

Journal Publications

1. Roni J. Rountree, Tim Pasang, Shumpei Fujio, Pai-Chen Lin, Zheng-Da Wang, Tony Hanson, Jie Xiong, Jacob Nyholm, Wojciech Z. Misiolek, Poppy Puspitasari, Yuji Sato, Masahiro Tsukamoto, "Comparison of the Mechanical, Electrical, and Microstructural Properties of Copper Wire Hairpins Welded by Infrared and Combined Infrared and Blue Diode Laser Techniques", J. Exp. Theor. Analysis. August 2026, 4, 27.
2. Yuji Sato, Yukino Kuga, Tim Pasang, Joerg Volpp, Keisuke Takenaka, and Masahiro Tsukamoto, Development of Spatter Suppression using Hybrid Laser with Blue and IR lasers for welding of Pure Copper, accepted for publication, Journal of Laser Applications, August 2026
3. Tim Pasang, Shumpei Fujio, Pai Chen Lin, Yuji Sato, Masahiro Tsukamoto, "Recent Advancements in Hairpin Welding: Manufacturing and Properties", International Journal of the Society of Materials Engineering for Resources, Vol. 27, No. 1, 665; Advanced Publication by J-STAGE; DOI:<https://doi.org/10.5188/ijmsmer.665>
4. Michael V. Pires, Gregory T. Pawlikowski, Bradley Schultz, Roni Rountree, Tim Pasang, Masashi Watanabe, And Wojciech Z. Misiolek, A Comparison of Metal Additive and Micro-metal Additive Manufactured 316L Stainless Steel Produced via Selective Laser Melting, Binder Jetting, and Digital Light Processing, Metallurgical and Materials Transactions A, Volume 57a, January 2026, pp. 318-334
5. Tim Pasang, Shumpei Fujio, Pai-Chen Lin, Yuan Tao, Mao Sudo, Travis Kuendig, Yuji Sato and Masahiro Tsukamoto, "Weldability and Mechanical Properties of Pure Copper Foils Welded by Blue Diode Laser", Materials 2024, 17, 2140.
6. Arief Suriadi Budiman, Dianing Novita Nurmala Putri, Henry Candra, Endang Djuana, Tyas Kartika Sari, Daisman P.B P.B. Aji, Larasati Rizky P., Elinoenai S., Derrick Speaks, Tim Pasang, "Crack Catcher AI – Enabling smart fracture mechanics approaches for damage control of thin silicon cells or wafers", Solar Energy Materials and Solar Cells, Volume 273, 15 August 2024, 112927
7. Chinmai Bhat, Yulius Shan Romario, Cho-Pei Jiang, Ehsan Toyserkani, Maziar Ramezani, Tim Pasang, "Additive Manufacturing of a Topology Optimized Automotive Flange Fork – A Step Towards Cleaner Production of Automotive Components, Nature Portfolio, January 2024, DOI:10.21203/rs.3.rs-3865454/v1
8. Tim PASANG, Shumpei FUJIO, Yuji SATO and Masahiro TSUKAMOTO, Int. J. Soc. Mater. Eng. Resour. No.661, April 9, 2024, ©2024 Soc. Mater. Eng. Resour. Japan, Advance Publication by J-STAGE
9. Celine Turangi, Marcel Schaefer, Junior Nomani, Florian Häslich, Tim Pasang, Shih-Jie Gao and Pai-Chen Lin, Mechanical Properties and Microstructural Evolution of GTAW Welded Joints on Additively Manufactured Scalmalloy® and Extruded Aluminium Alloys, Journal of the Chinese Society of Mechanical Engineers, Vol.45, No.4, pp385-396 (2024).
