Jea-Young Leem

List of Publications by Year
in descending order

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110	773	687220	713332
papers	citations	13 h-index	21 g-index

112	112	112	910
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Morphology modification of ZnO nanosheets and ZnO nanorods via thermal dissipation system for UV photoresponse improvement. Materials Science in Semiconductor Processing, 2022, 138, 106286.	1.9	4
2	Synthesis of interface modified MoS2/ZnO heterostructure via simple hydrothermal method and their enhanced UV photodetection characteristics with ultrafast photoresponse speed. Materials Research Bulletin, 2022, 150, 111767.	2.7	4
3	Modified interfaces of ZnO thin films through MoS2 addition in precursor solution for MoS2/ZnO heterojunctions and their enhanced ultraviolet photodetection properties. Journal of Alloys and Compounds, 2022, 905, 164168.	2.8	5
4	Regrowth of ZnO nanorods via VC-FTFA method and the effect of oxidation of ZnCl2 and InCl3 vapors on the photoresponse rate, photosensitivity, and stability. Materials Chemistry and Physics, 2022, 284, 126089.	2.0	0
5	Improved photoresponse properties of hydrothermally grown ZnO nanorods by controlling the Ga doping location. Journal of the Korean Physical Society, 2021, 78, 144-156.	0.3	1
6	Optimal temperature of the solâ€“gel solution used to fabricate high-quality ZnO thin films via the dip-coating method for highly sensitive UV photodetectors. Journal of the Korean Physical Society, 2021, 78, 504-509.	0.3	4
7	Crystallization of ZnO thin films without polymer substrate deformation via thermal dissipation annealing method for next generation wearable devices. RSC Advances, 2021, 11, 876-882.	1.7	9
8	Transparent and flexible ZnO nanorods induced by thermal dissipation annealing without polymer substrate deformation for next-generation wearable devices. RSC Advances, 2021, 11, 17538-17546.	1.7	6
9	Thermal Dissipation Annealing for Crystallization of Inâ€Doped ZnO Films Deposited on Polyethylene Naphthalate Substrate without Substrate Deformation. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000698.	0.8	2
10	Morphology changes of In-doped ZnO nanosheets via ZnCl2 and InCl3 vapor formation during thermal dissipation annealing process and improved UV photoresponse properties. Journal of Alloys and Compounds, 2021, 877, 160241.	2.8	5
11	Crystallization of ZnO thin films via thermal dissipation annealing method for high-performance UV photodetector with ultrahigh response speed. Scientific Reports, 2021, 11, 382.	1.6	29
12	Morphology Effect of 1D ZnO Nanostructures Designed by Hydrothermal and Thermal Annealing for Fast Ultraviolet Photodetector Applications. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900946.	0.8	4
13	Effect of the Seed Layer Type and Precursor Concentration on the Structural, Morphological, and Photoresponse Properties of Hydrothermally Grown ZnO Nanorods. Journal of Nanoscience and Nanotechnology, 2020, 20, 298-303.	0.9	0
14	Improving of the Rise and Decay Rates of an Ultraviolet Photodetector Using Stepwise Annealed ZnO Nanorods. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800929.	0.8	5
15	Electrical and optical characterizations of InAs/GaAs quantum dot solar cells. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	1.1	3
16	Fabrication of Fast-response Ultraviolet Light Sensors with LZO Thin Films using Sol-gel Spin-coating Method. Journal of the Korean Physical Society, 2018, 72, 417-423.	0.3	2
17	Effect of the pH of an Aqueous Solution on the Structural, Optical, and Photoresponse Properties of Hydrothermally Grown ZnO Nanorods and the Fabrication of a High Performance Ultraviolet Sensor. Journal of the Korean Physical Society, 2018, 72, 400-405.	0.3	5
18	Enhancement of the Ultraviolet Photoresponsivity of Al-doped ZnO Thin Films Prepared by using the Sol-gel Spin-coating Method. Journal of the Korean Physical Society, 2018, 72, 610-614.	0.3	11

