

Masaru K Kuno

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/9197369/masaru-k-kuno-publications-by-year.pdf>

Version: 2024-04-19

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

138
papers

17,964
citations

53
h-index

134
g-index

151
ext. papers

19,404
ext. citations

10.4
avg, IF

6.74
L-index

#	Paper	IF	Citations
138	Using Infrared Photothermal Heterodyne Imaging to Characterize Micro- and Nanoplastics in Complex Environmental Matrices. <i>Environmental Science & Technology</i> , 2021 , 55, 15891-15899	10.3	4
137	Deep image restoration for infrared photothermal heterodyne imaging. <i>Journal of Chemical Physics</i> , 2021 , 155, 214202	3.9	0
136	Modulation of Photoinduced Iodine Expulsion in Mixed Halide Perovskites with Electrochemical Bias. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 2615-2621	6.4	6
135	Excitation Energy Dependence of Semiconductor Nanocrystal Emission Quantum Yields. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 4024-4031	6.4	5
134	Distinguishing Models for Mixed Halide Lead Perovskite Photo-segregation via Terminal Halide Stoichiometry. <i>ACS Energy Letters</i> , 2021 , 6, 2064-2071	20.1	5
133	Shining more light on photoinduced segregation. <i>Nature Materials</i> , 2021 , 20, 6-7	27	1
132	Halide Ion Migration in Perovskite Nanocrystals and Nanostructures. <i>Accounts of Chemical Research</i> , 2021 , 54, 520-531	24.3	38
131	Universal Size-Dependent Stokes Shifts in Lead Halide Perovskite Nanocrystals. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 4937-4944	6.4	22
130	Photoinduced Anion Segregation in Mixed Halide Perovskites. <i>Trends in Chemistry</i> , 2020 , 2, 282-301	14.8	81
129	Up-conversion emission thermometry for semiconductor laser cooling. <i>Journal of Luminescence</i> , 2020 , 222, 117088	3.8	2
128	Approaches to mid-infrared, super-resolution imaging and spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 4313-4325	3.6	21
127	What Exactly Causes Light-Induced Halide Segregation in Mixed-Halide Perovskites?. <i>Matter</i> , 2020 , 2, 21-23	12.7	11
126	Far-field midinfrared superresolution imaging and spectroscopy of single high aspect ratio gold nanowires. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 2288-2293	11.5	14
125	Infrared photothermal heterodyne imaging: Contrast mechanism and detection limits. <i>Journal of Applied Physics</i> , 2020 , 127, 165101	2.5	15
124	Superlattices are Greener on the Other Side: How Light Transforms Self-Assembled Mixed Halide Perovskite Nanocrystals. <i>ACS Energy Letters</i> , 2020 , 5, 1465-1473	20.1	24
123	Quantitative infrared photothermal microscopy 2020 ,		3
122	How Interplay between Photo and Thermal Activation Dictates Halide Ion Segregation in Mixed Halide Perovskites. <i>ACS Energy Letters</i> , 2020 , 5, 56-63	20.1	75

