

2008 年度業績 — 藤本 慎司

学術論文・解説記事

1. S. Berger, H. Tsuchiya, P. Schmuki, Transition from Nanopores to Nanotubes: Self-Ordered Anodic Oxide Structures on Titanium-Aluminides, *Chemistry of Materials*, 20 (10), 3245-3247, 2008
2. D. Kim, S. Fujimoto, P. Schmuki, H. Tsuchiya, Nitrogen doped anodic TiO₂ nanotubes grown from nitrogen-containing Ti alloys, *Electrochemistry Communications*, 10(6), 910-913, 2008
3. S. Suzuki, K. Shinoda, M. Sato, S. Fujimoto, M. Yamashita, H. Konishi, T. Doi, T. Kamimura, K. Inoue, Y. Waseda, Changes in chemical state and local structure of green rust by addition of copper sulphate ions, *Corrosion Science*, 50(6), 1761-1765, 2008
4. 佐藤眞直, 藤本慎司, 放射光を用いたステンレス鋼不働態皮膜の構造解析, *材料と環境*, 57(6), 250-257, 2008
5. 中嶋英雄, 多根正和, 中田一博, 藤本慎司, 市坪哲, 田中徹, 山田康雄, 一方向気孔を有するポーラス金属の物性評価, *ふえらむ*, 13(6), 368-374, 2008
6. S. Suzuki, K. Shinoda, M. Sato, S. Fujimoto, M. Yamashita, H. Konishi, T. Doi, T. Kamimura, K. Inoue, Y. Waseda, Characterization of Reaction of Green Rust with Foreign Ions using X-ray Absorption Fine Structure, *Corrosion Engineering*, 57(8), 353-357, 2008
7. K. Alvarez, S.-K. Hyun, S. Fujimoto, H. Nakajima, In vitro corrosion resistance of lotus-type porous Ni-free stainless steels, *Journal of Materials Science:Materials in Medicine*, 19(11), 3385-3398, 2008
8. Tomo Saito, Hiroya Masaki, Fahmi Azhari Mukhlis, Hiroaki Tsuchiya and Shinji Fujimoto, Crystallographic Characterization of Stress Corrosion Cracking Initiation on Type316L Stainless Steel in High Temperature and High Pressure Water, *Journal of Physics: Conference Series*, in press, 2009
9. S. Fujimoto, V. Raman, H. Tsuchiya, Surface Modification of b-type Titanium Alloy by Electrochemical Potential Pulse Polarization, *Journal of Physics: Conference Series*, in press, 2009
10. Hiroaki Tsuchiya, Toshifumi Akaki, Junji Nakata, Daisuke Terada, Nobuhiro Tsuji, Yuichiro Koizumi, Yoritoshi Minamino, Patrik Schmuki, Shinji Fujimoto, Metallurgical aspects on the formation of self-organized anodic oxide nanotube layers, *Electrochimica Acta*, in press, 2009
11. Hiroaki Tsuchiya, Toshifumi Akaki, Junji Nakata, Daisuke Terada, Nobuhiro Tsuji, Yuichiro Koizumi, Yoritoshi Minamino, Patrik Schmuki, Shinji Fujimoto, Anodic oxide nanotube layers on Ti-Ta alloys: Substrate composition, microstructure and self-organization on two-size scales, *Corrosion Science*, in press, 2009

12. Hiroaki Tsuchiya, Nozomu Tokuoka, Shinji Honda, Yuji Shinkai, Yasutomo Shimizu, Shinji Fujimoto, TiO₂ nanotube layers with metallic nanoparticles, Journal of Physics: Conference Series, in press, 2009
13. Nabeen K. Shrestha, Yoon-Chae Nah, Hiroaki Tsuchiya, Patrik Schmuki, Self organized nano-tubes of TiO₂-MoO₃ with enhanced electrochromic properties, Chemical Communications, in press, 2009
14. J.M. Macak, C. Zollfrank, B.J. Rodriguez, H. Tsuchiya, M. Alexe, P. Greil, P. Schmuki, Ordered Ferroelectric Lead Titanate Nanocellular Structure by Conversion of Anodic TiO₂ Nanotubes, Advanced Materials, in press, 2009

国際会議プロシーディングス

1. Y. Shinkai, H. Tsuchiya, S. Fujimoto, Dye-sensitized TiO₂ Nanotubes with Ag Nanoparticles, ECS Transactions, 16(3), 261-266, 2008
2. H. Tsuchiya, J. Nakata, S. Fujimoto, S. Berger, P. Schmuki, Anodic Porous and Tubular Oxide Layers on Ti Alloys, ECS Transactions, 16(39), 359-367, 2008

著書

1. 藤本慎司(分担), レアメタルの代替材料とリサイクル, シー・エム・シー出版, 2008, 総ページ数 350

受賞

1. A. Ghicov, H. Tsuchiya, J.M. Macak, P. Schmuki, Electrochemistry Communications Best Cited Paper Award 2008, 2008 年 10 月 1 日
2. 赤木俊文, 土谷博昭, 寺田大将, 辻伸泰, 藤本慎司, 平成 20 年度第 3 回材料化学研究会・第 2 回鉄鋼プロセス研究会合同研究会 優秀発表賞, 2008 年 12 月 19 日

シンポジウム開催状況

1. コロージョン・ドリーム 2008 若手研究者セミナー, 招待講演者なし, 参加人数 20(外国人参加者数 3)
2. (社)日本材料学会 腐食防食部門委員会 第 267 回例会, 主な招待講演者: 山田義和(三菱重工業株), 石田雅巳(新日鐵エンジニアリング株), 松橋透(新日鐵住金ステンレス株), 参加人数 20(外国人参加者数 0)

3. 214th meeting of The Electrochemical Society, Critical Factors in Localized Corrosion 6, in Honor of Professor Shibata, 主な招待講演者 : R. Frankenthal (Frankenthal Associates), M. Stratmann (Max-Planck-Institut für Eisenforschung), P. Schmuki (University of Erlangen-Nuremberg), 参加人数 81(外国人参加者数 46)