## Program

## The 121st Conference of The Japan Institute of Light Metals (Nov. 12-13, 2011, Tokyo)

| 1. Microstructures of pure aluminum single crystals highly deformed by accumulative roll-bonding (ARB) process  |
|---|
| 2. Crystal rotation of pure alminum single crystals during plane strain compression  K.Kashihara , Y.Tsujimoto , D.Terada , N.Tsuji   |
| 3. Effects of compressive torsion processing conditions on microstructure refinement and tensile property of Al-Fe alloy  |
| 4. Effect of strain path on recrystallization behabvior of A1050 aluminum sheet   |
| T.Shimamura , M.Imoto , T.Sakai , H.Utsunomiya  5. Shear texture analysis of surface layer subjected to friction roll surface processing and annealing in high-purity titanium sheet                    |
| S.Nakama , Y.Ougiya , Y.Takayama , H.Watanabe 6. Recrystallization behavior of an Al-Mg-Si alloy during hot rolling   |
| S.Yasuda , K.Ichitani , A.Hibino  |
| 8. Effects of coarse particles on recrystallization behavior in the cold-rolled Al-Mn alloy   |
| K.Ogawa , S.Iwamura   |
| 9. Effect of coarse partilees on work hardening in the Al-Mn alloy S.Iwamura , K.Ogawa  |
| 10. Effect of laser processing on texture in aluminum alloy sheet  S.Kikuta , T.Sakai , H.Omata , J.Koyama  |
| 11. Effect of alloy composition and pre-aging condition on multi-step aging behavior in Al-Mg-Si alloy  Y.Takaki , T.Masuda , T.Sato  |
| 12. Analyses of clustering behavior in an Al-Mg-Si alloy using computer simulation and 3DAP technique Y.Shinoda , A.Serizawa , H.Tezuka , E.Kobayashi , T.Sato  |
| 13. Aging behavior of T6 heat-treated Al-Si-Mg alloy castings  R.Morioka , M.Furui , S.Terayama , T.Kawabata , K.Matsuda , S.Ikeno , S.Saikawa  |
| 14. Age hardening behavior and precipitation structure of Al-10%Si-X%Mg casting alloys with T5 heat-treated condition  T.Kitamura , T.Kawabata , M.Furui , K.Matsuda , K.Terayama , S.Ikeno , S.Saikawa |
| 15. Effect of precipitation morphology on tensile deformation of Al-Mg-Si alloy  R.Akiyoshi , K.Ikeda , M.Mitsuhara , S.Hata , H.Nakashima , K.Kaneko , M.Kikuchi , K.Takata , M.Saga , K.Ushioda       |
| 16. Effect of manganese addition on aging behavior of T6 heat-treated Al-10%Si-0.3%Mg alloy  S.Tomita , T.Kawabata , M.Furui , K.Matsuda , K.Terayama , S.Ikeno , S.Saikawa                             |
| 17. Effect of Mn and Fe content on age-hardening behavior of Al-Mg <sub>2</sub> Si alloy  S. Wang, S. Chen, T. Kawabata, T. Yamazaki, S. Ikeno, H. Takagi, K. Kawakita, K. Matsuda                      |
| 18. Behavior of two-stage aging in Al-Mg-Si-(Ag/Cu) alloys  Y.Oe, M.Tokuda, K.Nagai, T.Kawabata, S.Ikeno, K.Matuda  |
| 19. Effect of the solution heat treatment conditions on the age hardening behavior of Al-Mg-Si alloy  |
| 20. Effects of Zn content and ageing condition on serration in Al-Mg alloys   |
| 21. Effect of Cu and Ag addition on the age-precipitate of Al-Mg-Si alloys aged at 523K   |
| M.Tokuda , T.Nagai , T.Kawabata , J.Nakamura , S.Ikeno , K.Matsuda 22. Effect of Mn content on T5 heat treatment behavior of Al-Si-Mg casting alloy   |
| T.Otake , T.Inoue , A.Kuroda , H.Kanbe , M.Yoshida 23. Effect of additional elements on the age-hardening property of Al-Zn-Mg alloys   |
| **************************************  |
| Y.Miyata , S.Yoshihara 25. Application of High-Pressure Sliding for 7075 Al alloy and microstructure control  |
