

# Sung-Won Youn

## List of Publications by Year in descending order

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70  
papers

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citations

567281

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70  
docs citations

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times ranked

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| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | 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         |
| 2  | 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         |
| 3  | 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         |
| 4  | 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         |
| 5  | Chip-scale pattern modification method for equalizing residual layer thickness in nanoimprint lithography. Japanese Journal of Applied Physics, 2018, 57, 06HG03.  | 1.5 | 3         |
| 6  | Filling behavior and mold release force in UV nanoimprinting using PDMS mold in different atmosphere. , 2017, , .  |     | 0         |
| 7  | 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         |
| 8  | 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        |
| 9  | 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         |
| 10 | 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         |
| 11 | 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         |
| 12 | 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         |
| 13 | Nano-patterning on soluble block copolymer polyimide by nanoimprint. Japanese Journal of Applied Physics, 2015, 54, 088002.  | 1.5 | 4         |
| 14 | 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         |
| 15 | 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         |
| 16 | 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         |
| 17 | Improved Performances of All-Polyimide Fluidic Devices Using Thermal Nanoimprinting. Applied Mechanics and Materials, 2013, 300-301, 1360-1363.  | 0.2 | 0         |
| 18 | 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         |

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|----|--|-----|-----------|
| 19 | 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         |
| 20 | 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         |
| 21 | 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         |
| 22 | 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         |
| 23 | In-situ Evaluation 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         |
| 24 | 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         |
| 25 | Surface Patterning of Glass via Electrostatic Imprinting Using a Platinum Mold. Journal of Nanoscience and Nanotechnology, 2012, 12, 3181-3185.  | 0.9 | 4         |
| 26 | 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         |
| 27 | 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         |
| 28 | In-situ Evaluation 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 | Fabrication Processes for Capacity-Equalized Mold with Fine Patterns. Japanese Journal of Applied Physics, 2011, 50, 06GK04.   | 1.5 | 1         |
| 30 | 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         |
| 31 | Study on Quartz Multitier Mold Fabrication Using Gray Scale Laser Beam Lithography. Japanese Journal of Applied Physics, 2011, 50, 06GK03.   | 1.5 | 1         |
| 32 | Flexible Polyimide Micropump Fabricated Using Hot Embossing. Japanese Journal of Applied Physics, 2011, 50, 06GM09.  | 1.5 | 16        |
| 33 | Fabrication Processes for Capacity-Equalized Mold with Fine Patterns. Japanese Journal of Applied Physics, 2011, 50, 06GK04.   | 1.5 | 6         |
| 34 | Flexible Polyimide Micropump Fabricated Using Hot Embossing. Japanese Journal of Applied Physics, 2011, 50, 06GM09.  | 1.5 | 15        |
| 35 | 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         |
| 36 | Study on Quartz Multitier Mold Fabrication Using Gray Scale Laser Beam Lithography. Japanese Journal of Applied Physics, 2011, 50, 06GK03.   | 1.5 | 0         |

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|----|--|-----|-----------|
| 37 | 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        |
| 38 | Formation of Cu electrical circuit by simplified damascene process based on UV-assisted thermal imprinting. Microelectronic Engineering, 2010, 87, 1150-1153.  | 2.4 | 0         |
| 39 | 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        |
| 40 | UV Nanoimprint in Pentafluoropropane at a Minimal Imprint Pressure. Japanese Journal of Applied Physics, 2010, 49, 06GL01.   | 1.5 | 15        |
| 41 | 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        |
| 42 | 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         |
| 43 | 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        |
| 44 | Microstructuring of 45- $\mu\text{m}$ -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         |
| 45 | Direct imprint of Al foil for metallization of high-aspect ratio Al lines in nano/micro patterned SiO <sub>2</sub> /Si. Microelectronic Engineering, 2009, 86, 600-603.  | 2.4 | 5         |
| 46 | REPLICATION OF NANO/MICRO QUARTZ MOLD BY HOT EMBOSSING AND ITS APPLICATION TO BOROSILICATE GLASS EMBOSSING. , 2009, , .  |     | 0         |
| 47 | A replication process of metallic micro-mold by using parylene embossing and electroplating. Microelectronic Engineering, 2008, 85, 161-167.   | 2.4 | 17        |
| 48 | 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        |
| 49 | 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        |
| 50 | 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        |
| 51 | Microstructuring of SU-8 photoresist by UV-assisted thermal imprinting with non-transparent mold. Microelectronic Engineering, 2008, 85, 1924-1931.  | 2.4 | 19        |
| 52 | 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         |
| 53 | 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        |
| 54 | 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         |

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|----|---|-----|-----------|
| 55 | UV-assisted Thermal Imprint of SU-8 Using Nickel Mold. , 2008, , .  |     | 1         |
| 56 | Control of Parameters Influencing the Thermal Imprint of Parylene/Silicon. Japanese Journal of Applied Physics, 2007, 46, 6363-6369.  | 1.5 | 8         |
| 57 | 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        |
| 58 | Thermal Imprint Process of Parylene for MEMS Applications. Key Engineering Materials, 2007, 340-341, 931-936.   | 0.4 | 8         |
| 59 | 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         |
| 60 | Microstructuring of dual damascene opening by using hot-embossing combined with etch-back process. , 2007, , .  |     | 0         |
| 61 | Metallization of Cu on Parylene-C Film Micro-patterned by Hot-embossing. , 2007, , .  |     | 1         |
| 62 | Fabrication of micro-mold for glass embossing using focused ion beam, femto-second laser, excimer laser and dicing techniques. Journal of Materials Processing Technology, 2007, 187-188, 326-330.  | 6.3 | 50        |
| 63 | 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        |
| 64 | Microstructuring of glassy carbon mold for glass embossing “ Comparison of focused ion beam, nano/femtosecond-pulsed laser and mechanical machining. Microelectronic Engineering, 2006, 83, 2482-2492.  | 2.4 | 64        |
| 65 | Effect of nanoscratch conditions on both deformation behavior and wet-etching characteristics of silicon (100) surface. Wear, 2006, 261, 328-337.   | 3.1 | 38        |
| 66 | 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        |
| 67 | 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         |
| 68 | 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        |
| 69 | 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         |
| 70 | Maskless patterning of borosilicate glass surface using nanoindentation-induced etch-hillock phenomena. Journal of Non-Crystalline Solids, 2005, 351, 3065-3074.  | 3.1 | 4         |