Masato Uehara

List of Publications by Year in descending order

96 papers	2,548 citations	218592 26 h-index	206029 48 g-index
97 all docs	97 docs citations	97 times ranked	2661 citing authors

#	Article	IF	Citations
1	Tunable Photoluminescence Wavelength of Chalcopyrite CuInS2-Based Semiconductor Nanocrystals Synthesized in a Colloidal System. Chemistry of Materials, 2006, 18, 3330-3335.	3.2	272
2	Preparation of CdSe nanocrystals in a micro-flow-reactor. Chemical Communications, 2002, , 2844-2845.	2.2	180
3	Synthesis of CuInS2 fluorescent nanocrystals and enhancement of fluorescence by controlling crystal defect. Journal of Chemical Physics, 2008, 129, 134709.	1.2	179
4	Effects of deposition conditions on the ferroelectric properties of (Al1â^'xScx)N thin films. Journal of Applied Physics, 2020, 128, .	1.1	127
5	Continuous synthesis of CdSeâ€“ZnS composite nanoparticles in a microfluidic reactor. Chemical Communications, 2004, , 48-49.	2.2	116
6	Synthesis of Well-Dispersed Y2O3:Eu Nanocrystals and Self-Assembled Nanodisks Using a Simple Non-hydrolytic Route. Advanced Materials, 2005, 17, 2506-2509.	11.1	111
7	Highly Luminescent CdSe/ZnS Nanocrystals Synthesized Using a Single-Molecular ZnS Source in a Microfluidic Reactor. Advanced Functional Materials, 2005, 15, 603-608.	7.8	105
8	Preparation of titania particles utilizing the insoluble phase interface in a microchannel reactor. Chemical Communications, 2002, , 1462-1463.	2.2	90
9	A simple method of self assembled nano-particles deposition on the micro-capillary inner walls and the reactor application for photo-catalytic and enzyme reactions. Chemical Engineering Journal, 2004, 101, 261-268.	6.6	61
10	Combinatorial Synthesis of CdSe Nanoparticles Using Microreactors. Journal of Physical Chemistry C, 2010, 114, 7527-7534.	1.5	59
11	SiCâ€“B4C composites for synergistic enhancement of thermoelectric property. Journal of the European Ceramic Society, 2004, 24, 409-412.	2.8	52
12	Giant increase in piezoelectric coefficient of AlN by Mg-Nb simultaneous addition and multiple chemical states of Nb. Applied Physics Letters, 2017, 111, .	1.5	50
13	Preparation of functionalized nanostructures on microchannel surface and their use for enzyme microreactors. Chemical Engineering Journal, 2004, 101, 277-284.	6.6	47
14	Continuous Preparation of CdSe Nanocrystals by a Microreactor. Chemistry Letters, 2002, 31, 1072-1073.	0.7	46
15	Mechanism of Alumina-Enhanced Sintering of Fine Zirconia Powder: Influence of Alumina Concentration on the Initial Stage Sintering. Journal of the American Ceramic Society, 2008, 91, 1888-1897.	1.9	44
16	Effects of Interior Wall on Continuous Fabrication of Silver Nanoparticles in Microcapillary Reactor. Chemistry Letters, 2005, 34, 748-749.	0.7	41
17	Efficient Immobilization of Enzymes on Microchannel Surface Through His-Tag and Application for Microreactor. Protein and Peptide Letters, 2005, 12, 207-210.	0.4	36
18	Effect of Polyelectrolyte Dispersants on the Preparation of Silicaâ€Coated Zinc Oxide Particles in Aqueous Media. Journal of the American Ceramic Society, 2002, 85, 1937-1940.	1.9	33

