Mauritius C M Van De Sanden

List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/4368415/mauritius-c-m-van-de-sanden-publications-by-year.pdf

Version: 2024-04-10

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.

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	Observation and rationalization of nitrogen oxidation enabled only by coupled plasma and catalyst <i>Nature Communications</i> , 2022 , 13, 402	17.4	1
456	The Chemical Origins of Plasma Contraction and Thermalization in CO Microwave Discharges Journal of Physical Chemistry Letters, 2022 , 1203-1208	6.4	0
455	Plasma Driven Exsolution for Nanoscale Functionalization of Perovskite Oxides <i>Small Methods</i> , 2021 , 5, e2100868	12.8	4
454	Plasma Activated Electrochemical Ammonia Synthesis from Nitrogen and Water. <i>ACS Energy Letters</i> , 2021 , 6, 313-319	20.1	16
453	Revisiting spontaneous Raman scattering for direct oxygen atom quantification. <i>Optics Letters</i> , 2021 , 46, 2172-2175	3	5
452	High-Throughput Computational Screening of Cubic Perovskites for Solid Oxide Fuel Cell Cathodes. Journal of Physical Chemistry Letters, 2021 , 12, 4160-4165	6.4	3
451	Resolving discharge parameters from atomic oxygen emission. <i>Plasma Sources Science and Technology</i> , 2021 , 30, 065022	3.5	O
450	Operando attenuated total reflection Fourier-transform infrared (ATR-FTIR) spectroscopy for water splitting. <i>Journal Physics D: Applied Physics</i> , 2021 , 54, 133001	3	2
449	Electrochemical Activation of Atomic Layer-Deposited Cobalt Phosphate Electrocatalysts for Water Oxidation. <i>ACS Catalysis</i> , 2021 , 11, 2774-2785	13.1	13
448	Operational Strategies to Improve the Performance and Long-Term Cyclability of Intermediate Temperature Sodium-Sulfur Batteries. <i>ChemElectroChem</i> , 2021 , 8, 1156-1166	4.3	4
447	Flame bands: CO + O chemiluminescence as a measure of gas temperature. <i>Journal Physics D: Applied Physics</i> , 2021 , 54, 374005	3	1
446	Redefining the Microwave Plasma-Mediated CO2 Reduction Efficiency Limit: The Role of OffO2 Association. <i>ACS Energy Letters</i> , 2021 , 6, 2876-2881	20.1	3
445	Rational Design of Photoelectrodes for the Fully Integrated Polymer Electrode Membrane P hotoelectrochemical Water-Splitting System: A Case Study of Bismuth Vanadate. <i>ACS Applied Energy Materials</i> , 2021 , 4, 9600-9610	6.1	1
444	Emission spectroscopy of He lines in high-density plasmas in Magnum-PSI. AIP Advances, 2020 , 10, 0252	2£ 5	4
443	Insight into contraction dynamics of microwave plasmas for CO2 conversion from plasma chemistry modelling. <i>Plasma Sources Science and Technology</i> , 2020 , 29, 105014	3.5	9
442	Plasma activation of N2, CH4 and CO2: an assessment of the vibrational non-equilibrium time window. <i>Plasma Sources Science and Technology</i> , 2020 , 29, 115001	3.5	7
441	Mode resolved heating dynamics in pulsed microwave CO2 plasma from laser Raman scattering. <i>Journal Physics D: Applied Physics</i> , 2020 , 53, 054002	3	12

440	Symmetrical Exsolution of Rh Nanoparticles in Solid Oxide Cells for Efficient Syngas Production from Greenhouse Gases. <i>ACS Catalysis</i> , 2020 , 10, 1278-1288	13.1	26	
439	Implications of thermo-chemical instability on the contracted modes in CO2 microwave plasmas. <i>Plasma Sources Science and Technology</i> , 2020 , 29, 025005	3.5	26	
438	Charge carrier dynamics and photocatalytic activity of {111} and {100} faceted AgPO particles. Journal of Chemical Physics, 2020 , 152, 244710	3.9	2	
437	CO2 Conversion in Nonuniform Discharges: Disentangling Dissociation and Recombination Mechanisms. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 16806-16819	3.8	17	
436	Enhancing the Electrocatalytic Activity of Redox Stable Perovskite Fuel Electrodes in Solid Oxide Cells by Atomic Layer-Deposited Pt Nanoparticles. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 12646-12654	8.3	8	
435	Validation of the FokkerPlanck Approach to Vibrational Kinetics in CO2 Plasma. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 22823-22831	3.8	16	
434	Atmospheric-pressure silica-like thin film deposition using 200 kHz/13.56 MHz dual frequency excitation. <i>Journal Physics D: Applied Physics</i> , 2019 , 52, 355201	3	4	
433	Electrochemistry of Sputtered Hematite Photoanodes: A Comparison of Metallic DC versus Reactive RF Sputtering. <i>ACS Omega</i> , 2019 , 4, 9262-9270	3.9	4	
432	Numerical model for the determination of the reduced electric field in a CO2 microwave plasma derived by the principle of impedance matching. <i>Plasma Sources Science and Technology</i> , 2019 , 28, 0750	1 ² 6 ⁵	13	
431	High and intermediate temperature sodium-sulfur batteries for energy storage: development, challenges and perspectives <i>RSC Advances</i> , 2019 , 9, 5649-5673	3.7	50	
430	Excitation and relaxation of the asymmetric stretch mode of CO2 in a pulsed glow discharge. <i>Plasma Sources Science and Technology</i> , 2019 , 28, 035011	3.5	18	
429	Plasma-Activated Electrolysis for Cogeneration of Nitric Oxide and Hydrogen from Water and Nitrogen. <i>ACS Energy Letters</i> , 2019 , 4, 2091-2095	20.1	18	
428	Co-electrolysis of H2O and CO2 on exsolved Ni nanoparticles for efficient syngas generation at controllable H2/CO ratios. <i>Applied Catalysis B: Environmental</i> , 2019 , 258, 117950	21.8	29	
427	Role of ElectronIbn Dissociative Recombination in (hbox {CH}_{4}) Microwave Plasma on Basis of Simulations and Measurements of Electron Energy. <i>Plasma Chemistry and Plasma Processing</i> , 2019 , 39, 1275-1289	3.6	3	
426	Solar Hydrogen Generation from Ambient Humidity Using Functionalized Porous Photoanodes. <i>ACS Applied Materials & District Materials & </i>	9.5	8	
425	Characterization of CO2 microwave plasma based on the phenomenon of skin-depth-limited contraction. <i>Plasma Sources Science and Technology</i> , 2019 , 28, 115022	3.5	17	
424	Observation of Nanoparticle Exsolution from Perovskite Oxides: From Atomic Scale Mechanistic Insight to Nanostructure Tailoring. <i>ACS Nano</i> , 2019 , 13, 12996-13005	16.7	78	
423	FokkerPlanck equation for chemical reactions in plasmas. <i>Rendiconti Lincei</i> , 2019 , 30, 25-30	1.7	2	

422	28. Plasma-based CO2 conversion 2019 , 585-634		2
421	The importance of thermal dissociation in CO2 microwave discharges investigated by power pulsing and rotational Raman scattering. <i>Plasma Sources Science and Technology</i> , 2019 , 28, 055015	3.5	39
420	An Electrochemical Study on the Cathode of the Intermediate Temperature Tubular Sodium-Sulfur (NaS) Battery. <i>Journal of the Electrochemical Society</i> , 2019 , 166, A135-A142	3.9	14
419	Atomic layer deposition of cobalt phosphate thin films for the oxygen evolution reaction. <i>Electrochemistry Communications</i> , 2019 , 98, 73-77	5.1	18
418	The role of carrier gas flow in roll-to-roll AP-PECVD synthesized silica moisture barrier films. <i>Surface and Coatings Technology</i> , 2018 , 339, 20-26	4.4	5
417	Preferential vibrational excitation in microwave nitrogen plasma assessed by Raman scattering. <i>Plasma Sources Science and Technology</i> , 2018 , 27, 055006	3.5	17
416	Atmospheric-pressure diffuse dielectric barrier discharges in Ar/O2gas mixture using 200 kHz/13.56 MHz dual frequency excitation. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 114002	3	10
415	Improving uniformity of atmospheric-pressure dielectric barrier discharges using dual frequency excitation. <i>Plasma Sources Science and Technology</i> , 2018 , 27, 01LT01	3.5	7
414	A rotational Raman study under non-thermal conditions in a pulsed CO2glow discharge. <i>Plasma Sources Science and Technology</i> , 2018 , 27, 045009	3.5	16
413	Plasma for electrification of chemical industry: a case study on CO2reduction. <i>Plasma Physics and Controlled Fusion</i> , 2018 , 60, 014019	2	43
412	Plasma radiation studies in Magnum-PSI using resistive bolometry. <i>Nuclear Fusion</i> , 2018 , 58, 106006	3.3	10
411	How the alternating degeneracy in rotational Raman spectra of CO and CH reveals the vibrational temperature. <i>Applied Optics</i> , 2018 , 57, 5694-5702	1.7	9
410	Plasma conductivity as a probe for ambient air admixture in an atmospheric pressure plasma jet. <i>Plasma Chemistry and Plasma Processing</i> , 2018 , 38, 63-74	3.6	1
409	The role of the gradient film properties in silica moisture barriers synthesized in a roll-to-roll atmospheric pressure plasma enhanced CVD reactor. <i>Plasma Processes and Polymers</i> , 2018 , 15, 170009	3 ^{3.4}	10
408	Visible detection of performance controlling pinholes in silica encapsulation films. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 43LT01	3	1
407	Numerical simulation of atmospheric-pressure 200 kHz/13.56 MHz dual-frequency dielectric barrier discharges. <i>Plasma Sources Science and Technology</i> , 2018 , 27, 105016	3.5	8
406	Non-oxidative methane coupling to C2 hydrocarbons in a microwave plasma reactor. <i>Plasma Processes and Polymers</i> , 2018 , 15, 1800087	3.4	18
405	Vibrational Kinetics in Plasma as a Functional Problem: A Flux-Matching Approach. <i>Journal of Physical Chemistry A</i> , 2018 , 122, 7918-7923	2.8	16

(2017-2018)

