Francesc Perez-Murano

List of Publications by Year in Descending Order

210 papers	3,991 citations	33 h-index	54 g-index
245 ext. papers	4,410 ext. citations	3.8 avg, IF	4.97 L-index

#	Paper	IF	Citations
210	Introducing surface functionality on thermoformed polymeric films. *Micro and Nano Engineering*, **2022**, 14, 100112	3.4	0
209	Thermal Imaging of Block Copolymers with Sub-10 nm Resolution. *ACS Nano*, **2021**, 15, 9005-9016	16.7	1
208	Uncapped Gold Nanoparticles for the Metallization of Organic Monolayers. *Advanced Materials Interfaces*, **2021**, 8, 2100876	4.6	1
207	Grain-Boundary-Induced Alignment of Block Copolymer Thin Films. *Nanomaterials*, **2020**, 10,	5.4	3
206	Multi-Frequency Resonance Behaviour of a Si FractalNEMS Resonator. *Nanomaterials*, **2020**, 10,	5.4	2
205	Exploring Strategies to Contact 3D Nano-Pillars. *Nanomaterials*, **2020**, 10,	5.4	2
204	Directed Self-Assembly of Block Copolymers for the Fabrication of Functional Devices. *Polymers*, **2020**, 12,	4.5	10
203	Self-assembly of block copolymers under non-isothermal annealing conditions as revealed by grazing-incidence small-angle X-ray scattering. *Journal of Synchrotron Radiation*, **2020**, 27, 1278-1288	2.4	3
202	Influence of Quantum Dot Characteristics on the Performance of Hybrid SET-FET Circuits. *IEEE Transactions on Electron Devices*, **2019**, 66, 4461-4467	2.9	1
201	Self-assembly morphology of block copolymers in sub-10 nm topographical guiding patterns. *Molecular Systems Design and Engineering*, **2019**, 4, 175-185	4.6	4
200	Replication of nanoscale surface gratings via injection molding. *Micro and Nano Engineering*, **2019**, 3, 37-43	3.4	5
199	New routes to organometallic molecular junctions via a simple thermal processing protocol. *Journal of Materials Chemistry C*, **2019**, 7, 6630-6640	7.1	16
198	Synchrotron Radiation for the Understanding of Block Copolymer Self-assembly. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2019**, 32, 423-427	0.7	1
197	Role of Penetrability into a Brush-Coated Surface in Directed Self-Assembly of Block Copolymers. *ACS Applied Materials & Interfaces*, **2019**, 11, 3571-3581	9.5	6
196	Arrays of suspended silicon nanowires defined by ion beam implantation: mechanical coupling and combination with CMOS technology. *Nanotechnology*, **2018**, 29, 155303	3.4	7
195	Sub-30 nm patterning of molecular resists based on crosslinking through tip based oxidation. *Applied Surface Science*, **2018**, 442, 106-113	6.7	
194	Quantification of nanomechanical properties of surfaces by higher harmonic monitoring in amplitude modulated AFM imaging. *Ultramicroscopy*, **2018**, 187, 20-25	3.1	13

193	Study of buckling behavior at the nanoscale through capillary adhesion force. *Applied Physics Letters*, **2018**, 112, 193102	3.4	1
192	Geometric frustration in a hexagonal lattice of plasmonic nanoelements. *Optics Express*, **2018**, 26, 20211-20224	3.3	3
191	Nano-confinement of block copolymers in high accuracy topographical guiding patterns: modelling the emergence of defectivity due to incommensurability. *Soft Matter*, **2018**, 14, 6799-6808	3.6	9
190	Towards molecular electronic devices based on Sall-carbonSwires. *Nanoscale*, **2018**, 10, 14128-14138	7.7	28
189	Sequential Infiltration of Self-Assembled Block Copolymers: A Study by Atomic Force Microscopy. *Journal of Physical Chemistry C*, **2017**, 121, 3078-3086	3.8	19
188	Thermal scanning probe lithography for the directed self-assembly of block copolymers. *Nanotechnology*, **2017**, 28, 175301	3.4	23
187	A statistical analysis of nanocavities replication applied to injection´moulding. *International Communications in Heat and Mass Transfer*, **2017**, 81, 131-140	5.8	11
