

Publications 2017 – 1976, Bo Sundman

1. A Quaini, Christine Gueneau, S Gosse, N Dupin, B Sundman, E Brackx, R Domenger, M Kurata, F Hodaj, Contribution to the thermodynamic description of the corium - The U-Zr-O system, *Journal of Nuclear Matertials*, **501** (2018) 104-131
2. Liu Yuling, Bo Sundman, Yong Du, A stepwise thermodynamic modeling of the phase diagram for the Cu-Be system, *Journal of Materials Science*, **53** (2018) 3756-3766
3. Milena Premovic, Yong Du, Dusko Minic and Bo Sundman, Experimental investigation and thermodynamic calculations of the Ag-Ga-Sn phase diagram, *Calphad* **56** (2017) 215-223
4. Bo Sundman, A note on models for phases with order/disorder transitions in Thermodynamic software and databases, *J Mining and Metallurgy B*, **53** (2017)
5. M Premovic, Y Du, D Minic, B Sundman, C Zhang, A Watson, D Manasijevic and A Djordjevic, Experimental investigation and thermodynamic calculations of the Ag-Ga-Sn phase diagram. *Calphad* **56** (2017) 215-223.
6. D Huang, S Liu, Y Tang, Y Du, P Nash and B Sundman, Experimental investigation and thermodynamic modeling of the Ce-Si system, *Thermochimica Acta*, **646** (2016) 49-58
7. Y Wang, P Zhou, Y Peng, Y Du, B Sundman, J Long, T Xu, and Z Zhang, A thermodynamic description of the Al-Co-Ni system and site occupancy in Co + AlNi₃ composite binder phase, *J of Alloys and Compounds*, **687** (2016) 855-866
8. B Sundman, U R Kattner, C Sigli, M Stratmann, R Le Tellier, M Palumbo and S G Fries, The Open Calphad thermodynamic software interface, *Comp Mat Sci*, **125** (2016) 188-196
9. Y Wang, P Zhou, Y Peng, Y Du, B Sundman, J Long T Xu and Z Zhang, A thermodynamic description of the Al-Co-Ni system and site occupancy in Co+AlNi₃ composite binder phase, *J All and Comp*, **687** (2016) 855-866
10. A L Smith, J-Y Colle O Benes, R J M Konings, B Sundman and C Guéneau, Thermodynamic assessment of the neptunium-oxygen system: Mass spectrometric studies and thermodynamic modelleing, *J Chem Therm*, **103** (2016) 257-275
11. C Zhang, Y Du, S Liu, Y Liu and B Sundman, Thermal conductivity of Al-Cu-Mg-Si alloys: Experimental measurements and CALPHAD modeling, *Thermochimica Acta*, **635** (2016) 8-16

12. B Sundman and Q Chen, A database format for Integrated Computational Materials Engineering, *Calphad* **51** (2015) 352-353
13. D Huang, S Liu, Y Du, B Sundman, Modeling of the molar volume of the solution phases in the Al-Cu-Mg system, *Calphad* **51** (2015) 261-271
14. I Roslyakova, B Sundman and H Dette, Modeling of thermo-physical properties for pure elements using segmented regression methodology, *Calphad* **51** (2015) 367
15. B Sundman, M Palumbo, U R Kattner, S G Fries, New features implemented in the Open Calphad software project, *Calphad* **51** (2015) 398
16. A Quaini, C Guéneau, S Gosse, B Sundman, D Manara, A L Smith, D Bottomly, O Lajarg, M Erstberger, F Hoaj, High temperature investigation of the solid/liquid transition in the $\text{PuO}_2\text{-UO}_2\text{-ZrO}_2$ system, *J Nucl Sci bf* 467:2 (2015) 660-676
17. C Zhang, Y Du, S Liu, S Liu, W Jie and B Sundman, Microstructure and Thermal Conductivity of the As-Cast and Annealed AL-Cu-Mg-Si Alloys in the Temperature range from 25 to 400 °C, *Int J of Thermophysics*, **36** (2015) 2869-2880.
18. X Lu, S Liu, K Cheng, Y Tang, P Ou, P Nash, B Sundman, Y Du and F Zheng, Thermodynamic modeling of the Co-Hf system supported by key experiments and first-principles calculation, *Thermochimica Acta*, **608** (2015) 49-58
19. Bo Sundman, Matthias Stratmann, Lijun Zhang and Yong Du, Computational Thermodynamics and its Application to Materials Science, in *Materials China*, **34** (2015) 15-29
20. Bo Sundman, Xiao-Gang Lu and Hiroshi Ohtani, The implementation of an algorithm to calculate thermodynamic equilibria for multi-component systems with non-ideal phases in a free software, in *Computational Materials Science*, **101** (2015) 127-137
21. Bo Sundman, Ursula R Kattner, Mauro Palumbo and Suzana G Fries, OpenCalphad - a free thermodynamic software, in *Integrating Materials and Manufacturing Innovation*, **4:1** (2015), open access
22. Lijun Zhang, Matthias Stratmann, Yong Du, Bo Sundman and Ingo Steinbach, Incorporating the CALPHAD sublattice approach of ordering into the phase-field model with finite interface dissipation, in *Acta Materialia* **88** (2015) 156-169
23. Aning Qin, Rong Wang, Yanu Wang and Bo Sundman, Thermodynamic assessment of the Cd-X (X=Sn, Mn, Fe) systems in CALPHAD, **47** (2014) 83-91
24. Yan-Lin He, Xiao-Gang Lu, Na-Quong Zhu and Bo Sundman in CALPHAD modeling of molar volume, *Chinese Science Bulletin*, **59** Special issue: SI (2014) 1646-1651

