

# Kozo Fujiwara

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/3131125/kozo-fujiwara-publications-by-year.pdf>

**Version:** 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

174  
papers

2,734  
citations

27  
h-index

43  
g-index

180  
ext. papers

2,969  
ext. citations

3.1  
avg, IF

4.74  
L-index

#	Paper	IF	Citations
174	Twin boundary formation at a grain-boundary groove during the directional solidification of InSb. <i>Journal of Crystal Growth</i> , <b>2022</b> , 577, 126403	1.6	0
173	Dynamics at crystal/melt interface during solidification of multicrystalline silicon. <i>High Temperature Materials and Processes</i> , <b>2022</b> , 41, 31-47	0.9	0
172	Facet formation during the solidification of pure antimony. <i>Journal of Crystal Growth</i> , <b>2022</b> , 586, 126633	1.6	0
171	Dendritic Growth in Si <sub>1-x</sub> Ge <sub>x</sub> Melts. <i>Crystals</i> , <b>2021</b> , 11, 761	2.3	0
170	Segregation mechanism of arsenic dopants at grain boundaries in silicon. <i>Science and Technology of Advanced Materials Methods</i> , <b>2021</b> , 1, 169-180	1.6	2
169	Seeded Growth of Type-II Na <sub>24</sub> Si <sub>136</sub> Clathrate Single Crystals. <i>Crystals</i> , <b>2021</b> , 11, 808	2.3	1
168	In situ observation of multiple parallel (1 1 1) twin boundary formation from step-like grain boundary during Si solidification. <i>Applied Physics Express</i> , <b>2020</b> , 13, 105501	2.4	2
167	In situ observation of the solidification interface and grain boundary development of two silicon seeds with simultaneous measurement of temperature profile and undercooling. <i>Journal of Crystal Growth</i> , <b>2020</b> , 532, 125428	1.6	3
166	Effect of twin boundary formation on the growth rate of the GaSb{111} plane. <i>Acta Materialia</i> , <b>2020</b> , 185, 453-460	8.4	2
165	Crystallization and re-melting of Si <sub>1-x</sub> Ge <sub>x</sub> alloy semiconductor during rapid cooling. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 798, 493-499	5.7	5
164	The in situ observation of faceted dendrite growth during the directional solidification of GaSb. <i>Scripta Materialia</i> , <b>2019</b> , 168, 56-60	5.6	5
163	A {112} grain boundary generated from the decomposition of a $\Sigma$ grain boundary in multicrystalline silicon during directional solidification. <i>Scripta Materialia</i> , <b>2019</b> , 167, 46-50	5.6	5
162	The effect of grain boundaries on instability at the crystal/melt interface during the unidirectional growth of Si. <i>Materialia</i> , <b>2019</b> , 7, 100386	3.2	5
161	Effect of misorientation angle of grain boundary on the interaction with $\Sigma$ boundary at crystal/melt interface of multicrystalline silicon. <i>Materialia</i> , <b>2019</b> , 7, 100357	3.2	4
160	Influence of interfacial structure on propagating direction of small-angle grain boundaries during directional solidification of multicrystalline silicon. <i>Scripta Materialia</i> , <b>2019</b> , 172, 105-109	5.6	3
159	Growth of Multicrystalline Silicon for Solar Cells: Dendritic Cast Method <b>2019</b> , 1-22		
158	Growth of Multicrystalline Silicon for Solar Cells: Dendritic Cast Method <b>2019</b> , 193-214		

