

Ulf Helmersson

List of Publications by Year in descending order

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210
papers

12,408
citations

26610

56
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27389

106
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213
all docs

213
docs citations

213
times ranked

6017
citing authors

#	ARTICLE	IF	CITATIONS
1	Dynamics of bipolar HiPIMS discharges by plasma potential probe measurements. Plasma Sources Science and Technology, 2022, 31, 025007.	1.3	10
2	Experimental verification of deposition rate increase, with maintained high ionized flux fraction, by shortening the HiPIMS pulse. Plasma Sources Science and Technology, 2021, 30, 045006.	1.3	18
3	Low temperature growth of stress-free single phase TiN films using HiPIMS with synchronized pulsed substrate bias. Journal of Applied Physics, 2021, 129, .	1.1	10
4	Bipolar HiPIMS: The role of capacitive coupling in achieving ion bombardment during growth of dielectric thin films. Surface and Coatings Technology, 2021, 416, 127152.	2.2	16
5	Copper thin films deposited using different ion acceleration strategies in HiPIMS. Surface and Coatings Technology, 2021, 422, 127487.	2.2	16
6	Magnetically Collected Platinum/Nickel Alloy Nanoparticles as Catalysts for Hydrogen Evolution. ACS Applied Nano Materials, 2021, 4, 12957-12965.	2.4	9
7	Tuning the stress in TiN films by regulating the doubly charged ion fraction in a reactive HiPIMS discharge. Journal of Applied Physics, 2020, 127, .	1.1	7
8	Pulse length selection for optimizing the accelerated ion flux fraction of a bipolar HiPIMS discharge. Plasma Sources Science and Technology, 2020, 29, 125013.	1.3	24
9	Room-temperature Micropillar Growth of Lithium-Titanate-Carbon Composite Structures by Self-Biased Direct Current Magnetron Sputtering for Lithium Ion Microbatteries. Advanced Functional Materials, 2019, 29, 1904306.	7.8	7
10	Impact of nanoparticle magnetization on the 3D formation of dual-phase Ni/NiO nanoparticle-based nanotrusses. Journal of Nanoparticle Research, 2019, 21, 1.	0.8	5
11	A nanostructured NiO/cubic SiC n heterojunction photoanode for enhanced solar water splitting. Journal of Materials Chemistry A, 2019, 7, 4721-4728.	5.2	50
12	Bipolar HiPIMS for tailoring ion energies in thin film deposition. Surface and Coatings Technology, 2019, 359, 433-437.	2.2	70
13	Bipolar high power impulse magnetron sputtering for energetic ion bombardment during TiN thin film growth without the use of a substrate bias. Thin Solid Films, 2019, 688, 137350.	0.8	30
14	Growth of semi-coherent Ni and NiO dual-phase nanoparticles using hollow cathode sputtering. Journal of Nanoparticle Research, 2019, 21, 1.	0.8	9
15	Graphene Decorated with Iron Oxide Nanoparticles for Highly Sensitive Interaction with Volatile Organic Compounds. Sensors, 2019, 19, 918.	2.1	22
16	Plasma-based processes for planar and 3D surface patterning of functional nanoparticles. Journal of Nanoparticle Research, 2019, 21, 1.	0.8	4
17	Catalytic Nanotruss Structures Realized by Magnetic Self-Assembly in Pulsed Plasma. Nano Letters, 2018, 18, 3132-3137.	4.5	16
18	Low-energy ion irradiation in HiPIMS to enable anatase TiO_2 selective growth. Journal Physics D: Applied Physics, 2018, 51, 235301.	1.3	24

