Wolfram Miller

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4181830/publications.pdf

Version: 2024-02-01

70 papers	1,407 citations	411340 20 h-index	388640 36 g-index
70 all docs	70 docs citations	70 times ranked	1279 citing authors

#	Article	IF	Citations
1	Toward Precise n-Type Doping Control in MOVPE-Grown Î²-Ga2O3 Thin Films by Deep-Learning Approach. Crystals, 2022, 12, 8.	1.0	7
2	Machine learning supported analysis of MOVPE grown Î²-Ga2O3 thin films on sapphire. Journal of Crystal Growth, 2022, 592, 126737.	0.7	7
3	Quantitative dislocation multiplication law for Ge single crystals based on discrete dislocation dynamics simulations. Computational Materials Science, 2022, 211, 111537.	1.4	5
4	Numerical Modeling of Heat Transfer and Thermal Stress at the Czochralski Growth of Neodymium Scandate Single Crystals. Crystal Research and Technology, 2021, 56, 2000106.	0.6	3
5	Impact of chamber pressure and Si-doping on the surface morphology and electrical properties of homoepitaxial (100) Î²-Ga₂O₃thin films grown by MOVPE. Journal Physics D: Applied Physics, 2021, 54, 034003.	1.3	26
6	Technology development of high purity germanium crystals for radiation detectors. Journal of Crystal Growth, 2020, 532, 125396.	0.7	18
7	Step flow growth of Î²-Ga2O3 thin films on vicinal (100) Î²-Ga2O3 substrates grown by MOVPE. Applied Physics Letters, 2020, 116, .	1.5	59
8	The History of the German Association for Crystal Growth. Crystal Research and Technology, 2020, 55, 1900202.	0.6	0
9	The 50th Anniversary of the German Association for Crystal Growth, DGKK. Crystal Research and Technology, 2020, 55, 2000009.	0.6	0
10	Quasi-Transient Calculation of Czochralski Growth of Ge Crystals Using the Software Elmer. Crystals, 2020, 10, 18.	1.0	7
11	Kinetic Monte Carlo model for homoepitaxial growth of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>Ga</mml:mi></mml:mrow><mml:mn>2</mml:mn></mml:msub><mml:mrow><mml:mi mathvariant="normal">O</mml:mi></mml:mrow><mml:mn>3</mml:mn></mml:math>. Physical Review Research, 2020, 2, .	1.3	10
12	Effect of misorientation angle of grain boundary on the interaction with Î£3 boundary at crystal/melt interface of multicrystalline silicon. Materialia, 2019, 7, 100357.	1.3	5
13	Modeling anisotropic shape evolution during Czochralski growth of oxide single crystals. Journal of Crystal Growth, 2019, 509, 71-86.	0.7	3
14	Simulation of grain evolution in solidification of silicon on meso-scopic scale. Computational Materials Science, 2019, 159, 432-439.	1.4	2
15	In situ observation of interaction between grain boundaries during directional solidification of Si. Scripta Materialia, 2018, 148, 37-41.	2.6	15
16	Forced convection by Inclined Rotary Bridgman method for growth of CoSb3 and FeSb2 single crystals from Sb-rich solutions. Journal of Crystal Growth, 2017, 475, 346-353.	0.7	3
17	Micro structures in the grain evolution during solidification of silicon: Phase field calculations. Acta Materialia, 2017, 140, 1-9.	3.8	9
18	Numerical Modelling of the Czochralski Growth of Î²-Ga2O3. Crystals, 2017, 7, 26.	1.0	46

