



## 査読付き論文

1. J. Huang, A. Issariyapat, S. Kariya, J. Umeda, K. Kondoh: On the viability of in-situ alloyed Ti-1Fe as a strong and ductile alternative to Ti-6Al-4V for laser-based powder bed fusion, *Additive Manufacturing* 105 5 (2025) 104788, DOI: 10.1016/j.addma.2025.104788.
2. S. Miyamoto, S. Kariya, J. Umeda, B. Chen, J. Shen, S. Li, A. N. AlHazaa and K. Kondoh: Strengthening Mechanism of Powder Metallurgy Hot-Rolled Ti-Zr-TiC Composites, *Materials Transactions* (2025), DOI: 10.2320/matertrans.MT-Y2025001.
3. K. Kondoh, N. Nishimura, K. Shitara, S. Kariya, K. Chen, J. Umeda: Direct bonding mechanism of titanium and PET resin via heating and pressurization: Influence of bubble dynamics on bonding strength, *Journal of Advanced Joining Processes* 11 (2025) 100301, DOI: 10.1016/j.jajp.2025.100301.
4. L. Liu, S. Li, S. Li, H. Liu, S. Wang, D. Hui, X. Zhang, S. Kariya, A. Issariyapat, J. Umeda, K. Kondoh, B. Xiao, Z. Ma: Microstructure and mechanical properties of nano TiB whisker-reinforced titanium matrix composites using atomized Ti-TiB composite powder as raw materials, *Composites Part B* 298 (2025) 112392, DOI: 10.1016/j.compositesb.2025.112392..
5. 阿南伶永大, 刈屋翔太, S. Li, Y. Yang, 梅田純子, 近藤勝義: Ti-6Al-4V 積層造形熱処理材における  $\alpha'$ 相の分解と引張特性, *粉体および粉末冶金* 72 4 (2025) 79-84, DOI: 10.2497/jjspm.25-00001.
6. S. Li, S. Li, H. Liu, L. Liu, S. Wang, D. Hui, J. Yan, R. Zhou, Dingbo Tao, W. Huang, J. Ga, X. Hou, X. Zhang, B. Li, G. Li, J. Luan, J. Umeda, K. Kondoh, Y. Ren, Y. Zhu: Hierarchical Heterostructure Titanium Matrix Composites With Synergy of Ultrahigh Strength-Ductility and Heat-Resistant, *SSRN* (2025), DOI: 10.2139/ssrn.5115967.
7. 平子綾音, 刈屋翔太, 梅田純子, 山中謙太, X. Li, 近藤勝義: 機械学習を援用した Ti-Fe 二相合金における強化因子の特定, *粉体および粉末冶金* 72 3 (2025) 73-78, DOI: 10.2497/jjspm.24-00057.
8. L. Cao, B. Chen, J. Wan, J. Shen, K. Kondoh, S. Li, J. Li: Simultaneously improving strength and ductility of carbon nanotube (CNT)-reinforced aluminum matrix composites by embedding CNTs inside matrix grains, *Composites Part B* (2025) 112240, DOI: 10.1016/j.compositesb.2025.112240.
9. L. Liu, S. Li, S. Li, H. Liu, S. Wang, D. Hui, X. Zhang, S. Kariya, J. Umeda, K. Kondoh, A. Bahador, B. Xiao, Z. Ma: Overcoming strength-ductility trade-off in pelleted heterostructure titanium matrix composites by optimizing pellet size, *Materials Characterization* 222 (2025) 114803, DOI: 10.1016/j.matchar.2025.114803.
10. X. Ga, D. Ye, S. Li, S. Xiao, C. Hu, K. Kondoh, S. Kariya, L. Zhang, Y. Yang: Inducing  $\alpha''$  phase by interstitial carbon atoms to achieve strength-ductility enhancement in as-printed Ti alloy, *Materials Research Letter* (2025) 1-8, DOI: 10.1080/21663831.2025.2450470.
11. A. Issariyapat, J. Huang, S. Kariya, B. Chen, S. Li, J. Umeda, K. Yamanaka, A. Chiba, K. Kondoh: Sustainable alloy design: Fe-enhanced Ti alloys for superior mechanical performance in additive manufacturing, *Journal of Alloys and Compounds* 1010 (2025) 177767, DOI: 10.1016/j.jallcom.2024.177767.
12. S. Abolkassem, A. Elsayed, S. Kariya, J. Umeda, K. Kondoh: Microstructure, mechanical, and magnetic properties of powder metallurgy FeCoNiSi-Cu, FeCoNiSi-Mn, and FeCoNiSi-Ti equiautomic HEAs manufactured by spark plasma sintering, *Journal of Materials Research and Technology* 33 (2024) 9426-9438, DOI: 10.1016/j.jmrt.2024.11.252.



13. X. Zhang, X. Li, J. Wang, L. Liu, S. Li, B. Li, X. Hou, J. Gao, S. Kariya, J. Umeda, K. Kondoh, S. Li: Synthesis mechanism and interface contribution towards the strengthening effect of in-situ Ti<sub>5</sub>Si<sub>3</sub> reinforced Al matrix composites, *Materials Science & Engineering A* 918 (2024) 147427, DOI: 10.1016/j.msea.2024.147427.
14. Y. Zhang, L. Jia, J. Li, Z. Lu, K. Kondoh: Regulation of reinforced phases and its influence on the properties of (Ni<sub>2</sub>B+C)/Cu composite by heat and mechanical treatments, *Materials Today Communications* 41 (2024) 110787, DOI: 10.1016/j.mtcomm.2024.110787.
15. J. Huang, A. Bahador, K. Kondoh: Microstructure development and strengthening behaviour in hot-extruded Ti-Mo alloys with exceptional strength-ductility balance, *Journal of Alloys and Compounds* 1010 (2025) 177195, DOI: 10.1016/j.jallcom.2024.177195.
16. G. Li, H. Yao, B. Fu, K. Chen, K. Kondoh, N. Chen, M. Wang: Robust interfacial bonding achieved via phase separation induced by enhanced Al diffusion during AZ31/high-entropy alloy friction stir welding, *Journal of Magnesium and Alloys* 13 (2025) 1012-1019, DOI: 10.1016/j.jma.2024.09.010.
17. X. Ye, Z. Heng, B. Chen, Q. Wei, J. Umeda, K. Kondoh, J. Shen: An in-situ study of static recrystallization in Mg using high temperature EBSD, *Journal of Magnesium and Alloys* 12 (2024) 1419-1430, DOI: 10.1016/j.jma.2023.01.021.
18. Y. Zhang, L. Jia, Y. Zhou, Z. Lu, K. Kondoh: Research progress in carbon nanotube reinforced copper matrix composites prepared by powder metallurgy, *Journal of Central South University (Science and Technology)* 55 8 (2024) 3165–3179, (in Chinese), DOI: 10.11817/j.issn.1672-7207.2024.08.028.
19. H. Geng, B. Chen, L. Cao, J. Wan, J. Shen, K. Kondoh, J. Li: Aging behavior, microstructure and mechanical properties of Al-Cu-Mg alloy matrix composites reinforced with carbon nanotubes, *Materials Science and Engineering A* 915 (2024) 147174, DOI: 10.1016/j.msea.2024.147174.
20. M. Hou, L. Jia, R. Huang, C. Li, Z. Shi, J. Cui, Z. Lu, K. Kondoh: First-principle and experimental investigation into the interfacial characters of Ti-doped ZTA and high chromium cast iron, *Ceramics International* 50 (2024) 45289-45299, DOI: 10.1016/j.ceramint.2024.08.368.
21. 宮本晴, 刈屋翔太, 梅田純子, B. Chen, J. Shen, S. Li, A. N. Alhazaa, 近藤勝義: TiC 粒子分散 Ti-Zr 粉末圧延複合材の強化機構解明, 粉体および粉末冶金 71 10 (2024) 492-498, DOI:10.2497/jjspm.23-00072
22. 刈屋翔太, 田中貴之, 梅田純子, Y. Yang, S. Li, A. Khantachawana, A. Bahador, 近藤勝義:  $\alpha+\beta$  2 相 Ti-Fe 焼結圧延材の組織形成機構, 粉体および粉末冶金 71 10 (2024) 510-516, DOI: 10.2497/jjspm.23-00078.
23. Y. Shigeta, N. Nomura, K. Kondoh, K. Uesugi, M. Hoshino, M. Aramaki, Y. Ozaki: Use of X-ray CT Imaging to Quantitatively Analyze the Effects of the Pore Morphology on the Tensile Properties of CP-Ti L-PBF Materials, *ISIJ International* 64 7 (2024) 1162–1171, DOI: 10.2355/isijinternational.ISIJINT-2023-431.
24. H. Yao, H. Wen, G. Li, N. Chen, K. Chen, K. Kondoh, X. Dong, H. Zhu, M. Wang: Evolution of interfacial phases between Al alloy and high entropy alloy during annealing, *Materials Characterization* 211 (2024) 113890, DOI: 10.1016/j.matchar.2024.113890.
25. 刈屋翔太, 市川絵理, A. Issariyapat, 梅田純子, B. Chen, A. Bahador, 近藤勝義: 炭素の固溶がチタン積層造形合金の結晶組織形成に及ぼす影響, 粉体および粉末冶金 71 10 (2024) 517-523, DOI: 10.2497/jjspm.23-00079.
26. 刈屋翔太, A. Issariyapat, A. Bahador, M. Qian, 梅田純子, 近藤勝義: レーザ粉末床溶融法により作製した過飽和鉄固溶  $\alpha$  チタン合金の結晶組織と強化機構, 粉体および粉末冶金 71 12 (2024) 686-692, DOI: 10.2497/jjspm.23-00068.



27. L. Liu, S. Li, X. Zhang, S. Li, S. Wang, B. Li, L. Gao, H. Liu, D. Hui, D. Pan, S. Kariya, J. Umeda, K. Kondoh: Synthesis mechanism of pelleted heterostructure Ti64–TiB composites via an interdiffusion and self-organization strategy based on powder metallurgy, Composites Part B: Engineering 276 (2024) 111366, DOI: 10.1016/j.compositesb.2024.111366.
28. J. Wan, B. Chen, J. Shen, K. Kondoh, S. Liu, J. Li: Improving the mechanical properties of laser powder bed fused AlSi10Mg alloys by eliminating the inevitable micro-voids via hot forging, Rapid Prototyping Journal 30 4 (2024) 621-632, DOI: 10.1108/RPJ-06-2023-0202.
29. K. Ratanapongpien, A. Khantachawana, K. Kondoh: Effect of Laser Scanning Speed and Fine Shot Peening on Pore Characteristics, Hardness, and Residual Stress of Ti-6Al-4V Fabricated by Laser Powder Bed Fusion, metals 14 (2024) 250. DOI: 10.3390/met14020250.
30. 刈屋翔太, 永田晃貴, 梅田純子, B. Chen, J. Shen, S. Li, 近藤勝義:Sc 添加 Ti-Zr 系焼結合金の強化機構, 粉体および粉末冶金 71 10 (2024) 482-491, DOI: 10.2497/jjspm.23-00067.
31. 刈屋翔太, 林雄大, A. Issariyapat, 梅田純子, S. Moon, B. Chen, S. Li, 近藤 勝義:温間圧延加工を施した超急速凝固 Ti-Si 粉末合金の結晶組織形成と強化機構, 粉体および粉末冶金 71 10 (2024) 499-509, DOI: 10.2497/jjspm.23-00073.
32. 刈屋翔太, 市川絵理, 寺前拓馬, S. Li, X. Li, 近藤勝義, 梅田純子:炭素固溶チタン焼結押出材の結晶組織と強化機構, 粉体および粉末冶金 71 10 (2024) 474-481, DOI: 10.2497/jjspm.23-00064.
33. S.X. Wang, S.F. Li, X.M. Gan, R.D.K. Misra, R. Zheng, K. Kondoh, Y.F. Yang: Insights into the microstructural design of high-performance Ti alloys for laser powder bed fusion by tailoring columnar prior- $\beta$  grains and  $\alpha$ -Ti morphology, Journal of Materials Science & Technology 187 (2024) 156-168, DOI: 10.1016/j.jmst.2023.11.055.
34. S. Kariya, A. Issariyapat, A. Bahador, J. Umeda, J. Shen, K. Yamanaka, A. Chiba, K. Kondoh: Novel tensile deformation mode in laser powder bed fusion prepared Ti-O alloy, Materials Science & Engineering A 892 (2024) 146057, DOI: 10.1016/j.msea.2023.146057.
35. X. Guo, L. Jia, Z. Lu, H. Xie, K. Kondoh: Enhanced combination of strength and electrical conductivity properties with CrB<sub>2</sub> reinforced Cu matrix composites fabricated by powder metallurgy, Materials Today Communications 38 (2024) 107980, DOI: 10.1016/j.mtcomm.2023.107980.
36. X. Guo, L. Jia, Z. Lu, H. Xie, K. Kondoh: Mechanical and tribological property of Cu/CrB<sub>2</sub> composites under dry sliding condition, Materials Science and Technology (2024) 1-8, DOI: 10.1177/02670836231219189.
37. X.M. Gan, S.F. Li, S.X. Wang, R.D.K. Misra, K. Kondoh, C.Q. Hu, Y.F.Yang, Ductile Ti-Ni alloys with an equiaxed microstructure designed by tuning the precipitation pathway of Ti<sub>2</sub>Ni, Metallurgical and Materials Transactions A 54 (2023) 4208–4214, DOI: 10.1007/s11661-023-07179-6.
38. 李少龙, 李树丰, 张鑫, 潘登, 刘磊, 陈彪, 贾磊, J. Umeda, K. Kondoh: 粉末冶金 TC4-B4C 原位反应制备 TiC+TiB 增强 TC4 基复合材料的显微组织和力学性能, 中国有色金属学报 33 06 (2023) 1769-1783. DOI:10.11817/j.ysxb.1004.0609.2021-41102.
39. J. Huang, A. Issariyapat, S. Kariya, Y. Yang, J. Umeda, K. Kondoh: Cost Effective In-Situ Alloying of Ti-Fe via Laser Powder Bed Fusion, International Journal of Powder Metallurgy 59 4 (2023) 19-29.
40. S. Abolkassem, A. Elsayed, S. Kariya, J. Umeda, K. Kondoh: Influence of thermo-mechanical processing on microstructure and properties of bulk metallic glassy alloys-reinforced Al matrix composites prepared by powder metallurgy, Journal of Materials Research and Technology 27 (2023) 8197-8208, DOI: 10.1016/j.jmrt.2023.11.225.



41. M. Hou, L. Jia, Z. Lu, B. Chen, K. Kondoh, J. Cui: First-principles study and its experimental verification on the strength and ductility of O/Si solid solution strengthened Ti alloys, *Journal of Materials Research and Technology* 27 (2023) 7778–7786, DOI: 10.1016/j.jmrt.2023.11.221.
42. J. Wan, B. Chen, X. Zhou, L. Cao, H. Geng, J. Shen, A. Bahador, K. Kondoh, J. Li: CNT-induced heterogeneous matrix grain structure in CNTs/Al composites, *Carbon* 216 5 (2024) 118529, DOI: 10.1016/j.carbon.2023.118529.
43. P. Nyanor, H. M. Yehia, A. Bahador, J. Umeda, K. Kondoh, M. A. Hassan: Microstructure and mechanical properties of hybrid nano-titanium carbide-carbon nanotubes (nano-TiC-CNT) reinforced aluminium matrix composite, *Advanced Composite Materials* (2023) 1-19, DOI: 10.1080/09243046.2023.2253097.
44. R. Zheng, S. F. Li, R. D. K. Misra, K. Kondoh, Y. F. Yang: Role of W in W-coated Cu powder in enhancing the densification-conductivity synergy of laser powder bed fusioPPan built Cu component, *Journal of Materials Processing Technology* 322 (2023) 118169, DOI: 10.1016/j.jmatprotec.2023.118169.
45. S. Wang, S. Li, L. Liu, S. Li, L. Gao, H. Liu, X. Zhang, B. L, B. Chen, J. Umeda, K. Kondoh, S. Zhou: Microstructure and mechanical properties of powder metallurgy Ti-TiB<sub>w</sub>-xFe titanium matrix composites using Ti-TiB<sub>w</sub> composite powder, *Journal of Materials Science* 58 (2023) 13662–13677, DOI: 10.1007/s10853-023-08870-0.
46. J. Peterson, A. Issariyapat, S. Kariya, J. Umeda, K. Kondoh: The mechanical and microstructural behavior of heat treated, texture-controlled Ti-10%Mo alloys manufactured by laser powder bed fusion, *Materials Science & Engineering A* 884 (2023) 145553, DOI: 10.1016/j.msea.2023.145553
47. 近藤勝義, 市川絵理, A. Issariyapat, 梅田純子:高濃度軽元素含有チタン積層造形材の力学機能化, 粉体および粉末冶金 71 12 (2024) 586-595, DOI: 10.2497/jjspm.23-00031.
48. A. Bahador, A. Amrin, S. Kariya, A. Issariyapat, O. Gokcekaya, G. Zhao, J. Umeda, Y. Yang, M. Qian, K. Kondoh: Excellent tensile yield strength with ultrafine grain and tailored microstructure in plastically deformed Ti-Re alloys, *Journal of Alloys and Compounds* 967 (2023) 171544, DOI: 10.1016/j.jallcom.2023.171544.
49. X. Guo, L. Jia, Z. Lu, Z. Lu, H. Xie, K. Kondoh: Simultaneous improvement on strength and conductivity of CrB<sub>2</sub>/Cu composites by inhomogeneous design, *Materials Letters* 349 15 (2023) 134874, DOI: 10.1016/j.matlet.2023.134874.
50. L. Liu, S. Li, D. Pan, D. Hui, X. Zhang, B. Li, T. Liang, P. Shi, A. Bahador, J. Umeda, K. Kondoh, S. Li, L. Gao, Z. Wang, G. Li, S. Zhang, R. Wang, W. Chen: Loss-free tensile ductility of dual-structure titanium composites via an interdiffusion and self-organization strategy, *PNAS* 120 28 (2023) e2302234120, DOI: 10.1073/pnas.2302234120.
51. A. Issariyapat, J. Huang, T. Teramae, S. Kariya, A. Bahador, P. Visuttipitukul, J. Umeda, A. Alhazaa, K. Kondoh: Microstructure refinement and strengthening mechanisms of additively manufactured Ti-Zr alloys prepared from pre-mixed feedstock, *Additive Manufacturing* 73 5 (2023) 103649, DOI: 10.1016/j.addma.2023.103649.
52. 花田滉生, 刈屋翔太, 設樂一希, 梅田純子, 近藤勝義:Ti-Cu 積層造形合金における熱処理による析出形態の制御と機構解明, 粉体および粉末冶金 70 6 (2023) 290-297, DOI: 10.2497/jjspm.70.290
53. B. Nalcaci, M. Baysun, A. Bahador, J. Umeda, S. Münstermann, A. A. Kaya, M. Erdogan: Influence of two-step austempering at different temperatures on mechanical and microstructural properties of AISI 9254 high silicon steel, *Ironmaking & Steelmaking* (2023) DOI: 10.1080/03019233.2023.2204268.