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19	Iron Oxide Nanoparticle Decorated Graphene for Ultra-Sensitive Detection of Volatile Organic Compounds. Proceedings (mdpi), 2018, 2, .	0.2	1
20	Low temperature (<math>T < 0.1 \text{ eV}</math>) epitaxial growth of HfN/MgO(001) via reactive HiPIMS with metal-ion synchronized substrate bias. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .	0.9	23
21	Nucleation of titanium nanoparticles in an oxygen-starved environment. II: theory. Journal Physics D: Applied Physics, 2018, 51, 455202.	1.3	4
22	Nucleation of titanium nanoparticles in an oxygen-starved environment. I: experiments. Journal Physics D: Applied Physics, 2018, 51, 455201.	1.3	3
23	Phase separation within NiSiN coatings during reactive HiPIMS discharges: A new pathway to grow Ni _x Si nanocrystals composites at low temperature. Applied Surface Science, 2018, 454, 148-156.	3.1	0
24	Performance tuning of gas sensors based on epitaxial graphene on silicon carbide. Materials and Design, 2018, 153, 153-158.	3.3	25
25	Effect of substrate temperature on the deposition of Al-doped ZnO thin films using high power impulse magnetron sputtering. Surface and Coatings Technology, 2018, 347, 245-251.	2.2	25
26	Low-Loss and Tunable Localized Mid-Infrared Plasmons in Nanocrystals of Highly Degenerate InN. Nano Letters, 2018, 18, 5681-5687.	4.5	24
27	Restoring the Properties of Transparent Al-Doped ZnO Thin Film Electrodes Exposed to Ambient Air. Journal of Physical Chemistry C, 2017, 121, 14426-14433.	1.5	10
28	Synthesis of hydrogenated diamondlike carbon thin films using neon-acetylene based high power impulse magnetron sputtering discharges. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, 061504.	0.9	18
29	Compressive intrinsic stress originates in the grain boundaries of dense refractory polycrystalline thin films. Journal of Applied Physics, 2016, 119, .	1.1	44
30	The influence of pressure and gas flow on size and morphology of titanium oxide nanoparticles synthesized by hollow cathode sputtering. Journal of Applied Physics, 2016, 120, 044308.	1.1	14
31	Complex 3D nanocoral like structures formed by copper nanoparticle aggregation on nanostructured zinc oxide rods. Materials Letters, 2016, 184, 127-130.	1.3	0
32	Room temperature deposition of homogeneous, highly transparent and conductive Al-doped ZnO films by reactive high power impulse magnetron sputtering. Solar Energy Materials and Solar Cells, 2016, 157, 742-749.	3.0	74
33	Nanoparticle growth by collection of ions: orbital motion limited theory and collision-enhanced collection. Journal Physics D: Applied Physics, 2016, 49, 395208.	1.3	5
34	The role of Ohmic heating in dc magnetron sputtering. Plasma Sources Science and Technology, 2016, 25, 065024.	1.3	41
35	Modified Epitaxial Graphene on SiC for Extremely Sensitive and Selective Gas Sensors. Materials Science Forum, 2016, 858, 1145-1148.	0.3	8
36	Process stabilization by peak current regulation in reactive high-power impulse magnetron sputtering of hafnium nitride. Journal Physics D: Applied Physics, 2016, 49, 065202.	1.3	22

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37	Highly reflective rear surface passivation design for ultra-thin Cu(In,Ga)Se 2 solar cells. Thin Solid Films, 2015, 582, 300-303.	0.8	51
38	Publisher's Note: Molecular dynamics simulation of the growth of Cu nanoclusters from Cu ions in a plasma [Phys. Rev. B, 165421 (2014)]. Physical Review B, 2015, 91, .	1.1	0
39	Synthesis of titanium-oxide nanoparticles with size and stoichiometry control. Journal of Nanoparticle Research, 2015, 17, 1.	0.8	21
40	The use of Highly Ionized Pulsed Plasmas for the Synthesis of Advanced Thin Films and Nanoparticles. KONA Powder and Particle Journal, 2014, 31, 171-180.	0.9	7
41	Characterisation of Nanoparticle Structure by High Resolution Electron Microscopy. Journal of Physics: Conference Series, 2014, 522, 012065.	0.3	1
42	Double oxide shell layer formed on a metal nanoparticle as revealed by aberration corrected (scanning) transmission electron microscopy. Materials Research Express, 2014, 1, 025016.	0.8	6
43	Principles for designing sputtering-based strategies for high-rate synthesis of dense and hard hydrogenated amorphous carbon thin films. Diamond and Related Materials, 2014, 44, 117-122.	1.8	16
44	Deposition of yttria-stabilized zirconia thin films by high power impulse magnetron sputtering and pulsed magnetron sputtering. Surface and Coatings Technology, 2014, 240, 1-6.	2.2	24
45	Molecular dynamics simulation of the growth of Cu nanoclusters from Cu ions in a plasma. Physical Review B, 2014, 90, .	1.1	5
46	Understanding the discharge current behavior in reactive high power impulse magnetron sputtering of oxides. Journal of Applied Physics, 2013, 113, .	1.1	86
47	Size-controlled growth of nanoparticles in a highly ionized pulsed plasma. Applied Physics Letters, 2013, 102, .	1.5	42
48	Modeling the extraction of sputtered metal from high power impulse hollow cathode discharges. Plasma Sources Science and Technology, 2013, 22, 035006.	1.3	17
49	Fast growth of nanoparticles in a hollow cathode plasma through orbit motion limited ion collection. Applied Physics Letters, 2013, 103, 193108.	1.5	33
50	Time-domain and energetic bombardment effects on the nucleation and coalescence of thin metal films on amorphous substrates. Journal Physics D: Applied Physics, 2013, 46, 215303.	1.3	19
51	High power impulse magnetron sputtering discharge. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, .	0.9	568
52	Growth of Ti-C nanocomposite films by reactive high power impulse magnetron sputtering under industrial conditions. Surface and Coatings Technology, 2012, 206, 2396-2402.	2.2	58
53	ZrB2 thin films grown by high power impulse magnetron sputtering from a compound target. Thin Solid Films, 2012, 526, 163-167.	0.8	58
54	Influence of ionization degree on film properties when using high power impulse magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, .	0.9	28

