

# George Kaptay

## List of Publications by Citations

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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	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> , <b>2006</b> , 282-283, 387-401	5.1	235
142	Interfacial criteria for stabilization of liquid foams by solid particles. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2003</b> , 230, 67-80	5.1	183
141	Aluminium reinforced by WC and TiC nanoparticles (ex-situ) and aluminide particles (in-situ): Microstructure, wear and corrosion behaviour. <i>Materials &amp; Design</i> , <b>2015</b> , 65, 1121-1135		109
140	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> , <b>2004</b> , 28, 115-124	1.9	105
139	Nano-Calphad: extension of the Calphad method to systems with nano-phases and complexions. <i>Journal of Materials Science</i> , <b>2012</b> , 47, 8320-8335	4.3	97
138	On the size and shape dependence of the solubility of nano-particles in solutions. <i>International Journal of Pharmaceutics</i> , <b>2012</b> , 430, 253-7	6.5	90
137	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 &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 495, 19-26	5.3	84
136	A unified equation for the viscosity of pure liquid metals. <i>International Journal of Materials Research</i> , <b>2005</b> , 96, 24-31		84
135	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> , <b>2012</b> , 43, 531-543	2.3	67
134	The sol-gel synthesis of cotton/TiO <sub>2</sub> composites and their antibacterial properties. <i>Surface and Coatings Technology</i> , <b>2014</b> , 253, 171-179	4.4	59
133	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> , <b>2017</b> , 423, 160-169	6.7	58
132	Partial surface tension of components of a solution. <i>Langmuir</i> , <b>2015</b> , 31, 5796-804	4	55
131	Thermodynamic description of the Al-Mg-Bi system using a new formulation for the temperature dependence of the excess Gibbs energy. <i>Thermochimica Acta</i> , <b>2012</b> , 527, 131-142	2.9	54
130	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> , <b>2012</b> , 12, 2625-33	1.3	51
129	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> , <b>2001</b> , 32, 993-1005	2.3	51
128	Electrochemical synthesis of refractory borides from molten salts. <i>Plasmas &amp; Ions</i> , <b>1999</b> , 2, 45-56		51
127	Wettability of carbon surfaces by pure molten alkali chlorides and their penetration into a porous graphite substrate. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 495, 192-196	5.3	49

126	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> , <b>2005</b> , 40, 2125-2131	4.3	47
125	Fabrication of carbon fiber reinforced aluminum matrix composites via a titanium-ion containing flux. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2013</b> , 44, 47-50	8.4	37
124	On the interfacial energy of coherent interfaces. <i>Acta Materialia</i> , <b>2012</b> , 60, 6804-6813	8.4	36
123	A Calphad-compatible method to calculate liquid/liquid interfacial energies in immiscible metallic systems. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , <b>2008</b> , 32, 338-352	1.9	35
122	The chemical (not mechanical) paradigm of thermodynamics of colloid and interface science. <i>Advances in Colloid and Interface Science</i> , <b>2018</b> , 256, 163-192	14.3	34
121	The exponential excess Gibbs energy model revisited. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , <b>2017</b> , 56, 169-184	1.9	33
120	Modelling equilibrium grain boundary segregation, grain boundary energy and grain boundary segregation transition by the extended Butler equation. <i>Journal of Materials Science</i> , <b>2016</b> , 51, 1738-1755	4.3	31
119	Perfect wettability of carbon by liquid aluminum achieved by a multifunctional flux. <i>Journal of Materials Science</i> , <b>2010</b> , 45, 5177-5190	4.3	31
118	Theoretical Analysis of Melting Point Depression of Pure Metals in Different Initial Configurations. <i>Journal of Materials Engineering and Performance</i> , <b>2014</b> , 23, 1600-1607	1.6	30
117	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> , <b>2013</b> , 44, 351-361	2.3	30
116	Calculation of surface tension and surface phase transition line in binary Ga <sub>40</sub> In <sub>60</sub> system. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 495, 65-69	5.3	30
115	Measurement and modelling of the wettability of graphite by a silver <sub>50</sub> tin (Ag <sub>50</sub> Sn) liquid alloy. <i>Applied Surface Science</i> , <b>2013</b> , 268, 52-60	6.7	29
114	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> , <b>2009</b> , 203, 3049-3057	4.4	27
113	A method to calculate equilibrium surface phase transition lines in monotectic systems. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , <b>2005</b> , 29, 56-67	1.9	27
112	Interfacial Design for Joining Technologies: An Historical Perspective. <i>Journal of Materials Engineering and Performance</i> , <b>2014</b> , 23, 1608-1613	1.6	26
111	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> , <b>2009</b> , 54, 6725-6731	6.7	26
110	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> , <b>2005</b> , 40, 2531-2535	4.3	26
109	Melting Point Depression and Fast Diffusion in Nanostructured Brazing Fillers Confined Between Barrier Nanolayers. <i>Journal of Materials Engineering and Performance</i> , <b>2016</b> , 25, 3275-3284	1.6	25

