

Sergii V Yakunin

List of Publications by Year in descending order

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85
papers

17,931
citations

76196

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69108

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86
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86
docs citations

86
times ranked

13858
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanocrystals of Cesium Lead Halide Perovskites (CsPbX_3 , X = Cl, Br, and I): Novel Optoelectronic Materials Showing Bright Emission with Wide Color Gamut. <i>Nano Letters</i> , 2015, 15, 3692-3696.	4.5	6,814
2	Fast Anion-Exchange in Highly Luminescent Nanocrystals of Cesium Lead Halide Perovskites (CsPbX_3 , X = Cl, Br, I). <i>Nano Letters</i> , 2015, 15, 5635-5640.	4.5	1,938
3	Low-threshold amplified spontaneous emission and lasing from colloidal nanocrystals of caesium lead halide perovskites. <i>Nature Communications</i> , 2015, 6, 8056.	5.8	1,278
4	Detection of X-ray photons by solution-processed lead halide perovskites. <i>Nature Photonics</i> , 2015, 9, 444-449.	15.6	916
5	Colloidal CsPbX_3 (X = Cl, Br, I) Nanocrystals 2.0: Zwitterionic Capping Ligands for Improved Durability and Stability. <i>ACS Energy Letters</i> , 2018, 3, 641-646.	8.8	647
6	Harnessing Defect-Tolerance at the Nanoscale: Highly Luminescent Lead Halide Perovskite Nanocrystals in Mesoporous Silica Matrixes. <i>Nano Letters</i> , 2016, 16, 5866-5874.	4.5	501
7	Detection of gamma photons using solution-grown single crystals of hybrid lead halide perovskites. <i>Nature Photonics</i> , 2016, 10, 585-589.	15.6	437
8	Dismantling the "Red Wall" of Colloidal Perovskites: Highly Luminescent Formamidinium and Formamidinium-Cesium Lead Iodide Nanocrystals. <i>ACS Nano</i> , 2017, 11, 3119-3134.	7.3	414
9	Monodisperse Formamidinium Lead Bromide Nanocrystals with Bright and Stable Green Photoluminescence. <i>Journal of the American Chemical Society</i> , 2016, 138, 14202-14205.	6.6	385
10	Disphenoidal Zero-Dimensional Lead, Tin, and Germanium Halides: Highly Emissive Singlet and Triplet Self-Trapped Excitons and X-ray Scintillation. <i>Journal of the American Chemical Society</i> , 2019, 141, 9764-9768.	6.6	336
11	Efficient Blue Electroluminescence Using Quantum-Confined Two-Dimensional Perovskites. <i>ACS Nano</i> , 2016, 10, 9720-9729.	7.3	299
12	Solution-Grown CsPbBr_3 Perovskite Single Crystals for Photon Detection. <i>Chemistry of Materials</i> , 2016, 28, 8470-8474.	3.2	294
13	Coherent Nanotwins and Dynamic Disorder in Cesium Lead Halide Perovskite Nanocrystals. <i>ACS Nano</i> , 2017, 11, 3819-3831.	7.3	246
14	High-resolution remote thermometry and thermography using luminescent low-dimensional tin-halide perovskites. <i>Nature Materials</i> , 2019, 18, 846-852.	13.3	246
15	Highly Emissive Self-Trapped Excitons in Fully Inorganic Zero-Dimensional Tin Halides. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 11329-11333.	7.2	242
16	Polar-solvent-free colloidal synthesis of highly luminescent alkylammonium lead halide perovskite nanocrystals. <i>Nanoscale</i> , 2016, 8, 6278-6283.	2.8	233
17	Manganese(II) in Tetrahedral Halide Environment: Factors Governing Bright Green Luminescence. <i>Chemistry of Materials</i> , 2019, 31, 10161-10169.	3.2	200
18	Bright Blue and Green Luminescence of Sb(III) in Double Perovskite $\text{Cs}_2\text{MInCl}_6$ (M = Na, K) Matrices. <i>Chemistry of Materials</i> , 2020, 32, 5118-5124.	3.2	196

