

Program  
of  
The 136th Conference of Japan Institute of Light Metals  
(May 11-12, 2019, Toyama International Conference Center)

1. Effect of additive element on aging products of Al-1.0mass%Mg<sub>2</sub>Si alloy  
..... K.Ikeda, T.Sun, Y.Shimada, S.Lee, T.Tsuchiya, K.Matsuda, T.Homma
2. TEM observation of Al-7%Si-0.3%Mg alloy demolded and aged at 473K  
..... K.Muro, Y.Makita, T.Tsuchiya, S.Lee, S.Saikawa, K.Matsuda, S.Ikeno
3. Precipitates observation of Al-7Si-0.4Mg casting alloy extracted by the thermal phenol method  
..... Y.Makita, K.Muro, T.Tsuchiya, S.Lee, S.Saikawa, S.Ikeno, K.Matsuda
4. HRTEM observations in the early stage of aging of 6000 series aluminum alloy  
..... AmalinaAina, Y.Asada, H.Yamato, S.Lee, T.Tsuchiya, K.Matsuda, K.Ikeda, THomma
5. Microstructure observation of pre-strained Cu and Ag added Al-Mg-Si alloy with aging treatment  
..... K.Yatsukura, T.Tsuchiya, S.Lee, K.Matsuda, K.Ikeda, T.Homma
6. Effect of nanoclusters formed during pre-aging and natural aging on artificial age-hardening behavior of Al-Mg-Si alloys  
..... S.Tsukamoto, S.Hirosawa, Y.Koshino, Y.Aruga, K.Matsumoto, H.Shishido
7. Two-step aging behavior of Al-1.0mass%Mg<sub>2</sub>Si(-Ni,Co,V) alloys pre-aged at 393K  
..... M.Amano, T.Umezawa, T.Tsuchiya, S.Lee, S.Ikeno, K.Matsuda
8. Effect of Ag addition on microstructure in Al-1.0mass%Mg<sub>2</sub>Ge alloys  
..... S.Umemura, T.Tsuchiya, S.Lee, K.Matsuda, K.Ikeda, T.Homma, S.Ikeno
9. TEM observation of Al-1.0mass%Mg<sub>2</sub>Ge alloys with different transition elements  
..... T.Kataoka, S.Umemura, T.Tsuchiya, S.Lee, K.Matsuda, K.Ikeda, T.Homma, S.Ikeno
10. Effect of intermediate plastic work on two step aging behavior in A7050 aluminum alloy  
..... Y.Sano, S.Muraishi, Y.Harada, S.Kumai
11. Effect of retrogression on mechanical properties in 7000 series aluminum extrusion material  
..... K.Shibata, T.Yoshida, S.Murakami
12. Effect of Cu on mechanical properties and precipitation of Al-MgZn<sub>2</sub> alloy aged at 473K.  
..... T.Yasumoto, T.Tsuchiya, S.Lee, K.Matsuda, S.Nishikawa, K.Shibata, T.Yoshida, S.Murakami, S.Ikeno
13. 【Keynote】 Crystallographic orientation relationships of T-/S-phase aggregates in an Al-Cu-Mg-Ag alloy  
..... J.K.Sunde, S.Wenner, A.T.J.V.Helvoort, R.Holmestad
14. 【Theme session Invited Lecture】 Advanced electron microscopy of fine precipitates in aluminum alloys  
..... E.Abe
15. Aging behavior of Al-Li(-Cu)(-Mg) alloys deformed by high-pressure torsion (HPT)  
..... Y. Haizuka, T.Tsuchiya, S.Lee, S.Saikawa, K.Matsuda, Z.Horita, S.Hirosawa, S.Ikeno
16. 【Keynote】 Characterization the Density and Spatial Distribution of Dispersoids in Al-Mg-Si Alloys  
..... M.S.Remoe, I.Westermann, K.Marthinsen
17. Effect of homogenization on the microstructure of Al-0.33%Mg-0.67%Si and Al-0.67%Mg-0.33%Si (mol%) alloys  
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19. TEM investigation of H effect into solid solution decomposition in an Al-Zn-Mg alloy  
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20. 【Keynote】 Materials analysis using muon  
..... J.Sugiyama
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22. Investigation of cluster formation behavior in Al-Mg-Si alloy by soft X-ray XAFS analysis  
..... T.Serina, N.Takehiro, A.Hiroki
23. Dislocation density change during tensile test in Al-Zn-Mg-Cu alloys  
..... H.Adachi, K.Iwata
24. Effect of natural aging on mechanical properties in aluminum die-casting material  
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25. First-principles calculation of Mg<sub>2</sub>Zn<sub>11</sub> and Mg<sub>32</sub>(Al,Zn)<sub>49</sub>  