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19	Effect of an Electrochemically Oxidized ZnO Seed Layer on ZnO Nanorods Grown by using Electrodeposition. Journal of the Korean Physical Society, 2018, 72, 1237-1242.	0.3	3
20	Effect of Zn Nitrate Hexahydrate Concentration on ZnO Nanorods Grown from an Electrochemically Oxidized ZnO Seed Layer. Journal of the Korean Physical Society, 2018, 72, 1364-1368.	0.3	4
21	Effect of Electric Current on Oxidation of Zn Films to ZnO Films Using Electrochemical System. Journal of Nanoscience and Nanotechnology, 2018, 18, 6095-6100.	0.9	1
22	Effect of an Oxidized Metallic Zn Buffer Layer on the Morphological, Optical, Electrical, and Photoresponse Properties of Spin-coated ZnO Films. Journal of the Korean Physical Society, 2018, 72, 1243-1248.	0.3	0
23	A regrowth method for the fabrication of high-quality ZnO films and their application in fast-response UV sensors. Journal of the Korean Physical Society, 2017, 71, 47-53.	0.3	0
24	Size Control of ZnO Nanorods Using the Hydrothermal Method in Conjunction with Substrate Rotation. Journal of Nanoscience and Nanotechnology, 2017, 17, 7952-7956.	0.9	9
25	Effects of Al-Doping Concentration on the Photoresponse Properties of Al-Doped ZnO Thin Films with ZnO Buffer Layer. Journal of Nanoscience and Nanotechnology, 2017, 17, 7879-7882.	0.9	2
26	Preparation of Highâ€Quality <scp>ZnO</scp> Nanorods by Electrodeposition Using a Rotating Cathode and Improvements in their <scp>UV</scp> Sensing Properties. Bulletin of the Korean Chemical Society, 2016, 37, 1278-1284.	1.0	3
27	Improved UV photoresponse properties of high-quality ZnO thin films through the use of a ZnO buffer layer on flexible polyimide substrates. Journal of the Korean Physical Society, 2016, 68, 705-709.	0.3	3
28	Enhanced Light Emission from Monolayer Semiconductors by Forming Heterostructures with ZnO Thin Films. ACS Applied Materials & Interfaces, 2016, 8, 28809-28815.	4.0	47
29	Temperature dependence of the photovoltage from Franz-Keldysh oscillations in a GaAs p+-i-n+ structure. Journal of the Korean Physical Society, 2015, 67, 916-920.	0.3	3
30	Structural and electrical properties of catalyst-free Si-doped InAs nanowires formed on Si(111). Scientific Reports, 2015, 5, 16652.	1.6	16
31	Evaluation of the photo-generated carrier density of GaAs solar cells by using electrical and optical biased electroreflectance spectroscopy. Journal of the Korean Physical Society, 2015, 67, 723-727.	0.3	7
32	Structural and Optical Properties of Nitrogenâ€doped Zinc Oxide Thin Films Grown on Muscovite Mica Substrates Using Solâ€“Gel Process. Bulletin of the Korean Chemical Society, 2015, 36, 2267-2271.	1.0	2
33	Improvement of the Crystallinity of <scp>MgZnO</scp> with a Zn Buffer Layer by Solâ€“Gel Spinâ€coating Method. Bulletin of the Korean Chemical Society, 2015, 36, 1575-1579.	1.0	3
34	Photoluminescence and Structural Properties of Tinâ€doped <scp>ZnO</scp> Thin Films Deposited by Solâ€“Gel Dip Coating. Bulletin of the Korean Chemical Society, 2015, 36, 1613-1617.	1.0	0
35	Effect of a Sn seed layer and ZnCl2 concentration on electrodeposited ZnO nanostructures. Journal of the Korean Physical Society, 2015, 66, 1253-1258.	0.3	7
36	Effects of doping concentration on the structural and the optical properties of Sol-gel-derived In-doped ZnO thin films grown on muscovite mica substrates. Journal of the Korean Physical Society, 2015, 66, 1516-1520.	0.3	2

