

# Mauritius C M Van De Sanden

## List of Publications by Citations

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457 papers	16,784 citations	64 h-index	109 g-index
478 ext. papers	18,415 ext. citations	3.6 avg, IF	6.65 L-index

#	Paper	IF	Citations
457	Plasma-Assisted Atomic Layer Deposition: Basics, Opportunities, and Challenges. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2011</b> , 29, 050801	2.9	565
456	Ultralow surface recombination of c-Si substrates passivated by plasma-assisted atomic layer deposited Al <sub>2</sub> O <sub>3</sub> . <i>Applied Physics Letters</i> , <b>2006</b> , 89, 042112	3.4	562
455	The 2017 Plasma Roadmap: Low temperature plasma science and technology. <i>Journal Physics D: Applied Physics</i> , <b>2017</b> , 50, 323001	3	496
454	On the c-Si surface passivation mechanism by the negative-charge-dielectric Al <sub>2</sub> O <sub>3</sub> . <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 113703	2.5	414
453	Silicon surface passivation by atomic layer deposited Al <sub>2</sub> O <sub>3</sub> . <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 044903	3.5	361
452	Surface passivation of high-efficiency silicon solar cells by atomic-layer-deposited Al <sub>2</sub> O <sub>3</sub> . <i>Progress in Photovoltaics: Research and Applications</i> , <b>2008</b> , 16, 461-466	6.8	361
451	Excellent passivation of highly doped p-type Si surfaces by the negative-charge-dielectric Al <sub>2</sub> O <sub>3</sub> . <i>Applied Physics Letters</i> , <b>2007</b> , 91, 112107	3.4	317
450	Optical constants of graphene measured by spectroscopic ellipsometry. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 091904	3.4	282
449	Determining the material structure of microcrystalline silicon from Raman spectra. <i>Journal of Applied Physics</i> , <b>2003</b> , 94, 3582-3588	2.5	274
448	High efficiency n-type Si solar cells on Al <sub>2</sub> O <sub>3</sub> -passivated boron emitters. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 253504	3.4	273
447	In situspectroscopic ellipsometry as a versatile tool for studying atomic layer deposition. <i>Journal Physics D: Applied Physics</i> , <b>2009</b> , 42, 073001	3	232
446	Plasma-assisted atomic layer deposition of Al <sub>2</sub> O <sub>3</sub> moisture permeation barriers on polymers. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 081915	3.4	231
445	Vacancies and voids in hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 1547-1549	3.4	199
444	Plasma and Thermal ALD of Al <sub>2</sub> O <sub>3</sub> in a Commercial 200 mm ALD Reactor. <i>Journal of the Electrochemical Society</i> , <b>2007</b> , 154, G165	3.9	196
443	Influence of the Deposition Temperature on the c-Si Surface Passivation by Al <sub>2</sub> O <sub>3</sub> Films Synthesized by ALD and PECVD. <i>Electrochemical and Solid-State Letters</i> , <b>2010</b> , 13, H76		171
442	Silicon surface passivation by ultrathin Al <sub>2</sub> O <sub>3</sub> films synthesized by thermal and plasma atomic layer deposition. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2010</b> , 4, 10-12	2.5	163
441	Waveguide Nanowire Superconducting Single-Photon Detectors Fabricated on GaAs and the Study of Their Optical Properties. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2015</b> , 21, 1-10	3.8	157

