

国内共同研究員との共著査読付学術論文(2020年度)

- (1) "Direct Measurement of Shot Velocity and Numerical Analysis of Residual Stress from Pneumatic Shot Peening"
Surf. Coat. Technol., 22, 22 (2020), 1-12.
T. Ohta, S. Tsutsumi and N. Ma
- (2) "Mechanism of Grain Structure Development for Pure Cu and Cu-30Zn with Low Stacking Fault Energy during FSW"
Sci. Technol. Weld. Joining, 25, 8 (2020), 669-678.
T. Nagira, X. C. Liu, K. Ushioda and H. Fujii
- (3) "Direct Observation of Potential Phase at Joining Interface between p-MgO and n-MgFe₂O₄"
Sci. Rep., 10 (2020), 17055.
C. Sakaguchi, Y. Nara, T. Hashishin, H. Abe, M. Matsuda, S. Tsurekawa and H. Kubota
- (4) "Numerical Simulation of Droplet Transfer with TiO₂ Flux Column During Flux Cored Arc Welding by 3D Smoothed Particle Hydrodynamics Method"
Q. J. Jpn. Weld. Soc., 38, 2 (2020), 84s-88s.
R. Ueno, H. Komen, M. Shigeta and M. Tanaka
- (5) "REM添加ワイヤを用いたガスマタルアーク溶接現象に与えるシールドガス組成の影響"
溶接学会論文集, 38, 4 (2020), 438-447.
田中 学, Titinan Methong, 古免 久弥, 茂田 正哉, 片岡 時彦, 松下 宗生, 上月 渉平
- (6) "重ねすみ肉アーク溶接におけるガスシールド性に関する実験的検討"
溶接学会論文集, 39, 1 (2021), 51-63.
田中 学, 山田 哲生, 茂田 正哉, 古免 久弥, 深堀 貢, 斎藤 直子
- (7) "Electrode Contamination Caused by Metal Vapour Transport during Tungsten Inert Gas Welding"
Sci. Technol. Weld. Joining, 26, 3 (2021), 258-263.
K. Tanaka, M. Shigeta, H. Komen and M. Tanaka
- (8) "Numerical Investigation of Heat Transfer During Submerged Arc Welding Phenomena by Coupled DEM-ISPH Simulation"
Int. J. Heat Mass Transf., 171 (2021), 121062(15 pages).
H. Komen, M. Shigeta, M. Tanaka, Y. Abe, T. Fujimoto, M. Nakatani and A. B. Murphy
- (9) "Isolation and Characterization of Facultative-Anaerobic Antimonate-Reducing Bacteria"
Microorganisms, 8, 9 (2020), 1435.
Z. Yang, H. Hosokawa, T. Sadakane, M. Kuroda, D. Inoue, H. Nishikawa and M. Ike
- (10) "風力を受ける低層鋼構造建築柱梁溶接接合部の疲労損傷評価"
鋼構造年次論文報告集, 28 (2020), 956-967.
佐藤 公亮, 松本 拓, 堤 成一郎, 植松 康

- (11) "Formation of Cemented Tungsten Carbide Layer with Compositional Gradient Processed by Directed Energy Deposition"
Mater. Sci. Forum, 1016 (2021), 1676-1681.
Y. Yamashita, Y. Funada, T. Kunimine, Y. Sato and M. Tsukamoto
- (12) "Pure Copper Rod Formation by Multibeam Laser Metal Deposition Method with Blue Diode Lasers"
J. Laser Appl., 33, 1 (2020), 012013.
K. Ono, Y. Sato, R. Higashino, Y. Funada, N. Abe and M. Tsukamoto
- (13) "Pure Copper Layer Formation on Pure Copper Substrate Using Multi-Beam Laser Cladding System with Blue Diode Lasers"
Appl. Phys. A, 26 (2020), 418.
T. Hara, Y. Sato, R. Higashino, Y. Funada, T. Ohkubo, K. Morimoto, N. Abe and M. Tsukamoto
- (14) "Elucidation of Fatigue Characteristics and Fracture Mechanism of Friction Stir Spot-Welded Tension-Shear Joint Steels"
Fatigue Fract. Eng. Mater. Struct., 44, 1 (2021), 74-84.
