

# Michael O Thompson

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4757141/publications.pdf>

Version: 2024-02-01

198  
papers

5,624  
citations

109137

35  
h-index

91712

69  
g-index

198  
all docs

198  
docs citations

198  
times ranked

3636  
citing authors

#	ARTICLE	IF	CITATIONS
1	Melting Temperature and Explosive Crystallization of Amorphous Silicon during Pulsed Laser Irradiation. <i>Physical Review Letters</i> , 1984, 52, 2360-2363.	2.9	533
2	Phase transformation mechanisms involved in excimer laser crystallization of amorphous silicon films. <i>Applied Physics Letters</i> , 1993, 63, 1969-1971.	1.5	525
3	Early Insulin Therapy in Very-Low-Birth-Weight Infants. <i>New England Journal of Medicine</i> , 2008, 359, 1873-1884.	13.9	264
4	Density of amorphous Si. <i>Applied Physics Letters</i> , 1994, 64, 437-439.	1.5	262
5	Silicon Melt, Regrowth, and Amorphization Velocities During Pulsed Laser Irradiation. <i>Physical Review Letters</i> , 1983, 50, 896-899.	2.9	246
6	Measurement of the Velocity of the Crystal-Liquid Interface in Pulsed Laser Annealing of Si. <i>Physical Review Letters</i> , 1982, 48, 33-36.	2.9	164
7	Solute Trapping: Comparison of Theory with Experiment. <i>Physical Review Letters</i> , 1986, 56, 2489-2492.	2.9	161
8	Supercooling and Nucleation of Silicon after Laser Melting. <i>Physical Review Letters</i> , 1988, 60, 2519-2522.	2.9	160
9	Transient laser heating induced hierarchical porous structures from block copolymerâ€ directed self-assembly. <i>Science</i> , 2015, 349, 54-58.	6.0	145
10	Complete experimental test of kinetic models for rapid alloy solidification. <i>Acta Materialia</i> , 2000, 48, 4797-4811.	3.8	122
11	Block Copolymer Self-Assemblyâ€ Directed Single-Crystal Homo- and Heteroepitaxial Nanostructures. <i>Science</i> , 2010, 330, 214-219.	6.0	108
12	Transient nucleation following pulsed-laser melting of thin silicon films. <i>Physical Review B</i> , 1991, 43, 9851-9855.	1.1	90
13	Asymmetric Melting and Freezing Kinetics in Silicon. <i>Physical Review Letters</i> , 1986, 56, 2712-2715.	2.9	79
14	The interstitial fraction of diffusivity of common dopants in Si. <i>Applied Physics Letters</i> , 1997, 71, 3862-3864.	1.5	75
15	Germanium partitioning in silicon during rapid solidification. <i>Journal of Applied Physics</i> , 1995, 78, 1575-1582.	1.1	73
16	Determination of the elastic constants of anisotropic materials using laserâ€ generated ultrasonic signals. <i>Journal of Applied Physics</i> , 1991, 70, 150-157.	1.1	72
17	Temperature measurements of polyimide during KrF excimer laser ablation. <i>Journal of Applied Physics</i> , 1992, 72, 4344-4350.	1.1	61
18	Melt dynamics of siliconâ€ onâ€ sapphire during pulsed laser annealing. <i>Applied Physics Letters</i> , 1983, 42, 445-447.	1.5	60