10. Shumpei Fujio, Yuji Sato, Mao Sudo, Keisuke Takenaka, Koji Tojo, Tim Pasang, Masahiro Tsukamoto, "Spatter reduction in deep penetration welding of pure copper using blue-IR hybrid laser", Welding in the World, published March 2024, <https://doi.org/10.1007/s40194-024-01734-4>

11. Yulius Shan Romario, Chinmai Bhat, Maziar Ramezani, Tim Pasang, Zhangwei Chen, Cho-Pei Jiang, "Fabrication of translucent graded dental crown using zirconia-yttrium multi-slurry tape casting 3D printer", *Journal of the Mechanical Behavior of Biomedical Materials*, January 2024, 106406
12. Tim Pasang, Arief S. Budiman, J.C. Wang, C.P. Jiang, Rodney Boyer, Jim Williams, Wojciech Z. Misiolek, "Additive manufacturing of titanium alloys – Enabling re-manufacturing of aerospace and biomedical components", *Microelectronic Engineering* 270 (2023) 111935
13. Maziar Ramezani, Zaidi Mohd Ripin, Tim Pasang and Cho-Pei Jiang, "Surface Engineering of Metals: Techniques, Characterizations and Applications", *Metals* 2023, 13, 1299. <https://doi.org/10.3390/met13071299>
14. Maziar Ramezani, Zaidi Mohd Ripin, Cho-Pei Jiang and Tim Pasang, "Superlubricity of Materials: Progress, Potential, and Challenges", *Materials* 2023, 16, 5145. <https://doi.org/10.3390/ma16145145>
15. Cho-Pei Jiang, Andi Ard Maidhah, Shun-Hsien Wang, Yuh-Ru Wang, Tim Pasang and Maziar Ramezani, "Laser Powder Bed Fusion of Inconel 718 Tools for Cold Deep Drawing Applications: Optimization of Printing and Post-Processing Parameters", *Materials* 2023, 16, 4707. <https://doi.org/10.3390/ma16134707>
16. Arief Suriadi Budiman, D. Speaks, E. Hossain, S.K. Tippabhotla, R. Sahay, A. Baji, T. Pasang, "Battery anode design: From 1D nanostructure to 3D nanoarchitecture – Enabling next-generation energy storage technology", *Microelectronic Engineering*, Volume 270 (2023), 111927
17. Nico Hananda, Azure Kamul, Christian Harito, Arief Budiman, Endang Djuana, Timotius Pasang, "Battery optimization by machine learning algorithms: Research gap via bibliometric analysis", *May 2023E3S Web of Conferences* 388, DOI:10.1051/e3sconf/202338801020
18. Azure Kamul, Nico Hananda, Christian Harito, Arief Budiman, Endang Djuana, Tim Pasang, "Machine Learning Application in Battery Prediction: A Systematic Literature Review and Bibliometric Study", *May 2023E3S Web of Conferences* 388, DOI:10.1051/e3sconf/202338801021
19. Ryo G. Widjaja, Muhammad Asrol, Iwan Agustono, Endang Djuana, Christian Harito, G. N. Elwirehardja, Bens Pardamean, Fergyanto E. Gunawan, Tim Pasang, Derrick Speaks, Arief S. Budiman, "State of Charge Estimation of Lead Acid Battery using Neural Network for Advanced Renewable Energy Systems", *Emerging Science Journal* 7(3):691-703, May 2023, DOI:10.28991/ESJ-2023-07-03-02
20. Cho-Pei Jiang, Alvian Toto Wibisono, Shun-Hsien Wang, Tim Pasang and Maziar Ramezani, "Selective Laser Melting of Free-Assembled Stainless Steel 316L Hinges: Optimization of Volumetric Laser Energy Density and Joint Clearance", *Metals* 2022, 12, 1223. <https://doi.org/10.3390/met12071223>
21. Tim Pasang, Pai-Chen Lin, Wojciech Z. Misiolek, Jia-Yuan Wei, Shinichiro Masuno, Masahiro Tsukamoto, Eiji Hori, Yuji Sato, Yuan Tao, Danang Yudhistiro and Salahuddin Yunus, "Blue Diode Laser Welding of Commercially Pure Titanium Foils", *Quantum Beam Sci.* 2022, 6, 24. <https://doi.org/10.3390/qubs6030024>
22. Ronny Lesmana, Felix Zulhendri, Ilham Irsyam, Renaldi Prasetya Nagarasyid, Trimurni Abidin, James Fearnley, Anant Pradhakar, Arief S Budiman, Timotius Pasang, "The Suitability of

Propolis as A Bioactive Component of Biomaterials”, accepted, *Frontiers in Pharmacology*, section *Ethnopharmacology*, May 2022

23. Maziar Ramezani, Hitesh Dommati, Jia-Chang Wang, Timotius Pasang, Calvin Lee, “Tribological Characterization of Alumina Ceramic Manufactured by Solvent-Based Slurry Stereolithography”, December 2022, *Journal of Materials Engineering and Performance* 32(4), DOI:10.1007/s11665-022-07724-1
24. Steve Ales, S. Yazdanian, Timotius Pasang, Zhan W. Chen, “Fatigue strength of friction stir lap welded AA2024 to Ti6Al4V dissimilar joints”, April 2022, *Engineering Failure Analysis* 138(9-12):106309, DOI:10.1016/j.engfailanal.2022.106309
25. Cho-Pei Jiang, Alvian Toto Wibisono, Timotius Pasang, Selective Laser Melting of Stainless Steel 316L with Face-Centered-Cubic-Based Lattice Structures to Produce Rib Implants, October 2021, *Materials* 14(20):5962, DOI:10.3390/ma14205962
26. Cho-Pei Jiang, Alvian Toto Wibisono and Tim Pasang, “Selective Laser Melting of Stainless Steel 316L with Face-Centered-Cubic-Based Lattice Structures to Produce Rib Implants”, *Materials* 2021, 14, 5962. <https://doi.org/10.3390/ma14205962>
27. Tim Pasang, Benny Tavlovich, Omri Yannay, Ben Jackson, Mike Fry, Yuan Tao, Celine Turangi, Jia-Chang Wang, Cho-Pei Jiang, Yuji Sato, Masahiro Tsukamoto and Wojciech Z. Misiolek, Directionally-Dependent Mechanical Properties of Ti6Al4V Manufactured by Electron Beam Melting (EBM) and Selective Laser Melting (SLM), *Materials* 2021, 14, 3603.