T. Selvaraj, S. Ishida, J. Arakawa, H. Akebono, A. Sugeta, Y. Aoki and H. Fujii
- (15) "繰り返し載荷における塑性誘起損傷による強度と韌性の低下を考慮した結合力埋込型弾塑性構成則"
鉄と鋼, 106, 9 (2020), 662-671.
新宅 勇一, 副島 克哉, 堤 成一郎, 寺田 賢二郎
- (16) "A Gurson Model Improved by Cohesive Traction-Separation Law to Realize Transition from Ductile to Brittle Fracture"
Q. J. Jpn. Weld. Soc., 38, 2 (2020), 126s-130s.
T. Kagimura, Y. Shintaku, S. Tsutsumi and K. Terada
- (17) "Characterization of Shock Wave Damages in Explosion Welded Mo/Cu Clads"
Metals, 11, 3 (2021), 501.
P. K. Parchuri, S. Kotegawa, K. Ito, H. Yamamoto, A. Mori, S. Tanaka and K. Hokamoto
- (18) "Growth Behaviour of Creep Cracks in the Simulated Heat-Affected Zone of Modified 9Cr-1Mo Steel"
Mater. High Temp., 37, 4 (2020), 268-277.
S. Nishikawa, T. Hasegawa and M. Takahashi
- (19) "Relationship between the Microstructure and Local Corrosion Properties of Weld Metal in Austenitic Stainless Steels"
Corrosion Sci., 175 (2020), 108867.
S. Tokita, K. Kadoi, S. Aoki and H. Inoue
- (20) "Effect of Ball Collision Direction on a Wet Mechanochemical Reaction"
Sci. Rep., 11 (2021), 210.
T. Kozawa, K. Fukuyama, K. Kushimoto, S. Ishihara, J. Kano, A. Kondo and M. Naito

- (21) "遊星ボールミルによる液中粉碎結果とDEMシミュレーションにより算出した衝突エネルギー分布との関係"
粉体工学会誌, 57 (2020), 176-183.
近藤 光, 石原 真吾, 久志本 築, 小澤 隆弘, 加納 純也, 内藤 牧男
- (22) "A New Process for Creating a Solid-Phase Sintered Body Using a Unique Densification Process between Powders"
Int. J. Ceramic Eng. Sci., 2021;00: (2021), 1-7.
T. Ishikawa and M. Naito
- (23) "Effect of SiC Crystal Orientation on Ti₃SiC₂formation between SiC and Al/Ti Bi-Layered Film"
Ceram. Int., 47 (2021), 7753-7763.
Y. Takahashi, M. Tsutaoka and M. Maeda
- (24) "Measurement of Shot Velocity Using Particle Image Velocimetry and Numerical Analysis of Residual Stress at Two Shot Peening Conditions,"
Mech. Eng. J., 7, 4 (2020), 1-9.
T. Ohta and N. Ma
- (25) "Proposal of Vase Shaped Pumping Cavity for Solar-Pumped Laser"
J. Adv. Comput. Intell. and Intell. Inform., 25, 2 (2021), 242-247.
H. Koshiji, T. Ohkubo, T. Shimoyama, T. Nagai, E. Matsunaga, Y. Sato and T.-H. Dinh
- (26) "Numerical Simulation of Laser-Induced Bubble and Metal-Free Water Cannon"
J. Adv. Comput. Intell. and Intell. Inform., 25, 1 (2021), 50-55.
T. Ohkubo, E. Matsunaga and Y. Sato
- (27) "不均一温度場における高温下での熱伝導率測定"
熱物性, 34, 4 (2020), 137-146.
大村 高弘, 石井 健登, 田坂 太一, 近藤 光, 内藤 牧男
- (28) "アルミニナ粒子断熱材の熱的および機械的特性におよぼす温度履歴の影響"
粉体工学会誌, 57 (2020), 612-618.
田坂 太一, 大村 高弘, 萩原 伸治, 近藤 光, 内藤 牧男
- (29) "縦型双ロールキャスティングを用いたプリカーサ法によるポーラスアルミニウムの製作"
鋳造工学, 92, 11 (2020), 577-582.