#	ARTICLE	IF	CITATIONS
19	Experimental test of morphological stability theory for a planar interface during rapid solidification. <i>Physical Review B</i> , 1998, 58, 189-199.	1.1	55
20	A New System for the Rapid Collection of Large Numbers of Developmentally Staged Zebrafish Embryos. <i>PLoS ONE</i> , 2011, 6, e21715.	1.1	53
21	Time-resolved conductance and reflectance measurements of silicon during pulsed-laser annealing. <i>Physical Review B</i> , 1983, 27, 1079-1087.	1.1	51
22	Nonequilibrium segregation and trapping phenomena during ion-induced crystallization of amorphous Si. <i>Physical Review Letters</i> , 1988, 60, 1322-1325.	2.9	49
23	Phonon focusing and mode-conversion effects in silicon at ultrasonic frequencies. <i>Physical Review Letters</i> , 1990, 65, 1446-1449.	2.9	49
24	Laser crystallization and structural characterization of hydrogenated amorphous silicon thin films. <i>Journal of Applied Physics</i> , 1999, 85, 7914-7918.	1.1	47
25	Equilibrium concentrations of defects in pure and $\delta$ -doped silicon. <i>Journal of Applied Physics</i> , 1996, 79, 8998-9011.	1.1	46
26	Effect of nonequilibrium interface kinetics on cellular breakdown of planar interfaces during rapid solidification of Si-Sn. <i>Journal of Crystal Growth</i> , 1991, 109, 107-112.	0.7	45
27	Room temperature indium tin oxide by XeCl excimer laser annealing for flexible display. <i>Thin Solid Films</i> , 2004, 460, 291-294.	0.8	44
28	Characterization of reactively sputtered c-axis aligned nanocrystalline InGaZnO <sub>4</sub> . <i>Applied Physics Letters</i> , 2014, 105, .	1.5	42
29	High mobility, dual layer, c-axis aligned crystalline/amorphous IGZO thin film transistor. <i>Applied Physics Letters</i> , 2015, 107, 183503.	1.5	40
30	Time-resolved temperature measurements during rapid solidification of SiAs alloys induced by pulsed-laser melting. <i>Journal of Applied Physics</i> , 1993, 73, 3725-3733.	1.1	39
31	Direct measurements of liquid/solid interface kinetics during pulsed-laser-induced melting of aluminum. <i>Applied Physics Letters</i> , 1986, 48, 278-280.	1.5	38
32	Optical and structural effects of aniline intercalation in PbI <sub>2</sub> . <i>Physical Review B</i> , 1991, 44, 5786-5790.	1.1	37
33	Absence of solute drag in solidification. <i>Applied Physics Letters</i> , 1994, 64, 2359-2361.	1.5	36
34	Atomistic computer simulation of explosive crystallization in pure silicon and germanium. <i>Physical Review B</i> , 2004, 70, .	1.1	36
35	In-beam growth and rearrangement of nanoparticles in insulators induced by high-current negative copper ions. <i>Vacuum</i> , 2000, 58, 60-78.	1.6	35
36	Orientation dependence of laser amorphization of crystal Si. <i>Physical Review Letters</i> , 1989, 63, 2088-2091.	2.9	33

#	ARTICLE	IF	CITATIONS
37	Kinetics of crystal dissolution for a Stillinger-Weber model of silicon. <i>Physical Review B</i> , 1993, 47, 15717-15726.	1.1	33
38	Substitutional carbon in Si $\lambda^{\sim}$ yCy alloys as measured with infrared absorption and Raman spectroscopy. <i>Journal of Applied Physics</i> , 1997, 82, 4246-4252.	1.1	33
39	Ultrafast Self-Assembly of Sub-10 nm Block Copolymer Nanostructures by Solvent-Free High-Temperature Laser Annealing. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 31317-31324.	4.0	33
40	Behavior of intrinsic Si point defects during annealing in vacuum. <i>Applied Physics Letters</i> , 1995, 67, 1558-1560.	1.5	31
41	Improvement of surface properties by modification and alloying with high-power ion beams. <i>Physics of Plasmas</i> , 1998, 5, 2144-2150.	0.7	31
42	Kinetic Rates of Thermal Transformations and Diffusion in Polymer Systems Measured during Sub-millisecond Laser-Induced Heating. <i>ACS Nano</i> , 2012, 6, 5830-5836.	7.3	31
43	Nucleation of amorphous germanium from supercooled melts. <i>Applied Physics Letters</i> , 1990, 56, 1025-1027.	1.5	30
44	Thermal stability of epitaxial <i>In</i>-Ga <sub>2</sub> O <sub>3</sub> and (Al,Ga) <sub>2</sub> O <sub>3</sub> layers on m-plane sapphire. <i>Applied Physics Letters</i> , 2021, 119, .	1.5	30
45	Effects of As impurities on the solidification velocity of Si during pulsed laser annealing. <i>Applied Physics Letters</i> , 1985, 47, 244-246.	1.5	29
46	Demonstration of laser-assisted epitaxial deposition of GexSi1 $\lambda^{\sim}$ xalloys on single-crystal Si. <i>Applied Physics Letters</i> , 1991, 58, 1768-1770.	1.5	27
47	Excimer Laser Induced Crystallization of thin Amorphous Si Films on SiO <sub>2</sub> : Implications of Crystallized Microstructures for Phase Transformation Mechanisms. <i>Materials Research Society Symposia Proceedings</i> , 1992, 283, 703.	0.1	26
48	Laser-assisted transfer of silicon by explosive hydrogen release. <i>Applied Physics Letters</i> , 1999, 74, 2170-2172.	1.5	26
49	Solute diffusion in liquid nickel measured by pulsed ion beam melting. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2004, 35, 2803-2807.	1.1	26
50	Pulsed Laser Annealing of Thin Films of Self-Assembled Nanocrystals. <i>ACS Nano</i> , 2011, 5, 7010-7019.	7.3	26
51	Autonomous materials synthesis via hierarchical active learning of nonequilibrium phase diagrams. <i>Science Advances</i> , 2021, 7, eabg4930.	4.7	26
52	Relation Between Temperature and Solidification Velocity in Rapidly Cooled Liquid Silicon. <i>Materials Research Society Symposia Proceedings</i> , 1984, 35, 181.	0.1	25
53	Solidification kinetics in SiGe alloys. <i>Physical Review B</i> , 1996, 53, 8386-8397.	1.1	25
54	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