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19	Low-Cost Synthesis of Highly Luminescent Colloidal Lead Halide Perovskite Nanocrystals by Wet Ball Milling. <i>ACS Applied Nano Materials</i> , 2018, 1, 1300-1308.	2.4	159
20	Single crystals of caesium formamidinium lead halide perovskites: solution growth and gamma dosimetry. <i>NPG Asia Materials</i> , 2017, 9, e373-e373.	3.8	145
21	Luminescent and Photoconductive Layered Lead Halide Perovskite Compounds Comprising Mixtures of Cesium and Guanidinium Cations. <i>Inorganic Chemistry</i> , 2017, 56, 11552-11564.	1.9	130
22	Guanidinium-Formamidinium Lead Iodide: A Layered Perovskite-Related Compound with Red Luminescence at Room Temperature. <i>Journal of the American Chemical Society</i> , 2018, 140, 3850-3853.	6.6	123
23	Supramolecular Approach for Fine-Tuning of the Bright Luminescence from Zero-Dimensional Antimony(III) Halides. , 2020, 2, 845-852.		94
24	Hybrid OD Antimony Halides as Air-Stable Luminophores for High-Spatial-Resolution Remote Thermography. <i>Advanced Materials</i> , 2021, 33, e2007355.	11.1	80
25	A Small Cationic Organo-Copper Cluster as Thermally Robust Highly Photo- and Electroluminescent Material. <i>Journal of the American Chemical Society</i> , 2020, 142, 373-381.	6.6	77
26	Hydrogen-Bonded Organic Semiconductor Micro- And Nanocrystals: From Colloidal Syntheses to (Opto-)Electronic Devices. <i>Journal of the American Chemical Society</i> , 2014, 136, 16522-16532.	6.6	75
27	Quasi-epitaxial Metal-Halide Perovskite Ligand Shells on PbS Nanocrystals. <i>ACS Nano</i> , 2017, 11, 1246-1256.	7.3	74
28	Radiative lifetime-encoded unicolour security tags using perovskite nanocrystals. <i>Nature Communications</i> , 2021, 12, 981.	5.8	67
29	Aggregation-induced emission in lamellar solids of colloidal perovskite quantum wells. <i>Science Advances</i> , 2017, 3, eaaq0208.	4.7	65
30	Colloidal CdSe Quantum Wells with Graded Shell Composition for Low-Threshold Amplified Spontaneous Emission and Highly Efficient Electroluminescence. <i>ACS Nano</i> , 2019, 13, 13899-13909.	7.3	64
31	High Infrared Photoconductivity in Films of Arsenic-Sulfide-Encapsulated Lead-Sulfide Nanocrystals. <i>ACS Nano</i> , 2014, 8, 12883-12894.	7.3	62
32	Localized holes and delocalized electrons in photoexcited inorganic perovskites: Watching each atomic actor by picosecond X-ray absorption spectroscopy. <i>Structural Dynamics</i> , 2017, 4, 044002.	0.9	61
33	Photovoltaic properties of thin film heterojunctions with cupric oxide absorber. <i>Journal of Renewable and Sustainable Energy</i> , 2013, 5, .	0.8	58
34	The $\text{Rb}_{7-x}\text{Bi}_3\text{Sb}_3\text{Cl}_{16}$ Family: A Fully Inorganic Solid Solution with Room-Temperature Luminescent Members. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 14490-14497.	7.2	56
35	Nanoprinted Quantum Dot-Graphene Photodetectors. <i>Advanced Optical Materials</i> , 2019, 7, 1900019.	3.6	53
36	Random Lasing with Systematic Threshold Behavior in Films of CdSe/CdS Core/Thick-Shell Colloidal Quantum Dots. <i>ACS Nano</i> , 2015, 9, 9792-9801.	7.3	49

