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	Graphitic Nitrogen Triggers Red Fluorescence in Carbon Dots. ACS Nano, 2017, 11, 12402-12410.	7.3	550
2	Color-Switchable Electroluminescence of Carbon Dot Light-Emitting Diodes. ACS Nano, 2013, 7, 11234-11241.	7.3	471
3	Thickness-Dependent Full-Color Emission Tunability in a Flexible Carbon Dot Ionogel. Journal of Physical Chemistry Letters, 2014, 5, 1412-1420.	2.1	361
4	Carbon Dot Nanothermometry: Intracellular Photoluminescence Lifetime Thermal Sensing. ACS Nano, 2017, 11, 1432-1442.	7.3	243
5	Growth mechanism of strongly emitting CH3NH3PbBr3 perovskite nanocrystals with a tunable bandgap. Nature Communications, 2017, 8, 996.	5.8	210
6	Carbon Dot Fluorescence-Lifetime-Encoded Anti-Counterfeiting. ACS Applied Materials & Interfaces, 2018, 10, 29902-29908.	4.0	183
7	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
8	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
9	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
10	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
11	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
12	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
13	A carbon dot-based tandem luminescent solar concentrator. Nanoscale, 2020, 12, 6664-6672.	2.8	75
14	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
15	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
16	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
17	Shuttling Photoelectrochemical Electron Transport in Tricomponent CdS/rGO/TiO₂ Nanocomposites. Journal of Physical Chemistry C, 2013, 117, 20406-20414.	1.5	55
18	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

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19	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
20	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
21	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
22	Highâ€Performance Supercapacitors Based on a Zwitterionic Network of Covalently Functionalized Graphene with Iron Tetraaminophthalocyanine. Advanced Functional Materials, 2018, 28, 1801111.	7.8	38
23	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
24	Purple-emissive carbon dots enhance sensitivity of Si photodetectors to ultraviolet range. Nanoscale, 2020, 12, 8379-8384.	2.8	36
25	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
26	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
27	Synthesis, solution-processed thin film transistors and solid solutions of silylethynylated diazatetracenes. Chemical Communications, 2014, 50, 12828-12831.	2.2	32
28	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
29	Highly luminescent covalently bonded layered double hydroxideâ€"fluorescent dye nanohybrids. Journal of Materials Chemistry C, 2014, 2, 4490-4494.	2.7	27
30	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
31	Intrinsic photoluminescence of amine-functionalized graphene derivatives for bioimaging applications. Applied Materials Today, 2019, 17, 112-122.	2.3	25
32	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
33	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
34	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
35	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
36	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

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37	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
38	Ultrafast Exciton Dynamics in Cd x Hg (1 â˜' x) Te alloy Quantum Dots. Chemical Physics, 2016, 469-470, 25-30.	0.9	10
39	Enhancing Photoelectrochemical Energy Storage by Large-Area CdS-Coated Nickel Nanoantenna Arrays. ACS Applied Energy Materials, 2021, 4, 11367-11376.	2.5	10
40	Colloidal CdTe and CdSe Quantum Dots: Technology of Preparing and Optical Properties. Journal of Nanoelectronics and Optoelectronics, 2009, 4, 174-179.	0.1	9
41	Pressure-Modulated Broadband Emission in 2D Layered Hybrid Perovskite-Like Bromoplumbate. Inorganic Chemistry, 2020, 59, 12431-12436.	1.9	9
42	Effect of microwave treatment on the luminescence properties of CdS and CdTe:Cl Single Crystals. Semiconductors, 2015, 49, 895-898.	0.2	8
43	Thin polymer films with embedded CdS nanocrystals. Colloid and Polymer Science, 2015, 293, 1159-1169.	1.0	6
44	Size-Selected Graphene Oxide Loaded with Photosensitizer (TMPyP) for Targeting Photodynamic Therapy In Vitro. Processes, 2020, 8, 251.	1.3	6
45	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
46	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
47	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
48	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