Gottlieb S Oehrlein

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

283	9,515	53	81
papers	citations	h-index	g-index
289	10,256	3	5.93
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
283	Characterization of plasma catalytic decomposition of methane: role of atomic O and reaction mechanism. *Journal Physics D: Applied Physics*, **2022**, 55, 155204	3	1
282	Investigation of Ni catalyst activation during plasma-assisted methane oxidation. *Journal Physics D: Applied Physics*, **2022**, 55, 155202	3	2
281	From thermal catalysis to plasma catalysis: a review of surface processes and their characterizations. *Journal Physics D: Applied Physics*, **2021**, 54, 213001	3	7
280	Effect of nonvertical ion bombardment due to edge effects on polymer surface morphology evolution and etching uniformity. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2021**, 39, 043001	2.9	
279	Etching of Si3N4 induced by electron beam plasma from hollow cathode plasma in a downstream reactive environment. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2020**, 38, 032208	1.3	3
278	O▯, H▯, and ▯OH radical etching probability of polystyrene obtained for a radio frequency driven atmospheric pressure plasma jet. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2020**, 38, 033012	2.9	10
277	Electron beam injection from a hollow cathode plasma into a downstream reactive environment: Characterization of secondary plasma production and Si3N4 and Si etching. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2020**, 38, 033001	2.9	4
276	Selective atomic layer etching of HfO2 over silicon by precursor and substrate-dependent selective deposition. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2020**, 38, 032601	2.9	7
275	Mechanistic aspects of plasma-enhanced catalytic methane decomposition by time-resolved operando diffuse reflectance infrared Fourier transform spectroscopy. *Journal Physics D: Applied Physics*, **2020**, 53, 215201	3	10
274	Sensitivity of tumor versus normal cell migration and morphology to cold atmospheric plasma-treated media in varying culture conditions. *Plasma Processes and Polymers*, **2020**, 17, 1900103	3.4	8
273	Significance of plasma-photoresist interactions for atomic layer etching processes with extreme ultraviolet photoresist. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2020**, 38, 052601	2.9	1
272	Rethinking surface reactions in nanoscale dry processes toward atomic precision and beyond: a physics and chemistry perspective. *Japanese Journal of Applied Physics*, **2019**, 58, SE0801	1.4	3
271	Decontamination of raw produce by surface microdischarge and the evaluation of its damage to cellular components. *Plasma Processes and Polymers*, **2019**, 16, 1800193	3.4	5
270	Effect of water vapor on plasma processing at atmospheric pressure: Polymer etching and surface modification by an Ar/H2O plasma jet. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2019**, 37, 031305	2.9	12
269	Substrate temperature effect on migration behavior of fluorocarbon film precursors in high-aspect ratio structures. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2019**, 37, 031802	1.3	0
268	Characterization of Ultrathin Polymer Films Using p-Polarized ATR-FTIR and Its Comparison with XPS. *Langmuir*, **2019**, 35, 4270-4277	4	13
267	Infrared studies of gas phase and surface processes of the enhancement of catalytic methane decomposition by low temperature plasma. *Journal Physics D: Applied Physics*, **2019**, 52, 225201	3	9

266	Validation of etching model of polypropylene layers exposed to argon plasmas. *Plasma Processes and Polymers*, **2019**, 16, 1900019	3.4	9
265	Evolution of photoresist layer structure and surface morphology under fluorocarbon-based plasma exposure. *Plasma Processes and Polymers*, **2019**, 16, 1900026	3.4	2
264	Interaction of long-lived reactive species from cold atmospheric pressure plasma with polymers: Role of macromolecular structure and deep modification of aromatic polymers. *Plasma Processes and Polymers*, **2019**, 16, 1900053	3.4	1
263	Interaction of long-lived reactive species from cold atmospheric pressure plasma with polymers: Chemical modification by ozone and reactive oxygen-nitrogen species. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2019**, 37, 051303	2.9	7
262	Stages of polymer transformation during remote plasma oxidation (RPO) at atmospheric pressure. *Journal Physics D: Applied Physics*, **2018**, 51, 135201	3	11
261	Foundations of low-temperature plasma enhanced materials synthesis and etching. *Plasma Sources Science and Technology*, **2018**, 27, 023001	3.5	62
