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Geotechnical Earthquake Engineering including Soil Dynamics.

Ground Motion Characterization and Site Response Analysis

### 期刊論文 (Journal Paper)

1. D. M. Weidinger, H. Zhao, A. O.L. Kwok, X. Kang and L. Ge (2019). Small strain moduli of compacted silt by ultrasonic pulse velocity measurements. *Marine Georesources & Geotechnology*, DOI: 10.1080/1064119X.2019.1657209 (SCI)
2. C.T. Sun, O.L. A. Kwok, P.C. Guan, and W.K. Shih (2018). Using reproducing kernel particle method for shallow water problems. *Journal of Marine Science and Technology*, 26 (3), 431-440. (SCI)
3. C.T. Sun, P.C. Guan, W.K. Shih, O.L. A. Kwok (2018). The weighted reconstruction of reproducing kernel particle method for one-dimensional shock wave problems, *Ocean Engineering*, 149, 325-340. (SCI)
4. P.C. Guan, O.L. Kwok, W.C. Yao, Y.F. Chen, J.S. Li, Y.L. Chen, L.C. Chen, H.H. Chou (2017). The development of transformation interface program between AVEVA marine data base and finite element method. *Journal of Taiwan Society of Naval Architects and Marine Engineers*, 36 (4), 179-188. (EI)
5. X. Kang, L. Ge, K.T. Chang, A. O.L. Kwok (2016, Apr). Strain-controlled cyclic simple shear tests on sand with radial strain measurements. *Journal of Materials in Civil Engineering*, 28 (4). (SCI)

### 研討會論文 (Conference full papers)

1. O.L. A. Kwok (2019). Reliability of conventional ground response analysis method in estimating earthquake ground motion, 6th Cross-strait Forum on Sustainable Urban Development, May 17-18, 2019, Shanghai, China

2. C.C Yao, and O.L .A. Kwok (2019). Site Response at the Vertical Arrays in the Taiwan Surface Downhole Monitoring Network. The 32nd KKHTCNN Symposium on Civil Engineering, October 24-26, 2019, Daejeon, Korea, Daejeon, Korea.
3. J.R. Liu and O.L. A. Kwok (2019). Experimental Investigation of Soil Behavior of Partially Saturated Penghu Calcareous Sand. The 32nd KKHTCNN Symposium on Civil Engineering, October 24-26, 2019, Daejeon, Korea, Daejeon, Korea.
4. O.L. A. Kwok, J.R. Liu and C.Y. Lien (2019). Liquefaction Resistance of Penghu Calcareous Sand. International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake, Taipei, Taiwan, September 15-19, 2019, Taipei, Taiwan.
5. O.L. A. Kwok, Z.R. Yang, and C.C. Yao (2019). Numerical Study of Ground Response for Sites with Inclined Layers. International Conference in Commemoration of 20th Anniversary of the 1999 Chi-Chi Earthquake, Taipei, Taiwan, September 15-19, 2019, Taipei, Taiwan.
6. O.L. A. Kwok, PC Guan, CT Sun (2018). Numerical Investigation of Stability of Submarine Pipelines Subjected to Wave/Current-Induced Scour Using RKPM Method. 13TH World Congress on Computational Mechanics, New York, USA.
7. A. O.L. Kwok, Y.W. Hwang, M.L. Lee (2018). Numerical Simulation of Site Effect Due to Inclined Bedrock on Seismic Ground Motion. 11th US National Conference on Earthquake Engineering, Los Angeles, USA.
8. T. Kishida, V. Contreras, Y. Bozorgnia, N. A. Abrahamson, S. K. Ahdi, T. D. Ancheta, D. M. Boore, K. W. Campbell, B. Chiou, R. Darragh, N. Gregor, N. Kuehn, D. Y. Kwak, A. O.L. Kwok, P. Lin, H. Magistrale, S. Mazzoni, S. Muin, S. Midorikawa, H. Si, W. J. Silva, J. P. Stewart, K. E. Wooddell, R. R. Youngs (2018). NGA-SUB Ground Motion Database. 11th National Conference on Earthquake Engineering, Los Angeles, USA.
9. Y. Bozorgnia, T. Kishida, N.A. Abrahamson, S.K. Ahdi, T D. Ancheta, R.J. Archuleta, G. Atkinson, D. M. Boore, K. W. Campbell, B. Chiou, V. Contreras, R. Darragh, N. Gregor, Z. Gulerce, I.M. Idriss, C. Ji, R. Kamai, N. Kuehn, D. Y. Kwak, A. O.L. Kwok, P.S. Lin, H Magistrale, S. Mazzoni, S. Muin, S. Midorikawa, G. Parker, H Si, W.J. Silva, J.P. Stewart, M. Walling, K. E. Wooddell, R. R. Youngs (2018). NGA-Subduction Research Program. 11th National Conference on Earthquake Engineering, Los Angeles, USA.
10. O.L. A. Kwok, C.Y. Lien (2017). Determination of Small-strain Dynamic Shear Modulus and Damping Ratio of Penghu Calcareous Sand by Resonant Column Test. The Thirtieth KKHTCNN Symposium on Civil Engineering, Taipei, Taiwan.

