

原著論文 (吉村)

- 1 A. Okada, Y. Nakata, K. Minou, M. Yoshimura, K. Kadono, “Effect of solvent evaporation temperature on the structure of two-dimensional melamine networks on Au(111)”, *Jpn. J. Appl. Phys.* **2016**, *55*, 125001.
- 2 Y. You, J. Deng, X. Tan, N. Gorjizadeh, M. Yoshimura, S. C. Smith, V. Sahajwalla, R. K. Joshi, “On the mechanism of gas adsorption for pristine, defective and functionalized graphene”, *Phys. Chem. Chem. Phys.* **2017**, *19*, 6051-6056.
- 3 A. Okada, S. Hara, M. Yoshimura, “Atomistic study of comblike structure on the MoO₂/Mo(110) surface by scanning tunneling microscopy and density functional theory calculations”, *Jpn. J. Appl. Phys.* **2017**, *56*, 095501.
- 4 S. Suzuki, Y. Terada, M. Yoshimura, “Suppression of Graphene Nucleation by Turning Off Hydrogen Supply Just before Atmospheric Pressure Chemical Vapor Deposition Growth”, *Coatings* **2017**, *7*, 206.
- 5 Y. Hashimoto, S. Katafuchi, M. Yoshimura, T. Hara, Y. Hara, M. Hamagaki, “Effect of Low-Energy Nitrogen Ion Treatment of Highly Ordered Pyrolytic Graphite on Oxygen Reduction Reaction Activity”, *Nanomaterials and Nanotechnology* **2017**, *7*, 1-8.
- 6 R. Badam, M. Hara, H.-H. Huang, M. Yoshimura, “Synthesis and Electrochemical Analysis of Novel IrO₂ Nanoparticle Catalysts Supported on Carbon Nanotube for Oxygen Evolution Reaction”, *Int. J. Hydrogen Energy*, **2018**, *43* 18095–18104.
- 7 H.-H. Huang, R. Joshi, K. De Silva, R. Badam, M. Yoshimura, “Fabrication of Reduced Graphene Oxide Membranes for Water Desalination”, *J. Membrane Sci.*, **2019**, *572*, 12–19.
- 8 H. Huang, K. De Silva, G. Kumara, M. Yoshimura, “Structural Evolution of Hydrothermally Derived Reduced Graphene Oxide”, *Scientific Report*, **2019**, *8*, 6849–6857.

学会発表

国内

- 1 甲斐鈴菜, 原民夫, 原正則, 吉村雅満, 「大気圧プラズマによる欠陥導入 HOPG の触媒活性の評価」, 第 64 回応用物理学会春季学術講演会 (横浜) **2017**, 14p-P4-22 (3/14).
- 2 原正則, Rajashekar Badam, Hsin-Hui Huang, 吉村雅満, 「グラフェン上におけるキノン分子の酸化反応の活性評価」, 第 79 回応用物理学会秋季学術講演会 (名古屋) **2018**, 18p-PB3-53 (9/18).
- 3 Prerna Joshi, Rajashekar Badam, Hsin-Hui Huang, Masanori Hara, Masamichi Yoshimura, 「Effect of Nitrogen Doping Amount on Electrocatalytic Activity of IrO₂ on Nitrogen-doped Graphene for Excellent Oxygen Evolution Reaction」, 第 65 回応用物理学会春季学術講演会 (東京) **2018**, 20a-PB9-5 (9/20).
- 4 米田大祐, 鈴木誠也, 原正則, 吉村雅満, 「電気二重層キャパシタ用カーボンナノチューブ/グラファイト複合電極の作製」, 2018 年電気化学会秋季大会 (金沢) **2018**, 1D14 (9/25).
- 5 原正則, 「固体高分子形燃料電池内部の反応挙動のその場観察」, 実用エネルギー材料開発のためのオ

ペラント解析研究会（名古屋）**2019**（1/31）.

- 6 原正則, 池田義仁, 吉村雅満, 「電気二重層キャパシタ用カーボンナノチューブ/Cu 電極の作製と評価」, 第 66 回応用物理学会春季学術講演会（東京）**2019**, 10p-PB5-26（3/10）.
- 7 Prerna Joshi, Hsin-Hui Huang, Masanori Hara, Masamichi Yoshimura, 「Evaluation of IrO₂ Activity as an Electrocatalyst for Oxygen Evolution Reaction by Heteroatom doped Reduced Graphene Oxide」, 第 66 回応用物理学会春季学術講演会（東京）**2019**, 10a-W521-11（3/10）.
- 8 原正則, Prerna Joshi, Hsin-Hui Huang, 吉村雅満, 「水電解アノード用の新規触媒 IrRuO_x 合金ナノ粒子担持グラフェンの合成」, 電気化学会 第 86 回大会（京都）**2019**, 2A01（3/28）.

国際会議

- 1 R. Kai, M. Hara, M. Yoshimura, “Catalytic Activity of Defective Highly Oriented Pyrolytic Graphite Modified by Hydrogen Plasma”, 25th International Colloquium on Scanning Probe Microscopy (Shizuoka) **2017**, S4-49 (12/7).
- 2 P. Joshi, R. Badam, H.-H. Huang, M. Hara, M. Yoshimura, “Design and Evaluation of IrO₂ on Nitrogen-doped Reduced Graphene Oxide as an Electrocatalyst for Oxygen Evolution Reaction”, ACSIN-14 & ICSPM26 (Sendai) **2018** (10/23).
- 3 H.-H. Huang, K. De Silva, M. Yoshimura, “Kelvin Probe Force Microscopy Study of 2D Graphene-Based Sheets”, ACSIN-14 & ICSPM26 (Sendai) **2018** (10/22).
- 4 H.-H. Huang, L.-W. Su, K. De Silva, M. Yoshimura, “Graphene/Layered Double Hydroxide Composite for Ion Sieving”, ACSIN-14 & ICSPM26 (Sendai) **2018** (10/23).
- 5 M. Hara, P.a Joshi, H.-H. Huang, M. Yoshimura, “Synthesis of Heteroatom-doped Graphene as Active Catalysts for Hydroquinones Oxidation Reaction”, The 56th Fullerenes-Nanotubes-Graphene General symposium (Tokyo) **2019**, No. 1-8 (3/2).