| 26. TEM observation for precipitates in aged Al-Mg-Ge alloys with different Mg <sub>2</sub> Ge contents   |
| T.Murakami , T.Nagai , T.Kawabata , S.Ikeno , K.Matsuda   |
| 27. Precipitation under external stress and dimensional change in a Al-4mass%Cu alloy  S.Okawara , M.Kurasawa , C.Watanabe , R.Monzen   |
| 28. Characteristic microstructural features and enhanced mechanical properties in bulk and powder-consolidated Al-Fe alloys after processing by High-Pressure Torsion                                   |
| J. Cubero , Z. Horita  29. Effect of homogenization treatment on n value of Al-Fe alloy sheets  |
| M.Asano , H.Yoshida 30. The effects of heat treatment conditions on the elongation of 1200 alloy sheets   |
| T.Nakamura , H.Yoshida , M.Asano 31. Hydrogen generation of bulk Al alloys  |
| T.Omori , Y.Takaku , I.Ohnuma , K.Ishida  |

| 32. Effects of intermetallic compounds on solid solution amount determination by phenol dissolution method  Y.Shimizu , K.Kojima , K.Kurusu  |
|--|
| 33. Effect of collision condition on metal jet emission and interface morphology at high speed collision of Al plates  S.Kakizaki , Y.Sawa , S.Kumai   |
| 34. Strength and interfacial microstructure of aluminum alloy stud/plated steel joints fabricated by high-speed solid-state joining  K.Ishizuka , S.Kumai  |
| 35. Effect of plate thickness on microstructure and mechanical properties of high-speed solid-state welded 2024 aluminum alloy stud and 6N01 aluminum alloy plate  K.Takaya, S.Kumai   |
| 36. The tightening characteristics and effectiveness of magnesium alloy holts  |
| 37. Oxidation behavior of Nocolok flux/Nocolok Zn flux   |
| 38. Effect of Mg addition of Al-Si filler alloy on brazability of wide lap joint at atmospheric pressure  H.Kumagai , Y.Hisatomi  H.Miyake , M.Edo   |
| 39. Influence of Filler Composition and Brazing Conditions on Erosion Phenomena by Flowing Liquid Filler during Aluminum Brazing  K.Matsukado , A.Tsuruno  |
| 40. Effect of the Bonding Pressure on Solid-state Bonding Strength of Al/Cu with Alkali Treatment  H.Hata , S.Koyama , I.Shohji  |
| 41. Laser pressure welding of A5052/HTSS and A1050/Ti  K.Nishimoto   |
| 42. Studies on MIG welding of aliminum and steel  T.Fukuda , M.Kumagai   |
| 43. 3D-FEM stress analysis of adhesively single-lap joints with both adherends quasi-isotropic CFRP laminate and metal  J.Shimura , N.Kosaka , S.Kurosaki , T.Suzuki   |
| [Cancellation] 44. Bonding strength and plastic workability of Mg ally composite material coated by Al alloy  H.Saito , M.Noda , K.Funami  |
| 45. Strength of butt-weld joints of high strength Al-Zn-Mg alloys  Y.Hiraguti , Y.Sanda , T.Minoda , H.Yamagata , T.Takada , M.Niikawa   |
| 46. Effect of Bonding Pressure on Bond Strength on Al with Modification Treatment  S.Amari , S.Koyama , I.Shoji  |
| 47. The effect of stress axis on fatigue behavior of pure Al single crystals with single slip orientation  M.Fukasawa , C.Watanabe , R.Monzen  |
| 48. Effect of pre-existing hydrogen on ductile fracture in a 2024 aluminum alloy   |
| T.Inamori , H.Toda , K.Horikawa , M.Kobayashi , Y.Suzuki , K.Uesugi , A.Takeuchi 49. 4D analysis of deformation localization in the vicinity of crack tip  |
