

Michael O Thompson

List of Publications by Year in descending order

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198
papers

5,624
citations

109137

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69
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198
docs citations

198
times ranked

3636
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural, Thermal, and Mechanical Characterization of a Thermally Conductive Polymer Composite for Heat Exchanger Applications. <i>Polymers</i> , 2021, 13, 1970.	2.0	7
2	Rapid Identification of Synthetic Routes to Functional Metastable Phases Using X-ray Probed Laser Anneal Mapping (XPLAM) Time-Resolved Temperature Quench Maps. <i>Chemistry of Materials</i> , 2021, 33, 4328-4336.	3.2	7
3	Thermal stability of epitaxial In_{\pm} -Ga ₂ O ₃ and (Al,Ga) ₂ O ₃ layers on m-plane sapphire. <i>Applied Physics Letters</i> , 2021, 119, .	1.5	30
4	Autonomous materials synthesis via hierarchical active learning of nonequilibrium phase diagrams. <i>Science Advances</i> , 2021, 7, eabg4930.	4.7	26
5	Block Copolymer Self-Assembly-Directed and Transient Laser Heating-Enabled Nanostructures toward Phononic and Photonic Quantum Materials. <i>ACS Nano</i> , 2020, 14, 11273-11282.	7.3	16
6	Optical Identification of Materials Transformations in Oxide Thin Films. <i>ACS Combinatorial Science</i> , 2020, 22, 887-894.	3.8	4
7	Chemical reaction and diffusion kinetics during laser-induced submillisecond heating for lithographic applications. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2019, 37, 041601.	0.6	2
8	Enhanced Thermal Stability of Low- κ Ethyl-Bridged Organosilicas Using Laser Spike Annealing. <i>ACS Applied Electronic Materials</i> , 2019, 1, 1243-1250.	2.0	2
9	Synthesis and Formation Mechanism of All-Organic Block Copolymer-Directed Templating of Laser-Induced Crystalline Silicon Nanostructures. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 42777-42785.	4.0	15
10	Ultrafast Self-Assembly of Sub-10 nm Block Copolymer Nanostructures by Solvent-Free High-Temperature Laser Annealing. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 31317-31324.	4.0	33
11	Ab initio modeling of vacancies, antisites, and Si dopants in ordered InGaAs. <i>Journal of Applied Physics</i> , 2017, 121, .	1.1	9
12	Ab Initio Studies of the Diffusion of Intrinsic Defects and Silicon Dopants in Bulk InAs. <i>Langmuir</i> , 2017, 33, 11484-11489.	1.6	5
13	Finite element and analytical solutions for van der Pauw and four-point probe correction factors when multiple non-ideal measurement conditions coexist. <i>Review of Scientific Instruments</i> , 2017, 88, 094704.	0.6	18
14	Preferred diffusional pathways of intrinsic defects and silicon dopants in an ordered phase of In _{0.5} Ga _{0.5} As: A first-principles study. <i>Acta Materialia</i> , 2017, 140, 39-45.	3.8	5
15	Activation of Si implants into InAs characterized by Raman scattering. <i>Journal of Applied Physics</i> , 2016, 119, 095705.	1.1	3
16	Initial performance studies of a wearable brain positron emission tomography camera based on autonomous thin-film digital Geiger avalanche photodiode arrays. <i>Journal of Medical Imaging</i> , 2016, 4, 011003.	0.8	7
17	Effects of RF Sputtering Parameters on C-axis Aligned Crystalline (CAAC) InGaZnO ₄ Films Using Design of Experiment (DOE) Approach. <i>ECS Journal of Solid State Science and Technology</i> , 2016, 5, P368-P375.	0.9	6
18	Lateral Temperature-Gradient Method for High-Throughput Characterization of Material Processing by Millisecond Laser Annealing. <i>ACS Combinatorial Science</i> , 2016, 18, 548-558.	3.8	19

