

List of publications

- 1. Preparation of nitrogen-doped YSZ thin films by pulsed laser deposition and their characterization.** Valov, I.; De Souza, R. A.; Wang, C. Z.; Boerger, A.; Korte, C.; Martin, M.; Becker, K.-D.; Janek, *Journal of Materials Science* (2007), 42(6), 1931-1941.
- 2. Electrochemically controlled reduction of molecular nitrogen at iridium microelectrodes on zirconia solid electrolyte.** Valov, I.; Luerssen, B.; Mutoro, E.; Janek, J.; Günther, S.; Barinov, A.; Dudin, P.; Gregoratti, L., *ELETTRA HIGHLIGHTS* (2006) 57-60
- 3. Kinetic studies of the electrochemical nitrogen reduction and incorporation into yttria stabilized zirconia.** Valov, I.; Janek, J.; Juergen. *Solid State Ionics* (2006), 177(19-25), 1619-1624.
- 4. Electrochemical Incorporation of Nitrogen into a Zirconia Solid Electrolyte.** Valov, I.; Korte, C.; De Souza, R. A.; Martin, M.; Janek, J., *Electrochemical and Solid-State Letters* (2006), 9(5), F23-F26.
- 5. Anodic reactions with As(III) participation.** Petkov, L.; Stoytcheva, M.; Valov, I., *Bulletin of Electrochemistry* (2005), 21(2), 93-96.
- 6. Nitrogen tracer diffusion in yttria doped zirconium oxonitride.** Taylor, M. A.; Kilo, M.; Argiris, C.; Borchardt, G.; Valov, I.; Korte, C.; Janek, J.; Roedel, T. C.; Lerch, M., *Diffusion and Defect Data--Solid State Data*, Pt. A: Defect and Diffusion Forum (2005), 237-240(Part. 1, Diffusion in Materials), 479-484.
- 7. XPS analysis of the oxidation state of electrochemically deposited cerium oxide films.** Stefanov, P.; Atanasova, G.; Stoychev, D.; Valov, I.; Marinova, Ts. Editor(s): Anic, Slobodan. *Physical Chemistry 2002, Proceedings of the International Conference on Fundamental and Applied Aspects of Physical Chemistry, 6th, Belgrade, Yugoslavia, Sept. 26-28, 2002* (2002), 1 198-200.
- 8. Electrochemical preparation of anode materials.** Petkov, L.; Alexandrova, A.; Valov, I.; Kostova, D.; Gadjov, I., *Journal of the University of Chemical Technology and Metallurgy* (2003), 38(2), 523-528.
- 9. Electrochemical growth of thin La₂O₃ films on oxide and metal surfaces.** Stoychev, D.; Valov, I.; Stefanov, P.; Atanasova, G.; Stoycheva, M.; Marinova, Ts., *Materials Science & Engineering, C: Biomimetic and Supramolecular Systems* (2003), C23(1-2), 123-128.
- 10. Study of the kinetics of processes during electrochemical deposition of zirconia from nonaqueous electrolytes.** Valov, I.; Stoychev, D.; Dimitar; Marinova, Ts., *Electrochimica Acta* (2002), 47(28), 4419-4431.
- 11. Study of the kinetics of cathode reduction of arsenic in low-concentration solutions.** Petkov, L.; Valov, I., *Bulletin of Electrochemistry* (2002), 18(1), 7-11.

- 12. Chemical composition and corrosion resistance of passive chromate films formed on stainless steels 316 L and 1.4301.** Stoychev, D.; Stefanov, P.; Nicolova, D.; Valov, I.; Marinova, Ts., *Materials Chemistry and Physics* (2002), 73(2-3), 252-258.
- 13. Electrochemical deposition of thin zirconia films on stainless steel 316 L.** Stefanov, P.; Stoychev, D.; Valov, I.; Kakanakova-Georgieva, A.; Marinova, T., *Materials Chemistry and Physics* (2000), 65(2), 222-225