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The ion energy distributions and ion flux composition from a high power impulse magnetron sputtering discharge

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| # | Paper | IF | Citations |
|-----|--|-----|-----------|
| 261 | Highly ionized fluxes of sputtered titanium atoms in high-power pulsed magnetron discharges. <i>Plasma Sources Science and Technology</i> , 2008 , 17, 025010 | 3.5 | 52 |
| 260 | Ion composition produced by high power impulse magnetron sputtering discharges near the substrate. <i>Journal of Applied Physics</i> , 2008 , 104, 083305 | 2.5 | 55 |
| 259 | Sputtering in vacuum: A technology for ultraclean metallization and space propulsion. 2008, | | |
| 258 | Anomalous electron transport in high power impulse magnetron sputtering. <i>Plasma Sources Science and Technology</i> , 2008 , 17, 025007 | 3.5 | 47 |
| 257 | Study of a fast high power pulsed magnetron discharge: role of plasma deconfinement on the charged particle transport. <i>Plasma Sources Science and Technology</i> , 2008 , 17, 035007 | 3.5 | 21 |
| 256 | Origins of ion energy distribution function (IEDF) in high power impulse magnetron sputtering (HIPIMS) plasma discharge. <i>Journal Physics D: Applied Physics</i> , 2008 , 41, 095203 | 3 | 76 |
| 255 | Cross-field ion transport during high power impulse magnetron sputtering. <i>Plasma Sources Science and Technology</i> , 2008 , 17, 035021 | 3.5 | 96 |
| 254 | A bulk plasma model for dc and HiPIMS magnetrons. <i>Plasma Sources Science and Technology</i> , 2008 , 17, 045009 | 3.5 | 44 |
| 253 | Spatial distribution of average charge state and deposition rate in high power impulse magnetron sputtering of copper. <i>Journal Physics D: Applied Physics</i> , 2008 , 41, 135210 | 3 | 36 |
| 252 | Ion energy distributions and efficiency of sputtering process in HIPIMS system. <i>Journal Physics D: Applied Physics</i> , 2008 , 41, 115306 | 3 | 22 |
| 251 | Observation of Ti4+ ions in a high power impulse magnetron sputtering plasma. 2008 , 93, 071504 | | 54 |
| 250 | Simulation of ion energy distributions in Ar/CH4rf discharges with ion extraction. <i>Plasma Sources Science and Technology</i> , 2009 , 18, 035003 | 3.5 | 6 |
| 249 | High Temporal Resolution Ion Energy Distribution Functions in HIPIMS Discharges. 2009 , 6, S610-S614 | | 10 |
| 248 | Control of molybdenum disulfide basal plane orientation during coating growth in pulsed magnetron sputtering discharges. <i>Thin Solid Films</i> , 2009 , 517, 5605-5610 | 2.2 | 65 |
| 247 | Ion energy and mass distributions of the plasma during modulated pulse power magnetron sputtering. <i>Surface and Coatings Technology</i> , 2009 , 203, 3676-3685 | 4.4 | 95 |
| 246 | Recent progress in thin film processing by magnetron sputtering with plasma diagnostics. <i>Journal Physics D: Applied Physics</i> , 2009 , 42, 043001 | 3 | 59 |
| 245 | Study of a HPPMS discharge in Ar/O2mixture: I. Discharge characteristics with Ru cathode. <i>Plasma Sources Science and Technology</i> , 2009 , 18, 045025 | 3.5 | 21 |

(2010-2009)

| 244 | Time evolution of ion energies in HIPIMS of chromium plasma discharge. <i>Journal Physics D: Applied Physics</i> , 2009 , 42, 135209 | 3 | 65 |
|-----|---|-----|-----|
| 243 | On the electron energy in the high power impulse magnetron sputtering discharge. <i>Journal of Applied Physics</i> , 2009 , 105, 123302 | 2.5 | 61 |
| 242 | Evolution of the plasma composition of a high power impulse magnetron sputtering system studied with a time-of-flight spectrometer. <i>Journal of Applied Physics</i> , 2009 , 105, 093304 | 2.5 | 35 |
| 241 | Self-sputtering far above the runaway threshold: an extraordinary metal-ion generator. 2009 , 102, 0450 | 003 | 63 |
| 240 | Energy flux measurements in high power impulse magnetron sputtering. <i>Journal Physics D: Applied Physics</i> , 2009 , 42, 185202 | 3 | 51 |
| 239 | Sputtering-Based Metal Ion Sources and their Applications. 2010 , 53, 480-485 | | |
| 238 | On the film density using high power impulse magnetron sputtering. <i>Surface and Coatings Technology</i> , 2010 , 205, 591-596 | 4.4 | 261 |
| 237 | 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 | 2.2 | 93 |
| 236 | High power pulsed magnetron sputtering: A review on scientific and engineering state of the art. <i>Surface and Coatings Technology</i> , 2010 , 204, 1661-1684 | 4.4 | 714 |
| 235 | High power impulse magnetron sputtering and related discharges: Scalable plasma sources for plasma-based ion implantation and deposition. <i>Surface and Coatings Technology</i> , 2010 , 204, 2864-2868 | 4.4 | 45 |
| 234 | The high power impulse magnetron sputtering discharge as an ionized physical vapor deposition tool. <i>Vacuum</i> , 2010 , 84, 1360-1364 | 3.7 | 82 |
| 233 | Time and energy resolved ion mass spectroscopy studies of the ion flux during high power pulsed magnetron sputtering of Cr in Ar and Ar/N2 atmospheres. <i>Vacuum</i> , 2010 , 84, 1159-1170 | 3.7 | 106 |
| 232 | Reactive deposition of Al N coatings in Ar/N2 atmospheres using pulsed-DC or high power impulse magnetron sputtering discharges. <i>Vacuum</i> , 2010 , 85, 120-125 | 3.7 | 29 |
| 231 | Plasma Parameters in a Pre-Ionized HiPIMS Discharge Operating at Low Pressure. 2010 , 38, 3007-3015 | | 37 |
| 230 | . 2010 , 38, 3089-3094 | | 35 |
| 229 | Influence of Substrate Biasing on (Al, Ti)N Thin Films Deposited by a Hybrid HiPIMS/DC Sputtering Process. 2010 , 38, 3040-3045 | | 10 |
| 228 | \$hbox{CrN}_{rm x}\$ Films Prepared by DC Magnetron Sputtering and High-Power Pulsed Magnetron Sputtering: A Comparative Study. 2010 , 38, 3046-3056 | | 65 |
| 227 | Spatial and temporal evolution of ion energies in high power impulse magnetron sputtering plasma discharge. <i>Journal of Applied Physics</i> , 2010 , 108, 063301 | 2.5 | 47 |

