

# TOMOYA OHNO

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## ACADEMIC QUALIFICATIONS

Ph.D. in Engineering, 2004 Shizuoka University, Shizuoka, Japan

M.S. 2001 Shizuoka University, Shizuoka, Japan

B.S. 1999 Shizuoka University, Shizuoka, Japan

## ACADEMIC EXPERIENCE

### *Professor*

Faculty of Engineering, Kitami Institute of Technology

April 2017-

### *Associate Professor*

Department of Materials Science, Kitami Institute of Technology

April 2011- March 2017

### *Assistant Professor*

Department of Materials Science, Kitami Institute of Technology

April 2008- March 2011

### *Postdoctoral Researcher*

Electronic Ceramics Department, Jožef Stefan Institute

April 2007- March 2008

### *Research Associate*

Department of Materials Science, Kitami Institute of Technology

April 2005- March 2008

### *Postdoctoral Researcher*

Innovative Joint Research Center, Shizuoka University

May 2004- March 2005

## HEAD of the RESEARCH PROJECTS

1. Research Grant from MATSUDA Foundation  
“Design of the Air-electrode for Metal air battery”  
2019 April – 2021 March
2. Research Grant from NOASTEC Foundation  
“Granulation of Scallop shell powder for fertilizer particle”  
2018 April – 2019 March
3. Research Grant from Hosokawa Powder Tehchnology Foundation  
“Microstructure Design of the Air-electrode for Metal-air battery”  
2018 April- 2019 Match

4. Research Grant from Takayanagi Foundation  
“Stress Engineering of the alkoxide derived lead-free Piezoelectric Thin Film on a Si wafer”  
2015 April – 2016 March
5. Grant-in-Aid for Scientific Research from Japan Society of the Promotion of Science (JSPS)  
“Development of the Perovskite Catalyst for Ethanol Steam Reforming Process”  
2015 April – 2018 March
6. Research Grant from SUZUKI Foundation  
“Development of the High-dispersed Metal Catalyst on the Perovskite”  
2015 April – 2016 March
7. Research Grant from JGC-S  
“Development of Nano-coating techniques of LaAlO<sub>3</sub> on the nano-particle”  
2013 September – 2014 August
8. Research Grant from Hosokawa Powder Technology Foundation  
“Preparation of the Perovskite Catalyst for Steam Reforming Process”  
2013 April – 2014 March
9. Adaptable and Seamless Technology transfer Program (A-STEP)  
from Japan Science and Technology Agency (JST)  
“Design of the Bifunctional Catalyst from H<sub>2</sub> bronze as a precursor”  
2012 April – 2014 March
10. Research Grant from Nippon Sheet Glass Foundation for Material Science and Engineering  
“Stress Engineering of lead-free Piezoelectric Thin Film by Ceramics Integration”  
2011 April – 2012 March
11. Adaptable and Seamless Technology transfer Program (A-STEP)  
from Japan Science and Technology Agency (JST)  
“Development of the Novel Perovskite Catalyst with High Surface Area for Steam Reforming Process”  
2010 April – 2011 March

## PUBLICATIONS

1. **T. Ohno**, K. Fukumitsu, T. Honda, A. Sakamoto, S. Tanaka, S. Hirai, T. Matsuda, N. Sakamoto and H. Suzuki “Piezoelectric properties of a near strain-free lead zirconate titanate thin films deposited on a Si substrate” *Mater. Lett.* 239 (2019) pp.584-589.
2. S. Hirai, **T. Ohno**, R. Uemura, T. Maruyama, M. Furunaka, R. Fukunaga, W.-T. Chen, H. Suzuki, T. Matsuda, S. Yagi, Ca<sub>1-x</sub>Sr<sub>x</sub>RuO<sub>3</sub> Perovskite at the Metal-insulator Boundary as a Highly Active Oxygen Evolution Catalyst, *J. Mater. Chem. A*, 7 (2019) pp.15387-15394
3. S. Hirai, K. Morita, K. Yasuoka, T. Shibuya, Y. Tojo, Y. Kamihara, A. Miura, H. Suzuki, **T. Ohno**, T. Matsuda and S. Yagi “Oxygen vacancy-originated highly active electrocatalysts for the oxygen evolution reaction” *J. Mater. Chem. A*, 6 (2018) pp. 15102-15109.

