

# Ilka Kriegel

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2500617/publications.pdf>

Version: 2024-02-01

71  
papers

2,780  
citations

257357

24  
h-index

182361

51  
g-index

74  
all docs

74  
docs citations

74  
times ranked

4206  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tuning the Excitonic and Plasmonic Properties of Copper Chalcogenide Nanocrystals. <i>Journal of the American Chemical Society</i> , 2012, 134, 1583-1590.	6.6	454
2	Plasmonic doped semiconductor nanocrystals: Properties, fabrication, applications and perspectives. <i>Physics Reports</i> , 2017, 674, 1-52.	10.3	252
3	Shedding Light on Vacancy-Doped Copper Chalcogenides: Shape-Controlled Synthesis, Optical Properties, and Modeling of Copper Telluride Nanocrystals with Near-Infrared Plasmon Resonances. <i>ACS Nano</i> , 2013, 7, 4367-4377.	7.3	186
4	Optimal metal domain size for photocatalysis with hybrid semiconductor-metal nanorods. <i>Nature Communications</i> , 2016, 7, 10413.	5.8	184
5	Cu <sub>3</sub> P Nanocrystals as a Material Platform for Near-Infrared Plasmonics and Cation Exchange Reactions. <i>Chemistry of Materials</i> , 2015, 27, 1120-1128.	3.2	137
6	Colloidal CuFeS <sub>2</sub> Nanocrystals: Intermediate Fe d-Band Leads to High Photothermal Conversion Efficiency. <i>Chemistry of Materials</i> , 2016, 28, 4848-4858.	3.2	126
7	Effect of Surface Coating on the Photocatalytic Function of Hybrid CdS-Au Nanorods. <i>Small</i> , 2015, 11, 462-471.	5.2	124
8	Optical properties of periodic, quasi-periodic, and disordered one-dimensional photonic structures. <i>Optical Materials</i> , 2017, 72, 403-421.	1.7	120
9	Charge Transfer Excitons in Polymer/Fullerene Blends: The Role of Morphology and Polymer Chain Conformation. <i>Advanced Functional Materials</i> , 2009, 19, 3662-3668.	7.8	116
10	Shape-Dependent Field Enhancement and Plasmon Resonance of Oxide Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2015, 119, 6227-6238.	1.5	102
11	The ultrafast onset of exciton formation in 2D semiconductors. <i>Nature Communications</i> , 2020, 11, 5277.	5.8	57
12	Molecular-Level Switching of Polymer/Nanocrystal Non-Covalent Interactions and Application in Hybrid Solar Cells. <i>Advanced Functional Materials</i> , 2015, 25, 111-119.	7.8	50
13	Tuning and Locking the Localized Surface Plasmon Resonances of CuS (Covellite) Nanocrystals by an Amorphous CuPd <sub>S</sub> Shell. <i>Chemistry of Materials</i> , 2017, 29, 1716-1723.	3.2	50
14	Hybrid One-Dimensional Plasmonic Photonic Crystals for Optical Detection of Bacterial Contaminants. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 4980-4986.	2.1	50
15	Tuning the Light Absorption of Cu <sub>1.97</sub> S Nanocrystals in Supercrystal Structures. <i>Chemistry of Materials</i> , 2011, 23, 1830-1834.	3.2	46
16	Ultrafast Photodoping and Plasmon Dynamics in Fluorine-Indium Codoped Cadmium Oxide Nanocrystals for All-Optical Signal Manipulation at Optical Communication Wavelengths. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 3873-3881.	2.1	46
17	Colloidal Bi-Doped Cs <sub>2</sub> AgNaInCl <sub>6</sub> Nanocrystals: Undercoordinated Surface Cl Ions Limit their Light Emission Efficiency. , 2020, 2, 1442-1449.		41
18	Two-Dimensional Gallium Sulfide Nanoflakes for UV-Selective Photoelectrochemical-type Photodetectors. <i>Journal of Physical Chemistry C</i> , 2021, 125, 11857-11866.	1.5	41

