Toshiharu Teranishi

List of Publications by Year
in descending order

97 papers	4,238 citations	109321 35 h-index	118850 62 g-index
103 all docs	103 docs citations	103 times ranked	5882 citing authors

#	Article	IF	Citations
1	Synthesis of Mesoscopic Particles of Multi-Component Rare Earth Permanent Magnet Compounds. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2022, 69, S84-S98.	0.2	0
2	Bridging electrocatalyst and cocatalyst studies for solar hydrogen production <i>via</i> water splitting. Chemical Science, 2022, 13, 2824-2840.	7.4	15
3	Inter-element miscibility driven stabilization of ordered pseudo-binary alloy. Nature Communications, 2022, 13, 1047.	12.8	6
4	<i>In Situ</i> 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
5	Band Engineering-Tuned Localized Surface Plasmon Resonance in Diverse-Phased Cu_{2â€“<i>x</i>}S_{<i>y</i>}Se_{1â€“<i>y</i>} Nanocrystals. Journal of Physical Chemistry C, 2022, 126, 8107-8112.	3.1	3
6	Bimetallic Synergy in Ultrafine Cocatalyst Alloy Nanoparticles for Efficient Photocatalytic Water Splitting. Advanced Functional Materials, 2022, 32, .	14.9	35
7	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
8	Exciton Recycling in Triplet Energy Transfer from a Defect-Rich Quantum Dot to an Organic Molecule. Journal of Physical Chemistry C, 2022, 126, 11674-11679.	3.1	1
9	(Invited, Digital Presentation) Transformations of Ionic Nanocrystals Via Ion Exchange Reactions. ECS Meeting Abstracts, 2022, MA2022-01, 930-930.	0.0	0
10	Control over Ligand-Exchange Positions of Thiolate-Protected Gold Nanoclusters Using Steric Repulsion of Protecting Ligands. Journal of the American Chemical Society, 2022, 144, 12310-12320.	13.7	30
11	Interference effects in high-order harmonics from colloidal perovskite nanocrystals excited by an elliptically polarized laser. Physical Review Materials, 2021, 5, .	2.4	11
12	Transformations of Ionic Nanocrystals via Full and Partial Ion Exchange Reactions. Accounts of Chemical Research, 2021, 54, 765-775.	15.6	43
13	Morphology-Dependent Coherent Acoustic Phonon Vibrations and Phonon Beat of Au Nanopolyhedrons. ACS Omega, 2021, 6, 5485-5489.	3.5	5
14	Strong spin-orbit coupling inducing Autler-Townes effect in lead halide perovskite nanocrystals. Nature Communications, 2021, 12, 3026.	12.8	17
15	Bragg coherent diffraction imaging allowing simultaneous retrieval of three-dimensional shape and strain distribution for 40â€“500Ânm particles. Japanese Journal of Applied Physics, 2021, 60, SFFA07.	1.5	7
16	Innentitelbild: Creation of Highâ€Performance Heterogeneous Photocatalysts by Controlling Ligand Desorption and Particle Size of Gold Nanocluster (Angew. Chem. 39/2021). Angewandte Chemie, 2021, 133, 21242-21242.	2.0	0
17	Determinants of crystal structure transformation of ionic nanocrystals in cation exchange reactions. Science, 2021, 373, 332-337.	12.6	50
18	Creation of Highâ€Performance Heterogeneous Photocatalysts by Controlling Ligand Desorption and Particle Size of Gold Nanocluster. Angewandte Chemie, 2021, 133, 21510-21520.	2.0	12

