

# 18th International Conference on Aluminium Alloys (ICAA18)

## Program (Poster)

September 5<sup>th</sup>

Poster Discussion (Zoom)

13:40-14:40

Poster Session P1~P25

- P-1      **Interaction between dislocation and {100} oblate misfit precipitates through parametric dislocation dynamics (PDD) simulation**  
Zheng HAIWEI  
Tokyo Institute of Technology (Japan)
- P-2      **First-principles study on the local bonding of nanoclusters formed in an Al-Mg-Si alloy**  
Kensuke KURIHARA  
Shibaura Institute of Technology (Japan)
- P-3      **Stability and properties of Al<sub>3</sub>Li precipitate by adding Zn using first-principles calculation**  
Takahito ITO  
University of Toyama (Japan)
- P-4      **Solute clustering behaviors in Al-Mg-Si alloys based on theoretical calculations and materials informatics**  
Daisuke EGUSA  
The University of Tokyo (Japan)
- P-5      **Effects of Mn and Cu additions on solidification microstructure of near-eutectic Al-Fe alloy**  
Naoki OKANO  
Nagoya University (Japan)
- P-6      **Investigation of strip solidification between the rolls of a high-speed roll caster**  
Toshio HAGA  
Osaka Institute of Technology (Japan)
- P-7      **In-line hot rolling of an Al-Mg strip cast using an unequal diameter twin roll caster**  
Masataka FURUKAWA  
Osaka Institute of Technology (Japan)
- P-8      **Free surface phenomena and their influence on ultrasonic treatment performance of aluminum alloys**  
Jincheng SUN  
Tohoku University (Japan)
- P-9      **Effect of laser conditions on the aging behavior of Al-12Si alloy additive-manufactured by laser powder bed fusion**  
Keito SAKI  
Nagoya University (Japan)
- P-10     **Additive manufacturing of carbon fiber/Al-Ti alloy composite by laser powder bed fusion**  
Tsubasa AOKI  
Nagoya University (Japan)

- P-11 **A new process index for optimizing laser powder bed fusion conditions to manufacture dense parts: Validation with Al-Si alloys**  
Mai KUNIEDA  
Nagoya University (Japan)
- P-12 **Additive manufacturing of wax injection mold for aluminum investment casting using material jetting process**  
Ji-Woon LEE  
Kongju National University (Korea)
- P-13 **Advanced heat reactivity of Polytetrafluoroethylene(PTFE) synthetic Ni covered Al particles**  
Junsoo SEO  
Kyungpook National University (Korea)
- P-14 **Development of high-strength Al-Cu-Mg alloy by combined application of high-pressure torsion and aging treatment**  
Pengcheng MA  
Yokohama National University (Japan)
- P-15 **Effect of aging treatment on tensile properties in cold-rolled Al-Cu-Mg alloy**  
Yuki ISHII  
Ibaraki University (Japan)
- P-16 **Evaluation of hydrogen embrittlement for aluminum alloys by fatigue testing**  
Makoto HINO  
Hiroshima Institute of Technology (Japan)
- P-17 **Effects of various plating on fatigue properties of A2017-T4 aluminum alloy**  
Kota KAWAUE  
Hiroshima Institute of Technology (Japan)
- P-18 **Effect of high temperature aging on hydrogen embrittlement in 7XXX alloys**  
Ryuji ONO  
Iwate University (Japan)
- P-19 **Development of new aluminum alloy for casting with high mechanical properties based on JIS-AC7A**  
Tadao FUKUTA  
Okayama Prefectural University (Japan)
- P-20 **Dynamic measurement of hydrogen release of 5083 aluminum alloys accompanied with dynamic strain aging**  
Takahiro SAKATA  
Osaka University (Japan)
- P-21 **Effects of strain rate on stress- strain curves in 2024 aluminum alloy after solution heat treatment**  
Masahiro NISHIDA  
Nagoya Institute of Technology (Japan)
- P-22 **TEM observation of cold-rolled Al-2.5Li(-2.0Cu) alloys with aging treatment**  
Hiroki SAITO  
University of Toyama (Japan)

- P-23      **Effect of Cu on age-hardening behavior in Al-Zn-Mg alloys aged at 393K**  
Yusuke SEKIGUCHI  
University of Toyama (Japan)
- P-24      **Effect of aging on mechanical properties of cold-rolled Al-Mg-Si alloys**  
Hiroki FUKUZAWA  
Ibaraki University (Japan)
- P-25      **Effect of internal hydrogen on mechanical properties and hydrogen embrittlement sensitivity in cold-rolled Al-Cu-Mg alloys**  
Ziang WU  
Ibaraki University (Japan)

