Massimo Tallarida

List of Publications by Year
in descending order

63 papers	1,740 citations	304743 22 h-index	276875 41 g-index
64 all docs	64 docs citations	64 times ranked	3172 citing authors

#	Article	IF	Citations
1	Unification of Catalytic Water Oxidation and Oxygen Reduction Reactions: Amorphous Beat Crystalline Cobalt Iron Oxides. Journal of the American Chemical Society, 2014, 136, 17530-17536.	13.7	575
2	Ellipsometry and XPS comparative studies of thermal and plasma enhanced atomic layer deposited Al2O3-films. Beilstein Journal of Nanotechnology, 2013, 4, 732-742.	2.8	93
3	A facile corrosion approach to the synthesis of highly active CoO_xwater oxidation catalysts. Journal of Materials Chemistry A, 2017, 5, 5171-5177.	10.3	81
4	Thin manganese films on Si(111)-(7 Ã— 7): electronic structure and strain in silicide formation. Journal Physics D: Applied Physics, 2004, 37, 1083-1090.	2.8	60
5	Atomic Layer Deposition of Ruthenium Films from (Ethylcyclopentadienyl)(pyrrolyl)ruthenium and Oxygen. Journal of the Electrochemical Society, 2011, 158, D158.	2.9	52
6	Self-organization of Pb thin films on Cu(111) induced by quantum size effects. Physical Review B, 2004, 70, .	3.2	51
7	Atom-Specific Identification of Adsorbed Chiral Molecules by Photoemission. Physical Review Letters, 2005, 95, 107601.	7.8	45
8	Surface Functionalization of Nanostructured Fe₂O₃ Polymorphs: From Design to Light-Activated Applications. ACS Applied Materials & Interfaces, 2013, 5, 7130-7138.	8.0	44
9	Surface chemistry and Fermi level movement during the self-cleaning of GaAs by trimethyl-aluminum. Applied Physics Letters, 2011, 99, .	3.3	37
10	Substrate Reactivity Effects in the Atomic Layer Deposition of Aluminum Oxide from Trimethylaluminum on Ruthenium. Chemistry of Materials, 2011, 23, 3159-3168.	6.7	35
11	Surface Chemistry and Interface Formation during the Atomic Layer Deposition of Alumina from Trimethylaluminum and Water on Indium Phosphide. Chemistry of Materials, 2013, 25, 1078-1091.	6.7	33
12	Thermal and plasma enhanced atomic layer deposition of TiO2: Comparison of spectroscopic and electric properties. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	2.1	32
13	Adsorption of 2,3-butanediol on Si(1 0 0). Surface Science, 2004, 559, 179-185.	1.9	31
14	Synchrotron radiation x-ray photoelectron spectroscopy study on the interface chemistry of high-kâ€ˆPrxAl2â ̂'xO3â€ˆ(x=0â€"2) dielectrics on TiN for dynamic random access memory applications. Journal of Applied Physics, 2007, 102, .	2.5	31
15	Electronic properties of atomic layer deposition films, anatase and rutile TiO₂studied by resonant photoemission spectroscopy. Journal Physics D: Applied Physics, 2016, 49, 275304.	2.8	29
16	The initial atomic layer deposition of HfO2â ̂•Si(001) as followed in situ by synchrotron radiation photoelectron spectroscopy. Journal of Applied Physics, 2008, 104, 064116.	2.5	28
17	Study of InP Surfaces after Wet Chemical Treatments. ECS Journal of Solid State Science and Technology, 2014, 3, N3016-N3022.	1.8	25
18	Structure and morphology of Ru films grown by atomic layer deposition from 1-ethyl-1â€™-methyl-ruthenocene. Journal of Crystal Growth, 2010, 312, 2025-2032.	1.5	24

#	Article	IF	Citations
19	Capacitance and conductance versus voltage characterization of Al2O3 layers prepared by plasma enhanced atomic layer deposition at 25â€‰Â°Câ‰â€‰Tâ€‰â‰â€‰200â€‰Â°C. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, 01A107.	2.1	24
20	Si microstructures laminated with a nanolayer of TiO₂ as long-term stable and effective photocathodes in PEC devices. Nanoscale, 2015, 7, 7726-7733.	5.6	24
21	In situALD experiments with synchrotron radiation photoelectron spectroscopy. Semiconductor Science and Technology, 2012, 27, 074010.	2.0	23
22	Structural and Magnetic Studies on Iron Oxide and Iron-Magnesium Oxide Thin Films Deposited Using Ferrocene and (Dimethylaminomethyl)ferrocene Precursors. ECS Journal of Solid State Science and Technology, 2013, 2, N45-N54.	1.8	23
23	Atomic layer deposition of nanolaminate oxide films on Si. Journal of Nanoparticle Research, 2011, 13, 5975-5983.	1.9	22
24	Graphene oxide monolayers as atomically thin seeding layers for atomic layer deposition of metal oxides. Nanoscale, 2015, 7, 10781-10789.	5.6	22
25	Modification of Hematite Electronic Properties with Trimethyl Aluminum to Enhance the Efficiency of Photoelectrodes. Journal of Physical Chemistry Letters, 2014, 5, 3582-3587.	4.6	21
26	Sacrificial Self-Assembled Monolayers for the Passivation of GaAs (100) Surfaces and Interfaces. Chemistry of Materials, 2016, 28, 5689-5701.	6.7	20
27	Al-oxynitrides as a buffer layer for Pr2O3/SiC interfaces. Materials Science in Semiconductor Processing, 2006, 9, 945-948.	4.0	15
28	X-ray absorption and photoemission spectroscopy of 3C- and 4H-SiC. Surface Science, 2006, 600, 3879-3883.	1.9	15
29	<i>In situ</i> study of the atomic layer deposition of HfO2 on Si. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, .	2.1	15
30	In situ Nearâ€Ambient Pressure Xâ€ray Photoelectron Spectroscopy Reveals the Influence of Photon Flux and Water on the Stability of Halide Perovskite. ChemSusChem, 2020, 13, 5722-5730.	6.8	15
31	In situ studies of the atomic layer deposition of thin HfO2 dielectrics by ultra high vacuum atomic force microscope. Thin Solid Films, 2010, 518, 4688-4691.	1.8	14
32	Growth of TiO₂ with Thermal and Plasma Enhanced Atomic Layer Deposition. Journal of Nanoscience and Nanotechnology, 2011, 11, 8049-8053.	0.9	14
33	Quantum size effects in TiO₂ thin films grown by atomic layer deposition. Beilstein Journal of Nanotechnology, 2014, 5, 77-82.	2.8	14
34	HfO[sub 2]â^•Si interface formation in atomic layer deposition films: An in situ investigation. Journal of Vacuum Science & Technology B, 2009, 27, 300.	1.3	13
35	Atomic Layer Deposition and Characterization of Erbium Oxide-Doped Zirconium Oxide Thin Films. Journal of the Electrochemical Society, 2010, 157, G193.	2.9	11
36	Enhancement of phase stability and optoelectronic performance of BiFeO₃thin films<i>via</i>cation co-substitution. Journal of Materials Chemistry C, 2021, 9, 330-339.	5.5	11

