Sergii V Yakunin

List of Publications by Year
in descending order

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85 papers	17,931 citations	76294 40 h-index	69214 77 g-index
86 all docs	86 docs citations	86 times ranked	13858 citing authors

#	Article	IF	Citations
1	Amphiphilic Polymer Coâ€Network: A Versatile Matrix for Tailoring the Photonic Energy Transfer in Wearable Energy Harvesting Devices. Advanced Energy Materials, 2022, 12, .	10.2	10
2	Temperature-Dependent Charge Carrier Transfer in Colloidal Quantum Dot/Graphene Infrared Photodetectors. ACS Applied Materials & Interfaces, 2021, 13, 848-856.	4.0	16
3	Laser Patterning of Highâ€Massâ€Loading Graphite Anodes for Highâ€Performance Liâ€Ion Batteries. Batteries and Supercaps, 2021, 4, 464-468.	2.4	19
4	Enhanced Roomâ€Temperature Photoluminescence Quantum Yield in Morphology Controlled Jâ€Aggregates. Advanced Science, 2021, 8, 1903080.	5.6	16
5	Radiative lifetime-encoded unicolour security tags using perovskite nanocrystals. Nature Communications, 2021, 12, 981.	5.8	67
6	Colloidal HgTe Quantum Dot/Graphene Phototransistor with a Spectral Sensitivity Beyond 3ÂÂµm. Advanced Science, 2021, 8, 2003360.	5.6	30
7	Lone-Pair-Induced Structural Ordering in the Mixed-Valent 0D Metal-Halides Rb₂₃Bi^{III}_xSb^{III}_{7â€“x}Sb^V₂Cl<sub>s (0 â‰ x â‰ 7). Chemistry of Materials, 2021, 33, 2408-2419.	8.6	28
8	Shortwave infrared-absorbing squaraine dyes for all-organic optical upconversion devices. Science and Technology of Advanced Materials, 2021, 22, 194-204.	2.8	15
9	Hybrid 0D Antimony Halides as Airâ€Stable Luminophores for Highâ€Spatialâ€Resolution Remote Thermography. Advanced Materials, 2021, 33, e2007355.	11.1	80
10	Luminescent Lead Halide Ionic Liquids for High-Spatial-Resolution Fast Neutron Imaging. ACS Photonics, 2021, 8, 3357-3364.	3.2	2
11	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.	8.8	30
12	A Small Cationic Organoâ€“Copper Cluster as Thermally Robust Highly Photo- and Electroluminescent Material. Journal of the American Chemical Society, 2020, 142, 373-381.	6.6	77
13	Fast Neutron Imaging with Semiconductor Nanocrystal Scintillators. ACS Nano, 2020, 14, 14686-14697.	7.3	34
14	The Rb₇Bi_{3â€™3x}Sb_{3x}Cl₁₆ Family: A Fully Inorganic Solid Solution with Roomâ€Temperature Luminescent Members. Angewandte Chemie, 2020, 132, 14598-14605.	1.6	11
15	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.	7.2	56
16	Nano-domains assisted energy transfer in amphiphilic polymer conetworks for wearable luminescent solar concentrators. Nano Energy, 2020, 76, 105039.	8.2	29
17	Supramolecular Approach for Fine-Tuning of the Bright Luminescence from Zero-Dimensional Antimony(III) Halides. , 2020, 2, 845-852.		94
18	Bright Blue and Green Luminescence of Sb(III) in Double Perovskite Cs₂MInCl₆ (M = Na, K) Matrices. Chemistry of Materials, 2020, 32, 5118-5124.	3.2	196

