

Program  
of  
The 132nd Conference of Japan Institute of Light Metals  
(May 20-21, 2017, Nagoya University)

1. Time dependent electrical resistivity and magnetization on natural aging of Al-Mg-Si alloys  
..... D.Hatakeyama, K.Nishimura, T.Namiki, K.Matsuda, N.Nunomura, T.Matsuzaki
2. The relationship between the serrated flow behavior and the cluster formation in Al-Mg-Si alloys  
..... T.Hashimoto, R.Akiyoshi, K.Ihara, Y.Takaki
3. Microstructure Observation of Al-7wt.%Si-0.3wt.%Mg casting alloy aged at 473K  
..... Y.Makita, D.Yoshino, S.Lee, S.Saikawa, S.Ikeno, K.Matsuda
4. Age-hardening behavior of Al-7%Si-0.3%Mg system alloys with T6 treatment after sand casting  
..... K.Takahashi, M.Masuda, S.Ikeno, S.Saikawa
5. Effect of second-phase particles on crack initiation in tensile deformation of some 6000 series aluminum alloys.  
..... G.Akaba, G.Itoh, J.Kobayashi
6. The effect of pre-ageing on the behavior of ageing at high temperatures for Al-Mg-Si alloy  
..... M.Hori
7. Influence of Mg / Si ratio and Mg+Si amount on age-hardening of Al-Mg-Si alloy  
..... D.Yoshino, S.Lee, S.Ikeno, K.Matsuda
8. Observation of multiplication and dynamic recovery behavior of dislocation during tensile deformation in 6016 and 6014 alloys  
..... Y.Koshino, Y.Aruga, J.Mukai, K.Kaneko
9. Effect of casting speed on solidification structures and crystal orientation of Al-3.8mass%Fe hypereutectic alloy OCC wires  
..... T.Sawaya, K.Hotozuka, N.Murakami, G.Motoyasu
10. Influence of Iron addition on solidification microstructure of an Al-Ca alloy and its in-situ observation  
..... R.Taniguchi, J.Yu, S.Norita, Y.Ishiwata, H.Yasuda
11. Effect of small amounts of additional elements on softening property of high-purity aluminum  
..... T.Hayashi, H.Tanaka
12. effect of si and fe content on the elongation of al-fe based alloy foils  
..... T.Suzuki, M.Endo, Q.Cui, S.Kuramoto
13. Molten metal quality of heat resistant magnesium alloy with melting and holding  
..... D.Kano, H.Kako, S.Ikeno, S.Saikawa
14. Microstructure and heat resistance in Mg-Al alloy with containing of Sr and RE  
..... Y.Yamanishi, H.Kako, S.Ikeno, S.Saikawa, M.Mizutani, K.Yoshida, N.Kawabe
15. Combustion behavior of the molten metal surface of AZ91 magnesium alloy  
..... H.Kawabata, H.Kato, K.Kitayama, K.Hibi, Y.Yagi, Y.Aoki
16. Influence of calcium on the combustion behavior of the molten metal surface of AZ91 magnesium alloy  
..... H.Kawabata, H.Kato, K.Kitayama, K.Hibi, Y.Yagi, Y.Aoki
17. Effect of extrusion conditions on deformation heating and microstructure of extruded Mg-Zn-Y-Al-La alloy with LPSO phase  
..... K.Suzawa, S.Inoue, J.Kim, Y.Kawamura, M.Miyanaga, N.Kawabe
18. Effects of pre-strain on creep strength in a directionally solidified long period stacking ordered Mg-Zn-Y alloy  
..... M.Suzuki, R.Watanabe, K.Hagihara
19. Comparison of plastic deformation behaviors of magnesium-based LPSO alloy and pure magnesium right after sudden load change  
..... Y.Ishii, H.Takagi, M.Fujiwara
20. Microstructure observation of Mg-Y-Sc alloys aged at 473K  
..... T.Hiragi, Y.Tomuro, S.Lee, S.Ikeno, K.Matsuda
21. Effects of forging conditions on microstructure and mechanical properties of pure magnesium  
..... H.Watanabe, Y.Sakanoue, N.Saito, Y.Chino
22. Influence of carbon addition on mechanical properties of various magnesium alloys  
..... M.Hino, M.Mimura, Y.Hashimoto, K.Murakami, T.Kanadani
23. Study on forgeability of molded magnesium alloy AZX912  
..... T.Yanagiya, Y.Kishi, K.Kajikawa, T.Yamaguchi, K.Saito
24. Preparation of CNF/ flame-resistant magnesium alloy composites by stir casting and its mechanical properties  
..... G.Sasaki, Y.Yao, Y.B.Choi, K.Sugio, K.Matsugi
25. Properties of Mg-CaO composite materials fabricated by powder metallurgy  
