Jun-Bo Yoon

List of Publications by Citations

Source: https://exaly.com/author-pdf/6915917/jun-bo-yoon-publications-by-citations.pdf

Version: 2024-04-28

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.

165 papers

3,275 citations

31 h-index 51 g-index

198 ext. papers

3,838 ext. citations

5.7 avg, IF

5.09 L-index

| # | Paper | IF | Citations |
|-----|---|------|-----------|
| 165 | A robust superhydrophobic and superoleophobic surface with inverse-trapezoidal microstructures on a large transparent flexible substrate. <i>Soft Matter</i> , 2010 , 6, 1401 | 3.6 | 290 |
| 164 | A sub-1-volt nanoelectromechanical switching device. <i>Nature Nanotechnology</i> , 2013 , 8, 36-40 | 28.7 | 135 |
| 163 | Microlens array diffuser for a light-emitting diode backlight system. <i>Optics Letters</i> , 2006 , 31, 3016-8 | 3 | 126 |
| 162 | Self-cleaning hybrid energy harvester to generate power from raindrop and sunlight. <i>Nano Energy</i> , 2015 , 12, 636-645 | 17.1 | 118 |
| 161 | Fabrication and characterization of a nanoelectromechanical switch with 15-nm-thick suspension air gap. <i>Applied Physics Letters</i> , 2008 , 92, 103110 | 3.4 | 112 |
| 160 | Performance-enhanced triboelectric nanogenerator enabled by wafer-scale nanogrates of multistep pattern downscaling. <i>Nano Energy</i> , 2017 , 35, 415-423 | 17.1 | 101 |
| 159 | "Lock-and-key" geometry effect of patterned surfaces: wettability and switching of adhesive force. <i>Small</i> , 2009 , 5, 90-4 | 11 | 97 |
| 158 | CMOS-compatible surface-micromachined suspended-spiral inductors for multi-GHz silicon RF ICs. <i>IEEE Electron Device Letters</i> , 2002 , 23, 591-593 | 4.4 | 89 |
| 157 | Shape-controlled, high fill-factor microlens arrays fabricated by a 3D diffuser lithography and plastic replication method. <i>Optics Express</i> , 2004 , 12, 6366-71 | 3.3 | 82 |
| 156 | Surface micromachined solenoid on-Si and on-glass inductors for RF applications. <i>IEEE Electron Device Letters</i> , 1999 , 20, 487-489 | 4.4 | 81 |
| 155 | NEMS switch with 30 nm-thick beam and 20 nm-thick air-gap for high density non-volatile memory applications. <i>Solid-State Electronics</i> , 2008 , 52, 1578-1583 | 1.7 | 74 |
| 154 | 3-D construction of monolithic passive components for RF and microwave ICs using thick-metal surface micromachining technology. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2003 , 51, 279-288 | 4.1 | 69 |
| 153 | Simple liquid crystal display backlight unit comprising only a single-sheet micropatterned polydimethylsiloxane (PDMS) light-guide plate. <i>Optics Letters</i> , 2007 , 32, 2665-7 | 3 | 61 |
| 152 | A simple and effective lift-off with positive photoresist. <i>Journal of Micromechanics and Microengineering</i> , 2005 , 15, 2136-2140 | 2 | 60 |
| 151 | Spontaneous Lamellar Alignment in Thickness-Modulated Block Copolymer Films. <i>Advanced Functional Materials</i> , 2009 , 19, 2584-2591 | 15.6 | 59 |
| 150 | 60-GHz CPW-fed post-supported patch antenna using micromachining technology. <i>IEEE Microwave and Wireless Components Letters</i> , 2005 , 15, 635-637 | 2.6 | 54 |
| 149 | Experimental analysis of the effect of metal thickness on the quality factor in integrated spiral inductors for RF ICs. <i>IEEE Electron Device Letters</i> , 2004 , 25, 76-79 | 4.4 | 47 |