11. O.L. A. Kwok, M.L. Lee, Y.W. Huang, W.A. Chang (2017). Numerical Study of Ground Response of Sites with Inclined Bedrock. The Thirtieth KKHTCNN Symposium on Civil Engineering, Taipei, Taiwan.
12. O.L. A. Kwok, B.H. Ye, W.A. Chang (2017). A Study of Maximum Shear Modulus of Sands Containing Fines by Bender Element Tests. The 17th Conference on Current Researches in Geotechnical Engineering in Taiwan, Yilan, Taiwan.
13. O.L. A. Kwok, C.H. Hung, Y.T. Lu (2017). Determination of Small-Strain Dynamic Shear Modulus and Damping Ratio of Laterite from Linkou Tableland by Resonant Column Tests. The 17th Conference on Current Researches in Geotechnical Engineering in Taiwan, Yilan, Taiwan.
14. O.L.A Kwok, P.C. Guan, C.T. Sun (2017). Modeling of Flow and Scouring under Pipelines by Reproducing Kernel Particle Method. 14th U.S. National Congress on Computational Mechanics, Montreal, Canada.
15. P.C. Guan, O.L. A. Kwok, C.T. Sun (2017). Keynote Speech: Development of fluid-solid interacting reproducing kernel particle method for the modeling of flow and scouring under pipelines. Engineering Mechanics Institute Conference, Taiwan.
16. SK Ahdi, TD Ancheta, V Contreras, T Kishida, DY Kwak, O.L. A. Kwok, GA Parker, Y Bozorgnia, JP Stewart (2017). NGA-Subduction site database. 16th World Conference Earthquake Engineering, Santiago, Chile.
17. T. Kishida, Y. Bozorgnia, N. Abrahamson, S. Ahdi, T. Ancheta, D. Boore, K. Campbell, B. Chiou, R. Darragh, N. Gregor, R. Kamai, D. Kwak, O.L. A. Kwok, P. Lin, H. Magistrale, S. Midorikawa, G. Parker, H. Si, W. Silva, J. Stewart, C. Tsai, K. Wooddell, R. Youngs (2017). Development of the NGA-Subduction Database. 16th World Conference on Earthquake, Santiago, Chile.
18. O.L.A Kwok, B.H. Ye (2016). A study of dynamic properties of sands containing fines. 29th KKHTCNN Symposium on Civil Engineering, Hong Kong.
19. O.L.A. Kwok, C.-H. Hung (2016). Determination of small-strain dynamic shear modulus and damping ratio of laterite in Linkou Tableland by resonant column test. 29th KKHTCNN Symposium on Civil Engineering, Hong Kong.
20. O.L.A. Kwok, Y.C, Li (2016). Determination of Small-strain Dynamic Shear Modulus and Damping Ratio of Calcareous Sand by Resonant Column Tests. 7th Japan-Taiwan Workshop on Geotechnical Hazards from Large Earthquakes and Heavy Rainfall , PingTung, Taiwan.

21. O.L. A Kwok, B.-J. Chen (2016). Evaluation of Site Effect at Surface-Downhole Ground Motion Stations in Taiwan by Nonlinear Ground Response Analyses. 5th IASPEI / IAEE International Symposium: Effects of Surface Geology on Seismic Motion, Taipei, Taiwan.
22. P.C. Guan, C.-T. Sun, O.L. A. Kwok (2016). Modeling of Offshore Foundation with Dynamic Wave Loading Using Reproducing Kernel Particle Method. 12th World Congress on Computational Mechanics, Seoul, Korea.
23. A. O.L. Kwok, P.K. Chen, P.L. Sun (2015). A Preliminary Study on the Depth Parameters for the Ground Motion Prediction Equations in Taiwan. The Twenty-Eight KKHTCNN Symposium on Civil Engineering, Bangkok, Thailand.
24. A. O.L. Kwok, P.L. Sun, P.K. Chen, H.C. Chiu (2015). Estimation of Vs30 for Ground Motion Prediction in Taiwan. The Twenty-Eight KKHTCNN Symposium on Civil Engineering, Bangkok, Thailand.
25. A.O.L. Kwok, B.J. Chen (2015). Comparison of Theoretical Site Response Modeling Methods by Using Vertical Array. The Twenty-Eight KKHTCNN Symposium on Civil Engineering, Bangkok, Thailand.
26. O.L. A. Kwok, P.C. Guan (2015). Modeling of Dynamic Slope Behavior by Semi-Lagrangian Reproducing Kernel Particle Meshfree Method. The 16th Conference on Current Researches in Geotechnical Engineering in Taiwan, Kaohsiung, Taiwan.
27. O.L. A. Kwok, Y.-H. Kao, Y.-C. Li, T.-C. Lai (2015). Dynamic Properties of Soil Mixture. The 16th Conference on Current Researches in Geotechnical Engineering in Taiwan, Kaohsiung, Taiwan.
28. O.L. A. Kwok, P.C. Guan, C.T. Sun, J.H. Jiang, W.H. Tsou (2015). Modeling of Wave-Induced Slump Using Reproducing Kernel Particle Method. 13th U.S. National

### 其他（含 Technical reports）

- 許尚逸、鄧崇任、廖文義、郭安妮、楊炫志、陳北亭（2019）。核能電廠耐震先導技術研發計畫第二次期中報告，子計畫二：地盤受震反應分析技術提升研究。台灣電力股份有限公司委託之研究計畫(027050000101)。
- 許尚逸、鄧崇任、廖文義、郭安妮、楊炫志、許雅涵、黃郁惟、劉佳泓（2018）。核能電廠耐震先導技術研發計畫第二次期中報告，子計畫二：地盤受震反應分析技術提升研究。台灣電力股份有限公司委託之研究計畫(027050000101)。

- 許尚逸、鄧崇任、廖文義、郭安妮、楊炫志、許雅涵、黃郁惟、劉佳泓（2017年）。核能電廠耐震先導技術研發計畫第一次期中報告,子計畫二：地盤受震反應分析技術提升研究。台灣電力股份有限公司委託之研究計畫(027050000101)。