Gabriele Seguini

List of Publications by Year
in descending order

83 papers	1,874 citations	218677 26 h-index	315739 38 g-index
84 all docs	84 docs citations	84 times ranked	1829 citing authors

#	Article	IF	Citations
1	Rapid thermal processing of self-assembling block copolymer thin films. Nanotechnology, 2013, 24, 315601.	2.6	72
2	Resistive Switching in High-Density Nanodevices Fabricated by Block Copolymer Self-Assembly. ACS Nano, 2015, 9, 2518-2529.	14.6	72
3	Ultrathin Random Copolymer-Grafted Layers for Block Copolymer Self-Assembly. ACS Applied Materials & Interfaces, 2015, 7, 10944-10951.	8.0	71
4	Fine Tuning of Lithographic Masks through Thin Films of PS-b-PMMA with Different Molar Mass by Rapid Thermal Processing. ACS Applied Materials & Interfaces, 2014, 6, 7180-7188.	8.0	64
5	Energy band alignment at TiO2âˆ•Si interface with various interlayers. Journal of Applied Physics, 2008, 103, .	2.5	63
6	Charging phenomena in dielectric/semiconductor heterostructures during x-ray photoelectron spectroscopy measurements. Journal of Applied Physics, 2011, 110, .	2.5	62
7	Energy-band diagram of metal/Lu2O3/silicon structures. Applied Physics Letters, 2004, 85, 5316-5318.	3.3	60
8	Ordering dynamics in symmetric PS-b-PMMA diblock copolymer thin films during rapid thermal processing. Journal of Materials Chemistry C, 2014, 2, 6655-6664.	5.5	54
9	Effects of the oxygen precursor on the electrical and structural properties of HfO2 films grown by atomic layer deposition on Ge. Applied Physics Letters, 2005, 87, 112904.	3.3	52
10	Conduction band offset of HfO2 on GaAs. Applied Physics Letters, 2007, 91, .	3.3	46
11	Trimethylaluminum Diffusion in PMMA Thin Films during Sequential Infiltration Synthesis: In Situ Dynamic Spectroscopic Ellipsometric Investigation. Advanced Materials Interfaces, 2018, 5, 1801016.	3.7	44
12	On the Thermal Stability of PS-b-PMMA Block and P(S-r-MMA) Random Copolymers for Nanopatterning Applications. Macromolecules, 2013, 46, 8224-8234.	4.8	43
13	Flash grafting of functional random copolymers for surface neutralization. Journal of Materials Chemistry C, 2014, 2, 4909-4917.	5.5	43
14	Solid-state dewetting of ultra-thin Au films on SiO₂and HfO₂. Nanotechnology, 2014, 25, 495603.	2.6	41
15	Energy band alignment of HfO2 on Ge. Journal of Applied Physics, 2006, 100, 093718.	2.5	40
16	The energy band alignment of Si nanocrystals in SiO2. Applied Physics Letters, 2011, 99, .	3.3	37
17	High Aspect Ratio PS-b-PMMA Block Copolymer Masks for Lithographic Applications. ACS Applied Materials & Interfaces, 2014, 6, 21389-21396.	8.0	35
18	Control of Doping Level in Semiconductors via Self-Limited Grafting of Phosphorus End-Terminated Polymers. ACS Nano, 2018, 12, 178-186.	14.6	35

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19	Scaling size of the interplay between quantum confinement and surface related effects in nanostructured silicon. Applied Physics Letters, 2013, 103, .	3.3	33
20	Thermodynamic stability of high phosphorus concentration in silicon nanostructures. Nanoscale, 2015, 7, 14469-14475.	5.6	33
21	Band alignment at the La2Hf2O7âˆ•(001)Si interface. Applied Physics Letters, 2006, 88, 202903.	3.3	31
22	Thermally induced self-assembly of cylindrical nanodomains in low molecular weight PS-b-PMMA thin films. Nanotechnology, 2014, 25, 045301.	2.6	31
23	Characterization of ultra-thin polymeric films by Gas chromatography-Mass spectrometry hyphenated to thermogravimetry. Journal of Chromatography A, 2014, 1368, 204-210.	3.7	31
24	Si surface passivation by Al2O3 thin films deposited using a low thermal budget atomic layer deposition process. Applied Physics Letters, 2013, 102, .	3.3	30
25	Scaling of correlation length in lamellae forming PS-b-PMMA thin films upon high temperature rapid thermal treatments. Journal of Materials Chemistry C, 2015, 3, 8618-8624.	5.5	29
26	Ozone-Based Sequential Infiltration Synthesis of Al₂O₃ Nanostructures in Symmetric Block Copolymer. ACS Applied Materials & Interfaces, 2016, 8, 33933-33942.	8.0	29
27	X-ray photoelectron spectroscopy study of energy-band alignments of Lu2O3 on Ge. Surface and Interface Analysis, 2006, 38, 494-497.	1.8	28
28	Thermal Stability of Functional P(S-r-MMA) Random Copolymers for Nanolithographic Applications. ACS Applied Materials & Interfaces, 2015, 7, 3920-3930.	8.0	28
29	The effect of random copolymer on the characteristic dimensions of cylinder-forming PS-b-PMMA thin films. Nanotechnology, 2011, 22, 185304.	2.6	27
30	Synthesis and characterization of PÎ´-layer in SiO₂by monolayer doping. Nanotechnology, 2016, 27, 075606.	2.6	27
31	Evolution of lateral ordering in symmetric block copolymer thin films upon rapid thermal processing. Nanotechnology, 2014, 25, 275601.	2.6	26
32	Quantification of phosphorus diffusion and incorporation in silicon nanocrystals embedded in silicon oxide. Surface and Interface Analysis, 2014, 46, 393-396.	1.8	26
33	GISAXS Analysis of the In-Depth Morphology of Thick PS-b-PMMA Films. ACS Applied Materials & Interfaces, 2017, 9, 11054-11063.	8.0	24
34	The fabrication of tunable nanoporous oxide surfaces by block copolymer lithography and atomic layer deposition. Nanotechnology, 2011, 22, 335303.	2.6	23
35	Enhanced Lateral Ordering in Cylinder Forming PS-b-PMMA Block Copolymers Exploiting the Entrapped Solvent. ACS Applied Materials & Interfaces, 2016, 8, 8280-8288.	8.0	22
36	Hierarchical Order in Dewetted Block Copolymer Thin Films on Chemically Patterned Surfaces. ACS Nano, 2018, 12, 7076-7085.	14.6	22

