Gabriele Seguini

List of Publications by Year in descending order

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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 | 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 |
| 2 | Doping of silicon with phosphorus end-terminated polymers: source characterization and dopant diffusion in SiO ₂ . Journal of Materials Chemistry C, 2021, 9, 4020-4028. | 5.5 | 8 |
| 3 | Silicon Doping by Polymer Grafting: Size Distribution Matters. ACS Applied Polymer Materials, 2021, 3, 6383-6393. | 4.4 | 8 |
| 4 | 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 |
| 5 | Thermodynamics and ordering kinetics in asymmetric PS- <i>b</i> -PMMA block copolymer thin films. Soft Matter, 2020, 16, 5525-5533. | 2.7 | 8 |
| 6 | Effect of the Density of Reactive Sites in P(Sâ€∢i>ràâ€MMA) Film during Al ₂ O ₃ Growth by Sequential Infiltration Synthesis. Advanced Materials Interfaces, 2019, 6, 1900503. | 3.7 | 19 |
| 7 | Electronic band structures of undoped and P-doped Si nanocrystals embedded in SiO ₂ . Journal of Materials Chemistry C, 2018, 6, 119-126. | 5.5 | 8 |
| 8 | Control of Doping Level in Semiconductors <i>via</i> Self-Limited Grafting of Phosphorus End-Terminated Polymers. ACS Nano, 2018, 12, 178-186. | 14.6 | 35 |
| 9 | 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 |
| 10 | Analysis of phosphorus-end capped functional polymers, from bulk to ultrathin films. AIP Conference Proceedings, 2018, , . | 0.4 | 0 |
| 11 | Hierarchical Order in Dewetted Block Copolymer Thin Films on Chemically Patterned Surfaces. ACS Nano, 2018, 12, 7076-7085. | 14.6 | 22 |
| 12 | Deterministic doping via self-limited grafting of phosphorus end-terminated polymers. AIP Conference Proceedings, $2018, \ldots$ | 0.4 | 0 |
| 13 | Boron-terminated polystyrene as potential spin-on dopant for microelectronic applications. AIP Conference Proceedings, 2018, , . | 0.4 | 0 |
| 14 | 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 |
| 15 | From grafting to to grafting from. AIP Conference Proceedings, 2018, , . | 0.4 | 1 |
| 16 | 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 |
| 17 | Effect of Entrapped Solvent on the Evolution of Lateral Order in Self-Assembled P(S- <i>r</i> -MMA)/PS- <i>b</i> -PMMA Systems with Different Thicknesses. ACS Applied Materials & lateral Self-Assembled Materials & lateral Self-Assembled Materials & lateral Self-Assembled Materials & lateral Self-Assembled Materials & lateral Order in Self-Assembled & lateral Order & lateral | 8.0 | 15 |
| 18 | Toward Lateral Length Standards at the Nanoscale Based on Diblock Copolymers. ACS Applied Materials & Diblock Copolymers. | 8.0 | 14 |

