Hilmi Volkan Demir

List of Publications by Year
in descending order

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544 papers	17,389 citations	14644 66 h-index	26591 107 g-index
559 all docs	559 docs citations	559 times ranked	17041 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
166	Transition metal oxides on organic semiconductors. Organic Electronics, 2014, 15, 871-877.	1.4	30
167	Type-tunable amplified spontaneous emission from core-seeded CdSe/CdS nanorods controlled by excitonâ€“exciton interaction. Nanoscale, 2014, 6, 8509-8514.	2.8	30
168	Highly stable and high power efficiency tandem organic light-emitting diodes with transition metal oxide-based charge generation layers. Organic Electronics, 2015, 23, 70-75.	1.4	30
169	Non-radiative resonance energy transfer in bi-polymer nanoparticles of fluorescent conjugated polymers. Optics Express, 2010, 18, 670.	1.7	29
170	On the mechanisms of InGaN electron cooler in InGaN/GaN light-emitting diodes. Optics Express, 2014, 22, A779.	1.7	29
171	Comparative study of field-dependent carrier dynamics and emission kinetics of InGaN/GaN light-emitting diodes grown on (112Â¯2) semipolar versus (0001) polar planes. Applied Physics Letters, 2014, 104, .	1.5	29
172	Nanosecond colloidal quantum dot lasers for sensing. Optics Express, 2014, 22, 7308.	1.7	29
173	InGaN/GaN multiple-quantum-well light-emitting diodes with a grading InN composition suppressing the Auger recombination. Applied Physics Letters, 2014, 105, .	1.5	29
174	Colloidal nanophotonics: the emerging technology platform. Optics Express, 2016, 24, A430.	1.7	29
175	Reconfigurable Liquid Whispering Gallery Mode Microlasers. Scientific Reports, 2016, 6, 27200.	1.6	29
176	Broad-band polarization-insensitive all-dielectric metalens enabled by intentional off-resonance waveguiding at mid-wave infrared. Applied Physics Letters, 2019, 114, .	1.5	29
177	Plasmon-enhanced fluorescence in gold nanorod-quantum dot coupled systems. Nanotechnology, 2020, 31, 105201.	1.3	29
178	Trion-Mediated FÃ¶rster Resonance Energy Transfer and Optical Gating Effect in WS₂/hBN/MoSe₂ Heterojunction. ACS Nano, 2020, 14, 13470-13477.	7.3	29
179	Spectrally Wide-Range-Tunable, Efficient, and Bright Colloidal Light-Emitting Diodes of Quasi-2D Nanoplatelets Enabled by Engineered Alloyed Heterostructures. Chemistry of Materials, 2020, 32, 7874-7883.	3.2	29
180	An Indium-Free Transparent Resistive Switching Random Access Memory. IEEE Electron Device Letters, 2011, 32, 797-799.	2.2	28

#	Article	IF	Citations
181	Strongly linearly polarized low threshold lasing of all organic photonic quasicrystals. Scientific Reports, 2012, 2, 627.	1.6	28
182	FÃ¶rster-Type Nonradiative Energy Transfer for Assemblies of Arrayed Nanostructures: Confinement Dimension vs Stacking Dimension. Journal of Physical Chemistry C, 2014, 118, 4951-4958.	1.5	28
183	On the origin of the electron blocking effect by an n-type AlGaN electron blocking layer. Applied Physics Letters, 2014, 104, .	1.5	28
184	Colloidal Nanocrystals Embedded in Macrocrystals: Methods and Applications. Journal of Physical Chemistry Letters, 2016, 7, 4117-4123.	2.1	28
185	Temperature-Dependent Emission Kinetics of Colloidal Semiconductor Nanoplatelets Strongly Modified by Stacking. Journal of Physical Chemistry Letters, 2016, 7, 548-554.	2.1	28
186	Rapid Crystallization of All-Inorganic CsPbBr3 Perovskite for High-Brightness Light-Emitting Diodes. ACS Omega, 2017, 2, 2757-2764.	1.6	28
187	Nanocrystal-based hybrid white light generation with tunable colour parameters. Journal of Optics, 2007, 9, S419-S424.	1.5	27
188	Highly efficient nonradiative energy transfer using charged CdSe/ZnS nanocrystals for light-harvesting in solution. Applied Physics Letters, 2009, 95, 033106.	1.5	27
189	A two-dimensional nanopatterned thin metallic transparent conductor with high transparency from the ultraviolet to the infrared. Applied Physics Letters, 2012, 101, 181112.	1.5	27
190	p-doping-free InGaN/GaN light-emitting diode driven by three-dimensional hole gas. Applied Physics Letters, 2013, 103, .	1.5	27
191	Phonon-Assisted Exciton Transfer into Silicon Using Nanoemitters: The Role of Phonons and Temperature Effects in FÃ¶rster Resonance Energy Transfer. ACS Nano, 2013, 7, 10492-10501.	7.3	27
192	Bright Future of Deep-Ultraviolet Photonics: Emerging UVC Chip-Scale Light-Source Technology Platforms, Benchmarking, Challenges, and Outlook for UV Disinfection. ACS Photonics, 2022, 9, 1513-1521.	3.2	27
193	Spatially Selective Assembly of Quantum Dot Light Emitters in an LED Using Engineered Peptides. ACS Nano, 2011, 5, 2735-2741.	7.3	26
194	Efficient three-color white organic light-emitting diodes with a spaced multilayer emitting structure. Applied Physics Letters, 2015, 106, .	1.5	26
195	Optically controlled electroabsorption modulators for unconstrained wavelength conversion. Applied Physics Letters, 2004, 84, 469-471.	1.5	25
196	White light generation by resonant nonradiative energy transfer from epitaxial InGaN/GaN quantum wells to colloidal CdSe/ZnS core/shell quantum dots. New Journal of Physics, 2008, 10, 123001.	1.2	25
197	Quantum efficiency enhancement in film by making nanoparticles of polyfluorene. Optics Express, 2008, 16, 13391.	1.7	25
198	Photocatalytic hybrid nanocomposites of metal oxide nanoparticles enhanced towards the visible spectral range. Applied Catalysis B: Environmental, 2011, 105, 77-85.	10.8	25

#	Article	IF	Citations
199	Reordering orbitals of semiconductor multi-shell quantum dot-quantum well heteronanocrystals. Journal of Applied Physics, 2012, 111, 023713.	1.1	25
200	Enhanced efficiency of solution-processed small-molecule solar cells upon incorporation of gold nanospheres and nanorods into organic layers. Chemical Communications, 2014, 50, 4451-4454.	2.2	25
201	Nonradiative recombination â€" critical in choosing quantum well number for InGaN/GaN light-emitting diodes. Optics Express, 2015, 23, A34.	1.7	25
202	Nearâ€Infraredâ€Emitting Fiveâ€Monolayer Thick Copperâ€Doped CdSe Nanoplatelets. Advanced Optical Materials, 2019, 7, 1900831.	3.6	25
203	Utilizing Multiple BioMEMS Sensors to Monitor Orthopaedic Strain and Predict Bone Fracture Healing. Journal of Orthopaedic Research, 2019, 37, 1873-1880.	1.2	25
204	Bifunctional highly fluorescent hollow porous microspheres made of BaMoO4â€‰:â€‰Pr3+ nanocrystals via a template-free synthesis. Journal of Materials Chemistry, 2011, 21, 9009.	6.7	24
205	Efficient nonradiative energy transfer from InGaN/GaN nanopillars to CdSe/ZnS core/shell nanocrystals. Applied Physics Letters, 2011, 98, .	1.5	24
206	Study of exciton transfer in dense quantum dot nanocomposites. Nanoscale, 2014, 6, 11387-11394.	2.8	24
207	Observation of polarized gain from aligned colloidal nanorods. Nanoscale, 2015, 7, 6481-6486.	2.8	24
208	Influence of n-type versus p-type AlGaN electron-blocking layer on InGaN/GaN multiple quantum wells light-emitting diodes. Applied Physics Letters, 2013, 103, .	1.5	23
209	Wireless Measurement of Elastic and Plastic Deformation by a Metamaterial-Based Sensor. Sensors, 2014, 14, 19609-19621.	2.1	23
210	Time-resolved photoluminescence study of CdSe/CdMnS/CdS core/multi-shell nanoplatelets. Applied Physics Letters, 2016, 108, .	1.5	23
211	Multifunctional integrated photonic switches. IEEE Journal of Selected Topics in Quantum Electronics, 2005, 11, 86-96.	1.9	22
212	White emitting polyfluorene functionalized with azide hybridized on near-UV light emitting diode for high color rendering index. Optics Express, 2008, 16, 1115.	1.7	22
213	Excitation resolved color conversion of CdSe/ZnS core/shell quantum dot solids for hybrid white light emitting diodes. Journal of Applied Physics, 2009, 105, .	1.1	22
214	A quinoxaline based N-heteroacene interfacial layer for efficient hole-injection in quantum dot light-emitting diodes. Nanoscale, 2015, 7, 11531-11535.	2.8	22
215	Ultra-thin broadband nanostructured insulator-metal-insulator-metal plasmonic light absorber. Optics Express, 2015, 23, 9753.	1.7	22
216	On the hole accelerator for III-nitride light-emitting diodes. Applied Physics Letters, 2016, 108, .	1.5	22