157	In situ observation of interaction between grain boundaries during directional solidification of Si. <i>Scripta Materialia</i> , <b>2018</b> , 148, 37-41	5.6	11
156	Application of weighted Voronoi diagrams to analyze nucleation sites of multicrystalline silicon ingots. <i>Journal of Crystal Growth</i> , <b>2018</b> , 499, 62-66	1.6	4
155	In situ observation of grain-boundary development from a facet-facet groove during solidification of silicon. <i>Acta Materialia</i> , <b>2018</b> , 153, 186-192	8.4	11
154	In situ observation of grain boundary groove at the crystal/melt interface in Cu. <i>Scripta Materialia</i> , <b>2018</b> , 146, 169-172	5.6	6
153	Crystal Growth Conditions of Types I and II NaBi Clathrates by Evaporation of Na from a NaBi <sub>2</sub> Sn Solution. <i>Crystal Growth and Design</i> , <b>2018</b> , 18, 351-355	3.5	5
152	In-situ studies of multicrystalline silicon nucleation and growth on Si and Si <sub>3</sub> N <sub>4</sub> coated substrates. <i>Journal of Crystal Growth</i> , <b>2018</b> , 482, 75-84	1.6	2
151	Investigation of Si Dendrites by Electron-Beam-Induced Current. <i>Crystals</i> , <b>2018</b> , 8, 317	2.3	1
150	In-situ observation of instability of a crystal/melt interface during the directional growth of pure antimony. <i>AIP Advances</i> , <b>2018</b> , 8, 075121	1.5	5
149	Origin of small-angle grain boundaries during directional solidification in multicrystalline silicon. <i>Materialia</i> , <b>2018</b> , 3, 347-352	3.2	4
148	In situ observation of twin boundary formation at grain-boundary groove during directional solidification of Si. <i>Scripta Materialia</i> , <b>2017</b> , 133, 65-69	5.6	19
147	Impact of local atomic stress on oxygen segregation at tilt boundaries in silicon. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 062105	3.4	15
146	Effect of point defects on Curie temperature of lithium niobate. <i>Journal of the American Ceramic Society</i> , <b>2017</b> , 100, 1118-1124	3.8	3
145	Effect of an External Electric Field on the Kinetics of Dislocation-Free Growth of Tetragonal Hen Egg White Lysozyme Crystals. <i>Crystals</i> , <b>2017</b> , 7, 170	2.3	8
144	Growth of Multicrystalline Silicon for Solar Cells: Dendritic Cast Method <b>2017</b> , 1-22		
143	Effect of grain boundary grooves at the crystal/melt interface on impurity accumulation during the unidirectional growth of multicrystalline silicon. <i>Scripta Materialia</i> , <b>2016</b> , 117, 73-76	5.6	12
142	Technique for High-Quality Protein Crystal Growth by Control of Subgrain Formation under an External Electric Field. <i>Crystals</i> , <b>2016</b> , 6, 95	2.3	9
141	Orientation-dependent impurity partitioning of colloidal crystals. <i>Journal of Crystal Growth</i> , <b>2016</b> , 439, 13-18	1.6	1
140	Effect of Solid-Liquid Interface Morphology on Grain Boundary Segregation during Colloidal Polycrystallization. <i>Crystal Growth and Design</i> , <b>2016</b> , 16, 2765-2770	3.5	4

