

Ivo W Rangelow

List of Publications by Year in descending order

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161
papers

2,787
citations

185998

28
h-index

233125

45
g-index

161
all docs

161
docs citations

161
times ranked

2165
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 1 | Components for high speed atomic force microscopy. <i>Ultramicroscopy</i> , 2006, 106, 881-887. | 0.8 | 220 |
| 2 | Critical tasks in high aspect ratio silicon dry etching for microelectromechanical systems. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2003, 21, 1550-1562. | 0.9 | 167 |
| 3 | Piezoresistive sensors for scanning probe microscopy. <i>Ultramicroscopy</i> , 2000, 82, 39-48. | 0.8 | 104 |
| 4 | Nanoscale Engineering and Optical Addressing of Single Spins in Diamond. <i>Small</i> , 2010, 6, 2117-2121. | 5.2 | 100 |
| 5 | Hierarchical interconnections in the nano-composite material bone: Fibrillar cross-links resist fracture on several length scales. <i>Composites Science and Technology</i> , 2006, 66, 1205-1211. | 3.8 | 66 |
| 6 | Towards the implanting of ions and positioning of nanoparticles with nm spatial resolution. <i>Applied Physics A: Materials Science and Processing</i> , 2008, 91, 567-571. | 1.1 | 64 |
| 7 | Concept of deterministic single ion doping with sub-nm spatial resolution. <i>Applied Physics A: Materials Science and Processing</i> , 2006, 83, 321-327. | 1.1 | 59 |
| 8 | Dry etching with gas chopping without rippled sidewalls. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1999, 17, 2768. | 1.6 | 56 |
| 9 | Dry etching-based silicon micro-machining for MEMS. <i>Vacuum</i> , 2001, 62, 279-291. | 1.6 | 54 |
| 10 | Review of scanning probe micromachining and its applications within nanoscience. <i>Microelectronic Engineering</i> , 2014, 126, 191-203. | 1.1 | 53 |
| 11 | Nanolithography by scanning probes on calixarene molecular glass resist using mix-and-match lithography. <i>Journal of Micro/ Nanolithography, MEMS, and MOEMS</i> , 2013, 12, 031111. | 1.0 | 49 |
| 12 | Thermally driven microgripper as a tool for micro assembly. <i>Microelectronic Engineering</i> , 2006, 83, 1393-1395. | 1.1 | 44 |
| 13 | Piezoresistive and self-actuated 128-cantilever arrays for nanotechnology applications. <i>Microelectronic Engineering</i> , 2007, 84, 1260-1264. | 1.1 | 44 |
| 14 | Review Article: Active scanning probes: A versatile toolkit for fast imaging and emerging nanofabrication. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2017, 35, . | 0.6 | 44 |
| 15 | Integration of Scanning Probes and Ion Beams. <i>Nano Letters</i> , 2005, 5, 1087-1091. | 4.5 | 43 |
| 16 | Use of self-actuating and self-sensing cantilevers for imaging biological samples in fluid. <i>Nanotechnology</i> , 2009, 20, 434003. | 1.3 | 40 |
| 17 | Quantum size aspects of the piezoresistive effect in ultra thin piezoresistors. <i>Ultramicroscopy</i> , 2003, 97, 377-384. | 0.8 | 39 |
| 18 | Charging effect simulation model used in simulations of plasma etching of silicon. <i>Journal of Applied Physics</i> , 2012, 112, . | 1.1 | 38 |