121	Suppressing Cation Migration in Triple-Cation Lead Halide Perovskites. <i>ACS Energy Letters</i> , 2020 , 5, 2802-2810	28.1	26
120	Thermal Decoherence of Superradiance in Lead Halide Perovskite Nanocrystal Superlattices. <i>Nano Letters</i> , 2020 , 20, 7382-7388	11.5	10
119	Energy Selects. <i>ACS Energy Letters</i> , 2019 , 4, 2351-2352	20.1	1
118	Can lasers really refrigerate CdS nanobelts?. <i>Nature</i> , 2019 , 570, E60-E61	50.4	13
117	Progress in laser cooling semiconductor nanocrystals and nanostructures. <i>NPG Asia Materials</i> , 2019 , 11,	10.3	15
116	Energy Spotlight: New Inroads in Metal Halide Perovskite Research. <i>ACS Energy Letters</i> , 2019 , 4, 3036-3038	20.1	3
115	Crystal Structure of Individual CsPbBr Perovskite Nanocubes. <i>Inorganic Chemistry</i> , 2019 , 58, 1555-1560	5.1	38
114	A quantitative and spatially resolved analysis of the performance-bottleneck in high efficiency, planar hybrid perovskite solar cells. <i>Energy and Environmental Science</i> , 2018 , 11, 960-969	35.4	34
113	Subdiffraction Infrared Imaging of Mixed Cation Perovskites: Probing Local Cation Heterogeneities. <i>ACS Energy Letters</i> , 2018 , 3, 469-475	20.1	34
112	Light-Induced Anion Phase Segregation in Mixed Halide Perovskites. <i>ACS Energy Letters</i> , 2018 , 3, 204-213	20.1	307
111	To Exchange or Not to Exchange. Suppressing Anion Exchange in Cesium Lead Halide Perovskites with PbSO ₄ Plate Capping. <i>ACS Energy Letters</i> , 2018 , 3, 1049-1055	20.1	80
110	Single Semiconductor Nanostructure Extinction Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 16443-16463	3.8	12
109	Charge and thermal modeling of a semiconductor-based optical refrigerator. <i>Applied Physics Letters</i> , 2018 , 113, 181105	3.4	2
108	Vacancy-Mediated Anion Photo-segregation Kinetics in Mixed Halide Hybrid Perovskites: Coupled Kinetic Monte Carlo and Optical Measurements. <i>ACS Energy Letters</i> , 2018 , 3, 2321-2328	20.1	70
107	Fluorescence intermittency originates from re-clustering in two-dimensional organic semiconductors. <i>Nature Communications</i> , 2017 , 8, 14521	17.4	2
106	Molybdenum Carbamate Nanosheets as a New Class of Potential Phase Change Materials. <i>Nano Letters</i> , 2017 , 17, 3902-3906	11.5	3
105	Existence of a Size-Dependent Stokes Shift in CsPbBr ₃ Perovskite Nanocrystals. <i>ACS Energy Letters</i> , 2017 , 2, 1487-1488	20.1	72
104	Shift Happens. How Halide Ion Defects Influence Photoinduced Segregation in Mixed Halide Perovskites. <i>ACS Energy Letters</i> , 2017 , 2, 1507-1514	20.1	209

103	Photoluminescence Up-Conversion in CsPbBr ₃ Nanocrystals. <i>ACS Energy Letters</i> , 2017 , 2, 2514-2515	20.1	29
102	TEM Analysis of CsPbBr ₃ Nanocrystals: Challenges and Perspectives.. <i>Microscopy and Microanalysis</i> , 2017 , 23, 2096-2097	0.5	
101	Super-Resolution Far-Field Infrared Imaging by Photothermal Heterodyne Imaging. <i>Journal of Physical Chemistry B</i> , 2017 , 121, 8838-8846	3.4	65
100	Origin of the Size-Dependent Stokes Shift in CsPbBr Perovskite Nanocrystals. <i>Journal of the American Chemical Society</i> , 2017 , 139, 12201-12208	16.4	171
99	Rationalizing the light-induced phase separation of mixed halide organic-inorganic perovskites. <i>Nature Communications</i> , 2017 , 8, 200	17.4	264
98	Defect-Mediated CdS Nanobelt Photoluminescence Up-Conversion. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 16607-16616	3.8	22
97	Tracking Iodide and Bromide Ion Segregation in Mixed Halide Lead Perovskites during Photoirradiation. <i>ACS Energy Letters</i> , 2016 , 1, 290-296	20.1	251
96	Spectroscopic signatures of ligand field states in {Ru(II)(imine)} complexes. <i>Dalton Transactions</i> , 2016 , 45, 5464-75	4.3	16
95	Spatially Non-uniform Trap State Densities in Solution-Processed Hybrid Perovskite Thin Films. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 715-21	6.4	133
94	Super-resolution Mid-infrared Imaging using Photothermal Microscopy 2016 ,		3
93	Dimensional crossover in semiconductor nanostructures. <i>Nature Communications</i> , 2016 , 7, 12726	17.4	12
92	Transforming Layered to Nonlayered Two-Dimensional Materials: Cation Exchange of SnS ₂ to Cu ₂ SnS ₃ . <i>ACS Energy Letters</i> , 2016 , 1, 175-181	20.1	18
91	Concerted single-nanowire absorption and emission spectroscopy: Explaining the origin of the size-dependent Stokes shift in single cadmium selenide nanowires. <i>Physical Review B</i> , 2015 , 91,	3.3	7
90	Synthesis and Application of Solution-Based II-VI and IV-VI Semiconductor Nanowires. <i>Nanoscience and Technology</i> , 2015 , 119-156	0.6	1
89	Heterogeneous Fluorescence Intermittency in Single Layer Reduced Graphene Oxide. <i>Nano Letters</i> , 2015 , 15, 4317-21	11.5	11
88	Efficient Photocatalytic Hydrogen Generation from Ni Nanoparticle Decorated CdS Nanosheets. <i>ACS Catalysis</i> , 2015 , 5, 6615-6623	13.1	122
87	Optical constants and dynamic conductivities of single layer MoS ₂ , MoSe ₂ , and WSe ₂ . <i>Applied Physics Letters</i> , 2015 , 107, 083103	3.4	64
86	Super-resolution imaging with mid-IR photothermal microscopy on the single particle level 2015 ,		6