139	Liquid immiscibility in a CTGS (Ca <sub>3</sub> TaGa <sub>3</sub> Si <sub>2</sub> O <sub>14</sub> ) melt. <i>Journal of Crystal Growth</i> , <b>2016</b> , 454, 82-86	1.6	5
138	Segregation of Ge in B and Ge codoped Czochralski-Si crystal growth. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 639, 588-592	5.7	1
137	The solid-solution region for the langasite-type Ca <sub>3</sub> TaGa <sub>3</sub> Si <sub>2</sub> O <sub>14</sub> crystal as determined by a lever rule. <i>Journal of Crystal Growth</i> , <b>2015</b> , 415, 111-117	1.6	2
136	Grain Boundary Segregation of Impurities During Polycrystalline Colloidal Crystallization. <i>Crystal Growth and Design</i> , <b>2015</b> , 15, 5685-5692	3.5	7
135	Investigation of defect structure of impurity-doped lithium niobate by combining thermodynamic constraints with lattice constant variations. <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 014102	2.5	5
134	Grain Growth in the Melt <b>2015</b> , 723-748		3
133	Liquinert quartz crucible for the growth of multicrystalline Si ingots. <i>Energy Science and Engineering</i> , <b>2015</b> , 3, 419-422	3.4	11
132	Three-dimensional evaluation of gettering ability for oxygen atoms at small-angle tilt boundaries in Czochralski-grown silicon crystals. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 251603	3.4	13
131	Crystallization of high-quality protein crystals using an external electric field. <i>Journal of Applied Crystallography</i> , <b>2015</b> , 48, 1507-1513	3.8	18
130	Partitioning of ionic species during growth of impurity-doped lithium niobate by electric current injection. <i>Journal of Crystal Growth</i> , <b>2014</b> , 406, 78-84	1.6	6
129	Crystal growth under external electric fields <b>2014</b> ,		2
128	Instability of crystal/melt interface including twin boundaries of silicon. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 182110	3.4	11
127	Crystal growth and equilibrium crystal shapes of silicon in the melt. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2014</b> , 22, 574-580	6.8	12
126	Growth of congruent-melting lithium tantalate crystal with stoichiometric structure by MgO doping. <i>Journal of Crystal Growth</i> , <b>2013</b> , 383, 63-66	1.6	7
125	Grown-in microdefects and photovoltaic characteristics of heavily Ge co-doped Czochralski-grown p-type silicon crystals. <i>Scripta Materialia</i> , <b>2013</b> , 69, 686-689	5.6	3
124	Germanium-doped Czochralski silicon: a novel material for solar cells. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2013</b> , 10, 1746-1749		2
123	Improvement of crystal quality for tetragonal hen egg white lysozyme crystals under application of an external alternating current electric field. <i>Journal of Applied Crystallography</i> , <b>2013</b> , 46, 25-29	3.8	21
122	Impurity partitioning during colloidal crystallization. <i>Journal of Physical Chemistry B</i> , <b>2013</b> , 117, 5289-95	3.4	18

121	The effect of grain boundary characteristics on the morphology of the crystal/melt interface of multicrystalline silicon. <i>Scripta Materialia</i> , <b>2013</b> , 69, 266-269	5.6	27
120	Evaluation of crystalline silicon solar cells by current-modulating four-point-probe method. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 043903	3.4	
119	Fabrication of Quasi-Phase-Matching Structure during Paraelectric Borate Crystal Growth. <i>Applied Physics Express</i> , <b>2013</b> , 6, 015501	2.4	3
118	Control of Gibbs free energy relationship between hen egg white lysozyme polymorphs under application of an external alternating current electric field. <i>Journal of Applied Crystallography</i> , <b>2012</b> , 45, 207-212	3.8	5
117	The critical growth velocity for planar-to-faceted interfaces transformation in SiGe crystals. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 141601	3.4	11
116	Nucleation rate enhancement of porcine insulin by application of an external AC electric field. <i>Journal of Crystal Growth</i> , <b>2012</b> , 352, 155-157	1.6	19
115	Growth velocity and grain size of multicrystalline solar cell silicon. <i>Journal of Crystal Growth</i> , <b>2012</b> , 356, 17-21	1.6	9
114	Formation mechanism of cellular structures during unidirectional growth of binary semiconductor Si-rich SiGe materials. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 021903	3.4	21
113	Crystal and faceted dendrite growth of silicon near (1 0 0). <i>Acta Materialia</i> , <b>2012</b> , 60, 3259-3267	8.4	9
112	Crystal Growth Behaviors of Silicon during Melt Growth Processes. <i>International Journal of Photoenergy</i> , <b>2012</b> , 2012, 1-16	2.1	23
111	Boron-oxygen defect in Czochralski-silicon co-doped with gallium and boron. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 042110	3.4	42
110	Effect of silicon/crucible interfacial energy on orientation of multicrystalline silicon ingot in unidirectional growth. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 113521	2.5	9
109	The impact of Ge codoping on the enhancement of photovoltaic characteristics of B-doped Czochralski grown Si crystal. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 043707	2.5	10
108	Formation mechanism of twin boundaries in lithium tetraborate. <i>Journal of Crystal Growth</i> , <b>2011</b> , 331, 78-82	1.6	2
107	Generation mechanism of dislocations and their clusters in multicrystalline silicon during two-dimensional growth. <i>Journal of Applied Physics</i> , <b>2011</b> , 110, 083530	2.5	18
106	Formation mechanism of twin boundaries during crystal growth of silicon. <i>Scripta Materialia</i> , <b>2011</b> , 65, 556-559	5.6	21
105	Dependence of Si-Faceted Dendrite Growth Orientation on Twin Spacing and Undercooling. <i>Crystal Growth and Design</i> , <b>2011</b> , 11, 1402-1410	3.5	10
104	Control of effect on the nucleation rate for hen egg white lysozyme crystals under application of an external ac electric field. <i>Langmuir</i> , <b>2011</b> , 27, 8333-8	4	21