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55	A strategy for increased carbon ionization in magnetron sputtering discharges. <i>Diamond and Related Materials</i> , 2012, 23, 1-4.	1.8	97
56	Understanding deposition rate loss in high power impulse magnetron sputtering: I. Ionization-driven electric fields. <i>Plasma Sources Science and Technology</i> , 2012, 21, 025005.	1.3	64
57	Internal current measurements in high power impulse magnetron sputtering. <i>Plasma Sources Science and Technology</i> , 2011, 20, 045003.	1.3	35
58	Studies of hysteresis effect in reactive HiPIMS deposition of oxides. <i>Surface and Coatings Technology</i> , 2011, 205, S303-S306.	2.2	59
59	Hysteresis and process stability in reactive high power impulse magnetron sputtering of metal oxides. <i>Thin Solid Films</i> , 2011, 519, 7779-7784.	0.8	82
60	Two-domain formation during the epitaxial growth of GaN (0001) on <i>c</i> -plane Al ₂ O ₃ (0001) by high power impulse magnetron sputtering. <i>Journal of Applied Physics</i> , 2011, 110, .	1.1	18
61	Effect of peak power in reactive high power impulse magnetron sputtering of titanium dioxide. <i>Surface and Coatings Technology</i> , 2011, 205, 4828-4831.	2.2	70
62	On the film density using high power impulse magnetron sputtering. <i>Surface and Coatings Technology</i> , 2010, 205, 591-596.	2.2	317
63	Low-temperature Superionic Conductivity in Strained Yttria-Stabilized Zirconia. <i>Advanced Functional Materials</i> , 2010, 20, 2071-2076.	7.8	150
64	Fully dense, non-faceted 111-textured high power impulse magnetron sputtering TiN films grown in the absence of substrate heating and bias. <i>Thin Solid Films</i> , 2010, 518, 5978-5980.	0.8	101
65	Dual-magnetron open field sputtering system for sideways deposition of thin films. <i>Surface and Coatings Technology</i> , 2010, 204, 2165-2169.	2.2	27
66	Ab initio calculations and synthesis of the off-stoichiometric half-Heusler phase Ni ^x Mn ^{1+x} Sb. <i>Journal of Applied Physics</i> , 2010, 108, 093712.	1.1	10
67	Faster-than-Bohm Cross- $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle \text{mml:mi} \rangle B \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ Electron Transport in Strongly Pulsed Plasmas. <i>Physical Review Letters</i> , 2009, 103, 225003.	2.9	49
68	Low-temperature $\hat{\pm}$ -alumina thin film growth:ab initiostudies of Al adatom surface migration. <i>Journal Physics D: Applied Physics</i> , 2009, 42, 125302.	1.3	11
69	$\hat{\pm}$ -Alumina coatings on WC/Co substrates by physical vapor deposition. <i>International Journal of Refractory Metals and Hard Materials</i> , 2009, 27, 507-512.	1.7	37
70	On the electron energy in the high power impulse magnetron sputtering discharge. <i>Journal of Applied Physics</i> , 2009, 105, .	1.1	76
71	Transition between the discharge regimes of high power impulse magnetron sputtering and conventional direct current magnetron sputtering. <i>Plasma Sources Science and Technology</i> , 2009, 18, 045008.	1.3	79
72	Energy flux measurements in high power impulse magnetron sputtering. <i>Journal Physics D: Applied Physics</i> , 2009, 42, 185202.	1.3	60

