

George Kaptay

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

143 papers	2,909 citations	29 h-index	48 g-index
160 ext. papers	3,268 ext. citations	3.3 avg, IF	6.31 L-index

#	Paper	IF	Citations
143	Boride Coatings on Steel Protecting it Against Corrosion by a Liquid Lead-Free Solder Alloy. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2022 , 53, 730	2.5	0
142	Spontaneous inversion of the submicron ceramic layer deposited on steel and the copper droplet positioned on their top (case of ceramic poorly wetted by liquid Cu). <i>Journal of Materials Science</i> , 2022 , 57, 1648-1668	4.3	
141	Complex Avrami kinetics of TiB ₂ transformation into TiB whiskers during sintering of Ti-TiB ₂ nanocomposites. <i>Journal of Alloys and Compounds</i> , 2022 , 894, 162442	5.7	0
140	A new model for thermal conductivity of continuous matrix / dispersed and separated 3D-particles type composite materials and its application to WC-M (M = Co, Ag) systems. <i>Journal of Materials Science and Technology</i> , 2022 , 97, 123-133	9.1	3
139	Large NaCl-effect on the Decomposition Rate of Chlorate Ions in HCl-containing Brine Solutions and Its Consequences for the Chlor-alkali Industry. <i>Periodica Polytechnica: Chemical Engineering</i> , 2021 , 65, 238-242	1.3	2
138	Acoustic-Pressure-Assisted Engineering of Aluminum Foams. <i>Advanced Engineering Materials</i> , 2021 , 23, 2100306	3.5	
137	Synthesis, characterisation and thermal behaviour of Cu-based nano-multilayer. <i>Journal of Materials Science</i> , 2021 , 56, 7823-7839	4.3	4
136	Preface to the special section on high-temperature capillarity. <i>Journal of Materials Science</i> , 2021 , 56, 7789-7790	4.3	
135	A new model to describe composition and temperature dependence of thermal conductivity for solution phases in binary alloys. <i>Journal of Materials Science and Technology</i> , 2020 , 59, 72-82	9.1	3
134	Cracking of Copper Brazed Steel Joints Due to Precipitation of MnS upon Cooling. <i>Journal of Materials Engineering and Performance</i> , 2020 , 29, 8183-8193	1.6	2
133	A coherent set of model equations for various surface and interface energies in systems with liquid and solid metals and alloys. <i>Advances in Colloid and Interface Science</i> , 2020 , 283, 102212	14.3	22
132	The k-index is introduced to replace the h-index to evaluate better the scientific excellence of individuals. <i>Heliyon</i> , 2020 , 6, e04415	3.6	8
131	Development of Ag nanoparticles on the surface of Ti powders by chemical reduction method and investigation of their antibacterial properties. <i>Applied Surface Science</i> , 2020 , 533, 147494	6.7	8
130	Thermodynamic Stability of Nano-grained Alloys Against Grain Coarsening and Precipitation of Macroscopic Phases. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019 , 50, 4931-4947	2.3	5
129	OpenIEC: an open-source code for interfacial energy calculation in alloys. <i>Journal of Materials Science</i> , 2019 , 54, 10297-10311	4.3	9
128	The behaviour of steel coated with TiB ₂ in Sn-Ag-Cu melt. <i>Materials Science and Technology</i> , 2019 , 35, 680-686	1.5	3
127	Super-paramagnetic magnetite nanoparticles obtained by different synthesis and separation methods stabilized by biocompatible coatings. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019 , 568, 113-122	5.1	20