#	Article	IF	Citations
217	A Wireless Metamaterial-Inspired Passive Rotation Sensor With Submilliradian Resolution. IEEE Sensors Journal, 2018, 18, 4482-4490.	2.4	22
218	Quantum efficiency enhancement in nanocrystals using nonradiative energy transfer with optimized donor-acceptor ratio for hybrid LEDs. Applied Physics Letters, 2009, 94, 243107.	1.5	21
219	Plasmon-based photopolymerization: near-field probing, advanced photonic nanostructures and nanophotochemistry. Journal of Optics (United Kingdom), 2014, 16, 114002.	1.0	21
220	All-optical control of exciton flow in a colloidal quantum well complex. Light: Science and Applications, 2020, 9, 27.	7.7	21
221	Self-Resonant Microlasers of Colloidal Quantum Wells Constructed by Direct Deep Patterning. Nano Letters, 2021, 21, 4598-4605.	4.5	21
222	High-Performance Deep Red Colloidal Quantum Well Light-Emitting Diodes Enabled by the Understanding of Charge Dynamics. ACS Nano, 2022, 16, 10840-10851.	7.3	21
223	Violet to deep-ultraviolet InGaNâˆ•GaN and GaNâˆ•AlGaN quantum structures for UV electroabsorption modulators. Journal of Applied Physics, 2007, 102, .	1.1	20
224	Luminescence in quantum-confined cadmium selenide nanocrystals and nanorods in external electric fields. Semiconductors, 2009, 43, 1008-1016.	0.2	20
225	Photovoltaic nanopillar radial junction diode architecture enhanced by integrating semiconductor quantum dot nanocrystals as light harvesters. Applied Physics Letters, 2010, 97, 093111.	1.5	20
226	Influence of gold-silica nanoparticles on the performance of small-molecule bulk heterojunction solar cells. Organic Electronics, 2015, 22, 20-28.	1.4	20
227	Ultralow-threshold up-converted lasing in oligofluorenes with tailored strong nonlinear absorption. Journal of Materials Chemistry C, 2015, 3, 12018-12025.	2.7	20
228	Understanding and Modeling FÃ¶rster-type Resonance Energy Transfer (FRET). SpringerBriefs in Applied Sciences and Technology, 2016, , .	0.2	20
229	Plasmon-Enhanced Energy Transfer in Photosensitive Nanocrystal Device. ACS Nano, 2017, 11, 5430-5439.	7.3	20
230	Magneto-Optics of Excitons Interacting with Magnetic Ions in CdSe/CdMnS Colloidal Nanoplatelets. ACS Nano, 2020, 14, 9032-9041.	7.3	20
231	Ultrahigh Green and Red Optical Gain Cross Sections from Solutions of Colloidal Quantum Well Heterostructures. Journal of Physical Chemistry Letters, 2021, 12, 2177-2182.	2.1	20
232	Electric field dependent radiative decay kinetics of polar InGaN/GaN quantum heterostructures at low fields. Applied Physics Letters, 2009, 94, 211107.	1.5	19
233	FÃ¶rster resonance energy transfer enhanced color-conversion using colloidal semiconductor quantum dots for solid state lighting. Applied Physics Letters, 2009, 95, 151111.	1.5	19
234	Evidence for Nonradiative Energy Transfer in Graphene-Oxide-Based Hybrid Structures. Journal of Physical Chemistry C, 2013, 117, 25298-25304.	1.5	19

#	Article	IF	Citations
235	A hole modulator for InGaN/GaN light-emitting diodes. Applied Physics Letters, 2015, 106, .	1.5	19
236	Possible Plasmonic Acceleration of LED Modulation for Li-Fi Applications. Plasmonics, 2018, 13, 2133-2140.	1.8	19
237	Optical Microfluidic Waveguides and Solution Lasers of Colloidal Semiconductor Quantum Wells. Advanced Materials, 2021, 33, e2007131.	11.1	19
238	Observation of Biexcitons in Nanocrystal Solids in the Presence of Photocharging. ACS Nano, 2013, 7, 4799-4809.	7.3	18
239	PN-type quantum barrier for InGaN/GaN light emitting diodes. Optics Express, 2013, 21, 15676.	1.7	18
240	An efficient non-Lambertian organic light-emitting diode using imprinted submicron-size zinc oxide pillar arrays. Applied Physics Letters, 2013, 102, .	1.5	18
241	Mid-wave infrared metasurface microlensed focal plane array for optical crosstalk suppression. Optics Express, 2015, 23, 27020.	1.7	18
242	Wireless Sensing in Complex Electromagnetic Media: Construction Materials and Structural Monitoring. IEEE Sensors Journal, 2015, 15, 5545-5554.	2.4	18
243	Azimuthally Polarized, Circular Colloidal Quantum Dot Laser Beam Enabled by a Concentric Grating. ACS Photonics, 2016, 3, 2255-2261.	3.2	18
244	Light Trapping in Inverted Organic Photovoltaics With Nanoimprinted ZnO Photonic Crystals. IEEE Journal of Photovoltaics, 2017, 7, 545-549.	1.5	18
245	Temperature-dependent optoelectronic properties of quasi-2D colloidal cadmium selenide nanoplatelets. Nanoscale, 2017, 9, 6595-6605.	2.8	18
246	Plasmonic enhancement of electroluminescence. AIP Advances, 2018, 8, 015324.	0.6	18
247	Strong Plasmon-Wannier Mott Exciton Interaction with High Aspect Ratio Colloidal Quantum Wells. Matter, 2020, 2, 1550-1563.	5.0	18
248	Lowâ€Threshold Lasing from Copperâ€Doped CdSe Colloidal Quantum Wells. Laser and Photonics Reviews, 2021, 15, 2100034.	4.4	18
249	Dual-diode quantum-well modulator for C-band wavelength conversion and broadcasting. Optics Express, 2004, 12, 310.	1.7	17
250	Metamaterial-based wireless RF-MEMS strain sensors. , 2010, , .		17
251	Hyperbolic metamaterials based on quantum-dot plasmon-resonator nanocomposites. Optics Express, 2014, 22, 18290.	1.7	17
252	Stable and efficient colour enrichment powders of nonpolar nanocrystals in LiCl. Nanoscale, 2015, 7, 17611-17616.	2.8	17