404	Mechanisms of elementary hydrogen ion-surface interactions during multilayer graphene etching at high surface temperature as a function of flux. <i>Carbon</i> , 2018 , 137, 527-532	10.4	6
403	Zeolites for CO-CO-O Separation to Obtain CO-Neutral Fuels. <i>ACS Applied Materials & amp;</i> Interfaces, 2018 , 10, 20512-20520	9.5	20
402	Variable roughness development in statically deposited SiO2 thin films: a spatially resolved surface morphology analysis. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 285303	3	2
401	Nanostructuring of iron thin films by high flux low energy helium plasma. <i>Thin Solid Films</i> , 2017 , 631, 50-56	2.2	7
400	Defect prevention in silica thin films synthesized using AP-PECVD for flexible electronic encapsulation. <i>Journal Physics D: Applied Physics</i> , 2017 , 50, 25LT01	3	6
399	Atomic layer deposition of highly dispersed Pt nanoparticles on a high surface area electrode backbone for electrochemical promotion of catalysis. <i>Electrochemistry Communications</i> , 2017 , 84, 40-44	5.1	14
398	Time evolution of vibrational temperatures in a CO2glow discharge measured with infrared absorption spectroscopy. <i>Plasma Sources Science and Technology</i> , 2017 , 26, 115008	3.5	41
397	Atomistic simulations of graphite etching at realistic time scales. <i>Chemical Science</i> , 2017 , 8, 7160-7168	9.4	3
396	Fast nanostructured carbon microparticle synthesis by one-step high-flux plasma processing. <i>Carbon</i> , 2017 , 124, 403-414	10.4	5
395	Atomic hydrogen induced defect kinetics in amorphous silicon. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2017 , 35, 05C307	2.9	5
394	The 2017 Plasma Roadmap: Low temperature plasma science and technology. <i>Journal Physics D: Applied Physics</i> , 2017 , 50, 323001	3	496
393	Infrared gas phase study on plasma-polymer interactions in high-current diffuse dielectric barrier discharge. <i>Journal of Applied Physics</i> , 2017 , 121, 243301	2.5	5
392	Oscillatory vapour shielding of liquid metal walls in nuclear fusion devices. <i>Nature Communications</i> , 2017 , 8, 192	17.4	28
391	Insight into CO2 Dissociation in Plasma from Numerical Solution of a Vibrational Diffusion Equation. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 19568-19576	3.8	31
390	Control of the intrinsic microstructure in AP-PECVD synthesised amorphous silica thin films. <i>RSC Advances</i> , 2017 , 7, 52274-52282	3.7	1
389	An analytical force balance model for dust particles with size up to several Debye lengths. <i>Physics of Plasmas</i> , 2017 , 24, 113702	2.1	3
388	On the synergistic effect of inorganic/inorganic barrier layers: An ellipsometric porosimetry investigation. <i>Plasma Processes and Polymers</i> , 2017 , 14, 1700012	3.4	2
387	Homogeneous CO2 conversion by microwave plasma: Wave propagation and diagnostics. <i>Plasma Processes and Polymers</i> , 2017 , 14, 1600120	3.4	70

386	Atmospheric pressure roll-to-roll plasma enhanced CVD of high quality silica-like bilayer encapsulation films. <i>Plasma Processes and Polymers</i> , 2017 , 14, 1600143	3.4	19
385	Plasma-driven dissociation of CO2 for fuel synthesis. <i>Plasma Processes and Polymers</i> , 2017 , 14, 1600126	3.4	113
384	The electrochemistry of iron oxide thin films nanostructured by high ion flux plasma exposure. <i>Electrochimica Acta</i> , 2017 , 258, 709-717	6.7	13
383	Non-equilibrium Microwave Plasma for Efficient High Temperature Chemistry. <i>Journal of Visualized Experiments</i> , 2017 ,	1.6	2
382	Synergy Between Plasma-Assisted ALD and Roll-to-Roll Atmospheric Pressure PE-CVD Processing of Moisture Barrier Films on Polymers. <i>Plasma Processes and Polymers</i> , 2016 , 13, 311-315	3.4	13
381	Self-Regulated Plasma Heat Flux Mitigation Due to Liquid Sn Vapor Shielding. <i>Physical Review Letters</i> , 2016 , 116, 135002	7.4	42
380	Molecular dynamics simulations of ballistic He penetration into W fuzz. <i>Nuclear Fusion</i> , 2016 , 56, 12601	53.3	16
379	CO2-Neutral Fuels. Europhysics News, 2016 , 47, 22-26	0.2	21
378	Gas-Phase Plasma Synthesis of Free-Standing Silicon Nanoparticles for Future Energy Applications. <i>Plasma Processes and Polymers</i> , 2016 , 13, 19-53	3.4	14
377	Analysis of temporal evolution of quantum dot surface chemistry by surface-enhanced Raman scattering. <i>Scientific Reports</i> , 2016 , 6, 29508	4.9	9
376	Fluid modelling of CO2 dissociation in a dielectric barrier discharge. <i>Journal of Applied Physics</i> , 2016 , 119, 093301	2.5	58
375	Dielectric barrier discharges revisited: the case for mobile surface charge. <i>Plasma Sources Science and Technology</i> , 2016 , 25, 03LT03	3.5	10
374	In situspectroscopic ellipsometry during atomic layer deposition of Pt, Ru and Pd. <i>Journal Physics D: Applied Physics</i> , 2016 , 49, 115504	3	24
373	Oxygen Evolution at Hematite Surfaces: The Impact of Structure and Oxygen Vacancies on Lowering the Overpotential. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 18201-18208	3.8	97
372	Back Cover: Plasma Process. Polym. 10016. <i>Plasma Processes and Polymers</i> , 2016 , 13, 202-202	3.4	1
371	Expanding Thermal Plasma Deposition of Al-Doped ZnO: On the Effect of the Plasma Chemistry on Film Growth Mechanisms. <i>Plasma Processes and Polymers</i> , 2016 , 13, 54-69	3.4	4
370	Improved size distribution control of silicon nanocrystals in a spatially confined remote plasma. <i>Plasma Sources Science and Technology</i> , 2015 , 24, 015030	3.5	3
369	The impact of the nano-pore filling on the performance of organosilicon-based moisture barriers. Thin Solid Films, 2015, 595, 251-257	2.2	11

(2014-2015)

368	The relation between the production efficiency of nitrogen atoms and the electrical characteristics of a dielectric barrier discharge. <i>Plasma Sources Science and Technology</i> , 2015 , 24, 045006	3.5	15
367	Note: Rotational Raman scattering on COlplasma using a volume Bragg grating as a notch filter. <i>Review of Scientific Instruments</i> , 2015 , 86, 046106	1.7	20
366	Gas temperature in transient CO2plasma measured by Raman scattering. <i>Journal Physics D: Applied Physics</i> , 2015 , 48, 155201	3	16
365	Residual gas entering high density hydrogen plasma: rarefaction due to rapid heating. <i>Plasma Sources Science and Technology</i> , 2015 , 24, 025020	3.5	4
364	Taming microwave plasma to beat thermodynamics in CO2 dissociation. <i>Faraday Discussions</i> , 2015 , 183, 233-48	3.6	128
363	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> , 2015 , 21, 1-10	3.8	157
362	Surface modifications induced by high fluxes of low energy helium ions. <i>Scientific Reports</i> , 2015 , 5, 9779	4.9	33
361	Characterization of Nanocrystal Size Distribution using Raman Spectroscopy with a Multi-particle Phonon Confinement Model. <i>Journal of Visualized Experiments</i> , 2015 , e53026	1.6	2
360	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> , 2015 , 12, 545-554	3.4	41
359	Relation between light trapping and surface topography of plasma textured crystalline silicon wafers. <i>Progress in Photovoltaics: Research and Applications</i> , 2015 , 23, 352-366	6.8	7
358	The influence of partial surface discharging on the electrical characterization of DBDs. <i>Plasma Sources Science and Technology</i> , 2015 , 24, 015016	3.5	37
357	Spontaneous synthesis of carbon nanowalls, nanotubes and nanotips using high flux density plasmas. <i>Carbon</i> , 2014 , 68, 695-707	10.4	18
356	An improved thin film approximation to accurately determine the optical conductivity of graphene from infrared transmittance. <i>Applied Physics Letters</i> , 2014 , 105, 013105	3.4	8
355	Nanostructuring of iron surfaces by low-energy helium ions. <i>ACS Applied Materials & amp; Interfaces</i> , 2014 , 6, 3462-8	9.5	31
354	On the role of nanoporosity in controlling the performance of moisture permeation barrier layers. <i>Microporous and Mesoporous Materials</i> , 2014 , 188, 163-171	5.3	34
353	CO and byproduct formation during CO2 reduction in dielectric barrier discharges. <i>Journal of Applied Physics</i> , 2014 , 116, 123303	2.5	77
352	Nucleation of silicon nanocrystals in a remote plasma without subsequent coagulation. <i>Journal of Applied Physics</i> , 2014 , 115, 244301	2.5	10
351	On the intrinsic moisture permeation rate of remote microwave plasma-deposited silicon nitride layers. <i>Thin Solid Films</i> , 2014 , 558, 54-61	2.2	22