| K.Sakai , H.Toda , Y.Sakaguchi , M.Kobayashi , Y.Suzuki , A.Takeuchi , K.Uesugi 50. Behavior of hydrogen in the vicinity of crack tip in aluminum alloys   |
| 51. Fatigue properties of the anodized Magnesium Die-Casts  G.Itoh , H.Iwahashi , T.Watakabe , N.Itoh  |
| T.Suzuki , T.kitsunai 52. Age-hardening behavior of Mg-3~9%Al system alloys cast into sand mold  |
| Y.Ebata , M.Furui , K.Terayama , S.Ikeno , K.Sakakibara , S.Saikawa 53. Microstructure and age hardening behavior of Mg-10~13%Al system alloys cast by permanent mold process  |
| K.Minami , M.Furui , K.Terayama , S.Ikeno , S.Saikawa , K.Sakakibara 54. Microstructure and age-hardening behavior of Mg-10~13%Al alloy cast by sand-mold process.   |
| A. Yoshida , M. Furui , K. Terayama , S. Ikeno , S. Saikawa 55. Effect of Mn contents on age-hardening in AM-series magnesium alloy  |
| T.Tsuchiya , K.Watanabe , T.Kawabata , S.Ikeno , K.Matsuda , S.Saikawa 56. TEM observation of precipitates in early stage of aging of direct quenched binary Mg-Zn alloys  |
| R.Nakanishi , T.Kawabata , S.Ikeno , K.Matsuda 57. The thickness measurement method of the magnesium oxide film by XPS depth analysis  |
| 58. Preparation and corrosion resistance of Molybdate film on magnesium alloy  |
| T.Ishizaki , M.Sakamoto  |
| 59. Influence of aluminum content on corrosion resistance of Mg-Al alloys containing copper and zinc  H.Kawabata , N.Nishino , Y.Genma , T.Seguchi  60. Simultaneous acquisition of age-hardening and corrosion resistance of AZ80 magnesium alloy by sol-gel method |
| Y.Harada , S.Kumai 61. Creep properties characterization on a magnesium alloy with LPSO phase through instrumented indentation testing technique   |
| D.Takeda , H.Takagi , M.Fujiwara , K.Higashida , Y.Kawamura 62. Compressive Deformation behavior and Dislocation Substructures in an Long Period Stacking Ordered Mg-Ni-Y alloy  |
| M.Suzuki , A.Shimaya , K.Maruyama , T.Itoi 63. Optimization of Ca content in compressed and T5-treated AZ 91 alloy   |
| T.Homma, R.Yoshimasu, S.Kamado  64. Microstructure and mechanical properties of room-temperature multidirectionally forged AZ61 Mg alloy   |
| H.Miura , T.Maruoka  |
| 65. Influence of Zn contents on microstructure in AZ-series magnesium alloys  Y.Narukawa , K.Watanabe , T.Kawabata , S.Ikeno , K.Matsuda , S.Saikawa   |

| 66. Effects of texture and microstructure on the mechanical property of AZ61 alloy magnesium continuous casting sheets  |
|---|
| T.Kimura , N.Oda , M.Kozui , G.Sasaki 67. Microstructure and mechanical properties of rolled Mg-Al-Ca-Mn alloy sheets   |
| 68. Dynamic microstructure development of an Mg-Al-Ca-Mn alloy during hot rolling process   |
| 69. Change of crystal orientation and mechanical properties by torsion extrusion of magnesium alloy AZ31  |
| T.Takeuchi , S.Mizunuma , K.Mitsui , M.Kohzu  |
| 70. Influence of grain size on fatigue properties in extruded AZ31B magnesium alloy  S.Morita , T.Hirai , T.Enjoji , N.Hattori  |
| 71. The grain size dependence of fracture mechanism by tension-tension fatigue test in AZ31  D.Ando , Y.Sudo , J.Koike  |
| 72. Microstructure of high strength Mg-3.6Al-3.3Ca-0.4Mn alloy subjected to hot extrusion  K.Oishi , S.W.Xu , T.Homma , S.Kamado  |
| 73. Corrosion behavior of aluminum during electrolytic hydrogen charging G.Itoh , T.Tsutsumi , N.Itoh   |
| 74. Effect of surface treatments on the frosting behavior  Y.Ota , T.Tateyama , Y.Toyoda  |