| 148 | Hermetically Sealed Inductor-Capacitor (LC) Resonator for Remote Pressure Monitoring. <i>Japanese Journal of Applied Physics</i> , 1998 , 37, 7124-7128 | 1.4 | 47 | |
|-----|--|----------------|----|--|
| 147 | Optically selective microlens photomasks using self-assembled smectic liquid crystal defect arrays. <i>Advanced Materials</i> , 2010 , 22, 2416-20 | 24 | 44 | |
| 146 | A simple and effective fabrication method for various 3D microstructures: backside 3D diffuser lithography. <i>Journal of Micromechanics and Microengineering</i> , 2008 , 18, 125015 | 2 | 44 | |
| 145 | Nanoelectromechanical (NEM) relays integrated with CMOS SRAM for improved stability and low leakage 2009 , | | 43 | |
| 144 | Versatile Transfer of an Ultralong and Seamless Nanowire Array Crystallized at High Temperature for Use in High-Performance Flexible Devices. <i>ACS Nano</i> , 2017 , 11, 1520-1529 | 16.7 | 41 | |
| 143 | A thermal inkjet printhead with a monolithically fabricated nozzle plate and self-aligned ink feed hole. <i>Journal of Microelectromechanical Systems</i> , 1999 , 8, 229-236 | 2.5 | 40 | |
| 142 | A one-step route to a perfectly ordered wafer-scale microbowl array for size-dependent superhydrophobicity. <i>Small</i> , 2008 , 4, 211-6 | 11 | 37 | |
| 141 | Monolithic Fabrication of Electroplated Solenoid Inductors Using Three-Dimensional Photolithography of a Thick Photoresist. <i>Japanese Journal of Applied Physics</i> , 1998 , 37, 7081-7085 | 1.4 | 36 | |
| 140 | Metal-oxide-semiconductor field effect transistor humidity sensor using surface conductance. <i>Applied Physics Letters</i> , 2012 , 100, 101603 | 3.4 | 35 | |
| 139 | A high fill-factor infrared bolometer using micromachined multilevel electrothermal structures. <i>IEEE Transactions on Electron Devices</i> , 1999 , 46, 1489-1491 | 2.9 | 35 | |
| 138 | Industrial Grade, Bending-Insensitive, Transparent Nanoforce Touch Sensor via Enhanced Percolation Effect in a Hierarchical Nanocomposite Film. <i>Advanced Functional Materials</i> , 2018 , 28, 18047 | 7 2 5.6 | 35 | |
| 137 | High throughput ultralong (20 cm) nanowire fabrication using a wafer-scale nanograting template. <i>Nano Letters</i> , 2013 , 13, 3978-84 | 11.5 | 33 | |
| 136 | Electrowetting on a polymer microlens array. <i>Langmuir</i> , 2010 , 26, 12443-7 | 4 | 32 | |
| 135 | Fabrication of polymeric large-core waveguides for optical interconnects using a rubber molding process. <i>IEEE Photonics Technology Letters</i> , 2000 , 12, 62-64 | 2.2 | 32 | |
| 134 | Analytical modeling and thermodynamic analysis of robust superhydrophobic surfaces with inverse-trapezoidal microstructures. <i>Langmuir</i> , 2010 , 26, 17389-97 | 4 | 30 | |
| 133 | One-chip electronic detection of DNA hybridization using precision impedance-based CMOS array sensor. <i>Biosensors and Bioelectronics</i> , 2010 , 26, 1373-9 | 11.8 | 30 | |
| 132 | An Extremely Low Contact-Resistance MEMS Relay Using Meshed Drain Structure and Soft Insulating Layer. <i>Journal of Microelectromechanical Systems</i> , 2011 , 20, 204-212 | 2.5 | 29 | |
| 131 | High-Performance Copper Oxide Visible-Light Photodetector via Grain-Structure Model. <i>Scientific Reports</i> , 2019 , 9, 7334 | 4.9 | 28 | |