| 226 | Advances in Thin Film Technology through the Application of Modulated Pulse Power Sputtering. 2010 , 638-642, 208-213 | | 6 |
|-----|--|------|-----|
| 225 | Effect of nitrogen doping on TiOxNythin film formation at reactive high-power pulsed magnetron sputtering. <i>Journal Physics D: Applied Physics</i> , 2010 , 43, 285203 | 3 | 44 |
| 224 | Time resolved optical emission spectroscopy of an HPPMS coating process. <i>Journal Physics D: Applied Physics</i> , 2010 , 43, 075205 | 3 | 13 |
| 223 | Energetic deposition of metal ions: observation of self-sputtering and limited sticking for off-normal angles of incidence. <i>Journal Physics D: Applied Physics</i> , 2010 , 43, 065206 | 3 | 13 |
| 222 | The evolution of the plasma potential in a HiPIMS discharge and its relationship to deposition rate. <i>Plasma Sources Science and Technology</i> , 2010 , 19, 045014 | 3.5 | 100 |
| 221 | Short- and long-term plasma phenomena in a HiPIMS discharge. <i>Plasma Sources Science and Technology</i> , 2010 , 19, 025010 | 3.5 | 90 |
| 220 | Time-resolved investigation of dual high power impulse magnetron sputtering with closed magnetic field during deposition of Titu thin films. <i>Journal of Applied Physics</i> , 2010 , 108, 043305 | 2.5 | 50 |
| 219 | Temporal Evolution of the Ion Fluxes for Various Elements in HIPIMS Plasma Discharge. 2011 , 39, 1154- | 1164 | 25 |
| 218 | An ionization region model for high-power impulse magnetron sputtering discharges. <i>Plasma Sources Science and Technology</i> , 2011 , 20, 065007 | 3.5 | 78 |
| 217 | Double magnetron self-sputtering in HiPIMS discharges. <i>Plasma Sources Science and Technology</i> , 2011 , 20, 065008 | 3.5 | 4 |
| 216 | Internal current measurements in high power impulse magnetron sputtering. <i>Plasma Sources Science and Technology</i> , 2011 , 20, 045003 | 3.5 | 31 |
| 215 | Metal Ionization in a High-Power Pulsed Sputtering Penning Discharge. 2011 , 39, 3125-3132 | | 10 |
| 214 | Current-voltage-time characteristics of the reactive Ar/N2 high power impulse magnetron sputtering discharge. <i>Journal of Applied Physics</i> , 2011 , 110, 083306 | 2.5 | 47 |
| 213 | The evolution of the IEDFs in a low-pressure HiPIMS discharge. <i>Surface and Coatings Technology</i> , 2011 , 205, S307-S311 | 4.4 | 13 |
| 212 | Hysteresis and process stability in reactive high power impulse magnetron sputtering of metal oxides. <i>Thin Solid Films</i> , 2011 , 519, 7779-7784 | 2.2 | 72 |
| 211 | A comparison of reactive plasma pre-treatments on PET substrates by Cu and Ti pulsed-DC and HIPIMS discharges. <i>Thin Solid Films</i> , 2011 , 520, 1564-1570 | 2.2 | 16 |
| 210 | Two-domain formation during the epitaxial growth of GaN (0001) on c-plane Al2O3 (0001) by high power impulse magnetron sputtering. <i>Journal of Applied Physics</i> , 2011 , 110, 123519 | 2.5 | 15 |
| 209 | Study of the plasma parameters in a high-current pulsed magnetron sputtering system. 2011 , 37, 239-2 | 43 | 7 |

| 208 | Optical studies of plasma inhomogeneities in a high-current pulsed magnetron discharge. 2011 , 37, 621-6 | 27 | 75 |
|-----|--|----|-----|
| 207 | Growth and properties of Ti-Cu films with respect to plasma parameters in dual-magnetron sputtering discharges. 2011 , 64, 427-435 | | 28 |
| 206 | High rate deposition of thick CrN and Cr2N coatings using modulated pulse power (MPP) magnetron sputtering. <i>Surface and Coatings Technology</i> , 2011 , 205, 3226-3234 | ·4 | 104 |
| 205 | Effect of peak power in reactive high power impulse magnetron sputtering of titanium dioxide. Surface and Coatings Technology, 2011 , 205, 4828-4831 | ·4 | 62 |
| 204 | Recent advances in modulated pulsed power magnetron sputtering for surface engineering. 2011 , 63, 48-58 | | 63 |
| 203 | Time-Resolved Diagnostics of Dual High Power Impulse Magnetron Sputtering With Pulse Delays of 15 µs and 500 µs. 2011 , 51, 237-245 | | 24 |
| 202 | Ion density increase in high power twin-cathode magnetron system. <i>Vacuum</i> , 2011 , 86, 78-81 | ·7 | 8 |
| 201 | Effects of the magnetic field strength on the modulated pulsed power magnetron sputtering of metallic films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2011 , 29, 061301 ² | .9 | 11 |
| 200 | Study of plasma dynamics in a modulated pulsed power magnetron discharge using a time-resolved Langmuir probe. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2011 , 29, 01102 | 24 | 25 |
| 199 | Ion distribution measurements to probe target and plasma processes in electronegative magnetron discharges. II. Positive ions. <i>Journal of Applied Physics</i> , 2011 , 109, 073303 | .5 | 12 |
| 198 | Nanocrystalline thin films synthesized from a Ti2AlN compound target by high power impulse magnetron sputtering technique. <i>Surface and Coatings Technology</i> , 2012 , 212, 199-206 | -4 | 25 |
| 197 | High power impulse magnetron sputtering discharge. <i>Journal of Vacuum Science and Technology A:</i> Vacuum, Surfaces and Films, 2012 , 30, 030801 | .9 | 477 |
| 196 | An introduction to thin film processing using high-power impulse magnetron sputtering. 2012 , 27, 780-79 | 2 | 217 |
| 195 | Growth of Ti-C nanocomposite films by reactive high power impulse magnetron sputtering under industrial conditions. <i>Surface and Coatings Technology</i> , 2012 , 206, 2396-2402 | -4 | 49 |
| 194 | Plasma diagnostics of low pressure high power impulse magnetron sputtering assisted by electron cyclotron wave resonance plasma. <i>Journal of Applied Physics</i> , 2012 , 112, 093305 | .5 | 15 |
| 193 | Titanium film deposition by high-power impulse magnetron sputtering: Influence of pulse duration. <i>Vacuum</i> , 2012 , 86, 2114-2119 | .7 | 45 |
| 192 | Quadrupole mass spectrometry of reactive plasmas. <i>Journal Physics D: Applied Physics</i> , 2012 , 45, 403001 ₃ | | 71 |
| 191 | A strategy for increased carbon ionization in magnetron sputtering discharges. 2012 , 23, 1-4 | | 84 |

