

顏鴻威

著作目錄

期刊論文

1. Ingrid E McCarroll, Yu-Chen Lin, Alexander Rosenthal, Hung-Wei Yen, Julie M Cairney* (2022, Dec). Hydrogen trapping at dislocations, carbides, copper precipitates and grain boundaries in a dual precipitating low-carbon martensitic steel. *Scripta Materialia*, 221,114934.
2. Yi-Ting Lin, Xianghai An*, Zhiguang Zhu, Mui Ling Sharon Nai, Che-Wei Tsai, Hung-Wei Yen* (2022, Dec). Effect of cell wall on hydrogen response in CoCrFeMnNi high-entropy alloy additively manufactured by selective laser melting. *Journal of Alloys and Compounds*, 925,166735. 本人為通訊作者.
3. Kai Ni, Ming-Hsiang Ku, Yu-Jen Tseng, Hung-Wei Yen*, Ming-Wei Wu* (2022, Oct). Identification of prior β grains of additive manufactured Ti-6Al-4V alloy using electron backscatter diffraction. *Materials Letters*, 324,132758. 本人為通訊作者.
4. Che-Jen Liu, Christian Gadelmeier, Shao-Lun Lu, Jien-Wei Yeh, Hung-Wei Yen*, Stéphane Gorsse*, Uwe Glatzel*, An-Chou Yeh* (2022, Sep). Tensile creep behavior of HfNbTaTiZr refractory high entropy alloy at elevated temperatures. *Acta Materialia*, 237, 118188. 本人為通訊作者.
5. Cheng-Yao Huang, Shao-Lun Lu, Hung-Wei Yen* (2022, Sep). Digital Reconstruction of Engineered Austenite: Revisiting Effects of Grain Size and Ausforming on Variant Selection of Martensite. *Metals*, 12(9),1511. 本人為通訊作者.
6. Mao Liu, Pengfei Wang*, Guoxing Lu*, Cheng-Yao Huang, Zhong You, Chien-He Wang, Hung-Wei Yen* (2022, May). Deformation-activated recrystallization twin: New twinning path in pure aluminum enabled by cryogenic and rapid compression. *Isience*, 25(5),104248. 本人為通訊作者.
7. Thu-Trang Nguyen, Chih-Chien Hu, Bo-Yan Chou, Ching-Yi Chou, Guan-Yi Lin, Yu-Chen Hu, Yan-Lin Chen, Wei-Tung Hsu, Zi-Sheng Lin, Yueh-Lien Lee, Chih-Hsuan Chen, Hung-Wei Yen*, Ren-Jei Chung* (2022, May). Evaluating hydrogenated nickel-titanium alloy for orthopedic implant. *Journal of Materials Research and Technology*, 18,1115-1123. 本人為通訊作者.
8. Zen-Hao Lai, Yi-Ting Lin, Yi-Hsuan Sun, Jui-Fan Tu, Hung-Wei Yen* (2022, May). Hydrogen-induced ductilization in a novel austenitic lightweight TWIP

- steel. *Scripta Materialia*, 213,114629. 本人為通訊作者.
9. Neng-Hao Gan, Yi-Hsuan Sun, Tzu-Ching Tsao, Chia-Lin Li, Jia-Heng Liu, Hung-Wei Yen, Chun-Hway Hsueh, Jer-Ren Yang, Shing-Hoa Wang*, Jien-Wei Yeh, Horng-Yi Chang, Wen-Hsing Hou (2022, Apr). Verification of the ability of Cu to dissolve in BCC δ in a δ - γ Solid Solution above 1200 °C and boosting δ nano-hardness in Cu-containing PHSS. *Scripta Materialia*, 211,114505.
 10. Chun-Te Wu, Po-Hsun Lin, Sih-Ying Huang, Yu-Jen Tseng, Hsiao-Tzu Chang, Sheng-Yen Li, Hung-Wei Yen* (2022, Mar). Revisiting alloy design of low-modulus biomedical β -Ti alloys using an artificial neural network. *Materialia*, 21,101313. 本人為通訊作者.
 11. Kaifan Lin, Shih-Che Chen, Hsin-Chih Lin*, Hung-Wei Yen* (2022, Mar). Enhancement in mechanical properties through an FCC-to-HCP phase transformation in an Fe-17.5Mn-10Co-12.5Cr-5Ni-5Si (in at%) medium-entropy alloy. *Journal of Alloys and Compounds*, 898,162765. 本人為通訊作者.
 12. Pai-Keng Shen, Hung-Chih Liu, Cheng-Yao Huang, Hung-Wei Yen, Jien-Wei Yeh, Che-Wei Tsai* (2022, Mar). Microstructure and mechanical properties of medium-entropy alloys with a high-density η -D024 phase. *Materials Characterization*, 185,111713.
 13. Ping-Jui Yu, Cheng-Yao Huang, Yi-Ting Lin, Yu-Cheng Su, Hung-Wei Yen, Cheng-An Hsu, Shing-Hoa Wang*, Jien-Wei Yeh, Wen-Hsing Hou, Tzy-Rong Lin, Tai-Wen Hsu (2022, Mar). Crystalline characteristics of a dual-phase precipitation hardening stainless steel in quenched solid solution and aging treatments. *Materials Chemistry and Physics*, 280,125804.
 14. Sebastian Walde, Cheng-Yao Huang, Chia-Lung Tsai, Wen-Hsuang Hsieh, Yi-Keng Fu, Sylvia Hagedorn, Hung-Wei Yen, Tien-Chang Lu, Markus Weyers, Chia-Yen Huang* (2022, Mar). High-quality AlGaN epitaxy on lattice-engineerable AlN template for high-power UVC light-emitting diodes. *Acta Materialia*, 226,117625.
 15. Chwen-Haw Liao, Chiung-Han Chen, Jueming Bing, Christopher Bailey, Yi-Ting Lin, Twishi Mukul Pandit, Laura Granados, Jianghui Zheng, Shi Tang, Bi-Hsuan Lin, Hung-Wei Yen, Dane R McCamey, Brendan J Kennedy, Chu-Chen Chueh*, Anita WY Ho-Baillie* (2022, Feb). Inorganic-Cation Pseudohalide 2D Cs₂Pb(SCN)₂Br₂ Perovskite Single Crystal. *Advanced Materials*, 34(7),2104782.
 16. Chwen-Haw Liao, Chiung-Han Chen, Jueming Bing, Christopher Bailey, Yi-Ting Lin, Twishi Mukul Pandit, Laura Granados, Jianghui Zheng, Shi Tang, Bi-Hsuan Lin, Hung-Wei Yen, Dane R McCamey, Brendan J Kennedy, Chu-Chen Chueh, Anita WY Ho-Baillie (2022, Feb). Inorganic-Cation Pseudohalide 2D