103	Morphological transformation of a crystal/melt interface during unidirectional growth of silicon. <i>Acta Materialia</i> , <b>2011</b> , 59, 4700-4708	8.4	38
102	Plastically deformed Si-crystal wafers for neutron-monochromator elements. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2011</b> , 635, 137-140	1.2	4
101	Arrangement of dendrite crystals grown along the bottom of Si ingots using the dendritic casting method by controlling thermal conductivity under crucibles. <i>Journal of Crystal Growth</i> , <b>2011</b> , 319, 13-18	1.6	41
100	The impact of Ge codoping on grown-in O precipitates in Ga-doped Czochralski-silicon. <i>Journal of Crystal Growth</i> , <b>2011</b> , 321, 24-28	1.6	1
99	Implementation of faceted dendrite growth on floating cast method to realize high-quality multicrystalline Si ingot for solar cells. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 083527	2.5	18
98	Dependence of Si faceted dendrite growth velocity on undercooling. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 012113	3.4	18
97	Growth mechanism of the Si <110> faceted dendrite. <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	22
96	Relationship between grain boundary structures in Si multicrystals and generation of dislocations during crystal growth. <i>Journal of Applied Physics</i> , <b>2010</b> , 107, 013511	2.5	41
95	Role of the Electric Double Layer in Controlling the Nucleation Rate for Tetragonal Hen Egg White Lysozyme Crystals by Application of an External Electric Field. <i>Crystal Growth and Design</i> , <b>2010</b> , 10, 2591-2595	3.5	29
94	Effect of twin spacing on the growth velocity of Si faceted dendrites. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 172104	3.4	17
93	Realization of a High-Performance Point-Focusing Monochromator for X-ray Studies. <i>Applied Physics Express</i> , <b>2010</b> , 3, 046601	2.4	4
92	Ga segregation during Czochralski-Si crystal growth with Ge codoping. <i>Journal of Crystal Growth</i> , <b>2010</b> , 312, 2865-2870	1.6	5
91	Effect of various precipitants on the nucleation rate of tetragonal hen egg-white lysozyme crystals in an AC external electric field. <i>Journal of Crystal Growth</i> , <b>2010</b> , 312, 3503-3508	1.6	11
90	Pattern formation mechanism of a periodically faceted interface during crystallization of Si. <i>Journal of Crystal Growth</i> , <b>2010</b> , 312, 3670-3674	1.6	13
89	Formation mechanism of a faceted interface: In situ observation of the Si(100) crystal-melt interface during crystal growth. <i>Physical Review B</i> , <b>2009</b> , 80,	3.3	43
88	Effects of B and Ge codoping on minority carrier lifetime in Ga-doped Czochralski-silicon. <i>Journal of Applied Physics</i> , <b>2009</b> , 106, 013721	2.5	14
87	Quantitative analysis of subgrain boundaries in Si multicrystals and their impact on electrical properties and solar cell performance. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 044909	2.5	24
86	High minority carrier lifetime in Ga-doped Czochralski-grown silicon by Ge codoping. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 072102	3.4	9

