

Keywords index

1-decyylimidazole	673	CNC	421
Abrasive wear	416	Coke	536
Acidithiobacillus ferrooxidans	860	Cold deformation	331
Acoustic wave	596	Cold forging	716
Additive manufacturing	511	Cold plastic deformation	529
AFM microscopy	396	Cold rolling	810
AISI 304	841	Collapsing effect of polyethylene foam	895
AISI H13	439	Composite materials	316
AlCrN coating	607	Composite pipes	596
Alloy nitrogen	265	Composites	504
Alloyed copper	529	Computational material science	159, 461, 529
Alumina	841	Computer science	477
Aluminide coatings	848	Computer simulation	349, 551
Aluminium	285, 551	Conformity assessment	881
Aluminium cast alloys	734	Constitutive relationships	504
Aluminium high pressure die casting	439	Constructional design	488
Aluminium matrix composites	339, 654	Contact resistance measurement	921
Aluminum powder	790	Contact resistance	921
Analysis and modelling	421-596	Continuous casting	561, 590, 638
Angular distortions	578	Continuous casting of steel	668
APS	547	Copper	777
Argon blowing	573	Corrosion	378, 685, 689, 907, 912
Artificial neural network	454, 529	Cost evaluation	716
Ash in coke	536	CP wire	727
Austenitic stainless steels	679	Crater wear	829
Automotive industry	716	Creep	403
Ball end milling	616	CRT funnel	825
Basquin	439	CRT glass	825
Batch size	716	Cryogenic treatment	829
Battery scarp	855	Crystallization process	225
Bioleaching	860	Crystallizer	454
Blast furnace	536, 712, 889	CuTi4 alloy	331
Blast furnace numerical analysis	523	Data driven model	446
Blast furnace operation	876	Defects	454, 706
Bulk metallic glasses	225, 349, 363	Deformation	629
CAD/CAM	469	Density	902
Cantilever	616	Dental bridge	469
Catalyst	864	Design parameters	921
CCT diagram	280	Destruction of austenitic steel	378
Central composite design	616	Desulphurization process	855
Ceramic and glass	907	Diagnostics	454, 596
Ceramic filter	410	Digitization	469
Ceramic molds	661	Direct cutting zone	706
Ceramics	902	Donor acceptor couple	396
Ceramics and glasses	912	Dust	772
Cleaner production and biotechnology	855-860	Dynamic recrystallization	759
		Elastic metamaterials	584

Elastoplasticity	504	HP-HT method Bridgman type	700
Electric arc furnace	518	Hydraulic actuator performance	431
Electrical properties	307	Hydraulic damper	446
Electroless nickel plating	782	Hydrogen	742
Electromagnetic stirring	638	Hypoeutectoid steel	280
Electron microscopy	331	Hysteresis	504
Electrospinning	835		
Element birth and death method	578	I base alloy	280
Energy harvesting	355	Identification	921
Engineering design	488	Inclusion engineering	721
Engineering materials	644	Inconel 718	616
Engineering polymer	291	Industrial application of cleaner production methods	855
Enterprises	498	Industrial management and organisation	864-895
Erosion	912	Infrared imaging camera	706
Experimental laboratory research	825	Injection moulding	239
Experimental tests	265	Innovation	498
Extrusion with reversibly rotating die	159	Interface intermetallic	629
Fatigue degradation processes	596	Intermetallic phases	275
Fatigue testing	386	Ions separation	673
Fe-based alloy	363	Iron alloys	265
Fe-C alloys	748	Iron manufacturing	889
FEM	668	Jets&Poudres	547
Ferrochromium	870	Kelex 100	777
Ferromanganese	870	Kinetic phase transformations of undercooled austenite	280
Ferrous scrap	518		
Filter slenderness ratios	410		
Finite Element Method	523, 551, 578	Ladle furnace	390
Finite Element Method analysis	488	Laser ablation texturing	748
First principle model	446	Laser alloying	623, 734
Flank wear	829	Laser flash apparatus	902
Fluid flow	561	Laser surface treatment	734
Formability	799	Leaching	825
Formation enthalpy	275	Lead	825
Forming limit diagram	799	Lead welding	727
Fractal dimensions of flocculated suspension	299	Life time	454
Fracture counteraction	230	Limiting drawing ratio	799
Friction stir welding	339, 607	Liquid alloy-gaseous phase system equilibrium	265
FSW	607	Liquid steel	518, 573
Functional properties	159	Liquidus temperatures	694
Fused deposition modeling	511	LIX 70	777
Future prospects	889	LPPS	547
Gas-solid flow	567	Machinability	841
Generalized Prandtl model	504	Machines	817
Geothermal power plants	918	Machining	421
Giant magnetostrictive materials	316	Macrosegregation	256
Glass forming ability	349, 363	Magnesium	799
Graphene oxide	835	Magnetic properties	225, 270
		Magnetostriction	316
Halloysite	654	Manual Metal arc welding	578
Hardness	403	Manufacturing and processing	600-848
Heat affected zone (HAZ)	378	Material science	912
Heat flow	706	Materials	280
Heat treatment	331, 529	Materials science virtual laboratory	461
High manganese TWIP, TRIP & TRIPLEX steels	230	Materials	225-291
High strength steels	245	Mechanical milling	654, 790
Hooking	629	Mechanical properties	159, 230, 239, 339
Hot extrusion	654	Mechanical stability	323