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19	Application of Artificial Neural Networks to Rapid Data Analysis in Combinatorial Nanoparticle Syntheses. Journal of Physical Chemistry C, 2012, 116, 17885-17896.	1.5	33
20	Modified micro-space using self-organized nanoparticles for reduction of methylene blue. Chemical Communications, 2003, , 964-965.	2.2	32
21	Simple method for preparation of nanostructure on microchannel surface and its usage for enzyme-immobilization. Chemical Communications, 2003, , 648-649.	2.2	32
22	First-principles calculations of spontaneous polarization in ScAlN. Journal of Applied Physics, 2021, 130, .	1.1	32
23	First-Principles Study of Piezoelectric Properties and Bonding Analysis in (Mg, X, Al)N Solid Solutions (X = Nb, Ti, Zr, Hf). ACS Omega, 2019, 4, 15081-15086.	1.6	31
24	Sintering Kinetics at Isothermal Shrinkage: Effect of Specific Surface Area on the Initial Sintering Stage of Fine Zirconia Powder. Journal of the American Ceramic Society, 2007, 90, 44-49.	1.9	30
25	Sintering Kinetics at Isothermal Shrinkage: II, Effect of Y2O3Concentration on the Initial Sintering Stage of Fine Zirconia Powder. Journal of the American Ceramic Society, 2007, 90, 443-447.	1.9	30
26	Thickness scaling of (Al_{0.8}Sc_{0.2})N films with remanent polarization beyond 100ÂÎ¼CÂcm^{â^'2} around 10Ânm in thickness. Applied Physics Express, 2021, 14, 105501.	1.1	30
27	Synthesis of CdSe magic-sized nanocluster and its effect on nanocrystal preparation in a microfluidic reactor. Journal of Materials Research, 2004, 19, 3157-3161.	1.2	26
28	In situ extended x-ray absorption fine structure study of initial processes in CdSe nanocrystals formation using a microreactor. Applied Physics Letters, 2009, 94, 063104.	1.5	26
29	In situXAFS experiments using a microfluidic cell: application to initial growth of CdSe nanocrystals. Journal of Synchrotron Radiation, 2011, 18, 272-279.	1.0	26
30	A simple method for surface modification of microchannels. New Journal of Chemistry, 2003, 27, 1765.	1.4	25
31	Ligand Effects of Amine on the Initial Nucleation and Growth Processes of CdSe Nanocrystals. Journal of Physical Chemistry C, 2010, 114, 10126-10131.	1.5	25
32	Catalytic combustion of methane over Pd-based catalyst supported on a macroporous alumina layer in a microchannel reactor. Chemical Engineering Journal, 2008, 144, 270-276.	6.6	24
33	Preparation of ZnS/CdSe/ZnS Quantum Dot Quantum Well by Using a Microfluidic Reactor. Journal of Nanoscience and Nanotechnology, 2009, 9, 577-583.	0.9	24
34	Study on Initial Kinetics of CdSe Nanocrystals by a Combination of in Situ X-ray Absorption Fine Structure and Microfluidic Reactor. Journal of Physical Chemistry C, 2009, 113, 18608-18613.	1.5	22
35	Nanoclusters Synthesized by Synchrotron Radiolysis in Concert with Wet Chemistry. Scientific Reports, 2014, 4, 7199.	1.6	22
36	Microreactor combinatorial system for nanoparticle synthesis with multiple parameters. Chemical Engineering Science, 2012, 75, 292-297.	1.9	21

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37	Polarity Inversion of Aluminum Nitride Thin Films by using Si and MgSi Dopants. Scientific Reports, 2020, 10, 4369.	1.6	21
38	Small copper clusters studied by x-ray absorption near-edge structure. Journal of Applied Physics, 2012, 111, .	1.1	20
39	Effectiveness of X-ray grating interferometry for non-destructive inspection of packaged devices. Journal of Applied Physics, 2013, 114, 134901.	1.1	20
40	Photoluminescence of CuInS₂-based semiconductor quantum dots; Its origin and the effect of ZnS coating. Journal of Physics: Conference Series, 2009, 165, 012028.	0.3	19
41	Direct synthesis of well dispersed ZnO nanorods without using additional surfactant. Materials Letters, 2007, 61, 626-628.	1.3	18
42	Synthesis of mesoporous silica modified with titania and application to gas adsorbent. Solid State Ionics, 2002, 151, 171-175.	1.3	17
43	Mg and Ti codoping effect on the piezoelectric response of aluminum nitride thin films. Scripta Materialia, 2019, 159, 9-12.	2.6	17
44	Increase in the piezoelectric response of scandium-doped gallium nitride thin films sputtered using a metal interlayer for piezo MEMS. Applied Physics Letters, 2019, 114, .	1.5	17
45	Sintering mechanism of fine zirconia powders with alumina added by powder mixing and chemical processes. Journal of Materials Science, 2008, 43, 2745-2753.	1.7	16
46	Demonstration of ferroelectricity in ScGaN thin film using sputtering method. Applied Physics Letters, 2021, 119, .	1.5	15
47	Fabrication of organicâ€“inorganic nano-complexes using ABC type triblock copolymer and polyoxotungstates. Colloid and Polymer Science, 2005, 283, 1226-1232.	1.0	14
48	Computational Method for Efficient Screening of Metal Precursors for Nanomaterial Syntheses. Industrial & Engineering Chemistry Research, 2009, 48, 3389-3397.	1.8	14
49	Significant Enhancement of Piezoelectric Response in AlN by Yb Addition. Materials, 2021, 14, 309.	1.3	13
50	Preparation of YbAlN piezoelectric thin film by sputtering and influence of Yb concentration on properties and crystal structure. Ceramics International, 2021, 47, 16029-16036.	2.3	13
51	Wet Chemical Preparation of Well-dispersed Colloidal Cerium Oxide Nanocrystals. Chemistry Letters, 2007, 36, 764-765.	0.7	12
52	Effects of different divalent cations in mTi-based codopants (m = Mg or Zn) on the piezoelectric properties of AlN thin films. Ceramics International, 2020, 46, 4015-4019.	2.3	12
53	Enhancement of crystal anisotropy and ferroelectricity by decreasing thickness in (Al,Sc)N films. Journal of the Ceramic Society of Japan, 2022, 130, 436-441.	0.5	11
54	Preparation of carbon microparticle assemblies from phenolic resin using an inverse opal templating method. Journal of Materials Science, 2007, 42, 10196-10202.	1.7	10