4. **T. Ohno**, S. Ochibe, H. Wachi, S. Hirai, T. Arai, N. Sakamoto, H. Suzuki and T. Matsuda, "Preparation of metal catalyst component doped perovskite catalyst particle for steam reforming process by chemical solution deposition with partial reduction" *Adv. Powder Technol.* **29** (2018) pp.584-589
5. S. Hirai, S. Yagi, W. - T. Chen, F. - C. Chou, N. Okazaki, **T. Ohno**, H. Suzuki and T. Matsuda, "Non - Fermi Liquids as Highly Active Oxygen Evolution Reaction Catalysts" *Advanced Science* **4** (2017) pp.1700176
6. **T. Ohno**, K. Fukumitsu, T. Honda, S. Hirai, T. Arai, N. Sakamoto, N. Wakiya, H. Suzuki and T. Matsuda, "Orientation control of SrRuO<sub>3</sub> thin film on a Si substrate by chemical solution deposition for an electrode of lead zirconate titanate thin films" *Mater. Lett.* **181** (2016) pp.74-77
7. T. Arai, **T. Ohno**, T. Matsuda, N. Sakamoto, N. Wakiya and H. Suzuki, "Synthesis and electrical properties of Pb(Mg<sub>1/3</sub>Nb<sub>2/3</sub>)O<sub>3</sub>-PbTiO<sub>3</sub> epitaxial thin films on Si wafers using chemical solution deposition" *Thin Solid Films* **603** (2016) pp.97-102
8. **T. Ohno**, T. Masuda, S. Ochibe, S. Hirai, H. Suzuki, T. Arai, N. Sakamoto, N. Wakiya and T. Matsuda, "Effect of the reduction condition on the catalytic activity for steam reforming process using Ni doped LaAlO<sub>3</sub> nano-particles" *Adv. Powder Technol.*, **27** (2016) pp.179-183
9. S. Hirai, S. Yagi, A. Seno, M. Fujioka, **T. Ohno** and T. Matsuda "Enhancement of the oxygen evolution reaction in Mn<sup>3+</sup> based electrocatalysts: correlation between Jahn-Teller distortion and catalytic activity" *RSC Advances* **6**(2016) pp.2019-2023
10. **T. Ohno**, H. Yanagida, K. Maekawa, T. Arai, N. Sakamoto, N. Wakiya, H. Suzuki, S. Satoh and T. Matsuda "Stress engineering for the design of morphotropic phase boundary in piezoelectric material" *Thin Solid Films* **585**(2015) pp.91-94
11. T. Arai, **T. Ohno**, T. Matsuda, N. Sakamoto, N. Wakiya and H. Suzuki "Effects of synthesis conditions on electrical properties of chemical solution deposition-derived Pb(Mg<sub>1/3</sub>Nb<sub>2/3</sub>)O<sub>3</sub>-PbTiO<sub>3</sub> thin films" *Thin Solid Films* **585**(2015) pp.86-90
12. T. Masuda, N. Sakamoto, N. Wakiya, H. Suzuki, T. Matsuda and **T. Ohno** "Catalytic activities of Alkoxide-derived LaAlO<sub>3</sub> for ethanol steam reforming processing " *Trans. Mat. Res. Soc. Jpn.*, **40**[1](2015) pp.51-54
13. **T. Ohno**, Y. Kamai, Y. Oda, N. Sakamoto, T. Matsuda, N. Wakiya and H. Suzuki "Strain Engineering Effects on Electrical Properties of Lead-free Piezoelectric Thin Film on Si Wafers" *Acta Chim. Slov.* **61** (2014) 453-456.
14. **T. Ohno**, H. Yanagida, H. Suzuki and T. Matsuda "Preparation of lanthanum strontium cobalt oxide electrode on a Si wafer for stress engineering of ferroelectric thin films" *J. Ceram. Soc. Jpn.*, **122** (2014) 63-66
15. H. Sakagami, **T. Ohno**, H. Itoh, Z. Li, N. Takahashi and T. Matsuda "Physical and catalytic properties of Pt/MoO<sub>3</sub> reduced at different H<sub>2</sub> flow rates" *Appl. Catal. A: general*, **470** (2014) 8-14
16. N. Sakamoto, K. Ozawa, K. Murakoshi, **T. Ohno**, T. Kiguchi, T. Matsuda, T. Konno, N. Wakiya and H. Suzuki "TEM study for self oriented LaNiO<sub>3</sub> film along [100]" *Key Eng. Mater.*, **582** (2014) 185-188

