

Program
of
The 120th Conference of Japan Institute of Light Metals
(May 21-22, 2011, Nagoya)

1. Corrosion behavior of Mg-3mass%Al alloy immersed in Na₂SO₄ solution
..... Y.Hori , S.Sunada , M.Furui , S.Ikeno , K.Sasaki , S.Saikawa
2. Electrochemical characteristics of Mg-9mass%Al alloy immersed in Na₂SO₄ solution
..... M.Hori , S.Sunada , M.Furui , S.Ikeno , S.Sakaki , S.Saikawa
3. Investigation of corrosion behavior using Mg-Al-Ca-Sr heat-resistant magnesium alloy by electrochemical method
..... S.Saito , S.Sunada , M.Furui , S.Ikeno , S.Saikawa
4. Influence of dent on corrosion resistance for Ni-plated Magnesium alloy
..... M.Yoshida , S.Sunada , H.Notoya
5. Corrosion resistance and age-hardening characteristics of AZ80 magnesium alloy coated by sol-gel based CeO₂
..... Y.Harada , S.Kumai
6. Influence of anodizing treatment on corrosion characteristic for AZ91D Magnesium alloy
..... S.Sunada , T.Tsugawa , H.Notoya
7. Improvement of corrosion resistance of magnesium alloy by re-anodizing
..... K.Fukuoka , H.Asoh , K.Inokuchi , O.Mizuno , S.Ono
8. Formation of anticorrosive film on magnesium alloy by two step processes
..... R.Kudou , T.Ohmi , M.Sakiyama , T.Ishizaki , M.Sakamoto
9. Corrosion resistance of paint coating AZ91D magnesium alloy exposed for 20 years in Choshi of the Pacific Ocean climate
..... A.Konno , K.Nishinaka , M.Senzaki , H.Umehara
10. Corrosion characteristics of pure magnesium materials produced by MM-SPS method
..... Y.Watabe , M.Kubota
11. Influence of mechanical alloying on corrosion resistance and biocompatibility of Ti-HAp composite materials
..... H.Asoh , H.Tanigawa , T.Ohno , M.Kubota , S.Ono
12. Titania coating on beta-type titanium alloy by anodizing in concentrated phosphoric acid aqueous solution and its osteoconductivity
..... D.Yamamoto , K.Kuroda , R.Ichino , M.Okido , T. Akahori , M.Niinomi , M.Ueda , M.Ikeda , Y. Koyanagi
13. Influence of temperature on high temperature oxidation of Al-Mg alloys
..... A.Yamauchi
14. Zincate treatment and electroless nickel-phosphorus plating on binary aluminum alloys
..... K.Murakami , M.Hino , D.Yokomizo , T.Kanadani
15. Zincate treatment and electroless nickel-phosphorus plating on aluminum-magnesium-zinc alloy
..... K.Murakami , M.Hino , S.Ohara , T.Kanadani
16. Self-healing corrosion protective polymer coatings for aluminum
..... A.Yabuki , H.Okuno
17. Behavior of hydrogen invading aluminum alloys through second-phase particles
..... G.Itoh , T.Watakabe , Y.Hatano
18. Effect of intermetallic compound particles on the behavior of releasing hydrogen in some aluminum alloys
..... M.Nakano , T.Watakabe , G.Itoh
19. Height measurement of steps between neighbor grains with different crystallographic orientation planes after corrosion in ultra high-purity Al
..... M.Sato , Y.Takayama , H.Watanabe
20. Effect of chloride concentration and potential on propagation behavior of simulated-pit for aluminum
..... T.Haruna , M.Nishikawa
21. Analysis of corrosion behavior for aluminum and its alloy
..... O.Seri
22. Effect of cations on corrosion behavior of 3000-Al alloy in low Cl⁻ containing solutions
..... M. Sakairi , K.Otani
23. Effect of Mg contents on intergranular corrosion of Al-Mn alloys
..... H.Teramoto , T.Toyama , A.Niikura , A.Fukumoto , Y.Ooya
24. Effects of sulfur oxoacids ion on corrosion of aluminum alloys
..... Y.Oya , Y.Hara , Y.Kojima
25. Effects of combination of corrosion inhibitors for aluminum alloys in weak alkaline solutions
..... H.Tanaka , M.Takayanagi , O.Ryota , T.Koyama , M.Yonemitsu
26. Effect of NaCl, MgCl₂ and CaCl₂ on corrosion of Al-Mg-Si alloy
..... R.Fujimura , T.Koyama , H.Uchida
27. Pitting corrosion resistance of brazing sheet clad with Zn content filler in low Cl⁻ ion concentration atmosphere
..... S.Kuroda , M.Yoshino , S.Iwao , M.Edo
28. Influence of alloying elements on corrosion resistance for pre-coated aluminum fin-stocks