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19	High-resolution remote thermometry and thermography using luminescent low-dimensional tin-halide perovskites. Nature Materials, 2019, 18, 846-852.	13.3	246
20	Manganese(II) in Tetrahedral Halide Environment: Factors Governing Bright Green Luminescence. Chemistry of Materials, 2019, 31, 10161-10169.	3.2	200
21	Microcarrier-Assisted Inorganic Shelling of Lead Halide Perovskite Nanocrystals. ACS Nano, 2019, 13, 11642-11652.	7.3	46
22	Tunability and Scalability of Single-Atom Catalysts Based on Carbon Nitride. ACS Sustainable Chemistry and Engineering, 2019, 7, 5223-5230.	3.2	31
23	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.	6.6	336
24	Nanoprinted Quantum Dotâ€“Graphene Photodetectors. Advanced Optical Materials, 2019, 7, 1900019.	3.6	53
25	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.	3.2	24
26	Colloidal CdSe Quantum Wells with Graded Shell Composition for Low-Threshold Amplified Spontaneous Emission and Highly Efficient Electroluminescence. ACS Nano, 2019, 13, 13899-13909.	7.3	64
27	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.	6.6	123
28	Low-Cost Synthesis of Highly Luminescent Colloidal Lead Halide Perovskite Nanocrystals by Wet Ball Milling. ACS Applied Nano Materials, 2018, 1, 1300-1308.	2.4	159
29	Colloidal CsPbX₃ (X = Cl, Br, I) Nanocrystals 2.0: Zwitterionic Capping Ligands for Improved Durability and Stability. ACS Energy Letters, 2018, 3, 641-646.	8.8	647
30	Squaraine Dye for a Visibly Transparent All-Organic Optical Upconversion Device with Sensitivity at 1000 nm. ACS Applied Materials & Interfaces, 2018, 10, 11063-11069.	4.0	47
31	Superweak Coordinating Anion as Superstrong Enhancer of Cyanine Organic Semiconductor Properties. ChemPhysChem, 2018, 19, 3356-3363.	1.0	7
32	Highly Emissive Selfâ€Trapped Excitons in Fully Inorganic Zeroâ€Dimensional Tin Halides. Angewandte Chemie - International Edition, 2018, 57, 11329-11333.	7.2	242
33	Highly Emissive Selfâ€Trapped Excitons in Fully Inorganic Zeroâ€Dimensional Tin Halides. Angewandte Chemie, 2018, 130, 11499-11503.	1.6	37
34	Quasi-epitaxial Metal-Halide Perovskite Ligand Shells on PbS Nanocrystals. ACS Nano, 2017, 11, 1246-1256.	7.3	74
35	Localized holes and delocalized electrons in photoexcited inorganic perovskites: Watching each atomic actor by picosecond X-ray absorption spectroscopy. Structural Dynamics, 2017, 4, 044002.	0.9	61
36	Dismantling the â€œRed Wallâ€•of Colloidal Perovskites: Highly Luminescent Formamidinium and Formamidiniumâ€“Cesium Lead Iodide Nanocrystals. ACS Nano, 2017, 11, 3119-3134.	7.3	414

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37	Coherent Nanotwins and Dynamic Disorder in Cesium Lead Halide Perovskite Nanocrystals. ACS Nano, 2017, 11, 3819-3831.	7.3	246
38	Single crystals of caesium formamidinium lead halide perovskites: solution growth and gamma dosimetry. NPG Asia Materials, 2017, 9, e373-e373.	3.8	145
39	Strongly Red-Shifted Photoluminescence Band Induced by Molecular Twisting in Cyanine (Cy3) Dye Films. Journal of Physical Chemistry C, 2017, 121, 9587-9593.	1.5	19
40	Non-dissipative internal optical filtering with solution-grown perovskite single crystals for full-colour imaging. NPG Asia Materials, 2017, 9, e431-e431.	3.8	44
41	Luminescent and Photoconductive Layered Lead Halide Perovskite Compounds Comprising Mixtures of Cesium and Guanidinium Cations. Inorganic Chemistry, 2017, 56, 11552-11564.	1.9	130
42	Design and Synthesis of Heteroleptic Iridium(III) Phosphors for Efficient Organic Light-Emitting Devices. Inorganic Chemistry, 2017, 56, 15304-15313.	1.9	20
43	Aggregation-induced emission in lamellar solids of colloidal perovskite quantum wells. Science Advances, 2017, 3, eaaq0208.	4.7	65
44	Probing the molecular character of periodic mesoporous organosilicates via photoluminescence of Lewis acidâ€“base adducts. Physical Chemistry Chemical Physics, 2016, 18, 13746-13749.	1.3	3
45	Monodisperse Formamidinium Lead Bromide Nanocrystals with Bright and Stable Green Photoluminescence. Journal of the American Chemical Society, 2016, 138, 14202-14205.	6.6	385
46	Efficient Blue Electroluminescence Using Quantum-Confined Two-Dimensional Perovskites. ACS Nano, 2016, 10, 9720-9729.	7.3	299
47	Harnessing Defect-Tolerance at the Nanoscale: Highly Luminescent Lead Halide Perovskite Nanocrystals in Mesoporous Silica Matrixes. Nano Letters, 2016, 16, 5866-5874.	4.5	501
48	Solution-Grown CsPbBr₃ Perovskite Single Crystals for Photon Detection. Chemistry of Materials, 2016, 28, 8470-8474.	3.2	294
49	Detection of gamma photons using solution-grown single crystals of hybrid lead halide perovskites. Nature Photonics, 2016, 10, 585-589.	15.6	437
50	Polar-solvent-free colloidal synthesis of highly luminescent alkylammonium lead halide perovskite nanocrystals. Nanoscale, 2016, 8, 6278-6283.	2.8	233
51	Detection of X-ray photons by solution-processed lead halide perovskites. Nature Photonics, 2015, 9, 444-449.	15.6	916
52	Hostâ€“guest chemistry for tuning colloidal solubility, self-organization and photoconductivity of inorganic-capped nanocrystals. Nature Communications, 2015, 6, 10142.	5.8	20
53	Iodideâ€Capped PbS Quantum Dots: Full Optical Characterization of a Versatile Absorber. Advanced Materials, 2015, 27, 1533-1539.	11.1	14
54	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.	4.5	6,814