350	High throughput deposition of hydrogenated amorphous carbon coatings on rubber with expanding thermal plasma. <i>Surface and Coatings Technology</i> , 2014 , 245, 74-83	4.4	9
349	Direct ion flux measurements at high-pressure-depletion conditions for microcrystalline silicon deposition. <i>Journal of Applied Physics</i> , 2013 , 114, 063305	2.5	19
348	Efficient plasma route to nanostructure materials: case study on the use of m-WO3 for solar water splitting. <i>ACS Applied Materials & amp; Interfaces</i> , 2013 , 5, 7621-5	9.5	84
347	Direct characterization of nanocrystal size distribution using Raman spectroscopy. <i>Journal of Applied Physics</i> , 2013 , 114, 134310	2.5	51
346	Morphological Description of Ultra-Smooth Organo-Silicone Layers Synthesized Using Atmospheric Pressure Dielectric Barrier Discharge Assisted PECVD. <i>Plasma Processes and Polymers</i> , 2013 , 10, 313-319	3 .4	13
345	Ultrahigh throughput plasma processing of free standing silicon nanocrystals with lognormal size distribution. <i>Journal of Applied Physics</i> , 2013 , 113, 134306	2.5	35
344	Carbon monoxide-induced reduction and healing of graphene oxide. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2013 , 31, 040601	2.9	13
343	Chemical sputtering of graphite by low temperature nitrogen plasmas at various substrate temperatures and ion flux densities. <i>Journal of Applied Physics</i> , 2013 , 114, 133301	2.5	7
342	On the effect of the underlying ZnO:Al layer on the crystallization kinetics of hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 2013 , 102, 212107	3.4	2
341	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> , 2013 , 31, 01A106	2.9	77
340	Evidence of the filling of nano-porosity in SiO2-like layers by an initiated-CVD monomer. <i>Microporous and Mesoporous Materials</i> , 2012 , 151, 434-439	5.3	28
339	Kinetic study of solid phase crystallisation of expanding thermal plasma deposited a-Si:H. <i>Thin Solid Films</i> , 2012 , 520, 5820-5825	2.2	5
338	The Relation Between the Bandgap and the Anisotropic Nature of Hydrogenated Amorphous Silicon. <i>IEEE Journal of Photovoltaics</i> , 2012 , 2, 94-98	3.7	25
337	Reaction mechanisms of atomic layer deposition of TaNx from Ta(NMe2)5 precursor and H2-based plasmas. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2012 , 30, 01A101	2.9	21
336	Gas-phase hydrosilylation of plasma-synthesized silicon nanocrystals with short- and long-chain alkynes. <i>Langmuir</i> , 2012 , 28, 17295-301	4	19
335	Improved conductivity of aluminum-doped ZnO: The effect of hydrogen diffusion from a hydrogenated amorphous silicon capping layer. <i>Journal of Applied Physics</i> , 2012 , 111, 063715	2.5	9
334	Controlling the resistivity gradient in aluminum-doped zinc oxide grown by plasma-enhanced chemical vapor deposition. <i>Journal of Applied Physics</i> , 2012 , 112, 043708	2.5	9
333	Remote plasma deposition of microcrystalline silicon thin-films: Film structure and the role of atomic hydrogen. <i>Journal of Non-Crystalline Solids</i> , 2012 , 358, 379-386	3.9	10

332	Synergistic etch rates during low-energetic plasma etching of hydrogenated amorphous carbon. Journal of Applied Physics, 2012 , 112, 013302	2.5	13
331	Plasma Atomic Layer Deposition 2012 , 131-157		5
330	Real time in situ spectroscopic ellipsometry of the growth and plasmonic properties of au nanoparticles on SiO2. <i>Nano Research</i> , 2012 , 5, 513-520	10	34
329	Atomic layer deposition for nanostructured Li-ion batteries. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2012 , 30, 010801	2.9	102
328	Detailed H(n= 2) density measurements in a magnetized hydrogen plasma jet. <i>Plasma Sources Science and Technology</i> , 2012 , 21, 024009	3.5	5
327	Surface passivation of phosphorus-diffused n+-type emitters by plasma-assisted atomic-layer deposited Al2O3. <i>Physica Status Solidi - Rapid Research Letters</i> , 2012 , 6, 4-6	2.5	67
326	Hydrogenated amorphous silicon pld solar cells deposited under well controlled ion bombardment using pulse-shaped substrate biasing. <i>Progress in Photovoltaics: Research and Applications</i> , 2012 , 20, 333-342	6.8	5
325	Plasma-enhanced Chemical Vapor Deposition of Aluminum Oxide Using Ultrashort Precursor Injection Pulses. <i>Plasma Processes and Polymers</i> , 2012 , 9, 761-771	3.4	13
324	Surface Dynamics of SiO2-like Films on Polymers Grown by DBD Assisted CVD at Atmospheric Pressure. <i>Plasma Processes and Polymers</i> , 2012 , 9, 1194-1207	3.4	15
323	In situ crystallization kinetics studies of plasma-deposited, hydrogenated amorphous silicon layers. <i>Journal of Applied Physics</i> , 2012 , 111, 033508	2.5	9
322	Ion-induced effects on grain boundaries and a-Si:H tissue quality in microcrystalline silicon films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2012 , 30, 061512	2.9	5
321	Initiated-chemical vapor deposition of organosilicon layers: Monomer adsorption, bulk growth, and process window definition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2012 , 30, 041503	2.9	25
320	Solid-phase crystallization of ultra high growth rate amorphous silicon films. <i>Journal of Applied Physics</i> , 2012 , 111, 103510	2.5	8
319	Influence of annealing and Al2O3 properties on the hydrogen-induced passivation of the Si/SiO2 interface. <i>Journal of Applied Physics</i> , 2012 , 111, 093713	2.5	112
318	Microfocus infrared ellipsometry characterization of air-exposed graphene flakes. <i>Applied Physics Letters</i> , 2011 , 99, 061909	3.4	14
317	Substrate Biasing during Plasma-Assisted ALD for Crystalline Phase-Control of TiO2 Thin Films. <i>Electrochemical and Solid-State Letters</i> , 2011 , 15, G1-G3		41
316	Er3+ and Si luminescence of atomic layer deposited Er-doped Al2O3 thin films on Si(100). <i>Journal of Applied Physics</i> , 2011 , 109, 113107	2.5	21
315	On the oxidation mechanism of microcrystalline silicon thin films studied by Fourier transform infrared spectroscopy. <i>Journal of Non-Crystalline Solids</i> , 2011 , 357, 884-887	3.9	23

314	Improved adhesion and tribological properties of fast-deposited hard graphite-like hydrogenated amorphous carbon films. <i>Diamond and Related Materials</i> , 2011 , 20, 1266-1272	3.5	12
313	Excellent Si surface passivation by low temperature SiO2 using an ultrathin Al2O3 capping film. <i>Physica Status Solidi - Rapid Research Letters</i> , 2011 , 5, 22-24	2.5	63
312	Plasma-Assisted Deposition of Au/SiO2 Multi-layers as Surface Plasmon Resonance-Based Red-Colored Coatings. <i>Plasmonics</i> , 2011 , 6, 255-260	2.4	12
311	H2: The Critical Juncture between Polymerization and Dissociation of Hydrocarbons in a Low-temperature Plasma. <i>Plasma Processes and Polymers</i> , 2011 , 8, 832-841	3.4	3
310	On the Effect of the Amorphous Silicon Microstructure on the Grain Size of Solid Phase Crystallized Polycrystalline Silicon. <i>Advanced Energy Materials</i> , 2011 , 1, 401-406	21.8	20
309	Plasma-Assisted Atomic Layer Deposition: Basics, Opportunities, and Challenges. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2011 , 29, 050801	2.9	565
308	Surface Hydride Composition of Plasma-Synthesized Si Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 20375-20379	3.8	34
307	Ion and Photon Surface Interaction during Remote Plasma ALD of Metal Oxides. <i>Journal of the Electrochemical Society</i> , 2011 , 158, G88	3.9	66
306	Investigating the flow dynamics and chemistry of an expanding thermal plasma through CH(AX) emission spectra. <i>Journal Physics D: Applied Physics</i> , 2011 , 44, 355205	3	
305	Effect of ion bombardment on the a-Si:H based surface passivation of c-Si surfaces. <i>Applied Physics Letters</i> , 2011 , 98, 242115	3.4	34
304	Population inversion in a magnetized hydrogen plasma expansion as a consequence of the molecular mutual neutralization process. <i>Physical Review E</i> , 2011 , 83, 036412	2.4	7
303	Atomic layer deposition of Ru from CpRu(CO)2Et using O2 gas and O2 plasma. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2011 , 29, 021016	2.9	46
302	Controlling the fixed charge and passivation properties of Si(100)/Al2O3 interfaces using ultrathin SiO2 interlayers synthesized by atomic layer deposition. <i>Journal of Applied Physics</i> , 2011 , 110, 093715	2.5	124
301	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> , 2011 , 14, H1		131
300	Dielectric Properties of Thermal and Plasma-Assisted Atomic Layer Deposited Al[sub 2]O[sub 3] Thin Films. <i>Journal of the Electrochemical Society</i> , 2011 , 158, G21	3.9	53
299	Remote Plasma ALD of SrTiO[sub 3] Using Cyclopentadienlyl-Based Ti and Sr Precursors. <i>Journal of the Electrochemical Society</i> , 2011 , 158, G34	3.9	25
298	Effective passivation of Si surfaces by plasma deposited SiOx/a-SiNx:H stacks. <i>Applied Physics Letters</i> , 2011 , 98, 222102	3.4	54
297	(Invited) All-Solid-State Batteries: A Challenging Route towards 3D Integration. <i>ECS Transactions</i> , 2010 , 33, 213-222	1	9

(2010-2010)