10

Investigations on tailoring the deposition conditions in HIPIMS by varying the pulse durations and 190 the argon partial pressure. **2012**, 39, 012002 More evidence for azimuthal ion spin in HiPIMS discharges. Plasma Sources Science and Technology, 189 3.5 21 **2012**, 21, 015001 Argon metastables in HiPIMS: time-resolved tunable diode-laser diagnostics. Plasma Sources 188 70 3.5 Science and Technology, **2012**, 21, 025010 Plasma potential mapping of high power impulse magnetron sputtering discharges. Journal of 187 65 2.5 Applied Physics, **2012**, 111, 083302 Understanding deposition rate loss in high power impulse magnetron sputtering: I. 186 58 3.5 Ionization-driven electric fields. Plasma Sources Science and Technology, 2012, 21, 025005 Surface characterisation of PET modified using a p-DC or HIPIMS reactive sputter pre-treatment. 185 2012, 44, 1063-1067 Ion mass spectrometry investigations of the discharge during reactive high power pulsed and direct 184 2.5 33 current magnetron sputtering of carbon in Ar and Ar/N2. Journal of Applied Physics, 2012, 112, 013305 Effect of mid-frequency discharge assistance on dual-high power impulse magnetron sputtering. 183 36 4.4 Surface and Coatings Technology, 2012, 206, 2801-2809 Encyclopedia of Tribology. 2013, 2717-2726 182 1 181 Encyclopedia of Tribology. 2013, 2704-2704 Atom insertion into grain boundaries and stress generation in physically vapor deposited films. 180 51 2013, 103, 051910 Influence of inert gases on the reactive high power pulsed magnetron sputtering process of carbon-nitride thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 179 2.9 17 2013, 31, 011503 Rarefaction windows in a high-power impulse magnetron sputtering plasma. Journal of Applied 178 2.5 31 Physics, 2013, 114, 113302 Microstructure and Platelet Adhesion Behavior of Titanium Oxide Films Synthesized by Reactive 6 177 High-Power Pulse Magnetron Sputtering. 2013, 41, 1837-1843 Spokes and charged particle transport in HiPIMS magnetrons. Journal Physics D: Applied Physics, 176 3 77 2013, 46, 084005 Mass spectrometry diagnostics of short-pulsed HiPIMS discharges. Journal Physics D: Applied Physics 175 34 , **2013**, 46, 215201 Dynamic of the growth flux at the substrate during high-power pulsed magnetron sputtering 26 174 3 (HiPIMS) of titanium. Journal Physics D: Applied Physics, 2013, 46, 485204

A simultaneous increase in the thermal and electrical transport in carbon nanotube yarns induced

by inter-tube metallic welding. 2013, 59, 479-486

(2014-2013)

| 172 | Angle-resolved investigation of ion dynamics in high power impulse magnetron sputtering deposition system. <i>Thin Solid Films</i> , 2013 , 549, 177-183 | 2.2 | 25 |
|-----|---|-----|-----|
| 171 | Time-resolved Langmuir probe investigation of hybrid high power impulse magnetron sputtering discharges. <i>Vacuum</i> , 2013 , 90, 176-181 | 3.7 | 11 |
| 170 | Understanding the discharge current behavior in reactive high power impulse magnetron sputtering of oxides. <i>Journal of Applied Physics</i> , 2013 , 113, 133302 | 2.5 | 75 |
| 169 | The Ito Phase transition of tantalum coatings deposited by modulated pulsed power magnetron sputtering. <i>Surface and Coatings Technology</i> , 2013 , 214, 38-45 | 4.4 | 63 |
| 168 | Time-domain and energetic bombardment effects on the nucleation and coalescence of thin metal films on amorphous substrates. <i>Journal Physics D: Applied Physics</i> , 2013 , 46, 215303 | 3 | 16 |
| 167 | Decorative PVD Coatings. 2013 , 109-162 | | 1 |
| 166 | The use of Highly Ionized Pulsed Plasmas for the Synthesis of Advanced Thin Films and Nanoparticles. 2014 , 31, 171-180 | | 6 |
| 165 | Origin of the energetic ions at the substrate generated during high power pulsed magnetron sputtering of titanium. <i>Journal Physics D: Applied Physics</i> , 2014 , 47, 224002 | 3 | 71 |
| 164 | Downstream plasma transport and metal ionization in a high-powered pulsed-plasma magnetron. Journal of Applied Physics, 2014 , 115, 223301 | 2.5 | 19 |
| 163 | Ionized sputtering with a pulsed hollow cathode magnetron. <i>Thin Solid Films</i> , 2014 , 572, 147-152 | 2.2 | 3 |
| 162 | Kinetics of plasma species and their ionization in short-HiPIMS by particle modeling. <i>Surface and Coatings Technology</i> , 2014 , 255, 52-61 | 4.4 | 27 |
| 161 | High-power pulsed plasma deposition of hematite photoanode for PEC water splitting. 2014 , 230, 8-14 | | 31 |
| 160 | Enhanced ionization sputtering: A concept for superior industrial coatings. <i>Surface and Coatings Technology</i> , 2014 , 255, 43-51 | 4.4 | 28 |
| 159 | Plasma diagnostics for understanding the plasmaBurface interaction in HiPIMS discharges: a review. <i>Journal Physics D: Applied Physics</i> , 2014 , 47, 224001 | 3 | 101 |
| 158 | Time resolved tunable diode laser absoption spectroscopy of dual High Power Impulse Magnetron Sputtering discharges. 2014 , 32, 1460337 | | |
| 157 | Asymmetric particle fluxes from drifting ionization zones in sputtering magnetrons. <i>Plasma Sources Science and Technology</i> , 2014 , 23, 025007 | 3.5 | 40 |
| 156 | Titanium oxide thin film growth by magnetron sputtering: Total energy flux and its relationship with the phase constitution. <i>Surface and Coatings Technology</i> , 2014 , 254, 291-297 | 4.4 | 21 |
| 155 | Anti-reflection porous SiO 2 thin film deposited using reactive high-power impulse magnetron sputtering at high working pressure for use in a-Si:H solar cells. 2014 , 130, 582-586 | | 12 |

