

国内共同研究員との共著査読付学術論文(2023年度)

- (1) "Identification of the Dominant Factor for Droplet Ejection from the Tungsten Electrode during AC Tungsten Inert Gas Welding by Visualisation of Electrode Phenomena"
Materials, 16, 7 (2023), 2899.
K. Iida, H. Komen, M. Shigeta and M. Tanaka
- (2) "Measurement of Electron Density Distribution During AC-GTA Welding in Mars-like Atmosphere by IR Method"
溶接学会論文集, 41, 2 (2023), 49s-52s.
K. Aoyama, S. Shobako, T. Yamashita, T. Souma, S. Shimasaki, N. Terajima, H. Komen and M. Tanaka
- (3) "Splashing of Tungsten-Based Anode during Arc Discharge"
Sci. Rep., 13, 1 (2023), 12210.
K. Iida, H. Komen, M. Shigeta and M. Tanaka
- (4) "Analysis of Residual Oxygen during A-IGZO Thin Film Formation by Plasma-Assisted Reactive Sputtering Using a Stable Isotope"
Vacuum, 215 (2023), 112227/1-112227/6.
K. Takenaka, M. Endo, H. Hirayama, S. Toko, G. Uchida, A. Ebe and Y. Setsuhara
- (5) "Analysis of Oxygen-Based Species Introduced during Plasma Assisted Reactive Processing of A-IGZO Films"
Jpn. J. Appl. Phys., 62 (2023), SL1018/1-SL1018/5.
K. Takenaka, H. Hirayama, M. Endo, S. Toko, G. Uchida, A. Ebe and Y. Setsuhara
- (6) "Direct Bonding of Stainless Steel and PEEK Using Non-thermal Atmospheric Pressure Plasma-assisted Joining Technology"
J. Manuf. Process., 105 (2023), 276-281.
K. Takenaka, A. Jinda, S. Nakamoto, S. Toko, G. Uchida and Y. Setsuhara
- (7) "Influence of Pre-Treatment Using Non-Thermal Atmospheric Pressure Plasma Jet on Aluminum Alloy A1050 to PEEK Direct Joining with Hot-Pressing Process"
Int. J. Adv. Manuf. Technol., 130 (2024), 1925-1933.
K. Takenaka, A. Jinda, S. Nakamoto, R. Koyari, S. Toko, G. Uchida and Y. Setsuhara
- (8) "Improving Bonding Strength by Non-Thermal Atmospheric Pressure Plasma-Assisted Technology for A5052/PEEK Direct Joining"
Int. J. Adv. Manuf. Technol., 130 (2024), 903-913.
K. Takenaka, A. Jinda, S. Nakamoto, R. Koyari, S. Toko, G. Uchida and Y. Setsuhara
- (9) "Stability and Gap States of Amorphous In-Ga-Zn-Ox Thin Film Transistors: Impact of Sputtering Configuration and Post-Annealing on Device Performance"
Thin Solid Films, 790 (2024), 140203/1-140203/8.
K. Takenaka, S. Nunomura, Y. Hayashi, H. Komatsu, S. Toko, H. Tampo and Y. Setsuhara

- (10) "Optical Emission Spectroscopy Study in CO₂ Methanation with Plasma"
Jpn. J. Appl. Phys., 62 (2023), SI1008.
S. Toko, T. Hasegawa, T. Okumura, K. Kamataki, K. Takenaka, K. Koga, M. Shiratani and Y. Setsuhara
- (11) "Contribution of Active Species Generated in Plasma to CO₂ Methanation"
Jpn. J. Appl. Phys., 62 (2023), SL1023.
S. Toko, T. Hasegawa, T. Okumura, K. Kamataki, K. Takenaka, K. Koga, M. Shiratani and Y. Setsuhara
- (12) "Improving the Efficiency of Sabatier Reaction through H₂O Removal with Low-Pressure Plasma Catalysis"
Jpn. J. Appl. Phys., 62 (2023), SL1028.
T. Hasegawa, S. Toko, K. Kamataki, K. Koga and M. Shiratani
- (13) "プラズマ触媒作用を用いた二酸化炭素還元反応の促進に関する基礎研究"
スマートプロセス学会誌, 13, 1 (2023), 31-36.
都甲 将, 奥村 賢直, 鎌滝 晋礼, 竹中 弘祐, 古閑 一憲, 白谷 正治, 節原 裕一
- (14) "Improving the Efficiency of CO₂ Methanation Using a Combination of Plasma and Molecular Sieves"
Results in Surf. Interfaces, In Press (2024)
S. Toko, T. Okumura, K. Kamataki, K. Takenaka, K. Koga, M. Shiratani and Y. Setsuhara
- (15) "Fabrication of Nanocrystalline Diamond Capsules by Hot-Filament Chemical Vapor Deposition for Direct-Drive Inertial Confinement Fusion Experiments, Diamond and Related Materials"
Diamond and Related Mater., 135 (2023), 109896.
K. Kawasaki, H. Yamada, H. Nagatomo, Y. Hironaka, K. Yamanoi, D. Tanaka, T. Idesaka, Y. Mokuno, A. Chayahara, T. Shimaoka, K. Mima, T. Somekawa, M. Tsukamoto, Y. Sato, A. Iwamoto and K. Shigemori
- (16) "Optical Properties of Liquid Pure Copper by Density Functional Theory"
J. Phys. : Condensed Matter, 35, 32 (2023), 324004.
S. Kato, S. Ono, A. Sunahara, Y. Sato and M. Tsukamoto
- (17) "Effects of WC Ratios on Bead Size and Crack Initiation in Forming WC-Co Cemented Carbides by the Laser Metal Deposition"
J. Laser Appl., 35, 4 (2023), 42010.
Y. Yamashita, M. Nakamura, T. Kunimine, Y. Sato, Y. Funada and M. Tsukamoto
- (18) "Friction Stir Welding of Fe-15Mn-10Cr-8Ni-4Si Seismic Damping Alloy"
ISIJ Int., 63, 12 (2023), 2056-2065.
T. Nagira, T. Nakamura, T. Sawaguchi, M. Mori, Y. Morisada and H. Fujii
- (19) "A1050アルミニウム/SS400鋼接合体の接合界面への発泡剤塗布によるポーラス化を用いた易分離の検討"
軽金属, 73, 4 (2023), 164-166.
増田 敦哉, 半谷 禎彦, 鈴木 良祐, 松原 雅昭, 青木 祥宏, 藤井 英俊

