

2009 年度業績 一藤井 英俊

学術論文・解説記事

1. Y.D.Chung, H.Fujii, R.Ueji and K.Nogi, Friction Stir Welding of Hypereutectoid Steel (SK5) below Eutectoid Temperature, Scienced and Technology of Welding and Joining, 14 (3) , 233 ~238, 2009/4/1
2. K. H. Song, H. Fujii and K. Nakata, Evaluation of Grain Refinement and Mechanical Property on Friction Stir Welded Inconel 600, Mater. Trans., 50 (4) , 832-836, 2009/4/1
3. Y. C. Chen, H. Fujii, T. Tsumura, Y. Kitagawa, K. Nakata, K. Ikeuchi, K. Matsubayashi, Y. Michishita, Y. Fujiya and J. Katoh, Friction Stir Processing of 316L Stainless Steel Plate, Sci. Technol. Weld. Joining, 14 (3) , 197-201, 2009/4/1
4. Y.Morisada, H.Fujii, T.Mizuno, G.Abe, T.Nagaoka and M.Fukuzumi, Nanostructured Tool Steel Fabricated by Combination of Laser Melting and Friction Stir Processing, Materials Science and Engineering A, A505, 157~162, 2009/4/15
5. Ping Shen, Hidetoshi Fujii and Kiyoshi Nogi, Wettability of Some Refractory Materials by Molten SiO₂-MnO-TiO₂-FeO_x Slag, Materials Chemistry and Physics, 114, 681 ~ 686, 2009/4/15
6. Yutaka Shinoda, Yuki Yanagisawa, Takashi Akatsu, Fumihiro Wakai and Hidetoshi Fujii, Development of Creep-Resistant Tungsten Carbide Copper Cemented Carbide, Materials Transactions, 50 (6) , 1250~1254, 2009/5/13
7. Y.S.Ji, H.Fujii, M.Maeda, K.Nakata, H.Kimura, A.Inoue and K.Nogi, Friction Stir Welding of Zr55Cu30Ni5Al10 Bulk Metallic Glass, Materials Transactions, 50 (6) , 1300-1303, 2009/6/1
8. 藤井 英俊, FSW, Y. S. Ji, H. Fujii, Y. Sun, M. Maeda, K. Nakata, H. Kimura, A. Inoue and K. Nogi, 78 (4) , 274~282, 2009/6/1
9. Hidetoshi Fujii, Yasufumi Yamaguchi, Toshifumi Kikuchi, Shoji Kiguchi and Kiyoshi Nogi, Surface Hardening of Two Cast Irons by Friction Stir Processing, Journal of Physics: Conference Series, 165, 12013, 2009/6/1
10. Y.S.Ji, H.Fujii, M.Maeda, K.Nakata, H.Kimura, A.Inoue and K.Nogi, Friction Stir Welding of Zr-Based Bulk Metallic Glass, Journal of Physics: Conference Series, 165, 12015, 2009/6/1
11. J.Lobos, S.Suzuki, H.Nakajima, Y.S.Ji, H.Fujii, D.Terada and N.Tsuji, Structural Change and Improvement of the Mechanical Properties of a Lotus-Type Porous Copper by Wire-Brushing, Journal of Physics: Conference Series, 165, 12070, 2009/6/1
12. K.Nogi, Y.Hirata, T.Matsumoto and H.Fujii, Reactive Wetting in Liquid Cu Alloy – Carbon and Silicon Carbide Systems, Journal of Physics: Conference Series, 165, 12073, 2009/6/1
13. Takeshi Ishikawa, Hidetoshi Fujii, Kazuo Genchi, Shunichi Iwaki, Shigeki Matsuoka and

Kiyoshi Nogi, High Speed-High Quality Friction Stir Welding of Austenitic Stainless Steel, ISIJ International, 49, 897~901, 2009/6/1