260	Role of the dense amorphous carbon layer in photoresist etching. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2018**, 36, 021304	2.9	7
259	Polymer etching by atmospheric-pressure plasma jet and surface micro-discharge sources: Activation energy analysis and etching directionality. *Plasma Processes and Polymers*, **2018**, 15, 1700217	3.4	15
258	Achieving ultrahigh etching selectivity of SiO2 over Si3N4 and Si in atomic layer etching by exploiting chemistry of complex hydrofluorocarbon precursors. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2018**, 36, 040601	2.9	27
257	The state of the art in multicolor visible photolithography **2018**,		1
256	Characterizing fluorocarbon assisted atomic layer etching of Si using cyclic Ar/CF and Ar/CHF plasma. *Journal of Chemical Physics*, **2017**, 146, 052801	3.9	26
255	Investigation of thin oxide layer removal from Si substrates using an SiO2atomic layer etching approach: the importance of the reactivity of the substrate. *Journal Physics D: Applied Physics*, **2017**, 50, 254006	3	18
254	Model polymer etching and surface modification by a time modulated RF plasma jet: role of atomic oxygen and water vapor. *Journal Physics D: Applied Physics*, **2017**, 50, 03LT02	3	26
253	Plasmaßurface interaction at atmospheric pressure: A case study of polystyrene etching and surface modification by Ar/O2 plasma jet. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2017**, 35, 05C315	2.9	22
252	The 2017 Plasma Roadmap: Low temperature plasma science and technology. *Journal Physics D: Applied Physics*, **2017**, 50, 323001	3	496
251	Editorial for achieving atomistic control in plasmaħaterial interactions. *Journal Physics D: Applied Physics*, **2017**, 50, 490201	3	
250	Cold Atmospheric Pressure Plasma VUV Interactions With Surfaces: Effect of Local Gas Environment and Source Design. *Plasma Processes and Polymers*, **2016**, 13, 1069-1079	3.4	18
249	A comparative study of biomolecule and polymer surface modifications by a surface microdischarge. *European Physical Journal D*, **2016**, 70, 1	1.3	11

248	On the Interaction of Cold Atmospheric Pressure Plasma with Surfaces of Bio-molecules and Model Polymers. *Plasma Chemistry and Plasma Processing*, **2016**, 36, 121-149	3.6	27
247	Biodeactivation of Lipopolysaccharide Correlates with Surface-Bound NO_3 After Cold Atmospheric Plasma Treatment. *Plasma Processes and Polymers*, **2016**, 13, 410-418	3.4	16
246	He plasma pretreatment of organic masking materials for performance improvement during pattern transfer by plasma etching. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2016**, 34, 041604	1.3	5
245	Application of cyclic fluorocarbon/argon discharges to device patterning. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2016**, 34, 01B102	2.9	16
244	Impact of hydrofluorocarbon molecular structure parameters on plasma etching of ultra-low-K dielectric. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2016**, 34, 031306	2.9	11
243	Fluorocarbon based atomic layer etching of Si_3N_4 and etching selectivity of SiO_2 over Si_3N_4. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2016**, 34, 041307	2.9	56
242	Effect of the chamber wall on fluorocarbon-assisted atomic layer etching of SiO using cyclic Ar/CF plasma. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2016**, 34, 040603	2.9	20
241	Fluorocarbon assisted atomic layer etching of SiO_2 and Si using cyclic Ar/C_4F_8 and Ar/CHF_3 plasma. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2016**, 34, 01B101	2.9	54
240	Atomic Layer Etching at the Tipping Point: An Overview. *ECS Journal of Solid State Science and Technology*, **2015**, 4, N5041-N5053	2	146
239	Polystyrene as a model system to probe the impact of ambient gas chemistry on polymer surface modifications using remote atmospheric pressure plasma under well-controlled conditions. *Biointerphases*, **2015**, 10, 029512	1.8	21
238	Formation of nanometer-thick delaminated amorphous carbon layer by two-step plasma processing of methacrylate-based polymer. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2015**, 33, 051601	1.3	8
237	Effect of surface derived hydrocarbon impurities on Ar plasma properties. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2014**, 32, 030601	2.9	10
236	Fluorocarbon assisted atomic layer etching of SiO_2 using cyclic Ar/C_4F_8 plasma. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2014**, 32, 020603	2.9	134
235	Deactivation of lipopolysaccharide by Ar and H_2inductively coupled low-pressure plasma. *Journal Physics D: Applied Physics*, **2014**, 47, 045202	3	24
