

# 燃料電池

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巻頭言 「水素元年」～本格的な水素社会の幕開け～

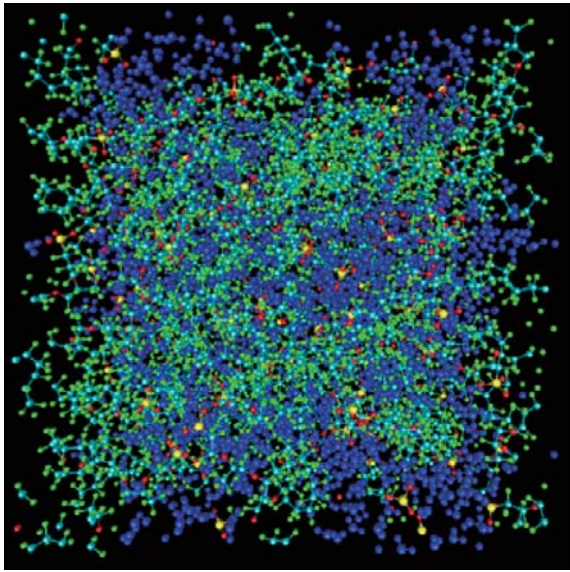
**特集**

**燃料電池に関連する基礎研究Ⅱ**

寄稿 最近のエネルギー事情と水素利用の今後

投稿論文 PEFC 用 Zr 酸化物系酸素還元触媒の活性影響因子の検討



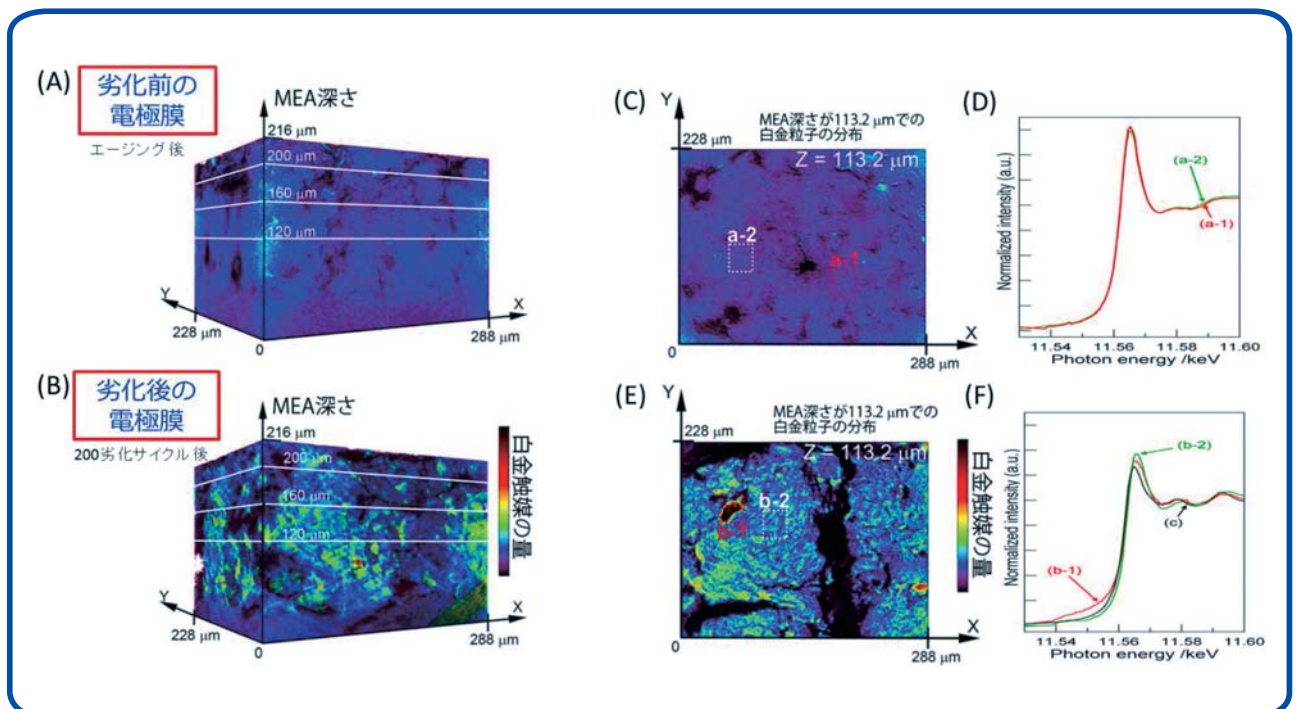


高分子電解質膜内部のプロトン・水輸送シミュレーションの模式図。緑がPFSA分子、青が水分子およびヒドロニウムイオン、黄色がPFSA分子のS原子を表している

A schematic diagram of simulation of the transport phenomena of proton and water in polymer electrolyte membrane : PFSA molecules (green), hydronium ion and water (blue), sulfur atoms in PFSA molecules (yellow)

P22参照

P80参照



ラミノグラフィ・XAFS法による燃料電池の白金触媒の分布と白金の化学状態を3次元可視化：(A, C, D) エージング後；(B, E, F) 200劣化サイクル後。(A, B) 電極膜内の3次元白金分布；(C, E) 電極膜断面の2次元白金分布；(D, F) それぞれ(C)の(a-1, a-2)及び(D)の(b-1, b-2)の各箇所のXANESスペクトル（白金の電子状態）

3D visualization of the spatial distribution of the quantity and chemical states of Pt nanoparticles in PEFC MEA by 3D Laminography-XAFS

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# The Journal of Fuel Cell Technology