| # | ARTICLE | IF | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Pattern-generation and pattern-transfer for single-digit nano devices. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, . | 0.6 | 34 |
| 20 | Scanning probes in nanostructure fabrication. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, . | 0.6 | 33 |
| 21 | Scanning proximal probe lithography for sub-10 nm resolution on calix[4]resorcinarene. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, . | 0.6 | 32 |
| 22 | Scanning probe nanolithography on calixarene. Microelectronic Engineering, 2012, 97, 96-99. | 1.1 | 32 |
| 23 | Calibration and examination of piezoresistive Wheatstone bridge cantilevers for scanning probe microscopy. Ultramicroscopy, 2003, 97, 385-389. | 0.8 | 30 |
| 24 | The spring constant calibration of the piezoresistive cantilever based biosensor. Sensors and Actuators B: Chemical, 2012, 170, 201-206. | 4.0 | 30 |
| 25 | Scanning proximity probes for nanoscience and nanofabrication. Microelectronic Engineering, 2006, 83, 1449-1455. | 1.1 | 29 |
| 26 | Advanced electric-field scanning probe lithography on molecular resist using active cantilever. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2015, 14, 031202. | 1.0 | 29 |
| 27 | Atomic layer etching of SiO ₂ with Ar and CHF ₃ plasmas: A self-limiting process for aspect ratio independent etching. Plasma Processes and Polymers, 2019, 16, 1900051. | 1.6 | 29 |
| 28 | <title>Fabrication of piezoresistive-sensed AFM cantilever probe with integrated tip</title>. Proceedings of SPIE, 1996, , . | 0.8 | 28 |
| 29 | DMCMN: In Depth Characterization and Control of AFM Cantilevers With Integrated Sensing and Actuation. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2009, 131, . | 0.9 | 28 |
| 30 | Adaptive AFM scan speed control for high aspect ratio fast structure tracking. Review of Scientific Instruments, 2014, 85, 103706. | 0.6 | 27 |
| 31 | Large area fast-AFM scanning with active "Quattro" cantilever arrays. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, . | 0.6 | 27 |
| 32 | Room-temperature single dopant atom quantum dot transistors in silicon, formed by field-emission scanning probe lithography. Journal of Applied Physics, 2018, 124, . | 1.1 | 27 |
| 33 | Field emission from diamond nanotips for scanning probe lithography. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2018, 36, . | 0.6 | 26 |
| 34 | Nanoprobe maskless lithography. Proceedings of SPIE, 2010, , . | 0.8 | 25 |
| 35 | Microthermomechanical infrared sensors. Opto-electronics Review, 2014, 22, 1-15. | 2.4 | 25 |
| 36 | Profile simulation model for sub-50nm cryogenic etching of silicon using SF ₆ /O ₂ inductively coupled plasma. Journal of Applied Physics, 2015, 118, . | 1.1 | 23 |

| # | ARTICLE | IF | CITATIONS |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Duo-action electro thermal micro gripper. <i>Microelectronic Engineering</i> , 2007, 84, 1329-1332. | 1.1 | 22 |
| 38 | Thermo-mechanical transduction suitable for high-speed scanning probe imaging and lithography. <i>Microelectronic Engineering</i> , 2016, 154, 1-7. | 1.1 | 22 |
| 39 | Atomic force microscope integrated with a scanning electron microscope for correlative nanofabrication and microscopy. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2018, 36, . | 0.6 | 22 |
| 40 | The influence of reactant transport on the profiles of gas chopping etching processes: a simulation approach. <i>Microelectronic Engineering</i> , 2003, 67-68, 338-348. | 1.1 | 20 |
| 41 | Micromachined self-actuated piezoresistive cantilever for high speed SPM. <i>Microelectronic Engineering</i> , 2012, 97, 265-268. | 1.1 | 20 |
| 42 | Increased imaging speed and force sensitivity for bio-applications with small cantilevers using a conventional AFM setup. <i>Micron</i> , 2012, 43, 1399-1407. | 1.1 | 19 |
| 43 | Atomic layer deposition for spacer defined double patterning of sub-10 nm titanium dioxide features. <i>Nanotechnology</i> , 2018, 29, 405302. | 1.3 | 19 |
| 44 | High speed quasi-monolithic silicon/piezostack SPM scanning stage. <i>Microelectronic Engineering</i> , 2012, 98, 520-523. | 1.1 | 18 |
| 45 | Multi-eigenmode control for high material contrast in bimodal and higher harmonic atomic force microscopy. <i>Nanotechnology</i> , 2015, 26, 235706. | 1.3 | 18 |
| 46 | Six-axis AFM in SEM with self-sensing and self-transduced cantilever for high speed analysis and nanolithography. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2016, 34, . | 0.6 | 17 |
| 47 | Scanning probe lithography on calixarene towards single-digit nanometer fabrication. <i>International Journal of Extreme Manufacturing</i> , 2020, 2, 032005. | 6.3 | 17 |
| 48 | <title>High-resolution tri-level process by downstream-microwave rf-biased etching</title>. , 1991, , . | | 16 |
| 49 | Thermally driven piezoresistive cantilevers for shear-force microscopy. <i>Microelectronic Engineering</i> , 2009, 86, 1212-1215. | 1.1 | 16 |
| 50 | Micromachined scanning proximal probes with integrated piezoresistive readout and bimetal actuator for high eigenmode operation. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2010, 28, C6N12-C6N17. | 0.6 | 16 |
| 51 | Fast atomic force microscopy with self-transduced, self-sensing cantilever. <i>Journal of Micro/ Nanolithography, MEMS, and MOEMS</i> , 2015, 14, 031209. | 1.0 | 16 |
| 52 | Local formation of nitrogen-vacancy centers in diamond by swift heavy ions. <i>Journal of Applied Physics</i> , 2014, 116, . | 1.1 | 15 |
| 53 | Profile evolution of Cr masked features undergoing HBr-inductively coupled plasma etching for use in 25nm silicon nanoimprint templates. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2005, 23, 2073. | 1.6 | 14 |
| 54 | Quantitative force and mass measurements using the cantilever with integrated actuator and deflection detector. <i>Microelectronic Engineering</i> , 2009, 86, 1043-1045. | 1.1 | 14 |