108	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> , <b>2014</b> , 44, 81-94	1.9	22
107	The threshold pressure of infiltration into fibrous preforms normal to the fibers axes. <i>Composites Science and Technology</i> , <b>2008</b> , 68, 228-237	8.6	22
106	An Absolute Scale for the Cohesion Energy of Pure Metals. <i>Materials Science Forum</i> , <b>2003</b> , 414-415, 235-240	2.4	22
105	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> , <b>2020</b> , 283, 102212	14.3	22
104	A new theoretical equation for temperature dependent self-diffusion coefficients of pure liquid metals. <i>International Journal of Materials Research</i> , <b>2008</b> , 99, 14-17	0.5	21
103	Nanotubes: number of Kekulé structures and aromaticity. <i>Journal of Chemical Information and Computer Sciences</i> , <b>2003</b> , 43, 609-14		21
102	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> , <b>2019</b> , 568, 113-122	5.1	20
101	Direct observation of the segregation driven by bubble evolution and liquid phase separation in Al <sub>90</sub> wt.% Bi immiscible alloy. <i>Scripta Materialia</i> , <b>2015</b> , 102, 19-22	5.6	20
100	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> , <b>2015</b> , 50, 678-687	4.3	20
99	A new paradigm on the chemical potentials of components in multi-component nano-phases within multi-phase systems. <i>RSC Advances</i> , <b>2017</b> , 7, 41241-41253	3.7	20
98	On the solid/liquid interfacial energies of metals and alloys. <i>Journal of Materials Science</i> , <b>2018</b> , 53, 3767-3784	1.9	20
97	Chemical and Electrochemical Behavior of Titanium Diboride in Cryolite-Alumina Melt and in Molten Aluminum. <i>Journal of Solid State Chemistry</i> , <b>2000</b> , 154, 107-109	3.3	19
96	Improved Derivation of the Butler Equations for Surface Tension of Solutions. <i>Langmuir</i> , <b>2019</b> , 35, 10987-10992	4.8	18
95	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> , <b>2009</b> , 40, 1524-1528	2.3	18
94	Interfacial Forces in Dispersion Science and Technology. <i>Journal of Dispersion Science and Technology</i> , <b>2012</b> , 33, 130-140	1.5	18
93	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> , <b>2016</b> , 120, 1881-1890	3.8	17
92	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> , <b>2017</b> , 533, 296-301	5.1	17
91	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> , <b>2011</b> , 211, 750-758	5.3	17

