

J Leon Shohet

List of Publications by Citations

Source: <https://exaly.com/author-pdf/7652017/j-leon-shohet-publications-by-citations.pdf>

Version: 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

58
papers

744
citations

16
h-index

24
g-index

59
ext. papers

833
ext. citations

3.5
avg, IF

3.61
L-index

#	Paper	IF	Citations
58	Measurement of bandgap energies in low-k organosilicates. <i>Journal of Applied Physics</i> , 2014 , 115, 094105	5.5	71
57	Plasma vacuum ultraviolet emission in an electron cyclotron resonance etcher. <i>Applied Physics Letters</i> , 1999 , 74, 2599-2601	3.4	40
56	Measurement of ion flows using an unmagnetized Mach probe in the interchangeable module stellarator. <i>Review of Scientific Instruments</i> , 1994 , 65, 2599-2606	1.7	40
55	The effects of vacuum ultraviolet radiation on low-k dielectric films. <i>Journal of Applied Physics</i> , 2012 , 112, 111101	2.5	31
54	Plasma damage effects on low-k porous organosilicate glass. <i>Journal of Applied Physics</i> , 2010 , 108, 094110	5	28
53	The effect of water uptake on the mechanical properties of low-k organosilicate glass. <i>Journal of Applied Physics</i> , 2013 , 114, 084103	2.5	27
52	Time-dependent dielectric breakdown of plasma-exposed porous organosilicate glass. <i>Applied Physics Letters</i> , 2012 , 100, 112905	3.4	27
51	Charge Trapping within UV and Vacuum UV Irradiated Low-k Porous Organosilicate Dielectrics. <i>Journal of the Electrochemical Society</i> , 2010 , 157, G177	3.9	26
50	Measuring vacuum ultraviolet radiation-induced damage. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2003 , 21, 1253-1259	2.9	26
49	Photoemission and conduction currents in vacuum ultraviolet irradiated aluminum oxide. <i>Journal of Applied Physics</i> , 2002 , 91, 1242-1246	2.5	26
48	Defect-induced bandgap narrowing in low-k dielectrics. <i>Applied Physics Letters</i> , 2015 , 107, 082903	3.4	25
47	Impact of VUV photons on SiO ₂ and organosilicate low-k dielectrics: General behavior, practical applications, and atomic models. <i>Applied Physics Reviews</i> , 2019 , 6, 011301	17.3	23
46	Effects of plasma and vacuum-ultraviolet exposure on the mechanical properties of low-k porous organosilicate glass. <i>Journal of Applied Physics</i> , 2014 , 116, 044103	2.5	20
45	Effect of vacuum ultraviolet and ultraviolet Irradiation on capacitance-voltage characteristics of low-k-porous organosilicate dielectrics. <i>Applied Physics Letters</i> , 2010 , 96, 052901	3.4	18
44	Plasma-Generated OH Radical Production for Analyzing Three-Dimensional Structure in Protein Therapeutics. <i>Scientific Reports</i> , 2017 , 7, 12946	4.9	17
43	Reduced adhesion of human blood platelets to polyethylene tubing by microplasma surface modification. <i>Journal of Applied Physics</i> , 2004 , 96, 4539-4546	2.5	17
42	Defects in low-k organosilicate glass and their response to processing as measured with electron-spin resonance. <i>Applied Physics Letters</i> , 2011 , 98, 102903	3.4	15

41	Direct measurement of topography-dependent charging of patterned oxide/semiconductor structures. <i>Applied Physics Letters</i> , 2007 , 91, 182108	3.4	15
40	In situ electrical characterization of dielectric thin films directly exposed to plasma vacuum-ultraviolet radiation. <i>Journal of Applied Physics</i> , 2000 , 88, 1742-1746	2.5	15
39	Effects of vacuum ultraviolet radiation on deposited and ultraviolet-cured low-k porous organosilicate glass. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2011 , 29, 030602	2.9	14
38	Bandgap measurements of low-k porous organosilicate dielectrics using vacuum ultraviolet irradiation. <i>Applied Physics Letters</i> , 2014 , 104, 062904	3.4	13
37	Monte Carlo simulation of the effects of vacuum-ultraviolet radiation on dielectric materials. <i>Applied Physics Letters</i> , 2005 , 86, 102101	3.4	13
36	Depletion of charge produced during plasma exposure in aluminum oxide by vacuum ultraviolet radiation. <i>Applied Physics Letters</i> , 2000 , 77, 3914-3916	3.4	13
35	Memristive Behavior Enabled by Amorphous-Crystalline 2D Oxide Heterostructure. <i>Advanced Materials</i> , 2020 , 32, e2000801	2.4	12
34	Numerical simulation of vacuum-ultraviolet irradiation of dielectric layers. <i>Applied Physics Letters</i> , 2010 , 96, 142903	3.4	12
33	The nature of the defects generated from plasma exposure in pristine and ultraviolet-cured low-k organosilicate glass. <i>Applied Physics Letters</i> , 2011 , 98, 252902	3.4	12
32	Effect of thermal annealing on charge exchange between oxygen interstitial defects within HfO ₂ and oxygen-deficient silicon centers within the SiO ₂ /Si interface. <i>Applied Physics Letters</i> , 2009 , 94, 162907 ⁴	3.4	12
31	Surface potential due to charge accumulation during vacuum ultraviolet exposure for high-k and low-k dielectrics. <i>Applied Physics Letters</i> , 2010 , 97, 072901	3.4	11
30	Effects of vacuum ultraviolet and ultraviolet irradiation on ultrathin hafnium-oxide dielectric layers on (100)Si as measured with electron-spin resonance. <i>Applied Physics Letters</i> , 2010 , 96, 192904	3.4	10
29	Effect of vacuum ultraviolet and ultraviolet irradiation on mobile charges in the bandgap of low-k-porous organosilicate dielectrics. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2011 , 29, 010601	2.9	10
28	Reflectance and substrate currents of dielectric layers under vacuum ultraviolet irradiation. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2010 , 28, 1316-1318	2.9	9
27	Effects of vacuum-ultraviolet irradiation on copper penetration into low-k dielectrics under bias-temperature stress. <i>Applied Physics Letters</i> , 2015 , 106, 012904	3.4	8
26	The effects of plasma exposure and vacuum ultraviolet irradiation on photopatternable low-k dielectric materials. <i>Journal of Applied Physics</i> , 2013 , 114, 104107	2.5	8
25	The sine-Gordon equation in toroidal magnetic-fusion experiments. <i>European Physical Journal: Special Topics</i> , 2007 , 147, 191-207	2.3	8
24	Vacuum-ultraviolet-induced charge depletion in plasma-charged patterned-dielectric wafers. <i>Journal of Applied Physics</i> , 2009 , 105, 053308	2.5	7

