Sergii V Yakunin

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5462996/publications.pdf

Version: 2024-02-01

85 papers	17,931 citations	76326 40 h-index	69250 77 g-index
86 all docs	86 docs citations	86 times ranked	13858 citing authors

#	Article	IF	Citations
1	Nanocrystals of Cesium Lead Halide Perovskites (CsPbX₃, X = Cl, Br, and I): Novel Optoelectronic Materials Showing Bright Emission with Wide Color Gamut. Nano Letters, 2015, 15, 3692-3696.	9.1	6,814
2	Fast Anion-Exchange in Highly Luminescent Nanocrystals of Cesium Lead Halide Perovskites (CsPbX₃, X = Cl, Br, I). Nano Letters, 2015, 15, 5635-5640.	9.1	1,938
3	Low-threshold amplified spontaneous emission and lasing from colloidal nanocrystals of caesium lead halide perovskites. Nature Communications, 2015, 6, 8056.	12.8	1,278
4	Detection of X-ray photons by solution-processed lead halide perovskites. Nature Photonics, 2015, 9, 444-449.	31.4	916
5	Colloidal CsPbX₃ (X = Cl, Br, I) Nanocrystals 2.0: Zwitterionic Capping Ligands for Improved Durability and Stability. ACS Energy Letters, 2018, 3, 641-646.	17.4	647
6	Harnessing Defect-Tolerance at the Nanoscale: Highly Luminescent Lead Halide Perovskite Nanocrystals in Mesoporous Silica Matrixes. Nano Letters, 2016, 16, 5866-5874.	9.1	501
7	Detection of gamma photons using solution-grown single crystals of hybrid lead halide perovskites. Nature Photonics, 2016, 10, 585-589.	31.4	437
8	Dismantling the â€œRed Wallâ€•of Colloidal Perovskites: Highly Luminescent Formamidinium and Formamidiniumâ€“Cesium Lead Iodide Nanocrystals. ACS Nano, 2017, 11, 3119-3134.	14.6	414
9	Monodisperse Formamidinium Lead Bromide Nanocrystals with Bright and Stable Green Photoluminescence. Journal of the American Chemical Society, 2016, 138, 14202-14205.	13.7	385
10	Disphenoidal Zero-Dimensional Lead, Tin, and Germanium Halides: Highly Emissive Singlet and Triplet Self-Trapped Excitons and X-ray Scintillation. Journal of the American Chemical Society, 2019, 141, 9764-9768.	13.7	336
11	Efficient Blue Electroluminescence Using Quantum-Confined Two-Dimensional Perovskites. ACS Nano, 2016, 10, 9720-9729.	14.6	299
12	Solution-Grown CsPbBr₃ Perovskite Single Crystals for Photon Detection. Chemistry of Materials, 2016, 28, 8470-8474.	6.7	294
13	Coherent Nanotwins and Dynamic Disorder in Cesium Lead Halide Perovskite Nanocrystals. ACS Nano, 2017, 11, 3819-3831.	14.6	246
14	High-resolution remote thermometry and thermography using luminescent low-dimensional tin-halide perovskites. Nature Materials, 2019, 18, 846-852.	27.5	246
15	Highly Emissive Selfâ€Trapped Excitons in Fully Inorganic Zeroâ€Dimensional Tin Halides. Angewandte Chemie - International Edition, 2018, 57, 11329-11333.	13.8	242
16	Polar-solvent-free colloidal synthesis of highly luminescent alkylammonium lead halide perovskite nanocrystals. Nanoscale, 2016, 8, 6278-6283.	5.6	233
17	Manganese(II) in Tetrahedral Halide Environment: Factors Governing Bright Green Luminescence. Chemistry of Materials, 2019, 31, 10161-10169.	6.7	200
18	Bright Blue and Green Luminescence of Sb(III) in Double Perovskite Cs₂MInCl₆ (M = Na, K) Matrices. Chemistry of Materials, 2020, 32, 5118-5124.	6.7	196