25. Wei Luo, Shuhong Liu, Ying Tang, Ming Yin, Bo Sundman, Yong Du, Philip Nash and Huijin Tao, Experimental investigation and thermodynamic modelling of the Ga-Zr system, in J of Alloys and Compounds, **587** (2014) 497-505
26. M Ghasemi, B Sundman, S G Fries and J Johansson, The thermodynamic assessment of the Au-In-Ga system, in J of Alloys and Compounds, **600**, (2014) 178-185
27. Jutta Rogal, Sergiy V. Divinski, Mike W. Finnis, Albert Glensk, Jörg Neugebauer, John H. Perepezko, Sergej Schwalow, Marcel H. F. Sluiter and Bo Sundman, Perspectives on point defect thermodynamics, in Phys Status Solidi B, **251** (2014) 97-129
28. Bo Sundman and Christine Guéneau, The use of Computational Thermodynamics to predict Properties of Multicomponent Materials for Nuclear Applications, in 1st International Workshop on Materials Innovation for Nuclear Optimized Systems (MINOS) at CEA INSTN, France. Ed C Galle EPJ Web of conferences, **57** (2013), article 01006.
29. P Shi, A Engström and B Sundman, Thermodynamic investigations on materials corrosion in some industrial and environmental processes, in J of Environmental Sciences, **23**, supplement 1, (2011) 31-37
30. C Guéneau, N Dupin, B Sundman, C Martial, J-C Dumas, S Gosse, S Chatain, F de Bruycker, D Manara and R J M Konings, Thermodynamic modelling of advanced oxide and carbide nuclear fuels: Description of the U-Pu-O-C systems, in J Nuclear Materials **419** (2011) 145-167
31. B Sundman, C Guéneau and N Dupin, Modelling Multiple defects in ionic phases like $\text{UO}_{2\pm x}$ using the Compound Energy Formalism, in Acta Mater. **59** (2011) 6039-6047
32. P Gotcu-Freis, J Colle, C Guéneau, N Dupin, B Sundman and R J M Konings, A thermodynamic study of the Pu-Am-O system, in J Nuclear Materials, **414** (2011) 408-421
33. A Berche, N Dupin, C Guéneau, C Rado, B Sundman and J-C Dumas, Calphad thermodynamic description of some binary systems involving U, in J Nuclear Materials, **411** (2011) 131-143
34. J Lacaze, L Eleno and B Sundman, Thermodynamic assessment of the Aluminium corner of the Al-Fe-Mn-Si system, in Met Trans A, **41A** (2010) 2208-2215
35. L Eleno, J Vezely, B Sundman, M Cieslar and J Lacaze, Thermodynamic assessment of the Al corner of the Al-Fe-Si system, in Solidification and Gravity V, Book series: Materials Science Forum, **649** (2010) 523-528
36. M Mathon, D Connetable, B Sundman and J Lacaze, Calphad-type assessment of the Fe-Nb-Ni ternary system Calphad **33** (2009) 136-161

37. M Hillert, L Kjellqvist, H Mao, M Selleby and B Sundman, Parameters in the compound energy formalism for ionic systems, *Calphad* **33** (2009) 227-232
38. B Sundman, N Dupin, U Kattner, I Ohnuma and S G Fries, An assessment of the entire Al-Fe system with D0₃ ordering, *Acta Materialia* **57** (2009) 2896-2908
39. L Eleno, B Sundman and J Lacaze, Solidification path of Al-Fe-Mn-Si aluminium alloys, 12th Conf on Modelling Casting, Welding and Advanced Solidification Processes, Vancouver Canada (2009) 635-642
40. X-G Lu, B Sundman and J Ågren, Thermodynamic Assessments of the Ni-Pt and Al-Ni-Pt systems. *Calphad* **33** (2009) 450-456
41. V Rigaud, B Sundman, D Daloz and G Lesoult, Thermodynamic Assessment of the Fe-Al-Zr phase diagram, *Calphad* **33** (2009) 442-449
42. M Hillert, M Selleby and B Sundman, An attempt to correct the quasichemical model, *Acta Materialia*, **57** (2009) 5237-5244
43. B Sundman, S Ford, X-G Lu, T Narita and D Monreau, Experimental and Simulation Study of Uphill Diffusion of Al in a Pt Coated γ -Ni-Al Alloy, *J of Phase Equilibria and Diffusion*, **30** (2009) 602-607
44. Damien Connetable, Jacques Lacaze, Philippe Maugis and Bo Sundman, A Calphad assessment of Al-C-Fe system with the K carbide modelled as an ordered form of the fcc phase, in *Calphad* **32** (2008) 361-370
45. Lina Kjellqvist, Malin Selleby and Bo Sundman, Thermodynamic modelling of the Cr-Fe-Ni-O system in *Calphad* **32** (2008) 577-592
46. Rosa Jerlerud Perez, Caroline Toffolon-Masclet, Jean-Marc Joubert and Bo Sundman, The Zr-Sn binary system: New experimental results and thermodynamic assessment, *Calphad* **32** (2008) 593-601
47. Christine Guéneau, Christian Chattion and Bo Sundman, Thermodynamic modeling of the plutonium-oxygen system, *J of Nucl Mater*, **378** (2008) 257-272
48. R. Schmid-Fetzer, D. Andersson, P-Y Chevalier, L. Eleno, O. Fabrichnaya, U. R. Kattner, B. Sundman, C. Wang, A. Watson, L. Zabdyr, M. Zinkevich, Assessment techniques, database design and software facilities for thermodynamics and diffusion, in *Calphad* **31** (2007) 38-52
49. X-G Lu, M Selleby and B Sundman, Calculations of thermophysical properties of cubic carbides and nitrides using the Debye-Gruneisen model, in *Acta Mater* **55** (2007) 1215-1226