Mechanism	772	Plastic anisotropy	504
Mechanoacoustic efficiency	753	Plastic coating	782
Metal alloys	416	Plastic deformation	679
Metallic alloys	245, 256, 275, 285, 331, 685, 689, 907	Plastic forming	810
Metallic glasses	270, 363	Plastics processing industry	895
Metallothermic reduction	870	Polymer inclusive membranes	673
Metallurgical units analysis	523	Polymer nanocomposites	644
Metallurgy	518	Polymer processing	644
Methanol	790	Polymer-aluminosilicate composites	239
Methodology of research	410-416	Post forming characteristics	799
Micro hardness	616	Powder	902
Microalloyed steel	759	Powder hold up	567
Microsegregation	256	Powder injection moulding	556
Microstructure	159, 239, 748, 790	Pressing	661
Milling	661	Process of stamping	551
Milling parameters	790	Production and operation management	483, 876
Milton-Willis material	584	Production of sintered Ni-Al	700
MMT	644	Properties	299-403
Mn addition	245	Prosthodontia	469
Model	918	PTCDA	396
Modelling	454, 547	PVD and CVD surface layers	159
Modernization	889		
Modification	245	Quality criterion	881
Mold welding	727	Quality Management	895
Mould powder	345	Quantitative metallography	410
Mountain tractor	817		
Moving bed	67	Radial distribution of flow	567
Mower	817	Rapid prototyping	511, 584, 782
Multiphase steel	256	Rare earth elements	245
Nanocomposite	835	Recovery of metals	864
Nano-fiber	835	Recycling	661, 855
Nb-microalloying	256	Recycling of catalyst	864
Nickel(II), cobalt(II), zinc(II), cadmium(II) ions	673	Refining	410
NiTi	368	Refining slag	390, 742
Non-metallic inclusions	245, 590, 721, 742	Reforming	864
Numerical modelling	561, 590, 668	Renewable source of energy	918
Numerical simulations	523	Research monograph	159
		Research ranking	498
		Response surface methodology	616
Off-line error cancellation	431	Retained austenite	256, 323
Operating reliability	416	Rheological models	541
Optimization methods	477	Rheological properties	477
Organic binder	345	Rheological schemes	504
Organic thin films	396	Rheology	541
Oxidation resistance	848	Rheometer	541
Oxygen	742	Roll contour	810
		Roll gap control	810
Palladium modification	848	RTD curves	561
Pareto-Lorenz diagram	498		
Particle composition of suspension	299	Sandwich films	835
PCBs	860	Screen printing	307
Percussion welding	727	Secondary metallurgy	573
Phthalocyanine	396	Sedimentation	299
Physical modelling	285, 567, 573	Segregation	638
Physical properties	345	Series of types	488
Piezoceramic power head	753	Shape memory actuators	368
Piezoelectric	355	Shape memory alloys	368
Pig iron	876	Shape memory applications	368
Plasma spraying	547	Sherescan instrument	307

Signal profile correction	431	Temperature	355
Silicon	712	Temperature distribution	578
Silicon dioxide reduction	712	Tensile strength	727
Simulating the stress-strain curve	679	Terfenol-D	316
Simulation	421, 547, 556	Thermal analysis	694
Simulation models	596	Thermal barrier coatings	902
Sintering	556, 661	Thermal conductivity	349
Six Sigma method implementation	895	Thermal diffusivity	902
Sn plated	727	Thermal evaporation	396
Sn whisker	727	Thermal fatigue	439
Softening kinetics	759	Thermochemical calsulations	536
Softening	721	Thermo-derivative analysis	734
Solar cells	307	Thermomechanical analysis	578
Solid non-metallic inclusions	410	Thermomechanical rolling	245, 256
Solidification	694	Thermo-mechanical treatment	759
Solidus temperatures	694	Thin and Thick Coatings	291, 685, 689, 907, 912
Solution calorimetry	275	Titanium	265
Solvent extraction	777	Titanium alloy	607
Static recrystallization	759	Titanium alloy machining	600
Statistic methods	876	Tool life	421, 600
Statistical methods	416	Tool materials	556
Steady state	918	Tool steels	623
Stearic acid	790	Tool wear	600
Steel	541, 694	Torsional moment	753
Steel desulphurisation	390	Transient thermal analysis	578
Steel Super 304H	403	Tribology	607
Steelmaking process	772	TRIP effect	323, 679
STEP-NC	421	Tundish	561, 590
Stranded cable	921	Turning	716
Strength	629, 721	TWIP & TRIP mechanisms	230
Strengthening mechanisms	230	Two-phase alloys NiAl/Ni ₃ Al	700
Stress concentration	629		
Structural relaxation	225		
Structural steel	461, 721	Ultra-pure steel	742
Structure	270, 403,	UV-Vis spectroscopy	396
Subzero	355		
Sulphur	742	VD method	848
Surface engineering	623	Virtual investigations	461
Surface integrity	616	Viscosity	541
Surface properties	291		
Surface roughness	600, 829	Water treatment	299
Surface stereometry	748	WC tool	607
Surface treatment	291, 685, 689, 907, 912	Wear	607
Survey	498	Wearing	454
System risk minimization	881	Weibull modulus	416
Technical announcement	918-921	Welded joints	378
Technical paper	902-912	Work piece deflection	616
Technological design	689, 907, 685	Working properties of materials and products	323
Technological devices and equipment	817	Worldwide production	889
Technology	889	Zinc	772