| 75. Effects of white particulates in coating films on heat radiating and general properties of pre-coated aluminum sheet  T.Ozawa , T.Maezono                                       |
| 76. Effect of sealing in lithium hydroxide solution on corrosion resistance of anodic porous films formed on aluminum  H.Asoh , M.Okura , H.Tanaka , M.Fujita , H.Muramatsu , S.Ono |
| 77. TiN coating on the thermo mechanical treated A7075 ally and its mechanical property   |
| 78. Effect of Cu addition and heat treatment on pitting corrosion of Al-Mn alloy  |
| 79. Effect of Fe or Ni addition on corrosion behaviors for aluminum in weak alkaline solution under high temperature  |
| 80. Surface analysis of A3003 after corrosion tests in model tap water  |
| M.Sakairi , K.Otani  81. Crystallographic orientation dependence of the corrosion behavior in HCl aqueous solution with different concentrations of ultra-high purity aluminum      |
| 82. Electropolishing of casting aluminum-magnesium-zinc alloy   |
|   |
| 83. Performance characteristics of large-sized ceramic ultrasonic horn used for treatment of liquid metals S.Komarov , Y.Ishiwata   |
| 84. Influence of Ultrasonic Irradiation on Grain Refinement of Al-4mass%Si Alloy T.Kubo , Y.Matsui , M.Yoshida , H.Uno , K.Matsuda  |
| 85. Nucleus for Al-Fe-Si compound refined by ultrasonic radiation  K.Oda , T.Isobe , H.Okada  |
| 86. Refinement of Al-Fe-Si compound by addition of heterogeneous nucleus  T.Isobe , K.Oda , H.Okada   |
| 87. Effect of strain and 0.5mass%Fe addition on the semi-solid microstructure of Al-Zn-Mg alloy  A.Ohtani , H.Tezuka , E.Kobayashi , T.Sato   |
| 88. Evaluation of internal defect of the aluminum cast product by using the gas analysis  K.Itabashi , H.Takahashi  |
| 89. Effect of microstructure on mechanical property of 7075 aluminum alloy  |
| 90. Effect of heating rate during solution treatment on morphology of eutectic Si particles of AC4CH casting alloys   |
| 91. Casting of clad strips by roll casters  N.Saruwatari , Y.Nakayama , E.Sekiya  |
| 92. Casting of Al-SiCp strip by twin roll caster  |
| 93. Heat transfer solidification analyses of twin roll casting for magnesium alloy  |
| T.Nagumo , M.Endou , S.Nishida , H.Watari   |
| 94. Aging behavior of Al-10%Si-Mg alloy sand castings under various demolding temperatures  Y.Kano , M.Furui , K.Terayama , S.Ikeno , S.Saikawa                                     |
| 95. Age hardening characteristics of Al-10%Si-Mg alloy permanent mold castings demolded at different temperature  Y.Takada , M.Furui , K.Terayama , S.Ikeno , S.Saikawa             |
| 96. Effect of oiliness agent on wear particles in cold rolling of A1050 aluminum  Y.Totani , K.Ueda , M.Yonemitsu , Y.Hosomi  |
| 97. Microstructural control of Al1070 by Rotary Bending and Tensile Loading  T.Nishimura , Y.Enomoto , H.Sato   |
| 98. Deformation behavior of Al alloy asymmetric channel with various cross section on draw bending  Y.Okude , S.Sakaki , S.Yoshihara  |
| (Cancellation) 99. Effect of Zn content on the bendability of Al-Zn-Mg alloys  H.Nakanishi , H.Yoshida , H.Hatta  |
| H.INAKANISNI , H. YOSNIQA , H.HATTA   |

| 100. Boss forming simulation of AZ31 magnesium alloys  Y.Kobayashi , S.Takahashi , E.Yukutake , S.Negishi  |
|--|