50. Byeong-Joo Lee, Bo Sundman, Sung Il Kim and Kwang-Geun Chin, Thermodynamic calculations on the stability of Cu₂S in low carbon alloys, in *ISIJ International*, **47** (2007) 163-171
51. Rockefeller Maciel Pecanha, Flávio Ferreira, Gilberto Carvalho Coelho, Carlos Angelo Nunes and Bo Sundman, Thermodynamic modeling of the Nb-B system in *Intermetallics*, **15** (2007) 999-1005
52. Ping-Fang Shi, Anders Engström, Lars Höglund, Qing Chen, Bo Sundman, John Ågren and Mats Hillert, Computational Thermodynamics in Materials Modelling and Simulations in *J of Iron and Steel Research International*, **14** (2007) 210-215
53. V I Baykov, R J Perez, P A Korzhavyi, B Sundman and B Johansson, Structural stability of intermetallic phases in the Zr-Sn system, in *Scripta Mat.*, **55** (2006) 485-488
54. N Dupin, S G Fries, J M Joubert, B Sundman, M H F Sluiter, Y Kawazoe and A Pasturel, Using first-principles results to calculate finite-temperature thermodynamic properties of the Nb-Ni μ phase in the Bragg-Williams approximation, in *Phil Mag* **86** (2006) 1631-1641
55. T Abe, B Sundman and H Onodera, Thermodynamic assessment of the Cu-Pt system, in *J Phase Eq and Diff*, **27** (2006) 5-13
56. H H Mao, M Hillert, M Selleby and B Sundman, Thermodynamic assessment of the CaO-Al₂O₃-SiO₂ system, in *J of Am Cer Soc* **89** (2006) 298-308
57. J Wang, X-G Lu, B Sundman and X Su, Thermodynamic reassessment of the Au-Te system, in *J of Alloys and Compounds*. **407**, no. 1-2, (2006) 106-111
58. P A Korzhavyi, B Sundman, M Selleby and B Johansson, Atomic Electronic and Magnetic Structure of Iron-Based Sigma-Phases, in *Mater Res Soc Symp Proc*, **842**, (2005) S4.10.1-6
59. X-G Lu, M Selleby and B Sundman, Theoretical modeling of molar volume and thermal expansion, in *Acta Materialia*, **53** (2005) 2259-2272
60. S G Fries and B Sundman, Development of multicomponent thermodynamic databases for use in process modelling and simulations, in *J Phys and Chem of Solids*, **66** (2005) 226-230
61. A Markström, B Sundman and K Frisk, A revised thermodynamic description of the Co-W-C system, in *J Phase Eq and Diff*, **26** (2005) 152-160

62. X G Lu, M Selleby and B Sundman, Implementation of a new model for pressure dependence of condensed phases in Thermo-Calc, in Calphad **29** (2005) 49-55
63. X G Lu, M Selleby and B Sundman, Assessments of molar volume and thermal expansion for selected bcc, fcc and hcp metallic elements, in Calphad **29** (2005) 68-89
64. H H Mao, M Selleby and B Sundman, Phase equilibria and thermodynamics in the Al₂O₃-SiO₂ system - Modelling of mullite and liquid, in J of the American Ceramic Soc. **88** (2005) 2544-2551
65. H Ohtani, S Matsumoto, B Sundman, T Sakuma and M Hasebe, Equilibrium between fluorite and pyrochlore structures in the ZrO₂-Nd₂O₃ system, in Materials Trans **46** (2005) 1167-1174
66. H H Mao, A Fabrichnaya, M Selleby and B Sundman, Thermodynamic assessment of the MgO-Al₂O₃-SiO₂ system, in J of Materials Research **20** (2005) 975-986
67. Q Chen, A Engström, L Höglund, H Strandlund and B Sundman, Thermo-Calc program interfaces and their applications - Direct insertion of thermodynamic and kinetic data into modelling of materials processing, structure and property, in Materials Science Forum, **475-479** (2005) pp 3145-3148
68. P F Shi, A Engström, L Höglund, B Sundman and J Ågren, Thermo-Calc and DICTRA enhance materials design and processing, in Materials Science Forum, **475-479** (2005) pp 3339-3346
69. J H Wang, X G Lu, B Sundman and X P Su, Thermodynamic assessment of the Au-Ni system, in Calphad **29** (2005) 263-268
70. J-M Joubert, B Sundman and N Dupin, An assessment of the niobium-nickel system, in Calphad **28**, (2004) 299-306
71. H Mao, M Selleby and B Sundman, A re-evaluation of the liquid phases in the CaO-Al₂O₃ and MgO-Al₂O₃ systems, in Calphad **28** (2004) 307-312.
72. J Odqvist, B Sundman and J Ågren, A general method for calculating deviation from local equilibrium at phase interfaces, in Acta Mat., **51** (2003) 1035-1043
73. S N Prins, L A Comish, W E Stumpf and B Sundman, Thermodynamic Assessment of the Al-Ru system, in Calphad **27** (2003) 79-90
74. T Abe and B Sundman, A description of the effect of short range ordering in the compound energy formalism, in Calphad **27** (2003) 403-408
75. R Jerlerud Perez and B Sundman, Thermodynamic assessment of the Mo-Zr binary phase diagram, in Calphad **27** (2003) 253-262

