

# Nobuyuki Imaishi

## List of Publications by Year in descending order

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48  
papers

1,443  
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times ranked

581  
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#	ARTICLE	IF	CITATIONS
1	Effect of TiO <sub>2</sub> thin film thickness and specific surface area by low-pressure metalorganic chemical vapor deposition on photocatalytic activities. <i>Applied Catalysis B: Environmental</i> , 2005, 55, 253-257.	20.2	121
2	Three-dimensional oscillatory flow in a thin annular pool of silicon melt. <i>Journal of Crystal Growth</i> , 2004, 260, 28-42.	1.5	91
3	Marangoni convection during steam absorption into aqueous LiBr solution with surfactant.. <i>Journal of Chemical Engineering of Japan</i> , 1991, 24, 209-214.	0.6	84
4	Three-dimensional thermocapillary buoyancy flow of silicone oil in a differentially heated annular pool. <i>International Journal of Heat and Mass Transfer</i> , 2007, 50, 872-880.	4.8	81
5	Reaction analysis for ZrO <sub>2</sub> and Y <sub>2</sub> O <sub>3</sub> thin film growth by low-pressure metalorganic chemical vapor deposition using $\beta^2$ -diketonate complexes. <i>Journal of Crystal Growth</i> , 1995, 147, 130-146.	1.5	78
6	Temperature fluctuations of the Marangoni flow in a liquid bridge of molten silicon under microgravity on board the TR-IA-4 rocket. <i>Journal of Crystal Growth</i> , 1998, 186, 85-94.	1.5	76
7	Effect of internal radiation within crystal and melt on Czochralski crystal growth of oxide. <i>International Journal of Heat and Mass Transfer</i> , 1995, 38, 2707-2714.	4.8	71
8	Three-dimensional numerical simulation of thermocapillary flow of moderate Prandtl number fluid in an annular pool. <i>Journal of Crystal Growth</i> , 2003, 259, 374-387.	1.5	66
9	Global Analysis of Heat Transfer in CZ Crystal Growth of Oxide.. <i>Journal of Chemical Engineering of Japan</i> , 1994, 27, 25-31.	0.6	50
10	Hydrothermal waves in differentially heated shallow annular pools of silicone oil. <i>Journal of Crystal Growth</i> , 2006, 290, 280-291.	1.5	47
11	Global simulation of a silicon Czochralski furnace. <i>Journal of Crystal Growth</i> , 2002, 234, 32-46.	1.5	46
12	Experimental study on transition to oscillatory thermocapillary flow in a low Prandtl number liquid bridge. <i>Journal of Crystal Growth</i> , 2001, 233, 399-407.	1.5	45
13	Epitaxial growth of lithium niobate film using metalorganic chemical vapor deposition. <i>Thin Solid Films</i> , 2007, 515, 4975-4979.	1.8	38
14	Effect of pool rotation on thermocapillary convection in shallow annular pool of silicone oil. <i>Journal of Crystal Growth</i> , 2006, 294, 474-485.	1.5	37
15	Numerical study on Czochralski growth of oxide single crystals. <i>Journal of Crystal Growth</i> , 1991, 109, 94-98.	1.5	36
16	Preparation, crystal structure, and photocatalytic activity of TiO <sub>2</sub> films by chemical vapor deposition. <i>Korean Journal of Chemical Engineering</i> , 2001, 18, 867-872.	2.7	34
17	Macro- and micro-scale simulation of growth rate and composition in MOCVD of yttria-stabilized zirconia. <i>Journal of Crystal Growth</i> , 2002, 241, 352-362.	1.5	30
18	Effect of pool rotation on flow pattern transition of silicon melt thermocapillary flow in a slowly rotating shallow annular pool. <i>International Journal of Heat and Mass Transfer</i> , 2008, 51, 1810-1817.	4.8	29

