

Subject Index of Volume 148

- Abrasive test**
Qualitative evaluation of sol–gel SiO_2 as a protective layer for soft surfaces, 1
- Aluminium alloy**
Laser surface alloying of NiCrSiB on Al6061 aluminium alloy, 136
- Aluminum**
Electrochemical study of laser nitrided and PVD TiN coated Ti–6Al–4V alloy: the observation of selective dissolution, 46
- Amorphous carbon**
Characterization of microstructure and mechanical behavior of sputter deposited Ti-containing amorphous carbon coatings, 153
- Ar⁺ ion beam**
Structure–property relationship of Si-DLC films, 305
- Atomic Force Microscopy**
Qualitative evaluation of sol–gel SiO_2 as a protective layer for soft surfaces, 1
- Auger electron spectroscopy (AES)**
Characterisation of the oxide scale on a Ti–2Al–2.5Zr alloy with and without pre-oxidation in an alkaline steam at 300°C, 216
- Autocatalytic nickel**
Solid-state reactions in low-phosphorus autocatalytic NiP–SiC coatings, 284
- Biomedical coatings**
Binary nitride and oxynitride PVD coatings on titanium for biomedical applications, 226
- Carbon tool steel**
Formation of Ti–Ni intermetallic coatings on carbon tool steel by a duplex process, 55
- Cathodic arc deposition**
The influence of magnetic solenoid filtration on the property of (Ti–Al)N coatings deposited in a cathodic arc deposition system, 25
- Cavitation erosion**
Laser surface alloying of NiCrSiB on Al6061 aluminium alloy, 136
- CH_4**
Chemical vapor deposition of Ti–W–C thin films, 262
- Chemical vapor deposition**
Chemical vapor deposition of Ti–W–C thin films, 262
- Coating**
The influence of magnetic solenoid filtration on the property of (Ti–Al)N coatings deposited in a cathodic arc deposition system, 25
Electrochemical study of laser nitrided and PVD TiN coated Ti–6Al–4V alloy: the observation of selective dissolution, 46
- Coating removal**
The influence of vapor–gaseous envelope behavior on plasma electrolytic coating removal, 30
- Cobalt alloys**
Cyclic oxidation of diffusion aluminide coatings on cobalt base super alloys, 163
- Composite coatings**
Solid-state reactions in low-phosphorus autocatalytic NiP–SiC coatings, 284
- Composite hardness**
Analytical correlation of hardness and scratch adhesion for hard films, 8
- Composite thin-film deposition**
Low-pressure RF multi-plasma-jet system for deposition of alloy and composite thin films, 199
- Composites**
Electrodeposition and sliding wear resistance of nickel composite coatings containing micron and submicron SiC particles, 171
- Corrosion**
Electrochemical study of laser nitrided and PVD TiN coated Ti–6Al–4V alloy: the observation of selective dissolution, 46
- Corrosion potential**
Effects of nitrogen ion implantation on the surface characteristics of iron aluminides, 77
- Creep**
Investigation of creep behaviour under load during indentation experiments and its influence on hardness and modulus results, 191
- Current densities**
Structure–property relationship of Si-DLC films, 305
- Diamond**
A study on the mechanism of formation of electrocodeposited Ni–diamond coatings, 234
- Diamond-like carbon film**
Investigation of the reflectivity of multilayer diamond-like carbon X-ray mirror, 149
- Diffusion and phase transformation**
Simultaneous growth mechanism of intermediate silicides in MoSi_2/Mo system, 129
- Diffusion coating**
Formation of Ti–Ni intermetallic coatings on carbon tool steel by a duplex process, 55
- Diffusion coatings**
Cyclic oxidation of diffusion aluminide coatings on cobalt base super alloys, 163
- Drill coatings**
Experimental investigation of the effect of drill coatings on hole quality under dry and wet drilling conditions, 117
- Dry**
Experimental investigation of the effect of drill coatings on hole quality under dry and wet drilling conditions, 117

- Duplex process
 - Formation of Ti–Ni intermetallic coatings on carbon tool steel by a duplex process, 55
- Elastic–plastic deformation
 - Analytical correlation of hardness and scratch adhesion for hard films, 8
- Electric current
 - Analysis of surface and subsurface of sliding electrical contact steel/steel in magnetic field, 241
- Electrical property
 - Influence of nanostructure on electrical and mechanical properties for Cu implanted PET, 221