- Cs₂Pb(SCN)₂Br₂ Perovskite Single Crystal (Adv. Mater. 7/2022). *Advanced Materials*, 34(7),2270054.
17. Qinyi Guo, Hung-Wei Yen, Haiwen Luo*, Simon P Ringer* (2022, Feb). On the mechanism of Mn partitioning during intercritical annealing in medium Mn steels. *Acta Materialia*, 225,117601.
 18. Hung-Wei Yen (2022, Jan). Advanced Characterization on Nanostructure in Steels. *Journal: Encyclopedia of Materials: Metals and Alloys*, 250-279.
 19. Hung-Chih Liu, Chia-Ming Kuo, Pai-Keng Shen, Cheng-Yao Huang, Hung-Wei Yen, Che-Wei Tsai* (2021, Dec). Disordering of L12 Phase in High-Entropy Alloy Deformed at Cryogenic Temperature. *Advanced Engineering Materials*, 23(12),2100564.
 20. Qinyi Guo, Hung-Wei Yen, Haiwen Luo, Simon P Ringer (2021, Dec). On the mechanism of Mn partitioning during intercritical annealing in medium Mn steels. *Acta Materialia*.
 21. Shu-Ming Hsu, Cheng-En Yang, Min-Hsuan Lu, Yi-Ting Lin, Hung-Wei Yen, I-Chun Cheng (2021, Dec). Mobility Enhancement in P-Type SnO Thin-Film Transistors via Ni Incorporation by Co-Sputtering. *IEEE Electron Device Letters*.
 22. Kaifan Lin, Shih-Che Chen, Hsin-Chih Lin, Hung-Wei Yen (2021, Nov). Enhancement in mechanical properties through an FCC-to-HCP phase transformation in an Fe-17.5 Mn-10Co-12.5 Cr-5Ni-5Si (in at%) medium-entropy alloy. *Journal of Alloys and Compounds*. MOST 106-2218-E-002-025. 本人為通訊作者.
 23. Kuan-Ting Chen, Ting-Ju Wei, Guo-Chi Li, Mei-Yi Chen, Yi-Shiang Chen, Shu-Wei Chang, Hung-Wei Yen, Chuin-Shan Chen (2021, Oct). Mechanical properties and deformation mechanisms in CoCrFeMnNi high entropy alloys: A molecular dynamics study. *Materials Chemistry and Physics*. MOST 109-2224-E-002-002.
 24. Hung-Chih Liu, Chia-Ming Kuo, Pai-Keng Shen, Cheng-Yao Huang, Hung-Wei Yen, Che-Wei Tsai (2021, Sep). Disordering of L12 Phase in High-Entropy Alloy Deformed at Cryogenic Temperature. *Advanced Engineering Materials*. MOST 108-2218-E-007-005.
 25. Jhe-Yu Lin, Zen-Hao Lai, Tatsuya Otsuki, Hung-Wei Yen, Shoichi Nambu (2021, Sep). Gradient microstructure and interfacial strength of CoCrFeMnNi high-entropy alloy in solid-state ultrasonic welding. *Materials Science and Engineering: A*. MOST 108-2218-E-002-033.
 26. Anni Wang, Isabella Gallino, Sascha Sebastian Riegler, Yi-Ting Lin, Nishchay A Isaac, Yesenia Haydee Sauni Camposano, Sebastian Matthes, Dominik Flock,

- Heiko O Jacobs, Hung-Wei Yen, Peter Schaaf (2021, Aug). Ultrafast formation of single phase B2 AlCoCrFeNi high entropy alloy films by reactive Ni/Al multilayers as heat source. *Materials & Design*. MOST 108-2218-E-002-033.
27. Anni Wang, Isabella Gallino, Sascha Sebastian Riegler, Yi-Ting Lin, Nishchay A Isaac, Yesenia Haydee Sauni Camposano, Sebastian Matthes, Dominik Flock, Heiko O Jacobs, Hung-Wei Yen, Peter Schaaf (2021, May). Ultrafast formation of single phase B2 AlCoCrFeNi high entropy alloy films by reactive Ni/Al multilayers as heat source. *Materials & Design*, X, 109790. MOST 109-2224-E-002-002.
 28. Cheng-Yao Huang, Hung-Wei Yen (2021, May). HRTEM investigations on nano precipitates in Custom 475 maraging stainless steel. *Materials Characterization*. MOST 110-2524-F-002-043. 本人為通訊作者.
 29. Pei-Huan Lee, Ting-Tzu Wu, Chia-Feng Li, Damian Głowienka, Yi-Hsuan Sun, Yi-Ting Lin, Hung-Wei Yen, Cheng-Gang Huang, Yulia Galagan, Yu-Ching Huang, Wei-Fang Su (2021, May). Highly crystalline colloidal nickel oxide hole transport layer for low-temperature processable perovskite solar cell. *Chemical Engineering Journal*, 412, 128746. MOST 109-3116-F-002-004-CC1.
 30. Zen-Hao Lai, Yi-Hsuan Sun, Yi-Ting Lin, Jui-Fan Tu, Hung-Wei Yen (2021, May). Mechanism of twinning induced plasticity in austenitic lightweight steel driven by compositional complexity. , 210, 116814. MOST 109-2224-E-002-002. 本人為通訊作者.
 31. Guan-Ju Cheng, Zen-Hao Lai, Tao Jia, Ching-Yuan Huang, Hung-Wei Yen (2021, Jan). Extraordinary warm ductility of a Mn-rich high-strength steel achieved at temperature below 0.5 Tm. *Materials Science and Engineering: A*, 803, 140704. MOST 109-2628-E-002-009-MY3. 本人為通訊作者.
 32. Po-Ting Lin, Hung-Chi Liu, Po-Ying Hsieh, Cheng-Yu Wei, Che-Wei Tsai, Yutaka S Sato, Shih-Che Chen, Hung-Wei Yen, Nian-Hu Lu, Chih-Hsuan Chen (2021, Jan). Heterogeneous structure-induced strength-ductility synergy by partial recrystallization during friction stir welding of a high-entropy alloy. *Materials & Design*, 197, 109238. MOST 109-2634-F-007-024.
 33. Dierk Raabe, Binhan Sun, Alisson Kwiatkowski Da Silva, Baptiste Gault, Hung-Wei Yen, Karo Sedighiani, Prithiv Thoudeden Sukumar, Isnaldi R Souza Filho, Shyam Katnagallu, Eric Jäggle, Philipp Kürnsteiner, Navyanth Kusampudi, Leigh Stephenson, Michael Herbig, Christian H Liebscher, Hauke Springer, Stefan Zaeferrer, Vitesh Shah, Su-Leen Wong, Christian Baron, Martin Diehl, Franz Roters, Dirk Ponge (2020, Nov). Current challenges and opportunities in microstructure-related properties of Advanced High-Strength Steels. *Metallurgical and Materials Transactions A*, 51, 5517-5586.

