Hilmi Volkan Demir

List of Publications by Year
in descending order

544	17,389	14614 66	26548 107
papers	citations	h-index	g-index

559	559	559	17041
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	State of the Art and Prospects for Halide Perovskite Nanocrystals. ACS Nano, 2021, 15, 10775-10981.	7.3	705
2	Inorganic Halide Perovskites for Efficient Light-Emitting Diodes. Journal of Physical Chemistry Letters, 2015, 6, 4360-4364.	2.1	482
3	Conjugated polymer nanoparticles. Nanoscale, 2010, 2, 484.	2.8	376
4	High-Efficiency Light-Emitting Diodes of Organometal Halide Perovskite Amorphous Nanoparticles. ACS Nano, 2016, 10, 6623-6630.	7.3	347
5	Amplified Spontaneous Emission and Lasing in Colloidal Nanoplatelets. ACS Nano, 2014, 8, 6599-6605.	7.3	288
6	Full Visible Range Covering InP/ZnS Nanocrystals with High Photometric Performance and Their Application to White Quantum Dot Lightâ€Emitting Diodes. Advanced Materials, 2012, 24, 4180-4185.	11.1	283
7	Photogeneration of hot plasmonic electrons with metal nanocrystals: Quantum description and potential applications. Nano Today, 2014, 9, 85-101.	6.2	270
8	Quantum dot integrated LEDs using photonic and excitonic color conversion. Nano Today, 2011, 6, 632-647.	6.2	245
9	Vertically Aligned Gold Nanorod Monolayer on Arbitrary Substrates: Self-Assembly and Femtomolar Detection of Food Contaminants. ACS Nano, 2013, 7, 5993-6000.	7.3	218
10	White light generation using CdSe/ZnS coreâ€“shell nanocrystals hybridized with InGaN/GaN light emitting diodes. Nanotechnology, 2007, 18, 065709.	1.3	209
11	Highly Efficient Visible Colloidal Lead-Halide Perovskite Nanocrystal Light-Emitting Diodes. Nano Letters, 2018, 18, 3157-3164.	4.5	199
12	Color-converting combinations of nanocrystal emitters for warm-white light generation with high color rendering index. Applied Physics Letters, 2008, 92, .	1.5	192
13	Bright Whiteâ€Light Emitting Manganese and Copper Coâ€Doped ZnSe Quantum Dots. Angewandte Chemie - International Edition, 2011, 50, 4432-4436.	7.2	173
14	Stimulated Emission and Lasing from CdSe/CdS/ZnS Coreâ€Multiâ€Shell Quantum Dots by Simultaneous Threeâ€Photon Absorption. Advanced Materials, 2014, 26, 2954-2961.	11.1	172
15	Material Binding Peptides for Nanotechnology. Molecules, 2011, 16, 1426-1451.	1.7	165
16	Morphology-Tailored Synthesis of Tungsten Trioxide (Hydrate) Thin Films and Their Photocatalytic Properties. ACS Applied Materials & Interfaces, 2011, 3, 229-236.	4.0	163
17	Solution-processed highly bright and durable cesium lead halide perovskite light-emitting diodes. Nanoscale, 2016, 8, 18021-18026.	2.8	160
18	Lateral Size-Dependent Spontaneous and Stimulated Emission Properties in Colloidal CdSe Nanoplatelets. ACS Nano, 2015, 9, 5041-5050.	7.3	154

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19	Experimental Determination of the Absorption Cross-Section and Molar Extinction Coefficient of Colloidal CdSe Nanoplatelets. Journal of Physical Chemistry C, 2015, 119, 26768-26775.	1.5	146
20	Advances in the LED Materials and Architectures for Energy-Saving Solid-State Lighting Toward â€œLighting Revolutionâ€• IEEE Photonics Journal, 2012, 4, 613-619.	1.0	145
21	Metamaterial-based wireless strain sensors. Applied Physics Letters, 2009, 95, .	1.5	144