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37	Infrared Emitting PbS Nanocrystal Solids through Matrix Encapsulation. <i>Chemistry of Materials</i> , 2014, 26, 4256-4264.	3.2	47
38	Squaraine Dye for a Visibly Transparent All-Organic Optical Upconversion Device with Sensitivity at 1000 nm. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 11063-11069.	4.0	47
39	Microcarrier-Assisted Inorganic Shelling of Lead Halide Perovskite Nanocrystals. <i>ACS Nano</i> , 2019, 13, 11642-11652.	7.3	46
40	Non-dissipative internal optical filtering with solution-grown perovskite single crystals for full-colour imaging. <i>NPG Asia Materials</i> , 2017, 9, e431-e431.	3.8	44
41	Highly Emissive Self-Trapped Excitons in Fully Inorganic Zero-Dimensional Tin Halides. <i>Angewandte Chemie</i> , 2018, 130, 11499-11503.	1.6	37
42	EUV micropatterning for biocompatibility control of PET. <i>Applied Physics A: Materials Science and Processing</i> , 2010, 100, 511-516.	1.1	34
43	Fast Neutron Imaging with Semiconductor Nanocrystal Scintillators. <i>ACS Nano</i> , 2020, 14, 14686-14697.	7.3	34
44	Tunability and Scalability of Single-Atom Catalysts Based on Carbon Nitride. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 5223-5230.	3.2	31
45	Colloidal HgTe Quantum Dot/Graphene Phototransistor with a Spectral Sensitivity Beyond 3 Åµm. <i>Advanced Science</i> , 2021, 8, 2003360.	5.6	30
46	Highly Concentrated, Zwitterionic Ligand-Capped Mn ²⁺ :CsPb(Br _x Cl _{1-x}) ₃ Nanocrystals as Bright Scintillators for Fast Neutron Imaging. <i>ACS Energy Letters</i> , 2021, 6, 4365-4373.	8.8	30
47	Nano-domains assisted energy transfer in amphiphilic polymer conetworks for wearable luminescent solar concentrators. <i>Nano Energy</i> , 2020, 76, 105039.	8.2	29
48	Dynamics of Spreading and Alignment of Cells Cultured In Vitro on a Grooved Polymer Surface. <i>Journal of Nanomaterials</i> , 2011, 2011, 1-10.	1.5	25
49	Guanidinium and Mixed Cesium-Guanidinium Tin(II) Bromides: Effects of Quantum Confinement and Out-of-Plane Octahedral Tilting. <i>Chemistry of Materials</i> , 2019, 31, 2121-2129.	3.2	24
50	Host-guest chemistry for tuning colloidal solubility, self-organization and photoconductivity of inorganic-capped nanocrystals. <i>Nature Communications</i> , 2015, 6, 10142.	5.8	20
51	Design and Synthesis of Heteroleptic Iridium(III) Phosphors for Efficient Organic Light-Emitting Devices. <i>Inorganic Chemistry</i> , 2017, 56, 15304-15313.	1.9	20
52	Techniques to Characterize the Nonlinear Optical Response of Doped Nematic Liquid Crystals. <i>Molecular Crystals and Liquid Crystals</i> , 2005, 426, 231-241.	0.4	19
53	Strongly Red-Shifted Photoluminescence Band Induced by Molecular Twisting in Cyanine (Cy3) Dye Films. <i>Journal of Physical Chemistry C</i> , 2017, 121, 9587-9593.	1.5	19
54	Laser Patterning of High-Mass-Loading Graphite Anodes for High-Performance Li-Ion Batteries. <i>Batteries and Supercaps</i> , 2021, 4, 464-468.	2.4	19

