

Adriana V Szeghalmi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8165037/publications.pdf>

Version: 2024-02-01

60
papers

2,111
citations

257450

24
h-index

233421

45
g-index

63
all docs

63
docs citations

63
times ranked

2728
citing authors

#	ARTICLE	IF	CITATIONS
1	Materials Pushing the Application Limits of Wire Grid Polarizers further into the Deep Ultraviolet Spectral Range. <i>Advanced Optical Materials</i> , 2016, 4, 1780-1786.	7.3	337
2	How Delocalized Is N,N,N',N'-Tetraphenylphenylenediamine Radical Cation? An Experimental and Theoretical Study on the Electronic and Molecular Structure. <i>Journal of the American Chemical Society</i> , 2004, 126, 7834-7845.	13.7	156
3	Atomic layer deposition of Al ₂ O ₃ and TiO ₂ multilayers for applications as bandpass filters and antireflection coatings. <i>Applied Optics</i> , 2009, 48, 1727.	2.1	117
4	A synchrotron FTIR microspectroscopy investigation of fungal hyphae grown under optimal and stressed conditions. <i>Analytical and Bioanalytical Chemistry</i> , 2007, 387, 1779-1789.	3.7	92
5	Density functional and vibrational spectroscopic analysis of β -carotene. <i>Journal of Raman Spectroscopy</i> , 2003, 34, 413-419.	2.5	89
6	Tuning Material Properties of Oxides and Nitrides by Substrate Biasing during Plasma-Enhanced Atomic Layer Deposition on Planar and 3D Substrate Topographies. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 13158-13180.	8.0	85
7	The Creatine Kinase/Creatine Connection to Alzheimer's Disease: CK Inactivation, APP-CK Complexes and Focal Creatine Deposits. <i>Journal of Biomedicine and Biotechnology</i> , 2006, 2006, 1-11.	3.0	83
8	Influence of the oxygen plasma parameters on the atomic layer deposition of titanium dioxide. <i>Nanotechnology</i> , 2015, 26, 024003.	2.6	69
9	Focally Elevated Creatine Detected in Amyloid Precursor Protein (APP) Transgenic Mice and Alzheimer Disease Brain Tissue. <i>Journal of Biological Chemistry</i> , 2006, 281, 5-8.	3.4	67
10	Ultrafast proton transfer of 1-hydroxy-2-acetonaphthone: Reaction path from resonance Raman and transient absorption studies. <i>Journal of Chemical Physics</i> , 2005, 122, 244315.	3.0	62
11	Antireflection Coatings for Strongly Curved Glass Lenses by Atomic Layer Deposition. <i>Coatings</i> , 2017, 7, 118.	2.6	59
12	Time Fluctuations and Imaging in the SERS Spectra of Fungal Hypha Grown on Nanostructured Substrates. <i>Journal of Physical Chemistry B</i> , 2007, 111, 12916-12924.	2.6	53
13	Comparative study of ALD SiO ₂ thin films for optical applications. <i>Optical Materials Express</i> , 2016, 6, 660.	3.0	53
14	Theoretical and Experimental Analysis of the Sensitivity of Guided Mode Resonance Sensors. <i>Journal of Physical Chemistry C</i> , 2010, 114, 21150-21157.	3.1	48
15	In vitro polarization-resolved resonance Raman studies of the interaction of hematin with the antimalarial drug chloroquine. <i>Journal of Raman Spectroscopy</i> , 2004, 35, 819-821.	2.5	45
16	Mechanical, structural, and optical properties of PEALD metallic oxides for optical applications. <i>Applied Optics</i> , 2017, 56, C47.	2.1	42
17	Wide-Angle Broadband Antireflection Coatings Prepared by Atomic Layer Deposition. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 21887-21894.	8.0	41
18	Tunable Guided-Mode Resonance Grating Filter. <i>Advanced Functional Materials</i> , 2010, 20, 2053-2062.	14.9	40