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19	Kinetics of Block Copolymer Phase Segregation during Sub-millisecond Transient Thermal Annealing. <i>Macromolecules</i> , 2016, 49, 6462-6470.	2.2	23
20	1/4-Rainbow: CdSe Nanocrystal Photoluminescence Gradients via Laser Spike Annealing for Kinetic Investigations and Tunable Device Design. <i>Nano Letters</i> , 2016, 16, 967-972.	4.5	2
21	Laser Spike Annealing of DSA Photoresists. <i>Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]</i> , 2015, 28, 631-634.	0.1	10
22	High mobility, dual layer, c-axis aligned crystalline/amorphous IGZO thin film transistor. <i>Applied Physics Letters</i> , 2015, 107, 183503.	1.5	40
23	45.2: Effects of RF Sputtering Parameters and Film Composition on c-Axis Aligned Crystalline (CAAC) IGZO Films. <i>Digest of Technical Papers SID International Symposium</i> , 2015, 46, 677-680.	0.1	21
24	21.4: Deposition Conditions and HRTEM Characterization of CAAC IGZO. <i>Digest of Technical Papers SID International Symposium</i> , 2015, 46, 308-311.	0.1	25
25	(Invited) Dopant Activation and Deactivation in InGaAs during Sub-Millisecond Thermal Annealing. <i>ECS Transactions</i> , 2015, 66, 117-124.	0.3	3
26	Effect of Laser Annealing on the Structure of Amorphous Porous SiCOH Materials. <i>Journal of Physical Chemistry C</i> , 2015, 119, 12616-12624.	1.5	5
27	Chemical Etch Rate and X-Ray Structure of Reactive Sputtered c-Axis Aligned Crystalline In _x Ga _y Zn _z O ₄ Films. <i>ECS Journal of Solid State Science and Technology</i> , 2015, 4, Q43-Q45.	0.9	24
28	Transient laser heating induced hierarchical porous structures from block copolymer "directed self-assembly. <i>Science</i> , 2015, 349, 54-58.	6.0	145
29	High mobility amorphous InGaZnO ₄ thin film transistors formed by CO ₂ laser spike annealing. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	24
30	Processing "Structure" Property Relationships in Laser-Annealed PbSe Nanocrystal Thin Films. <i>ACS Nano</i> , 2015, 9, 4096-4102.	7.3	8
31	Energetics of neutral Si dopants in InGaAs: An <i>ab initio</i> and semiempirical Tersoff model study. <i>Physical Review B</i> , 2015, 91, .	1.1	11
32	Understanding of PS- <i>b</i> -PMMA phase segregation under laser-induced millisecond thermal annealing. <i>Proceedings of SPIE</i> , 2015, , .	0.8	4
33	Control of polystyrene- <i>block</i> -poly(methyl methacrylate) directed self-assembly by laser-induced millisecond thermal annealing. <i>Journal of Micro/ Nanolithography, MEMS, and MOEMS</i> , 2015, 14, 031205.	1.0	10
34	Characterization of reactively sputtered c-axis aligned nanocrystalline InGaZnO ₄ . <i>Applied Physics Letters</i> , 2014, 105, .	1.5	42
35	Control of PS- <i>b</i> -PMMA directed self-assembly registration by laser induced millisecond thermal annealing. <i>Proceedings of SPIE</i> , 2014, , .	0.8	11
36	Controlled roughness reduction of patterned resist polymers using laser-induced sub-millisecond heating. <i>Journal of Materials Chemistry C</i> , 2014, 2, 9115-9121.	2.7	5

