

Keywords index

Abrasive wear	236	Corrosion resistance	108, 125, 228
Age forming	353	Corrosion	252
AISI 304	432	Crack resistance	117, 214
Alumina fibre	88	Creep age forming	353
Aluminium matrix	88	Creep forming	353
Aluminium alloy	393	Creep-resistance	244
Aluminium	448	Cr-Ni-Mo steel	125
Amorphous phase	145	Cyclic fatigue	379
Analysing system	349		
Analysis and modelling	280-379	Database system	349
Anodic layers	424	Decarburization	403
Applied mechanics	38	Deep cryogenic treatment	80
Arc-plasma spraying	463	Degradation	72
Attachment	205	Denture relining	324
Austenite	385	Diamond	94
		DLC coatings	108
Bimetallic bars	371	Ductile cast iron with carbides	136
Bioactivity	424	Ductile iron	310
Biocompatibility	260		
Biomaterials	125, 162, 205, 222, 324	Eco-efficiency analysis methodology	469
Biomechanical analysis of plate fixation	108	Education and research trends	333
Block sections	236	EFQM Excellence Model	476
Bone substitute	170	Electrical properties	125
Boron	200	Electrodepositing	264
Bronzes	136	Electroless surface layers	269
Bulk amorphous alloys	463	Electromagnetic field	448
		Electrons irradiation	192
CA 310 FDM	310	Engineering polymers	192
Calcium sulfate	170	Engineering design	333
Canine model	260	Extruding process	178
Carbides	80		
Cast iron	385, 418	FCAE	455
Casting	153, 385, 393, 448	FEM	27, 371, 379
Cation diffusion	403	Femoral part	379
Chaotic algorithms	288	Ferrite	385
Chromium carbide coatings	145	Fibers	72
Chromium-nickel-molybdenum steel	108	Filtration systems	178
Clad strip	393	Forging tools	341
Composite coatings	162	Fracture	27
Composite layers	269	Frequency	448
Composites	72, 88, 153	Friction	222
Computational materials science	310	Friction Stir Welding	432
Computer tomography	288	Friction reduction	455
Constructional design	280	FTIR	72
Constructional similarity	280		
Cooling of the cast	299	General corrosion	228
Copper films	264	Graphene-like nanoparticles	341
Corona discharge	192	Gravimetric method	228
Coronary stents	125	Grinding wheels	27

Heat treatment	117	Optimization	15
Heat transfer	299	Overdenture	205
Heavy plates	117	Oxidation	252, 403
High speed steel	80	Parallel algorithms	288
High temperature oxidation	418	Passive carbon coatings	108
High density polyethylene (HDPE)	469	PCAD	455
High-manganese steels	228	PDCA Cycle	476
High-speed steel	64	Pearlite morphology	236
Hip endoprostheses	222	Phosphoric acid solutions	424
Homotopy perturbation method	299	Pitting corrosion	228
Hot rolling	371	Plastic working of metals	371
Hot dip zinc galvanizing	418	Poly lactide	72
Hybrid method	162	Polymeric Gradient Materials	153
Hybrid material	409	Polymers	153
Hydrogen	214	Polytypes	94
Hydrogen degradation	214	Properties	205-276
Hydrogen cracking	228	PVD processes	145
Hydroxyapatite	162	PVD/CVD coatings	341
Hypereutectoid cast steel with graphite	136	Quality continuous improvement	476
Implant	205	RADAR Matrix	476
Imprint	409	Railroad switches	236
IN-519 cast steel	244	Reactive extrusion	192
Industrial management and organisation	469, 476	Recycling	178
Intermetallics	252	Reformer tubes	244
Iron-chromium-carbon	403	Reinforcement bar	371
Laser modification	192	Reliability	15
Laser micro-machining	341	Residual life analysis	38
Layer structures	269	Residual magnetic field	362
Life Cycle Assessment (LCA)	469	Resistance to wear	455
Low density polyethylene (LDPE)	469	Roll-to-roll	409
Manufacturing and processing	385-463	Rotational tool speed	432
Materials	64-200	Scales morphology	403
Materials and engineering databases	333	Series of types	280
Matrix modelling	15	Shielded metal arc welding	276
Mechanical properties	64, 136, 205, 324	Shot-peening	440
Metal magnetic memory method	362	Silicon carbide	27
Metallic implants	108	Simulation results	349
Metallic alloys	117, 214	Six Sigma	476
Meteorite	94	Solid lubricants	341
Microalloyed steels	117	Solidification	310
Microstructure	200	Springback	353
Modelling	310, 440	Stainless steel	432
Modular systems	280	Steel - steel resistant to corrosion	371
Nanocomposite	192, 455	Strengthening	440
Nanolaminate	455	Stress-strain analysis	379
Nanomaterials	94, 145	Structure degradation	244
Nanostructural layer	424	Suction-casting	463
Net Present Value (NPV)	469	Sulfidation	252
Nickel layers	269	Sunlight guide	409
Non-destructive testing	362	Superhard coating	455
Numerical analysis	27	Surface treatment	440
Numerical techniques	38	System quality	15
Numerical simulations	222, 288, 299, 333, 371		
Numerical modelling	371		

Technological devices and equipment	463	Total endoprosthesis	379
TEM	200	Traverse speed	432
Tempering	64	Truck steel	276
Tensile	178	Twin roll caster	393
Texture	264		
Thermoplastics	178	VM12 steel	200
THR	260		
Tissue	324	Wear resistance	88
Titanium	162	Wear	222
Titanium modified hydroxyapatite	170	Wear products	222
Titanium materials	424	Welding	276
Tool materials	64, 80		