 2021, 8, e2101560.	5.6	35
11	The Impact of Solvent Vapor on the Film Morphology and Crystallization Kinetics of Lead Halide Perovskites during Annealing. ACS Applied Materials & Interfaces, 2021, 13, 45365-45374.	4.0	12
12	Selfâ€Powered Highâ€Detectivity Lateral MoS₂ Schottky Photodetectors for Nearâ€Infrared Operation. Advanced Electronic Materials, 2021, 7, 2001138.	2.6	31
13	Real-time observation of ion migration in halide perovskite by photoluminescence imaging microscopy. Journal Physics D: Applied Physics, 2021, 54, 044002.	1.3	10
14	Encapsulation Techniques of Perovskite Solar Cells. , 2021, , .		0
15	Efficient Electroabsorption Modulation of Mid- and Far-Infrared Radiation by Driving the Band-Inversion Transition of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mrow><mml:mi>In</mml:mi><mml:mi>As</mml:mi></mml:mrow></mml:math> / <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mrow><mml:mi>Ga</mml:mi><mml:mi>Sb</mml:mi></mml:mrow></mml:math>	1.5	0
16	Role of Molecular and Interchain Ordering in the Formation of a Î´-Hole-Transporting Layer in Organic Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 3806-3814.	4.0	6
17	The Stability of Metal Halide Perovskite Nanocrystalsâ€”A Key Issue for the Application on Quantum-Dot-Based Micro Light-Emitting Diodes Display. Nanomaterials, 2020, 10, 1375.	1.9	36
18	An Efficient Trap Passivator for Perovskite Solar Cells: Poly(propylene glycol) bis(2-aminopropyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62	14.4	35

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19	Role of PCBM in the Suppression of Hysteresis in Perovskite Solar Cells. Advanced Functional Materials, 2020, 30, 1908920.	7.8	110
20	Enhancing the interface stability of Li1.3Al0.3Ti1.7(PO4)3 and lithium metal by amorphous Li1.5Al0.5Ge1.5(PO4)3 modification. Ionics, 2020, 26, 3815-3821.	1.2	15
21	Localized surface plasmon enhanced Ga₂O₃ solar blind photodetectors. Optics Express, 2020, 28, 5731.	1.7	42
22	Planar perovskite solar cells with long-term stability using ionic liquid additives. Nature, 2019, 571, 245-250.	13.7	1,103
23	Potassium ions as a kinetic controller in ionic double layers for hysteresis-free perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 18807-18815.	5.2	54
24	High Performance Germanium n+/p Shallow Junction for nano-Scaled n-MOSFET. , 2019, , .		1
25	Interfacial Passivation for Perovskite Solar Cells: The Effects of the Functional Group in Phenethylammonium Iodide. ACS Energy Letters, 2019, 4, 2913-2921.	8.8	176
26	Incorporating CsF into the PbI₂ Film for Stable Mixed Cationâ€Halide Perovskite Solar Cells. Advanced Energy Materials, 2019, 9, 1901726.	10.2	46
27	Polyâ€GeSn Junctionless Thinâ€Film Transistors on Insulators Fabricated at Low Temperatures via Pulsed Laser Annealing. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1900420.	1.2	18
28	Understanding the Improvement in the Stability of a Self-Assembled Multiple-Quantum Well Perovskite Light-Emitting Diode. Journal of Physical Chemistry Letters, 2019, 10, 6857-6864.	2.1	42
29	High-Performance Planar Perovskite Solar Cells with Negligible Hysteresis Using 2,2,2-Trifluoroethanol-Incorporated SnO2. IScience, 2019, 16, 433-441.	1.9	63
30	In situ investigation of light soaking in organolead halide perovskite films. APL Materials, 2019, 7, .	2.2	23
31	An environmental friendly cross-linked polysaccharide binder for silicon anode in lithium-ion batteries. Ionics, 2019, 25, 4109-4118.	1.2	14
32	Growth mechanism identification of sputtered single crystalline bismuth nanowire. Applied Nanoscience (Switzerland), 2019, 9, 2091-2102.	1.6	1