54. R. Yamanoglu, A. Bahador, K. Kondoh, C. Duran, Y. Akyildiz, Y. Ozdemir, O. Ozturk: Characterization of Ti4Al4Mo/SiC composite produced by pressure-assisted sintering, *Bulletin of Materials Science*, 46 (2023) 104, DOI: 10.1007/s12034-023-02947-x.
55. R. Yamanoglu, A. Bahador, K. Kondoh: Support recycling in additive manufacturing: A case study for enhanced wear performance of Ti6Al4V alloy, *Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology* (2023), DOI: 10.1177/13506501231159447.
56. R. Zheng, S. Li, R.D.K. Misra, K. Kondoh, Y. Yang: Laser powder bed fusion of electrically/thermally conductive component by developing inert Cr<sub>2</sub>O<sub>3</sub>-coated Cu powder, *Additive Manufacturing* (2023) 103617, DOI: 10.1016/j.addma.2023.103617.
57. S. Kariya, A. Issariyapat, A. Bahador, J. Umeda, J. Shen, K. Kondoh: Effect of grain size on the tensile ductility and fracture mechanism of Ti–O alloys, *Materials Science and Engineering A* 874 (2023) 145068, DOI: 10.1016/j.msea.2023.145068.
58. J. Peterson, S. Kariya, A. Issariyapat, J. Umeda, K. Kondoh: Experimentally mapping the oriented-to-misoriented transition in laser powder bed fusion Ti-10%Mo alloys, *Scripta Materialia* 231 (2023) 115472, DOI: 10.1016/j.scriptamat.2023.115472.
59. X. Shi, X. Wang, B. Chen, J. Umeda, A. Bahador, K. Kondoh, J. Shen: Precision control of oxygen content in CP-Ti for ultra-high strength through titanium oxide decomposition: an in-situ study, *Materials & Design* 227 (2023) 111797.
60. Y. Wang, M. Wang, B. Chen, H. Sun, K. Kondoh, L. J. Kecske, J. Shen: Thermal activation based constitutive model for the dynamic deformation of AA5083 processed by large-scale equal-channel angular pressing, *Chinese Journal of Aeronautics* (2023), DOI: 10.1016/j.cja.2022.07.01.
61. X. Ye, Z. Suo, Z. Heng, B. Chen, Q. Wei, J. Umeda, K. Kondoh, J. Shen: An in-situ study of static recrystallization in Mg using high temperature EBSD, *Journal of Magnesium and Alloys* 12 4 (2023) 1419-1430, DOI: 10.1016/j.jma.2023.01.021.
62. S. Wang, S. Li, X. Gan, R. Zheng, D. Ye, R. Misra, K. Kondoh, Y. Yang: Achieving synergy of mechanical isotropy and tensile properties by constructing equiaxed microstructure in as-printed Ti alloys, *Scripta Materialia* 229 (2023) 115379, DOI: 10.1016/j.scriptamat.2023.115379.
63. X. Shi, X. Wang, B. Chen, J. Umeda, K. Kondoh, J. Shen: Effect of Bimodal Grain Structure on the Yielding Behavior of Commercial Purity Titanium Under Quasi-static Tension, *Metals and Materials International* (2023), DOI: 1007/s12540-022-01373-8.
64. J. Wan, K. Li, H. Geng, B. Chen, J. Shen, Y. Guo, K. Kondoh, A. Bahador, J. Li: Simultaneously enhancing strength and ductility of selective laser melted AlSi<sub>10</sub>Mg via introducing in-cell Al<sub>4</sub>C<sub>3</sub> nanorods, *Materials Research Letters* 11 (2023) 422-429, DOI: 10.1080/21663831.2023.2173028.
65. J. Wan, H. Geng, B. Chen, J. Shen, K. Kondoh, J. Li: Assessing the thermal stability of laser powder bed fused AlSi10Mg by short-period thermal exposure, *Virtual and Physical Prototyping* 18 (2023) e2165122. DOI: 10.1080/17452759.2023.2165122.
66. S. Lu, S. Lu, B. Chen, M. Qian, Q. Wei, K. Kondoh, J. Shen: Phase transformation induced twinning in commercially pure titanium: An in-situ study, *Scripta Materialia* 229 (2023) 115350, DOI: 10.1016/j.scriptamat.2023.115350.



67. N. Mori, H. Kawasaki, E. Nishida, Y. Kanemoto, H. Miyaji, J. Umeda, K. Kondoh: Rose bengal-decorated rice husk-derived silica nanoparticles enhanced singlet oxygen generation for antimicrobial photodynamic inactivation, *Journal of Materials Science* 58 (2023) 2801–2813. DOI: 10.1007/s10853-023-08194-z.
68. J. Wan, J. Yang, X. Zhou, B. Chen, J. Shen, K. Kondoh, J. Li: Superior tensile properties of graphene/Al composites assisted by in-situ alumina nanoparticles, *Carbon* 204 (2023) 447-455, DOI: 10.1016/j.carbon.2022.12.088.
69. Y. Wang, L. Zhang, Y. Yang, K. Kondoh, L. Sun, Y. Lu: Elimination of  $\eta$  phase in WC–Co cemented carbides during laser powder bed fusion by powder coating compensation strategy, *Journal of the American Ceramic Society* 106 3 (2023) 1681-1693, DOI: 10.1111/jace.18882
70. J. Wan, H. Geng, B. Chen, J. Shen, K. Kondoh, J. Li: Evading ductility deterioration in aluminum matrix composites via intragranulation of nano-reinforcement by reactive selective laser melting, *Materials Science and Engineering A* 863 (2022) 144552, DOI: 10.1016/j.msea.2022.144552
71. G. Ongtrakulkij, J. Kajornchaiyakul, K. Kondoh, A. Khantachawana: Investigation of Microstructure, Residual Stress, and Hardness of Ti-6Al-4V after Plasma Nitriding Process with Different Times and Temperatures, *Coatings* 12 12 (2022),1932, DOI: 10.3390/coatings12121932.
72. X. Zhuo, H. Yao, K. Chen, K. Kondoh, M. Wang, X. Hua, A. Shan: Friction stir lap welding of AZ31 and TC4: Mechanical properties and bonding mechanism, *Materials Characterization* 195 (2023) 112507, DOI: 10.1016/j.matchar.2022.112507.
73. Y. Wang, L. Zhang, Y. Yang, K. Kondoh, L. Sun, Y. Lu: Elimination of  $\eta$  phase in WC–Co cemented carbides during laser powder bed fusion by powder coating compensation strategy, *Journal of the American Ceramic Society* (2022), DOI: 10.1111/jace.18882.
74. H. Yao, K. Chen, K. Kondoh, X. Dong, M. Wang, X. Hua, A. Shan: Microstructure and mechanical properties of friction stir lap welds between FeCoCrNiMn high entropy alloy and 6061 Al alloy, *Materials & Design* 224 (2022) 111411, DOI: 10.1016/j.matdes.2022.111411.
75. H. Geng, B. Chen, J. Wan, J. Shen, K. Kondoh, J. S. Li: Matrix effect on strengthening behavior of carbon nanotubes in aluminum matrix composites, *Materials Characterization* 195 (2023) 112484, DOI: 10.1016/j.matchar.2022.112484.
76. J. Cui, S. Li, R. D. K. Misra, K. Geng, K. Kondoh, G. Li, Y. Yang: Printability enhancement and mechanical property improvement via in situ synthesis of carbon nanotubes on aluminium powder, *Powder Technology* 413 (2023) 118038, DOI: 10.1016/j.powtec.2022.118038.
77. 尾崎由紀子, 重田雄二, 荒牧正俊, 野村直之, 近藤勝義, 大林一平: 粉末冶金材料としての積層造形材料—組織の数値化による機械的特性予測への試み—, *ふえらむ* 27(12)(2022), 825-835.
78. J. Umeda, H. Fujii, R. Takizawa, T. Teramae, A. Issariyapat, S. Kariya, Y. Yang, S. Li, K. Kondoh: Tribological Behavior of Titanium-Sintered Composites with Ring-Shaped TiN Dispersoids, *Lubricants* 10 (2022) 254, DOI:10.3390/lubricants10100254.
79. A. Degnah, H.F. Alnaser, El-Sayed M. Sherif, I. Alhoweml, K. Kondoh, A. Alhaza: Investigation of Ti-Zr-Fe-N-H system properties for marine applications, *Materials Today Communications* 32 (2022) 103978, DOI: 10.1016/j.mtcomm.2022.103978.



80. A. Bahador, A. Yurtsever, A. Amrin, S. Kariya, J. Umeda, J. Shen, B. Chen, T. Fukuma, K. Kondoh: Room temperature and high-temperature properties of extruded Ti–4Fe–3W/2TiC composites in  $\alpha$ + $\beta$  and  $\beta$  phases, *Materials & Design* 220 (2022) 110901, DOI: 10.1016/j.matdes.2022.110901.
81. C. Zhang, L. Jia, H. Xie, R. Niu, Z. Lu, K. Kondoh: Simulation on the Direct Powder Rolling Process of Cu Powder by Drucker-Prager/Cap Model and Its Experimental Verification, *Metals* 12 (2022) 1145, DOI: 10.3390/met12071145.
82. K.Y. Liu, J.S. Li, J. Wan, Q. Yan, K. Kondoh, J. Shen, S. Li, B. Chen: Sintering-free fabrication of high-strength titanium matrix composites reinforced with carbon nanotubes, *Carbon* 197 (2022) 412–424, DOI: 10.1016/j.carbon.2022.06.038.
83. J. Peterson, A. Issariyapat, J. Umeda, K. Kondoh: The Effects of Heat Treatment and Carbon Content on the Microstructure and Mechanical Properties of Laser Powder Bed Fusion Ti-6Al-4V with Dissolved TiC Particles, *Journal of Alloys and Compounds* 920 (2022) 165930, DOI: 10.1016/j.jallcom.2022.165930.
84. A. Issariyapat, S. Kariya, K. Shitara, J. Umeda, K. Kondoh: Solute-induced near-isotropic performance of laser powder bed fusion manufactured pure titanium, *Additive Manufacturing* 56 (2022) 102907, DOI: 10.1016/j.addma.2022.102907.
85. W. Shi, Y. Yang, N. Kang, M. Wang, B. Chen, Y. Li, J. Umeda, K. Kondoh, J. Shen: Microstructure and mechanical characterizations of additively manufactured high oxygen-doped titanium, *Materials Characterization* 189 (2022) 112008, DOI: 10.1016/j.matchar.2022.112008.
86. Y. Yang, J. Shen, J. Umeda, K. Kondoh, Y. Li: Investigation into the Intermetallic Layers in Ti/Al Multi-Layer Composites Produced via Accumulative Rolling and Sintering, *Science of Advanced Materials* 14 (2022) 1–6, DOI: 10.1166/sam.2022.4239.
87. K. Shitara, K. Yokota, M. Yoshiya, J. Umeda, K. Kondoh: First-principles design and experimental validation of  $\beta$ -Ti alloys with high solid-solution strengthening and low elasticities, *Materials Science and Engineering A* 843 (2022) 143053, DOI: 10.1016/j.msea.2022.143053.
88. L. Zhang, C. Hu, Y. Yang, R.D.K. Misra, K. Kondoh, Y. Lu: Laser powder bed fusion of cemented carbides by developing a new type of Co coated WC composite powder, *Additive Manufacturing* 55 (2022) 10282, DOI: 10.1016/j.addma.2022.102820.
89. 寺西未沙, 勝又美穂子, 西川宏, 近藤勝義, 田中学: 大阪大学カップリング・インターング・シップにおける成果プロセス(プログラムの質的向上を目指して), *グローバル人材育成教育研究* 9 2 (2021) 95-108.
90. K. Kondoh, R. Takei, S. Kariya, S. Li, J. Umeda: Local galvanic corrosion analysis on cast Mg-Ca binary alloy using scanning Kelvin probe force microscopy, *Materials Letters* 319 (2022) 132266, DOI: 10.1016/j.matlet.2022.132266.
91. R. Zheng, J. Cui, Y. Yang, S. Li, R.D.K. Misra, K. Kondoh, Q. Zhu, Y. Lu, X. Li: Enhanced densification of copper during laser powder bed fusion through powder surface alloying, *Journal of Materials Processing Technology* 305 (2022) 117575, DOI: 10.1016/j.jmatprotec.2022.117575.
92. S. Kariya, A. Issariyapat, A. Bahador, J. Umeda, J. Shen, K. Kondoh: Ductility improvement of high-strength Ti-O material upon heteromicrostructure formation, *Materials Science and Engineering A* 842 (2022) 143041, DOI: 10.1016/j.msea.2022.143041.



93. J. Wan, B. Chen, J. Shen, W. Shi, K. Kondoh, S. Li, J. S. Li: Developing dual-textured titanium (Ti) extrudates via utilizing the  $\beta$  transus in commercially pure Ti, *Materials & Design* 215 (2022) 110459, DOI: 10.1016/j.matdes.2022.110459.
94. L. Jia, M. Hou, C. Zhang, J. Xua, S. Lia, Z. Lua, K. Kondoh: Accelerated diffusion phenomenon of Ti-B<sub>4</sub>C system and its influence on resulted composites, *Journal of Materials Engineering and Performance* (2022), DOI: 10.1007/s11665-022-07224-2.
95. N. Suesawadwanid, A. Khantachawana, K. Srirussamee, K. Kondoh: Effect of Nb Content and water quenching on microstructure and mechanical properties of Ti-Nb alloys fabricated by spark plasma sintering, *Powder Metallurgy* 65 5 (2022). DOI: 10.1080/00325899.2022.2029303.
96. L. Cao, B. Chen, J. Wan, K. Kondoh, B. Guo, J. Shen, J. S. Li: Superior high-temperature tensile properties of aluminum matrix composites reinforced with carbon nanotubes, *Carbon* 191 (2022) 403-414, DOI: 10.1016/j.carbon.2022.02.009.
97. X. Guo, L. Jia, Z. Lu, Z. Xing, H. Xie, K. Kondoh: Preparation of Cu/CrB<sub>2</sub> composites with well-balanced mechanical properties and electrical conductivity by ex-situ powder metallurgy, *Journal of materials research and technology* 17 (2022) 1605-1615, DOI: 10.1016/j.jmrt.2022.01.112.
98. K. Kondoh, R. Takei, S. Kariya, S. Li, J. Umeda: Quantitative analysis on surface potentials of impurities and intermetallic compounds dispersed in Mg alloys using scanning Kelvin probe force microscopy and ultraviolet photoelectron spectroscopy, *Materials Chemistry and Physics* 279 (2022) 125760, DOI: 10.1016/j.matchemphys.2022.125760.
99. G. Ongtrakulkij, A. Khantachawana, J. Kajornchaiyakul, K. Kondoh: Effects of the secondary shot in the double shot peening process on the residual compressive stress distribution of Ti-6Al-4V, *Heliyon* 8 (2022) e08758, DOI: 10.1016/j.heliyon.2022.e08758.
100. M. Wang, J. Shen, B. Chen, Y. Wang, J. Umeda, K. Kondoh, Y. Li: Compressive behavior of CNT-reinforced aluminum matrix composites under various strain rates and temperatures, *Ceramics International* 48 (2022) 10299-10310, DOI: 10.1016/j.ceramint.2021.12.248.
101. H. Ghandvar, M. A. Jabbar, A. Bahador, T. A. A. Bakar, N. A. Fadil, K. Kondoh: Microstructure Examination and Sliding Wear Behavior of Al-15%Mg2Si-xGd In Situ Composites before and after Hot Extrusion, *Lubricants* 10 1 (2022) 3, DOI: 10.3390/lubricants10010003.
102. J. Yang, J. Shen, Y. Liang, W. Shi, B. Chen, J. Umeda, K. Kondoh: Advanced tensile properties and strain rate sensitivity of titanium matrix composites reinforced with CaTiO<sub>3</sub> particles, *Journal of Alloys and Compounds* 897 (2022) 163229, DOI: 10.1016/j.jallcom.2021.163229.
103. D. Pan, S. Li, L. Liu, X. Zhang, B. Li, B. Chen, M. Chu, X. Hou, Z. Sun, J. Umeda, K. Kondoh: Enhanced strength and ductility of nano-TiB<sub>2</sub>-reinforced titanium matrix composites fabricated by electron beam powder bed fusion using Ti6Al4V-TiB<sub>2</sub> composite powder, *Additive Manufacturing* 50 (2022) 102519, DOI: 10.1016/j.addma.2021.102519.
104. X. Wang, S. Lu, B. Chen, J. Umeda, Y. Shibutani, K. Kondoh, J. Shen: Micro-compression of high oxygen doped single-crystal titanium along different orientations, *Materials Science and Engineering A* 832 14(2022) 142449, DOI: 10.1016/j.msea.2021.142449.



