

Ricardo Ruiz

List of Publications by Year in descending order

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56
papers

5,821
citations

159585

30
h-index

197818

49
g-index

56
all docs

56
docs citations

56
times ranked

5881
citing authors

#	ARTICLE	IF	CITATIONS
1	Self-assembly for electronics. MRS Bulletin, 2020, 45, 807-814.	3.5	10
2	Path to Move Beyond the Resolution Limit with Directed Self-Assembly. ACS Applied Materials & Interfaces, 2019, 11, 20333-20340.	8.0	4
3	Heat-assisted magnetic recording media materials. MRS Bulletin, 2018, 43, 93-99.	3.5	32
4	Line Roughness in Lamellae-Forming Block Copolymer Films. Macromolecules, 2017, 50, 1037-1046.	4.8	17
5	Self-Registered Self-Assembly of Block Copolymers. ACS Nano, 2017, 11, 7666-7673.	14.6	20
6	Self-Assembly and Directed Assembly of Polymer Grafted Nanocrystals via Solvent Annealing. Macromolecules, 2017, 50, 9636-9646.	4.8	14
7	Directed self-assembly of high-chi block copolymer for nano fabrication of bit patterned media via solvent annealing. Nanotechnology, 2016, 27, 415601.	2.6	19
8	Directed Self-Assembly of Triblock Copolymer on Chemical Patterns for Sub-10-nm Nanofabrication via Solvent Annealing. ACS Nano, 2016, 10, 7855-7865.	14.6	62
9	Nanoscale chemical imaging by photoinduced force microscopy. Science Advances, 2016, 2, e1501571.	10.3	228
10	Strong Coupling of Plasmon and Nanocavity Modes for Dual-Band, Near-Perfect Absorbers and Ultrathin Photovoltaics. ACS Photonics, 2016, 3, 456-463.	6.6	61
11	Special Section Guest Editorial: Alternative Lithographic Technologies V. Journal of Micro/Nanolithography, MEMS, and MOEMS, 2016, 15, 031601.	0.9	0
12	Template-mediated polymer commensurability and directed self-assembly block copolymer lithography. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 595-603.	2.1	26
13	Double-Patterned Sidewall Directed Self-Assembly and Pattern Transfer of Sub-10 nm PTMSS-PMOST. ACS Applied Materials & Interfaces, 2015, 7, 13476-13483.	8.0	60
14	Special Section Guest Editorial: Alternative Lithographic Technologies IV. Journal of Micro/Nanolithography, MEMS, and MOEMS, 2015, 14, 031201.	0.9	0
15	Bit-Patterned Magnetic Recording: Theory, Media Fabrication, and Recording Performance. IEEE Transactions on Magnetics, 2015, 51, 1-42.	2.1	179
16	Transfer of self-aligned spacer patterns for single-digit nanofabrication. Nanotechnology, 2015, 26, 085304.	2.6	19
17	The Limits of Lamellae-Forming PS-PMMA Block Copolymers for Lithography. ACS Nano, 2015, 9, 7506-7514.	14.6	128
18	Special Section Guest Editorial: Alternative Lithographic Technologies. Journal of Micro/Nanolithography, MEMS, and MOEMS, 2014, 13, 031301.	0.9	0

#	ARTICLE	IF	CITATIONS
19	Bit patterned media optimization at 1 Tdot/in ² by post-annealing. Journal of Applied Physics, 2014, 116, .	2.5	12
20	Ordering poly(trimethylsilyl styrene- <i>b</i> -D,L-lactide) block copolymers in thin films by solvent annealing using a mixture of domain-selective solvents. Journal of Polymer Science, Part B: Polymer Physics, 2014, 52, 36-45.	2.1	25
21	Evolutionary Optimization of Directed Self-Assembly of Triblock Copolymers on Chemically Patterned Substrates. ACS Macro Letters, 2014, 3, 747-752.	4.8	64
22	Self-Assembly Based Plasmonic Arrays Tuned by Atomic Layer Deposition for Extreme Visible Light Absorption. Nano Letters, 2013, 13, 3352-3357.	9.1	118
23	Bit Patterned Media at 1 Tdot/in ² and Beyond. IEEE Transactions on Magnetics, 2013, 49, 773-778.	2.1	75
24	Topcoat Approaches for Directed Self-Assembly of Strongly Segregating Block Copolymer Thin Films. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2013, 26, 55-58.	0.3	52
25	Fabrication of templates with rectangular bits on circular tracks by combining block copolymer directed self-assembly and nanoimprint lithography. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2012, 11, 031405-1.	0.9	30
26	Image quality and pattern transfer in directed self assembly with block-selective atomic layer deposition. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2012, 30, .	1.2	52
27	Integration of Servo and High Bit Aspect Ratio Data Patterns on Nanoimprint Templates for Patterned Media. IEEE Transactions on Magnetics, 2012, 48, 2757-2760.	2.1	11
28	Fabrication of templates with rectangular bits on circular tracks by combining block copolymer directed self-assembly and nanoimprint lithography. , 2012, , .		4
29	Directed Self-Assembly of POSS Containing Block Copolymer on Lithographically Defined Chemical Template with Morphology Control by Solvent Vapor. Macromolecules, 2012, 45, 292-304.	4.8	91
30	Rectangular Patterns Using Block Copolymer Directed Assembly for High Bit Aspect Ratio Patterned Media. ACS Nano, 2011, 5, 79-84.	14.6	107
31	Impact of Out-of-Plane Translational Order in Block Copolymer Lithography. Macromolecules, 2011, 44, 9196-9204.	4.8	12
32	Fabrication of chevron patterns for patterned media with block copolymer directed assembly. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2011, 29, 06F204.	1.2	14
33	20nm Pitch Directed Block Copolymer Assembly Using Solvent Annealing for Bit Patterned Media. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2010, 23, 145-148.	0.3	22
34	High-Resolution PFPE-based Molding Techniques for Nanofabrication of High-Pattern Density, Sub-20 nm Features: A Fundamental Materials Approach. Nano Letters, 2010, 10, 1421-1428.	9.1	96
35	Practical implementation of order parameter calculation for directed assembly of block copolymer thin films. Journal of Polymer Science, Part B: Polymer Physics, 2010, 48, 2589-2603.	2.1	13
36	Magnetic recording at 1.5ÂPbÂ” ² using an integrated plasmonic antenna. Nature Photonics, 2010, 4, 484-488.	31.4	412

