Ivan G Petrov

List of Publications by Year
in descending order

331	19,185	13087 68	14736 127
papers	citations	h-index	g-index

346	346	346	13887
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Effect of low-energy ion assistance on the properties of sputtered ZrB2 films. Vacuum, 2022, 195, 110688.	1.6	3
2	Oxidation resistance and mechanical properties of sputter-deposited Ti0.9Al0.1B2-y thin films. Surface and Coatings Technology, 2022, 442, 128187.	2.2	7
3	Dense, single-phase, hard, and stress-free Ti0.32Al0.63W0.05N films grown by magnetron sputtering with dramatically reduced energy consumption. Scientific Reports, 2022, 12, 2166.	1.6	8
4	Improving oxidation and wear resistance of TiB2 films by nano-multilayering with Cr. Surface and Coatings Technology, 2022, 436, 128337.	2.2	4
5	Microstructure, mechanical, and corrosion properties of Zr1-xCrxBy diboride alloy thin films grown by hybrid high power impulse/DC magnetron co-sputtering. Applied Surface Science, 2022, 591, 153164.	3.1	3
6	On the nature of planar defects in transition metal diboride line compounds. Materialia, 2022, 24, 101478.	1.3	4
7	Reprint of: Improving oxidation and wear resistance of TiB2 films by nano-multilayering with Cr. Surface and Coatings Technology, 2022, 442, 128602.	2.2	2
8	Oxidation kinetics of overstoichiometric TiB2 thin films grown by DC magnetron sputtering. Corrosion Science, 2022, 206, 110493.	3.0	17
9	Age hardening in superhard ZrB2-rich Zr1-xTaxBy thin films. Scripta Materialia, 2021, 191, 120-125.	2.6	28
10	Where is the unpaired transition metal in substoichiometric diboride line compounds?. Acta Materialia, 2021, 204, 116510.	3.8	21
11	Multifunctional ZrB2-rich Zr1-xCrxBy thin films with enhanced mechanical, oxidation, and corrosion properties. Vacuum, 2021, 185, 109990.	1.6	21
12	X-ray photoelectron spectroscopy analysis of TiBx (1.3â€‰â‰€â€‰xâ€‰â‰€â€‰3.0) thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	0.9	7
13	Dense Ti0.67Hf0.33B1.7 thin films grown by hybrid HfB2-HiPIMS/TiB2-DCMS co-sputtering without external heating. Vacuum, 2021, 186, 110057.	1.6	9
14	Toward energy-efficient physical vapor deposition: Routes for replacing substrate heating during magnetron sputter deposition by employing metal ion irradiation. Surface and Coatings Technology, 2021, 415, 127120.	2.2	23
15	Synthesis and characterization of CrB2 thin films grown by DC magnetron sputtering. Scripta Materialia, 2021, 200, 113915.	2.6	12
16	Improved oxidation properties from a reduced B content in sputter-deposited TiBx thin films. Surface and Coatings Technology, 2021, 420, 127353.	2.2	24
17	Towards energy-efficient physical vapor deposition: Mapping out the effects of W+ energy and concentration on the densification of TiAlWN thin films grown with no external heating. Surface and Coatings Technology, 2021, 424, 127639.	2.2	15
18	Systematic compositional analysis of sputter-deposited boron-containing thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	0.9	26

#	Article	IF	Citations
19	Thermally induced structural evolution and age-hardening of polycrystalline V1â€“xMoxN (xÂâ‰ˆÂ0.4) thin films. Surface and Coatings Technology, 2021, 405, 126723.	2.2	11
20	Cubic-structure Al-rich TiAlSiN thin films grown by hybrid high-power impulse magnetron co-sputtering with synchronized Al+ irradiation. Surface and Coatings Technology, 2020, 385, 125364.	2.2	10
21	Improving the high-temperature oxidation resistance of TiB2 thin films by alloying with Al. Acta Materialia, 2020, 196, 677-689.	3.8	65
22	Self-organized columnar Zr0.7Ta0.3B1.5 core/shell-nanostructure thin films. Surface and Coatings Technology, 2020, 401, 126237.	2.2	15
23	Microstructure and materials properties of understoichiometric TiBx thin films grown by HiPIMS. Surface and Coatings Technology, 2020, 404, 126537.	2.2	33
24	Growth of dense, hard yet low-stress Ti0.40Al0.27W0.33N nanocomposite films with rotating substrate and no external substrate heating. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	0.9	13
