Dong-Seon Lee

List of Publications by Year
in descending order

76 papers	1,249 citations	361388 20 h-index	414395 32 g-index
76 all docs	76 docs citations	76 times ranked	1553 citing authors

#	Article	IF	Citations
1	Analyses of pâ€“n heterojunction in 9.4%-efficiency CZTSSe thin-film solar cells: Effect of Cu content. Journal of Alloys and Compounds, 2022, 910, 164899.	5.5	4
2	The Role of the Graphene Oxide (GO) and Reduced Graphene Oxide (RGO) Intermediate Layer in CZTSSe Thin-Film Solar Cells. Materials, 2022, 15, 3419.	2.9	4
3	Monolithic integration of AlGaInP red and InGaN blue/green LEDs. Semiconductors and Semimetals, 2021, 106, 345-387.	0.7	0
4	Toward Large-Scale Ga₂O₃ Membranes via Quasi-Van Der Waals Epitaxy on Epitaxial Graphene Layers. ACS Applied Materials & Interfaces, 2021, 13, 13410-13418.	8.0	17
5	Improving Ultraviolet Responses in Cu2ZnSn(S,Se)4 Thin-Film Solar Cells Using Quantum Dot-Based Luminescent Down-Shifting Layer. Nanomaterials, 2021, 11, 1166.	4.1	3
6	Highly Efficient Fullâ€Color Inorganic LEDs on a Single Wafer by Using Multiple Adhesive Bonding. Advanced Materials Interfaces, 2021, 8, 2100300.	3.7	16
7	Influence of Al-doped ZnO transparent electrodes on thin-film interference in Cu2ZnSn(S,Se)4 thin-film solar cells prepared via a sputtering method. Materials Science in Semiconductor Processing, 2021, 127, 105719.	4.0	5
8	Chemical tailoring of sodium content for optimization of interfacial band bending and alignment in flexible kesterite solar cells. Solar Energy Materials and Solar Cells, 2021, 230, 111243.	6.2	8
9	Annealing-based manipulation of thermal phonon transport from light-emitting diodes to graphene. Journal of Applied Physics, 2021, 130, .	2.5	3
10	Controlling the Chromaticity of White Organic Lightâ€Emitting Diodes Using a Microcavity Architecture. Advanced Optical Materials, 2020, 8, 1901365.	7.3	10
11	Impact of Na Doping on the Carrier Transport Path in Polycrystalline Flexible Cu₂ZnSn(S,Se)₄ Solar Cells. Advanced Science, 2020, 7, 1903085.	11.2	25
12	Morphological control of Cu2ZnSn(S,Se)4 absorber films via inverted annealing for high-performance solar cells. Applied Surface Science, 2020, 534, 147610.	6.1	4
13	Optimization of the Secondary Optical Element of a Hybrid Concentrator Photovoltaic Module Considering the Effective Absorption Wavelength Range. Applied Sciences (Switzerland), 2020, 10, 2051.	2.5	1
14	Enhanced Emission of Deep Ultraviolet Light-Emitting Diodes through Using Work Function Tunable Cu Nanowires as the Top Transparent Electrode. Journal of Physical Chemistry Letters, 2020, 11, 2559-2569.	4.6	14
15	Flexible High-Efficiency CZTSSe Solar Cells on Diverse Flexible Substrates via an Adhesive-Bonding Transfer Method. ACS Applied Materials & Interfaces, 2020, 12, 8189-8197.	8.0	20
16	Influence of Temperatureâ€Dependent Substrate Decomposition on Graphene for Separable GaN Growth. Advanced Materials Interfaces, 2019, 6, 1900821.	3.7	31
17	Gallium Nitride: Influence of Temperatureâ€Dependent Substrate Decomposition on Graphene for Separable GaN Growth (Adv. Mater. Interfaces 18/2019). Advanced Materials Interfaces, 2019, 6, 1970114.	3.7	0
18	Strategy toward the fabrication of ultrahigh-resolution micro-LED displays by bonding-interface-engineered vertical stacking and surface passivation. Nanoscale, 2019, 11, 23139-23148.	5.6	44