#	ARTICLE	IF	CITATIONS
19	Theoretical study of the flow and temperature fields in cz single crystal growth.. Journal of Chemical Engineering of Japan, 1988, 21, 184-191.	0.6	27
20	Gravitational Effects on Mixing and Growth Morphology of an In <sub>0.5</sub> Ga <sub>0.5</sub> System. Crystal Research and Technology, 1996, 31, 969-978.	1.3	23
21	Three-dimensional thermocapillary-buoyancy flow in a shallow molten silicon pool with Cz configuration. International Journal of Heat and Mass Transfer, 2005, 48, 1952-1960.	4.8	23
22	Thermocapillary flow in a shallow molten silicon pool with Czochralski configuration. Journal of Crystal Growth, 2004, 266, 88-95.	1.5	22
23	Sensitivity analyses of the thermophysical properties of silicon melt and crystal. Measurement Science and Technology, 2005, 16, 457-466.	2.6	22
24	Influence of Buoyancy Force on Thermocapillary Convection Instability in the Differentially Heated Annular Pools of Silicon Melt. Microgravity Science and Technology, 2009, 21, 289-297.	1.4	21
25	Global analysis of a small Czochralski furnace with rotating crystal and crucible. Journal of Crystal Growth, 2003, 255, 81-92.	1.5	20
26	Oxygen-transport phenomena in a small silicon Czochralski furnace. Journal of Crystal Growth, 2004, 267, 466-474.	1.5	19
27	Micro/macro modeling of CVD synthesis. Journal of Crystal Growth, 1997, 180, 680-690.	1.5	18
28	Global simulation of a silicon Czochralski furnace in an axial magnetic field. International Journal of Heat and Mass Transfer, 2003, 46, 2887-2898.	4.8	17
29	Thermocapillary convection in a differentially heated annular pool for moderate Prandtl number fluid. International Journal of Thermal Sciences, 2004, 43, 587-593.	4.9	17
30	Stability of Thermocapillary Convection in Rotating Shallow Annular Pool of Silicon Melt. Microgravity Science and Technology, 2010, 22, 315-320.	1.4	14
31	Three-dimensional numerical simulation of oscillatory Marangoni flow in half-zone of low-Pr fluids. , 1999, , .		13
32	Bifurcation of thermocapillary convection in a shallow annular pool of silicon melt. Acta Mechanica Sinica/Lixue Xuebao, 2007, 23, 43-48.	3.4	13
33	Thermocapillary Convection and Buoyant-Thermocapillary Convection in the Annular Pools of Silicon Melt and Silicone Oil. Journal of Superconductivity and Novel Magnetism, 2010, 23, 1169-1172.	1.8	13
34	Marangoni flow in floating half zone of molten tin. International Journal of Heat and Mass Transfer, 2015, 83, 575-585.	4.8	12
35	Global analysis of heat transfer in Si CZ furnace with specular and diffuse surfaces. Journal of Crystal Growth, 1998, 191, 413-420.	1.5	11
36	The growth of LiNbO <sub>3</sub> thin film by LPMOCVD using $\beta^2$ -diketonate complexes. Korean Journal of Chemical Engineering, 1999, 16, 229-233.	2.7	11

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37	Effects of temperature coefficient of surface tension on oxygen transport in a small silicon Cz furnace. <i>Journal of Crystal Growth</i> , 2004, 266, 48-53.	1.5	11
38	Observation of Marangoni convection in a half-zone silicon melt. <i>Advances in Space Research</i> , 1999, 24, 1417-1421.	2.6	10
39	Thermocapillary Convection Instability in Shallow Annular Pools by Linear Stability Analysis. <i>Journal of Superconductivity and Novel Magnetism</i> , 2010, 23, 1185-1188.	1.8	9
40	Effect of interface inversion on thermal stress field in CZ crystal growth of oxide.. <i>Journal of Chemical Engineering of Japan</i> , 1990, 23, 286-290.	0.6	7
41	Marangoni flow of molten silicon. <i>Acta Astronautica</i> , 2001, 48, 71-78.	3.2	7
42	Hydrothermal waves in rotating annular pools of silicon melt. <i>Microgravity Science and Technology</i> , 2007, 19, 159-160.	1.4	6
43	Thermocapillary convection in a shallow annular pool heated from inner wall. <i>Microgravity Science and Technology</i> , 2007, 19, 104-105.	1.4	4
44	Effect of a funnel-shaped radiation shield on the characteristics of a silicon CZ furnace.. <i>Journal of Chemical Engineering of Japan</i> , 1992, 25, 84-89.	0.6	3
45	Bifurcation and Hysteresis of Flow Pattern Transition in a Shallow Molten Silicon Pool with Cz Configuration. <i>Numerical Heat Transfer; Part A: Applications</i> , 2007, 51, 211-223.	2.1	3
46	Experimental investigation on hydrothermal wave in a shallow annular pool. <i>Microgravity Science and Technology</i> , 2007, 19, 161-162.	1.4	3
47	A theoretical study of the temperature field in a pancake CVD reactor.. <i>Journal of Chemical Engineering of Japan</i> , 1992, 25, 692-697.	0.6	2
48	Numerical Simulation of Silicon Epitaxial Growth in a Single-wafer CVD Reactor.. <i>Kagaku Kogaku Ronbunshu</i> , 2004, 30, 22-28.	0.3	2