22	A photometric investigation of ultra-efficient LEDs with high color rendering index and high luminous efficacy employing nanocrystal quantum dot luminophores. Optics Express, 2010, 18, 340.	1.7	141
23	Color science of nanocrystal quantum dots for lighting and displays. Nanophotonics, 2013, 2, 57-81.	2.9	140
24	Colloidal Nanocrystals Embedded in Macrocrystals: Robustness, Photostability, and Color Purity. Nano Letters, 2012, 12, 5348-5354.	4.5	136
25	Highly Flexible, Electrically Driven, Top-Emitting, Quantum Dot Light-Emitting Stickers. ACS Nano, 2014, 8, 8224-8231.	7.3	135
26	Stacking in Colloidal Nanoplatelets: Tuning Excitonic Properties. ACS Nano, 2014, 8, 12524-12533.	7.3	134
27	High brightness formamidinium lead bromide perovskite nanocrystal light emitting devices. Scientific Reports, 2016, 6, 36733.	1.6	134
28	Nearâ€Unity Emitting Copperâ€Doped Colloidal Semiconductor Quantum Wells for Luminescent Solar Concentrators. Advanced Materials, 2017, 29, 1700821.	11.1	133
29	Blue Liquid Lasers from Solution of CdZnS/ZnS Ternary Alloy Quantum Dots with Quasiâ€Continuous Pumping. Advanced Materials, 2015, 27, 169-175.	11.1	127
30	Influence of Channel Layer Thickness on the Electrical Performances of Inkjet-Printed In-Ga-Zn Oxide Thin-Film Transistors. IEEE Transactions on Electron Devices, 2011, 58, 480-485.	1.6	121
31	Room-Temperature Lasing in Colloidal Nanoplatelets via Mie-Resonant Bound States in the Continuum. Nano Letters, 2020, 20, 6005-6011.	4.5	115
32	Chiral Ceramic Nanoparticles and Peptide Catalysis. Journal of the American Chemical Society, 2017, 139, 13701-13712.	6.6	110
33	Hydrothermally grown nanostructured WO₃ films and their electrochromic characteristics. Journal Physics D: Applied Physics, 2010, 43, 285501.	1.3	107
34	Large-Area (over 50 cm Ã— 50 cm) Freestanding Films of Colloidal InP/ZnS Quantum Dots. Nano Letters, 2012, 12, 3986-3993.	4.5	104
35	Electrochromic properties of nanostructured tungsten trioxide (hydrate) films and their applications in a complementary electrochromic device. Electrochimica Acta, 2012, 63, 153-160.	2.6	98
36	Solution Processed Tungsten Oxide Interfacial Layer for Efficient Holeâ€Injection in Quantum Dot Lightâ€Emitting Diodes. Small, 2014, 10, 247-252.	5.2	96

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37	Record High External Quantum Efficiency of 19.2% Achieved in Lightâ€Emitting Diodes of Colloidal Quantum Wells Enabled by Hotâ€Injection Shell Growth. Advanced Materials, 2020, 32, e1905824.	11.1	95
38	Flexible metamaterials for wireless strain sensing. Applied Physics Letters, 2009, 95, 181105.	1.5	94
39	Nested Metamaterials for Wireless Strain Sensing. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 450-458.	1.9	93
40	Free-standing ZnOâ€“CuO composite nanowire array films and their gas sensing properties. Nanotechnology, 2011, 22, 325704.	1.3	93
41	Giant Modal Gain Coefficients in Colloidal IIâ€“VI Nanoplatelets. Nano Letters, 2019, 19, 277-282.	4.5	93
42	Stable and Lowâ€Threshold Optical Gain in CdSe/CdS Quantum Dots: An Allâ€Colloidal Frequency Upâ€Converted Laser. Advanced Materials, 2015, 27, 2741-2746.	11.1	92
43	InGaN/GaN light-emitting diode with a polarization tunnel junction. Applied Physics Letters, 2013, 102, .	1.5	89
44	Graphene-based transparent conductive electrodes for GaN-based light emitting diodes: Challenges and countermeasures. Nano Energy, 2015, 12, 419-436.	8.2	86