105. W. Shi, S. Lu, J. Shen, B. Chen, J. Umeda, Q. Wei, K. Kondoh, Y. Li: ASB induced phase transformation in high oxygen doped commercial purity Ti, *Materials Science and Engineering A* 830 (2022) 142321, DOI: 10.1016/j.msea.2021.142321.
106. K. Kondoh, S. Kariya, A. Khantachawana, A. Alhazaa, J. Umeda: Quantitative Strengthening Evaluation of Powder Metallurgy Titanium Alloys with Substitutional Zr and Interstitial O Solutes via Homogenization Heat Treatment, *Materials* 14 (2021) 6561, DOI: 10.3390/ma14216561.
107. A. Issariyapat, S. Kariya, A. Alhazaa, J. Umeda, K. Kondoh: Additive Manufacturing and Characterization of High Strength Ti-Zr Gyroid Scaffolds Using Pre-Mixed Ti-ZrH<sub>2</sub> Powders, *JOM* 73 12 (2021) 4166–4176, DOI: 10.1007/s11837-021-04923-4.
108. R. Yamanoglu, A. Bahador, K. Kondoh, S. Gumus, S. Gokce, O. Muratal: New Magnesium Composite With Mg<sub>17</sub>Al<sub>12</sub> intermetallic Particles, *Powder Metallurgy and Metal Ceramics* 60 (2021) 3-4, DOI: 10.1007/s11106-021-00230-4.
109. A. Issariyapat, A. Bahador, P. Visuttipitukul, S. Li, J. Umeda, K. Kondoh: Strengthening and deformation mechanism of selective laser-melted high-concentration nitrogen solute α-Ti materials with heterogeneous microstructures via heat treatment, *Materials Science and Engineering A* 826 (2021) 141935, DOI: 10.1016/j.msea.2021.141935.
110. L. Liu, S. Li, X. Zhang, D. Pan, L. Gao, B. Chen, J. Umeda, K. Kondoh: Syntheses, microstructure evolution and performance of strength-ductility matched aluminum matrix composites reinforced by nano SiC-cladded CNTs, *Materials Science and Engineering A* 824 (2021) 141784, DOI: 10.1016/j.msea.2021.141784.
111. D. Pan, S. Li, L. Gao, L. Liu, X. Zhang, X. Ji, J. Umeda, K. Kondoh: TiB Whisker and Nitrogen Solid-Solution Synergistic Strengthened Titanium Matrix Composites by Ti-BN via Spark Plasma Sintering and Hot Extrusion, *Advanced Engineering Materials* 23 9 (2021) 2100344, DOI: 10.1002/adem.202100344.
112. R. Yamanoglu, A. Bahador, K. Kondoh: Fabrication Methods of Porous Titanium Implants by Powder Metallurgy, *Transactions of the Indian Institute of Metals* 74 11 (2021) 2555–2567, DOI: 10.1007/s12666-021-02332-4.
113. A. Bahador, A. Issariyapat, J. Umeda, R. Yamanoglu, C. Pruncu, A. Amrin, K. Kondoh: Strength-ductility balance of powder metallurgy Ti-2Fe-2W alloy extruded at high-temperature, *Journal of materials research and technology* 14 (2021) 677-691, DOI: 10.1016/j.jmrt.2021.06.086.
114. L. Jia, M. Yang, S. Tao, H. Xie, Z. Lu, K. Kondoh, Z. Xing: Microstructure evolution and reaction behavior of Cu–Ni–Si powder system under solid-state sintering, *Materials Chemistry and Physics* 271 (2021) 124942, DOI: 10.1016/j.matchemphys.2021.124942.
115. T. Song, T. Dong, S. L. Lu, K. Kondoh, R. Das, M. Brandt, M. Qian: Simulation-informed laser metal powder deposition of Ti-6Al-4V with ultrafine α-β lamellar structures for desired tensile properties, *Additive Manufacturing* 46 (2021) 102139, DOI: 10.1016/j.addma.2021.102139.
116. T. Tansiranon, K. Kondoh, K. Ishikawa, Y. Miyajima, A. Khantachawana: Effect of Sintering Temperature on Mechanical Property of Ti + ZrO<sub>2</sub> Prepared by Spark Plasma Sintering for Biomedical Applications, *Materials Science Forum* 1033 (2021) 93-97, DOI: 10.4028/www.scientific.net/msf.1033.93.
117. K. Shitara, M. Yoshiya, J. Umeda, K. Kondoh: Substantial role of charge transfer on the diffusion mechanism of interstitial elements in α-titanium: A First-principles study, *Scripta Materialia* 203 (2021) 114065, DOI: 10.1016/j.scriptamat.2021.114065.



118. X. Fu, K. Chen, Z. Zhang, K. Kondoh, M. Wang, X. Hua: Interfacial microstructure and mechanical property in friction stir welded Mg/Al joints under low rotation speed, *Science and Technology of Welding and Joining* 26 (2021), DOI: 10.1080/13621718.2021.1935155.
119. Q. Yan, B. Chen, L. Cao, K. Y. Liu, S. Li, L. Jia, K. Kondoh, J. S. Li: Improved mechanical properties in titanium matrix composites reinforced with quasi-continuously networked graphene nanosheets and in-situ formed carbides, *Journal of Materials Science & Technology* 96 10 (2022) 85-93, DOI: 10.1016/j.jmst.2021.03.073.
120. A. Issariyapat, T. Song, P. Visuttipitukul, J. Umeda, M. Qian, K. Kondoh: Development of core-shell-structured Ti-(N) powders for additive manufacturing and comparison of tensile properties of the additively manufactured and spark-plasma-sintered Ti-N alloys, *Advanced Powder Technology* 32 7 (2021) 2379-2389, DOI: 10.1016/j.apt.2021.05.023.
121. H. Yao, H. Wen, K. Chen, M. Jiang, K. M. Reddy, K. Kondoh, M. Wang, X. Hua, A. Shan: Interfacial phases formed in friction stir lap welding high entropy alloy to Al alloy, *Scripta Materialia* 201 (2021) 113972, DOI: 10.1016/j.scriptamat.2021.113972.
122. A. Bahador, J. Umeda, R. Yamanoglu, A. Amrin, A. Alhazaa, K. Kondoh: Ultrafine-grain formation and improved mechanical properties of novel extruded Ti-Fe-W alloys with complete solid solution of tungsten, *Journal of Alloys and Compounds* 875 (2021) 160031, DOI: 10.1016/j.jallcom.2021.160031.
123. L. Jia, M. Yang, Z. Lu, J. Xu, H. Xie, K. Kondoh: Microstructure evolution and reaction behavior of Cu–Ni alloy and B4C powder system, *Progress in Natural Science: Materials International* 31 (2021) 55-62, DOI: 10.1016/j.pnsc.2020.12.002.
124. 寺西未沙, 勝又美穂子, 西川宏, 近藤勝義, 田中学: 大阪大学カップリング・インターンシップにおけるキャリア教育的効果について(実践型短期海外インターンシップ成果報告書からの分析), *グローバル人材育成教育研究* 8 2 (2021) 1-12.
125. J. Umeda, L. Jia, B. Chen, K. Chen, S. Li, K. Shitara, K. Kondoh: Precipitation and distribution behavior of in-situ-formed TiB whiskers in Ti64 composites fabricated by selective laser melting, *Crystals* 11 (2021) 374, DOI: 10.3390/crust11040374.
126. H. Ghandvar, M. A. Jabbar, S. S. R. Koloor, M. Petru, A. Bahador, T. A. A. Bakar, K. Kondoh: Role B<sub>4</sub>C Addition on Microstructure, Mechanical, and Wear Characteristics of Al-20%Mg<sub>2</sub>Si Hybrid Metal Matrix Composite, *Applied Science* 11 (2021) 3047, DOI: 10.3990/app11073047.
127. R. Yamanoglu, A. Bahador, K. Kondoh: Effect of Mo Addition on the Mechanical and Wear Behavior of Plasma Rotating Electrode Process Atomized Ti6Al4V Alloy, *Journal of Materials Engineering and Performance* (2021), DOI: 10.1007/s11665-021-05631-5.
128. Q. Yan, B. Chen, X. Zhou, K. Kondoh, J. Li: Effect of Metal Powder Characteristics on Structural Defects of Graphene Nanosheets in Metal Composite Powders Dispersed by Ball Milling, *Crystals* 11 3 (2021) 260, DOI: 10.3390/crust11030260.
129. J. Umeda, N. Nishimura, H. Fujii, L. Jia, K. Kondoh: In-situ formed Al<sub>3</sub>Zr compounds reinforced Al composites and tribological application, *Crystals* 11 3 (2021) 227, DOI: 10.3390/crust11030227.
130. M. Wang, Y. Li, B. Chen, D. Shi, J. Umeda, K. Kondoh, J. Shen: The rate-dependent mechanical behavior of CNT-reinforced aluminum matrix composites under tensile loading, *Materials Science and Engineering A* 808, (2021) 140893, DOI: 10.1016/j.msea.2021.140893.



131. A. Alhazaa, A. Assaifan, M. Hezam, M. A. Shar, J. Umeda, K. Kondoh: Effect of sintering temperature on the microstructure and mechanical properties of the Ti-2.5Zr alloy, *Materials Research Express* 8 (2021) 016522, DOI: 10.1088/2053-1591/abd91f.
132. 市川絵理, 設樂一希, 梅田純子, S. Li, B. Chen, 近藤勝義:レーザ積層造形法により作製した酸素固溶チタン材における結晶組織と強化機構, *粉体および粉末冶金* 68 2 (2021) 67-75, DOI: 10.2497/jjspm.68.67.
133. X. Zhang, S. Li, L. Liu, D. Pan, L. Gao, X. Ji, K. Kondoh: Balanced development in strength-ductility of ultrahigh-strength aluminum matrix composites by controlled oxidation method, *Materials Science and Engineering A* 804 (2021) 140781, DOI: 10.1016/j.msea.2021.140781.
134. J. Umeda, T. Tanaka, T. Teramae, S. Kariya, J. Fujita, H. Nishikawa, Y. Shibutani, J. Shen, K. Kondoh: Microstructures analysis and quantitative strengthening evaluation of powder metallurgy Ti–Fe binary extruded alloys with  $(\alpha+\beta)$ -dual-phase, *Materials Science and Engineering A* 803 (2021) 140708, DOI: 10.1016/j.msea.2020.140708.
135. A. Bahador, J. Umeda, H. Ghandvar, T. A. A. Bakar, R. Yamanoglu, A. Issariyapat, K. Kondoh: Microstructure globularization of high oxygen concentration dual-phase extruded Ti alloys via powder metallurgy route, *Materials Characterization* 172 (2021) 110855, DOI: 10.1016/j.matchar.2020.110855.
136. T. Teramae, T. Tanaka, M. Fukuo, K. Shitara, J. Umeda, S. Li, A. Alhazaa, K. Kondoh: Acicular microstructure formation and strengthening behavior of Ti-4%Fe alloys by Zr addition, *Journal of Alloys and Compounds* 858 (2021) 158292, DOI: 10.1016/j.jallcom.2020.158292.
137. K. Yokota, A. Bahador, K. Shitara, J. Umeda, K. Kondoh: Mechanisms of Tensile Strengthening and Oxygen Solid Solution in Single  $\beta$ -Phase Ti-35 at.% Ta+O Alloy, *Materials Science and Engineering A* 802 (2021) 140677, DOI: 10.1016/j.msea.2020.140677.
138. K. Kondoh, K. Funatsu, M. Takahashi, S. Li, F. Akamatsu, J. Umeda: Understanding Corrosion Behavior of Magnesium Surface by x-Ray Irradiation for Improved Surface Design and Applications, *JOM* 72 (2020) 4657-4664, DOI: 10.1007/s11837-020-04403-1.
139. A. Khaliq, D. J. Parker, N. Setargew, K. Kondoh, M. Qian: Dissolution Kinetics of Iron-Based Intermetallic Compounds (s5c IMCs) in a Commercial Steel Strip Metallic Alloy Coating Process, *Metallurgical and Materials Transactions B* 52B (2020) 41-50, DOI: 10.1007/s11663-020-01985-8.
140. L. Jia, M. Yang, J. Chen, Z. Lu, K. Kondoh, H. Xie: Tribological properties of low-cost titanium alloys by using rice husk as reinforcement, *Rare Metal Materials and Engineering* 49 10 (2020) 3309-3313.
141. A. Issariyapat, P. Visuttipitukul, T. Song, A. Bahador, J. Umeda, M. Qian, K. Kondoh: Tensile properties improvement by homogenized nitrogen solid solution strengthening of commercially pure titanium through powder metallurgy process, *Materials Characterization* 170 (2020) 110700, DOI: 10.1016/j.matchar.2020.110700.
142. 西村のどか, 梅田純子, 藤井寛子, Lei JIA, 近藤勝義: その場合成法による  $Al_3Zr$  粒子分散  $Al$  基焼結複合材の創製および摩擦摩耗特性, *粉体および粉末冶金* 67 10 (2020) 536-542, DOI: 10.2497/jjspm.67.536.
143. A. Bahador, J. Umeda, R. Yamanoglu, T. A. A. Bakar, K. Kondoh: Strengthening evaluation and high-temperature behavior of Ti–Fe–O–Cu–Si alloy, *Materials Science and Engineering A* 800 (2021) 140324, DOI: 10.1016/j.msea.2020.140324.



144. K. Kondoh, M. Fukuo, S. Kariya, K. Shitara, S. Li, A. Alhazaa, J. Umeda: Quantitative strengthening evaluation of powder metallurgy Ti–Zr binary alloys with high strength and ductility, *Journal of Alloys and Compounds* 852 (2021) 156954, DOI: 10.1016/j.jallcom.2020.156954.
145. A. Issariyapat, P. Visuttipitukul, J. Umeda, K. Kondoh: Refined grain formation behavior and strengthening mechanism of  $\alpha$ -titanium with nitrogen fabricated by selective laser melting, *Additive Manufacturing* 36 (2020) 101537, DOI: 10.1016/j.addma.2020.101537.
146. P. Nyanor, A. Bahador, O. A El-Kady, J. Umeda, K. Kondoh, M. A. Hassan: Improved ductility of spark plasma sintered aluminium-carbon nanotube composite through the addition of titanium carbide microparticles, *Materials Science and Engineering A* 795 (2020) 139959, DOI: 10.1016/j.msea.2020.139959.
147. D. Pan, X. Zhang, Xi. Hou, Y. Han, M. Chu, B. Chen, L. Jia, K. Kondoh, S. Li: TiB nano-whiskers reinforced titanium matrix composites with novel nano-reticulated microstructure and high performance via composite powder by selective laser melting, *Materials Science and Engineering A* 799 (2021) 140137, DOI: 10.1016/j.msea.2020.140137.
148. A. Bahador, J. Umeda, R. Yamanoglu, H. Ghandvar, A. Issariyapat, T. A. A. Bakar, K. Kondoh: Deformation mechanism and enhanced properties of Cu–TiB<sub>2</sub> composites evaluated by the in-situ tensile test and microstructure characterization, *Journal of Alloys and Compounds* 847 (2020) 156555, DOI: 10.1016/j.jallcom.2020.156555.
149. J. Umeda, J. Fujita, S. Li, K. Kondoh: Reduction Mechanism of Thermally Stable CaO during Heating Mg-Al Composites with CaO Particles, *Journal of Scientific and Engineering Research* 7 7 (2020) 85-93.
150. X. Zou, M.Y. Jiang, K. Chen, B.X. Chen, K.M. Reddy, S.Y. Zhang, K. Kondoh, M. Wang, X.M. Hua, L.T. Zhang, A.D. Shan: Mechanism of defect formation during friction spot joining of 3D-printed TC4 alloy and ultra-high molecular weight polyethylene, *Materials and Design* 195 (2020) 108989, DOI: 10.1016/j.matdes.2020.108989.
151. J. Umeda, H. Ishizaka, S. Li, A. Alhazaa, K. Kondoh: Comparison study on mechanical properties of powder metallurgy titanium materials with nitrogen solutes and TiN dispersoids, *Journal of Alloys and Compounds* 846 (2020) 156455, DOI: 10.1016/j.jallcom.2020.156455.
152. H. Luo, Y. Wu, X. Diao, W. Shi, F. Feng, F. Qian, J. Umeda, K. Kondoh, H. Xin, J. Shen: Mechanical properties and biocompatibility of titanium with a high oxygen concentration for dental implants, *Materials Science and Engineering C* 117 (2020) 111306, DOI: 10.1016/j.msec.2020.111306.
153. B. Chen, X.Y. Zhou, B. Zhang, K. Kondoh, J.S. Li, M. Qian: Microstructure, tensile properties and deformation behaviors of aluminium metal matrix composites co-reinforced by ex-situ carbon nanotubes and in-situ alumina nanoparticles, *Materials Science and Engineering A* 795 (2020) 139930, DOI: 10.1016/j.msea.2020.139930.
154. K. Kondoh, E. Ichikawa, A. Issariyapat, K. Shitara, J. Umeda, B. Chen, S. Li: Tensile property enhancement by oxygen solutes in selectively laser melted titanium materials fabricated from pre-mixed pure Ti and TiO<sub>2</sub> powder, *Materials Science and Engineering A* 795 (2020) 139983, DOI: 10.1016/j.msea.2020.139983.
155. L. Jia, C. Zhang, K. Kondoh, R. Niu, B. Chen, S. Li, Z. Lua: Obvious yielding phenomenon and selective fracture behavior in powder metallurgy (TiC<sub>p</sub>+TiB<sub>w</sub>)/Ti composites, *Journal of Materials Research and Technology* 9 5 (2020) 10184-10188, DOI: 10.1016/j.jmrt.2020.07.044.
156. X. Zhang, X. Hou, D. Pan, B. Pan, L. Liu, B. Chen, K. Kondoh, S. Li: Designable interfacial structure and its influence on interface reaction and performance of MWCNTs reinforced aluminum matrix composites, *Materials Science & Engineering A* 793 (2020) 139783, DOI/10.1016/j.msea.2020.139783.