..... Y.Toyoda , Y.Ota , T.Shimizu , K.Tateyama

29. Effect of inner wax on lubricity of pre-coated aluminium sheets
..... K.Hatsuno , M.Yonemitsu
30. Temperature distribution in 1050 aluminum sheet during friction stir spot welding
..... T.Shibayanagi , A.Ueno
31. Process of friction reversal stir welding on aluminum alloys
..... Y.Katsuragi , T.Shinoda , K.Tani
32. Mechanical properties of friction stir welded joint of AZ91D magnesium alloy die cast
..... D.Nakama , K.Yoshihara , K.Katoh
33. Mechanical properties of friction lap welded AZ61 magnesium alloy joint
..... N.Seo , D.Nakama , K.Katoh
34. 5052/6061 aluminum alloy thin sheet friction seam butt welding
..... W.Nakamura , N.Seo , D.Nakama , K.Katoh
35. Investigation of optimum welding conditions and joint property for friction welding on aluminum alloy deformed by ECAP
..... K.Aoki , S.Yada , E.Endo , K.Kazuyoshi , D. Nakama
36. Consolidation of 1050 aluminum chip by friction welding
..... K.Otsuka , D.Nakama , K.Katoh
37. Influence of rolling conditions on cladding in hot rolling of aluminum alloy
..... N.Yukawa , Y.Takahashi , T.Ishikawa , Y.Funato
38. Injection molding characteristics by difference of mold material using rapid heating and cooling mold system
..... Y.Matsui , H.Yamagata , M.Niikawa , M.Kinoshita , T.Yamawaki , W.Oikawa
39. Effect of flare-crack on heat transfer performance of heat exchanger for room air conditioner
..... Y.Sato
40. Effect of Si content on flow behavior of Al-Si filler alloy during brazing
..... M.Edo , H.Miyake , S.Kuroda
41. Influence of brazing condition on flow behavior of liquid Al-Si filler between brazed components
..... T.Izumi , T.Ueda
42. Aluminum foam, "ALPORAS": Production process, properties and applications
..... T. Miyoshi
43. Performance Estimate of Aluminum Foam for Landing Gear of Smart Lander
..... M.Masugi , H.Takamiya , K.Kitazono , E.Sato , S.Sawai
44. Investigation of fabricating highly-functional porous aluminum by using ADC12 die-casting
..... K.Takahashi , Y.Hangai , T.Utsunomiya , S.Kitahara , O.Kuwazuru , N.Yoshikawa
45. Foaming condition on manufacture of ADC12/A1050 porous aluminum by using friction stir welding
..... T.Utsunomiya , Y.Ozeki , Y.Hangai , O.Kuwazuru , N.Yoshikawa
46. Fabrication of porous aluminum without using blowing agent by ADC12 aluminum alloy die-casting and the compressive characteristic
..... H.Kato , Y.Hangai , T.Utsunomiya , S.Kitahara , O.Kuwazuru , N.Yoshikawa , S.Takahashi
47. Combustion foaming of porous Al-Ti intermetallics made from sheet-type precursor
..... M.Kobashi , S.Murata , N. Kanetake
48. Effect of exothermic agent addition on self-propagating foaming of long-scale Al-Ti intermetallic foam
..... Y.Arakawa , M.Kobashi , N.Kanetake
49. Fabrication of Aluminum Foam through the Melt Route with Adding Mg and Bi
..... S.Suzuki , H.Murakami , K.Kadoi , T.Saiwai , N.Babcsan , H.Nakae
50. Fabrication of lotus-type porous aluminium and clarification of pore formation mechanism
..... T.Ide , Y.Iio , H.Nakajima
51. Control of mechanical properties of aluminum foam by resin coating or boring
..... K.Kitazono , T.Takeda , R.Suzuki
52. Evaluation of compression strength and absorbed energy of porous Al-Si alloy
..... N.Aoyagi , F.Matsumoto , Hafiz Ruhani , T.Igarashi
53. Compression properties of porous Ti6Al4V alloy prepared by spark plasma sintering technique
..... N.Aoyagi , T.Yajima , Cheng Wei Shen , T.Matsuya
54. Mechanical properties of biodegradable ceramics / porous titanium composite materials
..... Y.Shibata , E.Kobayashi , Y.Watanabe , T.Kikuchi , H.Tezuka , T.Sato
55. Sound absorption of porous aluminum fabricated by spacer method
..... M. Hakamada , M.Mabuchi
56. Corrosion behavior of anti-corrosion treated biomedical porous magnesium in a pseudo physiological environment
..... Lubin JIA , E.Kobayashi , H.Tezuka , T.Sato