..... M.Kubota, T.Hagino
26. Numerical analysis of wall thickness variation in extruding of aluminum alloys  
..... P.Lin
27. A study on determination method of the heat transfer coefficients for extrusion simulation  
..... T.Suzuki, H.Takeshita, H.Fukumasu, S.Tanimura, S.Okita, N.Takatsuji
28. Material modeling and forming limit measurement for A6082 extruded circular tube using multiaxial tube expansion testing method  
..... K.Nagai, S.Takagi, K.Hirose, T.Kuwabara, A.Ilinichi, G.Luckey
29. Improvement of Stretch Flangeability in Rectangular Burring Using Gradually Contacting Punch  
..... Y.Ueno, Y.Yamada, M.Asano
30. Orientation dependence of bending deformation behavior in pure magnesium  
..... S.Ando, R.Fukumori, Y.Hirokawa, H.Kitahara

31. Effects of alloying elements on indentation behavior of Mg alloy single crystals  
..... H.Kitahara, Y.Takamatsu, M.Tsushida, S.Ando
32. Mechanical properties of identified local areas in aluminum alloys using micropillar compression tests  
..... N.Takata, S.Takeyasu, M.Kobashi
33. Effect of chemical compositions and process conditions on work-hardening behavior of Al-Fe alloy sheet.  
..... Y.Tabuchi, K.Hoshino
34. Improvement of fatigue properties of low-cost beta-type Ti-Mn alloys through {332}<113> deformation twinning  
..... K.Cho, H.Kobata, K.Yuki, M.Niinomi, H.Y.Yasuda
35. Effects of microstructure on the high cycle fatigue property of Ti-6242S  
..... T.Kitashima, M.Hagiwara, S.Emura, Y.Mitarai
36. Short crack growth behavior in Ti-6Al-4V alloy  
..... S.Watanabe, H.Toda, K.Uesugi, A.Takeuchi
37. Relationship between strain rate and microstructural sizes consisting of acicular microstructure the near- $\alpha$  type Ti-Al-Zr-Mo-Nb-Si alloys  
..... T.Ito, T.Kitashima, Y.Mitarai
38. Mechanical properties and cold workability of Ti-V alloy with high oxygen content  
..... M.Oomiya, K.Ueda, T.Narushima
39. Effect of  $\alpha$  2 phase on high-temperature strength of Ti alloys  
..... Y.YamabeMitarai, K.Shimagami, S.Matsunaga, T.Kitashima, T.Ito
40. Deformation mechanism analysis of Gum Metal by in-situ TEM compression test  
..... K.Onose, Y.Shibayama, S.Kuramoto, T.Ohmura, T.Suzuki, E.Nakagawa
41. Improvement in fatigue life of titanium alloy by applying microshot and ultrasonic peening  
..... Y.Harada, Y.Saeki, K.hattori
42. Resistance to hydrogen embrittlement of cold-rolled Al-Zn-Mg alloy  
..... Y.Nakajima, S.Kuramoto, I.Aoi, Y.Shimizu
43. Effect of major alloying elements on fracture surface Al-Mg-Si alloys  
..... S.Ishizawa, S.Kuramoto, M.Nakai, G.Itoh, A.Kurumada, F.Yang, S.Aoshima
44. Effect of Pb and Bi on humid gas stress corrosion cracking in aluminum alloys for high-pressure hydrogen container.  
..... M.Nakajima, G.Itoh, A.Kurumada, S.Kuramoto, S.Aoshima, R.Akishino, F.Yang
45. Effect of impurity hydrogen on fatigue properties in an Al-10%Mg alloy  
..... K.Kizawa, R.Yamada, G.Itoh, M.Nakamura
46. GB embrittlement at room temperature in Al-5%Mg alloys induced by sodium of the order of 100ppm  
..... K.Horikawa, S.Kitahata, H.Kobayashi
47. Dynamic microstructural development and strength modification in superplastic Al-Mg-Mn alloy  
..... H.Masuda, T.Kanazawa, H.Tobe, E.Sato
48. Effect of heat treatment and trace elements on fatigue crack initiation in 2024 aluminum alloy  
..... K.Nakagawa, G.Itoh, N.Nakai, H.Matsuura, T.Kanadani
49. Hydrogen charging of 6061 aluminum alloys by means of friction in water and its effect on tensile properties  
..... K.Horikawa, T.Taguchi, H.Kobayashi
50. TEM observation for hydrogen distribution behavior using electrical discharge machining of Al-7.8wt%Zn-1.6wt%Mg alloy  
..... R.Arita, S.Lee, K.Matsuda, K.Nishimura, N.Nunomura, H.Toda, K.Hirayama, K.Shimizu, H.Gao, M.Yamaguchi