#	Article	IF	Citations
253	Macrocrystals of Colloidal Quantum Dots in Anthracene: Exciton Transfer and Polarized Emission. Journal of Physical Chemistry Letters, 2015, 6, 1767-1772.	2.1	17
254	A charge inverter for III-nitride light-emitting diodes. Applied Physics Letters, 2016, 108, 133502.	1.5	17
255	On the internal quantum efficiency for InGaN/GaN light-emitting diodes grown on insulating substrates. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 3078-3102.	0.8	17
256	Polarization-Resolved Plasmon-Modulated Emissions of Quantum Dots Coupled to Aluminum Dimers with Sub-20 nm Gaps. ACS Photonics, 2018, 5, 1566-1574.	3.2	17
257	Light-Induced Paramagnetism in Colloidal Ag+-Doped CdSe Nanoplatelets. Journal of Physical Chemistry Letters, 2021, 12, 2892-2899.	2.1	17
258	Self-Aligning Planarization and Passivation for Integration Applications in IIIâ€“V Semiconductor Devices. IEEE Transactions on Semiconductor Manufacturing, 2005, 18, 182-189.	1.4	16
259	On the triplet distribution and its effect on an improved phosphorescent organic light-emitting diode. Applied Physics Letters, 2012, 101, 093301.	1.5	16
260	Low thermal-mass LEDs: size effect and limits. Optics Express, 2014, 22, 32200.	1.7	16
261	Plasmonic Metamaterials and Nanocomposites with the Narrow Transparency Window Effect in Broad Extinction Spectra. ACS Photonics, 2014, 1, 822-832.	3.2	16
262	Highly Efficient Nonradiative Energy Transfer from Colloidal Semiconductor Quantum Dots to Wells for Sensitive Noncontact Temperature Probing. Advanced Functional Materials, 2016, 26, 2891-2899.	7.8	16
263	High-Stability, High-Efficiency Organic Monoliths Made of Oligomer Nanoparticles Wrapped in Organic Matrix. ACS Nano, 2016, 10, 5333-5339.	7.3	16
264	High-efficiency low-crosstalk dielectric metasurfaces of mid-wave infrared focal plane arrays. Applied Physics Letters, 2017, 110, .	1.5	16
265	Coreâ€crown Quantum Nanoplatelets with Favorable Typeâ€II Heterojunctions Boost Charge Separation and Photocatalytic NO Oxidation on TiO₂. ChemCatChem, 2020, 12, 6329-6343.	1.8	16
266	Ultralow Threshold Optical Gain Enabled by Quantum Rings of Inverted Typeâ€I CdS/CdSe Core/Crown Nanoplatelets in the Blue. Advanced Optical Materials, 2021, 9, 2002220.	3.6	16
267	Title is missing!. Optical and Quantum Electronics, 2001, 33, 1035-1054.	1.5	15
268	Graded-host phosphorescent light-emitting diodes with high efficiency and reduced roll-off. AIP Advances, 2012, 2, 012192.	0.6	15
269	Effect of shell thickness on small-molecule solar cells enhanced by dual plasmonic gold-silica nanorods. Applied Physics Letters, 2014, 105, .	1.5	15
270	Nanocrystal Skins with Exciton Funneling for Photosensing. Small, 2014, 10, 2470-2475.	5.2	15

#	Article	IF	Citations
271	Sweet plasmonics: Sucrose macrocrystals of metal nanoparticles. Nano Research, 2015, 8, 860-869.	5.8	15
272	Investigation of p-type depletion doping for InGaN/GaN-based light-emitting diodes. Applied Physics Letters, 2017, 110, .	1.5	15
273	Engineering Quantum Dots with Different Emission Wavelengths and Specific Fluorescence Lifetimes for Spectrally and Temporally Multiplexed Imaging of Cells. Nanotheranostics, 2017, 1, 131-140.	2.7	15
274	CdTe Quantum Dot-Functionalized P25 Titania Composite with Enhanced Photocatalytic NO₂ Storage Selectivity under UV and Vis Irradiation. ACS Applied Materials & Interfaces, 2019, 11, 865-879.	4.0	15
275	Spectrally Resolved Nonlinear Optical Properties of Doped Versus Undoped Quasi-2D Semiconductor Nanocrystals: Copper and Silver Doping Provokes Strong Nonlinearity in Colloidal CdSe Nanoplatelets. ACS Photonics, 2022, 9, 256-267.	3.2	15
276	Deepâ€Redâ€Emitting Colloidal Quantum Well Lightâ€Emitting Diodes Enabled through a Complex Design of Core/Crown/Double Shell Heterostructure. Small, 2022, 18, e2106115.	5.2	15
277	Integrated photonic switches for nanosecond packet-switched optical wavelength conversion. Optics Express, 2006, 14, 361.	1.7	14
278	Highly efficient nonradiative energy transfer mediated light harvesting in water using aqueous CdTe quantum dot antennas. Optics Express, 2010, 18, 10720.	1.7	14
279	Polarization-dependent circular Dammann grating made of azo-dye-doped liquid crystals. Applied Optics, 2011, 50, 2316.	2.1	14
280	Improved performance of organic light-emitting diodes with MoO_3 interlayer by oblique angle deposition. Optics Express, 2011, 19, 4513.	1.7	14
281	Large-area semi-transparent light-sensitive nanocrystal skins. Optics Express, 2012, 20, 25255.	1.7	14
282	UV-blocking ZnO nanostructure anti-reflective coatings. Optics Communications, 2012, 285, 3238-3241.	1.0	14
283	Energy-saving quality road lighting with colloidal quantum dot nanophosphors. Nanophotonics, 2014, 3, 373-381.	2.9	14
284	Simultaneous enhancement of electron overflow reduction and hole injection promotion by tailoring the last quantum barrier in InGaN/GaN light-emitting diodes. Applied Physics Letters, 2014, 104, .	1.5	14
285	Blue-Emitting CdSe Nanoplatelets Enabled by Sulfur-Alloyed Heterostructures for Light-Emitting Diodes with Low Turn-on Voltage. ACS Applied Nano Materials, 2022, 5, 1367-1376.	2.4	14
286	Scalable Wavelength-Converting Crossbar Switches. IEEE Photonics Technology Letters, 2004, 16, 2305-2307.	1.3	13
287	Electrically switchable finite energy Airy beams generated by a liquid crystal cell with patterned electrode. Optics Communications, 2010, 283, 3846-3849.	1.0	13
288	Electrically tunable lasing from a dye-doped two-dimensional hexagonal photonic crystal made of holographic polymer-dispersed liquid crystals. Applied Physics Letters, 2010, 97, .	1.5	13