- Electroco-deposition
 - A study on the mechanism of formation of electrocodeposited Ni–diamond coatings, 234
- Electrodeposition
 - Electrodeposition of graphite-brass composite coatings and characterization of the tribological properties, 71
 - Electrodeposition and sliding wear resistance of nickel composite coatings containing micron and submicron SiC particles, 171
- Electroless deposition
 - A comparative study on the crystallization behavior of electroless Ni–P and Ni–Cu–P deposits, 143
- Electrolytic cleaning
 - The influence of vapor–gaseous envelope behavior on plasma electrolytic coating removal, 30
- Electron beam physical vapor deposition (EB-PVD)
 - Investigation on hot-fatigue behaviors of gradient thermal barrier coatings by EB-PVD, 110
- Electron diffraction
 - Characterization of nanostructured multiphase Ti–Al–B–N thin films with extremely small grain size, 206
- Electron energy loss spectroscopy (EELS)
 - Characterization of nanostructured multiphase Ti–Al–B–N thin films with extremely small grain size, 206
- Electrophoresis
 - A study on the mechanism of formation of electrocodeposited Ni–diamond coatings, 234
- Failure mechanism
 - Cyclic oxidation of diffusion aluminide coatings on cobalt base super alloys, 163
- Fatigue
 - Fatigue properties of a 316L stainless steel coated with different TiN_x deposits, 179
- Ferromagnetic material
 - Analysis of surface and subsurface of sliding electrical contact steel/steel in magnetic field, 241
- Fracture
 - Stress analyses and in-situ fracture observation of wear protective multilayer coatings in contact loading, 38
- Gas injection inside discharge
 - Magnetron with gas injection through hollow cathodes machined in sputtered target, 296
- Gradient thermal barrier coatings (GTBCs)
 - Investigation on hot-fatigue behaviors of gradient thermal barrier coatings by EB-PVD, 110
- Grain boundary activation
 - Effects of nitrogen ion implantation on the surface characteristics of iron aluminides, 77
- Graphite-brass coating
 - Electrodeposition of graphite-brass composite coatings and characterization of the tribological properties, 71
- Hard coatings
 - Chemical vapor deposition of Ti–W–C thin films, 262
- Hardness
 - Investigation of creep behaviour under load during indentation experiments and its influence on hardness and modulus results, 191
- Hardness and Young's modulus
 - Influence of nanostructure on electrical and mechanical properties for Cu implanted PET, 221
- High-speed steel substrates
 - Tungsten carbide/diamond-like carbon multilayer coatings on steel for tribological applications, 277
- High-velocity oxy-fuel (HVOF)
 - HVOF system definition to maximise the thickness of formed components, 18
- Hole quality
 - Experimental investigation of the effect of drill coatings on hole quality under dry and wet drilling conditions, 117
- Hollow cathode
 - Low-pressure RF multi-plasma-jet system for deposition of alloy and composite thin films, 199
- Hollow cathodes
 - Magnetron with gas injection through hollow cathodes machined in sputtered target, 296
- Intermetallic compound coatings
 - Formation of Ti–Ni intermetallic coatings on carbon tool steel by a duplex process, 55
- Ion energies
 - Structure–property relationship of Si-DLC films, 305
- Iron aluminides
 - Effects of nitrogen ion implantation on the surface characteristics of iron aluminides, 77
- Kinetics
 - Kinetics and mechanism relevant to TiSiN chemical vapor deposition from TDMAT, silane and ammonia, 251
- Laser surface-alloying
 - Laser surface alloying of NiCrSiB on Al6061 aluminium alloy, 136
- Laser treatment
 - The influence of surface roughness of sprayed zirconia coatings on laser treatment, 87
- Light scattering
 - The influence of surface roughness of sprayed zirconia coatings on laser treatment, 87
- Low friction coating
 - Tungsten carbide/diamond-like carbon multilayer coatings on steel for tribological applications, 277
- Macroparticle
 - The influence of magnetic solenoid filtration on the property of (Ti–Al)N coatings deposited in a cathodic arc deposition system, 25
- Magnetic field
 - Analysis of surface and subsurface of sliding electrical contact steel/steel in magnetic field, 241
