Sunggook Park

List of Publications by Year in descending order

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99 papers	2,297 citations	236925 25 h-index	233421 45 g-index
100 all docs	100 docs citations	100 times ranked	2556 citing authors

#	Article	IF	Citations
1	Modifying surface charge density of thermoplastic nanofluidic biosensors by multivalent cations within the slip plane of the electric double layer. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 648, 129147.	4.7	2
2	Fluidic operation of a polymer-based nanosensor chip for analysing single molecules. Flow, 2022, 2, .	2.6	0
3	Thermoplastic nanofluidic devices for identifying abasic sites in single DNA molecules. Lab on A Chip, 2021, 21, 1579-1589.	6.0	6
4	Electrokinetic identification of ribonucleotide monophosphates (rNMPs) using thermoplastic nanochannels. Journal of Chromatography A, 2021, 1638, 461892.	3.7	7
5	Tailoring Thermoplastic In-Plane Nanopore Size by Thermal Fusion Bonding for the Analysis of Single Molecules. ACS Sensors, 2021, 6, 3133-3143.	7.8	6
6	Labelâ€Free Identification of Single Mononucleotides by Nanoscale Electrophoresis. Small, 2021, 17, e2102567.	10.0	8
7	Labelâ€Free Identification of Single Mononucleotides by Nanoscale Electrophoresis (Small 42/2021). Small, 2021, 17, 2170220.	10.0	0
8	Openâ€tubular nanoelectrochromatography (OTâ€NEC): gelâ€free separation of single stranded DNAs (ssDNAs) in thermoplastic nanochannels. Electrophoresis, 2020, 41, 1627-1640.	2.4	15
9	Robust, transparent, superhydrophobic coatings using novel hydrophobic/hydrophilic dual-sized silica particles. Journal of Colloid and Interface Science, 2020, 574, 347-354.	9.4	57
10	Copperâ€Coordinated Histidyl Bolaamphiphile Assembly as an Oxidative Catalyst: Coordination Structure and Catalytic Activity in Cyclohexane Oxidation. ChemCatChem, 2019, 11, 4935-4943.	3.7	9
11	Nanohole array plasmonic biosensors: Emerging point-of-care applications. Biosensors and Bioelectronics, 2019, 130, 185-203.	10.1	81
12	Scalable fabrication of sub-10â€‰nm polymer nanopores for DNA analysis. Microsystems and Nanoengineering, 2019, 5, 12.	7.0	33
13	Patterned electromagnetic alignment of magnetic nanowires. Microelectronic Engineering, 2018, 193, 71-78.	2.4	8
14	Droplet impinging behavior on surfaces with wettability contrasts. Microelectronic Engineering, 2018, 195, 50-56.	2.4	29
15	Accurate, predictable, repeatable micro-assembly technology for polymer, microfluidic modules. Sensors and Actuators B: Chemical, 2018, 254, 1249-1258.	7.8	15
16	Surface Charge Density-Dependent DNA Capture through Polymer Planar Nanopores. ACS Applied Materials & Interfaces, 2018, 10, 40927-40937.	8.0	10
17	Fabrication of polymeric dual-scale nanoimprint molds using a polymer stencil membrane. Microelectronic Engineering, 2018, 199, 101-105.	2.4	9
18	Selection of UV-resins for nanostructured molds for thermal-NIL. Nanotechnology, 2018, 29, 365302.	2.6	14