#	Article	IF	Citations
19	The large enriched germanium experiment for neutrinoless double beta decay (LEGEND). AIP Conference Proceedings, 2017, , .	0.3	126
20	Simulation of Epitaxial Growth byÂMeans of Density Functional Theory, Kinetic Monte Carlo, andÂPhase Field Methods. , 2015, , 521-559.		1
21	Fast kinetic Monte Carlo simulation and statistics of quantum dot arrays. Surface Science, 2014, 621, 175-183.	0.8	5
22	Solidification of multicrystalline siliconâ€"simulation of micro-structures. Journal of Crystal Growth, 2014, 385, 127-133.	0.7	13
23	Crystallization of 640kg mc-silicon ingots under traveling magnetic field by using a heater-magnet module. Journal of Crystal Growth, 2013, 365, 54-58.	0.7	36
24	Grain growth of silicon. Acta Materialia, 2012, 60, 6755-6761.	3.8	16
25	Influence of travelling magnetic fields on Sâ€"L interface shapes of materials with different electrical conductivities. Journal of Crystal Growth, 2012, 338, 208-213.	0.7	21
26	Kinetic Monte Carlo simulation of the wetting layer in Stranskiâ€"Krastanov heteroepitaxial growth. Computational Materials Science, 2012, 60, 176-180.	1.4	14
27	Numerical modelling of Czochralski growth of quadratic silicon crystals by means of a travelling magnetic field. Crystal Research and Technology, 2012, 47, 285-292.	0.6	7
28	Numerical studies of flow patterns during Czochralski growth of square-shaped Si crystals. Journal of Crystal Growth, 2011, 318, 244-248.	0.7	7
29	Some remarks on the undercooling of the Si(1 1 1) facet and the â€œMonte Carlo modeling of silicon crystal growthâ€•by Kirk M. Beatty & Kenneth A. Jackson, J. Crystal Growth 211 (2000) 13. Journal of Crystal Growth, 2011, 325, 101-103.	0.7	21
30	A new method for calculation of island-size distribution in submonolayer epitaxial growth. Applied Mathematical Modelling, 2011, 35, 1331-1336.	2.2	6
31	The use of heater-magnet module for Czochralski growth of PV silicon crystals with quadratic cross section. Journal of Crystal Growth, 2011, 318, 249-254.	0.7	25
32	Numerical study on improved mixing in silicon melts by double-frequency TMF. Journal of Crystal Growth, 2011, 318, 275-279.	0.7	28
33	Homogeneous TMF melt-solution mixing during dipping LPE of (Hg,Cd)Te layers. Journal of Crystal Growth, 2011, 318, 1034-1038.	0.7	4
34	Three-dimensional calculations of facets during Czochralski crystal growth. Journal of Crystal Growth, 2010, 312, 989-996.	0.7	8
35	Numerical study on transport phenomena in a directional solidification process in the presence of travelling magnetic fields. Journal of Crystal Growth, 2010, 312, 1407-1410.	0.7	32
36	Oxygen adatoms at SrTiO3(001): A density-functional theory study. Surface Science, 2010, 604, 372-376.	0.8	20

#	Article	IF	Citations
37	Numerical simulations of bulk crystal growth on different scales: silicon and GeSi. Physica Status Solidi (B): Basic Research, 2010, 247, 855-869.	0.7	13
38	Water adsorption and dissociation on<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>SrTiO</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> A density functional theory study. Physical Review B, 2010, 81, .	3.1	67
39	Evolution of cellular structures during<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Ge</mml:mtext></mml:mrow><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> growth by means of a modified phase-field method. Physical Review E, 2010, 81, 051604.	0.8	12
40	A NEW KINETIC MONTE CARLO METHOD FOR THE THIN FILM GROWTH OF PEROVSKITES. Surface Review and Letters, 2009, 16, 909-916.	0.5	4
41	First atomistic studies of epitaxial growth of Na_{0.5}Bi_{0.5}TiO₃ on SrTiO₃. Physica Status Solidi (B): Basic Research, 2008, 245, 2649-2656.	0.7	6
42	Cellular growth of single crystals. Journal of Crystal Growth, 2008, 310, 1405-1409.	0.7	11
43	Numerical simulation of Czochralski crystal growth under the influence of a traveling magnetic field generated by an internal heater-magnet module (HMM). Journal of Crystal Growth, 2008, 310, 1523-1532.	0.7	22
44	Phase-field calculations of pattern formation in solidification of binary alloys. Philosophical Magazine Letters, 2007, 87, 855-862.	0.5	0
45	Lattice gas modeling of nanowhisker growth. Physical Review E, 2007, 76, 031601.	0.8	6
46	Growth kinetics by means of phase-field methods in applied crystal growth. Journal of Crystal Growth, 2007, 303, 95-99.	0.7	9
47	Lattice Boltzmann phase-field modelling of binary-alloy solidification. Physica A: Statistical Mechanics and Its Applications, 2006, 362, 78-83.	1.2	49
48	Numerical study of the development of cellular structure during the Czochralski growth of GeSi bulk crystals. Journal of Crystal Growth, 2005, 275, e67-e71.	0.7	2
49	A multi-relaxation lattice kinetic method for passive scalar diffusion. Journal of Computational Physics, 2005, 206, 453-462.	1.9	94
50	Phase-field lattice kinetic scheme for the numerical simulation of dendritic growth. Physical Review E, 2005, 72, 066705.	0.8	61
51	3D parallel calculations of dendritic growth with the lattice Boltzmann method. Advances in Parallel Computing, 2004, 13, 291-296.	0.3	2
52	Axisymmetric and 3D calculations of melt flow during VCz growth. Journal of Crystal Growth, 2004, 266, 60-66.	0.7	1
53	Growth kinetics and melt convection. Journal of Crystal Growth, 2004, 266, 283-288.	0.7	42
54	CRYSTAL GROWTH KINETICS AND FLUID FLOW. International Journal of Modern Physics B, 2003, 17, 227-230.	1.0	9