57. Development of new refiner using L12 type Al_3CuTi_2 intermetallic particles
..... Y.Watanabe , T.Matsuoka , H.Sato
58. Performance characteristics of Nb-based alloy ultrasonic horn used in aluminum casting applications
..... S.Komarov , Y.Ishiwata
59. Stress-strain curves fo Al-4.5Cu alloys in mushy zone
..... N. Sakaguchi , M. Tsunekawa , Y.Watanabe
60. Effect of trace elements on molten metal oxidation of Al-Mg alloys
..... M.Abe , M.Morishita
61. Rheo-extrusion of Al-7.0%Si-0.36%Mg alloy using semi-solid slurry
..... N.Mori , Y.Uetani , M.Dohi , K.Matsuda , S.Ikeno
62. Castability of Al-Mg-Si alloy with different magnesium and silicon contents
..... Y.Maeda , M.Furui , S.Ikeno , N.Sakai , S.Saikawa
63. Effect of pre-aging condition on two-step aging of Al-10mass%Si-0.3mass%Mg alloy castings
..... R.Morioka , M.Furui , S.Ikeno , N.Sakai , S.Saikawa
64. Variation of hardness during aging treatment in Al-10%Si casting alloy with different magnesium contents
..... T.Kitamura , M.Furui , S.Ikeno , S.Saikawa , N.Sakai
65. Variation of hardness during aging treatment in Al-10%Si sand casting alloy with various magnesium contents
..... K.Morita , M.Furui , S.Ikeno , N.Sakai , S.Saikawa
66. Fabrication of carbon fiber/ aluminum composites by low pressure infiltration and evaluation of properties
..... G.Sasaki , Moonhee Lee , Y.B. Choi , K.Sugio , K.Matsugi
67. Fabrication and mechanical properties of Al-based in situ nano-composites reinforced by Al_2O_3 and intermetallic compounds
..... Lee Hyun Bom , H.Tezuka , E.Kobayashi , T.Sato , Woo Kee Do
68. Consolidation and mechanical property of CNF/Al composite powder prepared by compressive torsion process
..... Y.Kume , H. Kimura , M.Kobashi , N.Kanetake
69. Influence of intermetallic phases at bond interface on tensile strength of aluminum / copper clad materials
..... W.Xie , T.Yamaguchi , K.Nishio
70. Effect of Indium addition on MgB_2 particle-dispersed Al based composite materials
..... M.Mizutani , K.Matsuda , K.Nishimura , T.Kawabata , Y.Hishinuma , S.Ikeno , S.Aoyama
71. Elucidation of Promotive Effect of the AlN Combustion Synthesis Reaction at the Nitrogen Gas Flow Atmosphere
..... Y.Komiya , Y.Seimiya
72. Fabrication and properties of aluminum-phosphorescence based composite materials
..... Y.Watanabe , M.Kubota
73. Microstructure of a hypoeutectic Al-Si alloy containing TiB_2 cast after mechanical stirring
..... I.Yamamoto , S.Suzuki , K.Oda , H.Okada
74. Effect of heat treatment on Young's modulus and ductility of a hypoeutectic Al-Si alloy containing TiB_2
..... S.Suzuki , I.Yamamoto , K.Oda , H.Okada
75. Effect of demolding temperature on aging behavior in Al-Si-Mg alloy cast into sand mold
..... Y.Kano , M.Furui , S.Ikeno , S.Saikawa , N.Sakai , T.Yamaguchi
76. Effect of demolding temperature on aging behavior of Al-Si-Mg alloy poured into permanent mold
..... Y.Takada , M.Furui , S.Ikeno , N.Sakai , S.Saikawa
77. Microstructure change in AC4CH casting alloy by high temperature and short time solution treatments
..... N.Saruwatari , E.Sekiya , Y.Nakayama
78. Computer analysis of microstructure of thin-walled AC4C casting using a bottom pouring plan
..... Y.Miwa , H.Yamagata , M.Niikawa , K.Kurokawa
79. Properties of aluminum honeycomb core sandwich panel produced by melt drag process
..... S.Nishida , H.Tanaka , A.Adachi , M.Motomura
80. Improvement of surface roughness of aluminum alloy strip produced by melt drag process with vertical nozzle
..... K.Fukudome , H.Furusawa , S.Nishida , M.Motomura
81. Hardness measurement of primary α and eutectic phases in Al-Si-Mg alloy castings modified by strontium
..... S.Tomita , M.Furui , S.Ikeno , N.Sakai , S.Saikawa
82. Microstructure Evaluation of As-cast Process in gravity casting of AM60 Magnesium alloy
..... T.Maekawa , M.Furui , S.Ikeno , T.Yamaguchi , S.Saikawa