186	Recent Achievements in Sub-10 nm DSA Lithography for Line/Space Patterning. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2017**, 30, 69-75	0.7	3
185	Functional dependence of resonant harmonics on nanomechanical parameters in dynamic mode atomic force microscopy. *Beilstein Journal of Nanotechnology*, **2017**, 8, 883-891	3	5
184	Identifying the nature of surface chemical modification for directed self-assembly of block copolymers. *Beilstein Journal of Nanotechnology*, **2017**, 8, 1972-1981	3	6
183	Conductive Atomic Force Microscopy for Nanolithography Based on Local Anodic Oxidation **2017**, 211-223		
182	Suspended tungsten-based nanowires with enhanced mechanical properties grown by focused ion beam induced deposition. *Nanotechnology*, **2017**, 28, 445301	3.4	7
181	High surface coverage of a self-assembled monolayer by in situ synthesis of palladium nanodeposits. *Nanoscale*, **2017**, 9, 13281-13290	7.7	12
180	Exploring the Influence of Variability on Single-Electron Transistors Into SET-Based Circuits. *IEEE Transactions on Electron Devices*, **2017**, 64, 5172-5180	2.9	6
179	Design and Synthesis of Aviram-Ratner-Type Dyads and Rectification Studies in Langmuir-Blodgett (LB) Films. *Chemistry - A European Journal*, **2016**, 22, 10539-47	4.8	19
178	Gold interdigitated nanoelectrodes as a sensitive analytical tool for selective detection of electroactive species via redox cycling. *Mikrochimica Acta*, **2016**, 183, 1633-1639	5.8	14
177	Nanocantilever Beam Fabrication for CMOS Technology Integration **2016**, 3-36		
176	Evaluating the compressive stress generated during fabrication of Si doubly clamped nanobeams with AFM. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2016**, 34, 06KK02	1.3	4

175	Confinement of water droplets on rectangular micro/nano-arrayed surfaces. *Lab on A Chip*, **2016**, 16, 2487-93	7.2	7
174	Towards a metallic top contact electrode in molecular electronic devices exhibiting a large surface coverage by photoreduction of silver cations. *Journal of Materials Chemistry C*, **2016**, 4, 9036-9043	7.1	13
173	Nanoscale reduction of graphene oxide thin films and its characterization. *Nanotechnology*, **2015**, 26, 285301	3.4	24
172	Fabrication of functional electromechanical nanowire resonators by focused ion-beam (FIB) implantation **2015**,		2
171	Top-down silicon microcantilever with coupled bottom-up silicon nanowire for enhanced mass resolution. *Nanotechnology*, **2015**, 26, 145502	3.4	14
170	Creation of guiding patterns for directed self-assembly of block copolymers by resistless direct e-beam exposure. *Journal of Micro/ Nanolithography, MEMS, and MOEMS*, **2015**, 14, 033511	0.7	6
169	Assessing the Local Nanomechanical Properties of Self-Assembled Block Copolymer Thin Films by Peak Force Tapping. *Langmuir*, **2015**, 31, 11630-8	4	39
168	Laser Fabrication of Polymer Ferroelectric Nanostructures for Nonvolatile Organic Memory Devices. *ACS Applied Materials & Interfaces*, **2015**, 7, 19611-8	9.5	21
167	Fabrication of functional electromechanical nanowire resonators by focused ion beam implantation. *Journal of Micro/ Nanolithography, MEMS, and MOEMS*, **2015**, 14, 031207	0.7	6
166	Au cylindrical nanocup: A geometrically, tunable optical nanoresonator. *Applied Physics Letters*, **2015**, 107, 033102	3.4	3
165	Piezoresistive cantilever force sensors based on polycrystalline silicon **2015**,		2
164	Nanomechanical properties of solvent cast polystyrene and poly(methyl methacrylate) polymer blends and self-assembled block copolymers. *Journal of Micro/ Nanolithography, MEMS, and MOEMS* , **2015**, 14, 033509	0.7	4
