

# Yuko Inatomi

## List of Publications by Year in descending order

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papers

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92  
docs citations

92  
times ranked

506  
citing authors

#	ARTICLE	IF	CITATIONS
1	Growth interface of CdZnTe grown from Te solution with THM technique under static magnetic field. Journal of Crystal Growth, 2005, 284, 406-411.	1.5	40
2	Study of lysozyme crystal growth under a strong magnetic field using a Mach-Zehnder interferometer. Journal of Crystal Growth, 2001, 226, 534-542.	1.5	38
3	Density and Thermal Conductivity Measurements for Silicon Melt by Electromagnetic Levitation under a Static Magnetic Field. International Journal of Thermophysics, 2007, 28, 44-59.	2.1	32
4	Measurement of Diffusion Coefficient in Liquid Metal under Static Magnetic Field. Japanese Journal of Applied Physics, 2002, 41, L811-L813.	1.5	31
5	Pure iron grains are rare in the universe. Science Advances, 2017, 3, e1601992.	10.3	25
6	Growth of In <sub>x</sub> Ga <sub>1-x</sub> Sb alloy semiconductor at the International Space Station (ISS) and comparison with terrestrial experiments. Npj Microgravity, 2015, 1, 15011.	3.7	24
7	Uncertainties in crystallization of hen-egg white lysozyme: reproducibility issue. Crystal Research and Technology, 2008, 43, 447-454.	1.3	20
8	Growth and structure of CdZnTe crystal from Te solution with THM technique under static magnetic field. Journal of Crystal Growth, 2005, 275, e1551-e1556.	1.5	19
9	Growth of a Si <sub>0.50</sub> Ge <sub>0.50</sub> crystal by the traveling liquidus-zone (TLZ) method in microgravity. Journal of Crystal Growth, 2014, 388, 12-16.	1.5	19
10	Initial transient solute redistribution during directional solidification with liquid flow. Journal of Crystal Growth, 1997, 182, 212-218.	1.5	17
11	Effects of varying indium composition on the thermoelectric properties of In <sub>x</sub> Ga <sub>1-x</sub> Sb ternary alloys. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	17
12	In-situ observations of dissolution process of GaSb into InSb melt by X-ray penetration method. Journal of Crystal Growth, 2010, 312, 2677-2682.	1.5	16
13	Measurement of temperature and concentration dependences of refractive index of hen-egg-white lysozyme solution. Crystal Research and Technology, 2003, 38, 785-792.	1.3	15
14	Buoyancy convection in cylindrical conducting melt with low Grashof number under uniform static magnetic field. International Journal of Heat and Mass Transfer, 2006, 49, 4821-4830.	4.8	15
15	Growth of homogeneous polycrystalline Si <sub>1-x</sub> Gex and Mg <sub>2</sub> Si <sub>1-x</sub> Gex for thermoelectric application. Thin Solid Films, 2011, 519, 8532-8537.	1.8	15
16	Enhanced thermoelectric properties of InSb: Studies on In/Ga doped GaSb/InSb crystals. Intermetallics, 2019, 105, 21-28.	3.9	15
17	In situ observation for semiconductor solution growth using a near-infrared microscope. Journal of Crystal Growth, 2005, 275, 193-200.	1.5	14
18	Effects of solutal convection on the dissolution of GaSb into InSb melt and solute transport mechanism in InGaSb solution: Numerical simulations and in-situ observation experiments. Journal of Crystal Growth, 2011, 324, 157-162.	1.5	14