鈴木 良祐, 増渕 匠, 西田 進一, 荘司 郁夫, 半谷 穎彦, 藤井 英俊, 松原 雅昭
- (30) "Nondestructive Observation of Pores during Press Forming of Aluminum Foam by X-ray Radiography"
Mater. Charact., 170 (2020)
Y. Hangai, D. Kawato, M. Ando, M. Ohashi, Y. Morisada, T. Ogura, H. Fujii, R. Nagahiro, K. Amagai, T. Utsunomiya and N. Yoshikawa
- (31) "摩擦攪拌接合を利用したプリカーサ作製とその発泡の連続プロセスの開発"
軽金属, 71, 2 (2021), 121-126.
諸橋 寛海, 半谷 穎彦, 青木 祥宏, 藤井 英俊, 吉川 暢宏

- (32) "SS400鋼材の動的力学特性に及ぼす応力三軸度の影響に関する基礎的研究"
土木学会論文集A2, 76, 2 (2021), I_379-I_387.
濱田 匠季, 別府 万寿博, 堤 成一郎, 市野 宏嘉
- (33) "Evaluation of Hydrogen-induced Cracking Behavior in Duplex Stainless Steel by Numerical Simulationof Stress and Diffusible Hydrogen Distribution at the Microstructural Scale"
ISIJ Int., 61, 4 (2020)
G. Ogita, K. Matsumoto, M. Mochizuki, Y. Mikami and K. Ito
- (34) "Numerical Simulation on Effect of Microstructure on Hydrogen-induced Cracking Behavior in Duplex Stainless Steel Weld Metal"
ISIJ Int., 61, 4 (2020)
G. Ogita, K. Matsumoto, M. Mochizuki, Y. Mikami and K. Ito
- (35) "Chemical and Physical Pressure Effects in the A-site Spinel Antiferromagnetes CoM₂O₄(M=Al, Co, Rh)"
Mater. Res. Express, 7 (2020), 056105(13pages).
T. Naka, J. Valenta, J. Kastil, M. Misek, J. Prchal, V. Sechovsky, H. Abe, T. Nakane, M. Nakayama and T. Uchikoshi
- (36) "新型コロナウイルスCOVID-19のエアロゾル感染の可能性—微粒子工学の立場からの考察"
粉体工学会誌, 57 (2020), 526-529.
向阪 保雄, 野村 俊之, 内藤 牧男
- (37) "親水性ナノ粒子を用いたバイオフィルムの形成抑制"
粉体工学会誌, 57 (2020), 588-592.
田中 智彦, 藤澤 瑛梨, 吉原 章仙, 小西 康裕, 野村 俊之, 近藤 光, 内藤 牧男
- (38) "高P耐候性鋼の摩擦攪拌接合-その接合性,組織の発達および機械的特性-"
鉄と鋼, 106, 12 (2020), 892-901.
川久保 拓海, 柳樂 知也, 潮田 浩作, 藤井 英俊
- (39) "Microstructures and Tensile Properties of Friction Stir Welded 0.2%C-Si-Mn Steel"
Mater. Sci. Eng. A., 799 (2021), 140068.
Z. Wu, T. Nagira, K. Ushioda, G. Miyamoto and H. Fujii
- (40) "In Situ Observation of Solidification Crack Propagation for Type 310S and 316L Stainless Steels during TIG Welding Using Synchrotron X-ray Imaging"
J. Mater. Sci., 56 (2021), 10653-10663.
T. Nagira, D. Yamashita, M. Kamai, H. Liu, Y. Aoki, K. Uesugi, A. Takeuchi and H. Fujii

国際共同研究員との共著査読付学術論文(2020年度)

- (1) "Imaging Spectroscopy for Transient Transport of Chromium Vapor During Helium TIG Welding"
Q. J. Jpn. Weld. Soc., 38, 2 (2020), 21s-24s.
K. Tanaka, M. Shigeta, M. Tanaka and A. B. Murphy
- (2) "Investigation of Transient Metal Vapour Transport Processes in Helium Arc Welding by Imaging Spectroscopy"
J. Phys. D-Appl. Phys., 53, 42 (2020), 425202(8 pages).
K. Tanaka, M. Shigeta, M. Tanaka and A. B. Murphy
- (3) "Modelling and Measurements of Gas Tungsten Arc Welding in Argon-Helium Mixtures with Metal Vapour"
Weld. World (2021), online(17 pages).
