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	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
2	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
3	Lower ferroelectric coercive field of ScGaN with equivalent remanent polarization as ScAlN. Applied Physics Express, 2022, 15, 081003.	1.1	5
4	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
5	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
6	Significant Enhancement of Piezoelectric Response in AlN by Yb Addition. Materials, 2021, 14, 309.	1.3	13
7	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
8	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
9	Impact of Deposition Temperature on Crystal Structure and Ferroelectric Properties of (Al_{1âˆ’<i>x</i>}Sc_{<i>x</i>})N Films Prepared by Sputtering Method. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2100302.	0.8	6
10	First-principles calculations of spontaneous polarization in ScAlN. Journal of Applied Physics, 2021, 130, .	1.1	32
11	Thickness scaling of (Al_{0.8}Sc_{0.2})N films with remanent polarization beyond 100ÂÎ¼CÂcm^{âˆ’2} around 10Ânm in thickness. Applied Physics Express, 2021, 14, 105501.	1.1	30
12	Demonstration of ferroelectricity in ScGaN thin film using sputtering method. Applied Physics Letters, 2021, 119, .	1.5	15
13	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
14	Effects of deposition conditions on the ferroelectric properties of (Al1âˆ’<i>x</i>Sc<i>x</i>)N thin films. Journal of Applied Physics, 2020, 128, .	1.1	127
15	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
16	Polarity Inversion of Aluminum Nitride Thin Films by using Si and MgSi Dopants. Scientific Reports, 2020, 10, 4369.	1.6	21
17	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
18	Mg and Ti codoping effect on the piezoelectric response of aluminum nitride thin films. Scripta Materialia, 2019, 159, 9-12.	2.6	17

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19	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
20	Effect of Mg addition on the physical properties of aluminum nitride. Materials Letters, 2018, 219, 247-250.	1.3	10
21	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
22	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
23	Direct Evaluation about Structure and Optical Property of Individual Multi-Shell Quantum Dot by TEM. ECS Transactions, 2017, 75, 7-12.	0.3	1
24	Nanoclusters Synthesized by Synchrotron Radiolysis in Concert with Wet Chemistry. Scientific Reports, 2014, 4, 7199.	1.6	22
25	Effectiveness of X-ray grating interferometry for non-destructive inspection of packaged devices. Journal of Applied Physics, 2013, 114, 134901.	1.1	20
26	Investigation of Growth Behavior of ZnS Nanocrystal by HR-TEM and STEM-Tomography. Materials Research Society Symposia Proceedings, 2012, 1474, 12.	0.1	0
27	Small copper clusters studied by x-ray absorption near-edge structure. Journal of Applied Physics, 2012, 111, .	1.1	20
28	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
29	Microreactor combinatorial system for nanoparticle synthesis with multiple parameters. Chemical Engineering Science, 2012, 75, 292-297.	1.9	21
30	Structural characterization of ZnS nanocrystals with a conic head using HRâ€“TEM and HAADF tomography. CrystEngComm, 2011, 13, 5998.	1.3	3
31	Controlled synthesis and structural evolutions of ZnS nanodots and nanorods using identical raw material solution. CrystEngComm, 2011, 13, 2973.	1.3	8
32	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
33	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
34	Development of automatic combinatorial system for synthesis of nanoparticles using microreactors. IOP Conference Series: Materials Science and Engineering, 2011, 18, 082010.	0.3	2
35	Controlling the structure and morphology of ZnS nanoparticles by manipulating the temperature profile. Ã‰pÃtÅ‘anyag: Journal of Silicate Based and Composite Materials, 2011, 63, 52-56.	0.0	2
36	The preparation and property control of Zinc Oxide NPs. IOP Conference Series: Materials Science and Engineering, 2011, 18, 082026.	0.3	0

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37	Seed Assisted Phase Control of TiOPc: Application of Microfluidic Mixing. Materials Research Society Symposia Proceedings, 2010, 1272, 1.	0.1	0
38	Combinatorial Synthesis of CdSe Nanoparticles Using Microreactors. Journal of Physical Chemistry C, 2010, 114, 7527-7534.	1.5	59
39	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
40	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
41	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
42	Enhancement of Fluorescence in Colloidal CuInS2 Nanocrystals by Introduction of Crystal Defect. Materials Research Society Symposia Proceedings, 2009, 1176, 1.	0.1	0
43	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
44	Computational Method for Efficient Screening of Metal Precursors for Nanomaterial Syntheses. Industrial & Engineering Chemistry Research, 2009, 48, 3389-3397.	1.8	14
45	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
46	In-situ EXAFS study of nucleation process of CdSe nanocrystals. Journal of Physics: Conference Series, 2009, 190, 012120.	0.3	5
47	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
48	Fabrication and structural analysis of three-dimensionally well-ordered arrangements of silicon oxycarbide microparticles. Chemical Engineering Journal, 2008, 135, 232-237.	6.6	9
49	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
50	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
51	Synthesis of CuInS2 fluorescent nanocrystals and enhancement of fluorescence by controlling crystal defect. Journal of Chemical Physics, 2008, 129, 134709.	1.2	179
52	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
53	Temperature Measurement of Microfluid Using Core/Shell Composite Nanocrystals. Journal of Chemical Engineering of Japan, 2008, 41, 1127-1132.	0.3	1
54	High Yield Synthesis of single crystal FCC Silver Nanoparticles and their Size Control. Materials Research Society Symposia Proceedings, 2007, 1056, 1.	0.1	0

