Adriana V Szeghalmi

List of Publications by Year
in descending order

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	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
2	Plasma-Enhanced Atomic Layer Deposition of HfO₂ with Substrate Biasing: Thin Films for High-Reflective Mirrors. ACS Applied Materials & Interfaces, 2022, 14, 14677-14692.	8.0	5
3	On-Chip Carrier-Envelope Phase Scanner. , 2022, , .		0
4	Laser-Induced Ultrafast Currents in Dielectrics Enhanced by Iridium Nanoparticles. , 2022, , .		0
5	Influence of Substrate Materials on Nucleation and Properties of Iridium Thin Films Grown by ALD. Coatings, 2021, 11, 173.	2.6	23
6	Light-field-driven current control in solids with pJ-level laser pulses at 80â€‰â€‰MHz repetition rate. Optica, 2021, 8, 570.	9.3	22
7	Optical bandgap control in Al2O3/TiO2 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
8	Influence of seed layers on the reflectance of sputtered aluminum thin films. Optics Express, 2021, 29, 19472.	3.4	12
9	Influence of temperature and plasma parameters on the properties of PEALD HfO₂. Optical Materials Express, 2021, 11, 1918.	3.0	21
10	Structural, optical, and mechanical properties of TiO₂ nanolaminates. Nanotechnology, 2021, 32, 095709.	2.6	17
11	Light-Field-Driven Current Control in Dielectrics with pJ-Level Laser Pulses at 80 MHz Repetition Rate. , 2021, , .		0
12	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
13	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
14	Antireflection Coating on PMMA Substrates by Atomic Layer Deposition. Coatings, 2020, 10, 64.	2.6	23
15	Light scattering characterization of single-layer nanoporous SiO2 antireflection coating in visible light. Applied Optics, 2020, 59, A143.	1.8	5
16	Wide-Angle Broadband Antireflection Coatings Prepared by Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2019, 11, 21887-21894.	8.0	41
17	On the Properties of Nanoporous SiO₂ Films for Single Layer Antireflection Coating. Advanced Engineering Materials, 2019, 21, 1801229.	3.5	15
18	Antireflection coating with consistent near-neutral color on complex-shaped substrates prepared by ALD. Optics Letters, 2019, 44, 3270.	3.3	6

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19	Tuning Material Properties of Oxides and Nitrides by Substrate Biasing during Plasma-Enhanced Atomic Layer Deposition on Planar and 3D Substrate Topographies. ACS Applied Materials & Interfaces, 2018, 10, 13158-13180.	8.0	85
20	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
21	Laser-induced damage threshold of nanoporous single-layer ALD antireflective coatings. , 2018, , .		0
22	Antireflection Coatings for Strongly Curved Glass Lenses by Atomic Layer Deposition. Coatings, 2017, 7, 118.	2.6	59
23	Mechanical, structural, and optical properties of PEALD metallic oxides for optical applications. Applied Optics, 2017, 56, C47.	2.1	42
24	High-reflective coatings for ground and space based applications. , 2017, , .		4
25	Blistering during the atomic layer deposition of iridium. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, .	2.1	10
26	Nanoporous SiO2thin films made by atomic layer deposition and atomic etching. Nanotechnology, 2016, 27, 255603.	2.6	25
27	Materials Pushing the Application Limits of Wire Grid Polarizers further into the Deep Ultraviolet Spectral Range. Advanced Optical Materials, 2016, 4, 1780-1786.	7.3	337
28	Comparative study of ALD SiO_2 thin films for optical applications. Optical Materials Express, 2016, 6, 660.	3.0	53
29	Inhibition of Crystal Growth during Plasma Enhanced Atomic Layer Deposition by Applying BIAS. Materials, 2015, 8, 7805-7812.	2.9	14
30	Multilayer Fresnel Zone Plates for X-ray Microscopy. Microscopy and Microanalysis, 2015, 21, 1987-1988.	0.4	1
31	Double-sided structured mask for sub-micron resolution proximity i-line mask-aligner lithography. Optics Express, 2015, 23, 16628.	3.4	12
32	Encapsulation process for diffraction gratings. Optics Express, 2015, 23, 17955.	3.4	12
33	Plasma-enhanced atomic layer deposition for antireflection coatings using SiO₂as low-refractive index material. Proceedings of SPIE, 2015, , .	0.8	7
34	High-efficiency embedded transmission grating. , 2015, , .		2
35	Nanoporous SiO₂made by atomic layer deposition and atomic layer etching. Proceedings of SPIE, 2015, , .	0.8	0
36	Influence of the oxygen plasma parameters on the atomic layer deposition of titanium dioxide. Nanotechnology, 2015, 26, 024003.	2.6	69

