

Costas P Grigoropoulos

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/6465724/costas-p-grigoropoulos-publications-by-year.pdf>

Version: 2024-04-20

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

340
papers

16,327
citations

63
h-index

119
g-index

374
ext. papers

18,212
ext. citations

6.7
avg, IF

6.51
L-index

#	Paper	IF	Citations
340	Micro-engineered architected metamaterials for cell and tissue engineering. <i>Materials Today Advances</i> , 2022 , 13, 100206	7.4	1
339	In-situ enhanced laser absorption in aqueous transition metal salt solution enables high-quality backside wet etching of optical glass by near-infrared lasers. <i>Journal of Materials Processing Technology</i> , 2022 , 302, 117507	5.3	0
338	Profiling the responsiveness of focal adhesions of human cardiomyocytes to extracellular dynamic nano-topography.. <i>Bioactive Materials</i> , 2022 , 10, 367-377	16.7	2
337	Ultrathin ferroic HfO-ZrO superlattice gate stack for advanced transistors.. <i>Nature</i> , 2022 , 604, 65-71	50.4	13
336	Emergent ferroelectricity in subnanometer binary oxide films on silicon.. <i>Science</i> , 2022 , 376, 648-652	33.3	9
335	Temperature-adaptive radiative coating for all-season household thermal regulation.. <i>Science</i> , 2021 , 374, 1504-1509	33.3	43
334	Spatio-temporal ablation dynamics and plasma chemistry of aluminum induced by temporally modulated ytterbium fiber laser. <i>Applied Physics Letters</i> , 2021 , 119, 224103	3.4	2
333	Strength through defects: A novel Bayesian approach for the optimization of architected materials. <i>Science Advances</i> , 2021 , 7, eabk2218	14.3	6
332	Laser-Induced Processing of Nanoparticles and Growth of Nanowires 2021 , 1537-1575		
331	Evaluating the effects of pillar shape and gallium ion beam damage on the mechanical properties of single crystal aluminum nanopillars. <i>Journal of Materials Research</i> , 2021 , 36, 2515-2528	2.5	1
330	Flat Bands in Magic-Angle Bilayer Photonic Crystals at Small Twists. <i>Physical Review Letters</i> , 2021 , 126, 223601	7.4	12
329	Comparison of transient absorption of laser ablation plasma with fundamental plasma absorption relations. <i>Applied Physics A: Materials Science and Processing</i> , 2021 , 127, 1	2.6	0
328	Effects of immersion depth on the dynamics of cavitation bubbles generated during ns laser ablation of submerged targets. <i>Optics and Lasers in Engineering</i> , 2021 , 137, 106334	4.6	7
327	Capturing the final stage of the collapse of cavitation bubbles generated during nanosecond laser ablation of submerged targets. <i>Optics and Laser Technology</i> , 2021 , 134, 106647	4.2	4
326	Nanosecond laser-induced reshaping of periodic silicon nanostructures. <i>Current Applied Physics</i> , 2021 , 22, 43-49	2.6	0
325	Phase change materials in photonic devices. <i>Journal of Applied Physics</i> , 2021 , 129, 030902	2.5	13
324	Design and Characterization of Microscale Auxetic and Anisotropic Structures Fabricated by Multiphoton Lithography. <i>Nanomaterials</i> , 2021 , 11,	5.4	5

323	Investigating the mechanical response of microscale pantographic structures fabricated by multiphoton lithography. <i>Extreme Mechanics Letters</i> , 2021 , 43, 101202	3.9	14
322	Actively variable-spectrum optoelectronics with black phosphorus. <i>Nature</i> , 2021 , 596, 232-237	50.4	28
321	Dynamic Pore Modulation of Stretchable Electrospun Nanofiber Filter for Adaptive Machine Learned Respiratory Protection. <i>ACS Nano</i> , 2021 , 15, 15730-15740	16.7	8
320	Flashlight-material interaction for wearable and flexible electronics. <i>Materials Today</i> , 2021 , 51, 525-525	21.8	3
319	Time-resolved emission and scattering imaging of plume dynamics and nanoparticle ejection in femtosecond laser ablation of silver thin films. <i>Applied Physics Letters</i> , 2020 , 116, 234105	3.4	4
318	Laser-made 3D Auxetic Metamaterial Scaffolds for Tissue Engineering Applications. <i>Macromolecular Materials and Engineering</i> , 2020 , 305, 2000238	3.9	14
317	Tailoring the Dynamic Actuation of 3D-Printed Mechanical Metamaterials through Inherent and Extrinsic Instabilities. <i>Advanced Engineering Materials</i> , 2020 , 22, 1901586	3.5	3
316	Laser pyrolysis for controlled morphing and chemical modification on 3D microlattices. <i>Journal of Micromechanics and Microengineering</i> , 2020 , 30, 055008	2	4
315	Maladaptive Contractility of 3D Human Cardiac Microtissues to Mechanical Nonuniformity. <i>Advanced Healthcare Materials</i> , 2020 , 9, e1901373	10.1	7
314	Fast Reversible Phase Change Silicon for Visible Active Photonics. <i>Advanced Functional Materials</i> , 2020 , 30, 1910784	15.6	9
313	Design and Testing of Bistable Lattices with Tensegrity Architecture and Nanoscale Features Fabricated by Multiphoton Lithography. <i>Nanomaterials</i> , 2020 , 10,	5.4	10
312	Early dynamics of cavitation bubbles generated during ns laser ablation of submerged targets. <i>Optics Express</i> , 2020 , 28, 14300-14309	3.3	13
311	Laser-Induced Processing of Nanoparticles and Growth of Nanowires 2020 , 1-39		
310	Tailoring 3D Buckling and Post Contact in Microlattice Metamaterials. <i>Advanced Structured Materials</i> , 2020 , 471-484	0.6	
309	Comprehensive analysis of blue diode laser-annealing of amorphous silicon films. <i>Thin Solid Films</i> , 2020 , 696, 137779	2.2	7
308	Laser-induced graphitization of polydopamine leads to enhanced mechanical performance while preserving multifunctionality. <i>Nature Communications</i> , 2020 , 11, 4848	17.4	14
307	Laser-Induced Crystalline-Phase Transformation for Hematite Nanorod Photoelectrochemical Cells. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 48917-48927	9.5	4
306	Comparison of the mechanical performance of architected three-dimensional intertwined lattices at the macro/microscale. <i>Extreme Mechanics Letters</i> , 2020 , 40, 100930	3.9	4