15:00-16:00

Poster Session P26~P49

- P-26      **STEM studies of wire arc additive manufactured AA5183 alloy with TiC nanoparticles.**  
Tor Inge THORSEN  
Norwegian University of Science and Technology (NTNU) (Norway)
- P-27      **Formability of aluminum clad cup with thermoplastic resin**  
Yasunori HARADA  
University of Hyogo (Japan)
- P-28      **Plastic anisotropy of multi-axial forged and annealed Al-Mg alloy with high Mg content**  
Hoon CHO  
Korea Institute of Industrial Technology (Korea)
- P-29      **Comprehensive properties enhancement and microstructure evolution of Al Cu-Mg alloys via novel thermomechanical treatment**  
Zhiguo CHEN  
Hunan University of Humanities (China)
- P-30      **Grain refinement and age precipitation in Al-0.5%Si-0.5%Ge alloy fabricated by ARB process**  
Keiyu NAKAGAWA  
Okayama University of Science (Japan)
- P-31      **Combined cyclic deformation and artificial ageing of an Al-Mg-Si alloy**  
Johannes A. ÖSTERREICHER  
Austrian Institute of Technology (Austria)
- P-32      **Microstructure observation at maximum hardness in two-step aging of 6xxx series Al alloys aged at room temperature**  
Hayato TSUJIGUCHI  
University of Toyama (Japan)
- P-33      **Microstructure observation of Al-1.0%Mg<sub>2</sub>Ge (-0.4%Si) alloys aged at 473K**  
Shuehi MURAKATA  
University of Toyama (Japan)
- P-34      **DSC analysis and TEM microstructure observation of Al-Mg<sub>2</sub>Ge alloy**  
Shoya UKITA  
University of Toyama (Japan)
- P-35      **Microstructure observation of T6 treated Al-Mg<sub>2</sub>Si alloys with different amount of excess Si**  
Junya MAEDA  
University of Toyama (Japan)
- P-36      **In-situ characterization of nanostructures of Al-Zn-Mg-Cu alloy with laboratory high-energy SAXS**  
Tomomi SUZUKI  
Hokkaido University (Japan)
- P-37      **The relationship between microstructures and properties in the early aging stage of Al-4Cu-1.5Mg-0.15Cr aluminum alloy**  
Shin FUKUDA  
Hokkaido University (Japan)

- P-38      **Microstructure observation of Al-Mg-Si alloy with different Mg/Si ratio in two step aging condition**  
Jiaming WANG  
University of Toyama (Japan)
- P-39      **Relationship between initiation time of pitting corrosion for aluminum and chloride concentration during atmospheric corrosion**  
Ryota YAMAGUCHI  
Kansai University (Japan)
- P-40      **Lining of aluminum alloy with dissimilar materials using particle impact**  
Kenta SUGIHARA  
University of Hyogo (Japan)
- P-41      **Fabrication of multilayer by two-step anodization for A5052 aluminum alloy and its adhesion**  
Takayuki HASHIMOTO  
Hiroshima Institute of Technology (Japan)
- P-42      **Strength and interfacial microstructure of magnetic pulse welded aluminum/magnesium lap joint**  
Issei SHIBATA  
Nihon University (Japan)
- P-43      **Dissimilar metal welding of 6000 series Al alloy sheet and DP steel sheet by magnetic pulse welding -Welding condition and microstructure -**  
Ryoma HARA  
Chiba University (Japan)
- P-44      **Relationship between formation of microstructure and geometry of probe in friction stir welding**  
Kyohei ORI  
University of Toyama (Japan)
- P-45      **Disc friction joining of A1050-H24 aluminum and AZ31 magnesium alloy**  
Keisuke MIZUTANI  
University of Toyama (Japan)
- P-46      **Serration analysis in Al-Mg alloy by In-situ XRD / DIC simultaneous measurements**  
Tatsuya KITANO  
University of Hyogo (Japan)
- P-47      **SPED studies of quasicrystalline phases in Al-Mg-Cu-Ag alloys**  
Oskar RYGGETANGEN  
Norwegian University of Science and Technology (NTNU) (Norway)
- P-48      **Synthesis of metal hydrides by hydrogen plasma irradiation**  
Tomoharu OUCHI  
Ibaraki University (Japan)
- P-49      **Fabrication and microstructure observation of Al based composite containing cellulose nanofiber**  
Seungwon LEE  
University of Toyama (Japan)