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73	The spatial and temporal variation of the electron energy distribution function (EEDF) in the HiPIMS discharge. , 2009, , .		0
74	Hysteresis-free reactive high power impulse magnetron sputtering. Thin Solid Films, 2008, 516, 6398-6401.	0.8	123
75	Influence of residual water on magnetron sputter deposited crystalline Al ₂ O ₃ thin films. Thin Solid Films, 2008, 516, 3877-3883.	0.8	28
76	Anomalous electron transport in high power impulse magnetron sputtering. Plasma Sources Science and Technology, 2008, 17, 025007.	1.3	58
77	Synthesis of Al ₂ O ₃ thin films using reactive high-power impulse magnetron sputtering. Europhysics Letters, 2008, 82, 36002.	0.7	82
78	Cross-field ion transport during high power impulse magnetron sputtering. Plasma Sources Science and Technology, 2008, 17, 035021.	1.3	106
79	A bulk plasma model for dc and HiPIMS magnetrons. Plasma Sources Science and Technology, 2008, 17, 045009.	1.3	48
80	Phase tailoring of Ta thin films by highly ionized pulsed magnetron sputtering. Thin Solid Films, 2007, 515, 3434-3438.	0.8	104
81	Ab initio studies of Al, O, and O ₂ adsorption on Al ₂ O ₃ (0001) surfaces. Physical Review B, 2006, 74, .	1.1	42
82	Investigation of RuO ₂ /4H-SiC Schottky diode contacts by deep level transient spectroscopy. Chemical Physics Letters, 2006, 429, 617-621.	1.2	11
83	Investigation of high power impulse magnetron sputtering pretreated interfaces for adhesion enhancement of hard coatings on steel. Surface and Coatings Technology, 2006, 200, 6495-6499.	2.2	131
84	Phase control of Al ₂ O ₃ thin films grown at low temperatures. Thin Solid Films, 2006, 513, 57-59.	0.8	91
85	Ionized physical vapor deposition (IPVD): A review of technology and applications. Thin Solid Films, 2006, 513, 1-24.	0.8	886
86	The ion energy distributions and ion flux composition from a high power impulse magnetron sputtering discharge. Thin Solid Films, 2006, 515, 1522-1526.	0.8	279
87	High-power impulse magnetron sputtering of Ti-Si-C thin films from a Ti ₃ SiC ₂ compound target. Thin Solid Films, 2006, 515, 1731-1736.	0.8	96
88	Guiding the deposition flux in an ionized magnetron discharge. Thin Solid Films, 2006, 515, 1928-1931.	0.8	88
89	Molecular content of the deposition flux during reactive Ar-O ₂ magnetron sputtering of Al. Applied Physics Letters, 2006, 88, 054101.	1.5	10
90	Energy distributions of positive and negative ions during magnetron sputtering of an Al target in Ar-O ₂ mixtures. Journal of Applied Physics, 2006, 100, 033305.	1.1	53

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91	Radio frequency dual magnetron sputtering deposition and characterization of nanocomposite Al ₂ O ₃ /ZrO ₂ thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 309-316.	0.9	27
92	Deep energy levels in RuO ₂ /SiC Schottky barrier structures. Applied Physics Letters, 2006, 88, 153509.	1.5	12
93	Hydrogen sensing by NKN thin film with high dielectric constant and ferroelectric property. Sensors and Actuators B: Chemical, 2005, 108, 490-495.	4.0	3
94	Sol-gel synthesis and characterization of Na _{0.5} K _{0.5} NbO ₃ thin films. Journal of Crystal Growth, 2005, 281, 468-474.	0.7	54
95	Erratum to "Spatial Electron Density Distribution in a High-Power Pulsed Magnetron Discharge". IEEE Transactions on Plasma Science, 2005, 33, 1129-1129.	0.6	1
96	Spatial electron density distribution in a high-power pulsed magnetron discharge. IEEE Transactions on Plasma Science, 2005, 33, 346-347.	0.6	100
97	Ionization of sputtered metals in high power pulsed magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2005, 23, 18-22.	0.9	214
98	Eliminating the hysteresis effect for reactive sputtering processes. Applied Physics Letters, 2005, 86, 164106.	1.5	43
99	Plasma dynamics in a highly ionized pulsed magnetron discharge. Plasma Sources Science and Technology, 2005, 14, 525-531.	1.3	98
100	Ab initio calculations on the effects of additives on alumina phase stability. Physical Review B, 2005, 71, .	1.1	25
101	Ion-assisted physical vapor deposition for enhanced film properties on nonflat surfaces. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2005, 23, 278-280.	0.9	211
102	Ion-acoustic solitary waves in a high power pulsed magnetron sputtering discharge. Journal Physics D: Applied Physics, 2005, 38, 3417-3421.	1.3	36
103	Effect of chemical composition on the elastic and electrical properties of the boron-oxygen-yttrium system studied by ab initio and experimental means. Physical Review B, 2004, 69, .	1.1	1
104	Microstructure of γ -alumina thin films deposited at low temperatures on chromia template layers. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 117-121.	0.9	99
105	Measurement of the magnetic field change in a pulsed high current magnetron discharge. Plasma Sources Science and Technology, 2004, 13, 654-661.	1.3	64
106	Properties of Al ₂ O ₃ /SrTiO ₃ ITO Capacitors for Microelectronic Device Applications. IEEE Transactions on Electron Devices, 2004, 51, 1202-1205.	1.6	6
107	Effects of additives in γ - and δ -alumina: an ab initio study. Journal of Physics Condensed Matter, 2004, 16, 8971-8980.	0.7	32
108	Comparison of microstructure and mechanical properties of chromium nitride-based coatings deposited by high power impulse magnetron sputtering and by the combined steered cathodic arc/unbalanced magnetron technique. Thin Solid Films, 2004, 457, 270-277.	0.8	196