296	The Staebler-Wronski Effect: New Physical Approaches and Insights as a Route to Reveal its Origin. <i>Materials Research Society Symposia Proceedings</i> , 2010 , 1245, 1		23
295	Plasma-Enhanced ALD of TiO2 Using a Novel Cyclopentadienyl Alkylamido Precursor [Ti(CpMe)(NMe2)3] and O2 Plasma. <i>ECS Transactions</i> , 2010 , 33, 385-393	1	8
294	Comparison between aluminum oxide surface passivation films deposited with thermal ALD, plasma ALD and PECVD 2010 ,		6
293	The effect of low frequency pulse-shaped substrate bias on the remote plasma deposition of a-Si: H thin films. <i>Plasma Sources Science and Technology</i> , 2010 , 19, 015012	3.5	14
292	Corona charging and optical second-harmonic generation studies of the field-effect passivation of c-SI by Al2O3 films 2010 ,		4
291	Amorphization of Si(100) by Ar+-ion bombardment studied with spectroscopic and time-resolved second-harmonic generation. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films,</i> 2010 , 28, 293-301	2.9	5
290	Hydrogen induced passivation of Si interfaces by Al2O3 films and SiO2/Al2O3 stacks. <i>Applied Physics Letters</i> , 2010 , 97, 152106	3.4	143
289	Optical emission spectroscopy as a tool for studying, optimizing, and monitoring plasma-assisted atomic layer deposition processes. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2010 , 28, 77-87	2.9	51
288	Hard graphitelike hydrogenated amorphous carbon grown at high rates by a remote plasma. <i>Journal of Applied Physics</i> , 2010 , 107, 013305	2.5	25
287	Hydrogenated amorphous silicon deposited under accurately controlled ion bombardment using pulse-shaped substrate biasing. <i>Journal of Applied Physics</i> , 2010 , 108, 103304	2.5	14
286	Role of field-effect on c-Si surface passivation by ultrathin (200 nm) atomic layer deposited Al2O3. <i>Applied Physics Letters</i> , 2010 , 96, 112101	3.4	103
285	Influence of the Deposition Temperature on the c-Si Surface Passivation by Al[sub 2]O[sub 3] Films Synthesized by ALD and PECVD. <i>Electrochemical and Solid-State Letters</i> , 2010 , 13, H76		171
284	Ion probe detection of clusters in a remotely expanding thermal plasma. <i>Plasma Sources Science and Technology</i> , 2010 , 19, 065012	3.5	7
283	Shape Memory Polymer Thin Films Deposited by Initiated Chemical Vapor Deposition. <i>Macromolecules</i> , 2010 , 43, 8344-8347	5.5	11
282	Optical constants of graphene measured by spectroscopic ellipsometry. <i>Applied Physics Letters</i> , 2010 , 97, 091904	3.4	282
281	Low Temperature Plasma-Enhanced Atomic Layer Deposition of Metal Oxide Thin Films. <i>Journal of the Electrochemical Society</i> , 2010 , 157, P66	3.9	135
280	Conformality of Plasma-Assisted ALD: Physical Processes and Modeling. <i>Journal of the Electrochemical Society</i> , 2010 , 157, G241	3.9	133
279	High current diffuse dielectric barrier discharge in atmospheric pressure air for the deposition of thin silica-like films. <i>Applied Physics Letters</i> , 2010 , 96, 061502	3.4	53

278	Silicon surface passivation by ultrathin Al2O3 films synthesized by thermal and plasma atomic layer deposition. <i>Physica Status Solidi - Rapid Research Letters</i> , 2010 , 4, 10-12	2.5	163
277	Role of a-Si:H bulk in surface passivation of c-Si wafers. <i>Physica Status Solidi - Rapid Research Letters</i> , 2010 , 4, 172-174	2.5	11
276	Hydrogenated amorphous silicon based surface passivation of c-Si at high deposition temperature and rate. <i>Physica Status Solidi - Rapid Research Letters</i> , 2010 , 4, 206-208	2.5	9
275	Optical Characterization of Plasma-Deposited SiO2-Like Layers on Anisotropic Polymeric Substrates. <i>Plasma Processes and Polymers</i> , 2010 , 7, 766-774	3.4	13
274	Smooth and Self-Similar SiO2-like Films on Polymers Synthesized in Roll-to-Roll Atmospheric Pressure-PECVD for Gas Diffusion Barrier Applications. <i>Plasma Processes and Polymers</i> , 2010 , 7, 635-639	3.4	50
273	Hybrid Sputtering-Remote PECVD Deposition of Au Nanoparticles on SiO2 Layers for Surface Plasmon Resonance-Based Colored Coatings. <i>Plasma Processes and Polymers</i> , 2010 , 7, 657-664	3.4	13
272	Views on Macroscopic Kinetics of Plasma Polymerization: Acrylic Acid Revisited. <i>Plasma Processes and Polymers</i> , 2010 , 7, 887-888	3.4	14
271	Influence of hydrogen dilution on surface roughness development of a-Si:H thin films grown by remote plasma deposition. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2010 , 7, NA-NA		2
270	Composition and bonding structure of plasma-assisted ALD Al2O3 films. <i>Physica Status Solidi C:</i> Current Topics in Solid State Physics, 2010 , 7, NA-NA		32
269	Plasma-assisted atomic layer deposition of TiN/Al2O3 stacks for metal-oxide-semiconductor capacitor applications. <i>Journal of Applied Physics</i> , 2009 , 106, 114107	2.5	43
268	Roughening during XeF2 etching of Si(100) through interface layers: H:Si(100) and a-SiBi(100). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2009 , 27, 367-375	2.9	1
267	Accurate control of ion bombardment in remote plasmas using pulse-shaped biasing. <i>Journal of Applied Physics</i> , 2009 , 106, 073303	2.5	27
266	B-spline parametrization of the dielectric function applied to spectroscopic ellipsometry on amorphous carbon. <i>Journal of Applied Physics</i> , 2009 , 106, 123503	2.5	51
265	Stability of Al2O3 and Al2O3/a-SiNx:H stacks for surface passivation of crystalline silicon. <i>Journal of Applied Physics</i> , 2009 , 106, 114907	2.5	123
264	On the surface roughness development of hydrogenated amorphous silicon deposited at low growth rates. <i>Applied Physics Letters</i> , 2009 , 95, 021503	3.4	6
263	Ion Assisted ETP-CVD a-Si:H at Well Defined Ion Energies. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1153, 1		1
262	On the formation mechanisms of the diffuse atmospheric pressure dielectric barrier discharge in CVD processes of thin silica-like films. <i>Plasma Sources Science and Technology</i> , 2009 , 18, 045021	3.5	52
261	Novel approach to thin film polycrystalline silicon on glass. <i>Materials Letters</i> , 2009 , 63, 1817-1819	3.3	23

(2008-2009)

260	High Quality SiO2-like Layers by Large Area Atmospheric Pressure Plasma Enhanced CVD: Deposition Process Studies by Surface Analysis. <i>Plasma Processes and Polymers</i> , 2009 , 6, 693-702	3.4	43
259	Silicon surface passivation by hot-wire CVD Si thin films studied by in situ surface spectroscopy. <i>Thin Solid Films</i> , 2009 , 517, 3456-3460	2.2	17
258	Remote Plasma ALD of Platinum and Platinum Oxide Films. <i>Electrochemical and Solid-State Letters</i> , 2009 , 12, G34		100
257	In situspectroscopic ellipsometry as a versatile tool for studying atomic layer deposition. <i>Journal Physics D: Applied Physics</i> , 2009 , 42, 073001	3	232
256	Surface reactions during atomic layer deposition of Pt derived from gas phase infrared spectroscopy. <i>Applied Physics Letters</i> , 2009 , 95, 013114	3.4	102
255	Silicon surface passivation by atomic layer deposited Al2O3. <i>Journal of Applied Physics</i> , 2008 , 104, 0449	03 .5	361
254	A capacitive probe with shaped probe bias for ion flux measurements in depositing plasmas. <i>Review of Scientific Instruments</i> , 2008 , 79, 115104	1.7	10
253	Negative charge and charging dynamics in Al2O3 films on Si characterized by second-harmonic generation. <i>Journal of Applied Physics</i> , 2008 , 104, 073701	2.5	119
252	Optical second-harmonic generation in thin film systems. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2008 , 26, 1519-1537	2.9	30
251	On the c-Si surface passivation mechanism by the negative-charge-dielectric Al2O3. <i>Journal of Applied Physics</i> , 2008 , 104, 113703	2.5	414
250	High efficiency n-type Si solar cells on Al2O3-passivated boron emitters. <i>Applied Physics Letters</i> , 2008 , 92, 253504	3.4	273
249	Conformal coverage of poly(3,4-ethylenedioxythiophene) films with tunable nanoporosity via oxidative chemical vapor deposition. <i>ACS Nano</i> , 2008 , 2, 1959-67	16.7	87
248	Deposition of TiN and TaN by Remote Plasma ALD for Cu and Li Diffusion Barrier Applications. Journal of the Electrochemical Society, 2008 , 155, G287	3.9	76
247	Formation and Expansion Phases of an Atmospheric Pressure Glow Discharge in a PECVD Reactor via Fast ICCD Imaging. <i>IEEE Transactions on Plasma Science</i> , 2008 , 36, 968-969	1.3	18
246	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> , 2008 , 103, 03370	4 ^{2.5}	60
245	Reaction mechanisms during plasma-assisted atomic layer deposition of metal oxides: A case study for Al2O3. <i>Journal of Applied Physics</i> , 2008 , 103, 103302	2.5	92
244	Plasma-assisted atomic layer deposition of Ta2O5 from alkylamide precursor and remote O2 plasma. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2008 , 26, 472-480	2.9	26
243	A hard graphitelike hydrogenated amorphous carbon grown at high deposition rate (>15nmE). <i>Applied Physics Letters</i> , 2008 , 92, 221502	3.4	16

