Masaki Saruyama

List of Publications by Year
in descending order

37 papers	1,320 citations	304743 22 h-index	345221 36 g-index
37 all docs	37 docs citations	37 times ranked	1866 citing authors

#	Article	IF	Citations
1	Bridging electrocatalyst and cocatalyst studies for solar hydrogen production via water splitting. Chemical Science, 2022, 13, 2824-2840.	7.4	15
2	In Situ Control of Crystallinity of 3D Colloidal Crystals by Tuning the Growth Kinetics of Nanoparticle Building Blocks. Journal of the American Chemical Society, 2022, 144, 5871-5877.	13.7	12
3	Size-controlled quantum dots reveal the impact of intraband transitions on high-order harmonic generation in solids. Nature Physics, 2022, 18, 874-878.	16.7	17
4	Interference effects in high-order harmonics from colloidal perovskite nanocrystals excited by an elliptically polarized laser. Physical Review Materials, 2021, 5, .	2.4	11
5	Transformations of Ionic Nanocrystals via Full and Partial Ion Exchange Reactions. Accounts of Chemical Research, 2021, 54, 765-775.	15.6	43
6	Strong spin-orbit coupling inducing Autler-Townes effect in lead halide perovskite nanocrystals. Nature Communications, 2021, 12, 3026.	12.8	17
7	Determinants of crystal structure transformation of ionic nanocrystals in cation exchange reactions. Science, 2021, 373, 332-337.	12.6	50
8	Luminescence Fine Structures in Single Lead Halide Perovskite Nanocrystals: Size Dependence of the Excitonâ€“Phonon Coupling. Nano Letters, 2021, 21, 7206-7212.	9.1	39
9	Phase segregated Cu_{2â^'x}Se/Ni₃Se₄ bimetallic selenide nanocrystals formed through the cation exchange reaction for active water oxidation precatalysts. Chemical Science, 2020, 11, 1523-1530.	7.4	26
10	Coreâ€“Shell CsPbBr₃@CdS Quantum Dots with Enhanced Stability and Photoluminescence Quantum Yields for Optoelectronic Devices. ACS Applied Nano Materials, 2020, 3, 7563-7571.	5.0	45
11	Self-activated Rhâ€“Zr mixed oxide as a nonhazardous cocatalyst for photocatalytic hydrogen evolution. Chemical Science, 2020, 11, 6862-6867.	7.4	12
12	Reduction of Optical Gain Threshold in CsPbI₃ Nanocrystals Achieved by Generation of Asymmetric Hot-Biexcitons. Nano Letters, 2020, 20, 3905-3910.	9.1	22
13	Effect of A-Site Cation on Photoluminescence Spectra of Single Lead Bromide Perovskite Nanocrystals. Nano Letters, 2020, 20, 4022-4028.	9.1	29
14	Ionization and Neutralization Dynamics of CsPbBr₃ Perovskite Nanocrystals Revealed by Double-Pump Transient Absorption Spectroscopy. Journal of Physical Chemistry Letters, 2019, 10, 4731-4736.	4.6	8
15	Hot Biexciton Effect on Optical Gain in CsPbI₃ Perovskite Nanocrystals. Journal of Physical Chemistry Letters, 2018, 9, 2222-2228.	4.6	67
16	Phase-segregated NiP_x@FeP_yO_z core@shell nanoparticles: ready-to-use nanocatalysts for electro- and photo-catalytic water oxidation through in situ activation by structural transformation and spontaneous ligand removal. Chemical Science, 2018, 9, 4830-4836.	7.4	21
17	Boosting photocatalytic overall water splitting by Co doping into Mn₃O₄ nanoparticles as oxygen evolution cocatalysts. Nanoscale, 2018, 10, 10420-10427.	5.6	56
18	Suppression of Trion Formation in CsPbBr₃ Perovskite Nanocrystals by Postsynthetic Surface Modification. Journal of Physical Chemistry C, 2018, 122, 22188-22193.	3.1	54