126	A correction to parallel tangent method for modelling segregation to grain boundaries and other interfaces for components of different atomic sizes. <i>Scripta Materialia</i> , 2019 , 172, 47-50	5.6	3
125	Modelling the viscosity of liquid alloys with associates. <i>Journal of Molecular Liquids</i> , 2019 , 291, 111345	6	4
124	Improved Derivation of the Butler Equations for Surface Tension of Solutions. <i>Langmuir</i> , 2019 , 35, 109874-109928	4	18
123	Electrokinetic Potential and Size Distribution of Magnetite Nanoparticles Stabilized by Poly(vinyl Pyrrolidone). <i>Colloid Journal</i> , 2019 , 81, 773-778	1.1	1
122	The nano heat effect of replacing macro-particles by nano-particles in drop calorimetry: the case of core/shell metal/oxide nano-particles.. <i>RSC Advances</i> , 2018 , 8, 8856-8869	3.7	5
121	The chemical (not mechanical) paradigm of thermodynamics of colloid and interface science. <i>Advances in Colloid and Interface Science</i> , 2018 , 256, 163-192	14.3	34
120	Investigation of dissolution resistance of blank and gas-nitrided carbon steels in stationary SAC305 solder alloy melt. <i>Journal of Mining and Metallurgy, Section B: Metallurgy</i> , 2018 , 54, 283-290	1	3
119	On the solid/liquid interfacial energies of metals and alloys. <i>Journal of Materials Science</i> , 2018 , 53, 3767-3784	4.9	20
118	Modelling surface melting of macro-crystals and melting of nano-crystals for the case of perfectly wetting liquids in one-component systems using lead as an example. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , 2018 , 63, 37-50	1.9	10
117	On the Size Dependence of Molar and Specific Properties of Independent Nano-phases and Those in Contact with Other Phases. <i>Journal of Materials Engineering and Performance</i> , 2018 , 27, 5023-5029	1.6	5
116	The exponential excess Gibbs energy model revisited. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , 2017 , 56, 169-184	1.9	33
115	The influence of the phosphorous content and heat treatment on the nano-micro-structure, thickness and micro-hardness of electroless Ni-P coatings on steel. <i>Applied Surface Science</i> , 2017 , 423, 160-169	6.7	58
114	Prediction of Phase Separation of Immiscible Ga-Tl Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017 , 48, 3130-3136	2.3	4
113	A new paradigm on the chemical potentials of components in multi-component nano-phases within multi-phase systems. <i>RSC Advances</i> , 2017 , 7, 41241-41253	3.7	20
112	On the Negative Surface Tension of Solutions and on Spontaneous Emulsification. <i>Langmuir</i> , 2017 , 33, 10550-10560	4	16
111	Derivation of the Butler equation from the requirement of the minimum Gibbs energy of a solution phase, taking into account its surface area. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2017 , 533, 296-301	5.1	17
110	Honorary note to celebrate the 80th birthday of professor Sidor By. <i>Advances in Colloid and Interface Science</i> , 2017 , 243, 1-7	14.3	
109	Effect of Wetting Agent and Carbide Volume Fraction on the Wear Response of Aluminum Matrix Composites Reinforced by WC Nanoparticles and Aluminide Particles. <i>Archives of Metallurgy and Materials</i> , 2017 , 62, 1235-1242		9

108	Ti oxidation states in Zn(Ti) coating of hot-dip galvanized steels. <i>Surface and Coatings Technology</i> , 2017 , 326, 121-125	4.4	4
107	On the Configurational Entropy of Nanoscale Solutions for More Accurate Surface and Bulk Nano-Thermodynamic Calculations. <i>Entropy</i> , 2017 , 19, 248	2.8	9
106	Coloring hot-dip galvanization of steel samples in industrial zinc-manganese baths. <i>Journal of Mining and Metallurgy, Section B: Metallurgy</i> , 2017 , 53, 319-326	1	2
105	TiC crystallite formation and the role of interfacial energies on the composition during the deposition process of TiC/a:C thin films. <i>Surface and Coatings Technology</i> , 2016 , 302, 410-419	4.4	15
104	On the General Material Balance Equation(S) to Calculate Quasi-Binary Sections of Multi-Component Phase Diagrams. <i>Archives of Metallurgy and Materials</i> , 2016 , 61, 75-78		
103	Designing the Color of Hot-Dip Galvanized Steel Sheet Through Destructive Light Interference Using a Zn-Ti Liquid Metallic Bath. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016 , 47, 3580-3596	2.3	6
102	Melting Point Depression and Fast Diffusion in Nanostructured Brazing Fillers Confined Between Barrier Nanolayers. <i>Journal of Materials Engineering and Performance</i> , 2016 , 25, 3275-3284	1.6	25
101	Enthalpy Effect of Adding Cobalt to Liquid Sn-3.8Ag-0.7Cu Lead-Free Solder Alloy: Difference between Bulk and Nanosized Cobalt. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 1881-1890	3.8	17
100	Modelling equilibrium grain boundary segregation, grain boundary energy and grain boundary segregation transition by the extended Butler equation. <i>Journal of Materials Science</i> , 2016 , 51, 1738-1755	4.3	31
99	Partial surface tension of components of a solution. <i>Langmuir</i> , 2015 , 31, 5796-804	4	55
98	Direct observation of the segregation driven by bubble evolution and liquid phase separation in Al ₉₀ Bi ₁₀ wt.% Bi immiscible alloy. <i>Scripta Materialia</i> , 2015 , 102, 19-22	5.6	20
97	Approximated equations for molar volumes of pure solid fcc metals and their liquids from zero Kelvin to above their melting points at standard pressure. <i>Journal of Materials Science</i> , 2015 , 50, 678-687	4.3	20
96	Aluminium reinforced by WC and TiC nanoparticles (ex-situ) and aluminide particles (in-situ): Microstructure, wear and corrosion behaviour. <i>Materials & Design</i> , 2015 , 65, 1121-1135		109
95	Microstructure And Mechanical Properties Of Al-WC Composites. <i>Archives of Metallurgy and Materials</i> , 2015 , 60, 1517-1521		9
94	Theoretical Analysis of Melting Point Depression of Pure Metals in Different Initial Configurations. <i>Journal of Materials Engineering and Performance</i> , 2014 , 23, 1600-1607	1.6	30
93	Interfacial Design for Joining Technologies: An Historical Perspective. <i>Journal of Materials Engineering and Performance</i> , 2014 , 23, 1608-1613	1.6	26
92	A Method to Estimate Interfacial Energy between Eutectic Solid Phases from the Results of Eutectic Solidification Experiments. <i>Materials Science Forum</i> , 2014 , 790-791, 133-139	0.4	3
91	Brownian Motion Effects on Particle Pushing and Engulfment During Solidification in Metal-Matrix Composites. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014 , 45, 4635-4645	2.3	16