305	High-Speed Direct Writing of MoSe ₂ by Maskless and Gas-Free Laser-Assisted Selenization Process. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 19333-19339	3.8	1
304	Site-selective synthesis of onion like carbon from nanodiamond thin film via laser-assisted photothermal process. <i>Applied Physics A: Materials Science and Processing</i> , 2020 , 126, 1	2.6	0
303	Architected mechanical designs in tissue engineering. <i>MRS Communications</i> , 2020 , 10, 379-390	2.7	1
302	Cardiac Microtissues: Maladaptive Contractility of 3D Human Cardiac Microtissues to Mechanical Nonuniformity (Adv. Healthcare Mater. 8/2020). <i>Advanced Healthcare Materials</i> , 2020 , 9, 2070024	10.1	0
301	Feasibility Study of Single-Crystal Si Island Manufacturing by Microscale Printing of Nanoparticles and Laser Crystallization. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 34416-34423	9.5	1
300	Mechano-thermo-chromic device with supersaturated salt hydrate crystal phase change. <i>Science Advances</i> , 2019 , 5, eaav4916	14.3	15
299	Site-Selective Atomic Layer Precision Thinning of MoS via Laser-Assisted Anisotropic Chemical Etching. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 39385-39393	9.5	11
298	Intertwined microlattices greatly enhance the performance of mechanical metamaterials. <i>Mathematics and Mechanics of Solids</i> , 2019 , 24, 2636-2648	2.3	25
297	Advances in pantographic structures: design, manufacturing, models, experiments and image analyses. <i>Continuum Mechanics and Thermodynamics</i> , 2019 , 31, 1231-1282	3.5	153
296	Force-displacement relationship in micro-metric pantographs: Experiments and numerical simulations. <i>Comptes Rendus - Mecanique</i> , 2019 , 347, 397-405	2.1	42
295	Ultra-Short Pulsed Laser Annealing Effects on MoS ₂ Transistors with Asymmetric and Symmetric Contacts. <i>Electronics (Switzerland)</i> , 2019 , 8, 222	2.6	3
294	Length-controlled and selective growth of individual indium nitride nanowires by localized laser heating. <i>Applied Physics Express</i> , 2019 , 12, 056501	2.4	3
293	Role of Jakob number in Leidenfrost phenomena unveiled by theoretical modeling. <i>Physics of Fluids</i> , 2019 , 31, 042109	4.4	3
292	Laser synthesis and functionalization of nanostructures. <i>International Journal of Extreme Manufacturing</i> , 2019 , 1, 012002	7.9	10
291	High-Speed Photothermal Patterning of Doped Polymer Films. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 41717-41725	9.5	7
290	Architected metamaterials with tailored 3D buckling mechanisms at the microscale. <i>Extreme Mechanics Letters</i> , 2019 , 33, 100580	3.9	39
289	Laser machined ultrathin microscale platinum thermometers on transparent oxide substrates. <i>Sensors and Actuators A: Physical</i> , 2019 , 300, 111657	3.9	2
288	Design and validation of a ten nanosecond resolved resistive thermometer for Gaussian laser beam heating. <i>Review of Scientific Instruments</i> , 2019 , 90, 124903	1.7	

287	The effects of external fields in ceramic sintering. <i>Journal of the American Ceramic Society</i> , 2019 , 102, 5-31	3.8	27
286	Chemical etching mechanisms and crater morphologies pre-irradiated by temporally decreasing pulse trains of femtosecond laser. <i>Applied Surface Science</i> , 2019 , 469, 44-49	6.7	4
285	Vacancies for controlling the behavior of microstructured three-dimensional mechanical metamaterials. <i>Mathematics and Mechanics of Solids</i> , 2019 , 24, 511-524	2.3	27
284	A 0.2 V Micro-Electromechanical Switch Enabled by a Phase Transition. <i>Small</i> , 2018 , 14, e1703621	11	15
283	Programming Nanoparticles in Multiscale: Optically Modulated Assembly and Phase Switching of Silicon Nanoparticle Array. <i>ACS Nano</i> , 2018 , 12, 2231-2241	16.7	25
282	Reconfigurable Photonic Platforms: A Lithography-Free and Field-Programmable Photonic Metacanvas (Adv. Mater. 5/2018). <i>Advanced Materials</i> , 2018 , 30, 1870034	24	3
281	High-quality strain-relaxed Si _{0.72} Ge _{0.28} layers grown by MBE-UHV/CVD combined deposition chamber. <i>Journal of Alloys and Compounds</i> , 2018 , 735, 588-593	5.7	1
280	Nanosecond laser induce size-controllable SiGe islands with high Ge composition, large aspect ratio and defect-free characteristics. <i>Materials Letters</i> , 2018 , 211, 250-253	3.3	2
279	Tuning the optical and electrical properties of MoS ₂ by selective Ag photo-reduction. <i>Applied Physics Letters</i> , 2018 , 113, 013105	3.4	9
278	Single Pass Laser Process for Super-Hydrophobic Flexible Surfaces with Micro/Nano Hierarchical Structures. <i>Materials</i> , 2018 , 11,	3.5	9
277	57-2: Scalable Crystallization of a-Si Film on a Glass Substrate by Using a Blue Laser. <i>Digest of Technical Papers SID International Symposium</i> , 2018 , 49, 751-754	0.5	3
276	A Lithography-Free and Field-Programmable Photonic Metacanvas. <i>Advanced Materials</i> , 2018 , 30, 1703878	24	60
275	Effect of Enhanced Thermal Stability of Alumina Support Layer on Growth of Vertically Aligned Single-Walled Carbon Nanotubes and Their Application in Nanofiltration Membranes. <i>Nanoscale Research Letters</i> , 2018 , 13, 173	5	8
274	Guided Assembly of Block Copolymers in Three-Dimensional Woodpile Scaffolds. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 42933-42940	9.5	5
273	35.1: Blue-Diode Laser Annealing of Amorphous Silicon Films for Low-Cost, Large-Scale Manufacturing of Advanced Displays. <i>Digest of Technical Papers SID International Symposium</i> , 2018 , 49, 378-381	0.5	2
272	Contractile deficits in engineered cardiac microtissues as a result of MYBPC3 deficiency and mechanical overload. <i>Nature Biomedical Engineering</i> , 2018 , 2, 955-967	19	60
271	In situ TEM Raman spectroscopy and laser-based materials modification. <i>Ultramicroscopy</i> , 2017 , 178, 33-37	3.1	13
270	Laser welding of vertically aligned carbon nanotube arrays on polymer workpieces. <i>Carbon</i> , 2017 , 115, 688-693	10.4	9