#	ARTICLE	IF	CITATIONS
55	Explosive crystallization in amorphous Si initiated by long pulse width laser irradiation. Applied Physics Letters, 1988, 52, 203-205.	1.5	24
56	Chemical Etch Rate and X-Ray Structure of Reactive Sputtered c-Axis Aligned Crystalline In <sub>x</sub> Ga <sub>y</sub> Zn <sub>z</sub> O <sub>4</sub> Films. ECS Journal of Solid State Science and Technology, 2015, 4, Q43-Q45.	0.9	24
57	High mobility amorphous InGaZnO <sub>4</sub> thin film transistors formed by CO <sub>2</sub> laser spike annealing. Applied Physics Letters, 2015, 106, .	1.5	24
58	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
59	Kinetics of Block Copolymer Phase Segregation during Sub-millisecond Transient Thermal Annealing. Macromolecules, 2016, 49, 6462-6470.	2.2	23
60	Twin formation and Au segregation during ion-beam-induced epitaxy of amorphous Si. Applied Physics Letters, 1988, 52, 1043-1045.	1.5	22
61	Experimental and numerical investigations of a hydrogen-assisted laser-induced materials transfer procedure. Journal of Applied Physics, 2000, 87, 3537-3546.	1.1	21
62	45.2: Effects of RF Sputtering Parameters and Film Composition on c-Axis Aligned Crystalline (CAAC) IGZO Films. Digest of Technical Papers SID International Symposium, 2015, 46, 677-680.	0.1	21
63	A Test of Two Solute-Trapping Models. Materials Research Society Symposia Proceedings, 1984, 35, 153.	0.1	20
64	Rapid solidification studies of a model alloy system. Applied Physics Letters, 1986, 49, 558-560.	1.5	20
65	Steam pressure induced in crack-like cavities in moisture saturated polymer matrix composites during rapid heating. International Journal of Solids and Structures, 2005, 42, 1055-1072.	1.3	20
66	Nanocrystalline barium titanate films on flexible plastic substrates via pulsed laser annealing. Applied Physics Letters, 2006, 89, 202910.	1.5	20
67	Pulsed laser assisted epitaxy of Ge <sub>x</sub> Si <sub>1-x</sub> alloys on Si ~100%. Applied Physics Letters, 1991, 59, 3455-3457.	1.5	19
68	Pulsed laser induced epitaxial crystallization of carbon-silicon alloys. Journal of Applied Physics, 1996, 79, 4118.	1.1	19
69	Experimental determination of thermal profiles during laser spike annealing with quantitative comparison to 3-dimensional simulations. Applied Physics Letters, 2012, 100, .	1.5	19
70	Lateral Temperature-Gradient Method for High-Throughput Characterization of Material Processing by Millisecond Laser Annealing. ACS Combinatorial Science, 2016, 18, 548-558.	3.8	19
71	Laser-induced amorphization of silicon during pulsed-laser irradiation of TiN/Ti/polycrystalline silicon/SiO <sub>2</sub> /silicon. Applied Physics Letters, 2002, 81, 3786-3788.	1.5	18
72	Finite element and analytical solutions for van der Pauw and four-point probe correction factors when multiple non-ideal measurement conditions coexist. Review of Scientific Instruments, 2017, 88, 094704.	0.6	18

