

Program
of
The 131st Conference of Japan Institute of Light Metals
(November 5-6, 2016, Ibaraki University)

1. Prediction of high temperature properties of near-alpha titanium alloys
..... T.Kitashima, M.Hagiwara, Y.Mitarai
2. Microstructural prediction and hot forging properties of Ti-17 alloy for aerospace application
..... H.Matsumoto, D.Naito, G.Yamane
3. Influence of aluminum addition on isothermal aging at 673K in Ti-13mass%Cr-0.2mass%O alloy
..... M.Ikeda, M.Ueda
4. Effect of cold working on local mechanical response in Gum Metal
..... Y.Shibayama, K.Onose, S.Kuramoto, T.Suzuki, E.Nakagawa, T.Ohmura
5. Improvement of tensile-ductility balance of low-cost beta-type Ti alloys through {332}<113> deformation twinning
..... K.Cho, H.Kobata, P.F.Santo, Y.Itoh, M.Niinomi, H.Y.Yasuda
6. Deformation mechanism and effect of grain size on strength-ductility balance in Ti-4.5Al-2Mo-1.6V-0.5Fe (Ti-9) alloy
..... K.Minamino, H.Matsumoto
7. Microstructural control by thermomechanical process and mechanical properties of Ti-2Al-1Fe-0.5Cr-1Cu-1Sn(Ti-2111S)alloy.
..... Y.Tanaka, H.Matsumoto
8. Mechanical properties and nano structures in sintered Ti-Fe-Zr alloy
..... T.Homma, G.Kamata, H.Takano, M.Nanko, I.Ihara
9. Effect of insert metal on dissimilar metal joining between A5052 aluminum alloy and AZ31 magnesium alloy using laser brazing
..... T.Ogura, S.Netsu, K.Saida
10. Preparation of aluminum alloy sheet and cold rolled sheet by magnetic pulse welding and microstructure observation of the interface
..... S.Inoue, T.Itoi, K.Okagawa
11. Influence of adhesive type on the thermal deformation at adhesive bonding of dissimilar material
..... M.Tawara, Y.Ota
12. Effect of surface treatment for aluminum on adhesion between aluminum and engineering plastic
..... M.Hino, R.Kuwano, N.Nagata, K.Nagata, T.Kanadani
13. Casting of aluminum alloy clad strip by a vertical type tandem twin roll caster
..... K.Okamura, T.Haga
14. Bond interface microstructure and bond strength of A1050/C1020 clad materials using vacuum roll bonding
..... S.Matsumoto, T.Yamaguchi, K.Nishio
15. Ultrasonic welding process of multilayer metal foil
..... D.Shoji, M.Nakamura, T.Sasaki, Y.Do
16. Development of Stainless Steel/Mg alloy Clad Material produced by Surface Activated Bonding Method
..... Y.Hashimoto, H.Okayama, K.Nanbu, T.Kurokawa
17. Effect of heat balance on the friction stir diffusion bonding of aluminum alloys/titanium foils
..... T.Kodama, Y.Takayama, H.Watanabe
18. Effect of bonding conditions on spot bonding by friction stirring and diffusion in 5052 aluminum alloy and dissimilar metal foils
..... H.Fukushige, K.Igari, Y.Takayama, H.Watanabe
19. Effect of Nickel-coating thickness on A1050 Aluminum sheet and C1100 Copper Sheet obtained by Magnetic Pulse Welding
..... M.Sasaki, T.Itoi, K.Okagawa
20. Spot-welding of 1050 aluminum using W-TiN electrodes with different TiN content
..... Y.Ota, A.Kurumada, G.Itoh, S.Mukae
21. Effect of Sr addition on coarse Si-including particle formation in Al-Si filler alloy
..... Y.Uchida, T.Toyama, A.Tsuruno, T.Izumi
22. Effect of Si content and thickness of filler metal as flow pass on filler metal flow of aluminum brazing.
..... Y.Ohashi, W.Narita, Y.Ogawa, M.Inagaki
23. Influence of filler metal residue on the flow behavior of Al-Si brazing filler metal
..... H.Ogawa, M.Inagaki, Y.Ohashi, W.Narita
24. Effect of Bi content in filler for aluminum/aluminum nitride joint by vacuum brazing
..... K.Mianmi, I.Ota
25. Effects of homogenization and Fe content on erosion behavior with low-deformation of Al-Mn base alloys
..... S.Maruno, M.Yoshino, S.Iwao, M.Edo
26. Microstructure and Mn solid solubility of Al-1~4 wt%Mn strip rapidly solidified by high-speed twin-roll casting
..... K.Otsuka, Y.Harada, S.Muraishi, S.Kumai
27. Relation between casting speed and solidification structures of Al-Fe alloy OCC wires
..... T.Sawaya, K.Hotozuka, N.Murakami, G.Motoyasu
28. Heat radiation properties of the Al-25%Si escalope die-casting
..... H.Fuse, T.Haga, A.Hamada, M.Terao