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## Contents

### Foreword

#### ■ Towards Hydrogen Energy Society

C. Tobe – Director, Hydrogen and Fuel Cell Promotion Office, Agency for Natural Resources and Energy……2

### Special Issue Basic Researches for Fuel Cells II

#### ■ Visualization of Water Droplet Distribution States Inside PEFC and Its Effects on Unsteady Performance

T. Araki – Department of Mechanical Engineering, Faculty of Engineering, Yokohama National University……9

#### ■ Improvement in ORR Activity and Durability of Pt Electrocatalyst Using SnO<sub>2</sub>/Ketjen Black

T. Kinumoto – Oita University, Assistant Professor……14

#### ■ Analyses of the Characteristics of Transport Phenomena of Reaction Materials in PEFC by Large Scale Molecular Dynamics Simulations

T. Tokumasu – Quantum Nanoscale Flow Systems Laboratory, Institute of Fluid Science, Tohoku University……20

#### ■ Analysis of the Wettability of the Electrocatalyst Layer

T. Kaito, T. Jozuka, T. Matsuda – Electrochemical Device Laboratory, KRI Inc.……27

#### ■ Soft X-ray Radiography Technique for In Situ Visualization of Liquid Water in Polymer Electrolyte Membrane Fuel Cell

P. Deevanhxay, S. Tsushima, S. Hirai – Department of Mechanical and Control Engineering, Graduate School of Science and Engineering, Tokyo Institute of Technology……31

#### ■ Relationship between Fabrication Process of the Electrodes and Its Microscopic Structure Characteristics for High Performance PEFCs

K. Amemiya, T. Yoshida – Toyota Motor Corporation, Fuel Cell System Development Div., R & D Group  
M. Shibayama – The University of Tokyo, The Institute for Solid State Physics……38

#### ■ Structural Effects on the Oxygen Reduction Reaction on the High Index Planes of Platinum

N. Hoshi, A. Hitotsuyanagi, M. Nakamura, A. Nakahara  
– Department of Applied Chemistry and Biotechnology, Graduate School of Engineering, Chiba University  
O. Sakata – Natural Institute for Materials Science……45

#### ■ Influence of the Sintering of Electrocatalysts and Decrease of Proton Conductivity on the Voltage Drops in the High-Temperature Proton Exchange Membrane Fuel Cells (HT-PEMFC)

A. Suzuki, M. C. Williams, R. Miura, N. Hatakeyama, A. Miyamoto  
– New Industry Creation Hatchery Center, Tohoku University  
Y. Oono, M. Hori – Fuel Cell Research Center, Daido University……54

#### ■ Open Innovation for Development of Fuel Cell Vehicles

T. Hoshino – Vice President, NineSigma Japan, Inc.……62

### Contribution

#### ■ The Present Conditions of Energies in Japan and Utilization of Hydrogen in the Future

T. Kikkawa – Professor, Graduate School of Commerce and Management, Hitotsubashi University……67

#### ■ Overview of SPring-8 BL36XU Beamline and Its Application to Polymer Electrolyte Fuel Cells

M. Tada – Research Center for Materials Science, Nagoya University  
T. Uruga – JASRI/SPring-8,  
Innovation Research Center for Fuel Cells, The University of Electro-Communications  
Y. Iwasawa – Innovation Research Center for Fuel Cells, The University of Electro-Communications……74

**Topics**

■ **Power Generation on the Deep-Sea Hydrothermal Vent :  
Development of Hydrothermal Fluid - Seawater Fuel Cells**

M. Yamamoto – Institute of BioGeosciences, JAMSTEC  
R. Nakamura – Center for Sustainable Resource Science, RIKEN……83

■ **Development of Diesel Particulate Matter Oxidation Catalyst Based on  
Oxide Ion Conducting Materials**

T. Ishihara – International Institute for Carbon Neutral Energy Research, Kyushu University  
K. Harada – Graduate School of Integrated Frontier Science, Kyushu University……87

**Paper**

■ **Factors which Affect Oxygen Reduction Activity of Zr Oxide-Based Electrocatalysts for PEFC**

S. Yin, A. Ishihara, Y. Kohno, K. Matsuzawa, S. Mitsushima, K. Ota – Green Hydrogen Research Center,  
Yokohama National University  
M. Arao, M. Matsumoto, H. Imai – Nissan ARC, Co., Ltd.……93

**Column**

■ **Fuel Cells and Me No.11**

Y. Takasu – Prof. Emeritus, Shinshu University… 101

**Report**

■ **Report on 129<sup>th</sup> Workshop - Visit to SPring-8**

J. Susaki – Research & Development Dept., Denki Kagaku Kogyo Kabushiki Kaisha… 103

■ **Report on 4<sup>th</sup> FCDIC Mini Workshop**

I. Sakamoto – Fuel Cell Non Profit Organization PEMDREAM… 106

■ **Report on 2013 Special Joint Seminar I at Kanagawa Industrial Technology Center**

M. Kunitatsu – Chemical Engineering Division, Kanagawa Industrial Technology Center… 108

■ **Report on 2013 Special Joint Seminar II – Visit to Ebina-chuo Hydrogen Station**

T. Nakanishi – Public System Division, Network Infrastructures Operations Unit  
NEC Networks & System Integration Corporation… 110

■ **Report on 6<sup>th</sup> New Electrocatalysts Symposium & Stay Seminar**

Y. Agawa – ULVAC-RIKO, Inc. Customized Production Dept.  
Arc Plasma Deposition System Business Promotion Division… 112

**Information**

Fuel Cell Development Information Center… 115

**Postscript**

E. Ohira – Editorial Committee Member… 121