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37	Oxidation-temperature dependence of the optical properties of ZnO thin films grown on corning glass by oxidation of metallic Zn. Journal of the Korean Physical Society, 2015, 67, 1278-1283.	0.3	2
38	Optical, Electrical, and UV Photoresponse Properties of Fluorine-Doped ZnO Thin Films Grown on Flexible Mica Substrates. Journal of Electronic Materials, 2015, 44, 4717-4721.	1.0	6
39	Facile Synthesis and Enhanced Ultraviolet Emission of ZnO Nanorods Prepared by Vapor-Confined Face-to-Face Annealing. ACS Applied Materials & Interfaces, 2015, 7, 873-879.	4.0	11
40	Periodic variation in the electroluminescence intensity on a single pattern from InGaN/GaN light-emitting diodes fabricated on lens-shaped patterns. Journal of the Korean Physical Society, 2015, 66, 266-269.	0.3	1
41	Influence of Al-, Co-, Cu-, and In-doped ZnO buffer layers on the structural and the optical properties of ZnO thin films. Journal of the Korean Physical Society, 2015, 66, 224-228.	0.3	7
42	Influence of annealing temperature on photoluminescence properties and optical constants of N-doped ZnO thin films grown on muscovite mica substrates. Physica B: Condensed Matter, 2015, 476, 71-76.	1.3	13
43	Investigation of internal electric fields in GaAs solar cell under highly-concentrated light. Journal of the Korean Physical Society, 2015, 66, 667-671.	0.3	9
44	Effect of post-annealing temperature on structural and optical properties of ZnO thin films grown on mica substrates using sol-gel spin-coating. Journal of the Korean Physical Society, 2015, 67, 870-874.	0.3	7
45	Synthesis and fast-response of a photodetector of hydrothermally grown ZnO nanorods through the use of a graphene oxide/ZnO seed layer. RSC Advances, 2015, 5, 94222-94226.	1.7	5
46	Facile synthesis and an effective doping method for ZnO:In 3+ nanorods with improved optical properties. Journal of Alloys and Compounds, 2015, 651, 1-7.	2.8	5
47	Counterpoise-assisted annealing effects on enhanced photoluminescence and electrical properties of solâ€“gel-derived ZnO thin films grown on polyimide substrates. Materials Chemistry and Physics, 2015, 167, 18-21.	2.0	4
48	Optimizing the optical properties of fluorine-doped ZnO thin films deposited by sol-gel spin-coating. Journal of the Korean Physical Society, 2014, 65, 509-514.	0.3	5
49	A novel regrowth mechanism and enhanced optical properties of Mg_{0.25}Zn_{0.75}O nanorods subjected to vapor-confined face-to-face annealing. Journal of Materials Chemistry C, 2014, 2, 9918-9923.	2.7	10
50	Effect of different sol concentrations on the properties of nanocrystalline ZnO thin films grown on FTO substrates by sol-gel spin-coating. Journal of the Korean Physical Society, 2014, 65, 480-486.	0.3	9
51	Effects of Ga concentration on the structural, electrical and optical properties of Ga-doped ZnO thin films grown by sol-gel method. Journal of the Korean Physical Society, 2014, 64, 109-113.	0.3	6
52	Influence of Cr-doping on the structural and the optical properties of ZnO thin films prepared by sol-gel spin coating. Journal of the Korean Physical Society, 2014, 64, 41-45.	0.3	2
53	Photoluminescence studies of ZnO films fabricated by using a combination of a hydrothermal method and plasma-assisted molecular beam epitaxy regrowth. Journal of the Korean Physical Society, 2014, 64, 455-460.	0.3	1
54	Hydrothermally grown boron-doped ZnO nanorods for various applications: Structural, optical, and electrical properties. Electronic Materials Letters, 2014, 10, 81-87.	1.0	15