269	Shape-Controllable Gold Nanoparticle-MoS Hybrids Prepared by Tuning Edge-Active Sites and Surface Structures of MoS via Temporally Shaped Femtosecond Pulses. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 7447-7455	9.5	40
268	66-1: Invited Paper: High Mobility Flexible 2D Multilayer MoS ₂ TFTs on Solution-Based Polyimide Substrates. <i>Digest of Technical Papers SID International Symposium</i> , 2017 , 48, 965-967	0.5	1
267	Laser-assisted biofabrication in tissue engineering and regenerative medicine. <i>Journal of Materials Research</i> , 2017 , 32, 128-142	2.5	12
266	Nanowire-on-Nanowire: All-Nanowire Electronics by On-Demand Selective Integration of Hierarchical Heterogeneous Nanowires. <i>ACS Nano</i> , 2017 , 11, 12311-12317	16.7	29
265	Enhancing the expansion of a plasma shockwave by crater-induced laser refocusing in femtosecond laser ablation of fused silica. <i>Photonics Research</i> , 2017 , 5, 488	6	20
264	Solution-processed nickel oxide nanoparticles with NiOOH for hole injection layers of high-efficiency organic light-emitting diodes. <i>Nanoscale</i> , 2016 , 8, 17608-17615	7.7	26
263	Laser direct writing and inkjet printing for a ≈ 2 μm channel length MoS ₂ transistor with high-resolution electrodes. <i>Nanotechnology</i> , 2016 , 27, 405301	3.4	9
262	High-Performance Flexible Multilayer MoS ₂ Transistors on Solution-Based Polyimide Substrates. <i>Advanced Functional Materials</i> , 2016 , 26, 2426-2434	15.6	63
261	Facile fabrication of a superhydrophobic cage by laser direct writing for site-specific colloidal self-assembled photonic crystal. <i>Nanotechnology</i> , 2016 , 27, 145604	3.4	16
260	Laser-assisted Processing and Diagnostics of Functional Micro/Nanomaterials. <i>Materials Today: Proceedings</i> , 2016 , 3, 335-339	1.4	
259	Site Selective Doping of Ultrathin Metal Dichalcogenides by Laser-Assisted Reaction. <i>Advanced Materials</i> , 2016 , 28, 341-6	24	75
258	Incubation behavior of silicon nanowire growth investigated by laser-assisted rapid heating. <i>Applied Physics Letters</i> , 2016 , 109, 073106	3.4	8
257	Array Volume Fraction-Dependent Thermal Transport Properties of Vertically Aligned Carbon Nanotube Arrays. <i>Journal of Heat Transfer</i> , 2016 , 138,	1.8	11
256	Advances and opportunities of ultrafast laser synthesis and processing. <i>MRS Bulletin</i> , 2016 , 41, 955-959	3.2	12
255	Time-resolved analysis of thickness-dependent dewetting and ablation of silver films upon nanosecond laser irradiation. <i>Applied Physics Letters</i> , 2016 , 108, 211602	3.4	22
254	Laser Direct Writing Process for Making Electrodes and High-k Sol-Gel ZrO ₂ for Boosting Performances of MoS ₂ Transistors. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 9314-8	9.5	18
253	Laser-Assisted Doping: Site Selective Doping of Ultrathin Metal Dichalcogenides by Laser-Assisted Reaction (Adv. Mater. 2/2016). <i>Advanced Materials</i> , 2016 , 28, 392-392	24	1
252	Hydrogen production with CuO/ZnO nanowire catalyst for a nanocatalytic solar thermal steam-methanol reformer. <i>International Journal of Hydrogen Energy</i> , 2016 , 41, 16927-16931	6.7	9

251	Directing cell migration and organization via nanocrater-patterned cell-repellent interfaces. <i>Nature Materials</i> , 2015 , 14, 918-23	27	130
250	Laser wavelength effect on laser-induced photo-thermal sintering of silver nanoparticles. <i>Applied Physics A: Materials Science and Processing</i> , 2015 , 120, 1229-1240	2.6	41
249	Self-organizing human cardiac microchambers mediated by geometric confinement. <i>Nature Communications</i> , 2015 , 6, 7413	17.4	113
248	Low-cost facile fabrication of flexible transparent copper electrodes by nanosecond laser ablation. <i>Advanced Materials</i> , 2015 , 27, 2762-7	24	108
247	Laser-Induced Reductive Sintering of Nickel Oxide Nanoparticles under Ambient Conditions. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 6363-6372	3.8	45
246	Directed dewetting of amorphous silicon film by a donut-shaped laser pulse. <i>Nanotechnology</i> , 2015 , 26, 165303	3.4	23
245	Selective and directed growth of silicon nanowires by tip-enhanced local electric field. <i>Applied Physics A: Materials Science and Processing</i> , 2015 , 121, 255-260	2.6	5
244	Facile fabrication of flexible all solid-state micro-supercapacitor by direct laser writing of porous carbon in polyimide. <i>Carbon</i> , 2015 , 83, 144-151	10.4	179
243	Bioelectronic light-gated transistors with biologically tunable performance. <i>Advanced Materials</i> , 2015 , 27, 831-6	24	21
242	Directly Metering Light Absorption and Heat Transfer in Single Nanowires Using Metal/Insulator Transition in VO ₂ . <i>Advanced Optical Materials</i> , 2015 , 3, 336-341	8.1	20
241	Laser-Induced Hydrothermal Growth of Heterogeneous Metal-Oxide Nanowire on Flexible Substrate by Laser Absorption Layer Design. <i>ACS Nano</i> , 2015 , 9, 6059-68	16.7	64
240	Evaluation of pulsed laser annealing for flexible multilayer MoS ₂ transistors. <i>Applied Physics Letters</i> , 2015 , 106, 113111	3.4	18
239	Optically transparent thin-film transistors based on 2D multilayer MoS ₂ and indium zinc oxide electrodes. <i>Nanotechnology</i> , 2015 , 26, 035202	3.4	16
238	Highly flexible, all solid-state micro-supercapacitors from vertically aligned carbon nanotubes. <i>Nanotechnology</i> , 2014 , 25, 055401	3.4	166
237	Fabrication of flexible, aligned carbon nanotube/polymer composite membranes by in-situ polymerization. <i>Journal of Membrane Science</i> , 2014 , 460, 91-98	9.6	84
236	Synergistic integration of Ni and vertically aligned carbon nanotubes for enhanced transport properties on flexible substrates. <i>Carbon</i> , 2014 , 68, 308-318	10.4	17
235	Tip-based nanoscale selective growth of discrete silicon nanowires by near-field laser illumination. <i>Applied Physics A: Materials Science and Processing</i> , 2014 , 116, 51-58	2.6	5
234	Osmotically-driven transport in carbon nanotube porins. <i>Nano Letters</i> , 2014 , 14, 7051-6	11.5	28

233	Stochastic transport through carbon nanotubes in lipid bilayers and live cell membranes. <i>Nature</i> , 2014 , 514, 612-5	50.4	291
232	Electrical characteristics of multilayer MoS2 transistors at real operating temperatures with different ambient conditions. <i>Applied Physics Letters</i> , 2014 , 105, 152105	3.4	34
231	Vacuum-free, maskless patterning of Ni electrodes by laser reductive sintering of NiO nanoparticle ink and its application to transparent conductors. <i>ACS Nano</i> , 2014 , 8, 9807-14	16.7	98
230	Selective and localized laser annealing effect for high-performance flexible multilayer MoS2 thin-film transistors. <i>Nano Research</i> , 2014 , 7, 1137-1145	10	55
229	Single nanowire resistive nano-heater for highly localized thermo-chemical reactions: localized hierarchical heterojunction nanowire growth. <i>Small</i> , 2014 , 10, 5015-22	11	8
228	Three-dimensional filamentous human diseased cardiac tissue model. <i>Biomaterials</i> , 2014 , 35, 1367-77	15.6	90
227	Analysis of flicker noise in two-dimensional multilayer MoS2 transistors. <i>Applied Physics Letters</i> , 2014 , 104, 083110	3.4	49
226	Nanoscale Heaters: Single Nanowire Resistive Nano-heater for Highly Localized Thermo-Chemical Reactions: Localized Hierarchical Heterojunction Nanowire Growth (Small 24/2014). <i>Small</i> , 2014 , 10, 5014 ¹¹ -5014 ³⁰		
225	Nanofluidic Carbon Nanotube Membranes 2014 , 173-188		2
224	Exploitation of the coffee-ring effect to realize mechanically enhanced inkjet-printed microelectromechanical relays with U-bar-shaped cantilevers. <i>Applied Physics Letters</i> , 2014 , 105, 261901	3.4	14
223	Crystallization in nano-confinement seeded by a nanocrystal: a molecular dynamics study. <i>Journal of Applied Physics</i> , 2014 , 115, 104307	2.5	6
222	Characteristic time scales of coalescence of silver nanocomposite and nanoparticle films induced by continuous wave laser irradiation. <i>Applied Physics Letters</i> , 2014 , 105, 073110	3.4	14
221	In situ monitoring of laser-assisted hydrothermal growth of ZnO nanowires: thermally deactivating growth kinetics. <i>Small</i> , 2014 , 10, 741-9	11	30
220	A study of the transport phenomena in a wall-coated micro steam-methanol reformer. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 2008-2017	6.7	6
219	Generation of single-crystalline domain in nano-scale silicon pillars by near-field short pulsed laser. <i>Applied Physics A: Materials Science and Processing</i> , 2014 , 114, 277-285	2.6	10
218	Nanowires: Rapid, One-Step, Digital Selective Growth of ZnO Nanowires on 3D Structures Using Laser Induced Hydrothermal Growth (Adv. Funct. Mater. 26/2013). <i>Advanced Functional Materials</i> , 2013 , 23, 3315-3315	15.6	
217	Rapid, One-Step, Digital Selective Growth of ZnO Nanowires on 3D Structures Using Laser Induced Hydrothermal Growth. <i>Advanced Functional Materials</i> , 2013 , 23, 3316-3323	15.6	80
216	Nanosecond laser ablation of silver nanoparticle film. <i>Optical Engineering</i> , 2013 , 52, 024302	1.1	16