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19	Effects of nitrogen flow rate on the morphology and composition of AlGaN nanowires grown by plasma-assisted molecular beam epitaxy. Journal of Crystal Growth, 2019, 528, 125233.	1.5	3
20	A highly conductive and flexible metal mesh/ultrathin ITO hybrid transparent electrode fabricated using low-temperature crystallization. Journal of Alloys and Compounds, 2019, 794, 114-119.	5.5	16
21	Enhanced performance of InGaN/GaN MQW LED with strain-relaxing Ga-doped ZnO transparent conducting layer. Optics Express, 2019, 27, A458.	3.4	6
22	Magnetically enhanced luminescence of CdSe/ZnS quantum dot light-emitting diodes using circular ferromagnetic Co/Pt multilayer disks. Optics Express, 2019, 27, 36601.	3.4	2
23	Improved efficiency of InGaN/GaN light-emitting diodes with perpendicular magnetic field gradients. Optics Express, 2019, 27, 36708.	3.4	0
24	Quantification of effective thermal conductivity in the annealing process of Cu₂ZnSn(S,Se)₄ solar cells with 9.7% efficiency fabricated by magnetron sputtering. Sustainable Energy and Fuels, 2018, 2, 999-1006.	4.9	6
25	Spontaneous and Selective Nanowelding of Silver Nanowires by Electrochemical Ostwald Ripening and High Electrostatic Potential at the Junctions for High-Performance Stretchable Transparent Electrodes. ACS Applied Materials & Interfaces, 2018, 10, 14124-14131.	8.0	47
26	Heterogeneous Integration Toward a Monolithic 3-D Chip Enabled by IIIâ€"V and Ge Materials. IEEE Journal of the Electron Devices Society, 2018, 6, 579-587.	2.1	26
27	Influence of effective thermal conductivity on the performance of the highly efficient CZTSSe thin film solar cells. , 2018, , .		0
28	Hybrid Full-Color Inorganic Light-Emitting Diodes Integrated on a Single Wafer Using Selective Area Growth and Adhesive Bonding. ACS Photonics, 2018, 5, 4413-4422.	6.6	60
29	Detailed analysis and performance limiting mechanism of Si delta-doped GaAs tunnel diode grown by MBE. Japanese Journal of Applied Physics, 2018, 57, 120306.	1.5	3
30	45â€4: Hybrid Integration of RGB Inorganic LEDs using Adhesive Bonding and Selective Area Growth. Digest of Technical Papers SID International Symposium, 2018, 49, 604-606.	0.3	3
31	Selectiveâ€area growth of doped GaN nanorods by pulsedâ€mode MOCVD: Effect of Si and Mg dopants. Physica Status Solidi (B): Basic Research, 2017, 254, 1600722.	1.5	14
32	III-nitride coreâ€"shell nanorod array on quartz substrates. Scientific Reports, 2017, 7, 45345.	3.3	16
33	Very thin ITO/metal mesh hybrid films for a high-performance transparent conductive layer in GaN-based light-emitting diodes. Nanotechnology, 2017, 28, 045201.	2.6	5
34	High-performance metal mesh/graphene hybrid films using prime-location and metal-doped graphene. Scientific Reports, 2017, 7, 10225.	3.3	10
35	Monolithic integration of AlGaInP-based red and InGaN-based green LEDs via adhesive bonding for multicolor emission. Scientific Reports, 2017, 7, 10333.	3.3	39
36	Influence of precursor uniformity on the performance of Cu2ZnSnSxSe4â^'x thin film solar cells prepared by the sputtering method. Thin Solid Films, 2017, 638, 305-311.	1.8	10

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37	Earth-Abundant CZTSSe Thin Film Solar Cells on Flexible Stainless Steel Foil Substrates. , 2017, , .		1
38	Fabrication of a vertically-stacked passive-matrix micro-LED array structure for a dual color display. Optics Express, 2017, 25, 2489.	3.4	57
39	Improvement of light extraction for a target wavelength in InGaN/GaN LEDs with an indium tin oxide dual layer by oblique angle deposition. Applied Physics Express, 2016, 9, 082103.	2.4	3
40	Size-controlled InGaN/GaN nanorod LEDs with an ITO/graphene transparent layer. Nanotechnology, 2016, 27, 465202.	2.6	3
41	Structural and optical study of coreâ€"shell InGaN layers of nanorod arrays with multiple stacks of InGaN/GaN superlattices for absorption of longer solar spectrum. Japanese Journal of Applied Physics, 2016, 55, 05FG03.	1.5	7
42	Effect of p-GaN hole concentration on the stabilization and performance of a graphene current spreading layer in near-ultraviolet light-emitting diodes. Current Applied Physics, 2016, 16, 1382-1387.	2.4	3
43	Color tunable monolithic InGaN/GaN LED having a multi-junction structure. Optics Express, 2016, 24, A667.	3.4	21
44	Ag nanoparticles-embedded surface plasmonic InGaN-based solar cells via scattering and localized field enhancement. Optics Express, 2016, 24, A1176.	3.4	15
45	Highly elongated vertical GaN nanorod arrays on Si substrates with an AlN seed layer by pulsed-mode metalâ€"organic vapor deposition. CrystEngComm, 2016, 18, 1505-1514.	2.6	33
46	Optical and structural properties of microcrystalline GaN on an amorphous substrate prepared by a combination of molecular beam epitaxy and metalâ€"organic chemical vapor deposition. Japanese Journal of Applied Physics, 2016, 55, 05FB03.	1.5	5
47	Domain Aligned Growth of Molybdenum Disulfide on Various Substrates by Chemical Vapor Deposition. Science of Advanced Materials, 2016, 8, 1683-1687.	0.7	0
48	Solution-Based High-Density Arrays of Dielectric Microsphere Structures for Improved Crystal Quality of III-Nitride Layers on Si Substrates. Journal of Nanomaterials, 2015, 2015, 1-7.	2.7	0
49	Evolutionary growth of microscale single crystalline GaN on an amorphous layer by the combination of MBE and MOCVD. CrystEngComm, 2015, 17, 5849-5859.	2.6	8
50	Combined Effect of Carrier Localization and Polarity in In_{<I>x</I>}Ga_{1âˆ’<I>x</I>}N/GaN Quantum Wells. Journal of Nanoscience and Nanotechnology, 2015, 15, 5933-5936.	0.9	3
51	Ag-mesh-combined graphene for an indium-free current spreading layer in near-ultraviolet light-emitting diodes. RSC Advances, 2015, 5, 75325-75332.	3.6	6
52	Highly ordered catalyst-free InGaN/GaN coreâ€"shell architecture arrays with expanded active area region. Nano Energy, 2015, 11, 294-303.	16.0	47
53	Graphene interlayer for current spreading enhancement by engineering of barrier height in GaN-based light-emitting diodes. Optics Express, 2014, 22, A1040.	3.4	17
54	Light-extraction enhancement of a GaN-based LED covered with ZnO nanorod arrays. Nanoscale, 2014, 6, 4371-4378.	5.6	60