17. T. Arai, Y. Goto, H. Yanagida, N. Sakamoto, **T. Ohno**, T. Matsuda, N. Wakiya and H. Suzuki "Effects of Oxide Seeding Layers on Electrical Properties of Chemical Solution Deposition-Derived  $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3\text{-PbTiO}_3$  Relaxor Thin Films" *Jpn. J. Appl. Phys.*, **52** (2013) 09KA07
18. N. Sakamoto, K. Ozawa, **T. Ohno**, T. Kiguchi, T. Matsuda, T. Konno, N. Wakiya and H. Suzuki "Micro/Crystal structure analysis of CSD derived porous  $\text{LaNiO}_3$  electrode films" *J. Ceram. Soc. Jpn.*, **121** (2013) 619-622
19. **T. Ohno**, T. Sugiura, S. Watanabe, H. Suzuki and T. Matsuda "Preparation of barium titanate hollow particle by two-step chemical solution deposition" *J. Ceram. Soc. Jpn.*, **121** (2013) 80-83
20. K. Murakoshi, K. Fukamachi, N. Sakamoto, **T. Ohno**, T. Kiguchi, T. Matsuda, T. Konno, N. Wakiya and H. Suzuki "Stress state analysis of stress engineered  $\text{BaTiO}_3$  thin film by  $\text{LaNiO}_3$  bottom electrode" *J. Ceram. Soc. Jpn.*, **121** (2013) 273-277
21. **T. Ohno**, M. Ishiduka, T. Arai, H. Yanagida, T. Matsuda, N. Sakamoto, N. Wakiya and H. Suzuki "Strain-Induced Electrical Properties of Lead Zirconate Titanate Thin Films on a Si wafer with Controlled Oxide Electrode Structure" *Jpn. J. Appl. Phys.*, **51** (2012) 09LA13
22. **T. Ohno**, K. Numakura, H. Suzuki and T. Matsuda "Preparation of the BTO- $\text{SiO}_2$  hybrid particles for the catalyst of methane steam reforming process" *Mater. Chem. Phys.*, **134** (2012) 514-517
23. K. Ozawa, M. Ishizuka, N. Sakamoto, **T. Ohno**, T. Kiguchi, T. Matsuda, T. Konno, N. Wakiya and H. Suzuki "TEM microstructure analysis for Compressively Stressed PZT Thin Films by CSD derived LNO bottom electrodes" *Functional Mater. Lett.* **5(2)** (2012) 1260016
24. **T. Ohno**, Y. Gotoh, N. Sakamoto, N. Wakiya, T. Kiguchi, T. Matsuda and H. Suzuki "Low temperature processing of alkoxide derived PMN thin films" *Mater. Sci. Eng.*, **30** (2012) 012002
25. K. Fukamachi, N. Sakamoto, **T. Ohno**, D. S. Fu, N. Wakiya, T. Matsuda and H. Suzuki "Effect of Stress Engineering on the Electrical Properties of  $\text{BaTiO}_3$  Thin Film" *Jpn. J. Appl. Phys.*, **50** (2011) 09NA03
26. S. Tagawa, **T. Ohno**, H. Itoh, H. Suzuki and T. Matsuda "The agglomeration control of alkoxide derived  $\text{TiO}_2\text{-SiO}_2$  hybrid nano-particle" *Trans. Mater. Res. Soc. Jpn.*, **36[2]** (2011) 237-240
27. **T. Ohno**, K. Numakura, H. Itoh, H. Suzuki, and T. Matsuda "Control of the coating layer thickness of  $\text{TiO}_2\text{-SiO}_2$  core-shell hybrid particles by liquid phase deposition" *Adv. Powder Technol.* **22** (2011) 390-395
28. **T. Ohno**, Z. Li, N. Sakai, H. Sakagami, N. Takahashi, T. Matsuda "Heptane isomerization over molybdenum oxides obtained by  $\text{H}_2$  reduction of  $\text{H}_x\text{MoO}_3$  with different hydrogen contents" *Applied Catal. A* **389** (2010) 52-59
29. **T. Ohno**, K. Uchida, N. Sakamoto, D. S. Fu, N. Wakiya, T. Matsuda, and H. Suzuki "Preparation and Characterization of Alkoxide Derived Lead-Free Piezoelectric Barium Zirconate Titanate Thin Films with Different Compositions" *Jpn. J. Appl. Phys.* **49** (2010) 09MA11
30. **T. Ohno**, T. Matsuda, T. Nukina, N. Sakamoto, N. Wakiya, S. Tokuda and H. Suzuki, "Effect of the electrode structure on the electrical properties of alkoxide derived ferroelectric thin film" *Mater Lett.* **64** (2010) 1742-1744