215	Laser-induced direct graphene patterning and simultaneous transferring method for graphene sensor platform. <i>Small</i> , 2013 , 9, 4269-75	11	43
214	Synthesis of hierarchical TiO ₂ nanowires with densely-packed and omnidirectional branches. <i>Nanoscale</i> , 2013 , 5, 11147-52	7.7	69
213	On demand shape-selective integration of individual vertical germanium nanowires on a Si(111) substrate via laser-localized heating. <i>ACS Nano</i> , 2013 , 7, 2090-8	16.7	17
212	Localized planarization of optical damage using laser-based chemical vapor deposition 2013 ,		2
211	Hierarchical ZnO Nano-Tree Growth for High Efficiency Solar Cell 2013 , 149-154		
210	Laser crystallization and localized growth of nanomaterials for solar applications 2013 ,		2
209	Hierarchical ZnO Nano-Tree Growth for High Efficiency Solar Cell 2013 , 149-154		
208	Effect of copper surface roughness on thermal conductance of copper/carbon nanotube array interface 2012 ,		2
207	3D micro-structures by piezoelectric inkjet printing of gold nanofluids. <i>Journal of Micromechanics and Microengineering</i> , 2012 , 22, 055022	2	58
206	Large area crystallization of amorphous Si with overlapping high repetition rate laser pulses. <i>Thin Solid Films</i> , 2012 , 520, 6724-6729	2.2	22
205	Femtosecond laser ablation enhances cell infiltration into three-dimensional electrospun scaffolds. <i>Acta Biomaterialia</i> , 2012 , 8, 2648-58	10.8	101
204	ZnO nano-tree growth study for high efficiency solar cell. <i>Energy Procedia</i> , 2012 , 14, 1093-1098	2.3	11
203	Laser-assisted simultaneous transfer and patterning of vertically aligned carbon nanotube arrays on polymer substrates for flexible devices. <i>ACS Nano</i> , 2012 , 6, 7858-66	16.7	48
202	In situ TEM near-field optical probing of nanoscale silicon crystallization. <i>Nano Letters</i> , 2012 , 12, 2524-9	11.5	38
201	Digital selective growth of ZnO nanowire arrays from inkjet-printed nanoparticle seeds on a flexible substrate. <i>Langmuir</i> , 2012 , 28, 4787-92	4	47
200	Graphene folds by femtosecond laser ablation. <i>Applied Physics Letters</i> , 2012 , 100, 233124	3.4	44
199	Large-area nanoimprinting on various substrates by reconfigurable maskless laser direct writing. <i>Nanotechnology</i> , 2012 , 23, 344012	3.4	13
198	Hierarchical weeping willow nano-tree growth and effect of branching on dye-sensitized solar cell efficiency. <i>Nanotechnology</i> , 2012 , 23, 194005	3.4	64

197	Direct Micro/Nano Patterning of Multiple Colored Quantum Dots by Large Area and Multilayer Imprinting. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 11728-11733	3.8	19
196	Non-vacuum, single-step conductive transparent ZnO patterning by ultra-short pulsed laser annealing of solution-deposited nanoparticles. <i>Applied Physics A: Materials Science and Processing</i> , 2012 , 107, 161-171	2.6	33
195	Femtosecond laser drilling of crystalline and multicrystalline silicon for advanced solar cell fabrication. <i>Applied Physics A: Materials Science and Processing</i> , 2012 , 108, 113-120	2.6	21
194	Next generation non-vacuum, maskless, low temperature nanoparticle ink laser digital direct metal patterning for a large area flexible electronics. <i>PLoS ONE</i> , 2012 , 7, e42315	3.7	92
193	Optimization of commercial rooftop PV systems in the continental united states using angle-and-wavelength-resolved solar irradiance data 2012 ,		1
192	Rapid selective metal patterning on polydimethylsiloxane (PDMS) fabricated by capillarity-assisted laser direct write. <i>Journal of Micromechanics and Microengineering</i> , 2011 , 21, 095018	2	32
191	Nanoforest of hydrothermally grown hierarchical ZnO nanowires for a high efficiency dye-sensitized solar cell. <i>Nano Letters</i> , 2011 , 11, 666-71	11.5	886
190	Growth kinetics of vertically aligned carbon nanotube arrays in clean oxygen-free conditions. <i>ACS Nano</i> , 2011 , 5, 9602-10	16.7	60
189	Frictionless sliding of single-stranded DNA in a carbon nanotube pore observed by single molecule force spectroscopy. <i>Nano Letters</i> , 2011 , 11, 1171-6	11.5	43
188	Precipitation of silicon nanoclusters by laser direct-write. <i>Optics Express</i> , 2011 , 19, 15452-8	3.3	4
187	Large heat junction thermal resistance reduction in electronics by interface nanoengineering. <i>International Journal of Heat and Mass Transfer</i> , 2011 , 54, 5183-5183	4.9	19
186	Multi-parametric growth of silicon nanowires in a single platform by laser-induced localized heat sources. <i>Nanotechnology</i> , 2011 , 22, 385303	3.4	16
185	Measurement of contractile forces generated by individual fibroblasts on self-standing fiber scaffolds. <i>Biomedical Microdevices</i> , 2011 , 13, 107-15	3.7	19
184	Fiber laser annealing of indium-tin-oxide nanoparticles for large area transparent conductive layers and optical film characterization. <i>Applied Physics A: Materials Science and Processing</i> , 2011 , 104, 29-38	2.6	28
183	In-situ monitoring of optical near-field material processing by electron microscopes. <i>Applied Physics A: Materials Science and Processing</i> , 2011 , 105, 317-321	2.6	3
182	Nanoscale electronics: digital fabrication by direct femtosecond laser processing of metal nanoparticles. <i>Advanced Materials</i> , 2011 , 23, 3176-81	24	147
181	Chemical patterning of ultrathin polymer films by direct-write multiphoton lithography. <i>Journal of the American Chemical Society</i> , 2011 , 133, 6138-41	16.4	41
180	Heat transfer across the interface between nanoscale solids and gas. <i>ACS Nano</i> , 2011 , 5, 10102-7	16.7	55