34. Ping-Jui Yu, Shih-Che Chen, Hung-Wei Yen, Horng-Yi Chang, Jer-Ren Yang, Shing-Hoa Wang, Po-Kai Chiu, Tzy-Rong Lin (2020, Nov). Large Delta T Thermal Cycling Induced Stress Accelerates Equilibrium and Transformation in Super DSS. *Crystals*, 10, 962-976. MOST 109-2221-E-019-047.
35. Yi-Ting Lin, Hong Liang Yi, Zhi Yuan Chang, Hsin-Chih Lin, Hung-Wei Yen (2020, Nov). Role of Vanadium Carbide in Hydrogen Embrittlement of Press-Hardening Steels: Strategy from 1500 MPa to 2000 MPa. *Frontiers in Materials*, 7, 611390. MOST 109-3116-F-002-004-CC1.
36. Zheng-Ming Su, Pai-Chen Lin, Wei-Jen Lai, Jwo Pan, Guan-Ju Cheng, Hung-Wei Yen (2020, Nov). Fatigue analyses and life predictions of laser-welded lap-shear specimens made of low carbon and high strength low alloy steels. *International Journal of Fatigue*, 140, 105849. MOST 107-2221-E-194-028.
37. Yi-Ting Lin, Lung-Jen Chiang, Yu-Chen Lin, Hung-Wei Yen (2020, Oct). New approaches in understanding the effects of hydrogen trapping and the fishscaling resistance of enameled steels. *Surface and Coatings Technology*, 399, 126135. MOST 106-2628-E-002-015-MY3.
38. Yu-Chen Lin, Ingrid E McCarroll, Yi-Ting Lin, Wei-Chih Chung, Julie M Cairney, Hung-Wei Yen (2020, Sep). Hydrogen trapping and desorption of dual precipitates in tempered low-carbon martensitic steel. *Acta Materialia*, 196, 516-527. MOST 106-2628-E-002-015-MY3.
39. Che-Wei Lu, Yi-Sheng Lu, Zen-Hao Lai, Hung-Wei Yen, Yueh-Lien Lee (2020, Jun). Comparative corrosion behavior of Fe₅₀Mn₃₀Co₁₀Cr₁₀ dual-phase high-entropy alloy and CoCrFeMnNi high-entropy alloy in 3.5 wt% NaCl solution. *Journal of Alloys and Compounds*, 842, 155824. MOST 108-2218-E-002-033.
40. Jun-Jie Yang, Chia-Ming Kuo, Po-Ting Lin, Hung-Chih Liu, Cheng-Yao Huang, Hung-Wei Yen, Che-Wei Tsai (2020, Jun). Improvement in oxidation behavior of Al_{0.2}Co_{1.5}CrFeNi_{1.5}Ti_{0.3} high-entropy superalloys by minor Nb addition. *Journal of Alloys and Compounds*, 825, 153983. MOST 107-2218-E-007-012.
41. Shih-Che Chen, Cheng-Yao Huang, Yuan-Tsung Wang, Ching-Yuan Huang, Hung-Wei Yen (2020, Jun). Role of the crystallographic texture in anisotropic mechanical properties of a newly-developed hot-rolled TRIP steel. *Materials Science and Engineering: A*, 790, 139683. MOST 106-2628-E-002-015-MY3.
42. Guan-Ju Cheng, Lola Lilensten, Ching-Yuan Huang, Baptiste Gault, Hung-Wei Yen (2020, May). Nanoscale compositional fluctuations enabled by dynamic strain-induced austenite reversion in a Mn-rich duplex steel. *Scripta Materialia*, Vol. 181, 101-107. MOST 106-2628-E-002-015-MY3. 本人為通訊作者.
43. Jian-Sin Li, Guan-Ju Cheng, Hung-Wei Yen, Yo-Lun Yang, Horng-Yi Chang, Chen-Yu Wu, Shing-Hoa Wang, Jer-Ren Yang (2020, May). Microstrain and