J. Xiang, K. Tanaka, F. F. Chen, M. Shigeta, M. Tanaka and A. B. Murphy
- (4) "Numerical Simulation of the Behavior of Hydrogen Source in a Novel Welding Process to Reduce Diffusible Hydrogen"
Materials, 13 (2020), 1619(18pp).
S. Tashiro, N. Mukai, Y. Inoue, A. B. Murphy, T. Suga and M. Tanaka
- (5) "Numerical Prediction of Influence of Gas Species on Gas Convective Pattern of Short Arc Lamp"
Q. J. Jpn. Weld. Soc., 38 (2020), 30-34.
S. Maenaka, S. Tashiro, A. B. Murphy, K. Fujita and M. Tanaka
- (6) "数値シミュレーションによる拡散性水素低減プロセスのシールド性に関する検討"
スマートプロセス学会誌, 9, 4 (2020), 199-207.
迎井 直樹, 田代 真一, A. B. Murphy, 井上 芳英, 菅 哲男, 田中 学
- (7) "Numerical Simulation of Magnetic Blowout Process of Air Arc Plasma in Electrical Contacts"
Q. J. Jpn. Weld. Soc., 38 (2020), 74s-78s.
S. Tashiro, S. Itoda, T. Morichi, A. B. Murphy and M. Tanaka
- (8) "Investigation of the Influence of Buoyancy on Gas Convection of a Horizontal Xenon Short Arc Lamp through 3D Numerical Simulation"
J. Phys. D-Appl. Phys., 53 (2020), 85205(17pp).
S. Maenaka, S. Tashiro, A. B. Murphy, K. Fujita and M. Tanaka
- (9) "ガスの熱力学・輸送特性がショートランプのバルブへの熱負荷に及ぼす影響"
スマートプロセス学会誌, 9, 3 (2020), 148-155.
前中 志郎, 田代 真一, A. B. Murphy, 藤田 和宣, 田中 学
- (10) "Physical Mechanism of Material Flow in Variable Polarity Plasma Arc Keyhole Welding Revealed by in Situ X-ray Imaging"
Phys. Fluids, 33, 1 (2021), 017121-1-10.
B. Xu, S. Chen, S. Tashiro, F. Jiang and M. Tanaka

- (11) "3D Numerical Study of External Axial Magnetic Field-Controlled High-Current GMAW Metal Transfer Behavior"
Materials, 13 (2020), 5792(16pp).
L. Xiao, D. Fan, J. Huang, S. Tashiro and M. Tanaka
- (12) "Effect of Plasma Flow in Plasma MIG Welding Process to the Microstructure Refinement at Heat Affected Zone of As-Welded Carbon Steel"
Mater. Sci. Forum, 1010 (2020), 15-20.
S. Mamat, A. A. M. Afandi, M. B. A. Baker, M. N. Masri, M. Mohamed, M. K. A. A. Razab, T. Yuji, S. Tashiro and M. Tanaka
- (13) "Observation of Arc Behaviour in TIG/MIG Hybrid Welding Process"
IOP Conf. Ser. : Earth Environ. Sci., 596 (2021), 12025(7pp).
R. A. E. Roslan, S. Mamat, P. T. Teo, F. Mohamad, S. Gudur, Y. Toshifumi, S. Tashiro and M. Tanaka
- (14) "Microstructure and Mechanical Properties of Laser Welded Ti-10V-2Fe-3Al (Ti1023) Titanium Alloy"
J. Mater. Res. Technol-JMRT, 9, 4 (2020), 7721-7731.
A. Chamanfara, M.-F. Huang, T. Pasang, M. Tsukamoto and W. Z. Misiolek
- (15) "Microstructure and Hardness Response of Novel 316L Stainless Steel Composite with TiN Addition Fabricated by SLM"
Opt. Laser Technol., 129 (2020), 106238.
D. Tanprayoona, S. Srisawadi, Y. Sato, M. Tsukamoto and T. Suga
- (16) "Spatter Behavior for 316L Stainless Steel Fabricated by Selective Laser Melting in a Vacuum"
Opt. Lasers Eng., 134 (2020), 106209.
