Anthony J Muscat

List of Publications by Year
in descending order

61 papers	1,002 citations	430874 18 h-index	434195 31 g-index
62 all docs	62 docs citations	62 times ranked	1594 citing authors

#	Article	IF	Citations
1	Detecting and Removing Defects in Organosilane Self-Assembled Monolayers. Langmuir, 2020, 36, 2563-2573.	3.5	11
2	Dense Organosilane Monolayer Resist That Directs Highly Selective Atomic Layer Deposition. ACS Applied Nano Materials, 2020, 3, 3185-3194.	5.0	4
3	Modified Organosilane Monolayers With Enhanced Radiation Stability. Langmuir, 2020, 36, 4116-4122.	3.5	1
4	(Invited) Reaction of Aqueous Tetramethylammonium Sulfide on SiGe(100) 25% as a Function of pH. ECS Transactions, 2019, 92, 47-56.	0.5	1
5	Comparison of Inorganic and Organic Acid Etching Processes on Germanium(100). ECS Transactions, 2019, 92, 57-63.	0.5	1
6	Surfactant templated oriented 1-D nanoscale platinum and palladium systems on a modified silicon surface. Nano Structures Nano Objects, 2019, 17, 1-6.	3.5	4
7	(Invited) Reaction of Aqueous Tetramethylammonium Sulfide on SiGe(100) 25% as a Function of pH. ECS Meeting Abstracts, 2019, , .	0.0	0
8	Comparison of Inorganic and Organic Acid Etching Processes on Germanium(100). ECS Meeting Abstracts, 2019, , .	0.0	0
9	Self-assembly of alkanethiolates directs sulfur bonding with GaAs(100). Applied Surface Science, 2017, 397, 1-12.	6.1	13
10	(Invited) Speciation during Wet Etching of III-V Semiconductors. ECS Transactions, 2017, 80, 163-170.	0.5	0
11	Editorial 2016 Best Paper Award. IEEE Transactions on Semiconductor Manufacturing, 2017, 30, 314-314.	1.7	0
12	Editorial Kudos to Our Reviewers. IEEE Transactions on Semiconductor Manufacturing, 2017, 30, 313-313.	1.7	0
13	Changes in the Editorial Board. IEEE Transactions on Semiconductor Manufacturing, 2017, 30, 312-312.	1.7	0
14	Editorial Kudos to Our Reviewers. IEEE Transactions on Semiconductor Manufacturing, 2016, 29, 390-390.	1.7	0
15	Editorial 2015 IEEE TSM Best Paper Award. IEEE Transactions on Semiconductor Manufacturing, 2016, 29, 69-69.	1.7	0
16	In-Situ FTIR Kinetic Study in the Silylation of Low-k Films with Hexamethyldisilazane Dissolved in Supercritical CO2. Chemical Engineering Communications, 2016, 203, 908-916.	2.6	1
17	Coating nonfunctionalized silica spheres with a high density of discrete silver nanoparticles. Journal of Nanoparticle Research, 2016, 18, 1.	1.9	7
18	Self-assembly of a 1-eicosanethiolate layer on InSb(100). Applied Surface Science, 2016, 370, 67-75.	6.1	6

#	Article	IF	Citations
19	Study of Low-k Film Functionalization and Pore Sealing Using Chlorosilanes Dissolved in Supercritical Carbon Dioxide. Chemical Engineering Communications, 2016, 203, 880-889.	2.6	1
20	Editorial 2014 IEEE TSM Best Paper Award. IEEE Transactions on Semiconductor Manufacturing, 2015, 28, 444-444.	1.7	0
21	Editorial Kudos to Our Reviewers. IEEE Transactions on Semiconductor Manufacturing, 2015, 28, 443-443.	1.7	0
22	Phase Pure Pyrite FeS₂ Nanocubes Synthesized Using Oleylamine as Ligand, Solvent, and Reductant. Crystal Growth and Design, 2015, 15, 3565-3572.	3.0	43
23	Editorial from the Incoming Editor-in-Chief. IEEE Transactions on Semiconductor Manufacturing, 2014, 27, 454-454.	1.7	0
24	Passivation of InSb(100) with 1-Eicosanethiol Self-Assembled Monolayers. Solid State Phenomena, 2014, 219, 59-62.	0.3	3
25	Ammonia Photodissociation Promoted by Si(100). Journal of Physical Chemistry A, 2014, 118, 3880-3890.	2.5	2
26	In situ FTIR experimental results in the silylation of low-k films with hexamethyldisilazane dissolved in supercritical carbon dioxide. Journal of Supercritical Fluids, 2014, 90, 134-143.	3.2	18
27	Solvent-Triggered Self-Assembly of CdTe Quantum Dots into Flat Ribbons. Journal of Physical Chemistry C, 2013, 117, 22069-22078.	3.1	7
28	Surface Modification of Porous Silicon-Based Films Using Dichlorosilanes Dissolved in Supercritical Carbon Dioxide. Industrial & Engineering Chemistry Research, 2013, 52, 4762-4771.	3.7	13
29	Dealloying Multiphase AgCu Thin Films in Supercritical CO₂. Journal of Physical Chemistry C, 2013, 117, 12071-12077.	3.1	8
30	Ligand-Controlled Growth of ZnSe Quantum Dots in Water during Ostwald Ripening. Langmuir, 2012, 28, 12931-12940.	3.5	38
31	Oxide Removal and Selective Etching of In from InSb(100) with TiCl4. Journal of Physical Chemistry C, 2011, 115, 19733-19740.	3.1	5
32	Controlled Oxide Removal and Surface Morphology on InSb(100) Using Gas Phase HF/H₂O. Journal of Physical Chemistry C, 2011, 115, 7440-7449.	3.1	12
33	Surface reactions of TiCl4 and Al(CH3)3 on GaAs(100) during the first half-cycle of atomic layer deposition. Surface Science, 2011, 605, 1243-1248.	1.9	17
34	Effect of Deep-Level Defects on Surface Recombination Velocity at the Interface Between Silicon and Dielectric Films. IEEE Transactions on Electron Devices, 2010, 57, 877-889.	3.0	6
35	Synthesis and purple-blue emission of antimony trioxide single-crystalline nanobelts with elliptical cross section. Nano Research, 2009, 2, 151-160.	10.4	42
36	Nanoporous Silver with Controllable Optical Properties Formed by Chemical Dealloying in Supercritical CO₂. Chemistry of Materials, 2009, 21, 3865-3870.	6.7	38