76. J Bratberg and B Sundman, A thermodynamic assessment of the Co-V system. *J Phase Equil*, **24** (2003) 495-503
77. Ikuo Ohnuma, H Enoki, Osamu Ikeda, Ryosuke Kainuma, Hiroshi Ohtani, Bo Sundman and Kiyohito Ishida, Phase equilibria in the Fe-Co binary system, in *Acta Materialia*, **50** (2002) 379-393.
78. S G Fries and B Sundman, Using Re-W sigma-phase first-principles results in the Bragg-Williams approximation to calculate finite-temperature thermodynamic properties, in *Phy. Rev. B*, **66** (2002) art. no. 012203
79. J-O Andersson, T Helander, L Höglund, P Shi and B Sundman, Thermo-Calc and DICTRA, computational tools for materials science, in *Calphad* **26** (2002) 273-312
80. Qing Chen and Bo Sundman, Computation of Partial Equilibrium with Complete Interstitial and Negligible Substitutional Solute Back Diffusion, in *Mat. Trans.*, **43**, Jap Inst of Metals (2002) 551-559
81. C Toffolon, C Servant, J C Gachon and B Sundman, Reassessment of the Nb-Sn system, in *J Phase Eq*, **23** (2002) 134-139
82. P B Fernandes, G C Coelho, F Ferreira, C A Nunes and B Sundman, Thermodynamic modeling of the Nb-Si system, in *Intermetallics* **10** (2002) 993-999
83. C Guéneau, M Baichi, D Labroche, C Chatillon and B Sundman, Thermodynamic assessment of the uranium-oxygen system, in *J Nucl Mater*, **304** (2002) 161-175
84. Q Chen and B Sundman, Calculation of Debye temperature for crystalline structures – a case study on Ti, Zr and Hf, in *Acta Mater.*, **49** (2001) 947-961.
85. N Dupin and B Sundman, A thermodynamic database for Ni-base superalloys, in *Scand J Metall* **30** (2001) 184-192.
86. C Servant, B Sundman and O Lyon, Thermodynamic Assessment of the Cu-Fe-Ni System, *Calphad*, **25** (2001) 79-95.
87. N Dupin, I Ansara and B Sundman, Thermodynamic Re-assessment of the Ternary Al-Cr-Ni, in *Calphad*, **25** (2001) 279-298.
88. H H Mao, B Sundman, Z W Wang and S K Saxena, Volumetric properties and phase relations of silica - thermodynamic assessment, in *J of Alloys and Compounds* **327**, (2001), 253-262
89. B Sundman, I Ansara, M Hillert, G Inden, H-L Lukas and K C Hari Kumar, Contributions to the thermodynamic modelling of solutions, in *Z Metallkd.* **92** (2001) 526-532

90. R J Perez, B Sundman, Thermodynamic assessment of the Cr-Sn binary system, in Calphad **25** (2001) 59-66
91. P Fredriksson and B Sundman, A thermodynamic assessment of the Fe-Pt system, in Calphad **25** (2001) 535-548
92. Qing Chen and Bo Sundman, Modeling of Thermodynamic properties for bcc, fcc, liquid and amorpheus Iron, J of Phase Equilibria, **22** (2001) 631-644
93. A Kusoffsky, N Dupin and B Sundman, On the compound energy formalism applied to fcc ordering, in Calphad **25** (2001) 549-566
94. M Hillert and B Sundman, Predicting miscibility gaps in reciprocal liquids, in Calphad **25** (2001) 599-606
95. K Frisk, L Dumitrescu, M Ekroth, B Jansson, O Kruse and B Sundman, Development of a Database for Cemented Carbides: Thermodynamic Modelling and Experiments, in J of Phase Eq. **22** (2001) 645-655
96. U R Kattner, G Eriksson, I Hahn, R Schmid-Fetzer, B Sundman, V Swamy, A Kussmaul, P J Spencer, T J Andersson, T G Chart, A Costa e Silva, B Jansson, B-J Lee and M Schalin, Use of thermodynamic software in process modelling and new applications of thermodynamic calculations, in Calphad, **24** (2000) 55-94.
97. Niklas Ahlen, Mats Johnsson, Ann-Kristin Larsson, Bo Sundman, On the carbothermal vapour-liquid-solid (VLS) mechanism for TaC, TiC and Ta_xTi_{1-x} whisker growth, in J European Ceramic Society, **20** (2000) 2607-2618.
98. I Ansara and B Sundman, Calculation of the Magnetic Contribution for Intermetallic Compounds, in Calphad, **24** (2000) 181-182.
99. B. Sundman, S.G. Fries and W. A. Oates, CALPHAD-Type Assessement of the Au-Cu System using the Cluster Variation Method, in Z. Metallkde, **90** (1999) 267-273.
100. L.F.S. Dumitrescu, M. Hillert and B. Sundman, A Reassessment of Ti-C-N based on a Critical Review of Available Assessments of Ti-N and Ti-C, in Z. Metallkde, **90** (1999) 534-541.
101. W. Tang, B. Sundman, R. Sandström and C. Qiu, New Modelling of the B2 phase and its associated Martensitic Transformation in the Ti-Ni system, in Acta Mater. **47** (1999) 3457-3468.
102. N A Dubrovinskaia, L S Dubrovinsky, S K Saxena, M Selleby and B Sundman, Thermal expansion and compressibility of Co₆W₆C, in J of Alloys and Compounds, **285** (1999) 242-245.

