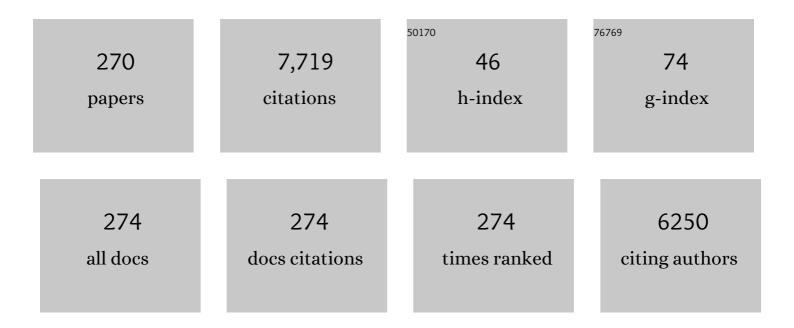
Evangelos Gogolides

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3291178/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	Mechanisms of Oxygen Plasma Nanotexturing of Organic Polymer Surfaces: From Stable Super Hydrophilic to Super Hydrophobic Surfaces. Langmuir, 2009, 25, 11748-11759.	1.6	311
2	From Superamphiphobic to Amphiphilic Polymeric Surfaces with Ordered Hierarchical Roughness Fabricated with Colloidal Lithography and Plasma Nanotexturing. Langmuir, 2011, 27, 3960-3969.	1.6	212
3	Durable superhydrophobic and superamphiphobic polymeric surfaces and their applications: A review. Advances in Colloid and Interface Science, 2017, 250, 132-157.	7.0	203
4	Continuum modeling of radioâ€frequency glow discharges. I. Theory and results for electropositive and electronegative gases. Journal of Applied Physics, 1992, 72, 3971-3987.	1.1	187
5	Nanotexturing of poly(dimethylsiloxane) in plasmas for creating robust super-hydrophobic surfaces. Nanotechnology, 2006, 17, 3977-3983.	1.3	187
6	Hierarchical micro and nano structured, hydrophilic, superhydrophobic and superoleophobic surfaces incorporated in microfluidics, microarrays and lab on chip microsystems. Microelectronic Engineering, 2015, 132, 135-155.	1.1	187
7	Hydrophobic and superhydrophobic surfaces fabricated using atmospheric pressure cold plasma technology: A review. Advances in Colloid and Interface Science, 2018, 254, 1-21.	7.0	179
8	Plasma Micro-Nanotextured, Scratch, Water and Hexadecane Resistant, Superhydrophobic, and Superamphiphobic Polymeric Surfaces with Perfluorinated Monolayers. ACS Applied Materials & Interfaces, 2014, 6, 6510-6524.	4.0	165
9	"Smart―polymeric microfluidics fabricated by plasma processing: controlled wetting, capillary filling and hydrophobic valving. Lab on A Chip, 2010, 10, 462-469.	3.1	164
10	Nanotextured super-hydrophobic transparent poly(methyl methacrylate) surfaces using high-density plasma processing. Nanotechnology, 2007, 18, 125304.	1.3	150
11	Controlling roughness: from etching to nanotexturing and plasma-directed organization on organic and inorganic materials. Journal Physics D: Applied Physics, 2011, 44, 174021.	1.3	110
12	Quantification of line-edge roughness of photoresists. II. Scaling and fractal analysis and the best roughness descriptors. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 1019.	1.6	103
13	Is There a Threshold in the Antibacterial Action of Superhydrophobic Surfaces?. ACS Applied Materials & Interfaces, 2017, 9, 39781-39789.	4.0	102
14	Control of Nanotexture and Wetting Properties of Polydimethylsiloxane from Very Hydrophobic to Super-Hydrophobic by Plasma Processing. Plasma Processes and Polymers, 2007, 4, 398-405.	1.6	96
15	Line edge roughness and critical dimension variation: Fractal characterization and comparison using model functions. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 1974.	1.6	94
16	Comparison of experimental measurements and model predictions for radioâ€frequency Ar and SF6 discharges. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1989, 7, 1001-1006.	0.9	85
17	RF Plasmas in Methane: Prediction of Plasma Properties and Neutral Radical Densities with Combined Gas-Phase Physics and Chemistry Model. Japanese Journal of Applied Physics, 1995, 34, 261-270.	0.8	83
18	A global model for C ₄ F ₈ plasmas coupling gas phase and wall surface reaction kinetics. Journal Physics D: Applied Physics. 2008, 41, 195211.	1.3	82

