# Chung Wen Lan

#### List of Publications by Citations

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209 papers 3,882 citations

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221 ext. papers

**4,140** ext. citations

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5.57 L-index

#	Paper	IF	Citations
209	Development of high-performance multicrystalline silicon for photovoltaic industry. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2015</b> , 23, 340-351	6.8	188
208	A novel approach for recycling of kerf loss silicon from cutting slurry waste for solar cell applications. <i>Journal of Crystal Growth</i> , <b>2008</b> , 310, 3403-3406	1.6	128
207	Grain control in directional solidification of photovoltaic silicon. <i>Journal of Crystal Growth</i> , <b>2012</b> , 360, 68-75	1.6	107
206	Recovery of silicon powder from kerf loss slurry by centrifugation. <i>Powder Technology</i> , <b>2010</b> , 200, 216-	-22532	95
205	Recent progress of crystal growth modeling and growth control. <i>Chemical Engineering Science</i> , <b>2004</b> , 59, 1437-1457	4.4	74
204	Heat transfer, fluid flow and interface shapes in floating-zone crystal growth. <i>Journal of Crystal Growth</i> , <b>1991</b> , 108, 351-366	1.6	70
203	Recovery of silicon from kerf loss slurry waste for photovoltaic applications. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2009</b> , 17, 155-163	6.8	68
202	Grain control using spot cooling in multi-crystalline silicon crystal growth. <i>Journal of Crystal Growth</i> , <b>2009</b> , 311, 263-267	1.6	62
201	Phase field simulation of non-isothermal free dendritic growth of a binary alloy in a forced flow. <i>Journal of Crystal Growth</i> , <b>2004</b> , 264, 472-482	1.6	60
200	The emergence of high-performance multi-crystalline silicon in photovoltaics. <i>Journal of Crystal Growth</i> , <b>2017</b> , 468, 17-23	1.6	57
199	Adaptive phase field simulation of non-isothermal free dendritic growth of a binary alloy. <i>Acta Materialia</i> , <b>2003</b> , 51, 1857-1869	8.4	56
198	Adaptive phase field simulation of dendritic crystal growth in a forced flow: 2D vs 3D morphologies. <i>International Journal of Heat and Mass Transfer</i> , <b>2009</b> , 52, 1158-1166	4.9	53
197	Optical and microhardness studies of KDP crystals grown from aqueous solutions with organic additives. <i>Materials Letters</i> , <b>2002</b> , 52, 326-328	3.3	53
196	High-quality multi-crystalline silicon (mc-Si) grown by directional solidification using notched crucibles. <i>Journal of Crystal Growth</i> , <b>2011</b> , 318, 219-223	1.6	51
195	An Adaptive Finite Volume Method for Incompressible Heat Flow Problems in Solidification. <i>Journal of Computational Physics</i> , <b>2002</b> , 178, 464-497	4.1	49
194	An enhanced cooling design in directional solidification for high quality multi-crystalline solar silicon. <i>Journal of Crystal Growth</i> , <b>2012</b> , 340, 202-208	1.6	48
193	Development of grain structures of multi-crystalline silicon from randomly orientated seeds in directional solidification. <i>Journal of Crystal Growth</i> , <b>2014</b> , 387, 10-15	1.6	45