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37	Laser-Induced Sub-millisecond Heating Reveals Distinct Tertiary Ester Cleavage Reaction Pathways in a Photolithographic Resist Polymer. ACS Nano, 2014, 8, 5746-5756.	7.3	23
38	Line width roughness reduction by rational design of photoacid generator for sub-millisecond laser post-exposure bake. , 2014, , .		2
39	Deposited low temperature silicon GHz modulator. Optics Express, 2013, 21, 26688.	1.7	16
40	Line edge roughness of high deprotection activation energy photoresist by using sub-millisecond post exposure bake. , 2013, , .		4
41	Experimental determination of thermal profiles during laser spike annealing with quantitative comparison to 3-dimensional simulations. Applied Physics Letters, 2012, 100, .	1.5	19
42	Deprotection reaction kinetics in chemically amplified photoresists determined by sub-millisecond post exposure bake. Proceedings of SPIE, 2012, , .	0.8	1
43	Investigation of acid diffusion during laser spike annealing with systematically designed photoacid generators. Proceedings of SPIE, 2012, , .	0.8	5
44	Kinetic Rates of Thermal Transformations and Diffusion in Polymer Systems Measured during Sub-millisecond Laser-Induced Heating. ACS Nano, 2012, 6, 5830-5836.	7.3	31
45	Characterization of dopant diffusion, mobility, activation and deactivation effects for n-type dopants with long-dwell laser spike annealing. , 2011, , .		2
46	Colloidal Self-Assembly-Directed Laser-Induced Non-Close-Packed Crystalline Silicon Nanostructures. ACS Nano, 2011, 5, 7960-7966.	7.3	15
47	Pulsed Laser Annealing of Thin Films of Self-Assembled Nanocrystals. ACS Nano, 2011, 5, 7010-7019.	7.3	26
48	A New System for the Rapid Collection of Large Numbers of Developmentally Staged Zebrafish Embryos. PLoS ONE, 2011, 6, e21715.	1.1	53
49	Time Dependent Behavior of Chemically Amplified Resist Characterized under Sub-millisecond Post Exposure Bake. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2011, 24, 487-490.	0.1	7
50	Excimer-Laser-Induced Melting and Solidification of PECVD a-Si films under Partial-Melting Conditions. Materials Research Society Symposia Proceedings, 2011, 1321, 197.	0.1	1
51	Two-stage Laser Thermal Processing of Nanoparticle Inks on Flexible Substrates for High Performance Electronics. Materials Research Society Symposia Proceedings, 2011, 1340, 1.	0.1	1
52	LWR reduction and flow of chemically amplified resist patterns during sub-millisecond heating. Proceedings of SPIE, 2011, , .	0.8	11
53	Addressing challenges in lithography using sub-millisecond post exposure bake of chemically amplified resists. , 2011, , .		4
54	Block Copolymer Self-Assemblyâ€“Directed Single-Crystal Homo- and Heteroepitaxial Nanostructures. Science, 2010, 330, 214-219.	6.0	108

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55	Quantifying electronic charge trap states and the effect of imprint on ferroelectric poly(vinylidene fluoride) thin films. <i>Journal of Applied Physics</i> , 2010, 105, 054112.	1.1	12
56	Sub-millisecond post exposure bake of chemically amplified resists by CO ₂ laser heat treatment. <i>Proceedings of SPIE</i> , 2010, .	0.8	9
57	A 3D model for simulating temperature and stress profiles during sub-millisecond laser spike annealing. , 2010, .		3
58	Characterization of dopant activation, mobility and diffusion in advanced millisecond laser spike annealing. , 2010, .		1
59	Characterizing trapped charge dynamics in imprinted poly(vinylidene fluoride-trifluoroethylene) ferroelectric thin films using the fast ramp thermally stimulated current technique. <i>Journal of Applied Physics</i> , 2009, 105, 054112.	1.1	11
60	Submillisecond post-exposure bake of chemically amplified resists by CO ₂ laser spike annealing. <i>Journal of Vacuum Science & Technology B</i> , 2009, 27, 3020.	1.3	5
61	Early Insulin Therapy in Very-Low-Birth-Weight Infants. <i>New England Journal of Medicine</i> , 2008, 359, 1873-1884.	13.9	264
62	Direct melt processing of pentacene at temperatures above 1000°C by pulsed laser irradiation. <i>Applied Physics Letters</i> , 2008, 93, .	1.5	5
63	A fast ramp rate thermally stimulated current technique to quantify electronic charge dynamics in thin films. <i>Review of Scientific Instruments</i> , 2008, 79, 043906.	0.6	4
64	P(VDF-TrFE) ferroelectrics: Integration in hybrid and thin-film memories. , 2008, .		0
65	Molecular Dynamics Study of Explosive Crystallization of SiGe and Boron-Doped SiGe Alloys. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 5628-5639.	1.8	13
66	Carbon fibers as a novel material for high-performance microelectromechanical systems (MEMS). <i>Journal of Micromechanics and Microengineering</i> , 2006, 16, 1403-1407.	1.5	11
67	Nanocrystalline barium titanate films on flexible plastic substrates via pulsed laser annealing. <i>Applied Physics Letters</i> , 2006, 89, 202910.	1.5	20
68	Steam pressure induced in crack-like cavities in moisture saturated polymer matrix composites during rapid heating. <i>International Journal of Solids and Structures</i> , 2005, 42, 1055-1072.	1.3	20
69	Atomistic computer simulation of explosive crystallization in pure silicon and germanium. <i>Physical Review B</i> , 2004, 70, .	1.1	36
70	Time-resolved reflectance studies of silicon during laser thermal processing of amorphous silicon gates on ultrathin gate oxides. <i>Journal of Applied Physics</i> , 2004, 95, 6048-6053.	1.1	2
71	Reduction of Polysilicon Gate Depletion Effect in NMOS Devices Using Laser Thermal Processing. <i>Electrochemical and Solid-State Letters</i> , 2004, 7, G25.	2.2	1
72	Quantifying the Role of Electronic Charge Trap States on Imprint Behavior in Ferroelectric Poly(vinylidene fluoride-trifluoroethylene) (P(VDF-TrFE)) Thin Films. <i>Materials Research Society Symposia Proceedings</i> , 2004, 830, 113.	0.1	0