Evangelos Gogolides

#	Article	IF	CITATIONS
19	Superamphiphobic Polymeric Surfaces Sustaining Ultrahigh Impact Pressures of Aqueous High―and Lowâ€6urfaceâ€Tension Mixtures, Tested with Laserâ€Induced Forward Transfer of Drops. Advanced Materials, 2015, 27, 2231-2235.	11.1	78
20	Surface and plasma simulation of deposition processes: CH4plasmas for the growth of diamondlike carbon. Journal of Applied Physics, 1996, 79, 3718-3729.	1.1	77
21	A review of line edge roughness and surface nanotexture resulting from patterning processes. Microelectronic Engineering, 2006, 83, 1067-1072.	1.1	75
22	Quantification of line-edge roughness of photoresists. I. A comparison between off-line and on-line analysis of top-down scanning electron microscopy images. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 1008.	1.6	74
23	Biomimetic, antireflective, superhydrophobic and oleophobic PMMA and PMMA-coated glass surfaces fabricated by plasma processing. Microelectronic Engineering, 2014, 121, 33-38.	1.1	73
24	Etching of SiO2 and Si in fluorocarbon plasmas: A detailed surface model accounting for etching and deposition. Journal of Applied Physics, 2000, 88, 5570-5584.	1.1	72
25	Sub-micrometre luminescent porous silicon structures using lithographically patterned substrates. Thin Solid Films, 1995, 255, 329-333.	0.8	69
26	A global model for SF ₆ plasmas coupling reaction kinetics in the gas phase and on the surface of the reactor walls. Journal Physics D: Applied Physics, 2009, 42, 055209.	1.3	67
27	Plasma nanotextured polymeric lab-on-a-chip for highly efficient bacteria capture and lysis. Lab on A Chip, 2016, 16, 120-131.	3.1	67
28	Plasma processing for polymeric microfluidics fabrication and surface modification: Effect of super-hydrophobic walls on electroosmotic flow. Microelectronic Engineering, 2008, 85, 1124-1127.	1.1	65
29	Radioâ€frequency plasmas in CF4: Selfâ€consistent modeling of the plasma physics and chemistry. Journal of Applied Physics, 1995, 77, 6169-6180.	1.1	63
30	Hierarchical, Plasma Nanotextured, Robust Superamphiphobic Polymeric Surfaces Structurally Stabilized Through a Wetting–drying Cycle. Plasma Processes and Polymers, 2012, 9, 304-315.	1.6	63
31	Surface passivation effect by fluorine plasma treatment on ZnO for efficiency and lifetime improvement of inverted polymer solar cells. Journal of Materials Chemistry A, 2016, 4, 11844-11858.	5.2	62
32	Simulation of SiO2 and Si feature etching for microelectronics and microelectromechanical systems fabrication: A combined simulator coupling modules of surface etching, local flux calculation, and profile evolution. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 1896-1902.	0.9	59
33	Plasma Nanotextured PMMA Surfaces for Protein Arrays: Increased Protein Binding and Enhanced Detection Sensitivity. Langmuir, 2010, 26, 13883-13891.	1.6	59
34	Controlled protein adsorption on microfluidic channels with engineered roughness and wettability. Sensors and Actuators B: Chemical, 2012, 161, 216-222.	4.0	58
35	Atmospheric plasma etching of polymers: A palette of applications in cleaning/ashing, pattern formation, nanotexturing and superhydrophobic surface fabrication. Microelectronic Engineering, 2018, 194, 109-115.	1.1	58
36	Three-dimensional plasma micro–nanotextured cyclo-olefin-polymer surfaces for biomolecule immobilization and environmentally stable superhydrophobic and superoleophobic behavior. Chemical Engineering Journal, 2016, 300, 394-403.	6.6	56

#	Article	IF	CITATIONS
37	Superhydrophobic Paper by Facile and Fast Atmospheric Pressure Plasma Etching. Plasma Processes and Polymers, 2017, 14, 1600069.	1.6	56
38	Visible luminescence from one―and twoâ€dimensional silicon structures produced by conventional lithographic and reactive ion etching techniques. Applied Physics Letters, 1995, 66, 1114-1116.	1.5	55
39	Effects of photoresist polymer molecular weight on line-edge roughness and its metrology probed with Monte Carlo simulations. Microelectronic Engineering, 2004, 75, 297-308.	1.1	55
40	Polyhedral Oligomeric Silsesquioxane (POSS) Based Resists:  Material Design Challenges and Lithographic Evaluation at 157 nm. Chemistry of Materials, 2004, 16, 2567-2577.	3.2	55
41	Dual nanoscale roughness on plasma-etched Si surfaces: Role of etch inhibitors. Physical Review B, 2007, 76, .	1.1	55
42	Effect of surface nanostructuring of PDMS on wetting properties, hydrophobic recovery and protein adsorption. Microelectronic Engineering, 2009, 86, 1321-1324.	1.1	55
43	Ultra-high aspect ratio Si nanowires fabricated with plasma etching: plasma processing, mechanical stability analysis against adhesion and capillary forces and oleophobicity. Nanotechnology, 2014, 25, 035302.	1.3	55
44	Plasma directed assembly and organization: bottom-up nanopatterning using top-down technology. Nanotechnology, 2010, 21, 085302.	1.3	53
45	Tailoring the surface topography and wetting properties of oxygen-plasma treated polydimethylsiloxane. Journal of Applied Physics, 2005, 98, 113502.	1.1	51
46	Nano-texturing of poly(methyl methacrylate) polymer using plasma processes and applications in wetting control and protein adsorption. Microelectronic Engineering, 2009, 86, 1424-1427.	1.1	48
47	Continuum modeling of radioâ€frequency glow discharges. II. Parametric studies and sensitivity analysis. Journal of Applied Physics, 1992, 72, 3988-4002.	1.1	45
48	Modelling of radio frequency plasmas in tetrafluoromethane (CF4): the gas phase physics and the role of negative ion detachment. Journal Physics D: Applied Physics, 1994, 27, 1878-1886.	1.3	44
49	Photosensitive poly(dimethylsiloxane) materials for microfluidic applications. Microelectronic Engineering, 2007, 84, 1104-1108.	1.1	44
50	Si etching in high-density SF6 plasmas for microfabrication: surface roughness formation. Microelectronic Engineering, 2004, 73-74, 312-318.	1.1	43
51	Micro-nano-bio acoustic system for the detection of foodborne pathogens in real samples. Biosensors and Bioelectronics, 2018, 111, 52-58.	5.3	43
52	"Mesh-assisted―colloidal lithography and plasma etching: A route to large-area, uniform, ordered nano-pillar and nanopost fabrication on versatile substrates. Microelectronic Engineering, 2011, 88, 2547-2551.	1.1	41
53	Tailoring Wetting Properties at Extremes States to Obtain Antifogging Functionality. Advanced Functional Materials, 2021, 31, .	7.8	41
54	A novel microfluidic integration technology for PCB-based devices: Application to microflow sensing. Microelectronic Engineering, 2009, 86, 1382-1384.	1.1	40