234	Real time characterization of polymer surface modifications by an atmospheric-pressure plasma jet: Electrically coupled versus remote mode. *Applied Physics Letters*, **2014**, 105, 171601	3.4	35
233	Controlling Asymmetric Photoresist Feature Dimensions during Plasma-Assisted Shrink. *Plasma Processes and Polymers*, **2014**, 11, 714-720	3.4	
232	Plasma flux-dependent lipid A deactivation. *Journal Physics D: Applied Physics*, **2014**, 47, 224015	3	3
231	Isotope effects on plasma species of Ar/H_2/D_2 plasmas. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2014**, 32, 041206	1.3	1

230	Determination of Ar metastable atom densities in Ar and Ar/H_2inductively coupled low-temperature plasmas. *Journal Physics D: Applied Physics*, **2013**, 46, 485202	3	21
229	Plasma Deactivation of Endotoxic Biomolecules: Vacuum Ultraviolet Photon and Radical Beam Effects on Lipid A. *Plasma Processes and Polymers*, **2013**, 10, 167-180	3.4	25
228	Atmospheric pressure plasma treatment of lipopolysaccharide in a controlled environment. *Journal Physics D: Applied Physics*, **2013**, 46, 312002	3	39
227	Feasibility of atomic layer etching of polymer material based on sequential O_2 exposure and Ar low-pressure plasma-etching. *Applied Physics Letters*, **2013**, 102, 253105	3.4	28
226	Correlation between Tribological Properties, sp[illegible]/sp[illegible]-Ratio and H-Content of Low-Wear Diamond-Like Carbon (DLC) Layers. *Materials Science Forum*, **2012**, 706-709, 2596-2601	0.4	1
225	Real-time measurements of plasma photoresist modifications: The role of plasma vacuum ultraviolet radiation and ionsa). *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2012**, 30, 031807	1.3	17
224	Study of Ti etching and selectivity mechanism in fluorocarbon plasmas for dielectric etch. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2012**, 30, 021804	1.3	3
223	Differences in erosion mechanism and selectivity between Ti and TiN in fluorocarbon plasmas for dielectric etch. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2012**, 30, 041811	1.3	6
222	Direct and quantitative evidence for buckling instability as a mechanism for roughening of polymer during plasma etching. *Applied Physics Letters*, **2012**, 100, 233113	3.4	10
221	Ion and Vacuum Ultraviolet Photon Beam Effects in 193 nm Photoresist Surface Roughening: The Role of the Adamantyl Pendant Group. *Plasma Processes and Polymers*, **2011**, 8, 1068-1079	3.4	17
220	Poly(2-vinylnaphthalene)-block-poly(acrylic acid) Block Copolymer: Self-Assembled Pattern Formation, Alignment, and Transfer into Silicon via Plasma Etching. *Macromolecular Chemistry and Physics*, **2011**, 212, 1735-1741	2.6	7
219	Plasma-polymer interactions: A review of progress in understanding polymer resist mask durability during plasma etching for nanoscale fabrication. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2011**, 29, 010801	1.3	144
218	Hydrogenation and surface density changes in hydrocarbon films during erosion using Ar/H_2 plasmas. *Journal of Applied Physics*, **2011**, 110, 104314	2.5	17
217	Characterization and mechanism of He plasma pretreatment of nanoscale polymer masks for improved pattern transfer fidelity. *Applied Physics Letters*, **2011**, 99, 261501	3.4	10
216	On the absence of post-plasma etch surface and line edge roughness in vinylpyridine resists. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2011**, 29, 041604	1.3	20
215	Electron, ion and vacuum ultraviolet photon effects in 193 nm photoresist surface roughening. *Journal Physics D: Applied Physics*, **2010**, 43, 272001	3	13
214	Real-time and post-plasma studies of influence of low levels of tungsten on carbon erosion and surface evolution behaviour in D_2plasma. *Nuclear Fusion*, **2010**, 50, 025027	3.3	4
213	Surface and near-surface modifications of ultralow dielectric constant materials exposed to plasmas under sidewall-like conditions. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2010**, 28, 1104-1110	1.3	7

212	Photoresist modifications by plasma vacuum ultraviolet radiation: The role of polymer structure and plasma chemistry. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2010**, 28, 993-1004	1.3	41
211	Molecular structure effects on dry etching behavior of Si-containing resists in oxygen plasma. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2010**, 28, 751-757	1.3	8
210	Influence of C4F8/Ar-based etching and H2-based remote plasma ashing processes on ultralow k materials modifications. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2010**, 28, 284-294	1.3	18