- boundary misorientation evolution for recrystallized super DSS after deformation. *Materials Chemistry and Physics*, 246, 122815. MOST 106-2221-E-019-026-MY2.
44. Yi-Sheng Lu, Che-Wei Lu, Yi-Ting Lin, Hung-Wei Yen, Yueh-Lien Lee (2020, May). Corrosion Behavior and Passive Film Characterization of Fe₅₀Mn₃₀Co₁₀Cr₁₀ Dual-Phase High-Entropy Alloy in Sulfuric Acid Solution. *Journal of The Electrochemical Society*, 167 (8), 081506. MOST 108-2218-E-002-033.
 45. Chun-Te Wu, Hsiao-Tzu Chang, Chien-Yu Wu, Shi-Wei Chen, Sih-Ying Huang, Mingxin Huang, Yeong-Tsuen Pan, Peta Bradbury, Joshua Chou, Hung-Wei Yen (2020, Apr). Machine learning recommends affordable new Ti alloy with bone-like modulus. *Materials Today*, Vol 34., pp. 41-50. MOST 108-3017-F-002-002. 本人為通訊作者.
 46. Cheng-Yao Huang, Hsu-Chih Ni, Hung-Wei Yen (2020, Mar). New protocol for orientation reconstruction from martensite to austenite in steels. *Materialia*, Vol. 9, 100554. MOST 108-2218-E-002-033. 本人為通訊作者.
 47. Tian-Yue Chen, Cheng-Wei Peng, Tsung-Yu Tsai, Wei-Bang Liao, Chun-Te Wu, Hung-Wei Yen, Chi-Feng Pa (2020, Jan). Efficient Spin–Orbit Torque Switching with Nonepitaxial Chalcogenide Heterostructures. *ACS Applied Materials & Interfaces*, 12(6), 7788-7794. MOST 105-2112-M-002-007-MY3.
 48. Yu-Tung Hsu, He-Ying Jiang, Hung-Wei Yen, Hsin-Chih Lin & Steven Hong (2020, Jan). Hydrogen-induced embrittlement of nickelchromium-molybdenum containing HSLA steels. *Journal of the Chinese Institute of Engineers*, 43 (1), 58-66.
 49. Omaru Nimaga, Binbin He, Guan-Ju Cheng, Hung-Wei Yen, Mingxin Huang (2019, Dec). Revealing orientation-dependent martensitic transformation in a medium Mn steel by micropillar compression. *International Journal of Plasticity*, 123, 165-177.
 50. Jian-Sin Li, Guan-Ju Cheng, Hung-Wei Yen, Liberty T. Wu, Yo-Lun Yang, Rudder T. Wu, Jer-Ren Yang, Shing-Hoa Wang (2019, Nov). Thermal cycling induced stress–assisted sigma phase formation in super duplex stainless steel. *Materials and Design*, 182, 108003.
 51. Tzu-Hou Hsu, Yao-Jen Chang, Cheng-Yao Huang, Hung-Wei Yen, Chih-Peng Chen, Kuo-Kuang Jen, An-Chou Yeh (2019, Sep). Microstructure and property of a selective laser melting process induced oxide dispersion strengthened 17-4 PH stainless steel. *Journal of Alloys and Compounds*, 803, 30-41.
 52. Bin Hu, BinBin He, Guan-Ju Cheng, Hung-Wei Yen, MingXin Huang, HaiWen Luo (2019, Aug). Super-high-strength and formable medium Mn steel

- manufactured by warm rolling process. *Acta Materialia*, 174, 131-141. MOST 104-2218-E-002-022-MY3.
53. Omaru G. Nimaga, Binbin He, Guan-Ju Cheng, Hung-Wei Yen, Minxing Huang (2019, Jul). Revealing orientation-dependent martensitic transformation in a medium Mn steel by micropillar compression. *International Journal of Plasticity*, In Press.
 54. Shih-Che Chen, Yuan-Tsung Wang, Yu-Chen Lin, Ching-Yuan Huang, Jer-Ren Yang, Hung-Wei Yen (2019, Jul). Microstructure and mechanical behaviors of GPa-grade TRIP steels enabled by hot-rolling processes. *Materials Science and Engineering: A*, 761(22), 138005. MOST 106-2628-E-002-015-MY3. 本人為通訊作者.
 55. Yu-Chen Lin, Delphic Chen, Meng-Hsuan Chiang, Guan-Ju Cheng, Hsin-Chih Lin, Hung-Wei Yen (2019, Apr). Response of Hydrogen Desorption and Hydrogen Embrittlement to Precipitation of Nanometer-Sized Copper in Tempered Martensitic Low-Carbon Steel. *JOM*, Vol. 71, pp 1349–1356. MOST 106-2628-E-002-015-MY3. 本人為通訊作者.
 56. Zhichao Luo, RD Liu, X Wang, Hung-Wei Yen, Mingxin Huang (2019, Mar). The Role of Plastic Strain on the Delayed Fracture Behavior of Twinning-Induced Plasticity Steels. *Metallurgical and Materials Transactions A*, Vol. 50, pp 1437-1447. MOST 106-2628-E-002-015-MY3.
 57. Wei-Hsuan Huang, Hung-Wei Yen, Yueh-Lien Lee (2019, Jan). Corrosion behavior and surface analysis of 690 MPa-grade offshore steels in chloride media. *Journal of Materials Research and Technology*, 8(1), 1476-1485 .
 58. JC Zhuang, Wai Kong Yeoh, HW Yen, Xun Xu, Yi Du, HW Liu, Chao Yao, YW Ma, XL Wang, Simon Peter Ringer, Shi Xue Dou (2018, Jul). Microscopic origin of highly enhanced supercurrent in 122 pnictide superconductor. *Journal of Alloys and Compounds* , Vol. 745, pp 1-6.
 59. Li Liu, BinBin He, Guan0Ju Cheng, Hung-Wei Yen, Mingxin Huang (2018, Jun). Optimum properties of quenching and partitioning steels achieved by balancing fraction and stability of retained austenite. *Scripta Materialia*, Vol. 150, pp 1-6. MOST 104-2218-E-002-022-MY3.
 60. BinBin He, Bo-Ming Huang, Shihui He, Yang Qi, Hung-Wei Yen, MingXin Huang (2018, Mar). Increasing yield strength of medium Mn steel by engineering multiple strengthening defects. *Materials Science and Engineering: A*, Vol. 724, pp 11-16. MOST 104-2218-E-002-022-MY3. 本人為通訊作者.
 61. Chuan-Che Hsu, Po-Chun Chang, Yi-Hua Chen, Chak-Ming Liu, Chun-Te Wu, Hung-Wei Yen, Wen-Chin Lin (2018, Feb). Reversible 90-Degree Rotation of Fe Magnetic Moment Using Hydrogen. *Scientific Reports*, Article number: 3251.