157. J. Shen, B. Chen, J. Umeda, J. Zhang, Yulong Li, K. Kondoh: An in-situ study on deformation and cracking initiation in oxygen-doped commercial purity titanium, *Mechanics of Materials* 148 (2020) 103519, DOI: 10.1016/j.mechmat.2020.103519.
158. K. Kondoh, A. Issariyapat, J. Umeda, P. Visuttipitukul: Selective laser-melted titanium materials with nitrogen solid solutions for balanced strength and ductility, *Materials Science & Engineering A* 790 (2020) 139641, DOI: 10.1016/j.msea.2020.139641.
159. A. Elsayed, J. Umeda, K. Kondoh: Effect of quenching media on the properties of TiNi shape memory alloys fabricated by powder metallurgy, *Journal of Alloys and Compounds* 842 (2020) 155931, DOI: 10.1016/j.jallcom.2020.155931.
160. Q. Yan, B. Chen, N. Kang, X. Lin, S. Lv, K. Kondoh, S. Li, J.S. Li: Comparison study on microstructure and mechanical properties of Ti-6Al-4V alloys fabricated by powder-based selective-laser-melting and sintering methods, *Materials Characterization* 164 (2020) 110358, DOI: 10.1016/j.matchar.2020.110358.
161. L. Jia, J. Xu, S. Li, Z. Lu, H. Xie, K. Kondoh: Reaction kinetics of Cu–Ni and B<sub>4</sub>C in Cu–Ni alloy under solid-state sintering, *Materials Science and Technology* (2020) 36 (2020) 759-764, DOI: 10.1080/02670836.2020.1738070.
162. A. Issariyapat, P. Visuttipitukul, T. Song, J. Umeda, Q. Ma, K. Kondoh: Strength-ductility improvement of extruded Ti-(N) materials using pure Ti powder with high nitrogen solution, *Materials Science and Engineering A* 779 (2020) 139136, DOI: 10.1016/j.msea.2020.139136.
163. K. Kamiyama, S. Kariya, M. Fukuo, J. Umeda, K. Kondoh: Ductility Improvement Mechanism of Ti-6Al-4V+O Sintered Material, *Materials Transactions* 61 3 (2020) 430-437, DOI: 10.2320/matertrans.Y-M2019869.
164. B. Chen, K. Kondoh, J. S. Li: In-situ observation of interaction between dislocations and carbon nanotubes in aluminum at elevated temperatures, *Materials Letters* 264 (2020) 127323, DOI: 10.1016/j.matlet.2020.127323.
165. B. Chen, Z. Li, J. Shen, S. Li, L. Jia, J. Umeda, K. Kondoh, J. S. Li: Mechanical properties and strain hardening behavior of aluminum matrix composites reinforced with few-walled carbon nanotubes, *Journal of Alloys and Compounds* 826 (2020) 154075, DOI: 10.1016/j.jallcom.2020.154075.
166. A. Bahador, J. Umeda, M. Mizutani, E. Hamzah, F. Yusof, K. Kondoh: High-Brightness and High-Power Laser Welding of Powder Metallurgy Shape Memory Alloy: Welding-Parameter-Dependent Microstructure, *Journal of Materials Engineering and Performance* 29 (2020) 987-996, DOI: 10.1007/s11665-020-04597-0.
167. A. Bahador, J. Umeda, E. Hamzah, F. Yusof, X. Li, K. Kondoh: Synergistic strengthening mechanisms of copper matrix composites with TiO<sub>2</sub> nanoparticles, *Materials Science and Engineering A* 772 (2020) 138797, DOI: 10.1016/j.msea.2019.138797.
168. G. Ongtrakulkij, A. Khantachawana, K. Kondoh: Effects of media parameters on enhance ability of hardness and residual stress of Ti6Al4V by fine shot peening, *Surfaces and Interfaces* 18 (2020) 100424, DOI: 10.1016/j.surfin.2019.100424.
169. B. Chen, K. Kondoh, J.S. Li, M. Qian: Extraordinary reinforcing effect of carbon nanotubes in aluminium matrix composites assisted by in-situ alumina nanoparticles, *Composites Part B* 183 (2020) 107691, DOI: 10.1016/j.compositesb.2019.107691.
170. A. Bahador, J. Umeda, S. Tsutsumi, E. Hamzah, F. Yusof, H. Fujii, K. Kondoh: Asymmetric local strain, microstructure and superelasticity of friction stir welded Nitinol alloy, *Materials Science and Engineering A* 767 8 (2019) 138344, DOI: 10.1016/j.msea.2019.138344.



171. X. Zhang, S. Li, B. Pan, D. Pan, L. Liu, X. Hou, M. Chu, K. Kondoh, M. Zhao: Regulation of interface between carbon nanotubes-aluminum and its strengthening effect in CNTs reinforced aluminum matrix nanocomposites, *Carbon* 155 (2019) 686-696, DOI: 10.1016/j.carbon.2019.09.016.
172. J. Umeda, K. Kondoh, H. Sannomiya, T. Luangvaranunt, M. Takahashi, H. Nishikawa: Interfacial reaction behavior and mechanical properties of pure aluminum and magnesium alloy dissimilar materials fabricated by hot press and heat treatment, *Materials Characterization* 157 (2019) 109879, DOI: 10.1016/j.matchar.2019.109879.
173. M. Fukuo, S. Kariya, J. Umeda, K. Kondoh, M. Yoshiya: Strengthening Mechanisms of Powder Metallurgy Extruded CP Titanium Materials with Zirconium and Oxygen Solid Solution via Decomposition of  $ZrO_2$  Additives in Sintering, *Materials Transactions* 60 9 (2019) 1881-1889, DOI:10.2320/matertrans.Y-M2019833.
174. T. Eda, A. Khantachawana, J. Umeda, K. Kondoh: Phase Transformation Control of Powder Metallurgy Super-Elastic Ti-Ni Alloy by Adding Co Element, *Materials Transactions* 60 8 (2019) 1583-1590, DOI:10.2320/matertrans.Y-M2019821.
175. M. Yoshiyia, T. Kobayashi, A. K. Saha, K. Kondoh: Heterogeneous Two-Phase Boundary of Titanium by Atomistic Simulation, *AMTC Letters* 6 (2019) 228-229.
176. Z.H. Xiong, Y.F. Yang, K. Kondoh, R.D.K. Misra: A Novel W-Skeleton-Reinforced Al Matrix Composite by Consolidating a Newly Developed Core–Shell-Structured W-Coated Al Powder, *Metallurgical And Materials Transactions A* 50A 7 (2019) 3301-3309.
177. A. Bahador, S. Kariya, J. Umeda, E. Hamzah, K. Kondoh: Tailoring Microstructure and Properties of a Superelastic Ti-Ta Alloy by Incorporating Spark Plasma Sintering with Thermomechanical Processing, *Journal of Materials Engineering and Performance*, (2019), DOI:10.1007/s11665-019-04061-8.
178. B. Chen, K. Kondoh, J. Umeda, S. Li, L. Jia, J. Li: Interfacial in-situ  $Al_2O_3$  nanoparticles enhance load transfer in carbon nanotube (CNT)-reinforced aluminum matrix composites, *Journal of Alloys and Compounds* 789 (2019) 25-29, DOI:10.1016/j.jallcom.2019.03.063.
179. L. Jia, X. Li, K. Kondoh, B. Chen, S. Li, J. Umeda, Z. Lu: Hybrid effect of TiCp and TiBw co-strengthening Ti matrix composites prepared by spark plasma sintering and hot extrusion, *Materials Characterization* 151 (2019) 6-14, DOI:10.1016/j.matchar.2019.02.026.
180. S. Kariya, M. Fukuo, J. Umeda, K. Kondoh: Quantitative analysis on light elements solution strengthening in pure titanium sintered materials by Labusch model using experimental data, *Materials Transactions* 60 2 (2019) 263-268, DOI:10.2320/matertrans.Y-M2018849.
181. 枝知樹, A. Khantachawana, 梅田純子, 近藤勝義:Co 元素添加による Ti-Ni 超弾性焼合金の力学特性制御, 粉体および粉末冶金 66 1 (2019) 9-16, DOI:10.2497/jjspm.66.9.
182. Q. Guo, K. Kondoh, S. M. Han: Nanocarbon-reinforced metal-matrix composites for structural applications, *MRS Bulletin* 44 (2019) 40-45, DOI:10.1557/mrs.2018.321.
183. J. Shen, B. Chen, J. Umeda, J. Zhang, Y.Li, K. Kondoh: Rate sensitivity and work-hardening behavior of an advanced Ti-Al-N alloy under uniaxial tensile loading, *Materials Science & Engineering A* 744 28 (2019) 630-637, DOI:10.1016/j.msea.2018.12.066.
184. S.F. Li, Y.F. Yang, K. Kondoh, S. Kariya, Q.S. Zhu, Y. Shi: Activation of B as a sintering aid and its improved microstructure modification by using Ni-B coated Ti core-shell powder, *Materialia* 5 (2019) 100182, DOI: /10.1016/j.mtla.2018.100182.



185. 福生瑞希, 刈屋翔太, 梅田純子, 近藤勝義, 吉矢真人: 焼結過程での分解を利用したジルコニウムと酸素の複合固溶による工業用純チタン粉末押出材の強化機構, 粉体および粉末冶金 65 12 (2018) 746-755, DOI:10.2497/jjspm.65.746.
186. 竹内彰吾, 畠山賢彦, 吉矢真人, 刈屋翔太, 梅田純子, 近藤勝義, 砂田聰: Fe 固溶強化チタン焼結材の電気化学特性, 粉体および粉末冶金 65 12 (2018) 761-765, DOI: 10.2497/jjspm.65.761.
187. 上山健人, 刈屋翔太, 福生瑞希, 梅田純子, 近藤勝義: 酸素固溶強化 Ti-6Al-4V 焼結合金の高延性発現機構の解明, 粉体および粉末冶金 65 11 (2018) 699-706, DOI:10.2497/jjspm.65.699.
188. K. Kondoh, R. Ikemasu, J. Umeda, S. Kariya, A. Khantachawana: Microstructural and mechanical properties of α-titanium sintered material via thermal decomposition of additive chromium oxide particles, Materials Science & Engineering A 739 (2019) 491-498, DOI:10.1016/j.msea.2018.10.081.
189. 刈屋翔太, 梅田純子, Ma Qian, 近藤勝義: 急冷処理による酸素過剰添加チタン材の延性向上とその機構解明, 金属学会誌 82 10 (2018) 390-395, DOI:10.2320/jinstmet.JAW201810.
190. M. Rizwan, M. Hamdi, W.J. Basirun, K. Kondoh, J. Umeda: Low pressure spark plasma sintered hydroxyapatite and Bioglass® composite scaffolds for bone tissue repair, Ceramics International 44 (2018) 23052-23062, DOI:10.1016/j.ceramint.2018.09.108.
191. K. Boontawee, W. Pansuk, L. Tachai, K. Kondoh: Effect of Rice Husk Ash Silica as Cement Replacement for Making Construction Mortar, Key Engineering Materials 775 (2018) 624-629, DOI: 10.4028/www.scientific.net/KEM.775.624.
192. 刈屋翔太, 福生瑞希, 梅田純子, 近藤勝義: 純チタン焼結材における軽元素固溶強化に関する実験データを用いた Labusch モデルによる定量解析, 粉体および粉末冶金 65 7 (2018) 407-413, DOI:10.2497/jjspm.65.407.
193. X. Zhang, S. Li, B. Pan, D. Pan, S. Zhou, S. Yang, L. Jia, K. Kondoh: A novel strengthening effect of in-situ nano Al<sub>2</sub>O<sub>3</sub>W on CNTs reinforced aluminum matrix nanocomposites and the matched strengthening mechanisms, Journal of Alloys and Compounds 764 (2018) 279-288, DOI:10.1016/j.jallcom.2018.06.006.
194. H. Miyaji, S. Murakami, E. Nishida, T. Akasaka, B. Fugetsu, J. Umeda, K. Kondoh, T. Iizuka, T. Sugaya: Evaluation of Tissue Behavior on Three-dimensional Collagen Scaffold Coated with Carbon Nanotubes and β-tricalcium Phosphate Nanoparticles, Journal of Oral Tissue Engineering 15 3 (2018) 123-130, DOI:10.11223/jarde.15.123.
195. A. Bahador, E. Hamzah, K. Kondoh, S. Tsutsumi, J. Umeda, T. A. A. Bakar, F. Yusof: Heat-Conduction-Type and Keyhole-Type Laser Welding of Ti-Ni Shape-Memory Alloys Processed by Spark-Plasma Sintering, Materials Transactions 59 5 (2018) 835-842, DOI:10.2320/matertrans.M2017387.
196. R. Soba, Y. Tanabe, T. Yonezawa, J. Umeda, K. Kondoh: Effect of Shape Memory Heat Treatment on Microstructures and Mechanical Properties of Powder Metallurgy TiNi Shape Memory Alloy, Materials Transactions 59 5 (2018) 805-810, DOI:10.2320/matertrans.Y-M2018810.
197. L.Jia, J. Chen, Z. Lu, S. Li, J. Umeda, K. Kondoh: Preparation of Si and O co-solution strengthened Ti alloys by using rice husks as SiO<sub>2</sub> resource and quantitative descriptions on their strengthening effects, Materials Research Express 5 (2018) 046524, DOI:10.1088/2053-1591/aabbde.
198. B. Chen, J. Umeda, K. Kondoh: Study on Aluminum Matrix Composites Reinforced with Singly Dispersed Carbon Nanotubes, 粉体および粉末冶金 65 3 (2018) 139-144, DOI:10.2497/jjspm.65.139.
199. 氷見太, 川人洋介, 水谷正海, 井上裕滋, 近藤勝義: 高出力・高輝度レーザを用いたステンレス鋼の水中レーザ貫通溶接特性, 溶接学会論文集 36 1 (2018) 122-128, DOI:10.2207/qjjws.36.122.



200. J. Shen, B. Chen, J. Umeda, K. Kondoh: Advanced Mechanical Properties of a Powder Metallurgy Ti-Al-N Alloy Doped with Ultrahigh Nitrogen Concentration, *JOM* 70 5 (2018) 626-631, DOI:10.1007/s11837-018-2780-9.
201. B. Chen, S. K. Moon, X. Yao, G. Bi, J. Shen, J. Umeda, K. Kondoh: Comparison Study on Additive Manufacturing (AM) and Powder Metallurgy (PM) AlSi<sub>10</sub>Mg Alloys, *JOM* 70 5 (2018) 644-649, DOI:10.1007/s11837-018-2793-4.
202. 早場亮一, 田邊由紀子, 米澤隆行, 梅田純子, 近藤勝義: TiNi 形状記憶粉末合金の組織および力学的特性に及ぼす形状記憶熱処理の影響, *粉体および粉末冶金* 65 2 (2018) 85-90, DOI:10.2497/jjspm.65.85.
203. D. Pan, S. Li, X. Zhang, B. Pan, S. Zhou, Y. Fu, K. Kondoh: Effect of Graphite Content on Properties of B<sub>4</sub>C-W<sub>2</sub>B<sub>5</sub> Ceramic composites by In-situ Reaction of B-Gr-WC, *Journal of the American Ceramic Society* (2018) 3617-3626, DOI:10.1111/jace.15474.
204. R. Soba, Y. Tanabe, T. Yonezawa, J. Umeda, K. Kondoh: Microstructures and Mechanical Properties of Shape Memory Alloy Using Pre-Mixed TiNi Powders with TiO<sub>2</sub> Particles, *Materials Transactions* 59 1 (2018) 117-122, DOI:10.2320/matertrans.Y-M2017848.
205. Y. Yamabe, J. Umeda, H. Imai, K. Kondoh: Tribological Property of α- Pure Titanium Strengthened by Nitrogen Solid-Solution, *Materials Transactions* 59 1 (2018) 61-65, DOI:10.2320/matertrans.Y-M2017842.
206. J. Shen, B. Chen, J. Umeda, K. Kondoh: Microstructure and mechanical properties of CP-Ti fabricated via powder metallurgy with non-uniformly dispersed impurity solutes, *Materials Science and Engineering A* 716 (2018) 1-10, DOI:10.1016/j.msea.2018.01.031.
207. J. Umeda, T. Mimoto, H. Imai, K. Kondoh: Powder Forming Process from Machined Titanium Chips via Heat Treatment in Hydrogen Atmosphere, *Materials Transactions* 58 12 (2017) 1702-1707, DOI:10.2320/matertrans.Y-M2017833.
208. X. Zhang, S. Li, D. Pan, B. Pan, K. Kondoh: Microstructure and synergistic-strengthening efficiency of CNTs-SiC<sub>p</sub> dual-nano reinforcements in aluminum matrix composites, *Composites Part A Applied Science and Manufacturing* 105 (2018) 87-96, DOI:10.1016/j.compositesa.2017.11.013.
209. 早場亮一, 田邊由紀子, 米澤隆行, 梅田純子, 近藤勝義: TiO<sub>2</sub> 粒子添加 TiNi 混合素粉末焼結材の組織構造と力学特性, *粉体および粉末冶金* 64 11 (2017) 589-594, DOI:10.2497/jjspm.64.589.
210. K. Kondoh, J. Umeda: C-O bond enhancing direct bonding strength between plastic and pure titanium, *Materials Letters*, 211 (2018) 331-334, DOI:10.1016/j.matlet.2017.10.042.
211. B. Chen, J. Shen, X. Ye, J. Umeda, K. Kondoh: Advanced mechanical properties of powder metallurgy commercially pure titanium with a high oxygen concentration, *Journal of Material Research* 32 19 (2017) 3769-3776, DOI:10.1557/jmr.2017.338.
212. A. Azarniya, M. S. Safavi, S. Sovizi, A. Azarniya, B. Chen, H. R. M. Hosseini, S. Ramakrishna: Metallurgical Challenges in Carbon Nanotube-Reinforced Metal Matrix Nanocomposites, *Metals* 7 10 (2017) 1-44, DOI:10.3390/met7100384.
213. 藤田淳司, 梅田純子, 近藤勝義: 酸化物分散マグネシウム複合焼結材の高温での強化機構解明, *粉体および粉末冶金* 64 9 (2017) 479-485, DOI:10.2497/jjspm.64.479.
214. B. Chen, J. Shen, X. Ye, L. Jia, S. Li, J. Umeda, M. Takahashi, K. Kondoh: Length effect of carbon nanotubes on the strengthening mechanisms in metal matrix composites, *Acta Materialia* 140 (2017) 317-325, DOI:10.1016/j.actamat.2017.08.048.
215. 森脇慶幸, 周藤将司, 梅田純子, 道浦吉貞: バイオシリカのコンクリート混和材としての利用に関する研究, *コンクリート工学年次論文* 37 1 (2017) 145-150.