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55	Influence of gas flow on structural and optical properties of ZnO submicron particles grown on Au nano thin films by vapor phase transport. Electronic Materials Letters, 2014, 10, 915-920.	1.0	1
56	A novel regrowth method to simply prepare Li-doped ZnO nanorods and improve their photoluminescence properties. RSC Advances, 2014, 4, 46635-46638.	1.7	2
57	Structural, optical, and electrical properties of ZnO thin films deposited by sol-gel dip-coating process at low temperature. Electronic Materials Letters, 2014, 10, 869-878.	1.0	12
58	Evaluation of the junctionâ€™s electric field and the ideality factor of GaAs p-n junction solar cells by using photoreflectance spectroscopy. Journal of the Korean Physical Society, 2014, 64, 1031-1035.	0.3	21
59	K-doping effects on the characteristics of ZnO thin films synthesized by using a spin-coating method. Journal of the Korean Physical Society, 2014, 64, 1581-1585.	0.3	9
60	Optical and electrical properties of InAs/GaAs quantum-dot solar cells. Journal of the Korean Physical Society, 2014, 64, 895-899.	0.3	12
61	Seed-layer-free hydrothermal growth of zinc oxide nanorods on porous silicon. Electronic Materials Letters, 2014, 10, 565-571.	1.0	5
62	Photoluminescent properties of Cd x Zn1â^'x O thin films prepared by sol-gel spin-coating method. Electronic Materials Letters, 2013, 9, 497-500.	1.0	3
63	Effects of in doping on structural and optical properties of ZnO nanorods grown by hydrothermal method. Electronic Materials Letters, 2013, 9, 509-512.	1.0	8
64	Effects of annealing temperature on optical properties of ZnO nanorods with Mg0.2Zn0.8O capping layers. Electronic Materials Letters, 2013, 9, 545-548.	1.0	2
65	Effects of post-heated ZnO seed layers on structural and optical properties of ZnO nanostructures grown by hydrothermal method. Electronic Materials Letters, 2013, 9, 293-298.	1.0	17
66	Improved optical and electrical properties of solâ€“gel-derived boron-doped zinc oxide thin films. Journal of Sol-Gel Science and Technology, 2013, 67, 580-591.	1.1	10
67	Influences of dot-in-a-well structure and GaAs insertion layer on InP-based InAs quantum dots. Journal of the Korean Physical Society, 2013, 62, 1274-1279.	0.3	2
68	Growth and optical properties of sol-gel ZnO thin films grown on R-plane sapphire substrates. Journal of the Korean Physical Society, 2013, 62, 1154-1159.	0.3	3
69	Improved blue electroluminescence in InGaN/GaN multiple-quantum well light-emitting diodes with an electron blocking layer. Journal of the Korean Physical Society, 2013, 62, 1160-1163.	0.3	0
70	Structural properties and optical constants of Co-doped ZnO thin films deposited using sol-gel spin-coating. Journal of the Korean Physical Society, 2013, 63, 1962-1967.	0.3	1
71	Analysis of the abnormal voltage-current behaviors on localized carriers of InGaN/GaN multiple quantum well from electron blocking layer. Journal of the Korean Physical Society, 2013, 63, 1784-1788.	0.3	0
72	Enhanced optical and electrical properties of boron-doped zinc-oxide thin films prepared by using the sol-gel dip-coating method. Journal of the Korean Physical Society, 2013, 63, 1804-1808.	0.3	6

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73	Influence of dislocation density on carrier injection in InGaN/GaN light-emitting diodes operated with alternating current. Applied Physics Letters, 2013, 102, 011115.	1.5	3
74	Studies on temperature- and excitation-power-dependent photoluminescence of ZnO thin film grown by plasma-assisted molecular beam epitaxy. Current Applied Physics, 2013, 13, S168-S171.	1.1	11
75	Temperature-dependent Photoluminescence of Boron-doped ZnO Nanorods. Bulletin of the Korean Chemical Society, 2013, 34, 3335-3339.	1.0	20
76	Optical Properties of ZnO Soccer-Ball Structures Grown by Vapor Phase Transport. Japanese Journal of Applied Physics, 2012, 51, 021102.	0.8	3
77	Structural and blue emission properties of Al-doped ZnO nanorod array thin films grown by hydrothermal method. Electronic Materials Letters, 2012, 8, 445-450.	1.0	46
78	Catalyst-free ZnO on porous silicon grown by using vapor phase transport. Journal of the Korean Physical Society, 2012, 60, 1129-1134.	0.3	1
79	Temperature dependence of the optical properties of high-density GaAs quantum dots. Journal of the Korean Physical Society, 2012, 60, 1428-1432.	0.3	3
80	Effects of post-annealing temperature on the properties of ZnO nanorods grown on homogenous seed-layers by using the hydrothermal method. Journal of the Korean Physical Society, 2012, 60, 1605-1610.	0.3	2
81	Optical parameters of Mg x Zn1â^'x O thin films prepared by using the sol-gel method. Journal of the Korean Physical Society, 2012, 60, 830-835.	0.3	4
82	Fabrication and photoluminescence studies of porous ZnO nanorods. Journal of the Korean Physical Society, 2012, 61, 102-107.	0.3	3
83	Temperature-dependent photoluminescence of ZnO thin films deposited by using the sol-gel dip-coating method. Journal of the Korean Physical Society, 2012, 61, 1171-1176.	0.3	0
84	Photoluminescence studies of ZnO thin films prepared using a laser-assisted sol-gel method. Journal of the Korean Physical Society, 2012, 61, 1826-1830.	0.3	1
85	Effects of precursor concentrations on ZnO nano-fibrous thin films grown by using the sol-gel dip-coating method. Journal of the Korean Physical Society, 2012, 61, 1925-1931.	0.3	10
86	Formation characteristics of a self-catalyzed GaAs nanowire without a Ga droplet on Si(111). Journal of the Korean Physical Society, 2012, 61, 2017-2021.	0.3	2
87	Structural dependency of the optical properties of coupled GaAs quantum qots and rings. Journal of the Korean Physical Society, 2012, 61, 455-459.	0.3	2
88	Oxygen plasma power dependence on ZnO grown on porous silicon substrates by plasma-assisted molecular beam epitaxy. Materials Research Bulletin, 2012, 47, 2879-2883.	2.7	4
89	Photoluminescence studies of ZnO thin films on porous silicon grown by plasma-assisted molecular beam epitaxy. Current Applied Physics, 2012, 12, S94-S98.	1.1	9
90	Laser-assisted sol-gel growth and characteristics of ZnO thin films. Applied Physics Letters, 2012, 100, 252108.	1.5	13