62. Guan-Ju. Cheng, Baptiste Gault, Cheng-Yao Huang, Ching-Yuan Huang, Hung-Wei Yen (2018, Feb). Warm ductility enhanced by austenite reversion in ultrafine-grained duplex steel. *Acta Materialia*, Vol. 148, pp. 345-355. MOST 104-2218-E-002-022-MY3. 本人為通訊作者.
63. Ting-Chien Wang, Tian-Yue Chen, Chun-Te Wu, Hung-Wei Yen, and Chi-Feng Pai (2018, Jan). Comparative Study on Spin-Orbit Torque Efficiencies from W/ferromagnetic and W/ferrimagnetic Heterostructures. *PHYSICAL REVIEW MATERIALS*, 2, 014403.
64. Tian-Yue Chen, Tsao-Chi Chuang, Ssu-Yen Huang, Hung-Wei Yen, and Chi-Feng Pai (2017, Oct). Spin-Orbit Torque from a Magnetic Heterostructure of High-Entropy Alloy. *Physical Review Applied*, 8, 044005.
65. Tian-Yue Chen, Chun-Te Wu, Hung-Wei Yen, Chi-Feng Pai (2017, Sep). Tunable Spin-Orbit Torque in Cu-Ta Binary Alloy Heterostructures. *Physical Review B*, 96,104434.
66. BinBin He, Bin Hu, Hung-wei Yen, Guan-Ju Cheng, Zuankai Wang, Haiwen Luo, Mingxin Huang (2017, Aug). High dislocation density–induced large ductility in deformed and partitioned steels. *Science*. MOST 104-2218-E-002-022-MY3.
67. Chia-Yen Huang, Kai-Shiang Chang, Cheng-Yao Huang, Yun-Hsiang Lin, Wei-Chih Peng, Hung-Wei Yen, Ray-Ming Lin, and Hao-Chung Kuo (2017, Aug). The origin and mitigation of volcano-like morphologies in micron-thick AlGa_N/AlN heteroepitaxy. *Applied Physics Letters*, 111, 072110.
68. O.G. Nimagaa, G.J. Cheng, H.W. Yen, M.X. Huang (2017, Aug). Large strain burst induced by martensitic transformation in austenitic micropillars. *Scripta Materialia*, 187, 64-68. (SCI, 3/73, METALLURGY & METALLURGICAL ENGINEERING). MOST 104-2218-E-002-022-MY3.
69. Shih-Che Chen, Cheng-Yao Huang, Yuan-Tsung Wang, and Hung-Wei Yen (2017, Aug). Coopetitive micro-mechanisms between recrystallization and transformation during/after dynamic strain-induced transformation in aluminum-containing low-carbon steel Materials and Design. *Materials & Design*, 134, 434-445. MOST 104-2218-E-002-022-MY3. 本人為通訊作者.
70. Hung-Wei Yen, Meng-Hsuan Chiang, Yu-Chen Lin, Delphic Chen, Ching-Yuan Huang, Hsin-Chih Lin (2017, Jul). High-temperature tempered martensite embrittlement in quenched-and-tempered offshore steels. *Metals*, 7(7), 253. MOST 105-2266-8-006-001. 本人為第一作者、通訊作者.
71. Chia-Yen Huang, Pei-Yu Wu, Kai-Shiang Chang, Yun-Hsiang Lin, Wei-Chih Peng, Yem-Yeu Chang, Jui-Ping Li, Hung-Wei Yen, YewChung Sermon Wu, Hideto Miyake, and Hao-Chung Kuo (2017, May). High-quality and highly-

- transparent AlN template on annealed sputter-deposited AlN buffer layer for deep ultra-violet light-emitting diodes. *AIP Advances*, 7, 055110.
72. Chuan-Che Hsu, Hsiang-Chih Chiu, Venkata Ramana Mudinepalli, Yu-Chuan Chen, Po-Chun Chang, Chun-Te Wu, Hung-Wei Yen, Wen-Chin Lin (2017, Apr). Modulation of magnetic anisotropy through self-assembled surface nanoclusters: Evolution of morphology and magnetism in Co–Pd alloy films. *Applied Surface Science*, 416, 133-143. (SCI, 1/18, MATERIALS SCIENCE, COATINGS & FILMS). MOST 104-2218-E-002-022-MY3. 本人為通訊作者.
 73. Venkata Ramana Mudinepalli, Yu-Chuan Chen, Po-Chun Chang, Chuan-Che Hsu, Chan-Yi Tsai, Hsiang-Chih Chiu, Chun-Te Wu, Hung-Wei Yen, Shao-Ju Shih, Wen-Chin Lin (2017, Feb). Hydrogenation effect on uniaxial magnetic anisotropy of a Co x Pd 1– x alloy microstructure. *Journal of Alloys and Compounds*, 695, 2365–2373.
 74. Wei-Lung Tzeng, Hung-Wei Yen, Wen-Chin Lin, Shao-Ju Shih (2017, Feb). Grain boundary engineering for improving conductivity of polycrystalline SrTiO₃. *Ceramics International*, 43, 2361–2367.
 75. Shao-Pu Tsai, Chih-Hung Jen, Hung-Wei Yen, Chih-Yuan Chen, Ming-Chin Tsai, Ching-Yuan Huang, Yuan-Tsung Wang, Jer-Ren Yang (2017, Jan). Effects of interphase TiC precipitates on tensile properties and dislocation structures in a dual phase steel. *Materials Characterization*, 123, 153-158.
 76. TC Chen, Wen Hao Chien, Yuan Tsung Wang, Ching Yuan Huang, Hung Wei Yen, Hsin Chih Lin (2017, Jan). Hydrogen Assisted Tempered Martensite Embrittlement of Ultra High Strength Martensitic Steel. *Materials Science Forum*, 880, 29-32.

研討會論文

1. An Lee, Chih-Hsuan Chen, Shi-Wei Chen, Yi-Ting Lin, Ying-Chun Chao, Hung-Wei Yen (2021, Nov). Microstructure and Mechanical Behaviors of B2 Intermetallic Compounds with High-Entropy Sublattice. Materials Research Society-Taiwan International Conference. 本人為通訊作者.
2. Hsuan-Hsuan Chen; Chin-En Chou; Zhong-Shun Yang; Hung-Wei Yen (2021, Nov). Effects of Retained Austenite on Hydrogen Embrittlement of Ultrahigh-Strength TRIP-Assisted Steels. Materials Research Society-Taiwan International Conference, 線上. 本人為通訊作者.
3. Hung-Wei Yen (2021, Nov). Complementary Characterizations by High-Resolution Transmission Electron Microscopy and Atom Probe Tomography on Tetragonality in Steels. Materials Research Society-Taiwan International