| 154 | Deposition of Pt inside fuel cell electrodes using high power impulse magnetron sputtering. Journal Physics D: Applied Physics, 2014 , 47, 272001 | 3 | 10 | |
|-----|--|-----------------------------------|----|--|
| 153 | Correlation between mass-spectrometer measurements and thin film characteristics using dcMS and HiPIMS discharges. <i>Surface and Coatings Technology</i> , 2014 , 250, 52-56 | 4.4 | 32 | |
| 152 | Observation of multiple charge states and high ion energies in high-power impulse magnetron sputtering (HiPIMS) and burst HiPIMS using a LaB6target. <i>Plasma Sources Science and Technology</i> , 2014 , 23, 035001 | 3.5 | 16 | |
| 151 | Effect of duty cycles on the deposition and characteristics of high power impulse magnetron sputtering deposited TiN thin films. <i>Surface and Coatings Technology</i> , 2014 , 259, 232-237 | 4.4 | 47 | |
| 150 | Structural and optical properties of zirconia thin films deposited by reactive high-power impulse magnetron sputtering. <i>Thin Solid Films</i> , 2014 , 570, 404-411 | 2.2 | 18 | |
| 149 | TiO2 and Fe2O3 films for photoelectrochemical water splitting. 2015 , 20, 1046-58 | | 52 | |
| 148 | HIPIMS in full face erosion circular cathode for semiconductor applications. 2015, | | 1 | |
| 147 | Coatings and Surface Engineering: Physical Vapor Deposition. 2015 , 1-20 | | | |
| 146 | Direct measurement and modeling of the redirected ion flux in a high-powered pulsed-plasma magnetron. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2015 , 33, 031301 | 2.9 | 1 | |
| 145 | Analysis of ion energy distribution at the substrate during a HPPMS (Cr,Al)N process using retarding field energy analyzer and energy resolved mass spectrometer. <i>Thin Solid Films</i> , 2015 , 596, 140 |)- ² 1 ² 46 | 8 | |
| 144 | Photoanodes with Fully Controllable Texture: The Enhanced Water Splitting Efficiency of Thin Hematite Films Exhibiting Solely (110) Crystal Orientation. 2015 , 9, 7113-23 | | 85 | |
| 143 | Adding high time resolution to charge-state-specific ion energy measurements for pulsed copper vacuum arc plasmas. <i>Plasma Sources Science and Technology</i> , 2015 , 24, 045010 | 3.5 | 12 | |
| 142 | Industrial-scale high power impulse magnetron sputtering of yttria-stabilized zirconia on porous NiO/YSZ fuel cell anodes. <i>Surface and Coatings Technology</i> , 2015 , 281, 150-156 | 4.4 | 17 | |
| 141 | Selective Plasma Etching of Polymeric Substrates for Advanced Applications. 2016 , 6, | | 71 | |
| 140 | A HiPIMS plasma source with a magnetic nozzle that accelerates ions: application in a thruster. 2016 , 76, 30801 | | 7 | |
| 139 | Time-resolved ion flux and impedance measurements for process characterization in reactive high-power impulse magnetron sputtering. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2016 , 34, 041305 | 2.9 | 11 | |
| 138 | Comparison in formation, optical properties and applicability of DC magnetron and RF sputtered aluminum oxide films. <i>Vacuum</i> , 2016 , 128, 213-218 | 3.7 | 10 | |
| 137 | Structure, mechanical and corrosion properties of TiN films deposited on stainless steel substrates with different inclination angles by DCMS and HPPMS. <i>Surface and Coatings Technology</i> , 2016 , 292, 54-6 | 52 ^{4·4} | 30 | |

