Andre Anders

List of Publications by Citations

377 papers	13,674 citations	59 h-index	100 g-index
426 ext. papers	15,096 ext. citations	2.7 avg, IF	7.07 L-index

#	Paper	IF	Citations
377	A structure zone diagram including plasma-based deposition and ion etching. *Thin Solid Films*, **2010**, 518, 4087-4090	2.2	480
376	Dynamically modulating the surface plasmon resonance of doped semiconductor nanocrystals. *Nano Letters*, **2011**, 11, 4415-20	11.5	423
375	Cathodic Arcs. *Springer Series on Atomic, Optical, and Plasma Physics*, **2008**,	0.4	361
374	Nanoindentation and Nanoscratching of Hard Carbon Coatings for Magnetic Disks. *Materials Research Society Symposia Proceedings*, **1995**, 383, 447		304
373	Ion flux from vacuum arc cathode spots in the absence and presence of a magnetic field. *Journal of Applied Physics*, **2002**, 91, 4824-4832	2.5	295
372	Ion charge state distributions of vacuum arc plasmas: The origin of species. *Physical Review E*, **1997**, 55, 969-981	2.4	251
371	High power impulse magnetron sputtering: Current-voltage-time characteristics indicate the onset of sustained self-sputtering. *Journal of Applied Physics*, **2007**, 102, 113303	2.5	249
370	Hardness, elastic modulus, and structure of very hard carbon films produced by cathodic-arc deposition with substrate pulse biasing. *Applied Physics Letters*, **1996**, 68, 779-781	3.4	231
369	Metal plasma immersion ion implantation and deposition: a review. *Surface and Coatings Technology*, **1997**, 93, 158-167	4.4	213
368	Tutorial: Reactive high power impulse magnetron sputtering (R-HiPIMS). *Journal of Applied Physics*, **2017**, 121, 171101	2.5	199
367	Discharge physics of high power impulse magnetron sputtering. *Surface and Coatings Technology*, **2011**, 205, S1-S9	4.4	194
366	Regulation of the alpha-secretase ADAM10 by its prodomain and proprotein convertases. *FASEB Journal*, **2001**, 15, 1837-9	0.9	188
365	Ion velocities in vacuum arc plasmas. *Journal of Applied Physics*, **2000**, 88, 5618-5622	2.5	187
364	A discussion on the absence of plasma in spark plasma sintering. *Scripta Materialia*, **2009**, 60, 835-838	5.6	179
363	Approaches to rid cathodic arc plasmas of macro- and nanoparticles: a review. *Surface and Coatings Technology*, **1999**, 120-121, 319-330	4.4	177
362	Review of cathodic arc deposition technology at the start of the new millennium. *Surface and Coatings Technology*, **2000**, 133-134, 78-90	4.4	169
361	Comparative surface and nano-tribological characteristics of nanocomposite diamond-like carbon thin films doped by silver. *Applied Surface Science*, **2008**, 255, 2551-2556	6.7	158