28. F Sarwar, A Griffin, SU Rehman, T Pasang, Detecting sheep in UAV images, *Computers and Electronics in Agriculture* Volume 187, August 2021, 106219, 2021
29. J.C. Wang, T. Pasang, Manuel Ruilova, L.H.A. Pasang, C.P Jiang, K. Edwards, N. V.d. Geest, and M. Protheroe, Truly hands-on 3D printing: a case study from Taiwan, *Journal of Engineering Technology*, Spring Edition 2021, Vol. 31. pp. 46-54
30. A. Chamanfar, MF, Huang, T. Pasang, M. Tsukamoto and W. Misiolek, Microstructure and Mechanical properties of laser welded Ti-10V-2Fe-3Al (Ti1023) titanium alloy, *Journal of Materials Research and Technology*, Volume 9, Issue 4, July–August 2020, pp. 7721-7731
31. Mona Aziziderouei, Zhan Chen, Timotius Pasang, Martyn Newby & Yuan Tao, Effect of Lack of Fusion Formed during Electron Beam Powder Bed Fusion of Ti-6Al-4V Alloy on Impact Toughness, *Journal of Materials Engineering and Performance* volume 29, pages 4978–4990 (2020)
32. T. Pasang, A. Kirchner, U. Jehring, M. Aziziderouei, Y. Tao, C-P. Jiang, J. C. Wang, I. S. Aisyah, Microstructure and Mechanical Properties of Welded Additively Manufactured Stainless Steels SS316L, *Metals and Materials International*, Volume 25, Issue 5, pp 1278–1286, September 2019
33. Timotius Pasang, Mona Aziziderouei, Yuan Tao, Dominique Ogletree, Gorja Stump, Yuji Sato, Masahiro Tsukamoto and Cho-Pei Jiang, “Improvements in Welding Properties of Titanium Through the Use of Interlayers”, *Journal of Metal*, Volume 71, Issue 2, pp 697–702, The Minerals, Metals & Materials, February 2019
34. M. Darsin, T. Pasang. "Drillability of Titanium Alloy 6246 from Surface Quality Perspective". *Mat. Sci. Res. India*;16 (1), 2019.

35. Timotius Pasang, Stevin Snellius Pramana, Michael Kracum, Wojciech Zbigniew Misiolek, Mona Aziziderouei, Masami Mizutani and Osamu Kamiya, " Charac. of Intermetallic Phases in Fusion Welded Commercially Pure Titanium and Stainless Steel 304," *Metals* 2018, 8, 863.
36. T. Rodts, S.R. Schmid, M.A. Selles, T. Pasang, S. Sanchez-Caballero, "Selective laser fiber welding on woven polymer fabrics for biomedical applications", *Materials Science & Engineering C94* (2019) 628-634
37. Wayne Stalls, Gow-Yi Tzow, Tim Pasang, FEM Simulation Analysis of Ring Compression Test Using Stationary and Rotating Die under Constant Shear Friction, *Key Engineering Materials (Volume 830)*, pp. 15-28, 2019, <https://doi.org/10.4028/www.scientific.net/KEM.830.15>
38. Mahros Darsin, Dedi Dwilaksana, Tim Pasang & Zhan Chen, Study on the effect of Heat Treatment on Chips Formation and Forces in Drilling Titanium Ti6Al-2Sn-4Zr-6Mo, *International Journal of Mechanical and Production Engineering Research and Development*, Vol. 9, Issue 6, Dec 2019, 1079–1090
39. Mahros Darsin, Timotius Pasang, Zhan Chen, Forces Perspective of Drillability of Titanium Alloy 6Al-2Sn-4Zr-6Mo, *Journal of Energy, Mechanical, Material and Manufacturing Engineering* Vol 3, No 1 (2018), DOI: <https://doi.org/10.22219/jemmme.v3i1.5825>
40. K. Darvish, Z.W. Chen, M.A.L. Phan, T. Pasang, "Selective laser melting of Co-29Cr-6Mo alloy with laser power 180–360 W: Cellular growth, intercellular spacing and the related thermal condition", *Materials Characterisation* 135 (2018) 183-191.