85	Floating cast method to realize high-quality Si bulk multicrystals for solar cells. <i>Journal of Crystal Growth</i> , <b>2009</b> , 311, 228-231	1.6	34
84	Systematic studies of Si and Ge hemispherical concave wafers prepared by plastic deformation. <i>Journal of Crystal Growth</i> , <b>2009</b> , 311, 4587-4592	1.6	5
83	Growth behavior of faceted Si crystals at grain boundary formation. <i>Journal of Crystal Growth</i> , <b>2009</b> , 312, 19-23	1.6	7
82	Microstructures of Si multicrystals and their impact on minority carrier diffusion length. <i>Acta Materialia</i> , <b>2009</b> , 57, 3268-3276	8.4	34
81	Control of Nucleation Rate for Tetragonal Hen-Egg White Lysozyme Crystals by Application of an Electric Field with Variable Frequencies. <i>Crystal Growth and Design</i> , <b>2009</b> , 9, 2420-2424	3.5	44
80	Development of high-resolution and light-weight x-ray optics with deformed silicon wafers <b>2009</b> ,		2
79	Mechanism of Dendrite Crystal Growth. <i>Advances in Materials Research</i> , <b>2009</b> , 71-82		1
78	Fundamental Understanding of Subgrain Boundaries. <i>Advances in Materials Research</i> , <b>2009</b> , 83-95		2
77	Impact of Defect Density in Si Bulk Multicrystals on Gettering Effect of Impurities. <i>Japanese Journal of Applied Physics</i> , <b>2008</b> , 47, 8790-8792	1.4	11
76	Wave-dispersive x-ray spectrometer for simultaneous acquisition of several characteristic lines based on strongly and accurately shaped Ge crystal. <i>Review of Scientific Instruments</i> , <b>2008</b> , 79, 033110	1.7	8
75	Growth mechanism of Si-faceted dendrites. <i>Physical Review Letters</i> , <b>2008</b> , 101, 055503	7.4	61
74	Structural Origin of a Cluster of Bright Spots in Reverse Bias Electroluminescence Image of Solar Cells Based on Si Multicrystals. <i>Applied Physics Express</i> , <b>2008</b> , 1, 075001	2.4	14
73	Point-focusing monochromator crystal realized by hot plastic deformation of a Ge wafer. <i>Journal of Applied Crystallography</i> , <b>2008</b> , 41, 798-799	3.8	7
72	Influence of growth temperature and cooling rate on the growth of Si epitaxial layer by dropping-type liquid phase epitaxy from the pure Si melt. <i>Journal of Crystal Growth</i> , <b>2008</b> , 310, 5248-5251 <sup>1,6</sup>		2
71	In situ observation of Si faceted dendrite growth from low-degree-of-undercooling melts. <i>Acta Materialia</i> , <b>2008</b> , 56, 2663-2668	8.4	74
70	Influence of structural imperfection of B grain boundaries in bulk multicrystalline Si on their electrical activities. <i>Journal of Applied Physics</i> , <b>2007</b> , 101, 063509	2.5	16
69	Effect of the compositional distribution on the photovoltaic power conversion of SiGe solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2007</b> , 91, 123-128	6.4	14
68	Formation mechanism of parallel twins related to Si-faceted dendrite growth. <i>Scripta Materialia</i> , <b>2007</b> , 57, 81-84	5.6	68