440	Hydrogen induced passivation of Si interfaces by Al <sub>2</sub> O <sub>3</sub> films and SiO <sub>2</sub> /Al <sub>2</sub> O <sub>3</sub> stacks. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 152106	3.4	143
439	Low Temperature Plasma-Enhanced Atomic Layer Deposition of Metal Oxide Thin Films. <i>Journal of the Electrochemical Society</i> , <b>2010</b> , 157, P66	3.9	135
438	Conformality of Plasma-Assisted ALD: Physical Processes and Modeling. <i>Journal of the Electrochemical Society</i> , <b>2010</b> , 157, G241	3.9	133
437	Influence of the Oxidant on the Chemical and Field-Effect Passivation of Si by ALD Al[sub 2]O[sub 3]. <i>Electrochemical and Solid-State Letters</i> , <b>2011</b> , 14, H1		131
436	Taming microwave plasma to beat thermodynamics in CO <sub>2</sub> dissociation. <i>Faraday Discussions</i> , <b>2015</b> , 183, 233-48	3.6	128
435	Controlling the fixed charge and passivation properties of Si(100)/Al <sub>2</sub> O <sub>3</sub> interfaces using ultrathin SiO <sub>2</sub> interlayers synthesized by atomic layer deposition. <i>Journal of Applied Physics</i> , <b>2011</b> , 110, 093715	2.5	124
434	Stability of Al <sub>2</sub> O <sub>3</sub> and Al <sub>2</sub> O <sub>3</sub> /a-SiN <sub>x</sub> :H stacks for surface passivation of crystalline silicon. <i>Journal of Applied Physics</i> , <b>2009</b> , 106, 114907	2.5	123
433	Thermodynamic generalization of the Saha equation for a two-temperature plasma. <i>Physical Review A</i> , <b>1989</b> , 40, 5273-5276	2.6	122
432	Negative charge and charging dynamics in Al <sub>2</sub> O <sub>3</sub> films on Si characterized by second-harmonic generation. <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 073701	2.5	119
431	Plasma-driven dissociation of CO <sub>2</sub> for fuel synthesis. <i>Plasma Processes and Polymers</i> , <b>2017</b> , 14, 1600126	3.4	113
430	Influence of annealing and Al <sub>2</sub> O <sub>3</sub> properties on the hydrogen-induced passivation of the Si/SiO <sub>2</sub> interface. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 093713	2.5	112
429	Surface chemistry of plasma-assisted atomic layer deposition of Al <sub>2</sub> O <sub>3</sub> studied by infrared spectroscopy. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 231904	3.4	108
428	Relation of the Si-H stretching frequency to the nanostructural Si-H bulk environment. <i>Physical Review B</i> , <b>2007</b> , 76,	3.3	108
427	Plasma chemistry aspects of a-Si:H deposition using an expanding thermal plasma. <i>Journal of Applied Physics</i> , <b>1998</b> , 84, 2426-2435	2.5	108
426	A combined Thomson-Rayleigh scattering diagnostic using an intensified photodiode array. <i>Review of Scientific Instruments</i> , <b>1992</b> , 63, 3369-3377	1.7	107
425	Role of field-effect on c-Si surface passivation by ultrathin (20 nm) atomic layer deposited Al <sub>2</sub> O <sub>3</sub> . <i>Applied Physics Letters</i> , <b>2010</b> , 96, 112101	3.4	103
424	Atomic layer deposition for nanostructured Li-ion batteries. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2012</b> , 30, 010801	2.9	102
423	Surface reactions during atomic layer deposition of Pt derived from gas phase infrared spectroscopy. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 013114	3.4	102