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19	Real-time measurement of LPE growth rate in GaP. Journal of Crystal Growth, 1991, 114, 380-388.	1.5	13
20	Sounding-rocket microgravity experiments on alumina dust. Nature Communications, 2018, 9, 3820.	12.8	13
21	Influence of mixing in liquid on unidirectional solidification rate in transparent organic alloy. Journal of Crystal Growth, 1993, 130, 85-95.	1.5	12
22	Scaling Analysis of Semiconductor Crystal Growth from the Liquid Phase in an Axis Static Magnetic Field. Materials Transactions, JIM, 2000, 41, 1026-1033.	0.9	12
23	Interferometry measurement of protein concentration evolution during crystallization and dissolution with improved reliability and versatility. Measurement Science and Technology, 2008, 19, 045303.	2.6	12
24	Numerical simulations of SiGe crystal growth by the traveling liquidus-zone method in a microgravity environment. Journal of Crystal Growth, 2014, 402, 71-77.	1.5	12
25	Homogeneous InGaSb crystal grown under microgravity using Chinese recovery satellite SJ-10. Npj Microgravity, 2019, 5, 8.	3.7	12
26	Direct observation of LPE growth in GaP. Journal of Crystal Growth, 1990, 99, 124-127.	1.5	11
27	An investigation of magnetic field effects on the dissolution of lysozyme crystal and related phenomena. Acta Crystallographica Section D: Biological Crystallography, 2002, 58, 2024-2030.	2.5	11
28	Morphological stability of GaP(111)B in LPE under static magnetic field. Journal of Crystal Growth, 2002, 241, 395-403.	1.5	11
29	<i>In situ</i> visualization of crystallization inside high temperature silicate melts. Journal of Applied Physics, 2010, 107, .	2.5	11
30	Investigation of directionally solidified InGaSb ternary alloys from Ga and Sb faces of GaSb(111) under prolonged microgravity at the International Space Station. Npj Microgravity, 2016, 2, 16026.	3.7	11
31	Numerical simulation model by volume averaging for the dissolution process of GaSb into InSb in a sandwich system. Numerical Heat Transfer, Part B: Fundamentals, 2016, 70, 441-458.	0.9	11
32	Influence of Ultrasound on Crystal Growth from Solution and Related Flow Visualization. Crystal Growth and Design, 2006, 6, 2412-2416.	3.0	10
33	Homogeneous SiGe crystal growth in microgravity by the travelling liquidus-zone method. Journal of Physics: Conference Series, 2011, 327, 012017.	0.4	10
34	Growth of Si <sub>1-x</sub> Ge bulk crystals with highly homogeneous composition for thermoelectric applications. Journal of Crystal Growth, 2011, 318, 324-327.	1.5	10
35	A Numerical Study on the Growth Process of InGaSb Crystals Under Microgravity with Interfacial Kinetics. Microgravity Science and Technology, 2015, 27, 313-320.	1.4	10
36	In-situ observation of unidirectional solidification in transparent organic alloy. Journal of Crystal Growth, 1993, 128, 178-182.	1.5	9