Y. Sato, S. Srisawadi, D. Tanprayoon, T. Suga, T. Ohkubo and M. Tsukamoto
- (17) "A Unique CEL Numerical Method on Material Flow in a Molten Pool of Workpiece Vibration Assisted Welding"
Quarterly J. Japan Welding Soc., 38, 2 (2020), 54s-58s.
H. Hamed, K. Ito, Y. Mikami and A. Sharma
- (18) "Metallurgical Characterization of Penetration Shape Change in Workpiece Vibration-Assisted Tandem-Pulsed Gas Metal Arc Welding"
Materials, 13 (2020), 3096.
H. H. Zargari, K. Ito, T. Miwa, P. K. Parchuri, H. Yamamoto and A. Sharma
- (19) "Visualizing the Vibration Effect on the Tandem-Pulsed Gas Metal Arc Welding in the Presence of Surface Tension Active Elements"
Int. J. Heat Mass Transf., 161 (2020), 120310.
H. Hamed, K. Ito, M. Kumar and A. Sharma
- (20) "Predicting Tensile Properties of Friction-Stir-Welded 6063 Aluminum with Experimentally Measured Welding Heat Input"
Acta Metall. Sin., 33, 9 (2020), 1235-1242.
T. Zhao, Y. S. Sato, H. Kokawa and K. Ito

- (21) "Study on Residual Stress by Neutron Diffraction in SM570-TMC Welded by Flux-Cored Wires Containing Different Nickel"
Quarterly J. Japan Welding Soc., 38, 2 (2020), 116s-120s.
H. Oktadinata, W. Winarto, E. S. Siradj, D. Priadi, H. R. Muslih and K. Ito
- (22) "Microstructure and Impact Toughness Relationship for Different Nickel Level of Electrode in Multi-pass FCA Welded SM570-TMC Steel Joint"
Quarterly J. Japan Welding Soc., 38, 2 (2020), 154s-158s.
H. Oktadinata, W. Winarto, E. S. Siradj, D. Priadi, H. R. Muslih and K. Ito
- (23) "Ultrasonic-induced Excess Vacancies in Friction Stir Processing and Exploration of Acoustoplastic Effect"
Scr. Mater., 185 (2020), 117-121.
Y. Hu, H. Liu, H. Fujii, H. Araki, K. Sugita and K. Liu
- (24) "Effect of Ultrasound on Microstructure Evolution of Friction Stir Welded Aluminum Alloys"
J. Manufacturing Processes, 56 (2020), 362-371.
Y. Hu, H. Liu, H. Fujii and K. Ushioda
- (25) "Effect of Process Parameters on Microstructure and Mechanical Properties of Friction Stir Welded CoCrFeNi High Entropy Alloy"
Mater. Sci. Eng. A., 782 (2020)
X. Qin, Y. Xu, Y. Sun, H. Fujii, Z. Zhu and C. H. Shek
- (26) "Influences of Temperature and Sn-addition on Microstructural Evolution of Ag during FSW"
Sci. Technol. Weld. Joining, 25, 3 (2020), 198-207.
T. Nagira, X. C. Liu, K. Ushioda and H. Fujii
- (27) "Effect of Stacking Fault Energy on the Grain Structure Evolution of FCC Metals During Friction Stir Welding"
Acta Metall. Sin., 33 (2020), 1001-1012.
X. Liu, Y. Sun, T. Nagira, K. Ushioda and H. Fujii
- (28) "Effects of Al-Ni Powder Addition on Dissimilar Friction Stir Welding between AA7075-T6 and 304L"
Materialwiss. Werkstofftech., 51 (2020), 1274-1284.
M. R. Muhamad, M. F. Jamaludin, F. Yusof, R. Mahmoodian, Y. Morisada, T. Suga and H. Fujii
- (29) "Quasi-in-situ Investigation into the Microstructure and Texture Evolution of Pure Magnesium during Friction Stir Welding"
J. Magnes. Alloy., 8, 4 (2020), 1071-1083.
M. Zhou, Y. Sun, Y. Morisada, K. Ushioda and H. Fujii
- (30) "Microstructure, Tensile Properties and Deformation Behaviors of Aluminium Metal Matrix Composites Co-Reinforced by Ex-Situ Carbon Nanotubes and In-Situ Alumina Nanoparticles"
Mater. Sci. Eng. A., 795 (2020), 139930.