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26. Effect of Pre-aging on Final aging Behavior of Al-Mg-Si alloys  
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27. Effect of cold-rolling on aging precipitation of Al-Cu-Mg alloy with different Cu/Mg ratio aged at 473K  
 ..... M.Matsumoto, T.Tsuchiya, S.Lee, K.Matsuda, K.Ikeda, T.Homma, S.Ikeno
28. Atomic microstructure of kink formed in LPSO type Mg alloys  
 ..... D.Egusa, E.Abe
29. Control of the formation behavior of deformation band in the Mg-based LPSO-phase, and the evolution to the Mg-Al alloys  
 ..... K.Hagihara, K.Hayakawa, Y.Narimoto, R.Ueyama, T.Nakano, M.Yamasaki, T.Mayama, Y.Kawamura
30. Effect of flow stress in large strain range in finite element simulation of LPSO type magnesium alloy  
 ..... S.Inoue, K.Suzawa, R.Matsumoto, Y.Kawamura
31. Orientation effect on deformation behavior in directionally solidified Mg-LPSO alloy studied by in-situ techniques  
 ..... D.Drozdenko, K.Máthis, M.Yamasaki, S.Harjo, W.Gong, K.Aizawa, Y.Kawamura
32. **【Award Lecture】** High temperature Creep behavior and strengthening mechanism in Mg alloys  
 ..... M.Suzuki
33. Relationship between creep strength and c-dislocations by pre-straining in Mg-Y-Zn dilute solid solution alloys  
 ..... M.Suzuki, D.Sugita, N.Tsuchida, F.Kondo
34. Activity of non-basal slips in Mg-Li alloy  
 ..... S.Ando, H.Miyano, K.Takemoto, H.Kitahara
35. Effects of cerium additions on deformation behavior of magnesium single crystals  
 ..... H.Kitahara, K.Hayashi, M.Tsushida, S.Ando
36. Microstructure observation of  $\beta_1'$  in binary Mg-2.2mol%Zn alloy aged at 473K  
 ..... T.Maeda, B.Artenis, T.Tsuchiya, S.Lee, S.Ikeno, K.Matsuda
37. The improvement of room temperature superelasticity in Mg-Sc binary alloy through grain size control  
 ..... K.Yamagishi, D.Ando, Y.Sutou, J.Koike
38. Thermal conductivity and mechanical property of heat resistant Mg-Al-Ca casting alloy with 3D network intermetallic compounds  
 ..... Y.Ienaga
39. Effect of grain refinement on mechanical properties in AZ31B magnesium alloy by Equal-Channel Angular Pressing  
 ..... R.Yamada, T.Orii, T.Miyagawa, H.Yasui, S.Yoshihara, Y.Ito
40. Effect of grain size on mechanical properties of friction-stir processed Mg-Al-Zn alloy  
 ..... K.Ajiro, N.Ozawa, S.Kuramoto, E.yukutake
41. **【Keynote】** Prototyping of partial body of a high speed railway vehicle by using new flame-retardant magnesium alloys  
 ..... T.Ishikawa, K.Shimizu, H.Ueda, K.Yamada, S.Sugimoto, M.Noda, K.Yoshida, Y.Chino
42. Flat bending fatigue characteristics of Mg-Al-Ca-Mn alloy for high speed extrusion  
 ..... S.Kanitani, Y.Matsumoto, M.Ogawa, K.Shimizu, T.Nakata, Y.Miyashita, S.Kamado
43. Effects of microstructure and weld zone on plane bending fatigue properties of MIG welded flame retardant  
 Mg-8Al-1Zn-1Ca alloy sheet  
 ..... M.Noda, T.Ito, M.Ueda
44. Plate bending fatigue properties of Mg-9%Al-1%Zn-2%Ca alloy FSW joints  
 ..... N.Saito, X.Huang, Y.Chino, H.Ueda, M.Inoue, T.Matsumoto, E.Yukutake
45. Effect of microstructural factors on mechanical properties of an extruded Mg-4.0Al-1.0Ca-0.2Mn (mass%) alloy  
 ..... D.Kawagoe, T.Nakata, S.Kamado, Y.Matsumoto, K.Shimizu
46. Effect of Zn addition and rolling conditions on mechanical properties of a rolled Mg-8Al-1Ca (mass%) alloy sheet  
 ..... T.Nakatsugawa, T.Nakata, S.Kamado, K.Suzawa, K.Yoshida, N.Kawabe
47. Influence of Friction Stir-Process on Mechanical Properties of Mg-Al-Zn-Ca Alloys  
 ..... K.Kimura, N.Ozawa, S.Kuramoto, E.Yukutake