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37	Nine-fold density multiplication of hcp lattice pattern by directed self-assembly of block copolymer. <i>Polymer</i> , 2009, 50, 4250-4256.	3.8	45
38	Bit-Patterned Magnetic Recording: Nanoscale Magnetic Islands for Data Storage. , 2009, , 237-274.		22
39	Density Multiplication and Improved Lithography by Directed Block Copolymer Assembly. <i>Science</i> , 2008, 321, 936-939.	12.6	1,099
40	Control of Self-Assembly of Lithographically Patternable Block Copolymer Films. <i>ACS Nano</i> , 2008, 2, 1396-1402.	14.6	149
41	Rapid directed self assembly of lamellar microdomains from a block copolymer containing hybrid. <i>Applied Physics Letters</i> , 2007, 91, 143106.	3.3	24
42	Control of Morphology Orientation in Lithographically Patternable Diblock Copolymers. <i>Journal of Photopolymer Science and Technology</i> = [Fotoporima Konwakai Shi], 2007, 20, 519-522.	0.3	4
43	Polymer self assembly in semiconductor microelectronics. <i>IBM Journal of Research and Development</i> , 2007, 51, 605-633.	3.1	397
44	Induced Orientational Order in Symmetric Diblock Copolymer Thin Films. <i>Advanced Materials</i> , 2007, 19, 587-591.	21.0	124
45	Directed Assembly of Lamellae- Forming Block Copolymers by Using Chemically and Topographically Patterned Substrates. <i>Advanced Materials</i> , 2007, 19, 607-611.	21.0	196
46	Local Defectivity Control of 2D Self-Assembled Block Copolymer Patterns. <i>Advanced Materials</i> , 2007, 19, 2157-2162.	21.0	92
47	Growth dynamics of pentacene thin films: Real-time synchrotron x-ray scattering study. <i>Physical Review B</i> , 2006, 73, .	3.2	56
48	Thickness Dependence of Mobility in Pentacene Thin-Film Transistors. <i>Advanced Materials</i> , 2005, 17, 1795-1798.	21.0	309
49	Early stages of pentacene film growth on silicon oxide. <i>Organic Electronics</i> , 2004, 5, 257-263.	2.6	84
50	Pentacene Thin Film Growth. <i>Chemistry of Materials</i> , 2004, 16, 4497-4508.	6.7	588
51	Structure of pentacene thin films. <i>Applied Physics Letters</i> , 2004, 85, 4926-4928.	3.3	163
52	Dynamic Scaling, Island Size Distribution, and Morphology in the Aggregation Regime of Submonolayer Pentacene Films. <i>Physical Review Letters</i> , 2003, 91, 136102.	7.8	172
53	Pentacene ultrathin film formation on reduced and oxidized Si surfaces. <i>Physical Review B</i> , 2003, 67, .	3.2	204
54	Pulsed laser deposition of conductive metallo-dielectric optical filters. <i>Applied Physics A: Materials Science and Processing</i> , 2002, 74, 307-310.	2.3	3

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55	Growth and Morphology of Pentacene Films on Oxide Surfaces. Materials Research Society Symposia Proceedings, 2001, 708, 10541.	0.1	0
56	<title>Injection of light into a planar dielectric waveguide of metallic walls</title>. , 2001, , .		1