## (2002-2003)

192	Studies on the growth and characterization of p-hydroxyacetophenone single crystals. <i>Journal of Crystal Growth</i> , <b>2003</b> , 249, 309-315	1.6	45	
191	Effects of rotation on heat transfer, fluid flow and interfaces in normal gravity floating-zone crystal growth. <i>Journal of Crystal Growth</i> , <b>1991</b> , 114, 517-535	1.6	44	
190	Engineering silicon crystals for photovoltaics. <i>CrystEngComm</i> , <b>2016</b> , 18, 1474-1485	3.3	43	
189	Three-dimensional simulation of facet formation and the coupled heat flow and segregation in Bridgman growth of oxide crystals. <i>Journal of Crystal Growth</i> , <b>2001</b> , 233, 523-536	1.6	40	
188	Recycling and reuse of kerf-loss silicon from diamond wire sawing for photovoltaic industry. <i>Waste Management</i> , <b>2019</b> , 84, 204-210	8.6	40	
187	Effects of ampoule rotation on vertical zone-melting crystal growth: steady rotation versus accelerated crucible rotation technique (ACRT). <i>Journal of Crystal Growth</i> , <b>1999</b> , 203, 286-296	1.6	38	
186	Silicon recovery from cutting slurry by phase transfer separation. <i>Separation and Purification Technology</i> , <b>2014</b> , 133, 1-7	8.3	37	
185	A rapid thermal process for silicon recycle and refining from cutting kerf-loss slurry waste. <i>Separation and Purification Technology</i> , <b>2015</b> , 149, 38-46	8.3	35	
184	Effects of internal radiation on heat flow and facet formation in Bridgman growth of YAG crystals. <i>International Journal of Heat and Mass Transfer</i> , <b>2003</b> , 46, 1629-1640	4.9	34	
183	Adaptive phase field simulation of dendritic growth in a forced flow at various supercoolings. <i>Physical Review E</i> , <b>2002</b> , 65, 061601	2.4	34	
182	Thermocapillary flow and melt/solid interfaces in floating-zone crystal growth under microgravity. Journal of Crystal Growth, <b>1990</b> , 102, 1043-1058	1.6	34	
181	Shallow bath chemical deposition of CdS thin film. <i>Thin Solid Films</i> , <b>2011</b> , 520, 217-223	2.2	33	
180	Nucleation, growth and characterization of L-tartaric acidBicotinamide NLO crystals. <i>Journal of Crystal Growth</i> , <b>2004</b> , 270, 475-480	1.6	33	
179	A finite volume method for solute segregation in directional solidification and comparison with a finite element method. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>1996</b> , 131, 191-207	5.7	33	
178	Three-dimensional convection and solute segregation in vertical Bridgman crystal growth. <i>Journal of Crystal Growth</i> , <b>1996</b> , 167, 320-332	1.6	33	
177	NewtonS method for solving heat transfer, fluid flow and interface shapes in a floating molten zone. <i>International Journal for Numerical Methods in Fluids</i> , <b>1994</b> , 19, 41-65	1.9	33	
176	Efficient phase field simulation of a binary dendritic growth in a forced flow. <i>Physical Review E</i> , <b>2004</b> , 69, 031601	2.4	32	
175	Synthesis and crystal growth of binary organic NLO material UNBA. <i>Journal of Crystal Growth</i> , <b>2002</b> , 235, 499-504	1.6	31	

174	Three-dimensional simulation of floating-zone crystal growth of oxide crystals. <i>Journal of Crystal Growth</i> , <b>2003</b> , 247, 597-612	1.6	30
173	An investigation on the growth and characterization of DAST crystals grown by two zone growth technique. <i>Journal of Crystal Growth</i> , <b>2005</b> , 282, 117-124	1.6	30
172	Revisiting the twinning mechanism in directional solidification of multi-crystalline silicon sheet. <i>Acta Materialia</i> , <b>2017</b> , 131, 1-10	8.4	29
171	Efficient adaptive phase field simulation of dendritic growth in a forced flow at low supercooling. Journal of Crystal Growth, 2002, 241, 379-386	1.6	29
170	Effects of ampoule rotation on flows and dopant segregation in vertical Bridgman crystal growth. Journal of Crystal Growth, <b>1999</b> , 197, 983-991	1.6	29
169	Numerical investigation on the batch characteristics of liquid encapsulated vertical Bridgman crystal growth. <i>Journal of Crystal Growth</i> , <b>1995</b> , 149, 175-186	1.6	29
168	Efficient adaptive phase field simulation of directional solidification of a binary alloy. <i>Journal of Crystal Growth</i> , <b>2003</b> , 250, 525-537	1.6	28
167	Multigrid Methods for Incompressible Heat Flow Problems with an Unknown Interface. <i>Journal of Computational Physics</i> , <b>1999</b> , 152, 55-77	4.1	28
166	Evolution of grain structures during directional solidification of silicon wafers. <i>Journal of Crystal Growth</i> , <b>2016</b> , 439, 40-46	1.6	26
165	A Finite-Volume/Newton Method for a Two-Phase Heat Flow Problem Using Primitive Variables and Collocated Grids. <i>Journal of Computational Physics</i> , <b>1996</b> , 127, 330-345	4.1	26
164	Effect of axisymmetric magnetic fields on radial dopant segregation of floating-zone silicon growth in a mirror furnace. <i>Journal of Crystal Growth</i> , <b>1996</b> , 169, 269-278	1.6	26
163	Phase field modeling of growth competition of silicon grains. <i>Acta Materialia</i> , <b>2008</b> , 56, 4114-4122	8.4	25
162	Quantitative phase field simulation of deep cells in directional solidification of an alloy. <i>Acta Materialia</i> , <b>2005</b> , 53, 2285-2294	8.4	25
161	Three-dimensional simulation of Marangoni flow and interfaces in floating-zone silicon crystal growth. <i>Journal of Crystal Growth</i> , <b>2001</b> , 230, 172-180	1.6	25
160	The effect of silica nucleation layers on grain control of multi-crystalline silicon in directional solidification. <i>Journal of Crystal Growth</i> , <b>2014</b> , 404, 59-64	1.6	24
159	Adaptive three-dimensional phase-field modeling of dendritic crystal growth with high anisotropy. Journal of Crystal Growth, <b>2011</b> , 318, 51-54	1.6	24
158	Reversing radial segregation and suppressing morphological instability during Bridgman crystal growth by angular vibration. <i>Journal of Crystal Growth</i> , <b>2004</b> , 271, 474-480	1.6	24
157	Nucleation studies and crystal growth of (NH4)H2PO4 doped with thiourea in supersaturated aqueous solutions. <i>Materials Chemistry and Physics</i> , <b>2002</b> , 76, 181-186	4.4	23