#	Article	IF	CITATIONS
55	Effect of Cold Atmospheric Plasma processing on quality and shelf-life of ready-to-eat rocket leafy salad. Innovative Food Science and Emerging Technologies, 2020, 66, 102502.	2.7	40
56	How Different Are Fog Collection and Dew Water Harvesting on Surfaces with Different Wetting Behaviors?. ACS Applied Materials & amp; Interfaces, 2021, 13, 48322-48332.	4.0	40
57	Selective plasma-induced deposition of fluorocarbon films on metal surfaces for actuation in microfluidics. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 1546-1551.	0.9	39
58	Tunable Poly(dimethylsiloxane) Topography in O2or Ar Plasmas for Controlling Surface Wetting Properties and Their Ageing. Japanese Journal of Applied Physics, 2007, 46, 744-750.	0.8	39
59	Plasma Nanotextured Polymeric Surfaces for Controlling Cell Attachment and Proliferation: A Short Review. Plasma Chemistry and Plasma Processing, 2016, 36, 107-120.	1.1	39
60	Lab-on-Chip platform and protocol for rapid foodborne pathogen detection comprising on-chip cell capture, lysis, DNA amplification and surface-acoustic-wave detection. Sensors and Actuators B: Chemical, 2020, 320, 128345.	4.0	39
61	Polyhedral oligomeric silsesquioxane (POSS) acrylate copolymers for microfabrication: properties and formulation of resist materials. Microelectronic Engineering, 2004, 73-74, 238-243.	1.1	38
62	Stable superhydrophobic surfaces induced by dual-scale topography on SU-8. Microelectronic Engineering, 2010, 87, 782-785.	1.1	37
63	Roughness threshold for cell attachment and proliferation on plasma micro-nanotextured polymeric surfaces: the case of primary human skin fibroblasts and mouse immortalized 3T3 fibroblasts. Journal Physics D: Applied Physics, 2016, 49, 304002.	1.3	37
64	Integrated framework for the flux calculation of neutral species inside trenches and holes during plasma etching. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 2008-2020.	0.9	36
65	Micro and nano structuring and texturing of polymers using plasma processes: potential manufacturing applications. International Journal of Nanomanufacturing, 2010, 6, 152.	0.3	36
66	Direct Covalent Biomolecule Immobilization on Plasma-Nanotextured Chemically Stable Substrates. ACS Applied Materials & Interfaces, 2015, 7, 14670-14681.	4.0	36
67	A Review of Fabrication Methods, Properties and Applications of Superhydrophobic Metals. Processes, 2021, 9, 666.	1.3	35
68	Absorbance and outgasing of photoresist polymeric materials for UV lithography below 193 nm including 157 nm lithography. Microelectronic Engineering, 2000, 53, 123-126.	1.1	34
69	Superhydrophobic, passive microvalves with controllable opening threshold: exploiting plasma nanotextured microfluidics for a programmable flow switchboard. Microfluidics and Nanofluidics, 2014, 17, 489-498.	1.0	34
70	A modular integrated lab-on-a-chip platform for fast and highly efficient sample preparation for foodborne pathogen screening. Sensors and Actuators B: Chemical, 2019, 288, 171-179.	4.0	34
71	Radio-frequency glow discharges in methane gas: modelling of the gas-phase physics and chemistry. Journal Physics D: Applied Physics, 1994, 27, 818-825.	1.3	33
72	Plasma Directed Organization of Nanodots on Polymers: Effects of Polymer Type and Etching Time on Morphology and Order. Plasma Processes and Polymers, 2012, 9, 866-872.	1.6	33

#	Article	IF	CITATIONS
73	Plasma Etching of Poly(dimethylsiloxane): Roughness Formation, Mechanism, Control, and Application in the Fabrication of Microfluidic Structures. Plasma Processes and Polymers, 2013, 10, 29-40.	1.6	32
74	Optical properties of high aspect ratio plasma etched silicon nanowires: fabrication-induced variability dramatically reduces reflectance. Nanotechnology, 2015, 26, 085301.	1.3	32
75	Direct calculation of time-periodic states of continuum models of radio-frequency plasmas. Chemical Engineering Science, 1992, 47, 3839-3855.	1.9	31
76	Photoresist line-edge roughness analysis using scaling concepts. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2004, 3, 429.	1.0	31
77	Nano-textured polymer surfaces with controlled wetting and optical properties using plasma processing. International Journal of Nanotechnology, 2009, 6, 196.	0.1	31
78	Nanomechanical and nanotribological properties of plasma nanotextured superhydrophilic and superhydrophobic polymeric surfaces. Nanotechnology, 2012, 23, 505711.	1.3	31
79	How to Achieve Reversible Electrowetting on Superhydrophobic Surfaces. Langmuir, 2018, 34, 4173-4179.	1.6	31
80	Deep learning denoising of SEM images towards noise-reduced LER measurements. Microelectronic Engineering, 2019, 216, 111051.	1.1	31
81	Highly anisotropic silicon reactive ion etching for nanofabrication using mixtures ofSF[sub 6]/CHF[sub 3] gases. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1997, 15, 640.	1.6	30
82	Highly anisotropic room-temperature sub-half-micron Si reactive ion etching using fluorine only containing gases. Microelectronic Engineering, 1995, 27, 449-452.	1.1	29
83	Etching behavior of Si-containing polymers as resist materials for bilayer lithography: The case of poly-dimethyl siloxane. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 174.	1.6	29
84	TiO2–ZrO2 affinity chromatography polymeric microchip for phosphopeptide enrichment and separation. Lab on A Chip, 2011, 11, 3113.	3.1	29
85	Material and process effects on line-edge-roughness of photoresists probed with a fast stochastic lithography simulator. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 1371.	1.6	27
86	Plasma oxidation of polyhedral oligomeric silsesquioxane polymers. Journal of Vacuum Science & Technology B, 2006, 24, 2678.	1.3	27
87	Formation and metrology of dual scale nano-morphology on SF ₆ plasma etched silicon surfaces. Nanotechnology, 2008, 19, 255301.	1.3	27
88	Radio frequency atmospheric plasma source on a printed circuit board for large area, uniform processing of polymeric materials. Plasma Sources Science and Technology, 2016, 25, 025015.	1.3	27
89	Evaluation of siloxane and polyhedral silsesquioxane copolymers for 157 nm lithography. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2002, 20, 2902.	1.6	26
90	Electrowetting on plasma-deposited fluorocarbon hydrophobic films for biofluid transport in microfluidics. Journal of Applied Physics, 2007, 101, 103306.	1.1	26