51. Effect of pre-heating condition on recrystallization behavior of Zr-added Al-Mn alloy fin stocks  
..... D.Shimosaka, K.Suzuki, T.Sasaki, Y.Owada
52. Effect of deformation of brazing sheet as flow pass on filler metal flow of aluminum brazing  
..... W.Narita, Y.Ohashi
53. Casting of clad strip using twin roll casters  
..... T.Haga, K.Okamura, S.Mizuno
54. New brazing method using single layer material.  
..... T.Kurosaki, T.Murase
55. Mechanical properties of AlSi10Mg alloy manufactured by electron beam melting  
..... K.Yamakawa, H.Bian, K.Aoyagi, A.Chiba
56. Influence of AlP on the crystallization behavior of Al - Mg<sub>2</sub>Si quasi binary eutectics  
..... M.Masuda, T.Shibuya, T.Ozasa, S.Ikeno, S.Saikawa, H.Horikawa
57. Changes of Si particles morphology and mechanical property during heat treatment in Al-10%Si cast alloys  
..... S.Furuta, M.Kobayashi, T.Aoba, H.Miura
58. Effect of chromium on crystallization of primary silicon in rapidly solidified hypereutectic Al-Si system alloys  
..... S.Suzuki, K.Oda
59. Technical issues of car body structures of flame-resistant magnesium alloys  
..... N.Uehigashi, K.Shimizu, T.Ishikawa, H.Mori
60. MIG welding of magnesium alloys for high-speed railway vehicles  
..... Y.Takigawa, M.Ochi, M.Ueda, Y.Kinomoto, T.Uesugi, K.Higashi
61. Microstructure and mechanical property of TIG/MIG welded joints in Mg-Al-Ca-Mn dilute alloys  
..... T.Sasaki, T.Ishikawa, M.Ueda, K.Shimizu, K.Hono
62. Friction stir welding of High-speed extrusion flame-resistant magnesium alloy  
..... E.Yukutake, T.Ishikawa, K.Shimizu, H.Fujii
63. High strength and formable Mg-Zn based alloy sheets microalloyed with Zr and Ca  
..... B.C.Suh, T.Sasaki, M.Z.Bian, T.Nakata, S.Kamado, K.Hono

64. Effect of thermomechanical processing on the microstructure and mechanical properties in a Mg-Al-Ca-Mn-Zn alloy sheet  
..... M.Z.Bian, T.Sasaki, B.C.Suh, T.Nakata, S.Kamado, K.Hono
65. Effect of Ca and Zn additions on microstructure, tensile property, and room temperature formability in a rolled Mg-3.0Al-0.4Mn (wt.%) alloy  
..... T.Nakata, C.Xu, T.Sasaki, S.Kamado
66. Effect of rolling process on the development of flame resistance magnesium alloy thick plate  
..... Y.Fukuda, M.Noda
67. **【Keynote】** Fatigue characteristics of non-combustible magnesium alloy  
..... H.Noguchi
68. Fatigue crack growth behavior in extruded Mg-Al-Zn-Ca alloy TIG and MIG welds  
..... Y.Miyashita, K.Kokutani, M.Kimura
69. Effect of sheet thickness on bending workability of flame resistance magnesium alloy  
..... T.Ito, M.Noda, H.Mori
70. Measurements of ignition temperature of magnesium alloy powders and foils by using differential thermal analyzer  
..... K.Suzuki, N.Saito, X.Huang, Y.Chino
71. Flow localization in Al-Zn-Mg alloys  
..... H.Toda, K.Shimizu, H.Gao, H.Fujihara, K.Uesugi, A.Takeuchi
72. Microstructure optimization of aluminum alloy by Reverse 4D Materials Engineering  
..... H.Toda, D.Seo, H.Li, R.Batres, K.Uesugi, A.Takeuchi
73. 3D observation of nanovoids in aluminum alloy using imaging tomography  
..... C.Kadogawa, H.Toda, K.Shimizu, Y.Terada, A.Takeuchi, K.Uesugi
74. Evaluation of rotation of crystal orientation during plastic deformation in aluminum alloy using diffraction-amalgamated grain-boundary tracking technique  
..... K.Hirayama, H.Toda, K.Uesugi, A.Takeuchi
75. Mechanical properties and microstructure observation in Al-1.0mass%Mg2Ge alloys with different alloying elements  
..... T.Kataoka, T.Sato, S.Lee, S.Ikeno, K.Matsuda
76. TEM observation of Al-Mg<sub>2</sub>Ge(-Ag) alloys with artificial aging  