#	Article	IF	Citations
289	Microstructured porous ZnO thin film for increased light scattering and improved efficiency in inverted organic photovoltaics. Optics Express, 2014, 22, A1412.	1.7	13
290	Singlet and Triplet Exciton Harvesting in the Thin Films of Colloidal Quantum Dots Interfacing Phosphorescent Small Organic Molecules. Journal of Physical Chemistry C, 2014, 118, 25964-25969.	1.5	13
291	Development of a distance-independent wireless passive RF resonator sensor and a new telemetric measurement technique for wireless strain monitoring. Sensors and Actuators A: Physical, 2017, 255, 87-93.	2.0	13
292	Mutual Energy Transfer in a Binary Colloidal Quantum Well Complex. Journal of Physical Chemistry Letters, 2019, 10, 5193-5199.	2.1	13
293	Design and Realization of a Fully On-Chip High-Q Resonator at 15 GHz on Silicon. IEEE Transactions on Electron Devices, 2008, 55, 3459-3466.	1.6	12
294	Temperature effect on the lasing from a dye-doped two-dimensional hexagonal photonic crystal made of holographic polymer-dispersed liquid crystals. Journal of Applied Physics, 2010, 108, 013106.	1.1	12
295	Plasmonic light-sensitive skins of nanocrystal monolayers. Nanotechnology, 2013, 24, 155201.	1.3	12
296	Engineered Peptides for Nanohybrid Assemblies. Langmuir, 2014, 30, 2137-2143.	1.6	12
297	Green Stimulated Emission Boosted by Nonradiative Resonant Energy Transfer from Blue Quantum Dots. Journal of Physical Chemistry Letters, 2016, 7, 2772-2778.	2.1	12
298	Cucurbit[7]uril-threaded fluoreneâ€“thiophene-based conjugated polyrotaxanes. RSC Advances, 2016, 6, 98109-98116.	1.7	12
299	Exciton energy recycling from ZnO defect levels: towards electrically driven hybrid quantum-dot white light-emitting-diodes. Nanoscale, 2016, 8, 5835-5841.	2.8	12
300	An inductively coupled ultraâ€thin, flexible, and passive RF resonator for MRI marking and guiding purposes: Clinical feasibility. Magnetic Resonance in Medicine, 2018, 80, 361-370.	1.9	12
301	Persuasive Evidence for Electronâ€“Nuclear Coupling in Diluted Magnetic Colloidal Nanoplatelets Using Optically Detected Magnetic Resonance Spectroscopy. Journal of Physical Chemistry Letters, 2019, 10, 4437-4447.	2.1	12
302	Nonradiative resonance energy transfer directed from colloidal CdSe/ZnS quantum dots to epitaxial InGaN/GaN quantum wells for solar cells. Physica Status Solidi - Rapid Research Letters, 2010, 4, 178-180.	1.2	11
303	Tunable nano devices fabricated by controlled deposition of gold nanoparticles via focused ion beam. Microelectronic Engineering, 2010, 87, 1363-1366.	1.1	11
304	Excitonic enhancement of nonradiative energy transfer from a quantum well in the optical near field of energy gradient quantum dots. Applied Physics Letters, 2012, 100, 241109.	1.5	11
305	Strongly Coupled Outer Squircleâ€“Inner Circular Coil Architecture for Enhanced Induction Over Large Areas. IEEE Transactions on Industrial Electronics, 2016, 63, 7478-7487.	5.2	11
306	Colloidal Nanoplatelet/Conducting Polymer Hybrids: Excitonic and Material Properties. Journal of Physical Chemistry C, 2016, 120, 3573-3582.	1.5	11

#	Article	IF	Citations
307	An Equivalent Circuit Model for Nested Split-Ring Resonators. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 3733-3743.	2.9	11
308	Colloidal Photoluminescent Refractive Index Nanosensor Using Plasmonic Effects. Zeitschrift Fur Physikalische Chemie, 2018, 232, 1431-1441.	1.4	11
309	Exciton Dynamics in Colloidal Quantum-Dot LEDs under Active Device Operations. ACS Photonics, 2018, 5, 480-486.	3.2	11
310	Green/Yellow Solid-State Lighting via Radiative and Nonradiative Energy Transfer Involving Colloidal Semiconductor Nanocrystals. IEEE Journal of Selected Topics in Quantum Electronics, 2009, 15, 1163-1170.	1.9	10
311	Assembly Kinetics of Nanocrystals via Peptide Hybridization. Langmuir, 2011, 27, 4867-4872.	1.6	10
312	Morphology-Dependent Energy Transfer of Polyfluorene Nanoparticles Decorating InGaN/GaN Quantum-Well Nanopillars. Journal of Physical Chemistry C, 2013, 117, 18613-18619.	1.5	10
313	Wavelength tuning of the spirally drawn whispering gallery mode microfiber lasers and the perspectives for sensing applications. Optics Express, 2017, 25, 2618.	1.7	10
314	Highâ€efficiency flowâ€through induction heating. IET Power Electronics, 2020, 13, 2119-2126.	1.5	10
315	Optically detected magnetic resonance in CdSe/CdMnS nanoplatelets. Nanoscale, 2020, 12, 21932-21939.	2.8	10
316	Onâ€Chip Mercuryâ€Free Deepâ€UV Lightâ€Emitting Sources with Ultrahigh Germicidal Efficiency. Advanced Optical Materials, 2021, 9, 2100072.	3.6	10
317	Management of electroluminescence from silver-doped colloidal quantum well light-emitting diodes. Cell Reports Physical Science, 2022, 3, 100860.	2.8	10
318	Intimate monolithic integration of chip-scale photonic circuits. IEEE Journal of Selected Topics in Quantum Electronics, 2005, 11, 1255-1265.	1.9	9
319	Tailoring insoluble nanobelts into soluble anti-UV nanopotpourris. Nanoscale, 2011, 3, 4742.	2.8	9
320	Opposite carrier dynamics and optical absorption characteristics under external electric field in nonpolar vs polar InGaN/GaN based quantum heterostructures. Optics Express, 2011, 19, 5442.	1.7	9
321	Nanoplasmonic surfaces enabling strong surface-normal electric field enhancement. Optics Express, 2013, 21, 23097.	1.7	9
322	Exciton dynamics in luminescent carbon nanodots: Electronâ€“hole exchange interaction. Nano Research, 2016, 9, 549-559.	5.8	9
323	Simple and Complex Metafluids and Metastructures with Sharp Spectral Features in a Broad Extinction Spectrum: Particleâ€“Particle Interactions and Testing the Limits of the Beerâ€“Lambert Law. Journal of Physical Chemistry C, 2017, 121, 2987-2997.	1.5	9
324	Optical Gain in Ultrathin Selfâ€Assembled Biâ€Layers of Colloidal Quantum Wells Enabled by the Mode Confinement in their Highâ€Index Dielectric Waveguides. Small, 2020, 16, e2004304.	5.2	9

#	Article	IF	Citations
325	CdSe/CdMnS Nanoplatelets with Bilayer Core and Magnetically Doped Shell Exhibit Switchable Excitonic Circular Polarization: Implications for Lasers and Light-Emitting Diodes. ACS Applied Nano Materials, 2020, 3, 3151-3156.	2.4	9
326	Andreev-level spectroscopy and Josephson-current switching in a three-terminal Josephson junction. Physical Review B, 1998, 58, 15120-15127.	1.1	8
327	Circular High-Q Resonating Isotropic Strain Sensors with Large Shift of Resonance Frequency under Stress. Sensors, 2009, 9, 9444-9451.	2.1	8
328	Observation of efficient transfer from Mottâ€“Wannier to Frenkel excitons in a hybrid semiconductor quantum dot/polymer composite at room temperature. Applied Physics Letters, 2010, 97, .	1.5	8
329	Bio-nanohybrids of quantum dots and photoproteins facilitating strong nonradiative energy transfer. Nanoscale, 2013, 5, 7034.	2.8	8
330	Excitonic enhancement of nonradiative energy transfer to bulk silicon with the hybridization of cascaded quantum dots. Applied Physics Letters, 2013, 103, .	1.5	8
331	Photosensitivity Enhancement with TiO₂ in Semitransparent Light-Sensitive Skins of Nanocrystal Monolayers. ACS Applied Materials & Interfaces, 2014, 6, 9023-9028.	4.0	8
332	Flexible strain sensors based on electrostatically actuated graphene flakes. Journal of Micromechanics and Microengineering, 2015, 25, 075016.	1.5	8
333	Wireless Metal Detection and Surface Coverage Sensing for All-Surface Induction Heating. Sensors, 2016, 16, 363.	2.1	8
334	Improved performance of InGaN/GaN flip-chip light-emitting diodes through the use of robust Ni/Ag/TiW mirror contacts. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, 011209.	0.6	8
335	Multi-Point Single-Antenna Sensing Enabled by Wireless Nested Split-Ring Resonator Sensors. IEEE Sensors Journal, 2016, 16, 7744-7752.	2.4	8
336	Critical role of CdSe nanoplatelets in color-converting CdSe/ZnS nanocrystals for InGaN/GaN light-emitting diodes. Optics Letters, 2016, 41, 2883.	1.7	8
337	Excitonic improvement of colloidal nanocrystals in salt powder matrix for quality lighting and color enrichment. Optics Express, 2016, 24, A74.	1.7	8
338	Brightly Luminescent Cu-Zn-In-S/ZnS Core/Shell Quantum Dots in Salt Matrices. Zeitschrift Fur Physikalische Chemie, 2018, 233, 23-40.	1.4	8
339	All-Surface Induction Heating With High Efficiency and Space Invariance Enabled by Arraying Squircle Coils in Square Lattice. IEEE Transactions on Consumer Electronics, 2018, 64, 339-347.	3.0	8
340	High-performance AlGaInP light-emitting diodes integrated on silicon through a superior quality germanium-on-insulator. Photonics Research, 2018, 6, 290.	3.4	8
341	Cd-free Cu-doped ZnInS/ZnS Core/Shell Nanocrystals: Controlled Synthesis And Photophysical Properties. Nanoscale Research Letters, 2018, 13, 182.	3.1	8
342	MoS₂ Phototransistor Sensitized by Colloidal Semiconductor Quantum Wells. Advanced Optical Materials, 2020, 8, 2001198.	3.6	8