14. K.H. Song, H. Fujii and K. Nakata, Effect of Welding Speed on Microstructural and Mechanical Properties of Friction Stir Welded Inconel 600, Mater. Des., 30, 3972-3978, 2009/6/13
15. CHUNG Young Dong, FUJII Hidetoshi, NAKATA Kazuhiro and NOGI Kiyoshi, Friction Stir Welding of High Carbon Tool Steel (SK85) below Eutectoid Temperature, Trans. JWRI, 38 (1) , 37~41, 2009/9/1
16. Ping Shen, Qiaoli Lin, Qichuan Jiang, Hidetoshi Fujii and Kiyoshi Nogi, Reactive Wetting of Polycrystalline TiC by Molten Zr55Cu30Al10Ni5 Metallic Glass Alloy, Journal of Materials Research, 24 (7) , 2420~2427, 2009/7/1
17. 長岡 亨、森貞 好昭、藤井 英俊、福角 真男, 無酸素銅とアルミニウムの摩擦攪拌異材接合継手の機械的性質, 科学と工業, 83 (8) , 337~342, 2009/8/1
18. Y. Chen, H. Fujii, T. Tsumura, Y. Kitagawa, K. Nakata, K. Ikeuchi, K. Matsubayashi, Y. Michishita, Y. Fujiya and J. Katoh, Effect of Tool Geometry on Tool Wear Characterization and Weld Formation in Friction Stir Welding of 316L Stainless Steel, 溶接学会論文集, 27 (2) , 85s-88s, 2009/8/17
19. Y.Morisada, H.Fujii, T.Mizuno, G.Abe, T.Nagaoka and M.Fukuzumi, Modification of Nitride Layer on Cold-Work Tool Steel by Laser Melting and Friction Stir Processing, Surf. Coat. Tech., 204, 386~390, 2009/10/15
20. Y. Sun, H. Fujii, Y. Takada, N. Tsuji, K. Nakata and K. Nogi, Microstructure and Hardness Distribution of Friction Stir Welded 1050 Al and IF Steel with Different Original Grain Size, Trans. JWRI, 38 (2) , 43~48, 2009/12/1
21. Y.F.Sun, H.Fujii, Y.Takada, N.Tsuji, K.Nakata and K.Nogi, Effect of Initial Grain Size on the Joint Properties of Friction Stir Welded Aluminum, Materials Science and Engineering A, 527, 317~321, 2009/12/15
22. S.P.Lu, H.Fujii, K.Nogi, Weld Shape Variation and Electrode Protection under Ar-(Ar-O₂) Double Shielded GTA Welding, Science and Technology of Welding and Joining, 14 (8) , 726 ~733, 2009/11/1
23. 松下 宗生、木谷 靖、池田 倫正、小野 守章、藤井 英俊、鄭 永東, 高張力鋼板の摩擦攪拌接合 (FSW) 技術の開発, 溶接学会論文集, 27 (4) , 360~370, 2009/12/29
24. 藤井 英俊, 非常識を可能にする一鉄鋼材料を変態せずに接合一, 生産と技術, 61 (4) , 1 ~6, 2009/10/1
25. 藤井英俊、中田一博, 炭素鋼のレーザハイブリッド摩擦攪拌接合, レーザ加工学会誌, 16 (3) , 171~175, 2009/10/1
26. K. Kondoh, M. Kawakami, H. Imai, J. Umeda and H. Fujii, Wettability of Pure Ti by Molten Pure Mg Droplets, Acta Mater., 58, 606-614, 2010/1/1

27. "Koji Inada, Hidetoshi Fujii, Young Su Ji, Yoshiaki Morisada and kiyoshi Nogi", Design of Joint Properties by Friction Powder Processing, Materials Science Forum, 638-642, 2058~2063, 2009/2/1
28. K. Inada, H. Fujii, Y. S. Ji, Y. F. Sun and Y. Morisada, Effect of Gap on FSW Joint Formation and Development of Friction Powder Processing, Sci. Technol. Weld. Joining, 15 (2) , 131~136, 2010/2/1
29. Shanping Lu, Hidetoshi Fujii and Kiyoshi Nogi, Weld Shape Variation and Electrode Oxidation Behavior under Ar-(Ar-CO₂)Double Shielded GTA Welding, Journal of Materials Science and Technology, 26 (2) , 170~176, 2010/2/28
30. Y.F. Sun, H.Fujii, N.Tsuji, Y.Todaka and M.Umemoto, Fabrication of ZrAlNiCu bulk metallic glass composites containing pure copper particles by high-pressure torsion, Fabrication of ZrAlNiCu bulk metallic glass composites containing pure copper particles by high-pressure torsion, 492, 149~152, 2010/3/4