48. Effect of calcium addition on deformation behavior of magnesium in tension and compression  
 ..... Y.Chikanari, T.Nakatsuji, N.Ikeo, T.Mukai
49. Investigation of factors affecting weld strength in MIG welded flame retardant magnesium alloys  
 ..... Y.Takigawa, T.Uesugi, M.Ueda, Y.Kinomoto, K.Higashi
50. **【Keynote】** Fatigue Life Prediction of Magnesium Alloys by Crystal Plasticity Analysis  
 ..... M.Enoki, F.Briffod, T.Shiraiwa, S.Nakajima
51. Database designing for performance prediction of flame resistant magnesium alloys with materials integration technology  
 ..... K.Ito, M.Enoki
52. Investigation of drawability of flame resistance magnesium alloy sheet  
 ..... T.ITO, H.Katagiri, M.Noda
53. Effect of texture on formability of flame-resistant magnesium alloy sheets  
 ..... S.Kobune, G.Itoh
54. Real-time detection and source discrimination of welding defects in FSW of flame resistant magnesium alloy using wireless  
 AE monitoring  
 ..... K.Ito, K.Takahashi, E.Yukutake, M.Enoki

55. Evaluation of the resistance to hydrogen embrittlement in some flame-retardant magnesium alloy welds by means of SSRT test  
..... K.Hashimoto, G.Itoh, S.Kuramoto, J.Kobayashi, T.Ito, M.Noda
56. Resistance to humid gas stress corrosion cracking in some Mg-Al-Zn-Ca series alloys  
..... Y.Seki, Y.Okazaki, R.Sano, G.Itoh, A.Kurumada, S.Kuramoto, J.Kobayashi, T.Ito, M.Noda
57. Resistance to humid gas stress corrosion cracking in some weld of Mg-Al-Zn-Ca series alloys  
..... Y.Okazaki, Y.Seki, R.Sano, G.Ito, A.Kurumada, S.Kuramoto, J.Kobayashi, T.Ito
58. Influence of Al concentration and Zn addition on the corrosion resistance of rolled Mg-Al-(Zn)-Ca magnesium alloys  
..... I.Nakatsugawa, N.Saito, K.Suzuki, Y.Fukuda, T.Ito, M.Noda, Y.Chino
59. Ejecta and Crater Size on High-purity Aluminum and Aluminum Alloys by Hypervelocity Impact  
..... M.Nishida, Y.Mozaki, H.Yamada, H.Tanaka
60. The effect of yield strength on the generation of dent on Aluminum outer panel  
..... T.Kobayashi, K.Akasaki, H.Konishi, S.Tamehiro
61. Measurement of residual stress distribution in high depth in aluminum alloy  
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62. Development of evaluation for material properties of Aluminum plate by chip shape on orthogonal turning  
..... K.inagi, K.Aoki, S.Horike
63. Effect of cold rolling reduction on mechanical properties of Al-Fe alloy foils  
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64. Effect of cold rolling on mechanical properties of Al-Mg-Si alloys  
..... MiuraTakuma, ShigeruKuramoto, GorohItoh, JunyaKobayashi
65. Effects of insoluble trace impurity atoms on hot ductility of Al—Mg solid solution alloys  
..... T.Ito, K.Kawasaki, H.Fujiwara, T.Mizuguchi
66. High speed deformation structure at the surface of MPFed aluminum sheet and numerical analysis of deformation behavior  
..... T.Kambe, S.Muraishi, S.Kumai
67. Pseudo-Elastic Behavior and Martensitic Transformation of Al<sub>4</sub>Ca Phase in Al-Ca Eutectic Alloy  
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68. Microstructure analysis of quenched semi-solid A356 aluminum alloy slurry by using Weck's reagent  
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69. Die casting of thin fin using hyper eutectic Al-Si alloy  
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70. Microstructure observation in Al-0.5mol%Mg<sub>2</sub>Si cast alloys added various excess Si  
..... T.Tsuchiya, Y.Makita, S.Lee, S.Saikawa, S.Ikeno, K.Matsuda
71. Damage of fine eutectic Si-particles in Al-10%Si cast alloy for tensile test  
..... S.Furuta, M.kobayashi, T.Aoba, H.Miura