..... T.Sato, S.Lee, K.Matsuda, S.Wenner, C.D.Marioara, R.Holmestad, S.Ikeno
77. Aging behavior of transition metal added 6xxx series Al alloys  
..... Y.Kuroda, S.Lee, S.Ikeno, K.Matsuda
78. Aging behavior Cu and Ag additions to Al-1.0%wtMg<sub>2</sub>Si alloy  
..... A.Matamoto, S.Lee, S.Ikeno, K.Matsuda
79. Age hardening behavior of Al-1.1mass%Zn-3mass%Mg(-Ag) alloys  
..... T.Ogura, Y.Aruga, T.Kochi, K.Toyotake
80. Mechanical property and TEM observation of Al-Zn-Mg-Cu alloys with artificial aging  
..... F.Aoki, R.Arita, S.Lee, K.Matsuda, S.Nishikawa, T.Yoshida, S.Murakami, S.Ikeno
81. Effect of Cu addition on aging behavior of Al-Zn-Mg alloys with high Zn/Mg ratio  
..... T.Yasumoto, R.Arita, S.Lee, K.Matsuda, S.Nishikawa, T.Yoshida, S.Murakami, S.Ikeno
82. Effect of temperature and strain rate in hot rolling on substructure formation of 7000 series aluminum alloys  
..... K.Norikane, T.Fujimori, H.Tanaka
83. **【Keynote】** Heat treatment effects on Al-Mg-Si alloys studied by muon spin relaxation method  
..... K.Nishimura, K.Matsuda, N.Nunomura, S.Lee, T.Namiki, T.Matsuzaki, I.Watanabe, T.Sato
84. **【Keynote】** Structure of precipitates in age-hardenable Al alloys at early stage of aging  
..... K.Matsuda
85. Effects of cluster morphology on two-step aging behavior in Al-Mg-Si alloys with different Mg/Si ratio and natural aging period  
..... Y.Aruga, M.Kozuka, T.Sato, S.Kim, E.Kobayashi
86. Influence of additional Zr and aging treatment on intergranular fracture in high-purity Al-Zn-Mg-Cu alloy  
..... T.Uesugi, K.Yoshioka, Y.Takigawa, K.Higashi
87. Natural aging behavior of Mg-containing sacrificial layer of aluminum brazing sheet by 3DAP analyses  
..... S.Kimura, K.Yoshida, A.Tsuruno, M.Kozuka, K.Matsumoto, Y.Aruga
88. Hydrogen behavior in a plasma-charged pure aluminum  
..... T.Manaka, A.Hashimoto, G.Itoh
89. Behavior of hydrogen in plasma-hydrogen-charged aluminum alloys  
..... A.Shoji, G.Itoh
90. Computer simulation of nanocluster in an Al-Mg-Si alloy  
..... N.Nunomura, K.Matsuda, K.Nishimura
91. **【Keynote】** Three strategies to achieve concurrent strengthening of ultrafine-grained age-hardenable aluminum alloys  
..... S.Hirosawa, Y.Tang, Z.Horita, S.Lee, K.Matsuda, D.Terada
92. Concurrent strengthening of ultrafine-grained age-hardenable Al-Mg alloy by means of high-pressure torsion and spinodal decomposition  
..... Y.Tang, S.Hirosawa, Z.Horita, K.Matsuda, S.Lee, D.Terada
93. Thermodynamic Assessment and Determination of Metastable Phase Diagram in Al-Mg Binary Alloy  
..... S.Kogo, H.Iwaoka, S.Hirosawa
94. Microstructures and mechanical properties of ultrafine-grained Al-2%Fe alloy produced by High-Pressure Torsion using upsized ring samples  
..... T.Masuda, Z.Horita
95. Change in balance between strength and ductility of pre-deformed A6061 alloy during aging process  
..... D.Terada, J.Kawabuchi, S.Hirosawa, Y.Tang, Z.Horita, K.Matsuda, S.Lee
96. Suppression of serration of Al-Mg sheet by periodical micro indentation  
..... N.Ochi, S.Manabe, K.Natori, R.Matsumoto, H.Utsunomiya

97. Microstructure observation of HPT processed Zn, Si, Ge added Al-Cu-Mg alloy  
..... K.Kawai, S.Lee, K.Matsuda, S.Hirosawa, Z.Horita, D.Terada, S.Ikeno
98. Precipitation behavior on Al-Mg-Si-Cu alloy after deformation  
..... T.Nejigaki, S.Lee, S.Ikeno, K.Matsuda
99. Effect of casting condition on the butt curl of the aluminum direct chill casting  
..... N.Sakaguchi
100. Solubility of scandium oxide in fluoride molten salt for Al-Sc alloy production  
