Ho Seong Jang

List of Publications by Year
in descending order

94 papers	4,949 citations	87888 38 h-index	91884 69 g-index
96 all docs	96 docs citations	96 times ranked	5237 citing authors

#	Article	IF	Citations
1	Enhancement of red spectral emission intensity of Y3Al5O12:Ce3+ phosphor via Pr co-doping and Tb substitution for the application to white LEDs. Journal of Luminescence, 2007, 126, 371-377.	3.1	499
2	White Lightâ€Emitting Diodes with Excellent Color Rendering Based on Organically Capped CdSe Quantum Dots and Sr₃SiO₅:Ce³⁺,Li⁺ Phosphors. Advanced Materials, 2008, 20, 2696-2702.	21.0	391
3	Highly Efficient Blue Emission and Superior Thermal Stability of BaAl₁₂O₁₉:Eu²⁺ Phosphors Based on Highly Symmetric Crystal Structure. Chemistry of Materials, 2018, 30, 2389-2399.	6.7	302
4	Improvement of electroluminescent property of blue LED coated with highly luminescent yellow-emitting phosphors. Applied Physics B: Lasers and Optics, 2009, 95, 715-720.	2.2	279
5	Yellow-emitting Sr3SiO5:Ce3+,Li+ phosphor for white-light-emitting diodes and yellow-light-emitting diodes. Applied Physics Letters, 2007, 90, 041906.	3.3	207
6	Luminescence Properties and Energy Transfer of Site-Sensitive Ca_{6â^'xâ^'y}Mg_{xâ^'z}(PO₄)₄:Eu_y<sup Phosphors and Their Application to Near-UV LED-Based White LEDs. Inorganic Chemistry, 2009, 48, 11525-11532.	4.0	187
7	Effect of phosphor geometry on the luminous efficiency of high-power white light-emitting diodes with excellent color rendering property. Optics Letters, 2009, 34, 1.	3.3	128
8	Tunable full-color-emitting La0.827Al11.9O19.09:Eu2+,Mn2+ phosphor for application to warm white-light-emitting diodes. Applied Physics Letters, 2006, 89, 231909.	3.3	117
9	Rational morphology control of Î²-NaYF4:Yb,Er/Tm upconversion nanophosphors using a ligand, an additive, and lanthanide doping. Nanoscale, 2013, 5, 4242.	5.6	109
10	Highly Bright Yellow-Green-Emitting CuInS₂ Colloidal Quantum Dots with Core/Shell/Shell Architecture for White Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2015, 7, 6764-6771.	8.0	108
11	Highly Luminescent Lead Halide Perovskite Quantum Dots in Hierarchical CaF₂ Matrices with Enhanced Stability as Phosphors for White Lightâ€Emitting Diodes. Advanced Optical Materials, 2018, 6, 1701343.	7.3	107
12	Full visible light emission in Eu²⁺,Mn²⁺-doped Ca₉LiY_{0.667}(PO₄)₇ phosphors based on multiple crystal lattice substitution and energy transfer for warm white LEDs with high colour-rendering. Journal of Materials Chemistry C, 2019, 7, 3644-3655.	5.5	92
13	Facile synthesis of thermally stable CsPbBr3 perovskite quantum dot-inorganic SiO2 composites and their application to white light-emitting diodes with wide color gamut. Dyes and Pigments, 2018, 149, 246-252.	3.7	85
14	Yellow-emitting Î³-Ca_2SiO_4:Ce^3+, Li^+ phosphor for solid-state lighting: luminescent properties, electronic structure, and white light-emitting diode application. Optics Express, 2012, 20, 2761.	3.4	76
15	Orthogonal R/G/B Upconversion Luminescence-based Full-Color Tunable Upconversion Nanophosphors for Transparent Displays. Nano Letters, 2021, 21, 4838-4844.	9.1	73
16	White light emission from blue and near ultraviolet light-emitting diodes precoated with a Sr_3SiO_5:Ce^3+,Li^+ phosphor. Optics Letters, 2007, 32, 3444.	3.3	70
17	Plasmonic Nanowireâ€Enhanced Upconversion Luminescence for Anticounterfeit Devices. Advanced Functional Materials, 2016, 26, 7836-7846.	14.9	70
