

Poster Program (14 Nov. 14:00~15:30 Odd number, 15:45~17:15 Even number, Room P)

Prog. No.	Title Author(s)
P01	<b>Effect of Temperature on Lithium Storage Mechanisms in Niobium Oxides Using Ionic Liquid Electrolyte</b> Shaoning Zhang <sup>1</sup> , Jinkwang Hwang <sup>1</sup> , Kazuhiko Matsumoto <sup>1</sup> , Rika Hagiwara <sup>1</sup> (1. Graduate School of Energy Science, Kyoto University)
P02	<b>Effect of the physical state of sodium metal anode on the performance of a sodium secondary battery utilizing <math>\beta</math>"-alumina and ionic liquid electrolytes</b> Jie Qiu <sup>1</sup> , Di Wang <sup>1</sup> , Jinkwang Hwang <sup>1</sup> , Kazuhiko Matsumoto <sup>1</sup> , Rika Hagiwara <sup>1</sup> (1. Kyoto University)
P03	<b>Comprehending the corrosion of aluminum current collector in ionic liquid electrolytes for sodium-ion batteries</b> Huazhen Liu <sup>1</sup> , Jinkwang Hwang <sup>1</sup> , Kazuhiko Matsumoto <sup>1</sup> , Rika Hagiwara <sup>1</sup> (1. Kyoto University)
P04	<b><i>In-situ</i> Raman spectroscopic analysis of the electrode/electrolyte interface in the sodium secondary battery utilizing FSA-based ionic liquids</b> Yoshifumi Ishio <sup>1</sup> , Takayuki Yamamoto <sup>1</sup> , Toshiyuki Nohira <sup>1</sup> (1. Kyoto Univ.)
P05	<b>Electrolytes and temperature effects on Na metal deposition/dissolution efficiency for low N/P ratio sodium metal batteries</b> Shengan Wu <sup>1</sup> , Tomoki Wada <sup>1</sup> , Haruka Shionoya <sup>1</sup> , Jinkwang Hwang <sup>1</sup> , Kazuhiko Matsumoto <sup>1</sup> , Rika Hagiwara <sup>1</sup> (1. Kyoto University)
P06	<b>Charge-Discharge Behavior of Graphite Positive Electrode in FSA-Based Ionic Liquid Electrolytes</b> Riku Oe <sup>1</sup> , Takayuki Yamamoto <sup>1</sup> , Toshiyuki Nohira <sup>1</sup> (1. Kyoto Univ.)
P07	<b>Preparation of Low Melting Point Lithium-based Binary Salts and Their Physical Properties</b> Rino Masui <sup>1</sup> , Yoshiki Yokoyama <sup>1</sup> , Reita Furui <sup>1</sup> , Keitaro Takahashi <sup>1</sup> , Kikuko Hayamizu <sup>1</sup> , Shiro Seki <sup>1</sup> (1. Kogakuin University)
P08	<b>New-type Low-melting point ionic liquid Na[<math>((\text{FSO}_2)_2\text{N})_x((\text{CF}_3\text{SO}_2)(\text{FSO}_2)\text{N})_y</math>]</b> Yoshiki Yokoyama <sup>1</sup> , Rino Masui <sup>1</sup> , Reita Furui <sup>1</sup> , Keitaro Takahashi <sup>1</sup> , Koji Hiraoka <sup>1</sup> , Shiro Seki <sup>1</sup> (1. Kogakuin University)
P09	<b>Charge-discharge behavior of <math>\text{K}_{0.45}\text{MnO}_2</math> positive electrode for K-ion battery using an FSA-based ionic liquid electrolyte</b> Kai Jiao <sup>1</sup> , Takayuki Yamamoto <sup>1</sup> , Toshiyuki Nohira <sup>1</sup> (1. Kyoto University)
P10	<b>Organic Ionic Crystals Consisting of Quaternary Phosphonium Cations and Cyclic Perfluorosulfonylamide Anion</b> Naw Mie Mie Aung <sup>1</sup> , Makoto Moriya <sup>1</sup> (1. Shizuoka Univ.)