41. T. Pasang, Y. Tao, M. Azizi, O. Kamiya, M. Mizutani, W.Z. Misiolek, "Welding of Titanium alloys", Vol 123, *MATEC Web Conf.*, 123 (2017), p.1-6. <https://doi.org/10.1051/mateconf/201712300001>
42. C.J. Marvel, J.C. Sabol, T. Pasang, M. Watanabe, W.Z. Misiolek, "Improving the Mechanical Properties of the Fusion Zone in Electron Beam Welded Ti-5Al-5Mo-5V-3Cr Alloys", *Metallurgical and Materials Transactions*, Volume, April 2017, pages 1921-1930
43. Jose Maria Sánchez-Amaya, Timotius Pasang, Margarita Raquel Amaya-Vazquez, Juan De Dios Lopez-Castro, Cristina Churiaque, Yuan Tao and Francisco Javier Botana Pedemonte, "Microstructure and Mechanical Properties of Ti5553 Butt Welds Performed by LBW under Conduction Regime", *Metals* 2017, 7, pages 269-280; doi:10.3390/met7070269
44. T. Pasang, S. Lees, M. Takahashi, T. Fujita, P. Conor, K. Tanaka and O. Kamiya, "Machining of Dental Alloys: Evaluating the Surface Finish of Laterally Milled CoCrMo Alloy, *Procedia Manufacturing*, vol.13, (p.5 - 12), 2017
45. M. Darsin, T. Pasang, and Z. Chen, "Performance of TiAlN PVD Coated Carbide Drill when Drilling Titanium 6246 Alloy," in *MATEC Web of Conferences*, 2017, vol. 109.
46. M. Takahashi, O. Kamiya and T. Pasang, "Effect of Pre-treatment of Substrate on Synthesized Diamond Films on Tungsten Carbide Substrate by Flame Combustion, *Procedia Manufacturing*, vol.13, (p.21 - 28) , 2017
47. O. Kamiya, H. Mori, M. Ito, M. Takahashi, Y. Miyano, T. Pasang, M. Nakatsu, Y. Iwama, "Development of fixed grain micro-saw wire and cutting performance", *Procedia Manufacturing*, Volume 13, 2017, Pages 161-168

48. Timotius Pasang, Maziar Ramezani, Matthew Prygoski, Russell Wanhill, Rohan Byrnes, Osamu Kamiya, Kiyoshi Tanaka, "Fatigue of Commercially Pure Titanium Dental Implants", *Materials Physics and Mechanics* 27 (2016), pages 79-89
49. T. Soysal, S. Kou, D. Tat and T. Pasang, "Macrosegregation in Dissimilar-Metal Fusion Welding", *Acta Materialia* 110 (2016), pages 149-160
50. K. Darvish, Z.W. Chen, T. Pasang, "Reducing lack of fusion during selective laser melting of CoCrMo alloy: Effect of laser power on geometrical features of tracks", *Materials and Design* 112 (2016), pages 357–366
51. A. Chamanfar, T. Pasang, A. Ventura, W.Z. Misiolek, "Mechanical Properties and Microstructure of Laser Welded Ti–6Al–2Sn–4Zr–2Mo (Ti6242) Titanium Alloy", *Materials Science & Engineering A* 663 (2016), pages 213–224
52. Razak, N. H., Chen, Z. W., & Pasang, T. (2016). Progression of tool deterioration and related cutting force during milling of 718Plus superalloy using cemented tungsten carbide tools. *International Journal of Advanced Manufacturing Technology*, Volume 86, pages 3203–3216, (2016).
53. Daniel Tat, Timotius Pasang, Maziar Ramezani, "Gas Tungsten Arc Welding of Copper and Mild Steel", *International Journal of Science and Engineering Investigations* vol. 4 (45), October 2015
54. Wang, S., Nates, R., Pasang, T., & Ramezani, M. (2015). Modelling of Gas Tungsten Arc Welding Pool under Marangoni Convection. *Universal Journal of Mechanical Engineering*, 3(5), 185-201.