179	On demand-direct synthesis of Si and Ge nanowires on a single platform by focused laser illumination. <i>Applied Physics Letters</i> , 2011 , 99, 123109	3.4	13
178	Mismatched alloy nanowires for electronic structure tuning. <i>Applied Physics Letters</i> , 2011 , 99, 233111	3.4	2
177	Hidden role of trace gas impurities in chemical vapor deposition growth of vertically-aligned carbon nanotube arrays. <i>Applied Physics Letters</i> , 2011 , 98, 153102	3.4	21
176	Ultra high resolution, low temperature, direct metal patterning by selective laser processing of solution deposited metal nanoparticles. <i>Materials Research Society Symposia Proceedings</i> , 2010 , 1247, 1		
175	Assembly of Acircular SnO2Rod Using Optical Tweezers and Laser Curing of Metal Nanoparticles. <i>Japanese Journal of Applied Physics</i> , 2010 , 49, 05EA12	1.4	4
174	Metal nanoparticle direct inkjet printing for low-temperature 3D micro metal structure fabrication. <i>Journal of Micromechanics and Microengineering</i> , 2010 , 20, 125010	2	119
173	Recrystallization of picosecond laser-melted ZnO nanoparticles in a liquid: a molecular dynamics study. <i>Journal of Chemical Physics</i> , 2010 , 132, 164504	3.9	20
172	pH-tunable ion selectivity in carbon nanotube pores. <i>Langmuir</i> , 2010 , 26, 14848-53	4	90
171	Nanoparticle Selective Laser Processing for a Flexible Display Fabrication. <i>Japanese Journal of Applied Physics</i> , 2010 , 49, 05EC03	1.4	29
170	Ultrafast thin-film laser-induced breakdown spectroscopy of doped oxides 2010 , 49, C67		10
169	Carbon nanotube transistor controlled by a biological ion pump gate. <i>Nano Letters</i> , 2010 , 10, 1812-6	11.5	62
168	Fabrication of arbitrary polymer patterns for cell study by two-photon polymerization process. <i>Journal of Biomedical Materials Research - Part A</i> , 2010 , 93, 56-66	5.4	12
167	Exergetic Analysis of Solar-Powered Hybrid Energy Conversion and Storage Scenarios for Stationary Applications 2010 ,		1
166	Laser-induced acoustic wave generation/propagation/interaction in water in various internal channels. <i>Applied Physics A: Materials Science and Processing</i> , 2010 , 100, 391-400	2.6	2
165	The effect of micronscale anisotropic cross patterns on fibroblast migration. <i>Biomaterials</i> , 2010 , 31, 4286-95	9.6	92
164	Exergetic analysis and optimization of a solar-powered reformed methanol fuel cell micro-powerplant. <i>Journal of Power Sources</i> , 2010 , 195, 1676-1687	8.9	20
163	Hydrogen production with a solar steam-methanol reformer and colloid nanocatalyst. <i>International Journal of Hydrogen Energy</i> , 2010 , 35, 118-126	6.7	27
162	Hydrogen storage property of sandwiched magnesium hydride nanoparticle thin film. <i>International Journal of Hydrogen Energy</i> , 2010 , 35, 7232-7235	6.7	37

161	Formation of silicon ultra shallow junction by non-melt excimer laser treatment. <i>Solid-State Electronics</i> , 2010 , 54, 903-908	1.7	5
160	High-throughput near-field optical nanoprocessing of solution-deposited nanoparticles. <i>Small</i> , 2010 , 6, 1812-21	11	52
159	Optical emission imaging and spectroscopy during femtosecond laser ablation of thin metal films on flexible polymer substrates 2009 ,		2
158	Bioelectronic silicon nanowire devices using functional membrane proteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 13780-4	11.5	138
157	Absence of amorphous phase in high power femtosecond laser-ablated silicon. <i>Applied Physics Letters</i> , 2009 , 94, 011111	3.4	12
156	Large area flexible electronics fabrication by selective laser sintering of nanoparticles with a scanning mirror. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1196, 28		
155	Laser annealed composite titanium dioxide electrodes for dye-sensitized solar cells on glass and plastics. <i>Applied Physics Letters</i> , 2009 , 94, 071117	3.4	71
154	Organic Light Emitting Material Direct Writing by Nanomaterial Enabled Laser Transfer. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1179, 44		
153	Comparison of multilayer laser scribing of thin film solar cells with femto, pico, and nanosecond pulse durations 2009 ,		10
152	Self-standing aligned fiber scaffold fabrication by two photon photopolymerization. <i>Biomedical Microdevices</i> , 2009 , 11, 643-52	3.7	30
151	Melt-mediated coalescence of solution-deposited ZnO nanoparticles by excimer laser annealing for thin-film transistor fabrication. <i>Applied Physics A: Materials Science and Processing</i> , 2009 , 94, 111-115	2.6	69
150	Self-guided glass drilling by femtosecond laser pulses. <i>Applied Physics A: Materials Science and Processing</i> , 2009 , 94, 555-558	2.6	18
149	Hydrogen storage characteristics of nanograined free-standing magnesium-Biickel films. <i>Applied Physics A: Materials Science and Processing</i> , 2009 , 96, 349-352	2.6	11
148	Nanoscale laser processing and diagnostics. <i>Applied Physics A: Materials Science and Processing</i> , 2009 , 96, 289-306	2.6	28
147	Three-dimensional opto-fluidic devices fabricated by ultrashort laser pulses for high throughput single cell detection and processing. <i>Applied Physics A: Materials Science and Processing</i> , 2009 , 96, 385-390	2.6	15
146	Experimental study on spreading and evaporation of inkjet printed pico-liter droplet on a heated substrate. <i>International Journal of Heat and Mass Transfer</i> , 2009 , 52, 431-441	4.9	115
145	Transport phenomena in a steam-methanol reforming microreactor with internal heating. <i>International Journal of Hydrogen Energy</i> , 2009 , 34, 314-322	6.7	63
144	Nanocatalyst fabrication and the production of hydrogen by using photon energy. <i>International Journal of Hydrogen Energy</i> , 2009 , 34, 1835-1843	6.7	23