85	Intrawire absorption and emission spectroscopies of individual CdSe nanowires. <i>Applied Physics Letters</i> , 2015 , 107, 083106	3.4	1
84	Spectroscopy and Microscopy of Graphene Oxide and Reduced Graphene Oxide 2015 , 29-60		4
83	Double heterojunction nanowire photocatalysts for hydrogen generation. <i>Nanoscale</i> , 2014 , 6, 4117-24	7.7	37
82	Nanowire-functionalized cotton textiles. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 2262-9	9.5	28
81	Direct observation of single layer graphene oxide reduction through spatially resolved, single sheet absorption/emission microscopy. <i>Nano Letters</i> , 2014 , 14, 3172-9	11.5	30
80	Tailoring the Inherent Optical and Electrical Properties of Nanostructures. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 3817-8	6.4	5
79	Synthesis of Ultrathin and Thickness-Controlled Cu _{2-x} Se Nanosheets via Cation Exchange. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 3608-13	6.4	42
78	Supercontinuum spatial modulation spectroscopy: detection and noise limitations. <i>Review of Scientific Instruments</i> , 2013 , 84, 113104	1.7	18
77	Direct observation of spatially heterogeneous single-layer graphene oxide reduction kinetics. <i>Nano Letters</i> , 2013 , 13, 5777-84	11.5	37
76	Light induced nanowire assembly: the electrostatic alignment of semiconductor nanowires into functional macroscopic yarns. <i>Advanced Materials</i> , 2013 , 25, 601-5	24	14
75	Colloidal Quantum Dots: A Model Nanoscience System. <i>Journal of Physical Chemistry Letters</i> , 2013 , 4, 680	6.4	5
74	CdSe Heterostructures for Photocatalytic Hydrogen Generation. <i>Microscopy and Microanalysis</i> , 2013 , 19, 328-329	0.5	
73	Progress, challenges, and opportunities in two-dimensional materials beyond graphene. <i>ACS Nano</i> , 2013 , 7, 2898-926	16.7	3414
72	CdSe nanowire solar cells using carbazole as a surface modifier. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 5487	13	31
71	Charge carrier trapping and acoustic phonon modes in single CdTe nanowires. <i>ACS Nano</i> , 2012 , 6, 5274-82	16.7	35
70	Direct Measurement of Single CdSe Nanowire Extinction Polarization Anisotropies. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 2215-20	6.4	20
69	Electric field-induced emission enhancement and modulation in individual CdSe nanowires. <i>ACS Nano</i> , 2012 , 6, 9133-40	16.7	22
68	Photocatalytic Hydrogen Generation Efficiencies in One-Dimensional CdSe Heterostructures. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 3234-40	6.4	77

67	Single Nanowire Microscopy and Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 12379-12396	3.8	35
66	Controlled synthesis of compositionally tunable ternary PbSe(x)S(1-x) as well as binary PbSe and PbS nanowires. <i>ACS Nano</i> , 2012 , 6, 2833-43	16.7	46
65	Synthetic Strategy and Structural and Optical Characterization of Thin Highly Crystalline Titanium Disulfide Nanosheets. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 1554-8	6.4	36
64	Single nanowire extinction spectroscopy. <i>Nano Letters</i> , 2011 , 11, 3307-11	11.5	55
63	Low temperature solution-phase growth of ZnSe and ZnSe/CdSe core/shell nanowires. <i>Nanoscale</i> , 2011 , 3, 3145-51	7.7	22
62	II-VI heterostructures obtained by encapsulation of colloidal CdSe nanowires by molecular beam epitaxy deposition of ZnSe. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2011 , 29, 03C102	1.3	3
61	Carrier recombination dynamics in individual CdSe nanowires. <i>Physical Review B</i> , 2011 , 83,	3.3	55
60	Storable, thermally activated, near-infrared chemiluminescent dyes and dye-stained microparticles for optical imaging. <i>Nature Chemistry</i> , 2010 , 2, 1025-30	17.6	216
59	Bismuth-Assisted CdSe and CdTe Nanowire Growth on Plastics. <i>Chemistry of Materials</i> , 2010 , 22, 77-84	9.6	27
58	Imaging and Absolute Extinction Cross-Section Measurements of Nanorods and Nanowires through Polarization Modulation Microscopy. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 16029-16036	3.8	29
57	Experimental determination of single CdSe nanowire absorption cross sections through photothermal imaging. <i>ACS Nano</i> , 2010 , 4, 358-64	16.7	49
56	Nanostructure Absorption: A Comparative Study of Nanowire and Colloidal Quantum Dot Absorption Cross Sections. <i>Journal of Physical Chemistry Letters</i> , 2010 , 1, 3340-3348	6.4	61
55	A CdSe Nanowire/Quantum Dot Hybrid Architecture for Improving Solar Cell Performance. <i>Advanced Functional Materials</i> , 2010 , 20, 1464-1472	15.6	93
54	Near-field scanning optical microscopy of colloidal CdSe nanowires. <i>Physica Status Solidi (B): Basic Research</i> , 2010 , 247, 1416-1419	1.3	8
53	Facile synthesis and size control of II-VI nanowires using bismuth salts. <i>Small</i> , 2009 , 5, 1112-6	11	57
52	Wavelength Sensitivity of Single Nanowire Excitation Polarization Anisotropies Explained through a Generalized Treatment of Their Linear Absorption. <i>ACS Nano</i> , 2009 , 3, 1979-87	16.7	47
51	Ultrafast Transient Absorption Measurements of Charge Carrier Dynamics in Single II-VI Nanowires. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 19077-19081	3.8	50
50	Photocurrent polarization anisotropy of randomly oriented nanowire networks. <i>Nano Letters</i> , 2008 , 8, 1352-7	11.5	29