#	Article	IF	Citations
343	Mechanosynthesis of polymer-stabilized lead bromide perovskites: insight into the formation and phase conversion of nanoparticles. Nano Research, 2021, 14, 1078-1086.	5.8	8
344	Singleâ€Mode Lasing from a Single 7 nm Thick Monolayer of Colloidal Quantum Wells in a Monolithic Microcavity. Laser and Photonics Reviews, 2021, 15, 2000479.	4.4	8
345	Nearâ€Field Energy Transfer into Silicon Inversely Proportional to Distance Using Quasiâ€2D Colloidal Quantum Well Donors. Small, 2021, 17, e2103524.	5.2	8
346	Warm-white light-emitting diodes integrated with colloidal quantum dots for high luminous efficacy and color rendering: reply to comment. Optics Letters, 2011, 36, 2852.	1.7	7
347	RF-MEMS load sensors with enhanced Q-factor and sensitivity in a suspended architecture. Microelectronic Engineering, 2011, 88, 247-253.	1.1	7
348	Enhanced optical characteristics of light emitting diodes by surface plasmon of Ag nanostructures. , 2011, , .		7
349	Construction of multi-layered white emitting organic nanoparticles by clicking polymers. Journal of Materials Chemistry C, 2015, 3, 10277-10284.	2.7	7
350	Demonstration of the portability of porous microstructure architecture to indium-doped ZnO electron selective layer for enhanced light scattering in inverted organic photovoltaics. Journal of Sol-Gel Science and Technology, 2016, 78, 613-620.	1.1	7
351	Nonradiative Energy Transfer between Doped and Undoped Flat Semiconductor Nanocrystals of Colloidal Quasi-2D Nanoplatelets. Journal of Physical Chemistry C, 2019, 123, 1470-1476.	1.5	7
352	High-Performance Triangular Miniaturized-LEDs for High Current and Power Density Applications. ACS Photonics, 2021, 8, 2304-2310.	3.2	7
353	Ligand Exchange and Impurity Doping in 2D CdSe Nanoplatelet Thin Films and Their Applications. Advanced Electronic Materials, 2022, 8, 2100739.	2.6	7
354	Implementation of high qualityâ€factor onâ€chip tuned microwave resonators at 7 GHz. Microwave and Optical Technology Letters, 2009, 51, 497-501.	0.9	6
355	Spatial angle dependent lasing from a dye-doped two-dimensional hexagonal photonic crystal made of holographic polymer-dispersed liquid crystals. Optics Express, 2012, 20, 9058.	1.7	6
356	On the effect of N-GaN/P-GaN/N-GaN/P-GaN/N-GaN built-in junctions in the n-GaN layer for InGaN/GaN light-emitting diodes. Optics Express, 2014, 22, 809.	1.7	6
357	Decoupling contact and mirror: an effective way to improve the reflector for flip-chip InGaN/GaN-based light-emitting diodes. Journal Physics D: Applied Physics, 2016, 49, 265106.	1.3	6
358	Coupling and power transfer efficiency enhancement of modular and array of planar coils using in-plane ring-shaped inner ferrites for inductive heating applications. Journal of Applied Physics, 2017, 122, 014902.	1.1	6
359	Writing chemical patterns using electrospun fibers as nanoscale inkpots for directed assembly of colloidal nanocrystals. Nanoscale, 2020, 12, 895-903.	2.8	6
360	Vacuum-evaporated lead halide perovskite LEDs [Invited]. Optical Materials Express, 2022, 12, 256.	1.6	6

#	Article	IF	Citations
361	Plasmon-enhanced photoresponse of single silver nanowires and their network devices. Nanoscale Horizons, 2022, 7, 396-402.	4.1	6
362	Novel planarization and passivation in the integration of III-V semiconductor devices. , 2004, 5356, 81.		5
363	Comparative study of optically activated nanocomposites with photocatalytic TiO₂ and ZnO nanoparticles for massive environmental decontamination. Journal of Nanophotonics, 2007, 1, 011685.	0.4	5
364	Room-temperature larger-scale highly ordered nanorod imprints of ZnO film. Optics Express, 2013, 21, 26846.	1.7	5
365	Manipulating Optical Properties of ZnO/Ga:ZnO Coreâ€“Shell Nanorods Via Spatially Tailoring Electronic Bandgap. Advanced Optical Materials, 2015, 3, 1066-1071.	3.6	5
366	FÃ¶rster-Type Nonradiative Energy Transfer Models. SpringerBriefs in Applied Sciences and Technology, 2016, , 19-27.	0.2	5
367	Multiexciton generation assisted highly photosensitive CdHgTe nanocrystal skins. Nano Energy, 2016, 26, 324-331.	8.2	5
368	Flexible and fragmentable tandem photosensitive nanocrystal skins. Nanoscale, 2016, 8, 4495-4503.	2.8	5
369	Highly Luminescent CB[7]â€Based Conjugated Polyrotaxanes Embedded into Crystalline Matrices. Macromolecular Materials and Engineering, 2017, 302, 1700290.	1.7	5
370	â€œMeta-atomlessâ€•architecture based on an irregular continuous fabric of coupling-tuned identical nanopillars enables highly efficient and achromatic metasurfaces. Applied Physics Letters, 2021, 118, 081105.	1.5	5
371	Large-Signal Response of p-i-n Photodetectors Using Short Pulses With Small Spot Sizes. IEEE Journal of Quantum Electronics, 2004, 40, 143-151.	1.0	4
372	Self-aligned via and trench for metal contact in III-V semiconductor devices. Journal of Vacuum Science & Technology B, 2006, 24, 1117.	1.3	4
373	Comparative study of electroabsorption in InGaNâ•GaN quantum zigzag heterostructures with polarization-induced electric fields. Applied Physics Letters, 2008, 92, 201105.	1.5	4
374	A Complementary Electrochromic Device with Highly Improved Performance Based on Brick-Like Hydrated Tungsten Trioxide Film. Journal of Nanoscience and Nanotechnology, 2012, 12, 3838-3847.	0.9	4
375	Optical antenna of comb-shaped split ring architecture for increased field localization in NIR and MIR. Optics Express, 2013, 21, 29455.	1.7	4
376	Light-Emitting Diodes: Solution Processed Tungsten Oxide Interfacial Layer for Efficient Hole-Injection in Quantum Dot Light-Emitting Diodes (Small 2/2014). Small, 2014, 10, 246-246.	5.2	4
377	Wireless deep-subwavelength metamaterial enabling sub-mm resolution magnetic resonance imaging. Sensors and Actuators A: Physical, 2018, 274, 211-219.	2.0	4
378	Plasmonâ€“exciton systems with high quantum yield using deterministic aluminium nanostructures with rotational symmetries. Nanoscale, 2019, 11, 20315-20323.	2.8	4