90	The sol-gel synthesis of cotton/TiO ₂ composites and their antibacterial properties. <i>Surface and Coatings Technology</i> , 2014 , 253, 171-179	4.4	59
89	On the abilities and limitations of the linear, exponential and combined models to describe the temperature dependence of the excess Gibbs energy of solutions. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , 2014 , 44, 81-94	1.9	22
88	Effect of Y and Ni addition on liquid immiscibility in CuZrAg ternary alloys. <i>Journal of Alloys and Compounds</i> , 2014 , 615, S616-S620	5.7	6
87	Wettability of graphite by liquid aluminum under molten potassium halide fluxes. <i>Journal of Materials Science</i> , 2013 , 48, 7679-7685	4.3	9
86	An Improved Theoretical Model for A-TIG Welding Based on Surface Phase Transition and Reversed Marangoni Flow. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2013 , 44, 351-361	2.3	30
85	Measurement and modelling of the wettability of graphite by a silver-bismuth (Ag-Bi) liquid alloy. <i>Applied Surface Science</i> , 2013 , 268, 52-60	6.7	29
84	Fabrication of carbon fiber reinforced aluminum matrix composites via a titanium-ion containing flux. <i>Composites Part A: Applied Science and Manufacturing</i> , 2013 , 44, 47-50	8.4	37
83	A Unified Theoretical Framework to Model Bulk, Surface and Interfacial Thermodynamic Properties of Immiscible Liquid Alloys. <i>Materials Science Forum</i> , 2013 , 752, 10-19	0.4	3
82	On the size and shape dependence of the solubility of nano-particles in solutions. <i>International Journal of Pharmaceutics</i> , 2012 , 430, 253-7	6.5	90
81	The conversion of phase diagrams of solid solution type into electrochemical synthesis diagrams for binary metallic systems on inert cathodes. <i>Electrochimica Acta</i> , 2012 , 60, 401-409	6.7	6
80	Thermodynamic description of the Al-Mg-Si system using a new formulation for the temperature dependence of the excess Gibbs energy. <i>Thermochimica Acta</i> , 2012 , 527, 131-142	2.9	54
79	On the Tendency of Solutions to Tend Toward Ideal Solutions at High Temperatures. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012 , 43, 531-543	2.3	67
78	Nano-Calphad: extension of the Calphad method to systems with nano-phases and complexions. <i>Journal of Materials Science</i> , 2012 , 47, 8320-8335	4.3	97
77	Stable miscibility gap in liquid CuZrAg ternary alloy. <i>Journal of Alloys and Compounds</i> , 2012 , 541, 353-358	5.7	13
76	On the Order-Disorder Surface Phase Transition and Critical Temperature of Pure Metals Originating from BCC, FCC, and HCP Crystal Structures. <i>International Journal of Thermophysics</i> , 2012 , 33, 1177-1190	2.1	6
75	Stabilization of metallic emulsions by in-situ precipitating intermetallic layers. <i>Intermetallics</i> , 2012 , 26, 26-30	3.5	8
74	On the interfacial energy of coherent interfaces. <i>Acta Materialia</i> , 2012 , 60, 6804-6813	8.4	36
73	Particle Stabilized Foams 2012 , 121-143		4

