Clifford L Henderson

List of Publications by Citations

Source: https://exaly.com/author-pdf/10714789/clifford-l-henderson-publications-by-citations.pdf
Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

94	1,254	19	32
papers	citations	h-index	g-index

96	1,339	3.1	3.99
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
94	Influence of molecular weight and film thickness on the glass transition temperature and coefficient of thermal expansion of supported ultrathin polymer films. *Thin Solid Films*, **2004**, 449, 231-241	2.2	114
93	The Mechanism of Phenolic Polymer Dissolution: A New Perspective. *Macromolecules*, **1997**, 30, 4656-4664	5.5	99
92	Fabrication of microchannels using polycarbonates as sacrificial materials. *Journal of Micromechanics and Microengineering*, **2001**, 11, 733-737	2	78
91	Area-Selective ALD of Titanium Dioxide Using Lithographically Defined Poly(methyl methacrylate) Films. *Journal of the Electrochemical Society*, **2006**, 153, G465	3.9	66
90	Production of heavily n- and p-doped CVD graphene with solution-processed redox-active metal□organic species. *Materials Horizons*, **2014**, 1, 111-115	14.4	59
89	Creating graphene p-n junctions using self-assembled monolayers. *ACS Applied Materials & Interfaces*, **2012**, 4, 4781-6	9.5	50
88	Novel polymeric anionic photoacid generators (PAGs) and corresponding polymers for 193 nm lithography. *Journal of Materials Chemistry*, **2006**, 16, 3701		37
87	Impact of exposure induced refractive index changes of photoresists on the photolithographic process. *Journal of Applied Physics*, **2001**, 89, 8163-8168	2.5	36
86	Nanopatterning materials using area selective atomic layer deposition in conjunction with thermochemical surface modification via heated AFM cantilever probe lithography. *Microelectronic Engineering*, **2008**, 85, 934-936	2.5	34
85	A Top Surface Imaging Method Using Area Selective ALD on Chemically Amplified Polymer Photoresist Films. *Electrochemical and Solid-State Letters*, **2006**, 9, G330		34
84	Facile Formation of Graphene P□N Junctions Using Self-Assembled Monolayers. *Journal of Physical Chemistry C*, **2012**, 116, 19095-19103	3.8	31
83	The effect of humidity on water sorption in photoresist polymer thin films. *Polymer*, **2003**, 44, 2101-2108	3.9	31
82	In situ monitoring of mechanical properties during photopolymerization with particle tracking microrheology. *Polymer*, **2006**, 47, 2263-2268	3.9	26
81	Fabrication of Microchannels Using Polynorbornene Photosensitive Sacrificial Materials. *Journal of the Electrochemical Society*, **2003**, 150, H205	3.9	26
80	Comparison of positive tone versus negative tone resist pattern collapse behaviora). *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2010**, 28, C6S6-C6S11	1.3	23
79	Novel chemically amplified resists incorporating anionic photoacid generator functional groups for sub-50-nm half-pitch lithography. *Journal of Materials Chemistry*, **2009**, 19, 2797		23
78	Gel time prediction of multifunctional acrylates using a kinetics model. *Polymer*, **2011**, 52, 866-873	3.9	21

77	Photochemical Doping and Tuning of the Work Function and Dirac Point in Graphene Using Photoacid and Photobase Generators. *Advanced Functional Materials*, **2014**, 24, 5147-5156	15.6	20
76	Bis(trifluoromethyl)carbinol-Substituted Polynorbornenes: Dissolution Behavior. *Macromolecules*, **2004**, 37, 4512-4518	5.5	20
75	Direct writing and characterization of poly(p-phenylene vinylene) nanostructures. *Applied Physics Letters*, **2009**, 95, 233108	3.4	18
74	Effects of photoacid generator incorporation into the polymer main chain on 193nm chemically amplified resist behavior and lithographic performance. *Journal of Vacuum Science & Technology B*, **2007**, 25, 2136		18
73	Mesoscale simulation of molecular resists: The effect of PAG distribution homogeneity on LER. *Microelectronic Engineering*, **2009**, 86, 741-744	2.5	17
72	Influence of solubility switching mechanism on resist performance in molecular glass resists. *Journal of Vacuum Science & Technology B*, **2007**, 25, 2140		17
71	Epoxide functionalized molecular resists for high resolution electron-beam lithography. *Microelectronic Engineering*, **2008**, 85, 959-962	2.5	16
70	Coarse grained molecular dynamics model of block copolymer directed self-assembly **2013**,		14
69	Incorporation of ionic photoacid generator (PAG) and base quencher into the resist polymer main chain for sub-50 nm resolution patterning. *Journal of Materials Chemistry*, **2008**, 18, 2704		14
68	Single molecule chemically amplified resists based on ionic and non-ionic PAGs **2008**,		14
67	Detailed molecular dynamics studies of block copolymer directed self-assembly: Effect of guiding layer properties. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2013**, 31, 06F302	1.3	13
66	Molecular glass photoresists containing photoacid generator functionality: a route to a single-molecule photoresist **2007**, 6519, 549		13
65	Effects of block copolymer polydispersity and □N on pattern line edge roughness and line width roughness from directed self-assembly of diblock copolymers **2013**,		11
64	High resolution negative tone molecular resist based on di-functional epoxide polymerization. *Microelectronic Engineering*, **2009**, 86, 734-737	2.5	11
63	Photoresist characterization for lithography simulation: II. Exposure parameter measurements **1997**,		11
62	Lithographic Characteristics and Thermal Processing of Photosensitive Sacrificial Materials. *Journal of the Electrochemical Society*, **2002**, 149, G555	3.9	11
61	Simulation study of the effect of differences in block energy and density on the self-assembly of block copolymers. *Journal of Micro/ Nanolithography, MEMS, and MOEMS*, **2014**, 13, 031308	0.7	10
60	Effect of acid anion on the behavior of single component molecular resists incorporating ionic photoacid generators. *Microelectronic Engineering*, **2009**, 86, 738-740	2.5	9