33	Interface characteristics of different bonded structures fabricated by low-temperature a-Ge wafer bonding and the application of wafer-bonded Ge/Si photoelectric device. Journal of Materials Science, 2019, 54, 2406-2416.	1.7	5
34	Low-temperature oxide-free silicon and germanium wafer bonding based on a sputtered amorphous Ge. Applied Physics Letters, 2018, 112, .	1.5	13
35	Enhanced power conversion efficiency in iridium complex-based terpolymers for polymer solar cells. Npj Flexible Electronics, 2018, 2, .	5.1	84
36	Capitalization of interfacial AlON interactions to achieve stable binder-free porous silicon/carbon anodes. Journal of Materials Chemistry A, 2018, 6, 7449-7456.	5.2	15

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37	Cyclometalated Pt complex based random terpolymers as electron acceptors for all polymer solar cells. Journal of Polymer Science Part A, 2018, 56, 105-115.	2.5	14
38	Unravelling the role of vacancies in lead halide perovskite through electrical switching of photoluminescence. Nature Communications, 2018, 9, 5113.	5.8	196
39	Does Electron Delocalization Influence Charge Separation at Donorâ€“Acceptor Interfaces in Organic Photovoltaic Cells?. Journal of Physical Chemistry C, 2018, 122, 21792-21802.	1.5	33
40	A broad-spectral-response perovskite photodetector with a high on/off ratio and high detectivity. Materials Chemistry Frontiers, 2018, 2, 1847-1852.	3.2	19
41	Formation criteria of high efficiency perovskite solar cells under ambient conditions. Sustainable Energy and Fuels, 2017, 1, 540-547.	2.5	57
42	Origins and mechanisms of hysteresis in organometal halide perovskites. Journal of Physics Condensed Matter, 2017, 29, 193001.	0.7	55
43	Impacts of excimer laser annealing on Ge epilayer on Si. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	1.1	1
44	Observation of oxygen vacancy migration in memory devices based on ZnO nanoparticles. Journal of Applied Physics, 2017, 121, .	1.1	20
45	Simulation of the effects of defects in low temperature Ge buffer layer on dark current of Si-based Ge photodiodes. Journal of Semiconductors, 2017, 38, 042001.	2.0	1
46	Innovative Geâ€“SiO2 bonding based on an intermediate ultra-thin silicon layer. Journal of Materials Science: Materials in Electronics, 2017, 28, 10262-10269.	1.1	3
47	Realâ€Time Observation of Iodide Ion Migration in Methylammonium Lead Halide Perovskites. Small, 2017, 13, 1701711.	5.2	148
48	Perovskite Solar Cells: Capturing the Sun: A Review of the Challenges and Perspectives of Perovskite Solar Cells (Adv. Energy Mater. 16/2017). Advanced Energy Materials, 2017, 7, .	10.2	3
49	Optical gain from vertical Ge-on-Si resonant-cavity light emitting diodes with dual active regions. Applied Physics Letters, 2017, 111, 111106.	1.5	3
50	TiO₂ Nanocrystal/Perovskite Bilayer for Highâ€Performance Photodetectors. Advanced Electronic Materials, 2017, 3, 1700251.	2.6	39
51	Enhanced circular photogalvanic effect in HgTe quantum wells in the heavily inverted regime. Physical Review B, 2017, 95, .	1.1	11
52	Capturing the Sun: A Review of the Challenges and Perspectives of Perovskite Solar Cells. Advanced Energy Materials, 2017, 7, 1700264.	10.2	295
53	Cyclometalated Pt complex-based random terpolymers for efficient polymer solar cells. Polymer Chemistry, 2017, 8, 4729-4737.	1.9	21
54	Impact of Structural Dynamics on the Optical Properties of Methylammonium Lead Iodide Perovskites. Advanced Energy Materials, 2017, 7, 1700286.	10.2	52

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55	Ge n⁺/p shallow junctions for light emission and detection applications. , 2017, , .		0