| 1. Robayashi , S. Fakanashi , E. Fukutake , S. Negishi 101. Research on defective generation mechanism and the improvement in impact extrusion for battery case in vehicle  T. Watanabe , M. Motomura , A. Hagiwara , G. Konishi |
| 102. Effect of the grain size on high strain rate blow forming of 5000 series aluminum alloy  T.Kudou  T.Kudou   |
| 103. Effect of modified cross sectional configuration of the micro groove arrays of tool surface by first extrusion run on surface roughness of aluminum product  S.Kamitani , Y.Honda   |
| 104. Improvement of formability and 1 ubricant C haracteristics of r adial flow extrution process for forming aluminum C up  Y.Iwasaki , K.Aida , M.Motomura , A.Harada  |
| 105. Image-based numerical analysis of the deformation behaviors of blister and micro-pores in a die-casting aluminum alloy P.Qu , H.Toda , S.Ito , M.Kobayashi , K.Uesugi   |
| 106. Damage behaviors of aluminum alloy in high temperature deformation Z.A.B.Shamsudin , H.Toda , M.Kobayashi , Y.Suzuki , A.Takeuchi , K.Uesugi  |
| 107. Compressive relaxation characteristics and the dominant mechanism of Al-Si die-cast alloy subjected to various heat-treatments  Y.Kawakubo , S.Hirosawa , S.Hirawatari , H.Hosoi  |
| 108. Creep strength and deformation mechanism of high purity Al-Mn binary alloy with various grain sizes  A.Sakai , S.Hirosawa , M.Ando , A.Niikura , Y.Suzuki   |
| 109. Grain size dependenc y on creep behavior of ultra fine and coarse grained aluminum at low temperatures  |
| D.Kaneda , H.Umeda 111. Effect of pre-aging conditions on bendability of an Al-Mg-Si alloy   |
| T.Nakamura , T.Masuda , Y.Takaki  112. Effect of extrusion shape on mechanical property of Al-Zn-Mg-Cu alloys  Y.Shinzato , T.Minoda , H.Yoshida   |
| 113. Effect of impact compression on age-hardening behavior of rapidly solidified Al-Zn-Mg alloys  K.Horikawa , H.Kobayashi  |
| 114. Relationship between temperature and microstructure during friction stir welding of 1050Al/ 5052Al alloy  K.Kumai , Y.Akutsu , Y.Takayama , H.Watanabe  |
| 115. Dynamics properties during friction stir welding and mechanical properties of joint using a 6061 aluminum alloy  Y.Matsumaru , M.Nomoto , K.Katoh   |
| 116. Metal flow and stir zone microsructure during friction stir welding of dissimilar joints  T.Shibayanagi , Z.Di  |
| 117. Micro-tensile properties of friction stir welded A6061/SUS 304 grooved lap joint T.Ogura , T.Nishida , H.Nishida , S.Yoshikawa , M.Fujimoto , A.Hirose  |
| 118. Effect of tool shape on friction stir welding of 5052 aluminum alloy foil  K.Aramomi , Y.Takayama , H.Watanabe  |
| 119. Microstructure and mechanical properties of dissimilar friction stir welds between AZ31 and AA6061-T6 plates  |
| 120. Dissimilar friction stir welding of non-combustible magnesium and aluminum alloy T.Hirata , T.Tanaka , T.Morishige , K.Kitazawa   |
| 121. Isothermal aging behavior and mechanical properties in Ti-Cr-V-4Al alloys  Y.Takasaki , M.Ueda , M.Ikeda  |
| 122. Mechanical properties of biomedical Ti-29Nb-13Ta-4.6Zr alloy having micro-segregation  M.Nakai , M.Niinomi , J.Hieda , K.Narita , K.Oribe   |
| 123. Effect of high-pressure torsion on microstructures and mechanical properties of biomedical β-type Ti-29Nb-13Ta-4.6Zr after aging treatment H.Yilmazer , M.Niinomi , M.Nakai , J.Hieda , Y.Todaka                            |
