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研究專長：海岸地質學、近岸及河口過程、沖淡水擴散過程中物理和生地化的耦合、海底峽谷中異重流的沈積物動力

研究領域：從「源到匯」跨時空尺度之過程及紀錄

Selected recent publications :

1. Liu, J.T., Lee, J., Yang, R.J., Du, X., Li, A., Lin, Y.-S., Su, C.-C., Tao, S., (2021). Coupling between physical processes and biogeochemistry of suspended particles over the inner shelf mud in the East China Sea. *Marine Geology*, in press.
2. Lee, J., Liu*, J.T., Lee I.-H., Fu, K.-H., Yang R. J., Gong W., and Gan J. (2021) Encountering shoaling internal waves on the dispersal pathway of the pearl river plume in summer. *Scientific Reports*, 11, 999. <https://doi.org/10.1038/s41598-020-80215-2>
3. Sparkes, R.B., Houvius, N., Galy, A., and Liu, J.T. (2020) Survival of graphitized petrogenic organic carbon through multiple erosional cycles. *Earth and Planetary Science Letters*, 531, 115992. <https://doi.org/10.1016/j.epsl.2019.115992>
4. Liu, J.T., Huang, B., Chang, Y. Du, X., Liu, X., Yang, R. J., Hsu, R.T., Lin, S., Hung, J.J., Lee, J., Su, C.C., & Chang, Y.-P. (2019) Three-dimensional coupling between size-fractionated chlorophyll-a, POC and physical processes in the Taiwan Strait in summer. *Progress in Oceanography*, 176, 102129. <https://doi.org/10.1016/j.pocean.2019.102129>
5. Liu, J.T., Hsu, R.T., Yang, R.J., Wang, Y.P., Wu, H., Du, X., Li, A., Chien, S.C., Lee, J., Yang, S., Zhu, J., Su, C.C., Chang, Y., & Huh, C.-A. (2018) A comprehensive sediment dynamics study of a major mud belt system on the inner shelf along an energetic coast. *Scientific Reports*, 8(1), 4229. <https://doi.org/10.1038/s41598-018-22696-w>
6. Yang, R.J., Liu*, J.T., Fan, D., Burr, G.S., Lin, H.-L., & Chen, T.-T. (2017) Land-sea duel in the late Quaternary at the mouth of a small river with high sediment yield. *Journal of Asian Earth Sciences*, 143, 59-76. <http://dx.doi.org/10.1016/j.jseaes.2017.03.028>
7. Du, X., and Liu*, J.T. (2017). Particle dynamics of the surface, intermediate, and benthic nepheloid layers under contrasting conditions of summer monsoon and typhoon winds on the boundary between the Taiwan Strait and East China Sea. *Progress in Oceanography*, 156, 130-144. <https://doi.org/10.1016/j.pocean.2017.06.009>
8. Lee, J., Liu*, J.T., Hung, C.-C., & Du, X. (2016) River plume induced variability suspended particle characteristics. *Marine Geology*, 380, 219-230. <http://dx.doi.org/10.1016/j.margeo.2016.04.014>
9. Liu, J.T., Hsu, R.T., Hung, J.J., Kao, S.J., Chang, Y.P., Huh, C.A., Wang, Y.H., Lee, C.L., &

Yang, R.J. (2016) From the highest to the deepest: The Gaoping River-Gaoping Submarine Canyon dispersal system. *Earth-Science Reviews*, 153, 274-300.

<http://dx.doi.org/10.1016/j.earscirev.2015.10.012>

10. Hsu, R.T., **Liu, J.T.***, Su, C.-C., Kao, S.-J., Chen, S.-N., Kuo, F.-H., and Huang, J.C., 2014. On the links between a river's hyperpycnal plume and marine benthic nepheloid layer in the wake of a typhoon. *Progress in Oceanography*, 127, 62-73.

<https://doi.org/10.1016/j.pocean.2014.06.001>

11. **Liu, J.T.**, Kao, S.-J., Huh, C.-A., Hung, C.C., 2013. Gravity flows associated with flood events and carbon burial: Taiwan as instructional source area. *Annual Review of Marine Science*, 5, 47-68. <https://doi.org/10.1146/annurev-marine-121211-17230>

12. **Liu, J.T.**, Wang, Y.-H., Yang, R.J., Hsu, R.T., Kao, S.-J., Lin, H.-L., and Kuo, F.H., 2012. Cyclone-induced hyperpycnal turbidity currents in a submarine canyon. *Journal of Geophysical Research*, 117, C04033, [doi:10.1029/2011JC007630](https://doi.org/10.1029/2011JC007630).

Liu, J.T., Wang, Y.-H., Lee, I.-H., and Hsu, T.R., 2010. Quantifying tidal signatures of the benthic nepheloid layer in Gaoping Submarine Canyon in southern Taiwan. *Marine Geology*, 271, 119-130. <https://doi.org/10.1016/j.margeo.2010.01.016>