216. P. Khemglad, J. Kajornchaiyakul, K. Kondoh, A. Khantachawana: Effect of Si Content on Mechanical Properties of Ti-Si-N Ternary Alloys Prepared by Spark Plasma Sintering, Key Engineering Materials 751 (2017) 14-18, DOI:10.4028/www.scientific.net/KEM.751.14.
217. 麻寧緒, A. Elsayed, 近藤勝義: マグネシウム粉末焼結押出合金における異方性塑性硬化特性の実験測定と変形挙動の解析, 塑性と加工 58, 678, (2017), 587-592, DOI:10.9773/sosei.58.587.
218. B. Chen, S.K. Moon, X. Yao, G. Bi, J. Shen, J. Umeda, K. Kondoh: Strength and Strain Hardening of a Selective Laser Melted AlSi10Mg Alloy, Scripta Materialia 141 (2017) 45-49, DOI:10.1016/j.scriptamat.2017.07.025.
219. 近藤勝義, 池増竜帆, 梅田純子, 刈屋翔太, A. Khantachawan: 酸化物粒子の熱分解を利用したチタン焼結材の結晶粒微細化と高強度化(第2報), チタン 65 3 (2017) 114-119.
220. J. Fujita, J. Umeda, K. Kondoh: Synthesis of Al<sub>2</sub>Ca Dispersoids by Powder Metallurgy Using a Mg-Al Alloy and CaO Particles, Materials 10 7 (2017) 716, DOI:10.3390/ma10070716.
221. 山辺康宏, 梅田純子, 近藤勝義: 窒素固溶強化純チタン焼結材の摩擦摺動特性, 粉体および粉末冶金 64 6 (2017) 275-280, DOI:10.2497/jjspm.64.275.
222. H. Imai, H. Yamabe, K. Kondoh, J. Umeda, A. Khantachawana: In Situ Decomposition of Silicon Nitride Particles in Titanium Composite and its Mechanical Properties, Key Engineering Materials 737 (2017) 38-43, DOI:10.4028/www.scientific.net/KEM.737.38.
223. A. Bahador, E. Hamzah, K. Kondoh, Y. Kawahito, J. Umeda, T. A. A. Bakar: Mechanical and superelastic properties of laser welded Ti-Ni shape-memory alloys produced by powder metallurgy, Journal of Materials Processing Technology 248 (2017) 198-206, DOI:10.1016/j.jmatprotec.2017.05.019.
224. A. Bahador, E. Hamzah, K. Kondoh, T. Abubakar, F. Yusof, S. N. Saud, M. K. Ibrahim, M.A. Ezazi: Defocusing Effects of Laser Beam on the Weldability of Powder Metallurgy Ti-Based Shape Memory Alloys, Procedia Engineering 184 (2017) 205-213, DOI:10.1016/j.proeng.2017.04.087.
225. 近藤勝義, 池増竜帆, 梅田純子, 刈屋翔太, A. Khantachawan: 酸化物粒子の熱分解を利用したチタン焼結材の結晶粒微細化と高強度化(第1報), チタン 65 2 (2017) 130-137.
226. X.X. Ye, B. Chen, J.H. Shen, J. Umeda, K. Kondoh: Microstructure and strengthening mechanism of ultrastrong and ductile Ti-xSn alloy processed by powder metallurgy, Journal of Alloys and Compounds 709 (2017) 381-393, DOI:10.1016/j.jallcom.2017.03.171.
227. A. Bahador, E. Hamzah, K. Kondoh, T. A. A. Bakar, F. Yusof, H. Imai, S. N. Saud, M. K. Ibrahim: Effect of deformation on the microstructure, transformation temperature and superelasticity of Ti-23 at% Nb shape-memory alloys, Materials and Design 118 (2017) 152-162.
228. Y. F. Yang, H. Imai, K. Kondoh, M. Qian: Enhanced Homogenization of Vanadium in Spark Plasma Sintering of Ti-10V-2Fe-3Al Alloy from Titanium and V-Fe-Al Master Alloy Powder Blends, JOM 69 4 (2017) 663-668, DOI:10.1007/s11837-017-2271-4.
229. B. Chen, H. Imai, J. Umeda, M. Takahashi, K. Kondoh: Effect of Spark-Plasma-Sintering Conditions on Tensile Properties of Aluminum Matrix Composites Reinforced with Multiwalled Carbon Nanotubes (MWCNTs), JOM, 69 4 (2017) 669-675, DOI:10.1007/s11837-017-2263-4.
230. J. Shen, X. Chen, V. Hammond, L.J. Kecskes, S.N. Mathaudhu, K. Kondoh, Q. Wei: The effect of rolling on the microstructure and compression behavior of AA5083 subjected to large-scale ECAE, Journal of Alloys and Compounds 695 (2017) 3589-3597, DOI:10.1016/j.jallcom.2016.11.406.



231. B. Chen, J. Shen, X. Ye, H. Imai, J. Umeda, M. Takahashi, K. Kondoh: Solid-state interfacial reaction and load transfer efficiency in carbon nanotubes (CNTs)-reinforced aluminum matrix composites, *Carbon* 114 (2017) 198-208, DOI:10.1016/j.carbon.2016.12.013.
232. X.X. Ye, H. Imai, J.H. Shen, B. Chen, G.Q. Han, J. Umeda, M. Takahashi, K. Kondoh: Dynamic recrystallization behavior and strengthening-toughening effects in a near- $\alpha$  Ti-xSi alloy processed by hot extrusion, *Materials Science & Engineering A* 684 (2017) 165-177, DOI:10.1016/j.msea.2016.12.054.
233. J. Shen, B. Chen, X. Ye, H. Imai, J. Umeda, K. Kondoh: The formation of bimodal multilayered grain structure and its effect on the mechanical properties of powder metallurgy pure titanium, *Materials and Design* 116 (2017) 99-108, DOI:10.1016/j.matdes.2016.12.004.
234. X.X. Ye, H. Imai, J.H. Shen, B. Chen, G.Q. Han, J. Umeda, K. Kondoh: Study of twinning behavior of powder metallurgy Ti-Si alloy by interrupted in-situ tensile tests, *Materials Science & Engineering A* 679 (2017) 543-553, DOI:10.1016/j.msea.2016.10.070.
235. X.X. Ye, H. Imai, J.H. Shen, B. Chen, G.Q. Han, J. Umeda, M. Takahashi, K. Kondoh: Strengthening-toughening mechanism study of powder metallurgy Ti-Si alloy by interrupted in-situ tensile tests, *Journal of Alloys and Compounds* 694 (2017) 82-92, DOI:10.1016/j.jallcom.2016.09.319.
236. 梅田純子, 藤井寛子, 近藤勝義: 焼成糊殻中の脆性炭化物を利用した非晶質シリカ微粒子の生成プロセス, *スマートプロセス学会誌* 5 6 (2016) 365-372, DOI: 10.7791/jspmee.5.365.
237. 今井久志, 近藤勝義, 梅田純子: カーボンナノチューブ分散純銅基複合材料の組織変化と力学特性, *粉体および粉末冶金* 63 12 (2016) 1015-1020, DOI:10.2497/jjspm.63.1015.
238. 梅田純子, 三本嵩哲, 今井久志, 近藤勝義: 水素熱処理を利用したチタン切削屑の粉体化プロセス, *粉体および粉末冶金* 63 12 (2016) 1002-1008, DOI:10.2497/jjspm.63.1002.
239. J. Shen, H. Imai, B. Chen, X. Ye, J. Umeda, K. KONDOH: Highly Thermally Stable Microstructure in Mg Fabricated Via Powder Rolling, *JOM* 68 12 (2016) 1-6, DOI:10.1007/s11837-016-2209-2.
240. S. Li, H. Imai, J. Umeda, Y. Fu, K. Kondoh: Investigation of High-strength Lead-free Machinable Cu40Zn Duplex Graphite Brasses by Powder Metallurgy, *Materials Science and Technology* 32 17 (2016) 1751-1756, DOI:10.1080/02670836.2016.1246098.
241. P. Pripanapong, J. Umeda, H. Imai, M. Takahashi, K. Kondoh: Bonding mechanism of Ti/AZ80 dissimilar materials fabricated by spark plasma sintering, *Journal of Multidisciplinary Engineering Science Studies* 2 10 (2016) 1009-1013.
242. H. Imai, K.Y. Chen, K. Kondoh, J. Umeda, H.Y. Tsai: Effect of Reaction between Alloying Element and VGCFs on Mechanical and Electrical Properties of PM Copper Alloy Composites Dispersed with VGCFs, *Materials Transactions* 57 10 (2016) 1784-1788, DOI:10.2320/matertrans.Y-M201682.
243. B. Chen and K. Kondoh: Sintering Behaviors of Carbon Nanotubes—Aluminum Composite Powders, *Metals* 6(9) 213 (2016), DOI:10.3390/met6090213.
244. K. Kondoh, T. Oguri, J. Umeda, H. Imai: Anisotropy Of Texture-controlled Powder Metallurgy Magnesium Alloys Via Roll-compaction Process, *Journal of Multidisciplinary Engineering Science Studies* 2 8 (2016) 810-814.
245. T. Thruerujrapapong, K. Kondoh, J. Umeda: Tribological Behavior of Powder Metallurgy Ti Composites Reinforced With Multi-wall Carbon Nanotubes, *Journal of Multidisciplinary Engineering Science Studies* 2 8 (2016) 822-826.



246. P. Pripanapong, S. Kariya, T. Luangvaranunt, J. Umeda, S. Tsutsumi, M. Takahashi, K. Kondoh: Corrosion behavior and strength of dissimilar bonding material between Ti and Mg alloys by spark plasma sintering, *Materials* 9(8) 665 (2016), DOI:10.3390/ma9080665.
247. P. Pripanapong, J. Umeda, H. Imai, M. Takahashi, K. Kondoh: Tensile Strength of Ti/Mg Alloys Dissimilar Bonding Material Fabricated by Spark Plasma Sintering, *International Journal of Engineering Innovation & Research* 5 4 (2016) 253-259.
248. P. Pripanapong, S. Li, J. Umeda, K. Kondoh: Effect of Textures on Tensile Properties of Extruded Ti64/VGCF Composite by Powder Metallurgy Route, *Mechanics, Materials Science & Engineering* 5 1(2016), DOI:10.13140/RG.2.1.1120.1525.
249. L. Jia, X. Wang, B. Chen, H. Imai, S. Li, Z. Lu, K. Kondoh: Microstructural evolution and competitive reaction behavior of Ti–B<sub>4</sub>C system under solid-state sintering, *Journal of Alloys and Compounds* 687 (2016) 1004-1011.
250. B. Chen, K. Kondoh, H. Imai, J. Umeda: Effect of initial state on dispersion evolution of carbon nanotubes in aluminium matrix composites during a high-energy ball milling process, *Powder Metallurgy* 59 3 (2016) 216-222, DOI: 10.1080/00325899.2016.1144375.
251. T. Mimoto, J. Umeda, K. Kondoh: Strengthening behaviour and mechanisms of extruded powder metallurgy pure Ti materials reinforced with ubiquitous light elements, *Powder Metallurgy* 59 3 (2016) 223-228, DOI: 10.1080/00325899.2016.1148847.
252. G. Han, J. Shen, X. Ye, B. Chen, H. Imai, K. Kondoh, W. Du: The influence of CNTs on the microstructure and ductility of CNT/Mg composites, *Materials Letters* 181 (2016) 300-304, DOI: 10.1016/j.matlet.2016.06.021.
253. J. Umeda, N. Nakanishi, K. Kondoh, H. Imai: Surface potential analysis on initial galvanic corrosion of Ti/Mg-Al dissimilar material, *Materials Chemistry and Physics* 179 (2016) 5-9, DOI: 10.1016/j.matchemphys.2016.05.031.
254. J. Shen, V. Gärtnerová, L. J. Kecskes, K. Kondoh, A. Jäger, Q. Wei: Residual stress and its effect on the mechanical properties of Y-doped Mg alloy fabricated via back-pressure assisted equal channel angular pressing (ECAP-BP), *Materials Science & Engineering A* 669 (2016) 110-117, DOI: 10.1016/j.msea.2016.05.067.
255. 今井久志, 陳冠宇, 近藤勝義, 梅田純子, 蔡宏營: 添加元素と VGCF の反応が VGCF 分散銅基複合粉末材料の力学および電気特性に与える影響, *粉体および粉末冶金* 63 4 (2016) 150-156, DOI: 10.2497/jjspm.63.150.
256. N. A. Jamal, A. W. Tan, Y. Farazila, K. Kondoh, H. Imai, S. Ramesh, A. Hazleen: Fabrication and compressive properties of low to medium porosity closed-cell porous Aluminum using PMMA space holder technique, *Materials* 9(4) 254 (2016), DOI:10.3390/ma9040254.
257. J. Shen, H. Imai, B. Chen, X. Ye, J. Umeda, K. Kondoh: Deformation mechanisms of pure Mg materials fabricated by using pre-rolled powders, *Materials Science & Engineering A* 658 (2016) 309-320, DOI: 10.1016/j.msea.2016.02.027.
258. S. Sunada, A. Takagi, M. Hatakeyama, J. Umeda, S. Li, K. Kondoh: Corrosion Resistant Evaluation of Oxygen Solid-Solution Strengthened Pure Titanium, *Chiang Mai Journal of Science* 43 (2016) 381-392.
259. S. Li, K. Kondoh, H. Imai, B. Chen, L. Jia, J. Umeda, Y. Fu: Strengthening behavior of in situ-synthesized (TiC-TiB)/Ti composites by powder metallurgy and hot extrusion, *Materials and Design* 95 (2016) 127-132, DOI: 10.1016/j.matdes.2016.01.092.



260. B. Chen, K. Kondoh, H. Imai, J. Umeda, M. Takahashi: Simultaneously enhancing strength and ductility of carbon nanotube/aluminum composites by improving bonding conditions, *Scripta Materialia* 113 (2016) 158-162, DOI: 10.1016/j.scriptamat.2015.11.011.
261. J. Shen, K. Kondoh, T. L. Jones, S. N. Mathaudhu, L. J. Kecske, Q. Wei: Effect of strain rate on the mechanical properties of magnesium alloy AMX602, *Materials Science & Engineering A* 649 (2016) 338-348, DOI: 10.1016/j.msea.2015.10.022.
262. P. Pripanapong, T. Mimoto, J. Umeda, H. Imai, K. Kondoh: Effect of vapor grown carbon fiber content on microstructure and tensile properties of Ti64/TiC composite fabricated by powder metallurgy method, *Journal of Composite Materia*, 50(24) (2015) 3405-3414, DOI: 10.1177/0021998315620849.
263. B. Chen, H. Imai, S. Li, L. Jia, J. Umeda, K. Kondoh: Crack Formation in Powder Metallurgy Carbon Nanotube (CNT)/Al Composites During Post Heat-Treatment, *JOM* 67 12 (2015) 2887-2891, DOI: 10.1007/s11837-014-1246-y.
264. J. Umeda, B. Fugetsu, E. Nishida, H. Miyaji, K. Kondoh: Friction behavior of network-structured CNT coating on pure titanium plate, *Applied Surface Science* 357 (2015) 721-727, DOI: 10.1016/j.apsusc.2015.09.063.
265. E. Nishida, H. Miyaji, J. Umeda, K. Kondoh, H. Takita, I. Kanayama, S. Tanaka, A. Kato, B. Fugetsu, T. Akasaka, M. Kawanami: Biological Response to Nanostructure of Carbon Nanotube/titanium Composite Surfaces, *Nano Biomedicine* 7(1) (2015) 11-20, DOI: 10.11344/nano.7.11.
266. H. Imai, K. Chen, K. Kondoh, H. Tsai: Effect of alloying elements on mechanical properties and electrical conductivity of P/M copper alloys dispersed with vapor-grown carbon fiber, *Ceramic Transactions* 252 (2015) 383-392, DOI: 10.1002/9781119183860.ch36.
267. B. Chen, S. Li, H. Imai, L. Jia, J. Umeda, M. Takahashi, K. Kondoh: Carbon nanotube induced microstructural characteristics in powder metallurgy Al matrix composites and their effects on mechanical and conductive properties, *Journal of Alloys and Compounds* 651 (2015) 608-615, DOI: 10.1016/j.jallcom.2015.08.178.
268. 刈屋翔太, 梅田純子, 今井久志, 宇野澤晴生, Manuel MARYA, 近藤勝義:Fe/SiC 粒子分散 Mg 粉末合金の力学特性と腐食挙動, *粉体および粉末冶金* 62 9 (2015) 1-6, DOI:10.2497/jjspm.62.462.
269. T. Mimoto, J. Umeda, K. Kondoh: Titanium Powders via Gas-Solid Direct Reaction Process and Mechanical Properties of Their Extruded Materials, *Materials Transactions* 56 8 (2015) 1153-1158, DOI: 10.2320/matertrans.L-M2015816.
270. H. Imai, K. Chen, K. Kondoh, H. Tsai, J. Umeda: Effect of Chromium Behavior on Mechanical and Electrical Properties of P/M Copper-Chromium Alloy Dispersed with VGCF, *International Journal of Chemical, Nuclear, Materials and Metallurgical Engineering* 9 7 (2015) 755-758, DOI: 10.5281/zenodo.1106947.
271. B. Chen, S. Li, H. Imai, L. Jia, J. Umeda, M. Takahashi, K. Kondoh: Load transfer strengthening in carbon nanotubes reinforced metal matrix composites via in-situ tensile tests, *Composites Science and Technology* 113 (2015) 1-8, DOI: 10.1016/j.compscitech.2015.03.009.
272. Y. Sun, H. Fujii, H. Imai, K. Kondoh: Suppression of hydrogen-induced damage in friction stir welded low carbon steel joints, *Corrosion Science* 94 (2015) 88-98, DOI: 10.1016/j.corsci.2015.01.046.
273. S. Yamamoto, T. Okuaki, M. Egashira, K. Kondoh, C. Masuda: Evaluation of temperature distribution in steel balls induced by friction generated during tribotest against diamond like carbon coatings, *Tribology* 9 1 (2015) 33-40, DOI: 10.1179/1751584X14Y.0000000085.