25	The influence of pressure and magnetic field on the deposition of epitaxial TiBx thin films from DC magnetron sputtering. Vacuum, 2020, 177, 109355.	1.6	14
26	3D-to-2D Morphology Manipulation of Sputter-Deposited Nanoscale Silver Films on Weakly Interacting Substrates via Selective Nitrogen Deployment for Multifunctional Metal Contacts. ACS Applied Nano Materials, 2020, 3, 4728-4738.	2.4	38
27	Adaptive hard and tough mechanical response in single-crystal B1 VNx ceramics via control of anion vacancies. Acta Materialia, 2020, 192, 78-88.	3.8	46
28	Preface for the Festschrift Honoring Dr. Steve Rossnagel. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	0.9	0
29	A review of the intrinsic ductility and toughness of hard transition-metal nitride alloy thin films. Thin Solid Films, 2019, 688, 137479.	0.8	71
30	Paradigm shift in thin-film growth by magnetron sputtering: From gas-ion to metal-ion irradiation of the growing film. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .	0.9	94
31	Mechanical properties of VMoNO as a function of oxygen concentration: Toward development of hard and tough refractory oxynitrides. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .	0.9	1
32	High-power impulse magnetron sputter deposition of TiBx thin films: Effects of pressure and growth temperature. Vacuum, 2019, 169, 108884.	1.6	21
33	Preface of the special issue â€œThin Films Advancesâ€•dedicated to the 75th birthday of Professor Joe Greene. Thin Solid Films, 2019, 688, 137494.	0.8	0
34	TiN film growth on misoriented TiN grains with simultaneous low-energy bombardment: Restructuring leading to epitaxy. Thin Solid Films, 2019, 688, 137380.	0.8	7
35	Strategy for simultaneously increasing both hardness and toughness in ZrB2-rich Zr1â^'xTaxBy thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .	0.9	42
36	Corrosion Resistant TiTaN and TiTaAlN Thin Films Grown by Hybrid HiPIMS/DCMS Using Synchronized Pulsed Substrate Bias with No External Substrate Heating. Coatings, 2019, 9, 841.	1.2	5

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37	Time evolution of ion fluxes incident at the substrate plane during reactive high-power impulse magnetron sputtering of groups IVb and VIb transition metals in Ar/N2. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .	0.9	31
38	Effects of surface vibrations on interlayer mass transport: Ab initio molecular dynamics investigation of Ti adatom descent pathways and rates from TiN/TiN(001) islands. Physical Review B, 2018, 97, .	1.1	21
39	Controlling the B/Ti ratio of TiBx thin films grown by high-power impulse magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .	0.9	46
40	Enhanced Ti0.84Ta0.16N diffusion barriers, grown by a hybrid sputtering technique with no substrate heating, between Si(001) wafers and Cu overlayers. Scientific Reports, 2018, 8, 5360.	1.6	25
41	Elastic properties and plastic deformation of TiC- and VC-based pseudobinary alloys. Acta Materialia, 2018, 144, 376-385.	3.8	45
42	Low temperature (Ts/Tmâ€‰<â€‰0.1) 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
43	Self-structuring in Zr1âˆ’xAlxN films as a function of composition and growth temperature. Scientific Reports, 2018, 8, 16327.	1.6	9
44	Growth and mechanical properties of 111-oriented V0.5Mo0.5Nx/Al2O3(0001) thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, .	0.9	15
45	Recent developments in surface science and engineering, thin films, nanoscience, biomaterials, plasma science, and vacuum technology. Thin Solid Films, 2018, 660, 120-160.	0.8	27
46	V0.5Mo0.5Nx/MgO(001): Composition, nanostructure, and mechanical properties as a function of film growth temperature. Acta Materialia, 2017, 126, 194-201.	3.8	23
47	Effects of incident N atom kinetic energy on TiN/TiN(001) film growth dynamics: A molecular dynamics investigation. Journal of Applied Physics, 2017, 121, .	1.1	31