31. **T. Ohno**, B. Malič, H. Fukazawa, N. Wakiya, H. Suzuki, T. Matsuda and M. Kosec “Stress engineering of the alkoxide derived ferroelectric thin film on Si wafer” *J. Ceram Soc. Jpn.* **117** (2009) 1089-1094
32. **T. Ohno**, K. Numakura, H. Itoh, H. Suzuki and T. Matsuda “Control of the quantum size effect of TiO<sub>2</sub>-SiO<sub>2</sub> hybrid particles” *Mater. Lett.* **63** (2009) 1737-1739
33. T. Matsuda, **T. Ohno**, Y. Hiramatsu, Z. Li, H. Sakagami and N. Takahashi “Effects of the amount of MoO<sub>3</sub> on the catalytic properties of H<sub>2</sub>-reduced Pt/MoO<sub>3</sub>-SiO<sub>2</sub> for heptane isomerization” *Appl. Catal. A: General* **362** (2009) 40-46
34. **T. Ohno**, B. Malič, M. Kosec, N. Wakiya, H. Suzuki and T. Matsuda “Effect of Back-Etched on Electrical Properties of (111) - oriented PZT Thin Films” *Trans. Mater. Res. Soc. Jpn.*, **34** (2009) 113-116
35. **T. Ohno**, S. Tagawa, H. Itoh, H. Suzuki and T. Matsuda, “Size effect of TiO<sub>2</sub>-SiO<sub>2</sub> nano-hybrid particle” *Mater. Chem. Phys.*, **113** (2009) 119-123
36. **T. Ohno**, B. Malič, M. Kosec, T. Matsuda, N. Wakiya and H. Suzuki, “Effect of Back-Etched on Electrical Properties of (001)&(100) oriented PZT(30/70) Thin Films” *Ferroelectrics* **370** (2008) 119-125
37. **T. Ohno**, B. Malič, H. Fukazawa, N. Wakiya, H. Suzuki, T. Matsuda and M. Kosec, “Origin of Compressive Residual Stress in Alkoxide derived PTO thin film on Si wafer” *Jpn. J. Appl. Phys.*, **47** (2008) pp.7514-7518
38. T. Matsuda, **T. Ohno**, T. Sakagami and N. Takahashi, “Reduction of MoO<sub>3</sub> to porous molybdenum oxides and its catalytic properties for alkane isomerization” *J. Jpn. Petroleum Institute* **50(5)** (2007) pp.229-239
39. Y. Sakamaki, H. Fukazawa, N. Wakiya, H. Suzuki, K. Shinozaki, **T. Ohno** and M. Kosec, “Effect of Film Thickness on Electrical Properties of Chemical Solution Deposition Derived PZT/LNO/Si” *Jpn. J. Appl. Phys.*, **46**, (2007) pp.6925-6928
40. **T. Ohno**, D. Suzuki, K. Ishikawa and H. Suzuki, “Size effect for lead zirconate titanate nano-particles with PZT(40/60) composition” *Adv. Powder Technol.* **18**, (2007) pp. 579-589
41. M. Maruyama, M. Iwashita, N. Wakiya, H. Suzuki **T. Ohno**, and T. Matsuda, “Preparation of three -dimensional photonic crystal using self-assembled silica colloid” *Trans. Mater. Res. Soc. Jpn.*, **32[1]**, (2007) pp.135-138
42. **T. Ohno**, T. Matsuda, N. Wakiya and H. Suzuki, “Preparation of the TiO<sub>2</sub>-SiO<sub>2</sub> nano-hybrid particles by Nano-coating of TiO<sub>2</sub> layer on Monodispersed SiO<sub>2</sub> nano-particles” *Trans. Mater. Res. Soc. Jpn.*, **32[1]**, (2007) pp.155-158
43. **T. Ohno**, M. Fujimoto, T. Ota, M. Fuji, M. Takahashi and H. Suzuki, “Effect of seeding layer on orientation control of potassium niobate thin film by CSD” *J. Euro. Ceram. Soc.*, **26**, (2006) pp.2143-2146
44. H. Koyama, M. Fujimoto, **T. Ohno**, H. Suzuki and J. Tanaka “Effect of Thermal Annealing on