23	Effect of vacuum-ultraviolet irradiation on the dielectric constant of low-k organosilicate dielectrics. <i>Applied Physics Letters</i> , 2014 , 105, 202902	3.4	6
22	Changes to Charge and Defects in Dielectrics from Ion and Photon Fluences during Plasma Exposure. <i>Electrochemical and Solid-State Letters</i> , 2011 , 14, H107		6
21	Effects of neutron irradiation of ultra-thin HfO ₂ films. <i>Applied Physics Letters</i> , 2014 , 104, 032910	3.4	5
20	Effects of vacuum ultraviolet irradiation on trapped charges and leakage currents of low-k organosilicate dielectrics. <i>Applied Physics Letters</i> , 2015 , 106, 192905	3.4	4
19	The effects of vacuum-ultraviolet radiation on defects in low-k organosilicate glass (SiCOH) as measured with electron-spin resonance. <i>Thin Solid Films</i> , 2016 , 616, 23-26	2.2	4
18	Measurements of Schottky barrier at the low-k SiOC:H/Cu interface using vacuum ultraviolet photoemission spectroscopy. <i>Applied Physics Letters</i> , 2015 , 107, 232905	3.4	4
17	Fluorophore-based sensor for oxygen radicals in processing plasmas. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2015 , 33, 061305	2.9	4
16	Time-dependent dielectric breakdown measurements of porous organosilicate glass using mercury and solid metal probes. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2014 , 32, 051509	2.9	4
15	Plasma and vacuum ultraviolet induced charging of SiO ₂ and HfO ₂ patterned structures. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2012 , 30, 01A109	2.9	4
14	Effects of ultraviolet (UV) irradiation in air and under vacuum on low-k dielectrics. <i>AIP Advances</i> , 2016 , 6, 075012	1.5	4
13	Measurement of the vacuum-ultraviolet absorption spectrum of low-k dielectrics using X-ray reflectivity. <i>Applied Physics Letters</i> , 2018 , 112, 082902	3.4	3
12	Nonthermal combined ultraviolet and vacuum-ultraviolet curing process for organosilicate dielectrics. <i>Applied Physics Letters</i> , 2016 , 108, 242906	3.4	3
11	Influence of porosity on electrical properties of low-k dielectrics irradiated with vacuum-ultraviolet radiation. <i>Applied Physics Letters</i> , 2016 , 109, 122902	3.4	3
10	Transmission of oxygen radicals through free-standing single-layer and multilayer silicon-nitride and silicon-dioxide films. <i>Journal of Applied Physics</i> , 2017 , 122, 084101	2.5	1
9	Effects of cesium ion-implantation on mechanical and electrical properties of organosilicate low-k films. <i>Applied Physics Letters</i> , 2016 , 108, 202901	3.4	1
8	Effects of cesium ion implantation on the mechanical and electrical properties of porous SiCOH low-k dielectrics. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2017 , 35, 061506	2.9	1
7	Measuring the volume charge in dielectric films using single frequency electro-acoustic waves. <i>Journal of Materials Research</i> , 2014 , 29, 501-508	2.5	1
6	Surface photoconductivity of organosilicate glass dielectrics induced by vacuum-ultraviolet radiation. <i>Journal of Applied Physics</i> , 2013 , 114, 064104	2.5	1

5	Equivalent-circuit model for vacuum ultraviolet irradiation of dielectric films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2012 , 30, 031505	2.9	1
4	The effects of plasma-processing conditions on the morphology of adherent human blood platelets. <i>Journal of Applied Physics</i> , 2008 , 103, 093302	2.5	1
3	Surface-directed differentiation of embryonic stem cells. <i>Applied Physics Letters</i> , 2008 , 92, 193902	3.4	
2	Effect of frequency and applied voltage of an atmospheric-pressure dielectric-barrier discharge on breakdown and hydroxyl-radical generation with a liquid electrode. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2020 , 38, 043001	2.9	
1	The effect of vacuum ultraviolet irradiation on the time-dependent dielectric breakdown of organosilicate dielectrics. <i>Applied Physics Letters</i> , 2016 , 109, 122905	3.4	