49	Band-filling of solution-synthesized CdS nanowires. <i>ACS Nano</i> , 2008 , 2, 357-67	16.7	94
48	Quantum dot solar cells. Tuning photoresponse through size and shape control of CdSe-TiO ₂ architecture. <i>Journal of the American Chemical Society</i> , 2008 , 130, 4007-15	16.4	1463
47	Universal emission intermittency in quantum dots, nanorods and nanowires. <i>Nature Physics</i> , 2008 , 4, 519-522	16.2	418
46	Solution-based II-VI core/shell nanowire heterostructures. <i>Journal of the American Chemical Society</i> , 2008 , 130, 14822-33	16.4	88
45	Excitation and photoluminescence polarization anisotropy of single CdSe nanowires. <i>Applied Physics Letters</i> , 2008 , 92, 183110	3.4	34
44	An overview of solution-based semiconductor nanowires: synthesis and optical studies. <i>Physical Chemistry Chemical Physics</i> , 2008 , 10, 620-39	3.6	143
43	Polarization-sensitive nanowire photodetectors based on solution-synthesized CdSe quantum-wire solids. <i>Nano Letters</i> , 2007 , 7, 2999-3006	11.5	88
42	Size-dependent electron injection from excited CdSe quantum dots into TiO ₂ nanoparticles. <i>Journal of the American Chemical Society</i> , 2007 , 129, 4136-7	16.4	767
41	Spatial and intensity modulation of nanowire emission induced by mobile charges. <i>Journal of the American Chemical Society</i> , 2007 , 129, 13160-71	16.4	43
40	CdSe nanowires with illumination-enhanced conductivity: Induced dipoles, dielectrophoretic assembly, and field-sensitive emission. <i>Journal of Applied Physics</i> , 2007 , 101, 073704	2.5	48
39	Ultrathin CdSe nanowire field-effect transistors. <i>Journal of Electronic Materials</i> , 2006 , 35, 170-172	1.9	27
38	Quantum dot solar cells. harvesting light energy with CdSe nanocrystals molecularly linked to mesoscopic TiO ₂ films. <i>Journal of the American Chemical Society</i> , 2006 , 128, 2385-93	16.4	1621
37	Solution-Based Straight and Branched CdTe Nanowires. <i>Chemistry of Materials</i> , 2006 , 18, 5722-5732	9.6	125
36	Experimental determination of the absorption cross-section and molar extinction coefficient of CdSe and CdTe nanowires. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 25322-31	3.4	83
35	Exciton recombination dynamics in CdSe nanowires: bimolecular to three-carrier Auger kinetics. <i>Nano Letters</i> , 2006 , 6, 1344-9	11.5	121
34	Photon counting statistics for blinking CdSe-ZnS quantum dots: a Lévy walk process. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 19053-60	3.4	60
33	Induced Branching in Confined PbSe Nanowires. <i>Chemistry of Materials</i> , 2005 , 17, 4416-4425	9.6	92
32	Power-Law Blinking Quantum Dots: Stochastic and Physical Models. <i>Advances in Chemical Physics</i> , 2005 , 327-356		11