29. Solidification of supercooled hypereutectic Al-Mn alloys
..... T.Isobe, K.Oda, K.Murata
30. Non-destructive observation of local plastic strain distribution in aluminum alloy under rollin
..... M.Kobayashi, M.Nakayama, T.Aoba, H.Miura
31. Evaluation of the effects of polycrystallographic structure on damage evolution by using diffraction-amalgamated grain-boundary tracking technique
..... K.Hirayama, H.Toda, T.Shimoji, Y.Tanabe, K.Uesugi, A.Takeuchi
32. Fatigue properties of A7075 coated with Diamond-Like Carbon/AlN hybrid coatings by UBMS
..... M.Nakamura, Y.Takamori
33. AES analysis of passive film formed on aluminum alloy in model fresh water with metal cations
..... M.Sakairi, K.Otani, A.Kaneko
34. Effect of concentration of zinc ion on surface film morphology formed on aluminum alloy in fresh water
..... K.Otani, M.Sakairi, A.Kaneko
35. Corrosion morphology of Al alloy after repeated dry-wet cycling tests with NaCl solution
..... K.Nagai, A.Hyono, M.Chiba, Y.Shibata, H.Takahashi
36. Corrosion mass loss of magnesium alloy plates by atmospheric exposure test and salt spray test
..... A.konno, K.Nishinaka, T.Matsumura, Y.Hiyamori, T.Asano, H.Umehara
37. Galvanic corrosion between pure aluminum 1050 and CFRP using conductive resin
..... S.Kawato, M.Sakai, T.Yokozeiki
38. Effect of liquid flow rate on galvanic corrosion between pure aluminum 1050 and CFRP
..... Y.Uematsu, M.Sakai
39. Effect of Mn content on film quality of electrolytic Al-Mn alloy foil made by ionic liquid electrodeposition method
..... J.Nunomura, Y.Honkawa, T.Koyama, Y.Kojima
40. Electrodeposition of Ti from ionic liquid bath
..... Y.Hibino, K.Azumi
41. Development and characterization of electroless Ag plated aluminum powder
..... T.Nakatani, Y.Hashizume, H.Minamiyama, K.Minami
42. Effects of electrolytes on dielectric constants and defects of anodic film on high-purity aluminum
..... Y.Shimizu, S.Enoki, M.Katano
43. Influence of the surface layer on odor adsorption of pre-coated aluminum fin-stock
..... K.Tateyama, Y.Toyoda, N.Hattori
44. Discharge behavior of water-activated magnesium battery
..... I.Nakatsugawa
45. Experimental and numerical analysis of magnetic pulse forming and high-speed deformed microstructure of pure aluminum
..... Y.Kedo, T.Kambe, J.Nishiwaki, S.Muraishi, S.Kumai
46. Direct temperature measurement of the aluminum alloy in mold during hot extrusion
..... S.Tanimura, H.Takeshita, T.Suzuki, H.Fukumasu, N.Takatsuji, S.Okita
47. Generation of vertical wall on A5083 medium gauge plate by friction stir forming (FSF)
..... T.Ohashi, H.M.Tabatabaei, T.Nishihara
48. Spinning of neck portion of aluminum alloy cylinders using a disposable forming die
..... F.Nanjyo, J.Kobayashi, G.Itoh
49. Properties of pure aluminium produced by mechanical milling and spark plasma sinetring
..... M.Kubota
50. Comparison of creep characteristics of pure magnesium and synchronized LPSO magnesium alloy
..... Y.Ishii, S.Itabashi, H.Takagi, M.Fujiwara
51. Kink deformation behavior on Mg/LPSO phase boundary
..... H.Watanabe, M.Yamasaki, K.Hagihara, Y.Mine, K.Takashima, Y.Kawamura
52. Kink Band Formation in an 18R-LPSO Single Crystal and dislocation distributions
..... T.Matsumoto, M.Yamasaki, K.Hagihara, Y.Kawamura
53. Effect of the Y element of the structure in Mg-Y-RE alloy
..... T.Hamaguchi, S.Lee, S.Ikeno, K.Matsuda
54. Creep strength and microstructural stability in a room temperature multi-directional forged AZ80 magnesium alloy
..... M.Suzuki, K.Nakata, R.Watanabe
55. Temperature and strain-rate dependence of deformation behavior of ultrafine-grained AZ80Mg alloy
..... C.Watanabe, Y.Yoshida, R.Monzen, H.Miura
56. Influence of grain size on strength of Mg-Al-Zn base alloy
..... Y.Sakaoka, T.Sudou, S.Kuramoto, A.Kurumada
57. Improving ductility of AZ91D alloy by thermomechanical treatment with optimized press conditions
..... R.Yamaguchi, N.Kitazono, R.Koga, K.Kitazono
58. **[Keynote]** Production of partial outer panel for railway vehicle by using flame resistant magnesium alloy
..... T.Ishikawa, H.Mori, Y.Chino, K.Shimizu, Y.Gonda, H.Ueda, K.Yoshida, K.Yamada