163	Continuous monitoring of tip radius during atomic force microscopy imaging **2015**,		4
162	Increasing the elastic modulus of graphene by controlled defect creation. *Nature Physics*, **2015**, 11, 26-31	16.2	235
161	Resonant tunnelling features in a suspended silicon nanowire single-hole transistor. *Applied Physics Letters*, **2015**, 107, 223501	3.4	6
160	Boosting the local anodic oxidation of silicon through carbon nanofiber atomic force microscopy probes. *Beilstein Journal of Nanotechnology*, **2015**, 6, 215-22	3	7
159	Top-Down CMOS-NEMS Polysilicon Nanowire with Piezoresistive Transduction. *Sensors*, **2015**, 15, 17036-47	3.6	2
158	Tuning piezoresistive transduction in nanomechanical resonators by geometrical asymmetries. *Applied Physics Letters*, **2015**, 107, 073104	3.4	4

157	Nanomechanical properties of solvent cast PS and PMMA polymer blends and block co-polymers **2015**,		2
156	Nanoparticles with tunable shape and composition fabricated by nanoimprint lithography. *Nanotechnology*, **2015**, 26, 445302	3.4	9
155	Morphology of poly(propylene azelate) gratings prepared by nanoimprint lithography as revealed by atomic force microscopy and grazing incidence X-ray scattering. *Polymer*, **2015**, 61, 61-67	3.9	1
154	Batch fabrication of insulated conductive scanning probe microscopy probes with reduced capacitive coupling. *Microelectronic Engineering*, **2014**, 119, 44-47	2.5	0
153	Preparation of nascent molecular electronic devices from gold nanoparticles and terminal alkyne functionalised monolayer films. *Journal of Materials Chemistry C*, **2014**, 2, 7348-7355	7.1	31
152	H-bonding driven assembly of colloidal Au nanoparticles on nanostructured poly(styrene-b-ethylene oxide) block copolymer templates. *Journal of Materials Science*, **2014**, 49, 5246-5255	4.3	2
151	High-sensitivity linear piezoresistive transduction for nanomechanical beam resonators. *Nature Communications*, **2014**, 5, 4313	17.4	36
150	Graphene crystal growth by thermal precipitation of focused ion beam induced deposition of carbon precursor via patterned-iron thin layers. *Nanofabrication*, **2014**, 1,	4	1
149	Towards the fabrication of the top-contact electrode in molecular junctions by photoreduction of a metal precursor. *Chemistry - A European Journal*, **2014**, 20, 3421-6	4.8	12
148	Enabling electromechanical transduction in silicon nanowire mechanical resonators fabricated by focused ion beam implantation. *Nanotechnology*, **2014**, 25, 135302	3.4	23
147	Sub-10 nm resistless nanolithography for directed self-assembly of block copolymers. *ACS Applied Materials & Interfaces*, **2014**, 6, 21596-602	9.5	25
146	On the assessment by grazing-incidence small-angle X-ray scattering of replica quality in polymer gratings fabricated by nanoimprint lithography. *Journal of Applied Crystallography*, **2014**, 47, 613-618	3.8	11
145	From an Organometallic Monolayer to an Organic Monolayer Covered by Metal Nanoislands: A Simple Thermal Protocol for the Fabrication of the Top Contact Electrode in Molecular Electronic Devices. *Advanced Materials Interfaces*, **2014**, 1, 1400128	4.6	17
144	Polystyrene as a brush layer for directed self-assembly of block co-polymers. *Microelectronic Engineering*, **2013**, 110, 234-240	2.5	17
143	Horizontally patterned Si nanowire growth for nanomechanical devices. *Nanotechnology*, **2013**, 24, 095303	3.4	12
142	Improving information density in ferroelectric polymer films by using nanoimprinted gratings. *Applied Physics Letters*, **2013**, 102, 191601	3.4	18