P11	<b>Preparation of Solid Electrolytes Containing Highly Concentrated Electrolytes and Effects of Solidifying on Physicochemical Properties</b> Rintaro Mogi <sup>1</sup> , Reita Furui <sup>1</sup> , Keitaro Takahashi <sup>1</sup> , Kikuko Hayamizu <sup>1</sup> , Shiro Seki <sup>1</sup> (1. Kogakuin University)
P12	<b><i>In-situ</i> AFM Observation of the Formation of Solid Layers at the Interface between Superconcentrated Electrolyte and Electrode</b> Akito Kobayashi <sup>1,2</sup> , Taketoshi Minato <sup>2</sup> , Katsuyoshi Ikeda <sup>1</sup> , Kenta Motobayashi <sup>1</sup> (1. Nagoya Institute of Technology, 2. Institute for Molecular Science, National Institutes of Natural Sciences)
P13	<b>Evaluation of electrochemical characteristic of Li-Mg alloy for suppressing the formation of lithium dendrite in lithium metal electrodes</b> Chaeyeon Yeom <sup>1</sup> , Wooseok Choi <sup>1</sup> , Jonghyeon Lee <sup>1</sup> (1. Chungnam National Univ.)
P14	<b>Improvement of Anode Charge/Discharge Performance through Ag and Li Alloying</b> Seungho Lee <sup>1</sup> , Wooseok Choi <sup>1</sup> , Jonghyeon Lee <sup>1,2</sup> (1. Department of Advanced Materials Science and Engineering, Chungnam National University, 2. Rapidly Solidified Materials Research Center, Chungnam National University)
P15	<b>Tight-binding modelling of deep eutectic solvent based electrolytes</b> Mirna Alhanash <sup>1</sup> , Patrik Johansson <sup>1</sup> (1. Chalmers University of Technology)
P16	<b>Electrochemical Characteristics of Lithium-Air Secondary Battery Using Amide-Based Ionic Liquids</b> Koichi Ui <sup>1</sup> , Sota Nakamura <sup>1</sup> , Kentaro Shishido <sup>1</sup> , Toshinari Kamimura <sup>1</sup> , Tatsuya Takeguchi <sup>1</sup> (1. Iwate University)
P17	<b>Chlorine-free preparation of sodium and potassium</b> Lei Guo <sup>1</sup> , Huayi Yin <sup>1</sup> , Shuaibo Gao <sup>1</sup> , Kaifa Du <sup>1</sup> , Dihua Wang <sup>1</sup> (1. Wuhan University)
P18	<b>Effect of Oxygen Concentration in intermediate Ti feedstock on anodic dissolution rate for high purity metal production</b> KyuSeok Lim <sup>1</sup> , Hayk Nersisyan <sup>1</sup> , JongHyeon Lee <sup>1</sup> (1. Chungnam National University)
P19	<b>Synergistic promotion of zinc sulfide in the electrolytic extraction of molybdenum</b> Huakui Zhang <sup>1</sup> , Zepeng Lv <sup>1,2</sup> , Shaolong Li <sup>1,2</sup> , Jianxun Song <sup>1,2</sup> (1. School of Material Science and Engineering, Zhengzhou University, 2. Zhongyuan Critical Metals Laboratory, Zhengzhou University)
P20	<b>Molten Salt Based Eco-Friendly Electroreduction of Magnetite with Inert Anode</b> Wooseok Choi <sup>1</sup> , Wanbae Kim <sup>1</sup> , Junmo Jung <sup>1</sup> , Jonghyeon Lee <sup>1</sup> (1. Chungnam National University, Republic of Korea)
P21	<b>Exploration and Evaluation of Inert Anode Materials for Carbon-Neutral CaO Electroreduction</b> WanBae Kim <sup>1</sup> , Hayk Hacob Nersisyan <sup>2</sup> , JongHyeon Lee <sup>1,2</sup> (1. Department of Materials Science and Engineering, Chungnam National University, 2. Rapidly Solidified Materials Research Center, Chungnam National University)