209	Mechanistic study of ultralow k-compatible carbon dioxide in situ photoresist ashing processes. II. Interaction with preceding fluorocarbon plasma ultralow k etching processes. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2010**, 28, 961-967	1.3	3
208	Stages in the interaction of deuterium atoms with amorphous hydrogenated carbon films: Isotope exchange, soft-layer formation, and steady-state erosion. *Journal of Applied Physics*, **2010**, 108, 043307	2.5	9
207	Mechanistic study of ultralow k-compatible carbon dioxide in situ photoresist ashing processes. I. Process performance and influence on ULK material modification. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2010**, 28, 952-960	1.3	14
206	Role of polymer structure and ceiling temperature in polymer roughening and degradation during plasma processing: a beam system study of P4MS and P�MS. *Journal Physics D: Applied Physics*, **2010**, 43, 085204	3	13
205	Relationship between nanoscale roughness and ion-damaged layer in argon plasma exposed polystyrene films. *Journal of Applied Physics*, **2010**, 107, 084310	2.5	80
204	Plasma-surface interactions of advanced photoresists with C4F8�Ar discharges: Plasma parameter dependencies. *Journal of Vacuum Science & Technology B*, **2009**, 27, 92		20
203	Study of ion and vacuum ultraviolet-induced effects on styrene- and ester-based polymers exposed to argon plasma. *Journal of Vacuum Science & Technology B*, **2009**, 27, 1142		58
202	Dependence of photoresist surface modifications during plasma-based pattern transfer on choice of feedgas composition: Comparison of C4F8- and CF4-based discharges. *Journal of Vacuum Science & Technology B*, **2009**, 27, 1165		14
201	Low-Temperature Plasma-Assisted Nanotransfer Printing between Thermoplastic Polymers. *Advanced Materials*, **2009**, 21, 2524-2529	24	10
200	Dependence of Polymer Surface Roughening Rate on Deposited Energy Density During Plasma Processing. *Plasma Processes and Polymers*, **2009**, 6, 484-489	3.4	21
199	Understanding the Roughening and Degradation of 193 nm Photoresist during Plasma Processing: Synergistic Roles of Vacuum Ultraviolet Radiation and Ion Bombardment. *Plasma Processes and Polymers*, **2009**, 6, 649-657	3.4	58
198	Real-time studies of surface roughness development and reticulation mechanism of advanced photoresist materials during plasma processing. *Journal of Applied Physics*, **2009**, 105, 013311	2.5	20
197	Molecular dynamics simulations of near-surface modification of polystyrene: Bombardment with Ar+ and Ar+/radical chemistries. *Journal of Applied Physics*, **2008**, 104, 034308	2.5	38
196	Synergistic effects of vacuum ultraviolet radiation, ion bombardment, and heating in 193nm photoresist roughening and degradation. *Applied Physics Letters*, **2008**, 92, 153113	3.4	56
195	Study of 193nm photoresist degradation during short time fluorocarbon plasma exposure III. Effect of fluorocarbon film and initial surface condition on photoresist degradation. *Journal of Vacuum Science & Technology B*, **2008**, 26, 1978-1986		10

194	Studies of fluorocarbon film deposition and its correlation with etched trench sidewall angle by employing a gap structure using C4F8/Ar and CF4/H2 based capacitively coupled plasmas. *Journal of Vacuum Science & Technology B*, **2008**, 26, 11		16
193	Study of 193nm photoresist degradation during short time fluorocarbon plasma exposure. I. Studies of modified layer formation. *Journal of Vacuum Science & Technology B*, **2008**, 26, 1637		32
192	Study of 193nm photoresist degradation during short time fluorocarbon plasma exposures. II. Plasma parameter trends for photoresist degradation. *Journal of Vacuum Science & Technology B*, **2008**, 26, 1647		15
191	Interactions of photoresist stripping plasmas with nanoporous organo-silicate ultra low dielectric constant dielectrics. *Thin Solid Films*, **2008**, 516, 3697-3703	2.2	7
190	On the photoresist stripping and damage of ultralow k dielectric materials using remote H2- and D2-based discharges. *Journal of Vacuum Science & Technology B*, **2007**, 25, 1593		13
189	Transient roughening behaviour and spontaneous pattern formation during plasma etching of nanoporous silica. *Nanotechnology*, **2007**, 18, 055305	3.4	2
188	Study of photoresist etching and roughness formation in electron-beam generated plasmas. *Journal of Vacuum Science & Technology B*, **2007**, 25, 779		18
187	Near-surface modification of polystyrene by Ar+: Molecular dynamics simulations and experimental validation. *Applied Physics Letters*, **2007**, 91, 233113	3.4	49