48	Controlling the boron-to-titanium ratio in magnetron-sputter-deposited TiBx thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .	0.9	40
49	Low-temperature growth of dense and hard Ti0.41Al0.51Ta0.08N films via hybrid HIPIMS/DC magnetron co-sputtering with synchronized metal-ion irradiation. Journal of Applied Physics, 2017, 121, .	1.1	28
50	Control of the metal/gas ion ratio incident at the substrate plane during high-power impulse magnetron sputtering of transition metals in Ar. Thin Solid Films, 2017, 642, 36-40.	0.8	24
51	Gas rarefaction effects during high power pulsed magnetron sputtering of groups IVb and VIb transition metals in Ar. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .	0.9	27
52	Phonon and electron contributions to the thermal conductivity of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">V</mml:mi><mml:msub><mml:mi mathvariant="normal">N</mml:mi><mml:mi>x</mml:mi></mml:msub></mml:mrow></mml:math> epitaxial layers. Physical Review Materials, 2017, 1, .	0.9	34
53	Large-scale molecular dynamics simulations of TiN/TiN(001) epitaxial film growth. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, .	0.9	30
54	Nitrogen-doped bcc-Cr films: Combining ceramic hardness with metallic toughness and conductivity. Scripta Materialia, 2016, 122, 40-44.	2.6	41

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55	Growth, nanostructure, and optical properties of epitaxial VN_x/MgO(001) (0.80 â‰¤ x â‰¤ 1.00) layers deposited by reactive magnetron sputtering. Journal of Materials Chemistry C, 2016, 4, 7924-7938.	2.7	30
56	Interpretation of X-ray photoelectron spectra of carbon-nitride thin films: New insights from in situ XPS. Carbon, 2016, 108, 242-252.	5.4	158
57	Ab Initio Molecular Dynamics Simulations of Nitrogen/VN(001) Surface Reactions: Vacancy-Catalyzed N₂ Dissociative Chemisorption, N Adatom Migration, and N₂ Desorption. Journal of Physical Chemistry C, 2016, 120, 12503-12516.	1.5	39
58	Effects of phase stability, lattice ordering, and electron density on plastic deformation in cubic TiWN pseudobinary transition-metal nitride alloys. Acta Materialia, 2016, 103, 823-835.	3.8	56
59	N and Ti adatom dynamics on stoichiometric polar TiN(111) surfaces. Surface Science, 2016, 649, 72-79.	0.8	32
60	Reflection thermal diffuse x-ray scattering for quantitative determination of phonon dispersion relations. Physical Review B, 2015, 92, .	1.1	5
61	Dynamic and structural stability of cubic vanadium nitride. Physical Review B, 2015, 91, .	1.1	71
62	The dynamics of TiNx (x = 1â€“3) admolecule interlayer and intralayer transport on TiN/TiN(001) islands. Thin Solid Films, 2015, 589, 133-144.	0.8	12
63	Novel hard, tough HfAlSiN multilayers, defined by alternating Si bond structure, deposited using modulated high-flux, low-energy ion irradiation of the growing film. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	0.9	7
64	Strategy for tuning the average charge state of metal ions incident at the growing film during HIPIMS deposition. Vacuum, 2015, 116, 36-41.	1.6	34
65	Al capping layers for nondestructive x-ray photoelectron spectroscopy analyses of transition-metal nitride thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	0.9	33
66	Control of Ti1â^'xSixN nanostructure via tunable metal-ion momentum transfer during HIPIMS/DCMS co-deposition. Surface and Coatings Technology, 2015, 280, 174-184.	2.2	53
67	Self-organized anisotropic (Zr1â^'Si)N nanocomposites grown by reactive sputter deposition. Acta Materialia, 2015, 82, 179-189.	3.8	27
68	Vacancy-induced toughening in hard single-crystal V 0.5 Mo 0.5 N x /MgO(0 0 1) thin films. Acta Materialia, 2014, 77, 394-400.	3.8	75
69	Structure evolution and properties of TiAlCN/VCN coatings deposited by reactive HIPIMS. Surface and Coatings Technology, 2014, 257, 38-47.	2.2	26
70	Novel strategy for low-temperature, high-rate growth of dense, hard, and stress-free refractory ceramic thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, .	0.9	45