242	Real-time study of aBi:HBBi heterointerface formation and epitaxial Si growth by spectroscopic ellipsometry, infrared spectroscopy, and second-harmonic generation. <i>Physical Review B</i> , 2008 , 77,	3.3	39
241	Surface chemistry of plasma-assisted atomic layer deposition of Al2O3 studied by infrared spectroscopy. <i>Applied Physics Letters</i> , 2008 , 92, 231904	3.4	108
240	The atomic hydrogen flux to silicon growth flux ratio during microcrystalline silicon solar cell deposition. <i>Applied Physics Letters</i> , 2008 , 93, 111914	3.4	39
239	Influence of rarefaction on the flow dynamics of a stationary supersonic hot-gas expansion. <i>Physical Review E</i> , 2008 , 77, 036703	2.4	6
238	Ion-radical synergy in HfO2 etching studied with a XeF2/Ar+ beam setup. <i>Journal of Applied Physics</i> , 2008 , 103, 083304	2.5	5
237	Optical and chemical characterization of expanding thermal plasma-deposited carbon-containing silicon dioxide-like films. <i>Thin Solid Films</i> , 2008 , 516, 8547-8553	2.2	20
236	Surface passivation of high-efficiency silicon solar cells by atomic-layer-deposited Al2O3. <i>Progress in Photovoltaics: Research and Applications</i> , 2008 , 16, 461-466	6.8	361
235	Remote Plasma-Enhanced Metalorganic Chemical Vapor Deposition of Aluminum Oxide Thin Films. <i>Plasma Processes and Polymers</i> , 2008 , 5, 645-652	3.4	7
234	Hot-wire deposition of a-Si:H thin films on wafer substrates studied by real-time spectroscopic ellipsometry and infrared spectroscopy. <i>Thin Solid Films</i> , 2008 , 516, 511-516	2.2	6
233	Deep Reactive Ion Etching of Through Silicon Vias 2008 , 45-91		1
233	Deep Reactive Ion Etching of Through Silicon Vias 2008, 45-91 High-Rate Anisotropic Silicon Etching with the Expanding Thermal Plasma Technique. Electrochemical and Solid-State Letters, 2007, 10, H309		7
	High-Rate Anisotropic Silicon Etching with the Expanding Thermal Plasma Technique.	2.5	
232	High-Rate Anisotropic Silicon Etching with the Expanding Thermal Plasma Technique. Electrochemical and Solid-State Letters, 2007, 10, H309 Evolution of the electrical and structural properties during the growth of Al doped ZnO films by remote plasma-enhanced metalorganic chemical vapor deposition. Journal of Applied Physics, 2007,	2.5	7
232	High-Rate Anisotropic Silicon Etching with the Expanding Thermal Plasma Technique. <i>Electrochemical and Solid-State Letters</i> , 2007 , 10, H309 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> , 2007 , 102, 043709 Optical properties of Y2O3 thin films doped with spatially controlled Er3+ by atomic layer	2.5	7 100 21
232 231 230	High-Rate Anisotropic Silicon Etching with the Expanding Thermal Plasma Technique. <i>Electrochemical and Solid-State Letters</i> , 2007 , 10, H309 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> , 2007 , 102, 043709 Optical properties of Y2O3 thin films doped with spatially controlled Er3+ by atomic layer deposition. <i>Journal of Applied Physics</i> , 2007 , 101, 123116	2.5	7 100 21
232 231 230 229	High-Rate Anisotropic Silicon Etching with the Expanding Thermal Plasma Technique. <i>Electrochemical and Solid-State Letters</i> , 2007 , 10, H309 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> , 2007 , 102, 043709 Optical properties of Y2O3 thin films doped with spatially controlled Er3+ by atomic layer deposition. <i>Journal of Applied Physics</i> , 2007 , 101, 123116 Microcrystalline silicon deposition: Process stability and process control. <i>Thin Solid Films</i> , 2007 , 515, 74 On the H-exchange of ammonia and silica hydroxyls in the presence of Rh nanoparticles. <i>Applied</i>	2.5 15 5 -745	7 100 21 5930
232 231 230 229 228	High-Rate Anisotropic Silicon Etching with the Expanding Thermal Plasma Technique. Electrochemical and Solid-State Letters, 2007, 10, H309 Evolution of the electrical and structural properties during the growth of Al doped ZnO films by remote plasma-enhanced metalorganic chemical vapor deposition. Journal of Applied Physics, 2007, 102, 043709 Optical properties of Y2O3 thin films doped with spatially controlled Er3+ by atomic layer deposition. Journal of Applied Physics, 2007, 101, 123116 Microcrystalline silicon deposition: Process stability and process control. Thin Solid Films, 2007, 515, 74 On the H-exchange of ammonia and silica hydroxyls in the presence of Rh nanoparticles. Applied Surface Science, 2007, 253, 3600-3607 Remote Plasma Deposited Silicon Dioxide-Like Film Densification by Means of RF Substrate Biasing:	2.5 15 5.7 45 6.7	7 100 21 5930

(2006-2007)

224	Transient depletion of source gases during materials processing: a case study on the plasma deposition of microcrystalline silicon. <i>New Journal of Physics</i> , 2007 , 9, 280-280	2.9	31
223	Synthesis and in situ characterization of low-resistivity TaNx films by remote plasma atomic layer deposition. <i>Journal of Applied Physics</i> , 2007 , 102, 083517	2.5	70
222	Microcrystalline silicon solar cells with an open-circuit voltage above 600mV. <i>Applied Physics Letters</i> , 2007 , 90, 183504	3.4	29
221	Absolute in situ measurement of surface dangling bonds during a-Si:H growth. <i>Applied Physics Letters</i> , 2007 , 90, 161918	3.4	15
220	The effect of ion-surface and ion-bulk interactions during hydrogenated amorphous silicon deposition. <i>Journal of Applied Physics</i> , 2007 , 102, 073523	2.5	34
219	Probing the phase composition of silicon films in situ by etch product detection. <i>Applied Physics Letters</i> , 2007 , 91, 161902	3.4	17
218	a-Si:HĒ-Si heterointerface formation and epitaxial growth studied by real time optical probes. <i>Applied Physics Letters</i> , 2007 , 90, 202108	3.4	16
217	Deposition of TiN and HfO2 in a commercial 200mm remote plasma atomic layer deposition reactor. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2007 , 25, 1357	2.9	90
216	Real time spectroscopic ellipsometry on ultrathin (. Journal of Applied Physics, 2007, 101, 123529	2.5	11
215	Relation of the Si?H stretching frequency to the nanostructural Si?H bulk environment. <i>Physical Review B</i> , 2007 , 76,	3.3	108
214	Optimisation of Microcrystaline Silicon Deposited by Expanding Thermal Plasma Chemical Vapor Deposition for Solar-Cell Application. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 989, 2		
213	Hidden parameters in the plasma deposition of microcrystalline silicon solar cells. <i>Journal of Materials Research</i> , 2007 , 22, 1767-1774	2.5	10
212	Manipulating the Hydrogen-Bonding Configuration in ETP-CVD a-Si:H. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 989, 4		1
211	Reaction mechanisms and thin a-C:H film growth from low energy hydrocarbon radicals. <i>Journal of Physics: Conference Series</i> , 2007 , 86, 012020	0.3	16
210	Production mechanisms of NH and NH2 radicals in N2-H2 plasmas. <i>Journal of Physical Chemistry A</i> , 2007 , 111, 11460-72	2.8	32
209	Plasma and Thermal ALD of Al[sub 2]O[sub 3] in a Commercial 200 mm ALD Reactor. <i>Journal of the Electrochemical Society</i> , 2007 , 154, G165	3.9	196
208	Excellent passivation of highly doped p-type Si surfaces by the negative-charge-dielectric Al2O3. <i>Applied Physics Letters</i> , 2007 , 91, 112107	3.4	317
207	Real-time study of HWCVD a-Si:H film growth using optical second harmonic generation spectroscopy. <i>Thin Solid Films</i> , 2006 , 501, 70-74	2.2	

206	Optoelectronic properties of expanding thermal plasma deposited textured zinc oxide: Effect of aluminum doping. <i>Journal of Electronic Materials</i> , 2006 , 35, 711-716	1.9	7
205	ALD Options for Si-integrated Ultrahigh-density Decoupling Capacitors in Pore and Trench Designs. <i>ECS Transactions</i> , 2006 , 3, 173-181	1	14
204	Downstream ion and radical densities in an ArMH3plasma generated by the expanding thermal plasma technique. <i>Plasma Sources Science and Technology</i> , 2006 , 15, 546-555	3.5	12
203	On the hexamethyldisiloxane dissociation paths in a remote Ar-fed expanding thermal plasma. <i>Plasma Sources Science and Technology</i> , 2006 , 15, 421-431	3.5	31
202	Remote Plasma and Thermal ALD of Al2O3 for Trench Capacitor Applications. <i>ECS Transactions</i> , 2006 , 3, 67-77	1	3
201	Highly Efficient Microcrystalline Silicon Solar Cells Deposited from a Pure SiH4 Flow. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 910, 1		1
200	Opportunities for Plasma-Assisted Atomic Layer Deposition. <i>ECS Transactions</i> , 2006 , 3, 183-190	1	19
199	High-Rate Anisotropic Silicon Etching with the Expanding Thermal Plasma Technique. <i>ECS Transactions</i> , 2006 , 3, 291-298	1	1
198	Spectroscopic second-harmonic generation during Ar+-ion bombardment of Si(100). <i>Physical Review B</i> , 2006 , 74,	3.3	10
197	Attenuated total reflection infrared spectroscopy for studying adsorbates on planar model catalysts: CO adsorption on silica supported Rh nanoparticles. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2006 , 24, 296-304	2.9	9
196	In situ spectroscopic ellipsometry study on the growth of ultrathin TiN films by plasma-assisted atomic layer deposition. <i>Journal of Applied Physics</i> , 2006 , 100, 023534	2.5	81
195	Probing hydrogenated amorphous silicon surface states by spectroscopic and real-time second-harmonic generation. <i>Physical Review B</i> , 2006 , 73,	3.3	15
194	High-rate plasma-deposited SiO2 films for surface passivation of crystalline silicon. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2006 , 24, 1823-1830	2.9	41
193	Unraveling the deposition mechanism in a-C:H thin-film growth: A molecular-dynamics study for the reaction behavior of C3 and C3H radicals with a-C:H surfaces. <i>Journal of Applied Physics</i> , 2006 , 99, 01490	2 ^{.5}	23
192	Densification of thin a-C: H films grown from low-kinetic energy hydrocarbon radicals under the influence of H and C particle fluxes: a molecular dynamics study. <i>Journal Physics D: Applied Physics</i> , 2006 , 39, 1948-1953	3	3
191	N, NH, and NH2 radical densities in a remote ArNH3BiH4 plasma and their role in silicon nitride deposition. <i>Journal of Applied Physics</i> , 2006 , 100, 093303	2.5	21
190	Ultralow surface recombination of c-Si substrates passivated by plasma-assisted atomic layer deposited Al2O3. <i>Applied Physics Letters</i> , 2006 , 89, 042112	3.4	562
189	Low-Temperature Deposition of TiN by Plasma-Assisted Atomic Layer Deposition. <i>Journal of the Electrochemical Society</i> , 2006 , 153, G956	3.9	89

(2005-2006)