141	Grazing-incidence small-angle X-ray scattering of soft and hard nanofabricated gratings. *Journal of Applied Crystallography*, **2012**, 45, 1038-1045	3.8	46
140	Real time protein recognition in a liquid-gated carbon nanotube field-effect transistor modified with aptamers. *Nanoscale*, **2012**, 4, 5917-23	7.7	22

139	Nonlinear detection mechanism in quantitative atomic force microscopy characterization of high-frequency nanoelectromechanical systems. *Physical Review B*, **2012**, 85,	3.3	5
138	Conductivity of SU-8 Thin Films through Atomic Force Microscopy Nano-Patterning. *Advanced Functional Materials*, **2012**, 22, 1482-1488	15.6	14
137	Fast on-wafer electrical, mechanical, and electromechanical characterization of piezoresistive cantilever force sensors. *Review of Scientific Instruments*, **2012**, 83, 015002	1.7	6
136	Electrical transduction in nanomechanical resonators based on doubly clamped bottom-up silicon nanowires. *Applied Physics Letters*, **2012**, 101, 243115	3.4	13
135	Block co-polymer guided self-assembly by surface chemical modification: optimization of multiple patterning process and pattern transfer **2012**,		2
134	Opto-thermal actuation in double layer polymer microcantilevers **2011**,		1
133	Guided self-assembly of block-copolymer for CMOS technology: a comparative study between grapho-epitaxy and surface chemical modification **2011**,		3
132	Oxide nanocrystal based nanocomposites for fabricating photoplastic AFM probes. *Nanoscale*, **2011** , 3, 4632-9	7.7	7
131	Metal microelectromechanical oscillator exhibiting ultra-high water vapor resolution. *Lab on A Chip*, **2011**, 11, 2670-2	7.2	15
130	Towards individual electrical contact of nanoparticles in nanocomposites. *Microelectronic Engineering*, **2011**, 88, 2439-2443	2.5	1
129	Post-CMOS Integration of Nanomechanical Devices by Direct Ion Beam Irradiation of Silicon. *Materials Research Society Symposia Proceedings*, **2011**, 1354, 103		1
128	Fabrication Of Nanomechanical Devices Integrated In CMOS Circuits By Ion Beam Exposure Of Silicon **2011**,		4
127	Batch wafer scale fabrication of passivated carbon nanotube transistors for electrochemical sensing applications. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2010**, 28, C6P1-C6P5	1.3	7
126	Dynamic range enhancement of nonlinear nanomechanical resonant cantilevers for highly sensitive NEMS gas/mass sensor applications. *Journal of Micromechanics and Microengineering*, **2010**, 20, 045023	2	101
125	DNA hybridization detection by electrochemical impedance spectroscopy using interdigitated gold nanoelectrodes. *Mikrochimica Acta*, **2010**, 170, 275-281	5.8	50
124	Pattern transfer optimization for the fabrication of arrays of silicon nanowires. *Microelectronic Engineering*, **2010**, 87, 1479-1482	2.5	1
123	Silicon microcantilevers with MOSFET detection. *Microelectronic Engineering*, **2010**, 87, 1245-1247	2.5	14
122	Massive manufacture and characterization of single-walled carbon nanotube field effect transistors. *Microelectronic Engineering*, **2010**, 87, 1554-1556	2.5	20

121	Excitation of fluorescent nanoparticles by channel plasmon polaritons propagating in V-grooves. *Applied Physics Letters*, **2009**, 95, 203102	3.4	3
120	Protein patterning on the micro- and nanoscale by thermal nanoimprint lithography on a new functionalized copolymer. *Journal of Vacuum Science & Technology B*, **2009**, 27, 2439		5
119	A 0.3-mW/Ch 1.25 V Piezo-Resistance Digital ROIC for Liquid-Dispensing MEMS. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2009**, 56, 957-965	3.9	4