#	Article	IF	CITATIONS
91	Optimization of Antibacterial Properties of "Hybrid―Metal-Sputtered Superhydrophobic Surfaces. Coatings, 2020, 10, 25.	1.2	26
92	Comparative Study on the Effect of Cold Atmospheric Plasma, Ozonation, Pulsed Electromagnetic Fields and High-Pressure Technologies on Sea Bream Fillet Quality Indices and Shelf Life. Food Engineering Reviews, 2021, 13, 175-184.	3.1	26
93	Characterization and modeling of line width roughness (LWR). , 2005, 5752, 1227.		25
94	Stochastic simulation studies of molecular resists. Microelectronic Engineering, 2007, 84, 1062-1065.	1.1	25
95	High-aspect-ratio plasma-induced nanotextured poly(dimethylsiloxane) surfaces with enhanced protein adsorption capacity. Journal of Vacuum Science & Technology B, 2008, 26, 2543-2548.	1.3	25
96	Creating highly dense and uniform protein and DNA microarrays through photolithography and plasma modification of glass substrates. Biosensors and Bioelectronics, 2012, 34, 273-281.	5.3	25
97	Surface and line-edge roughness in solution and plasma developed negative tone resists: Experiment and simulation. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2000, 18, 3292.	1.6	24
98	Plasma micro-nanotextured polymeric micromixer for DNA purification with high efficiency and dynamic range. Analytica Chimica Acta, 2016, 942, 58-67.	2.6	24
99	Etching of SiO2 features in fluorocarbon plasmas: Explanation and prediction of gas-phase-composition effects on aspect ratio dependent phenomena in trenches. Journal of Applied Physics, 2002, 91, 2697-2707.	1.1	23
100	Surface modification of Si-containing polymers during etching for bilayer lithography. Microelectronic Engineering, 2002, 61-62, 901-906.	1.1	23
101	The challenges of 157 nm nanolithography: surface morphology of silicon-based copolymers. Materials Science and Engineering C, 2003, 23, 995-999.	3.8	23
102	Partially Fluorinated, Polyhedral Oligomeric Silsesquioxane-Functionalized (Meth)Acrylate Resists for 193 nm Bilayer Lithography. Chemistry of Materials, 2006, 18, 4040-4048.	3.2	23
103	Roughness Formation During Plasma Etching of Composite Materials: A Kinetic Monte Carlo Approach. IEEE Transactions on Plasma Science, 2007, 35, 1359-1369.	0.6	23
104	Characterization and global modelling of low-pressure hydrogen-based RF plasmas suitable for surface cleaning processes. Journal Physics D: Applied Physics, 2013, 46, 475206.	1.3	23
105	Photolithography and plasma processing of polymeric lab on chip for wetting and fouling control and cell patterning. Microelectronic Engineering, 2014, 124, 47-52.	1.1	23
106	Atmospheric Plasma Nanotexturing of Organic–Inorganic Nanocomposite Coatings for Multifunctional Surface Fabrication. ACS Applied Nano Materials, 2019, 2, 2969-2978.	2.4	23
107	Mass spectroscopic and degassing characteristics of polymeric materials for 157 nm photolithography. Applied Physics A: Materials Science and Processing, 1999, 69, S929-S933.	1.1	22
108	Roughness analysis of lithographically produced nanostructures: off-line measurement and scaling analysis. Microelectronic Engineering, 2003, 67-68, 319-325.	1.1	22

#	Article	IF	CITATIONS
109	Effects of model polymer chain architectures and molecular weight of conventional and chemically amplified photoresists on line-edge roughness. Stochastic simulations. Microelectronic Engineering, 2006, 83, 1078-1081.	1.1	22
110	A flexible capacitive device for pressure and tactile sensing. Procedia Chemistry, 2009, 1, 867-870.	0.7	22
111	The potential of ion-driven etching with simultaneous deposition of impurities for inducing periodic dots on surfaces. Journal Physics D: Applied Physics, 2012, 45, 165204.	1.3	22
112	A Synthetic Approach to RF Plasma Modeling Verified by Experiments: Demonstration of a Predictive and Complete Plasma Simulator. Japanese Journal of Applied Physics, 1997, 36, 2435-2442.	0.8	21
113	Characterization and simulation of surface and line-edge roughness in photoresists. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2001, 19, 2694.	1.6	21
114	A novel microfabrication technology on organic substrates – application to a thermal flow sensor. Journal of Physics: Conference Series, 2007, 92, 012046.	0.3	21
115	Roughness characterization in positive and negative resists. Microelectronic Engineering, 2002, 61-62, 793-801.	1.1	20
116	Effects of Photoresist Polymer Molecular Weight and Acid-Diffusion on Line-Edge Roughness. Japanese Journal of Applied Physics, 2005, 44, 6341-6348.	0.8	20
117	Bactericidal Action of Smooth and Plasma Microâ€Nanotextured Polymeric Surfaces with Varying Wettability, Enhanced by Incorporation of a Biocidal Agent. Macromolecular Materials and Engineering, 2021, 306, 2000694.	1.7	20
118	Patterning of thick polymeric substrates for the fabrication of microfluidic devices. Journal of Physics: Conference Series, 2005, 10, 293-296.	0.3	19
119	High-density protein patterning through selective plasma-induced fluorocarbon deposition on Si substrates. Biosensors and Bioelectronics, 2009, 24, 2979-2984.	5.3	19
120	Contact line dynamics of a superhydrophobic surface: application for immersion lithography. Microfluidics and Nanofluidics, 2011, 10, 1351-1357.	1.0	19
121	Motion of Drops with Different Viscosities on Microâ€Nanotextured Surfaces of Varying Topography and Wetting Properties. Advanced Functional Materials, 2019, 29, 1902905.	7.8	19
122	Nanoscale Roughness Effects at the Interface of Lithography and Plasma Etching: Modeling of Line-Edge-Roughness Transfer During Plasma Etching. IEEE Transactions on Plasma Science, 2009, 37, 1705-1714.	0.6	18
123	High-capacity and high-intensity DNA microarray spots using oxygen-plasma nanotextured polystyrene slides. Analytical and Bioanalytical Chemistry, 2012, 403, 2757-2764.	1.9	18
124	A comparative study of CH4 and CF4 rf discharges using a consistent plasma physics and chemistry simulator. Plasma Chemistry and Plasma Processing, 1996, 16, 301-327.	1.1	17
125	Highly anisotropic silicon and polysilicon room-temperature etching using fluorine-based high density plasmas. Microelectronic Engineering, 1998, 41-42, 411-414.	1.1	17
126	Simulation of surface and line-edge roughness formation in resists. Microelectronic Engineering, 2001, 57-58, 563-569.	1.1	17

