

Name: Prof. **Chi-Jen Chung**

Education:

- Ph. D. Department of Materials Science and Engineering, Feng Chia University
- M. D. Department of Education, William Woods University
- A. D. Department of Dental Technology and Materials Science, Central Taiwan University of Science and Technology

Career Experience:

- Dean of General Affairs, Central Taiwan University of Science and Technology
- Dean of Safety, Health and Environment, Central Taiwan University of Science and Technology
- Head, Department of Dental Technology and Materials Science, Central Taiwan University of Science and Technology
- Director, Institute of Biomedical Engineering and Materials Science, Central Taiwan University of Science and Technology
- General Manager, VEDEN Dental Group
- Chairman, Taiwan Association of Dental Technology

Courses Taught:

- Dental Morphology (Carving Skill of Dental Morphology)
- Oral Implant
- Dental Technology Practical Training

Professional Fields:

- Dental Technology
- Materials Science
- Management

Research Interests:

- Surface Treatment Technology
- Metal and Ceramic Materials
- Biomedical Material

Representative Publication in 5 Years:

Journal Articles:

1. H. C. Hsu, S. Y. Wong*, C. J. Chung, “**Mastering color toning wax to emulate natural tooth**”, The journal of the Japanese Society for Dental Materials and Devices, 43 (2024) 22. [ISSN 1884–4421]
2. S. Y. Huang, P. Y. Hsieh, C. J. Chung, C. M. Chou*, J. L. He, “**High power impulse magnetron sputtering (HiPIMS) prepared ultrathin gold film for plasmonic biosensor application**”, Gold Bulletin, 56 (2023) 199–208. [Chemistry, Inorganic & Nuclear, 2024 SCI Impact Factor: 1.5, Rank Factor: $N/M=32/42=76.19\%$]
3. S. Y. Huang, P. Y. Hsieh, C. J. Chung, C. M. Chou*, J. L. He, “**Nanoarchitectonics for ultrathin gold films deposited on collagen fabric by high-power impulse magnetron sputtering**”, Nanomaterials, 12 (2022) 1627–1644. [Physics, Applied, 2024 SCI Impact Factor: 4.3, Rank Factor: $N/M=57/187=30.48\%$][Cited Number: 8]
4. C. W. Lin, P. Y. Hsieh, C. M. Chou*, C. J. Chung, J. L. He, “**Femtosecond laser surface roughening and pulsed plasma polymerization duplex treatment on medical-grade stainless steel substrates for orthodontic purpose**”, Surface & Coatings Technology, 427 (2021) 127819–127828. [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.1, Rank Factor: $N/M=5/23=21.74\%$][Cited Number: 7]
5. H. T. Chen*, H. I. Lin, C. J. Chung, C. H. Tang, J. L. He, “**Osseointegrating and phase-oriented micro-arc-oxidized titanium dioxide bone implants**”, Journal of Applied Biomaterials & Functional Materials, 19 (2021) 1–8. [Biophysics, 2024 SCI Impact Factor: 3.1, Rank Factor: $N/M=23/79=29.11\%$][Cited Number: 20]
6. 彭韻芬、吳世經*、許學全、鍾啟仁、何文福, “**牙科氧化鋯陶瓷的發展**”, 牙技界, 22 (2020) 6–11。 [ISSN 2308–4596]
7. 林正偉*、鍾啟仁, “**牙科矯正不銹鋼裝置物表面製備超疏水鍍層之研究**”, 牙技界, 21 (2020) 6–14。 [ISSN 2308–4596]
8. C. W. Lin, C. J. Chung, C. M. Chou*, J. L. He, “***In vitro* wear tests of the dual-layer grid blasting-plasma polymerized superhydrophobic coatings on stainless steel orthodontic substrates**”, Thin Solid Films, 687 (2019) 137464–137471. [Physics, Condensed Matter, 2024 SCI Impact Factor: 2.0, Rank Factor: $N/M=50/79=63.29\%$][Cited Number: 11]
9. C. W. Lin, C. J. Chung, C. M. Chou*, J. L. He, “**Morphological effect governed by sandblasting and anodic surface reforming on the super-hydrophobicity of AISI 304 stainless steel**”, Thin Solid Films, 620 (2016) 88–93. [Physics, Condensed Matter, 2024 SCI Impact Factor: 2.0, Rank Factor: $N/M=50/79=63.29\%$][Cited Number: 22]
10. Y. H. Lee, C. J. Chung, C. W. Wang, Y. T. Peng, C. H. Chang, C. H. Chen, Y. N. Chen*, C. T. Li, “**Computational comparison of three posterior lumbar interbody fusion techniques by using porous titanium interbody cages with 50% porosity**”, Computers in Biology and Medicine, 71 (2016) 35–45. [Mathematical & Computational Biology, 2024 SCI Impact Factor: 6.3, Rank Factor: $N/M=4/67=5.97\%$][Cited Number: 74]
11. H. K. Tsou*, M. H. Chi, Y. W. Hung, C. J. Chung, J. L. He, “***In vivo* osseointegration performance of titanium dioxide coating modified polyetheretherketone using arc ion plating for spinal implant application**”, BioMed Research International, 2015 (2015) 1–9. [Medicine, Research & Experimental, 2024 SCI Impact Factor: 2.3, Rank Factor: $N/M=107/195=54.87\%$][Cited Number: 57]
12. Y. J. Yang, H. K. Tsou, Y. H. Chen, C. J. Chung*, J. L. He, “**Enhancement of bioactivity on medical polymer surface using high power impulse magnetron**