118	Nanostructuring of epitaxial graphene layers on SiC by means of field-induced atomic force microscopy modification. *Journal of Vacuum Science & Technology B*, **2009**, 27, 3149		15
117	Fabrication of complementary metal-oxide-semiconductor integrated nanomechanical devices by ion beam patterning. *Journal of Vacuum Science & Technology B*, **2009**, 27, 2691		13
116	Growth of Few Graphene Layers on 6H, 4H and 3C-SiC Substrates. *Materials Science Forum*, **2009**, 615-617, 203-206	0.4	2
115	Using electron and ion beams on carbon nanotube-based devices. Effects and considerations for nanofabrication. *Microelectronic Engineering*, **2009**, 86, 892-894	2.5	16
114	Electron- and ion-beam lithography for the fabrication of nanomechanical devices integrated on CMOS circuits. *Microelectronic Engineering*, **2009**, 86, 1046-1049	2.5	16
113	Stress and aging minimization in photoplastic AFM probes. *Microelectronic Engineering*, **2009**, 86, 1226-1229	2.5	18
112	Vertically aligned multi-walled carbon nanotube growth on platinum electrodes for bio-impedance applications. *Microelectronic Engineering*, **2009**, 86, 806-808	2.5	15
111	NEMS/CMOS sensor for monitoring deposition rates in stencil lithography. *Procedia Chemistry*, **2009**, 1, 425-428		
110	Magnetic Nanocrystals Modified Epoxy Photoresist for Microfabrication of AFM probes. *Procedia Chemistry*, **2009**, 1, 580-584		2
109	Controlled deposition of nanodroplets on a surface by liquid nanodispensing: Application to the study of the evaporation of femtoliter sessile droplets. *European Physical Journal: Special Topics*, **2009**, 166, 15-20	2.3	8
108	Anisotropic growth of long isolated graphene ribbons on the C face of graphite-capped 6H-SiC. *Physical Review B*, **2009**, 80,	3.3	81
107	Monolithic CMOS-MEMS oscillators with micro-degree temperature resolution in air conditions **2009**,		5
106	Nanomechanical mass sensor for spatially resolved ultrasensitive monitoring of deposition rates in stencil lithography. *Small*, **2009**, 5, 176-80	11	26
105	Compact CMOS current conveyor for integrated NEMS resonators. *IET Circuits, Devices and Systems*, **2008**, 2, 317	1.1	2
104	Monolithic CMOS MEMS Oscillator Circuit for Sensing in the Attogram Range. *IEEE Electron Device Letters*, **2008**, 29, 146-148	4.4	89

103	Dynamic stencil lithography on full wafer scale. *Journal of Vacuum Science & Technology B*, **2008**, 26, 2054-205815		
102	The effect of hydrophobicity of micro/nanostructured-surfaces on behaviours of water spreading **2008**,		1
101	Full-wafer fabrication by nanostencil lithography of micro/nanomechanical mass sensors monolithically integrated with CMOS. *Nanotechnology*, **2008**, 19, 305302	3.4	44
100	From VHF to UHF CMOS-MEMS monolithically integrated resonators **2008**,		10
99	Mechanical detection and mode shape imaging of vibrational modes of micro and nanomechanical resonators by dynamic force microscopy. *Journal of Physics: Conference Series*, **2008**, 100, 052009	0.3	2
98	Mass measurements based on nanomechanical devices: differential measurements. *Journal of Physics: Conference Series*, **2008**, 100, 052031	0.3	6
97	Fabrication of ordered arrays of quantum wires through hole patterning. *Journal of Physics: Conference Series*, **2008**, 100, 052049	0.3	1
96	Interaction of biomolecules sequentially deposited at the same location using a microcantilever-based spotter. *Biomedical Microdevices*, **2008**, 10, 479-87	3.7	15
95	CVD oriented growth of carbon nanotubes using AlPO4-5 and L type zeolites. *Microelectronic Engineering*, **2008**, 85, 1202-1205	2.5	8
94	Crystalline silicon cantilevers for piezoresistive detection of biomolecular forces. *Microelectronic Engineering*, **2008**, 85, 1120-1123	2.5	45