83. Casting of Al-Mg Alloy Strip by a Single Roll Caster Equipped with a Scraper
..... K.Akitsu , K.Kamakura , T.Haga , S.Kumai , H.Watari
84. Casting of Aluminum Alloy Clad Strip by Using a Vertical Type Tandem Twin Roll Caster Equipped with Scrapers
..... H.Tsuge , T.Ishihara , T.Haga , S.Kumai , H.Watari
85. Effect of Si content and roll separating force on solidified structure in high-speed twin-roll cast Al-Si alloy strips
..... Kim Min-Seok , K.Yoshie , Y.Harada , S.Kumai

86. Casting of Aluminum Alloy Clad Strip Using a Vertical Type Tandem Twin Roll Caster
 R.Nakamura , K.Shinchi , T.Haga , S.Kumai , H.Watari
87. **(Keynote)** Intrinsic structural science in aluminium alloys
 E.Matsubara , K.Higashi , M.Ninomi
88. First-principles study on solute segregation in aluminum symmetric tilt grain boundary
 T.Uesugi , K.Higashi
89. First-principles study on grain boundary cohesive energies in aluminum
 R.Shoda , T.Uesugi , K.higashi
90. Thermodynamic evaluation of beta stabilizers using heat of solution calculated by first principles in Ti alloys
 S.Miyamae , T.Uesugi , K.Higashi
91. Issues of prediction of α' phase formation in Ti alloys by using DV-X α alloying parameters
 S.Kobayashi , R.Wakamoto , K.Nakai , T.Sakamoto
92. Oxygen removal and microstructural change in deoxidation of NiTi alloys using metallic Ba
 D.Ito , K.Ueda , T.Narushima
93. Strengthening mechanism of Al supersaturated solid solution alloy fabricated by electron beam deposition
 H.Yanagitani , W.Kinoshita , Y.Takigawa , T.Uesugi , K.Higashi
94. Synchrotron Radiation Nano Structural Science for Novel Simple Alloying via SPring-8
 A.Fujiwara , M.Takata
95. Evaluation of materials by local potential measurements using STM
 S.Kurokawa
96. Atomic scale observations of crystal lattice defects by positron annihilation spectroscopy
 K.Inoue , Y.Shirai
97. Evaluation of surface properties of magnesium alloy via electrochemical measurement
 S.Yagi , A.Sengoku , E.Matsubara
98. High-temperature deformation in magnesium binary solid solution alloys
 Y.Takigawa , T.Uesugi , H.Tsuda , S.Mori , K.Higashi
99. Intrinsic behavior of Mn addition in heat-resistant Mg-Al-Ca alloy
 T.Homma , K.Oh-ishi , K.Hono , S.Kamado
100. Aging behaviors of Mg-Al-Sn alloys
 T.Konno , T.Ohya
101. Extraordinary strengthening of Mg-Al-Ca-Mn alloy containing only common metals by utilization of dynamic structural changes during hot extrusion
 S.Kamado , S.W. Xu , K.Oh-ishi , T.Homma , K.Hono
102. Microtexture evolution during superplastic deformation in AM60 magnesium alloy
 K.Kurimoto , H.Watanabe , T.Uesugi , Y.Takigawa , K.Higashi
103. Mechanical properties and microstructure of laser-welded α + β -type titanium alloys for next-generation air crafts
 Y.Nagasawa , M.Niinomi , M.nakai , K.Hayashi , Y.Itsumi , S.Murakami , H.Oyama , W.Abe
104. Three competing strain-free conditions in martensitic transformation of titanium-base shape memory alloy
 T.Inamura , H.Hosoda
105. Mechanical biocompatibility of rare earth dispersion strengthened β -titanium alloy for biomedical applications
 S.Nagai , M.Niinomi , M.Nakai , S.Yonezawa , Xiu Song
106. Process Designing for optimization of electrochemical properties
 T.Hanawa , K.Kuroda , Y.Tsutsumi
107. Effect of surface roughness on fabrication of hydroxyapatite film on surface of Ti-29Nb-13Ta-4.6Zr using a MOCVD process
 T.Gozawa , K.Saitou , M.Niinomi , M.Nakai , T.Gotou , Tu Rong
108. Effect of grain size on mechanical properties of a biocompatible beta-type titanium alloy
 R.Kanekiyo , K.Narita , M.Niinomi , M.Nakai
109. Development of Young's modulus changeable titanium alloys for spinal fixation
 M.Nakai , M.Niinomi
110. Effects of chemical composition and aging on mechanical properties of Ti-Mo-Al biomedical shape memory alloys
 H.Hosoda , T.Iamura , M.Taniguchi , H.Y.Kim , S.Miyazaki