#	Article	IF	Citations
379	Impurity incorporation and exchange interactions in Co2+-doped CdSe/CdS core/shell nanoplatelets. Journal of Chemical Physics, 2019, 151, 224708.	1.2	4
380	Strain-Reduced Micro-LEDs Grown Directly Using Partitioned Growth. Frontiers in Chemistry, 2021, 9, 639023.	1.8	4
381	Modulating Emission Properties in a Hostâ€“Guest Colloidal Quantum Well Superlattice. Advanced Optical Materials, 2022, 10, 2101756.	3.6	4
382	Narrow electroluminescence in bromide ligand-capped cadmium chalcogenide nanoplatelets. Applied Physics Letters, 2022, 120, .	1.5	4
383	High-speed optical switching based on diffusive conduction in an optical waveguide with surface-normal optical control. Journal of Applied Physics, 2004, 95, 2258-2263.	1.1	3
384	High Optical Efficiency of ZnO Nanoparticles. , 2007, , .		3
385	Power conversion and luminous efficiency performance of nanophosphor quantum dots on color-conversion LEDs for high-quality general lighting. , 2012, , .		3
386	Improved InGaN/GaN light-emitting diodes with a p-GaN/n-GaN/p-GaN/n-GaN/p-GaN current-spreading layer: errata. Optics Express, 2013, 21, 17670.	1.7	3
387	An improved polymer solar cell incorporating single-wall carbon nanotubes. Journal of Modern Optics, 2014, 61, 1761-1766.	0.6	3
388	Cascaded plasmon-plasmon coupling mediated energy transfer across stratified metal-dielectric nanostructures. Scientific Reports, 2016, 6, 34086.	1.6	3
389	Magnetic Resonance Imaging Assisted by Wireless Passive Implantable Fiducial e-Markers. IEEE Access, 2017, 5, 19693-19702.	2.6	3
390	Lightâ€Emitting Diodes: Control of LED Emission with Functional Dielectric Metasurfaces (Laser) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3	4.4	3
391	Tailored Synthesis of Iron Oxide Nanocrystals for Formation of Cuboid Mesocrystals. ACS Omega, 2021, 6, 20351-20360.	1.6	3
392	Metalâ€“organic frameworks protect perovskite. Nature Photonics, 2021, 15, 796-797.	15.6	3
393	White Light Generation with CdSe/ZnS Core-Shell Nanocrystals and InGaN/GaN Light Emitting Diodes. , 2006, , .		2
394	On-Chip-Integrated Nanowire Device Platform With Controllable Nanogap for Manipulation, Capturing, and Electrical Characterization of Nanoparticles. IEEE Journal of Selected Topics in Quantum Electronics, 2009, 15, 1413-1419.	1.9	2
395	Geometrically distributed aperiodic circular photonic crystals with broad and isotropic photonic band gaps. Optics Communications, 2011, 284, 2239-2241.	1.0	2
396	Three-dimensional study of planar optical antennas made of split-ring architecture outperforming dipole antennas for increased field localization. Optics Letters, 2012, 37, 139.	1.7	2

#	Article	IF	Citations
397	Strong nonradiative energy transfer from the nanopillars of quantum wells to quantum dots: Efficient excitonic color conversion for light emitting diodes. , 2012, , .		2
398	Highly polarized light emission by isotropic quantum dots integrated with magnetically aligned segmented nanowires. Applied Physics Letters, 2014, 105, 141116.	1.5	2
399	Low-threshold optical gain and lasing of colloidal nanoplatelets. , 2014, , .		2
400	Implementation of graphene multilayer electrodes in quantum dot light-emitting devices. Applied Physics A: Materials Science and Processing, 2015, 120, 1197-1203.	1.1	2
401	Upconversion Lasers: Stable and Lowâ€Threshold Optical Gain in CdSe/CdS Quantum Dots: An Allâ€Colloidal Frequency Upâ€Converted Laser (Adv. Mater. 17/2015). Advanced Materials, 2015, 27, 2678-2678.	11.1	2
402	Colloidal Nanoplatelets: Plateletâ€inâ€Box Colloidal Quantum Wells: CdSe/CdS@CdS Core/Crown@Shell Heteronanoplatelets (Adv. Funct. Mater. 21/2016). Advanced Functional Materials, 2016, 26, 3554-3554.	7.8	2
403	Unusual Fluorescent Properties of Stilbene Units and CdZnS/ZnS Quantum Dots Nanocomposites: Whiteâ€Light Emission in Solution versus Lightâ€Harvesting in Films. Macromolecular Chemistry and Physics, 2016, 217, 24-31.	1.1	2
404	Short History of Energy Transfer Theory Before FÃ¶rster, At The Time of FÃ¶rster, and After FÃ¶rster. SpringerBriefs in Applied Sciences and Technology, 2016, , 1-8.	0.2	2
405	Noncontact Temperature Probing: Highly Efficient Nonradiative Energy Transfer from Colloidal Semiconductor Quantum Dots to Wells for Sensitive Noncontact Temperature Probing (Adv. Funct.) Tj ETQq1 1 0.784314 rgBT /Over		
406	Fluorescent Heterodoped Nanotetrapods as Synergistically Enhancing Positive and Negative Magnetic Resonance Imaging Contrast Agents. ACS Applied Materials & Interfaces, 2016, 8, 12352-12359.	4.0	2
407	Spectral tunability and enhancement of molecular radiative emission by metal-dielectric-metal stratified plasmonic nanostructure. Applied Physics Letters, 2017, 111, 093302.	1.5	2
408	FÃ¶rster-type Resonance Energy Transfer (FRET): Applications. SpringerBriefs in Applied Sciences and Technology, 2017, , 1-40.	0.2	2
409	Energy transfer processes. , 0, , 210-226.		2
410	Luminescence of Gold Nanorod-Quantum Dots Complexes. International Journal of Nanoscience, 2019, 18, 1940002.	0.4	2
411	Color Science and Photometry for Lighting with LEDs and Semiconductor Nanocrystals. SpringerBriefs in Applied Sciences and Technology, 2019, , .	0.2	2
412	Solution Lasing: Optical Microfluidic Waveguides and Solution Lasers of Colloidal Semiconductor Quantum Wells (Adv. Mater. 10/2021). Advanced Materials, 2021, 33, 2170070.	11.1	2
413	Engineered ultraviolet InGaN/AlGaN multiple-quantum-well structures for maximizing cathodoluminescence efficiency. AIP Advances, 2022, 12, .	0.6	2
414	Electrically-reconfigurable integrated photonic switches. , 0, , .		1

#	Article	IF	Citations
415	CdSe/ZnS core-shell nanocrystal based scintillators for enhanced detection in UV. , 2006, , .		1
416	InGaN/GaN based LEDs with electroluminescence in violet, blue, and green tuned by epitaxial growth temperature. , 2006, , .		1
417	Size effect in optical activation of TiO2 nanoparticles in photocatalytic process. , 2006, , .		1
418	Multi-layered CdSe/ZnS/CdSe heteronanocrystals to generate and tune white light. , 2008, , .		1
419	Wavelength dependent color conversion of CdSe/ZnS core/shell nanocrystals for white LEDs. , 2009, , .		1
420	Cascading plasmonic and nonradiative energy transfer interactions by plasmon-coupling only donor or only acceptor quantum dots of the energy transfer pairs. , 2010, , .		1
421	Light-harvesting semiconductor quantum dot nanocrystals integrated on photovoltaic radial junction nanopillars. , 2010, , .		1
422	High-quality InP/ZnS nanocrystals with high photometric performance and their application to white quantum dot light-emitting diodes. , 2012, , .		1
423	Dislocation density dependent electroabsorption in epitaxial lateral overgrown InGaN/GaN quantum structures. Optics Express, 2013, 21, 1128.	1.7	1
424	Highly flexible, full-color, top-emitting quantum dot light-emitting diode tapes. , 2013, , .		1
425	CdSe/ZnS colloidal quantum dots for solution-processed DFB lasers. , 2013, , .		1
426	Advances in colloidal quantum dot distributed feedback lasers hybridized on glass membranes. , 2014, , .		1
427	Low-cost, large-scale, ordered ZnO nanopillar arrays for light extraction efficiency enhancement in quantum dot light-emitting diodes. , 2014, , .		1
428	Semiconductor Nanocrystals: Liquidâ€“Liquid Diffusionâ€Assisted Crystallization: A Fast and Versatile Approach Toward High Quality Mixed Quantum Dotâ€Salt Crystals (Adv. Funct. Mater. 18/2015). Advanced Functional Materials, 2015, 25, 2783-2783.	7.8	1
429	Quantum Dots: Blue Liquid Lasers from Solution of CdZnS/ZnS Ternary Alloy Quantum Dots with Quasi-Continuous Pumping (Adv. Mater. 1/2015). Advanced Materials, 2015, 27, 168-168.	11.1	1
430	Nonradiative energy transfer in a layered metal-dielectric nanostructure mediated by surface plasmons. Proceedings of SPIE, 2015, , .	0.8	1
431	Theoretical Approaches: Exciton Theory, Coulomb Interactions and Fluctuation-Dissipation Theorem. SpringerBriefs in Applied Sciences and Technology, 2016, , 41-51.	0.2	1
432	An Optically Readable InGaN/GaN RRAM. IEEE Transactions on Electron Devices, 2016, 63, 2328-2333.	1.6	1