67	Improvement in the conversion efficiency of single-junction SiGe solar cells by intentional introduction of the compositional distribution. <i>Journal of Applied Physics</i> , <b>2007</b> , 101, 054504	2.5	5
66	Modification of local structures in multicrystals revealed by spatially resolved x-ray rocking curve analysis. <i>Journal of Applied Physics</i> , <b>2007</b> , 102, 103504	2.5	12
65	Modification of Local Structure and Its Influence on Electrical Activity of Near (310) &Sigma;5 Grain Boundary in Bulk Silicon. <i>Materials Transactions</i> , <b>2007</b> , 48, 143-147	1.3	17
64	One-dimensionally curved Si and Ge single crystal wafers prepared by hot-pressing: potential performance for optical components for X-ray diffraction. <i>Journal of Physics: Conference Series</i> , <b>2007</b> , 83, 012030	0.3	1
63	Realization of Bulk Multicrystalline Silicon with Controlled Grain Boundaries by Utilizing Spontaneous Modification of Grain Boundary Configuration. <i>Japanese Journal of Applied Physics</i> , <b>2006</b> , 45, 1734-1737	1.4	12
62	High-Efficiency Concave and Conventional Solar Cell Integration System Using Focused Reflected Light. <i>Japanese Journal of Applied Physics</i> , <b>2006</b> , 45, 1664-1667	1.4	3
61	Suppression of structural imperfection in strained Si by utilizing SiGe bulk substrate. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 221912	3.4	4
60	?????????????????. <i>Materia Japan</i> , <b>2006</b> , 45, 720-724	0.1	
59	Si wafers having one- and two-dimensionally curved (111) planes examined by X-ray diffraction. <i>Journal of Applied Crystallography</i> , <b>2006</b> , 39, 443-445	3.8	7
58	Growth of structure-controlled polycrystalline silicon ingots for solar cells by casting. <i>Acta Materialia</i> , <b>2006</b> , 54, 3191-3197	8.4	143
57	Directional growth method to obtain high quality polycrystalline silicon from its melt. <i>Journal of Crystal Growth</i> , <b>2006</b> , 292, 282-285	1.6	90
56	Intermixing of Ge and Si during exposure of GeH <sub>4</sub> on Si. <i>Thin Solid Films</i> , <b>2006</b> , 508, 163-165	2.2	3
55	Control of compound forming reaction at the interface between SnZn solder and Cu substrate. <i>Journal of Alloys and Compounds</i> , <b>2005</b> , 392, 200-205	5.7	47
54	Growth of InGaAs and SiGe homogeneous bulk crystals which have complete miscibility in the phase diagrams. <i>International Journal of Materials and Product Technology</i> , <b>2005</b> , 22, 185	1	5
53	Effects of vicinal steps on the island growth and orientation of epitaxially grown perylene-3,4,9,10-tetracarboxylic dianhydride (PTCDA) thin film crystals on a hydrogen-terminated Si(1 1 1) substrate. <i>Journal of Crystal Growth</i> , <b>2005</b> , 273, 594-602	1.6	9
52	Growth and properties of SiGe multicrystals with microscopic compositional distribution and their applications for high-efficiency solar cells. <i>Journal of Crystal Growth</i> , <b>2005</b> , 275, e455-e460	1.6	6
51	Growth of SiGe-on-insulator and its application as a substrate for epitaxy of strained-Si layer. <i>Journal of Crystal Growth</i> , <b>2005</b> , 275, e1203-e1207	1.6	3
50	A simple approach to determine preferential growth orientation using multiple seed crystals with random orientations and its utilization for seed optimization to restrain polycrystallization of SiGe bulk crystal. <i>Journal of Crystal Growth</i> , <b>2005</b> , 276, 393-400	1.6	15