- Formation of Micro Porous Titanium Oxide by the Sol-Gel Method” J. Am. Ceram. Soc., **89(11)**, (2006), pp.3536-3540
45. **T. Ohno**, D. Suzuki, M. Horiuchi, K. Ishikawa, T. Matsuda, H. Suzuki “Size Effect for Ba(Zr<sub>x</sub>Ti<sub>1-x</sub>)O<sub>3</sub> (x = 0.05) Nano-Particles” *Ferroelectrics*, **337**, (2006) pp.25-32
  46. **T. Ohno**, T. Matsuda, K. Isahikawa and H. Suzuki "Thickness Dependence of Residual Stress in Alkoxide-Derived PZT30 Thin Film by Chemical Solution Deposition" *Jpn. J. Appl. Phys.*, **45**, (2006) pp.7265-7269
  47. H.Sakagami, **T. Ohno**, N.Takahashi and T.Matsuda, “The effects of Na loading on catalytic properties of H<sub>2</sub>-reduced Pt/MoO<sub>3</sub> for heptane isomerization” *J. Catal.*, **241** (2006) pp.296-303
  48. **T. Ohno**, T.Matsuda, H.Suzuki and M.Fujimoto, “Effect of monodispersed silica nanoparticles on DNA separation by micro-capillary electrophoresis” *Adv. Powder Technol.* **17(2)** (2006) pp.167-179
  49. H.Sakagami, Y.Asano, **T. Ohno**, N.Takahashi, H.Itoh and T.Matsuda, “Reduction of H<sub>x</sub>MoO<sub>3</sub> with different amounts of hydrogen to high surface area molybdenum oxides” *Appl. Catal. A* **297** (2006) pp.189-197
  50. H.Suzuki, Y.Miwa, **T. Ohno** and M. Fujimoto, “Chemical solution deposition of PZT/oxide electrode thin film capacitors with preferred orientation of Si substrate” *Key Eng. Mater.* **301** (2006) pp.269-272
  51. **T. Ohno**, M.Fujimoto and H.Suzuki, “Preparation and characterization of PZT thin films on ITO/glass substrate by CSD” *Key Eng. Mater.* **301** (2006) pp.41-44
  52. M. Fujimoto, **T. Ohno**, H. Suzuki, H. Koyama and J. Tanaka, “Nanostructure of TiO<sub>2</sub> Nano-Coated SiO<sub>2</sub> Particles” *J. Am. Ceram. Soc.* **88 (11)** (2005) pp. 3264-3266
  53. **T. Ohno**, D.Suzuki, T.Ida and H.Suzuki, “Size Effect for Barium Titanate Nano-particles” *Kona-Shi No.22* (2004) pp.195-201
  54. **T. Ohno**, H.Suzuki, H.Masui, K.Ishikawa and M.Fujimoto “Effect of Back-Etching on Residual stress in Lead Titanate Thin Film on Si wafer deposited by Chemical Solution Deposition” *Jpn. J. Appl. Phys.* **43** (2004) pp.6549-6553
  55. H.Suzuki, D.Suzuki, **T. Ohno**, T.Ota, M.Fuji and M.Takahashi, “Effect of A-Site Substitution on Electrical Properties of Pb(Zr<sub>x</sub>Ti<sub>1-x</sub>)O<sub>3</sub> Thin Films with Chemical Solution Deposition” *Trans. Mater. Res. Soc. Jpn.* **29[4]** (2004) pp.1155-1158
  56. **T. Ohno**, H.Suzuki, D.S.Fu, M.Takahashi, T.Ota and K.Ishikawa, “Effect of Rapid Thermal Annealing on Residual Stress in Lead Titanate Thin Film by Chemical Solution Deposition” *J. Ceram. International* **30[7]** (2004) pp.1487-1491
  57. **T. Ohno**, D.S.Fu, H.Suzuki, H.Miyazaki and K.Ishikawa, “Residual Stress in Lead Titanate Thin Film on Different Substrates” *J. Euro. Ceram. Soc.* **24** (2004) pp.1669-1672
  58. H. Miyazaki, T. Goto, Y. Miwa **T. Ohno**, H. Suzuki, T. Ota and M. Takahashi, “Preparation and Evaluation of LaNiO<sub>3</sub> thin film Electrode with Chemical Solution Deposition” *J. Euro. Ceram.*

