

# 2015

\* H. Asoh, Y. Suzuki and S. Ono

Metal-Assisted Chemical Etching of GaAs Using Au Catalyst Deposited on the Backside of a Substrate

Electrochimica Acta, in press

\* 小野幸子, 阿相英孝

自己組織化構造を用いた化合物半導体のナノ・マイクロファブリケーション(II) - 自己組織化構造のナノテクノロジーへの応用と

InP の微細加工-(トピックス)

金属, **85** (6), 461-467 (2015.6)

\* 小野幸子, 阿相英孝

自己組織化構造を用いた化合物半導体のナノ・マイクロファブリケーション(I) - 自己組織化構造のナノテクノロジーへの応用と

InP の微細加工-(トピックス)

金属, **85** (5), 369-374 (2015.5)

\* Anawati, H. Asoh and S. Ono

Enhanced Uniformity of Apatite Coating on a PEO Film Formed on AZ31 Mg Alloy by an Alkali Pretreatment

Surface and Coatings Technology, **272** (25), 182-189 (2015.6)

DOI: 10.1016/j.surfcoat.2015.04.007

\* T. Masuda, H. Asoh, S. Haraguchi and S. Ono

Fabrication and Characterization of Single Phase  $\alpha$ -Alumina Membranes with Tunable Pore Diameters

Materials, **8** (3), 1350-1368 (2015.3)

DOI: 10.3390/ma8031350

# 2014

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アノード酸化ポーラス皮膜のバイオ・医療分野への応用 –アノード酸化による軽金属の表面改質を中心に– (解説)

静電気学会 (J. Inst. Electrostatics Jpn.), **38** (6), 248-253 (2014.11)

\* Y. Mori, A. Koshi, J. Liao, H. Asoh and S. Ono

Characteristics and Corrosion Resistance of Plasma Electrolytic Oxidation Coatings on AZ31B Mg Alloy Formed in Phosphate - Silicate Mixture Electrolytes

Corrosion Science, **88** (11), 254-262 (2014.11)

DOI: 10.1016/j.corosci.2014.07.038

\* H. Asoh, S. Kotaka and S. Ono

High-Aspect-Ratio Vertically Aligned GaAs Nanowires Fabricated by Anodic Etching

Mater. Res. Express, **1** (10), 045002 (2014.10)

DOI: 10.1088/2053-1591/1/4/045002

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表面技術 (J. Surf. Finish. Soc. Jpn.), **65** (9), 406-413 (2014.9)

\* 増田達也, 阿相英孝, 原口智, 小野幸子

アノード酸化と熱処理により作製したナノポーラス  $\alpha$ -アルミナメンブレン

Nanoporous  $\alpha$ -Alumina Membrane Prepared by Anodizing and Heat Treatment

Electrochemistry, **82** (6), 448-455 (2014.6)

DOI: 10.5796/electrochemistry.82.448

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Materials Science Forum Vols., **783-786**, 1470-1475 (2014.5)

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アノード酸化ポーラスアルミナ皮膜を用いたシリコンのナノ構造制御(解説)

Nanostructuring of Silicon Using Anodic Porous Alumina Film

表面技術 (J. Surf. Finish. Soc. Jpn.), **65** (1), 18-25 (2014.1)

DOI: 10.4139/sfj.65.18

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Fabrication and Structure Modulation of High-Aspect-Ratio Porous GaAs through Anisotropic Chemical Etching, Anodic Etching, and Anodic Oxidation

Electrochimica Acta, **110**, 393-401 (2013.11)

DOI: 10.1016/j.electacta.2013.06.025

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Sub-100-nm Ordered Silicon Hole Arrays by Metal-Assisted Chemical Etching

Nanoscale Research Letters, **8**, 410/1-410/8 (2013.10)

DOI: 10.1186/1556-276X-8-410

\* Y. Sato, H. Asoh and S. Ono

Effects of Electrolyte Species and their Combination on Film Structures and Dielectric Properties of Crystalline Anodic Alumina Films Formed by Two-Step Anodization

Materials Transactions, **54** (10), 1993-1999 (2013.10)

DOI: 10.2320/matertrans.L-M2013826

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Metallographic Effects of Pure Aluminum on Properties of Nanoporous Anodic Alumina (NPAA)

Surface and Interface Analysis, **45** (10), 1490-1496 (2013.10)

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Proceedings of the third international conference and exposition "Aluminium-21/Coating" P.10 (2013.6)

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Anodization Behavior of Aluminum in Ionic Liquids with a Small Amount of Water  
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DOI: 10.5796/electrochemistry.81.440

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Electrochemical Corrosion and Bioactivity of Titanium-Hydroxyapatite Composites  
Prepared by Spark Plasma Sintering

Corrosion Science, **70** (5), 212-220 (2013.5)

## 2012

\* 阿相英孝, 小野幸子

電着法によるチタン基板上へのアパタイトコーティング(解説)

材料の科学と工学, **49** (6), 246-249 (2012.12)

\* 佐藤芳輝, 阿相英孝, 小野幸子

二段階電解で生成した結晶性アノード酸化アルミナ皮膜の構造と誘電特性に及ぼす電解液種とその組み合わせの影響

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Combined with Metal-Assisted Chemical Etching and Anisotropic Chemical Etching  
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Hexagonal Geometric Patterns Formed by Radial Pore Growth of InP Based on  
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Nanotechnology, **23** (21), 215304/1-215304/8 (2012.5)

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in Ammonia Atmosphere  
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Surface Phenomena and Oxide Film Growth on Magnesium

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Effect of Anodizing Condition on Corrosion Resistance of Mg-Li-Y Alloy

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Effect of High-Frequency Switching Electrolysis on Film Thickness Uniformity of Anodic Oxide Film Formed on AC8A Aluminum Alloy

軽金属(J. Jpn. Inst. Light Metals), **60** (11), 602-607 (2010.11)

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Periodic GaAs Convex and Hole Arrays Produced by Metal-Assisted Chemical Etching

Japanese Journal of Applied Physics, **49**, 116502/1-116502/4 (2010)

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Electrodeposition of Hydroxyapatite and Bioactivation of Porous Titanium

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Structure and Growth Mechanism of Anodic Oxide Films Formed on Aluminum and their Gas Emission Property in Vacuum

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Structure and Photocatalytic Property of Zinc Oxide Film Prepared by Anodizing  
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Fabrication of Si Nanostructures using Anodization of Aluminum Film Sputtered on Si

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Nano-structure Control of Magnesium Surfaces and their Functionalization

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