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19	Creation of Highâ€Performance Heterogeneous Photocatalysts by Controlling Ligand Desorption and Particle Size of Gold Nanocluster. Angewandte Chemie - International Edition, 2021, 60, 21340-21350.	13.8	74
20	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
21	Synthesis of mesoscopic particles of multi-component rare earth permanent magnet compounds. Science and Technology of Advanced Materials, 2021, 22, 37-54.	6.1	5
22	Gold Nanocluster Functionalized with Peptide Dendron Thiolates: Acceleration of the Photocatalytic Oxidation of an Amino Alcohol in a Supramolecular Reaction Field. ACS Catalysis, 2021, 11, 13180-13187.	11.2	12
23	Near-Unity Singlet Fission on a Quantum Dot Initiated by Resonant Energy Transfer. Journal of the American Chemical Society, 2021, 143, 17388-17394.	13.7	10
24	Collective enhancement of quantum coherence in coupled quantum dot films. Physical Review B, 2021, 104, .	3.2	6
25	Phase segregated Cu_{2âˆ’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
26	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
27	Cation Distribution in Monodispersed MFe₂O₄ (M = Mn, Fe, Co, Ni, and Zn) Nanoparticles Investigated by X-ray Absorption Fine Structure Spectroscopy: Implications for Magnetic Data Storage, Catalysts, Sensors, and Ferrofluids. ACS Applied Nano Materials, 2020, 3, 8389-8402.	5.0	42
28	Number of Surface-Attached Acceptors on a Quantum Dot Impacts Energy Transfer and Photon Upconversion Efficiencies. ACS Photonics, 2020, 7, 1876-1884.	6.6	13
29	Self-activated Rhâ€“Zr mixed oxide as a nonhazardous cocatalyst for photocatalytic hydrogen evolution. Chemical Science, 2020, 11, 6862-6867.	7.4	12
30	Hard X-ray excited optical luminescence from protein-directed Auâˆ¼20 clusters. RSC Advances, 2020, 10, 13824-13829.	3.6	3
31	Ligand-Stabilized CoO and NiO Nanoparticles for Spintronic Devices with Antiferromagnetic Insulators. ACS Applied Nano Materials, 2020, 3, 2745-2755.	5.0	18
32	Reduction of Optical Gain Threshold in CsPbI₃ Nanocrystals Achieved by Generation of Asymmetric Hot-Biexcitons. Nano Letters, 2020, 20, 3905-3910.	9.1	22
33	Effect of A-Site Cation on Photoluminescence Spectra of Single Lead Bromide Perovskite Nanocrystals. Nano Letters, 2020, 20, 4022-4028.	9.1	29
34	Plasmon-Induced Carrier Transfer for Infrared Light Energy Conversion. , 2020, , 211-222.		0
35	(Invited) Alchemy in Nanoplasmonics: New Class of Plasmonic Alloy Nanoparticles. ECS Meeting Abstracts, 2020, MA2020-01, 896-896.	0.0	0
36	Formation of strong <i>L</i>1₀-FePd/Î±-Fe nanocomposite magnets by visualizing efficient exchange coupling. Nanoscale Advances, 2019, 1, 2598-2605.	4.6	9

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37	Anomalous Photoinduced Hole Transport in Type I Core/Mesoporous-Shell Nanocrystals for Efficient Photocatalytic H₂ Evolution. ACS Nano, 2019, 13, 8356-8363.	14.6	44
38	Hot Carrier Chemistry. ChemNanoMat, 2019, 5, 976-976.	2.8	0
39	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
40	Impact of Orbital Hybridization at Moleculeâ€“Metal Interface on Carrier Dynamics. Journal of Physical Chemistry C, 2019, 123, 25877-25882.	3.1	7
41	Nanoparticle Approach to the Formation of Sm₂Fe₁₇N₃ Hard Magnetic Particles. Chemistry Letters, 2019, 48, 1054-1057.	1.3	7
42	Clear and transparent nanocrystals for infrared-responsive carrier transfer. Nature Communications, 2019, 10, 406.	12.8	33
43	Carrier-Selective Blocking Layer Synergistically Improves the Plasmonic Enhancement Effect. Journal of the American Chemical Society, 2019, 141, 8402-8406.	13.7	25
44	Plasmonic pâ€“n Junction for Infrared Light to Chemical Energy Conversion. Journal of the American Chemical Society, 2019, 141, 2446-2450.	13.7	110
45	Durian-Shaped CdS@ZnSe Core@Mesoporous-Shell Nanoparticles for Enhanced and Sustainable Photocatalytic Hydrogen Evolution. Journal of Physical Chemistry Letters, 2018, 9, 2212-2217.	4.6	31
46	Hot Biexciton Effect on Optical Gain in CsPbI₃ Perovskite Nanocrystals. Journal of Physical Chemistry Letters, 2018, 9, 2222-2228.	4.6	67
47	Phase-segregated NiP_x@FeP_yO_z core@shell nanoparticles: ready-to-use nanocatalysts for electro- and photo-catalytic water oxidation through <i>in situ</i> activation by structural transformation and spontaneous ligand removal. Chemical Science, 2018, 9, 4830-4836.	7.4	21
48	Numerical and experimental investigations of dependence of photoacoustic signals from gold nanoparticles on the optical properties. Optical Review, 2018, 25, 365-374.	2.0	8
49	Boosting photocatalytic overall water splitting by Co doping into Mn₃O₄ nanoparticles as oxygen evolution cocatalysts. Nanoscale, 2018, 10, 10420-10427.	5.6	56
50	Ligand effect on the catalytic activity of porphyrin-protected gold clusters in the electrochemical hydrogen evolution reaction. Chemical Science, 2018, 9, 261-265.	7.4	34
51	Quantum coherence of multiple excitons governs absorption cross-sections of PbS/CdS core/shell nanocrystals. Nature Communications, 2018, 9, 3179.	12.8	23
52	Suppression of Trion Formation in CsPbBr₃ Perovskite Nanocrystals by Postsynthetic Surface Modification. Journal of Physical Chemistry C, 2018, 122, 22188-22193.	3.1	54
53	Near infrared light induced plasmonic hot hole transfer at a nano-heterointerface. Nature Communications, 2018, 9, 2314.	12.8	103
54	Observation of positive and negative trions in organic-inorganic hybrid perovskite nanocrystals. Physical Review Materials, 2018, 2, .	2.4	35