| # | ARTICLE | IF | CITATIONS |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | 0.1-nanometer resolution positioning stage for sub-10 nm scanning probe lithography. Proceedings of SPIE, 2013, , . | 0.8 | 14 |
| 56 | Strategies for integration of donor electron spin qubits in silicon. Microelectronic Engineering, 2006, 83, 1814-1817. | 1.1 | 13 |
| 57 | Controllable off-plane deflection of cantilevers for multiple scanning proximity probe arrays. Applied Physics A: Materials Science and Processing, 2008, 92, 525-530. | 1.1 | 13 |
| 58 | Development and modeling of an electrothermally MEMS microactuator with an integrated microgripper. Journal of Micromechanics and Microengineering, 2011, 21, 125026. | 1.5 | 13 |
| 59 | Scanning probe lithography approach for beyond CMOS devices. Proceedings of SPIE, 2013, , . | 0.8 | 13 |
| 60 | Tip Motion Sensor Signal Relation for a Composite SPM/SPL Cantilever. Journal of Microelectromechanical Systems, 2016, 25, 78-90. | 1.7 | 13 |
| 61 | Experimental study of field emission from ultrasharp silicon, diamond, GaN, and tungsten tips in close proximity to the counter electrode. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2018, 36, . | 0.6 | 13 |
| 62 | Probe-induced resistive switching memory based on organic-inorganic lead halide perovskite materials. Organic Electronics, 2019, 69, 106-113. | 1.4 | 13 |
| 63 | Mix-and-match lithography and cryogenic etching for NIL template fabrication. Microelectronic Engineering, 2020, 224, 111234. | 1.1 | 13 |
| 64 | Investigation of the sorption properties of thin GeAg films deposited on cantilever-based gas sensor. Applied Physics A: Materials Science and Processing, 2007, 87, 31-36. | 1.1 | 12 |
| 65 | Improved single ion implantation with scanning probe alignment. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2012, 30, . | 0.6 | 12 |
| 66 | Low-energy electron exposure of ultrathin polymer films with scanning probe lithography. Microelectronic Engineering, 2017, 177, 78-86. | 1.1 | 12 |
| 67 | Monolithic technology for silicon nanowires in high-topography architectures. Microelectronic Engineering, 2017, 183-184, 42-47. | 1.1 | 12 |
| 68 | Nanofabrication by field-emission scanning probe lithography and cryogenic plasma etching. Microelectronic Engineering, 2018, 192, 77-82. | 1.1 | 12 |
| 69 | Electric field scanning probe lithography on molecular glass resists using self-actuating, self-sensing cantilever. Proceedings of SPIE, 2014, , . | 0.8 | 11 |
| 70 | Molecular glass resists for scanning probe lithography. Proceedings of SPIE, 2014, , . | 0.8 | 11 |
| 71 | Fabrication of self-actuated piezoresistive thermal probes. Microelectronic Engineering, 2015, 145, 32-37. | 1.1 | 11 |
| 72 | Simulation of field emission from volcano-gated tips for scanning probe lithography. Microelectronic Engineering, 2017, 177, 19-24. | 1.1 | 11 |