#	Article	IF	CITATIONS
127	Plasma etch rate measurements of thin PMMA films and correlation with the glass transition temperature. Journal of Physics: Conference Series, 2005, 10, 405-408.	0.3	17
128	Nanoscale Mechanical and Tribological Properties of Plasma Nanotextured COP Surfaces with Hydrophobic Coatings. Plasma Processes and Polymers, 2015, 12, 1271-1283.	1.6	17
129	Transition between stable hydrophilization and fast etching/hydrophilization of poly(methyl)methacrylate polymer using a novel atmospheric pressure dielectric barrier discharge source. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, 041303.	0.9	17
130	Superhydrophobic Fabrics with Mechanical Durability Prepared by a Two-Step Plasma Processing Method. Coatings, 2018, 8, 351.	1.2	17
131	Fabrication of a 3D microfluidic cell culture device for bone marrow-on-a-chip. Micro and Nano Engineering, 2020, 9, 100075.	1.4	17
132	Enhanced antibacterial activity of ZnO-PMMA nanocomposites by selective plasma etching in atmospheric pressure. Micro and Nano Engineering, 2021, 13, 100098.	1.4	17
133	Surface segregation of photoresist copolymers containing polyhedral oligomeric silsesquioxanes studied by x-ray photoelectron spectroscopy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 2526.	1.6	16
134	Protein arrays on high-surface-area plasma-nanotextured poly(dimethylsiloxane)-coated glass slides. Colloids and Surfaces B: Biointerfaces, 2011, 83, 270-276.	2.5	16
135	Superhydrophobic, hierarchical, plasma-nanotextured polymeric microchannels sustaining high-pressure flows. Microfluidics and Nanofluidics, 2013, 14, 247-255.	1.0	16
136	Parylene C Surface Functionalization and Patterning with pH-Responsive Microgels. ACS Applied Materials & Material	4.0	16
137	Micro-bead immunoassays for the detection of IL6 and PDCF-2 proteins on a microfluidic platform, incorporating superhydrophobic passive valves. Microelectronic Engineering, 2017, 175, 73-80.	1.1	16
138	n+â€Polysilicon Etching in CCl4 / He Discharges: Characterization and Modeling. Journal of the Electrochemical Society, 1989, 136, 1147-1154.	1.3	15
139	Surface roughness induced by plasma etching of Si-containing polymers. Journal of Adhesion Science and Technology, 2003, 17, 1083-1091.	1.4	15
140	Toward a complete description of linewidth roughness: a comparison of different methods for vertical and spatial LER and LWR analysis and CD variation. , 2004, , .		15
141	Electrical and optical characterization of an atmospheric pressure, uniform, large-area processing, dielectric barrier discharge. Journal Physics D: Applied Physics, 2017, 50, 135204.	1.3	15
142	Ultra-low friction, superhydrophobic, plasma micro-nanotextured fluorinated ethylene propylene (FEP) surfaces. Micro and Nano Engineering, 2022, 14, 100104.	1.4	15
143	Multiwavelength interferometry and competing optical methods for the thermal probing of thin polymeric films. Journal of Applied Polymer Science, 2006, 102, 4764-4774.	1.3	14
144	Biofluid transport on hydrophobic plasma-deposited fluorocarbon films. Microelectronic Engineering, 2007, 84, 1677-1680.	1.1	14

#	Article	IF	CITATIONS
145	Modeling of line edge roughness transfer during plasma etching. Microelectronic Engineering, 2009, 86, 968-970.	1.1	14
146	Flame aerosol deposition of TiO2 nanoparticle films on polymers and polymeric microfluidic devices for on-chip phosphopeptide enrichment. Microelectronic Engineering, 2012, 97, 341-344.	1.1	14
147	Nanostructuring of PDMS surfaces: Dependence on casting solvents. Microelectronic Engineering, 2007, 84, 1476-1479.	1.1	13
148	Three-dimensional (3D) plasma micro-nanotextured slides for high performance biomolecule microarrays: Comparison with epoxy-silane coated glass slides. Colloids and Surfaces B: Biointerfaces, 2018, 165, 270-277.	2.5	13
149	Application of plasmaâ€activated water as an antimicrobial washing agent of fresh leafy produce. Plasma Processes and Polymers, 2021, 18, e2100030.	1.6	13
150	Photoresist etch resistance enhancement using novel polycarbocyclic derivatives as additives. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 141.	1.6	12
151	Oriented spontaneously formed nano-structures on poly(dimethylsiloxane) films and stamps treated in O2 plasmas. Microelectronic Engineering, 2008, 85, 1233-1236.	1.1	12
152	Controllable fabrication of bioinspired three-dimensional ZnO/Si nanoarchitectures. Materials Letters, 2015, 142, 211-216.	1.3	12
153	Thickness-dependent glass transition temperature of thin resist films for high resolution lithography. Microelectronic Engineering, 2006, 83, 1073-1077.	1.1	11
154	Stochastic simulation studies of molecular resists for the 32nm technology node. Microelectronic Engineering, 2008, 85, 949-954.	1.1	11
155	Fractal dimension of line width roughness and its effects on transistor performance. , 2008, , .		11
156	Plasma Surface Modification of Epoxy Polymer in Air DBD and Gliding Arc. Processes, 2022, 10, 104.	1.3	11
157	Complete plasma physics, plasma chemistry, and surface chemistry simulation of SiO2 and Si etching in CF4 plasmas. Microelectronic Engineering, 1998, 41-42, 391-394.	1.1	10
158	Photoresist line-edge roughness analysis using scaling concepts. , 2003, , .		10
159	Effects of different processing conditions on line-edge roughness for 193-nm and 157-nm resists. , 2004, , .		10
160	Monolithic silicon optoelectronic transducers and elastomeric fluidic modules for bio-spotting and bio-assay experiments. Microelectronic Engineering, 2006, 83, 1605-1608.	1.1	10
161	Correlation length and the problem of line width roughness. , 2007, 6518, 577.		10
162	Plasma Etching and Roughening of Thin Polymeric Films: A Fast, Accurate, in situ Method of Surface Roughness Measurement. Plasma Processes and Polymers, 2008, 5, 825-833.	1.6	10