93	Determination of stress build-up during nanoimprint process in triangular polymer structures. *Microelectronic Engineering*, **2008**, 85, 838-841	2.5	4
92	Characterization at the nanometer scale of local electron beam irradiation of CNT based devices. *Microelectronic Engineering*, **2008**, 85, 1413-1416	2.5	6
91	Novel methods to pattern polymers for microfluidics. *Microelectronic Engineering*, **2008**, 85, 972-975	2.5	4
90	Piezoresistive Microcantilevers for Biomolecular Force Detection **2007**,		3
89	A Compact and Low-Power CMOS Circuit for Fully Integrated NEMS Resonators. *IEEE Transactions on Circuits and Systems Part 2: Express Briefs*, **2007**, 54, 377-381		29
88	Coupling Resonant Micro and Nanocantilevers to Improve Mass Responsivity by Detectability Product **2007**,		4
87	Local growth of carbon nanotubes by thermal chemical vapor deposition from iron based precursor nanoparticles **2007**,		2
86	Monolithic 0.35-μm CMOS Cantilever for Mass Sensing in the Attogram Range with Self-Excitation **2007**,		1

85	Evaporation of femtoliter sessile droplets monitored with nanomechanical mass sensors. *Journal of Physical Chemistry B*, **2007**, 111, 13020-7	3.4	57
84	V-groove plasmonic waveguides fabricated by nanoimprint lithography. *Journal of Vacuum Science & Technology B*, **2007**, 25, 2649		25
83	Mechanical detection of carbon nanotube resonator vibrations. *Physical Review Letters*, **2007**, 99, 085501	7.4	163
82	Nanometer scale gaps for capacitive transduction improvement on RF-MEMS resonators. *Microelectronic Engineering*, **2007**, 84, 1384-1387	2.5	7
81	Fabrication of nanogaps for MEMS prototyping using focused ion beam as a lithographic tool and reactive ion etching pattern transfer. *Microelectronic Engineering*, **2007**, 84, 1215-1218	2.5	6
80	DRIE based novel technique for AFM probes fabrication. *Microelectronic Engineering*, **2007**, 84, 1132-1135	2.5	12
79	Electrical detection of multiple resonant modes in a CMOS MEMS cantilever. *Microelectronic Engineering*, **2007**, 84, 1374-1378	2.5	4
78	Electron beam lithography at 10 keV using an epoxy based high resolution negative resist. *Microelectronic Engineering*, **2007**, 84, 1096-1099	2.5	10
77	Response of carbon nanotube transistors to electron beam exposure. *Microelectronic Engineering*, **2007**, 84, 1596-1600	2.5	8
76	Improved properties of epoxy nanocomposites for specific applications in the field of MEMS/NEMS. *Microelectronic Engineering*, **2007**, 84, 1075-1079	2.5	18
75	Fully integrated MIXLER based on VHF CMOS-MEMS clamped-clamped beam resonator. *Electronics Letters*, **2007**, 43, 452	1.1	22
74	High-sensitivity capacitive sensing interfacing circuit for monolithic CMOS M/NEMS resonators. *Electronics Letters*, **2007**, 43, 1274	1.1	6
73	Mixing in a 220MHz CMOS-MEMS **2007**,		2
72	Monitoring the evaporation of femtoliter droplets with CMOS integrated nanomechanical mass sensors **2007**,		1
71	Monolithic mass sensor fabricated using a conventional technology with attogram resolution in air conditions. *Applied Physics Letters*, **2007**, 91, 013501	3.4	49
70	Dry etching for the correction of gap-induced blurring and improved pattern resolution in nanostencil lithography. *Journal of Micro/ Nanolithography, MEMS, and MOEMS*, **2007**, 6, 013005	0.7	16
69	CMOS integrated nanomechanical mass sensors: determination of evaporation rate of femtoliter droplets **2007**,		1
68	Determining radial breathing mode frequencies of single-walled carbon nanotubes with an atomic force microscope. *Europhysics Letters*, **2007**, 78, 16001	1.6	2