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19	Electrokinetic transport properties of deoxynucleotide monophosphates (dNMPs) through thermoplastic nanochannels. Analytica Chimica Acta, 2018, 1027, 67-75.	5.4	18
20	The role of hydrophobic silane coating on Si stamps in nanoimprint lithography. Journal of Applied Physics, 2017, 121, 044909.	2.5	8
21	3D nanomolding and fluid mixing in micromixers with micro-patterned microchannel walls. Nano Convergence, 2017, 4, 4.	12.1	14
22	Effect of different fluids on rectified motion of Leidenfrost droplets on micro/sub-micron ratchets. Microelectronic Engineering, 2016, 158, 130-134.	2.4	17
23	Micron Level Placement of Nanowires via Real Time Observation Under Optical Microscope on a Desired Nanochannel for Nanosensors Application. , 2016, , .		2
24	Electrodeposition of Long Silver Nanowires in Highly Ordered Polymer-Based Template. , 2015, , .		0
25	Reduction of Nanowire Agglomeration via an Intermediate Membrane in Nanowires Preparation for Nanosensors Application. , 2015, , .		2
26	The Influence of Micro Scale Ratchet Depth on the Motion of Leidenfrost Drop. , 2015, , .		0
27	Synthesis and Characterization of ZIF-7 Membranes by <I>In Situ</I> Method. Journal of Nanoscience and Nanotechnology, 2015, 15, 575-578.	0.9	8
28	Polymer Stamps for Imprinting Nanopatterns in Polymer Substrate. Journal of Nanoscience and Nanotechnology, 2015, 15, 471-474.	0.9	4
29	Surface charge, electroosmotic flow and DNA extension in chemically modified thermoplastic nanoslits and nanochannels. Analyst, The, 2015, 140, 113-126.	3.5	57
30	Low Cost Fabrication of a Superhydrophobic <I>V</I>-Grooved Polymer Surface. Journal of Nanoscience and Nanotechnology, 2013, 13, 1884-1887.	0.9	2
31	Fabrication of Perforated Micro/Nanopore Membranes via a Combination of Nanoimprint Lithography and Pressed Self-Perfection Process for Size Reduction. Journal of Nanoscience and Nanotechnology, 2013, 13, 4129-4133.	0.9	4
32	Experimental and Numerical Study of the Effects of Asymmetric Micro Ratchets on Pool Boiling Performance. , 2013, , .		1
33	Deformation behavior in 3D molding: experimental and simulation studies. Journal of Micromechanics and Microengineering, 2012, 22, 115027.	2.6	4
34	Replication of a Thin Polydimethylsiloxane Stamp and Its Application to Dual-Nanoimprint Lithography for 3D Hybrid Nano/Micropatterns. Journal of Nanoscience and Nanotechnology, 2012, 12, 5489-5493.	0.9	4
35	3D Micromixer. , 2012, , .		0
36	The Effects of Asymmetric Micro Ratchets on Dynamic Contact Angle and Pool Boiling Performance. , 2012, , .		2

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37	A Simulation Study on the Effect of Cross-Linking Agent Concentration for Defect Tolerant Demolding in UV Nanoimprint Lithography. Langmuir, 2012, 28, 11546-11554.	3.5	25
38	3D nanomolding for lab-on-a-chip applications. Lab on A Chip, 2012, 12, 4764.	6.0	19
39	A universally applicable method for fabricating superhydrophobic polymer surfaces. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 407, 85-90.	4.7	43
40	Fabrication of Perforated Conical Nanopores in Freestanding Polymer Membranes Using Nanoimprint Lithography and Pressed Self-Perfection Method. , 2012, , .		0
41	3D molding of hierarchical micro- and nanostructures. Journal of Micromechanics and Microengineering, 2011, 21, 035016.	2.6	17
42	Flexible fabrication and applications of polymer nanochannels and nanoslits. Chemical Society Reviews, 2011, 40, 3677.	38.1	110
43	Complete plastic nanofluidic devices for DNA analysis via direct imprinting with polymer stamps. Lab on A Chip, 2011, 11, 2984.	6.0	70
44	Surface adhesion and demolding force dependence on resist composition in ultraviolet nanoimprint lithography. Applied Surface Science, 2011, 258, 1272-1278.	6.1	44
45	Novel, Gasketless, Interconnect Using Parallel Superhydrophobic Surfaces for Modular Microfluidic Systems. , 2011, , .		2
46	Soft UV-nanoimprint lithography on non-planar surfaces. Microelectronic Engineering, 2011, 88, 3287-3292.	2.4	26
47	Propulsion of droplets on micro- and sub-micron ratchet surfaces in the Leidenfrost temperature regime. Microfluidics and Nanofluidics, 2011, 10, 1045-1054.	2.2	58
48	Biocompatible/bioabsorbable silver nanocomposite coatings. Journal of Applied Polymer Science, 2011, 120, 3042-3053.	2.6	24
49	Polymerization shrinkage stress measurement for a UV-curable resist in nanoimprint lithography. Journal of Micromechanics and Microengineering, 2011, 21, 115013.	2.6	19
50	Polymerization Shrinkage and Adhesion in UV-Nanoimprint Lithography. , 2011, , .		0
51	Pool Boiling Enhancement via Micro Ratchets. , 2011, , .		1
52	Influence of Nanochannel Inlet Structure Upon DNA Capture Ratio. , 2011, , .		1
53	Fabrication of Cost-Effective Polymer-Based Nanofluidic Device for Single Molecular Analysis. , 2010, , .		0
54	Simple replication methods for producing nanoslits in thermoplastics and the transport dynamics of double-stranded DNA through these slits. Lab on A Chip, 2010, 10, 3255.	6.0	58

