CV - Dr. Chen Zhong

NAME Chen, Zhong (**Highly Cited Researcher by Clarivate; Top 2% Scientist by Standford University**)

CURRENT POSITION AND PAST EMPLOYMENT HISTORY

◊ Mar 2000 - present: Professor / Associate Professor / Assistant Professor, School of Materials Science & Engineering, Nanyang Technological University, Singapore.

◊ Apr 1997 - Mar 2000: Research Fellow / Research Associate, Institute of Materials Research and Engineering, Singapore.

◊ May 1992 - Sept 1993: Visiting Researcher, Department of Engineering, University of Reading, U.K.

◊ Jun 1987 - May 1992: Lecturer / Assistant Lecturer, Department of Materials Science and Engineering, Hefei University of Technology, China.

ACADEMIC QUALIFICATIONS

◊ Ph.D. (1993 - 1997), University of Reading, The United Kingdom
◊ M.Eng. (1984 - 1987), Hefei University of Technology, China
◊ B.Eng. (1980 - 1984), China University of Mining and Technology, China

RESEARCH INTERESTS

◊ Thin Films & Nanostructured Materials: Thin films & engineered nanostructures for environmental and clean energy applications; Electronic thin films; Protective and functional surface coatings.
◊ Mechanical and Long-term Behaviour of Materials: Fracture, fatigue, and creep of bulk, composite, and thin film materials; Experimental and computational mechanics. Materials degradation & failure analysis.

SELECTED PUBLICATIONS (Google Scholar citations > 30,000 & h-index = 94)

1. Y. H. Deng, Z. Chen, et al. "The combined impact of voids and thermal aging on the mechanical reliability of epoxy resin evaluated by statistical analysis", *Polymer Degradation and Stability*, 2023, Vol. 215, Article 110455
2. Z. Q. Li, Z. Chen, et al. "Mechanical properties and fractographic analyses of FeCo-2V alloy heat-treated around order-disorder transition temperature", *Journal of Materials Research and Technology*, 2023, Vol. 22, pp. 3302-3310
3. Y. Tan, Z. Chen, J. Hu, et al. "Discovery of Hydrogen Spillover Based Binary Electrocatalysts for Hydrogen Evolution: from Theory to Experiment", *ACS Catalysis*, 2022, Vol. 12, pp. 11821-11829
4. Y. Sun, R. S. Rawat, Z. Chen "Mechanically Robust Multifunctional Antifogging Coating on Transparent Plastic Substrates", *Applied Surface Science*, 2022, Vol. 580, 202101864
5. S. J. He, J. Hu, Y. K. Lai, Z. Chen, et al. "Rational designed structured superhydrophobic iron oxide surface towards sustainable anti-corrosion and self-cleaning", *Chemical Engineering Journal*, 2021, Vol. 416, 127768
6. T. Rui, G.-P. Lu, Z. Chen, et al. "The Synergistic Catalysis on Co Nanoparticles and CoN_x Sites of Aniline-modified ZIF Derived Co@NCs for Oxidative Esterification of HMF", *Chinese Chemical Letters*, 2021, Vol. 32, pp. 685-690
7. N. Agrawal, Z. Chen, et al. "Durable easy-cleaning and antibacterial cotton fabrics using fluorine-free silane coupling agents and CuO nanoparticles", *Nano Materials Science*, 2020, Vol. 2, pp. 281-291
8. X. Zhao, Z. Chen, et al. "Elucidating the Sources of Activity and Stability of FeP Electrocatalyst for Hydrogen Evolution Reactions in Acidic and Alkaline Media", *Applied Catalysis B: Environmental*, 2020, Vol. 260, 11815
9. J. S. J. Tan, Z. Chen "Mask-less preparation of Janus particles through ultraviolet irradiation on hydrophobic particles assembled at the air-water interface", *Journal of Colloid & Interface Science*, 2019, Vol. 546, pp. 285-292
10. Y. Z. Shen, J. Tao, Z. Chen, et al. "Icephobic materials: fundamentals, performance evaluation, and applications", *Progress in Materials Science*, 2019, Vol. 103, pp. 509-577
11. X. H. Wu, Z. Chen "A Mechanically Robust Transparent Coating for Anti-icing and Self-cleaning Applications", *Journal of Materials Chemistry A*, 2018, Vol. 6, pp. 16043-16052
12. C. Wang, Z. Chen, et al. "Damage Accumulation in Braided Textiles Reinforced Composites under Repeated Impacts: Experimental and Numerical Studies", *Composite Structures*, 2018, Vol. 204, pp. 256-267
13. L. Shen, Z. Chen, et al. "Enhancing Creep Resistance of SnBi Solder Alloy with Non-reactive Nano Fillers: A Study Using Nanoindentation", Journal Alloys and Compounds, 2017, Vol. 729, pp. 498-506
14. J. D. Lim, P. M. Lee, Z. Chen "Understanding the Bonding Mechanisms of Directly Sputtered Copper Thin Film on an Alumina Substrate", *Thin Solid Films*, 2017, Vol. 634, pp. 6-14

POSTGRADUATE STUDENTS TRAINED TO DATE

- Graduated 36 PhD students and 6 MEng students at NTU since 2000
- Currently supervising / co-supervising 7 PhD and 1 MEng students