67	VHF CMOS-MEMS resonator monolithically integrated in a standard 0.35μm CMOS technology **2007** ,		4
66	Time-Resolved Evaporation Rate of Attoliter Glycerine Drops Using On-Chip CMOS Mass Sensors Based on Resonant Silicon Micro Cantilevers. *IEEE Nanotechnology Magazine*, **2007**, 6, 509-512	2.6	7
65	A platform for monolithic CMOS-MEMS integration on SOI wafers. *Journal of Micromechanics and Microengineering*, **2006**, 16, 2203-2210	2	19
64	Atomic force microscopy local anodic oxidation of thin Si3N4 layers for robust prototyping of nanostructures. *Journal of Vacuum Science & Technology B*, **2006**, 24, 2988		9
63	CMOS-SOI platform for monolithic integration of crystalline silicon MEMS. *Electronics Letters*, **2006**, 42, 800	1.1	1
62	Full wafer integration of NEMS on CMOS by nanostencil lithography **2006**,		5
61	Integrated CMOS-MEMS with on-chip readout electronics for high-frequency applications. *IEEE Electron Device Letters*, **2006**, 27, 495-497	4.4	59
60	System on chip mass sensor based on polysilicon cantilevers arrays for multiple detection. *Sensors and Actuators A: Physical*, **2006**, 132, 154-164	3.9	31
59	Nanofabrication of Fresnel zone plate lenses for X-ray optics. *Microelectronic Engineering*, **2006**, 83, 1355-1359	2.5	6
58	Micro/nanomechanical resonators for distributed mass sensing with capacitive detection. *Microelectronic Engineering*, **2006**, 83, 1216-1220	2.5	24
57	Piezoresistive cantilevers in a commercial CMOS technology for intermolecular force detection. *Microelectronic Engineering*, **2006**, 83, 1302-1305	2.5	19
56	A femtogram resolution mass sensor platform, based on SOI electrostatically driven resonant cantilever. Part I: electromechanical model and parameter extraction. *Ultramicroscopy*, **2006**, 106, 800-7	3.1	16
55	A femtogram resolution mass sensor platform based on SOI electrostatically driven resonant cantilever. Part II: sensor calibration and glycerine evaporation rate measurement. *Ultramicroscopy*, **2006**, 106, 808-14	3.1	19
54	Design, fabrication, and characterization of a submicroelectromechanical resonator with monolithically integrated CMOS readout circuit. *Journal of Microelectromechanical Systems*, **2005**, 14, 508-519	2.5	52
53	Nanolithography on thin layers of PMMA using atomic force microscopy. *Nanotechnology*, **2005**, 16, 1016-1022	3.4	74
52	Ultrasensitive mass sensor fully integrated with complementary metal-oxide-semiconductor circuitry. *Applied Physics Letters*, **2005**, 87, 043507	3.4	89
51	Fully CMOS integrated low voltage 100 MHz MEMS resonator. *Electronics Letters*, **2005**, 41, 1327	1.1	15
50	Atomic force microscopy local oxidation of silicon nitride thin films for mask fabrication. *Nanotechnology*, **2005**, 16, 2731-2737	3.4	27

49	Resonators with integrated CMOS circuitry for mass sensing applications, fabricated by electron beam lithography. *Nanotechnology*, **2005**, 16, 98-102	3.4	36
48	Faradaic current detection during anodic oxidation of the H-passivated p-Si(001) surface with controlled relative humidity. *Nanotechnology*, **2004**, 15, 297-302	3.4	47
47	AFM lithography for the definition of nanometre scale gaps: application to the fabrication of a cantilever-based sensor with electrochemical current detection. *Nanotechnology*, **2004**, 15, 771-776	3.4	21
46	Current, charge, and capacitance during scanning probe oxidation of silicon. II. Electrostatic and meniscus forces acting on cantilever bending. *Journal of Applied Physics*, **2004**, 96, 2393-2399	2.5	34
45	On the electromechanical modelling of a resonating nano-cantilever-based transducer. *Ultramicroscopy*, **2004**, 100, 225-32	3.1	22