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55	Effect of Mg addition on the physical properties of aluminum nitride. Materials Letters, 2018, 219, 247-250.	1.3	10
56	Enhancement of piezoelectric property in MgTMAlN (TM = Cr, Mo, W): First-principles study. Journal of Physics and Chemistry of Solids, 2021, 152, 109913.	1.9	10
57	Fabrication and structural analysis of three-dimensionally well-ordered arrangements of silicon oxycarbide microparticles. Chemical Engineering Journal, 2008, 135, 232-237.	6.6	9
58	High Temperature Preparation of Core and Core/Shell Composite Nanocrystals in a Multiphase Microreactor. Journal of Chemical Engineering of Japan, 2008, 41, 644-648.	0.3	9
59	Continuous micro flow synthesis of ZnO nanorods with UV emissions. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2007, 137, 295-298.	1.7	8
60	Controlled synthesis and structural evolutions of ZnS nanodots and nanorods using identical raw material solution. CrystEngComm, 2011, 13, 2973.	1.3	8
61	Synthesis of Titania-Doped Mesoporous Silica and Its Gas Adsorbability.. Journal of the Ceramic Society of Japan, 2001, 109, 818-822.	1.3	7
62	Impact of Deposition Temperature on Crystal Structure and Ferroelectric Properties of (Al_{1â^'x}Sc_x)N Films Prepared by Sputtering Method. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2100302.	0.8	6
63	Development of Surface Modification Method and Its Application for Preparation of Enzyme-immobilized Microreactor. Kagaku Kogaku Ronbunshu, 2004, 30, 154-158.	0.1	6
64	Structures and Impurity Effect on Symmetric Tilt Boundaries of Molybdenum. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 1997, 61, 251-260.	0.2	6
65	Micro-Space Synthesis of Coreâ€“Shell-Type Semiconductor Nanocrystals for Thermosensing. Bulletin of the Chemical Society of Japan, 2007, 80, 794-796.	2.0	5
66	In-situ EXAFS study of nucleation process of CdSe nanocrystals. Journal of Physics: Conference Series, 2009, 190, 012120.	0.3	5
67	Lower ferroelectric coercive field of ScGaN with equivalent remanent polarization as ScAlN. Applied Physics Express, 2022, 15, 081003.	1.1	5
68	Low-temperature AlN film deposition using magnetic mirror-type magnetron cathode for low gas pressure operation. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, .	0.6	4
69	Microstructure and Fracture Toughness of Sintered Bodies from Fine SiC Powder and SiC-TiC Composite Powder.. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 1998, 45, 1166-1171.	0.1	3
70	Spectroscopic evaluation of nanocomposite formation from amorphous complex compound in Si 3 N 4 -BN system. Scripta Materialia, 2001, 44, 2169-2172.	2.6	3
71	Structural characterization of ZnS nanocrystals with a conic head using HRâ€“TEM and HAADF tomography. CrystEngComm, 2011, 13, 5998.	1.3	3
72	Determination of kinetic effects on particle size and concentration: instruction for scale up. IOP Conference Series: Materials Science and Engineering, 2011, 18, 082027.	0.3	3