- sputtered titanium dioxide film**", Materials Science & Engineering C-Materials for Biological Applications, 57 (2015) 58–66. [Materials Science, Biomaterials, 2024 SCI Impact Factor: 8.1, Rank Factor: $N/M=8/53=15.10\%$][Cited Number: 40]
13. H. T. Chen, H. Y. Shu, C. J. Chung*, J. L. He, "**Assessment of bone morphogenic protein and hydroxyapatite-titanium dioxide composites for bone implant materials**", Surface & Coatings Technology, 276 (2015) 168–174. [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.1, Rank Factor: $N/M=5/23=21.74\%$] [Cited Number: 28]
 14. C. R. Hsiao, C. W. Lin, C. M. Chou, C. J. Chung*, J. L. He, "**Surface modification of blood-contacting biomaterials by plasma-polymerized super-hydrophobic films using hexamethyldisiloxane and tetrafluoromethane as precursors**", Applied Surface Science, 346 (2015) 50–56. [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.9, Rank Factor: $N/M=3/23=13.04\%$][Cited Number: 37]
 15. T. C. Yang, H. Y. Shu, H. T. Chen, C. J. Chung*, J. L. He, "**Interface between grown osteoblast and micro-arc oxidized bioactive layers**", Surface & Coatings Technology, 259 (2014) 185–192. [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.1, Rank Factor: $N/M=5/23=21.74\%$][Cited Number: 27]
 16. N. H. Chen, C. J. Chung*, C. C. Chiang, K. C. Chen, J. L. He, "**Antimicrobial copper-containing titanium nitride coatings co-deposited by arc ion plating / magnetron sputtering for protective and decorative purposes**", Surface & Coatings Technology, 253 (2014) 83–88. [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.1, Rank Factor: $N/M=5/23=21.74\%$][Cited Number: 14]
 17. C. M. Chou, C. J. Shiao, C. J. Chung*, J. L. He, "**Deposition, characterization and *in vivo* performance of parylene coating on general-purposed silicone for biocompatible surface modification**", Thin Solid Films, 549 (2013) 103–107. [Physics, Condensed Matter, 2024 SCI Impact Factor: 2.0, Rank Factor: $N/M=50/79=63.29\%$][Cited Number: 6]
 18. H. Y. Long, C. J. Chung*, J. L. He, "**Characteristics of micro-arc treated osseointegrated porous hydroxyapatite/titanium dioxide coatings on titanium metal**", Key Engineering Materials, 573 (2014) 49–59. [Materials Science, Ceramics, 2024 SCI Impact Factor: 0.224, Rank Factor: $N/M=19/28=67.86\%$][Cited Number: 3]
 19. M. H. Chi, H. K. Tsou, C. J. Chung*, J. L. He, "**Biomimetic hydroxyapatite grown on biomedical polymer coated with titanium dioxide interlayer to assist osteocompatible performance**", Thin Solid Films, 549 (2013) 98–102. [Physics, Condensed Matter, 2024 SCI Impact Factor: 2.0, Rank Factor: $N/M=50/79=63.29\%$][Cited Number: 30]
 20. C. M. Chou, C. M. Yeh*, C. J. Chung, J. L. He, "***In vitro* cell culture, platelet adhesion tests and *in vivo* implant tests of plasma-polymerized para-xylene films**", Applied Surface Science, 280 (2013) 456–461. [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.9, Rank Factor: $N/M=3/23=13.04\%$][Cited Number: 5]
 21. N. H. Chen, C. J. Chung*, C. C. Chiang, K. C. Chen, J. L. He, "**Antimicrobial and decorative ion-plated copper-containing ceramic coatings**", Surface & Coatings Technology, 236 (2013) 29–35. [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.1, Rank Factor: $N/M=5/23=21.74\%$][Cited Number: 18]
 22. C. J. Chung*, R. T. Su, H. J. Chu, H. T. Chen, H. K. Tsou, J. L. He, "**Plasma electrolytic oxidation of titanium and improvement in osseointegration**", Journal of Biomedical Materials Research Part B-Applied Biomaterials, 101B (2013) 1023–1030. [Engineering, Biomedical, 2024 SCI Impact Factor: 3.4, Rank Factor: $N/M=56/124=45.16\%$][Cited Number: 97]
 23. H. T. Chen, C. J. Chung*, T. C. Yang, C. H. Tang, J. L. He, "**Microscopic observations of osteoblast growth on micro-arc oxidized β titanium**", Applied Surface Science, 266 (2013) 73–80. [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.9, Rank Factor: $N/M=3/23=13.04\%$][Cited Number: 37]