| 136 | Influence of dcMS and HPPMS in a dcMS/HPPMS hybrid process on plasma and coating properties. <i>Thin Solid Films</i> , 2016 , 620, 188-196 | 2.2 | 26 | |
|-----|---|------------------|----|--|
| 135 | Mass spectrometry analyzes to highlight differences between short and long HiPIMS discharges. 2016 , 390, 497-505 | | 18 | |
| 134 | Ion beam sputtering of Ti: Influence of process parameters on angular and energy distribution of sputtered and backscattered particles. 2016 , 385, 30-39 | | 20 | |
| 133 | SiNx Coatings Deposited by Reactive High Power Impulse Magnetron Sputtering: Process Parameters Influencing the Nitrogen Content. 2016 , 8, 20385-95 | | 21 | |
| 132 | Investigation of Reactive HPPMS Process and Influence of Bias Voltage during Deposition of Alumina Coatings . 2016 , 18, 665-670 | | 1 | |
| 131 | Deposition of ultrahard TiBiN coatings by pulsed high-current reactive magnetron sputtering. 2016 , 61, 215-220 | | | |
| 130 | Effect of bias voltage on the microstructure and hardness of Ti-Si-N films deposited by using high-power impulse magnetron sputtering. 2016 , 68, 351-356 | | 4 | |
| 129 | A comparative study of direct current magnetron sputtering and high power impulse magnetron sputtering processes for CNx thin film growth with different inert gases. 2016 , 64, 13-26 | | 18 | |
| 128 | On reactive high power impulse magnetron sputtering. 2016 , 58, 014002 | | 29 | |
| 127 | Fast charge exchange ions in high power impulse magnetron sputtering of titanium as probes for the electrical potential. <i>Plasma Sources Science and Technology</i> , 2017 , 26, 035007 | 3.5 | 7 | |
| 126 | Superhard nanocomposite nc-TiC/a-C:H coatings: The effect of HiPIMS on coating microstructure and mechanical properties. <i>Surface and Coatings Technology</i> , 2017 , 311, 257-267 | 4.4 | 43 | |
| 125 | Angular dependence of plasma parameters and film properties during high power impulse magnetron sputtering for deposition of Ti and TiO2 layers. <i>Journal of Applied Physics</i> , 2017 , 121, 17190 | 6 ^{2.5} | 19 | |
| 124 | Epitaxial growth of Cu(001) thin films onto Si(001) using a single-step HiPIMS process. 2017 , 7, 1655 | | 27 | |
| 123 | Creep behavior evaluation and characterization of SiC film with Cr interlayer deposited by HiPIMS in Ti-6Al-4V alloy. <i>Surface and Coatings Technology</i> , 2017 , 309, 410-416 | 4.4 | 5 | |
| 122 | Plasma analysis of inductively coupled impulse sputtering of Cu, Ti and Ni. <i>Plasma Sources Science and Technology</i> , 2017 , 26, 065012 | 3.5 | 3 | |
| 121 | Simultaneous electrical and optical study of spoke rotation, merging and splitting in HiPIMS plasma. <i>Journal Physics D: Applied Physics</i> , 2017 , 50, 015209 | 3 | 13 | |
| 120 | Benefits of energetic ion bombardment for tailoring stress and microstructural evolution during growth of Cu thin films. 2017 , 141, 120-130 | | 39 | |
| 119 | Control of the metal/gas ion ratio incident at the substrate plane during high-power impulse magnetron sputtering of transition metals in Ar. <i>Thin Solid Films</i> , 2017 , 642, 36-40 | 2.2 | 16 | |

| 118 | Gas rarefaction effects during high power pulsed magnetron sputtering of groups IVb and VIb transition metals in Ar. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2017 , 35, 060601 | 2.9 | 19 |
|-----|---|-----------------------------|----|
| 117 | Variation of local chemical compositions of (Ti, Al)N films on inner wall of small hole deposited by high-power impulse magnetron sputtering. <i>Thin Solid Films</i> , 2017 , 644, 99-105 | 2.2 | 3 |
| 116 | Particle-balance models for pulsed sputtering magnetrons. <i>Journal Physics D: Applied Physics</i> , 2017 , 50, 354003 | 3 | 31 |
| 115 | HiPIMS-deposited thermochromic VO2 films with high environmental stability. 2017 , 160, 217-224 | | 41 |
| 114 | Effect of bias voltage on TiAlSiN nanocomposite coatings deposited by HiPIMS. 2017 , 392, 826-833 | | 62 |
| 113 | Preface to the Special Issue for the High Power Impulse/Pulsed Magnetron Sputtering. 2017, 60, 339-34 | 10 | 1 |
| 112 | Transition Mode Control in Reactive High-Power Impulse Magnetron Sputtering (R-HiPIMS). 2017 , 60, 346-351 | | 2 |
| 111 | Effect of HPPMS Pulse-Frequency on Plasma Discharge and Deposited AlTiN Coating Properties. 2017 , 2017, 1-18 | | 5 |
| 110 | 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. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2018 , 36, 020602 | 2.9 | 23 |
| 109 | Effect of magnetic field on spoke behaviour in HiPIMS plasma. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 095204 | 3 | 18 |
| 108 | Silicon carbonitride thin films deposited by reactive high power impulse magnetron sputtering. <i>Surface and Coatings Technology</i> , 2018 , 335, 248-256 | 4.4 | 9 |
| 107 | Hybrid high power impulse and radio frequency magnetron sputtering system for TiCrSiN thin film depositions: Plasma characteristics and film properties. <i>Surface and Coatings Technology</i> , 2018 , 350, 762 | <u>2</u> - 171 2 | 9 |
| 106 | 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, 030604 | 2.9 | 30 |
| 105 | Low-energy ion irradiation in HiPIMS to enable anatase TiO2 selective growth. <i>Journal Physics D: Applied Physics,</i> 2018 , 51, 235301 | 3 | 18 |
| 104 | Growth of HfN thin films by reactive high power impulse magnetron sputtering. 2018 , 8, 035124 | | 7 |
| 103 | Reduced atomic shadowing in HiPIMS: Role of the thermalized metal ions. 2018 , 433, 934-944 | | 21 |
| 102 | Enhanced wear resistance of molybdenum nitride coatings deposited by high power impulse magnetron sputtering by using micropatterned surfaces. <i>Surface and Coatings Technology</i> , 2018 , 333, 1-12 | 4.4 | 20 |
| 101 | Noncontact measurement of substrate temperature by optical low-coherence interferometry in high-power pulsed magnetron sputtering. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 01AC03 | 1.4 | 3 |

