Sung-Won Youn

List of Publications by Year
in descending order

70	693	567281 15	610901 24
papers	citations	h-index	g-index

70	70	70	529
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Prototype development of a roller imprint system and its application to large area polymer replication for a microstructured optical device. Journal of Materials Processing Technology, 2008, 202, 76-85.	6.3	70
2	Microstructuring of glassy carbon mold for glass embossing â€“ Comparison of focused ion beam, nano/femtosecond-pulsed laser and mechanical machining. Microelectronic Engineering, 2006, 83, 2482-2492.	2.4	64
3	Fabrication of micro-mold for glass embossing using focused ion beam, femto-second laser, eximer laser and dicing techniques. Journal of Materials Processing Technology, 2007, 187-188, 326-330.	6.3	50
4	Effect of nanoscratch conditions on both deformation behavior and wet-etching characteristics of silicon (100) surface. Wear, 2006, 261, 328-337.	3.1	38
5	Characterization of age-hardening behavior of eutectic region in squeeze-cast A356-T5 alloy using nanoindenter and atomic force microscope. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 425, 28-35.	5.6	31
6	Fabrication of micro mold for hot-embossing of polyimide microfluidic platform by using electron beam lithography combined with inductively coupled plasma. Microelectronic Engineering, 2008, 85, 918-921.	2.4	26
7	Size Dependence of Quick Cavity Filling Behavior in Ultraviolet Nanoimprint Lithography Using Pentafluoropropane Gas. Japanese Journal of Applied Physics, 2010, 49, 06GL06.	1.5	26
8	A study on focused ion beam milling of glassy carbon molds for the thermal imprinting of quartz and borosilicate glasses. Journal of Micromechanics and Microengineering, 2006, 16, 2576-2584.	2.6	23
9	45 nm hp line/space patterning into a thin spin coat film by UV nanoimprint based on condensation. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, C6M12-C6M16.	1.2	23
10	A study on fabrication of silicon mold for polymer hot-embossing using focused ion beam milling. Journal of Materials Processing Technology, 2008, 201, 548-553.	6.3	22
11	Microstructuring of SU-8 photoresist by UV-assisted thermal imprinting with non-transparent mold. Microelectronic Engineering, 2008, 85, 1924-1931.	2.4	19
12	A replication process of metallic micro-mold by using parylene embossing and electroplating. Microelectronic Engineering, 2008, 85, 161-167.	2.4	17
13	Flexible Polyimide Micropump Fabricated Using Hot Embossing. Japanese Journal of Applied Physics, 2011, 50, 06GM09.	1.5	16
14	Characterization of age-hardening behavior of eutectic surface on rheo-cast A356-T5 alloy by using nano/micro-indentation, scratching and atomic force microscopy. Materials Chemistry and Physics, 2006, 100, 117-123.	4.0	15
15	Fabrication of a micro patterned parylene-C master by hot-embossing and its application to metallic mold replication. Journal of Micromechanics and Microengineering, 2007, 17, 1402-1413.	2.6	15
16	Dynamic mechanical thermal analysis, forming and mold fabrication studies for hot-embossing of a polyimide microfluidic platform. Journal of Micromechanics and Microengineering, 2008, 18, 045025.	2.6	15
17	UV Nanoimprint in Pentafluoropropane at a Minimal Imprint Pressure. Japanese Journal of Applied Physics, 2010, 49, 06GL01.	1.5	15
18	Flexible Polyimide Micropump Fabricated Using Hot Embossing. Japanese Journal of Applied Physics, 2011, 50, 06GM09.	1.5	15