188	Effect of hydrogen on the growth of thin hydrogenated amorphous carbon films from thermal energy radicals. <i>Applied Physics Letters</i> , 2006 , 88, 141922	3.4	32
187	Amorphous silicon layer characteristics during 70\textit{0000eV} Ar+-ion bombardment of Si(100)a). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 1933-1940	2.9	12
186	Nitrogen incorporation during metal organic chemical vapor deposition of ZnO films using a remote ArN2 plasma. <i>Applied Physics Letters</i> , 2006 , 89, 022110	3.4	10
185	Plasma-assisted atomic layer deposition of Al2O3 moisture permeation barriers on polymers. <i>Applied Physics Letters</i> , 2006 , 89, 081915	3.4	231
184	In situ reaction mechanism studies of plasma-assisted atomic layer deposition of Al2O3. <i>Applied Physics Letters</i> , 2006 , 89, 131505	3.4	95
183	New insights in microcrystalline silicon deposition with expanding thermal plasma chemical vapor deposition. <i>Journal of Non-Crystalline Solids</i> , 2006 , 352, 933-936	3.9	3
182	High-rate deposition of nanocrystalline silicon using the expanding thermal plasma technique. Journal of Non-Crystalline Solids, 2006 , 352, 915-918	3.9	8
181	Ammonia adsorption and decomposition on silica supported Rh nanoparticles observed by in situ attenuated total reflection infrared spectroscopy. <i>Applied Surface Science</i> , 2006 , 253, 572-580	6.7	18
180	Expanding thermal plasma-deposited ZnO films: Substrate temperature influence on films properties. Film growth studies. <i>Superlattices and Microstructures</i> , 2006 , 39, 348-357	2.8	7
179	Substrate temperature dependence of the roughness evolution of HWCVD a-Si:H studied by real-time spectroscopic ellipsometry. <i>Thin Solid Films</i> , 2006 , 501, 88-91	2.2	13
178	Quasi-ice monolayer on atomically smooth amorphous SiO2 at room temperature observed with a high-finesse optical resonator. <i>Physical Review Letters</i> , 2005 , 95, 166104	7.4	46
177	Density and production of NH and NH2 in an ArNH3 expanding plasma jet. <i>Journal of Applied Physics</i> , 2005 , 98, 093301	2.5	29
176	Optical and chemical characterization of expanding thermal plasma deposited silicon dioxide-like films. <i>Thin Solid Films</i> , 2005 , 484, 104-112	2.2	27
175	High-rate deposition of microcrystalline silicon with an expanding thermal plasma. <i>Thin Solid Films</i> , 2005 , 491, 280-293	2.2	11
174	Property control of expanding thermal plasma deposited textured zinc oxide with focus on thin film solar cell applications. <i>Thin Solid Films</i> , 2005 , 492, 298-306	2.2	20
173	Atmospheric glow stabilization. Do we need pre-ionization?. <i>Surface and Coatings Technology</i> , 2005 , 200, 46-50	4.4	29
172	Interaction of SiH3 radicals with deuterated (hydrogenated) amorphous silicon surfaces. <i>Surface Science</i> , 2005 , 598, 35-44	1.8	17
171	Threshold ionization mass spectrometry study of hydrogenated amorphous carbon films growth precursors. <i>Chemical Physics Letters</i> , 2005 , 402, 37-42	2.5	30

170	Dry etching of surface textured zinc oxide using a remote argonflydrogen plasma. <i>Applied Surface Science</i> , 2005 , 241, 321-325	6.7	22
169	Detailed TIMS study of Ar/C(2)H(2) expanding thermal plasma: identification of a-C:H film growth precursors. <i>Journal of Physical Chemistry A</i> , 2005 , 109, 10153-67	2.8	24
168	High rate (~3 nm/s) deposition of dense silicon nitride films at low substrate temperatures (. <i>Thin Solid Films</i> , 2005 , 484, 46-53	2.2	15
167	Initial growth and properties of atomic layer deposited TiN films studied by in situ spectroscopic ellipsometry. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2005 , 2, 3958-3962		10
166	Spectroscopic second harmonic generation as a diagnostic tool in silicon materials processing. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2005 , 2, 3968-3972		2
165	Plasma Processes and Film Growth of Expanding Thermal Plasma Deposited Textured Zinc Oxide. <i>Plasma Processes and Polymers</i> , 2005 , 2, 618-626	3.4	6
164	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> , 2005 , 13, 705-712	6.8	33
163	Surface-diffusion-controlled incorporation of nanosized voids during hydrogenated amorphous silicon film growth. <i>Applied Physics Letters</i> , 2005 , 86, 041909	3.4	23
162	Threshold ionization mass spectrometry of reactive species in remote Art 2H2 expanding thermal plasma. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2005 , 23, 1400-1412	2.9	37
161	Absence of the enhanced intra-4f transition cross section at 1.5th of Er3+ in Si-rich SiO2. <i>Applied Physics Letters</i> , 2005 , 86, 241109	3.4	16
160	Highly efficient microcrystalline silicon solar cells deposited from a pure SiH4 flow. <i>Applied Physics Letters</i> , 2005 , 87, 263503	3.4	60
159	Plasma-assisted atomic layer deposition of TiN monitored by in situ spectroscopic ellipsometry. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2005, 23, L5-L8	2.9	28
158	Plasma-surface interaction and surface diffusion during silicon-based thin-film growth. <i>IEEE Transactions on Plasma Science</i> , 2005 , 33, 234-235	1.3	4
157	Plasma-assisted Atomic Layer Deposition of TiN Films at low Deposition Temperature for High-aspect Ratio Applications. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 863, B6.4-1		3
156	Time-resolved cavity ringdown study of the Si and SiH3 surface reaction probability during plasma deposition of a-Si:H at different substrate temperatures. <i>Journal of Applied Physics</i> , 2004 , 96, 4094-410	6 ^{2.5}	35
155	The role of the silyl radical in plasma deposition of microcrystalline silicon. <i>Journal of Applied Physics</i> , 2004 , 96, 4076-4083	2.5	7
154	Two-photon absorption laser induced fluorescence on O and O3 in a dc plasma for oxidation of aluminum. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2004 , 22, L11-L14	2.9	1
153	Spectroscopic second harmonic generation measured on plasma-deposited hydrogenated amorphous silicon thin films. <i>Applied Physics Letters</i> , 2004 , 85, 4049-4051	3.4	18

152	Direct and highly sensitive measurement of defect-related absorption in amorphous silicon thin films by cavity ringdown spectroscopy. <i>Applied Physics Letters</i> , 2004 , 84, 3079-3081	3.4	33
151	Plasma diagnostic study of silicon nitride film growth in a remote ArH2N2BiH4 plasma: Role of N and SiHn radicals. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2004 , 22, 96-106	2.9	32
150	Roughness evolution of high-rate deposited a-SiNx:H films studied by atomic force microscopy and real time spectroscopic ellipsometry. <i>Materials Research Society Symposia Proceedings</i> , 2004 , 808, 532		2
149	Hydrogen Injection in ETP Plasma Jet for Fast-Deposition of High-Quality a-Si:H. <i>Materials Research Society Symposia Proceedings</i> , 2004 , 808, 609		
148	New ultrahigh vacuum setup and advanced diagnostic techniques for studying a-Si:H film growth by radical beams. <i>Materials Research Society Symposia Proceedings</i> , 2004 , 808, 491		4
147	External rf substrate biasing during a-Si:H film growth using the expanding thermal plasma technique. <i>Materials Research Society Symposia Proceedings</i> , 2004 , 808, 479		5
146	Electron beam induced fluorescence measurements of the degree of hydrogen dissociation in hydrogen plasmas. <i>Plasma Sources Science and Technology</i> , 2004 , 13, 729-738	3.5	2
145	Deposition of organosilicon thin films using a remote thermal plasma. <i>Thin Solid Films</i> , 2004 , 449, 52-62	2.2	20
144	Vapor Pressures of Precursors for the Chemical Vapor Deposition of Silicon-Based Films. <i>Chemical Vapor Deposition</i> , 2004 , 10, 20-22		6
143	Expanding thermal plasma for low-k dielectrics: engineering the film chemistry by means of specific dissociation paths in the plasma. <i>Materials Science in Semiconductor Processing</i> , 2004 , 7, 283-288	4.3	23
142	ArgonBxygen plasma treatment of deposited organosilicon thin films. <i>Thin Solid Films</i> , 2004 , 449, 40-51	2.2	27
141	Molecular dynamics simulations for the growth of diamond-like carbon films from low kinetic energy species. <i>Diamond and Related Materials</i> , 2004 , 13, 1873-1881	3.5	50
140	Measurement of absolute radical densities in a plasma using modulated-beam line-of-sight threshold ionization mass spectrometry. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2004 , 22, 71-81	2.9	52
139	Influence of the high-temperature f iringstep on high-rate plasma deposited silicon nitride films used as bulk passivating antireflection coatings on silicon solar cells. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and</i>		89
138	Stripping of photoresist using a remote thermal Ar/O2 and Ar/N2/O2 plasma. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2003 , 21, 61		24
137	The a-Si:H Growth Mechanism: Temperature Study of the SiH3 Surface Reactivity and the Surface Silicon Hydride Composition During Film Growth. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 762, 931		3
136	Temperature dependence of the surface reactivity of SiH3 radicals and the surface silicon hydride composition during amorphous silicon growth. <i>Surface Science</i> , 2003 , 547, L865-L870	1.8	31
135	Surface hydride composition of plasma deposited hydrogenated amorphous silicon: in situ infrared study of ion flux and temperature dependence. <i>Surface Science</i> , 2003 , 530, 1-16	1.8	46

134	Bulk passivation of multicrystalline silicon solar cells induced by high-rate-deposited (> 1 nm/s) silicon nitride films. <i>Progress in Photovoltaics: Research and Applications</i> , 2003 , 11, 125-130	6.8	20
133	Ellipsometric characterization of expanding thermal plasma deposited SiO2-like films. <i>Thin Solid Films</i> , 2003 , 427, 137-141	2.2	20
132	Plasma chemistry during the deposition of a-C:H films and its influence on film properties. <i>Diamond and Related Materials</i> , 2003 , 12, 90-97	3.5	46
131	Determining the material structure of microcrystalline silicon from Raman spectra. <i>Journal of Applied Physics</i> , 2003 , 94, 3582-3588	2.5	274
130	Supersonically expanding cascaded arc plasma properties: comparison of Ne, Ar and Xe. <i>Plasma Sources Science and Technology</i> , 2003 , 12, 107-118	3.5	8
129	Analysis of the expanding thermal argonBxygen plasma gas phase. <i>Plasma Sources Science and Technology</i> , 2003 , 12, 539-553	3.5	32
128	Design of a fast in situ infrared diagnostic tool. Review of Scientific Instruments, 2003, 74, 2675-2684	1.7	2
127	Temperature dependence of the surface roughness evolution during hydrogenated amorphous silicon film growth. <i>Applied Physics Letters</i> , 2003 , 82, 865-867	3.4	65
126	Role of carbon atoms in the remote plasma deposition of hydrogenated amorphous carbon. <i>Journal of Applied Physics</i> , 2003 , 94, 6932-6938	2.5	29
125	Absolute densities of N and excited N2 in a N2 plasma. <i>Applied Physics Letters</i> , 2003 , 83, 4918-4920	3.4	63
124	Vacancies and voids in hydrogenated amorphous silicon. <i>Applied Physics Letters</i> , 2003 , 82, 1547-1549	3.4	199
123	Material Structure of Microcrystalline Silicon Deposited with an Expanding Thermal Plasma. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 762, 1531		2
122	On the Role of Surface Diffusion and Its Relation to the Hydrogen Incorporation During Hydrogenated Amorphous Silicon Growth. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 762, 1031		1
121	Thin Film Cavity Ringdown Spectroscopy and Second Harmonic Generation on Thin a-Si:H Films. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 762, 1981		2
120	Expanding thermal plasma for low-k dielectrics deposition. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 766, 691		1
119	Post-transit Analysis of Transient Photocurrents from High-Deposition-Rate a-Si:H Samples. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 762, 1961		
118	High-rate (> 1nm/s) and low-temperature (Materials Research Society Symposia Proceedings, 2003 , 762, 1861		
117	Simulations of Buffer Layers in a-Si:H Thin Film Solar Cells Deposited with an Expanding Thermal Plasma. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 762, 751		