111. Effect of purity level on the grain size in SPD-processed pure aluminums
 T.Hirata , T.Morishige , M.Tsujikawa , T.Uesugi , Y.Takigawa , K.Higashi
112. Effect of Mg solubility on the minimum grain size in SPD-processed Al-Mg alloys
 T.Morishige , T.Hirata , T.Uesugi , Y.Takigawa , M.Tsujikawa , K.Higashi
113. Effect of zirconium and trace impurities Si and Fe content on high temperature ductility in Al-8mass%Mg alloys
 M.Ninomiya , T.Uesugi , Y.Takigawa , K.Higashi
114. Effect of additional elements on microstructures and mechanical properties in Al-Mg-Si alloys
 Y.Katoh , Pramote Thirathipviwat , K.Hisayuki , M.Sakaguchi , K.Higashi

115. Fabrication of composite material using aluminum alloy powder and coal ash by spark plasma sintering
..... M.Yamazato , I.Fukumoto , Y.Kanda
116. Consolidation of Al-Al₂O₃ composite powders by high-pressure torsion
..... M.Ashida , Z.Horita , T.Kita , A.Kato
117. Reevaluation of strain rate of Al-Mg solid solutions by strain acceleration parameter
..... H.Sato , H.Ota
118. The effect of grain boundary on formation of deformation bands in an aluminum bicrystal
..... K.Kashihara , H.Konishi , T.Shibayanagi
119. Influence of sheet thickness and clearance at sheet metal by L bending
..... M.Murata , T.Kuboki , N.Khamt , J.Koyama , Y.Jin
120. Influence of die open width and punch radius on springback at V bending process of plate
..... N.Khamt , M.Murata , T.Kuboki , Y.Jin , T.Shibata
121. Analytical and experimental studies of deformation behavior in new shearing method
..... D.Lu , M.Murata , T.Kuboki , Y.Jin
122. Effect of rolling condition on wear particles in cold rolling of 1050 aluminum
..... Y.Totani , K.Ueda , M. Yonemitsu , Y.Hosomi
123. Study of condition for determination of trace element with ICP-OES
..... S.Mae , M.Yonemitsu
124. Determination of aluminum oxide film thickness by surface analysis
..... M.Takayanagi , M.Yonemitsu
125. Invasion of hydrogen in a 7075 aluminum alloy affected by constituent particles
..... G.Itoh , H.Hayase , M.Watanabe
126. Problem in the behavior analysis of hydrogen in aluminum by means of hydrogen microprint technique
..... K.Saitoh , H.Iwahashi , T.Tsutsumi , G.Itoh , T.Shikagawa
127. Introduction to refractories for Aluminum melting-holding furnace
..... H.Anada , E.Motoki
128. Review of wettability between molten Aluminum and refractory materials
..... H.Anada , S.Tani
129. A testing method for evaluation of wettability between molten Aluminum and refractory materials
..... H.Anada , M.Morishita
130. Considerations of the experimental conditions from the shape of molten Aluminum for evaluation of wettability
..... H.Anada , M.Ishiduka
131. Effect of Barium Sulfate on the contact angle between molten Aluminum and refractory materials
..... H.Anada , K.Noda
132. Direct reduction of oxides without intermediated compounds
..... R.O.Suzuki , T.Kikuchi
133. Effect of aluminum content on phase constitution and heat treatment behavior of Ti-8.5Mn-1Fe-Al alloys
..... M.Ikeda , T.Kinoshita , A.Tomita , S.Toda , M.Ueda
134. Effect of coherent precipitates on the mechanical properties of the titanium alloy single crystals
..... T.Nakano , K.Hagihara , M.Niinomi
135. Effect of additive elements on α \rightarrow ω phase transformation by HPT-straining and heat-treatment
..... Y.Todaka , M.Iketani , K.Irie , H.Azuma , M.Umemoto
136. Effect of potential on hydrogen absorption to Ti containing Fe or Ni
..... S.Kijitori , T.Nishizawa , T.Haruna
137. Microstructure and heat treatment behavior of HPT- processed Ti-13Cr-1Fe-3Al alloy
..... H.Matsuhira , Y.Takasaki , M.Ikeda , M.Ueda , Y.Todaka
138. In-situ measurement of dislocation density during tensile deformation in bulk nanostructured aluminum
..... H.Adachi , T.Takagi , Y.Miyajima , N.Tsuji
139. The effects of transition elements on the control of surface recrystallization in Al-Zn-Mg aluminum alloy extrusion.