45	Robust Whispering-Gallery-Mode Microbubble Lasers from Colloidal Quantum Dots. Nano Letters, 2017, 17, 2640-2646.	4.5	83
46	Broadband absorption enhancement in randomly positioned silicon nanowire arrays for solar cell applications. Optics Letters, 2011, 36, 1884.	1.7	82
47	Plasmonic backcontact grating for P3HT:PCBM organic solar cells enabling strong optical absorption increased in all polarizations. Optics Express, 2011, 19, 14200.	1.7	81
48	Light Generation in Lead Halide Perovskite Nanocrystals: LEDs, Color Converters, Lasers, and Other Applications. Small, 2019, 15, e1902079.	5.2	81
49	Warm-white light-emitting diodes integrated with colloidal quantum dots for high luminous efficacy and color rendering. Optics Letters, 2010, 35, 3372.	1.7	77
50	Observation of Selective Plasmon-Exciton Coupling in Nonradiative Energy Transfer: Donor-Selective versus Acceptor-Selective Plexcitons. Nano Letters, 2013, 13, 3065-3072.	4.5	77
51	Localized plasmon-engineered spontaneous emission of CdSe/ZnS nanocrystals closely-packed in the proximity of Ag nanoisland films for controlling emission linewidth, peak, and intensity. Optics Express, 2007, 15, 14289.	1.7	75
52	Lasing Action in Single Subwavelength Particles Supporting Supercavity Modes. ACS Nano, 2020, 14, 7338-7346.	7.3	75
53	Dual-color emitting quantum-dot-quantum-well CdSe-ZnS heteronanocrystals hybridized on InGaNâˆ•GaN light emitting diodes for high-quality white light generation. Applied Physics Letters, 2008, 92, .	1.5	74
54	Semiconductor nanocrystals as rare-earth alternatives. Nature Photonics, 2011, 5, 126-126.	15.6	74

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55	Highly Efficient Green Lightâ€Emitting Diodes from Allâ€Inorganic Perovskite Nanocrystals Enabled by a New Electron Transport Layer. Advanced Optical Materials, 2018, 6, 1800220.	3.6	74
56	Nearâ€Field Energy Transfer Using Nanoemitters For Optoelectronics. Advanced Functional Materials, 2016, 26, 8158-8177.	7.8	73
57	Plateletâ€inâ€Box Colloidal Quantum Wells: CdSe/CdS@CdS Core/Crown@Shell Heteronanoplatelets. Advanced Functional Materials, 2016, 26, 3570-3579.	7.8	72
58	Dye-sensitized solar cell with a titanium-oxide-modified carbon nanotube transparent electrode. Applied Physics Letters, 2011, 99, .	1.5	71
59	Fluorophore-Doped Coreâ€“Multishell Spherical Plasmonic Nanocavities: Resonant Energy Transfer toward a Loss Compensation. ACS Nano, 2012, 6, 6250-6259.	7.3	71
60	The composition effect on the optical properties of aqueous synthesized Cuâ€“Inâ€“S and Znâ€“Cuâ€“Inâ€“S quantum dot nanocrystals. Physical Chemistry Chemical Physics, 2015, 17, 25133-25141.	1.3	71
61	Giant Alloyed Hot Injection Shells Enable Ultralow Optical Gain Threshold in Colloidal Quantum Wells. ACS Nano, 2019, 13, 10662-10670.	7.3	71
62	Type-II Colloidal Quantum Wells: CdSe/CdTe Core/Crown Heteronanoplatelets. Journal of Physical Chemistry C, 2015, 119, 2177-2185.	1.5	70
63	Colloidal nanocrystals for quality lighting and displays: milestones and recent developments. Nanophotonics, 2016, 5, 74-95.	2.9	70
64	Enhanced optical absorption in nanopatterned silicon thin films with a nano-cone-hole structure for photovoltaic applications. Optics Letters, 2011, 36, 1713.	1.7	68