90	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> , <b>2014</b> , 45, 4635-4645	2.3	16
89	On the Negative Surface Tension of Solutions and on Spontaneous Emulsification. <i>Langmuir</i> , <b>2017</b> , 33, 10550-10560	4	16
88	On the Temperature Gradient Induced Interfacial Gradient Force, Acting on Precipitated Liquid Droplets in Monotectic Liquid Alloys. <i>Materials Science Forum</i> , <b>2006</b> , 508, 269-274	0.4	16
87	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> , <b>2016</b> , 302, 410-419	4.4	15
86	Atomic force microscopy investigation of electrochemically produced carbon nanotubes. <i>Applied Physics A: Materials Science and Processing</i> , <b>2001</b> , 72, S189-S192	2.6	15
85	Stable miscibility gap in liquid Cu <sub>2</sub> ZrAg ternary alloy. <i>Journal of Alloys and Compounds</i> , <b>2012</b> , 541, 353-358	5.7	13
84	Fabrication of carbon fibre reinforced, aluminium matrix composite by potassium iodide (KI) and potassium hexafluoro-titanate (K <sub>2</sub> TiF <sub>6</sub> ) flux. <i>Materialwissenschaft Und Werkstofftechnik</i> , <b>2012</b> , 43, 310-314	0.9	13
83	Wettability of SiC and alumina particles by liquid Bi under liquid Al. <i>Journal of Materials Science</i> , <b>2010</b> , 45, 2090-2098	4.3	13
82	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> , <b>2005</b> , 41, 956-963	1.2	12
81	Inversion of a liquid Bi/Al metallic emulsion stabilized by solid SiC particles. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2011</b> , 377, 325-329	5.1	11
80	Interfacial Criteria for Producing Metal Matrix Composites and Ceramic Particle Stabilized Metallic Foams. <i>Materials Science Forum</i> , <b>2003</b> , 414-415, 419-424	0.4	11
79	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> , <b>2004</b> , 35, 471-486	2.5	11
78	Monotectic Al/Cd alloys with homogeneously dispersed Cd-droplets stabilized by strontium aluminide precipitates. <i>Intermetallics</i> , <b>2011</b> , 19, 423-425	3.5	10
77	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> , <b>2010</b> , 10, 8164-70	1.3	10
76	Thermodynamics-Based Semi-Empirical Description of the Liquidus Surface and Partition Coefficients in Ternary Al-Mg-Si Alloy. <i>Materials Science Forum</i> , <b>2003</b> , 414-415, 323-328	0.4	10
75	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> , <b>2018</b> , 63, 37-50	1.9	10
74	OpenIEC: an open-source code for interfacial energy calculation in alloys. <i>Journal of Materials Science</i> , <b>2019</b> , 54, 10297-10311	4.3	9
73	Wettability of graphite by liquid aluminum under molten potassium halide fluxes. <i>Journal of Materials Science</i> , <b>2013</b> , 48, 7679-7685	4.3	9

72	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> , <b>2017</b> , 62, 1235-1242		9
71	On the Configurational Entropy of Nanoscale Solutions for More Accurate Surface and Bulk Nano-Thermodynamic Calculations. <i>Entropy</i> , <b>2017</b> , 19, 248	2.8	9
70	Microstructure And Mechanical Properties Of Al-WC Composites. <i>Archives of Metallurgy and Materials</i> , <b>2015</b> , 60, 1517-1521		9
69	The separation of carbon nanotubes from chlorides. <i>Carbon</i> , <b>2009</b> , 47, 1195-1198	10.4	9
68	Modified classical homogeneous nucleation theory and a new minimum in free energy change. <i>Fluid Phase Equilibria</i> , <b>2007</b> , 254, 67-74	2.5	9
67	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> , <b>2002</b> , 33, 1869-1873	2.3	9
66	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> , <b>2001</b> , 41, 305-307	1.7	9
65	Discussion of microscale simulation of settler processes in copper matte smelting. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2001</b> , 32, 555-557	2.5	9
64	Stabilization of metallic emulsions by in-situ precipitating intermetallic layers. <i>Intermetallics</i> , <b>2012</b> , 26, 26-30	3.5	8
63	The k-index is introduced to replace the h-index to evaluate better the scientific excellence of individuals. <i>Heliyon</i> , <b>2020</b> , 6, e04415	3.6	8
62	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> , <b>2020</b> , 533, 147494	6.7	8
61	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> , <b>1999</b> , 30, 1887-1890	2.3	7
60	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> , <b>2016</b> , 47, 3580-3596	2.3	6
59	The conversion of phase diagrams of solid solution type into electrochemical synthesis diagrams for binary metallic systems on inert cathodes. <i>Electrochimica Acta</i> , <b>2012</b> , 60, 401-409	6.7	6
58	Effect of Y and Ni addition on liquid immiscibility in Cu <sub>2</sub> Zr-Ag ternary alloys. <i>Journal of Alloys and Compounds</i> , <b>2014</b> , 615, S616-S620	5.7	6
57	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> , <b>2012</b> , 33, 1177-1190	2.1	6
56	Classification of laser beam induced surface engineering technologies and in situ synthesis of steel matrix surface nanocomposites. <i>Surface Engineering</i> , <b>2011</b> , 27, 428-435	2.6	6
55	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> , <b>2008</b> , 39, 387-389	2.5	6