274. B. Chen, S. Li, H. Imai, L. Jia, J. Umeda, M. Takahashi, K. Kondoh: An approach for homogeneous carbon nanotube dispersion in Al matrix composites, *Materials and Design* 72 (2015) 1-8, DOI: 10.1016/j.matdes.2015.02.003.
275. S. Li, K. Kondoh, H. Imai, B. Chen, L. Jia, J. Umeda: Microstructure and mechanical properties of P/M titanium matrix composites reinforced by in-situ synthesized TiC-TiB, *Materials Science & Engineering A* 628 (2015) 75-83, DOI: 10.1016/j.msea.2015.01.033.
276. L. Jia, K. Kondoh, H. Imai, M. Onishi, B. Chen, S. Li: Nano-scale AlN powders and AlN/Al composites by full and partial direct nitridation of aluminum in solid-state, *Journal of Alloys and Compounds* 629 (2015) 184-187, DOI: 10.1016/j.jallcom.2014.12.220.
277. J. Shen, W. Yin, K. Kondoh, T. Jones, L. J. Kecske, S. N. Yarmolenko, Q. Wei: Mechanical behavior of alanthanum-doped magnesium alloy at different strain rates, *Materials Science & Engineering A* 626 (2015) 108-121, DOI: 10.1016/j.msea.2014.12.061.
278. L. Jia, B. Chen, S. Li, H. Imai, K. Kondoh: Pinning Effect of In-Situ TiCp and TiBw on the Grain Size and Room Temperature Strength of (TiC + TiB)/Ti Composites, *KONA Powder and Particle Journal* 32 (2015) 264-269, DOI: 10.14356/kona.2015020
279. B. Chen, S. Li, H. Imai, J. Umeda, M. Takahashi, K. Kondoh: Inter-Wall Bridging Induced Peeling of Multi-Walled Carbon Nanotubes during Tensile Failure in Aluminum Matrix Composites, *Micron* 69 (2015) 1-5, DOI: 10.1016/j.micron.2014.10.005.
280. 近藤勝義, 米澤隆行, 梅田純子, 今井久志, 早場亮一:粉末冶金法による非鉄系金属材料の高次機能化に関する研究 –TiNi系形状記憶焼結材における強度・形状回復率の向上を目指して-, 粉体および粉末冶金61 11 (2014) 501-513, DOI:10.2497/jjspm.61.501.
281. 梅田純子, 高田龍一, 道浦吉貞, 近藤勝義:農作物非食部バイオマスから高純度非晶質シリカの抽出プロセスとコンクリート用混和材としての利活用, スマートプロセス学会誌 3 5 (2014) 317-321, DOI: 10.7791/jspmee.3.323.
282. K. Kondoh, B. Sun, S. Li, H. Imai, J. Umeda: Experimental and Theoretical Analysis of Nitrogen Solid-Solution Strengthening of PM Titanium, *International Journal of Powder Metallurgy* 50 3 (2014) 35-40.
283. B. Chen, L. Jia, S. Li, H. Imai, M. Takahashi, K. Kondoh: In Situ Synthesized Al<sub>4</sub>C<sub>3</sub> Nanorods with Excellent Strengthening Effect in Aluminum Matrix Composites, *Advanced Engineering Materials* 16 8 (2014) 972-975, DOI: 10.1002/adem.201400232.
284. L. Jia, S. Li, H. Imai, B. Chen, K. Kondoh: Size effect of B<sub>4</sub>C powders on metallurgical reaction and resulting tensile properties of Ti matrix composites by in-situ reaction from Ti-B<sub>4</sub>C system under a relatively low temperature, *Materials Science & Engineering A*,614 (2014) 129-135, DOI: 10.1016/j.msea.2014.07.020.
285. L. Jia, B. Chen, S. Li, H. Imai, M. Takahashi, K. Kondoh: Stability of strengthening effect of in situ formed TiCp and TiBw on the elevated temperature strength of (TiCp+TiBw)/Ti composites, *Journal of Alloys and Compounds* 614 (2014) 29-34, DOI: 10.1016/j.jallcom.2014.06.094.
286. S. Yamamoto, M. Egashira, K. Kondoh, C. Masuda: Evaluation of the Wear Energy Consumption of Nitrogenated Diamond-Like Carbon against Alumina, *Tribology Letter* (2014), DOI:10.1007/s11249-014-0357-5.
287. T. Yonezawa, T. Yoshimura, J. Umeda, K. Kondoh and R. Souba: Microstructures and Mechanical Properties of Sintered and Extruded TiNi Shape-Memory Alloys Using Prealloyed Powder with Additions of TiO<sub>2</sub>, *International Journal of Powder Metallurgy* 50 1 (2014) 33-39.



288. Y.F. Yang, H. Imai, K. Kondoh and M. Qian: Comparison of Spark Plasma Sintering of Elemental and Master Alloy Powder Mixes and Prealloyed Ti-6Al-4V Powder, International Journal of Powder Metallurgy 50 1 (2014) 41-47.
289. H. Imai, S. Li, K. Kondoh, Y. Kosaka, T. Okada, K. Yamamoto, M. Takahashi, J. Umeda: Microstructure and Mechanical Properties of Cu-40%Zn-0.5%Cr Alloy by Powder Metallurgy, Materials Transactions 55 3 (2014) 528-533, DOI: 10.2320/matertrans.Y-M2013847.
290. H. Imai, K. Kondoh, S. Li, J. Umeda, B. Fugetsu, M. Takahashi: Microstructural and Electrical Properties of Copper-titanium Alloy Dispersed with Carbon Nanotubes via Powder Metallurgy Process, Materials Transactions 55 3 (2014) 522-527, DOI: 10.2320/matertrans.Y-M2013846.
291. K. Kondoh, H. Fukuda, J. Umeda, H. Imai, B. Fugetsu: Microstructural and mechanical behavior of MWCNTs reinforced Al-Mg-Si alloy composites in aging treatment, Carbon 72 (2014) 15-21, DOI: 10.1016/j.carbon.2014.01.013.
292. H. Imai, H. Atsumi, S. Li, K. Kondoh: Characteristics of Lead-free Machinable Brass of Powder Metallurgy Cu-40 mass% Zn /1.0 mass% Mg with Graphite Particles, Applied Mechanics and Materials 481 (2014) 79-85, DOI: 10.4028/www.scientific.net/AMM.481.79.
293. 米澤隆行, 今井久志, 梅田純子, 近藤勝義, 早場亮一: Ni-rich TiNi 形状記憶粉末合金の組成・組織制御と高強度発現機構の解明, 日本機械学会論文集(A編) 79 808 (2013) 1695-1704, DOI: 10.1299/kikaia.79.1695.
294. S. Li, H. Imai, K. Kondoh: Microstructure, Phase Transformation, Precipitation Behavior and Mechanical Properties of P/M Cu40Zn-1.0 wt% Ti Brass Alloy via Spark Plasma Sintering and Hot Extrusion, Journal of Materials Science & Technology 29 11 (2013) 1018-1024, 10.1016/j.jmst.2013.08.013.
295. 今井久志, 李樹豊, 上坂美治, 近藤勝義: 完全鉛フリー・快削性高強度黄銅粉末合金に関する研究-高強度黄銅合金粉末押出材における添加元素の挙動と機械的特性-, 粉体および粉末冶金 60 11 (2013) 453-459, DOI:10.2497/jjspm.60.453.
296. 三本嵩哲, 李樹豊, 梅田純子, 近藤勝義: 水素によるチタン焼結押出材の高強度発現機構, 粉体および粉末冶金 60 11 (2013) 467-474, DOI:10.2497/jjspm.60.467.
297. K. Funatsu, H. Fukuda, R. Takei, J. Umeda, K. Kondoh: Quantitative evaluation of initial galvanic corrosion behavior of CNTs reinforced Mg-Al alloy, Advanced Powder Technology 24 (2013) 833-837, DOI: 10.1016/j.apt.2013.02.002.
298. S. Li, B. Sun, H. Imai, K. Kondoh: Powder Metallurgy Ti-TiC Metal Matrix Composites Prepared by In-situ Reactive Processing of Ti-VGCFs System, Carbon 61 (2013) 216-228, DOI: 10.1016/j.carbon.2013.04.088.
299. S. Li, H. Imai, H. Atsumi, K. Kondoh: An investigation of microstructure and phase transformation behavior of Cu40Zn-1.0 wt.% Ti brass via powder metallurgy, Journal of Materials Engineering and Performance 22 10 (2013) 3168-3174, DOI: 10.1007/s11665-013-0602-3.
300. X. P. Li, M. Yan, H. Imai, K. Kondoh, G.B. Schaffer, M. Qian: The critical role of heating rate in enabling the removal of surface oxide films during spark plasma sintering of Al-based bulk metallic glass powder, Journal of Non-Crystalline Solids 375 (2013) 95-98, DOI: 10.1016/j.jnoncrysol.2013.05.001.
301. X. P. Li, M. Yan, H. Imai, K. Kondoh, J. Q. Wang, G. B. Schaffer, M. Qian: Fabrication of 10mm diameter fully dense Al<sub>86</sub>Ni<sub>6</sub>Y<sub>4.5</sub>Co<sub>2</sub>La<sub>1.5</sub> bulk metallic glass with high fracture strength, Materials Science & Engineering A 568 (2013) 155-159, DOI: 10.1016/j.msea.2013.01.041.



302. X. Yang, E. Liu, C. Shi, C. He, J. Li, N. Zhao, K. Kondoh: Fabrication of carbon nanotube reinforced Al composites with well-balanced strength and ductility, *Journal of Alloys and Compounds* 563 (2013) 216-220, DOI: 10.1016/j.jallcom.2013.02.066.
303. T. Jones, K. Kondoh, T. Mimoto, N. Nakanishi, J. Umeda: The Development of a Ti-6Al-4V Alloy via Oxygen Solid Solution Strengthening for Aerospace & Defense Applications, *Key Engineering Materials* 551 (2013) 118-126, DOI: 10.4028/www.scientific.net/KEM.551.118.
304. S. Li, B. Sun, H. Imai, T. Mimoto, K. Kondoh: Powder metallurgy titanium metal matrix composites reinforced with carbon nanotubes and graphite, *Composites A* 48 (2013) 57-66, DOI: 10.1016/j.compositesa.2012.12.005.
305. S. Li, B. Sun, K. Kondoh, T. Mimoto, H. Imai: Influence of carbon reinforcements on the mechanical properties of Ti composites via powder metallurgy and hot extrusion, *Materials Science Forum*, 750 (2013) 40-43, DOI: 10.4028/www.scientific.net/MSF.750.40.
306. J. Umeda, T. Mimoto, K. Kondoh, B. Fugetsu: Tribological Properties of Titanium Plate Coated with Carbon Nanotubes, *Key Engineering Materials* 545 (2013) 158-162, DOI: 10.4028/www.scientific.net/KEM.545.158.
307. B. Sun, S. Li, H. Imai, T. Mimoto, J. Umeda, K. Kondoh: Fabrication of high-strength Ti materials by in-process solid solution strengthening of oxygen via P/M methods, *Materials Science and Engineering A* 563 (2013) 95-100, DOI: 10.1016/j.msea.2012.11.058.
308. 今井久志, 李樹豊, 近藤勝義, 上坂美治, 岡田拓也, 山本浩士, 高橋基, 梅田純子: Cu-40%Zn-0.5%Cr粉末合金の組織および機械的性質に及ぼすCrの挙動, *粉体および粉末冶金* 59 11 (2012) 645-651, DOI:10.2497/jjspm.59.645.
309. 船津恵介, 梅田純子, 高橋誠, 近藤勝義:X線照射による励起場形成を利用した純マグネシウムの表面改質現象, *スマートプロセス学会誌* 1 6 (2012) 293-297, DOI: 10.7791/jspmee.1.293.
310. 孫斌, 李樹豊, 今井久志, 三本嵩哲, 梅田純子, 近藤勝義:酸素固溶強化による高強度チタン粉末焼結材の創製, *スマートプロセス学会誌* 1 6 (2012) 283-287, DOI: 10.7791/jspmee.1.283.
311. 米澤隆行, 吉村知浩, 梅田純子, 近藤勝義, 早場亮:TiO<sub>2</sub>粒子を添加した高強度TiNi形状記憶粉末合金の組織構造と力学特性, *スマートプロセス学会誌* 1 6 (2012) 288-292, DOI: 10.7791/jspmee.1.288.
312. 今井久志, 近藤勝義, 李樹豊, 梅田純子, 古月文志, 高橋誠:粉末冶金法を用いたカーボンナノチューブ分散 Cu-Ti合金の組織と機械的および電気的特性, *粉体および粉末冶金* 59 10 (2012) 609-615, DOI:10.2497/jjspm.59.609.
313. S. Li, H. Imai, K. Kondoh, A. Kojima, Y. Kosaka, K. Yamamoto, M. Takahashi: Dependence of microstructure and mechanical properties on hot-extrusion temperatures of the developed high-strength Cu<sub>40</sub>Zn-CrFeTiSn brass by powder metallurgy, *Materials Science & Engineering A* 558 (2012) 616-622, DOI: 10.1016/j.msea.2012.08.062.
314. 船津恵介, 竹井怜, 梅田純子, 近藤勝義: Mg 合金中の微視的異材界面における表面電位差が初期ガルバニック腐食現象へ及ぼす影響, *日本機械学会論文集(A編)* 78 794 (2012) 1432-1445, DOI:10.1299/kikaia.78.1432.
315. H. Atsumi, H. Imai, S. Li, K. Kondoh, Y. Kousaka, A. Kojima: Microstructural and Mechanical Properties of the Extruded  $\alpha/\beta$  Duplex Phase Brass Cu-40Zn-Ti Alloy, *Ceramic Transactions* 236 (2012) 41-46, DOI: 10.1002/9781118511435.ch5.
316. H. Atsumi, H. Imai, S. Li, K. Kondoh, Y. Kousaka, A. Kojima: The Characteristics of High Strength and Lead-Free Machinable  $\alpha/\beta$  Duplex Phase Brass Cu-40Zn-Cr-Fe-Sn-Bi Alloy, *Ceramic Transactions* 236 (2012) 47-56, DOI: 10.1002/9781118511435.ch6.



317. H. Atsumi, H. Imai, S. Li, K. Kondoh, Y. Kousaka, A. Kojima: Fabrication and properties of high-strength extruded brass using elemental mixture of Cu-40% Zn alloy powder and Mg particle, *Materials Chemistry and Physics* 135 (2012) 554-562, DOI: 10.1016/j.matchemphys.2012.05.025.
318. S. Li, H. Imai, K. Kondoh, A. Kojima, Y. Kosaka, K. Yamamoto, M. Takahashi: Development of precipitation strengthened brass with Ti and Sn alloying elements additives by using water atomized powder via powder metallurgy route, *Materials Chemistry and Physics* 135 (2012) 644-652, DOI: 10.1016/j.matchemphys.2012.05.039.
319. K. Kondoh, T. Threrujirapapong, S. Bin, H. Imai, S.F. Li, J. Umeda, B. Fugetsu: Multi-Walled Carbon Nanotubes Reinforced Titanium Composites via Powder Metallurgy Process, *Key Engineering Materials* 520 (2012) 261-268, DOI: 10.4028/www.scientific.net/KEM.520.261.
320. J. Chen, H. Fujii, Y. Sun, Y. Morisada, K. Kondoh, K. Hashimoto: Effect of grain size on the microstructure and mechanical properties of friction stir welded non-combustive magnesium alloys, *Materials Science & Engineering A* 549 (2012) 176-184, DOI: 10.1016/j.msea.2012.04.030.
321. K. Kondoh, T. Threrujirapapong, J. Umeda, B. Fugetsu: High-temperature properties of extruded titanium composites fabricated from carbon nanotubes coated titanium powder by spark plasma sintering and hot extrusion, *Composites Science and Technology* 72 (2012) 1291-1297, DOI: 10.1016/j.compscitech.2012.05.002.
322. S. Li, H. Imai, H. Atsumi, K. Kondoh, A. Kojima, Y. Kosaka, K. Yamamoto, M. Takahashi: The effects of Ti and Sn alloying elements on precipitation strengthened Cu40Zn brass using powder metallurgy and hot extrusion, *Materials Science & Engineering A* 535 (2012) 22-31, DOI: 10.1016/j.msea.2011.12.036.
323. B. Sun, S. Li, H. Imai, J. Umeda, K. Kondoh: Synthesis kinetics of Mg<sub>2</sub>Si and solid-state formation of Mg-Mg<sub>2</sub>Si composite, *Powder Technology* 217 (2012) 157-162, DOI: 10.1016/j.powtec.2011.10.022.
324. M. Wahba, Y. Kawahito, K. Kondoh, S. Katayama: A fundamental study of laser welding of hot extruded powder metallurgy (P/M) AZ31B magnesium alloy, *Materials Science & Engineering A*, 529 (2011) 143-150, DOI: 10.1016/j.msea.2011.09.010.
325. 三本嵩哲, 中西望, 梅田純子, 近藤勝義:水素化チタンの熱分解反応を利用した純チタン粉末材の創製, *高温学会誌* 37 6 (2011) 300-305, DOI: 10.7791/jhts.37.326.
326. 孫斌, 李樹豊, 今井久志, 梅田純子, 近藤勝義:粉末冶金法によるMg<sub>2</sub>Siの固相合成機構の解明, *高温学会誌* 37 6 (2011) 295-299, DOI: 10.7791/jhts.37.321.
327. H. Atsumi, H. Imai, S. Li, K. Kondoh, Y. Kousaka, A. Kojima: High-strength, lead-free machinable α-β duplex phase brass Cu-40Zn-Cr-Fe-Sn-Bi alloys, *Materials Science & Engineering A* 529 (2011) 275-281, DOI: 10.1016/j.msea.2011.09.029.
328. K. Kondoh, N. Nakanishi, R. Takei, H. Fukuda, J. Umeda: Evaluation of Initial Corrosion Phenomenon of Magnesium Alloys by SKPFM, *Materials Science Forum* 690 (2011) 397-400, DOI: 10.4028/www.scientific.net/MSF.690.397.
329. K. Kondoh, T. Threrujirapapong, H. Fukuda, J. Umeda: Un-bundled Carbon Nanotubes Reinforced Light Metal Composites via Powder Metallurgy Route, *Materials Science Forum* 690 (2011) 339-342, DOI: 10.4028/www.scientific.net/MSF.690.339.