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37	Multilayer Fresnel zone plates for high energy radiation resolve 21 nm features at 12 keV. Optics Express, 2014, 22, 18440.	3.4	20
38	Recent advances in use of atomic layer deposition and focused ion beams for fabrication of Fresnel zone plates for hard x-rays. , 2013, , .		4
39	Efficient focusing of 8â€…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
40	Atomic layer deposition of metal fluorides through oxide chemistry. Journal of Materials Chemistry, 2011, 21, 14461.	6.7	31
41	Multilayer Fresnel zone plate for soft X-ray microscopy resolves sub-39 nm structures. Ultramicroscopy, 2011, 111, 1706-1711.	1.9	40
42	Iridium wire grid polarizer fabricated using atomic layer deposition. Nanoscale Research Letters, 2011, 6, 558.	5.7	40
43	Tunable Guidedâ€Mode Resonance Grating Filter. Advanced Functional Materials, 2010, 20, 2053-2062.	14.9	40
44	Flexible Replication Technique for Highâ€Aspectâ€Ratio Nanostructures. Small, 2010, 6, 2701-2707.	10.0	11
45	Theoretical and Experimental Analysis of the Sensitivity of Guided Mode Resonance Sensors. Journal of Physical Chemistry C, 2010, 114, 21150-21157.	3.1	48
46	Selected Applications of Atomic Layer Deposition Dielectric Nanolaminates as Functional Optical Coatings. , 2009, , .		0
47	All dielectric hard x-ray mirror by atomic layer deposition. Applied Physics Letters, 2009, 94, .	3.3	24
48	Atomic layer deposition of Al_2O_3 and TiO_2 multilayers for applications as bandpass filters and antireflection coatings. Applied Optics, 2009, 48, 1727.	2.1	117
49	High spatial resolution analysis of fungal cell biochemistry Ã¢Â€Â“ bridging the analytical gap using synchrotron FTIR spectromicroscopy. FEMS Microbiology Letters, 2008, 284, 1-8.	1.8	36
50	Time Fluctuations and Imaging in the SERS Spectra of Fungal Hypha Grown on Nanostructured Substrates. Journal of Physical Chemistry B, 2007, 111, 12916-12924.	2.6	53
51	Spectroscopic and computational studies on self-assembly complexes of bis(pyrrol-2-) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 1 483-495.	2.5	6
52	A synchrotron FTIR microspectroscopy investigation of fungal hyphae grown under optimal and stressed conditions. Analytical and Bioanalytical Chemistry, 2007, 387, 1779-1789.	3.7	92
53	Spectroscopic and Computational Studies on the Coordination-Driven Self-Assembly Complexes (ZnL)2and (NiL)2[L= Bis(2,4-dimethyldipyrrin-3-yl)methane]. Journal of Physical Chemistry B, 2006, 110, 21958-21965.	2.6	28
54	The Creatine Kinase/Creatine Connection to Alzheimer's Disease: CK Inactivation, APP-CK Complexes and Focal Creatine Deposits. Journal of Biomedicine and Biotechnology, 2006, 2006, 1-11.	3.0	83

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55	Focally Elevated Creatine Detected in Amyloid Precursor Protein (APP) Transgenic Mice and Alzheimer Disease Brain Tissue. Journal of Biological Chemistry, 2006, 281, 5-8.	3.4	67
56	Ultrafast proton transfer of 1-hydroxy-2-acetonaphthone: Reaction path from resonance Raman and transient absorption studies. Journal of Chemical Physics, 2005, 122, 244315.	3.0	62
57	In vitro polarization-resolved resonance Raman studies of the interaction of hematin with the antimalarial drug chloroquine. Journal of Raman Spectroscopy, 2004, 35, 819-821.	2.5	45
58	Conformation and Hydrogen Bonding Properties of an Aziridinyl Peptide:Â X-ray Structure Analysis, Raman Spectroscopy and Theoretical Investigations. Journal of Physical Chemistry A, 2004, 108, 11398-11408.	2.5	12
59	How Delocalized Is N,N,Nâ€˜,Nâ€˜-Tetraphenylphenylenediamine Radical Cation? An Experimental and Theoretical Study on the Electronic and Molecular Structure. Journal of the American Chemical Society, 2004, 126, 7834-7845.	13.7	156
60	Density functional and vibrational spectroscopic analysis of Î²-carotene. Journal of Raman Spectroscopy, 2003, 34, 413-419.	2.5	89