54	Chemical and Electrochemical Behaviour of Titanium Oxide and Complexes in Cryolite-Alumina Melts. <i>High Temperature Material Processes</i> , <b>1998</b> , 2, 497-506	1.8	6
53	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> , <b>2003</b> , 39, 369-381	1	6
52	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> , <b>2019</b> , 50, 4931-4947	2.3	5
51	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> , <b>2018</b> , 8, 8856-8869	3.7	5
50	On the optimum contact angle of stability of foams by particles. <i>Advances in Colloid and Interface Science</i> , <b>2012</b> , 170, 87-8	14.3	5
49	Fabrication of SiC-Particles-Shielded Al Spheres upon Recycling Al/SiC Composites. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2011</b> , 42, 1439-1443	2.3	5
48	Electrochemical Synthesis of Titanium Silicides from Molten Salts. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , <b>2001</b> , 56, 739-740	1.4	5
47	Interface phenomena in processing of ceramic reinforced amorphous metal composites. <i>Journal of Non-Crystalline Solids</i> , <b>1996</b> , 205-207, 742-747	3.9	5
46	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> , <b>2018</b> , 27, 5023-5029	1.6	5
45	Prediction of Phase Separation of Immiscible Ga-Tl Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2017</b> , 48, 3130-3136	2.3	4
44	Modelling the viscosity of liquid alloys with associates. <i>Journal of Molecular Liquids</i> , <b>2019</b> , 291, 111345	6	4
43	Ti oxidation states in Zn(Ti) coating of hot-dip galvanized steels. <i>Surface and Coatings Technology</i> , <b>2017</b> , 326, 121-125	4.4	4
42	Particle Stabilized Foams <b>2012</b> , 121-143		4
41	Surface grain coarsening and surface softening during machining of ultra-fine grained titanium. <i>Journal of Mining and Metallurgy, Section B: Metallurgy</i> , <b>2012</b> , 48, 449-459	1	4
40	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 &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1997</b> , 226-228, 1083-1088	5.3	4
39	Modified classical homogeneous nucleation theory and a new minimum in free energy change. <i>Fluid Phase Equilibria</i> , <b>2007</b> , 255, 55-61	2.5	4
38	Physical, Chemical, and Electrochemical Behavior of Boron Oxide in Cryolite-Alumina Melts. <i>Russian Journal of Applied Chemistry</i> , <b>2002</b> , 75, 565-568	0.8	4
37	The Solubility of Nitrogen and Nitrides in Ternary Liquid Iron Alloys. The Limits of the 'Solubility Product' Concept. <i>Materials Science Forum</i> , <b>2003</b> , 414-415, 491-0	0.4	4

36	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> , <b>2000</b> , 31, 1695-1700	2.3	4
35	Some aspects of the electrochemical formation of carbon micro-tubes from molten chlorides. <i>Journal of Mining and Metallurgy, Section B: Metallurgy</i> , <b>2003</b> , 39, 343-352	1	4
34	Synthesis, characterisation and thermal behaviour of Cu-based nano-multilayer. <i>Journal of Materials Science</i> , <b>2021</b> , 56, 7823-7839	4.3	4
33	Interfacial Aspects to Produce Particulate Reinforced Metal Matrix Composites	71-99	4
32	The behaviour of steel coated with TiB <sub>2</sub> in Sn-Ag-Cu melt. <i>Materials Science and Technology</i> , <b>2019</b> , 35, 680-686	1.5	3
31	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> , <b>2020</b> , 59, 72-82	9.1	3
30	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> , <b>2019</b> , 172, 47-50	5.6	3
29	A Method to Estimate Interfacial Energy between Eutectic Solid Phases from the Results of Eutectic Solidification Experiments. <i>Materials Science Forum</i> , <b>2014</b> , 790-791, 133-139	0.4	3
28	A Unified Theoretical Framework to Model Bulk, Surface and Interfacial Thermodynamic Properties of Immiscible Liquid Alloys. <i>Materials Science Forum</i> , <b>2013</b> , 752, 10-19	0.4	3
27	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> , <b>2018</b> , 54, 283-290	1	3
26	Comparison of Different Theoretical Models to Experimental Data on Viscosity of Binary Liquid Alloys. <i>Materials Science Forum</i> , 489-496	0.4	3
25	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> , <b>2022</b> , 97, 123-133	9.1	3
24	Discussion of Thermodynamics of liquid Al-Na alloys determined by using CaF <sub>2</sub> solid electrolyte <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2004</b> , 35, 393-398	2.5	2
23	A Dynamic Model of Ceramic Particle-Solidification Front Interaction. <i>Materials Science Forum</i> , <b>2003</b> , 414-415, 371-376	0.4	2
22	Equilibrium electrochemical synthesis diagrams of systems, forming homogeneous alloys and compounds. <i>Journal of Mining and Metallurgy, Section B: Metallurgy</i> , <b>2003</b> , 39, 383-405	1	2
21	Coloring hot-dip galvanization of steel samples in industrial zinc-manganese baths. <i>Journal of Mining and Metallurgy, Section B: Metallurgy</i> , <b>2017</b> , 53, 319-326	1	2
20	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> , <b>2021</b> , 65, 238-242	1.3	2
19	Modelling Interfacial Energies in Metallic Systems. <i>Materials Science Forum</i> , 1-10	0.4	2