- Magnetic solenoid filtration
 - The influence of magnetic solenoid filtration on the property of (Ti–Al)N coatings deposited in a cathodic arc deposition system, 25
- Magnetron
 - Magnetron with gas injection through hollow cathodes machined in sputtered target, 296
- Magnetron sputtering
 - Fatigue properties of a 316L stainless steel coated with different

- TiN_x deposits, 179
- Characterization of nanostructured multiphase Ti–Al–B–N thin films with extremely small grain size, 206
- Mechanical behavior
 - Characterization of microstructure and mechanical behavior of sputter deposited Ti-containing amorphous carbon coatings, 153
- Metal ion implantation
 - Influence of nanostructure on electrical and mechanical properties for Cu implanted PET, 221
- Metal ion release
 - TiN coating improves the corrosion behavior of superelastic NiTi surgical alloy, 268
- Metallic foils
 - Arrangement of flexible foil substrates for CuInSe₂-based solar cells, 61
- Microstructure
 - Characterization of microstructure and mechanical behavior of sputter deposited Ti-containing amorphous carbon coatings, 153
- Mo-silicides
 - Simultaneous growth mechanism of intermediate silicides in MoSi₂/Mo system, 129
- Modification of polymer
 - Influence of nanostructure on electrical and mechanical properties for Cu implanted PET, 221
- Molecular beam mass spectrometer
 - Kinetics and mechanism relevant to TiSiN chemical vapor deposition from TDMAT, silane and ammonia, 251
- Molecular beam mass spectrometry
 - Gas phase analysis of TiCl₄ plasma processes by molecular beam mass spectrometry, 256
- Molybdenum
 - Arrangement of flexible foil substrates for CuInSe₂-based solar cells, 61
- Multilayer coating
 - Stress analyses and in-situ fracture observation of wear protective multilayer coatings in contact loading, 38
- Nanocomposite
 - Characterization of microstructure and mechanical behavior of sputter deposited Ti-containing amorphous carbon coatings, 153
- Nanocrystalline materials
 - Solid-state reactions in low-phosphorus autocatalytic NiP–SiC coatings, 284
- Nanoindentation
 - Investigation of creep behaviour under load during indentation experiments and its influence on hardness and modulus results, 191
- Nanostructured thin films
 - Characterization of nanostructured multiphase Ti–Al–B–N thin films with extremely small grain size, 206
- Ni–Cu–P
 - A comparative study on the crystallization behavior of electroless Ni–P and Ni–Cu–P deposits, 143
- Nickel
 - Electrodeposition and sliding wear resistance of nickel composite coatings containing micron and submicron SiC particles, 171
 - A study on the mechanism of formation of electrocodeposited Ni–diamond coatings, 234
- Nickel silicides
 - Solid-state reactions in low-phosphorus autocatalytic NiP–SiC coatings, 284
- NiCrSiB
 - Laser surface alloying of NiCrSiB on Al6061 aluminium alloy, 136
- NiTi alloy
 - TiN coating improves the corrosion behavior of superelastic NiTi surgical alloy, 268
- Nitride
 - Electrochemical study of laser nitrided and PVD TiN coated Ti–6Al–4V alloy: the observation of selective dissolution, 46
- Nitrogen ion implantation
 - Effects of nitrogen ion implantation on the surface characteristics of iron aluminides, 77
- Optical reflectance
 - Arrangement of flexible foil substrates for CuInSe₂-based solar cells, 61
- Oxidation
 - Analysis of surface and subsurface of sliding electrical contact steel/steel in magnetic field, 241
- Oxidation resistant
 - The influence of magnetic solenoid filtration on the property of (Ti–Al)N coatings deposited in a cathodic arc deposition system, 25
- Phase transition
 - A comparative study on the crystallization behavior of electroless Ni–P and Ni–Cu–P deposits, 143
- Phase transitions
 - Chemical and phase composition of SnO_x:F films grown by DC reactive sputtering, 103
- Phosphides
 - A comparative study on the crystallization behavior of electroless Ni–P and Ni–Cu–P deposits, 143
- Photoelectron spectroscopy
 - Chemical and phase composition of SnO_x:F films grown by DC reactive sputtering, 103
- Photoelectron spectroscopy
 - Characterisation of the oxide scale on a Ti–2Al–2.5Zr alloy with and without pre-oxidation in an alkaline steam at 300°C, 216