103. N A Dubrovinskaia, L S Dubrovinsky, A Karlsson, S K Saxena and B Sundman, Experimental study of thermal expansion and phase transformations in iron-rich Fe-Al alloys, in *Calphad*, **23** (1999) 69-84.
104. B Sundman and J Ågren, Computer Applications in the development of Steels, *MRS Bull*, **24** (1999) 32-36.
105. Q. Chen and B. Sundman, Thermodynamic Assessment of the Al-Ti-N System, in *J. Phase Equilibria*, **19**, (1998) 146-153.
106. S G Fries, H L Lukas, I Ansara and B Sundman, The Bragg-William-Gorsky (BWG) Ordering Treatment in the Compound Energy Formalism (CEF), in *Ber. Bunsenges. Phys Chem*, **102** (1998) 1102-1110.
107. A Kusoffsky and B Sundman, Thermodynamic Modelling of Short Range Order using the Compound Energy Formalism, in *Ber. Bunsenges. Phys Chem*, **102** (1998) 1111-1115.
108. Q Chen, M Hillert, B Sundman, W A Oates, S G Fries and R Schmid-Fetzer, Phase Equilibria, Defect Chemistry and Semiconducting Properties of CdTe(s) – Thermodynamic Modeling, in *J of Electronic Materials*, **27** (1998) 961-971.
109. A Kusoffsky and B Sundman, Irregular Composition Dependence of the Configurational Heat Capacity in the Modelling of Ordered Alloys, in *J Phys Chem Solids*, **59** (1998) 1549-1554.
110. Bo Sundman, Suzana G Fries and W Alan Oates, A Thermodynamic Assessment of the Au-Cu system, in *Calphad*, **22** (1998) 335-354.
111. B. Sundman, S.G. Fries and W. A. Oates, Incorporation of cluster expansion theory into the Compound Energy Formalism, in *Calphad*, **22** (1998) 355-357.
112. C Toffolon, C Servant and B Sundman, Thermodynamic Assessment of the Nb-Sn System, in *J Phase Equil*, **19** (1998) 479-485.
113. A Kusoffsky and B Sundman, A Simplified Short Range Order Model Suitable for Multicomponent Alloys, in *Z Metallkde*, **89** (1998) 836-839.
114. Ikuo Ohnuma, Osamu Ikeda, Ryosuke Kainuma, Bo Sundman and Kiyohito Ishida, Interaction between Magnetic and Chemical Ordering using the Compound Energy Model, in *Z. Metallkde*, **89** (1998) 847-854.
115. M Lindholm and B Sundman, A Thermodynamic Evaluation of the Nickel-Silicon System, *Met Trans A*, **27A**, (1996) 2897-2903

116. O B Fabrichnaya and B Sundman, The Assessment of Thermodynamic Parameters in the Fe-O and Fe-Si-O systems, in *Geochimica and Cosmochimica Acta*, **61** (1997) 4539-4555.
117. N Dupin, I Ansara, H L Lukas and B Sundman, An assessment of the Al-Ni system, in *J Alloys and Compounds*, **247** (1997) 20-30.
118. A D Pelton, M Blander, M T Clavaguera-Mora, M Hoch, L Höglund, H L Lukas, P Spencer and B Sundman, Thermodynamic modelling of solutions and alloys, in *Calphad*, **21** (1997) 155-170.
119. N A Dubrovinskaia, L S Dubrovinsky, S K Saxena and B Sundman, Thermal Expansion of Chromium (Cr) to Melting Temperature, in *Calphad* **21** (1997) 497-508.
120. I Ansara, N Dupin and B Sundman, Reply to paper "When is a Compound Energy not a Compound Energy? A critique of the 2-sublattice order/disorder model", in *Calphad* **21** (1997) 535-542.
121. M Hillert, M Selleby and B Sundman, Reassessment of the Non-Stoichiometry of Fayalite, in *Phys Chem Minerals*, **23** (1996) 387-390.
122. B Sundman, Implementation of the Ising Model in the Compound Energy Method, in *Z Metallkd*, **87** (1996) 529-534.
123. Pingfang Shi, S K Saxena, Zheru Zhang and B Sundman, Re-assessment of the Ca-Mg-Si-O Pyroxenes, in *Calphad*, **20** (1996) 93-94.
124. M Selleby and B Sundman, A Reassessment of the Ca-Fe-O system, in *Calphad*, **20** (1996) 381-392.
125. Kamal Mahdoui, Bo Sundman and Jean-Claude Gachon, New results about the Osmium-Zirconium system, in *J Alloys and Compounds*, **241** (1996) 199-209.
126. Benyan Pei, Bo Björkman, Bo Sundman and Bo Jansson, A Thermodynamic Assessment of the Iron-Antimony System, in *Calphad*, **19** (1995) 1-16.
127. Zi-kui Liu, Weijing Zhang and Bo Sundman, Thermodynamic Assessment of the Co-Fe-Gd systems, in *J of Alloys and Compounds*, **226** (1995) 33-45.
128. Lucia Dumitrescu and Bo Sundman, Computer Simulation of the b'-Sialon Synthesis, in *J European Ceramic Society*, **15** (1995) 89-94.
129. Lucia Dumitrescu and Bo Sundman, A Thermodynamic Reassessment of the Si-Al-O-N System, in *J European Ceramic Society*, **15** (1995) 239-247.