| 124. Rotating bending fatigue property of titanium alloy with surface ultrafine-grained structure produce by wearing process   |
| 125. Rotary bending fatigue properties of Prestrained Titanium alloys  K.Sato , T.Yakusiji , H.Oyama , Y.Itumi   |
| 126. Design of βType Ti Alloys and their Shape-Memory Characteristics  K.Matsugi , M.Nakata , T.Kashiwagi , Y.B.Choi , G.Sasaki  |
| 127. Effect of passivation potential on pitting resistance and concentration of bound water in passive film of Ti S.Ito , T.Haruna   |
| 128. Effect of citric acid addition on hydrothermal synthesis of ZrO <sub>2</sub> included oxide films on Ti Substrates  R.Kozakura , M.Ueda , M.Ikeda   |
| 129. Preparation of Hydroxyapatite coatings on Ti-29Nb-13Ta-4.6Zr alloy by MOCVD method and evaluation of biocompatibility  J.Hieda , M.Niinomi , M.Nakai , K.Saito , T.Goto , T.Rong  |
| 130. Effect of cathodic potential on Ca film formation on Ti in Ca <sup>2+</sup> /ethanol solution containing a fixed amount of water  A.Nonaka , T.Haruna   |
| 131. Fabrication and compression properties of A1050-ADC12 functionally graded porous aluminum  K.Saito , Y.Hangai , T.Utsunomiya , O.Kuwazuru , N.Yoshikawa   |
| 132. Fabrication of porous aluminum core hollow material by applying friction technology  M.saito , Y.Hangai   |

| 133 | . Fabrication of porous aluminum without using blowing agent by FSP route and estimation of their mechanical properties  H.Kamada , Y.Hangai , T.Utsunomiya , O.Kuwazuru , N.Yoshikawa  |
|-----|---|
| 134 | . Fabrication of ADC12 functionally graded porous aluminum without using blowing agent by using gases H.Kato , K.Takahashi , Y.Hangai , T.Utsunomiya , S.Kitahara , O.Kuwazuru , N.Yoshikawa                                  |
| 135 | . Fabrication of the aluminum foam with high porosity from the aluminium sheets   |
| 136 | . Fabrication of open cell porous aluminum without external heat by applying friction technology  |
| 137 | Pore Morphology and Microstructure in Cell Walls of Aluminum Foam fabricated with Adding Mg and Bi  |
| 138 | . Simultaneous bonding between foamed precursor and pure Al plate  Y.Okano , Y.Kume , M.Kobashi , N.Kanetake  |
| 139 | . Mechanical and magnetic properties of Al/Fe <sub>3</sub> O <sub>4</sub> composites consolidated by high-pressure torsion  R.Yonemoto , Z.Horita , M.Arita   |
| 140 | . Consolidation of high strength aluminum alloy machined chip wastes and their mechanical properties  R. Hohemoto , Z. Hohemoto , Z. Hohemoto , Y. Kume , M. Kobashi , N. Kanetake  |
| 141 | . Al–Al2O3 nanocomposites produced by High-Pressure Torsion and Ball Milling  M.Ashida , Z.Horita   |
| 142 | Properties of aluminum based magnetic materials produced by compressive torsion processing  G.Sogabe , Y.Kume , M.Kobashi , N.Kanetake  |
| 143 | . Sintering mechanism and microstructure of VGCF/ aluminum composites by spark sinterin  G.Sasaki , Z.F.Xu , Y.B.Choi , K.Sugio , K.Matsugi   |
| 144 | . Properties of Mg-CaO composite materials fabricated by mechanical alloying and spark plasma sintering process  T.Hagino , M.Kubota  |
| 145 | . Production of Al-Ti Bulk Nanostructured Intermetallics and Nanocomposites by High-Pressure Torsion  K.Edalati , S.Toh , Z.Horita  |
| P01 | . Effect of purity and strain rate on indentation test in pure aluminum H.Yamada , Y.Shimizu , N.Ogasawara , K.Horikawa , H.Kobayashi   |