- Polymethyl methacrylate
 - Qualitative evaluation of sol–gel SiO₂ as a protective layer for soft surfaces, 1
- Pitting and repassivation potential
 - Effects of nitrogen ion implantation on the surface characteristics of iron aluminides, 77
- Pitting corrosion
 - TiN coating improves the corrosion behavior of superelastic NiTi surgical alloy, 268
- Planarization
 - Investigation of the reflectivity of multilayer diamond-like carbon X-ray mirror, 149
- Plasma enhanced chemical vapor deposition
 - Gas phase analysis of TiCl₄ plasma processes by molecular beam mass spectrometry, 256
- Plasma jet
 - Low-pressure RF multi-plasma-jet system for deposition of alloy and composite thin films, 199
- Plasma simulation and modeling
 - The influence of vapor–gaseous envelope behavior on plasma electrolytic coating removal, 30
- Polishing
 - The influence of vapor–gaseous envelope behavior on plasma electrolytic coating removal, 30
- Pre-oxidation method
 - Characterisation of the oxide scale on a Ti–2Al–2.5Zr alloy with and without pre-oxidation in an alkaline steam at 300°C, 216
- Reactive sputtering
 - Chemical and phase composition of SnO_x:F films grown by DC reactive sputtering, 103
- Reactive sputtering

- Magnetron with gas injection through hollow cathodes machined in sputtered target, 296
- Reflectivity
 - Investigation of the reflectivity of multilayer diamond-like carbon X-ray mirror, 149
- Refractory metals
 - Binary nitride and oxynitride PVD coatings on titanium for biomedical applications, 226
- Residual stress
 - HVOF system definition to maximise the thickness of formed components, 18
- Ringer's solution
 - TiN coating improves the corrosion behavior of superelastic NiTi surgical alloy, 268
- Rotating disc electrode
 - A study on the mechanism of formation of electrocodeposited Ni-diamond coatings, 234
- Roughness
 - Investigation of the reflectivity of multilayer diamond-like carbon X-ray mirror, 149
- Scanning electron microscopy
 - Arrangement of flexible foil substrates for CuInSe₂-based solar cells, 61
- Scanning electron microscopy (SEM)
 - Characterisation of the oxide scale on a Ti-2Al-2.5Zr alloy with and without pre-oxidation in an alkaline steam at 300°C, 216
- Scratch adhesion
 - Analytical correlation of hardness and scratch adhesion for hard films, 8
- Scratch indentation
 - Analytical correlation of hardness and scratch adhesion for hard films, 8
- SiC
 - Electrodeposition and sliding wear resistance of nickel composite coatings containing micron and submicron SiC particles, 171
- Silane
 - Kinetics and mechanism relevant to TiSiN chemical vapor deposition from TDMAT, silane and ammonia, 251
- Silicon oxide
 - Arrangement of flexible foil substrates for CuInSe₂-based solar cells, 61
- Silicon oxide
 - Qualitative evaluation of sol-gel SiO₂ as a protective layer for soft surfaces, 1
- Simultaneous growth mechanism
 - Simultaneous growth mechanism of intermediate silicides in MoSi₂/Mo system, 129
- Solid-state reactions
 - Solid-state reactions in low-phosphorus autocatalytic NiP-SiC coatings, 284
- Stainless steel
 - Fatigue properties of a 316L stainless steel coated with different TiN_x deposits, 179
- Steered arc technique
 - Binary nitride and oxynitride PVD coatings on titanium for biomedical applications, 226
- Stress model
 - Stress analyses and in-situ fracture observation of wear protective multilayer coatings in contact loading, 38
- Surface
 - Surface properties of silver doped titanium oxide films, 65
- Surface property
 - Surface properties of silver doped titanium oxide films, 65
- Surface roughness
 - The influence of surface roughness of sprayed zirconia coatings on laser treatment, 87
- TBC coating
 - The influence of surface roughness of sprayed zirconia coatings on laser treatment, 87
- Tetrakis(dimethylamino)titanium
 - Kinetics and mechanism relevant to TiSiN chemical vapor deposition from TDMAT, silane and ammonia, 251
- TGA analysis
 - The influence of magnetic solenoid filtration on the property of (Ti-Al)N coatings deposited in a cathodic arc deposition system, 25
- Thermal cycling
 - Investigation on hot-fatigue behaviors of gradient thermal barrier coatings by EB-PVD, 110