High-rate a-Si:H and Ē-Si:H Film Growth Studied by Advanced Plasma and in situ Film Diagnostics. Materials Research Society Symposia Proceedings, **2002**, 715, 2561

115	Gas phase deposition of hybrid coatings. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 726, 1		1
114	Mechanism and activation energy barrier for H abstraction by H(D) from a-Si:H surfaces. <i>Surface Science</i> , 2002 , 515, L469-L474	1.8	27
113	Time-resolved cavity ring-down spectroscopic study of the gas phase and surface loss rates of Si and SiH3 plasma radicals. <i>Chemical Physics Letters</i> , 2002 , 360, 189-193	2.5	33
112	High-rate deposition of a-SiNx:H for photovoltaic applications by the expanding thermal plasma. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2002 , 20, 1704-1715	2.9	33
111	Abstraction of atomic hydrogen by atomic deuterium from an amorphous hydrogenated silicon surface. <i>Journal of Chemical Physics</i> , 2002 , 117, 10805-10816	3.9	44
110	In situ probing of surface hydrides on hydrogenated amorphous silicon using attenuated total reflection infrared spectroscopy. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2002 , 20, 781-789	2.9	28
109	Expanding Thermal Plasma Deposition of Silicon Dioxide-Like Films for Microelectronic Devices. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 715, 1931		7
108	Textured Zinc Oxide by Expanding Thermal Plasma CVD: the Effect of Aluminum Doping. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 730, 1		1
107	Integration of Expanding Thermal Plasma deposited Hydrogenated Amorphous Silicon in Solar Cells. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 715, 651		2
106	Stationary supersonic plasma expansion: continuum fluid mechanics versus direct simulation Monte Carlo method. <i>Journal Physics D: Applied Physics</i> , 2002 , 35, 1362-1372	3	33
105	Wall-association processes in expanding thermal hydrogen plasmas. <i>IEEE Transactions on Plasma Science</i> , 2002 , 30, 146-147	1.3	2
104	On the Surface Roughness Evolution During a-Si:H Growth. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 715, 1511		1
103	An expanding thermal plasma for deposition of surface textured ZnO:Al with focus on thin film solar cell applications. <i>Applied Surface Science</i> , 2001 , 173, 40-43	6.7	54
102	Surface textured ZnO films for thin film solar cell applications by expanding thermal plasma CVD. <i>Thin Solid Films</i> , 2001 , 392, 226-230	2.2	82
101	Amorphous silicon solar cells on natively textured ZnO grown by PECVD. <i>Thin Solid Films</i> , 2001 , 392, 315	5 <u>-2</u> 319	64
100	Investigation of processes in low-pressure expanding thermal plasmas used for carbon nitride deposition: I. Ar/N2/C2H2plasma. <i>Plasma Sources Science and Technology</i> , 2001 , 10, 513-523	3.5	19
99	Investigation of processes in low-pressure expanding thermal plasmas used for carbon nitride deposition: II. Ar/N2plasma with graphite nozzle. <i>Plasma Sources Science and Technology</i> , 2001 , 10, 524-5	529	10

98	Improvement of hydrogenated amorphous silicon properties with increasing contribution of SiH3 to film growth. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2001 , 19, 102	7-1029	31
97	Cavity ring down detection of SiH3 in a remote SiH4 plasma and comparison with model calculations and mass spectrometry. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2001 , 19, 467-476	2.9	44
96	Hydrogenated amorphous silicon deposited at very high growth rates by an expanding Ar III 2BiH4 plasma. <i>Journal of Applied Physics</i> , 2001 , 89, 2404-2413	2.5	87
95	Cavity ring down study of the densities and kinetics of Si and SiH in a remote Ar-H2-SiH4 plasma. Journal of Applied Physics, 2001, 89, 2065-2073	2.5	55
94	In Situ Probing and Atomistic Simulation of a-Si:H Plasma Deposition. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 664, 111		17
93	Ex situ and in situ defect density measurements of a-Si:H by means of the cavity ring down absorption technique. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 664, 2241		4
92	Importance of Defect Density near the p-i Interface for a-Si:H Solar Cell Performance. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 664, 2441		2
91	Material properties and growth process of microcrystalline silicon with growth rates in excess of 1 nm/s. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 664, 421		7
90	High-rate deposition of a-SiNx:H films for photovoltaic applications. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 664, 861		3
89	Relation between Growth Precursors and Film Properties for Plasma Deposition of a-Si:H at Rates up to 100 🛮 🏂. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 609, 421		2
88	Surface roughness evolution of a-Si:H growth and its relation to the growth mechanism. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 609, 761		17
87	Cavity ring down detection of SiH3 on the broadband □ 12A1? <- X 2A1 transition in a remote Ar⊞2BiH4 plasma. <i>Chemical Physics Letters</i> , 2000 , 326, 400-406	2.5	22
86	Use ofin situFTIR spectroscopy and mass spectrometry in an expanding hydrocarbon plasma. <i>Plasma Sources Science and Technology</i> , 2000 , 9, 615-624	3.5	20
85	In situ single wavelength ellipsometry studies of high rate hydrogenated amorphous silicon growth using a remote expanding thermal plasma. <i>Journal of Applied Physics</i> , 2000 , 88, 6388-6394	2.5	15
84	Modeling of the formation of cationic silicon clusters in a remote Ar/H2/SiH4 plasma. <i>Journal of Applied Physics</i> , 2000 , 88, 537-543	2.5	3
83	Film growth precursors in a remote SiH4 plasma used for high-rate deposition of hydrogenated amorphous silicon. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2000 , 18, 2153	2.9	60
82	Surface reaction probability during fast deposition of hydrogenated amorphous silicon with a remote silane plasma. <i>Journal of Applied Physics</i> , 2000 , 87, 3313-3320	2.5	41
81	Plasma and surface chemistry effects during high rate deposition of hydrogenated amorphous silicon. <i>Plasma Physics and Controlled Fusion</i> , 1999 , 41, A365-A378	2	15

80	Formation of large positive silicon-cluster ions in a remote silane plasma. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1999 , 17, 1531-1535	2.9	20	
79	Molecular Activated Recombination in Detached Recombining Plasmas. <i>Physical Review Letters</i> , 1999 , 82, 2215-2215	7.4	3	
78	Detection of CH in an expanding argon/acetylene plasma using cavity ring down absorption spectroscopy. <i>Chemical Physics Letters</i> , 1999 , 310, 405-410	2.5	55	
77	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> , 1999 , 86, 4029-4039	2.5	69	
76	Argon ion-induced dissociation of acetylene in an expanding Ar/C2H2 plasma. <i>Applied Physics Letters</i> , 1999 , 74, 2927-2929	3.4	34	
75	Plasma chemistry of an expanding Ar/C2H2 plasma used for fast deposition of a-C:H. <i>Diamond and Related Materials</i> , 1999 , 8, 677-681	3.5	23	
74	The Role of H in the Growth Mechanism of PECVD a-Si:H. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 557, 13		9	
73	Remote Silane Plasma Chemistry Effects and their Correlation with a-Si:H Film Properties. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 557, 25		16	
72	Novel Amorphous Silicon Solar Cell using a Manufacturing Procedure with a Temporary Superstrate. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 557, 713		3	
71	Evidence for charge exchange between N+ and N2(A3Hu) in a low-temperature nitrogen plasma. <i>Chemical Physics Letters</i> , 1998 , 290, 379-384	2.5	15	
70	Characterization of carbon nitride thin films deposited by a combined RF and DC plasma beam. <i>Thin Solid Films</i> , 1998 , 325, 123-129	2.2	25	
69	Amorphous hydrogenated carbon nitride films deposited via an expanding thermal plasma at high growth rates. <i>Thin Solid Films</i> , 1998 , 333, 29-34	2.2	26	
68	Langmuir probe measurements in expanding magnetized argon, nitrogen and hydrogen plasmas. <i>Surface and Coatings Technology</i> , 1998 , 98, 1416-1419	4.4	6	
67	A model for the deposition of a-C:H using an expanding thermal arc. <i>Surface and Coatings Technology</i> , 1998 , 98, 1584-1589	4.4	14	
66	The expanding thermal arc plasma: the low-flow regime. <i>Plasma Sources Science and Technology</i> , 1998 , 7, 28-35	3.5	7	
65	Hydrogen poor cationic silicon clusters in an expanding argon f lydrogen f lilane plasma. <i>Applied Physics Letters</i> , 1998 , 72, 2397-2399	3.4	40	
64	Plasma chemistry aspects of a-Si:H deposition using an expanding thermal plasma. <i>Journal of Applied Physics</i> , 1998 , 84, 2426-2435	2.5	108	
63	Hydrogen in a-Si:H Deposited by an Expanding Thermal Plasma: A Temperature, Growth Rate and Isotope Study. <i>Materials Research Society Symposia Proceedings</i> , 1998 , 507, 529		21	

