

Division: Energy Analysis

Year: 2015

No.	Description
20	Yayama, T., Ishimoto, T. and Koyama, M. (2016) Theoretical investigation of hydrogen absorption properties of rhodium-silver alloys, <i>Journal of Alloys and Compounds</i> , 662, 404-408. DOI: 10.1016/j.jallcom.2015.12.008
19	Kikuchi, Y., Kanematsu, Y., Sato, R. and Nakagaki, T. (2016) Distributed Cogeneration of Power and Heat within an Energy Management Strategy for Mitigating Fossil Fuel Consumption, <i>Journal of Industrial Ecology</i> , 20 (2), 289-303. DOI: 10.1111/jiec.12374
18	Liu, S.S., Takayama, A., Matsumura, S. and Koyama, M. (2016) Image contrast enhancement of Ni/YSZ anode during the slice-and-view process in FIB-SEM, <i>Journal of Microscopy</i> , 261 (3), 326-332. DOI: 10.1111/jmi.12355
17	Liu, S., Ishimoto, T., Monder, D.S. and Koyama, M. (2015) First-Principles Study of Oxygen Transfer and Hydrogen Oxidation Processes at the Ni-YSZ-Gas Triple Phase Boundaries in a Solid Oxide Fuel Cell Anode, <i>Journal of Physical Chemistry C</i> , 119 (49), 27603-27608. DOI: 10.1021/acs.jpcc.5b10878
16	Chen, K., Liu, S.-S., Ai, N., Koyama, M. and Jiang, S.P. (2015) Why solid oxide cells can be reversibly operated in solid oxide electrolysis cell and fuel cell modes?, <i>Physical Chemistry Chemical Physics</i> , 17 (46), 31308-31308. DOI: 10.1039/c5cp05065k
15	Lin, C.-t., Ishimoto, T. and Koyama, M. (2015) Theoretical Analysis of Cation Diffusion Pathway in SOFC Electrolyte, <i>Journal of Computer Chemistry, Japan</i> , 14 (3), 92-93. DOI: 10.2477/jccj.2015-0043
14	Liu, X., Mo, K., Miao, Y., Lan, K.-C., Zhang, G., Chen, W.-Y., Tomchik, C., Seibert, R., Terry, J. and Stubbins, J.F. (2016) Investigation of thermal aging effects on the tensile properties of Alloy 617 by in-situ synchrotron wide-angle X-ray scattering, <i>Materials Science and Engineering A</i> , 651, 55-62. DOI: 10.1016/j.msea.2015.10.098
13	Kikuchi, Y., Kanematsu, Y., Ugo, M., Hamada, Y. and Okubo, T. (2016) Industrial Symbiosis Centered on a Regional Cogeneration Power Plant Utilizing Available Local Resources: A Case Study of Tanegashima, <i>Journal of Industrial Ecology</i> , 20 (2), 276-288. DOI: 10.1111/jiec.12347
12	Ishimoto, T., Ito, Y., Tada, T., Oike, R., Nakamura, T., Amezawa, K., Koyama, M. (2016) Theoretical study on temperature effect of electronic structure and spin state in LaCoO ₃ by using density functional theory, <i>Solid State Ionics</i> , 285, 195-201. DOI: 10.1016/j.ssi.2015.08.017
11	Ishimoto, T., Inadomi, Y., honda, H. and Koyama, M. (2015) Parallel Performance Analysis for Electronic Structure Calculation of Metal Nanoparticles, <i>Journal of Computer Chemistry, Japan</i> , 14 (3), 52-53. DOI: 10.2477/jccj.2015-0040
10	Yayama, T., Ishimoto, T. and Koyama, M. (2015) Effect of alloying elements on hydrogen absorption properties of palladium-based solid solution alloys, <i>Journal of Alloys and Compounds</i> , 653, 444-452. DOI: 10.1016/j.jallcom.2015.09.038
9	Liu, S., Ishimoto, T. and Koyama, M. (2015) First-principles calculation of OH-/OH adsorption on gold nanoparticles, <i>International Journal of Quantum Chemistry</i> , 115 (22), 1597-1605. DOI:

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8	Koyama, M., Yayama, T., Ishimoto. T., Yang, A., Yoshikawa, H., Kusada, K., Kobayashi, H. and Kitagawa, H. (2015) Creation of New Functionality by Inter-element Fusion from the Electronic Viewpoints, <i>Inspection Engineering</i> , 20 (8), 16-20.
7	Chen, K., Liu, S.-S., Guagliardo, P., Kilburn, M.R., Koyama, M. and Jiang, S.P. (2015) A fundamental study of boron deposition and poisoning of $\text{La}_{0.8}\text{Sr}_{0.2}\text{MnO}_3$ cathode of solid oxide fuel cells under accelerated conditions, <i>Journal of the Electrochemical Society</i> , 162 (12), F1282-F1291. DOI: 10.1149/2.0141512jes
6	Shimizu, T., Kikuchi, Y., Sugiyama, H. and Hirao, M. (2015) Design method for a local energy cooperative network using distributed energy technologies, <i>Applied Energy</i> , 154, 781-793. DOI: 10.1016/j.apenergy.2015.05.032
5	Li, X., Paster, M. and Stubbins, J. (2015) The dynamics of electricity grid operation with increasing renewables and the path toward maximum renewable deployment, <i>Renewable and Sustainable Energy Reviews</i> , 47, 1007-1015. DOI: 10.1016/j.rser.2015.03.039
4	Liu, S.-S., Jiao, Z., Shikazono, N., Matsumura, S. and Koyama, M. (2015) Observation of the Ni/YSZ interface in a conventional SOFC, <i>Journal of the Electrochemical Society</i> , 162 (7), F750-F754. DOI: 10.1149/2.0591507jes
3	Bassett, K.P., Mohseni, P.K. and Li, X. (2015) Evolution of GaAs nanowire geometry in selective area epitaxy, <i>Applied Physics Letters</i> , 106 (13), 133102-. DOI: 10.1063/1.4916347
2	Taufiq, B.N., Kikuchi, Y., Ishimoto, T., Honda, K. and Koyama, M. (2015) Conceptual design of light integrated gasification fuel cell based on thermodynamic process simulation, <i>Applied Energy</i> , 147, 486-499. DOI: 10.1016/j.apenergy.2015.03.012
1	Liu, S., Ishimoto, T. and Koyama, M. (2015) First-principles study of oxygen coverage effect on hydrogen oxidation on $\text{Ni}(1\ 1\ 1)$ surface, <i>Applied Surface Science</i> , 333, 86-91. DOI: 10.1016/j.apsusc.2015.01.238