18	Cracking of Copper Brazed Steel Joints Due to Precipitation of MnS upon Cooling. <i>Journal of Materials Engineering and Performance</i> , <b>2020</b> , 29, 8183-8193	1.6	2
17	Diffusion of Carbon in the Centerline Region of Continuous Cast Slabs. <i>Materials Science Forum</i> , <b>2010</b> , 659, 441-446	0.4	1
16	Formation of nanoparticles by ion beam irradiation of thin films. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2012</b> , 12, 5009-15	1.3	1
15	Guest Editors Editorial: HTC-2009. <i>Journal of Materials Science</i> , <b>2010</b> , 45, 1977-1978	4.3	1
14	A Virtual LD-Steel-Converter. <i>Materials Science Forum</i> , <b>2003</b> , 414-415, 365-370	0.4	1
13	On the atomic masses (weights?) Of the elements. <i>Journal of Mining and Metallurgy, Section B: Metallurgy</i> , <b>2012</b> , 48, 153-159	1	1
12	Electrokinetic Potential and Size Distribution of Magnetite Nanoparticles Stabilized by Poly(vinyl Pyrrolidone). <i>Colloid Journal</i> , <b>2019</b> , 81, 773-778	1.1	1
11	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> , <b>2022</b> , 53, 730	2.5	0
10	Complex Avrami kinetics of TiB <sub>2</sub> transformation into TiB whiskers during sintering of Ti-TiB <sub>2</sub> nanocomposites. <i>Journal of Alloys and Compounds</i> , <b>2022</b> , 894, 162442	5.7	0
9	Amorphous alloys and differential scanning calorimetry (DSC). <i>Journal of Thermal Analysis and Calorimetry</i> , 1	4.1	0
8	On the General Material Balance Equation(S) to Calculate Quasi-Binary Sections of Multi-Component Phase Diagrams. <i>Archives of Metallurgy and Materials</i> , <b>2016</b> , 61, 75-78		
7	Honorary note to celebrate the 80th birthday of professor Södör Bily. <i>Advances in Colloid and Interface Science</i> , <b>2017</b> , 243, 1-7	14.3	
6	On the five base quantities of nature and SI (The International System of Units). <i>Journal of Mining and Metallurgy, Section B: Metallurgy</i> , <b>2011</b> , 47, 241-246	1	
5	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> , <b>2022</b> , 57, 1648-1668	4.3	
4	Interfacial Forces: Classification3281-3298		
3	Dynamic Simulation of the Movement of a Ceramic Particle in Front of a Solidifying Interface101-111		
2	Acoustic-Pressure-Assisted Engineering of Aluminum Foams. <i>Advanced Engineering Materials</i> , <b>2021</b> , 23, 2100306	3.5	
1	Preface to the special section on high-temperature capillarity. <i>Journal of Materials Science</i> , <b>2021</b> , 56, 7789-7790	4.3	