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109	Microstructure/dielectric property relationship of low temperature synthesised (Na,K)NbO _x thin films. Journal of Crystal Growth, 2004, 262, 322-326.	0.7	16
110	Elastic modulus-density relationship for amorphous boron suboxide thin films. Applied Physics A: Materials Science and Processing, 2003, 76, 269-271.	1.1	30
111	Low temperature growth and characterization of (Na,K)NbO _x thin films. Journal of Crystal Growth, 2003, 254, 400-404.	0.7	18
112	High power pulsed magnetron sputtered CrN films. Surface and Coatings Technology, 2003, 163-164, 267-272.	2.2	242
113	Quantum design and synthesis of a boron-oxygen-yttrium phase. Applied Physics Letters, 2003, 82, 4286-4288.	1.5	1
114	Role of carbon in boron suboxide thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2003, 21, 1355-1358.	0.9	10
115	Elastic modulus of amorphous boron suboxide thin films studied by theoretical and experimental methods. Journal of Applied Physics, 2003, 93, 940-944.	1.1	18
116	Stabilization of potential superhard RuO ₂ phases: A theoretical study. Physical Review B, 2002, 66, .	1.1	17
117	Low temperature deposition of Al ₂ O ₃ thin films by sputtering using a Cr ₂ O ₃ template. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2002, 20, 2134.	0.9	103
118	Synthesis and mechanical properties of boron suboxide thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2002, 20, 335-337.	0.9	24
119	Growth and Characterization of Na _{0.5} K _{0.5} NbO ₃ Thin Films on Polycrystalline Pt ₈₀ Ir ₂₀ Substrates. Journal of Materials Research, 2002, 17, 1183-1191.	1.2	24
120	Characteristics of SrTiO ₃ thin films deposited on Si by rf magnetron sputtering at various substrate temperatures. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2002, 82, 891-903.	0.6	6
121	Electrical characterisation of SrTiO ₃ /Si interfaces. Journal of Non-Crystalline Solids, 2002, 303, 185-189.	1.5	14
122	Influence of high-energy Si ⁺ ion irradiation on microstructure and mechanical properties of alumina films. Surface and Coatings Technology, 2002, 158-159, 534-537.	2.2	12
123	Spatial and temporal behavior of the plasma parameters in a pulsed magnetron discharge. Surface and Coatings Technology, 2002, 161, 249-256.	2.2	189
124	Optical properties of anatase TiO ₂ thin films prepared by aqueous sol-gel process at low temperature. Thin Solid Films, 2002, 405, 50-54.	0.8	286
125	Influence of high power densities on the composition of pulsed magnetron plasmas. Vacuum, 2002, 65, 147-154.	1.6	268
126	Characteristics of SrTiO ₃ thin films deposited on Si by rf magnetron sputtering at various substrate temperatures. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2002, 82, 891-903.	0.6	6