422	Remote Plasma ALD of Platinum and Platinum Oxide Films. <i>Electrochemical and Solid-State Letters</i> , <b>2009</b> , 12, G34		100
421	Evolution of the electrical and structural properties during the growth of Al doped ZnO films by remote plasma-enhanced metalorganic chemical vapor deposition. <i>Journal of Applied Physics</i> , <b>2007</b> , 102, 043709	2.5	100
420	Oxygen Evolution at Hematite Surfaces: The Impact of Structure and Oxygen Vacancies on Lowering the Overpotential. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 18201-18208	3.8	97
419	In situ reaction mechanism studies of plasma-assisted atomic layer deposition of Al <sub>2</sub> O <sub>3</sub> . <i>Applied Physics Letters</i> , <b>2006</b> , 89, 131505	3.4	95
418	Reaction mechanisms during plasma-assisted atomic layer deposition of metal oxides: A case study for Al <sub>2</sub> O <sub>3</sub> . <i>Journal of Applied Physics</i> , <b>2008</b> , 103, 103302	2.5	92
417	Deposition of TiN and HfO <sub>2</sub> in a commercial 200mm remote plasma atomic layer deposition reactor. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2007</b> , 25, 1357	2.9	90
416	Low-Temperature Deposition of TiN by Plasma-Assisted Atomic Layer Deposition. <i>Journal of the Electrochemical Society</i> , <b>2006</b> , 153, G956	3.9	89
415	Influence of the high-temperature firing step on high-rate plasma deposited silicon nitride films used as bulk passivating antireflection coatings on silicon solar cells. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2003</b> , 21, 2123		89
414	Conformal coverage of poly(3,4-ethylenedioxythiophene) films with tunable nanoporosity via oxidative chemical vapor deposition. <i>ACS Nano</i> , <b>2008</b> , 2, 1959-67	16.7	87
413	Hydrogenated amorphous silicon deposited at very high growth rates by an expanding Ar/B <sub>2</sub> SiH <sub>4</sub> plasma. <i>Journal of Applied Physics</i> , <b>2001</b> , 89, 2404-2413	2.5	87
412	Efficient plasma route to nanostructure materials: case study on the use of m-WO <sub>3</sub> for solar water splitting. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 7621-5	9.5	84
411	Anomalous fast recombination in hydrogen plasmas involving rovibrational excitation. <i>Physical Review E</i> , <b>1993</b> , 48, 2098-2102	2.4	83
410	Argon-hydrogen plasma jet investigated by active and passive spectroscopic means. <i>Physical Review E</i> , <b>1994</b> , 49, 4397-4406	2.4	83
409	Surface textured ZnO films for thin film solar cell applications by expanding thermal plasma CVD. <i>Thin Solid Films</i> , <b>2001</b> , 392, 226-230	2.2	82
408	In situ spectroscopic ellipsometry study on the growth of ultrathin TiN films by plasma-assisted atomic layer deposition. <i>Journal of Applied Physics</i> , <b>2006</b> , 100, 023534	2.5	81
407	Optical and mechanical properties of plasma-beam-deposited amorphous hydrogenated carbon. <i>Journal of Applied Physics</i> , <b>1996</b> , 80, 5986-5995	2.5	80
406	Recombination of argon in an expanding plasma jet. <i>Physical Review E</i> , <b>1993</b> , 47, 2792-2797	2.4	80
405	Observation of Nanoparticle Exsolution from Perovskite Oxides: From Atomic Scale Mechanistic Insight to Nanostructure Tailoring. <i>ACS Nano</i> , <b>2019</b> , 13, 12996-13005	16.7	78

404	CO and byproduct formation during CO <sub>2</sub> reduction in dielectric barrier discharges. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 123303	2.5	77
403	Substrate-biasing during plasma-assisted atomic layer deposition to tailor metal-oxide thin film growth. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2013</b> , 31, 01A106	2.9	77
402	Deposition of TiN and TaN by Remote Plasma ALD for Cu and Li Diffusion Barrier Applications. <i>Journal of the Electrochemical Society</i> , <b>2008</b> , 155, G287	3.9	76
401	Homogeneous CO <sub>2</sub> conversion by microwave plasma: Wave propagation and diagnostics. <i>Plasma Processes and Polymers</i> , <b>2017</b> , 14, 1600120	3.4	70
400	Synthesis and in situ characterization of low-resistivity TaN <sub>x</sub> films by remote plasma atomic layer deposition. <i>Journal of Applied Physics</i> , <b>2007</b> , 102, 083517	2.5	70
399	The behaviour of heavy particles in the expanding plasma jet in argon. <i>Plasma Sources Science and Technology</i> , <b>1994</b> , 3, 501-510	3.5	70
398	Formation of cationic silicon clusters in a remote silane plasma and their contribution to hydrogenated amorphous silicon film growth. <i>Journal of Applied Physics</i> , <b>1999</b> , 86, 4029-4039	2.5	69
397	Surface passivation of phosphorus-diffused n++-type emitters by plasma-assisted atomic-layer deposited Al <sub>2</sub> O <sub>3</sub> . <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2012</b> , 6, 4-6	2.5	67
396	Ion and Photon Surface Interaction during Remote Plasma ALD of Metal Oxides. <i>Journal of the Electrochemical Society</i> , <b>2011</b> , 158, G88	3.9	66
395	Temperature dependence of the surface roughness evolution during hydrogenated amorphous silicon film growth. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 865-867	3.4	65
394	Amorphous silicon solar cells on natively textured ZnO grown by PECVD. <i>Thin Solid Films</i> , <b>2001</b> , 392, 315-319	3.1	64
393	Excellent Si surface passivation by low temperature SiO <sub>2</sub> using an ultrathin Al <sub>2</sub> O <sub>3</sub> capping film. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2011</b> , 5, 22-24	2.5	63
392	Absolute densities of N and excited N <sub>2</sub> in a N <sub>2</sub> plasma. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 4918-4920	3.4	63
391	The argon-hydrogen expanding plasma: model and experiments. <i>Plasma Sources Science and Technology</i> , <b>1995</b> , 4, 74-85	3.5	63
390	In situ spectroscopic ellipsometry growth studies on the Al-doped ZnO films deposited by remote plasma-enhanced metalorganic chemical vapor deposition. <i>Journal of Applied Physics</i> , <b>2008</b> , 103, 033704	2.5	60
389	Highly efficient microcrystalline silicon solar cells deposited from a pure SiH <sub>4</sub> flow. <i>Applied Physics Letters</i> , <b>2005</b> , 87, 263503	3.4	60
388	Film growth precursors in a remote SiH <sub>4</sub> plasma used for high-rate deposition of hydrogenated amorphous silicon. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2000</b> , 18, 2153	2.9	60
387	Effect of substrate conditions on the plasma beam deposition of amorphous hydrogenated carbon. <i>Journal of Applied Physics</i> , <b>1997</b> , 82, 2643-2654	2.5	59