59	Photoinitiation systems and thermal decomposition of photodefinable sacrificial materials. *Journal of Applied Polymer Science*, **2003**, 88, 1186-1195	2.9	9
58	Coarse-grained molecular dynamics modeling of the kinetics of lamellar block copolymer defect annealing. *Journal of Micro/ Nanolithography, MEMS, and MOEMS*, **2016**, 15, 013508	0.7	8
57	Simulation study of the effect of molar mass dispersity on domain interfacial roughness in lamellae forming block copolymers for directed self-assembly. *Nanotechnology*, **2015**, 26, 385301	3.4	8
56	High sensitivity nonchemically amplified molecular resists based on photosensitive dissolution inhibitors. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2010**, 28, C6S12-C6S18	1.3	8
55	Water-developable negative-tone single-molecule resists: high-sensitivity nonchemically amplified resists **2008**,		8
54	Modeling parameter extraction for DNQ-novolak thick film resists **1998**, 3333, 256		8
53	Calculations of the free energy of dislocation defects in lamellae forming diblock copolymers using thermodynamic integration. *Journal of Micro/ Nanolithography, MEMS, and MOEMS*, **2016**, 15, 023505	0.7	8
52	Bleaching-induced changes in the dispersion curves of DNQ photoresists **1997**,		7
51	The effect of direct PAG incorporation into the polymer main chain on reactive ion etch resistance of 193nm and EUV chemically amplified resists. *Microelectronic Engineering*, **2008**, 85, 963-965	2.5	7
50	Stochastic modeling and simulation of photopolymerization process. *Polymer Engineering and Science*, **2011**, 51, 1710-1719	2.3	6
49	Development of realistic potentials for the simulation of directed self-assembly of PS-PMMA di-block copolymers **2011**,		6
48	Photosensitivity and line-edge roughness of novel polymer-bound PAG photoresists **2007**,		6
47	Quantitative characterization of the optical properties of absorbing polymer films: Comparative investigation of the internal reflection intensity analysis method. *Journal of Polymer Science, Part B: Polymer Physics*, **2003**, 41, 842-855	2.6	6
46	Influence of film thickness, molecular weight, and substrate on the physical properties of photoresist polymer thin films **2003**,		6
45	The effect of film thickness on the dissolution rate and hydrogen bonding behavior of photoresist polymer thin films **2005**,		6
44	Methods of controlling cross-linking in negative-tone resists **2014**,		5
43	A comprehensive model and method for model parameterization for predicting pattern collapse behavior in photoresist nanostructures **2011**,		5
42	Novel anionic photoacid generator (PAGs) and photoresist for sub-50-nm patterning by EUVL and EBL **2007**,		5

41	Effects of the photoacid generator type on the imaging and thermal decomposition properties of photodefinable, thermally sacrificial poly(propylene carbonate) materials. *Journal of Applied Polymer Science*, **2006**, 102, 266-271	2.9	5
40	Electron beam lithography process using radiation sensitive carboxylate metalorganic precursors. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2003**, 21, 3157		5
39	Improved method for measuring photoacid generator kinetics in polymer thin films using normalized interdigitated electrode capacitance data. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2004**, 22, 1163		5
38	Protracted Colored Noise Dynamics Applied to Linear Polymer Systems. *Macromolecular Theory and Simulations*, **2018**, 27, 1700062	1.5	4
37	RIS Model of the Helix-Kink Conformation of Erythro Diisotactic Polynobornene. *Macromolecular Theory and Simulations*, **2010**, 19, 421-431	1.5	4
36	Photoresist characterization for lithography simulation: III. Development parameter measurements **1997**,		4
35	Development of improved photosensitive polycarbonate systems for the fabrication of microfluidic devices. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2003**, 21, 2926		4
34	Area selective atomic layer deposition: use of lithographically defined polymer masking layers for the deposition of titanium dioxide **2005**,		4
33	Tuning domain size of block copolymers for directed self assembly using polymer blending: molecular dynamics simulation studies **2013**,		3
32	Thin film buckling as a method to explore the effect of reactive rinse treatments on the mechanical properties of resist thin films **2010**,		3
31	Influence of optical nonlinearities of the photoresist on the photolithographic process: basics **1997**, 3051, 529		3
30	Fullerene Grafted Photoacid Generator (PAG) Bound Polymer Resists. *Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]*, **2008**, 21, 747-751	0.7	3
29	Using Interdigitated Electrodes for Measuring Photoacid Generator Kinetics in Chemically Amplified Resists. *Journal of the Electrochemical Society*, **2004**, 151, G119	3.9	3
28	Microsystems manufacturing via embossing of photodefinable thermally sacrificial materials **2004**, 5374, 361		3
27	Investigating SEM metrology effects using a detailed SEM simulation and stochastic resist model **2015**,		2
26	Positive-tone crosslinked molecular resist based on acid-catalyzed depolymerization. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2017**, 35, 06GE03	1.3	2
25	Postiive tone resists based on network deploymerization of molecular resists **2013**,		2
24	Resist surface crosslinking using amine-based reactive rinses to mitagate pattern collapse in thin film lithography **2012**,		2