..... T.Teshima, K.Sugita, M.Yatsukura
101. Alloy design and preparation by casting process in Light-Weight High Entropy Alloys (LW-HEAs)  
..... T.Nagase, M.Matsumuro, M.Takemura, A.Terayama, N.Fuyama
102. Possibility for Al based superalloys designed based on thermodynamic assessments  
..... N.Takata, M.Ishihara, T.Okano, M.Kobashi
103. Preparation of toughness Mg-B-Sn-Zn type sintered alloy by gas atomization  
..... T.Iwaoka, M.Aonuma
104. Microstructures and mechanical property of Al-Li alloy produced by spark plasma sintering technique  
..... N.Aoyagi, I.Hirota, T.Homma
105. Effect of pre-heat temperature on mechanical properties of additive manufactured Al-Si-Mg alloy  
..... D.Terada, T.Arai, M.Mitsuhara, H.Nakashima, K.Kurita, Y.Nagata, S.Koiwai, M.Adachi
106. Development of titanium alloys from the mixture of pure metallic element powders via selected laser melting  
..... M.Todai, T.Nagase, T.Hori, T.Nakano
107. Effect of pH on sacrificial anode of aluminum alloy in chloride solution  
..... T.Kawakami, S.Iwao, S.Nakanishi, M.Yoshino
108. Effects of the priming coat on corrosion resistance of pre-coated aluminum sheets after forming  
..... T.Ozawa, T.Maezono
109. Effects of cross-cut shape on filiform corrosion test for coated aluminum sheet  
..... T.Mimura, T.Kobayashi, T.Shimada, Y.Oya, T.Koyama, Y.Kojima
110. Effect of Zn element on surface etching of 6XXX alloys  
..... Y.Tomuro, T.Saito, O.Bauger, S.Wenner, C.D.Marioara, R.Holmestad, S.Lee, S.Ikeno
111. Galvanic corrosion between aluminum alloy 3003 and CFRP in NaCl solution  
..... M.Sakai, T.Takayashiki
112. Influence of metal powder on galvanic corrosion of Al in wet and dry salt environment  
..... Y.Oya, Y.Kojima
113. Effect of metal cations on inhibitive ability of gluconic ions on aluminum alloy.  
..... K.Otani, M.Sakairi, A.Kaneko
114. Development of new coatings against liquid aluminum  
..... H.Takahashi, T.Yoshioka, T.Narita
115. Effect of treatment conditions of Ti-Zr conversion coating on adhesive bond durability  
..... T.Kojima, Y.Ota
116. Effect of anodizing temperature on defects in anodic film formed on hydration-treated high-purity aluminum  
..... S.Enoki, Y.Shimizu, M.Katano
117. Effect of laser irradiation on plasma electrolytic oxidation  
..... S.Dokizono, T.Yasui, M.Fukumoto
118. Effect of Frequency on Structure of Porous Alumina Formed by Indirect Oxidation  
..... M.Ishino, H.Hashimoto, H.Asoh
119. Active slip systems in ultra-fine grained hcp metals  
..... H.Adachi, Y.Yamashita, I.Ueda
120. Formation of bimodal grained structure by accumulative roll bonding and annealing in A5052 aluminum alloy  
..... K.Kashihara, N.Tsuji
121. Change in mechanical properties of Al-Mg-Si alloy by multi-directional forging  
..... T.Aoba, M.Kobayashi, H.Miura
122. Effects of particle shape on Al<sub>3</sub>Ti particle distribution in Al-Al<sub>3</sub>Ti multi-phase material deformed by multi directional forging  
..... K.Takayama, H.Sato, T.Chiba, Y.Watanabe
123. Analysis of local structure near a V atom in a Ti-20V alloy by using X-ray fluorescence holography  
..... T.Yamamoto, T.Yoshida, R.Shioda, K.Hayashi, N.Happo, S.Hosokawa
124. Prediction of transformation strain of Ti-Nb-X shape memory alloys from first-principles calculations  
..... D.Minami, J.Shimamoto, T.Uesugi, Y.Takigawa, K.Higashi
125. Effect of Fe addition as β-Stabilizer on Mechanical Properties of Ti-Zr Based Alloys for Biomedical Applications  
..... Y.Hadiwijaya, T.Okai, E.Kobayashi