186	Plasma-surface interactions of model polymers for advanced photoresists using C4F8/Ar discharges and energetic ion beams. *Journal of Vacuum Science & Technology B*, **2007**, 25, 1353		65
185	Time of flight secondary ion mass spectroscopy investigation of ultralow-k dielectric modifications in hydrogen and deuterium plasmas. *Journal of Vacuum Science & Technology B*, **2006**, 24, 2695		15
184	Nanoscale layer etching by short-time exposure of substrates to gas discharges using moving patterned shutter. *Journal of Vacuum Science & Technology B*, **2006**, 24, 279		7
183	Studies of plasma surface interactions during short time plasma etching of 193 and 248nm photoresist materials. *Journal of Vacuum Science & Technology B*, **2006**, 24, 1850		38
182	Damage of ultralow k materials during photoresist mask stripping process. *Journal of Vacuum Science & Technology B*, **2006**, 24, 1238		58
181	ToF-SIMS and AFM studies of low-k dielectric etching in fluorocarbon plasmas. *Applied Surface Science*, **2006**, 252, 7186-7189	6.7	9
180	Substrate interconnect technologies for 3-D MEMS packaging. *Microelectronic Engineering*, **2005**, 81, 106-116	2.5	17
179	Porosity-induced effects during C4F8/90% Ar plasma etching of silica-based ultralow-k dielectrics. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2005**, 23, 1491		20
178	Role of C2F4, CF2, and ions in C4F8/Ar plasma discharges under active oxide etch conditions in an inductively coupled GEC cell reactor. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2005**, 23, 408-416	2.9	30
177	Studies of film deposition in fluorocarbon plasmas employing a small gap structure. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2005**, 23, 634-642	2.9	38

176	Plasma-surface interactions of nanoporous silica during plasma-based pattern transfer using C4F8 and C4F8�Ar gas mixtures. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2005**, 23, 151-164	2.9	28
175	Investigation of surface modifications of 193 and 248nm photoresist materials during low-pressure plasma etching. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2004**, 22, 2594		34
174	Properties of C4F8 inductively coupled plasmas. I. Studies of Ar/c-C4F8 magnetically confined plasmas for etching of SiO2. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2004**, 22, 500	2.9	20
173	Properties of c-C4F8 inductively coupled plasmas. II. Plasma chemistry and reaction mechanism for modeling of Ar/c-C4F8/O2 discharges. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2004**, 22, 511	2.9	96
172	Study of C4F8/CO and C4F8/Ar/CO plasmas for highly selective etching of organosilicate glass over Si3N4 and SiC. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2004**, 22, 236-244	2.9	8
171	Role of fluorocarbon film formation in the etching of silicon, silicon dioxide, silicon nitride, and amorphous hydrogenated silicon carbide. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2004**, 22, 53-60	2.9	186
170	Surface chemical changes of aluminum during NF3-based plasma processing used for in situ chamber cleaning. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2004**, 22, 158-164	2.9	15
169	Molecular dynamics simulations of Ar+-induced transport of fluorine through fluorocarbon films. *Applied Physics Letters*, **2004**, 84, 1073-1075	3.4	26
168	Spatially resolved mass spectrometric sampling of inductively coupled plasmas using a movable sampling orifice. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2003**, 21, 1971-1977	2.9	8
167	Characteristics of C4F8 plasmas with Ar, Ne, and He additives for SiO2 etching in an inductively coupled plasma (ICP) reactor. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2003**, 21, 1955-1963	2.9	28
166	Study of C4F8/N2 and C4F8/Ar/N2 plasmas for highly selective organosilicate glass etching over Si3N4 and SiC. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2003**, 21, 1708-1716	2.9	48
165	Effects of Ar and O2 additives on SiO2 etching in C4F8-based plasmas. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2003**, 21, 284-293	2.9	73
164	Fluorocarbon-based plasma etching of SiO2: Comparison of C4F6/Ar and C4F8/Ar discharges. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2002**, 20, 2052	2.9	83
163	Development of a Slurry Employing a Unique Silica Abrasive for the CMP of Cu Damascene Structures. *Journal of the Electrochemical Society*, **2001**, 148, G321	3.9	23
162	A Review of SiO[sub 2] Etching Studies in Inductively Coupled Fluorocarbon Plasmas. *Journal of the Electrochemical Society*, **2001**, 148, C211	3.9	85
161	Surface Chemistry Studies of Copper Chemical Mechanical Planarization. *Journal of the Electrochemical Society*, **2001**, 148, G389	3.9	157