65	Light Extraction Efficiency Enhancement of Colloidal Quantum Dot Lightâ€Emitting Diodes Using Largeâ€Scale Nanopillar Arrays. Advanced Functional Materials, 2014, 24, 5977-5984.	7.8	68
66	Tunable White-Light-Emitting Mn-Doped ZnSe Nanocrystals. ACS Applied Materials & Interfaces, 2014, 6, 3654-3660.	4.0	67
67	Excitonics of semiconductor quantum dots and wires for lighting and displays. Laser and Photonics Reviews, 2014, 8, 73-93.	4.4	67
68	Highly Stable, Nearâ€Unity Efficiency Atomically Flat Semiconductor Nanocrystals of CdSe/ZnS Heteroâ€Nanoplatelets Enabled by ZnSâ€Shell Hotâ€Injection Growth. Small, 2019, 15, e1804854.	5.2	67
69	Anisotropic Emission from Multilayered Plasmon Resonator Nanocomposites of Isotropic Semiconductor Quantum Dots. ACS Nano, 2011, 5, 1328-1334.	7.3	66
70	Stable, Efficient, and All-Solution-Processed Quantum Dot Light-Emitting Diodes with Double-Sided Metal Oxide Nanoparticle Charge Transport Layers. ACS Applied Materials & Interfaces, 2014, 6, 495-499.	4.0	66
71	On the origin of high quality white light emission from a hybrid organic/inorganic light emitting diode using azide functionalized polyfluorene. Journal of Materials Chemistry, 2008, 18, 3568.	6.7	64
72	A bright cadmium-free, hybrid organic/quantum dot white light-emitting diode. Applied Physics Letters, 2012, 101, .	1.5	64

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73	Efficient synthesis of plate-like crystalline hydrated tungsten trioxide thin films with highly improved electrochromic performance. Chemical Communications, 2012, 48, 365-367.	2.2	63
74	Self-screening of the quantum confined Stark effect by the polarization induced bulk charges in the quantum barriers. Applied Physics Letters, 2014, 104, .	1.5	63
75	Mn²⁺-Doped CdSe/CdS Core/Multishell Colloidal Quantum Wells Enabling Tunable Carrierâ€“Dopant Exchange Interactions. ACS Nano, 2015, 9, 12473-12479.	7.3	63
76	Nanocrystal light-emitting diodes based on type II nanoplatelets. Nano Energy, 2018, 47, 115-122.	8.2	62
77	Onion-like (CdSe)ZnS/CdSe/ZnS quantum-dot-quantum-well heteronanocrystals for investigation of multi-color emission. Optics Express, 2008, 16, 3515.	1.7	59
78	Electroluminescence Efficiency Enhancement in Quantum Dot Lightâ€Emitting Diodes by Embedding a Silver Nanoisland Layer. Advanced Optical Materials, 2015, 3, 1439-1445.	3.6	59
79	Nonradiative energy transfer in colloidal CdSe nanoplatelet films. Nanoscale, 2015, 7, 2545-2551.	2.8	58
80	White-Emitting Conjugated Polymer Nanoparticles with Cross-Linked Shell for Mechanical Stability and Controllable Photometric Properties in Color-Conversion LED Applications. ACS Nano, 2011, 5, 2483-2492.	7.3	57
81	Stable Dispersion of Iodide-Capped PbSe Quantum Dots for High-Performance Low-Temperature Processed Electronics and Optoelectronics. Chemistry of Materials, 2015, 27, 4328-4337.	3.2	56
82	Ultrathin Highly Luminescent Twoâ€Monolayer Colloidal CdSe Nanoplatelets. Advanced Functional Materials, 2019, 29, 1901028.	7.8	56
83	White emitting CdS quantum dot nanoluminophores hybridized on near-ultraviolet LEDs for high-quality white light generation and tuning. New Journal of Physics, 2008, 10, 023026.	1.2	55
84	Generalized Theory of FÃ¶rster-Type Nonradiative Energy Transfer in Nanostructures with Mixed Dimensionality. Journal of Physical Chemistry C, 2013, 117, 10203-10212.	1.5	54