126. Fabrication of hydrothermal treated thin film on AZ31 alloy in alkaline solution and its corrosion resistance evaluation  
..... L.Zhu, H.Tanaka, K.Kuroda, M.Okido
127. Tensile properties of cold-rolled Al-Cu-Mg alloy  
..... R.Fujisawa, Y.Nakajima, S.Kuramoto
128. Evaluation of non-uniform deformation for foamed aluminum under impact velocity  
..... H.Yamada, C.Kakuno, T.Miyakubi, K.Tateyama, N.Ogasawara, K.Watanabe
129. Bore-expanding of aluminum alloy sheet using die-less shear spinning  
..... Y.Matsumoto, S.Tokuhiro, N.Suzuki, O.Takeuchi

130. Strain distribution of cylinder formed by die-less shear spinning  
..... S.Tokuhiro, Y.Matsumoto, N.Suzuki, O.Takeuti
131. Basic study about the effect of adhesive for structural performance of HAT section member  
..... A.Tatsumi, S.Takada, J.Naito, Y.Ota
132. Functional paste development applying aluminium eutectic reaction  
..... S.Suzuki, M.Nakahara, N.Morishita, M.Dhamrin
133. Fabrication of layered Al/Al and Al/Fe by electroplating  
..... Y.Yamano, M.Hakamada, M.Mabuchi, G.Ryu, T.Iizuka
134. Effect of stud shape on joint strength and microstructure in solid-state stud-welding to metal resin composite panel  
..... T.Asakura, Y.Harada, S.Kumai
135. Effect of impact angle on explosive welding behavior of Cu/Al joint  
..... J.Nishiwaki, S.Kumai
136. Thermal history at explosive welded pure aluminum / SS400 steel interface and the influence of collision condition on wavy interface formation.  
..... D.Yamagishi, J.Nishiwaki, S.Muraishi, S.Kumai
137. Effect of gap on magnetic pulse welding for aluminum alloy plate and bonding characteristics.  
..... T.Itoi, S.Inoue, K.Okagawa
138. Microstructural observation of lap joints between Ni-coated Cu plate and Al plate fabricated by Magnetic pulse welding  
..... M.Sasaki, T.Itoi, K.Okagawa
139. Generation of low-profile thin plate-fins on A5083 medium gauge plate by friction stir forming (FSF)  
..... T.Ohashi, H.Mofidi, T.Nishihara
140. Trials of Mechanical Interlocking of Aluminum Alloys with Stainless Steel Strands Using Friction Stir Forming  
..... H.Mofidi, T.Nishihara
141. Relationship between material flow and bonding characteristics on friction stir diffusion bonding of aluminum alloy/titanium foils.  
..... T.Kodama, Y.Takayama, H.Watanabe
142. Lap Friction Seam Welding of continuous carbon fiber reinforced thermoplastics to 5052 aluminum alloy  
..... K.Teshigawara, M.Maeda, K.Katoh, K.Sakata, N.Hirayama
- P01. Restraining of earing in cup drawing of titanium laminated sheets  
..... H.Ono, S.Hattori, Y.Harada
- P02. Fabrication of superhydrophilic and superhydrophobic aluminum surfaces via anodizing in pyrophosphoric acid  
..... D.Nakajima, T.Kikuchi, S.Natsui, R.O.Suzuki
- P03. Effect of grain size and amount of aluminum on mechanical properties in Mg-Al-Zn base alloy  
..... Y.Sakaoka, T.Sudou, S.Kuramoto, A.Kurumada
- P04. Deformation behavior of ultra-fine grained commercial purity titanium after hydrogen charging  
..... R.Nakamura, C.Watanabe, R.Monzen, H.Miura
- P05. Formability of titanium clud cup by multi-stage deep drawing  
..... Y.Harada, H.Ono, K.Hattori
- P06. Effects of sodium and low strain rate on room temperature ductility of 5083 aluminum alloys  
..... S.Kumeuchi, K.Horikawa, H.Kobayashi
- P07. Effect of loading rate on Nanoindentation deformation behavior in cold worked specimens of Gum Metal.  
..... Y.Shibayama, K.Onose, S.Kuramoto, T.Ohmura, T.Suzuki, E.Nakagawa
- P08. Electrodeposition of aluminum from AlCl<sub>3</sub>-DMSO<sub>2</sub> electrolytes with Triethylamine hydrochloride as additive.  