B. Chen, X. Y. Zhou, B. Zhang, K. Kondoh, J. S. Li and Q. Ma

- (31) "Effect of Metal Powder Characteristics on Structural Defects of Graphene Nanosheets in Metal Composite Powders Dispersed by Ball Milling"
Crystals, 11, 3 (2021), 260.
Q. Yan, B. Chen, X. Zhou, K. Kondoh and J. Li
- (32) "Comparison Study on Microstructure and Mechanical Properties of Ti-6Al-4V Alloys Fabricated by Powder-Based Selective-Laser-Melting and Sintering Methods"
Mater. Charact., 160 (2020), 110358.
Q. Yan, B. Chen, N. Kang, X. Lin, S. Lv, K. Kondoh, S. Li and J. S. Li
- (33) "Tensile Property Enhancement by Oxygen Solutes in Selectively Laser Melted Titanium Materials Fabricated from Pre-Mixed Pure Ti and TiO₂ Powder"
Mater. Sci. Eng. A., 795 (2020), 139983.
K. Kondoh, E. Ichikawa, A. Issariyapat, K. Shitara, J. Umeda, B. Chen and S. Li
- (34) "Designable Interfacial Structure and Its Influence on Interface Reaction and Performance of MWCNTs Reinforced Aluminum Matrix Composites"
Mater. Sci. Eng. A., 793 (2020), 139783.
X. Zhang, X. Hou, D. Pan, B. Pan, L. Liu, B. Chen, K. Kondoh and S. Li
- (35) "TiB Nano-Whiskers Reinforced Titanium Matrix Composites with Novel Nano-Reticulated Microstructure and High Performance via Composite Powder by Selective Laser Melting"
Mater. Sci. Eng. A., 795 (2020), 140137.
D. Pan, X. Zhang, X. Hou, Y. Han, M. Chu, B. Chen, L. Jia, K. Kondoh and S. Li
- (36) "Obvious Yielding Phenomenon and Selective Fracture Behavior in Powder Metallurgy (TiCp+TiBw)/Ti Composites"
J. Mater. Res. Technol-JMRT, 9, 5 (2020), 10184-10188.
L. Jia, C. Zhang, K. Kondoh, R. Niu, B. Chen, S. Li and Z. Lu
- (37) "Quantitative Strengthening Evaluation of Powder Metallurgy Ti-Zr Binary Alloys with High Strength and Ductility"
J. Alloy. Compd., 852 (2020), 156954.
K. Kondoh, M. Fukuo, S. Kariya, K. Shitara, S. Li, A. Alhazaa and J. Umeda
- (38) "Balanced Development in Strength-Ductility of Ultrahigh-Strength Aluminum Matrix Composites by Controlled Oxidation Method"
Mater. Sci. Eng. A., 804 (2021), 140781.
X. Zhang, S. Li, L. Liu, D. Pan, L. Gao, X. Ji and K. Kondoh
- (39) "Understanding Corrosion Behavior of Magnesium Surface by X-Ray Irradiation for Improved Surface Design and Applications"
JOM, 72, 12 (2020), 4657-4664.
K. Kondoh, K. Funatsu, M. Takahashi, S. Li, F. Akamatsu and J. Umeda
- (40) "An In-Situ Study on Deformation and Cracking Initiation in Oxygen-Doped Commercial Purity Titanium"
Mech. Mater., 148 (2020), 103519.
J. Shen, B. Chen, J. Umeda, J. Zhang, Y. Li and K. Kondoh

- (41) "The Rate-Dependent Mechanical Behavior of CNT-reinforced Aluminum Matrix Composites under Tensile Loading"
Mater. Sci. Eng. A., 808 (2021), 140893.
M. Wang, Y. Li, B. Chen, D. Shi, J. Umeda, K. Kondoh and J. Shen
- (42) "Reduction Mechanism of Thermally Stable CaO during Heating Mg-Al Composites with CaO Particles"
J. Sci. Eng. Res., 7 (2020), 85-93.
J. Umeda, J. Fujita, S. Li and K. Kondoh
- (43) "Comparison Study on Mechanical Properties of Powder Metallurgy Titanium Materials with Nitrogen Solutes and TiN Dispersoids"
J. Alloy. Compd, 846 (2020), 156455.
J. Umeda, H. Ishizaka, S. Li, A. Alhzaad and K. Kondoh
- (44) "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.