#	Article	IF	Citations
55	A Lattice Boltzmann Method for the Mesoscopic Calculation of Anisotropic Crystal Growth. Lecture Notes in Computational Science and Engineering, 2003, , 136-141.	0.1	0
56	A Lattice Boltzmann Model for Anisotropic Crystal Growth from Melt. Journal of Statistical Physics, 2002, 107, 173-186.	0.5	85
57	Lattice Boltzmann Model for Anisotropic Liquid-Solid Phase Transition. Physical Review Letters, 2001, 86, 3578-3581.	2.9	147
58	Using a Phase-field-like Approach for the Calculation of Melt Flow and Interface Shape during Czochralski Growth. Crystal Research and Technology, 2001, 36, 675.	0.6	2
59	Numerical Simulation of Temperature and Flow Field in the Melt for the Vapour-pressure- controlled Czochralski Growth of GaAs. Crystal Research and Technology, 2001, 36, 685.	0.6	2
60	A numerical investigation of the effects of iso- and counter-rotation on the shape of the VCz growth interface. Journal of Crystal Growth, 2001, 230, 143-147.	0.7	11
61	Numerical modeling at the IKZ: an overview and outlook. Journal of Crystal Growth, 2001, 230, 1-9.	0.7	12
62	The lattice Boltzmann method: a new tool for numerical simulation of the interaction of growth kinetics and melt flow. Journal of Crystal Growth, 2001, 230, 263-269.	0.7	66
63	Convection and Interface Shape During Czochralski Crystal Growth: A Numerical Study. , 2001, , 227-234.		1
64	Influence of melt convection on the interface during Czochralski crystal growth. Solid-State Electronics, 2000, 44, 825-830.	0.8	5
65	Analysis of Fluid Flow and Heat Transfer in a Gas Phase Crystal Growth Furnace. Crystal Research and Technology, 1999, 34, 441-448.	0.6	3
66	Melt Convection in a Czochralski Crucible. Crystal Research and Technology, 1999, 34, 481-489.	0.6	8
67	Numerical Study of Flow and Temperature Patterns During the Growth of GaPO4 Crystals Using the Lattice-Boltzmann Method. International Journal of Modern Physics C, 1998, 09, 1567-1576.	0.8	4
68	Flow in the driven cavity calculated by the lattice Boltzmann method. Physical Review E, 1995, 51, 3659-3669.	0.8	27
69	Renormalization of charge due to magnetic monopoles in the Villain form of U(1) lattice gauge theory. Physical Review D, 1988, 38, 1239-1259.	1.6	2
70	Renormalization of charge in Villain lattice gauge theory. Physical Review Letters, 1986, 56, 11-13.	2.9	7