23	Influence of optical nonlinearities of the photoresist on the photolithographic process: applications **1997**,		2
22	A Simple Method for Measurement of Photoacid Generator Photoreaction Kinetics in Formulated, Chemically Amplified Photoresist Films. *Electrochemical and Solid-State Letters*, **2007**, 10, H273		2
21	Equilibrium water uptake and diffusion behavior in model polynorbornene photoresist polymers **2005**,		2
20	Direct Photopatterning of Metal Oxide Structures Using Photosensitive Metallorganics. *Journal of the Electrochemical Society*, **2004**, 151, F235	3.9	2
19	New Materials and Methods for Hierarchically Structured Tissue Scaffolds. *Materials Research Society Symposia Proceedings*, **2004**, 845, 116		2
18	Photosensitive copolycarbonates for use as sacrificial materials in the fabrication of microfluidic and microelectromechanical devices **2004**,		2
17	Synthesis and characterization of photodefinable polycarbonates for use as sacrificial materials in the fabrication of microfluidic devices **2002**, 4690, 242		2
16	Some aspects of thick film resist performance and modeling **1998**,		2
15	Block copolymer directed self-assembly defect modes induced by localized errors in chemoepitaxial guiding underlayers: A molecular simulation study. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2020**, 38, 032604	1.3	2
14	Synthesis and self-assembly of high-□ poly(4-tertbutylstyrene)-block-poly(2-hydroxyethylmethacrylate). *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2019**, 37, 011603	1.3	1
13	Simulation of models for multifunctional photopolymerization kinetics. *Polymer Engineering and Science*, **2014**, 54, 1737-1746	2.3	1
12	Elucidating the physiochemical and lithographic behavior of ultra-thin photoresist films **2009**,		1
11	Nanolithography in thermally sacrificial polymers using nanoscale thermal probes **2006**, 6153, 485		1
10	Effect of film composition on the performance of interdigitated electrode methods used for chemically amplified photoresist characterization: methods for analyzing photoresist materials containing base quencher **2005**, 5753, 1076		1
9	Small Molecule Diffusion in Polymer Ultra-Thin Films. *Materials Research Society Symposia Proceedings*, **2005**, 899, 1		1
8	Structural effects on the performance of epoxide-based negative-tone molecular resists. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2019**, 37, 011604	1.3	1
7	Effect of Thin Film Confinement on the Transport Properties of Ultra-Thin Polymer Films. *Materials Research Society Symposia Proceedings*, **2003**, 790, 1		0
6	Novel Anionic Photoacid Generators (PAGs) and Photoresists for sub 50 nm Patterning by EUVL and EBL. *Materials Research Society Symposia Proceedings*, **2006**, 961, 1		

5	Photodefinable Metal Oxide Dielectrics: A Novel Method for Fabricating Low Cost RF Capacitive MEMS Switches. *Materials Research Society Symposia Proceedings*, **2003**, 783, 671	
4	Photodefinable Metal Oxide Dielectrics II: Direct Fabrication of Patterned High-k Dielectrics for Low Cost RF Capacitive MEMS Switches. *Materials Research Society Symposia Proceedings*, **2004**, 833, 199	
3	Novel Approaches to Nanopatterning: From Surface Monolayer Initiated Polymerization to Hybrid Organometallic-Organic Bilayers. *Materials Research Society Symposia Proceedings*, **2001**, 705, 261	
2	Effect of chemoepitaxial guiding underlayer design on the pattern quality and shape of aligned lamellae for fabrication of line-space patterns. *Journal of Micro/ Nanolithography, MEMS, and MOEMS*, **2017**, 16, 1	0.7
1	Phenol-functionalized polymerization control additives for negative tone epoxide crosslinking molecular resists. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2018**, 36, 06JC02	1.3