| P02 | Functionalization of nano-porous alumina membrane fabricated by anodic oxidation of Al metal with chemical surface modification  K.Kakiage , M.Hanaya   |
| P03 | . Improvement of corrosion resistance on the surface layer of AZX magnesium alloys by phosphate electrolytic solution  A.Saitou , T.Kenadani , K.Murakami , M.Hino , A.Saijyo   |
| P04 | . Laser joining of aluminum/plastic using insert materials  |
| P05 | . Effect of stacking fault energy on dislocation structures of new low-temperature creep in FCC Metals  F.Terasawa , K.Ishiwatari , N.Kawai , E.Satou , T.Matsunaga   |
| P06 | . Oxide dispersion strengthening of biomedical -type titanium alloy through rare-earth metal addition  S.Nagai , M.Ninomi , J.Hieda , M.Nakai   |
| P07 | . Galvanic corrosion between high strength aluminum 2024 and carbon fiber reinforced plastic in NaCl solution  M.Sakai , T.Wada   |
| P08 | . The effect of microstructure on stress corrosion cracking of AM60 magnesium alloy sheets  N.Yamamoto , H.Okumura , S.Kamado   |
| P09 | . Improvement of strength and microstructure of Mg-Zn-Y alloy by rolling  |
| P10 | . Propose Aluminum Foam for Landing Gear of Smart Lander  |
| P11 | . Mechanical properties of 6061 aluminium alloy protrusion formed on SPCC steel sheet by friction welding  K.Umejima, K.Katoh   |
| P12 | . Properties of aluminum-phosphorescence based composite materials fabricated by mechanical milling and spark plasma sintering  Y.Watanabe , M.Kubota   |
| P13 | . Properties of age-hardened pure magnesium fabricated by mechanical milling and spark plasma sintering process  T.Hagino , M.Kubota  |
| P14 | . Estimation of compression properties of porous aluminum by X-ray CT image based modeling  R.Yamaguchi , Y.Hangai , S.Takahashi , T.Utsunomiya , O.Kuwazuru , N.Yoshikawa  |
| P15 | . Effect of intermetallic compound on strength of sandwich panel with porous aluminum/dense steel plate fabricated by friction stir processing route  N.Ishii , Y.Hangai , S.Koyama , T.Utsunomiya , O.Kuwazuru , N.Yoshikawa |
| P16 | . Investigation of compressive deformation behavior of ADC12 functional graded porous aluminum by controlling pore structures  K.Takahashi , H.Kato , Y.Hangai , T.Utsunomiya , S.Kitahara , O.Kuwazuru , N.Yoshikawa         |
| P17 | . Effect of deformation-induced phase on mechanical properties of Ti-Mo alloys for spinal fixation devices  X.F.Zhao , M.Niinomi , M.Nakai , J.Hieda  |
| P18 | . AC2B aluminum alloy/SiC composite produced by semisolid slurry S.Kobayasi , T.Motegi , R.Yosida , R.Chiba , Y.Ishihara , S.Sasaki   |
| P19 | . Development for material-circulation type recycling of aluminum  T.Hiraki , T.Nagasaka  |
| P20 | . Fabrication of Al-Cu-Bi alloy foam with thickening effect of Mg  T.Fukui , S.Suzuki , Y.Nonaka , H.Nakae  |
| P21 | . Effects of fabrication conditions on pore morphology of Al-Mg-Bi alloy foam  K.Suzuki , S.Suzuki , Y.Nonaka , H.Nakae   |
|     |   |

| P22. Effect of Zn content on maximum hardness of aged Mg-Zn alloys in different of quench process  Y.Sakurai , R.Nakanishi , T.Kawabata , S.Ikeno , K.Matsuda  |
|--|
| P23. Effect of transition metals additicon on the age-hardening behavior of Al-Mg-Ge alloys  K.Matsuura , T.Murakami , T.Kawabata , S.Ikeno , K.Matsuda  |