360	A review comparing cathodic arcs and high power impulse magnetron sputtering (HiPIMS). *Surface and Coatings Technology*, **2014**, 257, 308-325	4.4	156
359	Transport of vacuum arc plasmas through magnetic macroparticle filters. *Plasma Sources Science and Technology*, **1995**, 4, 1-12	3.5	152
358	Metal plasma immersion ion implantation and deposition using vacuum arc plasma sources. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1994**, 12, 815		140
357	Ion charge state distributions in high current vacuum arc plasmas in a magnetic field. *IEEE Transactions on Plasma Science*, **1996**, 24, 1174-1183	1.3	137
356	Deposition rates of high power impulse magnetron sputtering: Physics and economics. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2010**, 28, 783-790	2.9	134
355	. *IEEE Transactions on Plasma Science*, **2005**, 33, 1944-1959	1.3	127
354	. *IEEE Transactions on Plasma Science*, **1992**, 20, 466-472	1.3	124
353	The absence of plasma in □spark plasma sintering□*Journal of Applied Physics*, **2008**, 104, 033305	2.5	123
352	Effect of vacuum arc deposition parameters on the properties of amorphous carbon thin films. *Surface and Coatings Technology*, **1994**, 68-69, 388-393	4.4	121
351	Drifting localization of ionization runaway: Unraveling the nature of anomalous transport in high power impulse magnetron sputtering. *Journal of Applied Physics*, **2012**, 111, 053304	2.5	115
350	Resonant inelastic scattering spectra of free molecules with vibrational resolution. *Physical Review Letters*, **2010**, 104, 193002	7.4	114
349	Drift compression of an intense neutralized ion beam. *Physical Review Letters*, **2005**, 95, 234801	7.4	108
348	Plasma and ion sources in large area coating: A review. *Surface and Coatings Technology*, **2005**, 200, 1893-1906	4.4	105
347	Fundamentals of pulsed plasmas for materials processing. *Surface and Coatings Technology*, **2004**, 183, 301-311	4.4	104
346	Macroparticle-free thin films produced by an efficient vacuum arc deposition technique. *Journal of Applied Physics*, **1993**, 74, 4239-4241	2.5	97
345	'Triggerless' triggering of vacuum arcs. *Journal Physics D: Applied Physics*, **1998**, 31, 584-587	3	94
344	Effect of intrinsic growth stress on the Raman spectra of vacuum-arc-deposited amorphous carbon films. *Applied Physics Letters*, **1995**, 66, 3444-3446	3.4	93
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342	Effect of duct bias on transport of vacuum arc plasmas through curved magnetic filters. *Journal of Applied Physics*, **1994**, 75, 4900-4905	2.5	87
341	Atomic scale heating in cathodic arc plasma deposition. *Applied Physics Letters*, **2002**, 80, 1100-1102	3.4	86
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339	Energetic deposition using filtered cathodic arc plasmas. *Vacuum*, **2002**, 67, 673-686	3.7	82
338	Structure and properties of silver-containing a-C(H) films deposited by plasma immersion ion implantation. *Surface and Coatings Technology*, **2008**, 202, 3675-3682	4.4	79
337	Plasma synthesis of metallic and composite thin films with atomically mixed substrate bonding. *Nuclear Instruments & Methods in Physics Research B*, **1993**, 80-81, 1281-1287	1.2	77
336	Correlation between cathode properties, burning voltage, and plasma parameters of vacuum arcs. *Journal of Applied Physics*, **2001**, 89, 7764-7771	2.5	75
335	Self-sputtering runaway in high power impulse magnetron sputtering: The role of secondary electrons and multiply charged metal ions. *Applied Physics Letters*, **2008**, 92, 201501	3.4	74
334	Ion energy distribution functions of vacuum arc plasmas. *Journal of Applied Physics*, **2003**, 93, 1899-1906	2.5	73
333	Streaming metal plasma generation by vacuum arc plasma guns. *Review of Scientific Instruments*, **1998**, 69, 801-803	1.7	73
332	Physics of arcing, and implications to sputter deposition. *Thin Solid Films*, **2006**, 502, 22-28	2.2	70
331	Hydrogen uptake in alumina thin films synthesized from an aluminum plasma stream in an oxygen ambient. *Applied Physics Letters*, **1999**, 74, 200-202	3.4	70
330	From plasma immersion ion implantation to deposition: a historical perspective on principles and trends. *Surface and Coatings Technology*, **2002**, 156, 3-12	4.4	69
329	The recycling trap: a generalized explanation of discharge runaway in high-power impulse magnetron sputtering. *Journal Physics D: Applied Physics*, **2012**, 45, 012003	3	68
328	Plasma potential mapping of high power impulse magnetron sputtering discharges. *Journal of Applied Physics*, **2012**, 111, 083302	2.5	65
327	Gasless sputtering: Opportunities for ultraclean metallization, coatings in space, and propulsion. *Applied Physics Letters*, **2008**, 92, 221503	3.4	65
326	Metal plasmas for the fabrication of nanostructures. *Journal Physics D: Applied Physics*, **2007**, 40, 2272-2284	3	65
325	Gas rarefaction and the time evolution of long high-power impulse magnetron sputtering pulses. *Plasma Sources Science and Technology*, **2012**, 21, 045004	3.5	63