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|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 73 | Thermomechanically and electromagnetically actuated piezoresistive cantilevers for fast-scanning probe microscopy investigations. <i>Sensors and Actuators A: Physical</i> , 2018, 276, 237-245. | 2.0 | 11 |
| 74 | Correlative Microscopy and Nanofabrication with AFM Integrated with SEM. <i>Microscopy Today</i> , 2019, 27, 24-30. | 0.2 | 11 |
| 75 | Lithographie der nÄchsten Generation: Angesichts milliardenschwerer Entwicklungskosten muss die Industrie zwischen vier lithographischen Verfahren auswÄhlen. <i>Physik Journal</i> , 2000, 56, 31-36. | 0.1 | 10 |
| 76 | Active Microcantilevers for High Material Contrast in Harmonic Atomic Force Microscopy. <i>Journal of Microelectromechanical Systems</i> , 2015, 24, 1622-1631. | 1.7 | 10 |
| 77 | Scanning probe-based high-accuracy overlay alignment concept for lithography applications. <i>Applied Physics A: Materials Science and Processing</i> , 2017, 123, 1. | 1.1 | 10 |
| 78 | Field-emission scanning probe lithography tool for 150Å€%mm wafer. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , 2018, 36, . | 0.6 | 10 |
| 79 | Towards alternative 3D nanofabrication in macroscopic working volumes. <i>Measurement Science and Technology</i> , 2018, 29, 114002. | 1.4 | 10 |
| 80 | Tip-based nano-manufacturing and -metrology. <i>Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics</i> , 2019, 37, . | 0.6 | 10 |
| 81 | Tip- and Laser-based 3D Nanofabrication in Extended Macroscopic Working Areas. <i>Nanomanufacturing and Metrology</i> , 2021, 4, 132-148. | 1.5 | 10 |
| 82 | Sensors for scanning probe microscopy. <i>Applied Physics A: Materials Science and Processing</i> , 2003, 76, 907-911. | 1.1 | 9 |
| 83 | Thermally driven multi-layer actuator for 2D cantilever arrays. <i>Applied Physics A: Materials Science and Processing</i> , 2011, 102, 61-68. | 1.1 | 9 |
| 84 | ViPER: simulation software for high aspect ratio plasma etching of silicon. <i>Microsystem Technologies</i> , 2014, 20, 1791-1796. | 1.2 | 9 |
| 85 | Advanced electric-field scanning probe lithography on molecular resist using active cantilever. <i>Proceedings of SPIE</i> , 2015, , . | 0.8 | 9 |
| 86 | Magnetolectric versus thermal actuation characteristics of shear force AFM probes with piezoresistive detection. <i>Measurement Science and Technology</i> , 2017, 28, 034011. | 1.4 | 9 |
| 87 | Contact atomic force microscopy using piezoresistive cantilevers in load force modulation mode. <i>Ultramicroscopy</i> , 2018, 184, 199-208. | 0.8 | 9 |
| 88 | Lights Out! Nano-Scale Topography Imaging of Sample Surface in Opaque Liquid Environments with Coated Active Cantilever Probes. <i>Nanomaterials</i> , 2019, 9, 1013. | 1.9 | 9 |
| 89 | Sensitivity Improvement to Active Piezoresistive AFM Probes Using Focused Ion Beam Processing. <i>Sensors</i> , 2019, 19, 4429. | 2.1 | 9 |
| 90 | Advanced Scanning Probe Nanolithography Using GaN Nanowires. <i>Nano Letters</i> , 2021, 21, 5493-5499. | 4.5 | 9 |