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55	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
56	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
57	Porphyrin Derivative-Protected Gold Cluster with a Pseudotetrahedral Shape. Journal of Physical Chemistry C, 2017, 121, 10760-10766.	3.1	3
58	Formation of Layerâ€byâ€Layer Assembled Cocatalyst Films of S^{2âˆ’}â€Stabilized Ni₃S₄ Nanoparticles for Hydrogen Evolution Reaction. ChemNanoMat, 2017, 3, 764-771.	2.8	5
59	Harmonic Quantum Coherence of Multiple Excitons in PbS/CdS Core-Shell Nanocrystals. Physical Review Letters, 2017, 119, 247401.	7.8	18
60	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
61	Light-stimulated carrier dynamics of CuInS₂/CdS heterotetrapod nanocrystals. Nanoscale, 2016, 8, 9517-9520.	5.6	22
62	Tin Ion Directed Morphology Evolution of Copper Sulfide Nanoparticles and Tuning of Their Plasmonic Properties via Phase Conversion. Langmuir, 2016, 32, 7582-7587.	3.5	30
63	Formation of pseudomorphic nanocages from Cu ₂ O nanocrystals through anion exchange reactions. Science, 2016, 351, 1306-1310.	12.6	101
64	Simple Surfactant Concentrationâ€Dependent Shape Control of Polyhedral Fe₃O₄ Nanoparticles and Their Magnetic Properties. ChemPhysChem, 2015, 16, 3200-3205.	2.1	11
65	Photoinduced Carrier Dynamics of Nearly Stoichiometric Oleylamine-Protected Copper Indium Sulfide Nanoparticles and Nanodisks. Journal of Physical Chemistry C, 2015, 119, 11100-11105.	3.1	18
66	Visible to near-infrared plasmon-enhanced catalytic activity of Pd hexagonal nanoplates for the Suzuki coupling reaction. Nanoscale, 2015, 7, 12435-12444.	5.6	50
67	Effect of Hydrogen and Oxygen Evolution Cocatalysts on Photocatalytic Activity of GaN:ZnO. European Journal of Inorganic Chemistry, 2014, 2014, 767-772.	2.0	52
68	Hard X-ray-induced optical luminescence via biomolecule-directed metal clusters. Chemical Communications, 2014, 50, 3549-3551.	4.1	43
69	Strongest Ï€â€“metal orbital coupling in a porphyrin/gold cluster system. Chemical Science, 2014, 5, 2007-2010.	7.4	15
70	Assessment of Hot-Carrier Effects on Charge Separation in Type-II CdS/CdTe Heterostructured Nanorods. Journal of Physical Chemistry Letters, 2014, 5, 2951-2956.	4.6	19
71	Investigation on photo-induced charge separation in CdS/CdTe nanopencils. Chemical Science, 2014, 5, 3831-3835.	7.4	12
72	Charge Separation in Type-II Semiconductor Heterodimers. Journal of Physical Chemistry Letters, 2013, 4, 2867-2873.	4.6	73