| 100 | Low temperature (Ts/Tm . <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2018 , 36, 061511 | 2.9 | 16 | |
|-----|---|-----|----|--|
| 99 | Velocity distribution of titanium neutrals in the target region of high power impulse magnetron sputtering discharges. <i>Plasma Sources Science and Technology</i> , 2018 , 27, 105012 | 3.5 | 7 | |
| 98 | Gas rarefaction in high power impulse magnetron sputtering: comparison of a particle simulation and volume-averaged models. <i>Plasma Sources Science and Technology</i> , 2018 , 27, 115012 | 3.5 | 8 | |
| 97 | Entwicklung von HPPMS-Al2O3-Beschichtungen fildie Zerspanung von schwer zerspanbaren Werkstoffen. 2018 , 49, 1287-1300 | | 2 | |
| 96 | On three different ways to quantify the degree of ionization in sputtering magnetrons. <i>Plasma Sources Science and Technology</i> , 2018 , 27, 105005 | 3.5 | 24 | |
| 95 | Space-resolved plasma diagnostics in a hybrid (Cr,Al)N process. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2018 , 36, 031515 | 2.9 | 2 | |
| 94 | Influence of backscattered neutrals on the grain size of magnetron-sputtered TaN thin films. <i>Thin Solid Films</i> , 2018 , 658, 46-53 | 2.2 | 14 | |
| 93 | Spokes in high power impulse magnetron sputtering plasmas. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 453001 | 3 | 25 | |
| 92 | On the microstructure of magnesium thin films deposited by magnetron sputtering. <i>Thin Solid Films</i> , 2019 , 689, 137501 | 2.2 | 5 | |
| 91 | Ultra-high selectivity pulsed plasmachemical deposition reaction pathways. 2019 , 21, 16468-16476 | | 5 | |
| 90 | Paradigm shift in thin-film growth by magnetron sputtering: From gas-ion to metal-ion irradiation of the growing film. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2019 , 37, 060801 | 2.9 | 55 | |
| 89 | Differences in surface reactivity in two synthetic routes between HiPIMS and DC magnetron sputtered carbon. <i>Surface and Coatings Technology</i> , 2019 , 378, 125003 | 4.4 | 2 | |
| 88 | Surface Stoichiometry and Optical Properties of CuxIIiyCz Thin Films Deposited by Magnetron Sputtering. <i>Coatings</i> , 2019 , 9, 551 | 2.9 | 11 | |
| 87 | Bipolar HiPIMS for tailoring ion energies in thin film deposition. <i>Surface and Coatings Technology</i> , 2019 , 359, 433-437 | 4.4 | 39 | |
| 86 | The Effect of Magnetic Field Strength and Geometry on the Deposition Rate and Ionized Flux Fraction in the HiPIMS Discharge. 2019 , 2, 201-221 | | 25 | |
| 85 | Comparison of microstructures and magnetic properties in FePt alloy films deposited by direct current magnetron sputtering and high power impulse magnetron sputtering. <i>Journal of Alloys and Compounds</i> , 2019 , 803, 341-347 | 5.7 | 4 | |
| 84 | Enhancement of discharge and deposition rate in dual-pulse pulsed magnetron sputtering: Effect of ignition pulse width. <i>Surface and Coatings Technology</i> , 2019 , 374, 383-392 | 4.4 | 1 | |
| 83 | Tuning high power impulse magnetron sputtering discharge and substrate bias conditions to reduce the intrinsic stress of TiN thin films. <i>Thin Solid Films</i> , 2019 , 688, 137335 | 2.2 | 16 | |

| 82 | Towards Functional Silicon Nitride Coatings for Joint Replacements. <i>Coatings</i> , 2019 , 9, 73 | 2.9 | 6 |
|----|---|-----|----|
| 81 | Role of ionization fraction on the surface roughness, density, and interface mixing of the films deposited by thermal evaporation, dc magnetron sputtering, and HiPIMS: An atomistic simulation. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2019 , 37, 031306 | 2.9 | 12 |
| 80 | Effect of atomic ordering on the magnetic anisotropy of single crystal Ni80Fe20. 2019 , 9, 035308 | | 9 |
| 79 | Evidence of ion energy distribution shift in HiPIMS plasmas with positive pulse. <i>Plasma Sources Science and Technology</i> , 2019 , 28, 01LT03 | 3.5 | 9 |
| 78 | Enhanced properties of tungsten films by high-power impulse magnetron sputtering. <i>Surface and Coatings Technology</i> , 2019 , 363, 191-197 | 4.4 | 10 |
| 77 | Effect of bias on structure mechanical properties and corrosion resistance of TiNx films prepared by ion source assisted magnetron sputtering. <i>Thin Solid Films</i> , 2019 , 676, 60-67 | 2.2 | 9 |
| 76 | The statistics of spoke configurations in high-power impulse magnetron sputtering discharges. <i>Journal Physics D: Applied Physics</i> , 2019 , 52, 125201 | 3 | 4 |
| 75 | Pressure dependence of singly and doubly charged ion formation in a HiPIMS discharge. <i>Journal of Applied Physics</i> , 2019 , 125, 013301 | 2.5 | 20 |
| 74 | Formation of diamond-like carbon film using high-power impulse magnetron sputtering. <i>Thin Solid Films</i> , 2019 , 672, 104-108 | 2.2 | 6 |
| 73 | The correlation between structure, multifunctional properties and application of PVD MAX phase coatings. Part I. Texture and room temperature properties. 2020 , 36, 225-267 | | 2 |
| 72 | Physics of high power impulse magnetron sputtering discharges. 2020 , 265-332 | | 4 |
| 71 | Reactive HiPIMS deposition of Ti-Al-N: Influence of the deposition parameters on the cubic to hexagonal phase transition. <i>Surface and Coatings Technology</i> , 2020 , 382, 125007 | 4.4 | 17 |
| 70 | Heavy species dynamics in high power impulse magnetron sputtering discharges. 2020 , 111-158 | | 4 |
| 69 | High-temperature oxidation behavior of HiPIMS as-deposited CrAlt and annealed Cr2AlC coatings on Zr-based alloy. 2020 , 528, 151855 | | 16 |
| 68 | Absolute spatially and time-resolved O, O3, and air densities in the effluent of a modulated RF-driven atmospheric pressure plasma jet obtained by molecular beam mass spectrometry. 2020 , 17, 1900163 | | 16 |
| 67 | Pattern Formation in High Power Impulse Magnetron Sputtering (HiPIMS) Plasmas. 2020 , 40, 643-660 | | 6 |
| 66 | Effects of HiPIMS discharges and annealing on Cr-Al-C thin films. <i>Surface and Coatings Technology</i> , 2020 , 399, 126141 | 4.4 | 6 |
| 65 | Cross-field electron diffusion due to the coupling of drift-driven microinstabilities. 2020 , 102, 023202 | | 22 |

