Sergii M Kalytchuk

List of Publications by Year
in descending order

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48 papers	3,596 citations	185998 28 h-index	214527 47 g-index
48 all docs	48 docs citations	48 times ranked	5733 citing authors

#	Article	IF	Citations
1	Robust dual cationic ligand for stable and efficient warm-white light emission in lead-free double perovskite nanocrystals. Applied Materials Today, 2022, 26, 101288.	2.3	4
2	Bright, Magnetic NIR-II Quantum Dot Probe for Sensitive Dual-Modality Imaging and Intensive Combination Therapy of Cancer. ACS Nano, 2022, 16, 8076-8094.	7.3	31
3	Carbon Dots Detect Water-to-Ice Phase Transition and Act as Alcohol Sensors via Fluorescence Turn-Off/On Mechanism. ACS Nano, 2021, 15, 6582-6593.	7.3	34
4	Transparent and Low-Loss Luminescent Solar Concentrators Based on Self-Trapped Exciton Emission in Lead-Free Double Perovskite Nanocrystals. ACS Applied Energy Materials, 2021, 4, 6445-6453.	2.5	27
5	Uncovering the Role of Trioctylphosphine on Colloidal and Emission Stability of Sb-Alloyed Cs₂NaInCl₆ Double Perovskite Nanocrystals. ACS Applied Materials & Interfaces, 2021, 13, 47845-47859.	4.0	24
6	Enhancing Photoelectrochemical Energy Storage by Large-Area CdS-Coated Nickel Nanoantenna Arrays. ACS Applied Energy Materials, 2021, 4, 11367-11376.	2.5	10
7	Manganese-Mediated Growth of ZnS Shell on KMnF₃:Yb,Er Cores toward Enhanced Up/Downconversion Luminescence. ACS Applied Materials & Interfaces, 2020, 12, 11934-11944.	4.0	18
8	Pressure-Modulated Broadband Emission in 2D Layered Hybrid Perovskite-Like Bromoplumbate. Inorganic Chemistry, 2020, 59, 12431-12436.	1.9	9
9	Purple-emissive carbon dots enhance sensitivity of Si photodetectors to ultraviolet range. Nanoscale, 2020, 12, 8379-8384.	2.8	36
10	Size-Selected Graphene Oxide Loaded with Photosensitizer (TMPyP) for Targeting Photodynamic Therapy In Vitro. Processes, 2020, 8, 251.	1.3	6
11	A carbon dot-based tandem luminescent solar concentrator. Nanoscale, 2020, 12, 6664-6672.	2.8	75
12	Intrinsic photoluminescence of amine-functionalized graphene derivatives for bioimaging applications. Applied Materials Today, 2019, 17, 112-122.	2.3	25
13	Bimodal role of fluorine atoms in fluorographene chemistry opens a simple way toward double functionalization of graphene. Carbon, 2019, 145, 251-258.	5.4	12
14	Highâ€Performance Supercapacitors Based on a Zwitterionic Network of Covalently Functionalized Graphene with Iron Tetraaminophthalocyanine. Advanced Functional Materials, 2018, 28, 1801111.	7.8	38
15	Carbon Dot Fluorescence-Lifetime-Encoded Anti-Counterfeiting. ACS Applied Materials & Interfaces, 2018, 10, 29902-29908.	4.0	183
16	Graphene: High-Performance Supercapacitors Based on a Zwitterionic Network of Covalently Functionalized Graphene with Iron Tetraaminophthalocyanine (Adv. Funct. Mater. 29/2018). Advanced Functional Materials, 2018, 28, 1870203.	7.8	0
17	Carbon Dot Nanothermometry: Intracellular Photoluminescence Lifetime Thermal Sensing. ACS Nano, 2017, 11, 1432-1442.	7.3	243
18	Sodium Chloride Protected CdHgTe Quantum Dot Based Solid-State Near-Infrared Luminophore for Light-Emitting Devices and Luminescence Thermometry. ACS Photonics, 2017, 4, 1459-1465.	3.2	21