49	Structural properties of directionally grown polycrystalline SiGe for solar cells. <i>Journal of Crystal Growth</i> , <b>2005</b> , 275, 467-473	1.6	13
48	Growth of multicrystalline Si with controlled grain boundary configuration by the floating zone technique. <i>Journal of Crystal Growth</i> , <b>2005</b> , 280, 419-424	1.6	26
47	Crystal quality of a 6H-SiC layer grown over macrodefects by liquid-phase epitaxy: a Raman spectroscopic study. <i>Thin Solid Films</i> , <b>2005</b> , 476, 206-209	2.2	23
46	Solar cell system using a polished concave Si-crystal mirror. <i>Solar Energy Materials and Solar Cells</i> , <b>2005</b> , 88, 323-329	6.4	5
45	Hemisphere-shaped silicon crystal wafers obtained by plastic deformation and preparation of their solar cells. <i>Journal of Electronic Materials</i> , <b>2005</b> , 34, 1047-1052	1.9	6
44	Analysis of the Dark-Current Density in Solar Cells Based on Multicrystalline SiGe. <i>Japanese Journal of Applied Physics</i> , <b>2005</b> , 44, 8019-8022	1.4	2
43	Floating Zone Growth of Si Bicrystals Using Seed Crystals with Artificially Designed Grain Boundary Configuration. <i>Japanese Journal of Applied Physics</i> , <b>2005</b> , 44, L778-L780	1.4	5
42	On the Origin of Improved Conversion Efficiency of Solar Cells Based on SiGe with Compositional Distribution. <i>Japanese Journal of Applied Physics</i> , <b>2005</b> , 44, 857-860	1.4	5
41	Influence of growth temperature on minority-carrier lifetime of Si layer grown by liquid phase epitaxy using Ga solvent. <i>Journal of Applied Physics</i> , <b>2005</b> , 98, 073708	2.5	1
40	Liquid Phase Epitaxial Growth of Si Layers on Si Thin Substrates from Si Pure Melts under Near-Equilibrium Conditions. <i>Japanese Journal of Applied Physics</i> , <b>2005</b> , 44, 5092-5095	1.4	5
39	Ge composition dependence of properties of solar cells based on multicrystalline SiGe with microscopic compositional distribution. <i>Journal of Applied Physics</i> , <b>2004</b> , 96, 1238-1241	2.5	28
38	Effects of spacer thickness on quantum efficiency of the solar cells with embedded Ge islands in the intrinsic layer. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 2802-2804	3.4	17
37	Wave-shaped Si crystal wafers obtained by plastic deformation and preparation of their solar cells. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 5896-5898	3.4	14
36	Rational development of new materials--putting the cart before the horse?. <i>Nature Materials</i> , <b>2004</b> , 3, 838	27	46
35	Fabrication of solar cell with stacked Ge islands for enhanced absorption in the infrared regime. <i>Thin Solid Films</i> , <b>2004</b> , 451-452, 604-607	2.2	6
34	Epitaxial relation and island growth of perylene-3,4,9,10-tetracarboxylic dianhydride (PTCDA) thin film crystals on a hydrogen-terminated Si(1 1 1) substrate. <i>Journal of Crystal Growth</i> , <b>2004</b> , 262, 196-201	1.6	20
33	Phase diagram of growth mode for the SiGe/Si heterostructure system with misfit dislocations. <i>Journal of Crystal Growth</i> , <b>2004</b> , 260, 372-383	1.6	12
32	In situ observation of elementary growth steps on the surface of protein crystals by laser confocal microscopy. <i>Journal of Crystal Growth</i> , <b>2004</b> , 262, 536-542	1.6	89

31	In-situ observations of melt growth behavior of polycrystalline silicon. <i>Journal of Crystal Growth</i> , <b>2004</b> , 262, 124-129	1.6	59
30	Effects of growth temperature on the surface morphology of silicon thin films on (111) silicon monocrystalline substrate by liquid phase epitaxy. <i>Journal of Crystal Growth</i> , <b>2004</b> , 266, 467-474	1.6	6
29	Grain growth behaviors of polycrystalline silicon during melt growth processes. <i>Journal of Crystal Growth</i> , <b>2004</b> , 266, 441-448	1.6	89
28	Fabrication of SiGe-on-insulator by rapid thermal annealing of Ge on Si-on-insulator substrate. <i>Applied Surface Science</i> , <b>2004</b> , 224, 95-98	6.7	10
27	On the origin of strain fluctuation in strained-Si grown on SiGe-on-insulator and SiGe virtual substrates. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 1335-1337	3.4	19
26	Molten metal flux growth and properties of CrSi <sub>2</sub> . <i>Journal of Alloys and Compounds</i> , <b>2004</b> , 383, 319-321	5.7	9
25	Fabrication of SiGe-on-Insulator through Thermal Diffusion of Ge on Si-on-Insulator Substrate. <i>Japanese Journal of Applied Physics</i> , <b>2003</b> , 42, L232-L234	1.4	8
24	High-Temperature Solution Growth and Characterization of Chromium Disilicide. <i>Japanese Journal of Applied Physics</i> , <b>2003</b> , 42, 7292-7293	1.4	2
23	Growth of SiGe bulk crystals with uniform composition by utilizing feedback control system of the crystal/melt interface position for precise control of the growth temperature. <i>Journal of Crystal Growth</i> , <b>2003</b> , 250, 298-304	1.6	27
22	Effects of high pressure on the growth kinetics of orthorhombic lysozyme crystals. <i>Journal of Crystal Growth</i> , <b>2003</b> , 254, 188-195	1.6	19
21	Stacked Ge islands for photovoltaic applications. <i>Science and Technology of Advanced Materials</i> , <b>2003</b> , 4, 367-370	7.1	10
20	Enhanced quantum efficiency of solar cells with self-assembled Ge dots stacked in multilayer structure. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 1258-1260	3.4	86
19	High-Quality Crystalline Silicon Layer Grown by Liquid Phase Epitaxy Method at Low Growth Temperature. <i>Japanese Journal of Applied Physics</i> , <b>2003</b> , 42, L217-L219	1.4	6
18	Influence of the elastic strain on the band structure of ellipsoidal SiGe coherently embedded in the Si matrix. <i>Journal of Applied Physics</i> , <b>2003</b> , 94, 916-920	2.5	18
17	Fabrication of SiGe bulk crystals with uniform composition as substrates for Si-based heterostructures. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2002</b> , 89, 364-367	3.1	4
16	Measurement of intrinsic diffusion coefficients of Al and Ni in Ni <sub>3</sub> Al using Ni/NiAl diffusion couples. <i>Acta Materialia</i> , <b>2002</b> , 50, 1571-1579	8.4	85
15	Melt growth of multicrystalline SiGe with large compositional distribution for new solar cell applications. <i>Solar Energy Materials and Solar Cells</i> , <b>2002</b> , 72, 93-100	6.4	15
14	In situ observations of crystal growth behavior of silicon melt. <i>Journal of Crystal Growth</i> , <b>2002</b> , 243, 275-282	2.8	64

