

Anthony J Muscat

List of Publications by Year in descending order

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61
papers

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430874

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434195

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times ranked

1594
citing authors

#	ARTICLE	IF	CITATIONS
1	Water-Based Route to Ligand-Selective Synthesis of ZnSe and Cd-Doped ZnSe Quantum Dots with Tunable Ultraviolet A to Blue Photoluminescence. <i>Langmuir</i> , 2009, 25, 434-442.	3.5	119
2	Simple Colloidal Synthesis of Single-Crystal Sb ₂ Se ₃ Nanotubes with Composition Dependent Band-Gap Energy in the Near-Infrared. <i>Nano Letters</i> , 2009, 9, 2015-2020.	9.1	77
3	Strong blue photoluminescence from single-crystalline bismuth oxychloride nanoplates. <i>Nanotechnology</i> , 2008, 19, 295705.	2.6	75
4	Silylation of porous methylsilsesquioxane films in supercritical carbon dioxide. <i>Microelectronic Engineering</i> , 2004, 76, 52-59.	2.4	50
5	Synthesis of two-dimensional single-crystal berzelianite nanosheets and nanoplates with near-infrared optical absorption. <i>Journal of Materials Chemistry</i> , 2009, 19, 6201.	6.7	46
6	Kinetics and Mechanism for the Reaction of Hexafluoroacetylacetone with CuO in Supercritical Carbon Dioxide. <i>Journal of the American Chemical Society</i> , 2008, 130, 16659-16668.	13.7	43
7	Phase Pure Pyrite FeS ₂ Nanocubes Synthesized Using Oleylamine as Ligand, Solvent, and Reductant. <i>Crystal Growth and Design</i> , 2015, 15, 3565-3572.	3.0	43
8	Synthesis and purple-blue emission of antimony trioxide single-crystalline nanobelts with elliptical cross section. <i>Nano Research</i> , 2009, 2, 151-160.	10.4	42
9	A New Route to Self-Assembled Tin Dioxide Nanospheres: Fabrication and Characterization. <i>Langmuir</i> , 2008, 24, 11089-11095.	3.5	39
10	Nanoporous Silver with Controllable Optical Properties Formed by Chemical Dealloying in Supercritical CO ₂ . <i>Chemistry of Materials</i> , 2009, 21, 3865-3870.	6.7	38
11	Ligand-Controlled Growth of ZnSe Quantum Dots in Water during Ostwald Ripening. <i>Langmuir</i> , 2012, 28, 12931-12940.	3.5	38
12	Removal of Copper from Silicon Surfaces Using Hexafluoroacetylacetone (hfacH) Dissolved in Supercritical Carbon Dioxide. <i>Chemistry of Materials</i> , 2005, 17, 1753-1764.	6.7	32
13	New Method to Single-Crystal Micrometer-Sized Ultra-Thin Silver Nanosheets: Synthesis and Characterization. <i>Journal of Physical Chemistry C</i> , 2009, 113, 867-873.	3.1	29
14	Moisture Absorption and Reaction in BPSG Thin Films. <i>Journal of the Electrochemical Society</i> , 2003, 150, F219.	2.9	28
15	The mechanism of amine formation on Si(100) activated with chlorine atoms. <i>Surface Science</i> , 2006, 600, 3363-3374.	1.9	24
16	The effect of site distribution on desorption kinetics: carbon monoxide from Ni(100). <i>Surface Science</i> , 1994, 301, 83-88.	1.9	22
17	The restoration of porous methylsilsesquioxane (p-MSQ) films using trimethylhalosilanes dissolved in supercritical carbon dioxide. <i>Microelectronic Engineering</i> , 2005, 82, 434-440.	2.4	19
18	Transport of monomer surfactant molecules and hindered diffusion of micelles through porous membranes. <i>Journal of Colloid and Interface Science</i> , 1984, 100, 497-505.	9.4	18

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19	Interdisciplinary Teaching and Learning in a Semiconductor Processing Course*. Journal of Engineering Education, 1998, 87, 413-421.	3.0	18
20	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
21	Surface reactions of TiCl ₄ and Al(CH ₃) ₃ on GaAs(100) during the first half-cycle of atomic layer deposition. Surface Science, 2011, 605, 1243-1248.	1.9	17
22	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
23	Self-assembly of alkanethiolates directs sulfur bonding with GaAs(100). Applied Surface Science, 2017, 397, 1-12.	6.1	13
24	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
25	Native oxide removal from SiGe using mixtures of HF and water delivered by aqueous, gas, and supercritical CO ₂ processes. Materials Science in Semiconductor Processing, 2005, 8, 231-237.	4.0	12
26	Controlled Oxide Removal and Surface Morphology on InSb(100) Using Gas Phase HF/H ₂ O. Journal of Physical Chemistry C, 2011, 115, 7440-7449.	3.1	12
27	Detecting and Removing Defects in Organosilane Self-Assembled Monolayers. Langmuir, 2020, 36, 2563-2573.	3.5	11
28	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
29	Kinetic to Transport-Limited Anhydrous HF Etching of Silicon Oxynitride Films in Supercritical CO ₂ . Journal of Physical Chemistry C, 2007, 111, 15251-15257.	3.1	8
30	High-pressure phase equilibria for chlorosilane+carbon dioxide mixtures. Fluid Phase Equilibria, 2008, 270, 121-128.	2.5	8
31	Dealloying Multiphase AgCu Thin Films in Supercritical CO ₂ . Journal of Physical Chemistry C, 2013, 117, 12071-12077.	3.1	8
32	Solvent-Triggered Self-Assembly of CdTe Quantum Dots into Flat Ribbons. Journal of Physical Chemistry C, 2013, 117, 22069-22078.	3.1	7
33	Coating nonfunctionalized silica spheres with a high density of discrete silver nanoparticles. Journal of Nanoparticle Research, 2016, 18, 1.	1.9	7
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	Self-assembly of a 1-eicosanethiolate layer on InSb(100). Applied Surface Science, 2016, 370, 67-75.	6.1	6
36	Oxide Removal and Selective Etching of In from InSb(100) with TiCl ₄ . Journal of Physical Chemistry C, 2011, 115, 19733-19740.	3.1	5