#	Article	IF	CITATIONS
163	Fabrication of axial p-n junction silicon nanopillar devices and application in photovoltaics. Microelectronic Engineering, 2017, 174, 74-79.	1.1	10
164	Atmospheric pressure plasma directed assembly during photoresist removal: A new route to micro and nano pattern formation. Micro and Nano Engineering, 2019, 3, 15-21.	1.4	10
165	Instabilities and multiple steady states of radio-frequency discharges inCF4. Physical Review E, 1996, 54, 782-790.	0.8	9
166	Fabrication of suspended thermally insulating membranes using frontside micromachining of the Si substrate: characterization of the etching process. Journal of Micromechanics and Microengineering, 2003, 13, 323-329.	1.5	9
167	Monte Carlo simulation of gel formation and surface and line-edge roughness in negative tone chemically amplified resists. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 254.	1.6	9
168	Increased plasma etch resistance of thin polymeric and photoresist films. Microelectronic Engineering, 2005, 78-79, 474-478.	1.1	9
169	Integrated simulation of line-edge roughness (LER) effects on sub-65nm transistor operation: From lithography simulation, to LER metrology, to device operation. , 2006, 6151, 952.		9
170	Materials for lithography in the nanoscale. International Journal of Nanotechnology, 2009, 6, 71.	0.1	9
171	Study of flow and pressure field in microchannels with various cross-section areas. Microelectronic Engineering, 2010, 87, 827-829.	1.1	9
172	Gradient-temperature hot-embossing for dense micropillar array fabrication on thick cyclo-olefin polymeric plates: An example of a microfluidic chromatography column fabrication. Micro and Nano Engineering, 2019, 5, 100042.	1.4	9
173	Food container employing a cold atmospheric plasma source for prolonged preservation of plant and animal origin food products. MethodsX, 2021, 8, 101177.	0.7	9
174	Thermal and mechanical analysis of photoresist and silylated photoresist films: Application to AZ 5214â,,¢. Microelectronic Engineering, 1996, 30, 267-270.	1.1	8
175	Wet silylation and oxygen plasma development of photoresists: A mature and versatile lithographic process for microelectronics and microfabrication. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1996, 14, 3332.	1.6	8
176	Surface and line-edge roughness in plasma-developed resists. Microelectronic Engineering, 2001, 57-58, 547-554.	1.1	8
177	Dry etching of porous silicon in high density plasmas. Physica Status Solidi A, 2003, 197, 163-167.	1.7	8
178	Contact Edge Roughness: Characterization and modeling. Microelectronic Engineering, 2011, 88, 2492-2495.	1.1	8
179	Critical dimension uniformity and contact edge roughness in extreme ultraviolet lithography: effect of photoacid generator, sensitizer and quencher. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2013, 12, 023003.	1.0	8
180	Nanostructured PMMA-coated Love wave device as a platform for protein adsorption studies. Sensors and Actuators B: Chemical, 2016, 236, 583-590.	4.0	8

#	Article	IF	CITATIONS
181	Wet silylation and dry development with the AZ 5214TM photoresist. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1992, 10, 2610.	1.6	7
182	Thermal analysis of photoresists in aid of lithographic process development. Microelectronic Engineering, 1997, 35, 141-144.	1.1	7
183	Silylation of epoxy functionalised photoresists for optical, e-beam lithography and micromachining applications. Microelectronic Engineering, 1998, 41-42, 335-338.	1.1	7
184	Silylation and Dry Development of Chemically Amplified Resists SAL601*, AZPN114*1, and Epoxidised Resist (EPR*1) for High Resolution Electron-Beam Lithography. Japanese Journal of Applied Physics, 1998, 37, 6873-6876.	0.8	7
185	Photoresist materials for 157-nm photolithography. Materials Science and Engineering C, 2001, 15, 159-161.	3.8	7
186	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
187	Noise-free estimation of spatial line edge/width roughness parameters. Proceedings of SPIE, 2009, , .	0.8	7
188	Line edge roughness transfer during plasma etching: modeling approaches and comparison with experimental results. , 2009, , .		7
189	Fractals and device performance variability: The key role of roughness in micro and nanofabrication. Microelectronic Engineering, 2012, 90, 121-125.	1.1	7
190	Plasma-Assisted Nanoscale Protein Patterning on Si Substrates via Colloidal Lithography. Journal of Physical Chemistry A, 2013, 117, 13743-13751.	1.1	7
191	Challenges in line edge roughness metrology in directed self-assembly lithography: placement errors and cross-line correlations. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2017, 16, 024001.	1.0	7
192	Comparison of Helical and Helicon Antennas as Sources of Plasma Excitation Using a Full Wave 3D Electromagnetic Analysis in Vacuum. Plasma Processes and Polymers, 2017, 14, 1600107.	1.6	7
193	Plasma induced degradation and surface electronic structure modification of Poly(3-hexylthiophene) films. Polymer Degradation and Stability, 2018, 149, 162-172.	2.7	7
194	Stable hydrophilization of FR4 and polyimide-based substrates implemented in microfluidics-on-PCB. Surface and Coatings Technology, 2018, 334, 292-299.	2.2	7
195	SiO2 and Si etching in fluorocarbon plasmas: A detailed surface model coupled with a complete plasma and profile simulator Microelectronic Engineering, 1999, 46, 311-314.	1.1	6
196	SiO2 and Si etching in fluorocarbon plasmas: Coupling of a surface model with a profile evolution simulator. Microelectronic Engineering, 2000, 53, 395-398.	1.1	6
197	Resist process issues related to the glass transition changes in chemically amplified resist films. Microelectronic Engineering, 2003, 67-68, 283-291.	1.1	6
198	Effects of model polymer chain architectures of photo-resists on line-edge-roughness: Monte Carlo simulations. Journal of Physics: Conference Series, 2005, 10, 389-392.	0.3	6