130. A Boudéne, K Hack, A Mohammad, D Neuschütz, E Zimmermann, G Effenberg, S Fries, H-L Lukas, R A Konetzki, R Schmid-Fetzer, W Huang, B Sundman, C Bernard, C Colinet, A Pasturel, A Pisch, F Weiss, A Rais, M Ganteaume, J C Mathieu, J Rogez, B B Argent, A T Dinsdale and A Watson, Thermodynamic Measurements and Assessment of the Phase Diagrams in the System Y-Ba-Cu-O, in High Temperature and Materials Science, **35** (1995) 159-179.
131. Bengt Hallstedt, Mats Hillert, Malin Selleby and Bo Sundman, Modelling of Acid and Basic Slags, in Calphad, **18** (1994) 31-38.
132. Pingfang Shi, Surendra K Saxena, Z Zhang and Bo Sundman, Thermodynamics of the Ca-Mg-Fe-Al-Si-O Pyroxenes: I. Theoretical Model and Assessment of the Ca-Mg-Si-O System, in Calphad, **18** (1994) 47-69.
133. V Swamy, S K Saxena and B Sundman, An Assessment of the One-bar Liquidus Phase Relations in the MgO-SiO₂ System, in Calphad, **18** (1994) 157-164.
134. I Ansara, C Chatillon, H L Lukas T Nishizawa, H Ohtani, K Ishida, M Hillert, B Sundman, B B Argent, A Watson, T G Chart and T Anderson, A Binary Database for III-V Compound Semiconductor Systems, in Calphad, **18** (1994) 177-222.
135. V Swamy, S K Saxena, B Sundman and J Zhang, A thermodynamic Assessment of Silica Phase Diagrams, in J Geophys Research, **99** (1994) 11787-11794.
136. Benyan Pei, Bo Björkman, Bo Sundman and Bo Jansson, Thermodynamic Assessment of the Fe-As System using an Ionic 2-sublattice model for the liquid phase, in Z Metallkde **85** (1994) pp 171-177.
137. Benyan Pei, Bo Björkman, Bo Sundman and Bo Jansson, Thermodynamic Assessment of the Cu-As System using an Ionic 2-sublattice model for the liquid phase, in Z Metallkde **85** (1994) pp 178-184.
138. Bo Sundman, Thermodynamics for Materials Design, in J Chim Phys, **90** (1993) 275-280.
139. Bo Jansson, Mikael Schalin, Malin Selleby and Bo Sundman, The Thermo-Calc Database System, in Computer Software in Chemical and Extractive Metallurgy. Eds C W Bale and G A Irons, The Met Soc of CIM, Quebec, (1993) 57-71.
140. Bo Sundman, Bo Jansson and Mikael Schalin, Thermodynamic Calculations Made Easy in J of Phase Equilibria, **14** (1993) 557-562.
141. Mats Hillert, Stefan Jonsson and Bo Sundman, Thermodynamic Calculation of the Si-N-O system in Z. Metallkde, **83** (1992) 648-654.

142. T I Barry, A T Dinsdale, J A Gisby, B Hallstedt M Hillert, B Jansson, S Jonsson, B Sundman and J R Taylor, The Compound Energy Model for Ionic Solutions with Applications to Solid Oxides, in J of Phase Equilibria, **13** (1992) 459-476.
143. Minsheng Wang and Bo Sundman, Thermodynamic Assessment of the Mn-O System in Met. Trans B, **23B** (1992) 821-831.
144. Pingfang Shi, Surendra K Saxena and Bo Sundman, Sublattice Solid Solution Model and its Application to Orthopyroxene (Mg,Fe)₂Si₂O₆. in Phys Chem Minerals, (1992) 393-405.
145. Bo Sundman, Modification of the Two-sublattice Model for Liquids, in Calphad, **15** (1991) 109-119.
146. Mats Hillert, Bo Sundman, Xizhen Wang and Tom Barry, A Reevaluation of the Rankinite Phase in the CaO-SiO₂ system in Calphad, **15** (1991) 53-58.
147. Bo Sundman, An Assessment of the Fe-O System in Journal of Phase Equilibria, **12** (1991) 127-140.
148. Bo Sundman, Thermodynamic Databanks, Visions and Facts in Scand Journal of Metallurgy, **20** (1991) 79-85.
149. Jacques Lacaze and Bo Sundman, An Assessment of the Fe-C-Si System in Met. Trans A, **22A** (1991) 2211-2223.
150. Bo Sundman and Tetsu Mohri, Implementation of Cluster Variation Method in the Framework of a General Thermodynamic Databank in Z Metallkde., **81** (1990) 251-254.
151. Mats Hillert, Bo Sundman and Xizhen Wang, An Assessment of the CaO-SiO₂ System in Met. Trans. B, **21B** (1990) 303-312.
152. Mats Hillert, Bo Jansson and Bo Sundman, A Model for Silicate Melts in Met. Trans. B, **21B** (1990) 404-406.
153. Mats Hillert, Malin Selleby and Bo Sundman, An Assessment of the Ca-Fe-O System in Met. Trans. A, **21A** (1990) 2759-2776.
154. Mats Hillert and Bo Sundman, Scheil Reaction Scheme by Computer in Calphad, **14** (1990) 111-114.
155. Bo Sundman, Review of Alloys Modelling in Anales de Fisica, Serie B, **86** (1990) 69-82.
156. Ibrahim Ansara, Bo Sundman and Pascal Willemin, Thermodynamic Modeling of Ordered Phases in the Ni-Al System in Acta Met., **36** (1988) 977-982.