18	Emission Band Change of (Sr[sub 1â^'x]M[sub x])[sub 3]SiO[sub 5]:Eu[sup 2+] (M=Ca,â€,Ba) Phosphor for White Light Sources Using Blue/Near-Ultraviolet LEDs. Journal of the Electrochemical Society, 2009, 156, J138.	2.9	67

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19	Multicolor Tunable Upconversion Luminescence from Sensitized Seed-Mediated Grown LiGdF₄:Yb,Tm-Based Core/Triple-Shell Nanophosphors for Transparent Displays. Chemistry of Materials, 2018, 30, 8457-8464.	6.7	66
20	Highly bright multicolor tunable ultrasmall Î²-Na(Y,Gd)F4:Ce,Tb,Eu/Î²-NaYF4 core/shell nanocrystals. Nanoscale, 2013, 5, 9255.	5.6	64
21	Simultaneous Enhancement of Upconversion and Downshifting Luminescence via Plasmonic Structure. Nano Letters, 2015, 15, 2491-2497.	9.1	64
22	A systematic in-vivo toxicity evaluation of nanophosphor particles via zebrafish models. Biomaterials, 2014, 35, 440-449.	11.4	61
23	A Plasmonic Platform with Disordered Array of Metal Nanoparticles for Threeâ€Order Enhanced Upconversion Luminescence and Highly Sensitive Nearâ€Infrared Photodetector. Advanced Materials, 2016, 28, 7899-7909.	21.0	61
24	White-light emitting surface-functionalized ZnSe quantum dots: europium complex-capped hybrid nanocrystal. Journal of Materials Chemistry, 2011, 21, 12812.	6.7	58
25	Remote-type, high-color gamut white light-emitting diode based on InP quantum dot color converters. Optical Materials Express, 2014, 4, 1297.	3.0	58
26	Core/shell nanoparticles as hybrid platforms for the fabrication of a hydrogen peroxide biosensor. Journal of Materials Chemistry, 2010, 20, 5030.	6.7	56
27	Facile synthesis of intense green light emitting LiGdF₄:Yb,Er-based upconversion bipyramidal nanocrystals and their polymer composites. Nanoscale, 2014, 6, 7461-7468.	5.6	53
28	Particle size control of a monodisperse spherical Y2O3:Eu3+ phosphor and its photoluminescence properties. Journal of Materials Research, 2007, 22, 2017-2024.	2.6	51
29	Bright dual-mode green emission from selective set of dopant ions in Î²-Na(Y,Gd)F₄:Yb,Er/Î²-NaGdF₄:Ce,Tb core/shell nanocrystals. Optics Express, 2012, 20, 17107.	3.4	51
30	Au-incorporated NiO nanocomposite thin films as electrochromic electrodes for supercapacitors. Electrochimica Acta, 2020, 330, 135203.	5.2	51
31	Multifunctional calcium carbonate microparticles: Synthesis and biological applications. Journal of Materials Chemistry, 2010, 20, 7728.	6.7	50
32	Biomagnetic Glasses: Preparation, Characterization, and Biosensor Applications. Langmuir, 2010, 26, 4320-4326.	3.5	46
33	Intense Red-Emitting Upconversion Nanophosphors (800 nm-Driven) with a Core/Double-Shell Structure for Dual-Modal Upconversion Luminescence and Magnetic Resonance in Vivo Imaging Applications. ACS Applied Materials & Interfaces, 2018, 10, 12331-12340.	8.0	46
34	Bright three-band white light generated from CdSe/ZnSe quantum dot-assisted Sr3SiO5:Ce3+,Li+-based white light-emitting diode with high color rendering index. Applied Physics Letters, 2009, 95, .	3.3	45
35	Red-Emitting LiLa[sub 2]O[sub 2]BO[sub 3]:Sm[sup 3+],Eu[sup 3+] Phosphor for Near-Ultraviolet Light-Emitting Diodes-Based Solid-State Lighting. Journal of the Electrochemical Society, 2008, 155, J226.	2.9	41
36	Fabrication of a white electroluminescent device based on bilayered yellow and blue quantum dots. Nanoscale, 2015, 7, 5363-5370.	5.6	41

