

18th International Conference on Aluminium Alloys (ICAA18)

Program (Poster)

September 5th

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 Al₃Li 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~P50

- 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%Mg₂Ge (-0.4%Si) alloys aged at 473K**
Shuehi MURAKATA
University of Toyama (Japan)
- P-34 **DSC analysis and TEM microstructure observation of Al-Mg₂Ge alloy**
Shoya UKITA
University of Toyama (Japan)

- P-35 **Microstructure observation of T6 treated Al-Mg₂Si 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)
- P-50 **Fabrication and mechanism of self-lubricious Al₂O₃/Sn-MoS₂ composite film on Al-Si-Cu casting alloys**
Jiacheng LIU
Nagoya Institute of Technology (Japan)