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| 19 | Nanoscale control of Si nanoparticles within a 2D hexagonal array embedded in SiO2thin films. Nanotechnology, 2017, 28, 014001. | 2.6 | 4 |
| 20 | GISAXS Analysis of the In-Depth Morphology of Thick PS- <i>b</i> -PMMA Films. ACS Applied Materials & Samp; Interfaces, 2017, 9, 11054-11063. | 8.0 | 24 |
| 21 | 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 |
| 22 | TGA-GC–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 |
| 23 | Influence of block copolymer feature size on reactive ion etching pattern transfer into silicon. Nanotechnology, 2017, 28, 404001. | 2.6 | 8 |
| 24 | High temperature surface neutralization process with random copolymers for block copolymer selfâ€assembly. Polymer International, 2017, 66, 459-467. | 3.1 | 21 |
| 25 | Molar mass and composition effects on the thermal stability of functional P(S- <i>r</i> -MMA) random copolymers for nanolithographic applications. Molecular Systems Design and Engineering, 2017, 2, 581-588. | 3.4 | 4 |
| 26 | Micrometer-Scale Ordering of Silicon-Containing Block Copolymer Thin Films via High-Temperature Thermal Treatments. ACS Applied Materials & Samp; Interfaces, 2016, 8, 9897-9908. | 8.0 | 19 |
| 27 | Modeling of phosphorus diffusion in silicon oxide and incorporation in silicon nanocrystals. Journal of Materials Chemistry C, 2016, 4, 3531-3539. | 5 . 5 | 10 |
| 28 | Ozone-Based Sequential Infiltration Synthesis of Al ₂ O ₃ Nanostructures in Symmetric Block Copolymer. ACS Applied Materials & Symmetric Block Copolymer. | 8.0 | 29 |
| 29 | Surface engineering with functional random copolymers for nanolithographic applications. AIP Conference Proceedings, $2016,\ldots$ | 0.4 | 1 |
| 30 | Neutral wetting brush layers for block copolymer thin films using homopolymer blends. AIP Conference Proceedings, 2016, , . | 0.4 | 0 |
| 31 | Synthesis and characterization of $P\hat{l}'$ -layer in $SiO2$ by monolayer doping. Nanotechnology, 2016, 27, 075606. | 2.6 | 27 |
| 32 | Composition of ultrathin binary polymer brushes by thermogravimetry–gas chromatography–mass spectrometry. Analytical and Bioanalytical Chemistry, 2016, 408, 3155-3163. | 3.7 | 6 |
| 33 | Evolution of shape, size, and areal density of a single plane of Si nanocrystals embedded in SiO ₂ matrix studied by atom probe tomography. RSC Advances, 2016, 6, 3617-3622. | 3.6 | 14 |
| 34 | Enhanced Lateral Ordering in Cylinder Forming PS- <i>b</i> -PMMA Block Copolymers Exploiting the Entrapped Solvent. ACS Applied Materials & Entrapped Solvent & Entrappe | 8.0 | 22 |
| 35 | Neutral wetting brush layers for block copolymer thin films using homopolymer blends processed at high temperatures. Nanotechnology, 2015, 26, 415603. | 2.6 | 15 |
| 36 | Resistive Switching in High-Density Nanodevices Fabricated by Block Copolymer Self-Assembly. ACS Nano, 2015, 9, 2518-2529. | 14.6 | 72 |

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| 37 | Thickness and Microdomain Orientation of Asymmetric PS- <i>b</i> -PMMA Block Copolymer Films Inside Periodic Gratings. ACS Applied Materials & Interfaces, 2015, 7, 23615-23622. | 8.0 | 11 |
| 38 | Thermal Stability of Functional P(S-r-MMA) Random Copolymers for Nanolithographic Applications. ACS Applied Materials & Distribution (2015), 7, 3920-3930. | 8.0 | 28 |
| 39 | Thermodynamic stability of high phosphorus concentration in silicon nanostructures. Nanoscale, 2015, 7, 14469-14475. | 5 . 6 | 33 |
| 40 | Ultrathin Random Copolymer-Grafted Layers for Block Copolymer Self-Assembly. ACS Applied Materials & Samp; Interfaces, 2015, 7, 10944-10951. | 8.0 | 71 |
| 41 | Fabrication of periodic arrays of metallic nanoparticles by block copolymer templates on HfO ₂ substrates. Nanotechnology, 2015, 26, 215301. | 2.6 | 11 |
| 42 | 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 |
| 43 | Magnetic hysteresis in array of magnetic nanostructures by block copolymers. , 2015, , . | | 0 |
| 44 | Silicon crystallization in nanodot arrays organized by block copolymer lithography. Journal of Nanoparticle Research, 2014, 16, 1. | 1.9 | 3 |
| 45 | Evolution of lateral ordering in symmetric block copolymer thin films upon rapid thermal processing. Nanotechnology, 2014, 25, 275601. | 2.6 | 26 |
| 46 | High Aspect Ratio PS- <i>b</i> -PMMA Block Copolymer Masks for Lithographic Applications. ACS Applied Materials & Discourse (2014, 6, 21389-21396. | 8.0 | 35 |
| 47 | Solid-state dewetting of ultra-thin Au films on SiO ₂ and HfO ₂ . Nanotechnology, 2014, 25, 495603. | 2.6 | 41 |
| 48 | Thermally induced self-assembly of cylindrical nanodomains in low molecular weight PS- <i>b</i> -PMMA thin films. Nanotechnology, 2014, 25, 045301. | 2.6 | 31 |
| 49 | Thermally induced orientational flipping of cylindrical phase diblock copolymers. Journal of Materials Chemistry C, 2014, 2, 2175-2182. | 5.5 | 20 |
| 50 | 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 |
| 51 | 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 |
| 52 | Flash grafting of functional random copolymers for surface neutralization. Journal of Materials Chemistry C, 2014, 2, 4909-4917. | 5. 5 | 43 |
| 53 | Fine Tuning of Lithographic Masks through Thin Films of PS- <i>b</i> -PMMA with Different Molar Mass by Rapid Thermal Processing. ACS Applied Materials & Samp; Interfaces, 2014, 6, 7180-7188. | 8.0 | 64 |
| 54 | Quantification of phosphorus diffusion and incorporation in silicon nanocrystals embedded in silicon oxide. Surface and Interface Analysis, 2014, 46, 393-396. | 1.8 | 26 |