### (2016-2005)

156	Flow and segregation control by accelerated rotation for vertical Bridgman growth of cadmium zinc telluride: ACRT versus vibration. <i>Journal of Crystal Growth</i> , <b>2005</b> , 274, 379-386	1.6	23
155	Phase field modeling of convective and morphological instability during directional solidification of an alloy. <i>Journal of Crystal Growth</i> , <b>2006</b> , 295, 202-208	1.6	22
154	Three-dimensional analysis of flow and segregation in vertical Bridgman crystal growth under axial and transversal magnetic fields. <i>Journal of Crystal Growth</i> , <b>2003</b> , 254, 503-515	1.6	22
153	Effects of centrifugal acceleration on the flows and segregation in vertical Bridgman crystal growth with steady ampoule rotation. <i>Journal of Crystal Growth</i> , <b>2001</b> , 229, 595-600	1.6	22
152	Radial dopant segregation in zero-gravity floating-zone crystal growth. <i>Journal of Crystal Growth</i> , <b>1993</b> , 132, 578-591	1.6	22
151	Three-dimensional adaptive phase field modeling of directional solidification of a binary alloy: 2DBD transitions. <i>International Journal of Heat and Mass Transfer</i> , <b>2010</b> , 53, 2272-2283	4.9	21
150	Modeling of dopant segregation in vertical zone-melting crystal growth. <i>Journal of Crystal Growth</i> , <b>1998</b> , 186, 203-213	1.6	21
149	Surface defects and mechanical hardness of rapidly grown DAST crystals. <i>Journal of Crystal Growth</i> , <b>2006</b> , 297, 146-151	1.6	21
148	Morphological instability due to double diffusive convection in directional solidification: the pit formation. <i>Journal of Crystal Growth</i> , <b>2000</b> , 220, 619-630	1.6	21
147	Control of ingot quality and solar cell appearance of cast mono-like silicon by using seed partitions. <i>Journal of Crystal Growth</i> , <b>2017</b> , 475, 136-143	1.6	20
146	Comparison of defect formations in solar silicon growth from small random and large oriented seeds. <i>Journal of Crystal Growth</i> , <b>2015</b> , 419, 1-6	1.6	20
145	Efficient adaptive three-dimensional phase-field simulation of dendritic crystal growth from various supercoolings using rescaling. <i>Journal of Crystal Growth</i> , <b>2009</b> , 311, 702-706	1.6	20
144	Three-dimensional thermocapillary and buoyancy convections and interface shape in horizontal Bridgman crystal growth. <i>Journal of Crystal Growth</i> , <b>1997</b> , 180, 587-596	1.6	20
143	On the hot-zone design of Czochralski silicon growth for photovoltaic applications. <i>Journal of Crystal Growth</i> , <b>2004</b> , 261, 433-443	1.6	20
142	Three-dimensional simulation of vertical zone-melting crystal growth: symmetry breaking to multiple states. <i>Journal of Crystal Growth</i> , <b>2000</b> , 208, 327-340	1.6	20
141	Improvement of multi-crystalline silicon ingot growth by using diffusion barriers. <i>Journal of Crystal Growth</i> , <b>2014</b> , 401, 727-731	1.6	19
140	Effects of axial vibration on vertical zone-melting processing. <i>International Journal of Heat and Mass Transfer</i> , <b>2000</b> , 43, 1987-1997	4.9	19
139	Effect of Seed Arrangements on the Quality of n-Type Monolike Silicon Grown by Directional Solidification. <i>Crystal Growth and Design</i> , <b>2016</b> , 16, 6641-6647	3.5	19