Soc. **24** (2004) pp.1005-1008

59. **T. Ohno**, T.Mori, H.Suzuki, D.S.Fu, W.Wunderlich, M.Takahashi and K.Ishikawa, "Size Effect for Lead Zirconate Titanate Nanopowders with  $\text{Pb}(\text{Zr}_{0.3}\text{Ti}_{0.7})\text{O}_3$  Composition" Jpn. J. Appl. Phys. **41** (2002) pp.6985-6988
60. **T. Ohno**, H.Suzuki, J.Takahashi, S.Shimada, T.Ota, M.Takahashi and Y.Hikichi, "Effect of Excess Lead on Dielectric and Ferroelectric properties of Alkoxide-Derived Lead Titanate Thin Films" Ferroelectrics **271** (2002) pp.309-314
61. H.Suzuki, **T. Ohno**, H.Miyazaki, D.S.Fu, K.Ishikawa and K.Kodaira, "Orientation Control of  $\text{KNbO}_3$  Thin Film on Silicon Wafer with Chemical Solution Deposition" Key Eng. Mater. **206-213** (2002) pp.1493-1496
62. **T. Ohno**, H.Suzuki, J.Takahashi, S.Shimada, T.Ota, M.Takahashi and Y.Hikichi, "Microstructure Control of Silica Thin Film by Spin Coating Method" Key Eng. Mater. **206-213** (2002) pp.2185-2188
63. D.S.Fu, **T. Ohno**, T.Ogawa, H.Suzuki, K.Ishikawa and T.Hayashi, "Raman Studies of the Effects of Nb Dopant on the Ferroelectric Properties in Lead Titanate Thin Film" Jpn. J. Appl. Phys. **39** (2000) pp.5687-5690
64. **T. Ohno**, M.Kunieda, H.Suzuki and T.Hayashi, "Low-Temperature Processing of  $\text{Pb}(\text{Zr}_{0.53}\text{Ti}_{0.47})\text{O}_3$  Thin Films by Sol-Gel Casting" Jpn. J. Appl. Phys. **39** (2000) pp.5429-5433

## AWARDS

1. Takayanagi Encourage Award (2014)  
"Stress Engineering of the Piezoelectric Thin Films on a Si Wafer"
2. IUMRS-ICA2008 Award for Encouragement of Research in Materials Science (2008)  
"Effect of Back-Etched on Electrical Properties of (001)&(100) oriented PZT(30/70) Thin Films"
3. 14<sup>th</sup> Young Researcher's Award of the Society of Powder Technology, Japan (2007)  
"Estimation of the Intrinsic Dielectric Constant for Ferroelectric nano-particles by Raman Analysis"
4. 25<sup>th</sup> Best Paper Award of Journal of the Society of Powder Technology, Japan (2007)  
"Size Effect for  $\text{BaTiO}_3$  nano-particles"

## INVITED LECTURE in the INTERNATIONAL CONFERENCE

1. Stress Engineering for Piezoelectric Thin Film on a Si wafer: **T. Ohno**, 17th Takayanagi Kenjiro Memorial Symposium (2015 Nov. 17-18, Hamamatsu, Japan) Invite
2. Preparation of Novel Catalyst for Steam Reforming Process by Chemical Solution Deposition: **T. Ohno**, T. Matsuda and H. Suzuki, IUMRS-ICAM2015 (2015 Oct. 26-29, Jeju-do, Korea) Invite

3. Preparation of Novel Catalyst for Steam Reforming Process by Chemical Solution Deposition: **T. Ohno**, T. Matsuda and H. Suzuki, The 6<sup>th</sup> Asian Particle Technology Symposium (APT2015) (2015 Sep. 15-18, Seoul, Korea) Invite
4. Preparation of the Sol-gel derived Metal Oxide Electrode: **T. Ohno**, T. Matsuda, N. Sakamoto, N. Wakiya and H. Suzuki, 31th Korea-Japan Ceramics Seminar (2014 Nov. 26-29, Changwon, Korea) Invite
5. Low Temperature Processing of the Alkoxide Derived PMN Thin Film; **T. Ohno**, Y. Gotoh, N. Sakamoto, N. Wakiya, T. Matsuda, and H. Suzuki, European Materials Research Society 2011 (E-MRS 2011) Fall Meeting (19-23 Sep., 2011 Warsaw, Poland) Invite
6. Quantum Size Effect of Core-shell type Hybrid Nano-particles: **T. Ohno**, T. Matsuda and H. Suzuki, The 4<sup>th</sup> Asian Particle Technology Symposium (APT2009) (14-16 Sep., 2009, New Delhi, India) Invite