71	Effect of WN content on toughness enhancement in V1â^'xWxN/MgO(001) thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, .	0.9	45
72	Ti adatom diffusion on TiN(001): Ab initio and classical molecular dynamics simulations. Surface Science, 2014, 627, 34-41.	0.8	40

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73	Strain-free, single-phase metastable Ti0.38Al0.62N alloys with high hardness: metal-ion energy vs. momentum effects during film growth by hybrid high-power pulsed/dc magnetron cosputtering. Thin Solid Films, 2014, 556, 87-98.	0.8	69
74	X-ray Photoelectron Spectroscopy Analyses of the Electronic Structure of Polycrystalline Ti1-xAlxN Thin Films with 0â€‰â‰€â€‰xâ€‰â‰€â€‰0.96. Surface Science Spectra, 2014, 21, 35-49.	0.3	20
75	Elastic constants, Poisson ratios, and the elastic anisotropy of VN(001), (011), and (111) epitaxial layers grown by reactive magnetron sputter deposition. Journal of Applied Physics, 2014, 115, 214908.	1.1	49
76	Ab initio and classical molecular dynamics simulations of N2 desorption from TiN(001) surfaces. Surface Science, 2014, 624, 25-31.	0.8	52
77	Electrochemically tunable thermal conductivity of lithium cobalt oxide. Nature Communications, 2014, 5, 4035.	5.8	137
78	Si incorporation in Ti1â^'xSixN films grown on TiN(001) and (001)-faceted TiN(111) columns. Surface and Coatings Technology, 2014, 257, 121-128.	2.2	25
79	Ti and N adatom descent pathways to the terrace from atop two-dimensional TiN/TiN(001) islands. Thin Solid Films, 2014, 558, 37-46.	0.8	29
80	Physical properties of epitaxial ZrN/MgO(001) layers grown by reactive magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, .	0.9	56
81	Electron/phonon coupling in group-IV transition-metal and rare-earth nitrides. Journal of Applied Physics, 2013, 114, .	1.1	31
82	Sputter-cleaned Epitaxial VxMo(1-x)Ny/MgO(001) Thin Films Analyzed by X-ray Photoelectron Spectroscopy: 3. Polycrystalline V0.49Mo0.51N1.02. Surface Science Spectra, 2013, 20, 80-85.	0.3	8
83	ICMCTF 2013 â€" Preface. Thin Solid Films, 2013, 549, 1.	0.8	0
84	Improving high-capacity Li1.2Ni0.15Mn0.55Co0.1O2-based lithium-ion cells by modifiying the positive electrode with alumina. Journal of Power Sources, 2013, 233, 346-357.	4.0	139
85	Stretchable batteries with self-similar serpentine interconnects and integrated wireless recharging systems. Nature Communications, 2013, 4, 1543.	5.8	1,169
86	Sputter-cleaned Epitaxial VxMo(1-x)Ny/MgO(001) Thin Films Analyzed by X-ray Photoelectron Spectroscopy: 1. Single-crystal V0.48Mo0.52N0.64. Surface Science Spectra, 2013, 20, 68-73.	0.3	12
87	Toughness enhancement in hard ceramic thin films by alloy design. APL Materials, 2013, 1, .	2.2	109
88	Epitaxial V0.6W0.4N/MgO(001): Evidence for ordering on the cation sublattice. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, .	0.9	15
89	Sputter-cleaned Epitaxial VxMo(1-x)Ny/MgO(001) Thin Films Analyzed by X-ray Photoelectron Spectroscopy: 2. Single-crystal V0.47Mo0.53N0.92. Surface Science Spectra, 2013, 20, 74-79.	0.3	11
90	Nanolabyrinthine ZrAlN thin films by self-organization of interwoven single-crystal cubic and hexagonal phases. APL Materials, 2013, 1, .	2.2	35

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91	Ion-induced surface relaxation: controlled bending and alignment of nanowire arrays. Nanotechnology, 2012, 23, 175302.	1.3	11
92	Microstructure, Oxidation and Tribological Properties of TiAlCN/VCN Coatings Deposited by Reactive HIPIMS. IOP Conference Series: Materials Science and Engineering, 2012, 39, 012011.	0.3	1
93	The Si3N4/TiN Interface: 3. Si3N4/TiN(001) Grown with a â^'150 V Substrate Bias and Analyzed In situ using Angle-resolved X-ray Photoelectron Spectroscopy. Surface Science Spectra, 2012, 19, 52-61.	0.3	2
94	The Si3N4/TiN Interface: 1. TiN(001) Grown and Analyzed In situ using Angle-resolved X-ray Photoelectron Spectroscopy. Surface Science Spectra, 2012, 19, 33-41.	0.3	5