#	ARTICLE	IF	CITATIONS
73	Solid/Liquid Cluster Recognition in Heterogeneous Systems. <i>Molecular Simulation</i> , 1993, 11, 121-144.	0.9	17
74	Epitaxial growth versus nucleation in amorphous Si doped with Cu and Ag. <i>Journal of Materials Research</i> , 1993, 8, 820-829.	1.2	17
75	Thermodynamic and kinetic studies of laser thermal processing of heavily boron-doped amorphous silicon using molecular dynamics. <i>Journal of Applied Physics</i> , 2002, 92, 2412-2419.	1.1	17
76	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
77	Evidence against surface nucleation following pulsed melting of Si. <i>Journal of Materials Research</i> , 1990, 5, 1463-1467.	1.2	16
78	Time-resolved temperature measurements during pulsed laser irradiation using thin film metal thermometers. <i>Review of Scientific Instruments</i> , 1993, 64, 2615-2623.	0.6	16
79	Deactivation kinetics of supersaturated boron:silicon alloys. <i>Journal of Applied Physics</i> , 2001, 90, 2262-2268.	1.1	16
80	Deposited low temperature silicon GHz modulator. <i>Optics Express</i> , 2013, 21, 26688.	1.7	16
81	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
82	Density Measurements of Ion Implanted Amorphous Silicon. <i>Materials Research Society Symposia Proceedings</i> , 1989, 157, 689.	0.1	15
83	Surface modification of ultra-high strength polyethylene fibers for enhanced adhesion to epoxy resins using intense pulsed high-power ion beam. <i>Journal of Adhesion Science and Technology</i> , 1999, 13, 1331-1342.	1.4	15
84	Liquid titanium solute diffusion measured by pulsed ion-beam melting. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2001, 32, 2969-2974.	1.1	15
85	Colloidal Self-Assembly-Directed Laser-Induced Non-Close-Packed Crystalline Silicon Nanostructures. <i>ACS Nano</i> , 2011, 5, 7960-7966.	7.3	15
86	Synthesis and Formation Mechanism of All-Organic Block Copolymer-Directed Templating of Laser-Induced Crystalline Silicon Nanostructures. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 42777-42785.	4.0	15
87	Thermodynamic and Kinetic Studies of Pulsed-Laser Annealing from Transient Conductivity Measurements. <i>Materials Research Society Symposia Proceedings</i> , 1984, 35, 53.	0.1	14
88	Synthesis and magnetic properties of $\text{Ni-Al}_2\text{O}_3$ thin films. <i>Journal of Applied Physics</i> , 1997, 82, 1189-1195.	1.1	14
89	Characterization and modeling of the ablation plumes formed by intense-pulsed ion beam impact on solid targets. <i>Journal of Applied Physics</i> , 1999, 85, 713-721.	1.1	14
90	Time Resolved Measurements of Interface Dynamics During Pulsed Laser Melting Observed by Transient Conductance. <i>Materials Research Society Symposia Proceedings</i> , 1983, 13, 57.	0.1	13