#	ARTICLE	IF	CITATIONS
19	Quasi-Static Resonances in the Visible Spectrum from All-Dielectric Intermediate Band Semiconductor Nanocrystals. <i>Nano Letters</i> , 2017, 17, 7691-7695.	4.5	38
20	Solution processable and optically switchable 1D photonic structures. <i>Scientific Reports</i> , 2018, 8, 3517.	1.6	38
21	Cation exchange synthesis and optoelectronic properties of type II CdTe/Cu <sub>2-x</sub> Te nano-heterostructures. <i>Journal of Materials Chemistry C</i> , 2014, 2, 3189.	2.7	29
22	Rationalizing the Impact of Surface Depletion on Electrochemical Modulation of Plasmon Resonance Absorption in Metal Oxide Nanocrystals. <i>ACS Photonics</i> , 2018, 5, 2044-2050.	3.2	29
23	Opportunities from Doping of Non-Critical Metal Oxides in Last Generation Light-Conversion Devices. <i>Advanced Energy Materials</i> , 2021, 11, 2101041.	10.2	29
24	Electro-optic and magneto-optic photonic devices based on multilayer photonic structures. <i>Journal of Photonics for Energy</i> , 2018, 8, 1.	0.8	29
25	Generating plasmonic heterostructures by cation exchange and redox reactions of covellite CuS nanocrystals with Au <sup>3+</sup> ions. <i>Nanoscale</i> , 2018, 10, 2781-2789.	2.8	28
26	Control of electronic band profiles through depletion layer engineering in core-shell nanocrystals. <i>Nature Communications</i> , 2022, 13, 537.	5.8	27
27	Electric field induced structural colour tuning of a silver/titanium dioxide nanoparticle one-dimensional photonic crystal. <i>Beilstein Journal of Nanotechnology</i> , 2016, 7, 1404-1410.	1.5	25
28	Colloidal Synthesis of Bipolar Off-Stoichiometric Gallium Iron Oxide Spinel-Type Nanocrystals with Near-IR Plasmon Resonance. <i>Journal of the American Chemical Society</i> , 2017, 139, 1198-1206.	6.6	25
29	Photodoping of metal oxide nanocrystals for multi-charge accumulation and light-driven energy storage. <i>Nanoscale</i> , 2021, 13, 8773-8783.	2.8	25
30	One dimensional disordered photonic structures characterized by uniform distributions of clusters. <i>Optical Materials</i> , 2015, 39, 235-238.	1.7	23
31	Band gap splitting and average transmission lowering in ordered and disordered one-dimensional photonic structures composed by more than two materials with the same optical thickness. <i>Optics Communications</i> , 2015, 338, 523-527.	1.0	19
32	Synthesis, optical properties, and photochemical activity of zinc-indium-sulfide nanoplates. <i>RSC Advances</i> , 2015, 5, 89577-89585.	1.7	19
33	Two-Dimensional Electronic Spectroscopy Unravels sub-100 fs Electron and Hole Relaxation Dynamics in Cd-Chalcogenide Nanostructures. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 2285-2290.	2.1	17
34	Influence of Magnetic Scaffold Loading Patterns on Their Hyperthermic Potential Against Bone Tumors. <i>IEEE Transactions on Biomedical Engineering</i> , 2022, 69, 2029-2040.	2.5	15
35	Plasmonic Heavily-Doped Semiconductor Nanocrystal Dielectrics: Making Static Photonic Crystals Dynamic. <i>Journal of Physical Chemistry C</i> , 2015, 119, 2775-2782.	1.5	14
36	Light-Driven Permanent Charge Separation across a Hybrid Zero-Dimensional/Two-Dimensional Interface. <i>Journal of Physical Chemistry C</i> , 2020, 124, 8000-8007.	1.5	14