#	Article	IF	CITATIONS
199	Fractal Roughness of Polymers after Lithographic Processing. Japanese Journal of Applied Physics, 2005, 44, L186-L189.	0.8	6
200	The potential of neutral beams for deep silicon nanostructure etching. Journal Physics D: Applied Physics, 2008, 41, 024004.	1.3	6
201	Is the resist sidewall after development isotropic or anisotropic? effects of resist sidewall morphology on LER reduction and transfer during etching. , 2010, , .		6
202	Optimized surface silylation of chemically amplified epoxidized photoresists for micromachining applications. Journal of Applied Polymer Science, 2010, 117, 2189-2195.	1.3	6
203	Stochastic modeling and simulation of photoresist surface and line-edge roughness evolution. European Polymer Journal, 2010, 46, 1988-1999.	2.6	6
204	Contact edge roughness metrology in nanostructures: Frequency analysis and variations. Microelectronic Engineering, 2012, 90, 126-130.	1.1	6
205	Toward an integrated line edge roughness understanding: metrology, characterization, and plasma etching transfer. , 2013, , .		6
206	A microfabricated cyclo-olefin polymer microcolumn used for reversed-phase chromatography. Journal of Micromechanics and Microengineering, 2015, 25, 015005.	1.5	6
207	Three-dimensional (3D) hierarchical oxygen plasma micro/nanostructured polymeric substrates for selective enrichment of cancer cells from mixtures with normal ones. Colloids and Surfaces B: Biointerfaces, 2020, 187, 110675.	2.5	6
208	Poly-L-histidine coated microfluidic devices for bacterial DNA purification without chaotropic solutions. Biomedical Microdevices, 2020, 22, 44.	1.4	6
209	One-step control of hierarchy and functionality of polymeric surfaces in a new plasma nanotechnology reactor. Nanotechnology, 2021, 32, 235305.	1.3	6
210	Realâ€Time Monitoring and Quantification of Underwater Superhydrophobicity. Advanced Materials Interfaces, 2022, 9, .	1.9	6
211	Modeling of roughness evolution during the etching of inhomogeneous films: Material-induced anomalous scaling. Physical Review E, 2009, 79, 041604.	0.8	5
212	Advanced lithography models for strict process control in the 32nm technology node. Microelectronic Engineering, 2009, 86, 513-516.	1.1	5
213	Electromagnetic simulation of helicon plasma antennas for their electrostatic shield design. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, .	0.9	5
214	Plasma effects on the bacteriaEscherichia colivia two evaluation methods. Plasma Science and Technology, 2017, 19, 075504.	0.7	5
215	Binding kinetics of bacteria cells on immobilized antibodies in microfluidic channels: Modeling and experiments. Sensors and Actuators B: Chemical, 2017, 253, 247-257.	4.0	5
216	Plasma-etched, silicon nanowire, radial junction photovoltaic device. Journal Physics D: Applied Physics, 2018, 51, 455101.	1.3	5

#	Article	IF	CITATIONS
217	Allowable SEM noise for unbiased LER measurement. , 2018, , .		5
218	Lithographic evaluation of a new wet silylation process using safe solvents and the commercial photoresist AZ 5214ETM. Microelectronic Engineering, 1994, 23, 267-270.	1.1	4
219	Epoxidized novolac resist (EPR) for high-resolution negative- and positive-tone electron beam lithography. , 2000, 3999, 1181.		4
220	A Stochastic Photoresist-Polymer Dissolution Model Combining the Percolation and Critical Ionization Models. Japanese Journal of Applied Physics, 2005, 44, 7400-7403.	0.8	4
221	Simulation of the combined effects of polymer size, acid diffusion length, and EUV secondary electron blur on resist line-edge roughness. , 2007, , .		4
222	TiO2 Affinity Chromatography Microcolumn on Si Substrates for Phosphopeptide Analysis. Procedia Engineering, 2011, 25, 717-720.	1.2	4
223	Contact edge roughness and CD uniformity in EUV: effect of photo acid generator and sensitizer. , 2012, , .		4
224	Cell array fabrication by plasma nanotexturing. , 2013, , .		4
225	Phosphopeptide enrichment and separation in an affinity microcolumn on a silicon microchip: Comparison of sputtered and wet-deposited TiO2 stationary-phase. Sensors and Actuators B: Chemical, 2013, 188, 1073-1079.	4.0	4
226	Effects of image noise on contact edge roughness and critical dimension uniformity measurement in synthesized scanning electron microscope images. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2013, 12, 013005.	1.0	4
227	A hybrid modeling framework for the investigation of surface roughening of polymers during oxygen plasma etching. Journal Physics D: Applied Physics, 2021, 54, 175205.	1.3	4
228	Characterization of a positive-tone wet silylation process with the AZ 5214TM photoresist. Microelectronic Engineering, 1993, 21, 263-266.	1.1	3
229	Characterization of a positive-tone wet silylation process with the AZ 5214â,,¢ photoresist. Microelectronic Engineering, 1994, 25, 75-90.	1.1	3
230	Simulation of fluorocarbon plasma etching of SiO2 structures. Microelectronic Engineering, 2001, 57-58, 599-605.	1.1	3
231	Polyhedral oligomeric silsesquioxane (POSS) based resist materials for 157-nm lithography. , 2003, , .		3
232	Oxygen-Plasma Modification of Polyhedral Oligomeric Silsesquioxane (POSS) Containing Copolymers for Micro- and Nanofabrication. , 2005, , 281-292.		3
233	Deposition of Fluorocarbon Films on Al and SiO2 Surfaces in High-Density Fluorocarbon Plasmas: Selectivity and Surface Wettability. , 2005, , 51-63.		3
234	Line-width roughness analysis of EUV resists after development in homogenous CO 2 solutions using CO 2 compatible salts (CCS) by a three-parameter model. , 2006, , .		3