59. Effect of Ca addition on asymmetry DFSW of magnesium alloy
..... M.Zhou, Y.Morisada, H.Fujii, T.Ishikawa
60. FSW of High-Strength flame-resistant magnesium alloy
..... E.Yukutake, S.Ueda, M.Sasaki, K.Takemori, M.Inoue, H.Fujii
61. Defect Monitoring with Movable AE Sensors during FSW of Flame-Resistant Magnesium Alloy
..... K.Ito, M.Enoki, E.Yukutake
62. Effect of filler composition on weld strength in MIG welded flame retardant magnesium alloys
..... Y.Takigawa, T.Uesugi, M.Ueda, Y.Kimonoto, K.Higashi
63. Fatigue crack growth behavior in extruded Mg-Al-Zn-Ca alloy TIG weld
..... K.Kokutani, T.Nishimizu, Y.Miyashita
64. Fatigue property of AZX611 magnesium alloy rolled sheets
..... N.Saito, K.Suzuki, Y.Chino, T.Ito, Y.Fukuda, M.Noda, Y.Gonda
65. Ductile fracture due to stress concentration on flame-resistant magnesium alloy
..... H.Mori, N.Uehigashi
66. **[Keynote]** Influence of calcium addition on deformation response of magnesium under dynamic loading
..... T.Mukai
67. Technology development trend of the magnesium alloy applications in the transport sector
..... H.Komai, H.Ohara
68. Fabrication of high strength AX81 Mg plate using multi pass hot rolling
..... Y.Fukuda, M.Noda, S.Yanagihara
69. Effect of V Bending Test Conditions on Specimen Surface and Microstructure of Flame Resistance Magnesium Alloy sheet
..... T.Ito, M.Noda, H.Mori
70. Effect of heat-treatment conditions on extrudability, microstructures and mechanical properties of Mg-xAl-0.5Ca-0.5Mn (wt.% x=2-6) alloy
..... T.Nakata, C.Xu, R.Ajima, T.Sasaki, Y.Matsumoto, K.Shimizu, S.Kamado
71. Influence of composition on microstructure and mechanical properties of extruded Mg-Al-Zn-Ca magnesium alloys
..... X.Huang, Y.Chino, H.Ueda, M.Inoue, F.Kido, T.Matsumoto
72. Effect of growth rate on corrosion resistance of film prepared on flame-resistant magnesium alloy by steam coating
..... K.Nakamura, M.Tsunakawa, R.Shiratori, T.ishizaki
73. Investigation of corrosion properties for noncombustible magnesium alloys
..... T.Matsumura, S.Umino, K.Kikuchi, Y.Hiyamori, K.Yamada, Y.Taniguchi, H.Nomura, K.Nishinaka
74. Creep properties of die-cast Mg-11~13wt%Al-2wt%Ca-0.7wt%Zn alloys
..... T.Kishi, C.Xu, K.Sasaki, S.Takeda, S.Orii, S.Kamado
75. Anisotropic grain growth during superplastic deformation in fine grained Al-Mg-Mn alloy
..... T.Kanazawa, H.Masuda, H.Tobe, K.Takehi, E.Sato
76. Low-temperature creep mechanism in ultrafine-grained Aluminum
..... K.Higane, H.Masuda, H.Tobe, K.Kitazono, E.Sato
77. Stress relief behavior of ultrafine grained pure aluminum
..... T.Koizumi, M.Kuroda
78. Effect of substitutional solute atom on dislocation multiplication behavior during tensile test in aluminum alloys
..... H.Adachi, M.Okada, K.Iwata, H.Nakanishi, S.Tamaru
79. Plastic flow behavior during indirect friction consolidation of AZ91 magnesium alloy chips
..... K.Souma, M.Maeda, K.Katoh, M.Nomoto
80. Fabrication of A1050 dense pipe using scrap material by friction welding
..... R.Kobayashi, S.Otazawa, Y.Hangai, R.Suzuki, M.Matsubara
81. Effects of forging temperature on Al₃Ti particle distribution in Al-Al₃Ti multi-phase materials deformed by multi-directional forging
..... H.Sato, F.Teshima, S.Jamian, Y.Watanabe
82. Microstructure and Mechanical Properties of AZ91Mg Alloys Multi-Directionally Forged at Room Temperature
..... H.Miura, T.Shibazaki, M.Kobayashi
83. Effect of strain rate and temperature on tensile properties of some 6000-series aluminum alloys
..... S.Koizumi, J.Kobayashi, G.Itoh
84. Deformation behavior of binary Al-Mg alloys under dynamic loading
..... Y.Ninomiya, N.Ikeo, Y.Osawa, K.Tuchiya, T.Mukai
85. Contributions of grain boundary sliding and solute drag creep to high-temperature ductility in Al-Mg alloy
..... T.Mizuguchi, T.Ito, K.Kimura, T.Kurisaka
86. Effect of secondary phase particles and shear bands on the bendability of Al-Mg alloy sheet
..... T.Abe, K.Kobayashi
87. Evaluation of durability for commercial pure titanium thin plates grain-refined by heat treatment after severe plastic deformation.
..... I.Kuboki, R.Yoshitsuru, T.Yanaseko
88. Evaluation of the penetration behavior of magnesium alloy with high strength into bone tissue
..... N.Ikeo, J.Shimizu, Y.Sano, Y.Shimizu, T.Mukai
89. Microstructure control of Mg-Zn alloy for suitable combination of strength and in vitro degradation speed
..... K.Fujiwara, Y.Kim, N.Ikeo, T.Mukai