| 130 | An Electrostatically Actuated Stacked-Electrode MEMS Relay With a Levering and Torsional Spring for Power Applications. <i>Journal of Microelectromechanical Systems</i> , 2012 , 21, 1209-1217 | 2.5 | 28 |
|-----|--|------|----|
| 129 | A conventional route to scalable morphology-controlled regular structures and their superhydrophobic/hydrophilic properties for biochips application. <i>Lab on A Chip</i> , 2009 , 9, 2140-4 | 7.2 | 28 |
| 128 | MEMS-Based Tunable LC Bandstop Filter With an Ultra-Wide Continuous Tuning Range. <i>IEEE Microwave and Wireless Components Letters</i> , 2009 , 19, 710-712 | 2.6 | 25 |
| 127 | Parallel-Plate MEMS Variable Capacitor With Superior Linearity and Large Tuning Ratio Using a Levering Structure. <i>Journal of Microelectromechanical Systems</i> , 2011 , 20, 1345-1354 | 2.5 | 24 |
| 126 | Liquid-based electrostatic energy harvester with high sensitivity to human physical motion. <i>Smart Materials and Structures</i> , 2011 , 20, 125012 | 3.4 | 24 |
| 125 | A simple breathing rate-sensing method exploiting a temporarily condensed water layer formed on an oxidized surface. <i>Applied Physics Letters</i> , 2015 , 106, 053701 | 3.4 | 22 |
| 124 | A CMOS label-free DNA sensor using electrostatic induction of molecular charges. <i>Biosensors and Bioelectronics</i> , 2012 , 31, 343-8 | 11.8 | 22 |
| 123 | 3-terminal nanoelectromechanical switching device in insulating liquid media for low voltage operation and reliability improvement 2009 , | | 22 |
| 122 | Monolithic high-Q overhang inductors fabricated on silicon and glass substrates | | 21 |
| 121 | A Complementary Dual-Contact MEMS Switch Using a Zipping Technique. <i>Journal of Microelectromechanical Systems</i> , 2014 , 23, 710-718 | 2.5 | 20 |
| 120 | Complementary Dual-Contact Switch Using Soft and Hard Contact Materials for Achieving Low Contact Resistance and High Reliability Simultaneously. <i>Journal of Microelectromechanical Systems</i> , 2013 , 22, 846-854 | 2.5 | 20 |
| 119 | CMOS capacitive biosensor with enhanced sensitivity for label-free DNA detection 2012, | | 19 |
| 118 | Use of a columnar metal thin film as a nanosieve with sub-10 nm pores. <i>Advanced Materials</i> , 2012 , 24, 4408-13 | 24 | 19 |
| 117 | An ultra-low voltage MEMS switch using stiction-recovery actuation. <i>Journal of Micromechanics and Microengineering</i> , 2013 , 23, 045022 | 2 | 19 |
| 116 | Nanowire mechanical switch with a built-in diode. <i>Small</i> , 2010 , 6, 1197-200 | 11 | 18 |
| 115 | Mechanically Operated Random Access Memory (MORAM) Based on an Electrostatic Microswitch for Nonvolatile Memory Applications. <i>IEEE Transactions on Electron Devices</i> , 2008 , 55, 2785-2789 | 2.9 | 18 |
| 114 | >1000-Fold Lifetime Extension of a Nickel Electromechanical Contact Device via Graphene. <i>ACS Applied Materials & Device Sciences</i> , 2018 , 10, 9085-9093 | 9.5 | 17 |
| 113 | Material-Independent Nanotransfer onto a Flexible Substrate Using Mechanical-Interlocking Structure. <i>ACS Nano</i> , 2018 , 12, 4387-4397 | 16.7 | 17 |

(2015-2012)