- (20) "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.
花田 滉生, 刈屋 翔太, 設樂 一希, 梅田 純子, 近藤 勝義
- (21) "Measurement and Identified Prediction Equation for Residual Stress Distribution in Aluminum Alloy A5052 under Various Pneumatic Shot Peening Conditions"
J. Mater. Eng. Perform., 1059-9495, 8031 (2023), 1-13.
T. Ohta, J. He, S. Takahashi and N. Ma
- (22) "Creep Analysis of Large-scale Weld Pipe Structure in Thermal Power Plant"
Q. J. Jpn. Weld. Soc., 41, 2 (2023), 58s-62s.
Y. Kitani, Y. Yamauchi, K. Ikushima, N. Hidetaka, N. Ma and M. Shibahara
- (23) "Effect of Load Changing on Creep Fatigue Life of Pipe Joints"
Q. J. Jpn. Weld. Soc., 41, 2 (2023), 36s-40s.
Y. Kitani, K. Ikushima, M. Arai, N. Hidetaka, N. Ma and M. Shibahara
- (24) "Local Mechanical Characterization and Fracture Prediction Modeling for Resistance Spot-Welded Joints of Advanced High-Strength Steel"
Mater. Today Commun., 36, 106787 (2023), 1-14.
Z. Yao, M. Omiya, N. Ma, S. Nishi, K. Takada, K. Okato, K. Oide, T. Kobayashi, J. Han and K. Terada
- (25) "Mechanical Performance Evaluation of Multi-Point Clinch-Adhesive Joints of Aluminum Alloy A5052-H34 and High-Strength Steel JSC780"
Automot. Innov., 7 (2023), 1-12.
Y. Ma, R. Akita, Y. Abe, P. Luo, P. Geng, S. Tsutsumi and N. Ma
- (26) "Microstructure Characteristics of Warm Spray Additively Manufactured Inconel 718 Superalloys and Correlation with Mechanical Performance"
Mater. Lett., 341 (2023), 134230.
Q. Wang, N. Ma, J. Chen, S. Tomitaka and M. Watanabe
- (27) "Characteristics of Residual Stress Distribution in Wire-Arc Additive Manufactured Layers of Low Transformation Temperature Material"
Int. Commun. Heat Mass Transf., 148 (2023), 107066.
W. Huang, Q. Wang, N. Ma and H. Kitano
- (28) "Improvement of Local Compression Condition for Fracture Toughness Test with Bayesian Optimization"
Weld. World, 67 (2023), 2315-2322.
T. Ozawa, T. Kawabata and Y. Mikami
- (29) "Fatigue Limit Estimation Based on Dissipated Energy of Butt Laser-Welded Joints"
Eng. Proc., 51, 47 (2024)
T. Yamamoto, Y. Ogawa, M. Hayashi, K. Kadoi, D. Shiozawa and T. Sakagami

- (30) "Single-step Fabrication of Fibrous Si/Sn Composite Nanowire Anodes by High-Pressure He Plasma Sputtering for High-Capacity Li-ion Batteries"
Sci. Rep., 13 (2023), 14280.
G. Uchida, K. Masumoto, M. Sakakibara, Y. Ikebe, S. Ono, K. Koga and T. Kozawa
- (31) "Development of Nanostructured Ge/C Anodes with a Multistacking Layer Fabricated via Ar High-Pressure Sputtering for High-Capacity Li⁺-ion Batteries"
Appl. Phys. Express, 17 (2024), 26001.
T. Omae, T. Yamada, D. Fujikake, T. Kozawa and G. Uchida