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91	Modification in the structural and optical characteristics of InAs quantum dots by manipulating the strain distribution. Journal of the Korean Physical Society, 2012, 60, 460-465.	0.3	2
92	Hydrothermal growth and properties of rod-like ZnO submicron crystals on Al-doped ZnO seed layers with different Al concentrations. Journal of the Korean Physical Society, 2012, 60, 94-98.	0.3	13
93	Effects of annealing atmosphere and temperature on properties of ZnO thin films on porous silicon grown by plasma-assisted molecular beam epitaxy. Electronic Materials Letters, 2012, 8, 123-129.	1.0	13
94	Growth and optical characteristics of Mg-doped GaAs epitaxial layers by molecular beam epitaxy. Microelectronic Engineering, 2012, 89, 6-9.	1.1	9
95	Effects of buffer layer thickness on properties of ZnO thin films grown on porous silicon by plasma-assisted molecular beam epitaxy. Vacuum, 2012, 86, 1373-1379.	1.6	19
96	Effects of growth temperature for buffer layers on properties of ZnO thin films grown on porous silicon by plasma-assisted molecular beam epitaxy. Optical Materials, 2012, 34, 1543-1548.	1.7	17
97	Effects of growth temperature on the structural and the optical properties of ZnO thin films on porous silicon grown by using plasma-assisted molecular beam epitaxy. Journal of the Korean Physical Society, 2012, 60, 1570-1575.	0.3	3
98	Effects of zinc capping layers and annealing on the properties of porous silicon. Journal of the Korean Physical Society, 2012, 60, 1582-1586.	0.3	3
99	Effects of post-heat-treatment temperature for seed layers on the properties of ZnO nanostructures grown by using the hydrothermal method. Journal of the Korean Physical Society, 2012, 60, 1593-1598.	0.3	5
100	Effects of growth conditions on the structural and the optical properties of ZnO submicron particles grown by using vapor phase transport. Journal of the Korean Physical Society, 2012, 60, 1599-1604.	0.3	6
101	Optical properties and crystallinity of ZnO thin films grown on porous silicon by using plasma-assisted molecular beam epitaxy. Journal of the Korean Physical Society, 2012, 60, 1949-1952.	0.3	1
102	Growth and characterization of seed layer-free ZnO thin films deposited on porous silicon by hydrothermal method. Electronic Materials Letters, 2012, 8, 75-80.	1.0	15
103	Carrier repopulation process for spatially-ordered InAs/InAlGaAs quantum dots. Journal of Applied Physics, 2011, 109, 113505.	1.1	5
104	Effects of Precursor Concentrations and Thermal Annealing on ZnO Nanorods Grown by Hydrothermal Method. Journal of Nanoscience and Nanotechnology, 2011, 11, 7479-7482.	0.9	6
105	White light emission from nano-fibrous ZnO thin films/porous silicon nanocomposite. Journal of Sol-Gel Science and Technology, 2011, 59, 364-370.	1.1	27
106	Effects of cooling rate and post-heat treatment on properties of ZnO thin films deposited by solâ€“gel method. Applied Surface Science, 2011, 257, 9019-9023.	3.1	27
107	Piezoelectric fields of localized states in trapezoidal InGaN quantum wells. Journal of Applied Physics, 2010, 108, 083110.	1.1	4
108	Optical stability of shape-engineered InAs/InAlGaAs quantum dots. Journal of Applied Physics, 2009, 105, 053510.	1.1	9

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109	Fabrication of coupled GaAs quantum dots and their optical properties. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 802-805.	0.8	8
110	The Role of AlN Interlayer in AlxGa1-xN/GaN Heterostructures with high x from 0.35 to 0.50 Grown on Sapphire (0001). Materials Research Society Symposia Proceedings, 2002, 722, 741.	0.1	0