| 112 | Fabrication of a uniform microlens array over a large area using self-aligned diffuser lithography (SADL). <i>Journal of Micromechanics and Microengineering</i> , 2012 , 22, 045002 | 2 | 16 | |
|-----|---|------|----|--|
| 111 | Actively transparent display with enhanced legibility based on an organic light-emitting diode and a cholesteric liquid crystal blind panel. <i>Optics Express</i> , 2013 , 21, 10358-66 | 3.3 | 15 | |
| 110 | Silicon Photonic Wire Filter Using Asymmetric Sidewall Long-Period Waveguide Grating in a Two-Mode Waveguide. <i>IEEE Photonics Technology Letters</i> , 2008 , 20, 520-522 | 2.2 | 15 | |
| 109 | Batch-fabricated CO gas sensor in large-area (8-inch) with sub-10 mW power operation. <i>Sensors and Actuators B: Chemical</i> , 2019 , 289, 153-159 | 8.5 | 14 | |
| 108 | A Highly Reliable MEMS Relay With Two-Step Spring System and Heat Sink Insulator for High-Power Switching Applications. <i>Journal of Microelectromechanical Systems</i> , 2016 , 25, 217-226 | 2.5 | 14 | |
| 107 | Multi-resonant energy harvester exploiting high-mode resonances frequency down-shifted by a flexible body beam. <i>Applied Physics Letters</i> , 2012 , 101, 123903 | 3.4 | 14 | |
| 106 | Edge-lit LCD backlight unit for 2D local dimming. Optics Express, 2018, 26, 20802-20812 | 3.3 | 14 | |
| 105 | . Journal of Microelectromechanical Systems, 2015 , 24, 1495-1502 | 2.5 | 13 | |
| 104 | Stress-engineered palladium nanowires for wide range (0.1%-3.9%) of H detection with high durability. <i>Nanoscale</i> , 2019 , 11, 16317-16326 | 7.7 | 12 | |
| 103 | A mechanical and electrical transistor structure (METS) with a sub-2 nm nanogap for effective voltage scaling. <i>Nanoscale</i> , 2014 , 6, 7799-804 | 7.7 | 12 | |
| 102 | Nanotransplantation Printing of Crystallographic-Orientation-Controlled Single-Crystalline Nanowire Arrays on Diverse Surfaces. <i>ACS Nano</i> , 2017 , 11, 11642-11652 | 16.7 | 12 | |
| 101 | Fabrication of three-dimensional SiC-based ceramic micropatterns using a sequential micromolding-and-pyrolysis process. <i>Microelectronic Engineering</i> , 2006 , 83, 2475-2481 | 2.5 | 12 | |
| 100 | Transparent conducting hybrid thin films fabricated by layer-by-layer assembly of single-wall carbon nanotubes and conducting polymers. <i>Applied Physics A: Materials Science and Processing</i> , 2012 , 108, 305-311 | 2.6 | 11 | |
| 99 | Multilevel microstructure fabrication using single-step 3D photolithography and single-step electroplating 1998 , | | 11 | |
| 98 | Geometrically Structured Nanomaterials for Nanosensors, NEMS, and Nanosieves. <i>Advanced Materials</i> , 2020 , 32, e1907082 | 24 | 10 | |
| 97 | Ultra-low voltage MEMS switch using a folded hinge structure. <i>Micro and Nano Systems Letters</i> , 2014 , 2, | 2 | 10 | |
| 96 | Electrostatic micro-actuator with a pre-charged series capacitor: modeling, design, and demonstration. <i>Journal of Micromechanics and Microengineering</i> , 2014 , 24, 065012 | 2 | 10 | |
| 95 | High-performance hybrid complementary logic inverter through monolithic integration of a MEMS switch and an oxide TFT. <i>Small</i> , 2015 , 11, 1390-5 | 11 | 10 | |