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19	Fe(III)-functionalized carbon dotsâ€"Highly efficient photoluminescence redox catalyst for hydrogenations of olefins and decomposition of hydrogen peroxide. Applied Materials Today, 2017, 7, 179-184.	2.3	34
20	Growth mechanism of strongly emitting CH3NH3PbBr3 perovskite nanocrystals with a tunable bandgap. Nature Communications, 2017, 8, 996.	5.8	210
21	Supported gold clusters as effective and reusable photocatalysts for the abatement of endocrine-disrupting chemicals under visible light. Journal of Catalysis, 2017, 354, 1-12.	3.1	37
22	Graphitic Nitrogen Triggers Red Fluorescence in Carbon Dots. ACS Nano, 2017, 11, 12402-12410.	7.3	550
23	Temperature-Dependent Exciton and Trap-Related Photoluminescence of CdTe Quantum Dots Embedded in a NaCl Matrix: Implication in Thermometry. Small, 2016, 12, 466-476.	5.2	107
24	Nanothermometry: Temperature-Dependent Exciton and Trap-Related Photoluminescence of CdTe Quantum Dots Embedded in a NaCl Matrix: Implication in Thermometry (Small 4/2016). Small, 2016, 12, 548-548.	5.2	2
25	Self-Assembly of Electron Donorâ€"Acceptor-Based Carbazole Derivatives: Novel Fluorescent Organic Nanoprobes for Both One- and Two-Photon Cellular Imaging. ACS Applied Materials & Interfaces, 2016, 8, 11355-11365.	4.0	56
26	Ultrafast Exciton Dynamics in Cd x Hg (1 â^' x) Te alloy Quantum Dots. Chemical Physics, 2016, 469-470, 25-30.	0.9	10
27	Impact of D₂O/H₂O Solvent Exchange on the Emission of HgTe and CdTe Quantum Dots: Polaron and Energy Transfer Effects. ACS Nano, 2016, 10, 4301-4311.	7.3	43
28	Insight into Strain Effects on Band Alignment Shifts, Carrier Localization and Recombination Kinetics in CdTe/CdS Core/Shell Quantum Dots. Journal of the American Chemical Society, 2015, 137, 2073-2084.	6.6	81
29	Carbon dot hybrids with oligomeric silsesquioxane: solid-state luminophores with high photoluminescence quantum yield and applicability in white light emitting devices. Chemical Communications, 2015, 51, 2950-2953.	2.2	125
30	Thin polymer films with embedded CdS nanocrystals. Colloid and Polymer Science, 2015, 293, 1159-1169.	1.0	6
31	Efficient Emission Facilitated by Multiple Energy Level Transitions in Uniform Graphitic Carbon Nitride Films Deposited by Thermal Vapor Condensation. ChemPhysChem, 2015, 16, 954-959.	1.0	72
32	Quasi Core/Shell Lead Sulfide/Graphene Quantum Dots for Bulk Heterojunction Solar Cells. Journal of Physical Chemistry C, 2015, 119, 18886-18895.	1.5	50
33	Effect of microwave treatment on the luminescence properties of CdS and CdTe:Cl Single Crystals. Semiconductors, 2015, 49, 895-898.	0.2	8
34	Down-conversion monochromatic light-emitting diodes with the color determined by the active layer thickness and concentration of carbon dots. Journal of Materials Chemistry C, 2015, 3, 6613-6615.	2.7	91
35	High color rendering index white light emitting diodes fabricated from a combination of carbon dots and zinc copper indium sulfide quantum dots. Applied Physics Letters, 2014, 104, .	1.5	93
36	Highly luminescent covalently bonded layered double hydroxideâ€"fluorescent dye nanohybrids. Journal of Materials Chemistry C, 2014, 2, 4490-4494.	2.7	27

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37	Semiconductor Nanocrystals as Luminescent Down-Shifting Layers To Enhance the Efficiency of Thin-Film CdTe/CdS and Crystalline Si Solar Cells. Journal of Physical Chemistry C, 2014, 118, 16393-16400.	1.5	82
38	Hierarchical growth of SnO2 nanostructured films on FTO substrates: structural defects induced by Sn(ii) self-doping and their effects on optical and photoelectrochemical properties. Nanoscale, 2014, 6, 6084.	2.8	51
39	Multiple exciton generation in cluster-free alloy Cd_xHg_{1â^'x}Te colloidal quantum dots synthesized in water. Physical Chemistry Chemical Physics, 2014, 16, 25710-25722.	1.3	22
40	Synthesis, solution-processed thin film transistors and solid solutions of silylethynylated diazatetracenes. Chemical Communications, 2014, 50, 12828-12831.	2.2	32
41	Thickness-Dependent Full-Color Emission Tunability in a Flexible Carbon Dot Ionogel. Journal of Physical Chemistry Letters, 2014, 5, 1412-1420.	2.1	361
42	Aqueous Manganese-Doped Core/Shell CdTe/ZnS Quantum Dots with Strong Fluorescence and High Relaxivity. Journal of Physical Chemistry C, 2013, 117, 18752-18761.	1.5	58
43	Color-Switchable Electroluminescence of Carbon Dot Light-Emitting Diodes. ACS Nano, 2013, 7, 11234-11241.	7.3	471
44	Sodium chloride protected CdTe quantum dot based solid-state luminophores with high color quality and fluorescence efficiency. Applied Physics Letters, 2013, 103, .	1.5	45
45	Shuttling Photoelectrochemical Electron Transport in Tricomponent CdS/rGO/TiO₂ Nanocomposites. Journal of Physical Chemistry C, 2013, 117, 20406-20414.	1.5	55
46	Influence of conditions for synthesis of CdTe nanocrystals on their photoluminescence properties and plasmon effect. Journal of Applied Spectroscopy, 2012, 79, 765-772.	0.3	11
47	Colloidal CdTe and CdSe Quantum Dots: Technology of Preparing and Optical Properties. Journal of Nanoelectronics and Optoelectronics, 2009, 4, 174-179.	0.1	9
48	Luminescence studies of heat treatment influence on size distribution of CdTe nanocrystals. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1074-1077.	0.8	1