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37	New insights into water photooxidation on reductively pretreated hematite photoanodes. Physical Chemistry Chemical Physics, 2017, 19, 21807-21817.	2.8	10
38	Linear dichroism in ALD layers of TiO2. Environmental Earth Sciences, 2013, 70, 3785-3795.	2.7	9
39	Inâ€Situ Studies of ALD Growth of Hafnium Oxide Films. Advanced Engineering Materials, 2009, 11, 265-268.	3.5	8
40	Understanding the Interface Reactions of Rutile TiO₂Grown by Atomic Layer Deposition on Oxidized Ruthenium. ECS Journal of Solid State Science and Technology, 2013, 2, N23-N27.	1.8	8
41	Amorphous Gadolinium Aluminate as a Dielectric and Sulfur for Indium Phosphide Passivation. ACS Applied Electronic Materials, 2019, 1, 2190-2201.	4.3	8
42	Structural and luminescence properties of HfO2 nanocrystals grown by atomic layer deposition on SiC/SiO2 core/shell nanowires. Scripta Materialia, 2013, 69, 744-747.	5.2	7
43	An (In Situ)2 Approach: ALD and resPES Applied to Al2O3, HfO2, and TiO2 Ultrathin Films. , 2018, , 18-26.		7
44	The band gap and band offset in ultrathin oxideâ€“semiconductor heterostructures. Superlattices and Microstructures, 2010, 47, 369-376.	3.1	6
45	Atomic layer deposition reactor for fabrication of metal oxides. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1287-1292.	0.8	6
46	Height distribution of atomic force microscopy images as a tool for atomic layer deposition characterization. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, .	2.1	6
47	Study of bulk and interface defects in silicon oxide with X-ray absorption spectroscopy. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2007, 144, 23-26.	3.5	5
48	Novel "In-situ²" Approach to Modified ALD Processes for Nano-functional Metal Oxide Films. ECS Transactions, 2009, 25, 253-261.	0.5	5
49	On the scalability of doped hafnia thin films. Applied Physics Letters, 2014, 104, .	3.3	5
50	Differential reflectivity and angle-resolved photoemission of PbS(1 0 0). Surface Science, 2001, 482-485, 659-663.	1.9	4
51	Reconstruction of Cleaved 6H-SiC Surfaces. Materials Science Forum, 2004, 457-460, 391-394.	0.3	4
52	Resonant photoemission at the oxygen K edge as a tool to study the electronic properties of defects at SiO2 /Si and SiO2 /SiC interfaces. Superlattices and Microstructures, 2006, 40, 393-398.	3.1	4
53	Interface Reactions in Ultrathin Functional Dielectric Films. Advanced Engineering Materials, 2009, 11, 269-274.	3.5	4
54	ALD on High Mobility Channels: Engineering the Proper Gate Stack Passivation. ECS Transactions, 2010, 33, 9-23.	0.5	4

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55	Electronic states in arsenic-decapped MnAs (11Â¯00) films grown on GaAs(001): A photoemission spectroscopy study. Applied Physics Letters, 2008, 92, 084103.	3.3	3
56	GaAs clean up studied with synchrotron radiation photoemission. IOP Conference Series: Materials Science and Engineering, 2012, 41, 012003.	0.6	2
57	Study of silicon/oxides interfaces by means of Si2p resonant photoemission. Thin Solid Films, 2008, 517, 447-449.	1.8	1
58	In situ measurements of the atomic layer deposition of high-k dielectrics by atomic force microscope for advanced microsystems. , 2009, , .		1
59	Study of InP Surfaces after Wet Chemical Treatments. ECS Transactions, 2013, 58, 297-303.	0.5	1
60	Electronic signature of MnAs phases in bare and buried films grown on GaAs(001). Journal of Vacuum Science & Technology B, 2008, 26, 1530.	1.3	0
61	Determination of interfacial layers in high-k nanomaterials by ADXPS measurements. , 2010, , .		0
62	Band alignment of high-. , 2010, , .		0
63	(Invited) III-V/Oxide Interfaces Investigated with Synchrotron Radiation Photoemission Spectroscopy. ECS Transactions, 2013, 50, 123-128.	0.5	0