P22	<b>Study on eco-friendly electroreduction method using Iron cathode for producing of Nd-Fe alloy from Nd<sub>2</sub>O<sub>3</sub></b> Donghee LEE <sup>1</sup> , Wanbae Kim <sup>1</sup> , Wooseok Choi <sup>1</sup> , Hayk Hacob Nersisyan <sup>2</sup> , Jong-Hyeon Lee <sup>1,2</sup> (1. Chungnam university, 2. Rapidly Solidified Material Research Center)
P23	<b>Production of Titanium Foil via Ce-Ti alloy coexisting with LiF-based molten salt</b> Takanori Osana <sup>1</sup> , Yamato Furukawa <sup>1</sup> , Hidehiro Sekimoto <sup>1</sup> (1. Iwate University)
P24	<b>Influence of various calcium silicate on Si electrodeposition in molten CaCl<sub>2</sub> at 1100~1300°C</b> Junxuan Zhang <sup>1</sup> , Taiki Morishige <sup>2</sup> , Toshihide Takenaka <sup>2</sup> (1. Kansai University, 2. Kansai University)
P25	<b>Influence of Nb additon and electrolytic potential on anode property of MoSi<sub>2</sub> in MgCl<sub>2</sub>-NaCl-CaCl<sub>2</sub></b> Riku Suehiro <sup>1</sup> , Shunsuke Irie <sup>1</sup> , Taiki Morishige <sup>2</sup> , Toshihide Takenaka <sup>2</sup> , Toshiharu Matsumoto <sup>3</sup> , Katsushi Nagayasu <sup>3</sup> , Yasuyuki Yoda <sup>3</sup> (1. Kansai University, 2. Kansai University, 3. Tobata seisakusyo)
P26	<b>Reaction of CaTiO<sub>3</sub> with Al metal in molten CaCl<sub>2</sub></b> Hisayoshi Kaneda <sup>1</sup> , Toshihide Takenaka <sup>2</sup> , Taiki Morishige <sup>2</sup> (1. Kansai University Graduate School, 2. Kansai University)
P27	<b>Anhydrous MgCl<sub>2</sub> production by dehydration of MgCl<sub>2</sub>·6H<sub>2</sub>O and its use as a source of Mg electrolysis</b> Tatsuya Sasaki <sup>1</sup> , Masaki Yoshimura <sup>2</sup> , Taiki Morishige <sup>2</sup> , Toshihide Takenaka <sup>2</sup> , Toshiharu Matsumoto <sup>3</sup> , Katsushi Nagayasu <sup>3</sup> , Yasuyuki Yoda <sup>3</sup> (1. Kansai University Graduate School, 2. Kansai University, 3. Tobata seisakusho Co., Ltd.)
P28	<b>Resources recovery from electrode materials in spent LiFePO<sub>4</sub> batteries in molten salt</b> Yao Yu <sup>1</sup> , Xiao Yang <sup>1</sup> (1. Westlake University)
P29	<b>Electrodeposition of Crystalline Si Film Using Liquid Zn Electrode in Molten KF-KCl-K<sub>2</sub>SiF<sub>6</sub></b> Wataru Moteki <sup>1</sup> , Yutaro Norikawa <sup>1</sup> , Toshiyuki Nohira <sup>1</sup> (1. Kyoto Univ.)
P30	<b>Preparation of PN Junction by Two-step Si Electrodeposition in Molten KF-KCl</b> Zhengyang Hou <sup>1</sup> , Wataru Moteki <sup>1</sup> , Yutaro Norikawa <sup>1</sup> , Toshiyuki Nohira <sup>1</sup> (1. Kyoto Univ.)
P31	<b>Composition dependence of Al-Au alloys on electrolysis potential in AlCl<sub>3</sub>-NaCl-KCl-AuCl molten salt</b> Masaya Sugizaki <sup>1</sup> , Hisayoshi Matsushima <sup>1</sup> , Mikito Ueda <sup>1</sup> , Midori Kawamura <sup>2</sup> (1. Hokkaido University, 2. Kitami Institute of Technology)
P32	<b>Effect of O<sup>2-</sup> Ion Concentration on the Crystal Structure of Electrodeposited W Films in Molten CsF-CsCl</b> Haochen Wang <sup>1</sup> , Yutaro Norikawa <sup>1</sup> , Toshiyuki Nohira <sup>1</sup> (1. Kyoto Univ.)