#	Article	IF	Citations
433	Time resolved photoluminescence study of magnetic CdSe/CdMnS/CdS core/multi-shell nanoplatelets. , 2017, , .		1
434	Inverted Type-I CdS/CdSe Core/Crown colloidal quantum ring. , 2017, , .		1
435	Color-Enrichment Semiconductor Nanocrystals for Biorhythm-Friendly Backlighting. Zeitschrift Fur Physikalische Chemie, 2018, 232, 1457-1468.	1.4	1
436	Polarization Properties of Photoluminescence of Anisotropic Polymer Films Containing Aligned Au Nanorods and Semiconductor Nanoparticles of Various Shape. Semiconductors, 2018, 52, 2054-2056.	0.2	1
437	Quantum confinement effects in semiconductors. , 0, , 52-91.		1
438	Lighting with nanostructures. , 0, , 229-277.		1
439	Wireless Monitoring of a Structural Beam to be Used for Post-Earthquake Damage Assessment. , 2018, , .		1
440	Active Nanophotonics [Scanning the Issue]. Proceedings of the IEEE, 2020, 108, 625-627.	16.4	1
441	Colloidal Gain Media: Singleâ€Mode Lasing from a Single 7 nm Thick Monolayer of Colloidal Quantum Wells in a Monolithic Microcavity (Laser Photonics Rev. 15(4)/2021). Laser and Photonics Reviews, 2021, 15, 2170024.	4.4	1
442	Ultraefficient FÃ¶rster-Type Nonradiative Energy Transfer Enabled by the Complex Dielectric Medium with Tuned Permittivity. Journal of Physical Chemistry C, 2021, 125, 12405-12413.	1.5	1
443	Coherent Random lasing from CdSe/CdS/ZnS quantum dots. , 2013, , .		1
444	Multifunctional Integrated Photonic Switches for Nanosecond Packet-Switched Wavelength Conversion. , 2005, , .		1
445	Color Enrichment Solids of Spectrally Pure Colloidal Quantum Wells for Wide Color Span in Displays. Advanced Optical Materials, 2022, 10, .	3.6	1
446	Single ultrafast diffusive conduction based optoelectronic switch for multi-channel operation. , 2005, , .		0
447	Blue InGaN/GaN-based Quantum Electroabsorption Modulators. , 2006, , .		0
448	Photonic devices and systems embedded with nanocrystals. , 2006, , .		0
449	Optoelectronic switches based on diffusive conduction. Journal of Applied Physics, 2006, 100, 043107.	1.1	0
450	Investigation of Excitonic Effects in Polar InGaN/GaN Quantum Heterostructures for Enhanced Quantum Electroabsorption in Blue. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	0

#	Article	IF	Citations
451	White Light Generation with Azide Functionalized Polyfluorene Hybridized on Near-UV Light Emitting Diode. , 2007, , .		0
452	White CdS Nanoluminophore based Tunable Hybrid Light Emitting Diodes. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	0
453	Near-UV InGaN/GaN-based dual-operation quantum optoelectronic devices. Proceedings of SPIE, 2007, , .	0.8	0
454	Localized plasmon-engineered spontaneous emission of CdSe/ZnS nanocrystals closely-packed in the proximity of Ag nanoislands. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	0
455	Tunable white light generating nanocyrstal-hybridized LEDs. , 2007, , .		0
456	High-Quality White Light Generation using Dually Hybridized Nanocrystals and Conjugated Polymers. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	0
457	Warm white light generating nanocrystal hybridized LEDs with high color rendering index. , 2008, , .		0
458	Surface-state emission enhancement in white-luminophor CdS nanocrystals using localized plasmon coupling. , 2008, , .		0
459	Experimental and computational analyses of electroabsorption in polar InGaN/GaN quantum zigzag heterostructures. , 2008, , .		0
460	How can we use nanophotonics to help in combating climate change?. , 2008, , .		0
461	Nanocrystal emitters for enhanced photovoltaics in UV. , 2008, , .		0
462	Increased quantum efficiency and reduced red-shift in polymer nanoparticle luminophors. , 2008, , .		0
463	White light generating semiconductor nanocrystal luminophors with high photometric quality. , 2008, , .		0
464	Light-harvesting positively-charged nanocrystals for strong energy transfer to dye molecules. , 2008, , .		0
465	Enhanced spontaneous emission in semiconductor nanocrystal solids using resonant energy transfer for integrated devices. , 2008, , .		0
466	Multi-material specific, targeted self-assembly of nanocrystal emitters using genetically engineered peptides on optoelectronic microchips. , 2008, , .		0
467	Development and Biocompatibility Characterization of a BioMEMS Sensor for Monitoring the Progression of Fracture Healing. , 2009, , .		0
468	On-chip integrated nanowire devices with controllable nanogap for manipulation, capturing, and electrical characterization of nanoparticles. , 2009, , .		0

#	Article	IF	Citations
469	Optically active bi-polymer hetero-nanoparticles. , 2009, , .		0
470	Electric field dependence of radiative recombination lifetimes in polar InGaN/GaN quantum heterostructures. , 2009, , .		0
471	Quantum dot emitters integrated with smart peptides. , 2009, , .		0
472	Plasmon enhanced colloidal nanocrystal composites incorporating Au nanoparticles in a repeating layered architecture. , 2009, , .		0
473	Architectural tuning of color chromaticity by controlled nonradiative resonance energy transfer in CdTe nanocrystal solids. , 2009, , .		0
474	Efficient migration of Mott-Wannier excitons to Frenkel excitons in hybrid organic/inorganic assembly of CdSe/ZnS nanocrystals in MDMO-PPV homopolymers. , 2009, , .		0
475	Highly efficient FRET-based light-harvesting using nanocrystals. , 2009, , .		0
476	Nanocrystal integrated light emitting diodes based on radiative and nonradiative energy transfer for the green gap. , 2009, , .		0
477	Quantum efficiency enhancement optimization in colloidal semiconductor quantum dot solids using nonradiative energy transfer. , 2010, , .		0
478	Volumetric plasmonic resonators for very thin organic solar cells. , 2010, , .		0
479	Observation of anisotropic emission from semiconductor quantum dots in nanocomposites of metal nanoparticles. , 2010, , .		0
480	FRET-assisted organic dye molecules using in conjunction with colloidal quantum dots for bio-labelling. , 2010, , .		0
481	Au-silica core/shell hybrid nanoparticles furnished with CdTe nanocrystals for enhanced plasmon-exciton interactions. , 2010, , .		0
482	Polar vs. nonpolar InGaN/GaN quantum heterostructures: Opposite quantum confined electroabsorption and carrier dynamics behavior. , 2010, , .		0
483	Controlled growth and characterization of epitaxially-laterally-overgrown InGaN/GaN quantum heterostructures. , 2010, , .		0
484	Non-radiative energy-transfer-driven quantum dot LEDs. , 2010, , .		0
485	Superior warm-white light-emitting diodes integrated with quantum dot nanophosphors for high luminous efficacy and color rendering. , 2011, , .		0
486	Phonon-assisted nonradiative energy transfer from colloidal quantum dots to monocrystalline bulk silicon. , 2012, , .		0

