

List of publications

40. B. Davaasuren, H. Borrmann, E. Dashjav, G. Kreiner, W. Schnelle, F. R. Wagner, R. Kniep: New structural elements in ternary carbide, *Scientific Report 2006-2008*, MPI-CPfS, Dresden,
39. F. R. Wagner, E. Dashjav, B. Davaasuren, G. Kreiner, W. Schnelle, R. Kniep: Concerning Carbo Compounds: On the Nature of C₂ Units, *Scientific Report 2006-2006*, MPI-CPfS, Dresden,
38. B. Davaasuren, E. Dashjav, A. Kerkau, G. Kreiner, W. Schnelle, F. R. Wagner, R. Kniep: Synthesis, crystal and electronic structure of a samarium carbochromate(III), Sm₂[Cr₂C₃], *Z. Anorg. Allg. Chem.*, online (2009).
37. B. Davaasuren, E. Dashjav, G. Kreiner, H. Borrmann, M. Mihalkovic, R. Kniep: The superstructure and homogeneity range of La_(0.5<x<0.67)La₃[Fe(C₂)₃], *J. Solid State Chem.*, online
36. E. Dashjav, Yu. Prots, F. R. Wagner, G. Kreiner, R. Kniep: Chemical bonding analysis and properties for La₇Os₄C₉ – A new structure type containing C⁴⁻ and C₂⁴⁻ as Os-coordinating ligands. *J. Solid State Chem.* **181** (2008) 3121-3130.
35. E. Dashjav, Y. Prots, G. Kreiner, W. Schnelle, F. R. Wagner, R. Kniep: Nd₂[MoC₂] and RE₂[WC₂], RE = Ce, Pr, Nd: New carbometalates with Pr₂[MoC₂] structure type. *Science and Technology of Advanced Materials*, **8**, 364-370 (2007).
34. E. Dashjav, G. Kreiner, F. R. Wagner, W. Schnelle, R. Kniep: Crystal and Electronic Structures of the New Carbomolybdates(III), RE₂[Mo₂C₃] with RE=Ce, Sm, Tb, and Dy. *Z. Anorg. Allg. Chem.*, **633**, 1349-1358 (2007).
33. T. Doert, E. Dashjav, B. P. T. Fokwa: Die Seltenerdmetallpolyselenide Gd₈Se₁₅, Tb₈Se_{15-x}, Dy₈Se_{15-x}, Ho₈Se_{15-x}, Er₈Se_{15-x} und Y₈Se_{15-x} (0 < x ≤ 0.3. - Zunehmende Fehlordnung in ausgedünnten, planaren Selenschichten. *Z. Anorg. Allg. Chem.*, **633**, 261-273 (2007).
32. E. Dashjav, F. R. Wagner, G. Kreiner, W. Jeitschko, R. Kniep: Ternary carbides with the view of carbometalates. *J. Solid State Chem.*, **180**, 2, 636-653 (2007).
31. E. Dashjav, W. Schnelle, G. Kreiner, R. Kniep: Crystal structure of praseodymium disilicacarbodimolybdate: PrMo₂Si₂C. *Z. Kristallogr. NCS.* **221**, 3, 267-268 (2006).
30. E. Dashjav, W. Schnelle, G. Kreiner, F. R. Wagner, R. Kniep: The new carbomolybdate Sm₂[Mo₂C₃] and its relationship to RE₂[Mo₂C₃] carbomolybdate structures. *Z. Anorg. Allg. Chem.*, 2094 (2006).
29. E. Dashjav, W. Schnelle, G. Kreiner, R. Kniep: Crystal structure of digadolinium tricarbomolybdate(III), Gd₂[Mo₂C₃]. *Z. Kristallogr. NCS.* **220**, 2, 129-130 (2005).
28. E. Dashjav, G. Kreiner, F. R. Wagner, R. Kniep: On the crystal structure of Ce₂[Mo₂C₃]. *Z. Kristallogr. Supplement* **22**, 144-144 (2005).