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55	The Influence of Ratchets Dimension and Shape on the Motion of Leidenfrost Droplet. , 2010, , .		0
56	A microfluidic platform with a free-standing perforated polymer membrane. Journal of Micromechanics and Microengineering, 2010, 20, 085011.	2.6	18
57	Nanostructuring Curved Surfaces Using a Flexible Stamp. , 2009, , .		1
58	Effect of Surface Wetting of Micro/Nano Ratchets on Leidenfrost Liquid Drop Motion. , 2009, , .		3
59	Passive micro-assembly of modular, hot embossed, polymer microfluidic devices using exact constraint design. Journal of Micromechanics and Microengineering, 2009, 19, 125025.	2.6	19
60	Demolding temperature in thermal nanoimprint lithography. Applied Physics A: Materials Science and Processing, 2009, 97, 395-402.	2.3	26
61	Perforated Micro- and Nanopores in Free-Standing Polymer Membranes Fabricated by Nanoimprint Lithography and Pressed Self-Perfection Method. , 2009, , .		0
62	3-D Integration of Micro-Gratings Into Bio-Analytical Devices. , 2009, , .		2
63	Study on demolding temperature in thermal imprint lithography via finite element analysis. Microsystem Technologies, 2008, 14, 1593-1597.	2.0	18
64	Direct microscale imprinting of Al at room temperature with Si inserts. Microsystem Technologies, 2008, 14, 815-819.	2.0	24
65	Correlation of residual stress and adhesion on copper by the effect of chemical structure of polyimides for copperâ€clad laminates. Polymer International, 2008, 57, 350-358.	3.1	27
66	Simulation study on stress and deformation of polymeric patterns during the demolding process in thermal imprint lithography. Journal of Vacuum Science & Technology B, 2008, 26, 598-605.	1.3	40
67	Fabrication of 3-D Superhydrophobic Micro-Ratchets via Combined Thermal Imprint Lithography and Photolithography. , 2008, , .		0
68	Protein Adsorption in a Continuous Flow Microchannel Environment. , 2008, , .		0
69	Photon-beam lithography reaches 12.5â€,nm half-pitch resolution. Journal of Vacuum Science & Technology B, 2007, 25, 91.	1.3	67
70	Effects of internal linkage groups of fluorinated diamine on the optical and dielectric properties of polyimide thin films. Polymer, 2007, 48, 2130-2143.	3.8	102
71	Nanoimprinting Technology for Biological Applications. , 2006, , 93-115.		0
72	Chemical patterning of sub-50-nm half pitches via nanoimprint lithography. Microelectronic Engineering, 2005, 78-79, 682-688.	2.4	10