P33	<b>Electrodeposition of boron in molten CaCl<sub>2</sub></b> Jiasheng Yuan <sup>1</sup> , Xiao Yang <sup>1</sup> (1. Westlake University)
P34	<b>Potential Dependence of Carbon Electrodeposition in Molten LiCl-KCl-K<sub>2</sub>CO<sub>3</sub></b> Yusuke Sakai <sup>1</sup> , Yutaro Norikawa <sup>1</sup> , Toshiyuki Nohira <sup>1</sup> (1. Kyoto University)
P35	<b>Formation of Solid Carbon by Electrochemical Reduction of CO<sub>3</sub><sup>2-</sup> in Molten Li<sub>2</sub>CO<sub>3</sub>-Na<sub>2</sub>CO<sub>3</sub></b> Kotaro Takase <sup>1</sup> , Seiya Tanaka <sup>1</sup> , Yuta Suzuki <sup>1</sup> , Takuya Goto <sup>1</sup> (1. Doshisha University)
P36	<b>Advance on molten salt oxidation for waste resin treatment</b> Yongde Yan <sup>1</sup> , Xin Liu <sup>1</sup> , Yanghai Zheng <sup>1</sup> , Yuelin Wang <sup>1</sup> , Qingguo Zhang <sup>1</sup> , Yun Xue <sup>1</sup> , Fuqiu Ma <sup>1</sup> (1. Harbin Engineering University)
P37	<b>MOSARWASTE, a French institutional project on molten salt reactor ultimate waste management</b> Magaly TRIBET <sup>1</sup> , Annabelle LAPLACE <sup>1</sup> , Anne SATURNIN <sup>1</sup> , Johann MARTINET <sup>1</sup> , Sylvie DELPECH <sup>3</sup> , Céline CANNES <sup>3</sup> , Gérald SENENTZ <sup>2</sup> , William ROCHER <sup>2</sup> , Lucile GAUQUELIN <sup>2</sup> , Elisa CAPELLI <sup>2</sup> (1. CEA, DES, ISEC, DPME, Univ Montpellier, Marcoule, France, 2. Pôle R&D, Orano Group, France, 3. IJCLab, CNRS, Paris-Saclay University, France)
P38	<b>Evaluation of the behavior of long-lived fission product compounds in molten fluoride salts for the development of transmutation target</b> Hiroki Shishido <sup>1</sup> , Hidetoshi Hashizume <sup>1</sup> (1. Tohoku Univ.)
P39	<b>Electrochemical Behavior of Neptunium in NaCl-2CsCl Melt</b> Hirokazu Hayashi <sup>1</sup> , Kazuo Minato <sup>2</sup> (1. Japan Atomic Energy Agency (JAEA), 2. Retired from JAEA)
P42	<b>Measuring the concentration of MgOHCl in NaCl-MgCl<sub>2</sub> molten salt</b> Jihun Kim <sup>1</sup> , Wonseok Yang <sup>2</sup> , Wonseok Lee <sup>1</sup> , Saehyun Choi <sup>1</sup> , Taeho Jang <sup>1</sup> , Sungyeol Choi <sup>1</sup> (1. Seoul National University, 2. Korea Advanced Institute of Science and Technology)
P43	<b>Assessing Corrosion-Resistance of Alloys Through NaCl-MgCl<sub>2</sub> Eutectic Droplet Corrosion Test: Development and Standardization</b> Wonseok Lee <sup>1</sup> , Wonseok Yang <sup>2,3</sup> , Jihun Kim <sup>1</sup> , Hyeongbin Kim <sup>1</sup> , Taeho Jang <sup>1</sup> , Sungyeol Choi <sup>1,3,4</sup> (1. Seoul National University, 2. Department of Nuclear Engineering, Seoul National University, 3. Department of Nuclear and Quantum Engineering, Korea Advanced Institute of Science and Technology, 4. Nuclear Research Institute for Future Technology and Policy, Seoul National University)