72	Fabrication of carbon fibre reinforced, aluminium matrix composite by potassium iodide (KI) □ potassium hexafluoro-titanate (K ₂ TiF ₆) flux. <i>Materialwissenschaft Und Werkstofftechnik</i> , 2012 , 43, 310-314	9.9	13
71	On the optimum contact angle of stability of foams by particles. <i>Advances in Colloid and Interface Science</i> , 2012 , 170, 87-8	14.3	5
70	The Gibbs equation versus the Kelvin and the Gibbs-Thomson equations to describe nucleation and equilibrium of nano-materials. <i>Journal of Nanoscience and Nanotechnology</i> , 2012 , 12, 2625-33	1.3	51
69	Surface grain coarsening and surface softening during machining of ultra-fine grained titanium. <i>Journal of Mining and Metallurgy, Section B: Metallurgy</i> , 2012 , 48, 449-459	1	4
68	Interfacial Forces in Dispersion Science and Technology. <i>Journal of Dispersion Science and Technology</i> , 2012 , 33, 130-140	1.5	18
67	Formation of nanoparticles by ion beam irradiation of thin films. <i>Journal of Nanoscience and Nanotechnology</i> , 2012 , 12, 5009-15	1.3	1
66	On the atomic masses (weights?) Of the elements. <i>Journal of Mining and Metallurgy, Section B: Metallurgy</i> , 2012 , 48, 153-159	1	1
65	Monotectic Al/Cd alloys with homogeneously dispersed Cd-droplets stabilized by strontium aluminide precipitates. <i>Intermetallics</i> , 2011 , 19, 423-425	3.5	10
64	Performance of a cutting tool made of steel matrix surface nano-composite produced by in situ laser melt injection technology. <i>Journal of Materials Processing Technology</i> , 2011 , 211, 750-758	5.3	17
63	Fabrication of SiC-Particles-Shielded Al Spheres upon Recycling Al/SiC Composites. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2011 , 42, 1439-1443	2.3	5
62	Inversion of a liquid Bi/Al metallic emulsion stabilized by solid SiC particles. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2011 , 377, 325-329	5.1	11
61	On the five base quantities of nature and SI (The International System of Units). <i>Journal of Mining and Metallurgy, Section B: Metallurgy</i> , 2011 , 47, 241-246	1	
60	Classification of laser beam induced surface engineering technologies and in situ synthesis of steel matrix surface nanocomposites. <i>Surface Engineering</i> , 2011 , 27, 428-435	2.6	6
59	Diffusion of Carbon in the Centerline Region of Continuous Cast Slabs. <i>Materials Science Forum</i> , 2010 , 659, 441-446	0.4	1
58	The extension of the phase rule to nano-systems and on the quaternary point in one-component nano phase diagrams. <i>Journal of Nanoscience and Nanotechnology</i> , 2010 , 10, 8164-70	1.3	10
57	Wettability of SiC and alumina particles by liquid Bi under liquid Al. <i>Journal of Materials Science</i> , 2010 , 45, 2090-2098	4.3	13
56	Guest Editors Editorial: HTC-2009. <i>Journal of Materials Science</i> , 2010 , 45, 1977-1978	4.3	1
55	Perfect wettability of carbon by liquid aluminum achieved by a multifunctional flux. <i>Journal of Materials Science</i> , 2010 , 45, 5177-5190	4.3	31