56	Room Temperature Electroluminescence from Tensile-Strained Si0.13Ge0.87/Ge Multiple Quantum Wells on a Ge Virtual Substrate. Materials, 2016, 9, 803.	1.3	10
57	Emission Enhancement and Intermittency in Polycrystalline Organolead Halide Perovskite Films. Molecules, 2016, 21, 1081.	1.7	33
58	Iodine Migration and its Effect on Hysteresis in Perovskite Solar Cells. Advanced Materials, 2016, 28, 2446-2454.	11.1	449
59	Effect of Thermal and Structural Disorder on the Electronic Structure of Hybrid Perovskite Semiconductor CH₃NH₃PbI₃. Journal of Physical Chemistry Letters, 2016, 7, 3014-3021.	2.1	148
60	Carbon-coated Si micrometer particles binding to reduced graphene oxide for a stable high-capacity lithium-ion battery anode. Journal of Materials Chemistry A, 2016, 4, 17757-17763.	5.2	25
61	Influence of Electron Extracting Interface Layers in Organic Bulkâ€Heterojunction Solar Cells. Advanced Materials Interfaces, 2016, 3, 1500422.	1.9	8
62	NiSi_x/a-Si Nanowires with Interfacial a-Ge as Anodes for High-Rate Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 673-679.	4.0	11
63	Interfacial nitrogen stabilizes carbon-coated mesoporous silicon particle anodes. Journal of Materials Chemistry A, 2016, 4, 434-442.	5.2	37
64	High-performance Ge p-i-n photodetector on Si substrate. Optoelectronics Letters, 2015, 11, 195-198.	0.4	3
65	Evolution of Laser-Induced Specific Nanostructures on SiGe Compounds via Laser Irradiation Intensity Tuning. IEEE Photonics Journal, 2014, 6, 1-5.	1.0	4
66	Ohmic contact formation of metal/amorphous-Ge/n-Ge junctions with an anomalous modulation of Schottky barrier height. Applied Physics Letters, 2014, 105, .	1.5	17
67	Inâ€Situ Switching from Barrierâ€Limited to Ohmic Anodes for Efficient Organic Optoelectronics. Advanced Functional Materials, 2014, 24, 3051-3058.	7.8	33
68	The study of temperature dependent strain in Ge epilayer with SiGe/Ge buffer layer on Si substrate with different thickness. Applied Physics Letters, 2014, 104, 241605.	1.5	5
69	Probing the switching mechanism in ZnO nanoparticle memristors. Journal of Applied Physics, 2014, 116, 114501.	1.1	23
70	Built-in potential shift and Schottky-barrier narrowing in organic solar cells with UV-sensitive electron transport layers. Physical Chemistry Chemical Physics, 2014, 16, 12131-12136.	1.3	11
71	Resonant cavity enhanced photoluminescence of tensile strained Ge/SiGe quantum wells on silicon-on-insulator substrate. Optoelectronics Letters, 2014, 10, 213-215.	0.4	3
72	Self-mask fabrication of uniformly orientated SiGe island/SiGe/Si hetero-nanowire arrays with controllable sizes. Journal of Materials Chemistry C, 2013, 1, 6878.	2.7	3

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73	Influence of Implantation Damages and Intrinsic Dislocations on Phosphorus Diffusion in Ge. IEEE Transactions on Electron Devices, 2013, 60, 3741-3745.	1.6	7
74	Improved Performance and Stability of Inverted Organic Solar Cells with Solâ€“Gel Processed, Amorphous Mixed Metal Oxide Electron Extraction Layers Comprising Alkaline Earth Metals. Advanced Energy Materials, 2013, 3, 1428-1436.	10.2	67
75	Thermal stability investigation of SiGe virtual substrate with a thin Ge buffer layer grown on Si substrate. Journal of Crystal Growth, 2013, 375, 115-118.	0.7	2
76	Influence of the hydrogen implantation power density on ion cutting of Ge. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2013, 31, .	0.6	2
77	In situ doped phosphorus diffusion behavior in germanium epilayer on silicon substrate by ultra-high vacuum chemical vapor deposition. Applied Physics Letters, 2013, 102, .	1.5	9