90. Variation in degradation behavior of Ca-Mg-Zn biodegradable two-phase inter metallic alloys via microstructural control
..... K.Ishii, K.Hagihara, T.Nakano
91. Effect of annealing and cold rolling rate on texture development of Al-Mg-Si alloy
..... R.Akiyoshi, K.Ihara, H.Shishido, Y.Takaki
92. Effect of heating rate on recrystallization textures of Al-Mg-Si alloy sheets fabricated by cold rolling and asymmetric warm rolling
..... R.Amane, H.Inoue
93. Effects of Zener-Hollomon parameter and strain in hot forging on recrystallization of an Al-Mg-Si alloy with transition elements
..... T.Ijiri, K.Shiozawa, S.Sumi, H.Okada
94. Texture characteristics of an A5052 alloy after accumulative roll bonding and subsequent low temperature annealing
..... K.Kashihara, N.Tsuji
95. Preferred orientation formation of aluminum by shear deformation and
..... T.Kanemaru, K.Wati, Y.Takayama, H.Watanabe
96. Effect of process parameter on microstructure of Ti-48Al-2Cr-2Nb alloy fabricated by Electron beam melting
..... M.Todai, T.Liu, H.Yasuda, K.Cho, T.Nakano, A.Ikeda, D.Kondo, Y.Nagamachi, M.Ueda, M.Takeyama
97. Mechanical properties of casted AC4C/additive manufactured Al-10Si-Mg joint fabricated by laser additive manufacturing
..... D.Terada, T.Arai, K.Kurita, Y.Nagata, S.Koiwai, M.Adachi, H.Nakashima
98. Centrifugal casting of pure aluminum using 3D printed mold
..... T.Kii, M.Yamada, T.Chiba, H.Sato, Y.Watanabe, H.Inoie
99. Study on transfer behavior of fine pattern to product through injection molding with Al-Mg alloy mold
..... M.Nikawa, D.Inaba, N.Tada, T.Takahashi, M.Okada, M.Yamashita
100. Evaluation of the effective thermal conductivity of Al-SiC particle-dispersed composites by using microstructure images
..... K.Sugio, Y.Choi, G.Sasaki
101. Hot tearing prediction of Al-5%Mg alloy with different grain sizes using FEM thermal stress analysis and its experimental validation
..... R.Takai, N.Endo, M.Yoshida
102. Prediction of Mechanical Properties of Semi-Solid Alloy using Image-Based Modeling and It's Validation
..... A.Matsushita, T.Iwamoto, H.Mizuno, T.Okane, M.Yoshida
103. Improvement in efficiency of mixing molten aluminum by using vortex rotation
..... R.Izumino, S.Komarov