..... Y.Miyata , S.Yoshihara
140. Microstructural control of an Al-Zn eutectoid alloy by rolling process
..... Nguyen Loc The , G.Itoh , Y.Motohashi , T.Sakuma , Y.Yi
141. Effects of Mg and Si on the recrystallization behavior during hot rolling of Al-Mn alloys
..... Y.Inoue , Y.Aruga , K.Matsumoto , K.Tsuruda , K.Masada
142. Mechanical Property Resulting from Aging treatment of Ultrafine Grained Al-0.5%Si-0.5%Ge Alloy by ARB
..... K.Nakagawa , T.Kanadani , Kairil Nizam , T.Nakano , N.Tsuji , D.Terada
143. Microstructure in surface layer of pure aluminum sheet by the friction roll surface processing with different applied direction
..... R.Hamano , K.Nonaka , Y.Takayama , H.Watanabe

144. Analysis of the occurrence of serrations in Al-Mg alloys by DSC
..... H.Tsuneishi , Y.Aruga , K.Matsumoto
145. Development of Bulk Texture Measurement Technique Based on Neutron Diffraction
..... P.G. Xu , H.Suzuki , S.Harjo , T.Suzuki
146. Various Applications of Bulk Texture Measurement Technique Based on Neutron Diffraction
..... P.G.Xu , T.Suzuki , S.Morooka , E.Yukutake
147. Microstructure refinement and mechanical property of Al-Fe alloy by compressive torsion processing
..... S.Ota , Y.Kume , M.Kobashi , N.Kanetake
148. Texture formation process during high temperature plane strain compression in Al-Mg alloys
..... K.Okayasu , H.Shimada , H.Fukutomi
149. High temperature deformation behavior of a 6N01 aluminum alloy extrusion containing a weld part
..... S.Yasuda , K.Atsuta , S.Wakaguri , K.Ichitani , A.Hibino
150. Use of Fe for Strengthening of Al through Application of High-Pressure Torsion
..... J.Cubero , Z.Horita
151. Effects of cold rolling reduction after solution heat treatment on aging hardening of Al-Mg-Si alloy sheet
..... Y.Yamamoto , Y.Ozeki , M.Asano
152. Stability of nanoclusters and two-step aging behavior of Al-Mg-Si(-Cu) alloys
..... JaeHwang Kim , E.Kobayashi , T.Sato
153. Effect of HPT or rolling on aging behavior in Al-Mg-Si alloys
..... T.Nagai , K.Matsuda , J.Nakamura , T.Kawabata , S.Ikeno , D.Akama , Z.Horita , S.Hirosawa
154. Precipitation structure in Cu and Ag added Al-Mg-Si alloys aged at 523K
..... M.Tokuda , K.Matsuda , T.Nagai , J.Nakamura , T.Kawabata , S.Ikeno
155. Effect of Mn or Fe addition on the age-hardening and precipitation in Al-Mg-Si alloys
..... S.Chen , S.Wang , K.Matsuda , T.Kawabata , S.Ikeno , T.Takai , Y.Yamasita
156. Effect of additional elements on material properties in Al-Zn-Mg series extrusion materials
..... T.Yoshida , S.Murakami
157. Effect of additional elements on the age-hardening property of 7000 series Al alloys
..... Y.Morioka , K.Matsuda , J.Nakamura , T.Nagai , T.Kawabata , S.Ikeno , T.Yoshida , S.Murakami
158. Change in strength of 7075 aluminum alloy by friction stir processing and aging
..... M.Takahashi , Y.Takayama , H.Watanabe
159. Relationship between β^2 -phase and its precursor phase in silver added Al-Mg-Si alloy
..... J.Nakamura , K.Matsuda , T.Sato , C.D.Marioara , S.J.Andersen , R. Holmestad
160. Microstructure and mechanical properties change with isochronal aging in Al-Ni-Gd metallic glasses
..... H.Kato , S.Hirosawa , K.Matsuda , G.J.Shiflet
161. Effect of different Mg₂Ge contents on the age-hardening behavior of Al-Mg-Ge alloys
..... T.Murakami , K.Matsuda , T.Nagai , J.Nakamura , T.Kawabata , S.Ikeno
162. TEM observation on early stage of age-precipitation in Mg-Gd-Y alloy
..... D.Nakagawa , T.Fujii , T.Kawabata , K.Matsuda , S.Ikeno
163. TEM observation of microstructure in Mg-Gd-6.4%Sc alloy
..... T.Fujii , T.Kawabata , K.Matsuda , S.Ikeno
164. Crystallographic orientation relationship between discontinuous precipitation and the matrix in AM-system magnesium alloys
..... K.Watanabe , K.Matsuda , T.Kawabata , K.Sakakibara , K.Sasaki , S.Saikawa , S.Ikeno
165. Effect of Mn contents on age-hardening in AM60 magnesium alloys.
..... T.Tsuchiya , K.Watanabe , K.Matsuda , T.Kawabata , K.Sakakibara , T.Yamaguchi , S.Saikawa , S.Ikeno