#	ARTICLE	IF	CITATIONS
37	Integration of bio-responsive silver in 1D photonic crystals: towards the colorimetric detection of bacteria. <i>Faraday Discussions</i> , 2020, 223, 125-135.	1.6	14
38	Electro-responsivity in electrolyte-free and solution processed Bragg stacks. <i>Journal of Materials Chemistry C</i> , 2020, 8, 13019-13024.	2.7	12
39	Covalent functionalized black phosphorus quantum dots. <i>Optical Materials</i> , 2018, 75, 521-524.	1.7	11
40	Large scale indium tin oxide (ITO) one dimensional gratings for ultrafast signal modulation in the visible spectral region. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 6881-6887.	1.3	11
41	Tunable light filtering by a Bragg mirror/heavily doped semiconducting nanocrystal composite. <i>Beilstein Journal of Nanotechnology</i> , 2015, 6, 193-200.	1.5	10
42	Electronically coupled hybrid structures by graphene oxide directed self-assembly of Cu <sub>2</sub> S nanocrystals. <i>Nanoscale</i> , 2015, 7, 6675-6682.	2.8	9
43	1D Nanocrystals as Light-Driven, Localized Charge-Injection Sources for the Contactless Manipulation of Atomically Thin 2D Materials. <i>Advanced Photonics Research</i> , 2021, 2, 2000151.	1.7	9
44	Black phosphorus-based one-dimensional photonic crystals and microcavities. <i>Applied Optics</i> , 2016, 55, 9288.	2.1	8
45	Delayed electron relaxation in CdTe nanorods studied by spectral analysis of the ultrafast transient absorption. <i>Chemical Physics</i> , 2016, 471, 39-45.	0.9	8
46	Magneto-optical switching in microcavities based on a TGG defect sandwiched between periodic and disordered one-dimensional photonic structures. <i>Optik</i> , 2017, 142, 249-255.	1.4	8
47	Three material and four material one-dimensional phononic crystals. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2017, 85, 34-37.	1.3	7
48	Multi-charge transfer from photodoped ITO nanocrystals. <i>Nanoscale Advances</i> , 2021, 3, 6628-6634.	2.2	7
49	Generation of Free Carriers in MoSe <sub>2</sub> Monolayers Via Energy Transfer from CsPbBr <sub>3</sub> Nanocrystals. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	7
50	Ultrafast Hole Transfer from (6,5) SWCNT to P3HT:PCBM Blend by Resonant Excitation. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 3353-3358.	2.1	5
51	Indium Tin Oxide Nanoparticle: TiO <sub>2</sub> : Air Layers for One-Dimensional Multilayer Photonic Structures. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 2564.	1.3	5
52	Modelling and fabrication of one-dimensional flexible multilayer photonic crystals based on polymers and inorganic materials. <i>Optical Materials</i> , 2022, 123, 111859.	1.7	5
53	Periodic transmission peaks in non-periodic disordered one-dimensional photonic structures. <i>Optical Materials</i> , 2015, 44, 54-57.	1.7	4
54	Light-induced switching in pDTE-FICO 1D photonic structures. <i>Optics Communications</i> , 2018, 410, 703-706.	1.0	4

#	ARTICLE	IF	CITATIONS
55	Optical properties of one-dimensional disordered multilayer photonic structures. , 2015, , .		3
56	Experimental Method to Distinguish between a Solution and a Suspension. Advanced Materials Interfaces, 2022, 9, .	1.9	3
57	Tantalum Arsenide-Based One-Dimensional Photonic Structures. Ceramics, 2018, 1, 139-144.	1.0	2
58	Ultrafast photochromism and bacteriochromism in one dimensional hybrid plasmonic photonic structures. , 2020, , .		2
59	Ultrafast carrier dynamics unravel role of surface ligands and metal domain size on the photocatalytic hydrogen evolution efficiency of Au-tipped CdS nanorods: an ultrafast transient absorption spectroscopy study. Proceedings of SPIE, 2017, , .	0.8	1
60	VACANCY-DOPED PLASMONIC COPPER CHALCOGENIDE NANOCRYSTALS WITH TUNABLE OPTICAL PROPERTIES. , 2014, , .		0
61	Exciton recombination dynamics in type II CdTe-Cu <sub>2-x</sub> Te nano-heterostructures with excitonic and plasmonic properties. , 2014, , .		0
62	Periodic transmission peak splitting in one dimensional disordered photonic structures. Optical Materials, 2016, 58, 113-115.	1.7	0
63	A probabilistic model of the electron transport in films of nanocrystals arranged in a cubic lattice. Thin Solid Films, 2016, 612, 327-330.	0.8	0
64	Tailoring the optical properties of one-dimensional (1D) photonic structures. , 2017, , .		0
65	Structural color tuning in a Ag/TiO <sub>2</sub> nanoparticle one-dimensional photonic crystal induced by electric field. Proceedings of SPIE, 2017, , .	0.8	0
66	Unraveling electron and hole relaxation dynamics in colloidal CdTe nanorods: a two-dimensional electronic spectroscopy study. Proceedings of SPIE, 2017, , .	0.8	0
67	Hybrid plasmonic/photonic crystals for optical detection of bacterial contaminants. EPJ Web of Conferences, 2020, 238, 07002.	0.1	0
68	(INVITED) Stable solution emission of 2,3,5,6-Tetrafluoro-7,7,8,8-tetracyanoquinodimethane. Optical Materials: X, 2021, 11, 100081.	0.3	0
69	Electron and hole relaxation dynamics in CdTe nanorods studied by two-dimensional electronic spectroscopy. , 2016, , .		0
70	One-dimensional disordered photonic structures with two or more materials. , 2018, , .		0
71	Structural color tuning in 1D photonic crystals with electric field and magnetic field. , 2018, , .		0