160	Surface etching mechanism of silicon nitride in fluorine and nitric oxide containing plasmas. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2001**, 19, 25-30	2.9	32
159	High-density plasma patterning of low dielectric constant polymers: A comparison between polytetrafluoroethylene, parylene-N, and poly(arylene ether). *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2001**, 19, 435-446	2.9	41

158	Gas-phase studies in inductively coupled fluorocarbon plasmas. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2001**, 19, 2946	2.9	22
157	Effect of radio frequency bias power on SiO2 feature etching in inductively coupled fluorocarbon plasmas. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2000**, 18, 848		31
156	Gas utilization in remote plasma cleaning and stripping applications. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2000**, 18, 2102	2.9	28
155	Using a quartz crystal microbalance for low energy ion beam etching studies. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2000**, 18, 232-236	2.9	10
154	Etching of xerogel in high-density fluorocarbon plasmas. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2000**, 18, 2742-2748	2.9	55
153	Chemical Mechanical Planarization of Copper Damascene Structures. *Journal of the Electrochemical Society*, **2000**, 147, 706	3.9	63
152	Characterization of Al, Cu, and TiN surface cleaning following a low-K dielectric etch. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1999**, 17, 1435		48
151	Polishing Parameter Dependencies and Surface Oxidation of Chemical Mechanical Polishing of Al Thin Films. *Journal of the Electrochemical Society*, **1999**, 146, 2689-2696	3.9	29
150	Silicon etching in NF3/O2 remote microwave plasmas. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1999**, 17, 2431-2437	2.9	24
149	Highly selective etching of silicon nitride over silicon and silicon dioxide. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1999**, 17, 3179-3184	2.9	69
148	Study of the SiO2-to-Si3N4 etch selectivity mechanism in inductively coupled fluorocarbon plasmas and a comparison with the SiO2-to-Si mechanism. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1999**, 17, 26-37	2.9	221
147	Patterning of fluorine-, hydrogen-, and carbon-containing SiO2-like low dielectric constant materials in high-density fluorocarbon plasmas: Comparison with SiO2. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1999**, 17, 741-748	2.9	68
146	Mass spectrometric measurements on inductively coupled fluorocarbon plasmas: Positive ions, radicals and endpoint detection. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1999**, 17, 2438-2446	2.9	36
145	Selective etching of SiO2 over polycrystalline silicon using CHF3 in an inductively coupled plasma reactor. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1999**, 17, 2492-2502	2.9	63
144	Surface science issues in plasma etching. *IBM Journal of Research and Development*, **1999**, 43, 181-197	2.5	40
143	Effect of capacitive coupling on inductively coupled fluorocarbon plasma processing. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1999**, 17, 3272-3280	2.9	25
142	Processing and Characterization of Silica Xerogel Films for Low-K Dielectric Applications. *Materials Research Society Symposia Proceedings*, **1999**, 565, 29		13
141	Chemical Mechanical Polishing of Al and SiO2 Thin Films: The Role of Consumables. *Journal of the Electrochemical Society*, **1999**, 146, 4647-4653	3.9	21

140	Sidewall surface chemistry in directional etching processes. *Materials Science and Engineering Reports*, **1998**, 24, 153-183	30.9	61
139	Influence of reactor wall conditions on etch processes in inductively coupled fluorocarbon plasmas. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1998**, 16, 2099-2107	2.9	87
138	Fabrication of Cu interconnects of 50 nm linewidth by electron-beam lithography and high-density plasma etching. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1998**, 16, 3344		11
137	Photoresist erosion studied in an inductively coupled plasma reactor employing CHF3. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1998**, 16, 1998		34
136	Selective SiO2-to-Si3N4 etching in inductively coupled fluorocarbon plasmas: Angular dependence of SiO2 and Si3N4 etching rates. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1998**, 16, 3281-3286	2.9	53
135	Remote plasma etching of silicon nitride and silicon dioxide using NF3/O2 gas mixtures. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1998**, 16, 2047-2056	2.9	77
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