55. J.C. Sabol, C.J. Marvel, M. Watanabe, T. Pasang, W.Z. Misiolek, "Confirmation of the ω -phase in electron beam welded Ti–5Al–5V–5Mo–3Cr by high-resolution scanning transmission electron microscopy: An initial investigation into its effects on embrittlement", *Scripta Materialia* Volume 92, 1 December 2014, Pages 15–18
56. N.H. Razak, Z.W. Chen, T. Pasang, "Modes of tool deterioration during milling of 718Plus superalloy using cemented tungsten carbide tools", *Wear* 316 (2014) 92–100
57. Maziar Ramezani, Timotius Pasang, Zhan Chen, Thomas Neitzert, Dominique Au, "Evaluation of carbon diffusion in heat treatment of H13 tool steel under different atmospheric conditions", *Journal of Materials Research and Technology*, Volume 4, Issue 2, April–June 2015, Pages 114-125
58. T. Pasang, V. Satanin, M. Ramezani, M. Waseem, T. Neitzert and O. Kamiya, "Formability of Magnesium Alloys AZ80 and ZE10", *Key Engineering Materials* Vols. 622-623 in 2014
59. Maziar Ramezani, Thomas Neitzert, Timotius Pasang, M.A. Sellès, "Dry sliding frictional characteristics of ZE10 and AZ80 magnesium strips under plastic deformation", *Tribology International* Volume 82, Part A, February 2015, Pages 255–262.
60. Maziar Ramezani, Thomas Neitzert, Timotius Pasang, Miguel Angel Sellès, "Frictional properties of AZ80 and ZE10 magnesium alloys under dry and lubricated contact conditions", *Procedia Engineering* Vol.81, 2014, Pages 1836–1841
61. Maziar Ramezani, Thomas Neitzert, Timotius Pasang, M.A. Sellès, "Characterization of friction behaviour of AZ80 and ZE10 magnesium alloys under lubricated contact condition by

strip draw and bend test", International Journal of Machine Tools & Manufacture, 85(2014)70–78

62. Mamoru Takahashi, Timotius Pasang, Patrick Conor, Hirotaka Ono, Kiyoshi Tanaka and Osamu Kamiya, "Machining Cobalt-Based Dental Alloys with Tungsten Carbide Mills", Int.J.Soc.Mater.Eng.Resources, Vol.20,No.2, October, 2014
63. Timotius Pasang, Yuan Tao, Osamu Kamiya, Yasuyuki Miyano, Gakuya Kudo, "Research on Various Welding Methods on Aerospace Titanium Alloys: Collaboration between Akita University and AUT University," Int. J. Soc. Mater. Eng. Resources Vol. 20, No1, April 2014
64. Maziar Ramezani, Thomas Neitzert, Timotius Pasang, "Simulation of Kinetic Friction in L-Bending of Sheet Metals" International Journal of Chemical, Nuclear, Metallurgical and Materials Engineering Vol:8 No:6, 2014
65. Glenn J. Stephen, Timotius Pasang, Benjamin P. Withy, "The effect of pitting corrosion on split sleeve cold hole expanded, bare 7075-T651 aluminium alloy", Journal of Manufacturing Processes 15 (2013) 115–120.
66. R.J.H. Wanhill, N. Symonds, A. Merati, T. Pasang, S.P. Lynch, "Five helicopter accidents with evidence of material and/or design deficiencies", Engineering Failure Analysis Journal, Volume 35, 15 December 2013, Pages 133-146.
67. Timotius Pasang, Zhan Chen, Maziar Ramezani, Thomas Neitzert, Dominique Au, "The Effect of Heat Treatment Atmosphere on Hardening of Surface Region of H13 Tool Steel," *Journal of Materials Science and Chemical Engineering*, 2013, 1, 20-29
68. J.C. Sabol, T. Pasang, W.Z. Misiolek, R.M. Mitchell, "Metallurgy and Localized Tensile Strain Distribution in Electron Beam Welded Ti-5Al-5V-5Mo-3Cr Titanium Alloy", Journal of Materials Processing and Technology, 212 (2012) 2380 – 2385
69. T. Pasang, J. C. Sabol, W. Z. Misiolek, R. Mitchell, A.B. Short, G., Littlefair, "Metallurgy and Deformation of Electron Beam Welded Similar Titanium Alloys" American Institute of Physics, AIP Conf Proceedings, 1431, 2012, page 982-990.
70. J.C. Sabol, T. Pasang, W.Z. Misiolek, J.C. Williams, "Localized tensile strain distribution and metallurgy of electron beam welded Ti-5Al-5V-5Mo-3Cr titanium alloys", Journal of Materials Processing Technology, Volume 212, Issue 11, November 2012, Pages 2380-2385
71. T. Pasang, N. Symonds, S. Moutsos, R.J.H. Wanhill, and S.P. Lynch, "Low-energy Intergranular Fracture in Al-Li Alloys", Eng. Failure Analysis Journal 22 (2012) 166–178.