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37	New Method to Single-Crystal Micrometer-Sized Ultra-Thin Silver Nanosheets: Synthesis and Characterization. Journal of Physical Chemistry C, 2009, 113, 867-873.	3.1	29
38	Simple Colloidal Synthesis of Single-Crystal Sbâ‚‚Seâ‚‚S Nanotubes with Composition Dependent Band-Gap Energy in the Near-Infrared. Nano Letters, 2009, 9, 2015-2020.	9.1	77
39	Water-Based Route to Ligand-Selective Synthesis of ZnSe and Cd-Doped ZnSe Quantum Dots with Tunable Ultraviolet A to Blue Photoluminescence. Langmuir, 2009, 25, 434-442.	3.5	119
40	Synthesis of two-dimensional single-crystal berzelianite nanosheets and nanoplates with near-infrared optical absorption. Journal of Materials Chemistry, 2009, 19, 6201.	6.7	46
41	High-pressure phase equilibria for chlorosilane+carbon dioxide mixtures. Fluid Phase Equilibria, 2008, 270, 121-128.	2.5	8
42	Strong blue photoluminescence from single-crystalline bismuth oxychloride nanoplates. Nanotechnology, 2008, 19, 295705.	2.6	75
43	Kinetics and Mechanism for the Reaction of Hexafluoroacetylacetone with CuO in Supercritical Carbon Dioxide. Journal of the American Chemical Society, 2008, 130, 16659-16668.	13.7	43
44	A New Route to Self-Assembled Tin Dioxide Nanospheres: Fabrication and Characterization. Langmuir, 2008, 24, 11089-11095.	3.5	39
45	Kinetic to Transport-Limited Anhydrous HF Etching of Silicon Oxynitride Films in Supercritical CO₂. Journal of Physical Chemistry C, 2007, 111, 15251-15257.	3.1	8
46	The mechanism of amine formation on Si(100) activated with chlorine atoms. Surface Science, 2006, 600, 3363-3374.	1.9	24
47	The restoration of porous methylsilsesquioxane (p-MSQ) films using trimethylhalosilanes dissolved in supercritical carbon dioxide. Microelectronic Engineering, 2005, 82, 434-440.	2.4	19
48	Native oxide removal from SiGe using mixtures of HF and water delivered by aqueous, gas, and supercritical CO2 processes. Materials Science in Semiconductor Processing, 2005, 8, 231-237.	4.0	12
49	Removal of Copper from Silicon Surfaces Using Hexafluoroacetylacetone (hfacH) Dissolved in Supercritical Carbon Dioxide. Chemistry of Materials, 2005, 17, 1753-1764.	6.7	32
50	Repair of Porous Methylsilsesquioxane Films using Supercritical Carbon Dioxide. Materials Research Society Symposia Proceedings, 2004, 812, F1.4.1.	0.1	4
51	Silylation of porous methylsilsesquioxane films in supercritical carbon dioxide. Microelectronic Engineering, 2004, 76, 52-59.	2.4	50
52	Moisture Absorption and Reaction in BPSG Thin Films. Journal of the Electrochemical Society, 2003, 150, F219.	2.9	28
53	Gas-Phase HF/Vapor Etching of Thermal Silicon Dioxide Films. Solid State Phenomena, 2003, 92, 207-210.	0.3	4
54	Characterization of residues formed by anhydrous hydrogen fluoride etching of doped oxides. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2001, 19, 1854-1861.	2.1	12

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55	Interdisciplinary Teaching and Learning in a Semiconductor Processing Course*. Journal of Engineering Education, 1998, 87, 413-421.	3.0	18
56	Coverage and site distribution effects in the desorption of carbon monoxide from sulfur-covered Ni(100). Surface Science, 1995, 339, 29-40.	1.9	9
57	The effect of site distribution on desorption kinetics: carbon monoxide from Ni(100). Surface Science, 1994, 301, 83-88.	1.9	22
58	Transport of monomer surfactant molecules and hindered diffusion of micelles through porous membranes. Journal of Colloid and Interface Science, 1984, 100, 497-505.	9.4	18
59	Comparison of the Chemical Passivation of GaAs, In_{0.53}Ga_{0.47}As, and InSb with 1-Eicosanethiol. Solid State Phenomena, 0, 255, 55-60.	0.3	2
60	Atomic Layer Deposition of TiN below 600 K Using N₂H₄. Solid State Phenomena, 0, 282, 232-237.	0.3	2
61	Wet Chemical Cleaning of Organosilane Monolayers. Solid State Phenomena, 0, 314, 54-59.	0.3	0