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37	Gas-Phase HF/Vapor Etching of Thermal Silicon Dioxide Films. <i>Solid State Phenomena</i> , 2003, 92, 207-210.	0.3	4
38	Repair of Porous Methylsilsesquioxane Films using Supercritical Carbon Dioxide. <i>Materials Research Society Symposia Proceedings</i> , 2004, 812, F1.4.1.	0.1	4
39	Surfactant templated oriented 1-D nanoscale platinum and palladium systems on a modified silicon surface. <i>Nano Structures Nano Objects</i> , 2019, 17, 1-6.	3.5	4
40	Dense Organosilane Monolayer Resist That Directs Highly Selective Atomic Layer Deposition. <i>ACS Applied Nano Materials</i> , 2020, 3, 3185-3194.	5.0	4
41	Passivation of InSb(100) with 1-Eicosanethiol Self-Assembled Monolayers. <i>Solid State Phenomena</i> , 2014, 219, 59-62.	0.3	3
42	Ammonia Photodissociation Promoted by Si(100). <i>Journal of Physical Chemistry A</i> , 2014, 118, 3880-3890.	2.5	2
43	Comparison of the Chemical Passivation of GaAs, In _{0.53} Ga _{0.47} As, and InSb with 1-Eicosanethiol. <i>Solid State Phenomena</i> , 0, 255, 55-60.	0.3	2
44	Atomic Layer Deposition of TiN below 600 K Using N ₂ H ₄ . <i>Solid State Phenomena</i> , 0, 282, 232-237.	0.3	2
45	In-Situ FTIR Kinetic Study in the Silylation of Low-k Films with Hexamethyldisilazane Dissolved in Supercritical CO ₂ . <i>Chemical Engineering Communications</i> , 2016, 203, 908-916.	2.6	1
46	Study of Low-k Film Functionalization and Pore Sealing Using Chlorosilanes Dissolved in Supercritical Carbon Dioxide. <i>Chemical Engineering Communications</i> , 2016, 203, 880-889.	2.6	1
47	(Invited) Reaction of Aqueous Tetramethylammonium Sulfide on SiGe(100) 25% as a Function of pH. <i>ECS Transactions</i> , 2019, 92, 47-56.	0.5	1
48	Comparison of Inorganic and Organic Acid Etching Processes on Germanium(100). <i>ECS Transactions</i> , 2019, 92, 57-63.	0.5	1
49	Modified Organosilane Monolayers With Enhanced Radiation Stability. <i>Langmuir</i> , 2020, 36, 4116-4122.	3.5	1
50	Editorial from the Incoming Editor-in-Chief. <i>IEEE Transactions on Semiconductor Manufacturing</i> , 2014, 27, 454-454.	1.7	0
51	Editorial 2014 IEEE TSM Best Paper Award. <i>IEEE Transactions on Semiconductor Manufacturing</i> , 2015, 28, 444-444.	1.7	0
52	Editorial Kudos to Our Reviewers. <i>IEEE Transactions on Semiconductor Manufacturing</i> , 2015, 28, 443-443.	1.7	0
53	Editorial Kudos to Our Reviewers. <i>IEEE Transactions on Semiconductor Manufacturing</i> , 2016, 29, 390-390.	1.7	0
54	Editorial 2015 IEEE TSM Best Paper Award. <i>IEEE Transactions on Semiconductor Manufacturing</i> , 2016, 29, 69-69.	1.7	0

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55	(Invited) Speciation during Wet Etching of III-V Semiconductors. ECS Transactions, 2017, 80, 163-170.	0.5	0
56	Editorial 2016 Best Paper Award. IEEE Transactions on Semiconductor Manufacturing, 2017, 30, 314-314.	1.7	0
57	Editorial Kudos to Our Reviewers. IEEE Transactions on Semiconductor Manufacturing, 2017, 30, 313-313.	1.7	0
58	Changes in the Editorial Board. IEEE Transactions on Semiconductor Manufacturing, 2017, 30, 312-312.	1.7	0
59	Wet Chemical Cleaning of Organosilane Monolayers. Solid State Phenomena, 0, 314, 54-59.	0.3	0
60	(Invited) Reaction of Aqueous Tetramethylammonium Sulfide on SiGe(100) 25% as a Function of pH. ECS Meeting Abstracts, 2019, , .	0.0	0
61	Comparison of Inorganic and Organic Acid Etching Processes on Germanium(100). ECS Meeting Abstracts, 2019, , .	0.0	0