95	The Si3N4/TiN Interface: 5. TiN/Si3N4 Grown and Analyzed In situ using Angle-resolved X-ray Photoelectron Spectroscopy. Surface Science Spectra, 2012, 19, 72-81.	0.3	0
96	Role of ethylene on surface oxidation of TiO2(110). Applied Physics Letters, 2012, 101, 211601.	1.5	2
97	The Si3N4/TiN Interface: An Introduction to a Series of Ultrathin Films Grown and Analyzed In situ using X-ray Photoelectron Spectroscopy. Surface Science Spectra, 2012, 19, 30-32.	0.3	3
98	The Si3N4/TiN Interface: 7. Ti/TiN(001) Grown and Analyzed In situ using X-ray Photoelectron Spectroscopy. Surface Science Spectra, 2012, 19, 92-97.	0.3	1
99	The Si3N4/TiN Interface: 6. Si/TiN(001) Grown and Analyzed In situ using Angle-resolved X-ray Photoelectron Spectroscopy. Surface Science Spectra, 2012, 19, 82-91.	0.3	0
100	Dynamics of Ti, N, and TiN<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mi>x</mml:mi></mml:msub></mml:math>(<mml:math) Tj ETQq0 0 0 rgBT /Overlock admolecule transport on TiN(001) surfaces. Physical Review B, 2012, 86, .	1.1	47
101	The Si3N4/TiN Interface: 2. Si3N4/TiN(001) Grown with a â^'7 V Substrate Bias and Analyzed In situ using Angle-resolved X-ray Photoelectron Spectroscopy. Surface Science Spectra, 2012, 19, 42-51.	0.3	1
102	Configurational disorder effects on adatom mobilities on Ti<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^'</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math>Al<mml:r xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mi>x</mml:mi></mml:msub></mml:math>N(001) surfaces from first principles. Physical Review B, 2012, 85, .	1.1	33
103	The Si3N4/TiN Interface: 4. Si3N4/TiN(001) Grown with a â^'250 V Substrate Bias and Analyzed In situ using Angle-resolved X-ray Photoelectron Spectroscopy. Surface Science Spectra, 2012, 19, 62-71.	0.3	1
104	Nanodiamond-Based Nanolubricants. Fullerenes Nanotubes and Carbon Nanostructures, 2012, 20, 606-610.	1.0	19
105	Metal versus rare-gas ion irradiation during Ti1â^'xAlxN film growth by hybrid high power pulsed magnetron/dc magnetron co-sputtering using synchronized pulsed substrate bias. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, .	0.9	98
106	Hierarchically textured Li Mn2â^'O4 thin films as positive electrodes for lithium-ion batteries. Journal of Power Sources, 2012, 206, 288-294.	4.0	10
107	Role of Tin+ and Aln+ ion irradiation (n=1, 2) during Ti1-xAlxN alloy film growth in a hybrid HIPIMS/magnetron mode. Surface and Coatings Technology, 2012, 206, 4202-4211.	2.2	119
108	In situ high-temperature scanning tunneling microscopy study of bilayer graphene growth on 6H-SiC(0001). Thin Solid Films, 2012, 520, 5289-5293.	0.8	3

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109	Selection of metal ion irradiation for controlling Ti1âˆ’xAlxN alloy growth via hybrid HIPIMS/magnetron co-sputtering. Vacuum, 2012, 86, 1036-1040.	1.6	66
110	Long-Range and Local Structure in the Layered Oxide Li_{1.2}Co_{0.4}Mn_{0.4}O₂. Chemistry of Materials, 2011, 23, 2039-2050.	3.2	171
111	Enhanced Ge/Si(001) island areal density and self-organization due to P predeposition. Journal of Applied Physics, 2011, 109, 093526.	1.1	2
112	ICMCTF 2011 â€" Preface. Surface and Coatings Technology, 2011, 206, 1511.	2.2	0
113	Real-time control of AlN incorporation in epitaxial Hf1âˆ’Al N using high-flux, low-energy (10â€“40 eV) ion bombardment during reactive magnetron sputter deposition from a Hf0.7Al0.3 alloy target. Acta Materialia, 2011, 59, 421-428.	3.8	20
114	Analytical electron microscopy of Li1.2Co0.4Mn0.4O2 for lithium-ion batteries. Solid State Ionics, 2011, 182, 98-107.	1.3	65
115	Electronic structure of the SiN<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:mrow></mml:math>/TiN interface: A model system for superhard nanocomposites. Physical Review B, 2011, 83, .	1.1	42
116	Raman scattering from TiNx (0.67â€‰â€‰â€‰xâ€‰â€‰â€‰1.00) single crystals grown on MgO(001). Journal of Applied Physics, 2011, 110, .	1.1	54