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| 91 | Microemulsion Polymerization of Butyl Acrylate under Ultrasound Irradiation. Polymer Journal, 2006, 38, 264-276. | 1.3 | 8 |
| 92 | Aspect ratio dependent plasma polymer deposition of fluorocarbons. Microelectronic Engineering, 2006, 83, 1174-1177. | 1.1 | 8 |
| 93 | On Total Internal Reflection Investigation of Nanoparticles by Integrated Micro-Fluidic System. Nano Letters, 2008, 8, 375-381. | 4.5 | 8 |
| 94 | Characterization of an electro-thermal micro gripper and tip sharpening using FIB technique. Microsystem Technologies, 2010, 16, 1901-1908. | 1.2 | 8 |
| 95 | Mix & match electron beam & scanning probe lithography for high throughput sub-10 nm lithography. Proceedings of SPIE, 2013, , . | 0.8 | 8 |
| 96 | Low temperature dry etching of chromium towards control at sub-5 nm dimensions. Nanotechnology, 2016, 27, 415302. | 1.3 | 8 |
| 97 | Nano-line width control and standards using Lateral Pattern Definition technique. Microelectronic Engineering, 2006, 83, 1555-1558. | 1.1 | 7 |
| 98 | Nanoscale pattern transfer for templates, NEMS, and nano-optics. , 2007, , . | | 7 |
| 99 | Inverse microemulsion copolymerization of butyl acrylate and acrylamide: kinetics, colloidal parameters and some model applications. Polymer International, 2007, 56, 364-370. | 1.6 | 7 |
| 100 | New method for the precise flux calculation of neutrals for arbitrary surfaces in profile etch simulations. Microelectronic Engineering, 2008, 85, 982-984. | 1.1 | 7 |
| 101 | Integrated plasma processing simulation framework, linking tool scale plasma models with 2D feature scale etch simulator. Microelectronic Engineering, 2009, 86, 976-978. | 1.1 | 7 |
| 102 | ARCH-type micro-cantilever FPA for uncooled IR detection. Microelectronic Engineering, 2012, 98, 614-618. | 1.1 | 7 |
| 103 | Tailored molecular glass resists for scanning probe lithography. Proceedings of SPIE, 2015, , . | 0.8 | 7 |
| 104 | Tip-based nanolithography methods and materials. Frontiers of Nanoscience, 2016, , 497-542. | 0.3 | 7 |
| 105 | Charged particle single nanometre manufacturing. Beilstein Journal of Nanotechnology, 2018, 9, 2855-2882. | 1.5 | 7 |
| 106 | Scanning probe lithography for electronics at the 5nm scale. SPIE Newsroom, 0, , . | 0.1 | 7 |
| 107 | Investigations of the sorption behaviour of amorphous nitrogen-rich carbon nitride films as sensitive layers for cantilever-based chemical sensors. Applied Physics A: Materials Science and Processing, 2004, 79, 531-536. | 1.1 | 6 |
| 108 | Micro-fluidic analysis based on total internal light reflection. Microelectronic Engineering, 2006, 83, 1294-1297. | 1.1 | 6 |