104. Microstructure changes of severe cold rolled 7075 aluminum alloy during aging
..... M.Hotta, S.Kuramoto, G.Ito, E.Kobayashi
105. Effects of aging temperature on age hardening behavior of uniaxial hot-pressed precipitation strengthening type aluminum alloy
..... M.Harita, M.Suzuki, K.Kitazono
106. Effect of solution heat treatment conditions on mechanical properties of 7000 series aluminum alloys
..... K.Norikane, H.Tanaka
107. Time dependent magnetization of Al-Mg-Si alloys
..... D.Hatakeyama, K.Nishimura, T.Namiki, K.Matsuda, H.Aoki, N.Nunomura, T.Matsuzaki
108. Aging behavior of Al-Mg-Si alloys with different Mg/Si alloy and Mg+Si alloy
..... D.Yoshino, S.Lee, S.Ikeno, K.Matsuda
109. The nanocluster formation behavior in Al-Mg-Si alloys with low Mg/Si ratio
..... S.Kani, S.N.Kim, A.Serizawa, E.Kobayashi
110. Aging behavior Al-Mg-Si-Cu-Ag alloy aged at 473K and 523K
..... A.Matsumoto, T.Nejigaki, S.Lee, S.Ikeno, K.Matsuda
111. Observation of microstructure in deformed Cu-added 6000 series Al alloy aged at 473K
..... T.Nejigaki, S.Lee, S.Ikeno, K.Matsuda
112. Aging behavior of Al-Zn-Mg alloys with low Zn/Mg ratio aged at 473K
..... R.Arita, F.Aoki, S.Lee, S.Ikeno, K.Matsuda
113. Microstructure observation in HPT processed Zn added 2000 series aluminum alloys
..... K.Kawai, T.Nejigaki, S.Lee, Z.Horita, S.Ikeno, K.Matsuda, S.Hirosawa, D.Terada
114. Microstructure observation of Cu and Ag added Al-Mg-Ge alloy
..... T.Sato, S.Lee, S.Ikeno, K.Matsuda
115. Aging behavior and mechanical properties of multi-directionally forged Al-Mg-Sc alloy
..... T.Aoba, M.Kobayashi, H.Miura, C.Watanabe
116. Aging behavior of cold-rolled Al-Mg-Si alloy
..... K.Ikeda, S.Sato, S.Miura, K.Takata
117. Effect of transition elements for aging of Al-1.0mass%Mg₂Si alloy
..... Y.Kuroda, D.Yoshino, S.Lee, S.Ikeno, K.Matsuda
118. The effect of Zn·Mg concentration in the aging precipitation of 7003 aluminum alloy extruded material
..... Y.Nara
119. Two step aging behavior and microstructure of Mg-Al system alloy
..... T.Ozasa, M.Koichi, S.Saikawa, S.Ikeno
120. microstructure and heat resistance of Mg-3%Al-1%Si alloy with containing large amount of Sn
..... H.Kako, S.Saikawa, S.Ikeno, M.Mizutani, K.Yoshida, N.Kawabe