44	Thermal AFM: a thermopile case study. *Ultramicroscopy*, **2004**, 101, 153-9	3.1	1
43	Large scale high precision nano-oxidation using an atomic force microscope. *Surface Science*, **2004**, 566-568, 343-348	1.8	22
42	AFM thermal imaging as an optimization tool for a bulk micromachined thermopile. *Sensors and Actuators A: Physical*, **2004**, 115, 440-446	3.9	9
41	Current, charge, and capacitance during scanning probe oxidation of silicon. I. Maximum charge density and lateral diffusion. *Journal of Applied Physics*, **2004**, 96, 2386-2392	2.5	77
40	Fabrication of cantilever based mass sensors integrated with CMOS using direct write laser lithography on resist. *Nanotechnology*, **2004**, 15, S628-S633	3.4	24
39	SOI-silicon as structural layer for NEMS applications **2003**,		4
38	The measurement of the tip current noise as a method to characterize the exposed area of coated ESTM tips. *IEEE Transactions on Instrumentation and Measurement*, **2003**, 52, 859-864	5.2	7
37	Atomic force microscope characterization of a resonating nanocantilever. *Ultramicroscopy*, **2003**, 97, 127-33	3.1	13
36	AFM lithography of aluminum for fabrication of nanomechanical systems. *Ultramicroscopy*, **2003**, 97, 467-72	3.1	59
35	Monolithic integration of mass sensing nano-cantilevers with CMOS circuitry. *Sensors and Actuators A: Physical*, **2003**, 105, 311-319	3.9	34
34	Correction to "Improved boundary conditions for the beam propagation method". *IEEE Photonics Technology Letters*, **2003**, 15, 1177-1177	2.2	
33	Measuring electrical current during scanning probe oxidation. *Applied Physics Letters*, **2003**, 82, 3086-3088	3.4	32
32	Electrochemical platinum coatings for improving performance of implantable microelectrode arrays. *Biomaterials*, **2002**, 23, 4515-21	15.6	43

31	Light propagation studies on laser modified waveguides using scanning near-field optical microscopy. *IEEE Photonics Technology Letters*, **2001**, 13, 809-811	2.2	1
30	Electromechanical model of a resonating nano-cantilever-based sensor for high-resolution and high-sensitivity mass detection. *Nanotechnology*, **2001**, 12, 100-104	3.4	89
29	Comparison of highly efficient absorbing boundary conditions for the beam propagation method. *Journal of the Optical Society of America A: Optics and Image Science, and Vision*, **2001**, 18, 2015-25	1.8	2
28	High Mass and Spatial Resolution Mass Sensor based on Resonating Nano-Cantilevers Integrated with CMOS **2001**, 72-75		5
27	Density variations in scanned probe oxidation. *Applied Surface Science*, **2000**, 158, 205-216	6.7	46
26	Predictive model for scanned probe oxidation kinetics. *Applied Physics Letters*, **2000**, 76, 2710-2712	3.4	100
25	Characterization of antiresonant reflecting optical waveguide devices by scanning near-field optical microscopy. *Journal of the Optical Society of America A: Optics and Image Science, and Vision*, **2000**, 17, 2243-8	1.8	1
24	Scanning near-field optical microscope for the characterization of optical integrated waveguides. *Journal of Lightwave Technology*, **2000**, 18, 370-374	4	10
23	Nanometre-scale oxidation of silicon surfaces by dynamic force microscopy: reproducibility, kinetics and nanofabrication. *Nanotechnology*, **1999**, 10, 34-38	3.4	52
22	Voltage modulation scanned probe oxidation. *Applied Physics Letters*, **1999**, 75, 199-201	3.4	73
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20	Improved boundary conditions for the beam propagation method. *IEEE Photonics Technology Letters*, **1999**, 11, 1000-1002	2.2	4
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