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37	In Situ Synthesis of Thiol-Capped CuInS2-ZnS Quantum Dots Embedded in Silica Powder by Sequential Ligand-Exchange and Silanization. Electrochemical and Solid-State Letters, 2011, 15, K16-K18.	2.2	40
38	A Strategy to enhance Eu3+ emission from LiYF4:Eu nanophosphors and green-to-orange multicolor tunable, transparent nanophosphor-polymer composites. Scientific Reports, 2015, 5, 7866.	3.3	40
39	Synthesis of blue emitting InP/ZnS quantum dots through control of competition between etching and growth. Nanotechnology, 2012, 23, 485609.	2.6	39
40	Solution-Processed CuInS₂-Based White QD-LEDs with Mixed Active Layer Architecture. ACS Applied Materials & Interfaces, 2017, 9, 11224-11230.	8.0	37
41	Upconversion luminescence enhancement in plasmonic architecture with random assembly of metal nanodomes. Nanoscale, 2016, 8, 2071-2080.	5.6	36
42	Facile synthesis of multicolor tunable ultrasmall LiYF 4 :Yb,Tm,Er/LiGdF 4 core/shell upconversion nanophosphors withÂsub-10Ânm size. Dyes and Pigments, 2017, 139, 831-838.	3.7	35
43	Interfacial band-edge engineered TiO2 protection layer on Cu2O photocathodes for efficient water reduction reaction. Electronic Materials Letters, 2017, 13, 57-65.	2.2	33
44	Synthesis of highly efficient azure-to-blue-emitting Znâ€“Cuâ€“Gaâ€“S quantum dots. Chemical Communications, 2017, 53, 4088-4091.	4.1	30
45	Direct observation of the core/double-shell architecture of intense dual-mode luminescent tetragonal bipyramidal nanophosphors. Nanoscale, 2016, 8, 10049-10058.	5.6	29
46	pH-Responsive Biodegradable Assemblies Containing Tunable Phenyl-Substituted Vinyl Ethers for Use as Efficient Gene Delivery Vehicles. ACS Applied Materials & Interfaces, 2013, 5, 5648-5658.	8.0	28
47	Highly Secure Plasmonic Encryption Keys Combined with Upconversion Luminescence Nanocrystals. Advanced Functional Materials, 2018, 28, 1800369.	14.9	28
48	Electrochemical synthesis of inorganic polycrystalline electrodes with controlled architectures. MRS Bulletin, 2010, 35, 753-760.	3.5	27
49	Photostability enhancement of InP/ZnS quantum dots enabled by In2O3 overcoating. Journal of Alloys and Compounds, 2015, 647, 6-13.	5.5	27
50	Multi-color luminescence evolution of SrGdAlO4:Ln3+ (Ln3+Â= Eu3+ and/or Tb3+) nanocrystalline phosphors via a sol-gel process. Journal of Alloys and Compounds, 2018, 753, 781-790.	5.5	27
51	Quantum dot-layer-encapsulated and phenyl-functionalized silica spheres for highly luminous, colour rendering, and stable white light-emitting diodes. Nanoscale, 2015, 7, 12860-12867.	5.6	26
52	CuInS₂â€Based Quantum Dot Lightâ€Emitting Electrochemical Cells (QLECs). Advanced Materials Technologies, 2017, 2, 1700154.	5.8	26
53	Flexible transparent displays based on core/shell upconversion nanophosphor-incorporated polymer waveguides. Scientific Reports, 2017, 7, 45659.	3.3	25
54	Mechanism for strong yellow emission of Y3Al5O12:Ce3+ phosphor under electron irradiation for the application to field emission backlight units. Applied Physics Letters, 2007, 90, 071908.	3.3	24

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55	Intense upconversion red emission from Gd-doped NaErF₄:Tm-based core/shell/shell nanocrystals under 980 and 800 nm near infrared light excitations. Chemical Communications, 2019, 55, 2261-2264.	4.1	24
56	Structural and luminescent properties of red-emitting SrGe 4 O 9 :Mn 4+ phosphors for white light-emitting diodes with high color rendering index. Journal of Luminescence, 2016, 172, 99-104.	3.1	23