54	In-situ synthesis of a carbide reinforced steel matrix surface nanocomposite by laser melt injection technology and subsequent heat treatment. <i>Surface and Coatings Technology</i> , 2009 , 203, 3049-3057	4.4	27
53	A New Class of Engineering Materials: Particle-Stabilized Metallic Emulsions and Monotectic Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2009 , 40, 1524-1528	2.3	18
52	Influence of current density on the erosion of a graphite cathode and electrolytic formation of carbon nanotubes in molten NaCl and LiCl. <i>Electrochimica Acta</i> , 2009 , 54, 6725-6731	6.7	26
51	The separation of carbon nanotubes from chlorides. <i>Carbon</i> , 2009 , 47, 1195-1198	10.4	9
50	A Calphad-compatible method to calculate liquid/liquid interfacial energies in immiscible metallic systems. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , 2008 , 32, 338-352	1.9	35
49	A new theoretical equation for temperature dependent self-diffusion coefficients of pure liquid metals. <i>International Journal of Materials Research</i> , 2008 , 99, 14-17	0.5	21
48	A unified model for the cohesive enthalpy, critical temperature, surface tension and volume thermal expansion coefficient of liquid metals of bcc, fcc and hcp crystals. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 495, 19-26	5.3	84
47	Link between the Semi-empirical Andrade and Schytil Equations and the Statistical-Mechanical Born-Green Equation for Viscosity and Surface Tension of Pure Liquid Metals. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2008 , 39, 387-389	2.5	6
46	The threshold pressure of infiltration into fibrous preforms normal to the fibers. <i>Composites Science and Technology</i> , 2008 , 68, 228-237	8.6	22
45	Calculation of surface tension and surface phase transition line in binary Ga-In system. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 495, 65-69	5.3	30
44	Wettability of carbon surfaces by pure molten alkali chlorides and their penetration into a porous graphite substrate. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 495, 192-196	5.3	49
43	Modified classical homogeneous nucleation theory and a new minimum in free energy change. <i>Fluid Phase Equilibria</i> , 2007 , 254, 67-74	2.5	9
42	Modified classical homogeneous nucleation theory and a new minimum in free energy change. <i>Fluid Phase Equilibria</i> , 2007 , 255, 55-61	2.5	4
41	On the Temperature Gradient Induced Interfacial Gradient Force, Acting on Precipitated Liquid Droplets in Monotectic Liquid Alloys. <i>Materials Science Forum</i> , 2006 , 508, 269-274	0.4	16
40	On the equation of the maximum capillary pressure induced by solid particles to stabilize emulsions and foams and on the emulsion stability diagrams. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2006 , 282-283, 387-401	5.1	235
39	A method to calculate equilibrium surface phase transition lines in monotectic systems. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , 2005 , 29, 56-67	1.9	27
38	Classification and general derivation of interfacial forces, acting on phases, situated in the bulk, or at the interface of other phases. <i>Journal of Materials Science</i> , 2005 , 40, 2125-2131	4.3	47
37	On the asymmetrical dependence of the threshold pressure of infiltration on the wettability of the porous solid by the infiltrating liquid. <i>Journal of Materials Science</i> , 2005 , 40, 2531-2535	4.3	26

36	Intercalation of Sodium and Lithium into Graphite as a First Stage in an Electrochemical Method for Producing Carbon Nanotubes. <i>Russian Journal of Electrochemistry</i> , 2005 , 41, 956-963	1.2	12
35	A unified equation for the viscosity of pure liquid metals. <i>International Journal of Materials Research</i> , 2005 , 96, 24-31		84
34	Discussion of Thermodynamics of liquid Al-Na alloys determined by using CaF ₂ solid electrolyte. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2004 , 35, 393-398	2.5	2
33	On different modifications of the capillary model of penetration of inert liquid metals into porous refractories and their connection to the pore size distribution of the refractories. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2004 , 35, 471-486	2.5	11
32	A new equation for the temperature dependence of the excess Gibbs energy of solution phases. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , 2004 , 28, 115-124	1.9	105
31	A Virtual LD-Steel-Converter. <i>Materials Science Forum</i> , 2003 , 414-415, 365-370	0.4	1
30	Interfacial Criteria for Producing Metal Matrix Composites and Ceramic Particle Stabilized Metallic Foams. <i>Materials Science Forum</i> , 2003 , 414-415, 419-424	0.4	11
29	Interfacial criteria for stabilization of liquid foams by solid particles. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2003 , 230, 67-80	5.1	183
28	Nanotubes: number of Kekulé structures and aromaticity. <i>Journal of Chemical Information and Computer Sciences</i> , 2003 , 43, 609-14		21
27	An Absolute Scale for the Cohesion Energy of Pure Metals. <i>Materials Science Forum</i> , 2003 , 414-415, 235-240	0.4	22
26	Thermodynamics-Based Semi-Empirical Description of the Liquidus Surface and Partition Coefficients in Ternary Al-Mg-Si Alloy. <i>Materials Science Forum</i> , 2003 , 414-415, 323-328	0.4	10
25	A Dynamic Model of Ceramic Particle-Solidification Front Interaction. <i>Materials Science Forum</i> , 2003 , 414-415, 371-376	0.4	2
24	The Solubility of Nitrogen and Nitrides in Ternary Liquid Iron Alloys. The Limits of the 'Solubility Product' Concept. <i>Materials Science Forum</i> , 2003 , 414-415, 491-0	0.4	4
23	Some aspects of the electrochemical formation of carbon micro-tubes from molten chlorides. <i>Journal of Mining and Metallurgy, Section B: Metallurgy</i> , 2003 , 39, 343-352	1	4
22	Electrochemical study of the electrodeposition and intercalation of sodium into graphite from sodium chloride as the first step of carbon nano-tubes formation. <i>Journal of Mining and Metallurgy, Section B: Metallurgy</i> , 2003 , 39, 369-381	1	6
21	Equilibrium electrochemical synthesis diagrams of systems, forming homogeneous alloys and compounds. <i>Journal of Mining and Metallurgy, Section B: Metallurgy</i> , 2003 , 39, 383-405	1	2
20	Reduced critical solidification front velocity of particle engulfment due to an interface active solute in the liquid metal. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2002 , 33, 1869-1873	2.3	9
19	Physical, Chemical, and Electrochemical Behavior of Boron Oxide in Cryolite-Alumina Melts. <i>Russian Journal of Applied Chemistry</i> , 2002 , 75, 565-568	0.8	4