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37	High temperature surface neutralization process with random copolymers for block copolymer selfâ€assembly. Polymer International, 2017, 66, 459-467.	3.1	21
38	Thermally induced orientational flipping of cylindrical phase diblock copolymers. Journal of Materials Chemistry C, 2014, 2, 2175-2182.	5.5	20
39	Electronic properties at the oxide interface with silicon and germanium through x-ray induced oxide charging. Applied Physics Letters, 2012, 101, 211606.	3.3	19
40	Micrometer-Scale Ordering of Silicon-Containing Block Copolymer Thin Films via High-Temperature Thermal Treatments. ACS Applied Materials & Interfaces, 2016, 8, 9897-9908.	8.0	19
41	Effect of the Density of Reactive Sites in P(Sâ€râ€MMA) Film during Al₂O₃ Growth by Sequential Infiltration Synthesis. Advanced Materials Interfaces, 2019, 6, 1900503.	3.7	19
42	XPS and IPE analysis of HfO2 band alignment with high-mobility semiconductors. Materials Science in Semiconductor Processing, 2008, 11, 221-225.	4.0	18
43	Collective behavior of block copolymer thin films within periodic topographical structures. Nanotechnology, 2013, 24, 245301.	2.6	17
44	Doping of silicon by phosphorus end-terminated polymers: drive-in and activation of dopants. Journal of Materials Chemistry C, 2020, 8, 10229-10237.	5.5	17
45	TGA-GCâ€“MS quantitative analysis of phosphorus-end capped functional polymers in bulk and ultrathin films. Journal of Analytical and Applied Pyrolysis, 2017, 128, 238-245.	5.5	16
46	Si nanocrystal synthesis in HfO₂/SiO/HfO₂multilayer structures. Nanotechnology, 2010, 21, 055606.	2.6	15
47	Atomic layer deposited TiO2 for implantable brain-chip interfacing devices. Thin Solid Films, 2012, 520, 4745-4748.	1.8	15
48	Neutral wetting brush layers for block copolymer thin films using homopolymer blends processed at high temperatures. Nanotechnology, 2015, 26, 415603.	2.6	15
49	Effect of Entrapped Solvent on the Evolution of Lateral Order in Self-Assembled P(S-r-MMA)/PS-b-PMMA Systems with Different Thicknesses. ACS Applied Materials & Interfaces, 2017, 9, 31215-31223.	8.0	15
50	Evolution of shape, size, and areal density of a single plane of Si nanocrystals embedded in SiO₂ matrix studied by atom probe tomography. RSC Advances, 2016, 6, 3617-3622.	3.6	14
51	Toward Lateral Length Standards at the Nanoscale Based on Diblock Copolymers. ACS Applied Materials & Interfaces, 2017, 9, 15685-15697.	8.0	14
52	In-plane organization of silicon nanocrystals embedded in SiO2thin films. Nanotechnology, 2013, 24, 075302.	2.6	13
53	Surface passivation for ultrathin Al₂O₃ layers grown at low temperature by thermal atomic layer deposition. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 732-736.	1.8	13
54	ToFâ€SIMS study of phosphorus diffusion in lowâ€dimensional silicon structures. Surface and Interface Analysis, 2013, 45, 386-389.	1.8	12