| 94 | An insulating liquid environment for reducing adhesion in a microelectromechanical system. <i>Applied Physics Letters</i> , 2011 , 99, 113516 | 3.4 | 10 |
|----|--|------|----|
| 93 | Modeling, Design, Fabrication, and Demonstration of a Digital Micromirror With Interdigitated Cantilevers. <i>Journal of Microelectromechanical Systems</i> , 2009 , 18, 1382-1395 | 2.5 | 10 |
| 92 | A new monolithic microbiosensor for whole blood analysis. <i>Sensors and Actuators A: Physical</i> , 2002 , 95, 108-113 | 3.9 | 10 |
| 91 | Fabrication of a membrane filter with controlled pore shape and its application to cell separation and strong single cell trapping. <i>Journal of Micromechanics and Microengineering</i> , 2015 , 25, 105007 | 2 | 9 |
| 90 | An effective light-extracting microstructure for a single-sheet backlight unit for liquid crystal display. <i>Journal of Micromechanics and Microengineering</i> , 2012 , 22, 095006 | 2 | 9 |
| 89 | Modeling, fabrication and demonstration of a rib-type cantilever switch with an extended gate electrode. <i>Journal of Micromechanics and Microengineering</i> , 2011 , 21, 115009 | 2 | 9 |
| 88 | A 3-D planar microlens for an effective monolithic optical interconnection system. <i>IEEE Photonics Technology Letters</i> , 2006 , 18, 814-816 | 2.2 | 9 |
| 87 | High-performance electroplated solenoid-type integrated inductor (SI/sup 2/) for RF applications using simple 3D surface micromachining technology | | 9 |
| 86 | Chemo-Mechanically Operating Palladium-Polymer Nanograting Film for a Self-Powered H Gas Sensor. <i>ACS Nano</i> , 2020 , | 16.7 | 9 |
| 85 | Use of nanoporous columnar thin film in the wafer-level packaging of MEMS devices. <i>Journal of Micromechanics and Microengineering</i> , 2010 , 20, 045002 | 2 | 8 |
| 84 | A new approach to control a deflection of an electroplated microstructure: dual current electroplating methods. <i>Journal of Micromechanics and Microengineering</i> , 2013 , 23, 055016 | 2 | 7 |
| 83 | Nanomechanical Encoding Method Using Enhanced Thermal Concentration on a Metallic Nanobridge. <i>ACS Nano</i> , 2017 , 11, 7781-7789 | 16.7 | 7 |
| 82 | An autonomous CMOS hysteretic sensor for the detection of desorption-free DNA hybridization. <i>Biosensors and Bioelectronics</i> , 2011 , 26, 4591-5 | 11.8 | 7 |
| 81 | A trans-scaled nanofabrication using 3D diffuser lithography, metal molding and nano-imprinting. <i>Journal of Micromechanics and Microengineering</i> , 2011 , 21, 045025 | 2 | 7 |
| 80 | MEMS Variable Capacitor Actuated with an Electrically Floating Plate 2007, | | 7 |
| 79 | 3-D lithography and metal surface micromachining for RF and microwave MEMS | | 7 |
| 78 | A Low Contact Resistance 4-Terminal Mems Relay: Theoretical Analysis, Design, and Demonstration. <i>Journal of Microelectromechanical Systems</i> , 2018 , 27, 497-505 | 2.5 | 6 |
| 77 | An electrostatic micromechanical biosensor for electrical detection of label-free DNA. <i>Applied Physics Letters</i> , 2012 , 100, 163701 | 3.4 | 6 |

(2017-2010)