18	The Force Acting on a Sphere Moving towards a Solidification Front due to an Interfacial Energy Gradient at the Sphere/Liquid Interface.. <i>ISIJ International</i> , 2001 , 41, 305-307	1.7	9
17	Atomic force microscopy investigation of electrochemically produced carbon nanotubes. <i>Applied Physics A: Materials Science and Processing</i> , 2001 , 72, S189-S192	2.6	15
16	Interfacial criterion of spontaneous and forced engulfment of reinforcing particles by an advancing solid/liquid interface. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2001 , 32, 993-1005	2.3	51
15	Discussion of microscale simulation of settler processes in copper matte smelting <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2001 , 32, 555-557	2.5	9
14	Electrochemical Synthesis of Titanium Silicides from Molten Salts. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 2001 , 56, 739-740	1.4	5
13	Chemical and Electrochemical Behavior of Titanium Diboride in Cryolite-Alumina Melt and in Molten Aluminum. <i>Journal of Solid State Chemistry</i> , 2000 , 154, 107-109	3.3	19
12	Further discussion of Particle engulfment and pushing by solidifying interfaces: Part II. microgravity experiments and theoretical analysis. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2000 , 31, 1695-1700	2.3	4
11	Electrochemical synthesis of refractory borides from molten salts. <i>Plasmas & Ions</i> , 1999 , 2, 45-56		51
10	Discussion of Particle engulfment and pushing by solidifying interfaces: Part II. Microgravity experiments and theoretical analysis <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1999 , 30, 1887-1890	2.3	7
9	Chemical and Electrochemical Behaviour of Titanium Oxide and Complexes in Cryolite-Alumina Melts. <i>High Temperature Material Processes</i> , 1998 , 2, 497-506	1.8	6
8	Correlation between the abrasive ability of ceramic reinforced amorphous metal matrix composites and the adhesion energy between the amorphous matrix and the ceramic particles. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1997 , 226-228, 1083-1088	5.3	4
7	Interface phenomena in processing of ceramic reinforced amorphous metal composites. <i>Journal of Non-Crystalline Solids</i> , 1996 , 205-207, 742-747	3.9	5
6	Comparison of Different Theoretical Models to Experimental Data on Viscosity of Binary Liquid Alloys. <i>Materials Science Forum</i> , 489-496	0.4	3
5	Modelling Interfacial Energies in Metallic Systems. <i>Materials Science Forum</i> , 1-10	0.4	2
4	Interfacial Forces: Classification 3281-3298		
3	Dynamic Simulation of the Movement of a Ceramic Particle in Front of a Solidifying Interface 101-111		
2	Amorphous alloys and differential scanning calorimetry (DSC). <i>Journal of Thermal Analysis and Calorimetry</i> , 1	4.1	0
1	Interfacial Aspects to Produce Particulate Reinforced Metal Matrix Composites 71-99		4