57	A Multiâ€Functional Highly Efficient Upconversion Luminescent Film with an Array of Dielectric Microbeads Decorated with Metal Nanoparticles. Advanced Functional Materials, 2020, 30, 1909445.	14.9	21
58	Origin of the discrepancy between photoluminescence brightness of TAG:Ce and electroluminescence brightness of TAG:Ce-based white LED expected from phosphor brightness. Optics Letters, 2008, 33, 2140.	3.3	20
59	Construction of Cuprous Oxide Electrodes Composed of 2D Singleâ€Crystalline Dendritic Nanosheets. Small, 2010, 6, 2183-2190.	10.0	19
60	Luminescence Tuning Mechanism of La0.827Al11.9O19.09:Eu2+,Mn2+ Phosphor for Multi-Color Light-Emitting Diodes. Journal of the Electrochemical Society, 2011, 158, J276.	2.9	19
61	Unique oxide overcoating of CuInS2/ZnS core/shell quantum dots with ZnGa2O4 for fabrication of white light-emitting diode with improved operational stability. Journal of Nanoparticle Research, 2013, 15, 1.	1.9	19
62	Luminescent and magnetic properties of cerium-doped yttrium aluminum garnet and yttrium iron garnet composites. Ceramics International, 2019, 45, 9846-9851.	4.8	19
63	800Ânm near-infrared light-excitable intense green-emitting Li(Gd,Y)F4:Yb,Er-based core/shell/shell upconversion nanophosphors for efficient liver cancer cell imaging. Materials and Design, 2020, 195, 108941.	7.0	19
64	Highly Bright and Photostable Li(Gd,Y)F₄:Yb,Er/LiGdF₄Core/Shell Upconversion Nanophosphors for Bioimaging Applications. Particle and Particle Systems Characterization, 2017, 34, 1600183.	2.3	18
65	Facile method for the synthesis of gold nanoparticles using an ion coater. Applied Surface Science, 2018, 434, 1001-1006.	6.1	18
66	Enhanced fluorescent stability of copper indium sulfide quantum dots through incorporating aluminum into ZnS shell. Journal of Alloys and Compounds, 2016, 662, 173-178.	5.5	17
67	Core/shell-structured upconversion nanophosphor and cadmium-free quantum-dot bilayer-based near-infrared photodetectors. Optics Letters, 2015, 40, 4959.	3.3	16
68	Sub-20 nm LiErF₄-Based Upconversion Nanophosphors for Simultaneous Imaging and Photothermal Therapeutics. ACS Applied Nano Materials, 2020, 3, 8662-8671.	5.0	16
69	Simultaneous enhancement of luminescence and stability of CsPbBr3 perovskite nanocrystals via formation of perhydropolysilazane-derived nanopatterned film. Chemical Engineering Journal, 2020, 393, 124767.	12.7	15
70	White ACPEL Device with ZnS:Cu,Cl, Tb₃Al₅O<SUB>12</SUB and CaS:Eu²⁺ Phosphors Using a Layered Structure. ETRI Journal, 2009, 31, 803-805.	2.0	13
71	Utilization of LiSrPO4:Eu phosphor and Cuî—¸Inî—¸S quantum dot for fabrication of high color rendering white light-emitting diode. Materials Letters, 2013, 92, 325-329.	2.6	13
72	Controlled Synthesis of CuInS₂/ZnS Nanocubes and Their Sensitive Photoluminescence Response toward Hydrogen Peroxide. ACS Applied Materials & Interfaces, 2017, 9, 32097-32105.	8.0	13

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73	Enhancement of electrochromic response and cyclic durability of WO3 thin films by stacking Nb2O5 layers. Applied Surface Science, 2022, 582, 152431.	6.1	12
74	Electrostatic Stabilized InP Colloidal Quantum Dots with High Photoluminescence Efficiency. Langmuir, 2015, 31, 7117-7121.	3.5	11