#	Article	IF	Citations
19	Low-Cost Synthesis of Highly Luminescent Colloidal Lead Halide Perovskite Nanocrystals by Wet Ball Milling. ACS Applied Nano Materials, 2018, 1, 1300-1308.	5.0	159
20	Single crystals of caesium formamidinium lead halide perovskites: solution growth and gamma dosimetry. NPG Asia Materials, 2017, 9, e373-e373.	7.9	145
21	Luminescent and Photoconductive Layered Lead Halide Perovskite Compounds Comprising Mixtures of Cesium and Guanidinium Cations. Inorganic Chemistry, 2017, 56, 11552-11564.	4.0	130
22	Guanidinium-Formamidinium Lead Iodide: A Layered Perovskite-Related Compound with Red Luminescence at Room Temperature. Journal of the American Chemical Society, 2018, 140, 3850-3853.	13.7	123
23	Supramolecular Approach for Fine-Tuning of the Bright Luminescence from Zero-Dimensional Antimony(III) Halides. , 2020, 2, 845-852.		94
24	Hybrid 0D Antimony Halides as Airâ€Stable Luminophores for Highâ€Spatialâ€Resolution Remote Thermography. Advanced Materials, 2021, 33, e2007355.	21.0	80
25	A Small Cationic Organoâ€“Copper Cluster as Thermally Robust Highly Photo- and Electroluminescent Material. Journal of the American Chemical Society, 2020, 142, 373-381.	13.7	77
26	Hydrogen-Bonded Organic Semiconductor Micro- And Nanocrystals: From Colloidal Syntheses to (Opto-)Electronic Devices. Journal of the American Chemical Society, 2014, 136, 16522-16532.	13.7	75
27	Quasi-epitaxial Metal-Halide Perovskite Ligand Shells on PbS Nanocrystals. ACS Nano, 2017, 11, 1246-1256.	14.6	74
28	Radiative lifetime-encoded unicolour security tags using perovskite nanocrystals. Nature Communications, 2021, 12, 981.	12.8	67
29	Aggregation-induced emission in lamellar solids of colloidal perovskite quantum wells. Science Advances, 2017, 3, eaaq0208.	10.3	65
30	Colloidal CdSe Quantum Wells with Graded Shell Composition for Low-Threshold Amplified Spontaneous Emission and Highly Efficient Electroluminescence. ACS Nano, 2019, 13, 13899-13909.	14.6	64
31	High Infrared Photoconductivity in Films of Arsenic-Sulfide-Encapsulated Lead-Sulfide Nanocrystals. ACS Nano, 2014, 8, 12883-12894.	14.6	62
32	Localized holes and delocalized electrons in photoexcited inorganic perovskites: Watching each atomic actor by picosecond X-ray absorption spectroscopy. Structural Dynamics, 2017, 4, 044002.	2.3	61
33	Photovoltaic properties of thin film heterojunctions with cupric oxide absorber. Journal of Renewable and Sustainable Energy, 2013, 5, .	2.0	58
34	The Rb₇Bi_{3â^'3x}Sb_{3x}Cl₁₆ Family: A Fully Inorganic Solid Solution with Roomâ€Temperature Luminescent Members. Angewandte Chemie - International Edition, 2020, 59, 14490-14497.	13.8	56
35	Nanoprinted Quantum Dotâ€“Graphene Photodetectors. Advanced Optical Materials, 2019, 7, 1900019.	7.3	53
36	Random Lasing with Systematic Threshold Behavior in Films of CdSe/CdS Core/Thick-Shell Colloidal Quantum Dots. ACS Nano, 2015, 9, 9792-9801.	14.6	49