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73	Solute diffusion in liquid nickel measured by pulsed ion beam melting. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2004, 35, 2803-2807.	1.1	26
74	Room temperature indium tin oxide by XeCl excimer laser annealing for flexible display. Thin Solid Films, 2004, 460, 291-294.	0.8	44
75	Laser-Crystallized High Quality ITO on Plastic Substrates for Flexible Displays. Materials Research Society Symposia Proceedings, 2003, 769, 1011.	0.1	1
76	Laser-induced lateral epitaxy in fully depleted silicon-on-insulator junctions. Applied Physics Letters, 2002, 81, 2238-2240.	1.5	12
77	Laser-induced amorphization of silicon during pulsed-laser irradiation of TiN/Ti/polycrystalline silicon/SiO ₂ /silicon. Applied Physics Letters, 2002, 81, 3786-3788.	1.5	18
78	Thermodynamic and kinetic studies of laser thermal processing of heavily boron-doped amorphous silicon using molecular dynamics. Journal of Applied Physics, 2002, 92, 2412-2419.	1.1	17
79	6.4: Crystallization of Ultra-low Temperature ITO by XeCl Excimer Laser Annealing. Digest of Technical Papers SID International Symposium, 2002, 33, 57.	0.1	1
80	Combinatorial Laser Processing Of Dielectric/Ferroelectric Thin and Thick Films. Materials Research Society Symposia Proceedings, 2002, 748, 1.	0.1	2
81	Bulk diffusion measurements to study the effectiveness of barrier layers: I. Mathematical treatment. Journal of Applied Physics, 2001, 90, 3799-3809.	1.1	6
82	Effect of Excimer Laser Annealing on Ultra-low Temperature Gate Dielectrics. Materials Research Society Symposia Proceedings, 2001, 685, 1.	0.1	3
83	Laser Thermal Induced Crystallization for 20 nm Device Structures. Materials Research Society Symposia Proceedings, 2001, 669, 1.	0.1	3
84	Silicide Formation by Pulsed Excimer Laser Annealing. Materials Research Society Symposia Proceedings, 2001, 685, 1.	0.1	0
85	Liquid titanium solute diffusion measured by pulsed ion-beam melting. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2001, 32, 2969-2974.	1.1	15
86	Deactivation kinetics of supersaturated boron:silicon alloys. Journal of Applied Physics, 2001, 90, 2262-2268.	1.1	16
87	Morphological Instabilities during Explosive Crystallization of Germanium Films. Materials Research Society Symposia Proceedings, 2000, 648, 1.	0.1	3
88	In-beam growth and rearrangement of nanoparticles in insulators induced by high-current negative copper ions. Vacuum, 2000, 58, 60-78.	1.6	35
89	Complete experimental test of kinetic models for rapid alloy solidification. Acta Materialia, 2000, 48, 4797-4811.	3.8	122
90	Experimental and numerical investigations of a hydrogen-assisted laser-induced materials transfer procedure. Journal of Applied Physics, 2000, 87, 3537-3546.	1.1	21