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127	High Li ⁺ -ion Storage Capacity and Double-Electrochromic Behavior of Solâ€”Gel-Derived Iron Oxide Thin Films with Sulfate Residues. Chemistry of Materials, 2001, 13, 1976-1983.	3.2	24
128	Electrical properties of SrTiO ₃ thin films on Si deposited by magnetron sputtering at low temperature. Applied Physics Letters, 2001, 79, 1513-1515.	1.5	53
129	Evolution of the electron energy distribution and plasma parameters in a pulsed magnetron discharge. Applied Physics Letters, 2001, 78, 3427-3429.	1.5	141
130	Microwave properties of tunable capacitors basee on magnetron sputtered ferroelectric Na _{0.5} K _{0.5} NbO ₃ film on low and high resistivity silicon substrates. Integrated Ferroelectrics, 2001, 39, 359-366.	0.3	4
131	RF-Magnetron Sputtered Au/(Na,K)NbO ₃ /SiO ₂ /Si MFIS-diode Structures. Materials Research Society Symposia Proceedings, 2001, 688, 1.	0.1	2
132	Pt/CeO ₂ SIC Schottky diodes with high response to hydrogen and hydrocarbons. , 2001, , 832-835.		9
133	Growth of SrTiO ₃ thin films on LaAlO ₃ (001) substrates; the influence of growth temperature on composition, orientation, and surface morphology. Thin Solid Films, 2000, 360, 181-186.	0.8	10
134	Epitaxial growth of W-doped VO ₂ /V ₂ O ₃ multilayer on $\hat{\pm}$ -Al ₂ O ₃ (110) by reactive magnetron sputtering. Thin Solid Films, 2000, 375, 128-131.	0.8	34
135	Electrostatic powder impact deposition (EPID) of Ge on Si and Cu substrates, microstructure and morphology study. Journal Physics D: Applied Physics, 2000, 33, 1155-1160.	1.3	0
136	Ionized sputter deposition using an extremely high plasma density pulsed magnetron discharge. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 1533-1537.	0.9	235
137	Peroxo solâ€”gel preparation: photochromic/electrochromic properties of Moâ€”Ti oxide gels and thin films. Journal of Materials Chemistry, 2000, 10, 2396-2400.	6.7	24
138	Evaluation of Intermittent Contact Mode AFM Probes by HREM and Using Atomically Sharp CeO ₂ Ridges as Tip Characterizer. Langmuir, 2000, 16, 6267-6277.	1.6	34
139	Composition, structure, and dielectric tunability of epitaxial SrTiO ₃ thin films grown by radio frequency magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1999, 17, 564-570.	0.9	41
140	Growth and characterization of epitaxial films of tungsten-doped vanadium oxides on sapphire (110) by reactive magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1999, 17, 1817-1821.	0.9	25
141	Reduction of density of subgrain boundaries and misfit dislocations in epitaxial (001) SrTiO ₃ thin films: Effect on dielectric tunability. Journal of Applied Physics, 1999, 85, 3976-3983.	1.1	12
142	Epitaxial cerium oxide buffer layers and YBa ₂ Cu ₃ O _{7-$\hat{\delta}$} thin films for microwave device applications. Journal of Materials Research, 1999, 14, 2385-2393.	1.2	28
143	Morphology changes of thin Pd films grown on SiO ₂ : influence of adsorbates and temperature. Thin Solid Films, 1999, 342, 297-306.	0.8	19
144	A novel pulsed magnetron sputter technique utilizing very high target power densities. Surface and Coatings Technology, 1999, 122, 290-293.	2.2	910

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145	Monte Carlo simulations of the transport of sputtered particles. Computer Physics Communications, 1999, 120, 238-254.	3.0	18
146	Carbon Monoxide Oxidation on Copper Oxide Thin Films Supported on Corrugated Cerium Dioxide {111} and {001} Surfaces. Journal of Catalysis, 1999, 181, 6-15.	3.1	41
147	Title is missing!. Journal of Materials Science: Materials in Electronics, 1999, 10, 203-208.	1.1	4
148	Hydrogen uptake in alumina thin films synthesized from an aluminum plasma stream in an oxygen ambient. Applied Physics Letters, 1999, 74, 200-202.	1.5	73
149	Low temperature growth of SrTiO ₃ thin films on glass fiber laminate substrates. Ferroelectrics, 1999, 225, 287-294.	0.3	1
150	Sharp microfaceting of (001)-oriented cerium dioxide thin films and the effect of annealing on surface morphology. Surface Science, 1999, 429, 22-33.	0.8	68
151	Determination of the complex dielectric function of epitaxial SrTiO ₃ films using transmission electron energy-loss spectroscopy. Journal of Applied Physics, 1999, 85, 2828-2834.	1.1	27
152	Dislocations, strain, and defects in heteroepitaxial YBa ₂ Cu ₃ O _{7-x} /SrTiO ₃ multilayers. Physica C: Superconductivity and Its Applications, 1998, 304, 307-313.	0.6	9
153	Formation of secondary phases in YBa ₂ Cu ₃ O _{7-x} /SrTiO ₃ multilayers. Physica C: Superconductivity and Its Applications, 1998, 304, 245-254.	0.6	10
154	Modeling of the deposition of stoichiometric Al ₂ O ₃ using nonarcing direct current magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1998, 16, 1286-1292.	0.9	10
155	Growth and field dependent dielectric properties of epitaxial Na _{0.5} K _{0.5} NbO ₃ thin films. Applied Physics Letters, 1998, 73, 927-929.	1.5	90
156	High rate reactive dc magnetron sputter deposition of Al ₂ O ₃ films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1998, 16, 639-643.	0.9	42
157	Microstructure and microwave dielectric properties of epitaxial SrTiO ₃ films on LaAlO ₃ substrates. Journal of Applied Physics, 1998, 83, 4884-4890.	1.1	28
158	Plasma characteristics at off-axis high pressure magnetron YBa ₂ Cu ₃ O _{7-x} sputtering. Journal of Applied Physics, 1997, 82, 1882-1889.	1.1	36
159	HTS/ferroelectric devices for microwave applications. IEEE Transactions on Applied Superconductivity, 1997, 7, 2458-2461.	1.1	46
160	High resolution X-ray diffraction mapping studies on the domain structure of LaAlO ₃ single crystal substrates and its influence on SrTiO ₃ film growth. Journal of Crystal Growth, 1997, 171, 401-408.	0.7	24
161	Modelling of thin-film HTS/ferroelectric interdigital capacitors. IET Microwaves Antennas and Propagation, 1996, 143, 397.	1.2	44
162	Structural and electrical characterization of sputter-deposited SrTiO ₃ thin films. Microelectronic Engineering, 1995, 29, 123-127.	1.1	13