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73	Ultrafast dynamics and single particle spectroscopy of Auâ€“CdSe nanorods. Physical Chemistry Chemical Physics, 2013, 15, 2141.	2.8	37
74	Polyol Synthesis of Size-Controlled Rh Nanoparticles and Their Application to Photocatalytic Overall Water Splitting under Visible Light. Journal of Physical Chemistry C, 2013, 117, 2467-2473.	3.1	78
75	Electroconductive Ï€-Junction Au Nanoparticles. Bulletin of the Chemical Society of Japan, 2012, 85, 957-961.	3.2	20
76	Ideal Discrete Energy Levels in Synthesized Au Nanoparticles for Chemically Assembled Single-Electron Transistors. ACS Nano, 2012, 6, 9972-9977.	14.6	24
77	Platonic Hexahedron Composed of Six Organic Faces with an Inscribed Au Cluster. Journal of the American Chemical Society, 2012, 134, 816-819.	13.7	25
78	Electricâ€Field Enhancement Inducing Nearâ€Infrared Twoâ€Photon Absorption in an Indiumâ€“Tin Oxide Nanoparticle Film. Angewandte Chemie - International Edition, 2012, 51, 2640-2642.	13.8	29
79	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
80	Exchange Coupling Interaction in <i>L</i>1₀-FePd/Î±-Fe Nanocomposite Magnets with Large Maximum Energy Products. ACS Nano, 2011, 5, 2806-2814.	14.6	54
81	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
82	Controlled localized surface plasmon resonance wavelength for conductive nanoparticles over the ultraviolet to near-infrared region. Journal of Materials Chemistry, 2011, 21, 10238.	6.7	40
83	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
84	Homoepitaxial Size Control and Largeâ€Scale Synthesis of Highly Monodisperse Amineâ€Protected Palladium Nanoparticles. Small, 2011, 7, 469-473.	10.0	33
85	Preparation of Coreâ€“Shellâ€Structured Nanoparticles (with a Nobleâ€Metal or Metal Oxide Core and a) Tj ETQq1 1 0.784314 rgBT /O European Journal, 2010, 16, 7750-7759.	3.3	156
86	Photocatalytic Overall Water Splitting Promoted by Two Different Cocatalysts for Hydrogen and Oxygen Evolution under Visible Light. Angewandte Chemie - International Edition, 2010, 49, 4096-4099.	13.8	356
87	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
88	Effect of End Group Position on the Formation of a Single Porphyrin Molecular Junction. Journal of Physical Chemistry C, 2009, 113, 9014-9017.	3.1	35
89	Indium Tin Oxide Nanoparticles with Compositionally Tunable Surface Plasmon Resonance Frequencies in the Near-IR Region. Journal of the American Chemical Society, 2009, 131, 17736-17737.	13.7	508
90	Highly dispersed noble-metal/chromia (core/shell) nanoparticles as efficient hydrogen evolution promoters for photocatalytic overall water splitting under visible light. Nanoscale, 2009, 1, 106.	5.6	105

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91	Seed-mediated synthesis of metal sulfide patchy nanoparticles. Nanoscale, 2009, 1, 225.	5.6	35
92	Gold(0) Porphyrins on Gold Nanoparticles. Angewandte Chemie - International Edition, 2008, 47, 307-310.	13.8	77
93	Conversion of Anisotropically Phase-Segregated Pd/Î³-Fe₂O₃ Nanoparticles into Exchange-Coupled fct-FePd/Î±-Fe Nanocomposite Magnets. Journal of the American Chemical Society, 2008, 130, 4210-4211.	13.7	59
94	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
95	Self-Assembly of Small Gold Nanoparticles through Interligand Interaction. Journal of the American Chemical Society, 2006, 128, 13084-13094.	13.7	68
96	Synthesis of Stably Water-Soluble Gold Nanoparticles Protected by Porphyrin-Thiol Derivative. E-Journal of Surface Science and Nanotechnology, 2005, 3, 30-32.	0.4	11
97	Desirable Patterning of Metal Nanoparticles and Application to Nanodevices. Hyomen Kagaku, 2004, 25, 761-767.	0.0	1