..... S.Kim, N.Matsunaga, K.Kuroda, M.Okido
- P09. Stress dependence on the Si precipitation process in Mg<sub>2</sub>Si  
..... B.Liu, T.Ikeda, Y.Sasajima
- P10. Microstructural change of heat-resistant Al-Mg-Zn wrought alloys with aging treatment  
..... M.Ishihara, N.Takata, M.Kobashi
- P11. Microstructure and mechanical properties of Mg-Ce-Zr alloys  
..... T.Sugiyama, Y.Tamura
- P12. Development of paraboloidal shaped porous aluminum fabricated by selective laser melting method for diagonal impact energy absorption  
..... Y.Sugiyama, R.Tada, T.Miura, K.Kitazono
- P13. Length-scale effect in the strength of single crystal pure Al micropillars  
..... S.Takeyasu, N.Takata, M.Kobashi
- P14. Stress relaxation characteristics of 2024Al alloy subjected to continuous cyclic bending  
..... T.Miyazawa, Y.Takayama, H.Watanabe
- P15. Solidification structures of Al based heat-resistant cast alloys prepared through eutectic reaction  
..... T.Okano, N.Takata, M.Kobashi
- P16. TEM observations of microstructure of severe cold rolled 7075 aluminum alloy during aging treatment  
..... M.Hotta, E.Kobayashi, S.Kuramoto, I.Goroh
- P17. Fabrication of ADC12 porous Al using scrap material / SUS304 thin-walled pipe composite materials by friction welding  
..... R.Kobayashi, Y.Hangai
- P18. Microstructure evolution in Al-Mg-Si alloys by high-speed shear deformation at elevated temperatures  
..... K.Minami, N.Ikeo, S.Alok, Y.Osawa, K.Tsuchiya, T.Mukai
- P19. Investigation of superplastic behavior of Al/Mg/Al clad sheet using microgrid drawn by electron beam lithography  
..... T.Tokunaga, K.Matsuura, M.Ohno
- P20. Development of microstructural refiner for ADC12 and its refining ability  
..... F.Nakamura, H.Sato, Y.Watanabe

- P21. Influence of volume fraction of heterogeneous nucleus on the grain refining performance of Al-Al<sub>2</sub>.7Fe0.3Ti refiners  
 ..... S.Taniai, Y.Watanabe, H.Sato
- P22. Effect of alcohol addition to electrolyte on plasma electrolytic oxidation of magnesium  
 ..... K.Asakura, H.Hashimoto, H.Asoh
- P23. High-temperature mechanical properties of Al-Mg solid solution alloys including non-solubility impurity atoms  
 ..... H.Fujiwara, K.Kawasaki, T.Ito, T.Mizuguchi
- P24. Effect of different magnesium content on serrated loading curvature of indentation in 5000 series aluminum alloy  
 ..... T.Kami, H.Yamada, M.Okada, N.Ogasawara
- P25. Very-high-cycle rotary bending fatigue of a casting aluminum alloy ADC12  
 ..... Y.Tanaka, T.Ito, K.Okada, T.Sakai
- P26. Fabrication of antibacterial silver zeolite powder dispersed aluminum bulk compact by spark plasma sintering  
 ..... R.Shibatani, T.Ito
- P27. High temperature mechanical properties of Ti<sub>3</sub>Al intermetallic compound  
 ..... T.Fukui, T.Ito
- P28. Hydrogen embrittlement in 6000 series aluminum alloys affected by temperature and alloy composition.  
 ..... I.Ide, G.Itoh
- P29. Influence of fin height and base thickness on heat dissipation of a thin wall heat sink model cast by Al-25%Si alloy  
 ..... M.Terao, T.Haga, H.Huse, A.Hamada
- P30. Crystallographic assessment of hydrogen embrittlement cracks in aluminium alloy using X-Ray diffraction contrast tomography  
 ..... Y.Sek, K.Hirayama, H.Toda, K.Uesugi, A.Takeuchi
- P31. Influence of additional Zr on condition for intergranular fracture in high-purity Al-Cu-Mg alloy  
 ..... R.Ohte, Y.Aoki, T.Uesugi, Y.Takigawa, K.Higashi
- P32. Influence of Ca-addition amounts on corrosion behavior of AZ61 Mg alloys  
 ..... Y.Shimada, M.Tsunakawa, K.Nakamura, T.Ishizaki
- P33. Bending behavior of ADC12 precursor core/A1050 sandwich panel prepared by friction stir welding and effect of foaming  
 ..... K.Otsuki, Y.Hangai, T.Utsunomiya