330. X. Luo, G. Yang, C. Lia, K. Kondoh: High strain rate induced localized amorphization in cubic BN/NiCrAl nanocomposite through high velocity impact, *Scripta Materialia* 65 (2011) 581-584, DOI: 10.1016/j.scriptamat.2011.06.030.
331. H. Imai, S. Li, K. Kondoh, Y. Kosaka, A. Kojima, H. Atsumi, J. Umeda: Effect of Chromium Precipitation on Machinability of Sintered Brass Alloys Dispersed with Graphite Particles, *Materials Transactions* 52 7 (2011) 1426-1430, DOI: 10.2320/matertrans.M2011051.
332. K. Kondoh, J. Fujita, J. Umeda, H. Imai, K. Enami, M. Ohara, T. Igarashi: Thermo-dynamic analysis on solid-state reduction of CaO particles dispersed in Mg-Al alloy, *Materials Chemistry and Physics* 129 (2011) 631-640, DOI: 10.1016/j.matchemphys.2011.05.017.
333. A. Elsayed, J. Umeda, K. Kondoh: The texture and anisotropy of hot extruded magnesium alloys fabricated via rapid solidification powder metallurgy, *Materials & Design* 32 (2011) 4590-4597, DOI: 10.1016/j.matdes.2011.03.066.
334. K. Okada, M. Nandi, J. Maruyama, T. Oka, T. Tsujimoto, K. Kondoh, H. Uyama: Fabrication of mesoporous polymer monolith: a template-free approach, *Chemical Communications*, (2011) DOI: 10.1039/C1CC12402A.
335. S. Li, H. Imai, A. Kojima, Y. Kosaka, K. Yamamoto, M. Takahashi, H. Atsumi, K. Kondoh: Effect of Heat Treatment on Phase Transformation and Precipitation Behavior of Cu40Zn-1.0 wt% Ti Brass via Powder Metallurgy, *ICEAM 2011, Advanced Materials Research* 233-235 (2011) 2732-2735, DOI: 10.4028/www.scientific.net/AMR.233-235.2732.
336. H. Fukuda, K. Kondoh, J. Umeda, B. Fugetsu: Fabrication of magnesium based composites reinforced with carbon nanotubes having superior mechanical properties, *Materials Chemistry and Physics* 127 (2011) 451-458, DOI: 10.1016/j.matchemphys.2011.02.036.
337. H. Fukuda, K. Kondoh, J. Umeda, B. Fugetsu: Aging behavior of the matrix of aluminum-magnesium-silicon alloy including carbon nanotubes, *Materials Letters* 65 (2011) 1723-1725, DOI: 10.1016/j.matlet.2011.03.023.
338. 竹井怜, 梅田純子, 近藤勝義:表面電位差を用いたMg合金中の母相と分散物間におけるガルバニック腐食現象の評価, 日本機械学会論文集(A編)77 774 (2011) 301-315, DOI: 10.1299/kikaia.77.301, DOI:.
339. 中西望, 竹井怜, 今井久志, 近藤勝義:Mg-Al合金とTiの界面における局所腐食現象の解析, 日本機械学会論文集(A編), 77 774 (2011) 316-322, DOI:10.1299/kikaia.77.316, DOI:.
340. H. Fukuda, K. Kondoh, J. Umeda, B. Fugetsu: Interfacial analysis between Mg matrix and carbon nanotubes in Mg-6 wt.% Al alloy matrix composites reinforced with carbon nanotubes, *Composites Science and Technology*, 71 (2011) 705-709, DOI: 10.1016/j.compscitech.2011.01.015.
341. S. Li, K. Kondoh, H. Imai, H. Atsumi: Fabrication and properties of lead-free machinable brass with Ti additive by powder metallurgy, *Powder Technology* 205 (2011) 242-249, DOI: 10.1016/j.powtec.2010.09.020.
342. A. Elsayed, J. Umeda, K. Kondoh: Application of rapid solidification powder metallurgy to the fabrication of high-strength, high-ductility Mg-Al-Zn-Ca-La alloy through hot extrusion, *Acta Materialia* 59 (2011) 273-282, DOI: 10.1016/j.actamat.2010.09.031.
343. 渥美春彦, 今井久志, 李樹豊, 上坂美治, 小島明倫, 近藤勝義:微量元素を添加した高強度黄銅合金の組織構造と力学特性, 日本機会学会論文集(A編)76 771 (2010) 1501-1506, DOI: 10.1299/kikaia.76.1501, DOI:.
344. H. Fukuda, J. A. Szpunar, K. Kondoh, R. Chromik: The influence of carbon nanotubes on the corrosion behaviour of AZ31B magnesium alloy, *Corrosion Science* 52 (2010) 3917-3923, DOI: 10.1016/j.corsci.2010.08.009.



345. J. Umeda, K. Kondoh: High-purification of amorphous silica originated from rice husks by combination of polysaccharide hydrolysis and metallic impurities removal, *Industrial Crops and Products* 32 (2010) 539-544 DOI: 10.1016/j.indcrop.2010.07.002.
346. K. Kondoh, K. Kaneko, T. Akita: Advanced Powder Metallurgy Metals by Metal Working, *Steel research international* 81 9 (2010) 1283-1287, DOI: 10.3390/ma13071742.
347. H. Imai, K. Kondoh, S. Li, H. Atsumi, Y. Kosaka, A. Kojima: Effect of Bismuth Addition on Machinability and Mechanical Properties of Lead-Free Brass via Powder Metallurgy Process, *Steel research international*, 81 9 (2010) 1296-1299.
348. S. Li, H. Imai, H. Atsumi, K. Kondoh: Effects of Ti Addition on Microstructure and Mechanical Properties of Extruded Cu40Zn-2.2Bi Brass by Powder Metallurgy, *Steel research international* 81 9 (2010) 1312-1315.
349. A. Elsayed, H. Imai, J. Umeda, K. Kondoh: Microstructure and Mechanical Properties of Hot Extruded ZK61 Alloy Produced by Rapid Solidification Powder Metallurgy, *Steel research international* 81 9 (2010) 1304-1307.
350. T. Threrujirapapong, K. Kondoh, H. Imai, J. Umeda, B. Fugetsu: Hot Extrusion of Pure Titanium Reinforced with Carbon Nanotubes, *Steel research international* 81 9 (2010) 1320-1323.
351. S. Li, H. Imai, H. Atsumi, K. Kondoh: Contribution of Ti Addition to Characteristics of Extruded Cu40Zn Brass Alloy Prepared by Powder Metallurgy, *Materials and Design* 32 (2011) 192-197, DOI: 10.1016/j.matdes.2010.06.008.
352. S. Li, H. Imai, H. Atsumi, K. Kondoh: Phase transformation and precipitation hardening behavior of Cr and Fe in BS40CrFeSn alloy, *Journal of Materials Science* 45 (2010) 5669-5675, DOI: 10.1007/s10853-010-4632-z.
353. 中西望, 今井久志, 近藤勝義, 藤井英俊: Mg-Al 系合金と Ti の高温濡れ現象, *高温学会誌* 36 4 (2010) 192-195, DOI: 10.7791/jhts.36.192.
354. J. Umeda, M. Kawakami, K. Kondoh, A. EL-Sayed, H. Imai: Microstructural and mechanical properties of titanium particulate reinforced magnesium composite materials, *Materials Chemistry and Physics* 123 (2010) 649-657, DOI: 10.1016/j.matchemphys.2010.05.033.
355. H. Imai, S. Li, Y. Kosaka, A. Kojima, H. Atsumi, K. Kondoh: High Strength and Lead-free Machinable Brass by Powder Metallurgy Process, *Materials Science Forum* 654-656 (2010) 2680-2683, 10.4028/www.scientific.net/MSF.654-656.2680.
356. T. Yoshimura, T. Threrujirapapong, H. Imai, K. Kondoh: Mechanical Properties of Oxide Dispersion Strengthened Pure Titanium Produced by Powder Metallurgy Method, *Materials Science Forum* 654-656 (2010) 815-818, DOI: 10.4028/www.scientific.net/MSF.654-656.815.
357. H. Atsumi, H. Imai, S. Li, Y. Kousaka, A. Kojima, K. Kondoh: Microstructure and Mechanical Properties of High Strength Brass Alloy with Some Elements, *Materials Science Forum* 654-656 (2010) 2552-2555, DOI: 10.4028/www.scientific.net/MSF.654-656.2552.
358. K. Kondoh, H. Fukuda, J. Umeda, H. Imai, B. Fugetsu, M. Endo: Microstructural and mechanical analysis of carbon nanotube reinforced magnesium alloy powder composites, *Materials Science & Engineering A* 527 (2010) 4103-4108, DOI: 10.1016/j.msea.2010.03.049.
359. H. Imai, S. Li, H. Atsumi, Y. Kosaka, A. Kojima, K. Kondoh: Development of Lead-Free Machinable Brass with Bismuth and Graphite Particles by Powder Metallurgy Process, *Materials Transactions* 51 5 (2010) 855-859, DOI: 10.2320/matertrans.MH200907.



360. T. Luangvaranunt, C. Dhadsanadhep, J. Umeda, E. Nisaratanaporn and K. Kondoh: Aluminum-4mass% Copper/Alumina Composites Produced from Aluminum Copper and Rice Husk Ash Silica Powders by Powder Forging, *Materials Transaction* 51 4 (2010) 756-761, DOI: 10.2320/matertrans.M2009429.
361. S. Li, H. Imai, H. Atsumi, K. Kondoh: Characteristics of High Strength Extruded BS40CrFeSn Alloy Prepared by Spark Plasma Sintering and Hot Pressing, *Journal of Alloys and Compounds* 493 1-2 (2010) 128-133, DOI: 10.1016/j.jallcom.2009.12.126.
362. H. Imai, Y. Kosaka, A. Kojima, S. Li, K. Kondoh, J. Umeda, H. Atsumi: Characteristics and machinability of lead-free P/M Cu60Zn40 brass alloys dispersed with graphite, *Powder Technology* 198 (2010) 417-421, DOI: 10.1016/j.powtec.2009.12.010.
363. 廖 金孫, 堀田 真, 関師昭彦, 金子貴太郎, 近藤勝義: 高耐衝撃性マグネシウム合金の製造技術の開発, *まてりあ* 49 1 (2010) 23-25, DOI: 10.2320/materia.49.23.
364. K. Kondoh, A. Elsayed, H. Imai, J. Umeda, T. Jones: Microstructures and mechanical responses of powder metallurgy non-combustive magnesium extruded alloy by rapid solidification process in mass production, *Materials and Design* 31 (2010) 1540-1546, DOI: 10.1016/j.matdes.2009.10.001.
365. A. Elsayed, K. Kondoh, H. Imai, J. Umeda: Microstructure and mechanical properties of hot extruded Mg-Al-Mn-Ca alloy produced by rapid solidification powder metallurgy, *Materials and Design*, 31 (2010) 2444-2453, DOI: 10.1016/j.matdes.2009.11.054.
366. K. Kondoh, M. Kawakami, H. Imai, J. Umeda, H. Fujii: Wettability of pure Ti by molten pure Mg droplets, *Acta Materialia* 58 (2010) 606-614, DOI: 10.1016/j.actamat.2009.09.039.
367. 榎並啓太郎, 大原正樹, 五十嵐貴教, 藤田淳司, 近藤勝義: バルクメカニカルアロイングによる耐熱性マグネシウム複合材料の開発, *粉体および粉末冶金* 56 12 (2009) 717-721, DOI: 10.1299/jsmemecjo.2009.1.0\_265.
368. T. Threrujirapapong, K. Kondoh, H. Imai, J. Umeda, B. Fugetsu: Mechanical properties of a Titanium Matrix Composite Reinforced with Low Cost Carbon Black via Powder Metallurgy Processing, *Materials Transactions* 50 12 (2009) 2757-2762, DOI: 10.2320/matertrans.MA200906.
369. T. Yoshimura, H. Imai, T. Threrujirapapong, K. Kondoh: Cost effective Pure Titanium with High Mechanical Response by Oxide Dispersion Strengthening, *Materials Transactions* 50 12 (2009) 2751-2756, DOI: 10.2320/MATERTRANS.MA200905.
370. 吉村知浩, 今井久志, 近藤勝義: 純チタンの結晶粒微細化と酸化物分散強化, *日本金属学会誌* 73 10 (2009) 768-772, DOI: 10.2320/jinstmet.73.768.
371. K. Kondoh, J. Umeda, R. Watanabe: Cavitation erosion of aluminum matrix sintered composite with AlN dispersoids, *Wear* 267 (2009) 1511-1515, DOI: 10.1016/j.wear.2009.03.040.
372. K. Kondoh, J. Umeda, K. Kawabata: Tribological analysis of Mg<sub>2</sub>Si particulates reinforced powder metallurgy magnesium alloy composites under oil lubrication condition, *Advances in Materials Science & Engineering* (2009) 628737, DOI: 10.1155/2009/628737.
373. J. Liao, M. Hotta, K. Kaneko, K. Kondoh: Enhanced impact toughness of magnesium alloy by grain refinement, *Scripta Materialia* 61 (2009) 208-211, DOI: 10.1016/j.scriptamat.2009.03.044.
374. K. Kondoh, T. Threrujirapapong, H. Imai, J. Umeda, B. Fugetsu: Characteristics of powder metallurgy pure titanium matrix composite reinforced with multi-wall carbon nanotubes, *Composites Science and Technology* 69 (2009) 1077-1081, DOI: 10.1016/j.compscitech.2009.01.026.



375. K. Kondoh, J. Fujita, J. Umeda, T. Serikawa: Estimation of Compositions of Zr-Cu Binary Sputtered Film and Its Characterization, *Advances in Materials Science & Engineering* (2009) 518354, DOI: 10.1155/2008/518354.
376. K. Kondoh, H. Imai, Y. Kosaka, A. Kojima, J. Umeda: Machinable Cu-40%Zn Composites Containing Graphite Particles by Powder Metallurgy Process, *Journal of Metallurgy* (2009) 853092, DOI: 10.1155/2009/853092.
377. K. Kondoh, J. Umeda, R. Watanabe: Cavitation resistance of powder metallurgy aluminum matrix composite with AlN dispersoids, *Materials Science & Engineering A* 499 (2009) 440-444, DOI: 10.1016/j.msea.2008.09.023.
378. J. Umeda, K. Kondoh, H. Imai: Friction and wear behavior of sintered magnesium composite reinforced with CNT-Mg<sub>2</sub>Si/MgO, *Materials Science & Engineering A* 504 (2009) 157-162, DOI: 10.1016/j.msea.2008.10.054.
379. K. Kondoh, M. Kawakami, J. Umeda, H. Imai: Magnesium Matrix Composites Reinforced with Titanium Particles, *Materials Science Forum* 618-619 (2009) 371-375, DOI: 10.4028/www.scientific.net/MSF.618-619.371.
380. K. Kondoh, T. Threrujirapapong, J. Umeda, H. Imai, B. Fugetsu: Microstructural and Mechanical Properties of Titanium Matrix Composites Reinforced with Nano Carbon Materials via Powder Metallurgy Process, *Materials Science Forum* 618-619 (2009) 495-499, DOI: 10.4028/www.scientific.net/MSF.618-619.495.
381. Ma Qian, K. Kondoh, D. Kent, J. Umeda, P. Yu, G. B. Schaffer: The In-Situ Fabrication of Al-AlN Composites from Metal Powders and their Resistance to Wear and Cavitation, *Materials Science Forum* 618-619 (2009) 617-620, DOI: 10.4028/www.scientific.net/MSF.618-619.617.
382. 川村貴人, 砂田聰, 近藤勝義, 真島一彦: SWAP 法を用いて作製された AZ31 焼結押出材の腐食特性, 日本金属学会誌, 73 3 (2009) 189-197, DOI: 10.2320/jinstmet.73.189.
383. 近藤勝義: Roll Compaction プロセスによるマグネシウム粉末合金の創製, 塑性と加工 50 578 (2009) 197-200, DOI: 10.9773/sosei.50.197.
384. J. Umeda, K. Kondoh, M. Kawakami, H. Imai: Powder metallurgy magnesium composite with magnesium silicide in using rice husk silica particles, *Powder Technology* 189 (2009) 399-403, DOI: 10.1016/j.powtec.2008.08.007.
385. 近藤勝義: 粉末成形の基礎と素材製造プロセス 2. 粉末の加工プロセスによる組織制御, 材料 57 12 (2008) 1261-1265, DOI: 10.2472/jsms.57.1261.
386. K. Kondoh, T. Threrujirapapong, H. Imai, J. Umeda, B. Fugetsu: CNTs/TiC reinforced titanium matrix nanocomposites via powder metallurgy and its microstructural and mechanical properties, *Journal of Nanomaterials* (2008) 127538, DOI: 10.1155/2008/127538.
387. J. Umeda, K. Kondoh: High-purity amorphous silica originated in rice husks via carboxylic acid leaching process, *Journal of Materials Science* 43 (2008) 7084-7090, DOI: 10.1007/s10853-008-3060-9.
388. K. Kondoh, K. Kawabata, T. Serikawa, H. Kimura: Structural Characteristics and Crystallization of Metallic Glass Sputtered Films by Using Zr System Target, *Research Letters in Materials Science* (2008) 312057, DOI: 10.1155/2008/312057.
389. 金子貴太郎, 閻師昭彦, 松田靖史, 近藤勝義: 高強度・高韌性マグネシウム合金製長下肢装具の開発, 軽金属 58 11 (2008) 617-621, DOI: 10.2464/jilm.58.617.
390. 今井久志, 近藤勝義, 上坂美治, 小島明倫, 片野元, 梅田純子: 放電焼結法を用いた 60Cu-40Zn 黄銅合金粉末押出材の特性, 粉体および粉末冶金, 55 10 (2008) 743-749, DOI: 10.2497/jjspm.55.743.
391. 川村貴人, 砂田聰, 近藤勝義, 能登谷久公, 真島一彦: SSRT 条件化における AZ31Mg 合金の電気化学インピーダンス



