Taro Uematsu

List of Publications by Year
in descending order

46 papers	728 citations	567281 15 h-index	552781 26 g-index
47 all docs	47 docs citations	47 times ranked	774 citing authors

#	Article	IF	Citations
1	Surface ligand chemistry on quaternary Ag(In_{<i>x</i>}Ga_{1âˆ’<i>x</i>})S₂ semiconductor quantum dots for improving photoluminescence properties. Nanoscale Advances, 2022, 4, 849-857.	4.6	20
2	Encapsulation of AgInS₂/GaS_{<i>x</i>} core/shell quantum dots in In-fumarate metalâ€“organic frameworks for stability enhancement. CrystEngComm, 2022, 24, 3715-3723.	2.6	4
3	Recent Progress of Multinary Semiconductor Quantum Dots Towards Luminescent and Photoelectrochemical Applications. Denki Kagaku, 2022, 90, 115-121.	0.0	0
4	Synthesis of multicolor-emitting nitrogenâ€“sulfur co-doped carbon dots and their photochemical studies for sensing applications. RSC Advances, 2022, 12, 20054-20061.	3.6	4
5	(Invited, Digital Presentation) Controlling the Energy Structure of Ag(In,Ga)S Quantum Dots for Photocatalytic H₂ Evolution. ECS Meeting Abstracts, 2022, MA2022-01, 1576-1576.	0.0	0
6	Controlling Electronic Energy Structure of Near-IR-Responsive Ag(In,Ga)(S,Se)₂ Quantum Dots for In Vivo Bioimaging. ECS Meeting Abstracts, 2022, MA2022-01, 935-935.	0.0	0
7	Photoluminescence Enhancement by Light Harvesting of Metalâ€“Organic Frameworks Surrounding Semiconductor Quantum Dots. Chemistry of Materials, 2021, 33, 1607-1617.	6.7	24
8	[Paper] Green Electroluminescence Generated by Band-edge Transition in Ag-In-Ga-S/GaS_{<i>x</i>} Core/shell Quantum Dots. ITE Transactions on Media Technology and Applications, 2021, 9, 222-227.	0.5	5
9	Photoluminescence properties of quinary Agâ€“(In,Ga)â€“(S,Se) quantum dots with a gradient alloy structure for <i>in vivo</i> bioimaging. Journal of Materials Chemistry C, 2021, 9, 12791-12801.	5.5	18
10	Variations in Photoluminescence Intensity of a Quantum Dot Assembly Investigated by Its Adsorption on Cubic Metalâ€“Organic Frameworks. Journal of Physical Chemistry C, 2021, 125, 8285-8293.	3.1	4
11	Luminescent Quaternary Ag(In_{<i>x</i>}Ga_{1â€“<i>x</i>})S₂/GaS_{<i>y</i>} Core/Shell Quantum Dots Prepared Using Dithiocarbamate Compounds and Photoluminescence Recovery via Post Treatment. Inorganic Chemistry, 2021, 60, 13101-13109.	4.0	30
12	Photoluminescence Stability Enhancement of Agâ€“Inâ€“Gaâ€“S/GaS_x Core/Shell Quantum Dots with Thicker Shells by the Addition of Gallium Diethyldithiocarbamate. Chemistry Letters, 2021, 50, 1863-1866.	1.3	12
13	Electroluminescence from band-edge-emitting AgInS2/GaSx core/shell quantum dots. Applied Physics Letters, 2020, 117, .	3.3	26
14	Efficient quantum-dot light-emitting diodes using ZnSâ€“AgInS2 solid-solution quantum dots in combination with organic charge-transport materials. Applied Physics Letters, 2020, 116, .	3.3	14
15	Tailored Photoluminescence Properties of Ag(In,Ga)Se₂ Quantum Dots for Near-Infrared <i>In Vivo</i> Imaging. ACS Applied Nano Materials, 2020, 3, 3275-3287.	5.0	32
16	Temperature dependences of photoluminescence intensities observed from AgInGaS and AgInGaS/GaSx coreâ€“shell nanoparticles. Journal of Nanophotonics, 2020, 14, 1.	1.0	1
17	Fabrication and Evaluation of Electroluminescence Devices Using Quantum Dots As Light Emitting Materials. ECS Meeting Abstracts, 2020, MA2020-02, 3638-3638.	0.0	0
18	Fabrication of Quantum Dots@Metalâ€“Organic Frameworks Nanocomposites By Direct Surface Modification. ECS Meeting Abstracts, 2020, MA2020-02, 2726-2726.	0.0	0