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19	A process of glassy carbon etching without the micro masking effect for the fabrication of a mold with a high-quality surface. Journal of Micromechanics and Microengineering, 2009, 19, 125010.	2.6	14
20	Effect of forming conditions on linear patterning of polymer materials by hot embossing process. International Journal of Precision Engineering and Manufacturing, 2010, 11, 119-127.	2.2	12
21	Bubble-free patterning with low line edge roughness by ultraviolet nanoimprinting using trans-1,3,3,3-tetrafluoropropene condensable gas. Applied Physics Letters, 2016, 109, .	3.3	10
22	Residual layer uniformity using complementary patterns to compensate for pattern density variation in UV nanoimprint lithography. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, C6M125-C6M129.	1.2	9
23	Transfer of Relatively Large Microstructures on Polyimide Films using Thermal Nanoimprinting. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2012, 25, 255-260.	0.3	9
24	Control of Parameters Influencing the Thermal Imprint of Parylene/Silicon. Japanese Journal of Applied Physics, 2007, 46, 6363-6369.	1.5	8
25	Thermal Imprint Process of Parylene for MEMS Applications. Key Engineering Materials, 2007, 340-341, 931-936.	0.4	8
26	Effective Linewidth Measurement of 45-nm-Half-Pitch Ultraviolet Nanoimprint Lithography Patterns by Scanning Electron Microscope Inspection and Extremely Shallow Si Etching. Japanese Journal of Applied Physics, 2012, 51, 06FJ09.	1.5	8
27	Control of Resin Filling and Pattern Quality of Ultraviolet Nanoimprint Lithography in Pentafluoropropane and Helium Ambient. Japanese Journal of Applied Physics, 2013, 52, 06GJ07.	1.5	7
28	In-situEvaluation of Air/Oxygen Percentage Variation by Introducing 1,1,1,3,3-Pentafluoropropane in Ultraviolet Nanoimprint Lithography. Japanese Journal of Applied Physics, 2012, 51, 118002.	1.5	7
29	The effect of heat-treatment conditions on mechanical and morphological properties of a FIB-milled glassy carbon mold with micro patterns. Journal of Micromechanics and Microengineering, 2006, 16, 1277-1284.	2.6	6
30	Microstructuring of 45-Âµm-Deep Dual Damascene Openings in SU-8/Si by UV-Assisted Thermal Imprinting with Opaque Mold. Japanese Journal of Applied Physics, 2009, 48, 06FH09.	1.5	6
31	Bubble-free high-speed UV nanoimprint lithography using condensable gas with very low global warming potential. Japanese Journal of Applied Physics, 2016, 55, 076502.	1.5	6
32	Filling Behavior and Mold Release Force in UV Nanoimprinting Using PDMS Mold in Different Atmosphere. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2018, 31, 295-300.	0.3	6
33	Fabrication Processes for Capacity-Equalized Mold with Fine Patterns. Japanese Journal of Applied Physics, 2011, 50, 06GK04.	1.5	6
34	Direct imprint of Al foil for metallization of high-aspect ratio Al lines in nano/micro patterned SiO2/Si. Microelectronic Engineering, 2009, 86, 600-603.	2.4	5
35	Uniform Residual Layer Creation in Ultraviolet Nanoimprint Using Spin Coat Films for Sub-100-nm Patterns with Various Pattern Densities. Japanese Journal of Applied Physics, 2013, 52, 06GJ06.	1.5	5
36	Maskless patterning of borosilicate glass surface using nanoindentation-induced etch-hillock phenomena. Journal of Non-Crystalline Solids, 2005, 351, 3065-3074.	3.1	4

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37	Microstructuring of Dual Damascene Opening by Hot Embossing Combined with Etch-Back Process. Japanese Journal of Applied Physics, 2008, 47, 5189-5196.	1.5	4
38	In-situEvaluation of Air/Oxygen Percentage Variation by Introducing 1,1,1,3,3-Pentafluoropropane in Ultraviolet Nanoimprint Lithography. Japanese Journal of Applied Physics, 2012, 51, 118002.	1.5	4
39	Surface Patterning of Glass via Electrostatic Imprinting Using a Platinum Mold. Journal of Nanoscience and Nanotechnology, 2012, 12, 3181-3185.	0.9	4
40	Fabrication of sub 20-nm wide grooves in a quartz mold by space narrowing dry etching. Microelectronic Engineering, 2013, 110, 432-435.	2.4	4
41	Cu/Polyimide Multilayer Interconnections Fabricated by Nanoimprint at Every Lithography Process. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2014, 27, 73-80.	0.3	4
42	Nano-patterning on soluble block copolymer polyimide by nanoimprint. Japanese Journal of Applied Physics, 2015, 54, 088002.	1.5	4
43	Ultraviolet Nanoimprint Lithography in the Mixture of Condensable Gases with Different Vapor Pressures. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2016, 29, 181-187.	0.3	4
44	Real-time full-area monitoring of the filling process in molds for UV nanoimprint lithography using dark field illumination. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 06FB13.	1.2	3
45	Simple fabrication process for UV nanoimprint mold with embedded metal alignment marks for in-liquid alignment. Japanese Journal of Applied Physics, 2014, 53, 06JK01.	1.5	3
46	Selective Cu Patterning on Polyimide Using UV Surface Treatment and Electroless Plating. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2015, 28, 157-161.	0.3	3
47	Chip-scale pattern modification method for equalizing residual layer thickness in nanoimprint lithography. Japanese Journal of Applied Physics, 2018, 57, 06HG03.	1.5	3
48	REPLICATION OF NANO/MICRO QUARTZ MOLD BY HOT EMBOSSING AND ITS APPLICATION TO BOROSILICATE GLASS EMBOSSING. International Journal of Modern Physics B, 2008, 22, 6118-6123.	2.0	2
49	Effects of Granularity of Complementary Patterns in a Capacity-Equalized Mold Used for UV Nanoimprint Lithography. Japanese Journal of Applied Physics, 2011, 50, 06GK08.	1.5	2
50	A Study on Surface Modification of Soluble Block Copolymer Polyimide by UV Irradiation and Its Application to Electroless Plating. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2013, 26, 297-302.	0.3	2
51	Solubility Property of Condensable Gases of Trans-1-Chloro-3,3,3-Trifluoropropene and Trans-1,3,3,3-Tetrafluoropropene in UV Nanoimprint. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2019, 32, 123-130.	0.3	2
52	Metallization of Cu on Parylene-C Film Micro-patterned by Hot-embossing. , 2007, , .		1
53	UV-assisted Thermal Imprint of SU-8 Using Nickel Mold. , 2008, , .		1
54	Fabrication Processes for Capacity-Equalized Mold with Fine Patterns. Japanese Journal of Applied Physics, 2011, 50, 06GK04.	1.5	1