72. Timotius Pasang, Joseph C. Sabol, Wojciech Z. Misiolek, Ryan Mitchell, Andrew B. Short, Guy Littlefair, "Tensile Ductility of Electron Beam Welded Titanium Alloys", published in Materials Science Forum (MSF), American Institute of Physics (AIP), MP-15-039, 2012
73. T. Pasang, J.C. Sabol W.Z. Misiolek, R.M. Mitchell, A.B. Short, G. Littlefair, A.J. Thome, "Metallurgical Characterization of Deformed Electron Beam Welded Dissimilar Titanium Alloys", Steel Research International Journal Special Edition, 2011, p. 657-661
74. Matthew Philip Prygoski, Timotius Pasang, Steven R. Schmid, Antony J. Lozier, "High speed insertion of bone fracture fixation pins: A finite element penetration model with experimental comparisons", J Mater Sci: Mater Med. 2011 Dec;22(12):2823-2832
75. Ryan Mitchell, Andrew Short, Timotius Pasang and Guy Littlefair, "Characteristics of Electron Beam Welded Ti & Ti alloys", Advanced Materials Research Vol. 275, 2011, p. 81-84
76. David P. Yan, Guy Littlefair and Tim Pasang, "Study of Phase Transformation and Work Hardening Phenomenon during Drilling of Ti-5553 and Ti-64". International Journal of Machining and Machinability of Materials, Vol. 10 No. 4, p. 264-279 – Special Issue: Developments in the Machinability of Titanium and its Alloys, 2011

77. Paul S Nebosky, Steven R Schmid and Timotius Pasang, "Formability of a Porous Trabecular Metal", Processing, Microstructure and Performance of Materials University of Auckland, New Zealand, p. 41-47, 2009; IOP Conf. Ser.: Mater. Sci. Eng. 4 012018, 2009
78. Chen, Z. W., Pasang, T., Qi, Y., " Shear flow and formation of nugget zone during friction stir welding of aluminium Alloy 5083-O", Materials Science and Engineering A 474:312-316, 2008
79. Ka Ki (Katie) Au, Hodgson, M., Pasang T., & Yu Lung Chiu Studies on Age Hardening for Improvement of 6261 and 6060 Extruded Aluminium Alloys. Advanced Materials, Development & Performance (AMDP) - International Journal of Modern Physics B, 2008
80. Chen, Z. W., Pasang, T., Qi, Y., & Perris, R. "Metallurgical nature at the interface between tool shoulder and workpiece during friction stir welding, Advanced Materials Research, 29, 43-46, 2007
81. Timotius Pasang, Stan Lynch and Stavroula Moutsos, "Challenges in Developing High Performance Al-Li Alloys" International Journal of the Society of Materials Engineering for Resour. 14 (1/2), pp.7 - 11, 2006, The Society of Materials Engineering for Resources of Japan, 2006
82. S.P. Lynch, B.C. Muddle, T. Pasang, "Ductile-to-Brittle Fracture Transitions in 8090 Al-Li Alloys", Acta Materialia vol. 49, pp. 2863-2874, (*based on T. Pasang PhD. thesis*), 2001
83. S.P. Lynch, B.C. Muddle, T. Pasang, " Mechanisms of brittle intergranular fracture in Al-Li alloys and comparison with other alloys" Philosophical Magazines A, 2002, Vol. 82, No. 17/18, pp. 3361-3373 (*based on T. Pasang PhD. thesis*), 2002.
84. S.P. Lynch, B. Hole, and T. Pasang, "Failure of Welded Titanium Aircraft Ducts", Engineering Failure Analysis, Vol 2, pp. 257-273, 1995.