121. Status quo of international standardization of aluminum alloys for the use of compressed hydrogen gas container for fuel cell vehicles
..... G.Itoh
122. Effect of composition on resistance to humid gas stress corrosion cracking in 6000 series aluminum alloys
..... S.Aoshima, F.Yang, A.Kurumada, G.Itoh, R.Akishino, M.Nakajima
123. Assessment of resistance to humid gas stress corrosion cracking of aluminium alloys
..... F.Yang, S.Aoshima, A.Kurumada, G.Itoh, R.Akishino, M.Nakajima
124. Effects of Silicon content on tensile strength and chip breakability of Al-Mg-Si alloys for a hydrogen container valve housing
..... J.Xing, Y.Owada, T.Anami
125. Effects of second-phase particles on crack initiation in 6000 series aluminum alloys
..... K.Mochizuki, G.Akaba, T.Manaka, G.Itoh
126. Influence of hydrogen existing state on fracture of aluminum alloy A6061-T6
..... K.Tsukamoto, H.Suzuki, K.Takai
127. Change of mechanical properties by hydrogen induced lattice defects in electrolysis hydrogen charged A7075-T651 alloy
..... Y.Arai, H.Suzuki, K.Takai
128. Effect of heat treatments on the hydrogen embrittlement in an Al-8%Mg alloy
..... K.Komatsu, G.Itoh, M.Nakai
129. Mechanical properties of electrolytic hydrogen charged A5052 aluminum alloy
..... N.Shindo, H.Suzuki, K.Takai
130. Initiation and growth of micro pores of A7075 aluminum alloy during tensile deformation
..... T.Hojo, M.Kikuchi, K.Shimizu, H.Toda, A.Takeuchi
131. Effect of microstructure on the hydrogen behavior in tensile-deformed Al-Cu-Mg alloy
..... S.Fukasawa, G.Itoh, M.Nakai
132. Effects of internal hydrogen on fatigue properties in a 7000 series aluminum alloy
..... R.Yamada, K.Kizawa, G.Itoh, A.Kurumada, M.Nakamura
133. Behavior of hydrogen in a plasma-charged aluminum
..... T.Manaka, G.Itoh
134. Ab initio calculation study on the site of hydrogen in Al-Zn-Mg alloys
..... T.Nagano, Y.Kawasaki
135. Decohesion of Al grain boundaries and interfaces: first-principles calculations
..... M.Yamaguchi, K.Ebihara, T.Tsuru, M.Itakura
136. Numerical Study on Thermal Desorption Spectra of Hydrogen for Pure Aluminium
..... K.Ebihara, M.Yamaguchi, T.Tsuru, M.Itakura
137. Control of structure of Al-Fe-Si compounds in Al alloys due to addition of particles synthesized by solid-phase reaction
..... S.Komarov
138. Elucidation of mechanism for ultrasonic assisted modification of intermetallic compounds in aluminum alloys
..... T.Ishii, S.Komarov
139. Microstructure control of TiB₂/ Al composites by spark sintering process and evaluation of mechanical properties and thermal conductivity
..... G.Sasaki, T.Hirose, Y.B.Choi, K.Sugio, K.Matsugi
140. Influence of additive elements on microstructure of an Al-Ca alloy
..... J.Yu, Y.Ishiwata, R.Taniguchi, H.Yasuda
141. Manufacturing aluminum foams by direct rolling precursor method
..... R.Suzuki, S.Nishida, R.Moteki, T.Kaburagi, T.Hagiwara, M.Matsubara
142. Fabrication of porous Al sandwich panel applying friction stir welding
..... K.Otsuki, Y.Hangai, T.Utsunomiya, S.Kitahara
143. Effect of powder diameter on throat shape of porous Al by spacer method
..... D.Katsuno, N.Takata, M.Kobashi
144. Microstructure and compressive properties of porous Al-Ti alloys fabricated using NaCl as space holder
..... Y.Oka, N.Takata, M.Kobashi
145. Bonding between porous Al-Ti alloy and stainless substrate by bonding layer
..... Y.Kaneda, N.Takata, M.Kobashi
- P01. Derivation of constitutive equation for hot-worked Al-Mg alloy and its application to FEM analysis of hot rolling
..... K.Goto, S.Saita, S.Hirosawa
- P02. Development of high-strength Al-Mg-Si aluminum alloy bolt by ECAP and various aging treatments
..... T.Obata, S.Hirosawa, K.Mouri, M.Shimoda
- P03. Effect of Mo addition on mechanical property and deformation mechanism of β -type Ti-Mn alloys
..... H.Kobata, K.Cho, T.Nagase, M.Niinomi, H.Y.Yasuda
- P04. Hetero-coagulation behavior of suspended particles in molten metal
..... H.Tsuchii, C.Ukawa, H.Arai, K.Matsumoto
- P05. Effect of hydrogen on tensile properties and hydrogen evolution in Al-Zn-Mg base alloys
..... Y.Hariki, K.Horikawa, K.Tanigaki, H.Kobayashi

