

劉格非 教授 Ko-Fei Liu

Professor

學歷/ 美國麻省理工學院博士

Ph.D., MIT

專長/ 土石流、環境流力、波浪力學

Debris Flow, Environmental Fluid Mechanics, Wave Dynamics

期刊論文(Journal Paper)

1. Wu, Y.H. and Liu, K.F. 2015 “Start-up flow of a Bingham fluid between two coaxial cylinders under a constant wall shear stress” **J. Non-Newtonian Fluid Mech.** 223: 116-121, DOI: 10.1016/j.jnnfm.2015.06.002 (ci=19)
2. Wu, Y.H. and Liu, K.F., 2015 Formulas for Calibration of Rheological Parameters of Bingham Fluid in Couette Rheometer. **J. Fluids Eng.** 137(4), 041202
3. Kuang, C., Wang, J., Liu, K.F., Hao, W., 2015, “Numerical study on debris flow under different rainfall intensities at Gangou in Hongse Village, Dujiangyan,” **J. Natural Science**, Vol. 43(7), pp.1012-1018.
4. 魏士超、劉格非、黃亦敏、方耀民、尹孝元、黃效禹、林建良 (2018)，「愛玉子溪土石流之地動訊號特性與警戒方法之探討」，**中華水土保持學報**，49(2)，77-88。
5. Wei, S.-C., Li, H.-C., Shih, H.-J., and Liu, K.-F.. (2018) Potential Impact of Climate Change and Extreme Events on Slope Land Hazard – A Case Study of Xindian Watershed, **Nat. Hazards Earth Syst. Sci.**, <https://doi.org/10.5194/nhess-2017-262>, (SCI, IF=2.51)
6. Hsu, Y.-C., Liu, K.-F., Shu, H.-M. (2019): Combining TRIGRS and DEBRIS-2D Models for A Debris Flow Simulation from Rainfall Infiltration Induced Shallow Landslides: A Case Validation of Daniao Tribe, **Water** doi:10.3390/w11050890 (SCI, IF=2.56)
7. Shih-Chao Wei, Ko-Fei Liu (2019, Dec). Automatic debris flow detection using geophones. **Landslides** DOI 10.1007/s10346-019-01258-9..(SCI, IF=3.81)
8. Liu K.F., Jhou J.M., Wei S.C. and Chien C.H. (2019, Jun). Tipping Bucket Rain Gauge Performance Analysis under Heavy Rain fall. **Advancements in Civil Engineering & Technology** DOI 10.31031/ACET.2019.03.000564. (SCI, IF=1.14)

研討會論文 Conference Presentations)

- 1.K.F. Liu, S.C. Wei, and P.C. Lee 2015 “Combined Different Techniques for Measuring the Rheological Parameters of Bingham Fluid.” The 13th International Symposium on Geo-disaster Reduction, 9-11 Aug. 2015, Prague, Czech Republic.
- 2.K.F. Liu, Jessie Chang, and S.C. Wei 2015“The Influence of Rainfall Intensity of Rainfall-based Debris Flow Warning System.” The 13th International Symposium on Geo-disaster Reduction, 9-11 Aug. 2015, Prague, Czech Republic.
- 3.Y.C. Hsu, K.F. Liu, M.P. Tsai, and S.C. Wei, 2015 “DEBRIS-2D Model Apply to Debris Flow Disaster Controlled - A Real Case at Songhe No.1 Creek in Central Taiwan” The 13th International Symposium on Geo-disaster Reduction, 9-11 Aug. 2015, Prague, Czech Republic.
- 4.K.F. Liu, and Jhan-Ming Jhou, 2015 “Mechanics analysis of tipping bucket rain gauge.” The 13th International Symposium on Geo-disaster Reduction, 9-11 Aug. 2015, Prague, Czech Republic.
- 5.K.F. Liu, and Kai-Yin Cheng 2015 “Applied the Image Velocimetry in Debris-Flow Monitoring Film.2015 ” The 13th International Symposium on Geo-disaster Reduction, 9-11 Aug. 2015, Prague, Czech Republic.
- 6.Chae, B.-G., Liu, K.-F., Choi, J., 2016, A study of landslide warning based on the RTI model in Korea, 2016 EGU General Assembly, Vienna, Austria, April 17-22, 2016
- 7.Hsu, Y-C, Liu, K.-F., Tsai, M.-P. 2016: DEBRIS_2D Model Apply to Debris Flow Disaster Management, 13th congress INTERPREVENT 2016 Living with natural risks, 30 May - 2 June, 2016, KKL Lucerne, Switzerland.
8. Liu, K.F., Wu, Y.H., 2016 “Large Scale Simulation of Watershed Mass Transport – a Case Study of Tsengwen Reservoir Watershed, Taiwan” The 7th International Conference on Water Resources and Environment Research (ICWRER2016), Kyoto TERRSA, Kyoto, Japan, June 5-9, 2016
- 9.Liu, K.F. Li, H.C. 2016, Social vulnerability index for natural disaster with case study for debris flows, Taiwan” The International Conference on Human Society and Culture (HSC2016), 8/19–21, Shenzhen, China (**Keynote**)
- 10.Liu, K. F., and S. C. Wei. 2017. A Complete Watershed Monitoring System in Shenmu Village, Taiwan. The 11th Asian Regional Conference of IAEG, Nov. 28-30, 2017, Kathmandu, Nepal.
- 11.Wei, S. C., K. F. Liu, Y. M. Huang, and Y. M. Fang. 2017. Characteristics of Ground