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| 55 | ToFâ€SIMS study of phosphorus diffusion in lowâ€dimensional silicon structures. Surface and Interface Analysis, 2013, 45, 386-389. | 1.8 | 12 |
| 56 | Al2O3 Passivation on c-si Surfaces for Low Temperature Solar Cell Applications. Energy Procedia, 2013, 38, 872-880. | 1.8 | 1 |
| 57 | Collective behavior of block copolymer thin films within periodic topographical structures. Nanotechnology, 2013, 24, 245301. | 2.6 | 17 |
| 58 | On the Thermal Stability of PS- <i>b</i> -PMMA Block and P(S- <i>r</i> -MMA) Random Copolymers for Nanopatterning Applications. Macromolecules, 2013, 46, 8224-8234. | 4.8 | 43 |
| 59 | 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 |
| 60 | In-plane organization of silicon nanocrystals embedded in SiO2thin films. Nanotechnology, 2013, 24, 075302. | 2.6 | 13 |
| 61 | Rapid thermal processing of self-assembling block copolymer thin films. Nanotechnology, 2013, 24, 315601. | 2.6 | 72 |
| 62 | Scaling size of the interplay between quantum confinement and surface related effects in nanostructured silicon. Applied Physics Letters, 2013, 103, . | 3.3 | 33 |
| 63 | Surface passivation for ultrathin Al ₂ O ₃ 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 |
| 64 | 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 |
| 65 | 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 |
| 66 | Atomic layer deposited TiO2 for implantable brain-chip interfacing devices. Thin Solid Films, 2012, 520, 4745-4748. | 1.8 | 15 |
| 67 | The energy band alignment of Si nanocrystals in SiO2. Applied Physics Letters, 2011, 99, . | 3.3 | 37 |
| 68 | The effect of random copolymer on the characteristic dimensions of cylinder-forming PS-b-PMMA thin films. Nanotechnology, 2011, 22, 185304. | 2.6 | 27 |
| 69 | The fabrication of tunable nanoporous oxide surfaces by block copolymer lithography and atomic layer deposition. Nanotechnology, 2011, 22, 335303. | 2.6 | 23 |
| 70 | Charging phenomena in dielectric/semiconductor heterostructures during x-ray photoelectron spectroscopy measurements. Journal of Applied Physics, 2011, 110, . | 2.5 | 62 |
| 71 | Si nanocrystal synthesis in HfO ₂ /SiO/HfO ₂ multilayer structures. Nanotechnology, 2010, 21, 055606. | 2.6 | 15 |
| 72 | XPS and IPE analysis of HfO2 band alignment with high-mobility semiconductors. Materials Science in Semiconductor Processing, 2008, 11, 221-225. | 4.0 | 18 |

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| 73 | Energy band alignment at TiO2â^•Si interface with various interlayers. Journal of Applied Physics, 2008, 103, . | 2.5 | 63 |
| 74 | Conduction band offset of HfO2 on GaAs. Applied Physics Letters, 2007, 91, . | 3.3 | 46 |
| 75 | Energy band alignment of HfO2 on Ge. Journal of Applied Physics, 2006, 100, 093718. | 2.5 | 40 |
| 76 | X-ray photoelectron spectroscopy study of energy-band alignments of Lu2O3 on Ge. Surface and Interface Analysis, 2006, 38, 494-497. | 1.8 | 28 |
| 77 | 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 |
| 78 | Band alignment at the La2Hf2O7â^•(001)Si interface. Applied Physics Letters, 2006, 88, 202903. | 3.3 | 31 |
| 79 | 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 |
| 80 | Energy-band diagram of metal/Lu2O3/silicon structures. Applied Physics Letters, 2004, 85, 5316-5318. | 3.3 | 60 |
| 81 | Structural and Electrical Properties of HfO ₂ Films Grown by Atomic Layer Deposition on Si, Ge, GaAs and GaN. Materials Research Society Symposia Proceedings, 2003, 786, 6141. | 0.1 | 2 |
| 82 | Experimental Determination of the Band Offset of Rare Earth Oxides onÂVariousÂSemiconductors. , 0, , 269-283. | | 4 |
| 83 | Al ₂ O ₃ Dot and Antidot Array Synthesis in Hexagonally Packed Poly(styrene- <i>block</i> methyl methacrylate) Nanometer-Thick Films for Nanostructure Fabrication. ACS Applied Nano Materials, 0, , . | 5.0 | 2 |