138	Growth and characterization of a new chelating agent added 4-dimethylamino-N-methyl-4-stilbazolium tosylate (DAST) single crystals. <i>Materials Chemistry and Physics</i> , <b>2007</b> , 102, 60-66	4.4	18
137	A new single step process for synthesis and growth of ZnGeP2 crystal. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , <b>2008</b> , 39, 385-387		18
136	Crystal Structure and Properties of a New Organic Nonlinear Optical Material. <i>Journal of Materials Research</i> , <b>2002</b> , 17, 1587-1591	2.5	18
135	A half-zone study of Marangoni convection in floating-zone crystal growth under microgravity. Journal of Crystal Growth, <b>1990</b> , 104, 801-808	1.6	18
134	Multicrystalline Silicon Crystal Growth for Photovoltaic Applications 2015, 373-411		17
133	Recent Progress of Crystal Growth Technology for Multi-Crystalline Silicon Solar Ingot. <i>Solid State Phenomena</i> , <b>2015</b> , 242, 21-29	0.4	17
132	A simple anisotropic surface free energy function for three-dimensional phase field modeling of multi-crystalline crystal growth. <i>Journal of Crystal Growth</i> , <b>2013</b> , 362, 62-65	1.6	17
131	Efficient adaptive three-dimensional phase field simulation of free dendritic growth under natural convection. <i>Journal of Crystal Growth</i> , <b>2010</b> , 312, 1437-1442	1.6	17
130	Comparative study of the influence of natural convection on directional solidification of AlB.5 wt% Ni and Al🏿 wt% Si alloys. <i>Advances in Space Research</i> , <b>2008</b> , 41, 2112-2117	2.4	17
129	Phase-field modeling of twin-related faceted dendrite growth of silicon. <i>Acta Materialia</i> , <b>2016</b> , 115, 324	I-8.3 <sub>1</sub> 2	16
128	Three-dimensional phase field modeling of silicon thin-film growth during directional solidification: Facet formation and grain competition. <i>Journal of Crystal Growth</i> , <b>2014</b> , 401, 740-747	1.6	16
127	Phase field modeling of facet formation during directional solidification of silicon film. <i>Journal of Crystal Growth</i> , <b>2014</b> , 385, 134-139	1.6	16
126	A Nano Quasi-Solid Electrolyte With Modified Nano-Clay Applied to Dye-Sensitized Solar Cells. Journal of Solar Energy Engineering, Transactions of the ASME, <b>2011</b> , 133,	2.3	16
125	Modeling of ellipsoid mirror furnace for floating-zone crystal growth. <i>Journal of Crystal Growth</i> , <b>1997</b> , 173, 561-573	1.6	16
124	Dynamic simulation of the vertical zone-melting crystal growth. <i>International Journal of Heat and Mass Transfer</i> , <b>1998</b> , 41, 4351-4373	4.9	16
123	Three-dimensional simulation of heat flow, segregation, and zone shape in floating-zone silicon growth under axial and transversal magnetic fields. <i>Journal of Crystal Growth</i> , <b>2004</b> , 262, 59-71	1.6	16
122	A visualization and computational study of horizontal Bridgman crystal growth. <i>Journal of Crystal Growth</i> , <b>2000</b> , 208, 717-725	1.6	16
121	Shortened floating zone crystal growth under normal gravity. <i>Journal of Crystal Growth</i> , <b>1992</b> , 119, 281	-21961	16