#	ARTICLE	IF	CITATIONS
19	Multilayer Fresnel zone plate for soft X-ray microscopy resolves sub-39 nm structures. Ultramicroscopy, 2011, 111, 1706-1711.	1.9	40
20	Iridium wire grid polarizer fabricated using atomic layer deposition. Nanoscale Research Letters, 2011, 6, 558.	5.7	40
21	High spatial resolution analysis of fungal cell biochemistry "bridging the analytical gap using synchrotron FTIR spectromicroscopy. FEMS Microbiology Letters, 2008, 284, 1-8.	1.8	36
22	Atomic layer deposition of metal fluorides through oxide chemistry. Journal of Materials Chemistry, 2011, 21, 14461.	6.7	31
23	Spectroscopic and Computational Studies on the Coordination-Driven Self-Assembly Complexes (ZnL) ₂ and (NiL) ₂ [L= Bis(2,4-dimethyldipyrrin-3-yl)methane]. Journal of Physical Chemistry B, 2006, 110, 21958-21965.	2.6	28
24	Nanoporous SiO ₂ thin films made by atomic layer deposition and atomic etching. Nanotechnology, 2016, 27, 255603.	2.6	25
25	All dielectric hard x-ray mirror by atomic layer deposition. Applied Physics Letters, 2009, 94, .	3.3	24
26	Efficient focusing of 8 keV X-rays with multilayer Fresnel zone plates fabricated by atomic layer deposition and focused ion beam milling. Journal of Synchrotron Radiation, 2013, 20, 433-440.	2.4	24
27	Antireflection Coating on PMMA Substrates by Atomic Layer Deposition. Coatings, 2020, 10, 64.	2.6	23
28	Influence of Substrate Materials on Nucleation and Properties of Iridium Thin Films Grown by ALD. Coatings, 2021, 11, 173.	2.6	23
29	Effect of an electric field during the deposition of silicon dioxide thin films by plasma enhanced atomic layer deposition: an experimental and computational study. Nanoscale, 2020, 12, 2089-2102.	5.6	22
30	Light-field-driven current control in solids with pJ-level laser pulses at 80 MHz repetition rate. Optica, 2021, 8, 570.	9.3	22
31	Influence of temperature and plasma parameters on the properties of PEALD HfO ₂ . Optical Materials Express, 2021, 11, 1918.	3.0	21
32	Multilayer Fresnel zone plates for high energy radiation resolve 21 nm features at 12 keV. Optics Express, 2014, 22, 18440.	3.4	20
33	Structural, optical, and mechanical properties of TiO ₂ nanolaminates. Nanotechnology, 2021, 32, 095709.	2.6	17
34	On the Properties of Nanoporous SiO ₂ Films for Single Layer Antireflection Coating. Advanced Engineering Materials, 2019, 21, 1801229.	3.5	15
35	Inhibition of Crystal Growth during Plasma Enhanced Atomic Layer Deposition by Applying BIAS. Materials, 2015, 8, 7805-7812.	2.9	14
36	Conformation and Hydrogen Bonding Properties of an Aziridinyl Peptide: X-ray Structure Analysis, Raman Spectroscopy and Theoretical Investigations. Journal of Physical Chemistry A, 2004, 108, 11398-11408.	2.5	12

#	ARTICLE	IF	CITATIONS
37	Double-sided structured mask for sub-micron resolution proximity i-line mask-aligner lithography. Optics Express, 2015, 23, 16628.	3.4	12
38	Encapsulation process for diffraction gratings. Optics Express, 2015, 23, 17955.	3.4	12
39	Influence of seed layers on the reflectance of sputtered aluminum thin films. Optics Express, 2021, 29, 19472.	3.4	12
40	Flexible Replication Technique for High Aspect Ratio Nanostructures. Small, 2010, 6, 2701-2707.	10.0	11
41	Growth of Atomic Layer Deposited Ruthenium and Its Optical Properties at Short Wavelengths Using Ru(EtCp) ₂ and Oxygen. Coatings, 2018, 8, 413.	2.6	11
42	Blistering during the atomic layer deposition of iridium. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, .	2.1	10
43	Optical, structural, and functional properties of highly reflective and stable iridium mirror coatings for infrared applications. Optical Materials Express, 2022, 12, 545.	3.0	10
44	Optical bandgap control in Al ₂ O ₃ /TiO ₂ heterostructures by plasma enhanced atomic layer deposition: Toward quantizing structures and tailored binary oxides. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 252, 119508.	3.9	9
45	Wafer-level integration of self-aligned high aspect ratio silicon 3D structures using the MACE method with Au, Pd, Pt, Cu, and Ir. Beilstein Journal of Nanotechnology, 2020, 11, 1439-1449.	2.8	8
46	Plasma-enhanced atomic layer deposition for antireflection coatings using SiO ₂ as low-refractive index material. Proceedings of SPIE, 2015, , .	0.8	7
47	Spectroscopic and computational studies on self-assembly complexes of bis(pyrrol-2-yl) ethylene. Optics Express, 2015, 23, 483-495.	2.5	6
48	Antireflection coating with consistent near-neutral color on complex-shaped substrates prepared by ALD. Optics Letters, 2019, 44, 3270.	3.3	6
49	Light scattering characterization of single-layer nanoporous SiO ₂ antireflection coating in visible light. Applied Optics, 2020, 59, A143.	1.8	5
50	Plasma-Enhanced Atomic Layer Deposition of HfO ₂ with Substrate Biasing: Thin Films for High-Reflective Mirrors. ACS Applied Materials & Interfaces, 2022, 14, 14677-14692.	8.0	5
51	Recent advances in use of atomic layer deposition and focused ion beams for fabrication of Fresnel zone plates for hard x-rays. , 2013, , .		4
52	High-reflective coatings for ground and space based applications. , 2017, , .		4
53	High-efficiency embedded transmission grating. , 2015, , .		2
54	Multilayer Fresnel Zone Plates for X-ray Microscopy. Microscopy and Microanalysis, 2015, 21, 1987-1988.	0.4	1

#	ARTICLE	IF	CITATIONS
55	Selected Applications of Atomic Layer Deposition Dielectric Nanolaminates as Functional Optical Coatings. , 2009, , .		0
56	Nanoporous SiO ₂ made by atomic layer deposition and atomic layer etching. Proceedings of SPIE, 2015, , .	0.8	0
57	Laser-induced damage threshold of nanoporous single-layer ALD antireflective coatings. , 2018, , .		0
58	Light-Field-Driven Current Control in Dielectrics with pJ-Level Laser Pulses at 80 MHz Repetition Rate. , 2021, , .		0
59	On-Chip Carrier-Envelope Phase Scanner. , 2022, , .		0
60	Laser-Induced Ultrafast Currents in Dielectrics Enhanced by Iridium Nanoparticles. , 2022, , .		0