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55	Development and Synchrotronâ€Based Characterization of Al and Cr Nanostructures as Potential Calibration Samples for 3D Analytical Techniques. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700866.	1.8	12
56	Thickness and Microdomain Orientation of Asymmetric PS-b-PMMA Block Copolymer Films Inside Periodic Gratings. ACS Applied Materials & Interfaces, 2015, 7, 23615-23622.	8.0	11
57	Fabrication of periodic arrays of metallic nanoparticles by block copolymer templates on HfO₂substrates. Nanotechnology, 2015, 26, 215301.	2.6	11
58	Atomic Layer Deposition of Lu Silicate Films Using [(Me[sub 3]Si)[sub 2]N][sub 3]Lu. Journal of the Electrochemical Society, 2006, 153, F271.	2.9	10
59	Modeling of phosphorus diffusion in silicon oxide and incorporation in silicon nanocrystals. Journal of Materials Chemistry C, 2016, 4, 3531-3539.	5.5	10
60	Magnetization switching in high-density magnetic nanodots by a fine-tune sputtering process on a large-area diblock copolymer mask. Nanoscale, 2017, 9, 16981-16992.	5.6	10
61	Influence of block copolymer feature size on reactive ion etching pattern transfer into silicon. Nanotechnology, 2017, 28, 404001.	2.6	8
62	Electronic band structures of undoped and P-doped Si nanocrystals embedded in SiO₂. Journal of Materials Chemistry C, 2018, 6, 119-126.	5.5	8
63	Thermodynamics and ordering kinetics in asymmetric PS-b-PMMA block copolymer thin films. Soft Matter, 2020, 16, 5525-5533.	2.7	8
64	Doping of silicon with phosphorus end-terminated polymers: source characterization and dopant diffusion in SiO₂. Journal of Materials Chemistry C, 2021, 9, 4020-4028.	5.5	8
65	Ordering kinetics in two-dimensional hexagonal pattern of cylinder-forming PS- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>b</mml:mi></mml:math> -PMMA block copolymer thin films: Dependence on the segregation strength. Physical Review Materials, 2018, 2, .	2.4	8
66	Silicon Doping by Polymer Grafting: Size Distribution Matters. ACS Applied Polymer Materials, 2021, 3, 6383-6393.	4.4	8
67	Composition of ultrathin binary polymer brushes by thermogravimetryâ€“gas chromatographyâ€“mass spectrometry. Analytical and Bioanalytical Chemistry, 2016, 408, 3155-3163.	3.7	6
68	Experimental Determination of the Band Offset of Rare Earth Oxides onÂVariousÂSemiconductors. , 0, , 269-283.		4
69	Fabrication of well-ordered arrays of silicon nanocrystals using a block copolymer mask. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1477-1484.	1.8	4
70	Nanoscale control of Si nanoparticles within a 2D hexagonal array embedded in SiO2thin films. Nanotechnology, 2017, 28, 014001.	2.6	4
71	Molar mass and composition effects on the thermal stability of functional P(S-r-MMA) random copolymers for nanolithographic applications. Molecular Systems Design and Engineering, 2017, 2, 581-588.	3.4	4
72	Silicon crystallization in nanodot arrays organized by block copolymer lithography. Journal of Nanoparticle Research, 2014, 16, 1.	1.9	3

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73	Influence of spin casting solvent on the selfâ€assembly of siliconâ€containing block copolymer thin films via high temperature thermal treatment. Polymer International, 2022, 71, 426-435.	3.1	3
74	Structural and Electrical Properties of HfO₂ Films Grown by Atomic Layer Deposition on Si, Ge, GaAs and GaN. Materials Research Society Symposia Proceedings, 2003, 786, 6141.	0.1	2
75	Al₂O₃ Dot and Antidot Array Synthesis in Hexagonally Packed Poly(styrene-block-methyl methacrylate) Nanometer-Thick Films for Nanostructure Fabrication. ACS Applied Nano Materials, 0, , .	5.0	2
76	Al2O3 Passivation on c-si Surfaces for Low Temperature Solar Cell Applications. Energy Procedia, 2013, 38, 872-880.	1.8	1
77	Surface engineering with functional random copolymers for nanolithographic applications. AIP Conference Proceedings, 2016, , .	0.4	1
78	From grafting to to grafting from. AIP Conference Proceedings, 2018, , .	0.4	1
79	Magnetic hysteresis in array of magnetic nanostructures by block copolymers. , 2015, , .		0
80	Neutral wetting brush layers for block copolymer thin films using homopolymer blends. AIP Conference Proceedings, 2016, , .	0.4	0
81	Analysis of phosphorus-end capped functionalpolymers, from bulk to ultrathin films. AIP Conference Proceedings, 2018, , .	0.4	0
82	Deterministic doping via self-limited grafting of phosphorus end-terminated polymers. AIP Conference Proceedings, 2018, , .	0.4	0
83	Boron-terminated polystyrene as potential spin-on dopant for microelectronic applications. AIP Conference Proceedings, 2018, , .	0.4	0