List of Publications

Refs. 1 – 7 contain parts of the present thesis.

[1] Jaeyoung Lee, Johannes Christoph, Markus Eiswirth and Gerhard Ertl, Controlled pulse reversal on a ring electrode, *Chem. Phys. Lett*. **346** (2001) 246.

[2] Jaeyoung Lee, Johannes Christoph, Peter Strasser, Markus Eiswirth and Gerhard Ertl, Spatio-temporal interfacial potential patterns during the electrocatalyzed oxidation of formic acid on Bi-modified Pt, *J. Chem. Phys.* **115** (2001) 1485.

[3] Jaeyoung Lee, Johannes Christoph, Markus Eiswirth and Gerhard Ertl, Spatiotemporal mixed-mode oscillations on a Pt ring electrode in the electrocatalytic oxidation of HCOOH, *Z. Phys. Chem.* (submitted).

[4] Jaeyoung Lee, Johannes Christoph, Markus Eiswirth and Gerhard Ertl, Existence regions of spatiotemporal patterns in the electro-oxidation of formic acid, *J. Electroanal. Chem.* (submitted).

[5] Jaeyoung Lee, Christian Eickes, Markus Eiswirth and Gerhard Ertl, Electrochemical oscillation in the methanol oxidation on pure Pt electrode, *Electrochim. Acta* (submitted).

[6] Jaeyoung Lee, Peter Strasser, Markus Eiswirth and Gerhard Ertl, On the origin of oscillations in the electrocatalytic oxidation of HCOOH on Pt electrode modified by Bi deposition, *Electrochim. Acta* **47** (2001) 501.

[7] Jaeyoung Lee, Wei-Bo Wang, Mau-Scheng Zei and Gerhard Ertl, Electrocatalytic oxidation of CO on Ru (0001) surfaces: The influence of surface disorder, *Phys. Chem. Chem. Phys.* (submitted).

[8] Jaeyoung Lee and Yongsug Tak, Electrodeposition of ZnO on ITO electrode by potential modulation method, *Electrochem. Solid-State Lett*. **4** (2001) C63.

[9] Jaeyoung Lee, Taegeun Noh, Jong Min Kim and Yongsug Tak, Electrodeposition of conducting ZnO on ITO electrode, *J. Electroanal. Chem.* (in press).

[10] Jin Sik Myoung, Jaeyoung Lee and Yongsug Tak, Electrodeposition of cobalt oxide from waste $LiCoO_2$, *Electrochem. Solid-State Lett*. (submitted).

[11] Jaeyoung Lee and Yongsug Tak, Electrocatalytic activity of Cu electrode in electroreduction of CO_2, *Electrochim. Acta* **46** (2001) 3015.

[12] Jaeyoung Lee and Yongsug Tak, Selective electrodeposition of ZnO onto Cu_2O, *Electrochem. Commun.* **2** (2000) 765.

[13] Jaeyoung Lee, Hamilton Varela, Sunghyun Uhm and Yongsug Tak, Electrodeposition of PbO_2 onto Au and Ti substrate, *Electrochem. Commun.* **2** (2000) 646.

[14] Jaeyoung Lee and Yongsug Tak, Electrochemical deposition of a single phase of pure Cu_2O thin films by current modulation methods, *Electrochem. Solid-State Lett*. **3** (2000) 69.

[15] Jaeyoung Lee and Yongsug Tak, Epitaxal growth of Cu_2O (111) by electrodeposition, *Electrochem. Solid-State Lett*. **2** (1999) 559.

[16] Jaeyoung Lee and Yongsug Tak, Initial behaviors during electrochemical ZnO film formation, *J. Ind. Eng. Chem.* **5** (1999) 87.

[17] Jaeyoung Lee and Yongsug Tak, The Preparation of yttrium oxide film deposited by electrochemical method, *J. Ind. Eng. Chem.* **5** (1999) 139.

[18] Jaeyoung Lee and Yongsug Tak, Electrochemical reduction mechanism of CO_2 on Cu electrode with EQCM, *International Journal of Environmentally Conscious Design & Manufacturing* **8** (1999) 55.

[19] Jaeyoung Lee and Yongsug Tak, Investigation on the growth mechanism of zinc oxide film prepared by electrochemical method, in: Chemical Aspects of Electronic Ceramics Processing. Eds. P. N. Kumta, A. F. Hepp, D. N. Beach, J. J. Sullivan and B. Arkles. *Mater. Res. Soc. Symp. Proc.* **495** (1998) 457.