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| 64 | Revisiting particle dynamics in HiPIMS discharges. I. General effects. <i>Journal of Applied Physics</i> , 2020 , 128, 043303 | 2.5 | 8 |
|----|--|-----|----|
| 63 | Revisiting particle dynamics in HiPIMS discharges. II. Plasma pulse effects. <i>Journal of Applied Physics</i> , 2020 , 128, 043304 | 2.5 | 5 |
| 62 | Metal-ion subplantation: A game changer for controlling nanostructure and phase formation during film growth by physical vapor deposition. <i>Journal of Applied Physics</i> , 2020 , 127, 180901 | 2.5 | 16 |
| 61 | Tuning the stress in TiN films by regulating the doubly charged ion fraction in a reactive HiPIMS discharge. <i>Journal of Applied Physics</i> , 2020 , 127, 103302 | 2.5 | 5 |
| 60 | Ionisation fractions of sputtered titanium species at target and substrate region in HiPIMS. <i>Plasma Sources Science and Technology</i> , 2020 , 29, 055010 | 3.5 | 9 |
| 59 | Effect of substrate bias on microstructure of epitaxial film grown by HiPIMS: An atomistic simulation. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2020 , 38, 043006 | 2.9 | 4 |
| 58 | Growth of dense, hard yet low-stress Ti0.40Al0.27W0.33N nanocomposite films with rotating substrate and no external substrate heating. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2020 , 38, 023006 | 2.9 | 8 |
| 57 | Study of the transition from self-organised to homogeneous plasma distribution in chromium HiPIMS discharge. <i>Journal Physics D: Applied Physics</i> , 2020 , 53, 155201 | 3 | 9 |
| 56 | Investigating the plasma parameters and discharge asymmetry in dual magnetron reactive high power impulse magnetron sputtering discharge with Al in Ar/O2 mixture. <i>Vacuum</i> , 2020 , 175, 109253 | 3.7 | 2 |
| 55 | Nano-second temporal particle behavior in high-power impulse magnetron sputtering discharge in a cylindrical cathode. <i>Journal of Applied Physics</i> , 2020 , 127, 023301 | 2.5 | 2 |
| 54 | Predicting structure zone diagrams for thin film synthesis by generative machine learning. <i>Communications Materials</i> , 2020 , 1, | 6 | 12 |
| 53 | Discharge model and plasma characteristics of high-power pulsed magnetron sputtering titanium target. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2021 , 70, 180701-180701 | 0.6 | |
| 52 | HiPIMS optimization by using mixed high-power and low-power pulsing. <i>Plasma Sources Science and Technology</i> , 2021 , 30, 015015 | 3.5 | 7 |
| 51 | Comparison of thermal properties of a hot target magnetron operated in DC and long HIPIMS modes. <i>Surface and Coatings Technology</i> , 2021 , 409, 126889 | 4.4 | 5 |
| 50 | Foundations of measurement of electrons, ions and species fluxes toward surfaces in low-temperature plasmas. <i>Plasma Sources Science and Technology</i> , 2021 , 30, 033001 | 3.5 | 9 |
| 49 | Influence of magnetic field configuration on plasma characteristics and thin film properties in dual magnetron reactive high power impulse magnetron sputtering discharge with Al in Ar/O2 mixture. <i>Surface and Coatings Technology</i> , 2021 , 409, 126837 | 4.4 | 3 |
| 48 | Experimental verification of deposition rate increase, with maintained high ionized flux fraction, by shortening the HiPIMS pulse. <i>Plasma Sources Science and Technology</i> , 2021 , 30, 045006 | 3.5 | 4 |
| 47 | Low temperature growth of stress-free single phase EW films using HiPIMS with synchronized pulsed substrate bias. <i>Journal of Applied Physics</i> , 2021 , 129, 155305 | 2.5 | Ο |

| 46 | Influence of N2 flow rate on microstructure and properties of CrNx ceramic films prepared by MPP technique at low temperature. <i>Ceramics International</i> , 2021 , 47, 20875-20875 | 5.1 | 1 |
|----|--|-----|----|
| 45 | Ionized particle transport in reactive HiPIMS discharge: correlation between the energy distribution functions of neutral and ionized atoms. <i>Plasma Sources Science and Technology</i> , | 3.5 | O |
| 44 | Bipolar HiPIMS: The role of capacitive coupling in achieving ion bombardment during growth of dielectric thin films. <i>Surface and Coatings Technology</i> , 2021 , 416, 127152 | 4.4 | 3 |
| 43 | Ion fluxes and memory effects in an Ar-O2 modulated RF-driven atmospheric pressure plasma jet. <i>Plasma Sources Science and Technology</i> , | 3.5 | 3 |
| 42 | Hard and tough nitrogen doped tungsten coatings deposited by HIPAC: Microstructure and mechanical properties. <i>Journal of Alloys and Compounds</i> , 2021 , 876, 160146 | 5.7 | |
| 41 | Influence of Si content on phase stability and mechanical properties of TiAlSiN films grown by AlSi-HiPIMS/Ti-DCMS co-sputtering. <i>Surface and Coatings Technology</i> , 2021 , 127661 | 4.4 | 2 |
| 40 | Copper thin films deposited using different ion acceleration strategies in HiPIMS. <i>Surface and Coatings Technology</i> , 2021 , 422, 127487 | 4.4 | 5 |
| 39 | Microstructure of titanium coatings controlled by pulse sequence in multipulse HiPIMS. <i>Surface and Coatings Technology</i> , 2021 , 423, 127624 | 4.4 | 3 |
| 38 | Time-averaged and time-resolved ion fluxes related to reactive HiPIMS deposition of Ti-Al-N films. <i>Surface and Coatings Technology</i> , 2021 , 424, 127638 | 4.4 | 1 |
| 37 | On the role of ion potential energy in low energy HiPIMS deposition: An atomistic simulation. <i>Surface and Coatings Technology</i> , 2021 , 426, 127726 | 4.4 | O |
| 36 | Measurement of negative ion fluxes during DC reactive magnetron sputtering of Ti in Ar/O2 atmosphere using a magnetic-filtering probe. <i>Vacuum</i> , 2021 , 194, 110549 | 3.7 | 1 |
| 35 | Reactively Sputter-Deposited Solid Electrolytes and Their Applications. <i>Springer Series in Materials Science</i> , 2008 , 367-411 | 0.9 | O |
| 34 | Calorimetric probe measurements for a high voltage pulsed substrate (PBII) in a HiPIMS process. <i>Plasma Sources Science and Technology</i> , 2017 , 26, 065013 | 3.5 | 15 |
| 33 | Physics and technology of magnetron sputtering discharges. <i>Plasma Sources Science and Technology</i> , 2020 , 29, 113001 | 3.5 | 79 |
| 32 | Pulse length selection for optimizing the accelerated ion flux fraction of a bipolar HiPIMS discharge. <i>Plasma Sources Science and Technology</i> , 2020 , 29, 125013 | 3.5 | 7 |
| 31 | Effect of Voltage Pulse Width and Synchronized Substrate Bias in High-Power Impulse Magnetron Sputtering of Zirconium Films. <i>Coatings</i> , 2021 , 11, 7 | 2.9 | 2 |
| 30 | Time-of-flight mass spectrometric diagnostics for ionized and neutral species in high-power pulsed magnetron sputtering of titanium. <i>Japanese Journal of Applied Physics</i> , 2020 , 59, SHHB05 | 1.4 | 4 |
| 29 | Surface Modification of Multiferroic BiFeO ₃ Ceramic by Argon Sputtering. Journal of Surface Engineered Materials and Advanced Technology, 2014, 04, 295-308 | 0.2 | 6 |