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19	Embedding Quantum Dots with High Quantum Yield in Inorganic Matrix By Sol-Gel Method. ECS Meeting Abstracts, 2020, MA2020-02, 3639-3639.	0.0	0
20	Narrow-Band Photoluminescence from Cadmium-Free I-III-VI Ternary Semiconductor Quantum Dots By Surface Modification. ECS Meeting Abstracts, 2020, MA2020-02, 2727-2727.	0.0	0
21	Controlling Electronic Energy Structure of Agâ€"Î™nâ€"Gaâ€"Sâ€"Se Quantum Dots Showing Band-Edge Emission. ECS Meeting Abstracts, 2020, MA2020-02, 3121-3121.	0.0	0
22	(Keynote) Band-Edge Emission from AgInS₂/Ga₂S₃ Core/Shell Quantum Dots and Enhancement of Their Quantum Yield. ECS Meeting Abstracts, 2020, MA2020-02, 3076-3076.	0.0	0
23	Direct surface modification of semiconductor quantum dots with metalâ€"organic frameworks. CrystEngComm, 2019, 21, 5568-5577.	2.6	21
24	The Capacitor Properties of KOH Activated Porous Carbon Beads Derived from Polyacrylonitrile. Bulletin of the Chemical Society of Japan, 2019, 92, 832-839.	3.2	4
25	Electric Double Layer Capacitors Based on Polyacrylonitrile-derived Porous Carbon Beads: Effects of Particle Size and Composite. Electrochemistry, 2019, 87, 119-122.	1.4	2
26	Core Nanoparticle Engineering for Narrower and More Intense Band-Edge Emission from AgInS2/GaSx Core/Shell Quantum Dots. Nanomaterials, 2019, 9, 1763.	4.1	21
27	Operando Observation of Vacuum and Liquid Interface while Conducting Gold Sputtering onto Ionic Liquid for Preparation of Au Nanoparticles. Electrochemistry, 2018, 86, 223-225.	1.4	5
28	Wavelength-Tunable Band-Edge Photoluminescence of Nonstoichiometric Agâ€"Inâ€"S Nanoparticles via Ga³⁺ Doping. ACS Applied Materials & Interfaces, 2018, 10, 42844-42855.	8.0	55
29	Narrow band-edge photoluminescence from AgInS2 semiconductor nanoparticles by the formation of amorphous IIIâ€"VI semiconductor shells. NPG Asia Materials, 2018, 10, 713-726.	7.9	91
30	Enhanced visible light response of a WO₃ photoelectrode with an immobilized fibrous gold nanoparticle assembly using an amyloid-Î² peptide. RSC Advances, 2017, 7, 1089-1092.	3.6	2
31	Improvement of Optical Properties for Semiconductor Nanoparticles by the Precise Control of Electron and Energy Transfer. Electrochemistry, 2017, 85, 543-551.	1.4	3
32	Evaluation of Surface Ligands on Semiconductor Nanoparticle Surfaces Using Electron Transfer to Redox Species. Journal of Physical Chemistry C, 2016, 120, 16012-16023.	3.1	11
33	Controlling Shape Anisotropy of ZnSâ€"AgInS₂ Solid Solution Nanoparticles for Improving Photocatalytic Activity. ACS Applied Materials & Interfaces, 2016, 8, 27151-27161.	8.0	53
34	Photocatalytic Properties of TiO₂ Composites Immobilized with Gold Nanoparticle Assemblies Using the Streptavidinâ€"Biotin Interaction. Langmuir, 2016, 32, 6459-6467.	3.5	14
35	Mannose-displaying fluorescent framboidal nanoparticles containing phenylboronic acid groups as a potential drug carrier for macrophage targeting. Colloids and Surfaces B: Biointerfaces, 2015, 136, 1174-1181.	5.0	9
36	Atomic Resolution Imaging of Gold Nanoparticle Generation and Growth in Ionic Liquids. Journal of the American Chemical Society, 2014, 136, 13789-13797.	13.7	61

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37	Visualization of Electrochemical Reactions by Redox-dependent Quenching of Photoluminescence from ZnS-AgInS2 Solid Solution Semiconductor Nanoparticles. Electrochemistry, 2014, 82, 338-340.	1.4	2
38	Colloidal Syntheses of Semiconductor Nanoparticles with Tunable Photoluminescence in Visible-Light Region and Their Application to Photo-functional Materials. Journal of the Japan Society of Colour Material, 2014, 87, 430-435.	0.1	0
39	Photoinduced Electron Transfer of ZnSâ€“AgInS2 Solid-Solution Semiconductor Nanoparticles: Emission Quenching and Photocatalytic Reactions Controlled by Electrostatic Forces. Journal of Physical Chemistry C, 2013, 117, 15667-15676.	3.1	18
40	Supramolecular Linear Assemblies of Cytochrome b 562 Immobilized on a Gold Electrode. Journal of Inorganic and Organometallic Polymers and Materials, 2013, 23, 172-179.	3.7	9
41	Shape-controlled Synthesis of ZnSâ€“CuInS2â€“AgInS2 Solid Solution Nanoparticles and Their Photoluminescence Properties. Chemistry Letters, 2013, 42, 171-173.	1.3	3
42	Preparation of gold nanoparticles using reactive species produced in room-temperature ionic liquids by accelerated electron beam irradiation. RSC Advances, 2012, 2, 11801.	3.6	15
43	Long Term Optical Properties of ZnS-AgInS2 and AgInS2-AgGaS2 Solid-Solution Semiconductor Nanoparticles Dispersed in Polymer Matrices. Electrochemistry, 2011, 79, 813-816.	1.4	6
44	Preparation of Luminescent AgInS₂âˆ’AgGaS₂ Solid Solution Nanoparticles and Their Optical Properties. Journal of Physical Chemistry Letters, 2010, 1, 3283-3287.	4.6	75
45	Emission quench of water-soluble ZnSâ€“AgInS2 solid solution nanocrystals and its application to chemosensors. Chemical Communications, 2009, , 7485.	4.1	42
46	In Situ Surface Plasmon Resonance Measurements of Self-assembled Monolayers of Ferrocenylalkylthiols under Constant Potentials. Analytical Sciences, 2008, 24, 307-312.	1.6	5