| 76 | High performance microshutter device with space-division modulation. <i>Journal of Micromechanics and Microengineering</i> , 2010 , 20, 075030 | 2 | 6 |
|----|--|------------------|---|
| 75 | Adhesion Force Change by Electrowetting on a Polymer Microlens Array. <i>Journal of Adhesion Science and Technology</i> , 2012 , 26, 2079-2086 | 2 | 6 |
| 74 | 56.2: A New Reflective-type Transparent Display Using Cholesteric Liquid Crystal. <i>Digest of Technical Papers SID International Symposium</i> , 2010 , 41, 838 | 0.5 | 6 |
| 73 | Sloping profile and pattern transfer to silicon by shape-controllable 3-D lithography and ICP. <i>Sensors and Actuators A: Physical</i> , 2007 , 139, 281-286 | 3.9 | 6 |
| 72 | A Dram-Like Mechanical Non-Volatile Memory 2007 , | | 6 |
| 71 | High-performance three-dimensional on-chip inductors fabricated by novel micromachining technology for RF MMIC | | 6 |
| 70 | Integration of a Carbon Nanotube Network on a Microelectromechanical Switch for Ultralong Contact Lifetime. <i>ACS Applied Materials & Acs Applied & Acs App</i> | 9.5 | 5 |
| 69 | Highly reliable MEMS relay with two-step spring system and heat sink insulator for power applications 2015 , | | 5 |
| 68 | Mechanical Reliability of a Digital Micromirror With Interdigitated Cantilevers. <i>Journal of Microelectromechanical Systems</i> , 2010 , 19, 1197-1206 | 2.5 | 5 |
| 67 | Indium Tin Oxide (ITO) Transparent MEMS Switches 2009 , | | 5 |
| 66 | P-73: A Novel LCD Backlight Unit using a Light-guide Plate with High Fill-factor Microlens Array and a Conical Microlens Array Sheet. <i>Digest of Technical Papers SID International Symposium</i> , 2007 , 38, 465-4 | 168 ⁵ | 5 |
| 65 | Monolithic integration of 3-D electroplated microstructures with unlimited number of levels using planarization with a sacrificial metallic mold (PSMM) 1999 , | | 5 |
| 64 | Perfectly Aligned, Air-Suspended Nanowire Array Heater and Its Application in an Always-On Gas Sensor. <i>Advanced Functional Materials</i> , 2020 , 30, 2004448 | 15.6 | 5 |
| 63 | A review of geometric and structural design for reliable flexible electronics. <i>Journal of Micromechanics and Microengineering</i> , 2021 , 31, 074001 | 2 | 5 |
| 62 | . Journal of Microelectromechanical Systems, 2015 , 24, 1545-1556 | 2.5 | 4 |
| 61 | Realization of Nanolene: A Planar Array of Perfectly Aligned, Air-Suspended Nanowires. <i>Small</i> , 2020 , 16, e1906845 | 11 | 4 |
| 60 | Voltage-Controlled \$C{-}V\$ Response Tuning in a Parallel Plate MEMS Variable Capacitor. <i>Journal of Microelectromechanical Systems</i> , 2013 , 22, 1403-1413 | 2.5 | 4 |
| 59 | . Journal of Microelectromechanical Systems, 2017 , 26, 1417-1427 | 2.5 | 4 |

| 58 | Novel buried inverse-trapezoidal micropattern for dual-sided light extracting backlight unit. <i>Optics Express</i> , 2014 , 22, 32440-9 | 3.3 | 4 |
|----|--|-----|---|
| 57 | MEMS variable capacitor with superior linearity and large tuning ratio by moving the plate to the increasing-gap direction 2011 , | | 4 |
| 56 | High-Q, tunable-gap MEMS variable capacitor actuated with an electrically floating plate 2008, | | 4 |
| 55 | A low loss MEMS transmission line with shielded ground | | 4 |
| 54 | P-72: Ultra-thin Edge Type Single Sheet Backlight Unit for Seamless Two-dimensional Local Dimming. <i>Digest of Technical Papers SID International Symposium</i> , 2016 , 47, 1406-1408 | 0.5 | 4 |
| 53 | Utilizing mechanical adhesion force as a high contact force in a MEMS relay. <i>Sensors and Actuators A: Physical</i> , 2021 , 331, 112894 | 3.9 | 4 |
| 52 | Increasing Capacitance and Self-Resonant Frequency of the MEMS Switched Capacitor Using High- \$kappa \$ TiO2 and SU-8 Bridged Beam Structure. <i>Journal of Microelectromechanical Systems</i> , 2015 , 24, 1006-1015 | 2.5 | 3 |
| 51 | Effect of excitation point on surface phonon fields in phononic crystals in real- and k-space. <i>Journal of Applied Physics</i> , 2015 , 117, 245308 | 2.5 | 3 |
| 50 | Improvement of hot switching lifetime in MEMS DC switches using a drain voltage-sustaining capacitor 2013 , | | 3 |
| 49 | Fabrication of a large-scale Ni stamp using a multi-level SU-8 photoresist mold for advanced printed circuit board manufacturing. <i>Journal of Micromechanics and Microengineering</i> , 2011 , 21, 065026 | 2 | 3 |
| 48 | Mass-Producible Polydimethylsiloxane (PDMS) Frontlight Unit (FLU) for Reflective Displays. <i>Journal of Display Technology</i> , 2011 , 7, 526-531 | | 3 |
| 47 | Exchangeable self-curable liquid gate dielectric embedded field effect transistor. <i>Applied Physics Letters</i> , 2010 , 97, 032112 | 3.4 | 3 |
| 46 | Modeling, fabrication and demonstration of an electrostatic actuator with a coplanar pre-charged electrode. <i>Journal of Micromechanics and Microengineering</i> , 2011 , 21, 085012 | 2 | 3 |
| 45 | Linearly variable inductor with RF MEMS switches to enlarge a continuous tuning range 2009, | | 3 |
| 44 | Electrostatic digital micromirror using interdigitated cantilevers | | 3 |
| 43 | First Lateral Contact Probing of 55- \$mu\$ m Fine Pitch Micro-Bumps. <i>Journal of Microelectromechanical Systems</i> , 2018 , 27, 1114-1123 | 2.5 | 3 |
| 42 | Carbon nanotubes network contact lubrication for highly reliable MEMS switch 2017, | | 2 |
| 41 | Highly aligned suspended nanowire array for self-heating type gas sensors 2017, | | 2 |