- P06. Effect of impurity sodium on the ductility of 5083 aluminum alloys
..... S.Kitahata, K.Horikawa, K.Tanigaki, H.Kobayashi
- P07. First-principles calculation of the effect of Na and In atoms on Al grain boundary cohesion
..... K.Taira, K.Tanigaki, K.Horikawa, H.Kobayashi
- P08. Development of wide rolled AX81 magnesium alloys by multi-pass hot rolling process
..... Y.Hayakawa, M.Noguchi, M.Noda
- P09. Effects of roll materials on characteristics of cast aluminium alloys during twin roll casting process
..... T.Ishikawa, S.Nishida, H.Watari
- P10. Hot forging of roll cast magnesium alloys with high aluminum content
..... T.Kishi, H.Watari, M.Suzuki, T.Haga
- P11. Microstructural development of rolled AZ31 magnesium alloy in tension and compression
..... A.Ichinose, S.Morita, N.Hattori, T.Mayama
- P12. Effect of casting conditions on twin-roll-cast-strip of aluminum alloy with wide solidification temperature
..... R.Oonishi, T.Haga
- P13. Fabrication of ADC12-A6061 functionally graded aluminum foam sandwich panel
..... S.Suto, Y.Hangai, T.Utsunomiya, O.Kuwazuru, S.Kitahara
- P14. Solidification structures of Al-0.20Ti alloy wires produced by OCC process
..... Y.Ajiri, Y.Okamoto, G.Motoyasu
- P15. High temperature mechanical properties of a flame-retardant magnesium alloy AZX611
..... G.Saito, T.Ito, N.Uehigashi, H.Mori
- P16. High ductility Ti-48Al-2Cr-2Nb alloy with peculiar layered microstructure fabricated by electron beam melting
..... T.Liu, M.Todai, H.Yasuda, K.Cho, K.Hagihara, T.Nakano, A.Ikeda, D.Kondo, Y.Nagamachi, M.Ueda, M.Takeyama
- P17. Effects of heat treatment on compressive property of porous Aluminium fabricated by SLM (Selective Laser Melting) method
..... Y.Sugiyama, K.Kitazono, R.Tada, E.Hoshi
- P18. Identification of hydrogen induced lattice defects in electrochemically hydrogen charged aluminum
..... Y.Saito, H.Suzuki, K.Takai
- P19. Simulation of the si precipitation process in Mg₂Si under an applied stress
..... B.Liu, Y.Sasajima, T.Ikeda
- P20. Microstructural change and tensile deformation behavior of deformation restricted forged AZ91 magnesium alloy
..... T.Yamaguchi, K.Kimura, T.Aoba, M.Kobayashi, H.Miura
- P21. Cold roll forming of wrought Mg alloy
..... K.Tsuruoka, H.Aso, H.Watari
- P22. Optimization of Al content for strengthening in high speed extrudable Mg-Al-Ca-Mn alloy
..... R.Ajima, T.Nakata, S.Kamado, T.Sasaki, Y.Matsumoto, K.Shimizu
- P23. Effects of rolling conditions on microstructures and mechanical properties in Mg-Al-Ca-Mn alloy sheets
..... T.Matsumoto, T.Nakata, S.Kamado, K.Kario, K.Suzawa, K.Yoshida, N.Kawabe
- P24. Mechanical behavior of Ti₃Al intermetallic compound by spark plasma sintering
..... T.Fukui, T.Ito
- P25. Microstructure evolution in Al-Mg-Si alloys under dynamic compressive loading
..... K.Minami, N.Ikeo, S.Alok, Y.Osawa, K.Tsuchiya, T.Mukai
- P26. Formation of intermetallic compound by laser irradiation to mixture of titanium and aluminum powders
..... S.Komaki, R.Matsumoto, H.Utsunomiya
- P27. Effects of quenching temperature on strength of cold-rolled Al-Zn-Mg alloy
..... Y.Nakajima, S.Kuramoto, I.Aoi, Y.Shimizu
- P28. Influence of Cu addition on the thermal fatigue behavior of Al-Si-Mg alloy
..... Y.Hirai, Y.Imu, A.Serizawa, K.Moizumi
- P29. Four-terminal sensing of contact resistance on titanium sheet-roll interface during cold rolling
..... S.Kameyama, R.Matsumoto, H.Utsunomiya
- P30. Effect of rolling directions at positions of flange fracture in an AZ31 magnesium alloy sheet
..... M.Okawa, S.Mori, A.Takasaki
- P31. Resistance to hydrogen embrittlement in 6000 series aluminum alloys affected by alloy composition
..... I.Ide, G.Itoh
- P32. Effect of extended forging conditions on precipitate dispersion of 7000 series aluminum cast alloy
..... H.Ito, Y.Kume
- P33. Relationship between intergranular cracking and precipitate microstructure in Al-Mg-Si alloys
..... S.Ishizawa, F.Yang, S.Aoshima, G.Itoh, M.Nakai, A.Kurumada
- P34. Deformation mechanism analysis of Gum Metal by nanoindentation
..... K.Onose, Y.Shibayama, S.Kuramoto, T.Suzuki, E.Nakagawa, T.Ohmura
- P35. Effect of NaCl solution concentrations on the corrosion behavior of flame-resistant magnesium alloy
..... M.Tsunakawa, R.Shiratori, K.Nakamura, T.Ishizaki
- P36. Effect of additive zinc on the in vitro fatigue properties of magnesium alloy
..... T.Uemura, N.Ikeo, T.Mukai