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91	Spatially selective materials deposition by hydrogen-assisted laser-induced transfer. Applied Physics Letters, 2000, 77, 307-309.	1.5	7
92	Laser-assisted transfer of silicon by explosive hydrogen release. Applied Physics Letters, 1999, 74, 2170-2172.	1.5	26
93	Laser crystallization and structural characterization of hydrogenated amorphous silicon thin films. Journal of Applied Physics, 1999, 85, 7914-7918.	1.1	47
94	Characterization and modeling of the ablation plumes formed by intense-pulsed ion beam impact on solid targets. Journal of Applied Physics, 1999, 85, 713-721.	1.1	14
95	Surface modification of ultra-high strength polyethylene fibers for enhanced adhesion to epoxy resins using intense pulsed high-power ion beam. Journal of Adhesion Science and Technology, 1999, 13, 1331-1342.	1.4	15
96	A new laser Printing technique for the fabrication of thin film transistors. Materials Research Society Symposia Proceedings, 1999, 558, 213.	0.1	0
97	Experimental test of morphological stability theory for a planar interface during rapid solidification. Physical Review B, 1998, 58, 189-199.	1.1	55
98	Improvement of surface properties by modification and alloying with high-power ion beams. Physics of Plasmas, 1998, 5, 2144-2150.	0.7	31
99	The interstitial fraction of diffusivity of common dopants in Si. Applied Physics Letters, 1997, 71, 3862-3864.	1.5	75
100	Numerical Modeling and Experimental Measurements of Pulsed Ion Beam Surface Treatment. Materials Research Society Symposia Proceedings, 1997, 504, 33.	0.1	12
101	Substitutional carbon in Si _{1-x} C _x alloys as measured with infrared absorption and Raman spectroscopy. Journal of Applied Physics, 1997, 82, 4246-4252.	1.1	33
102	Synthesis and magnetic properties of Ni-Al ₂ O ₃ thin films. Journal of Applied Physics, 1997, 82, 1189-1195.	1.1	14
103	Solidification kinetics in SiGe alloys. Physical Review B, 1996, 53, 8386-8397.	1.1	25
104	Equilibrium concentrations of defects in pure and B-doped silicon. Journal of Applied Physics, 1996, 79, 8998-9011.	1.1	46
105	Pulsed laser induced epitaxial crystallization of carbon-silicon alloys. Journal of Applied Physics, 1996, 79, 4118.	1.1	19
106	Epitaxial Silicon-Carbon Alloy Growth by Laser Induced Melting and Solidification. Materials Research Society Symposia Proceedings, 1995, 398, 127.	0.1	1
107	Substrate Heating Measurements in Pulsed Ion Beam Film Deposition. Materials Research Society Symposia Proceedings, 1995, 388, 171.	0.1	3
108	Test of Kinetic Models for Interface Velocity, Temperature, and Solute Trapping in Rapid Solidification. Materials Research Society Symposia Proceedings, 1995, 398, 119.	0.1	0

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109	Behavior of intrinsic Si point defects during annealing in vacuum. Applied Physics Letters, 1995, 67, 1558-1560.	1.5	31
110	Germanium partitioning in silicon during rapid solidification. Journal of Applied Physics, 1995, 78, 1575-1582.	1.1	73
111	Absence of solute drag in solidification. Applied Physics Letters, 1994, 64, 2359-2361.	1.5	36
112	Density of amorphous Si. Applied Physics Letters, 1994, 64, 437-439.	1.5	262
113	Measuring Vacancy Diffusivity and Vacancy Assisted Clustering by Nitridation Enhanced Diffusion of Sb IN Si(100) Doping Superlattices. Materials Research Society Symposia Proceedings, 1994, 355, 157.	0.1	0
114	Germanium Partitioning and Interface Stability During Rapid Solidification of Gesi Alloys. Materials Research Society Symposia Proceedings, 1994, 354, 653.	0.1	0
115	Characterization of Ceramic/Ceramic Matrix Composite Materials From Elastic Wave Scan Images. , 1994, , 291-298.		1
116	Solid/Liquid Cluster Recognition in Heterogeneous Systems. Molecular Simulation, 1993, 11, 121-144.	0.9	17
117	Time-resolved temperature measurements during pulsed laser irradiation using thin film metal thermometers. Review of Scientific Instruments, 1993, 64, 2615-2623.	0.6	16
118	Kinetics of crystal dissolution for a Stillinger-Weber model of silicon. Physical Review B, 1993, 47, 15717-15726.	1.1	33
119	Phase transformation mechanisms involved in excimer laser crystallization of amorphous silicon films. Applied Physics Letters, 1993, 63, 1969-1971.	1.5	525
120	Time-resolved temperature measurements during rapid solidification of Si-As alloys induced by pulsed laser melting. Journal of Applied Physics, 1993, 73, 3725-3733.	1.1	39
121	Epitaxial growth versus nucleation in amorphous Si doped with Cu and Ag. Journal of Materials Research, 1993, 8, 820-829.	1.2	17
122	Interface Stability During Solid Phase Epitaxy Of Strained Ge _x Si _{1-x} Films on Si (100). Materials Research Society Symposia Proceedings, 1993, 321, 503.	0.1	8
123	Preparation of transmission electron microscopy cross sections using nanofabrication techniques. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1992, 10, 183.	1.6	2
124	Temperature measurements of polyimide during KrF excimer laser ablation. Journal of Applied Physics, 1992, 72, 4344-4350.	1.1	61
125	Congruent Melting Temperatures of Si-As Alloys Measured During Pulsed-Laser Melting and Rapid Solidification. Materials Research Society Symposia Proceedings, 1992, 279, 691.	0.1	1
126	Excimer Laser Induced Crystallization of thin Amorphous Si Films on SiO ₂ : Implications of Crystallized Microstructures for Phase Transformation Mechanisms. Materials Research Society Symposia Proceedings, 1992, 283, 703.	0.1	26