(2014-2017)

| 40 | Realization of large-scale sub-10[hm nanogratings using a repetitive wet-chemical oxidation and etching technique. <i>Micro and Nano Systems Letters</i> , 2017 , 5, | 2 | 2 |
|----|--|-----|---|
| 39 | Ultra-Sensitive Strain Sensor Using High Density Self-Aligned Nano-Cracks 2020 , | | 2 |
| 38 | An investigation of surficial conduction heat loss in perfectly aligned micro-wire array. <i>Applied Physics Letters</i> , 2019 , 115, 131901 | 3.4 | 2 |
| 37 | 4-Terminal MEMS relay with an extremely low contact resistance employing a novel one-contact design 2017 , | | 2 |
| 36 | High-performance MEMS relay using a stacked-electrode structure and a levering and torsional spring for power applications 2012 , | | 2 |
| 35 | A Highly Flexible Superhydrophobic Microlens Array with Small Contact Angle Hysteresis for Droplet-Based Microfluidics 2009 , | | 2 |
| 34 | Performance comparison of 5GHz VCOs integrated by CMOS compatible high Q MEMS inductors | | 2 |
| 33 | A low-voltage two-axis electromagnetically actuated micromirror with bulk silicon mirror plates and torsion bars | | 2 |
| 32 | A high-performance MEMS transformer for silicon RF ICS | | 2 |
| 31 | A surface-micromachined tunable microgyroscope | | 2 |
| 30 | Fabrication of a Single Crystal Silicon Substrate for AM-LCD Using Vertical Etching of (110) Silicon. <i>Materials Research Society Symposia Proceedings</i> , 1995 , 377, 859 | | 2 |
| 29 | 4 W Power MEMS Relay With Extremely Low Contact Resistance: Theoretical Analysis, Design and Demonstration. <i>Journal of Microelectromechanical Systems</i> , 2020 , 29, 1304-1313 | 2.5 | 2 |
| 28 | Unconventional Use of a Photoresist as a Nitrogen Gas Generator Forming Transparent Dome-Shaped Microcavities . <i>Advanced Engineering Materials</i> , 2016 , 18, 559-566 | 3.5 | 2 |
| 27 | Micro and Nanoelectromechanical Contact Switches for Logic, Memory, and Power Applications. <i>KAIST Research Series</i> , 2016 , 65-117 | | 1 |
| 26 | Self-Powered, Ultra-Reliable Hydrogen Sensor Exploiting Chemomechanical Nano-Transducer and Solar-Cell 2019 , | | 1 |
| 25 | 2019, | | 1 |
| 24 | Efforts toward ideal microelectromechanical switches 2017, | | 1 |
| 23 | Three-dimensional (3-D) reshaping technique in MEMS devices by solely electrical control with ultrafine tuning resolution 2014 , | | 1 |