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37	In situ Observation Setup for Semiconductor Growth Interface from Solution in a Magnetic Field. Crystal Research and Technology, 1997, 32, 759-768.	1.3	9
38	Measurement of Refractive Index of GaP Crystal over a Large Temperature Range Using Interferometry. Crystal Research and Technology, 2000, 35, 221-228.	1.3	9
39	An experimental verification of a criterion for forming metastable phases in containerless solidification. Journal of Applied Physics, 2015, 117, .	2.5	9
40	Compositional uniformity of a Si 0.5 Ge 0.5 crystal grown on board the International Space Station. Journal of Crystal Growth, 2015, 419, 47-51.	1.5	9
41	An Approach to Optimize the Thermoelectric Properties of III-V Ternary InGaSb Crystals by Defect Engineering via Point Defects and Microscale Compositional Segregations. Inorganic Chemistry, 2019, 58, 11579-11588.	4.0	9
42	Enhanced seebeck coefficient and low thermal conductivity of Cu <sub>2</sub> SexTe <sub>1-x</sub> solid solutions via minority carrier blocking and interfacial effects. Journal of Alloys and Compounds, 2020, 835, 155188.	5.5	9
43	In-situ observation of morphological change on LPE grown surface in semiconductors. Journal of Crystal Growth, 1993, 128, 557-561.	1.5	8
44	Measurements of interdiffusion coefficients in metallic melts at high temperature under horizontal static magnetic field. Microgravity Science and Technology, 2006, 18, 86-90.	1.4	8
45	Bulk Growth of InGaSb Alloy Semiconductor under Terrestrial Conditions: A Preliminary Study for Microgravity Experiments at ISS. Defect and Diffusion Forum, 0, 323-325, 539-544.	0.4	8
46	In-situ observation of faceted growth of benzophenone single crystals. Materials Chemistry and Physics, 2014, 144, 402-408.	4.0	8
47	Orientation-dependent dissolution and growth kinetics of In <sub>x</sub> Ga <sub>1-x</sub> Sb by vertical gradient freezing method under microgravity. Journal of Crystal Growth, 2018, 496-497, 15-17.	1.5	8
48	Study of SiGe Crystal Growth Interface Processed in Microgravity. Crystal Growth and Design, 2018, 18, 3697-3703.	3.0	8
49	Three-dimensional Phase Field Modeling of the Faceted Cellular Growth. ISIJ International, 2010, 50, 1901-1907.	1.4	7
50	Strong magnetic field effect on the dissolution process of tetragonal lysozyme crystals. Advances in Space Research, 2003, 32, 217-223.	2.6	6
51	A Review on InGaSb Growth under Microgravity and Terrestrial Conditions Towards Future Crystal Growth Project Using Chinese Recovery Satellite SJ-10. Microgravity Science and Technology, 2016, 28, 143-154.	1.4	6
52	Effects of temperature gradient in the growth of Si <sub>0.5</sub> Ge <sub>0.5</sub> crystals by the traveling liquidus-zone method on board the International Space Station. Journal of Crystal Growth, 2016, 455, 49-54.	1.5	6
53	Growth and Dissolution Rates on GaP(111)B Facet Surface during Solution Growth under a Transverse Static Magnetic Field. Crystal Research and Technology, 1998, 33, 857-866.	1.3	5
54	A two-stage technique for single crystal growth of HgCdTe using a pressurized Bridgman method. Journal of Crystal Growth, 2004, 263, 273-282.	1.5	5

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55	Time-of-Flight Secondary Mass Spectrometry Analysis of Isotope Composition for Measurement of Self-Diffusion Coefficient. Japanese Journal of Applied Physics, 2006, 45, 5274-5276.	1.5	5
56	High Power Factor of Ga-Doped Compositionally Homogeneous Si <sub>0.68</sub> Ge <sub>0.32</sub> Bulk Crystal Grown by the Vertical Temperature Gradient Freezing Method. Crystal Growth and Design, 2015, 15, 1380-1388.	3.0	5
57	SiGe crystal growth aboard the international space station. Journal of Crystal Growth, 2015, 417, 31-36.	1.5	5
58	Crystallization kinetics in Si-1 at%Sn during rapid solidification in undercooled melt. Journal of Crystal Growth, 2017, 468, 73-78.	1.5	5
59	Numerical Investigation of the Effect of Heating Rate on InGaSb Crystal Growth under Zero-Gravity. Microgravity Science and Technology, 2019, 31, 377-380.	1.4	5
60	Analysis Method Using Two-Wavelength Mach-Zehnder Interferometer for the Measurement of Soret Coefficients in Soret-Facet Mission on ISS. Microgravity Science and Technology, 2019, 31, 49-59.	1.4	5
61	Simultaneous measurement of temperature and concentration during faceted cellular array growth under microgravity. World Journal of Engineering, 2014, 11, 41-48.	1.6	5
62	In situ observation experiment for semiconductor solution growth under reduced convection condition – a review. Crystal Research and Technology, 2003, 38, 535-541.	1.3	4
63	Thermal properties of molten InSb, GaSb, and In <sub>x</sub> Ga <sub>1-x</sub> Sb alloy semiconductor materials in preparation for crystal growth experiments on the international space station. Advances in Space Research, 2014, 53, 689-695.	2.6	4
64	Estimation of the diffusion coefficient of GaSb in InSb melt using Bayesian optimization and the ISS experimental results. Journal of Crystal Growth, 2021, 573, 126280.	1.5	4
65	Morphological change of semiconductor growth interface from solution in a magnetic field. Journal of Crystal Growth, 1999, 198-199, 176-181.	1.5	3
66	Semiconductor growth interface from solution in short-duration low-gravity environment. , 1999, , .		3
67	Real-time optical system for observing crystallization in levitated silicate melt droplets. Review of Scientific Instruments, 2010, 81, 073708.	1.3	3
68	Crystal Growth of Ternary Alloy Semiconductor and Preliminary Study for Microgravity Experiment at the International Space Station. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2014, 12, Ph_31-Ph_35.	0.2	3
69	Analysis of dissolution and growth process of SiGe alloy semiconductor based on penetrated X-ray intensities. Journal of Alloys and Compounds, 2014, 590, 96-101.	5.5	3
70	Vertical gradient solution growth of N-type Si <sub>0.73</sub> Ge <sub>0.27</sub> bulk crystals with homogeneous composition and its thermoelectric properties. Journal of Crystal Growth, 2016, 442, 102-109.	1.5	3
71	Influence of Release and Transport of Latent Heat on Solidification Behavior in Faceted Crystal. Materials Science Forum, 1996, 215-216, 339-346.	0.3	2
72	Growth kinetics of GaP in LPE. Journal of Crystal Growth, 2002, 237-239, 1428-1433.	1.5	2