#	Article	IF	Citations
487	Observation of biexcitons in the presence of trions generated via sequential absorption of multiple photons in colloidal quantum dot solids. , 2012, , .		0
488	Excitonic energy transfer dynamics in hybrid organic/inorganic nanocomposites at high loading levels. , 2012, , .		0
489	Large-area (> 50 cm Ã— 50 cm), freestanding, flexible, optical membranes of Cd-free nanocrystal quantum dots. , 2012, , .		0
490	Large-area semi-transparent light-sensitive nanocrystal skins. , 2012, , .		0
491	Nanocrystal LEDs with enhanced external quantum efficiency enabled by the use of phosphorescent molecules. , 2013, , .		0
492	Nanoplasmonic three-dimensional surfaces with strong surface-normal electric field enhancement. , 2013, , .		0
493	Quality LED lighting and displays using nanocrystals. , 2013, , .		0
494	Biomedical and Biochemical Tools of FÃ¶rster Resonance Energy Transfer Enabled by Colloidal Quantum Dot Nanocrystals for Life Sciences. , 2013, , 531-560.		0
495	A Novel Bio-Microelectromechanical System for In Vivo Diagnostic Monitoring of Fracture Healing. , 2013, , .		0
496	Plasmonic nanoparticle enhanced and extended performance of Light-sensitive nanocrystal skins. Materials Research Society Symposia Proceedings, 2013, 1509, 1.	0.1	0
497	Arrays of suspended plasmonic nanodiscs. , 2013, , .		0
498	Blue- and red-shifting amplified spontaneous emission of CdSe/CdS core/shell colloidal quantum dots. , 2013, , .		0
499	Three-dimensional nanoplasmonic surfaces with strong out-of-plane electric field enhancement. , 2013, , .		0
500	Type-tuning of quasi-type-II CdSe/CdS seeded core/shell nanorods: type-I vs. type-II. , 2013, , .		0
501	TiO<inf>2</inf> assisted sensitivity enhancement in photosensitive nanocrystal skins. , 2014, , .		0
502	Anisotropic stimulated emission from aligned CdSe/CdS dot-in-rods. , 2014, , .		0
503	Multi-photon Excited Amplified Spontaneous Emission and Lasing from CdSe/CdS/ZnS quantum dots. , 2014, , .		0
504	Novel optical antenna designs of comb shaped split ring architecture for NIR and MIR enhanced field localization. , 2014, , .		0

#	Article	IF	Citations
505	Silica Synthesis and Coating of Quantum Dots in Droplet Based Microreactors. , 2015, , .		0
506	Exciton transfer and polarized emission in colloidal quantum dot - anthracene crystals. , 2015, , .		0
507	Tandem InGaN/GaN light-emitting diodes. , 2015, , .		0
508	RF displacement and strain sensing system for wireless structural health monitoring. , 2015, , .		0
509	High-efficiency high-quality street lighting with colloidal quantum dot nanophosphors. , 2015, , .		0
510	Colloidal Quantum Dots for Quality Lighting. , 2016, , .		0
511	Magneto-optical studies of CdSe/CdMnS/CdS core/multi-shell colloidal nanoplatelets. , 2016, , .		0
512	Energy Transfer Review. SpringerBriefs in Applied Sciences and Technology, 2016, , 9-17.	0.2	0
513	Modulating Ohmic Contact Through InGa_xN_yO_zInterfacial Layer for High-Performance InGaN/GaN-Based Light-Emitting Diodes. IEEE Photonics Journal, 2016, 8, 1-8.	1.0	0
514	An electromagnetic sensing system incorporating multiple probes and single antenna for wireless structural health monitoring. , 2017, , .		0
515	Silica Nanoparticle Formation by Using Droplet-Based Microreactor. , 2017, , .		0
516	Nonradiative Energy Transfer in Assembly of Nanostructures. SpringerBriefs in Applied Sciences and Technology, 2017, , 27-38.	0.2	0
517	Guest Editorial: Introduction to the JSTQE Issue on Semiconductor Nanocrystal Optoelectronics. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 1-3.	1.9	0
518	Inductance and resistance measurement method for vessel detection and coil powering in all-surface inductive heating systems composed of outer squircle coils. AIP Advances, 2017, 7, 056645.	0.6	0
519	Heterodoped Nanoparticles as Dual-Mode Contrast Agent for MRI. , 2017, , .		0
520	Effect of Mg doping in the barriers on the electrical performance of InGaN/GaN-based light-emitting diodes. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 98, 29-32.	1.3	0
521	Emerging nanophotonics. , 0, , 380-428.		0
522	2.8Âµm infrared photodetectors based on PbSe colloidal quantum dot films. , 2018, , .		0

#	Article	IF	Citations
523	Metrics for Light Source Design. SpringerBriefs in Applied Sciences and Technology, 2019, , 17-26.	0.2	0
524	Light Stimulus and Human Eye. SpringerBriefs in Applied Sciences and Technology, 2019, , 5-9.	0.2	0
525	How to Design Quality Light Sources With Discrete Color Components. SpringerBriefs in Applied Sciences and Technology, 2019, , 35-43.	0.2	0
526	Future Outlook. SpringerBriefs in Applied Sciences and Technology, 2019, , 45-47.	0.2	0
527	Colorimetry for LED Lighting. SpringerBriefs in Applied Sciences and Technology, 2019, , 11-16.	0.2	0
528	NANOCRYSTAL HYBRIDIZED WHITE LIGHT SOURCES INTEGRATED ON NEAR UV LEDS. , 2007, , .		0
529	ELECTROMODULATION OF PHOTOLUMINESCENCE FROM CdSe NANORODS FILM. , 2007, , .		0
530	White light generating nonradiative energy transfer directly from epitaxial quantum wells colloidal nanocrystal quantum dots. , 2009, , .		0
531	Excitonically driven quantum dot light-emitting diodes: exLEDs. , 2013, , .		0
532	Enhanced exciton transfer from the cascaded bilayer of green- and red-emitting CdTe quantum dots into bulk silicon. , 2013, , .		0
533	Nanocrystal optoelectronics for quality lighting and displays (ID: 1780136). , 2013, , .		0
534	Nanocrystal Optoelectronics for Quality Lighting and Displays. , 2013, , .		0
535	Background Theory. SpringerBriefs in Applied Sciences and Technology, 2016, , 29-40.	0.2	0
536	Unraveling Exciton Kinetics of Electroluminescence in Colloidal Quantum Dot LEDs. , 2016, , .		0
537	Applying FÃ¶rster-Type Nonradiative Energy Transfer Formalism to Nanostructures with Various Directionalities: Dipole Electric Potential of Exciton and Dielectric Environment. SpringerBriefs in Applied Sciences and Technology, 2017, , 1-8.	0.2	0
538	FÃ¶rster-Type Nonradiative Energy Transfer Rates for Nanostructures with Various Dimensionalities. SpringerBriefs in Applied Sciences and Technology, 2017, , 9-25.	0.2	0
539	Anomalous Spectral Characteristics of Ultrathin sub-nm Colloidal CdSe Nanoplatelets. , 2017, , .		0
540	(Invited) Semiconductor Nanocrystal Optoelectronics of Colloidal Quantum Wells. ECS Meeting Abstracts, 2020, MA2020-01, 1081-1081.	0.0	0

#	Article	IF	Citations
541	Semiconductor Nanocrystal Optoelectronics: from colloidal Quantum Dots to Wells. , 0, , .		0
542	Exciton Dynamics of Colloidal Semiconductor Quantum Well Stacks. NATO Science for Peace and Security Series B: Physics and Biophysics, 2018, , 365-367.	0.2	0
543	Nonradiative recombination â€" critical in choosing quantum well number for InGaN/GaN light-emitting diodes. Optics Express, 2015, 23, A31.	1.7	0
544	Modulating Emission Properties in a Hostâ€"Guest Colloidal Quantum Well Superlattice (Advanced) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	3.6	0