International Conference Papers and Presentations

1. Roni Rountree, Tim Pasang, Shumpei Fujio, Pai Chen Lin, Wojciech Z. Misiolek, Yuji Sato, Masahiro Tsukamoto, "Material characterization of copper hairpins welded by infrared and a combination of infrared and blue diode laser", The 6th Smart Laser Processing Conference 2026; April 21-23, 2026, Yokohama, Japan
2. Tim Pasang, Shumpei Fujio, Jacob Nyholm, Pai Chen Lin, Yuji Sato, Roni Roundtree, Wojciech Misiolek, Masahiro Tsukamoto, "Hairpin Welding using Infrared and Hybrid Methods", The International Congress on Laser Advanced Materials Processing, June 2025, Ise-City, Mie, Japan
3. Tim Pasang, Shumpei Fujio, Yuji Sato and Masahiro Tsukamoto, "Blue diode laser and its applications in Manufacturing: a brief review", The 10th International Conference on Materials Engineering for. Resources (ICMR2025 AKITA), Akita, Japan, 2025 (***invited Speaker***)
4. T. Pasang, Zainab Manasawala & Sreenidhi Roshinkumar, Investigations on welding characteristics of additively manufactured Ti6Al4V and SS316, Materials Science and Technology Conference (MS&T), Portland, Oregon, September 2019
5. T. Pasang, Metal Additive Manufacturing, International Symposium of Additive Manufacturing and Microfabrication, National Taipei University of Technology, August 2019 (***keynote speaker***)
6. T. Pasang, D. Ogletree, G. Stump, M. Tsukamoto and Y. Sato, "Improvements in welding properties through the use of interlayer", Technological Innovations in Metals Engineering (TIME 2018), Haifa, Israel, May 2018
7. Tim PASANG, Yuan TAO, Mana AZIZI, Osamu KAMIYA, Masami MIZUTANI and Wojciech MISIOLEK, "Welding Characteristics of Titanium Alloys", Int'l Conference on Materials Engineering for Resources – ICMR 2017, Akita, Japan, October 2017 (***keynote speaker***)

8. T. Pasang, Y. Tao, M. Azizi, O. Kamiya, M. Mizutani, W.Z. Misiolek, "Welding of Titanium alloys", The 2nd International Conference on Precision Machinery and Manufacturing Technology 2017, Taiwan, May 2017 (**keynote speaker**)
9. Tim Pasang, Thomas Neitzert, Deepak Raji, Mona Aziziderouei, Yuan Tao and Jyhwen Wang, "Investigation of Material Dependent Variations during Roll-forming", Manufacturing Integrated Design - Final Colloquium CRC 666, TU Darmstadt, Germany, 20-21 February, 2017
10. T. Pasang D. Tat, S. Kou and M. Ramezani, "Dissimilar Welding of Cu-Steel", CanWeld 2016, 4-5 October 2016, Edmonton - Canada
11. A. A. Khrisna, R. Nates, T Pasang, "Innovative Manufacturing: welding by simulation and experimental", Proceedings of the 2016 International Conference on Innovative Design and Manufacturing, ICIDM2016, January 24-26, 2016, Auckland, New Zealand
12. Juzar Vohra, Ravish Malhotra, Tim Pasang, Mana Azizi, Yuan Tao and Masami Mizutani, "Intermetallic phases in the Fusion Weld of CP Ti to Stainless Steel", ICMSE 2016 : 18th International Conference on Materials Science and Engineering, 21-22 January, 2016, Paris
13. Timotius Pasang, Mamoru Takahashi, Daiki Shinohara, Patrick Conor, Kiyoshi Tanaka and Osamu Kamiya, "Machining of Metallic Biomaterials: Comparison between Co-Cr-Mo and Ti-Al-Nb Alloys, 26th European Conference on Biomaterials, 31 August – 3 September, 2014, Liverpool, UK.
14. T. Pasang, O. Kamiya, Y Miyano, Y. Tao, G. Kudo, "Research on Various Welding Methods on Titanium Alloys for Aerospace Applications: Collaboration between Akita University and AUT University", **Keynote Speaker**, Proceedings - ICMR 2013, Akita - Japan, November 2013.
15. Mamoru Takahashi, Timotius Pasang, Patrick Conor, Hirotaka Ono, Kiyoshi Tanaka and Osamu Kamiya, "Investigation of Cutting Forces on Dental Alloy during Milling", Proceedings - ICMR 2013, Akita - Japan, November 2013.
16. T. Pasang, Y. Tao, J.C. Sabol, W.Z. Misiolek, O. Kamiya and G. Kudo, "Welding Metallurgy of a Beta Titanium Alloy for Aerospace Applications", LighMat Conference Proceedings, Bremen – Germany, September 2013
17. T. Pasang, J. M. Sánchez Amaya, Y. Tao, M. R. Amaya-Vázquez, F.J. Botana, J.C Sabol , W.Z. Misiolek, O. Kamiya, "Comparison of Ti-5Al-5V-5Mo-3Cr welds performed by LBW, EBW and GTAW", Proceedings - Manufacturing Engineering Society International Conference (MESIC 2013), Zaragoza, Spain, June 2013
18. T. Pasang, Y. Tao, J.C. Sabol, W.Z. Misiolek, O. Kamiya and G. Kudo, "Welding Characteristics of a New Titanium Alloy for Aerospace Applications", Proceedings - International Symposium on Green Manufacturing and Applications (ISGMA 2013), Hawaii, June 2013
19. Ashwin Polishetty, Guy Littlefair and Timotius Pasang, "A Case Study on Effect of Feed Rate on Machinability of Austempered Ductile Iron", Proceedings - ICMMT 2013, South Korea.