- Conference, 線上. 本人為第一作者、通訊作者.
4. Hung-Wei Yen (2021, Nov). Effects of Warm Deformation on Mechanical Property and Nanostructure in Mn-Rich Duplex Steel. Materials Research Society-Taiwan International Conference, 線上. 本人為第一作者、通訊作者.
 5. Poulami Bhattacharjee, David Yang, Hung-Wei Yen (2021, Nov). Compositionally complicated Titanium rich alloy for biomedical application. Materials Research Society-Taiwan International Conference, 線上. MOST 109-2224-E-002-002. 本人為通訊作者.
 6. Shao-Lun Lu, Ming-Yu Tseng, Kuo-Cheng Yang, Ching-Yuan Huang, Hung-Wei Yen (2021, Nov). Design of Cold-Rolled Dual Phase Steel Strengthened by Interphase Precipitation. Materials Research Society-Taiwan International Conference, 線上. 本人為通訊作者.
 7. Yi-Hsuan Sun; Zen-Hao Lai; Yi-Ting Lin; Tzu-Chi Huang; Jui-Fan Tu; Hung-Wei Yen (2021, Nov). Ultrahigh Strength but Ductility in High-Entropy Duplex Lightweight Steel Strengthened by Hybrid Mechanisms. Materials Research Society-Taiwan International Conference, 線上. 本人為通訊作者.
 8. Yi-Jyun Guo; Chien-He Wang; Chung-Yi Yu; Hung-Wei Yen (2021, Nov). Nanostructure and Mechanical Property of AA7075 Aluminum Alloy in Simulated Warm Forming Process. Materials Research Society-Taiwan International Conference, 線上. 本人為通訊作者.
 9. Yi-Ting Lin, Zhiguang Zhu, Xianghai An, Mui Ling Sharon Nai, Hung Wei Yen (2021, Nov). Hydrogen-Enhanced Ductility in Selective Laser Melted CoCrFeMnNi High-entropy Alloy. Materials Research Society-Taiwan International Conference, 線上. 本人為通訊作者.
 10. Yo-Cheng Su, Tzu-Chi Huang, and Hung-Wei Yen (2021, Nov). A Newly Designed Deformed-and-Aged Maraging Stainless Steel . Materials Research Society-Taiwan International Conference, 線上. MOST 109-2224-E-002-002. 本人為通訊作者.
 11. Yu-Siang Wang, Yi-Hsuan Sun, Tzu-Hsien Yang, and Hung-Wei Yen (2021, Nov). Characterizations on Nanostructure of Mg-Based Hydrogen Storage Alloy. Materials Research Society-Taiwan International Conference, 線上. 本人為通訊作者.
 12. Zong-Ying Liu; Chien-He Wang; Chung-Yi Yu; Hung-Wei Yen (2021, Nov). Study on warm forming process and nano-precipitates in AA6111 Al alloy. Materials Research Society-Taiwan International Conference, 線上. 本人為通訊作者.
 13. Hung-Wei Yen (2021, Mar). Twinning-Induced Plasticity of Austenitic Lightweight High-Entropy Steel. The Minerals, Metals & Materials Society, 線

- 上. 本人為第一作者、通訊作者.
14. Chun-Te Wu, Hsiao-Tzu Chang, Shi-Wei Chen, Sih-Ying Huang, Yeong-Tsuen Pan, Joshua Chou, Hung-Wei Yen (2020, Feb). Machine Learning Assisted Discovery of Affordable Biomedical Ti Alloy. The Minerals, Metals & Materials Society, 美國. 本人為通訊作者.
 15. Hung-Wei Yen, Shi-Wei Chen, Yu-Ting Mai, Yi-Ting Lin (2020, Feb). Anisotropic Lattice Distortion Induced by Hydrogen in CoCrFeMnNi High-entropy Alloy. The Minerals, Metals & Materials Society, 美國. 本人為第一作者、通訊作者.
 16. Yi-Ting Lin (Oral), Hung-Wei Yen, Lung-Ren Chiang (2020, Feb). Advanced Approach in Investigating the Effects of Hydrogen Trapping on Fish-scaling Resistance of Enamelled Steels. The Minerals, Metals & Materials Society, 美國. 本人為通訊作者.
 17. Yu Chen Lin, Hsin-Chih Lin, Ingrid McCarroll, Julie M. Cairney, Hung-Wei Yen (2019, Dec). Hydrogen trapping and desorption in Q&T martensitic steel strengthened by co-precipitation. 6th International Conference on Advanced Steels (ICAS 2018), 韓國濟州島. MOST 106-2628-E-002-015-MY3. 本人為通訊作者.
 18. Cheng-Yao Huang, Hung-Wei Yen (2019, Nov). The Precipitation Behavior of Custom 475 Maraging Stainless Steel. 2019中國材料年會. 本人為通訊作者.
 19. Shih-Che Chen, Yuan-Tsung Wang, Yu-Chen Lin, Ching-Yuan Huang, Jer-Ren Yang, Hung-Wei Yen (2019, Nov). Development of a GPa-Grade Hot-Rolled TRIP Steel Enabled by Dynamic Strain-Induced Transformation. 2019中國材料年會. MOST 106-2628-E-002-015-MY3. 本人為通訊作者.
 20. Sih Ying Huang, Chun Te Wu, Hung-Wei Yen (2019, Nov). Tuning Young's Modulus of Martensitic Titanium Alloy Ti 16Nb 16Zr 6Sn by Cold Rolling Reduction and Heat Treatment. 2019中國材料年會. MOST 108-2218-E-002-033. 本人為通訊作者.
 21. Yi Ting Lin, Hung Wei Yen, Lung Ren Chiang (2019, Nov). New Approach in Studying Hydrogen Trapping Effect in Enamelled Steel. 2019中國材料年會. MOST 106-2628-E-002-015-MY3. 本人為通訊作者.
 22. Zen Hao Lai, Yi Hsuan Sun, Guan Ju Cheng, Hung Wei Yen (2019, Nov). Microstructure and Mechanical properties of High entropy Steels with Low Density and Relatively Low Stacking Fault Energy. 2019中國材料年會. MOST 106-2628-E-002-015-MY3. 本人為通訊作者.
 23. Cheng-Yao Huang, Hung-Wei Yen (2019, Sep). Precipitation Behavior in Custom 475 Maraging Stainless Steel. 台灣電子顯微鏡年會.
 24. Guan-Ju Cheng, Lola Liliensten, Ching-Yuan Huang, Dierk Rabbe, Baptiste