78	A Study of the Schottky-Barrier Height of Nickel Germanosilicide Contacts Formed on $hbox{Si}_{1-x}hbox{Ge}_{x}$ Epilayer on Si Substrates. IEEE Transactions on Electron Devices, 2012, 59, 2438-2443.	1.6	3
79	Novel Photoluminescence from Porous SiGe/Si Multilayer Structure. , 2012, , .		0
80	Properties of ultraâ€thin SiGeâ€onâ€insulator materials prepared by Ge condensation method. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 2027-2030.	0.8	0
81	Modulation of Schottky Barrier Height of Metal/TaN/n-Ge Junctions by Varying TaN Thickness. IEEE Transactions on Electron Devices, 2012, 59, 1328-1331.	1.6	19
82	Effect of excimer laser annealing on the silicon nanocrystals embedded in silicon-rich silicon nitride film. Applied Physics A: Materials Science and Processing, 2012, 106, 251-255.	1.1	8
83	Energy band design for p-type tensile strained Si/SiGe multi-quantum well infrared photodetector. Optoelectronics Letters, 2011, 7, 175-177.	0.4	1
84	Microcavity effects in SiGe/Si heterogeneous nanostructures prepared by electrochemical anodization of SiGe/Si multiple quantum wells. Journal of Applied Physics, 2011, 110, 103101.	1.1	0
85	Preparation for Si/Se/Si sandwich structure on Si (001). , 2010, , .		0
86	Fullerene-multiwalled carbon nanotube complexes for bulk heterojunction photovoltaic cells. Applied Physics Letters, 2010, 96, 143303.	1.5	30
87	Thermal Stability of Nickel Germanide Formed on Tensile-Strained Ge Epilayer on Si Substrate. IEEE Electron Device Letters, 2010, 31, 863-865.	2.2	15
88	Enhanced photoluminescence of strained Ge with a Î´-doping SiGe layer on silicon and silicon-on-insulator. Applied Physics Letters, 2009, 95, .	1.5	18
89	Room temperature photoluminescence of tensile-strained Ge/Si0.13Ge0.87 quantum wells grown on silicon-based germanium virtual substrate. Applied Physics Letters, 2009, 94, 141902.	1.5	43
90	Microwave-assisted solid-state grafting of multi-walled carbon nanotubes on polyurethane for the synthesis of a composite with optical limiting properties. Journal of Materials Chemistry, 2009, 19, 6568.	6.7	20

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91	Investigation of nanoscale morphological changes in organic photovoltaics during solvent vapor annealing. Journal of Materials Chemistry, 2008, 18, 306-312.	6.7	288
92	Metal-semiconductor-metal Ge photodetectors on SOI substrates for near infrared wavelength operation. , 2008, , .		0
93	Preparation for SiGe/Si heterogeneous nanostructures via a two-step approach strategy. , 2008, , .		0
94	Comment on â€œUse of Si+ pre-ion-implantation on Si substrate to enhance the strain relaxation of the GexSi1â^'x metamorphic buffer layer for the growth of Ge layer on Si substrateâ€•[Appl. Phys. Lett. 90, 083507 (2007)]. Applied Physics Letters, 2008, 93, 156102.	1.5	0
95	Processing of fullerene-single wall carbon nanotube complex for bulk heterojunction photovoltaic cells. Applied Physics Letters, 2007, 91, 253112.	1.5	38
96	A fullereneâ€“single wall carbon nanotube complex for polymer bulk heterojunction photovoltaic cells. Journal of Materials Chemistry, 2007, 17, 2406-2411.	6.7	190
97	Epitaxial Growth and Luminescence Characterization of Si-based Double Heterostructures Light-emitting Diodes with Iron Disilicide Active Region. Materials Research Society Symposia Proceedings, 2006, 958, 1.	0.1	0
98	Deducing localized surface plasmon properties through analysis of the far-field optical spectra. Journal Physics D: Applied Physics, 0, , .	1.3	1
99	Dipole-like and quadrupole-like reflection modes for Ag nanocube arrays on dielectric substrates. Journal Physics D: Applied Physics, 0, , .	1.3	0