157. Mats Hillert, Bo Jansson and Bo Sundman, Application of the Compound-Energy model to Oxide Systems in *Z Metallkde*, **79** (1988) 81-87.
158. J. P. Gros, B. Sundman and I. Ansara, Thermodynamic Modelling of the Ti-rich Phases in the Ti-Al System in *Scripta Met.*, **22** (1988) 1587-1591.
159. Ibrahim Ansara and Bo Sundman, The Scientific Group Thermodata Europe, in *Computer Handling and Dissemination of Data*. Ed P S Glaser Elsevier Science Publishers, CODATA, (1987) 154-158.
160. Jan-Olof Andersson and Bo Sundman, Thermodynamic Properties of the Cr-Fe System in *Calphad*, **11** (1987) 83-92.
161. Jan-Olof Andersson, Armando Fernandez Guillermet, Per Gustafson, Mats Hillert, Bo Jansson, Björn Jönsson, Bo Sundman and John Ågren, A New Method of Describing Lattice Stabilities in *Calphad*, **11** (1987) 93-98.
162. Jan-Olof Andersson, Armando Fernandez Guillermet, Mats Hillert, Bo Jansson and Bo Sundman, A Compound-Energy Model of Ordering in a Phase with Sites of Different Coordination Numbers in *Acta Met.*, **34** (1986) 437-445.
163. Mats Hillert, Bo Jansson, Bo Sundman and John Ågren, A Two-Sublattice Model for Molten Solutions with Different Tendency for Ionization in *Met. Trans. A*, **16A** (1985) 261-266.
164. Bo Sundman, Bo Jansson and Jan-Olof Andersson, The Thermo-Calc Databank System in *Calphad*, **9** (1985) 153-190.
165. Staffan Hertzman and Bo Sundman, A Thermodynamic Analysis of the Fe-Cr-Ni System in *Scand. J Metallurgy*, **14** (1985) 94-102.
166. Staffan Hertzman and Bo Sundman, A Thermodynamic Analysis of the Fe-Cr System in *Calphad*, **6** (1982) 67-80.
167. Lydon J. Swartzendruber and Bo Sundman, The Fe-Ru (Iron-Ruthenium) System, in *Bull. of Alloy Phase Diagrams*, **4** (1983) 155-160.
168. Lydon J. Swartzendruber and Bo Sundman, The Fe-Os (Iron-Osmium) system in *Bull. of Alloy Phase Diagrams*, **4** (1983) 396-399.
169. Jan-Olof Andersson, Per Gustafson, Mats Hillert, Bo Jansson, Bo Sundman and John Ågren, The Ferrite/Austenite Equilibrium in Silicon Steels in *Metal Science*, **18** (1984) 501-502.

170. Bo Sundman and John Ågren, A Regular Solution Model for Phases with several Components and Sublattices, suitable for Computer Applications in J. Phys. Chem. Solids, **42** (1981) 297-301.
171. Armando Fernandez Guillermet, Mats Hillert, Bo Jansson and Bo Sundman, An Assessment of the Fe-S System using a Two-Sublattice Model for the Liquid Phase in Met. Trans. B, **12B** (1981) 745-754.
172. Mats Hillert and Bo Sundman, A Solute Drag treatment of the Transition from Diffusion-controlled to Diffusionless Solidification in Acta Met., **25** (1977) 11-18.
173. Mats Hillert and Bo Sundman, A treatment of the Solute Drag on Moving Grain Boundaries and Phase Interfaces in Binary Alloys in Acta Met., **24** (1976) 731-743.

Thesis

Application of Computer Techniques on the Treatment of the Thermodynamics of Alloys.
 March 9, 1981, Royal Institute of Technology, Stockholm Sweden.

Books and other contributions.