- Gault, Hung-Wei Yen (2019, Sep). Chemical deviation of thermodynamic equilibrium under dynamic strain-induced austenite reversion in Mn-rich steel. 108年台灣顯微鏡年會. MOST 106-2628-E-002-015-MY3. 本人為通訊作者.
25. Shan-Chun Yang, Hung-Wei Yen (2019, Sep). Study on Microalloyed Medium-Manganese Steels in Quenching and Austenite Reversion Process. 台灣電子顯微鏡年會. MOST 108-2218-E-0022-033. 本人為通訊作者.
 26. Guan-Ju Cheng, Jen-Has Lai, Baptiste Gault, Hung-Wei Yen (2019, Apr). Excellent Warm Ductility Achieved at Temperature below $0.5T_m$ of a Mn-Rich High-Strength Steel. The 4th International Conference on Medium and High Manganese Steels. MOST 104-2218-E-002-022-MY3. 本人為通訊作者.
 27. Hung-Wei Yen (2019). Accelerating Developments of Biomedical Titanium Alloys by Machine Learning. Asia Forum of Light Metals, 高雄, 台灣. 本人為第一作者、通訊作者.
 28. Shih Che Chen, Yuan Tsung Wang, Hung-Wei Yen (2018, Dec). Tunable Microstructure and Mechanical Properties in Hot-rolled TRIP/DP Steels. 6th International Conference on Advanced Steels (ICAS 2018). MOST 106-2628-E-002-015-MY3. 本人為通訊作者.
 29. Yu-Ting Mai, Po-Cheng Kung, Yu-Chen Lin, Yu-Ting Lin, Che-Wei Tsai, Hung-Wei Yen (2018, Dec). Hydrogen Trapping and Desorption in FCC Alloys: Thermal Desorption Analyses from Nickel to High-Entropy Alloys. International Conference on High-Entropy Materials (ICHEM 2018). MOST 107-2218-E-002-059. 本人為通訊作者.
 30. Guan-Ju Cheng, Hung-Wei Yen (2018, Nov). Warm Ductility During Austenite Reversion in Cold-rolled and Hot-rolled Mn-rich Steels. 6th International Conference on Advanced Steels (ICAS 2018). MOST 106-2628-E-002-015-MY3. 本人為通訊作者.
 31. Po-Cheng Kung, Yu-Chen Lin, Yi-Ting Lin, Hung-Wei Yen (2018, Nov). Mechanism and Prevention of Hydrogen Embrittlement in Fe-15Mn-0.5C (in wt. %) TRIP Assisted Steel. 中國材料科學年會. MOST 106-2622-8-006-001. 本人為通訊作者.
 32. Yu-Chen Lin, Yi-Ting Lin, Ingrid McCarroll, Julie M. Cairney, Hung-Wei Yen (2018, Nov). Hydrogen trapping and desorption in Q&T martensitic steel strengthened by dual precipitates. 中國材料科學年會. MOST 106-2622-8-006-01. 本人為通訊作者.
 33. Cheng-Yao Huang, Hsu-Chih Ni, Hung-Wei Yen (2018, Sep). Algorithm for Parent Phase Reconstruction from EBSD Dataset. 19th International Congress on Microscopy (IMC2019). 本人為通訊作者.
 34. Hung-Wei Yen, Chun-Te Wu, Yao-Jen Chang, An-Chou Yeh (2018, Sep).

- Complex Architectures in High-Entropy Superalloy: A Study by Using Atom Probe. 19th International Congress on Microscopy. 本人為第一作者。
35. Hung-Wei Yen (2018, Aug). Discovery of Titanium Alloys with Bone-Like Modulus by Machine Learning. The 2018 Gordon Research Conference on Structural Nanomaterials, 香港. MOST 107-2218-E-002-059. 本人為第一作者、通訊作者。
 36. Chun-Te Wu, Chien-Yu Wu, Hsiao-Tze Chang, Sih-Ying Huang, Hung-Wei Yen (2018, Jul). Unexpected by human; predicted by machine Discovery of low-modulus Ti alloys by Machine Learning. THERMEC' 2018. MOST 107-2218-E-002-059. 本人為通訊作者。
 37. Hung-Wei Yen, Yu-Chen Lin, Hsin-Chih Lin (2018, Mar). Hydrogen Trapping and Desorption due to Nanometer-sized Copper Particles in Quenched-and-Tempered Martensite Steel. TMS 2018, Phoenix, USA. MOST 106-2628-E-002-015-MY3. 本人為第一作者、通訊作者。
 38. Guan-Ju Cheng(程冠儒), Ching-Yuan Huang(黃慶淵), Delphic Chen(陳志慶) and Hung-Wei Yen(顏鴻威) (2017, Nov). Warm Ductility Enhanced by Austenite Reversion in Ultrafine-Grained Duplex Steel. International Union of Materials Research Societies-International Conference in Asia (IUMRS-ICA), Taipei, Taiwan. 本人為通訊作者. Oral.
 39. Hung-Wei Yen (2017, Nov). Step-by-step characterizations on deformation-and-partition steel. 3rd East-Asia Microscopy Conference, Busan, Korea. 本人為第一作者、通訊作者. Invited Talk & Session Chair.
 40. Hung-Wei Yen, Yu-Chen Lin, Delphic Chen, Hsin-Chih Lin (2017, Nov). Hydrogen trapping and Desorption in Copper-Containing Martensite. The 5th International Symposium on Steel Science 2017, Kyoto, Japan. 本人為第一作者、通訊作者. Poster.
 41. Shih-Che Chen, Cheng-Yao Huang, Yuan-Tsung Wang, Hung-Wei Yen (2017, Nov). Micro-mechanisms of cooperative reactions between strain-induced transformation and recrystallization in Al-containing low-carbon steel. International Union of Materials Research Societies-International Conference in Asia (IUMRS-ICA), Taipei, Taiwan. 本人為通訊作者. Oral.
 42. Guan-Ju Cheng, Yu-Han Huang, Hung-Wei Yen (2017, Feb). Effects of Aluminum Addition on Warm Ductility and Microstructure in Mn-rich Steels. TMS 2017, San Diego, USA. 本人為通訊作者. Oral.
 43. Hung-Wei Yen (2017, Feb). Ultrahigh Strength and Excellent Ductility Achieved by Grain Refinement in Low-carbon High-manganese Steels. TMS 2017, San Diego, USA. 本人為第一作者、通訊作者. Oral.
 44. 孫苡瑄、賴人豪、林詣珽、黃資棋、涂睿帆、顏鴻威 (2021年12月)。Strength-

Ductility Balance in High-Entropy Duplex Lightweight Steel Strengthened by Geometrically Necessary Dislocation Assisted Mechanical Twins。110年台灣顯微鏡年會。科技部：109-2224-E-002-002。本人為通訊作者。