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73	Investigation on Mechanism of Faceted Cellular Array Growth in International Space Station. Defect and Diffusion Forum, 0, 323-325, 533-537.	0.4	2
74	Viscosity of Molten InSb, GaSb, and $\text{In}_{1-x}\text{Ga}_x\text{Sb}$ In x Ga 1 - x Sb Alloy Semiconductors. International Journal of Thermophysics, 2014, 35, 352-360.	2.1	2
75	IN SITU OBSERVATION OF FACETED CELLULAR ARRAY GROWTH IN TRANSPARENT ORGANIC MATERIAL. , 1994, , 637-641.		2
76	Directional Solidification of Faceting Material in a Centrifuge. Crystal Research and Technology, 1997, 32, 947-954.	1.3	1
77	Dissolution Rate of GaP Crystal on a Centrifuge. , 2001, , 83-91.		1
78	Growth and properties of 40mm diameter $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ using the two- stage Pressurised Bridgman Method. Journal of Crystal Growth, 2004, 273, 54-62.	1.5	1
79	Diffusion coefficient analysis method using data statistical processing to reduce interference fringe noise effects. AIChE Journal, 2022, 68, e17497.	3.6	1
80	Study on crystal growth of $\text{In}_{1-x}\text{Ga}_x\text{Sb}$ under microgravity. Scientia Sinica: Physica, Mechanica Et Astronomica, 2020, 50, 047002.		0
81	Morphological stability of gap growth interface in LPE under reduced convection condition. , 2002, , .		0
82	In situ Observation Experiment for Semiconductor Solution Growth under Reduced Convection Condition “A Review. ChemInform, 2003, 34, no.	0.0	0
83	Determination of butanol distribution on salol-butanol crystals using Micro Raman Spectroscopy. Microgravity Science and Technology, 2005, 16, 104-106.	1.4	0
84	Convective Behavior Of Low Prandtl Number Fluid Heated On Centrifuge. AIP Conference Proceedings, 2008, , .	0.4	0
85	Alloy Semiconductor Crystal Growth Under Microgravity. , 2010, , .		0
86	Growth of InGaSb Alloy Semiconductor Bulk Crystals under Microgravity. Hyomen Kagaku, 2012, 33, 687-693.	0.0	0
87	Viscosity Measurements of Molten $\text{In}_{1-x}\text{Ga}_x\text{Sb}$ toward the Experiment of Semiconductor Crystal Growth on the ISS. Netsu Bussei, 2015, 27, 152-163.	0.1	0
88	Numerical Prediction of the Spontaneous Ignition of Cool Flame for the Microgravity Experiment by Using Sounding Rocket. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2021, 19, 539-544.	0.2	0
89	Numerical investigation of growth interface shape and compositional distributions in SiGe crystals grown by the TLZ method in the International Space Station. Journal of Crystal Growth, 2021, 566-567, 126157.	1.5	0
90	In Situ Observation of Directional Solidification in High Gravity. , 1997, , 93-108.		0

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91	Natural convection induced by unintended horizontal temperature distribution in a narrow-closed container heated from above. International Journal of Heat and Mass Transfer, 2022, 183, 122018.	4.8	0