75	Facile synthesis of sub-10 nm-sized bright red-emitting upconversion nanophosphors via tetrahedral YOF:Yb,Er seed-mediated growth. Chemical Communications, 2019, 55, 13350-13353.	4.1	11
76	Luminescent silica films prepared using perhydropolysilazane and Mn-doped ZnS nanophosphors. Applied Surface Science, 2020, 511, 145441.	6.1	11
77	Widely Tunable Emissions of Colloidal ZnxCd1â^'xSe Alloy Quantum Dots Using a Constant Zn/Cd Precursor Ratio. Journal of Nanoscience and Nanotechnology, 2011, 11, 725-729.	0.9	9
78	Up-conversion routines of Er3+â€“Yb3+ doped Y6O5F8 and YOF phosphors. Materials Research Bulletin, 2015, 71, 25-29.	5.2	9
79	Biotemplated Silica and Titania Nanowires: Synthesis, Characterization and Potential Applications. Journal of Nanoscience and Nanotechnology, 2012, 12, 227-235.	0.9	8
80	Facile synthesis of ZnO microrod photodetectors by solid-state reaction. Journal of Alloys and Compounds, 2020, 825, 154110.	5.5	8
81	Enhanced photodetector performance in gold nanoparticle decorated ZnO microrods. Materials Characterization, 2021, 171, 110813.	4.4	8
82	Quantum-dot-based white lighting planar source through downconversion by blue electroluminescence. Optics Letters, 2014, 39, 1208.	3.3	6
83	Multi-color luminescence evolution of La2Zr3(MoO4)9:Ln3+ (Ln3+ = Dy3+ and/or Eu3+) nanocrystalline phosphors for UV-pumped white light-emitting devices. Journal of Luminescence, 2018, 203, 179-188.	3.1	6
84	Bright Blue, Green, and Red Luminescence from Dye-Sensitized Core@Shell Upconversion Nanophosphors under 800 nm Near-Infrared Light. Materials, 2020, 13, 5338.	2.9	5
85	Magnetic property modulation of Ni thin films transferred onto flexible substrates. Journal of Magnetism and Magnetic Materials, 2020, 511, 166968.	2.3	5
86	Superâ€boosted Hybrid Plasmonic Upconversion Process for Photodetection at 1550Ânm Wavelength. Advanced Materials, 2021, , 2106225.	21.0	5
87	Sputter-grown Eu-doped WO3-Eu2(WO4)3 composite red phosphor thin films. Optical Materials, 2021, 122, 111721.	3.6	4
88	Prediction of Ln3+<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:mrow><mml:mo linebreak="goodbreak" linebreakstyle="after">â^'</mml:mo></mml:mrow></mml:math>4f energy levels in Î²-NaYF4:Ln3+ and understanding of absorption behaviors. Materials Chemistry and Physics, 2022, 275, 125317.	4.0	4
89	Synthesis of Multifunctional Silica Composites Encapsulating a Mixture Layer of Quantum Dots and Magnetic Nanoparticles. Journal of Inorganic and Organometallic Polymers and Materials, 2014, 24, 78-86.	3.7	3
90	Strong upconversionâ€“downshifting green emission from Tb3+ ions in core/shell/shell-structured nanophosphors. Research on Chemical Intermediates, 2018, 44, 4641-4650.	2.7	3

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91	Phosphine-Free-Synthesized ZnSe/ZnS Core/Shell Quantum Dots for White Light-Emitting Diodes. Applied Sciences (Switzerland), 2021, 11, 10060.	2.5	3
92	Enhanced Optical Properties of Bredigiteâ€Structure Ca_{13.7}Eu_{0.3}Mg₂[SiO₄]₈ Phosphor: Effective Eu Reduction by La Coâ€Doping. Journal of the American Ceramic Society, 2016, 99, 557-563.	3.8	2
93	Enhancing the Up-conversion luminescence using All dielectric Three-Dimensional multiscale anodized aluminum oxide nanowire structure. Applied Surface Science, 2022, 571, 151278.	6.1	1
94	Determination of Core/Double-Shell Architecture of a Single Tetragonal Bipyramidal Nanophosphor for Intense Dual-Mode Luminescence. Microscopy and Microanalysis, 2016, 22, 1428-1429.	0.4	0