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55	Fast Anion-Exchange in Highly Luminescent Nanocrystals of Cesium Lead Halide Perovskites (CsPbX₃, X = Cl, Br, I). Nano Letters, 2015, 15, 5635-5640.	4.5	1,938
56	Low-threshold amplified spontaneous emission and lasing from colloidal nanocrystals of caesium lead halide perovskites. Nature Communications, 2015, 6, 8056.	5.8	1,278
57	Random Lasing with Systematic Threshold Behavior in Films of CdSe/CdS Core/Thick-Shell Colloidal Quantum Dots. ACS Nano, 2015, 9, 9792-9801.	7.3	49
58	High Infrared Photoconductivity in Films of Arsenic-Sulfide-Encapsulated Lead-Sulfide Nanocrystals. ACS Nano, 2014, 8, 12883-12894.	7.3	62
59	Aggregation of Anthraquinone Dye Molecules in a Nematic Liquid Crystal. Molecular Crystals and Liquid Crystals, 2014, 589, 96-104.	0.4	3
60	Infrared Emitting PbS Nanocrystal Solids through Matrix Encapsulation. Chemistry of Materials, 2014, 26, 4256-4264.	3.2	47
61	Hydrogen-Bonded Organic Semiconductor Micro- And Nanocrystals: From Colloidal Syntheses to (Opto-)Electronic Devices. Journal of the American Chemical Society, 2014, 136, 16522-16532.	6.6	75
62	Photovoltaic properties of thin film heterojunctions with cupric oxide absorber. Journal of Renewable and Sustainable Energy, 2013, 5, .	0.8	58
63	Short-wave infrared colloidal quantum dot photodetectors on silicon. Proceedings of SPIE, 2013, , .	0.8	7
64	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.	1.6	5
65	Laser-induced micro- and nanostructures at polymer surfaces for applications in cell biology. , 2011, , .		1
66	UV Laser Patterning of Various Polymers for Biocompatibility Control of Chondrocyte Adhesion and Differentiation Grade. Biophysical Journal, 2011, 100, 624a.	0.2	0
67	Dynamics of Spreading and Alignment of Cells CulturedIn Vitroon a Grooved Polymer Surface. Journal of Nanomaterials, 2011, 2011, 1-10.	1.5	25
68	Laser Micro-Patterning by Means of Optical Fibers with Micro-grinded Lens End Faces. Journal of Laser Micro Nanoengineering, 2011, 6, 180-184.	0.4	1
69	EUV micropatterning for biocompatibility control of PET. Applied Physics A: Materials Science and Processing, 2010, 100, 511-516.	1.1	34
70	Dynamics of the Alignment of Mammalian Cells on a Nanoâ€Structured Polymer Surface. Macromolecular Symposia, 2010, 296, 272-277.	0.4	10
71	Photonic nanostructures for potential applications in cell biology. , 2010, , .		0
72	UV Laser Patterning for Biocompatibility Control of Polystyrene. Biophysical Journal, 2010, 98, 605a.	0.2	0

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73	Deposition, characterization and biological application of epitaxial Li:ZnO/Al:ZnO double-layers. Thin Solid Films, 2009, 518, 1350-1354.	0.8	16
74	Microgrinding of lensed fibers by means of a scanning-probe microscope setup. Applied Optics, 2009, 48, 6172.	2.1	10
75	Nanosecond Laser Pulse-Induced Refractive Index Changes in Anthraquinone-Doped Liquid Crystal. Molecular Crystals and Liquid Crystals, 2008, 496, 310-321.	0.4	1
76	Enhanced light self-action in mesoporous silicon. , 2007, , .		0
77	Spectral and non-linear optical properties of cyanine bases' derivatives of benzo[c,d]indole. Dyes and Pigments, 2007, 74, 195-201.	2.0	15
78	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.	9.7	0
79	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].	0.4	18
80	Selfaction effects of femtosecond laser pulses in dye-doped 5CB liquid crystal. Laser Physics Letters, 2006, 3, 357-361.	0.6	8
81	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.	0.6	8
82	Title is missing!. Ukrainian Journal of Physical Optics, 2006, 7, 116-123.	9.7	6
83	Techniques to Characterize the Nonlinear Optical Response of Doped Nematic Liquid Crystals. Molecular Crystals and Liquid Crystals, 2005, 426, 231-241.	0.4	19
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