- P34. Effects of additional Cu and Mg contents on fatigue properties in a 7000 series aluminum alloy  
 ..... R.Yamada, K.Kizawa, G.Itoh, A.Kurumada, M.Nakai, M.Nakamura
- P35. Fabrication of ADC 12 porous aluminum foamed by frictional heat generated during friction stir welding  
 ..... K.Takada, Y.Hangai, H.Fujii, Y.Aoki, M.Zhou, T.Utsunomiya
- P36. Effect of Mg content on local plastic strain distribution under cold rolling in Al-Mg alloy  
 ..... M.Nakayama, M.Kobayashi, T.Aoba, H.Miura
- P37. Wear and friction characteristics of AlN/AlCrN hybrid coatings on A7075 alloy  
 ..... T.Ishii, M.Nakamura, Y.Takamori
- P38. Reforming treatment of aluminum dross residue by using sulfuric acid  
 ..... M.Yoshida, T.Hiraki, T.Nagasaka
- P39. Stress corrosion cracking in Al-10Mg alloys  
 ..... R.Masunaga, H.Toda, K.Uesugi, A.Takeuchi
- P40. In-situ observation of Al-Mg alloy oxidation for analyzing formation of aluminum dross  
 ..... H.Noguchi, T.Hiraki, N.Maruoka, T.Nagasaka
- P41. Liquid phase diffusion bonding of A1070 by using metal acetate coated Zn sheet  
 ..... K.Ozawa, S.Koyama, I.Shohji
- P42. The effect of boriding and nitriding on corrosion and wear resistance of titanium  
 ..... Y.Anzawa, R.Isino, S.Koyama, I.Shohji
- P43. Electrochemical behavior of titanium electrode in dimethylsulfoxide bath  
 ..... S.Kumeno, K.Kuroda, M.Okido
- P44. Protein adsorption and osteoconductivity of hydrophilic and hydrophobic titanium  
 ..... Y.Mori, Y.Yamaguchi, K.Kuroda, M.Okido
- P45. Solidification structures and crystal orientations of Al-0.20%Ti alloy wires produced by OCC process  
 ..... Y.Ajiri, Y.Okamoto, G.Motoyasu
- P46. 3D optimization of fatigue crack initiation resistance in aluminum casting alloy  
 ..... S.Suga, H.Toda, D.Seo, H.Li, K.Uesugi, A.Takeuchi
- P47. Effect of analysis model on material parameters in crystal plasticity analysis  
 ..... T.Kanda, Y.Kume
- P48. Effect of composition on the resistance to humid gas stress corrosion cracking in 6000 series aluminum alloys  
 ..... R.Akishino, G.Itoh, A.Kurumada, S.Kuramoto, S.Aoshima, M.Nakajima, F.Yang
- P49. Formation of anticorrosive films on Al-Zn-Mg alloy by steam coating  
 ..... T.Yokomizo, K.Sasagawa, K.Nakamura, O.Li, A.Serizawa, T.Ishizaki
- P50. Effect of Zr addition on beta Ti-Fe-Zr sintered alloy  
 ..... H.Takano, T.Tokizawa, N.Aoyagi, M.Ohnuma, T.Honma
- P51. Effect of Pb and Bi on resistance to humid gas stress corrosion cracking in 6000 series aluminum alloys  
 ..... S.Aoshima, G.Itoh, A.Kurumada, S.Kuramoto, F.Yang, M.Nakajima, R.Akishino
- P52. Effect of HPT on aging behavior of Al-2.5Li-(2.0Mg) alloy  
 ..... Y.Haizuka, K.Kawai, S.Lee, S.Saikawa, K.Matsuda, S.Hirosawa, Z.Horita, D.Terada
- P53. Thermomechanical treatment of Al-Cu-Mg alloys with different Cu/Mg ratio  
 ..... R.Uchikawa, T.Nejigaki, A.Matsumoto, S.Lee, S.Ikeno, K.Matsuda

P54. Analysis of local structure near a Ta atom in a Ti-20Ta alloy by using X-ray fluorescence holography  
..... T.Yoshida, T.Yamamoto, K.Hayashi, N.Happo, S.Hosokawa

P55. Influence of surface roughness on corrosion behavior of AZ31 magnesium alloy in simulated body fluid  
..... R.Kobayashi, T.Hosaka, S.Yoshihara, B.J.MacDonald

P56. Estimation of corrosion rate for Ca-added flame-resistant magnesium alloy in NaCl aqueous solution  
..... M.Tsunakawa, Y.Shimada, K.Nakamura, T.Ishizaki

P57. Effect of Ce or Nd addition on Mg-Y alloy  
..... T.Hamaguchi, Y.Tomuro, S.Lee, S.Ikeno, K.Matsuda

P58. Experimental and numerical analysis on magnetic pulse welding behaviour of Al/Fe joint  
..... J.Li, J.Nishiwaki, T.Kambe, D.Yamagishi, S.Kumai

P59. Effect of Calcium addition on dynamic compressive deformation behavior of magnesium  
..... Y.Chikanari, T.Maeda, N.Ikeo, T.Mukai