27. E. Dashjav, F. R. Wagner, G. Kreiner, R. Kniep, W. Jeitschko: Ternary carbides with the view of carbometalates. *Scientific Report 2003-2005, MPI-CPfS, Dresden*, 212-214.
26. E. Dashjav, F. R. Wagner, W. Schnelle, G. Kreiner, R. Kniep: Low-Valency Carbomolybdates and -tungstates. *Scientific Report 2003-2005, MPI-CPfS, Dresden*, 215-219.
25. S. Derakhshan, K. M. Kleinke, E. Dashjav, H. Kleinke: HfMoSb₄, the first nonmetallic early transition metal antimonide. *Chem. Commun.*, 2428 - 2429 (2004).
24. N. Soheilnia, K. M. Kleinke, E. Dashjav, H. L. Cuthbert, J. E. Greedan, H. Kleinke: Crystal structure and physical properties of a new modification of CuTi₂S₄ in comparison to the thiospinel. *Inorg. Chem.*, **43**, 6473 - 6478 (2004).
23. E. Dashjav, F. R. Wagner, G. Kreiner, R. Kniep: Carbomolybdate(III): Zur Kenntnis von Pr₂[Mo₂C₃] sowie Strukturbeziehungen zu Er₂Mo₂C₃. *Z. Anorg. Allg. Chem.*, **630**, 13-14, 2277-2286, (2004).
22. E. Dashjav, F. R. Wagner, G. Kreiner, R. Kniep: Neue Carbometallate im Pr₂[MoC₂]-Typ. *Z. Kristallogr. Supplem.*, **22**, 153, (2004).
21. E. Dashjav, F. R. Wagner, G. Kreiner, R. Kniep: Die Kristallstruktur von Pr₂[Mo₂C₃]-Ein Carbomolybdat(III). *Z. Kristallogr. Supplem.*, **21**, 152, (2004).
20. E. Dashjav, F. R. Wagner, G. Kreiner, R. Kniep: Carbometallate: Komplexe Anionenverbände $\frac{2}{\infty}$ [MoC_{4/2}] in der Kristallstruktur von Pr^{III}[Mo^{II}C₂]. *Z. Anorg. Allg. Chem.*, **630**, 5, 689-696, (2004).
19. S. Derakhshan, A. Assoud, K. M. Kleinke, E. Dashjav, X. Qiu, S. J. L. Billinge, H. Kleinke: Planar nets of Ti atoms comprising squares and rhombs in the new binary antimonide Ti₂Sb. *J. Am. Chem. Soc.*, **126**, 8295 - 8302 (2004).
18. S. Derakhshan, E. Dashjav, H. Kleinke: The predicted structures of the new pnictides HfMQ in contrast to ZrMQ (M = Ti, V; Q = P, As). *Eur. J. Inorg. Chem.*, 1183 - 1189 (2004).
17. N. Soheilnia, E. Dashjav, H. Kleinke: Band gap tuning by Solid-state Intercalations of Mg, Ni, and Cu into Mo₃Sb₇. *Can. J. Chem.*, **81**, 1157-63, (2003).
16. J. P. F. Jemetio, T. Doert, E. Dashjav, H. Kleinke: Peierls distortion in the As net of NdAgAs₂. *Z. Kristallogr. Supplem.*, **20**, 137, (2003).
15. E. Dashjav, H. Kleinke: Intercalation of small cations (Mg, Ni and Cu into the antimonide Mo₃Sb₇. *Z. Kristallogr. Supplem.*, **20**, 126, (2003).
14. E. Dashjav, H. Kleinke: Crystal and Electronic Structure and Physical Properties of TiSnSb. *Z. Kristallogr. Supplem.*, **20**, 125, (2003).
13. E. Dashjav, H. Kleinke: Sn/Sb atom ordering in the ternary stannide-antimonide TiSnSb. *J. Solid State Chem.*, **176**, 2, 329, (2003).
12. S. Derakhshan, E. Dashjav, H. Kleinke: Designing crystal structures from atoms up. *Mat. Res. Soc. Symp. Proc.*, **755**, 341-46 (2002).
11. E. Dashjav, Y. Zhu, H. Kleinke: Thermoelectric Properties of Early Transition Metal Antimonides. *Chemistry, Physics, and Materials Science of Thermoelectric Materials*,

Ed.: M. G. Kanatzidis, S. D. Mahanti, T. P. Hogan, Kluwer Academic/Plenum Publishers, New York, USA (2003).

10. E. Dashjav, C.-S. Lee, H. Kleinke: Crystal structure predictions: the crystal and electronic structure of $Zr_{1-x}V_{1+x}As$. *J. Solid State Chem.*, **169**, 96 (2002).
9. E. Dashjav, H. Kleinke: Thermoelectric Properties of the Antimonide-Telluride $Mo_3Sb_{5-x}Te_{2+x}$, *Mat. Res. Soc. Symp. Proc.*, **730**, V5.7 (2002).
8. E. Dashjav, H. Kleinke: Crystal and electronic structures of the new antimonides $TiGeSb$ and $HfGeSb$. *Z. Anorg. Allg. Chem.*, **628**, 2176 (2002).
7. C.-S. Lee, E. Dashjav, H. Kleinke: Ti_4MoAs_3 and $Ti_{3.7}Mo_{1.3}As_3$: the predicted structure changes in Ti_5As_3 by a partial substitution of Mo for Ti. *J. Alloys Compd.*, **338**, 60 (2002).
6. E. Dashjav, A. Szczepienowska, H. Kleinke: Optimization of the thermopower of the antimonide Mo_3Sb_7 by a partial Sb/Te substitution. *J. Mater. Chem.*, **12**, 345 (2002).
5. C.-S. Lee, E. Dashjav, H. Kleinke: Structure prediction using our semi-empirical structure map: the crystal structure of the new arsenide $ZrTiAs$. *Chem. Mater.*, **13**, 4053 (2001).
4. E. Dashjav, E. Oeckler O, Doert T, *et al.*: Gd_8Se_{15} - A 24-fold superstructure of the $ZrSSi$ type. *Angew. Chem. Int. Edit.*, **39** (11), (2000).
3. E. Dashjav, Doert T, Böttcher P, *et al.*: Crystal structure of samarium selenide, $SmSe_{1.90}$. *Z. Krist. NCS*, **215** (3), 337-338 (2000).
2. S. Dondog, E. Dashjav: Comparative investigations of catalytic activities of mixed P-heteropoly-oxovanadat-molybdates and P-heteropolyoxovanadat-wolframate acids. *Scientific letters of Faculty of Chemistry of Mongolian National University*, **3**, 119, (1996).
1. S. Dondog, E. Dashjav: Comparative investigations of catalytic activities of mixed Si-heteropoly-oxovanadat-molybdates and Si-heteropolyoxovanadat-wolframate acids. *Scientific letters of Mongolian academy of science*, **31**, (1996).