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| 109 | Diffraction under total internal reflection for micro-fluidic analysis. Applied Physics A: Materials Science and Processing, 2006, 84, 191-196. | 1.1 | 6 |
| 110 | Temperature and oxygen concentration effects on anisotropy in chromium hard mask etching for nanoscale fabrication. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, . | 0.9 | 6 |
| 111 | Cryogenic etching for pattern transfer into silicon of Mix-and-Match structured resist layers. Microelectronic Engineering, 2020, 227, 111325. | 1.1 | 6 |
| 112 | Lateral force microscopy using cantilevers with integrated Wheatstone bridge piezoresistive deflection sensor. Proceedings of SPIE, 1996, , . | 0.8 | 5 |
| 113 | Microfabricated cantilever with metallic tip for electrostatic and capacitance microscopy and its application to investigation of semiconductor devices. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004. 22. 506. | 1.6 | 5 |
| 114 | Application of a Scanning Thermal Nano-Probe for Thermal Imaging of High Frequency Active devices. Japanese Journal of Applied Physics, 2005, 44, 6823-6825. | 0.8 | 5 |
| 115 | Experimental setup for characterization of self-actuated microcantilevers with piezoresistive readout for chemical recognition of volatile substances. Review of Scientific Instruments, 2008, 79, 094101. | 0.6 | 5 |
| 116 | Self-actuated, self-sensing cantilever for fast CD measurement. Proceedings of SPIE, 2015, , . | 0.8 | 5 |
| 117 | Fabrication Process for an Optomechanical Transducer Platform with Integrated Actuation. Journal of Research of the National Institute of Standards and Technology, 2016, 121, 507. | 0.4 | 5 |
| 118 | Next generation lithographyâ€”the rise of unconventional methods?. Frontiers of Nanoscience, 2016, 11, 479-495. | 0.3 | 5 |
| 119 | Sharp GaN nanowires used as field emitter on active cantilevers for scanning probe lithography. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2018, 36, . | 0.6 | 5 |
| 120 | Theoretical investigation of the enhancement factor for a single field emitter in close proximity to the counter electrode. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2018, 36, 06JL01. | 0.6 | 5 |
| 121 | Balancing ion parameters and fluorocarbon chemical reactants for SiO2 pattern transfer control using fluorocarbon-based atomic layer etching. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2019, 37, . | 0.6 | 5 |
| 122 | Field-emission scanning probe lithography with self-actuating and self-sensing cantilevers for devices with single digit nanometer dimensions. , 2018, , . | | 5 |
| 123 | Mechanical characterization of membrane like microelectronic components. Microelectronic Engineering, 2006, 83, 1036-1042. | 1.1 | 4 |
| 124 | Selective Laser Ablation in Resists and Block Copolymers for High Resolution Lithographic Patterning. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2015, 28, 663-668. | 0.1 | 4 |
| 125 | High-throughput process chain for single electron transistor devices based on field-emission scanning probe lithography and Smart Nanoimprint lithography technology. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2019, 37, 021603. | 0.6 | 4 |
| 126 | Tip-based electron beam induced deposition using active cantilevers. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2019, 37, . | 0.6 | 4 |

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|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 127 | Line edge roughness metrology software. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, . | 0.6 | 4 |
| 128 | Atomic force microscope integrated into a scanning electron microscope for fabrication and metrology at the nanometer scale. , 2019, , . | | 4 |
| 129 | Nanostructuring Techniques for 3C-SiC(100) NEMS Structures. Materials Science Forum, 2010, 645-648, 841-844. | 0.3 | 3 |
| 130 | Parallel SPM cantilever arrays for large area surface metrology and lithography. Proceedings of SPIE, 2014, , . | 0.8 | 3 |
| 131 | Estimator based multi-eigenmode control of cantilevers in multifrequency Atomic Force Microscopy. , 2015, , . | | 3 |
| 132 | Cantilever array with optomechanical read-out and integrated actuation for simultaneous high sensitivity force detection. , 2016, , . | | 3 |
| 133 | Nanoscale lift-off process using field emission scanning probe lithography. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2019, 37, . | 0.6 | 3 |
| 134 | Field emission scanning probe lithography with GaN nanowires on active cantilevers. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, 032806. | 0.6 | 3 |
| 135 | Determination of the mixing ratio of a flowing gas mixture with self-actuated microcantilevers. Journal of Sensors and Sensor Systems, 2020, 9, 71-78. | 0.6 | 3 |
| 136 | Single nano-digit and closed-loop scanning probe lithography for manufacturing of electronic and optical nanodevices. , 2018, , . | | 3 |
| 137 | Thermal imaging of microwave power GaAs-FET with scanning thermal nanoprobe. , 2002, , . | | 2 |
| 138 | Radicals transport modelling in NANOJET. Applied Physics A: Materials Science and Processing, 2005, 81, 1661-1666. | 1.1 | 2 |
| 139 | Raster-Sonden-Mikroskopie mit Cantilever-Arrays (Scanning Probe Microscopy with Cantilever) Tj ETQq1 1 0.784314 rgBT /Oerlock 1 0,35 2 | 0.3 | 2 |
| 140 | Irregular film thickness distribution in C4F8 inductively coupled plasma polymer deposition. Microelectronic Engineering, 2012, 98, 524-527. | 1.1 | 2 |
| 141 | Shear force microscopy using piezoresistive cantilevers in surface metrology. , 2014, , . | | 2 |
| 142 | Heterodyne standing-wave interferometer / Heterodynes Stehende-Welle-Interferometer. TM Technisches Messen, 2018, 85, s80-s85. | 0.3 | 2 |
| 143 | Nanostructuring of Mo/Si multilayers by means of reactive ion etching using a three-level mask. Thin Solid Films, 2004, 458, 227-232. | 0.8 | 1 |
| 144 | Chromium nano-width ribbons by standard lithography and wet etching. Microelectronic Engineering, 2004, 73-74, 588-593. | 1.1 | 1 |