143	Mechanism and kinetics of growth termination in controlled chemical vapor deposition growth of multiwall carbon nanotube arrays. <i>Nano Letters</i> , 2009 , 9, 738-44	11.5	92
142	Highly efficient biocompatible single silicon nanowire electrodes with functional biological pore channels. <i>Nano Letters</i> , 2009 , 9, 1121-6	11.5	45
141	Ultrafast pulsed-laser dissociation of Mn ^{II} complexes in GaAs. <i>Journal of Applied Physics</i> , 2009 , 106, 103918	2.5	0
140	Single cell detection using a glass-based optofluidic device fabricated by femtosecond laser pulses. <i>Lab on A Chip</i> , 2009 , 9, 311-8	7.2	97
139	Large area flexible electronics fabrication by selective laser sintering of nanoparticles with a scanning mirror 2009 ,		1
138	Nanofluidic Carbon Nanotube Membranes: Applications for Water Purification and Desalination 2009 , 77-93		4
137	Transport in Laser Microfabrication: Fundamentals and Applications 2009 ,		32
136	Active glass nanoparticles by ultrafast laser pulses. <i>Micro and Nano Letters</i> , 2008 , 3, 121	0.9	9
135	Laser induced plane acoustic wave generation, propagation, and interaction with rigid structures in water. <i>Journal of Applied Physics</i> , 2008 , 104, 073104	2.5	7
134	A Review of Heat Transfer Physics. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2008 , 12, 1-60	3.7	74
133	Ion exclusion by sub-2-nm carbon nanotube pores. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 17250-5	11.5	523
132	Imaging dielectric properties of Si nanowire oxide with conductive atomic force microscopy complemented with femtosecond laser illumination. <i>Nano Letters</i> , 2008 , 8, 1949-53	11.5	12
131	Mechanism of Ion Exclusion by Sub-2nm Carbon Nanotube Membranes. <i>Materials Research Society Symposia Proceedings</i> , 2008 , 1106, 1		7
130	The Solid-State Neck Growth Mechanisms in Low Energy Laser Sintering of Gold Nanoparticles: A Molecular Dynamics Simulation Study. <i>Journal of Heat Transfer</i> , 2008 , 130,	1.8	77
129	Thermal sintering of solution-deposited nanoparticle silver ink films characterized by spectroscopic ellipsometry. <i>Applied Physics Letters</i> , 2008 , 93, 234104	3.4	35
128	Nanomaterial enabled laser transfer for organic light emitting material direct writing. <i>Applied Physics Letters</i> , 2008 , 93, 151110	3.4	38
127	Laser ablation-induced spectral plasma characteristics in optical far- and near fields. <i>Journal of Applied Physics</i> , 2008 , 104, 013110	2.5	19
126	ZnO nanowire network transistor fabrication on a polymer substrate by low-temperature, all-inorganic nanoparticle solution process. <i>Applied Physics Letters</i> , 2008 , 92, 154102	3.4	88

125	Laser activation of dopants for nanowire devices on glass and plastic. <i>Applied Physics Letters</i> , 2008 , 93, 121116	3.4	9
124	In situ monitoring of material processing by a pulsed laser beam coupled via a lensed fiber into a scanning electron microscope. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2008 , 26, 1432-1438	2.9	7
123	In situ monitoring of laser cleaning by coupling a pulsed laser beam with a scanning electron microscope. <i>Applied Physics A: Materials Science and Processing</i> , 2008 , 91, 219-222	2.6	4
122	Lithography-free high-resolution organic transistor arrays on polymer substrate by low energy selective laser ablation of inkjet-printed nanoparticle film. <i>Applied Physics A: Materials Science and Processing</i> , 2008 , 92, 579-587	2.6	67
121	Self-grown fiber fabrication by two-photon photopolymerization. <i>Applied Physics A: Materials Science and Processing</i> , 2008 , 93, 443-445	2.6	6
120	Nanoscale Patterning and Electronics on Flexible Substrate by Direct Nanoimprinting of Metallic Nanoparticles. <i>Advanced Materials</i> , 2008 , 20, 489-496	24	156
119	The neck growth mechanisms in low energy laser sintering of gold nanoparticles: a molecular dynamics simulation study 2007 ,		1
118	Nano-Structuring Using Pulsed Laser Radiation 2007 , 473-504		2
117	Direct nanoimprinting of metal nanoparticles for nanoscale electronics fabrication. <i>Nano Letters</i> , 2007 , 7, 1869-77	11.5	262
116	Transport in packed-bed and wall-coated steam-methanol reformers. <i>Journal of Power Sources</i> , 2007 , 166, 194-201	8.9	40
115	A study of steam methanol reforming in a microreactor. <i>Journal of Power Sources</i> , 2007 , 173, 458-466	8.9	59
114	Fabrication of multilayer passive and active electric components on polymer using inkjet printing and low temperature laser processing. <i>Sensors and Actuators A: Physical</i> , 2007 , 134, 161-168	3.9	136
113	Nanofluidics in carbon nanotubes. <i>Nano Today</i> , 2007 , 2, 22-29	17.9	963
112	Low Temperature OFET (Organic Field Effect Transistor) Fabrication by Metal Nanoparticle Imprinting 2007 , 947		
111	Micro/Nanoscale Structure Fabrication by Direct Nanoimprinting of Metallic and Semiconducting Nanoparticles 2007 , 307		
110	Laser induced short plane acoustic wave focusing in water. <i>Applied Physics Letters</i> , 2007 , 91, 051128	3.4	18
109	Maskless writing of a flexible nanoscale transistor with Au-contacted carbon nanotube electrodes. <i>Applied Physics Letters</i> , 2007 , 91, 243118	3.4	10
108	High resolution selective multilayer laser processing by nanosecond laser ablation of metal nanoparticle films. <i>Journal of Applied Physics</i> , 2007 , 102, 093102	2.5	41

107	Nanometer-Scale Laser Direct-Write Using Near-Field Optics. <i>MRS Bulletin</i> , 2007 , 32, 16-22	3.2	27
106	Laser Ablation-Induced Plasma Characteristics in Optical Near-Field 2007 , 357		
105	Excimer laser annealing of silicon nanowires. <i>Applied Physics Letters</i> , 2007 , 90, 111111	3.4	19
104	All-inkjet-printed flexible electronics fabrication on a polymer substrate by low-temperature high-resolution selective laser sintering of metal nanoparticles. <i>Nanotechnology</i> , 2007 , 18, 345202	3.4	560
103	Femtosecond laser ablation induced plasma characteristics from submicron craters in thin metal film. <i>Applied Physics Letters</i> , 2007 , 91, 251118	3.4	51
102	Air stable high resolution organic transistors by selective laser sintering of ink-jet printed metal nanoparticles. <i>Applied Physics Letters</i> , 2007 , 90, 141103	3.4	153
101	Air Stable High Resolution OFET (Organic Field Effect Transistor) Fabrication Using Inkjet Printing and Low Temperature Selective Laser Sintering Process 2006 , 201		
100	High-performance thin-silicon-film transistors fabricated by double laser crystallization. <i>Journal of Applied Physics</i> , 2006 , 99, 034508	2.5	12
99	Ablation of thin metal films by short-pulsed lasers coupled through near-field scanning optical microscopy probes. <i>Journal of Applied Physics</i> , 2006 , 99, 044905	2.5	50
98	Efficiency of silicon micromachining by femtosecond laser pulses in ambient air. <i>Journal of Applied Physics</i> , 2006 , 99, 083101	2.5	65
97	Nanosecond laser ablation of gold nanoparticle films. <i>Applied Physics Letters</i> , 2006 , 89, 141126	3.4	71
96	Optical near-field ablation-induced plasma characteristics. <i>Applied Physics Letters</i> , 2006 , 89, 254101	3.4	25
95	Methanol steam reformer on a silicon wafer. <i>Journal of Microelectromechanical Systems</i> , 2006 , 15, 976-985	2.5	27
94	Fast mass transport through sub-2-nanometer carbon nanotubes. <i>Science</i> , 2006 , 312, 1034-7	33.3	2257
93	Fabrication of multilayer passive electric components using inkjet printing and low temperature laser processing on polymer 2006 ,		4
92	Exergetic analysis of fuel cell micropowerplants fed by methanol. <i>International Journal of Heat and Mass Transfer</i> , 2006 , 49, 2397-2411	4.9	30
91	Damage-Free Low Temperature Pulsed Laser Printing of Gold Nanoinks On Polymers. <i>Journal of Heat Transfer</i> , 2005 , 127, 724-732	1.8	56
90	Compressible flow of liquid in a standing wave tube. <i>Journal of Fluid Mechanics</i> , 2005 , 536, 321-345	3.7	10