| 22 | Fast and robust cantilever switch with suppressed bouncing for ic applications 2011, | | 1 |
|----|--|--------------|---|
| 21 | 3.4: Invited Paper: A Novel Use of MEMS Switches in Driving AMOLED. <i>Digest of Technical Papers SID International Symposium</i> , 2008 , 39, 13 | 0.5 | 1 |
| 20 | A New Three-Dimensional Lithography Using Polymer Dispersed Liquid Crystal (PDLC) Films | | 1 |
| 19 | Micromachined CPW-fed suspended patch antenna for 77 GHz automotive radar applications 2005, | | 1 |
| 18 | Micromachined CPW-fed suspended patch antenna for 77 GHz automotive radar applications | | 1 |
| 17 | 3D diffuser lithography: a novel method to fabricate various rounded microstructures | | 1 |
| 16 | Self-assembled monolayer-assisted thin metal polishing for fabricating uniform 3D microstructures. Journal of Micromechanics and Microengineering, 2005 , 15, 1027-1032 | 2 | 1 |
| 15 | High fill-factor micromirror array and its fabrication process | | 1 |
| 14 | A disposable DNA sample preparation microfluidic chip for nucleic acid probe assay | | 1 |
| 13 | Aligned CuO nanowire array for a high performance visible light photodetector <i>Scientific Reports</i> , 2022 , 12, 2284 | 4.9 | 1 |
| 12 | Always-On Gas Sensors: Perfectly Aligned, Air-Suspended Nanowire Array Heater and Its Application in an Always-On Gas Sensor (Adv. Funct. Mater. 39/2020). <i>Advanced Functional Materials</i> , 2020 , 30, 2070264 | 15.6 | 1 |
| 11 | P-67: Wide Bandwidth Reflective Microshutter Blind Panel for Transparent Organic Light-Emitting Diode Display. <i>Digest of Technical Papers SID International Symposium</i> , 2016 , 47, 1389-1391 | 0.5 | 1 |
| 10 | P-70: Light Shifted Light-guide Plate for Simple Multi-view Spatial/Temporal Hybrid Autostereoscopic Display. <i>Digest of Technical Papers SID International Symposium</i> , 2016 , 47, 1399-1401 | 0.5 | 1 |
| 9 | Mass-producible structural design and fabrication method for a slim light-guide plate having inverse-trapezoidal light out-couplers. <i>Journal of Micromechanics and Microengineering</i> , 2019 , 29, 03500 | 2 | 1 |
| 8 | 4 W Dual-Contact Material MEMS Relay with a Contact Force Maximizing Structure 2020 , | | 1 |
| 7 | A Proactive Plastic Deformation Method for Fine-Tuning of Metal-Based MEMS Devices After Fabrication. <i>Journal of Microelectromechanical Systems</i> , 2018 , 27, 1124-1134 | 2.5 | 1 |
| 6 | Electro-Thermally Actuated Non-Volatile Mechanical Memory With CMOS-Level Operation Voltage and Low Contact Resistance. <i>Journal of Microelectromechanical Systems</i> , 2022 , 31, 87-96 | 2.5 | 0 |
| 5 | Integration of Gold Nanoparticle-Carbon Nanotube Composite for Enhanced Contact Lifetime of Microelectromechanical Switches with Very Low Contact Resistance. <i>ACS Applied Materials & amp; Interfaces</i> , 2021 , 13, 16959-16967 | 9.5 | О |

LIST OF PUBLICATIONS

| 4 | Nanowires: Realization of Nanolene: A Planar Array of Perfectly Aligned, Air-Suspended Nanowires (Small 13/2020). <i>Small</i> , 2020 , 16, 2070072 | 11 |
|---|---|------|
| 3 | . Journal of Microelectromechanical Systems, 2016 , 25, 909-915 | 2.5 |
| 2 | Densely-Packed Microbowl Array with Balanced Dielectrophoretic Forces for Single-Cell Microarray. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1222, 1 | |
| 1 | Touch Sensors: Industrial Grade, Bending-Insensitive, Transparent Nanoforce Touch Sensor via Enhanced Percolation Effect in a Hierarchical Nanocomposite Film (Adv. Funct. Mater. 42/2018). Advanced Functional Materials. 2018, 28, 1870305 | 15.6 |