31	Disorder-Induced Optical Heterogeneity in Single CdSe Nanowires. <i>Advanced Materials</i> , 2005 , 17, 2942-2949	9.6	249	82
30	Solution Phase Synthesis of Semiconductor Nanowires. <i>Materials Research Society Symposia Proceedings</i> , 2004 , 848, 394			
29	Solution-Based Straight and Branched CdSe Nanowires. <i>Chemistry of Materials</i> , 2004 , 16, 5260-5272	9.6		206
28	Synthesis and Characterization of Au/Bi Core/Shell Nanocrystals: A Precursor toward III-V Nanowires. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 9745-9751	3.4		72
27	Molecular Clusters of Binary and Ternary Mercury Chalcogenides: Colloidal Synthesis, Characterization, and Optical Spectra.. <i>ChemInform</i> , 2003 , 34, no			1
26	Molecular Clusters of Binary and Ternary Mercury Chalcogenides: Colloidal Synthesis, Characterization, and Optical Spectra. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 5758-5767	3.4		69
25	High temperature structural studies of HgS and HgSe quantum dots. <i>Applied Physics Letters</i> , 2003 , 83, 4011-4013	3.4		19
24	Modeling distributed kinetics in isolated semiconductor quantum dots. <i>Physical Review B</i> , 2003 , 67,	3.3		250
23	Luminescent Quantum Dot-Adaptor Protein-Antibody Conjugates for Use in Fluoroimmunoassays. <i>Physica Status Solidi (B): Basic Research</i> , 2002 , 229, 407-414	1.3		57
22	Fluorescence of single ZnS overcoated CdSe quantum dots studied by apertureless near-field scanning optical microscopy. <i>Optics Communications</i> , 2002 , 210, 11-23	2		20
21	Colloidal Semiconductor Quantum Dot Conjugates in Biosensing 2002 , 537-569			23
20	Synthesis and characterization of colloidal mercury chalcogenide quantum dots 2002 ,			4
19	Binary and Ternary Mercury Chalcogenide Quantum Dots and Clusters. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 737, 206			
18	Synthesis and Characterization of Colloidal HgS Quantum Dots. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 9982-9985	3.4		59
17	Avidin: a natural bridge for quantum dot-antibody conjugates. <i>Journal of the American Chemical Society</i> , 2002 , 124, 6378-82	16.4		468
16	Molecular fluorescence in the vicinity of a nanoscopic probe. <i>Journal of Chemical Physics</i> , 2001 , 114, 8596-8609	5.3		53
15	On-off fluorescence intermittency of single semiconductor quantum dots. <i>Journal of Chemical Physics</i> , 2001 , 115, 1028-1040	3.9		465
14	Fluorescence Intermittency in Single InP Quantum Dots. <i>Nano Letters</i> , 2001 , 1, 557-564	11.5		95

13	Organometallic Synthesis and Spectroscopic Characterization of Manganese-Doped CdSe Nanocrystals. <i>Journal of the American Chemical Society</i> , 2000 , 122, 2532-2540	16.4	416
12	Evidence of photo- and electrodarkening of (CdSe)ZnS quantum dot composites. <i>Journal of Applied Physics</i> , 2000 , 87, 8526-8534	2.5	57
11	Nonexponential Blinking Kinetics of single CdSe quantum dots: A universal power law behavior. <i>Journal of Chemical Physics</i> , 2000 , 112, 3117-3120	3.9	616
10	Organometallic Synthesis and Spectroscopic Characterization of Manganese Doped CdSe Nanocrystals. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 582, 56		1
9	Magnetic circular dichroism study of CdSe quantum dots. <i>Journal of Chemical Physics</i> , 1998 , 108, 4242-4247	3.9	70
8	Photoluminescent Mn-Doped ZNS Nanoclusters Synthesized within Block Copolymer Nanoreactors. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 471, 313		3
7	The band edge luminescence of surface modified CdSe nanocrystallites: Probing the luminescing state. <i>Journal of Chemical Physics</i> , 1997 , 106, 9869-9882	3.9	545
6	Band-edge exciton in quantum dots of semiconductors with a degenerate valence band: Dark and bright exciton states. <i>Physical Review B</i> , 1996 , 54, 4843-4856	3.3	1077
5	The Band Edge Luminescence of Surface Modified CdSe Nanocrystallites. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 452, 347		2
4	Surface Derivatization of Nanocrystalline CdSe Semiconductors. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 452, 323		4
3	Observation of the "Dark exciton" in CdSe quantum dots. <i>Physical Review Letters</i> , 1995 , 75, 3728-3731	7.4	695
2	Introductory Nanoscience		10
1	Deciphering the US News and World Report Ranking of US Chemistry Graduate Programs. <i>Scientometrics</i> , 1	3	