85	Implantable microelectromechanical sensors for diagnostic monitoring and postâ€surgical prediction of bone fracture healing. Journal of Orthopaedic Research, 2015, 33, 1439-1446.	1.2	54
86	Quantum dots on vertically aligned gold nanorod monolayer: plasmon enhanced fluorescence. Nanoscale, 2014, 6, 5592-5598.	2.8	53
87	Colloidal quantum-dot LEDs with a solution-processed copper oxide (CuO) hole injection layer. Organic Electronics, 2015, 26, 245-250.	1.4	53
88	Orientation-Controlled Nonradiative Energy Transfer to Colloidal Nanoplatelets: Engineering Dipole Orientation Factor. Nano Letters, 2019, 19, 4297-4305.	4.5	53
89	Metamaterial based telemetric strain sensing in different materials. Optics Express, 2010, 18, 5000.	1.7	52
90	Optimization of inverted tandem organic solar cells. Solar Energy Materials and Solar Cells, 2011, 95, 921-926.	3.0	52

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91	Continuously Tunable Emission in Inverted Typeâ€I CdS/CdSe Core/Crown Semiconductor Nanoplatelets. Advanced Functional Materials, 2015, 25, 4282-4289.	7.8	52
92	Liquidâ€“Liquid Diffusionâ€Assisted Crystallization: A Fast and Versatile Approach Toward High Quality Mixed Quantum Dotâ€Salt Crystals. Advanced Functional Materials, 2015, 25, 2638-2645.	7.8	52
93	High-efficiency all-inorganic full-colour quantum dot light-emitting diodes. Nano Energy, 2018, 46, 229-233.	8.2	52
94	Control of LED Emission with Functional Dielectric Metasurfaces. Laser and Photonics Reviews, 2020, 14, 1900235.	4.4	52
95	Self-consistent computation of electronic and optical properties of a single exciton in a spherical quantum dot via matrix diagonalization method. Journal of Applied Physics, 2009, 106, .	1.1	51
96	Alloyed Heterostructures of CdSe_xS_{1â€“x} Nanoplatelets with Highly Tunable Optical Gain Performance. Chemistry of Materials, 2017, 29, 4857-4865.	3.2	51
97	Understanding the Journey of Dopant Copper Ions in Atomically Flat Colloidal Nanocrystals of CdSe Nanoplatelets Using Partial Cation Exchange Reactions. Chemistry of Materials, 2018, 30, 3265-3275.	3.2	51
98	Near resonant and nonresonant third-order optical nonlinearities of colloidal InP/ZnS quantum dots. Applied Physics Letters, 2013, 102, .	1.5	48
99	Implementation of High-Quality Warm-White Light-Emitting Diodes by a Model-Experimental Feedback Approach Using Quantum Dotâ€“Salt Mixed Crystals. ACS Applied Materials & Interfaces, 2015, 7, 23364-23371.	4.0	48
100	Interfacial charge and energy transfer in van der Waals heterojunctions. InformaÄnÃ-MateriÃ¡ly, 2022, 4, .	8.5	48
101	Dye-sensitized solar cell with a pair of carbon-based electrodes. Journal Physics D: Applied Physics, 2012, 45, 165103.	1.3	47
102	On the Effect of Step-Doped Quantum Barriers in InGaN/GaN Light Emitting Diodes. Journal of Display Technology, 2013, 9, 226-233.	1.3	47
103	Improved InGaN/GaN light-emitting diodes with a p-GaN/n-GaN/p-GaN/n-GaN/p-GaN current-spreading layer. Optics Express, 2013, 21, 4958.	1.7	47
104	Multicolor lasing prints. Applied Physics Letters, 2015, 107, .	1.5	47
105	Hybrid white light sources based on layer-by-layer assembly of nanocrystals on near-UV emitting diodes. Nanotechnology, 2007, 18, 405702.	1.3	46