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55	Study on Quartz Multitier Mold Fabrication Using Gray Scale Laser Beam Lithography. Japanese Journal of Applied Physics, 2011, 50, 06GK03.	1.5	1
56	Effective Linewidth Measurement of 45-nm-Half-Pitch Ultraviolet Nanoimprint Lithography Patterns by Scanning Electron Microscope Inspection and Extremely Shallow Si Etching. Japanese Journal of Applied Physics, 2012, 51, 06FJ09.	1.5	1
57	Simplified Cu/Polyimide Damascene Approach Based on Imprint Process of Soluble Block Copolymer Polyimide. Japanese Journal of Applied Physics, 2013, 52, 10MD03.	1.5	1
58	Resin filling of UV-cured nanoimprints using pentafluoropropane to fabricate large patterns with a thin residual layer. Microelectronic Engineering, 2015, 136, 81-84.	2.4	1
59	Basic Verification of Method for Automated Design of Capacity-Equalized Mold for Nanoimprint Lithography. Journal of Nanoscience and Nanotechnology, 2017, 17, 8475-8479.	0.9	1
60	Effects of Granularity of Complementary Patterns in a Capacity-Equalized Mold Used for UV Nanoimprint Lithography. Japanese Journal of Applied Physics, 2011, 50, 06GK08.	1.5	1
61	A study on the effect of pattern pitch on deformation behaviors for surface patterning by using nano-indenter. Journal of Mechanical Science and Technology, 2005, 19, 2112-2121.	1.5	0
62	A Study on Formability of a Polyimide Film by Using Visco-Elasticity Measurement and Hot-Embossing Tests. Materials Science Forum, 2007, 561-565, 1189-1192.	0.3	0
63	Microstructuring of dual damascene opening by using hot-embossing combined with etch-back process. , 2007, , .		0
64	Formation of Cu electrical circuit by simplified damascene process based on UV-assisted thermal imprinting. Microelectronic Engineering, 2010, 87, 1150-1153.	2.4	0
65	Improved Performances of All-Polyimide Fluidic Devices Using Thermal Nanoimprinting. Applied Mechanics and Materials, 2013, 300-301, 1360-1363.	0.2	0
66	Filling behavior and mold release force in UV nanoimprinting using PDMS mold in different atmosphere. , 2017, , .		0
67	Fabrication of high-aspect-ratio micropatterns in soluble block-copolymer polyimides by a UV-assisted thermal imprint process. Journal of Mechanical Science and Technology, 2019, 33, 3755-3760.	1.5	0
68	REPLICATION OF NANO/MICRO QUARTZ MOLD BY HOT EMBOSSING AND ITS APPLICATION TO BOROSILICATE GLASS EMBOSSING. , 2009, , .		0
69	Study on Quartz Multitier Mold Fabrication Using Gray Scale Laser Beam Lithography. Japanese Journal of Applied Physics, 2011, 50, 06GK03.	1.5	0
70	Mold Design and Process for Application of Nanoimprint Lithography to Interconnections. Journal of Japan Institute of Electronics Packaging, 2019, 22, 158-163.	0.1	0