市川 紘理, 設樂 一希, 梅田 純子, Shufeng LI, Biao CHEN, 近藤 勝義
- (45) "Acicular Microstructure Formation and Strengthening Behavior of Ti-4%Fe Alloys by Zr Addition"
J. Alloy. Compd, 858 (2020), 158292.
T. Teramae, T. Tanaka, M. Fukuo, K. Shitara, J. Umeda, S. Li, A. Alhazaad and K. Kondoh
- (46) "Influences of Cooling Conditions on the Liquation Cracking in Laser Metal Deposition of a Directionally Solidified Superalloy"
Metals, 10, 4 (2020), 466.
B. Chang, S. Yang, G. Liu, W. Li, D. Du and N. Ma
- (47) "Study on Fracture Toughness of 617 Ni-based Alloy Welded Joint under Different Elevated Temperatures"
J. Mater. Res., 35, 14 (2020), 1-13.
Q. Gao, C. Shao, H. Cui, N. Ma and F. Lu
- (48) "Effect of Solidified Grain Boundary on Interfacial Creep Failure Behavior for Steel/nickel Dissimilar Metal Welded Joint"
Mater. Sci. Eng. A. (2020), 1-9.
Y. Wang, C. Shao, M. Fan, N. Ma and F. Lu
- (49) "MTT and LTT Weld Metal for Reduction of Stress Concentration and Tensile Residual Stress of Cruciform Welded Joint"
ISOPE2020, 30, 30 (2020), 3154-3156.
Z. Feng, N. Ma and F. Lu
- (50) "Investigation of Residual Stress in Multi-Pass T-welded Joint Using Low Transformation Temperature Welding Wire"
Materials, 14, 2 (2021), 1-15.
Z. Feng, N. Ma, S. Tsutsumi and F. Lu

- (51) "Influence of Shielding Gas on Microstructure and Mechanical Properties of Laser Welded-brazed Al/steel Lapped Joint"
J. Manufacturing Processes, 54 (2020), 347-358.
H. Xia, C. Tan, R. Tian, S. Meng, L. Li and N. Ma
- (52) "Toward Large-Scale Simulation for Residual Stress and Distortion in Wire and Arc Additive Manufacturing"
Addit. Manuf., 34 (2020), 101248(10Pages).
H. Huang, N. Ma, J. Chen, Z. Feng and H. Murakawa
- (53) "Progressive Collapse Analysis of Stiffened Panel Structure with Consideration of Actual Welding Distortion and Residual Stresses"
ISOPE2020, 30, 30 (2020), 2962-2968.
H. Huang, H. Murakawa, N. Ma and Z. Feng
- (54) "Microstructural Evolution and Shear Strength of Interface Layer between Steel and Aluminum Materials under Thermal and Mechanical Coupled Loading"
J. Manufacturing Processes, 56 (2020), 981-989.
J. Lin, Y. Lei, N. Ma and F. Guo
- (55) "Investigation of Creep-Fatigue Crack Growth of G115 Steel Using a Novel Damage Mode"
Int. J. Mech. Sci., 183, 10 (2020), 105827.
Z. Tang, H. Jing, L. Xu, D. Chi, L. Zhao, Y. Han, H. Li and N. Ma
- (56) "Influence of Ultrasonic Vibrations on the Microstructure and Mechanical Properties of Al/Ti Friction Stir Lap Welds"
J. Mater. Process. Technol., 282 (2020), 1-8.
M. Yu, H. Zhao, F. Xu, T. Chen, L. Zhou, X. Song and N. Ma
- (57) "厚板アルミFSWによる熱ひずみと残留応力の数値解析と実験測定"
軽金属溶接, 59, 2 (2021), 1-10.
于 民潤, 麻 寧緒, 橋崎 邦男, 堤 成一郎, 藤井 英俊
- (58) "Multiscale Modelling of Microstructure, Micro-segregation and Mechanical Properties of Al-Cu Alloy in Wire and Arc Additive Manufacturing"
Addit. Manuf., 36 (2020), 101735.