72. Effect of superheated melt treatment on AlP-compound size in Al-Si alloy  
..... R.Inoue, I.Yamamoto, K.Oda
73. Adsorption of phosphorus into carbide in eutectic Al-Si alloy after superheated melt treatment  
..... T.Tsubasa, R.Inoue, K.Oda
74. Influence of AlP and Mg content in solidification structure of Al-10% Si system alloys  
..... Y.Zhao, H.Kazuda, S.Ishihara, S.Ikeno, S.Saikawa
75. Effect of AlP in solidification structure of Al-2%Mg-1%Si alloy castings  
..... A.Osugi, S.Ishihara, S.Ikeno, S.Saikawa
76. Effects of beryllium addition on solidification structure of Al-Mg-Si alloy  
..... T.Kitamura, H.Yasuda
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..... H.Araki, M.Ozaki, K.Sugita, M.Mizuno, K.Matsumoto, H.Shishido, Y.Aruga, Y.Shirai
78. Effect of reversion treatment time on two-step aging behavior of 6061 aluminum alloy  
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79. Change of Mechanical Properties by aging heat treatment in Al-5%Mg-2%Si Cast Alloy  
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80. Effect of Si, Ni contents on Elevated-temperature Strength of Al-Cu-Mg alloys  
..... S.Chen, M. Dohi
81. Prediction of Temperature Change Using Uniform Heating Model on Aluminum Foam Formation Process by Halogen Lamp Heating  
..... R.Nagahiro, Y.Hangai, A.Yano, K.Amagai
82. Resistance to hydrogen embrittlement of an Al-4%Cu-1.5%Mg alloy in humid air  
..... T.Manaka, M.Yoshida
83. Effect of hydrogen on age hardening in Al-2Zn-4Mg alloy  
..... K.Takamoto, T.Yasumoto, ArteniBendo, T.Tsuchiya, S.Lee, K.Matsuda, K.Nishimura, N.Nunomura,  
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84. Hydrogen embrittlement cracking behavior of MIG weld of a 5083 aluminum alloy assessed by humid gas stress corrosion cracking test  
..... A.Ghorani, T.Kiuchi, T.Ohbuchi, G.Itoh
85. Pick-up reduction effect of die coating on hot extrusion of 6063 aluminium alloy  
..... S.Oda, Y.Watanabe, T.Funazuka, N.Takatsuji, K.Matsuda, K.Dohda
86. Effect of added element on recrystallized texture development of extruded aluminum alloys  
..... M.Araki, K.Matsuda, S.Lee, T.Tsuchiya, S.Ikeno
87. Microstructure observation of air cooled 6005C aluminum alloy after extrusion  
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88. Grain refinement of Al-Si alloy by heteromorphic die extrusion  
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89. Numerical analysis of extrusion process for multi-hollow aluminum alloy profiles  
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90. Microstructure and its thermal stability of hot rolled Al-1%Mn alloy  
..... K.Ikeda, H.Osafune, S.Miura, H.Imoto, K.Sato, M.Nagoshi
91. In-situ observation of recrystallization behavior and evaluation of recrystallization texture for 1100 Aluminum  
..... M.Ito, Y.Nagaoka
92. Effect of silicon addition on recrystallization in brazing heat treatment for Al-Mn-Si-Zr alloy  
..... D.Shimosaka, M.Ueno, T.Anami
93. Relationship between Vickers microhardness and full width at half maximum of Al alloy powder produced by mechanical milling process  
..... Kento.Mizuguchi, Masahiro.Kubota, Masahiko.Shioda
94. Influence of kinetic parameters on intermediate layer and temperature history of Al-Fe magnetic pulse welded joints  
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95. Effect of impact angle on Al/Cu joint interface morphology fabricated by MPW  
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96. Influence of Mg addition to core material on diffusion of Zn in sacrificial layer during blazing of Aluminum blazing sheet.  