89	Nanoscale rapid melting and crystallization of semiconductor thin films. <i>Nano Letters</i> , 2005 , 5, 1924-30	11.5	45
88	High Performance Thin Film Transistors (TFTs) of Polycrystalline Silicon Crystallized by the Double Laser Crystallization (DLC) Technique 2005 , 271		
87	An experimental investigation of microresistor laser printing with gold nanoparticle-laden inks. <i>Applied Physics A: Materials Science and Processing</i> , 2005 , 80, 1485-1495	2.6	28
86	Laser based hybrid inkjet printing of nanoink for flexible electronics 2005 , 5713, 97		12
85	Surface nanostructuring by nano-/femtosecond laser-assisted scanning force microscopy. <i>Journal of Applied Physics</i> , 2005 , 97, 104319	2.5	108
84	Subtractive Laser Processing of Low Temperature Inkjet Printed Micro Electric Components of Functional Nano-Ink for Flexible Electronics 2005 , 1935		4
83	Transport in a Methanol Steam Reformer as the Fuel Processor for Fuel Cell Systems 2004 , 433		1
82	Near-field laser-assisted localized crystal growth and nanodeposition 2004 ,		1
81	On the coalescence of gold nanoparticles. <i>International Journal of Multiphase Flow</i> , 2004 , 30, 979-994	3.6	193
80	Manufacturing of nanoscale thickness gold lines by laser curing of a discretely deposited nanoparticle suspension. <i>Superlattices and Microstructures</i> , 2004 , 35, 437-444	2.8	77
79	Liquid-assisted femtosecond laser drilling of straight and three-dimensional microchannels in glass. <i>Applied Physics A: Materials Science and Processing</i> , 2004 , 79, 605-612	2.6	152
78	In-tandem deposition and sintering of printed gold nanoparticle inks induced by continuous Gaussian laser irradiation. <i>Applied Physics A: Materials Science and Processing</i> , 2004 , 79, 1259-1261	2.6	65
77	Observation of Femtosecond Laser-Induced Ablation in Crystalline Silicon. <i>Journal of Heat Transfer</i> , 2004 , 126, 723-726	1.8	11
76	Conductor microstructures by laser curing of printed gold nanoparticle ink. <i>Applied Physics Letters</i> , 2004 , 84, 801-803	3.4	215
75	Fountain-pen-based laser microstructuring with gold nanoparticle inks. <i>Applied Physics Letters</i> , 2004 , 85, 13-15	3.4	68
74	Microconductors on Polymer by Nanoink Printing and Pulsed Laser Curing 2004 , 597		
73	High-Quality Poly-Si Crystallization Technology Based on Laser-Induced Melting and Resolidification Dynamics of Si Thin Films.. <i>The Review of Laser Engineering</i> , 2003 , 31, 57-62	0	
72	Combined Experimental and Theoretical Study of Femtosecond Laser Based Micro/Nano Machining of Ultra Thin Metallic Films 2003 , 115		

71	Microstructuring by printing and laser curing of nanoparticle solutions. <i>Applied Physics Letters</i> , 2003 , 82, 3529-3531	3.4	139
70	Ultrafast laser-induced crystallization of amorphous silicon films. <i>Optical Engineering</i> , 2003 , 42, 3383	1.1	63
69	Chapter 2 Heat Transfer and Phase Transformations in Laser Melting and Recrystallization of Amorphous Thin Si Films. <i>Semiconductors and Semimetals</i> , 2003 , 75, 11-41	0.6	4
68	Infrared thermal velocimetry in MEMS-based fluidic devices. <i>Journal of Microelectromechanical Systems</i> , 2003 , 12, 365-372	2.5	12
67	Infrared thermal velocimetry for nonintrusive flow measurement in silicon microfluidic devices. <i>Review of Scientific Instruments</i> , 2003 , 74, 2911-2917	1.7	10
66	Femtosecond laser aperturless near-field nanomachining of metals assisted by scanning probe microscopy. <i>Applied Physics Letters</i> , 2003 , 82, 1146-1148	3.4	147
65	Laser Curing of Gold Nanoparticle Inks 2003 ,		4
64	In-situ Observation of Laser-induced Melting and Resolidification Dynamics of Si Thin Films. <i>Hyomen Kagaku</i> , 2003 , 24, 375-382		
63	Analysis of Nanosecond Explosive Vaporization Process by Photothermal/Photoacoustic Methods. <i>Transactions of the Korean Society of Mechanical Engineers, B</i> , 2003 , 27, 804-812	0.5	
62	Nanostructuring With Scanning Probe Microscope Tip Irradiated With Femtosecond Laser 2002 , 291		2
61	Femtosecond laser induced ablation of crystalline silicon upon double beam irradiation. <i>Applied Surface Science</i> , 2002 , 197-198, 720-725	6.7	59
60	Thermal conductivity of amorphous silicon thin films. <i>International Journal of Heat and Mass Transfer</i> , 2002 , 45, 2439-2447	4.9	53
59	Heat Transfer and Phase Transformations in Laser Annealing of Thin Si Films. <i>Journal of Heat Transfer</i> , 2002 , 124, 253-264	1.8	22
58	Plasma and ablation dynamics in ultrafast laser processing of crystalline silicon. <i>Journal of Applied Physics</i> , 2002 , 92, 4918-4925	2.5	135
57	Ultra-large lateral grain growth by double laser recrystallization of a-Si films. <i>Applied Physics A: Materials Science and Processing</i> , 2001 , 73, 317-322	2.6	20
56	In situ visualization of interface dynamics during the double laser recrystallization of amorphous silicon thin films. <i>Journal of Crystal Growth</i> , 2001 , 226, 8-12	1.6	15
55	Friction in micro-channel flows of a liquid and vapor in trapezoidal and sinusoidal grooves. <i>International Journal of Heat and Mass Transfer</i> , 2001 , 44, 3103-3109	4.9	21
54	Interferometric probing of rapid vaporization at a solid-liquid interface induced by pulsed-laser irradiation. <i>International Journal of Heat and Mass Transfer</i> , 2001 , 44, 3843-3853	4.9	25