120	Shallow chemical bath deposition of ZnS buffer layer for environmentally benign solar cell devices. <i>Advances in Natural Sciences: Nanoscience and Nanotechnology</i> , <b>2014</b> , 5, 025015	1.6	15	
119	Effect of crucible coating on the grain control of multi-crystalline silicon crystal growth. <i>Journal of Crystal Growth</i> , <b>2013</b> , 363, 242-246	1.6	15	
118	Effects of cycle patterns of accelerated crucible rotation technique (ACRT) on the flows, interface, and segregation in vertical Bridgman crystal growth. <i>International Journal of Heat and Mass Transfer</i> , <b>2007</b> , 50, 5031-5040	4.9	15	
117	Long-time scale morphological dynamics near the onset of instability during directional solidification of an alloy. <i>Journal of Crystal Growth</i> , <b>2004</b> , 264, 379-384	1.6	15	
116	Experiment and simulation on interface shapes of an yttrium aluminium garnet miniature molten zone formed using the laser-heated pedestal growth method for single-crystal fibers. <i>Journal of Applied Crystallography</i> , <b>2009</b> , 42, 553-563	3.8	14	
115	Growth of benzil crystals by vertical dynamic gradient freeze technique in a transparent furnace. <i>Journal of Crystal Growth</i> , <b>1997</b> , 180, 127-135	1.6	14	
114	Theoretical analysis of the micro-pulling-down process for GexSi1 fiber crystal growth. <i>Journal of Crystal Growth</i> , <b>1998</b> , 193, 552-562	1.6	14	
113	Influence of ampoule rotation on three-dimensional convection and segregation in Bridgman crystal growth under imperfect growth conditions. <i>Journal of Crystal Growth</i> , <b>2000</b> , 212, 340-351	1.6	14	
112	Measurement of pressure fluctuations in two-dimensional gas-solid fluidized beds at elevated temperatures <i>Journal of Chemical Engineering of Japan</i> , <b>1990</b> , 23, 555-562	0.8	14	
111	High Efficiency Silicon Solar Cells with Bilayer Passivation Structure. <i>Electrochemical and Solid-State Letters</i> , <b>2009</b> , 12, H388		13	
110	Effect of EDTA on Growth of 4-Dimethylamino-N-Methyl-4-Stilbazolium Tosylate Crystals by Slope Nucleation Method. <i>Japanese Journal of Applied Physics</i> , <b>2004</b> , 43, 1507-1513	1.4	13	
109	Growth and characterization of di-sodium hydrogen phosphate. <i>Journal of Crystal Growth</i> , <b>2002</b> , 244, 194-199	1.6	13	
108	Thermocapillary flow and natural convection in a melt column with an unknown melt/solid interface. <i>International Journal for Numerical Methods in Fluids</i> , <b>1991</b> , 12, 59-80	1.9	13	
107	On the study of zinc doping in congruent LiTaO3 crystals. <i>Materials Chemistry and Physics</i> , <b>2012</b> , 133, 813-817	4.4	12	
106	Nanotextured crystalline silicon solar cells. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2011</b> , 208, 2926-2933	1.6	12	
105	Optical Properties of Mg, Fe, Co-Doped Near-Stoichiometric LiTaOl5ingle Crystals. <i>Materials</i> , <b>2012</b> , 5, 227-238	3.5	12	
104	Influence of surface structure on the performance of black-silicon solar cell. <i>Physica Status Solidi C:</i> Current Topics in Solid State Physics, <b>2010</b> , 7, 2778-2784		12	
103	Modulating dopant segregation in floating-zone silicon growth in magnetic fields using rotation.  Journal of Crystal Growth, 1997, 180, 381-387	1.6	12	