#	ARTICLE	IF	CITATIONS
91	Surface solidification and impurity segregation in amorphous silicon. Applied Physics Letters, 1986, 48, 1651-1653.	1.5	13
92	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
93	Molecular Dynamics Study of Explosive Crystallization of SiGe and Boron-Doped SiGe Alloys. Industrial & Engineering Chemistry Research, 2006, 45, 5628-5639.	1.8	13
94	Interfacial overheating during melting of Si at 190 m/s. Journal of Materials Research, 1987, 2, 91-95.	1.2	12
95	Epitaxial recrystallization and diffusion phenomena in amorphous silicon produced by MeV ion beams. Nuclear Instruments & Methods in Physics Research B, 1989, 37-38, 955-959.	0.6	12
96	Numerical Modeling and Experimental Measurements of Pulsed Ion Beam Surface Treatment. Materials Research Society Symposia Proceedings, 1997, 504, 33.	0.1	12
97	Laser-induced lateral epitaxy in fully depleted silicon-on-insulator junctions. Applied Physics Letters, 2002, 81, 2238-2240.	1.5	12
98	Quantifying electronic charge trap states and the effect of imprint on ferroelectric poly(vinylidene fluoride) thin films. Applied Physics Letters, 2011, 98, 121101.	1.1	12
99	Carbon fibers as a novel material for high-performance microelectromechanical systems (MEMS). Journal of Micromechanics and Microengineering, 2006, 16, 1403-1407.	1.5	11
100	Characterizing trapped charge dynamics in imprinted poly(vinylidene fluoride-trifluoroethylene) ferroelectric thin films using the fast ramp thermally stimulated current technique. Journal of Applied Physics, 2009, 105, 054112.	1.1	11
101	LWR reduction and flow of chemically amplified resist patterns during sub-millisecond heating. Proceedings of SPIE, 2011, , .	0.8	11
102	Control of PS-b-PMMA directed self-assembly registration by laser induced millisecond thermal annealing. Proceedings of SPIE, 2014, , .	0.8	11
103	Energetics of neutral Si dopants in InGaAs: An <i>ab initio</i> and semiempirical Tersoff model study. Physical Review B, 2015, 91, .	1.1	11
104	Solid phase epitaxy of laser amorphized silicon. Applied Physics Letters, 1988, 53, 1402-1404.	1.5	10
105	Time-Resolved Measurements of Solidification and Undercooling in Metals and Alloys. Materials Research Society Symposia Proceedings, 1989, 157, 369.	0.1	10
106	Laser Spike Annealing of DSA Photoresists. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2015, 28, 631-634.	0.1	10
107	Control of polystyrene- <i>block</i> -poly(methyl methacrylate) directed self-assembly by laser-induced millisecond thermal annealing. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2015, 14, 031205.	1.0	10
108	Dynamics of Rapid Solidification in Silicon. Materials Research Society Symposia Proceedings, 1986, 74, 15.	0.1	9

#	ARTICLE	IF	CITATIONS
109	Sub-millisecond post exposure bake of chemically amplified resists by CO <sub>2</sub> laser heat treatment. Proceedings of SPIE, 2010, , .	0.8	9
110	<i>Ab initio</i> modeling of vacancies, antisites, and Si dopants in ordered InGaAs. Journal of Applied Physics, 2017, 121, .	1.1	9
111	Supercooling of Silicon and Germanium after Laser Melting. Materials Research Society Symposia Proceedings, 1988, 100, 505.	0.1	8
112	Nanosecond Resolved Temperature Measurements Following Pulsed Laser Irradiation. Materials Research Society Symposia Proceedings, 1988, 100, 525.	0.1	8
113	Interface Stability During Solid Phase Epitaxy Of Strained Ge <sub>x</sub> S <sub>1-x</sub> Films on Si (100). Materials Research Society Symposia Proceedings, 1993, 321, 503.	0.1	8
114	Processing-Structure-Property Relationships in Laser-Annealed PbSe Nanocrystal Thin Films. ACS Nano, 2015, 9, 4096-4102.	7.3	8
115	Transition-State Model for Entropy-Limited Freezing. Materials Research Society Symposia Proceedings, 1986, 74, 117.	0.1	7
116	Pulsed-laser induced transient phase transformations at the Si-H <sub>2</sub> O interface. Journal of Materials Research, 1989, 4, 843-856.	1.2	7
117	Spatially selective materials deposition by hydrogen-assisted laser-induced transfer. Applied Physics Letters, 2000, 77, 307-309.	1.5	7
118	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
119	Initial performance studies of a wearable brain positron emission tomography camera based on autonomous thin-film digital Geiger avalanche photodiode arrays. Journal of Medical Imaging, 2016, 4, 011003.	0.8	7
120	Structural, Thermal, and Mechanical Characterization of a Thermally Conductive Polymer Composite for Heat Exchanger Applications. Polymers, 2021, 13, 1970.	2.0	7
121	Rapid Identification of Synthetic Routes to Functional Metastable Phases Using X-ray Probed Laser Anneal Mapping (XPLAM) Time-Temperature Quench Maps. Chemistry of Materials, 2021, 33, 4328-4336.	3.2	7
122	The Melting of Amorphous Si. Materials Research Society Symposia Proceedings, 1985, 57, 465.	0.1	6
123	Bulk diffusion measurements to study the effectiveness of barrier layers: I. Mathematical treatment. Journal of Applied Physics, 2001, 90, 3799-3809.	1.1	6
124	Effects of RF Sputtering Parameters on C-axis Aligned Crystalline (CAAC) InGaZnO <sub>4</sub> Films Using Design of Experiment (DOE) Approach. ECS Journal of Solid State Science and Technology, 2016, 5, P368-P375.	0.9	6
125	Nucleation of Internal Melt During Pulsed Laser Irradiation. Materials Research Society Symposia Proceedings, 1985, 51, 125.	0.1	5
126	Kinetic And Thermodynamic Studies Of Pulsed Laser Irradiation. , 1986, , .		5