- 386 Fluid modelling of CO<sub>2</sub> dissociation in a dielectric barrier discharge. *Journal of Applied Physics*, **2016**, 119, 093301 2.5 58
- 385 Scaling of Si and GaAs trench etch rates with aspect ratio, feature width, and substrate temperature. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1995**, 13, 92 56
- 384 Cavity ring down study of the densities and kinetics of Si and SiH in a remote Ar-H<sub>2</sub>-SiH<sub>4</sub> plasma. *Journal of Applied Physics*, **2001**, 89, 2065-2073 2.5 55
- 383 Detection of CH in an expanding argon/acetylene plasma using cavity ring down absorption spectroscopy. *Chemical Physics Letters*, **1999**, 310, 405-410 2.5 55
- 382 Effective passivation of Si surfaces by plasma deposited SiO<sub>x</sub>/a-SiN<sub>x</sub>:H stacks. *Applied Physics Letters*, **2011**, 98, 222102 3.4 54
- 381 An expanding thermal plasma for deposition of surface textured ZnO:Al with focus on thin film solar cell applications. *Applied Surface Science*, **2001**, 173, 40-43 6.7 54
- 380 Plasma beam deposited amorphous hydrogenated carbon: Improved film quality at higher growth rate. *Applied Physics Letters*, **1996**, 69, 152-154 3.4 54
- 379 High current diffuse dielectric barrier discharge in atmospheric pressure air for the deposition of thin silica-like films. *Applied Physics Letters*, **2010**, 96, 061502 3.4 53
- 378 Dielectric Properties of Thermal and Plasma-Assisted Atomic Layer Deposited Al[sub 2]O[sub 3] Thin Films. *Journal of the Electrochemical Society*, **2011**, 158, G21 3.9 53
- 377 On the formation mechanisms of the diffuse atmospheric pressure dielectric barrier discharge in CVD processes of thin silica-like films. *Plasma Sources Science and Technology*, **2009**, 18, 045021 3.5 52
- 376 Measurement of absolute radical densities in a plasma using modulated-beam line-of-sight threshold ionization mass spectrometry. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2004**, 22, 71-81 2.9 52
- 375 Direct characterization of nanocrystal size distribution using Raman spectroscopy. *Journal of Applied Physics*, **2013**, 114, 134310 2.5 51
- 374 Optical emission spectroscopy as a tool for studying, optimizing, and monitoring plasma-assisted atomic layer deposition processes. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2010**, 28, 77-87 2.9 51
- 373 B-spline parametrization of the dielectric function applied to spectroscopic ellipsometry on amorphous carbon. *Journal of Applied Physics*, **2009**, 106, 123503 2.5 51
- 372 High and intermediate temperature sodium-sulfur batteries for energy storage: development, challenges and perspectives.. *RSC Advances*, **2019**, 9, 5649-5673 3.7 50
- 371 Smooth and Self-Similar SiO<sub>2</sub>-like Films on Polymers Synthesized in Roll-to-Roll Atmospheric Pressure-PECVD for Gas Diffusion Barrier Applications. *Plasma Processes and Polymers*, **2010**, 7, 635-639 3.4 50
- 370 Molecular dynamics simulations for the growth of diamond-like carbon films from low kinetic energy species. *Diamond and Related Materials*, **2004**, 13, 1873-1881 3.5 50
- 369 Diagnostics of the magnetized low-pressure hydrogen plasma jet: Molecular regime. *Journal of Applied Physics*, **1996**, 80, 1312-1324 2.5 49