国際会議プロシーディングス

1. Yashuyuki Miyano, Hidetoshi Fujii, Yugeng Sun, Kouichi Ieko, Yasuyuki Katada and Osamu Kamiya, Friction Stir Welding of High Nitrogen-containing Austenitic Stainless Steel, 10th Int. Conf. High Nitrogen Steels Conf. Proc., 162~167, 2009/7/6
2. K. Kondoh, M. Kawakami, J. Umeda, H. Imai and H. Fujii, Microstructural and Mechanical Properties of Magnesium Matrix Composite Reinforced with Titanium Powders via Powder Metallurgy Process, 8th Int. Conf. on Magnesium Alloys and their Applications, Weimar, Germany, 668~675, 2009/10/26
3. H.Fujii and Y.D.Chung, High Strength and Toughness of High Carbon Steel Joint Friction Stir Welded below Eutectoid Temperature, Processing and Fabrication of Advanced Materials-XVIII, 1943~1952, 2009/12/12

著書

1. 藤井 英俊他, チタンの基礎・加工と最新応用技術, シーエムシー出版, 2009/8/1, 98~107 (文筆)

特許権などの知的財産権

1. 特許登録, Method of Connecting Metal Material, 発明者 : 藤井英俊、他 5 名, 権利者 : 大阪

大学 他 1 社, EP2427846, 出願年月日 : 2005/3/14, 取得年月日 : 2009/4/15

2. 特許登録, Method of Connecting Metal Material, 発明者 : 藤井英俊、他 5 名, 権利者 : 大阪大学 他 1 社, EP2452885, 出願年月日 : 2005/3/14, 取得年月日 : 2009/4/22
3. 特許登録, Method of Connecting Metal Material, 発明者 : 藤井英俊、他 5 名, 権利者 : 大阪大学 他 1 社, EP2439159, 出願年月日 : 2005/3/14, 取得年月日 : 2009/6/24
4. 特許登録, Method of Connecting Metal Material, 発明者 : 藤井英俊、他 5 名, 権利者 : 大阪大学 他 1 社, EP2454401, 出願年月日 : 2005/3/14, 取得年月日 : 2009/6/24
5. 特許登録, 摩擦攪拌接合用ツール, 発明者 : 藤井英俊、他 2 名, 権利者 : 大阪大学 他 1 社, 特許第 4375665 号, 出願年月日 : 2004/1/13, 取得年月日 : 2009/9/18
6. 特許出願, 回転ツール, 発明者 : 藤井英俊、他 4 名, 権利者 : 大阪大学 他 1 社, 特願 2009-111081, 出願年月日 : 2009/4/30
7. 特許出願, 超硬合金の改質方法および該方法によって改質された超硬合金, 発明者 : 藤井英俊、他 5 名, 権利者 : 大阪大学 他 2 社, 特願 2009-185651, 出願年月日 : 2009/8/10
8. 特許出願, 金属材の加工方法, 金属材の加工方法によって加工された構造物及び回転ツール, 発明者 : 藤井英俊、他 4 名, 権利者 : 大阪大学 他 2 社, PTC/JP2009/071476, 出願年月日 : 2009/12/24
9. 特許出願, Process for Working Metal Material and Structures, 発明者 : H.Fujii , 1 other, 権利者 : Osaka University , 1 other, US 12/438353, 出願年月日 : 2009/2/20
10. 特許出願, 金属皮膜の形成方法, 発明者 : 藤井英俊、他 5 名, 権利者 : 大阪大学 他 2 社, 特願 2010-070680, 出願年月日 : 2010/3/25

新聞報道（関連報道）など

1. 藤井英俊, 日刊工業新聞, 摩擦攪拌接合 鋼への展開研究進む, 2009/12/16
2. 藤井英俊, 日刊工業新聞, 高硬度の超硬合金被膜-摩擦熱で再結晶化, 2010/2/26