102	Zone-levelling Czochralski growth of MgO-doped near-stoichiometric lithium niobate single crystals. <i>Journal of Crystal Growth</i> , <b>2005</b> , 275, 504-511	1.6	12
101	Suppressing three-dimensional unsteady flows in vertical zone-melting by steady ampoule rotation. Journal of Crystal Growth, <b>2000</b> , 213, 395-407	1.6	12
100	Interface control mechanisms in horizontal zone-melting with slow rotation. <i>Journal of Crystal Growth</i> , <b>2000</b> , 218, 115-124	1.6	12
99	A computer simulation of crystal growth by the traveling-solvent method (TSM): pseudo-steady-state calculations. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>1995</b> , 3, 71-92	2	12
98	Floating-zone crystal growth with a heated and immersed shaper - experiments. <i>Journal of Crystal Growth</i> , <b>1991</b> , 108, 541-548	1.6	12
97	Silicon ingot casting using reusable silicon nitride crucibles made from diamond wire sawing kerf-loss silicon. <i>Journal of Crystal Growth</i> , <b>2019</b> , 525, 125184	1.6	11
96	Two-Dimensional Simulations on Heat Transfer and Fluid Flow for Yttrium Aluminium Garnet Single-Crystal Fiber in Laser-Heated Pedestal Growth System. <i>Japanese Journal of Applied Physics</i> , <b>2009</b> , 48, 115504	1.4	11
95	Growth and photorefractive properties of Mg, Fe co-doped near-stoichiometric lithium tantalate single crystals. <i>Optical Materials</i> , <b>2010</b> , 32, 1071-1076	3.3	11
94	Effects of angular vibration on the flow, segregation, and interface morphology in vertical Bridgman crystal growth. <i>International Journal of Heat and Mass Transfer</i> , <b>2007</b> , 50, 58-66	4.9	11
93	Effects of accelerated crucible rotation on segregation and interface morphology for vertical Bridgman crystal growth: Visualization and simulation. <i>Journal of Crystal Growth</i> , <b>2007</b> , 304, 236-243	1.6	11
92	Effect of sodium toluene sulfonate on the nucleation, growth and characterization of DAST single crystals. <i>Journal of Crystal Growth</i> , <b>2006</b> , 292, 510-514	1.6	11
91	A simple approach toward quantitative phase field simulation for dilute-alloy solidification. <i>Journal of Crystal Growth</i> , <b>2005</b> , 282, 515-524	1.6	11
90	A transparent multizone furnace for crystal growth and flow visualization. <i>Journal of Crystal Growth</i> , <b>1994</b> , 142, 373-378	1.6	11
89	Effect of rotation on radial dopant segregation in microgravity floating-zone crystal growth. Journal of Crystal Growth, <b>1993</b> , 133, 309-321	1.6	11
88	Phase field modeling of morphological instability near grain boundary during directional solidification of a binary alloy: The hump formation. <i>Journal of Crystal Growth</i> , <b>2011</b> , 324, 296-303	1.6	10
87	Segregation control of vertical Bridgman growth of Ga-doped germanium crystals by accelerated crucible rotation: ACRT versus angular vibration. <i>Journal of Crystal Growth</i> , <b>2009</b> , 311, 684-687	1.6	10
86	Bifurcation and stability analyses of horizontal Bridgman crystal growth of a low Prandtl number material. <i>Journal of Crystal Growth</i> , <b>1998</b> , 187, 303-313	1.6	10
85	Dynamic three-dimensional simulation of facet formation and segregation in Bridgman crystal growth. <i>Journal of Crystal Growth</i> , <b>2007</b> , 303, 287-296	1.6	10

#### (1996-2002)

84	Three-dimensional analysis of flow and segregation control by slow rotation for Bridgman crystal growth in microgravity. <i>Journal of Crystal Growth</i> , <b>2002</b> , 237-239, 1881-1885	1.6	10
83	Three-dimensional bifurcations of a two-phase Rayleigh <b>B</b> enard problem in a cylinder. <i>International Journal of Heat and Mass Transfer</i> , <b>2001</b> , 44, 1823-1836	4.9	10
82	Adaptive phase field modeling of morphological instability and facet formation during directional solidification of SiGe alloys. <i>Journal of Crystal Growth</i> , <b>2014</b> , 385, 44-48	1.6	9
81	The effects of shower head orientation and substrate position on the uniformity of GaN growth in a HVPE reactor. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , <b>2009</b> , 40, 475-478	5.3	9
80	High-quality multi-crystalline silicon growth for solar cells by grain-controlled directional solidification. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2010</b> , 18, n/a-n/a	6.8	9
79	Phase field modeling of excimer laser crystallization of thin silicon films on amorphous substrates. <i>Journal of Applied Physics</i> , <b>2006</b> , 100, 053504	2.5	9
78	ThermalBolutal flows and segregation and their control by angular vibration in vertical Bridgman crystal growth. <i>Chemical Engineering Science</i> , <b>2006</b> , 61, 7766-7773	4.4	9
77	Growth and characterizations of ZnO-doped near-stoichiometric LiNbO3 crystals by zone-leveling Czochralski method. <i>Journal of Crystal Growth</i> , <b>2006</b> , 289, 145-150	1.6	9
76	Detection characteristics of vertical Bridgman grown stilbene crystals for gamma rays using 60Co, 137Cs and 22Na gamma ray sources. <i>Materials Chemistry and Physics</i> , <b>2003</b> , 77, 77-80	4.4	9
75	Three-dimensional analysis of heat flow, segregation, and interface shape of gradient-freeze crystal growth in a centrifuge. <i>Journal of Crystal Growth</i> , <b>2001</b> , 226, 406-418	1.6	9
74	Floating-zone crystal growth with a heated ring covering the melt surface. <i>Journal of Crystal Growth</i> , <b>1991</b> , 108, 1-7	1.6	9
73	Formulation for correcting optical distortions due to a transparent floating zone. <i>Journal of Crystal Growth</i> , <b>1993</b> , 132, 471-476	1.6	9
72	Czochralski Silicon Crystal Growth for Photovoltaic Applications. <i>Advances in Materials Research</i> , <b>2009</b> , 25-39		9
71	Numerical simulations of flow and mass transfer during potassium dihydrogen phosphate single crystal growth via the three-dimensional motion growth method. <i>International Journal of Heat and Mass Transfer</i> , <b>2016</b> , 99, 65-75	4.9	9
70	Possible Twinning Operations during Directional Solidification of Multicrystalline Silicon. <i>Crystal Growth and Design</i> , <b>2018</b> , 18, 2518-2524	3.5	8
69	Segregation and morphological instability due to double-diffusive convection in rotational directional solidification. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2002</b> , 33, 3011-3017	2.3	8
68	Zone-melting Czochralski pulling growth of Bi12SiO20 single crystals. <i>Journal of Crystal Growth</i> , <b>2002</b> , 245, 56-62	1.6	8
67	NUMERICAL INVESTIGATION OF HEAT FLOW AND INTERFACES IN THE VERTICAL ZONE-MELTING CRYSTAL GROWTH. <i>Numerical Heat Transfer; Part A: Applications</i> , <b>1996</b> , 29, 131-146	2.3	8