#	ARTICLE	IF	CITATIONS
127	An Equation for Melting and Freezing Transition Rates. Materials Research Society Symposia Proceedings, 1986, 74, 123.	0.1	5
128	Interface Velocity Transients During Melting of a-Si/C-Si Thin Films. Materials Research Society Symposia Proceedings, 1988, 100, 519.	0.1	5
129	Dissolution Dynamics of Sub-Critical Clusters in Liquid Silicon. Materials Research Society Symposia Proceedings, 1990, 205, 417.	0.1	5
130	Interface-state-controlled segregation of gold during ion-beam-induced epitaxy of amorphous silicon. Physical Review B, 1991, 44, 8774-8778.	1.1	5
131	Direct melt processing of pentacene at temperatures above 1000°C by pulsed laser irradiation. Applied Physics Letters, 2008, 93, .	1.5	5
132	Submillisecond post-exposure bake of chemically amplified resists by CO <sub>2</sub> laser spike annealing. Journal of Vacuum Science & Technology B, 2009, 27, 3020.	1.3	5
133	Investigation of acid diffusion during laser spike annealing with systematically designed photoacid generators. Proceedings of SPIE, 2012, , .	0.8	5
134	Controlled roughness reduction of patterned resist polymers using laser-induced sub-millisecond heating. Journal of Materials Chemistry C, 2014, 2, 9115-9121.	2.7	5
135	Effect of Laser Annealing on the Structure of Amorphous Porous SiCOH Materials. Journal of Physical Chemistry C, 2015, 119, 12616-12624.	1.5	5
136	Ab Initio Studies of the Diffusion of Intrinsic Defects and Silicon Dopants in Bulk InAs. Langmuir, 2017, 33, 11484-11489.	1.6	5
137	Preferred diffusional pathways of intrinsic defects and silicon dopants in an ordered phase of In <sub>0.5</sub> Ga <sub>0.5</sub> As: A first-principles study. Acta Materialia, 2017, 140, 39-45.	3.8	5
138	Ion-Beam-Induced Epitaxy and Solute Segregation at the Si Crystal-Amorphous Interface. Materials Research Society Symposia Proceedings, 1988, 128, 533.	0.1	4
139	A fast ramp rate thermally stimulated current technique to quantify electronic charge dynamics in thin films. Review of Scientific Instruments, 2008, 79, 043906.	0.6	4
140	Addressing challenges in lithography using sub-millisecond post exposure bake of chemically amplified resists. , 2011, , .		4
141	Line edge roughness of high deprotection activation energy photoresist by using sub-millisecond post exposure bake. , 2013, , .		4
142	Understanding of PS-b-PMMA phase segregation under laser-induced millisecond thermal annealing. Proceedings of SPIE, 2015, , .	0.8	4
143	Optical Identification of Materials Transformations in Oxide Thin Films. ACS Combinatorial Science, 2020, 22, 887-894.	3.8	4
144	Segregation and Crystallization Phenomena in Germanium. Materials Research Society Symposia Proceedings, 1982, 13, 303.	0.1	3