106	Volumetric plasmonic resonator architecture for thin-film solar cells. Applied Physics Letters, 2011, 98, 093117.	1.5	46
107	Tuning shades of white light with multi-color quantum-dotâ€“quantum-well emitters based on onion-like CdSeâ€“ZnS heteronanocrystals. Nanotechnology, 2008, 19, 335203.	1.3	45
108	Wireless Displacement Sensing Enabled by Metamaterial Probes for Remote Structural Health Monitoring. Sensors, 2014, 14, 1691-1704.	2.1	45

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109	CdSe/CdSe_{1â€“x}Te_x Core/Crown Heteronanoplatelets: Tuning the Excitonic Properties without Changing the Thickness. Journal of Physical Chemistry C, 2017, 121, 4650-4658.	1.5	45
110	Solvent-Assisted Surface Engineering for High-Performance All-Inorganic Perovskite Nanocrystal Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2018, 10, 19828-19835.	4.0	45
111	Lightâ€Emitting Diodes with Cuâ€Doped Colloidal Quantum Wells: From Ultrapure Green, Tunable Dualâ€Emission to White Light. Small, 2019, 15, 1901983.	5.2	45
112	Unraveling the ultralow threshold stimulated emission from CdZnS/ZnS quantum dot and enabling highâ€Q microlasers. Laser and Photonics Reviews, 2015, 9, 507-516.	4.4	44
113	Ultrahigh-efficiency aqueous flat nanocrystals of CdSe/CdS@Cd_{1â€“x}Zn_xS colloidal core/crown@alloyed-shell quantum wells. Nanoscale, 2019, 11, 301-310.	2.8	44
114	Blue quantum electroabsorption modulators based on reversed quantum confined Stark effect with blueshift. Applied Physics Letters, 2007, 90, 011101.	1.5	43
115	Europium (II)-Doped Microporous Zeolite Derivatives with Enhanced Photoluminescence by Isolating Active Luminescence Centers. ACS Applied Materials & Interfaces, 2011, 3, 4431-4436.	4.0	43
116	Low-threshold lasing from colloidal CdSe/CdSeTe core/alloyed-crown type-II heteronanoplatelets. Nanoscale, 2018, 10, 9466-9475.	2.8	43
117	A new class of cubic SPIONs as a dual-mode T1 and T2 contrast agent for MRI. Magnetic Resonance Imaging, 2018, 49, 16-24.	1.0	43
118	Electrically control amplified spontaneous emission in colloidal quantum dots. Science Advances, 2019, 5, eaav3140.	4.7	43
119	Bio-implantable passive on-chip RF-MEMS strain sensing resonators for orthopaedic applications. Journal of Micromechanics and Microengineering, 2008, 18, 115017.	1.5	42
120	Quantum Dot Light-Emitting Diode with Quantum Dots Inside the Hole Transporting Layers. ACS Applied Materials & Interfaces, 2013, 5, 6535-6540.	4.0	42
121	High-efficiency and low-loss gallium nitride dielectric metasurfaces for nanophotonics at visible wavelengths. Applied Physics Letters, 2017, 111, .	1.5	42
122	Structural tuning of color chromaticity through nonradiative energy transfer by interspacing CdTe nanocrystal monolayers. Applied Physics Letters, 2009, 94, .	1.5	41
123	Improved hole distribution in InGaN/GaN light-emitting diodes with graded thickness quantum barriers. Applied Physics Letters, 2013, 102, .	1.5	41
124	Colloidal Quantum Dot Light-Emitting Diodes Employing Phosphorescent Small Organic Molecules as Efficient Exciton Harvesters. Journal of Physical Chemistry Letters, 2014, 5, 2802-2807.	2.1	41
125	Ultralow Threshold One-Photon- and Two-Photon-Pumped Optical Gain Media of Blue-Emitting Colloidal Quantum Dot Films. Journal of Physical Chemistry Letters, 2014, 5, 2214-2218.	2.1	41