- Vibration Signal Produced by Debris Flows at Ai-Yu-Zi Creek, Taiwan. The 11th Asian Regional Conference of IAEG, Nov. 28-30, 2017, Kathmandu, Nepal.
12. Liu, K.F. Li, H.C. 2017, Social vulnerability index for natural disaster with case study for debris flows, Taiwan” The International Conference on Human Society and Culture (HSC2016), 8/19–21, Shenzhen, China (**Keynote**)
13. Liu, K. F., and S. C. Wei. 2017. A Complete Watershed Monitoring System in Shenmu Village, Taiwan. The 11th Asian Regional Conference of IAEG, Nov. 28-30, 2017, Kathmandu, Nepal.
14. Wei, S. C., K. F. Liu, Y. M. Huang, and Y. M. Fang. 2017. Characteristics of Ground Vibration Signal Produced by Debris Flows at Ai-Yu-Zi Creek, Taiwan. The 11th Asian Regional Conference of IAEG, Nov. 28-30, 2017, Kathmandu, Nepal.
15. Wei S.C.*, Liu K.F., Yin H.Y., Lin C.L. (2018) Detecting Debris Flow Using Ground Vibration Signal. The 16th International Symposium on Geo-disaster Reduction, Aug. 27-31, 2018, Strasbourg, France.
16. Wei S.C.*, Liou J.W., Liu K.F. (2018) Grain-size Distributions Based on Automatic Image Processing. The 16th International Symposium on Geo-disaster Reduction, Aug. 27-31, 2018, Strasbourg, France.
17. Li P.C., Wei S.C.*, Liu K.F. (2018) Rheological Parameters Calibration for Unsteady Mud Flows in Concentric Cylinder Viscometer. The 16th International Symposium on Geo-disaster Reduction, Aug. 27-31, 2018, Strasbourg, France.
18. Liu K.F., Wei S.C., Yin H.Y., Lin C.L. (2018) Debris flow detection with geophones and video camera. 5th International Debris Flow Workshop & Symposium on Silk Roads Disaster Mitigation, Nov. 5-6, 2018 Beijing, China. (**Keynote**)
19. Wei S.C.*, Li P.C., Liu K.F. (2018) Transient Behavior of Bingham Fluid in Concentric Cylinder Viscometer. 5th International Debris Flow Workshop & Symposium on Silk Roads Disaster Mitigation, Nov. 5-6, 2018 Beijing, China.
20. Liu K.F., Jhou J.M., Wei S.C.*, Chien C.H. (2019) Tipping Bucket Rain Gauge Performance Analysis under Heavy Rainfall. 7th International Conference on Debris-Flow Hazards Mitigation, (EI)
21. Yu Charn - Hsu, Ko Fei Liu, Hung Ming Shu (2019,). Debris flow assessment from rainfall infiltration induced landslide. 7th International Conference on Debris Flow Hazards Mitigation , Colorado - School of Mine, Colorado, USA. (EI). 。
22. 劉格非, 2019 “流域土砂運移監測”。災害感知新技術國際學術研討會，北京。

- 23.Liu, K.F. (2019). Risk Assessment and Mitigation Strategy of Large Scale Potential Landslide. Nature Based Landslide Risk Management Training May 30-31, 2019, Hotel Taj Samudra, Colombo - Sri Lanka by WORLD BANK (**Keynote**)

專書

- 1.Wu, Y.H., Liu, K.F., Chen, Y.C., Chiu, Y.J., Shih, S.S, 2016 “Simulation of mass movement in a large-scale watershed,” In (Sassa K. eds.) Landslide Dynamics: ISDR-ICL Landslide Teaching Tools, 143-158.
- 2.Choi, J.H., Chae, B.G., Liu, K.F., & Wu, Y.-H. (2016). Numerical analysis of debris flow hazards from case study. Landslides and Engineered Slopes. Experience, Theory and Practice, 2, 649-656
- 3.Liu, K.F., and Wu, Y.H., 2016 “Debris-2D Tutorial,” In (Sassa K. eds.) Landslide Dynamics: ISDR-ICL Landslide Teaching Tools, 108-117.
- 4.Abolmasov B., Fathani, T. F., Liu, K. F. and Sassa K., 2017 “Progress of the World Report on Landslides” in Advancing Culture of Living with Landslides , pp.219-226. DOI: 10.1201/b21520-73
- 5.Wu, Y.-H., Liu, K.F., Chen, Y.C., Chiu, Y.J., & Shih, S.S. (2018). TXT-tool 3.886-1.2: Simulation of mass movement in a large-scale watershed. In (Sassa K. eds.) Landslide Dynamics: ISDR-ICL Landslide Interactive Teaching Tools, 2, 251-262.
- 6.Liu, K.F., & Wu, Y.-H. (2018). TXT-tool 3.886-1.1: Debris-2D Tutorial. In (Sassa K. eds.) Landslide Dynamics: ISDR-ICL Landslide Teaching Tools, 2, 181-189.