#	ARTICLE	IF	CITATIONS
145	<title>Melt Depth And Regrowth Kinetics In Pulsed Laser Annealing Of Silicon And Gallium Arsenide</title>. , 1983, 0385, 38.		3
146	Anomalous Behavior During The Solidification of Silicon In The Presence of Impurities. Materials Research Society Symposia Proceedings, 1985, 51, 99.	0.1	3
147	Quench rate enhancement in pulsed laser melting of Si by processing under water. Applied Physics Letters, 1988, 52, 535-537.	1.5	3
148	Substrate Heating Measurements in Pulsed Ion Beam Film Deposition. Materials Research Society Symposia Proceedings, 1995, 388, 171.	0.1	3
149	Morphological Instabilities during Explosive Crystallization of Germanium Films. Materials Research Society Symposia Proceedings, 2000, 648, 1.	0.1	3
150	Effect of Excimer Laser Annealing on Ultra-low Temperature Gate Dielectrics. Materials Research Society Symposia Proceedings, 2001, 685, 1.	0.1	3
151	Laser Thermal Induced Crystallization for 20 nm Device Structures. Materials Research Society Symposia Proceedings, 2001, 669, 1.	0.1	3
152	A 3D model for simulating temperature and stress profiles during sub-millisecond laser spike annealing. , 2010, , .		3
153	(Invited) Dopant Activation and Deactivation in InGaAs during Sub-Millisecond Thermal Annealing. ECS Transactions, 2015, 66, 117-124.	0.3	3
154	Activation of Si implants into InAs characterized by Raman scattering. Journal of Applied Physics, 2016, 119, 095705.	1.1	3
155	Effects of Arsenic Doping on the Solidification Dynamics of Pulsed-Laser-Melted Silicon. Materials Research Society Symposia Proceedings, 1984, 35, 169.	0.1	2
156	Transient Conductance Measurements And Heat-Flow Analysis of Pulsed-Laser-Induced Melting of Aluminum Thin Films. Materials Research Society Symposia Proceedings, 1985, 51, 283.	0.1	2
157	The Effects of N2 and Ar as the Ambient Gas During Rapid Thermal Annealing of Tungsten Silicide. Materials Research Society Symposia Proceedings, 1988, 100, 707.	0.1	2
158	Interface Velocity and Noble Metal Segregation During Ion Beam Induced Epitaxial Crystallization. Materials Research Society Symposia Proceedings, 1989, 157, 113.	0.1	2
159	Epitaxy and Nucleation in Cu and Ag Doped Amorphous Si. Materials Research Society Symposia Proceedings, 1990, 205, 69.	0.1	2
160	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
161	Measurements and Simulations of Temperatures in Polyimide During Excimer Laser Ablation. Materials Research Society Symposia Proceedings, 1992, 285, 151.	0.1	2
162	Combinatorial Laser Processing Of Dielectric/Ferroelectric Thin and Thick Films. Materials Research Society Symposia Proceedings, 2002, 748, 1.	0.1	2