166. Effect of Zn content on aging precipitate of Mg-Zn alloys
..... R.Nakanishi , T.Kawabata , K.Matsuda , S.Ikeno
167. HRTEM observation of the precipitates in Mg-Y(-Zr) alloy at early stage of aging.
..... T.Kawabata , K.Matsuda , S.Ikeno
168. Biomimetic color-tuned superhydrophobic surface on magnesium alloy
..... T.Ishizaki , N.Saito
169. Improvement of corrosion resistance of Mg-9%Al alloys containing copper by zinc addition
..... H.Kawabata , N.Nishino , Y.Genma , T.Seguchi
170. Susceptibility to environment-assisted cracking of Mg alloy in aqueous solutions of various pHs and chloride concentrations
..... T.Haruna , R.Kishimoto
171. Effect of laser cleaning on recycling of magnesium scrap
..... M.Hino , Y.Mitooka , K.Murakami , Y.Hashimoto , T.Kanadani
172. Microstructure and mechanical properties of Mg-Zn-Y-RE alloys with LPSO phase
..... Jonghyun Kim , Y.Kawamura

173. Fatigue behavior of Mg-Zn-Gd alloy with LPSO phase
..... S.Ando , H.Kitahara , T. Yanagihara , T.Yamashita
174. Mechanical properties and microstructure of extruded Mg alloys with long period stacking order phase
..... M.Noda , Y.Kawamura
175. Effects of Mn or Zr addition on mechanical properties of extruded Mg-Gd-Y-Zn alloy bars
..... Y.Hiramitsu , S.Kamado , T.Honma , T.Koike , M.Katsui
176. Indentation creep of Mg-based extruded alloy containing LPSO Phase
..... D.Takeda , H.Takagi , M.Fujiwara , K.Higashida , Y.Kawamura
177. Grain size dependence of microstructure and age hardening property in AM-type magnesium
..... H.Takano , M.Furui , S.Ikeno , T.Yamaguchi , S.Saikawa
178. Hardness and microstructure evolutions during aging treatment in AZ system magnesium alloys cast into permanent mold
..... K.Minami , M.Furui , S.Ikeno , S.Saikawa
179. Age-hardening behavior of 6mass% aluminum content magnesium alloys cast into sand mold
..... Y.Ebata , M.Furui , S.Ikeno , K.Sakakibara , S.Saikawa
180. Effect of rolling on age-precipitation in AM60 magnesium alloy with pre-precipitation area
..... T.Yoshida , M.Furui , S.Ikeno , T.Yamaguchi , S.Saikawa
181. Strength and ductility of torsion-extruded magnesium alloy AZ31
..... S.Mizunuma , K.Mitsui , H.Okumura , T.Takeuchi , Y.Nishihara , M.Kohzu
182. Multi-directional forging under decreasing temperature conditions and at room temperature of coarse grained AZ61Mg alloy
..... H.Miura , T.Maruoka , M.Ito
183. Texture formation process during high temperature plane strain compression deformation of AZ80 magnesium alloy
..... J.Kim , K.Okayasu , H.Fukutomi
184. Effect of Ca addition on microstructures and mechanical properties of hot-compressed AZ91 magnesium alloys
..... R.Yoshimasu , S.W.Xu , T.Homma , S.Kamado
185. Grain refinement and forgeability of magnesium alloy by torsion extrusion with rapid rotation
..... M.Fukui , M.kohzu , H.Numakura , S.Mizunuma
186. Improvement of hydrogen storage capacity and mechanical properties in pure magnesium by high-pressure torsion
..... K.Edalati , A.Yamamoto , Z.Horita , T.Ishihara
187. Orientation randomization and cold formability of AM60 magnesium alloy sheet
..... T.Yamakawa , M.Kohzu , K.Sugimoto , H.Numakura , Y.Nakaura , A.Watanabe
188. Fabrication and characterization of titanium-clad AZ80 magnesium alloy sheets
..... H.Inoue , S.Isono
189. Influence that difference of bonding method of Mg/Al clad sheets exerts on interface
..... M.Saito , M.Asakawa , M.Kobayashi , K.Matsuzaki , M.Katoh
190. Influence of texture on fatigue crack propagation in rolled AZ31B magnesium alloy
..... S.Morita , S.Morita , F.Tamai , Y.Kawakami
191. Damping characteristics of AZ31 magnesium alloy by inverted torsion pendulum method
..... T.Toguri , T.Shioya , T.Asahina
192. Effect of strain rate on indentation load in pure aluminum
..... H.Yamada , N.Ogasawara , K.Horikawa , M.Mutsuo , K.Watanabe , H.Kobayashi
193. Effect of hydrogen on ductile fracture in ultrahigh purity aluminum
..... K.Horikawa , N.Mimura , H.Kobayashi
194. Effect of shot peening on fatigue characteristic of AZ31 magnesium alloy
..... K.Funami , M.Noda , Y.Ichihara
195. Fatigue characteristic of scored thin sheet of aluminum alloy
..... M.Okada
196. Local heating of aluminum alloy by induction heating apparatus
..... F.Shang , E.Sekiya , Y.Nakayama
197. Effect of texture on the hydraulic bulging deformation of 6000-series aluminum alloy sheet: finite element analysis and experimental validation