66	Floating-zone crystal growth with a heated and immersed shaper - computer simulation. <i>Journal of Crystal Growth</i> , <b>1991</b> , 108, 340-350	1.6	8
65	Twinning mechanism at three-grain tri-junction during directional solidification of multi-crystalline silicon. <i>Acta Materialia</i> , <b>2018</b> , 144, 41-50	8.4	8
64	N-type high-performance multicrystalline and mono-like silicon wafers with lifetimes above 2 ms. <i>Japanese Journal of Applied Physics</i> , <b>2017</b> , 56, 08MB10	1.4	7
63	Simulation and experiment on laser-heated pedestal growth of chromium-doped yttrium aluminum garnet single-crystal fiber. <i>Journal of Crystal Growth</i> , <b>2011</b> , 318, 674-678	1.6	7
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37	Heterogeneous twinning during directional solidification of multi-crystalline silicon. <i>Journal of Crystal Growth</i> , <b>2019</b> , 508, 42-49	1.6	4
36	Minority lifetime degradation of silicon wafers after electric zone melting. <i>Journal of Crystal Growth</i> , <b>2015</b> , 420, 74-79	1.6	3
35	Green scalable vapor texture etching for multicrystalline silicon wafers. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2020</b> , 28, 993-1000	6.8	3
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30	Effect of axisymmetric magnetic fields on heat flow and interfaces in floating-zone silicon crystal growth. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>1998</b> , 6, 423-445	2	3
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27	Three-dimensional phase field modelling of twin nucleation during directional solidification of multi-crystalline silicon. <i>Journal of Crystal Growth</i> , <b>2019</b> , 520, 33-41	1.6	2
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25	Adaptive phase field modeling of grain boundary diffusion. <i>Journal of Crystal Growth</i> , <b>2011</b> , 318, 46-50	1.6	2
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10	Experimental study on floating-zone tube growth and comparison with computer simulation. <i>Journal of Crystal Growth</i> , <b>1996</b> , 165, 447-454	1.6
9	In situ visualization of traveling solvent growth of thin Si0.7Ge0.3 crystals. <i>Journal of Crystal Growth</i> , <b>2022</b> , 581, 126511	1.6
8	Growth of Multicrystalline Silicon: The High-Performance Casting Method 2018, 1-17	
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5	Convection and Control in Melt Growth of Bulk Crystals <b>2010</b> , 1215-1242	
4	Solar silicon <b>2019</b> , 57-87	
3	In situ visualization of silicon wafer casting on silicon carbide as low nucleation undercooling substrate. <i>Journal of Crystal Growth</i> , <b>2021</b> , 566-567, 126142	1.6
2	Monitoring Hydrogen Peroxide Using an Electrochemical Method During Metal Assisted Chemical Etching for Silicon. <i>Silicon</i> ,1	2.4
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