| P24. Microstructural refinement along with consolidation of Al-Cu alloys by high-pressure torsion  Y.Yonenaga , Z.Horita   |
| P25. Texture analysis of surface layer subjected to friction roll surface processing and annealing in pure aluminum sheet  R.Hamano , K.Nonaka , Y.Takayama , H.Watanabe                                 |
| P26. Surface characteristics of an AZ31 magnesium alloy with ultra fain-grained layer  Y.Ichihara , K.Funami , M.Noda  |
| P27. Effect of intermetallic compound particles on the behavior of environmental hydrogen in aluminum  G.Itoh , T.Watakabe , M.Nakano  |
| P28 Fatigue characteristics of extruded Mg-Al-Ca-Mn alloy  |
| Y.Murayama , Y.Miyashita , S.Kamado , T.Honma , S.W.Xu , K.Ohishi P29. Grain refinement and mechanical properties of Ti-29Nb-13Ta-4.6Zr for biomedical applications                                      |
| $R. Kanekiyo \ , \ M. Niinomi \ , \ M. Nakai \ , \ J. Hieda \ , \ K. Narita P30. Influence of microstructure on corrosion behavior of Mg-(Zn/Al)-Gd alloys$  |
| P31. Effect of Zr Addition on Workability of Mg-Zn-Y-Zr Alloys with LPSO Phase   |
| P32. Influence of LPSO phase volume fraction and extrusion ram speed on mechanical properties of Mg-Zn-Y alloys  |
| P33. Influence of extrusion parameters on microstructure evolution and mechanical properties of Mg-Zn-Gd alloys with LPSO phase  |
| P34. Ductility of Al-Zn eutectoid alloy sheets produced by hot-rolling   |
| P35. Analysis of grains deformation by 3-D orientation measurement and grain boundary particle tracking  |
| T.Kamiko , H.Toda , M.Kobayashi , D.J.Leclere , Y.Mizuseki , K.Uesugi P36. Influence of Zn and Nd contents on the microstructure and mechanical properties of extruded Mg-Zn-Y-Nd alloys with LPSO phase |
| P37. EBSD analysis of microstructural evolution after shear deformation and annealing in ultra high purity aluminum  |
| P38. Effect of pre-strain rolling conditions on hot blow forming of heat treatable aluminium alloys  |
| S.Kaneko , D.Chiba , F.Fujita  |
| P39. Thermal desorption spectroscopy study in a pure aluminum exposed to heavy water  G.Itoh , M.Nakano , T.Watakabe   |
| P40. Behavior of hydrogen in a 7075 aluminum alloy affected by second-phase particles  G.Itoh , H.Hayase   |
| P41. Annealing behavior of electrically conducting aluminum wires containing Zr W.Yi , G.Itoh , H.Kuroda , T.Horikoshi , Y.Oda   |
| P42. Effect of friction stir processing conditions on age hardening after processing in 7075 aluminum alloy  M.Takahashi , Y.Takayama , H.Watanabe , T.Shibayanagi                                       |
| P43. Behavior analysis on the desorption of hydrogen in an Al-Mg alloy by means of hydrogen microprint technique  G.Itoh , K.Saitoh , R.Koyama , T.Tsutsumi  |
| P44. Control of dielectric properties and leakage current of crystalline anodic oxide films formed on aluminum  T.Fukao , H.Asoh , S.Ono   |
| P45. Effect of Ca addition on microstructures and mechanical properties of Mg-Gd-Zn-Zr alloys  T.Saito , T.Ozaki , T.Homma , S.Kamado  |
| P46. Effect of Mn addition on microstructures and high-temperature properties of extruded Mg-Gd-Y-Zn alloy  R.Yoshimasu , Y.Hiramitsu , T.Koike , T.Homma , S.Kamado                                     |
| P47. Dissimilar friction stir welding for AZ31 and AA6061-T6 plates  Sanghyuk Kim , Kwangjin Lee , Keedo Woo   |
| Sangnyuk Kini , Kwangjin Lee , Keedo woo   |