..... D.Yanaga , T.Kuwabara , N.Uema , M.Asano
- P01. Visualization of hydrogen accumulation to grain boundaries or inclusions in tensile-deformed Al-Zn-Mg-Cu alloy
..... M.Mutsuo , H.Yamada , K.Horikawa , K.Watanabe , H.Kobayashi
- P02. Inline rolling of strip cast by a vertical high speed twin-roll caster
..... Y.Yamasaki , T.Haga
- P03. Investigation of the influence of the roll surface on the strip at the casting using a Vertical type high speed twin roll caster
..... T.Yamashiki , T.Haga
- P04. Casting of Aluminum Alloy Strip by an Improved Single-Roll Caster
..... K.Kamakura , K.Akitsu , H.Haga

- P05. Casting of aluminum alloy clad strip by a twin roll tandem caster with scrapers
 T.Ishihara , H.Tsuge , T.Haga , S.Kumai
- P06. Behavior of environmental hydrogen in electrolytically charged aluminum alloys
 T.Tsutsumi , G.Itoh , N.Itoh
- P07. Visualization of Al-Si melt during cast by centrifugal mixed-powder method
 K. Oguri , H.Sato , E. Miura-Fujiwara , Y.Watanabe
- P08. Estimation of the cooling rate distribution by means of lamellar spacing of Al-Al₂Cu eutectic structure during centrifugal casting method
 Y.Hattori , H.Sato , E. Miura-Fujiwara , Y.Watanabe
- P09. Fatigue characteristics of a cast aluminum alloy solution heat-treated at a high temperature
 T.Inamori , H.Toda , M.Kobayashi
- P10. Three-dimensional image base analysis of fatigue crack closure behaviors
 S.Yamauchi , H.Toda , M.Kobayashi , K.Uesugi , Y.Suzuki , A.Takeuchi
- P11. Surface corrosion behavior of electron-excited pure Mg
 K.Funatsu , R.Takei , J.Umeda , K.Kondoh
- P12. Mechanical property of titanium matrix composites reinforced with carbon black particles of wasted black ink
 T.Mimoto , N.Nakanishi , T.Yoshimura , T.Threrujirapong , J.Umeda , K.Kondoh
- P13. Pyrolysis behavior of titanium dioxide particles dispersed in pure titanium powder consolidated material
 N.Nakanishi , T.Yoshimura , T.Mimoto , H.Imai , K.Kondoh
- P14. Fabrication of α -alumina membrane with controlled pore interval by anodization
 T.Masuda , H.Asoh , S.Haraguchi , T.Shindou , S.Kuboya , S.Ono
- P15. Pulsed YAG laser weldability of pure Ti and A5052 Aluminum alloy / pure Cu sheet
 K.Tomura , T.Asahina
- P16. Temperature measurement during friction stir welding of 1050Al/ 5052Al alloy.
 K.Kumai , Y.Akutsu , Y.Takayama , H.Watanabe
- P17. Effect of tilt angle of tool on friction stir welding of 5052 aluminum alloy foil
 K.Aramomi , Y.Takayama , H.Watanabe
- P18. Titania coating on beta-type titanium alloy by anodizing in sulfuric aqueous
 X.J.Lu , D.Yamamoto , K.Kuroda , M.Okido , R.Ichino , T.Akahori , M.Niinomi , M.Ueda , M. Ikeda , Y. Koyanagi
- P19. In vivo Evaluation of Anodized Titania Coating on Titanium Substrate in Various Aqueous Solutions
 K.Arii , K.Kuroda , R.Ichino , M.Okido
- P20. Friction stir lap welding of 5454-O aluminum alloy with dissimilar thicknesses
 Y.J.Kwon , C.Y.Lim
- P21. Hot compression property of AZ80 continuous casting material and AZ80 Extruded material
 A.Watazu , N.Saito , H.Iwasaki , I.Shigematsu , M.Sakamoto
- P22. Forging properties of AZ91 continuous casting bar and AZ80 Extruded bar
 A.Watazu , N.Saito , H.Iwasaki , I.Shigematsu , M.Sakamoto
- P23. Effect of room temperature multi directional forging on microstructure and mechanical property of AZ61 magnesium alloy
 T.Maruoka
- P24. Effect of strain rate on microstructural change during multi directional forging of AZ80 magnesium alloy
 R.Watanabe , H.Miura
- P25. Synthesis of Sodium Titanate / TiO₂ Composite film on Ti Using Molten Salt Treatment
 Y.Tajima , K.Kuroda , R.Ichino , M.Okido
- P26. Effect of Zn contents on age-hardening in AZ-series magnesium alloys
 Y.Narukawa , K.Watanabe , K.Matsuda , T.Kawabata , K.Sakakibara , S.Saikawa , S.Ikeno
- P27. Recrystallization mechanism of Mg-5.99Zn-1.76Ca-0.35Mn (mass%) alloy during hot extrusion
 S.W.Xu , S.Kamado , T.Homma
- P28. Microstructural changes in Mg-Al-Ca-Mn alloys with hot rolling and mechanical properties of the rolled sheets
 K.Ueno , S.W.Xu , T.Homma , S.Kamado
- P29. Microstructures and creep properties of Mg-Al-Ca-Mn alloy based composites reinforced with Si-coated CNF
 T.Saito , K.Arai , A.Katoh , M.Suganuma , T.Homma , S.Kamado
- P30. Behavior of hydrogen in the vicinity of crack tip in 7075 and 6061 aluminum alloys
 G.Itoh , H.Iwahashi , T.Watakabe , R.Kurumada , Y.Hatano