R. Geng, J. Du, Z. Wei and N. Ma
- (59) "Efficient Analysis of Welding Thermal Conduction Using the Newton–Raphson Method, Implicit Method, and Their Combination"
Int. J. Adv. Manuf. Technol., 111 (2020), 1929-1940.
Z. Feng, N. Ma, W. Li, K. Narasaki and F. Lu
- (60) "Development of a Material Model for Predicting Extreme Deformation and Grain Refinement during Cold Spraying"
Acta Mater., 199 (2020), 326-339.
Q. Wang, N. Ma, M. Takahashi, X. Luo and C. Li

- (61) "Transformation Temperatures, Mechanical Properties and Residual Stress of Two Low-Transformation-Temperature Weld Metals"
Sci. Technol. Weld. Joining (2021), 1-10.
Z. Feng, X. Di, S. Wu and N. Ma
- (62) "Characterization of Microstructures and Hot-Compressive Behavior of GH4169 Superalloy by Kinetics Analysis and Simulation"
J. Mater. Process. Technol., 288 (2020), 116879.
P. Geng, G. Qin, J. Zhou, T. Li and N. Ma
- (63) "A Design Method of Tensile Triangles and Low Transformation Temperature Weld Metal for Reduction of Stress Concentration and Residual Stress of Welded Joints"
Mar. Struct., 72 (2020), 102759.
Z. Feng, T. L. Aung, C. Shao, F. Lu, S. Tsutsumi and N. Ma
- (64) "Impacts of Laser Cladding Residual Stress and Material Properties of Functionally Graded Layers on Titanium Alloy Sheet"
Addit. Manuf., 35 (2020), 1-10.
Q. Wang, J. Shi, L. Zhang, S. Tsutsumi, J. Feng and N. Ma
- (65) "Measurement and Analysis of Cold Spray Residual Stress Using Arbitrary Lagrangian-Eulerian Method"
Addit. Manuf., 35 (2020), 101296.
Q. Wang, X. Luo, S. Tsutsumi, T. Sasaki, C. Li and N. Ma
- (66) "Microstructural Characterisation and Corrosion Behaviour of Aluminium Alloy/steel Hybrid Structure Produced by Friction Welding"
J. Manufacturing Processes, 61 (2021), 349-356.
H. Ma, G. Qin, P. Geng, S. Wang and D. Zhang
- (67) "Linear Friction Welding of Dissimilar Ni-based Superalloys: Microstructure Evolution and Thermo-Mechanical Interaction"
J. Mater. Res. Technol-JMRT, 11 (2021), 633-649.
P. Geng, G. Qin, H. Ma, J. Zhou and N. Ma
- (68) "Evolution Behavior of Liquid Film in the Heat-Affected Zone of Laser Cladding Non-Weldable Nickel-Based Superalloy"
J. Alloy. Compd, 863 (2021), 158463.
Z. Zhang, Y. Zhao, J. Shan, A. Wu, Y. S. Sato, S. Tokita, K. Kadoi, H. Inoue, H. Gu and X. Tang
- (69) "Smart Mechanical Powder Processing for Producing Carbon Nanotube Reinforced Aluminum Matrix Composites"
KONA Powder Part. J., 38 (2021), 1-11.
B. Sadeghi, G. Fan, Z. Tan, Z. Li, A. Kondo and M. Naito

- (70) "A Novel Multi-Step Strategy of Single Point Incremental Forming for High Wall Angle Shape"
J. Manufacturing Processes, 56 (2020), 697-708.
S. Wu, Y. Ma, L. Gao, Y. Zhao, S. Rashed and N. Ma
- (71) "Impact of Stack Orientation on Self-Piercing Riveted and Friction Self-Piercing Riveted Aluminum Alloy and Magnesium Alloy Joints"
Automot. Innov., 3 (2020), 242-249.
Y. Ma, S. Niu, H. Shan, Y. Li and N. Ma
- (72) "A Comparative Study of Friction Self-Piercing Riveting (F-SPR) and Self-Piercing Riveting (SPR) of Aluminum Alloy AA5182-O"
Engineering (2020)
Y. Ma, H. Shan, S. Niu, Y. Li, Z. Lin and N. Ma