#	ARTICLE	IF	CITATIONS
163	Microstructure of SrTiO ₃ Thin Films as Single Layer and Incorporated in YBa ₂ Cu ₃ O _{7-x} /SrTiO ₃ Multilayers. Materials Research Society Symposia Proceedings, 1995, 401, 369.	0.1	2
164	Magnetoconductivity in YBa ₂ Cu ₃ O ₇ thin films. Physical Review B, 1995, 52, 3748-3755.	1.1	28
165	A spectroscopic ellipsometry study of cerium dioxide thin films grown on sapphire by rf magnetron sputtering. Journal of Applied Physics, 1995, 77, 5369-5376.	1.1	186
166	Reduction of surface particles on YBa ₂ Cu ₃ O ₇ thin films through the use of nonstoichiometric sputtering targets and N ₂ O in the sputtering gas. Journal of Applied Physics, 1995, 77, 6388-6393.	1.1	18
167	Transmission electron microscopy of epitaxial SrTiO ₃ films on LaAlO ₃ substrates. Microelectronic Engineering, 1995, 29, 309-312.	1.1	3
168	Formation of Cu-rich particles on the surface of YBa ₂ Cu ₃ O ₇ thin film grown by in situ off-axis sputtering. Journal of Applied Physics, 1994, 75, 2020-2025.	1.1	50
169	Conductance noise in YBCO thin films. Physica B: Condensed Matter, 1994, 194-196, 1635-1636.	1.3	1
170	Study of magnetoresistance in oriented YBa ₂ Cu ₃ O ₇ thin film. Physica B: Condensed Matter, 1994, 194-196, 2291-2292.	1.3	2
171	Fluctuation magnetoconductivity in an YBa ₂ Cu ₃ O ₇ thin film. Physica C: Superconductivity and Its Applications, 1994, 235-240, 1925-1926.	0.6	0
172	Characterization of Sputtered Cerium Dioxide Thin Films. Materials Research Society Symposia Proceedings, 1994, 355, 209.	0.1	0
173	Structural characterization of yttria (Y ₂ O ₃) inclusions in YBa ₂ Cu ₃ O ₇ films: Growth model and effect on critical current density. Thin Solid Films, 1993, 229, 237-248.	0.8	34
174	Spontaneous conductance fluctuations and percolation in YBa ₂ /Cu ₃ /O ₇ thin films. IEEE Transactions on Magnetics, 1993, 29, 3574-3576.	1.2	2
175	X-ray-diffraction mapping of epitaxial YBa ₂ Cu ₃ O ₇ thin films: Determination of in-plane epitaxy and a-, b-, and c-axis lengths in films with varying oxygen deficiency. Physical Review B, 1993, 47, 3431-3434.	1.1	17
176	Observation of metallic resistivity behavior following a 1/T ³ dependence of T _c in a YBa ₂ Cu ₃ O ₇ thin film with varying oxygen deficiency. Physical Review B, 1993, 48, 7708-7711.	1.1	6
177	Semi-Coherent Yttria Inclusions Occurring Spontaneously in YBa ₂ Cu ₃ O _{6+δ} Films Grown by Dc Magnetron Sputtering. Materials Research Society Symposia Proceedings, 1992, 275, 389.	0.1	1
178	Identification of semi-coherent Y ₂ O ₃ inclusions in YBa ₂ Cu ₃ O _x superconducting thin films by HREM. Micron and Microscopica Acta, 1992, 23, 231-232.	0.2	4
179	Yttrium oxide inclusions in YBa ₂ Cu ₃ O _x thin films. Physica C: Superconductivity and Its Applications, 1992, 202, 69-74.	0.6	61
180	Flux pinning in YBa ₂ Cu ₃ O ₇ thin films grown by d.c. magnetron sputtering. Cryogenics, 1992, 32, 1084-1088.	0.9	17

