David R Boris

List of Publications by Year
in descending order

35 papers	602 citations	687363 13 h-index	580821 25 g-index
35 all docs	35 docs citations	35 times ranked	777 citing authors

#	Article	IF	Citations
1	Chemical Gradients on Graphene To Drive Droplet Motion. ACS Nano, 2013, 7, 4746-4755.	14.6	142
2	Electron Beam Generated Plasmas for Ultra Low T_eProcessing. ECS Journal of Solid State Science and Technology, 2015, 4, N5033-N5040.	1.8	71
3	The role of plasma in plasma-enhanced atomic layer deposition of crystalline films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	2.1	50
4	Phase Control of Crystalline Ga₂O₃ Films by Plasma-Enhanced Atomic Layer Deposition. Chemistry of Materials, 2020, 32, 1140-1152.	6.7	48
5	Characterization of a Compact, Low-Cost Atmospheric-Pressure Plasma Jet Driven by a Piezoelectric Transformer. IEEE Transactions on Plasma Science, 2019, 47, 434-444.	1.3	30
6	Measuring the electron density, temperature, and electronegativity in electron beam-generated plasmas produced in argon/SF₆mixtures. Plasma Sources Science and Technology, 2015, 24, 025032.	3.1	27
7	The influence of magnetic field on electron beam generated plasmas. Journal Physics D: Applied Physics, 2015, 48, 275202.	2.8	25
8	Atomic fluorine densities in electron beam generated plasmas: A high ion to radical ratio source for etching with atomic level precision. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .	2.1	24
9	One-dimensional Ar-SF6 hydromodel at low-pressure in e-beam generated plasmas. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, .	2.1	21
10	Initial evaluation and comparison of plasma damage to atomic layer carbon materials using conventional and low Te plasma sources. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, .	2.1	18
11	Impact of Growth Conditions on the Phase Selectivity and Epitaxial Quality of TiO₂ Films Grown by the Plasma-Assisted Atomic Layer Deposition. Chemistry of Materials, 2019, 31, 3900-3908.	6.7	16
12	Role of plasma properties in controlling crystallinity and phase in oxide films grown by plasma-enhanced atomic layer epitaxy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .	2.1	16
13	Precise control of ion and radical production using electron beam generated plasmas. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .	2.1	15
14	Non-equilibrium steady-state kinetics of He-air atmospheric pressure plasmas. Physics of Plasmas, 2017, 24, .	1.9	14
15	Plasma-surface interactions in atmospheric pressure plasmas: In situ measurements of electron heating in materials. Journal of Applied Physics, 2018, 124, .	2.5	11
16	Spatio-temporal characterization of a pulsed DC atmospheric pressure plasma jet interacting with substrates. Journal Physics D: Applied Physics, 2021, 54, 085202.	2.8	11
17	Effect of varying plasma properties on III-nitride film growth by plasma enhanced atomic layer epitaxy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .	2.1	10
18	Extending the volume of atmospheric pressure plasma jets through the use of additional helium gas streams. Plasma Sources Science and Technology, 2020, 29, 015006.	3.1	10

#	Article	IF	Citations
19	Etching with electron beam-generated plasmas: Selectivity versus ion energy in silicon-based films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	2.1	7
20	Hollow cathode plasma electron source for low temperature deposition of cobalt films by electron-enhanced atomic layer deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	2.1	7
21	Plasma-induced surface cooling. Nature Communications, 2022, 13, 2623.	12.8	6
22	Hollow cathode enhanced capacitively coupled plasmas in Ar/N2/H2 mixtures and implications for plasma enhanced ALD. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2022, 40, .	1.2	6
23	Helium and oxygen excited states densities in a He-air RF-driven atmospheric pressure plasma jet. Physics of Plasmas, 2020, 27, .	1.9	5
24	On the Mechanism of Pulsed Electron Beam Production From an Uninterrupted Plasma Cathode. IEEE Transactions on Plasma Science, 2016, 44, 761-768.	1.3	4
25	Parametric study of low-pressure electron beam generated Arâ€“SF₆plasma and implications for processing. Plasma Sources Science and Technology, 2017, 26, 095006.	3.1	3
26	Correlating charge fluence with nanoparticle formation during in situ plasma synthesis of nanocomposite films. Plasma Processes and Polymers, 2017, 14, 1700079.	3.0	2
27	Optical emission spectroscopy measurements of electron beam-generated plasma in argon, nitrogen and their mixtures. , 2010, , .		1
28	Thermal conductance of aluminum oxy-fluoride passivation layers. Applied Physics Letters, 2019, 115, .	3.3	1
29	Characterization of a Compact, Low Cost, Atmospheric Pressure Plasma Jet Driven by a Piezoelectric Transformer. , 2018, , .		1
30	Frequency probe measurements in processing plasmas. , 2010, , .		0
31	Frequency probe measurements in processing plasmas. , 2011, , .		0
32	Optical emission spectroscopy measurements of electron beam-generated plasma in argon. , 2011, , .		0
33	The effects of in-elastic processes on electron temperature in electron beam generated plasmas. , 2014, , .		0
34	Modeling of an electron beam generated Ar-N2 Plasma for plasma processing. , 2014, , .		0
35	Modeling of a Nanosecond Pulsed Atmospheric Pressure Plasma on Water. , 2022, , .		0