45. 李安、陳志軒、陳世偉、林詣珽、趙英鈞、顏鴻威（2021年12月）。Microstructure of B2 Intermetallic Compounds with High-Entropy Sublattice。110年台灣顯微鏡年會。科技部：109-2224-E-002-002。本人為通訊作者。
46. 顏鴻威（2021年12月）。Computational Microscopy: Metallurgical Renaissance Inspired by Atom Probe Tomography。110年台灣顯微鏡年會。本人為第一作者、通訊作者。
47. 顏鴻威（2020年12月）。Developments of Frontier Alloys: Steel, High-Entropy Alloy, High-Entropy Steel。109年 台灣顯微鏡年會。本人為第一作者、通訊作者。
48. 黃思穎、曾宇任、趙英鈞、顏鴻威、張孝慈（2020年12月）。Ti-Nb-Zr-Sn合金之形狀記憶效應誘發脆化。109年台灣金屬熱處理學會年會。本人為通訊作者。
49. Tzu-Hsien Yang、Shih-Che Chen、Yi-Ting Lin、 Hung-Wei Yen、Yao-Jen Chang、Shou-Yi Chang、An-Chou Yeh、Uwe Glatzel（2020年11月）。The studying of nanoindenter induced geometrically necessary twins on dendrite structure of Cantor [001] single crystal high entropy alloy。109年中國材料科學學會年會。
50. 劉宗穎、郭怡君、顏鴻威（2020年11月）。Possibility to Enable Warm Forming for 6000-Series Al Alloy。109年 中國材料科學學會年會。本人為通訊作者。
51. 林詣珽、易紅亮、常智淵、陳宣瑄、車鎮宇、林新智、顏鴻威（2020年11月）。Hydrogen embrittlement in vanadium added hot-stamped steel。109年中國材料科學學會年會。本人為通訊作者。
52. 林柏勳、吳俊德、曾宇任、顏鴻威（2020年11月）。Revisit Young's Modulus in Ti-based Alloy by Machine Learning。109年 中國材料科學學會年會。本人為通訊作者。
53. 游秉叡、林詣珽、黃正堯、蘇游程、顏鴻威、許誠安、甘能豪、王星豪、侯文星（2020年11月）。高溫兩相區固溶 AISI 630 經不同介質淬火之結晶相特性。109年 中國材料科學學會年會。
54. 王昱翔、孫苡瑄、顏鴻威（2020年11月）。Characterizations on ZK60 Mg Alloy for Hydrogen Storage。109年台灣顯微鏡年會。本人為通訊作者。
55. 賴人豪、孫苡瑄、涂睿帆、顏鴻威（2020年11月）。Abnormal Hall-Petch Constant in High-Entropy Steel。109年台灣顯微鏡年會。本人為通訊作者。
56. 賴人豪、孫苡瑄、涂睿帆、顏鴻威（2020年11月）。Abnormal Hall-Petch Constant in High-Entropy Steel。109年 中國材料科學學會年會。本人為通訊

- 作者。
57. 顏鴻威（2020年11月）。TRIP Hot-Rolled TRIP Steel with Resistance to Hydrogen Embrittlement。109年 中國材料科學學會年會。本人為第一作者、通訊作者。
 58. 麥瑜庭、林昱辰、黃正堯、楊子賢、顏鴻威、葉安洲（2020年11月）。選擇性雷射燒熔17-4 PH 不鏽鋼的微結構和氫陷阱性質分析。109年 中國材料科學學會年會。本人為通訊作者。
 59. 黃思穎、趙英鈞、顏鴻威（2020年11月）。Embrittlement in Ti-Nb-Zr-Sn Biomedical Ti-Based Shape Memory Alloy。109年 中國材料科學學會年會。本人為通訊作者。
 60. 黃正堯、蘇游程、顏鴻威（2020年11月）。Precipitation Hardening in Medium-Entropy Maraging Steel。109年 中國材料科學學會年會。本人為通訊作者。
 61. 劉宗穎、郭怡君、鄭翊良、顏鴻威、陳俊杉、庾忠義（2020年11月）。Precipitation and Deformation Behavior in AA6111 Al Alloy。109年台灣顯微鏡年會。本人為通訊作者。
 62. 林凱帆、陳世哲、顏鴻威、林新智（2020年11月）。Strengthen mechanical property of A novel FeMnCoCrNiSi Medium entropy alloy by deformation induced FCC to HCP phase transformation。109年台灣顯微鏡年會。
 63. 林凱帆、陳世哲、顏鴻威、林新智（2019年11月）。Mechanical Properties of FeMnSibased Medium Entropy Alloy。108年 中國材料科學學會年會。
 64. 游秉叡、陳世哲、顏鴻威、王星豪、楊哲人（2019年11月）。固溶後熱循環週次對雙相不銹鋼再結晶方位效應。108年中國材料科學學會年會。
 65. 顏鴻威（2019年11月）。Hydrogen Embrittlement and Hydrogen Trapping in Martensitic Steels。108年中國材料科學學會年會。本人為第一作者、通訊作者。
 66. Po-Cheng Kung、Yu-Chen Lin、Yi-Ting Lin、Hung-Wei Yen（2018年11月）。Mechanism and Prevention of Hydrogen Embrittlement in Fe-15 Mn-0.1 C (in wt. %) TRIP-Assisted Steel。107年中國材料科學學會年會。本人為通訊作者。
 67. Yu-Chen Lin、Hung-Wei Yen Ingrid McCarroll、Julie M. Cairney、Yi-Ting Lin（2018年11月）。Hydrogen trapping and desorption in Q&T martensitic steel strengthened by dual precipitates。107年中國材料科學學會年會。
 68. 李建欣、楊哲人、程冠儒、顏鴻威、張宏宜、吳鎮宇、王星豪、游秉叡、許誠安（2018年11月）。超級雙相不銹鋼的晶粒細化的物理特性。107年中國材料科學學會年會。
 69. 黃正堯、倪緒之、顏鴻威（2018年11月）。Reconstruction of low-carbon martensitic steels。107年中國材料科學學會年會。本人為通訊作者。
 70. 吳俊德、黃思穎、吳建宇、張孝慈、顏鴻威（2018年10月）。利用機器學習設

計低楊氏係數合金。107年中國材料科學學會年會。本人為通訊作者。

71. 林新智、徐宇彤、江和穎、顏鴻威、洪榮德（2018年）。Effects of Heat Treatment on Yoke 8625M HSLA Steel。107年台灣顯微鏡年會。