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127	Measurements and Simulations of Temperatures in Polyimide During Excimer Laser Ablation. Materials Research Society Symposia Proceedings, 1992, 285, 151.	0.1	2
128	Optical and structural effects of aniline intercalation in Pbl ₂ . Physical Review B, 1991, 44, 5786-5790.	1.1	37
129	Determination of the elastic constants of anisotropic materials using laser-generated ultrasonic signals. Journal of Applied Physics, 1991, 70, 150-157.	1.1	72
130	Dissolution and Growth Kinetics of Small Crystals in Liquids. Materials Research Society Symposia Proceedings, 1991, 238, 279.	0.1	0
131	Effect of nonequilibrium interface kinetics on cellular breakdown of planar interfaces during rapid solidification of Si-Sn. Journal of Crystal Growth, 1991, 109, 107-112.	0.7	45
132	Interface-state-controlled segregation of gold during ion-beam-induced epitaxy of amorphous silicon. Physical Review B, 1991, 44, 8774-8778.	1.1	5
133	Transient nucleation following pulsed-laser melting of thin silicon films. Physical Review B, 1991, 43, 9851-9855.	1.1	90
134	Pulsed laser assisted epitaxy of GexSi1-x alloys on Si ~100%. Applied Physics Letters, 1991, 59, 3455-3457.	1.5	19
135	Demonstration of laser-assisted epitaxial deposition of GexSi1-x alloys on single-crystal Si. Applied Physics Letters, 1991, 58, 1768-1770.	1.5	27
136	Changing Segregation Coefficients During Ion Beam Induced Epitaxy of Amorphous Si. Materials Research Society Symposia Proceedings, 1990, 201, 363.	0.1	0
137	Laser Assisted E-Beam Epitaxial Growth of Si/Ge Alloys on Si. Materials Research Society Symposia Proceedings, 1990, 202, 603.	0.1	1
138	Dissolution Dynamics of Sub-Critical Clusters in Liquid Silicon. Materials Research Society Symposia Proceedings, 1990, 205, 417.	0.1	5
139	Epitaxy and Nucleation in Cu and Ag Doped Amorphous Si. Materials Research Society Symposia Proceedings, 1990, 205, 69.	0.1	2
140	Changing Segregation Coefficients During Ion Beam Induced Epitaxy of Amorphous Si. Materials Research Society Symposia Proceedings, 1990, 205, 81.	0.1	1
141	Evolution of the Microstructure During Laser-Induced Amorphization of Si. Materials Research Society Symposia Proceedings, 1990, 205, 93.	0.1	0
142	The isolation and nucleation of misfit dislocations in strained epitaxial layers grown on patterned, ion-damaged GaAs. Journal of Electronic Materials, 1990, 19, 957-965.	1.0	13
143	Nucleation of amorphous germanium from supercooled melts. Applied Physics Letters, 1990, 56, 1025-1027.	1.5	30
144	Evidence against surface nucleation following pulsed melting of Si. Journal of Materials Research, 1990, 5, 1463-1467.	1.2	16