| 28 | Enhanced discharge of high power pulsed magnetron sputtering coupling with high voltage. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2014 , 63, 185207 | 0.6 | 3 |
|----|---|-----|---|
| 27 | Temporal studies of titanium ionised density fraction in reactive HiPIMS with nitrogen admixture. <i>Plasma Sources Science and Technology</i> , | 3.5 | O |
| 26 | Recent Topics in R&D of the Plasma-Based Ion Process. <i>IEEJ Transactions on Fundamentals and Materials</i> , 2008 , 128, 5-8 | 0.2 | |
| 25 | Analysis on the ionization of high power pulsed unbalanced magnetron sputtering powered by direct current. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2011 , 60, 015204 | 0.6 | 3 |
| 24 | Uniqueness of High Power Impulse Magnetron Sputtering in Ionized Physical Vapor Deposition. <i>Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan</i> , 2017 , 68, 712-717 | 0.1 | 1 |
| 23 | Effects of multiply charged ions on microturbulence-driven electron transport in partially magnetized plasmas. <i>Journal of Applied Physics</i> , 2021 , 130, 173307 | 2.5 | 3 |
| 22 | Formation of Diamond-Like Carbon Film on Organic Substrate by High Power Impulse Magnetron Sputtering. <i>Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan</i> , 2022 , 73, 47-52 | 0.1 | |
| 21 | Dynamics of bipolar HiPIMS discharges by plasma potential probe measurements. <i>Plasma Sources Science and Technology</i> , | 3.5 | O |
| 20 | Cross-field electron transport due to coupling of drift-driven microinstabilities in the presence of singly, doubly, and triply charged ion streams. 2022 , | | |
| 19 | Development of a Plasma Diagnostic Method for High Power Pulsed Magnetron Sputtering Using a Reflectron-Type Time-of-Flight Mass Spectrometer. <i>Journal of the Mass Spectrometry Society of Japan</i> , 2022 , 70, 30-35 | 0.2 | O |
| 18 | The effect of RF plasma power on remote plasma sputtered AZO thin films. <i>Surface and Coatings Technology</i> , 2022 , 128402 | 4.4 | 2 |
| 17 | Parameters and ion mass-to-charge composition of a high-power impulse magnetron discharge with electron injection. <i>Vacuum</i> , 2022 , 200, 111056 | 3.7 | |
| 16 | Modeling of high power impulse magnetron sputtering discharges with tungsten target. <i>Plasma Sources Science and Technology</i> , | 3.5 | 1 |
| 15 | Time-of-flight mass spectrometry diagnostics in deep oscillation magnetron sputtering (DOMS) of titanium. <i>Journal of Applied Physics</i> , 2022 , 131, 243301 | 2.5 | 1 |
| 14 | Development of a Noninvasive Real-Time Ion Energy Distribution Monitoring System Applicable to Collisional Plasma Sheath. 2022 , 22, 6254 | | 3 |
| 13 | Influence of unipolar pulse time offset between Ti and Zr dual cathodes in closed magnetic field high power impulse magnetron sputtering. 2022 , 446, 128791 | | |
| 12 | Deviations between film and target compositions induced by backscattered Ar during sputtering from M2-Al-C (MI=ICr, Zr, and Hf) composite targets. 2022 , 446, 128764 | | О |
| 11 | Application of positive pulse to extract ions from HiPIMS ionization region. 2022 , 204, 111383 | | |

| 10 | Formations of anode double layer and ion beam in bipolar-pulse HiPIMS (BP-HiPIMS). | 0 |
|----|---|---|
| 9 | On selective ion acceleration in bipolar HiPIMS: A case study of (Al,Cr)2O3 film growth. 2023 , 454, 129153 | O |
| 8 | Time-resolved ion energy distribution functions during a HiPIMS discharge with cathode voltage reversal. 2023 , 98, 015605 | О |
| 7 | Determining role of W+ ions in the densification of TiAlWN thin films grown by hybrid HiPIMS/DCMS technique with no external heating. 2023 , 41, 013407 | O |
| 6 | Dense and hard TiWC protective coatings grown with tungsten ion irradiation using WC-HiPIMS/TiC-DCMS co-sputtering technique without external heating. 2023 , 618, 156639 | 0 |
| 5 | Effect of substrate bias voltage on structural and tribological properties of W-Ti-C-N thin films produced by combinational HiPIMS and DCMS co-sputtering. 2023 , 520-521, 204654 | O |
| 4 | Influence of substrate bias voltage on microstructure and mechanical characteristics of TiAlSiN coating deposited by High Power Impulse Magnetron Sputtering (HiPIMS). 2023 , 458, 129351 | O |
| 3 | Evolution of microstructure and properties of TiNbCrAlHfN films grown by unipolar and bipolar high-power impulse magnetron co-sputtering: The role of growth temperature and ion bombardment. 2023 , 459, 129389 | O |
| 2 | Microstructure and Mechanical Properties of a Ni-Based Superalloy Thin Film Investigated by Micropillar Compression. 2023 , 54, 1526-1534 | 0 |
| 1 | HiPIMS induced high-purity Ti3AlC2 MAX phase coating at low-temperature of 700IIC. 2023, | О |