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**List of publications:** [MOST webpage](#)

**List of projects:** [MOST webpage](#) (only in Chinese)

### Ongoing projects:

(Last update: February 14, 2022)

My ongoing research topics include two directions: mechanisms shaping microbial community compositions across watershed, and the connection between microbial activity and deoxygenation in Dongsha Atoll.

### Selected recent publications:

1. T.-H. Tu\*, C.-F. Dai (2022) A new species of anthothelid octocoral (Cnidaria, Alcyonacea) discovered on an algal reef of Taiwan. *ZooKeys*, vol. 1089, 37–51. doi: <https://doi.org/10.3897/zookeys.1089.77273> (SCI: Rank in Animal Science and Zoology: Q1).
2. T.-H. Tu, L.-L. Chen, Y.-P. Chiu, L.-H. Lin, L.-W. Wu, F. Italiano, J. B. H. Shyu, S. N. Raisossadat, and P.-L. Wang\* (2022) The biogeographic pattern of microbial communities inhabiting terrestrial mud volcanoes across the Eurasian continent. *Biogeosciences*, vol. 19, 831–843. doi: <https://doi.org/10.5194/bg-19-831-2022> (SCI: Rank in Earth-Surface Processes: Q1).
3. S. Mau, T.-H. Tu, M. Becker, C. Santos Ferreira, J.-N. Chen, L.-H. Lin, P.-L. Wang, S. Lin, G. Bohrmann (2020) Methane Seeps and Independent Methane Plumes in the South China Sea Offshore Taiwan. *Frontiers in Marine Science*. doi: <https://doi.org/10.3389/fmars.2020.00543> (SCI; Rank in Aquatic Science: Q1).
4. Huang, T.-Y., C.-Y. Huang, S.-R. Chen, J.-R. Weng, T.-H. Tu, Y.B. Cheng, S.H. Wu, J.-H. Sheu (2020) New Hydroquinone Monoterpenoid and Cembranoid-Related Metabolites from the Soft Coral Sarcophyton tenuispiculatum. *Marine Drugs* (SCI; Rank in Drug Discovery: Q2).
5. Imachi, H., E. Tasumi, Y. Takaki, T. Hoshino, F. Schubotz, S. Gan, T.H. Tu, Y. Saito, Y. Yamanaka, A. Ijiri, Y. Matsui, M. Miyazaki, Y. Morono, K. Takai, K.U. Hinrichs, and F. Inagaki (2019) Cultivable microbial community in 2-km-deep, 20-million-year-old seafloor coalbeds through ~1000 days anaerobic bioreactor cultivation. *Scientific Reports* (accepted, 2019/01/10) (SCI; Rank in Multidisciplinary Science: 5/52-Q1).
6. Lin, Y.T. +, T.H. Tu +, C.L. Wei, D. Rumble, L.H. Lin, P.L. Wang\* (2018) Steep redox gradient and biogeochemical cycling driven by deeply sourced fluids and gases in a terrestrial mud volcano. *FEMS Microbiology Ecology* Vol. 94, p. 3796, <https://doi.org/10.1093/femsec/fiy171> (SCI; Rank in Microbiology: 16/123-Q1). + Equal contribution.

7. Chang, N.N., L.H. Lin, T.H. Tu, M.S. Jeng, Y. Chikaraishi, P.L. Wang\* (2018) Trophic structure and energy flow in a shallow-water hydrothermal vent: insights from a stable isotope approach. *PLoS One* Vol. 13 (10), e0204753, <https://doi.org/10.1371/journal.pone.0204753> (SCI; Rank in Multidisciplinary Science: 4/52-Q1).
8. Rumble, D., J.L. Ash, P. L. Wang, L.H. Lin, Y.T. Lin, T.H. Tu (2018) Resolved measurements of  $^{13}\text{CDH}_3$  and  $^{12}\text{CD}_2\text{H}_2$  from a mud volcano in Taiwan. *Journal of Asian Earth Sciences* Vol. 167, p. 218, <https://doi.org/10.1016/j.jseaes.2018.03.007> (SCI; Rank in Geosciences: 47/419-Q1).
9. Tu, T.H., L.W. Wu, Y.S. Lin, H. Imachi, L.H. Lin, P.L. Wang\* (2017) Microbial community composition and functional capacity in a terrestrial ferruginous, sulfate-depleted mud volcano. *Frontiers in Microbiology* Vol. 8, p. 2137, <https://doi.org/10.3389/fmicb.2017.02137> (SCI; Rank in Microbiology: 8/123-Q1).
10. Tu, T.H., C.F. Dai, M.S. Jeng (2016) Taxonomic Revision of Coralliidae with descriptions of new species from New Caledonia and Hawaii Archipelago. *Marine Biology Research* Vol. 12 (10), p. 1003, <https://doi.org/10.1080/17451000.2016.1241411> (SCI; Rank in Plant & Animal Science: 420/791-Q3).
11. Chang, C.H., C.C. Wei, L.H. Lin, T.H. Tu, H.C. Liao (2015) Humic acids enhance microbial-mediated sedimentary ferrous iron release. *Environmental Science and Pollution Research* Vol. 23 (5), p. 4176, DOI:10.1007/s11356-015-4703-4 (SCI; Rank in Environment / Ecology: 20/361-Q1).
12. Tu, T.H., C.F. Dai, M.S. Jeng (2015) Phylogeny and systematics of deep-sea precious corals (Anthozoa: Octocorallia: Coralliidae). *Molecular Phylogenetics and Evolution* Vol. 84, p. 173, <https://doi.org/10.1016/j.ympev.2014.09.031> (SCI; Rank in Molecular Biology & Genetics: 39/303-Q1).
13. Tu, T.H., A. Altuna, M.S. Jeng (2015) Coralliidae (Anthozoa: Octocorallia) from the INDEMARES 2010 expedition to north and northwest Spain (northeast Atlantic), with the delimitation of a new species through morphological and molecular approaches. *Zootaxa* Vol. 3926, p. 301, <http://dx.doi.org/10.11646/zootaxa.3926.3.1> (SCI; Rank in Plant & Animal Science: 22/791-Q1).
14. Tu, T.H., C.F. Dai, M.S. Jeng (2012) Precious corals (Octocorallia: Coralliidae) from the northern West Pacific region with descriptions of two new species. *Zootaxa* 3395: 1-17.
15. Tu, T.H., K.K. Chan, M.S. Jeng (2009) Larval development and sex ratio variation of *Polyascus plana* (CIRRIPIEDIA: Rhizocephala), a parasite of the crab *Grapsus albolineatus*, in Taiwan. *Bull Mar Sci* 84(3): 331-349.