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145	Phonon focusing and mode-conversion effects in silicon at ultrasonic frequencies. <i>Physical Review Letters</i> , 1990, 65, 1446-1449.	2.9	49
146	Pulsed-laser induced transient phase transformations at the Si ²⁺ O interface. <i>Journal of Materials Research</i> , 1989, 4, 843-856.	1.2	7
147	Orientation dependence of laser amorphization of crystal Si. <i>Physical Review Letters</i> , 1989, 63, 2088-2091.	2.9	33
148	Epitaxial recrystallization and diffusion phenomena in amorphous silicon produced by MeV ion beams. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1989, 37-38, 955-959.	0.6	12
149	Interface Velocity and Noble Metal Segregation During Ion Beam Induced Epitaxial Crystallization. <i>Materials Research Society Symposia Proceedings</i> , 1989, 157, 113.	0.1	2
150	Thermodynamic Measurements via Time-Resolved Transient Conductance. <i>Materials Research Society Symposia Proceedings</i> , 1989, 157, 355.	0.1	1
151	Time-Resolved Measurements of Solidification and Undercooling in Metals and Alloys. <i>Materials Research Society Symposia Proceedings</i> , 1989, 157, 369.	0.1	10
152	Density Measurements of Ion Implanted Amorphous Silicon. <i>Materials Research Society Symposia Proceedings</i> , 1989, 157, 689.	0.1	15
153	Twin formation and Au segregation during ion-beam-induced epitaxy of amorphous Si. <i>Applied Physics Letters</i> , 1988, 52, 1043-1045.	1.5	22
154	Supercooling and Nucleation of Silicon after Laser Melting. <i>Physical Review Letters</i> , 1988, 60, 2519-2522.	2.9	160
155	Trapping of Au in Si during pulsed laser irradiation: A comparison with ion beam induced segregation. <i>Applied Physics Letters</i> , 1988, 53, 2486-2488.	1.5	16
156	Explosive crystallization in amorphous Si initiated by long pulse width laser irradiation. <i>Applied Physics Letters</i> , 1988, 52, 203-205.	1.5	24
157	Solid phase epitaxy of laser amorphized silicon. <i>Applied Physics Letters</i> , 1988, 53, 1402-1404.	1.5	10
158	Nonequilibrium segregation and trapping phenomena during ion-induced crystallization of amorphous Si. <i>Physical Review Letters</i> , 1988, 60, 1322-1325.	2.9	49
159	Quench rate enhancement in pulsed laser melting of Si by processing under water. <i>Applied Physics Letters</i> , 1988, 52, 535-537.	1.5	3
160	Supercooling of Silicon and Germanium after Laser Melting. <i>Materials Research Society Symposia Proceedings</i> , 1988, 100, 505.	0.1	8
161	Interface Velocity Transients During Melting of a-Si/C-Si Thin Films. <i>Materials Research Society Symposia Proceedings</i> , 1988, 100, 519.	0.1	5
162	Nanosecond Resolved Temperature Measurements Following Pulsed Laser Irradiation. <i>Materials Research Society Symposia Proceedings</i> , 1988, 100, 525.	0.1	8

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163	Transient Processes at the Si-Water Interface During Pulsed Laser Irradiation. Materials Research Society Symposia Proceedings, 1988, 100, 555.	0.1	1
164	The Effects of N ₂ and Ar as the Ambient Gas During Rapid Thermal Annealing of Tungsten Silicide. Materials Research Society Symposia Proceedings, 1988, 100, 707.	0.1	2
165	Ion-Beam-Induced Epitaxy and Solute Segregation at the Si Crystal-Amorphous Interface. Materials Research Society Symposia Proceedings, 1988, 128, 533.	0.1	4
166	Segregation of Ag and Cu During Ion Beam and Thermally Induced Recrystallization of Amorphous Si. Materials Research Society Symposia Proceedings, 1988, 128, 545.	0.1	0
167	Interfacial overheating during melting of Si at 190 m/s. Journal of Materials Research, 1987, 2, 91-95.	1.2	12
168	Asymmetric Melting and Freezing Kinetics in Silicon. Physical Review Letters, 1986, 56, 2712-2715.	2.9	79
169	Kinetic And Thermodynamic Studies Of Pulsed Laser Irradiation. , 1986, , .		5
170	Transition-State Model for Entropy-Limited Freezing. Materials Research Society Symposia Proceedings, 1986, 74, 117.	0.1	7
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