126	Quantum Dot/Light-Emitting Electrochemical Cell Hybrid Device and Mechanism of Its Operation. ACS Applied Materials & Interfaces, 2016, 8, 24692-24698.	4.0	41

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127	LEDs using halide perovskite nanocrystal emitters. Nanoscale, 2019, 11, 11402-11412.	2.8	41
128	Highly monodisperse low-magnetization magnetite nanocubes as simultaneous T₁â€“T₂ MRI contrast agents. Nanoscale, 2015, 7, 10519-10526.	2.8	40
129	Thickness-Tunable Self-Assembled Colloidal Nanoplatelet Films Enable Ultrathin Optical Gain Media. Nano Letters, 2020, 20, 6459-6465.	4.5	40
130	Resonant nonradiative energy transfer in CdSe/ZnS core/shell nanocrystal solids enhances hybrid white light emitting diodes. Optics Express, 2008, 16, 13961.	1.7	39
131	Selective enhancement of surface-state emission and simultaneous quenching of interband transition in white-luminophor CdS nanocrystals using localized plasmon coupling. New Journal of Physics, 2008, 10, 083035.	1.2	39
132	Two-Dimensional CdSe-Based Nanoplatelets: Their Heterostructures, Doping, Photophysical Properties, and Applications. Proceedings of the IEEE, 2020, 108, 655-675.	16.4	39
133	Sub-single exciton optical gain threshold in colloidal semiconductor quantum wells with gradient alloy shelling. Nature Communications, 2020, 11, 3305.	5.8	39
134	Universality of dissipative self-assembly from quantum dots to human cells. Nature Physics, 2020, 16, 795-801.	6.5	39
135	Peptide-Mediated Constructs of Quantum Dot Nanocomposites for Enzymatic Control of Nonradiative Energy Transfer. Nano Letters, 2011, 11, 1530-1539.	4.5	38
136	Attractive versus Repulsive Excitonic Interactions of Colloidal Quantum Dots Control Blue- to Red-Shifting (and Non-shifting) Amplified Spontaneous Emission. Journal of Physical Chemistry Letters, 2013, 4, 4146-4152.	2.1	38
137	Improving hole injection efficiency by manipulating the hole transport mechanism through p-type electron blocking layer engineering. Optics Letters, 2014, 39, 2483.	1.7	38
138	Carbon Nanotube Driver Circuit for 6 Ã— 6 Organic Light Emitting Diode Display. Scientific Reports, 2015, 5, 11755.	1.6	38
139	High-efficiency CdTe/CdS core/shell nanocrystals in water enabled by photo-induced colloidal hetero-epitaxy of CdS shelling at room temperature. Nano Research, 2015, 8, 2317-2328.	5.8	38
140	High-Efficiency Optical Gain in Type-II Semiconductor Nanocrystals of Alloyed Colloidal Quantum Wells. Journal of Physical Chemistry Letters, 2017, 8, 5317-5324.	2.1	37
141	Highly Stable Multicrown Heterostructures of Type-II Nanoplatelets for Ultralow Threshold Optical Gain. Chemistry of Materials, 2019, 31, 1818-1826.	3.2	37
142	White light generation tuned by dual hybridization of nanocrystals and conjugated polymers. New Journal of Physics, 2007, 9, 362-362.	1.2	36
143	AC-driven, color- and brightness-tunable organic light-emitting diodes constructed from an electron only device. Organic Electronics, 2013, 14, 3195-3200.	1.4	36
144	Photovoltaic nanocrystal scintillators hybridized on Si solar cells for enhanced conversion efficiency in UV. Optics Express, 2008, 16, 3537.	1.7	35

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145	Advantages of the Blue InGaN/GaN Light-Emitting Diodes with an AlGaN/GaN/AlGaN Quantum Well Structured Electron Blocking Layer. ACS Photonics, 2014, 1, 377-381.	3.2	35