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97. Change in porous structure and liquid phase migration in bonding porous aluminum with an Al-Si based alloy brazing sheet  
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98. Investigation on resistance spot weldability of Aluminum Alloy in combined adhesive bonding  
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99. Mechanical interlocking of aluminum alloys with stainless steel strands using friction stir forming  
..... H.MofidiTabatabaei, T.Ohashi, T.Nishihara
100. Fabrication of a pair of adjacent cylindrical extrusions on A5083 aluminum alloy plate by friction stir forming  
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..... T.Miyazaki, M.Maeda
102. Influence of welding condition and tool shape on material flow of friction stir welding between aluminum alloy and steel  
..... Y.Ogura, T.Yasui, X.Hulin, M.Fukumoto
103. Ultrasonic bonding of aluminum bundled wires and aluminum plate for electrical wiring  
..... S.Ishii, M.Maeda, H.Uchida, M.Shioda
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..... T.Hirata, T.Kimura, T.Nakamoto
106. Fabrication of carbon-fiber dispersed aluminum matrix composite by selective laser melting  
..... T.Kimura, T.Nakamoto, T.Suyama, T.Miki
107. Energy absorption property of additive manufactured porous aluminum alloys with an acorn shape  
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108. Investigation of deformation behavior of {332}<113> deformation twin on metastable  $\beta$ -type Ti alloy single crystal  
..... K.Cho, R.Morioka, H.Y.Yasuda
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..... OhataKota, H.Tobe, E.Sato
110. Changes of interfaces and microstructure of refractory niobium disilicide coating TiAl alloy after high-temperature oxidation  
..... Y.Tanaka, K.Ogihara, K.Hasezaki
111. High-temperature oxidation and its kinetics study of TiAl-Zr alloys in air  
..... T.Takahashi, T.Manaka, M.Todai, H.Hirazawa, E.Ikeda, T.Ouchi
112. Temperature-dependent mechanical behavior of Nb inserted Si<sub>3</sub>N<sub>4</sub>/Ti joints brazed with Ag and Au-filler alloy  
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113. Local Mechanical Response of Cold Worked Ti-18Mo Alloy  
 ..... K.Numata, T.Kimura, S.Kuramoto, E.Nakagawa, T.Ohmura
114. Influence of phase stability on deformation mechanism of Ti-Nb based alloy  
 ..... S.Yonemura, T.Kimura, S.Kuramoto, E.Nakagawa, T.Ohmura
115. Development of Ti-Nb alloy via selected laser melting  
 ..... M.Todai, R.Kato, T.Nagase, T.Nakano
116. Microstructure and mechanical properties of  $\alpha+\beta$  type Ti-5Nb alloys with high oxygen content  
 ..... K.Ueda, Y.Hirose, M.Omiya, T.Narushima
117. Microstructure and interfacial strength of Ti-6Al-4V/ZrO<sub>2</sub> sintered bonding material by SPS method  
 ..... O.Katagiri, R.Koizumi, N.Aoyagi
118. Effects of heat-treatments of Ti substrate on anodization behavior and morphology of anodic oxide layers  
 ..... H.Tsuchiya, Y.Kamimura, S.Fujimoto
119. Fabrication and characterization of Mechanoluminescence particle dispersed Al-7%Si based composite  
 ..... Y.Ota, T.Tsuchiya, S.Lee, S.Ikeno, Y.Horita, T.Ohji, K.Amei, K.Shibata, K.Okino, K.Matsuda
120. Si coating on magnesium alloys to improve corrosion resistance  
 ..... Y.Kang, T.Ishizaki, T.Koshina, Y.Nakagawa
121. Investigation of influence of polymer particles on friction and wear characteristics of magnesium based composite material  
 ..... Y.Geshi, T.Matsuoka, T.Hirayama, H.Sakamoto, H.Somekawa
122. Galvanic corrosion between aluminum alloy 5052 and CFRP in NaCl solution  
 ..... M.Sakai, H.Serita
123. Attempt for improving the resistance to SCC in an Al-Zn-Mg-Cu alloy by means of quenching condition control  
 ..... K.Hiyama, G.Akaba, G.Itoh, S.Ishizawa, S.Kuramoto
124. Effect of surface treatment and durability condition on adhesive durability of aluminum sheet  