- 特性, 日本金属学会誌 72 9 (2008) 667-673, DOI: 10.2320/jinstmet.72.667.
392. 榎並啓太郎, 藤田行俊, 本江克次, 大原正樹, 五十嵐貴教, 近藤勝義: バルクメカニカルアロイング法によるマグネシウム複合材料の開発, 粉体および粉末冶金 55 4 (2008) 244-249, DOI: 10.2497/jjspm.55.244.
393. 川村貴人, 砂田聰, 能登谷久公, 近藤勝義, 真島一彦: AZ 系Mg合金の自然浸漬環境下における腐食特性に及ぼす Al 含有量の影響, 日本金属学会誌 72 3 (2008) 216-223, DOI: 10.2320/jinstmet.72.216.
394. K. Kondoh, T. Serikawa, K. Kawabata, T. Yamaguchi: Mg-C films deposited by radio-frequency sputtering, *Scripta Materialia*, 57 6 (2007) 489-491, DOI: 10.1016/j.scriptamat.2007.05.033.
395. 砂田聰, 川村貴人, 近藤勝義, 能登谷久公, 真島一彦: 各種手法により作製された Mg 合金の腐食特性, 粉体および粉末冶金 54 9 (2007) 658-664, DOI: 10.2497/jjspm.54.658.
396. J. Umeda, K. Kondoh, Y. Michiura: Process Parameters Optimization in Preparing High-Purity Amorphous Silica Originated from Rice Husks, *Materials Transactions* 48 12 (2007) 3095-3100, DOI: 10.2320/matertrans.MK200715.
397. T. Luangvaranunt, T. Thrujirapapong, S. Danchaivijit, K. Kondoh: Fabrication of Al-Fe Alloys by Repeated Compaction and Extrusion of Mixture of Elemental Powders, *Journal of Solid Mechanics and Materials Engineering* 17 (2007) 931-937, DOI: 10.1299/jmmp.1.931.
398. T. Luangvaranunt, S. Jearwun, K. Kondoh: Removal of adsorbed moisture on iron powders by rice husk ash, *Journal of Metals, Materials and Minerals* 17 1 (2007) 47-52.
399. 近藤勝義: 粉体プロセスによるマグネシウム合金の微細組織制御と高強靱性化, 粉体工学会誌 43 6 (2006) 450-456, DOI:.
400. T. Serikawa, M. Henmi, T. Yamaguchi, H. Oginuma, K. Kondoh: Depositions and Microstructure of Mg-Si Thin Film by Ion Beam Sputtering, *Surface and Coatings Technology* 200 (2006) 4233-4239, DOI: 10.1016/j.surfcoat.2005.01.047.
401. T. Yamaguchi, T. Serikawa, M. Henmi, H. Oginuma, K. Kondoh: Mg<sub>2</sub>Si coating technology on magnesium alloys to improve corrosion and wear resistance, *Materials Transactions* 47 4 (2006) 1026-1030, DOI: 10.2320/matertrans.47.1026.
402. P. Cao, M. Qian, K. Kondoh and D. H. St John: A Comparative Study of Carbon Additives on Grain Refinement of Magnesium Alloys, *International Foundry Research* 58 4 (2006) 18-22.
403. 金子貴太郎, 塩崎修司, 護法良憲, 秋田亨, 近藤勝義, 荻沼秀樹: 高強靱性マグネシウム合金の環境軽負荷型製造技術の開発, 塑性と加工 47 551 (2006) 49-52, DOI: 10.9773/sosei.47.1187.
404. 金子貴太郎, 塩崎修司, 近藤勝義, 荻沼秀樹, 秋田亨: 高強靱性マグネシウム合金の環境軽負荷型製造技術の開発, まてりあ 45 1 (2006) 54-56, DOI: 10.2320/materia.45.54.
405. K. Kondoh, H. Oginuma, J. Umeda and T. Ueda: Innovative Reuse of Agricultural Wastes as Industrial Raw Materials to Form Magnesium Composites, *Materials Transactions*, 46 12 (2005) 2586-2591, DOI: 10.2320/matertrans.46.2586.
406. K. Kondoh, T. Yamaguchi, T. Serikawa, and H. Oginuma: Surface Modification of Magnesium Alloy by Mg<sub>2</sub>Si Coating Technology, *JSME International Journal A* 48 4 (2005) 264-268.
407. K. Kondoh, R. Tsuzuki, W. Du and S. Kamado: Materials and Processing Designs for High-Performance Magnesium Alloys, *Materials Science Forum* 475-479 (2005) 453-456.
408. 芹川正, 逸見百子, 山口貴嗣, 荻沼秀樹, 近藤勝義: イオンビームスパッタによる Mg-Si 薄膜形成, 日本金属学会誌, 69 1(2005) 31-35.



409. M. Sumida, K. Kondoh: In-situ synthesis of Ti matrix composite reinforced with dispersed  $Ti_5Si_3$  particles via spark plasma sintering, *Materials Transactions* 46 10 (2005) 2135-2141.
410. 山口貴嗣, 近藤勝義, 芹川正, 逸見百子, 荻沼秀樹:  $Mg_2Si$  焼結体を用いたマグネシウム合金への Mg-Si 成膜プロセスと皮膜特性, *粉末及び粉末冶金* 52 4 (2005) 276-281.
411. 荻沼秀樹, 近藤勝義, 住田雅樹, 湯浅栄二:  $Mg_2Si$  粒子添加によるマグネシウム基複合材料の作製およびその機械的特性, *粉体および粉末冶金* 52 4 (2005) 282-286.
412. 荻沼秀樹, 近藤勝義, 山口貴嗣, 湯浅栄二: 放電プラズマ焼結法によるMg-Si 金属間化合物の作製, *粉体および粉末冶金* 52 2 (2005) 79-83.
413. R. Tsuzuki, K. Kondoh, M. Ishihara, E. Yuasa: Thermal behavior of AZ31 and Si in solid state synthesis of  $Mg_2Si$ , *粉体および粉末冶金*, 51 (2005) 736-740.
414. 近藤勝義: 反復式塑性加工による高機能化材料技術, *塑性と加工* 45 519 (2004) 10-14.
415. 近藤勝義: マグネシウム合金の高機能化材料技術に関する実用化研究, *軽金属*, 54 5 (2004) 187-191.
416. 近藤勝義, 都筑律子, 杜文博, 鎌土重晴: 反復式塑性加工と固相合成法を利用したマグネシウム合金の高機能化リサイクル, *まてりあ*, 43 4 (2004) 275-280.
417. K. Kondoh, R. Tsuzuki, W. Du and T. Aizawa: High Performance Magnesium Composite Alloy by Employing Wasted High Purity  $SiO_2$  Ingot, *Transactions of the Materials Research Society of Japan* 29 5 (2004), 1961-1964.
418. K. Kondoh, R. Tsuzuki, W. Du and S. Kamado: Materials and Processing Designs for Magnesium Alloys-Grain Refining by Repeated Plastic Working and Solid-State Synthesis of  $Mg_2Si$  (Review), *Advances in Technology of Materials and Materials Processing Journal (ATM)* 6 2 (2004) 328-335.
419. T. Serikawa, M. Henmi, K. Kondoh: Microstructure and Mg concentration of Mg-Si thin film deposited by Ion beam sputtering on glass substrate, *Journal of Vacuum Science and Technology A* 22 (2004) 1971-1974.
420. K. Kondoh and T. Luangvaranunt: New Process to Fabricate Magnesium Composites Using  $SiO_2$  Glass Scraps, *Materials Transactions* 44 12 (2003) 2468-2474.
421. K. Kondoh and T. Aizawa: Environmentally Benign Fabricating Process of Magnesium Alloy by Cyclical Plastic Working in Solid-State, *Materials Transactions* 44 7 (2003) 1276-1283.
422. K. Kondoh, H. Oginuma, A. Kimura, S. Matsukawa, and T. Aizawa: In-situ Synthesis of  $Mg_2Si$  Intermetallics via Powder Metallurgy Process, *Materials Transactions* 44 5 (2003) 981-985.
423. K. Kondoh, H. Oginuma, R. Tsuzuki and T. Aizawa: Magnesium Matrix Composite with Solid-state Synthesized  $Mg_2Si$  Dispersoids, *Materials Transactions* 44 4 (2003) 611-618.
424. K. Kondoh, H. Oginuma, and T. Aizawa: Tribological Properties of Magnesium Composite Alloy with In-situ Synthesized  $Mg_2Si$  Dispersoids, *Materials Transactions* 44 4 (2003) 524-530.
425. K. Kondoh, T. Luangvaranunt and T. Aizawa: Solid-State Recycle Processing for Magnesium Alloy Waste via Direct Hot Forging, *Materials Transactions*, 43 3 (2002) 322-325.
426. T. Aizawa, T. Luangvaranunt, K. Kondoh: Solid State Recycling of Recyclable Aluminum Wastes with In-Process Microstructure Control, *Materials Transactions* 43 3 (2002) 315-321.
427. T. Luangvaranunt, K. Kondoh, T. Aizawa: A Novel Process to Form Al-12 mass% Si Bulk Material from Machined Chips using Bulk Mechanical Alloying, *Materials Transactions* 43 5 (2002) 1178-1182.
428. 近藤勝義, 木村淳, 渡辺龍三: 高温下での粒子表面酸化皮膜の還元反応に及ぼすマグネシウムの影響, アルミニウム合金粉末粒子の焼結現象と粒子表面構造制御に関する研究(第1報), *溶接学会論文集* 9 1 (2001) 167-173.



429. 近藤勝義, 木村淳, 渡辺龍三: マグネシウムによる  $\text{Al}_2\text{O}_3$  皮膜の還元分解現象を利用した焼結挙動, アルミニウム合金粉末粒子の焼結現象と粒子表面構造制御に関する研究(第2報), 溶接学会論文集 9 2 (2001) 377-382.
430. 近藤勝義, 木村淳, 渡辺龍三: 直接窒化反応法を利用した AlN の生成機構と Al-AlN 複合焼結体の特性, アルミニウム合金粉末粒子の焼結現象と粒子表面構造制御に関する研究(第3報), 溶接学会論文集, 9 2 (2001) 383-389.
431. 近藤勝義, 荻沼秀樹, 湯浅栄二, 相澤龍彦, 木村淳:  $\text{Mg}_2\text{Si}$  の固相合成に及ぼす粉体特性および圧粉条件の影響, 粉体および粉末冶金 48 9 (2001) 816-823.
432. 近藤勝義, T. Luangvaranunt, 相澤龍彦: AZ91D マグネシウム合金チップの固相リサイクルプロセス, 軽金属 51 10 (2001) 516-520.
433. K. Kondoh, T. Luangvaranunt and T. Aizawa: Morphology-Free Processing of Magnesium Alloys, Materials Transaction, 42 7 (2001) 1254-1257.
434. K. Kondoh, H. Oginuma, E. Yuasa, and T. Aizawa: Solid-State Synthesis of  $\text{Mg}_2\text{Si}$  from Mg-Si Mixture Powder, Materials Transactions 42 7 (2001) 1293-1300.
435. K. Kondoh, A. Kimura, and R. Watanabe: Cavitation Toughness of In-situ Nitrided Al-AlN Composite Sintered Material, Powder Metallurgy, The Institute of Materials 44 2 (2001) 157-160.
436. K. Kondoh, A. Kimura, R. Watanabe: Effect of Mg on Sintering Phenomenon of Aluminum Alloy Powder Particle, Powder Metallurgy, The Institute of Materials 44 2 (2001) 161-164.
437. K. Kondoh, A. Kimura, R. Watanabe: Analysis of Tin Behavior on Surface of Rapidly Solidified Aluminum Alloy Powder Particles during Heating, Powder Metallurgy, The Institute of Materials 44 3 (2001) 253-258.
438. T. Aizawa, K. Kondoh: Nano-structured materials via bulk mechanical alloying, Scripta materialia 44 (2001) 1751-1755.
439. T. Aizawa, T. Luangvaranunt, K. Kondoh: Solid State Recycling from Green Wastes to Aluminum Alloys with High Material Efficiency, J. Japan Inst. Metals 65 7 (2001) 581-588.
440. Kimura, K. Kondoh, M. Shibata, R. Watanabe: Breakaway Behavior of Surface Oxide film on Aluminum-Silicon-Magnesium Alloy Powder Particles at High Temperature in a Vacuum, Materials Transactions 42 (2001) 1373-1379.
441. T. Luagnvaranaunt, P. Visuttipitkul, K. Kondoh, H. Kuwahara, T. Aizawa: Gas nitriding of magnesium-titanium alloys fabricated by bulk mechanical alloying, Materials Transactions 42 (2001) 1312-1316.
442. 近藤勝義, 木村淳, 渡辺龍三: アルミニウム合金粉末の焼結現象に及ぼすマグネシウムの影響, 粉体および粉末冶金 47 1 (2000) 36-41.
443. 近藤勝義, 木村淳, 渡辺龍三: 急冷凝固アルミニウム合金粉末の直接窒化反応に及ぼす粉末中の錫の影響, 粉体および粉末冶金 47 1 (2000) 42-46.
444. 近藤勝義, 渡辺龍三, 橋本等: 急冷凝固アルミニウム合金粉末の圧密化挙動に及ぼす粒子径の影響, 粉体および粉末冶金 47 8 (2000) 853-859.
445. 近藤勝義, 渡辺龍三: AI基焼結複合材料の耐キャビテーション性能に及ぼす AlN 分散の影響, 粉体および粉末冶金 47 8 (2000) 860-865.
446. 近藤勝義, 木村淳, 武田義信, 渡辺龍三: 高温下での Al-Si-Mg-Sn 合金粉末表面におけるマグネシウムおよび錫の挙動とそれらの直接窒化反応に及ぼす影響, 日本国金属学会誌 64 11 (2000) 1106-1112.
447. 近藤勝義, 瀧川貴稔, 渡辺龍三: 温間成形における鉄系粉末の圧密化挙動に及ぼす潤滑剤の影響, 粉体および粉末冶金 47 9 (2000) 941-945.
448. K. Kondoh, Y. Takeda: Effects of Granulating Conditions on Characteristics of Wet Granulated Aluminum Alloy



- Powder, Powder Metallurgy2000, The Institute of Materials43 1 (2000) 63-68.
449. K. Kondoh, Y. Takeda: Tribological Property of In-Situ Directly Nitrided and Sintered Al-AlN Composite, Powder Metallurgy 2000, The Institute of Materials43 1 (2000) 69-75.
450. K. Kondoh and Y. Takeda: Effects of Content and Particle Size of Si crystal on Damping Property of Powder Forged Al-Si Alloy, Powder Metallurgy 2000, The Institute of Materials43 3 (2000) 275-280.
451. K. Kondoh, R. Watanabe, H. Hashimoto: Analysis of Compaction Behavior of Wet Granulated Aluminum Alloy Powder, Powder Metallurgy2000, The Institute of Materials43 4 (2000) 359-363.
452. K. Kondoh, A. Kimura, R. Watanabe: The effect of Sn and Mg on Direct Nitriding Reaction of PM Aluminum Alloy, Powder Metallurgy2000, The Institute of Materials43 5 (2000).
453. K. Kondoh, Y. Takeda: The Effect of Granulating Conditions on the Characteristics of a Granulated Aluminum Alloy, Aluminum Transactions 2 2 (2000) 345-352.
454. 木村淳, 近藤勝義, 柴田雅裕, 渡辺龍三: 高温真空下における Al-Si-Mg 合金粉末表面酸化膜の破壊挙動, 日本金属学会誌 64 (2000) 227-233.
455. 近藤勝義, 橋倉学, 武田義信: Al-Si 系粉末合金の減衰特性に及ぼす Si 含有量と粒子径の影響, 粉体および粉末冶金, 46 7 (1999) 715-721.
456. 近藤勝義, 武田義信: 湿式造粒処理を施したアルミニウム合金粉末の粉体特性に及ぼすバインダーの影響, 粉体および粉末冶金 46 7 (1999) 772-779.
457. 近藤勝義, 武田義信, 渡辺龍三, 橋本等: 湿式造粒処理を施したアルミニウム合金粉末の圧密化挙動解析, 粉体および粉末冶金 46 7 (1999) 780-786.
458. 近藤勝義, 木村淳, 武田義信: In-Situ 窒化反応法により合成した AlN 皮膜の SR-XPS による生成反応解析と組織構造解析, 粉体および粉末冶金 46 8 (1999) 801-810.
459. 近藤勝義, 木村淳, 武田義信, 渡辺龍三: In-Situ 窒化反応法を利用した Al-AlN 複合焼結材料の機械的特性および摩擦摺動特性, 粉体および粉末冶金 46 10 (1999) 1044-1052.
460. 近藤勝義, 木村淳, 渡辺龍三: 加熱過程におけるアルミニウム合金粉末表面での錫の挙動解析, 粉体および粉末冶金, 4611 (1999) 1141-1147.
461. K. Kondoh, A. Kimura, Y. Takeda: Wear Properties of In-Situ Reacted Al-AlN Composite Sintered Material and Applications for Automatic Transmission Parts, Society of Automotive Engineering Technical Paper, 99011048 (1999) 3-8.
462. 木村淳, 近藤勝義, 武田義信, 柴田雅裕: アルミニウム合金粉末表面でのマグネシウムの挙動, 日本金属学会誌 63 (1999) 1191-1196.
463. 木村淳, 近藤勝義, 柴田雅裕: 放射光光電子分光法によるアルミニウム合金粉末のナノ表面化学反応の解析, 光量子デバイス研究会資料 (1999) 29-32.
464. K. Kondoh, T. Ohji: Optimum Heat Input Control in Arc Welding on Steel and Aluminum Pipe, Materials Transactions 39 3 (1998) 413-419.
465. K. Kondoh, T. Ohji: Optimizing Algorithm Based on Convex Programming Method for Optimum Heat Input Control in Arc Welding, Materials Transactions 39 3 (1998) 420-426.
466. K. Kondoh, T. Ohji: Algorithm Based on Non-Linear Programming Method for Optimum Heat Input Control in Arc Welding, Science and Technology of Welding and Joining, The Institute of Materials3 3 (1998) 127-134.
467. K. Kondoh, T. Ohji: In-Process Heat Input Control in Arc Welding, Science and Technology of Welding and Joining, The Institute of Materials36 (1998) 295-303.



468. 木村淳, 近藤勝義, 片山誠, 蟹江智彦, 柴田雅裕: 放射光を用いたXPSによる表面化学反応の解析, X線分析の進歩 29 (1998) 13-21.
469. 近藤勝義, 上田恵司, 黄地尚義: パイプの円周溶接における最適入熱制御に関する研究, 溶接学会論文集 15-3 (1997) 494-501.
470. K. Kondoh, Y. Takano, Y. Takeda: Friction and Wear Properties of Integrated Composite Copper-Based Friction Materials, Society of Automotive Engineering Technical Paper970979 (1997) 11-17.
471. Kimura, M. Shibata, K. Kondoh, Y. Takeda, M. Katayama, T. Kanie, H. Takada: Reduction mechanism of surface oxide in aluminum alloy powders containing magnesium studied by x-ray photoelectron spectroscopy using synchrotron radiation, Applied Physics Letter 70 (1997) 3615-3617.
472. K. Kondoh, K. Kosuge, Y. Takeda: Lubrication Pump Made of Rapidly Solidified Aluminum Alloy for High Performance Engine, Society of Automotive Engineering Technical Paper 960281 (1996) 9-15.
473. K. Kondoh, T. Hayashi, Y. Takeda: Wear Property of Powder Forged Aluminum Alloy, Advanced Powder Metallurgy 6 (1993) 178-181.
474. K. Kondoh, T. Kaji, T. Hayashi, Y. Takeda: Al-Fe-X Alloys Consolidated by Powder Forging without Lateral Flow, Advanced Powder Metallurgy 2 (1992) 339-353.
475. 近藤勝義, 黄地尚義, 西口公之: 最適入熱条件推定のアルゴリズム, 溶接学会論文集 8-1 (1990) 48-53.
476. 近藤勝義, 黄地尚義, 西口公之: アーク溶接の最適入熱制御, 溶接学会論文集 8-2 (1990) 167-173.