324	Self-sputtering far above the runaway threshold: an extraordinary metal-ion generator. *Physical Review Letters*, **2009**, 102, 045003	7.4	63
323	The working principle of the hollow-anode plasma source. *Plasma Sources Science and Technology*, **1995**, 4, 571-575	3.5	63
322	Compression and strong rarefaction in high power impulse magnetron sputtering discharges. *Journal of Applied Physics*, **2010**, 108, 123306	2.5	62
321	. *IEEE Transactions on Plasma Science*, **2005**, 33, 1532-1536	1.3	62
320	S-shaped magnetic macroparticle filter for cathodic arc deposition. *IEEE Transactions on Plasma Science*, **1997**, 25, 670-674	1.3	59
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318	Drifting potential humps in ionization zones: The propeller blades of high power impulse magnetron sputtering. *Applied Physics Letters*, **2013**, 103, 144103	3.4	58
317	Smoothing of ultrathin silver films by transition metal seeding. *Solid State Communications*, **2006**, 140, 225-229	1.6	58
316	. *IEEE Transactions on Plasma Science*, **1991**, 19, 20-24	1.3	58
315	Self-organization and self-limitation in high power impulse magnetron sputtering. *Applied Physics Letters*, **2012**, 100, 224104	3.4	56
314	A Theoretical Analysis of Vacuum Arc Thruster and Vacuum Arc Ion Thruster Performance. *IEEE Transactions on Plasma Science*, **2008**, 36, 2167-2179	1.3	56
313	Observation of Ti4+ ions in a high power impulse magnetron sputtering plasma. *Applied Physics Letters*, **2008**, 93, 071504	3.4	54
312	Origin of the Delayed Current Onset in High-Power Impulse Magnetron Sputtering. *IEEE Transactions on Plasma Science*, **2010**, 38, 3028-3034	1.3	53
311	Inductive energy storage driven vacuum arc thruster. *Review of Scientific Instruments*, **2002**, 73, 925-927	1.7	53
310	Crystal structure and properties of CdxZn1−xO alloys across the full composition range. *Applied Physics Letters*, **2013**, 102, 232103	3.4	52
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305	Transparent and conductive indium doped cadmium oxide thin films prepared by pulsed filtered cathodic arc deposition. *Applied Surface Science*, **2013**, 265, 738-744	6.7	49
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301	Macroparticle filtering of high-current vacuum arc plasmas. *IEEE Transactions on Plasma Science*, **1997**, 25, 660-664	1.3	47
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299	High quality ZnO:Al transparent conducting oxide films synthesized by pulsed filtered cathodic arc deposition. *Thin Solid Films*, **2010**, 518, 3313-3319	2.2	46
298	. *IEEE Transactions on Plasma Science*, **2005**, 33, 1456-1464	1.3	46
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296	Pulsed vacuum-arc ion source operated with a triggerless arc initiation method. *Review of Scientific Instruments*, **2000**, 71, 827-829	1.7	46
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286	Ion charge state distributions of pulsed vacuum arc plasmas in strong magnetic fields. *Review of Scientific Instruments*, **1998**, 69, 1332-1335	1.7	43
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276	On the road to self-sputtering in high power impulse magnetron sputtering: particle balance and discharge characteristics. *Plasma Sources Science and Technology*, **2014**, 23, 025017	3.5	38
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258	Charge-state-resolved ion energy distributions of aluminum vacuum arcs in the absence and presence of a magnetic field. *Journal of Applied Physics*, **2005**, 97, 103306	2.5	33
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256	Achieving high mobility ZnO : Al at very high growth rates by dc filtered cathodic arc deposition. *Journal Physics D: Applied Physics*, **2011**, 44, 232003	3	32
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207	Puzzling differences in bismuth and lead plasmas: Evidence for the significant role of neutrals in cathodic vacuum arcs. *Applied Physics Letters*, **2007**, 91, 091502	3.4	19
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