P44	<b>Decontamination process of salt bath containing nuclear fuel materials by precipitation and distillation methods using manganese</b> Yuri Yamamoto <sup>1</sup> , Jun-ya Ibe <sup>2</sup> , Mao Mitani <sup>1</sup> , Youko Takahatake <sup>2</sup> , Sou Watanabe <sup>2</sup> , Nakamura Masahiro <sup>2</sup> , Haruaki Matsuura <sup>1</sup> (1. TCU, 2. JAEA)
P45	<b>AFM observation of ions near the EmlmCl-AlCl<sub>3</sub> ionic liquid-HOPG electrode interface</b> Atsuki Tabo <sup>1</sup> , Takahiro Ohkubo <sup>2</sup> , Kei Nishikawa <sup>3</sup> , Hisayoshi Matsushima <sup>1</sup> , Mikito Ueda <sup>1</sup> (1. Hokkaido University, 2. Chiba University, 3. NIMS)

P46	<b>Comparison of solubility of selected RE<sub>2</sub>O<sub>3</sub> in (LiF-NaF)<sub>eut</sub> vs (LiF-NaF-REF<sub>3</sub>) molten systems</b> <u>Blanka Kubikova</u> <sup>1</sup> , Zuzana Vaskova <sup>1</sup> , Miroslav Boca <sup>1</sup> (1. Institute of Inorganic Chemistry, Slovak Academy of Sciences)
P47	<b>Preparation and Physicochemical Properties of Ionic Liquids Based on Asymmetrical Phosphonium Cations and Carboxylate Anions</b> <u>Hyoma Akamatsu</u> <sup>1</sup> , Yusuke Tsuchida <sup>2</sup> , Seiya Kikuchi <sup>1</sup> , Katsuhiko Tsunashima <sup>1</sup> , Yoshiharu Okuno <sup>1</sup> , Hirohisa Yamada <sup>3</sup> (1. National Institute of Technology, Wakayama College., 2. National Institute of Technology, Yonago College., 3. National Institute of Technology, Nara College.)
P48	<b>Physicochemical Properties of Concentrated CsF-alcohol Systems: Effects of Fluoroalkyl Group</b> <u>Nozomi Yoneda</u> <sup>1</sup> , Haruka Iyama <sup>1</sup> , Yoshiki Ishii <sup>2</sup> , Kohei Tada <sup>3</sup> , Kazuhiko Matsumoto <sup>1</sup> , Rika Hagiwara <sup>1</sup> (1. Kyoto University, 2. Kitasato University, 3. National Institute of Advanced Industrial Science and Technology)
P49	<b>Removal of free O<sup>2-</sup> in molten CaCl<sub>2</sub></b> <u>Chenlu Lin</u> <sup>1</sup> , Xiao Yang <sup>1</sup> (1. Westlake University)
P50	<b>Electrode reactions of copper species in a bis(fluorosulfonyl)amide ionic liquid</b> <u>Takumi Hisada</u> <sup>1</sup> , Nobuyuki Serizawa <sup>1</sup> , Yasushi Katayama <sup>1</sup> (1. Keio University)
P51	<b>Evaluation of Wetting Behavior of Air Bubbles in Water or Ionic Liquid</b> <u>Nobumitsu Hirai</u> <sup>1</sup> , Mizuki Kashiwagi <sup>1</sup> , Yuriko Nanbu <sup>1</sup> , Yuhei Miwa <sup>1</sup> , Keita Otsuji <sup>1</sup> , Takeshi Kogo <sup>1</sup> , Akiko Ogawa <sup>1</sup> , Daisuke Kuroda <sup>1</sup> , Hideyuki Kanematsu <sup>1</sup> (1. National Institute of Technology (KOSEN), Suzuka College)
P52	<b>Ionic-size dependence of self-diffusion coefficients of molten alkali halides</b> <u>Yutaka Watanabe</u> <sup>1</sup> , Kaito Kawabata <sup>1</sup> , Yuka Hattori <sup>1</sup> , Yoshiki Ishii <sup>2</sup> , Norikazu Ohtori <sup>3</sup> (1. Niigata University, 2. Kitasato University, 3. Niigata University)
P53	<b>Dissolution of PO<sub>4</sub><sup>3-</sup> in molten CaCl<sub>2</sub></b> <u>Yangzhou He</u> <sup>1</sup> , Xiao Yang <sup>1</sup> (1. Westlake University)