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55	Sintering Mechanism of Fine Zirconia Powders with Alumina Added by Various Ways. Key Engineering Materials, 2007, 352, 219-222.	0.4	0
56	Micro-space synthesis of core-shell type semiconductor nanocrystals for thermo-sensing. , 2007, , 254-257.		0
57	Synthesis of Cu-In-S Fluorescent Nanocrystals. Materials Research Society Symposia Proceedings, 2007, 1064, 3191.	0.1	0
58	Wet Chemical Preparation of Well-dispersed Colloidal Cerium Oxide Nanocrystals. Chemistry Letters, 2007, 36, 764-765.	0.7	12
59	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
60	Synthesis of ZnS/CdSe/ZnS Quantum Dot Quantum Well in a Micro Reactor. , 2007, , 250-253.		1
61	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
62	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
63	Direct synthesis of well dispersed ZnO nanorods without using additional surfactant. Materials Letters, 2007, 61, 626-628.	1.3	18
64	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
65	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
66	Tunable Photoluminescence Wavelength of Chalcopyrite CuInS2-Based Semiconductor Nanocrystals Synthesized in a Colloidal System. Chemistry of Materials, 2006, 18, 3330-3335.	3.2	272
67	Fabrication of Si₃ N₄-TiN Nanocomposites via Various Routes. Key Engineering Materials, 2006, 317-318, 191-194.	0.4	1
68	Effects of Interior Wall on Continuous Fabrication of Silver Nanoparticles in Microcapillary Reactor. Chemistry Letters, 2005, 34, 748-749.	0.7	41
69	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
70	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
71	Fabrication of organicâ€“inorganic nano-complexes using ABC type triblock copolymer and polyoxotungstates. Colloid and Polymer Science, 2005, 283, 1226-1232.	1.0	14
72	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

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73	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
74	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
75	SiCâ€"B4C composites for synergistic enhancement of thermoelectric property. Journal of the European Ceramic Society, 2004, 24, 409-412.	2.8	52
76	Preparation of functionalized nanostructures on microchannel surface and their use for enzyme microreactors. Chemical Engineering Journal, 2004, 101, 277-284.	6.6	47
77	Continuous synthesis of CdSeâ€"ZnS composite nanoparticles in a microfluidic reactor. Chemical Communications, 2004, , 48-49.	2.2	116
78	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
79	Synthesis of CdSe Nanocrystals in a Microreactor. Kagaku Kogaku Ronbunshu, 2004, 30, 113-116.	0.1	2
80	Development of Surface Modification Method and Its Application for Preparation of Enzyme-immobilized Microreactor. Kagaku Kogaku Ronbunshu, 2004, 30, 154-158.	0.1	6
81	A simple method for surface modification of microchannels. New Journal of Chemistry, 2003, 27, 1765.	1.4	25
82	Modified micro-space using self-organized nanoparticles for reduction of methylene blue. Chemical Communications, 2003, , 964-965.	2.2	32
83	Simple method for preparation of nanostructure on microchannel surface and its usage for enzyme-immobilization. Chemical Communications, 2003, , 648-649.	2.2	32
84	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
85	Continuous Preparation of CdSe Nanocrystals by a Microreactor. Chemistry Letters, 2002, 31, 1072-1073.	0.7	46
86	Preparation of titania particles utilizing the insoluble phase interface in a microchannel reactor. Chemical Communications, 2002, , 1462-1463.	2.2	90
87	Preparation of CdSe nanocrystals in a micro-flow-reactor. Chemical Communications, 2002, , 2844-2845.	2.2	180
88	Synthesis of mesoporous silica modified with titania and application to gas adsorbent. Solid State Ionics, 2002, 151, 171-175.	1.3	17
89	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
90	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

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91	Synthesis of Titania-Doped Mesoporous Silica and Its Gas Adsorbability.. Journal of the Ceramic Society of Japan, 2001, 109, 818-822.	1.3	7
92	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
93	Effect of Al₂O₃ on the Sinterability of Fine Zirconia Powder. Key Engineering Materials, 2001, 206-213, 345-348.	0.4	1
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	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
96	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