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73	Chemical Nanopatterns via Nanoimprint Lithography for Simultaneous Control over Azimuthal and Polar Alignment of Liquid Crystals. Advanced Materials, 2005, 17, 1398-1401.	21.0	66
74	Hybrid bendable stamp copies for molding fabricated by nanoimprint lithography. Microelectronic Engineering, 2005, 78-79, 605-611.	2.4	12
75	Fabrication of polymer photonic crystals using nanoimprint lithography. Nanotechnology, 2005, 16, S261-S265.	2.6	60
76	NANOPATTERNED POLYMER THIN FILMS. Journal of Nonlinear Optical Physics and Materials, 2005, 14, 299-303.	1.8	1
77	Photonic band gaps and defect modes of polymer photonic crystal slabs. Applied Physics Letters, 2005, 86, 051101.	3.3	30
78	Controlled co-evaporation of silanes for nanoimprint stamps. Nanotechnology, 2005, 16, S171-S175.	2.6	119
79	Stamps for nanoimprint lithography by extreme ultraviolet interference lithography. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 3246.	1.6	21
80	Nanoindentation studies of polyimide thin films with various internal linkages in the diamine component. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 861-870.	2.1	13
81	Relation between morphology and work function of metals deposited on organic substrates. Applied Surface Science, 2004, 234, 333-340.	6.1	23
82	A Novel Approach to Produce Protein Nanopatterns by Combining Nanoimprint Lithography and Molecular Self-Assembly. Nano Letters, 2004, 4, 1909-1914.	9.1	194
83	Anti-adhesive layers on nickel stamps for nanoimprint lithography. Microelectronic Engineering, 2004, 73-74, 196-201.	2.4	10
84	Nanostructuring of anti-adhesive layers by hot embossing lithography. Microelectronic Engineering, 2003, 67-68, 252-258.	2.4	24
85	Copper phthalocyanine on InSb(111)Aâ€"interface bonding, growth mode and energy band alignment. Journal of Physics Condensed Matter, 2003, 15, S2729-S2740.	1.8	16
86	Nano-Imprint-Molding Resists for Lithography. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2003, 16, 435-438.	0.3	16
87	Optical constants of 3,4,9,10-perylenetetracarboxylic dianhydride films on silicon and gallium arsenide studied by spectroscopic ellipsometry. Applied Physics A: Materials Science and Processing, 2002, 75, 501-506.	2.3	25
88	Interaction of metals with an organic semiconductor: Ag and In on PTCDA. Applied Surface Science, 2002, 190, 376-381.	6.1	10
89	Tuning Schottky barrier heights by organic modification of metal-semiconductor contacts. Vacuum, 2002, 67, 101-113.	3.5	28
90	Barrier height engineering of Ag/GaAs(100) Schottky contacts by a thin organic interlayer. Applied Surface Science, 2002, 190, 461-466.	6.1	132

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91	Energy level alignment driven by electron affinity difference at 3,4,9,10-perylenetetracarboxylic dianhydride/n-GaAs(100) interfaces. Applied Physics Letters, 2001, 79, 4124-4126.	3.3	30
92	Optical Spectroscopy during Growth of PTCDA-C60Complex Thin Films. Journal of Physical Chemistry B, 2001, 105, 12076-12081.	2.6	0
93	Water sorption behaviors of the BPDA-based polyimide films depending upon the structural isomers of diamine. Journal of Applied Polymer Science, 2001, 79, 2121-2127.	2.6	16
94	Optical Anisotropy of Organic Layers Deposited on Semiconductor Surfaces. Physica Status Solidi A, 2001, 188, 1307-1317.	1.7	14
95	Optical characterisation of PTCDA films grown on passivated semiconductor substrates. Applied Surface Science, 2000, 166, 387-391.	6.1	22
96	The interface formation of PTCDA on Se-modified GaAs(100) surfaces. Applied Surface Science, 2000, 166, 376-379.	6.1	12
97	Single crystals of the organic semiconductor perylene tetracarboxylic dianhydride studied by Raman spectroscopy. Physical Review B, 2000, 61, 14564-14569.	3.2	57
98	Organic probe for inhomogeneous band bending. Applied Physics Letters, 2000, 76, 3200-3202.	3.3	14
99	Inâ€plane Extended Nanoâ€Coulter Counter (XnCC) for the Labelâ€Free Electrical Detection of Biological Particles. Electroanalysis, 0, , .	2.9	2