- Thermal spraying
 - HVOF system definition to maximise the thickness of formed components, 18
- Thickness determination
 - Thickness determination of thin polycrystalline film by grazing incidence X-ray diffraction, 95
- Ti
 - Chemical vapor deposition of Ti-W-C thin films, 262
- (Ti-Al)N coating
 - The influence of magnetic solenoid filtration on the property of (Ti-Al)N coatings deposited in a cathodic arc deposition system, 25
- Ti-Ni intermetallic compounds
 - Formation of Ti-Ni intermetallic coatings on carbon tool steel by a duplex process, 55
- Ti-Si-N
 - Kinetics and mechanism relevant to TiSiN chemical vapor deposition from TDMAT, silane and ammonia, 251
- TiCl₄
 - Gas phase analysis of TiCl₄ plasma processes by molecular beam mass spectrometry, 256
 - Chemical vapor deposition of Ti-W-C thin films, 262
- TiCN, TiN thin films
 - Gas phase analysis of TiCl₄ plasma processes by molecular beam mass spectrometry, 256
- TiN coating
 - TiN coating improves the corrosion behavior of superelastic NiTi surgical alloy, 268
- TiN coatings
 - Analytical correlation of hardness and scratch adhesion for hard films, 8
- Tin oxide
 - Chemical and phase composition of SnO_x:F films grown by DC reactive sputtering, 103
- Titanium
 - Electrochemical study of laser nitrided and PVD TiN coated Ti-6Al-4V alloy: the observation of selective dissolution, 46
 - Binary nitride and oxynitride PVD coatings on titanium for biomedical applications, 226
- Titanium nitride
 - The influence of vapor-gaseous envelope behavior on plasma electrolytic coating removal, 30
 - Thickness determination of thin polycrystalline film by grazing incidence X-ray diffraction, 95
 - Fatigue properties of a 316L stainless steel coated with different TiN_x deposits, 179
- Titanium oxide
 - Surface properties of silver doped titanium oxide films, 65
 - Characterisation of the oxide scale on a Ti-2Al-2.5Zr alloy with and without pre-oxidation in an alkaline steam at 300°C, 216
- Transmission electron microscopy (TEM)

- Characterization of nanostructured multiphase Ti–Al–B–N thin films with extremely small grain size, 206
- Tribological contact
 - Stress analyses and in-situ fracture observation of wear protective multilayer coatings in contact loading, 38
- Tribological properties
 - Electrodeposition of graphite-brass composite coatings and characterization of the tribological properties, 71
- Tungsten carbide/diamond like multilayers
 - Tungsten carbide/diamond-like carbon multilayer coatings on steel for tribological applications, 277
- Vacuum evaporation
 - Binary nitride and oxynitride PVD coatings on titanium for biomedical applications, 226
- Vickers indentation
 - Analytical correlation of hardness and scratch adhesion for hard films, 8
- W(CO)₆
 - Chemical vapor deposition of Ti–W–C thin films, 262
- WC
 - Chemical vapor deposition of Ti–W–C thin films, 262
- WC–Co
 - HVOF system definition to maximise the thickness of formed components, 18
- Wear
 - Electrodeposition and sliding wear resistance of nickel composite coatings containing micron and submicron SiC particles, 171
- Analysis of surface and subsurface of sliding electrical contact steel/steel in magnetic field, 241
- Wet
 - Experimental investigation of the effect of drill coatings on hole quality under dry and wet drilling conditions, 117
- X-Ray diffraction
 - Arrangement of flexible foil substrates for CuInSe₂-based solar cells, 61
 - Thickness determination of thin polycrystalline film by grazing incidence X-ray diffraction, 95
 - Characterization of nanostructured multiphase Ti–Al–B–N thin films with extremely small grain size, 206
 - Characterisation of the oxide scale on a Ti–2Al–2.5Zr alloy with and without pre-oxidation in an alkaline steam at 300°C, 216
 - Binary nitride and oxynitride PVD coatings on titanium for biomedical applications, 226
- X-Ray diffraction
 - Chemical and phase composition of SnO_x:F films grown by DC reactive sputtering, 103
- X-Ray mirror
 - Investigation of the reflectivity of multilayer diamond-like carbon X-ray mirror, 149
- Young's modulus
 - Investigation of creep behaviour under load during indentation experiments and its influence on hardness and modulus results, 191