368	Atomic layer deposition of Ru from CpRu(CO) <sub>2</sub> Et using O <sub>2</sub> gas and O <sub>2</sub> plasma. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2011</b> , 29, 021016	2.9	46
367	Quasi-ice monolayer on atomically smooth amorphous SiO <sub>2</sub> at room temperature observed with a high-finesse optical resonator. <i>Physical Review Letters</i> , <b>2005</b> , 95, 166104	7.4	46
366	Surface hydride composition of plasma deposited hydrogenated amorphous silicon: in situ infrared study of ion flux and temperature dependence. <i>Surface Science</i> , <b>2003</b> , 530, 1-16	1.8	46
365	Plasma chemistry during the deposition of a-C:H films and its influence on film properties. <i>Diamond and Related Materials</i> , <b>2003</b> , 12, 90-97	3.5	46
364	Cavity ring down detection of SiH <sub>3</sub> in a remote SiH <sub>4</sub> plasma and comparison with model calculations and mass spectrometry. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2001</b> , 19, 467-476	2.9	44
363	Abstraction of atomic hydrogen by atomic deuterium from an amorphous hydrogenated silicon surface. <i>Journal of Chemical Physics</i> , <b>2002</b> , 117, 10805-10816	3.9	44
362	Plasma for electrification of chemical industry: a case study on CO <sub>2</sub> reduction. <i>Plasma Physics and Controlled Fusion</i> , <b>2018</b> , 60, 014019	2	43
361	Plasma-assisted atomic layer deposition of TiN/Al <sub>2</sub> O <sub>3</sub> stacks for metal-oxide-semiconductor capacitor applications. <i>Journal of Applied Physics</i> , <b>2009</b> , 106, 114107	2.5	43
360	High Quality SiO <sub>2</sub> -like Layers by Large Area Atmospheric Pressure Plasma Enhanced CVD: Deposition Process Studies by Surface Analysis. <i>Plasma Processes and Polymers</i> , <b>2009</b> , 6, 693-702	3.4	43
359	Atmospheric Pressure Barrier Discharge Deposition of Silica-Like Films on Polymeric Substrates. <i>Plasma Processes and Polymers</i> , <b>2007</b> , 4, S440-S444	3.4	43
358	Cross section for the mutual neutralization reaction H <sub>2</sub> <sup>++</sup> H <sup>-</sup> , calculated in a multiple-crossing Landau-Zener approximation. <i>Physical Review A</i> , <b>1995</b> , 51, 3362-3365	2.6	43
357	Self-Regulated Plasma Heat Flux Mitigation Due to Liquid Sn Vapor Shielding. <i>Physical Review Letters</i> , <b>2016</b> , 116, 135002	7.4	42
356	Time evolution of vibrational temperatures in a CO <sub>2</sub> glow discharge measured with infrared absorption spectroscopy. <i>Plasma Sources Science and Technology</i> , <b>2017</b> , 26, 115008	3.5	41
355	Towards Roll-to-Roll Deposition of High Quality Moisture Barrier Films on Polymers by Atmospheric Pressure Plasma Assisted Process. <i>Plasma Processes and Polymers</i> , <b>2015</b> , 12, 545-554	3.4	41
354	Substrate Biasing during Plasma-Assisted ALD for Crystalline Phase-Control of TiO <sub>2</sub> Thin Films. <i>Electrochemical and Solid-State Letters</i> , <b>2011</b> , 15, G1-G3		41
353	High-rate plasma-deposited SiO <sub>2</sub> films for surface passivation of crystalline silicon. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2006</b> , 24, 1823-1830	2.9	41
352	Surface reaction probability during fast deposition of hydrogenated amorphous silicon with a remote silane plasma. <i>Journal of Applied Physics</i> , <b>2000</b> , 87, 3313-3320	2.5	41
351	Hydrogen poor cationic silicon clusters in an expanding argon/hydrogen/silane plasma. <i>Applied Physics Letters</i> , <b>1998</b> , 72, 2397-2399	3.4	40