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|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 145 | Low Frequency Measurements Using Piezoresistive Cantilever MEMS Devices – The Problem of Thermal Drift. <i>Procedia Engineering</i> , 2014, 87, 1259-1262. | 1.2 | 1 |
| 146 | Single mask fabrication process for movable MEMS devices. <i>Microsystem Technologies</i> , 2014, 20, 955-961. | 1.2 | 1 |
| 147 | Simulation of Fowler-Nordheim emission for scanning probe lithography. , 2017, , . | | 1 |
| 148 | Polymer–metal coating for high contrast SEM cross sections at the deep nanoscale. <i>Nanoscale</i> , 2018, 10, 22884-22895. | 2.8 | 1 |
| 149 | Silk as a biodegradable resist for field-emission scanning probe lithography. <i>Nanotechnology</i> , 2020, 31, 435303. | 1.3 | 1 |
| 150 | Parallel active cantilever AFM tool for high-throughput inspection and metrology. , 2019, , . | | 1 |
| 151 | High throughput AFM inspection system with parallel active cantilevers. , 2019, , . | | 1 |
| 152 | Mask-less nano-structuring of hydrogen terminated diamond using localized field emission scanning probe lithography (FE-SPL). <i>Applied Physics Letters</i> , 2022, 120, 093503. | 1.5 | 1 |
| 153 | Refractometric investigation and analysis of nano-scaled dispersions. , 2005, 5830, 491. | | 0 |
| 154 | Imaging Cellular and Viral Materials with Small Cantilevers Developed for High Speed Atomic Force Microscopy. <i>Materials Research Society Symposia Proceedings</i> , 2007, 1025, 1. | 0.1 | 0 |
| 155 | Design and Fabrication of a Horizontal Thermal Micro-Actuator with Integrated Micro Tweezers. <i>Advances in Science and Technology</i> , 2008, 54, 378-383. | 0.2 | 0 |
| 156 | Thermographischer Detektor basierend auf einem neuartigen Mikro-Spiegel Sensor. <i>TM Technisches Messen</i> , 2014, 81, 219-227. | 0.3 | 0 |
| 157 | Control of first and higher transverse eigenmodes of active Atomic Force Microscope cantilevers. , 2016, , . | | 0 |
| 158 | An Integrated in SEM Multi-Purpose AFM Instrument Utilizing an Active Cantilever. <i>Microscopy and Microanalysis</i> , 2019, 25, 806-807. | 0.2 | 0 |
| 159 | Active Cantilevers with Diamond-Tip for Field Emission Scanning Probe Lithography and Imaging. , 2019, , . | | 0 |
| 160 | Fabrication of optical nanodevices through field-emission scanning probe lithography and cryogenic etching. , 2018, , . | | 0 |
| 161 | Micro- and nanofabrication technologies using the nanopositioning and nanomeasuring machines. , 2019, , . | | 0 |