P54	<b>Effect of Deposition Conditions on Deposition Morphology of Al Electrodeposition from Chloroaluminate Ionic Liquids</b> <u>Koichi Ui</u> <sup>1</sup> , <u>Ryohei Hibino</u> <sup>1</sup> , Tatsuya Takeguchi <sup>1</sup> , Tetsuya Tuda <sup>2</sup> , Mikito Ueda <sup>3</sup> , Junji Nunomura <sup>4</sup> , Yoshihiko Kyo <sup>4</sup> , Yoichi Kojima <sup>4</sup> (1. Iwate University, 2. Chiba University, 3. Hokkaido University)
P55	<b>Aluminum Electrodeposition from Aluminum Chloride-Acetamide Melts Using Potentiostatic Deposition Method</b> <u>Koichi Ui</u> <sup>1</sup> , <u>Yuga Ito</u> <sup>1</sup> , Tatsuya Takeguchi <sup>1</sup> (1. Iwate University)
P57	<b>Direct Electrochemical Preparation of Gd<sub>2</sub>Fe<sub>17</sub> Intermetallic in Molten Salts</b> <u>MOHD. SUFIYAN KHAN</u> <sup>1,2</sup> , <u>ANWESHA MUKHERJEE</u> <sup>1,2</sup> , <u>R. KUMARESAN</u> <sup>1,2</sup> (1. Indira Gandhi Centre for Atomic Research, Kalpakkam 603102, Tamil Nadu, India, 2. Homi Bhabha National Institute, Training School Complex, Anushaktinagar, Mumbai 400094, India)
P58	<b>Deuterium isotope separation by electrolysis in a molten LiCl-KCl-LiD-LiH system</b> <u>Toranosuke Nago</u> <sup>1</sup> , Yutaro Norikawa <sup>2</sup> , Hisayoshi Matsushima <sup>1</sup> , Toshiyuki Nohira <sup>2</sup> , Mikito Ueda <sup>1</sup> (1. Hokkaido Univ., 2. Kyoto Univ.)
P59	<b>High-Temperature Water Electrolysis Using Molten NaOH-KOH-H<sub>2</sub>O System</b> <u>Keita Goto</u> <sup>1</sup> , Kenji Kawaguchi <sup>1</sup> , Toshiyuki Nohira <sup>1</sup> (1. Kyoto University)
P60	<b>The influence of fluoride ions on electrochemical behavior of lanthanum and neodymium ions</b> <u>Qilin Yuan</u> <sup>1</sup> , Xin Lu <sup>1,2</sup> , Osamu Takeda <sup>1</sup> , Hongmin Zhu <sup>1</sup> (1. Tohoku University, 2. University of Science and Technology Beijing)
P61	<b>Synthesis of Monocrystalline High-Entropy Carbide Nanoparticles in Molten Media exhibiting {100} and {111} facets and assessment of hydrogen evolution capability in water splitting applications</b> <u>Junmo Jeong</u> <sup>1</sup> , Kyoungjin Jeong <sup>1</sup> , Hayk Hacob Nersisyan <sup>2</sup> , Jonghyeon Lee <sup>1</sup> (1. Chungnam National University, Republic of Korea, 2. Rapidly Solidified Materials Research Center, Chungnam National University, Republic of Korea)
P62	<b>Synthesis of titanium (Ti)-based fine powder by using shuttle of the disproportionation and proportionation reactions of titanium ions</b> <u>TERIGELE</u> <sup>1</sup> , Xin Lu <sup>1,2</sup> , Osamu Takeda <sup>1</sup> , Hongmin Zhu <sup>1</sup> (1. Tohoku University, 2. University of Science and Technology Beijing)
P63	<b>Fabrication of SiC oxidation-resistant film on carbon/carbon composite by electrochemical siliciding in molten salt</b> <u>Yuto Hirose</u> <sup>1</sup> , Osamu Takeda <sup>1</sup> , Hongmin Zhu <sup>1</sup> (1. Tohoku University)