#	Article	IF	Citations
37	Infrared Emitting PbS Nanocrystal Solids through Matrix Encapsulation. Chemistry of Materials, 2014, 26, 4256-4264.	6.7	47
38	Squaraine Dye for a Visibly Transparent All-Organic Optical Upconversion Device with Sensitivity at 1000 nm. ACS Applied Materials & Interfaces, 2018, 10, 11063-11069.	8.0	47
39	Microcarrier-Assisted Inorganic Shelling of Lead Halide Perovskite Nanocrystals. ACS Nano, 2019, 13, 11642-11652.	14.6	46
40	Non-dissipative internal optical filtering with solution-grown perovskite single crystals for full-colour imaging. NPG Asia Materials, 2017, 9, e431-e431.	7.9	44
41	Highly Emissive Selfâ€Trapped Excitons in Fully Inorganic Zeroâ€Dimensional Tin Halides. Angewandte Chemie, 2018, 130, 11499-11503.	2.0	37
42	EUV micropatterning for biocompatibility control of PET. Applied Physics A: Materials Science and Processing, 2010, 100, 511-516.	2.3	34
43	Fast Neutron Imaging with Semiconductor Nanocrystal Scintillators. ACS Nano, 2020, 14, 14686-14697.	14.6	34
44	Tunability and Scalability of Single-Atom Catalysts Based on Carbon Nitride. ACS Sustainable Chemistry and Engineering, 2019, 7, 5223-5230.	6.7	31
45	Colloidal HgTe Quantum Dot/Graphene Phototransistor with a Spectral Sensitivity Beyond 3ÂÂµm. Advanced Science, 2021, 8, 2003360.	11.2	30
46	Highly Concentrated, Zwitterionic Ligand-Capped Mn²⁺:CsPb(Br_xCl_{1â€“x})₃ Nanocrystals as Bright Scintillators for Fast Neutron Imaging. ACS Energy Letters, 2021, 6, 4365-4373.	17.4	30
47	Nano-domains assisted energy transfer in amphiphilic polymer conetworks for wearable luminescent solar concentrators. Nano Energy, 2020, 76, 105039.	16.0	29
48	Dynamics of Spreading and Alignment of Cells CulturedIn Vitroon a Grooved Polymer Surface. Journal of Nanomaterials, 2011, 2011, 1-10.	2.7	25
49	Guanidinium and Mixed Cesiumâ€“Guanidinium Tin(II) Bromides: Effects of Quantum Confinement and Out-of-Plane Octahedral Tilting. Chemistry of Materials, 2019, 31, 2121-2129.	6.7	24
50	Hostâ€“guest chemistry for tuning colloidal solubility, self-organization and photoconductivity of inorganic-capped nanocrystals. Nature Communications, 2015, 6, 10142.	12.8	20
51	Design and Synthesis of Heteroleptic Iridium(III) Phosphors for Efficient Organic Light-Emitting Devices. Inorganic Chemistry, 2017, 56, 15304-15313.	4.0	20
52	Techniques to Characterize the Nonlinear Optical Response of Doped Nematic Liquid Crystals. Molecular Crystals and Liquid Crystals, 2005, 426, 231-241.	0.9	19
53	Strongly Red-Shifted Photoluminescence Band Induced by Molecular Twisting in Cyanine (Cy3) Dye Films. Journal of Physical Chemistry C, 2017, 121, 9587-9593.	3.1	19
54	Laser Patterning of Highâ€Massâ€Loading Graphite Anodes for Highâ€Performance Liâ€Ion Batteries. Batteries and Supercaps, 2021, 4, 464-468.	4.7	19