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55	Pseudomorphic thick InGaN growth with a grading interlayer by metal organic chemical vapor deposition for InGaN/GaN pâ€“iâ€“n solar cells. Journal of Crystal Growth, 2014, 387, 23-28.	1.5	13
56	Morphology development of GaN nanowires using a pulsed-mode MOCVD growth technique. CrystEngComm, 2014, 16, 2273-2282.	2.6	82
57	Growth, Fabrication, and Characterization of GaN-based Columnar LEDs. , 2014, , .		0
58	Improved light emission through an AlGaN coalescence layer of 365-nm ultraviolet lighting-emitting diodes on patterned sapphire substrates. Journal of the Korean Physical Society, 2013, 62, 942-948.	0.7	0
59	Controlled synthesis of ZnO spheres using structure directing agents. Thin Solid Films, 2013, 534, 76-82.	1.8	15
60	Improved photovoltaic effects in InGaN-based multiple quantum well solar cell with graphene on indium tin oxide nanodot nodes for transparent and current spreading electrode. Applied Physics Letters, 2013, 102, 031116.	3.3	13
61	Thin Ni film on graphene current spreading layer for GaN-based blue and ultra-violet light-emitting diodes. Applied Physics Letters, 2013, 102, .	3.3	26
62	nâ€<scp>Z</scp>n<scp>O</scp>/iâ€<scp>I</scp>n<scp>G</scp>a<scp>N</scp>/pâ€<scp>G</scp>a<scp>N</scp> heterostructure for solar cell application. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 2214-2218.	1.8	7
63	Size-controlled InGaN/GaN nanorod array fabrication and optical characterization. Optics Express, 2013, 21, 16854.	3.4	32
64	InGaN/GaN microcolumn light-emitting diode arrays with sidewall metal contact. Optics Express, 2013, 21, 22320.	3.4	9
65	Morphology Evolution of Pulsed-Flux Ga-Polar GaN Nanorod Growth by Metal Organic Vapor Phase Epitaxy and Its Nucleation Dependence. Applied Physics Express, 2013, 6, 075501.	2.4	17
66	Effect of indium composition on carrier escape in InGaN/GaN multiple quantum well solar cells. Applied Physics Letters, 2013, 103, .	3.3	27
67	Efficiency improvement in InGaN-based solar cells by indium tin oxide nano dots covered with ITO films. Optics Express, 2012, 20, A991.	3.4	28
68	Optical Characterization of Double Peak Behavior in $10ar{1}1$ Semipolar Light-Emitting Diodes on Miscut m-Plane Sapphire Substrates. Japanese Journal of Applied Physics, 2012, 51, 052101.	1.5	1
69	Improved efficiency of InGaN/GaN-based multiple quantum well solar cells by reducing contact resistance. Superlattices and Microstructures, 2012, 52, 299-305.	3.1	12
70	Au nanoparticle-decorated graphene electrodes for GaN-based optoelectronic devices. Applied Physics Letters, 2012, 101, .	3.3	48
71	A self-assembled Ag nanoparticle agglomeration process on graphene for enhanced light output in GaN-based LEDs. Nanotechnology, 2012, 23, 255201.	2.6	33
72	Effect of IIIâ€nitride polarization on <i>V</i>_{OC} in pâ€“iâ€“n and MQW solar cells. Physica Status Solidi - Rapid Research Letters, 2011, 5, 86-88.	2.4	14

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73	InGaN-Based pâ€"iâ€"n Solar Cells with Graphene Electrodes. Applied Physics Express, 2011, 4, 052302.	2.4	36
74	Improved Photovoltaic Effects of a Vertical-Type InGaN/GaN Multiple Quantum Well Solar Cell. Japanese Journal of Applied Physics, 2011, 50, 092301.	1.5	20
75	Improved Photovoltaic Effects of a Vertical-Type InGaN/GaN Multiple Quantum Well Solar Cell. Japanese Journal of Applied Physics, 2011, 50, 092301.	1.5	16
76	Improved Efficiency by Using Transparent Contact Layers in InGaN-Based p-i-n Solar Cells. IEEE Electron Device Letters, 2010, 31, 1140-1142.	3.9	36