24. H. K. Tsou, P. Y. Hsieh, M. H. Chi, C. J. Chung*, J. L. He, “**Improved osteoblast compatibility of medical-grade polyetheretherketone using arc ion plated rutile / anatase titanium dioxide films for spinal implants**”, Journal of Biomedical Materials Research Part A, 100A (2012) 2787–2792. [Engineering, Biomedical, 2024 SCI Impact Factor: 3.9, Rank Factor: $N/M=47/124=37.90\%$][Cited Number: 65]
25. 周佳滿、鍾啟仁*、何主亮, “電漿聚合對二甲苯與傳統聚對二甲苯薄膜之保固特性”, 防蝕工程, 26 (2012) 165–170。[ISSN 1016–2356][EI]
26. 陳南宏、鍾啟仁*、江忠鍵、陳克昌、何主亮, “離子鍍含銅陶瓷抗菌裝飾鍍膜的發色技術”, 防蝕工程, 26 (2012) 157–163。[ISSN 1016–2356][EI]
27. 朱厚任、陳芊卉、鍾啟仁*、陳克昌、何主亮, “脈衝電源波形對微弧氧化二氧化鈦微觀組織之影響”, 防蝕工程, 25 (2011) 147–154。[ISSN 1016–2356][EI]
28. C. J. Chung*, H. Y. Long, “**Systematic strontium substitution in hydroxyapatite coatings on titanium via micro-arc treatment and their osteoblast/osteoclast responses**”, Acta Biomaterialia, 7 (2011) 4081–4087. [Engineering, Biomedical, 2024 SCI Impact Factor: 9.6, Rank Factor: $N/M=11/124=8.87\%$][Cited Number: 181]
29. 陳南宏、鍾啟仁*、江忠鍵、陳克昌、何主亮, “含銅氮化鈦抗菌鍍膜用於衛浴黃銅的保固性”, 防蝕工程, 25 (2011) 47–54。[ISSN 1016–2356][EI]
30. C. J. Chung*, Hsi-Kai Tsou, H. L. Chen, P. Y. Hsieh, J. L. He, “**Low temperature preparation of phase-tunable and antimicrobial titanium dioxide coating on biomedical polymer implants for reducing implant-related infections**”, Surface & Coatings Technology, 205 (2011) 5035–5039. [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.1, Rank Factor: $N/M=5/23=21.74\%$][Cited Number: 22]
31. C. M. Chou, C. C. Chuang, C. H. Lin, C. J. Chung*, J. L. He, “**Plasma diagnostics for pulsed-dc plasma-polymerizing para-xylene using QMS and OES**”, Surface & Coatings Technology, 205 (2011) 4880–4885. [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.1, Rank Factor: $N/M=5/23=21.74\%$][Cited Number: 12]
32. H. K. Tsou, P. Y. Hsieh, M. H. Chi, Y. W. Hung, C. J. Chung*, J. L. He, “**Microstructure, mechanical and electrochemical properties of arc ion plated titanium dioxide on polyetheretherketone**”, Key Engineering Materials, 479 (2011) 98–105. [Materials Science, Ceramics, 2024 SCI Impact Factor: 0.224, Rank Factor: $N/M=19/28=67.86\%$][Cited Number: 4]
33. H. T. Chen, C. J. Chung*, T. C. Yang, I. P. Chiang, C. H. Tang, K. C. Chen, J. L. He, “**Osteoblast growth behavior on micro-arc oxidized β -titanium alloy**”, Surface & Coatings Technology, 205 (2010) 1624–1629. [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.1, Rank Factor: $N/M=5/23=21.74\%$][Cited Number: 38]
34. C. M. Chou, K. C. Hsieh, C. J. Chung*, J. L. He, “**Preparation of plasma-polymerized para-xylene as an alternative to parylene coating for biomedical surface modification**”, Surface & Coatings Technology, 204 (2010) 1631–1636. [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.1, Rank Factor: $N/M=5/23=21.74\%$][Cited Number: 20]
35. H. T. Chen, C. H. Hsiao, H. Y. Long, C. J. Chung*, C. H. Tang, K. C. Chen, J. L. He, “**Micro-arc oxidation of β -titanium alloy: Structural characterization and osteoblast compatibility**”, Surface & Coatings Technology, 204 (2009) 1126–1131. [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.1, Rank Factor: $N/M=5/23=21.74\%$][Cited Number: 58]
36. H. K. Tsou, P. Y. Hsieh, C. J. Chung*, T. W. Shyr, J. L. He, “**Low-temperature deposition of anatase TiO_2 on medical grade polyetheretherketone to assist osseous integration**”, Surface & Coatings Technology, 204 (2009) 1121–1125. [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.1, Rank Factor:

N/M=5/23=21.74%][Cited Number: 42]

37. C. J. Chung*, H. I. Lin, P. Y. Hsieh, K. C. Chen, J. L. He, A. Leyland, A. Matthews, **"Growth behavior and microstructure of arc ion plated titanium dioxide"**, Surface & Coatings Technology, 204 (2009) 915–922. [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.1, Rank Factor: N/M=5/23=21.74%][Cited Number: 25]
38. 謝秉諺*、吳沛芳、施智源、鍾啟仁、何主亮, “**聚醚醚酮表面生長銳鈦礦及金紅石陶瓷鍍膜的抗菌能力**”, 中華民國陶業研究學會會刊, 28 (2009) 15–21。[ISSN 1012–5442]
39. C. J. Chung*, P. Y. Hsieh, C. H. Hsiao, H. I. Lin, A. Leyland, A. Matthews, J. L. He, **"Multifunctional arc ion plated TiO₂ photocatalytic coatings with improved wear and corrosion protection"**, Surface & Coatings Technology, 203 (2009) 1689–1693. [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.1, Rank Factor: N/M=5/23=21.74%][Cited Number: 25]
40. C. J. Chung*, H. I. Lin, C. M. Chou, P. Y. Hsieh, C. H. Hsiao, Z. Y. Shi, J. L. He, **"Inactivation of *Staphylococcus aureus* and *Escherichia coli* under various light sources on photocatalytic titanium dioxide thin film"**, Surface & Coatings Technology, 203 (2009) 1081–1085. [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.1, Rank Factor: N/M=5/23=21.74%][Cited Number: 78]
41. K. F. Chiu*, C. L. Tsai, C. J. Chung, H. K. Tsou, **"Electrochemical performance of arc ion plated TiO₂ thin films on AISI 304 stainless steel substrates in bio-compatible solutions"**, Biological Nanostructures, Materials, and Applications, ECS Transactions, 16 (2009) 63–70. [EI]
42. C. J. Chung*, C. C. Chiang, C. H. Chen, C. H. Hsiao, H. I. Lin, P. Y. Hsieh, J. L. He, **"Photocatalytic TiO₂ on copper alloy for antimicrobial purposes"**, Applied Catalysis B-Environmental, 85 (2008) 103–108. [Engineering, Environmental, 2024 SCI Impact Factor: 22.1, Rank Factor: N/M=1/55=1.81%][Cited Number: 36]
43. 鍾啟仁*、謝秉諺、蕭景鴻、林欣熠、何主亮, “**不銹鋼鍍製銳鈦礦二氧化鈦的保固性**”, 台灣金屬熱處理學會期刊, 99 (2008) 31–38。[ISSN 1606–8246]
44. C. J. Chung*, H. I. Lin, H. K. Tsou, Z. Y. Shi, J. L. He, **"An antimicrobial TiO₂ coating for reducing hospital-acquired infection"**, Journal of Biomedical Materials Research Part B-Applied Biomaterials, 85B (2008) 220–224. [Engineering, Biomedical, 2024 SCI Impact Factor: 3.4, Rank Factor: N/M=56/124=45.16%][Cited Number: 143]