#	Article	IF	Citations
55	Hypothesis of Dye Aggregation in a Nematic Liquid Crystal: From Experiment to a Model of the Enhanced Light-Director Interaction. Molecular Crystals and Liquid Crystals, 2006, 454, 145/[547]-156/[558].	0.9	18
56	Deposition, characterization and biological application of epitaxial Li:ZnO/Al:ZnO double-layers. Thin Solid Films, 2009, 518, 1350-1354.	1.8	16
57	Temperature-Dependent Charge Carrier Transfer in Colloidal Quantum Dot/Graphene Infrared Photodetectors. ACS Applied Materials & Interfaces, 2021, 13, 848-856.	8.0	16
58	Enhanced Roomâ€Temperature Photoluminescence Quantum Yield in Morphology Controlled Jâ€Aggregates. Advanced Science, 2021, 8, 1903080.	11.2	16
59	Spectral and non-linear optical properties of cyanine bases' derivatives of benzo[c,d]indole. Dyes and Pigments, 2007, 74, 195-201.	3.7	15
60	Shortwave infrared-absorbing squaraine dyes for all-organic optical upconversion devices. Science and Technology of Advanced Materials, 2021, 22, 194-204.	6.1	15
61	Iodideâ€Capped PbS Quantum Dots: Full Optical Characterization of a Versatile Absorber. Advanced Materials, 2015, 27, 1533-1539.	21.0	14
62	The Rb₇Bi_{3â^'3x}Sb_{3x}Cl₁₆ Family: A Fully Inorganic Solid Solution with Roomâ€Temperature Luminescent Members. Angewandte Chemie, 2020, 132, 14598-14605.	2.0	11
63	Microgrinding of lensed fibers by means of a scanning-probe microscope setup. Applied Optics, 2009, 48, 6172.	2.1	10
64	Dynamics of the Alignment of Mammalian Cells on a Nanoâ€Structured Polymer Surface. Macromolecular Symposia, 2010, 296, 272-277.	0.7	10
65	Amphiphilic Polymer Coâ€Network: A Versatile Matrix for Tailoring the Photonic Energy Transfer in Wearable Energy Harvesting Devices. Advanced Energy Materials, 2022, 12, .	19.5	10
66	Selfaction effects of femtosecond laser pulses in dye-doped 5CB liquid crystal. Laser Physics Letters, 2006, 3, 357-361.	1.4	8
67	Sign inversion of the optical torque on the nematic director enhanced by anthraquinone dye dopants stable to the light action. Laser Physics Letters, 2006, 3, 531-535.	1.4	8
68	Short-wave infrared colloidal quantum dot photodetectors on silicon. Proceedings of SPIE, 2013, , .	0.8	7
69	Superweak Coordinating Anion as Superstrong Enhancer of Cyanine Organic Semiconductor Properties. ChemPhysChem, 2018, 19, 3356-3363.	2.1	7
70	Title is missing!. Ukrainian Journal of Physical Optics, 2006, 7, 116-123.	13.0	6
71	Laser microstructuring of photomodified fluorinated ethylene propylene surface for confined growth of Chinese hamster ovary cells and single cell isolation. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2012, 100B, 170-176.	3.4	5
72	Lone-Pair-Induced Structural Ordering in the Mixed-Valent 0D Metal-Halides Rb₂₃Bi^{III}_xSb^{III}_{7â€“x}Sb^V₂Cl<s (0 â‰¤ x â‰¤ 7). Chemistry of Materials, 2021, 33, 2408-2419.	9.7	5

#	Article	IF	Citations
73	Aggregation of Anthraquinone Dye Molecules in a Nematic Liquid Crystal. Molecular Crystals and Liquid Crystals, 2014, 589, 96-104.	0.9	3
74	Probing the molecular character of periodic mesoporous organosilicates via photoluminescence of Lewis acidâ€“base adducts. Physical Chemistry Chemical Physics, 2016, 18, 13746-13749.	2.8	3
75	Luminescent Lead Halide Ionic Liquids for High-Spatial-Resolution Fast Neutron Imaging. ACS Photonics, 2021, 8, 3357-3364.	6.6	2
76	Nanosecond Laser Pulse-Induced Refractive Index Changes in Anthraquinone-Doped Liquid Crystal. Molecular Crystals and Liquid Crystals, 2008, 496, 310-321.	0.9	1
77	Laser-induced micro- and nanostructures at polymer surfaces for applications in cell biology. , 2011, , .		1
78	Laser Micro-Patterning by Means of Optical Fibers with Micro-grinded Lens End Faces. Journal of Laser Micro Nanoengineering, 2011, 6, 180-184.	0.1	1
79	Enhanced light self-action in mesoporous silicon. , 2007, , .		0
80	Photonic nanostructures for potential applications in cell biology. , 2010, , .		0
81	UV Laser Patterning for Biocompatibility Control of Polystyrene. Biophysical Journal, 2010, 98, 605a.	0.5	0
82	UV Laser Patterning of Various Polymers for Biocompatibility Control of Chondrocyte Adhesion and Differentiation Grade. Biophysical Journal, 2011, 100, 624a.	0.5	0
83	Separation of instant and accumulated nonlinear optical responses of dye-doped liquid crystal using Z-scan traces. Ukrainian Journal of Physical Optics, 2007, 8, 88.	13.0	0
84	Lattice Softening Effects in Perovskite Nanocrystals: a Strategy for Lifetime-Encoded Unicolour Security Tags. , 0, , .		0
85	Low-dimensional Tin-halides: Properties and Novel Applications. , 0, , .		0