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55	Hypothesis of Dye Aggregation in a Nematic Liquid Crystal: From Experiment to a Model of the Enhanced Light-Director Interaction. <i>Molecular Crystals and Liquid Crystals</i> , 2006, 454, 145/[547]-156/[558].	0.4	18
56	Deposition, characterization and biological application of epitaxial Li:ZnO/Al:ZnO double-layers. <i>Thin Solid Films</i> , 2009, 518, 1350-1354.	0.8	16
57	Temperature-Dependent Charge Carrier Transfer in Colloidal Quantum Dot/Graphene Infrared Photodetectors. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 848-856.	4.0	16
58	Enhanced Room-Temperature Photoluminescence Quantum Yield in Morphology Controlled J-Aggregates. <i>Advanced Science</i> , 2021, 8, 1903080.	5.6	16
59	Spectral and non-linear optical properties of cyanine bases' derivatives of benzo[c,d]indole. <i>Dyes and Pigments</i> , 2007, 74, 195-201.	2.0	15
60	Shortwave infrared-absorbing squaraine dyes for all-organic optical upconversion devices. <i>Science and Technology of Advanced Materials</i> , 2021, 22, 194-204.	2.8	15
61	Iodide-Capped PbS Quantum Dots: Full Optical Characterization of a Versatile Absorber. <i>Advanced Materials</i> , 2015, 27, 1533-1539.	11.1	14
62	The $Rb_7Bi_3Sb_3Cl_{16}$ Family: A Fully Inorganic Solid Solution with Room-Temperature Luminescent Members. <i>Angewandte Chemie</i> , 2020, 132, 14598-14605.	1.6	11
63	Microgrinding of lensed fibers by means of a scanning-probe microscope setup. <i>Applied Optics</i> , 2009, 48, 6172.	2.1	10
64	Dynamics of the Alignment of Mammalian Cells on a Nano-Structured Polymer Surface. <i>Macromolecular Symposia</i> , 2010, 296, 272-277.	0.4	10
65	Amphiphilic Polymer Co-Network: A Versatile Matrix for Tailoring the Photonic Energy Transfer in Wearable Energy Harvesting Devices. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	10
66	Selfaction effects of femtosecond laser pulses in dye-doped 5CB liquid crystal. <i>Laser Physics Letters</i> , 2006, 3, 357-361.	0.6	8
67	Sign inversion of the optical torque on the nematic director enhanced by anthraquinone dye dopants stable to the light action. <i>Laser Physics Letters</i> , 2006, 3, 531-535.	0.6	8
68	Short-wave infrared colloidal quantum dot photodetectors on silicon. <i>Proceedings of SPIE</i> , 2013, , .	0.8	7
69	Superweak Coordinating Anion as Superstrong Enhancer of Cyanine Organic Semiconductor Properties. <i>ChemPhysChem</i> , 2018, 19, 3356-3363.	1.0	7
70	Title is missing!. <i>Ukrainian Journal of Physical Optics</i> , 2006, 7, 116-123.	9.7	6
71	Laser microstructuring of photomodified fluorinated ethylene propylene surface for confined growth of Chinese hamster ovary cells and single cell isolation. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2012, 100B, 170-176.	1.6	5
72	Lone-Pair-Induced Structural Ordering in the Mixed-Valent OD Metal-Halides $Rb_{23}Bi_{III}Sb_{III}V_{28}Cl_{107}$ (0 \approx 7). <i>Chemistry of Materials</i> , 2021, 33, 2408-2419.		

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73	Aggregation of Anthraquinone Dye Molecules in a Nematic Liquid Crystal. <i>Molecular Crystals and Liquid Crystals</i> , 2014, 589, 96-104.	0.4	3
74	Probing the molecular character of periodic mesoporous organosilicates via photoluminescence of Lewis acid–base adducts. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 13746-13749.	1.3	3
75	Luminescent Lead Halide Ionic Liquids for High-Spatial-Resolution Fast Neutron Imaging. <i>ACS Photonics</i> , 2021, 8, 3357-3364.	3.2	2
76	Nanosecond Laser Pulse-Induced Refractive Index Changes in Anthraquinone-Doped Liquid Crystal. <i>Molecular Crystals and Liquid Crystals</i> , 2008, 496, 310-321.	0.4	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. <i>Journal of Laser Micro Nanoengineering</i> , 2011, 6, 180-184.	0.4	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. <i>Biophysical Journal</i> , 2010, 98, 605a.	0.2	0
82	UV Laser Patterning of Various Polymers for Biocompatibility Control of Chondrocyte Adhesion and Differentiation Grade. <i>Biophysical Journal</i> , 2011, 100, 624a.	0.2	0
83	Separation of instant and accumulated nonlinear optical responses of dye-doped liquid crystal using Z-scan traces. <i>Ukrainian Journal of Physical Optics</i> , 2007, 8, 88.	9.7	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