45. C. J. Chung*, H. I. Lin, J. L. He, **"Antimicrobial efficacy of photocatalytic TiO₂ coatings prepared by arc ion plating"**, Surface & Coatings Technology, 202 (2007) 1302–1307. [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.1, Rank Factor: N/M=5/23=21.74%][Cited Number: 54]
46. C. J. Chung*, H. I. Lin, J. L. He, **"Microstructural effect on the antimicrobial efficacy of arc ion plated TiO₂"**, Journal of Materials Research, 22 (2007) 3137–3143. [Materials Science, Multidisciplinary, 2024 SCI Impact Factor: 2.9, Rank Factor: N/M=257/460=55.87%][Cited Number: 15]
47. C. J. Chung, H. I. Lin*, J. L. He, **"Low-temperature growth of TiO₂ on plastic fan blade for photodecomposition efficiency of methanol gas"**, Surface & Coatings Technology, Under review, (2025). [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.1, Rank Factor: N/M=5/23=21.74%]
48. H. T. Chen, C. J. Chung*, C. H. Tang, J. L. He, **"Systematic *in vitro* and *in vivo* investigations of osseointegrational micro-arc-oxidized titanium dioxide bone implant"**, Applied Surface Science, Under review, (2025). [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.9, Rank Factor: N/M=3/23=13.04%]
49. S. Y. Huang, P. Y. Hsieh, J. L. Syu, C. J. Chung, C. M. Chou*, J. L. He, **"Very thin gold film deposited on collagen substrates by high power impulse magnetron sputtering"**, Applied Surface Science, Under review, (2025). [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.9, Rank Factor: N/M=3/23=13.04%]

50. C. W. Lin, P. Y. Hsieh, C. J. Chung, C. M. Chou*, J. L. He, “**Superamphiphobic surfaces on stainless steel substrates for orthodontics by femtosecond laser surface texturing followed by pulsed plasma-polymerization and *in vitro* tests**”, Applied Surface Science, Under review, (2025). [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.9, Rank Factor: N/M=3/23=13.04%]
51. S. Y. Huang, P. Y. Hsieh, C. M. Chou*, C. J. Chung, J. L. He, “**Ultrathin gold films deposited on collagen fabric for skin cell recovery by high power impulse magnetron sputtering corresponding**”, Applied Surface Science, Under review, (2025). [Materials Science, Coatings & Films, 2024 SCI Impact Factor: 6.9, Rank Factor: N/M=3/23=13.04%]

Conference Papers:

1. 鍾啟仁*， “天然牙的顏色剖析及仿真”，廈門醫學院第三屆口腔學術論壇，2024 年 12 月 19~20 日，中國福建省廈門市/廈門醫學院。(Invited paper)
2. H. C. Hsu, S. Y. Wong*, C. J. Chung, “**Mastering color toning wax to emulate natural tooth**”，第 82 回日本齒科理工学会學術講演会プログラム, A-14, April 20–21, 2024, 一般社団法人日本齒科理工学会, Kagoshima, Japan.
3. 李典航*、謝秉諺、陳瑛鴻、鍾啟仁、何主亮，“銀摻雜類鑽碳薄膜應用於抗菌骨科植入材”，2023 第七屆臺灣碳材料學術研討會，2023CST-1-P-9，2023 年 11 月 03~04 日，桃園市中壢區國立中央大學。(論文獎 佳作)
4. 黃馨玉*、鍾啟仁，“自然牙仿真的色蠟顏色剖析”，2023 『TAIWAN ADT 瘋數位競美學·牙技新視野』國際學術研討會·牙技器材博覽會，B04，2023 年 05 月 27-28 日，台中市金典酒店。(論文獎 第二名)
5. 黃勝揚*、周佳滿、謝秉諺、鍾啟仁、何主亮，“**Ultrathin gold films deposited on collagen fabric by high-power impulse magnetron sputtering**”，2022 生醫材料及藥物制放學會年會暨國科會生科處工程醫學學門成果發表會，PB-45-B162，2022 年 09 月 02 日，新竹市國立清華大學。(論文獎 佳作)
6. S. Y. Huang*, P. Y. Hsieh, R. H. Chang, C. M. Chou, C. J. Chung, J. L. He, “**Very thin gold films deposited collagen biomedical materials improve skin wound healing in animal study**”，47th International Conference on Metallurgical Coatings and Thin Films (ICMCTF), D3-1, April 26–30, 2021, Advanced Surface Engineering Division of the AVS, San Diego, California, USA.
7. S. Y. Huang*, P. Y. Hsieh, R. H. Chang, C. M. Chou, C. J. Chung, J. L. He, “***In vitro* studies of very thin gold films deposited on collagen fabric**”，47th International Conference on Metallurgical Coatings and Thin Films (ICMCTF), DP-3, April 26–30, 2021, Advanced Surface Engineering Division of the AVS, San Diego, California, USA.
8. C. W. Lin, C. M. Chou, C. J. Chung*, J. L. He, “**Superamphiphobic stainless steel surface prepared by femtosecond laser patterning and pulsed plasma-polymerization**”，47th International Conference on Metallurgical Coatings and Thin Films (ICMCTF), DP-8, April 26–30, 2021, Advanced Surface Engineering Division of the AVS, San Diego, California, USA.
9. P. Y. Hsieh*, H. K. Tsou, C. J. Chung, J. L. He, “**Enhancing osseointegration on PEEK spinal implant by using laser surface roughening and HIPIMS titanium coating**”，47th International Conference on Metallurgical Coatings and Thin Films (ICMCTF), DP-7, April 26–30, 2021, Advanced Surface Engineering Division of the

AVS, San Diego, California, USA.

10. S. Y. Huang*, P. Y. Hsieh, C. M. Chou, C. J. Chung, J. L. He, “**Very thin gold films deposited on collagen fabric in skin cell experiments**”, *International Conference on Metallurgical Coatings and Thin Films (ICMCTF)*, D1-1-MoM4, April 26–May 01, 2020, Advanced Surface Engineering Division of the AVS, San Diego, California, USA.
11. 鍾啟仁*、林正偉、周佳滿、何主亮, “**超雙疏鍍層應用於口腔矯正裝置物之表面改質研究**”, 2019 年海峽兩岸科研學術論壇, 2019 年 11 月 02~04 日, 中國福建省廈門市/廈門醫學院。
12. P. Y. Hsieh, C. J. Chung*, H. K. Tsou, H. T. Chen, J. L. He, “**HIPIMS titanium dioxide on laser roughened PEEK surface for biomedical application**”, *International Conference on Metallurgical Coatings and Thin Films (ICMCTF)*, DP-ThP6, May 19–24, 2019, Advanced Surface Engineering Division of the AVS, San Diego, California, USA.
13. C. W. Lin*, C. M. Chou, C. J. Chung, J. L. He, “**In vitro wear tests of the dual-layer grid blasting-plasma polymerized superhydrophobic coatings on substrates made into sental stainless archwires**”, *International Conference on Metallurgical Coatings and Thin Films (ICMCTF)*, DP-ThP11, May 19–24, 2019, Advanced Surface Engineering Division of the AVS, San Diego, California, USA.
14. C. W. Lin*, G. H. Lu, X. X. Chang, P. Y. Hsieh, C. M. Chou, C. J. Chung, J. L. He, “**Superamphiphobic surface produced by femtosecond laser patterning and pulsed plasma polymerization**”, *International Conference on Metallurgical Coatings and Thin Films (ICMCTF)*, B5-1-ThA9, May 19–24, 2019, Advanced Surface Engineering Division of the AVS, San Diego, California, USA.
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