#	Article	IF	CITATIONS
235	Three-dimensional geometrical modeling of plasma transfer effects on line edge roughness: comparison with experiments and rules of thumb. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2013, 12, 041310.	1.0	3
236	A non-lithographic plasma nanoassembly technology for polymeric nanodot and silicon nanopillar fabrication. Frontiers of Chemical Science and Engineering, 2019, 13, 475-484.	2.3	3
237	Oxygen plasma micro-nanostructured PMMA plates and microfluidics for increased adhesion and proliferation of cancer versus normal cells: The role of surface roughness and disorder. Micro and Nano Engineering, 2020, 8, 100060.	1.4	3
238	A new method which increases the Si content in wet silylation, and its relation to the thermal effects during O2 plasma development. Microelectronic Engineering, 1995, 27, 381-384.	1.1	2
239	Effects of lithography non-uniformity on device electrical behavior. Simple stochastic modeling of material and process effects on device performance. Journal of Computational Electronics, 2007, 5, 341-344.	1.3	2
240	High-density plasma silicon oxide thin films grown at room-temperature. Microelectronic Engineering, 2008, 85, 1245-1247.	1.1	2
241	3d modeling of LER transfer from the resist to the underlying substrate: the effect of the resist roughness. Proceedings of SPIE, 2012, , .	0.8	2
242	Sidewall roughness in nanolithography: origins, metrology and device effects. , 2014, , 503-537.		2
243	3D Plasma Nanotextured® Polymeric Surfaces for Protein or Antibody Arrays, and Biomolecule and Cell Patterning. Methods in Molecular Biology, 2018, 1771, 27-40.	0.4	2
244	Multifractal analysis of line-edge roughness. , 2018, , .		2
245	Measuring the complexity of micro and nanostructured surfaces. Materials Today: Proceedings, 2022, 54, 63-72.	0.9	2
246	<title>Fabrication of suspended membranes for thermal sensors using high-density plasma
etching</title> . , 2002, , .		1
247	He2 60–90 nm photon source for investigating photodissociation dynamics of potential X-UV resists. Microelectronic Engineering, 2002, 61-62, 157-163.	1.1	1
248	Material origins of line-edge roughness: Monte Carlo simulations and scaling analysis. , 2004, , .		1
249	Monolithic silicon optoelectronic devices for protein and DNA detection. , 2006, , .		1
250	Stochastic simulation of material and process effects on the patterning of complex layouts. , 2007, , .		1
251	Line width roughness effects on device performance: the role of the gate width design. , 2010, , .		1
252	Plasma Nanotextured Polystyrene for Intense DNA Microarrays. Procedia Engineering, 2011, 25, 1573-1576.	1.2	1

#	Article	IF	CITATIONS
253	Nanoscale Protein Patterning on Si Substrates using Colloidal Lithography and Plasma Processing. Procedia Engineering, 2011, 25, 1641-1644.	1.2	1
254	Contact edge roughness (CER) characterization and modeling: effects of dose on CER and critical dimension (CD) variation. Proceedings of SPIE, 2011, , .	0.8	1
255	Improved immersion scanning speed using superhydrophobic surfaces. , 2011, , .		1
256	Noise effects on contact-edge roughness and CD uniformity measurement. Proceedings of SPIE, 2012, , .	0.8	1
257	Challenges in LER/CDU metrology in DSA: placement error and cross-line correlations. Proceedings of SPIE, 2016, , .	0.8	1
258	Deep learning nanometrology of line edge roughness. , 2019, , .		1
259	Computational nanometrology of line-edge roughness: noise effects, cross-line correlations and the role of etch transfer. , 2018, , .		1
260	Continuum Modeling Of rf Glow Discharges. Proceedings of SPIE, 1990, , .	0.8	0
261	Simulation of material and processing effects on photoresist line-edge roughness. International Journal of Computational Science and Engineering, 2006, 2, 134.	0.4	Ο
262	Electron-beam-patterning simulation and metrology of complex layouts on Si/Mo multilayer substrates. , 2008, , .		0
263	Evolution of resist roughness during development: stochastic simulation and dynamic scaling analysis. Proceedings of SPIE, 2010, , .	0.8	Ο
264	Line Width Roughness effects on device performance: The role of the gate width design. , 2010, , .		0
265	Evolution of resist roughness during development: Stochastic simulation and dynamic scaling analysis. , 2010, , .		0
266	Microwave exposure as a fast and cost-effective alternative of oxygen plasma treatment of indium-tin oxide electrode for application in organic solar cells. Journal Physics D: Applied Physics, 2017, 50, 505105.	1.3	0
267	Homer meets nano: Shrinking 2700Âyear old Greek poetry with state-of-the-art nanotechnology. Micro and Nano Engineering, 2020, 8, 100061.	1.4	Ο
268	Model-aided hybrid metrology for surface roughness measurement fusing AFM and SEM data. , 2015, , .		0
269	Denoising line edge roughness measurement using hidden Markov models. , 2019, , .		Ο
270	Edge placement error and line edge roughness. , 2019, , .		0

Edge placement error and line edge roughness. , 2019, , . 270