20. Andrew A. Thome, J. Walker, Timotius Pasang and Wojciech Z. Misiolek, "Metallurgical Analysis of Surface Streaking Defect in AA6060 Extrudate", Proceedings of Extrusion Technology Conference (ET 2012), Miami, May 2012
21. Timotius Pasang, Joseph C. Sabol, Wojciech Z. Misiolek, "Comparison of Deformation Characteristics Between Various Titanium Weldments", Planneralm, Austria, February 2012
22. Glenn J. Stephen, Timotius Pasang, Benjamin P. Witty, "The Effect of Pitting Corrosion on Split Sleeve Cold Hole Expanded, Bare 7075-T651 Aluminium Alloy", NAMRC Proceedings, University of Notre Dame, South Bend - USA, June 2012
23. Timotius Pasang, Joseph C. Sabol, Wojciech Z. Misiolek, Ryan Mitchell, Andrew B. Short, Guy Littlefair, "Metallurgy and Deformation of Electron Beam Welded Similar Titanium Alloys", Proceedings of Manufacturing Engineering Society International Conference (MESIC), Cadiz – Spain, 2011

24. T. Pasang, J. C. Sabol, W. Z. Misiolek, R. Mitchell, A. Short, "Strain Distribution in Tensile Test of Electron Beam Welded Dissimilar Titanium Alloys", Planneralm, Austria, March 2011 (ISBN 978-3-902078-15-5)
25. S.R. Schmid, J. Liu, M.A. Selles-Canto, T. Pasang, "Metal Forming Simulations: New Advanced Interface Models", Proceedings of Manufacturing Engineering Society International Conference (MESIC), Cadiz – Spain, 2011
26. David P. Yan, Guy Littlefair and Tim Pasang, "Deformation induced phase transformation during machining of Ti5Al-5V-5Mo-3Cr-0.5Fe", Supplemental Proceedings: volume 2: Materials Fabrication, Properties, Characterisation and Modelling TMS (The Minerals, Metals & Materials Society), 2011, p.633-640
27. Moutsos, S., Pasang, T., Muddle, B.C., & Lynch S.P. (2010), The Effect of Slip Mode on Brittle Intergranular Fracture of Al Alloys. In Proceedings of the 12th International Conference on Aluminium Alloys, Yokohama, Japan.
28. T. Pasang, N. Symonds, S. Moutsos, R.J.H. Wanhill, and S.P. Lynch, "Low-energy Intergranular Fracture in Al-Li Alloys", Proceedings of Engineering Failure Analysis IV Conference, Churchill College, Cambridge University, UK, 2010
29. Ashwin Polishetty, Bing (Bill) Pan, Timotius Pasang and Guy Littlefair, "Microstructural Study on Strain Induced Transformation in Austempered Ductile Iron Using Heat Tinting", Proceedings of the 2010 ASME International Manufacturing Science and Engineering Conference, MSEC2010, Erie, Pennsylvania, USA, 2010
30. Z.W. Chen, T. Pasang, " Friction Stir Welding of Aluminium Alloy Extrusion Panels for NZ Naval Inshore Vessel Building, ET08 Seminar, Orlando, Florida – USA, May 2008
31. Z.W. Chen, T. Pasang , Y. Qi and R. Perris, "Tool-Workpiece Interfaces and Shear Layers Formed during Friction Stir Welding", 6th International Friction Stir Welding Symposium, St. Sauveur, Canada, October 2006
32. S.P. Lynch and T. Pasang, "Effects of Slip Character on Fracture of Light Alloys", Australia-Korea Joint Seminar on Light Alloys, Brisbane, Australia, 1997.
33. T. Pasang, S.P. Lynch, "Hydrogen Embrittlement of D6ac steel", National Symposium in Aerospace, Bandung - Indonesia, 1995.
34. T. Pasang, B. Wirawan, M. Siswosuwarno, "Superplasticity of Ti-6Al-4V", National Symposium in Aerospace, Bandung - Indonesia, 1995.
35. T. Pasang, P. Tarigan, D. Sulistyowati, "Formability of Al-Li Sheet", Aerospace Student in Europe Conf., Katholieke Leuven University, Leuven - Belgium, 1993