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73	Enhancement in piezoelectric responses of AlN thin films by co-addition of Mg and Ta. Materials Chemistry and Physics, 2022, 276, 125394.	2.0	3
74	Grain Boundary Migration of <110> Tilt Î£11 and Î£27 Boundaries in Pure Aluminum. Materials Science Forum, 2004, 467-470, 835-842.	0.3	2
75	Development of automatic combinatorial system for synthesis of nanoparticles using microreactors. IOP Conference Series: Materials Science and Engineering, 2011, 18, 082010.	0.3	2
76	Synthesis of CdSe Nanocrystals in a Microreactor. Kagaku Kogaku Ronbunshu, 2004, 30, 113-116.	0.1	2
77	Controlling the structure and morphology of ZnS nanoparticles by manipulating the temperature profile. Â‰pÃtÅ‘anyag: Journal of Silicate Based and Composite Materials, 2011, 63, 52-56.	0.0	2
78	Effect of Al₂O₃ on the Sinterability of Fine Zirconia Powder. Key Engineering Materials, 2001, 206-213, 345-348.	0.4	1
79	Chemical Reaction of Carbonyl Group on Diamond Surface with LiAlH4. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2003, 54, 764-768.	0.1	1
80	Fabrication of Si₃ N₄-TiN Nanocomposites via Various Routes. Key Engineering Materials, 2006, 317-318, 191-194.	0.4	1
81	Synthesis of ZnS/CdSe/ZnS Quantum Dot Quantum Well in a Micro Reactor. , 2007, , 250-253.		1
82	Direct Evaluation about Structure and Optical Property of Individual Multi-Shell Quantum Dot by TEM. ECS Transactions, 2017, 75, 7-12.	0.3	1
83	Dielectric Properties of Photo-Luminescent CdSe/CdS Mono-Shell and CdSe/CdS/ZnS Multi-Shell Nanocrystals Studied by TEM-EELS. ECS Journal of Solid State Science and Technology, 2018, 7, R167-R174.	0.9	1
84	Temperature Measurement of Microfluid Using Core/Shell Composite Nanocrystals. Journal of Chemical Engineering of Japan, 2008, 41, 1127-1132.	0.3	1
85	Effect of RF power on AlN film crystallinity in low pressure range using Ar-20%N₂ gases by magnetic mirror-type magnetron cathode. Japanese Journal of Applied Physics, 2022, 61, 046001.	0.8	1
86	Influence of Precursor Preparation via Ammonolysis Route on Alumina-Zirconia Nanostructure.. Journal of the Ceramic Society of Japan, 2001, 109, 201-204.	1.3	0
87	High Yield Synthesis of single crystal FCC Silver Nanoparticles and their Size Control. Materials Research Society Symposia Proceedings, 2007, 1056, 1.	0.1	0
88	Sintering Mechanism of Fine Zirconia Powders with Alumina Added by Various Ways. Key Engineering Materials, 2007, 352, 219-222.	0.4	0
89	Micro-space synthesis of core-shell type semiconductor nanocrystals for thermo-sensing. , 2007, , 254-257.		0
90	Synthesis of Cu-In-S Fluorescent Nanocrystals. Materials Research Society Symposia Proceedings, 2007, 1064, 3191.	0.1	0

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91	Enhancement of Fluorescence in Colloidal CuInS2 Nanocrystals by Introduction of Crystal Defect. Materials Research Society Symposia Proceedings, 2009, 1176, 1.	0.1	0
92	Seed Assisted Phase Control of TiOPc: Application of Microfluidic Mixing. Materials Research Society Symposia Proceedings, 2010, 1272, 1.	0.1	0
93	Investigation of Growth Behavior of ZnS Nanocrystal by HR-TEM and STEM-Tomography. Materials Research Society Symposia Proceedings, 2012, 1474, 12.	0.1	0
94	Synthesis of Si-C-N Amorphous Powder by Imide Method and Its Crystallization Behavior.. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2001, 48, 854-857.	0.1	0
95	The preparation and property control of Zinc Oxide NPs. IOP Conference Series: Materials Science and Engineering, 2011, 18, 082026.	0.3	0
96	Substrate temperature dependence of GaN film deposited on sapphire substrate by high-density convergent plasma sputtering device. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2022, 40, 053001.	0.9	0