#	ARTICLE	IF	CITATIONS
181	Microstructure and microwave loss studies on epitaxial YBa ₂ Cu ₃ O _x thin films. , 1992, , 219-224.		0
182	Pressure dependence of the resputtering of Y-Ba-Cu-O thin films grown by DC magnetron sputtering. Superconductor Science and Technology, 1991, 4, S379-S381.	1.8	3
183	Resputtering effects on the stoichiometry of YBa ₂ Cu ₃ O _x thin films. Journal of Applied Physics, 1991, 69, 390-395.	1.1	46
184	Electronic properties of epitaxial TiN/VN(001) superlattices. Journal of Applied Physics, 1991, 70, 4963-4968.	1.1	20
185	The influence of target oxygen on the YBa ₂ Cu ₃ O ₆ + δ direct-current magnetron sputtering process. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1991, 9, 2165-2169.	0.9	2
186	Growth, structural characterization and properties of hard and wear-protective layered materials. Thin Solid Films, 1990, 193-194, 818-831.	0.8	55
187	Reproducible Fabrication of YBa ₂ Cu ₃ O ₆ + δ Thin Films by DC Magnetron Sputtering. , 1990, , 93-100.		0
188	The dc magnetron sputter deposition process of YBa ₂ Cu ₃ O _x thin films. Physica C: Superconductivity and Its Applications, 1989, 162-164, 599-600.	0.6	0
189	Structure and ammonia sensitivity of thin platinum or iridium gates in metal-oxide-silicon capacitors. Thin Solid Films, 1989, 177, 77-93.	0.8	53
190	Microstructure modification of TiN by ion bombardment during reactive sputter deposition. Thin Solid Films, 1989, 169, 299-314.	0.8	308
191	Target presputtering effects on stoichiometry and deposition rate of YBa ₂ Cu ₃ O _x thin films grown by dc magnetron sputtering. Applied Physics Letters, 1988, 52, 1907-1909.	1.5	30
192	Summary Abstract: The role of low-energy ion bombardment during the growth of epitaxial TiN(100) films by reactive magnetron sputtering: Defect formation and annihilation. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1987, 5, 2162-2164.	0.9	4
193	Growth of single-crystal TiN/VN strained-layer superlattices with extremely high mechanical hardness. Journal of Applied Physics, 1987, 62, 481-484.	1.1	714
194	Low-energy ion irradiation during film growth for reducing defect densities in epitaxial TiN(100) films deposited by reactive-magnetron sputtering. Journal of Applied Physics, 1987, 61, 552-555.	1.1	110
195	Microstructural and microchemical characterization of hard coatings. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1986, 4, 2770-2783.	0.9	53
196	Growth, structure and properties of TiN coatings on steel substrates. AIP Conference Proceedings, 1986, , .	0.3	2
197	Cross-Section preparation for TEM of film-substrate combinations with a large difference in sputtering yields. Journal of Electron Microscopy Technique, 1986, 4, 361-369.	1.1	76
198	Microstructure evolution in TiN films reactively sputter deposited on multiphase substrates. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1986, 4, 500-503.	0.9	76

#	ARTICLE	IF	CITATIONS
199	Cross-section preparation for tem of film-substrate combinations with large differences in sputtering yields. Ultramicroscopy, 1985, 17, 172.	0.8	0
200	Initial growth of TiN on different phases of high speed steel. Thin Solid Films, 1985, 124, 163-170.	0.8	41
201	Reactively magnetron sputtered Hf ϵ N films. I. Composition and structure. Journal of Applied Physics, 1985, 58, 3104-3111.	1.1	46
202	Reactively magnetron sputtered Hf ϵ N films. II. Hardness and electrical resistivity. Journal of Applied Physics, 1985, 58, 3112-3117.	1.1	61
203	Adhesion of titanium nitride coatings on high ϵ speed steels. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1985, 3, 308-315.	0.9	131
204	Structure of reactively magnetron sputtered Hf ϵ N films. Applied Physics Letters, 1984, 44, 670-672.	1.5	43
205	Effects of substrate temperature and substrate material on the structure of reactively sputtered TiN films. Thin Solid Films, 1984, 122, 115-129.	0.8	83
206	The effect of oxygen and substrate temperature on the growth of Ti thin films on stainless ϵ steel substrates. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1983, 1, 301-304.	0.9	8
207	Monte Carlo simulations of the transport of sputtered particles. , 0, , .		0
208	Ionized-PVD by pulsed sputtering of Ta for metallization of high-aspect-ratio structures in VLSI. , 0, , .		2
209	Growth and characterization of RuO/sub 2/ films prepared by reactive unbalanced magnetron sputtering. , 0, , .		0
210	Investigation of 4H-SiC diode with RuO/sub 2/ Schottky contact by DLTS. , 0, , .		0