146	Two-Color Single Hybrid Plasmonic Nanoemitters with Real Time Switchable Dominant Emission Wavelength. Nano Letters, 2015, 15, 7458-7466.	4.5	35
147	Nanocrystal hybridized scintillators for enhanced detection and imaging on Si platforms in UV. Optics Express, 2007, 15, 1128.	1.7	34
148	Computational study of power conversion and luminous efficiency performance for semiconductor quantum dot nanophosphors on light-emitting diodes. Optics Express, 2012, 20, 3275.	1.7	34
149	Enhanced hole transport in InGaN/GaN multiple quantum well light-emitting diodes with a p-type doped quantum barrier. Optics Letters, 2013, 38, 202.	1.7	34
150	Organicâ€“Inorganic Composites of Semiconductor Nanocrystals for Efficient Excitonics. Journal of Physical Chemistry Letters, 2015, 6, 2206-2215.	2.1	34
151	Near-Unity Efficiency Energy Transfer from Colloidal Semiconductor Quantum Wells of CdSe/CdS Nanoplatelets to a Monolayer of MoS₂. ACS Nano, 2018, 12, 8547-8554.	7.3	34
152	High scotopic/photopic ratio white-light-emitting diodes integrated with semiconductor nanophosphors of colloidal quantum dots. Optics Letters, 2011, 36, 1893.	1.7	33
153	On the origin of the redshift in the emission wavelength of InGaN/GaN blue light emitting diodes grown with a higher temperature interlayer. Applied Physics Letters, 2012, 100, .	1.5	33
154	A hole accelerator for InGaN/GaN light-emitting diodes. Applied Physics Letters, 2014, 105, .	1.5	33
155	Improved Inverted Organic Solar Cells With a Solâ€“Gel Derived Indium-Doped Zinc Oxide Buffer Layer. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 1700-1706.	1.9	32
156	Facile Synthesis of Luminescent AgInS₂â€“ZnS Solid Solution Nanorods. Small, 2013, 9, 2689-2695.	5.2	32
157	A Wireless Passive Sensing System for Displacement/Strain Measurement in Reinforced Concrete Members. Sensors, 2016, 16, 496.	2.1	32
158	High performance infrared photodetectors up to 28 Âµm wavelength based on lead selenide colloidal quantum dots. Optical Materials Express, 2017, 7, 2326.	1.6	32
159	spâ€“d Exchange Interactions in Wave Function Engineered Colloidal CdSe/Mn:CdS Hetero-Nanoplatelets. Nano Letters, 2018, 18, 2047-2053.	4.5	32
160	Top-illuminated dye-sensitized solar cells with a room-temperature-processed ZnO photoanode on metal substrates and a Pt-coated Ga-doped ZnO counter electrode. Journal Physics D: Applied Physics, 2011, 44, 045102.	1.3	31
161	A fast-switching light-writable and electric-erasable negative photoelectrochromic cell based on Prussian blue films. Solar Energy Materials and Solar Cells, 2012, 98, 154-160.	3.0	31
162	Manganese Doped Fluorescent Paramagnetic Nanocrystals for Dualâ€Modal Imaging. Small, 2014, 10, 4961-4966.	5.2	31

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163	Polarization self-screening in [0001] oriented InGaN/GaN light-emitting diodes for improving the electron injection efficiency. Applied Physics Letters, 2014, 104, .	1.5	31
164	Coreless Fiberâ€Based Whisperingâ€Galleryâ€Mode Assisted Lasing from Colloidal Quantum Well Solids. Advanced Functional Materials, 2020, 30, 1907417.	7.8	31
165	Blue organic light-emitting diodes based on pyrazoline phenyl derivative. Synthetic Metals, 2012, 162, 352-355.	2.1	30
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