1. B Sundman and S G Fries, Description of Thermodynamic Software, in “École d’été de calculs thermodynamique”, Eds M C Record and J C Tedenac, The Data Science Library, Elsevier (2001), ISBN 2-84299-360-8.
2. I Ansara, N Dupin and B Sundman, Description thermodynamique des phases métalliques ordonnées avec le modèle en sous-réseaux, in “École d’été de calculs thermodynamique”, Eds M C Record and J C Tedenac, The Data Science Library, Elsevier (2001), ISBN 2-84299-360-8.
3. Hans Leo Lukas, Suzana G Fries and Bo Sundman, *Computational Thermodynamics, The Calphad Method*, Cambridge University Press, UK (2007) ISBN 9780521868112
4. B Sundman and I Ansara, The Gulliver-Scheil method for the calculation of solidification paths, in “The SGTE Casebook”, 2nd edition, Ed K Hack, Woodhead Publishing Ltd, 2007 ISBN 1845692152
5. B Sundman and I Ansara, Calculation of Solidification Paths for Multicomponent Systems, in “The SGTE Casebook”, 2nd edition, Ed K Hack, Woodhead Publishing Ltd, 2007 ISBN 1845692152
6. B Sundman, Preventing Clogging in a Continuous Casting Process, in “The SGTE Casebook”, 2nd edition, Ed K Hack, Woodhead Publishing Ltd, 2007 ISBN 1845692152
7. N Warnken, B Böttger, D Ma, S G Fries, N Dupin and B Sundman, Microstructure of a five-component Ni-base superalloy: experiments and simulation, in “The SGTE Casebook”, 2nd edition, Ed K Hack, Woodhead Publishing Ltd, 2007 ISBN 1845692152

Some published lectures

1. Bo Sundman and John Ågren, The Sublattice Model, Materials Research Society, Symp. Proc., 19 (1983) 115-127.
2. Bo Sundman, Bo Jansson, Jan-Olof Andersson, John Ågren, Per Gustafson, Anders Lindquist, Armando Fernandez Guillermet, and Mats Hillert, Thermo-Calc, a Databank for Thermochemical Calculations, in "Nonbibliographic Data Banks in Science and Technology", Eds. Stephan Schwarz, David Watson and Olov Alvfeldt CO-DATA/Unesco/DFI Seminar, Stockholm Oct 15-22, (1983).
3. Bo Sundman, Bo Jansson and Jan-Olof Andersson, Thermo-Calc, a Databank for Calculation of Phase Equilibria and Phase Diagrams, in "User Applications of Alloy Phase Diagrams". Ed. L. Kaufman, Proc. Conf. ASM, Lake Buena Vista, Florida, USA, (1986).
4. Bo Sundman, Thermo-Calc, a General Tool for Phase Diagram Calculations, in "Computer Aided Innovation of New Materials". Eds M. Doyama, T. Suzuki, J. Kihara and R. Yamamoto. Elsevier Science Publishers B. V. (North Holland) (1991).
5. Waturu Yamada, Tooru Matsumiya, Bo Sundman, Development of Simulator of Solidification Path and Formation of Non-metallic Inclusion during Solidification of Stainless Steel, in "Computer Aided Innovation of New Materials". Eds M. Doyama, T. Suzuki, J. Kihara and R. Yamamoto. Elsevier Science Publishers B. V. (North Holland) (1991).
6. Bo Jansson, Björn Jönsson, Bo Sundman and John Ågren, The Thermo-Calc Project, Thermochim Acta, 214 (1993) 93-96.
7. Bo Sundman and Fritz Aldinger, Computer Simulation of Synthesis of Nitride Ceramics, in proc of TMS Conf on Applications of Thermodynamics in the Synthesis and Processing of Materials. Eds P Nash and B Sundman, (1995) 29-36.
8. I Ansara, N Dupin, H L Lukas and B Sundman, Thermodynamic Assessment of the Al-Ni System, in Proc of TMS Conf on Applications of Thermodynamics in the Synthesis and Processing of Materials. Eds P Nash and B Sundman, (1995) 273-283.
9. Bo Sundman and Fritz Aldinger, (Eds) Proceedings of "The Ringberg Workshop 1995 on Unary Data for Elements and other End-members of Solutions", arranged in Ringberg, Germany and published in Calphad Calphad, 19 (1995) p 433-591.
10. Bo Sundman, Implementation of pair-CVM in the Compound Energy Method, in proceedings of an International Workshop on "Computer Modelling and Simulation for Materials Design", Eds S Nishijima and H Onodera, NRIM, Tsukuba, Japan, (1996) 126-131.

11. B Sundman, H-J Seifert and F Aldinger, Proceedings from “The Ringberg Workshop 1996 on Solution Modelling”, in Calphad, 21 (1997) pp 139-285.
12. B Sundman, F Aldinger and H J Seifert, The Ringberg workshop 1997 on the Application of Computational Thermodynamics, in Calphad, 24 (2000) 15-18.
13. B Sundman, S G fries, A Kusoffsky and W A Oates, Progress in the Thermodynamic Modelling of Order/Disorder Transformations with the Compound Energy Formalism, in Proc Conf Solid-Solid Phase Transformations, Kyoto, Eds M Koiwa, K Otsuka and T Miyazaki, (1998) 689-692.
14. J A Cotton, R D Knutsen, B Sundman, Modification of the stainless steel database for high manganese, chromium and nitrogen contents, in Mater Sci Forum 318-3 (1999) 89-94.
15. H J Seifert, B Sundman and F Aldinger, The Ringberg Workshop 1999 on Thermodynamic Modelling and Applications, in Z Metallkde, 92 (2001) 513.
16. B Sundman, Summary of Calphad XXXI in Stockholm 2002, in Calphad 28 (2004) 221-240.
17. M Zinkewich, F Aldinger and B Sundman, The Ringberg workshop 2005 on thermodynamic modeling and first-principles calculations, Calphad **31** (2007) 2-3