 ..... T.Kojima, Y.Ota, Y.Takahashi
125. Effect of additional elements on corrosion resistance of Al-Si filler materials in alkaline solution  
 ..... S.Maruno, M.Yoshino, S.Iwao
126. Analysis of corrosion behavior of aluminum in aqueous solutions with electrochemical impedance spectroscopy  
 ..... M.Sakairi, K.Otani, Md.S.Islam
127. **【Award Lecture】** Assessment of mechanical behaviour via 3D/4D imaging: Its recent progress  
 ..... H.Toda
128. 4D characterization of the stress corrosion cracking behavior in Al-10Mg aluminium alloy  
 ..... H.Toda, K.Hirayama, H.Su, D.S.Fu, K.Uesugi, A.Takeuchi
129. Three-dimensional observation of grain boundary sliding inside superplastic 7475 aluminum alloy  
 ..... H.Masuda, H.Tobe, T.Hara, E.Sato
130. Effect of testing temperature on serration behavior of 7075 aluminum alloy in indentation  
 ..... H.Yamada, H.Ootani, T.Kami, N.Ogasawara
131. Characteristics of extraction curves of hydrogen from aluminum alloys by inert gas fusion method  
 ..... TakayukiMatsuno, KenjiWada
132. Attempt for aluminum smelting by hydrocarbon plasma  
 ..... K.Namai, T.Inoue, G.Itoh
133. Reduction process of aluminum oxide by hydrogen plasma  
 ..... T.Inoue, G.Itoh, N.Sato, T.Ikehata, R.Kurumada
134. Metal recovery from aluminum powder  
 ..... S.Ikeda, Y.Ishiwata, Y.Suzuki, K.Higashimura, A.Tanaka
135. Castability and microstructural evolution of high manganese-containing Al-Mn-Si alloys fabricated by vertical-type high-speed twin-roll casting  
 ..... T.H.Nguyen, R.Song, Y.Harada, S.Muraishi, S.Kumai
136. Thermal fluid analysis inside nozzle tips of horizontal twin roll continuous casting machine for aluminum alloy  
 ..... K.Kamiya, K.Fukawa, Y.Matsui
137. Casting of Al-Mg alloy clad strip by roll caster  
 ..... M.Tsuchida, H.Sakata, T.Haga
138. Casting of 1070 aluminum rod by casting wheel caster  
 ..... K.Tsuchitani, T.Haga
139. Effect of casting speed on solidification structures of Al-Mn alloy wires produced by OCC process  
 ..... T.Sawaya, A.Morita, Y.Yanagihori, G.Motoyasu
140. Estimation of anisotropic yield function for aluminum alloys using data assimilation  
 ..... A.Yamanaka, T.Kuwabara, K.Sasaki
141. Material modeling and forming limit analysis for 6000 series aluminum alloy sheet using multiaxial tube expansion test  
 ..... Y.Ogasawara, T.Hakoyama, H.Takeda, T.Ikeda, T.Kuwabara

142. Material Modeling of 5000-Series Aluminum Alloy Sheet Using Biaxial Tensile Tests and Hole Expansion Simulation  
..... N.Miyake, T.Kuwabara
143. Estimation of biaxial tensile deformation of aluminum alloy sheet using deep learning  
..... K.Koenuma, A.Yamanaka, T.Kuwabara
144. Effects of thermal refining on the plastic anisotropy and forming limit curves in 7000 series aluminum  
..... S.Akamatsu, H.Hosoi, K.Nagai, T.Kuwabara
145. Serration Behaviors in Tensile Deformation of Al-2.5mass%Mg Alloy  
..... X.Lan, S.Gao, M.Park, A.Shibata, N.Tsuji
146. Effects of grain size on acoustic emission during tensile deformation in aluminum  
..... D.Terada
147. Development of high-strength 7xxx aluminum alloy for next-generation aircrafts  
..... Y.Kanno
148. Microstructure and high-temperature strength of a novel heat-resistant aluminum alloy designed based on thermodynamic assessments  
..... N.Takata, M.Ishihara, S.Nakatsuka, A.Suzuki, M.Kobashi
149. Atomic structures of Mg symmetric tilt grain boundaries: ab initio local analysis  
..... Z.Xu, M.Kohyama
150. Effect of electrolyte temperature on crystallinity and dielectric constants of barrier-type oxide film on high-purity aluminum  
..... S.Enoki, Y.Shimizu, Y.Taguchi
151. Fabrication of SiGe layer on Si substrate by Screen-Printing of Al-Ge paste  
..... M.Nakahara
152. Effect of particle dispersion on thermal property and thermal expansion of TiB<sub>2</sub> particles/Al composites  
..... G.Sasaki, S.Kodama, K.Sugio
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