13	Growth and properties of SiGe multicrystals with microscopic compositional distribution for high-efficiency solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2002</b> , 73, 305-320	6.4	15
12	In situ observation of the Marangoni convection in a NaCl aqueous solutions under microgravity. <i>Journal of Crystal Growth</i> , <b>2002</b> , 234, 516-522	1.6	6
11	In-situ monitoring system of the position and temperature at the crystal/solution interface. <i>Journal of Crystal Growth</i> , <b>2002</b> , 236, 125-131	1.6	12
10	Compositional variation in Si-rich SiGe single crystals grown by multi-component zone melting method using Si seed and source crystals. <i>Journal of Crystal Growth</i> , <b>2002</b> , 240, 373-381	1.6	32
9	New method for measurement of interdiffusion coefficient in high temperature solutions based on Fick's first law. <i>Journal of Crystal Growth</i> , <b>2002</b> , 241, 387-394	1.6	13
8	Simultaneous in situ measurement of solute and temperature distributions in the alloy solutions. <i>Journal of Crystal Growth</i> , <b>2002</b> , 242, 313-320	1.6	6
7	Strain distribution of Si thin film grown on multicrystalline-SiGe with microscopic compositional distribution. <i>Journal of Applied Physics</i> , <b>2002</b> , 92, 7098-7101	2.5	2
6	Control of Macroscopic Absorption Coefficient of Multicrystalline SiGe by Microscopic Compositional Distribution. <i>Japanese Journal of Applied Physics</i> , <b>2002</b> , 41, L37-L39	1.4	7
5	Evidence of the Presence of Built-in Strain in Multicrystalline SiGe with Large Compositional Distribution. <i>Japanese Journal of Applied Physics</i> , <b>2002</b> , 41, 4462-4465	1.4	8
4	Evaluation of the diffusion coefficients in liquid GaGe binary alloys using a novel method based on Fick's first law. <i>Journal of Non-Crystalline Solids</i> , <b>2002</b> , 312-314, 196-202	3.9	3
3	Growth of SiGe bulk crystal with uniform composition by directly controlling the growth temperature at the crystal/melt interface using in situ monitoring system. <i>Journal of Crystal Growth</i> , <b>2001</b> , 224, 204-211	1.6	46
2	Physical model for the evaluation of solid/liquid interfacial tension in silicon. <i>Journal of Applied Physics</i> , <b>2001</b> , 90, 750-755	2.5	16
1	Interfacial observations of Ni/Ni <sub>3</sub> Si and Ni/Ni <sub>3</sub> Ga diffusion couples. <i>Philosophical Magazine Letters</i> , <b>1997</b> , 75, 149-154	1	5