62	Ion densities in a high-intensity, low flow nitrogen Irgon plasma. <i>Physics of Plasmas</i> , 1997 , 4, 3077-3081	2.1	15
61	Effect of substrate conditions on the plasma beam deposition of amorphous hydrogenated carbon. <i>Journal of Applied Physics</i> , 1997 , 82, 2643-2654	2.5	59
60	Hydrogen Incorporation During Deposition of a-Si:H From an Intense Source of SiH3. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 467, 621		12
59	High-quality aBi:H grown at high rate using an expanding thermal plasma. <i>Surface and Coatings Technology</i> , 1997 , 97, 719-722	4.4	17
58	Deposition of a-Si:H and a-C:H using an expanding thermal arc plasma. <i>Plasma Sources Science and Technology</i> , 1996 , 5, 268-274	3.5	26
57	Electrodeless thin film conductance measurements using the Sommer Tanner method. Review of Scientific Instruments, 1996, 67, 3624-3626	1.7	
56	Quality improvement of plasma-beam-deposited amorphous hydrogenated carbon with higher growth rate. <i>Plasma Sources Science and Technology</i> , 1996 , 5, 492-498	3.5	36
55	Plasma beam deposited amorphous hydrogenated carbon: Improved film quality at higher growth rate. <i>Applied Physics Letters</i> , 1996 , 69, 152-154	3.4	54
54	On the Effect of Substrate Temperature on a-Si:H Deposition Using an Expanding Thermal Plasma. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 420, 341		12
53	Hard Amorphous Hydrogenated Carbon Films Deposited from an Expanding Thermal Plasma. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 436, 287		1
52	Fast deposition of thin amorphous layers using an expanding thermal plasma. <i>Pure and Applied Chemistry</i> , 1996 , 68, 1155-1158	2.1	2
51	Fundamentals and application of an expanding hydrogen low-pressure plasma jet. <i>Vacuum</i> , 1996 , 47, 1123-1127	3.7	3
50	Diagnostics of the magnetized low-pressure hydrogen plasma jet: Molecular regime. <i>Journal of Applied Physics</i> , 1996 , 80, 1312-1324	2.5	49
49	Wall association and recirculation in expanding thermal arc plasmas. <i>Physical Review Letters</i> , 1996 , 76, 1840-1843	7.4	28
48	Langmuir probe measurements in an expanding magnetized plasma. <i>Physical Review E</i> , 1996 , 54, 1906-7	1914	28
47	Optical and mechanical properties of plasma-beam-deposited amorphous hydrogenated carbon. <i>Journal of Applied Physics</i> , 1996 , 80, 5986-5995	2.5	80
46	An approximate quantitative analysis of non-equilibrium plasma transport for high density plasmas. <i>Plasma Chemistry and Plasma Processing</i> , 1995 , 16, S19-S42	3.6	6
45	Characterization of plasma beam deposited amorphous hydrogenated silicon. <i>Applied Physics Letters</i> , 1995 , 67, 491-493	3.4	38

44	A new absorption spectroscopy setup for the sensitive monitoring of atomic and molecular densities. <i>Review of Scientific Instruments</i> , 1995 , 66, 968-974	1.7	4	
43	Scaling of Si and GaAs trench etch rates with aspect ratio, feature width, and substrate temperature. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1995 , 13, 92		56	
42	Cross section for the mutual neutralization reaction H2++H-, calculated in a multiple-crossing Landau-Zener approximation. <i>Physical Review A</i> , 1995 , 51, 3362-3365	2.6	43	
41	The argon-hydrogen expanding plasma: model and experiments. <i>Plasma Sources Science and Technology</i> , 1995 , 4, 74-85	3.5	63	
40	Absorption and stimulated emission between the electronic states of C and C2radicals in an expanding thermal plasma. <i>Plasma Sources Science and Technology</i> , 1995 , 4, 142-146	3.5	3	
39	Atomic hydrogen and argon ground state density determination in a recombining plasma using visible light absorption spectroscopy. <i>Journal Physics D: Applied Physics</i> , 1995 , 28, 1362-1368	3	3	
38	Influence of molecular processes on the hydrogen atomic system in an expanding argonflydrogen plasma. <i>Physics of Plasmas</i> , 1995 , 2, 1002-1008	2.1	11	
37	Heterogeneous and homogeneous hydrogen kinetics in plasma chemistry. <i>Plasma Sources Science and Technology</i> , 1995 , 4, 293-301	3.5	16	
36	Absorption spectroscopy measurements of atomic and molecular carbon population densities in an expanding thermal arc plasma. <i>Diamond and Related Materials</i> , 1995 , 4, 908-911	3.5	2	
35	Absolute density of the argon first excited states in plasmas used for carbon deposition as determined by absorption spectroscopy. <i>Diamond and Related Materials</i> , 1995 , 4, 1271-1276	3.5	5	
34	Fast deposition of amorphous carbon films by an expanding cascaded arc plasma jet. <i>Journal of Applied Physics</i> , 1995 , 78, 528-540	2.5	33	
33	Deposition of amorphous carbon layers from C2H2 and CF4 with an expanding thermal arc plasma beam set-up. <i>Thin Solid Films</i> , 1995 , 271, 56-63	2.2	16	
32	Influence of the addition of CF4 on the deposition of a-C:H layers using the expanding thermal plasma technique. <i>Diamond and Related Materials</i> , 1995 , 4, 328-332	3.5	1	
31	An Expanding Thermal Plasma for Deposition of a-Si:H. <i>Materials Research Society Symposia Proceedings</i> , 1995 , 377, 33		8	
30	Vibrational Population of Hydrogen Molecules Excited by an RF Discharge in an Expanding Thermal Arc Plasma as Determined by Emission Spectroscopy. <i>Contributions To Plasma Physics</i> , 1995 , 35, 195-20)2 ^{1.4}	7	
29	The behaviour of heavy particles in the expanding plasma jet in argon. <i>Plasma Sources Science and Technology</i> , 1994 , 3, 501-510	3.5	70	
28	The heating mechanism of electrons in the shock front of an expanding plasma. <i>Plasma Sources Science and Technology</i> , 1994 , 3, 511-520	3.5	37	
27	On expanding recombining plasma for fast deposition of a-Si:H thin films. <i>Plasma Sources Science and Technology</i> , 1994 , 3, 521-527	3.5	9	

26	Spectroscopic measurement of atomic hydrogen level populations and hydrogen dissociation degree in expanding cascaded arc plasmas. <i>Journal of Applied Physics</i> , 1994 , 76, 4499-4510	2.5	30
25	Fabry P □ rot line shape analysis on an expanding cascaded arc plasma in argon. <i>Journal of Applied Physics</i> , 1994 , 75, 2775-2780	2.5	19
24	Experimental characterization of a hydrogen/argon cascaded arc plasma source. <i>Review of Scientific Instruments</i> , 1994 , 65, 1469-1471	1.7	12
23	Dissociative recombination in cascaded arc generated ArN2 and N2 expanding plasma. <i>Physics of Plasmas</i> , 1994 , 1, 2086-2095	2.1	27
22	Absorption spectroscopy on the argon first excited state in an expanding thermal arc plasma. <i>Physical Review E</i> , 1994 , 50, 1383-1393	2.4	27
21	Plasma processing and chemistry. <i>Plasma Physics and Controlled Fusion</i> , 1994 , 36, B65-B78	2	19
20	Four ways to determine the electron density in low-temperature plasmas. <i>Physical Review E</i> , 1994 , 49, 2272-2275	2.4	30
19	Argon-hydrogen plasma jet investigated by active and passive spectroscopic means. <i>Physical Review E</i> , 1994 , 49, 4397-4406	2.4	83
18	Anomalous fast recombination in hydrogen plasmas involving rovibrational excitation. <i>Physical Review E</i> , 1993 , 48, 2098-2102	2.4	83
17	Recombination of argon in an expanding plasma jet. <i>Physical Review E</i> , 1993 , 47, 2792-2797	2.4	80
16	Hydrogen atom cleaning of archeological artefacts. <i>Journal of Nuclear Materials</i> , 1993 , 200, 380-382	3.3	19
15	Fast deposition of amorphous carbon and silicon layers. <i>Journal of Nuclear Materials</i> , 1993 , 200, 430-43	33.3	11
14	Application of a hybrid collisional radiative model to recombining argon plasmas. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 1993 , 49, 129-139	2.1	18
13	Optical Diagnostics for High Electron Density Plasmas. <i>NATO ASI Series Series B: Physics</i> , 1993 , 279-290		
12	A combined ThomsonRayleigh scattering diagnostic using an intensified photodiode array. <i>Review of Scientific Instruments</i> , 1992 , 63, 3369-3377	1.7	107
11	Emission spectroscopy on a supersonically expanding argon/silane plasma. <i>Journal of Applied Physics</i> , 1992 , 71, 4156-4163	2.5	31
10	Depolarization Rayleigh scattering as a means of molecular concentration determination in plasmas. <i>Physical Review Letters</i> , 1992 , 69, 1379-1382	7.4	28
9	The diagnostics of thermal plasmas. <i>Pure and Applied Chemistry</i> , 1992 , 64, 645-652	2.1	2

LIST OF PUBLICATIONS

8	The Saha Equation for a Two-Temperature Plasma. <i>Teubner-Texte Zur Physik</i> , 1992 , 81-86		2
7	Generalized law of mass action for a two-temperature plasma. <i>Physical Review A</i> , 1991 , 44, 5150-5157	2.6	7
6	Reply to "Saha equation for a two-temperature plasma". Physical Review A, 1990, 42, 2461-2462	2.6	2
5	Thermodynamic generalization of the Saha equation for a two-temperature plasma. <i>Physical Review A</i> , 1989 , 40, 5273-5276	2.6	122
4	Quantum Magnetoconductance of a Nondegenerate Two-Dimensional Electron Gas. <i>Europhysics Letters</i> , 1988 , 6, 75-80	1.6	38
3	Quantum Magnetoconductance of the Two-Dimensional Electron Gas on a Liquid Helium Surface. Japanese Journal of Applied Physics, 1987 , 26, 749	1.4	8
2	Studies into the Growth Mechanism of a-Si:H Using in situ Cavity Ring-Down Techniques237-271		
1	Advanced Plasma Diagnostics for Thin-Film Deposition117-136		