350	Real-time study of aSi:H/c-Si heterointerface formation and epitaxial Si growth by spectroscopic ellipsometry, infrared spectroscopy, and second-harmonic generation. <i>Physical Review B</i> , <b>2008</b> , 77, 3-3	39
349	The atomic hydrogen flux to silicon growth flux ratio during microcrystalline silicon solar cell deposition. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 111914	39
348	The importance of thermal dissociation in CO <sub>2</sub> microwave discharges investigated by power pulsing and rotational Raman scattering. <i>Plasma Sources Science and Technology</i> , <b>2019</b> , 28, 055015	39
347	Characterization of plasma beam deposited amorphous hydrogenated silicon. <i>Applied Physics Letters</i> , <b>1995</b> , 67, 491-493	38
346	Quantum Magnetoconductance of a Nondegenerate Two-Dimensional Electron Gas. <i>Europhysics Letters</i> , <b>1988</b> , 6, 75-80	38
345	The influence of partial surface discharging on the electrical characterization of DBDs. <i>Plasma Sources Science and Technology</i> , <b>2015</b> , 24, 015016	37
344	Threshold ionization mass spectrometry of reactive species in remote Ar/C <sub>2</sub> H <sub>2</sub> expanding thermal plasma. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2005</b> , 23, 1400-1412	37
343	The heating mechanism of electrons in the shock front of an expanding plasma. <i>Plasma Sources Science and Technology</i> , <b>1994</b> , 3, 511-520	37
342	Quality improvement of plasma-beam-deposited amorphous hydrogenated carbon with higher growth rate. <i>Plasma Sources Science and Technology</i> , <b>1996</b> , 5, 492-498	36
341	Ultrahigh throughput plasma processing of free standing silicon nanocrystals with lognormal size distribution. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 134306	35
340	Time-resolved cavity ringdown study of the Si and SiH <sub>3</sub> surface reaction probability during plasma deposition of a-Si:H at different substrate temperatures. <i>Journal of Applied Physics</i> , <b>2004</b> , 96, 4094-4106	35
339	On the role of nanoporosity in controlling the performance of moisture permeation barrier layers. <i>Microporous and Mesoporous Materials</i> , <b>2014</b> , 188, 163-171	34
338	Real time in situ spectroscopic ellipsometry of the growth and plasmonic properties of Au nanoparticles on SiO <sub>2</sub> . <i>Nano Research</i> , <b>2012</b> , 5, 513-520	34
337	Surface Hydride Composition of Plasma-Synthesized Si Nanoparticles. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 20375-20379	34
336	Effect of ion bombardment on the a-Si:H based surface passivation of c-Si surfaces. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 242115	34
335	The effect of ion-surface and ion-bulk interactions during hydrogenated amorphous silicon deposition. <i>Journal of Applied Physics</i> , <b>2007</b> , 102, 073523	34
334	Argon ion-induced dissociation of acetylene in an expanding Ar/C <sub>2</sub> H <sub>2</sub> plasma. <i>Applied Physics Letters</i> , <b>1999</b> , 74, 2927-2929	34
333	Surface modifications induced by high fluxes of low energy helium ions. <i>Scientific Reports</i> , <b>2015</b> , 5, 9779	33



332	Direct and highly sensitive measurement of defect-related absorption in amorphous silicon thin films by cavity ringdown spectroscopy. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 3079-3081	3.4	33
331	Time-resolved cavity ring-down spectroscopic study of the gas phase and surface loss rates of Si and SiH <sub>3</sub> plasma radicals. <i>Chemical Physics Letters</i> , <b>2002</b> , 360, 189-193	2.5	33
330	Industrial high-rate (~5 nm/s) deposited silicon nitride yielding high-quality bulk and surface passivation under optimum anti-reflection coating conditions. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2005</b> , 13, 705-712	6.8	33
329	High-rate deposition of a-SiN <sub>x</sub> :H for photovoltaic applications by the expanding thermal plasma. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2002</b> , 20, 1704-1715	2.9	33
328	Stationary supersonic plasma expansion: continuum fluid mechanics versus direct simulation Monte Carlo method. <i>Journal Physics D: Applied Physics</i> , <b>2002</b> , 35, 1362-1372	3	33
327	Fast deposition of amorphous carbon films by an expanding cascaded arc plasma jet. <i>Journal of Applied Physics</i> , <b>1995</b> , 78, 528-540	2.5	33
326	Composition and bonding structure of plasma-assisted ALD Al <sub>2</sub> O <sub>3</sub> films. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2010</b> , 7, NA-NA		32
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