#	ARTICLE	IF	CITATIONS
163	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
164	Characterization of dopant diffusion, mobility, activation and deactivation effects for n-type dopants with long-dwell laser spike annealing. , 2011, , .		2
165	Line width roughness reduction by rational design of photoacid generator for sub-millisecond laser post-exposure bake. , 2014, , .		2
166	¼-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
167	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
168	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
169	Velocity and Orientation Dependence of Solute Trapping. <i>Materials Research Society Symposia Proceedings</i> , 1985, 57, 487.	0.1	1
170	Transient Processes at the Si-Water Interface During Pulsed Laser Irradiation. <i>Materials Research Society Symposia Proceedings</i> , 1988, 100, 555.	0.1	1
171	Thermodynamic Measurements via Time-Resolved Transient Conductance. <i>Materials Research Society Symposia Proceedings</i> , 1989, 157, 355.	0.1	1
172	Laser Assisted E-Beam Epitaxial Growth of Si/Ge Alloys on Si. <i>Materials Research Society Symposia Proceedings</i> , 1990, 202, 603.	0.1	1
173	Changing Segregation Coefficients During Ion Beam Induced Epitaxy of Amorphous Si. <i>Materials Research Society Symposia Proceedings</i> , 1990, 205, 81.	0.1	1
174	Congruent Melting Temperatures of Si-As Alloys Measured During Pulsed-Laser Melting and Rapid Solidification. <i>Materials Research Society Symposia Proceedings</i> , 1992, 279, 691.	0.1	1
175	Epitaxial Silicon-Carbon Alloy Growth by Laser Induced Melting and Solidification. <i>Materials Research Society Symposia Proceedings</i> , 1995, 398, 127.	0.1	1
176	6.4: Crystallization of Ultra-low Temperature ITO by XeCl Excimer Laser Annealing. <i>Digest of Technical Papers SID International Symposium</i> , 2002, 33, 57.	0.1	1
177	Laser-Crystallized High Quality ITO on Plastic Substrates for Flexible Displays. <i>Materials Research Society Symposia Proceedings</i> , 2003, 769, 1011.	0.1	1
178	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
179	Characterization of dopant activation, mobility and diffusion in advanced millisecond laser spike annealing. , 2010, , .		1
180	Excimer-Laser-Induced Melting and Solidification of PECVD a-Si films under Partial-Melting Conditions. <i>Materials Research Society Symposia Proceedings</i> , 2011, 1321, 197.	0.1	1

#	ARTICLE	IF	CITATIONS
181	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
182	Deprotection reaction kinetics in chemically amplified photoresists determined by sub-millisecond post exposure bake. Proceedings of SPIE, 2012, , .	0.8	1
183	Characterization of Ceramic/Ceramic Matrix Composite Materials From Elastic Wave Scan Images. , 1994, , 291-298.		1
184	Pulsed Beams and Ion-Beam Mixing: Metal-Si and Metalmetal Structures. Materials Research Society Symposia Proceedings, 1981, 7, 125.	0.1	0
185	Crystallization of Amorphous Silicon Films by Pulsed Ion Beam Annealing. Materials Research Society Symposia Proceedings, 1982, 13, 455.	0.1	0
186	Summary Abstract: Pulsed laser and ion beam melting of materials. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1985, 3, 860-861.	0.9	0
187	Dynamics of Rapid Solidification in Silicon. Materials Research Society Symposia Proceedings, 1986, 80, 39.	0.1	0
188	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
189	Changing Segregation Coefficients During Ion Beam Induced Epitaxy of Amorphous Si. Materials Research Society Symposia Proceedings, 1990, 201, 363.	0.1	0
190	Evolution of the Microstructure During Laser-Induced Amorphization of Si. Materials Research Society Symposia Proceedings, 1990, 205, 93.	0.1	0
191	Dissolution and Growth Kinetics of Small Crystals in Liquids. Materials Research Society Symposia Proceedings, 1991, 238, 279.	0.1	0
192	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
193	Germanium Partitioning and Interface Stability During Rapid Solidification of Gesi Alloys. Materials Research Society Symposia Proceedings, 1994, 354, 653.	0.1	0
194	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
195	A new laser Printing technique for the fabrication of thin film transistors. Materials Research Society Symposia Proceedings, 1999, 558, 213.	0.1	0
196	Silicide Formation by Pulsed Excimer Laser Annealing. Materials Research Society Symposia Proceedings, 2001, 685, 1.	0.1	0
197	Quantifying the Role of Electronic Charge Trap States on Imprint Behavior in Ferroelectric Poly(vinylidene fluoride-trifluoroethylene) (P(VDF-TrFE)) Thin Films. Materials Research Society Symposia Proceedings, 2004, 830, 113.	0.1	0
198	P(VDF-TrFE) ferroelectrics: Integration in hybrid and thin-film memories. , 2008, , .		0