P37. Enhancing impact fracture toughness of Mg-3Al-1Zn alloy by severe plastic working with rolling
..... T.Maeda, T.Kawa, N.Ikeo, Y.Oosawa, T.Mukai

P38. Effect of isomorphous and eutectoid type β stabilizer on Young's modulus of Ti alloys
..... A.Nakao, S.Kobayashi

P39. Electrochemical behavior of the less noble metal salts in an aprotic polar solvent
..... N.Matsunaga, S.Kim, K.Kuroda, M.Okido

P40. Effect of strain rate on tensile properties of plasma-hydrogen-charged aluminum alloys
..... A.Shoji, G.Itoh

P41. Construction of titanium processing technology for imparting functionality by ELID grinding
..... K.Yamada, N.Itoh, H.Ohmori

P42. Film formation on AZ31 Mg alloys by hydrothermal and anodizing treatments, and characterization of the treated thin films
..... Z.Wei, K.Kuroda, M.Okido

P43. Influence of initial loading direction on fatigue properties in rolled AZ31 magnesium alloy
..... N.Sakaguchi, S.Morita, N.Hattori, T.Mayama

P44. Effect of eutectic on the yield stress in Mg-Ce-Zr alloys
..... T.Yamaura, T.Sugiyama

P45. Mechanical properties and microstructure Al-1.0mass%Mg2Ge alloys with different elements
..... T.Kataoka, T.Sato, S.Lee, S.Ikeno, K.Matsuda

P46. Effect of La addition on formability during deep drawing of Mg-Zr alloy rolled sheet
..... J.Tachibanaki, Y.Tamura, T.Sasaki

P47. Prediction of the drawing processing limit in magnesium alloys.
..... S.Ajihara, Y.Takigawa, M.Ueda, Y.Kinomoto, T.Uesugi, K.Higashi

P48. The Application of an Friction Compression Welding Process onto the Joints Made by Friction Stir Spot Welding
..... T.Nakajima, K.Nekozuka

P49. Preparation of highly corrosion-resistant film on the flame-retardant Mg alloy AZX612 by combined process using steam coating
..... R.Shiratori, M.Tsunakawa, T.Ishizaki

P50. Influence of residual stress on corrosion behavior of pure magnesium processed by ECAP
..... T.Hosaka, S.Yoshihara

P51. Microstructural observation of Mg-Y-Sc alloys aged at 473K
..... T.Hiragi, T.Hamaguchi, Y.Tomuro, S.Lee, S.Ikeno, K.Matsuda

P52. Formation of oxide film on aluminum by indirect oxidation under AC electric field
..... M.Ishino, H.Hashimoto, H.Asoh

P53. TEM observation of Mg-Gd-Sc alloys at early aged stage
..... Y.Tomuro, T.Hamaguchi, S.Lee, S.Saikawa, S.Ikeno, K.Matsuda

P54. Serration behavior of 5000 series aluminum alloys in indentation
..... T.Kami, H.Yamada, N.Ogasawara

P55. TEM observation of precipitates on Al-Zn-Mg alloys of different Zn/Mg ratio aged at 423K
..... F.Aoki, S.Lee, S.Ikeno, K.Matsuda

P56. Structure of anodic oxide film on Al alloy surface and formation of defect of film
..... H.Yanagimoto, H.Okuyama, K.Nagai, K.Ochi, A.Hyono, M.Chiba, Y.Shibata, H.Takahashi

P57. Effect of HPT process in aging precipitations of Al-Li-(Mg) alloy
..... Y.Haizuka, T.Nejigaki, K.Kawai, S.Lee, Z.Horita, S.Ikeno, K.Matsuda, S.Saikawa, S.Hirosawa, D.Terada

P58. Effect of Al in Mg alloy on bond strength of AZ61 Mg/Ti clad sheets
..... T.Inoue, H.Inoue

P59. Effect of Cu on aging behavior of Al-Zn-Mg alloys with high Zn concentration aged at 423K
..... T.Yasumoto, R.Arita, F.Aoki, S.Lee, S.Ikeno, K.Matsuda