53	Time-of-flight and emission spectroscopy study of femtosecond laser ablation of titanium. <i>Journal of Applied Physics</i> , 2001 , 89, 5183-5190	2.5	93
52	A New Double Laser Recrystallization Technique to Induce Ultra-Large Poly-Si Grains. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 685, 1		
51	Effect of Excimer Laser Fluence Gradient on Lateral Grain Growth in Crystallization of a-Si Thin Films. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 621, 761		
50	Relationship between fluence gradient and lateral grain growth in spatially controlled excimer laser crystallization of amorphous silicon films. <i>Journal of Applied Physics</i> , 2000 , 88, 4994-4999	2.5	56
49	In situ and ex situ diagnostics on melting and resolidification dynamics of amorphous and polycrystalline silicon thin films during excimer laser annealing. <i>Journal of Non-Crystalline Solids</i> , 2000 , 266-269, 654-658	3.9	23
48	Excimer laser-induced temperature field in melting and resolidification of silicon thin films. <i>Journal of Applied Physics</i> , 2000 , 87, 36-43	2.5	161
47	INTERPRETATION OF OPTICAL DIAGNOSTICS FOR THE ANALYSIS OF LASER CRYSTALLIZATION OF AMORPHOUS SILICON FILMS. <i>Microscale Thermophysical Engineering</i> , 2000 , 4, 25-38		8
46	Melting and resolidification dynamics of a-Si and poly-Si thin films during excimer laser annealing. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 558, 193		
45	Photothermal displacement detection and transient imaging of bump growth dynamics in laser zone texturing of NiB disk substrates. <i>Journal of Applied Physics</i> , 1999 , 85, 5618-5620	2.5	3
44	Thermal transport in melting and recrystallization of amorphous and polycrystalline Si thin films. <i>Applied Physics A: Materials Science and Processing</i> , 1999 , 69, S295-S298	2.6	25
43	Liquid-assisted pulsed laser cleaning using near-infrared and ultraviolet radiation. <i>Journal of Applied Physics</i> , 1999 , 86, 6519-6524	2.5	54
42	SPECTROSCOPIC ENERGY CHARACTERIZATION OF LASER-INDUCED TITANIUM PLUME. <i>Microscale Thermophysical Engineering</i> , 1999 , 3, 189-197		3
41	Mechanism of bump formation on glass substrates during laser texturing. <i>Journal of Applied Physics</i> , 1999 , 86, 1311-1316	2.5	45
40	Pulsed laser-induced ablation of absorbing liquids and acoustic-transient generation. <i>Applied Physics A: Materials Science and Processing</i> , 1998 , 67, 169-181	2.6	84
39	Phase-change phenomena and acoustic transient generation in the pulsed laser induced ablation of absorbing liquids. <i>Applied Surface Science</i> , 1998 , 127-129, 53-58	6.7	32
38	Laser cleaning of surface contaminants. <i>Applied Surface Science</i> , 1998 , 127-129, 721-725	6.7	87
37	Photothermal displacement measurement of transient melting and surface deformation during pulsed laser heating. <i>Applied Physics Letters</i> , 1998 , 73, 2093-2095	3.4	21
36	4. Lasers, Optics, and Thermal Considerations in Ablation Experiments. <i>Experimental Methods in the Physical Sciences</i> , 1997 , 173-223	0.4	3

35	Noncontact nanosecond-time-resolution temperature measurement in excimer laser heating of NiB disk substrates. <i>Applied Physics Letters</i> , 1997 , 71, 3191-3193	3.4	29
34	Spectral optical functions of silicon in the range of 1.13-4.96 eV at elevated temperatures. <i>International Journal of Heat and Mass Transfer</i> , 1997 , 40, 1591-1600	4.9	44
33	Optical probing of the temperature transients during pulsed-laser induced boiling of liquids. <i>Applied Physics Letters</i> , 1996 , 68, 596-598	3.4	54
32	Heat and Mass Transfer in Pulsed-Laser-Induced Phase Transformations. <i>Advances in Heat Transfer</i> , 1996 , 28, 75-144	1.9	8
31	Gas dynamics and radiation heat transfer in the vapor plume produced by pulsed laser irradiation of aluminum. <i>Journal of Applied Physics</i> , 1996 , 79, 7205-7215	2.5	97
30	Ultra-shallow p+-junction formation in silicon by excimer laser doping: a heat and mass transfer perspective. <i>International Journal of Heat and Mass Transfer</i> , 1996 , 39, 3835-3844	4.9	14
29	Pressure generation and measurement in the rapid vaporization of water on a pulsed-laser-heated surface. <i>Journal of Applied Physics</i> , 1996 , 80, 4072-4081	2.5	94
28	Separating thermal, electronic, and topographic effects in pulsed laser melting and sputtering of gold. <i>Physical Review Letters</i> , 1996 , 76, 1659-1662	7.4	17
27	Optical measurements of thermal diffusivity of a material. <i>International Journal of Thermophysics</i> , 1995 , 16, 973-995	2.1	31
26	Thermal conductivity and diffusivity of free-standing silicon nitride thin films. <i>Review of Scientific Instruments</i> , 1995 , 66, 1115-1120	1.7	123
25	Near-threshold laser sputtering of gold. <i>Journal of Applied Physics</i> , 1995 , 77, 849-864	2.5	110
24	Computational study of heat transfer and gas dynamics in the pulsed laser evaporation of metals. <i>Journal of Applied Physics</i> , 1995 , 78, 4696-4709	2.5	149
23	Enhanced acoustic cavitation following laser-induced bubble formation: Long-term memory effect. <i>Physical Review Letters</i> , 1994 , 72, 2021-2024	7.4	33
22	Measurement of solid-liquid interface temperature during pulsed excimer laser melting of polycrystalline silicon films. <i>Applied Physics Letters</i> , 1994 , 65, 1745-1747	3.4	26
21	Transient heating and melting transformations in argon-ion laser irradiation of polysilicon films. <i>Journal of Applied Physics</i> , 1993 , 73, 8088-8096	2.5	5
20	Optical reflectance and scattering studies of nucleation and growth of bubbles at a liquid-solid interface induced by pulsed laser heating. <i>Physical Review Letters</i> , 1993 , 70, 1830-1833	7.4	70
19	Transient reflectivity measurements and heat transfer modeling in laser annealing of semiconductor films. <i>International Journal of Heat and Mass Transfer</i> , 1993 , 36, 1219-1229	4.9	10
18	Modeling of pulsed laser irradiation of thin silicon layers. <i>International Journal of Heat and Mass Transfer</i> , 1993 , 36, 919-924	4.9	41

17	High temperature radiative properties of thin polysilicon films at the $\lambda = 0.6328 \mu\text{m}$ wavelength. <i>International Journal of Heat and Mass Transfer</i> , 1993 , 36, 4163-4172	4.9	13
16	Temperature dependence of optical properties for amorphous silicon at wavelengths of 632.8 and 752 nm. <i>Optics Letters</i> , 1993 , 18, 540-2	3	14
15	Temporal profile of optical transmission probe for pulsed-laser heating of amorphous silicon films. <i>Applied Physics Letters</i> , 1992 , 61, 749-751	3.4	23
14	Heat transfer in thin silicon film melting by laser line sources. <i>International Journal of Heat and Mass Transfer</i> , 1990 , 33, 797-803	4.9	3
13	Stability of phase boundaries on thin silicon layers with glass substrates. <i>Journal of Applied Physics</i> , 1987 , 62, 474-480	2.5	8
12	The role of reflectivity change in optically induced recrystallization of thin silicon films. <i>Journal of Applied Physics</i> , 1986 , 59, 454-458	2.5	33
11	A heat transfer algorithm for the laser-induced melting and recrystallization of thin silicon layers. <i>Journal of Applied Physics</i> , 1986 , 60, 2304-2309	2.5	35
10	Laser-assisted microprocessing350-375		
9	Laser processing of thin semiconductor films202-239		
8	Nano-structuring using pulsed laser radiation376-398		
7	Pulsed-laser interaction with liquids282-312		
6	Laser cleaning of particulate contaminants313-329		
5	Thermal processes in laser-materials interactions60-86		
4	Desorption at low laser energy densities87-108		
3	Laser-induced surface modification240-264		
2	Fundamentals of laser energy absorption1-32		
1	Ultrafast-laser interactions with materials146-201		