117	Importance of line and interfacial energies during VLS growth of finely stranded silica nanowires. Journal of Materials Research, 2011, 26, 2247-2253.	1.2	6
118	The Formation and Utility of Sub-Angstrom to Nanometer-Sized Electron Probes in the Aberration-Corrected Transmission Electron Microscope at the University of Illinois. Microscopy and Microanalysis, 2010, 16, 183-193.	0.2	32
119	Electrical characterization of MOS structures with self-organized three-layer gate dielectric containing Si nanocrystals. Journal of Physics: Conference Series, 2010, 253, 012034.	0.3	0
120	ICMCTF 2010. Surface and Coatings Technology, 2010, 205, 1177.	2.2	0
121	Structural Properties of AlN Grown on Sapphire at Plasma Self-Heating Conditions Using Reactive Magnetron Sputter Deposition. Journal of Electronic Materials, 2010, 39, 1146-1151.	1.0	19
122	Effect of oxygen to argon ratio on the properties of thin SiO x films deposited by r.f. sputtering. Journal of Materials Science: Materials in Electronics, 2010, 21, 481-485.	1.1	6
123	Conjugated Carbon Monolayer Membranes: Methods for Synthesis and Integration. Advanced Materials, 2010, 22, 1072-1077.	11.1	50
124	Probing Interfacial Electronic Structures in Atomic Layer LaMnO₃ and SrTiO₃ Superlattices. Advanced Materials, 2010, 22, 1156-1160.	11.1	69
125	Local Structure of Layered Oxide Electrode Materials for Lithiumâ€ion Batteries. Advanced Materials, 2010, 22, 1122-1127.	11.1	152
126	Microstructural characterization of thin SiOx films obtained by physical vapor deposition. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 174, 132-136.	1.7	21

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127	Fully strained low-temperature epitaxy of TiN/MgO(001) layers using high-flux, low-energy ion irradiation during reactive magnetron sputter deposition. Thin Solid Films, 2010, 518, 5169-5172.	0.8	16
128	Formation of Si Nanocrystals in Thin SiO₂ Films for Memory Device Applications. Materials Science Forum, 2010, 644, 101-104.	0.3	7
129	TiAlCN/VCN nanolayer coatings suitable for machining of Al and Ti alloys deposited by combined high power impulse magnetron sputtering/unbalanced magnetron sputtering. Surface Engineering, 2010, 26, 610-614.	1.1	25
130	MoirÃ© Superstructures of Graphene on Faceted Nickel Islands. ACS Nano, 2010, 4, 6509-6514.	7.3	78
131	Layer-by-Layer Transfer of Multiple, Large Area Sheets of Graphene Grown in Multilayer Stacks on a Single SiC Wafer. ACS Nano, 2010, 4, 5591-5598.	7.3	65
132	Synergistic Compositions of Colloidal Nanodiamond as Lubricant-additive. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, 869-877.	0.6	37
133	Elastic buckling of AlN ribbons on elastomeric substrate. Applied Physics Letters, 2009, 94, 092104.	1.5	5
134	Highly Sensitive, Mechanically Stable Nanopore Sensors for DNA Analysis. Advanced Materials, 2009, 21, 2771-2776.	11.1	190
135	LEEM investigations of surfaces using a beam of energetic selfâ€ions. Microscopy Research and Technique, 2009, 72, 197-207.	1.2	7
136	Structural study of Li2MnO3 by electron microscopy. Journal of Materials Science, 2009, 44, 5579-5587.	1.7	68
137	Transfer of graphene layers grown on SiC wafers to other substrates and their integration into field effect transistors. Applied Physics Letters, 2009, 95, .	1.5	71
138	Low-temperature vapourâ€“liquidâ€“solid (VLS) growth of vertically aligned silicon oxide nanowires using concurrent ion bombardment. Nanotechnology, 2009, 20, 115607.	1.3	21
139	Growth of Semiconducting Graphene on Palladium. Nano Letters, 2009, 9, 3985-3990.	4.5	307
140	Real-time imaging of surface evolution driven by variable-energy ion irradiation. Ultramicroscopy, 2008, 108, 646-655.	0.8	7
141	Local structure and composition studies of Li1.2Ni0.2Mn0.6O2 by analytical electron microscopy. Journal of Power Sources, 2008, 178, 422-433.	4.0	141
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