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19	Observation of positive and negative trions in organic-inorganic hybrid perovskite nanocrystals. Physical Review Materials, 2018, 2, .	2.4	35
20	Coulomb-Enhanced Radiative Recombination of Biexcitons in Single Giant-Shell CdSe/CdS Core/Shell Nanocrystals. Journal of Physical Chemistry Letters, 2017, 8, 1961-1966.	4.6	24
21	Dynamics of Charged Excitons and Biexcitons in CsPbBr₃ Perovskite Nanocrystals Revealed by Femtosecond Transient-Absorption and Single-Dot Luminescence Spectroscopy. Journal of Physical Chemistry Letters, 2017, 8, 1413-1418.	4.6	149
22	Formation of Layerâ€byâ€Layer Assembled Cocatalyst Films of S^{2â^'}â€Stabilized Ni₃S₄ Nanoparticles for Hydrogen Evolution Reaction. ChemNanoMat, 2017, 3, 764-771.	2.8	5
23	Impact of Postsynthetic Surface Modification on Photoluminescence Intermittency in Formamidinium Lead Bromide Perovskite Nanocrystals. Journal of Physical Chemistry Letters, 2017, 8, 6041-6047.	4.6	67
24	Light-stimulated carrier dynamics of CuInS₂/CdS heterotetrapod nanocrystals. Nanoscale, 2016, 8, 9517-9520.	5.6	22
25	Investigation on photo-induced charge separation in CdS/CdTe nanopencils. Chemical Science, 2014, 5, 3831-3835.	7.4	12
26	Crystal structure-selective formation and carrier dynamics of type-II CdSâ€“Cu31S16 heterodimers. Journal of Materials Chemistry C, 2013, 1, 3391.	5.5	7
27	Ultrafast dynamics and single particle spectroscopy of Auâ€“CdSe nanorods. Physical Chemistry Chemical Physics, 2013, 15, 2141.	2.8	37
28	Largeâ€Scale Synthesis of Highâ€Quality Metal Sulfide Semiconductor Quantum Dots with Tunable Surfaceâ€Plasmon Resonance Frequencies. Chemistry - A European Journal, 2012, 18, 9230-9238.	3.3	49
29	Quantized Auger recombination of biexcitons in CdSe nanorods studied by time-resolved photoluminescence and transient-absorption spectroscopy. Physical Review B, 2011, 83, .	3.2	41
30	Spontaneous Formation of Wurzite-CdS/Zinc Blende-CdTe Heterodimers through a Partial Anion Exchange Reaction. Journal of the American Chemical Society, 2011, 133, 17598-17601.	13.7	105
31	Drastic Structural Transformation of Cadmium Chalcogenide Nanoparticles Using Chloride Ions and Surfactants. Journal of the American Chemical Society, 2010, 132, 3280-3282.	13.7	77
32	CdS Nanoparticles Exhibiting Quantum Size Effect by Dispersion on TiO2: Photocatalytic H2 Evolution and Photoelectrochemical Measurements. Bulletin of the Chemical Society of Japan, 2009, 82, 528-535.	3.2	27
33	CdPd sulfide heterostructured nanoparticles with metal sulfide seed-dependent morphologies. Chemical Communications, 2009, , 2724.	4.1	16
34	Seed-mediated synthesis of metal sulfide patchy nanoparticles. Nanoscale, 2009, 1, 225.	5.6	35
35	Synthesis and Structure-specific Functions of Patchy Nanoparticles. Chemistry Letters, 2009, 38, 194-199.	1.3	8
36	Anisotropically Phase-segregated Co9S8/PdSxNanoacorns: Stability Improvement and New Heterostructures. Chemistry Letters, 2007, 36, 490-491.	1.3	11

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37	Anisotropically Phase-Segregated Pdâ€“Coâ€“Pd Sulfide Nanoparticles Formed by Fusing Two Coâ€“Pd Sulfide Nanoparticles. Angewandte Chemie - International Edition, 2007, 46, 1713-1715.	13.8	49