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研究領域：非破壞檢測、混凝土材料、結構振動監測、跨領域整合應用

著作：最近 5 年發表期刊論文 11 篇、研討會論文 6 篇

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### 1) General Information

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### 2) Academic Background and Degrees

- B.S. | Department of Construction Engineering  
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- M.S. | Department of Construction Engineering  
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### 3) Selected Publications

#### **Journal paper**

1. Y.T. Ke, **Y.C. Lin\***, C.C. Cheng, J.C. Chen Y.H. Pai, K.T. Hsu "Preliminary study on defect detection for sandwich composites using Impact-Echo method", International Journal of Applied Science and Engineering, 20(2), 2022312.
2. **Y.C. Lin**, Y Lin\*, and C-C Cheng, "A unified equation for prediction of

- concrete strength at various ages using the ultrasonic pulse velocity”, applied sciences, 12, 8416.
3. C.C. Cheng, **Y.C. Lin\***, Y.T. Ke, K.T. Hsu “Detecting the Interfacial Bonding of Concrete-Filled Steel Tube Columns after fire by two stress wave-based methods — a case study”, Case Studies in Construction Materials, Vol. 17, e01399.
  4. C.C. Cheng, **Y.C. Lin\***, Y.T. Ke, F.J. Ke “Using 3-D velocity contour plots to detect voids in grouted tendon ducts in post-tensioned concrete construction”, Construction and Building Materials, Vol. 331, 127277.
  5. D. Kumar, C-H Chiang\*, **Y.C. Lin** “Experimental vibration analysis of large structures using 3D DIC technique with a novel calibration method”, Journal of Civil Structural Health Monitoring, vol. 12, pp. 391–409.
  6. C.C. Cheng, **Y.C. Lin\***, C.P. Yu, K-T Hsu “A Quick Method to Construct 3-D Velocity Contour Map for Assessing Anomalies in Concrete” Construction and Building Materials, Vol. 285, 122765.
  7. **Y.C. Lin\***, C.H. Chiang, C.P. Yu, D. Kumar, K.T. Hsu “Application of DIC method to modal vibration study for structure health monitoring of WT tower”. International Journal of Applied Science and Engineering, Vol. 18(3), 2020291.
  8. **Y.C. Lin**, C.H. Chiang\*, C.P. Yu, K.T. Hsu “Deterministic deterioration modeling of wind turbines toward the failure identification – a modal curvature approach”, Journal of Structural Integrity and Maintenance, Vol. 5(2), pp. 104-112.
  9. C.H. Chiang, H.Y. Tao, **Y.C. Lin** “Transient thermal analysis of layered media based on thermal quadrupoles”, International Journal of Applied Science and Engineering, 18(3), 2020312.
  10. Y.T. Ke, C.C. Cheng\*, **Y.C. Lin**, Y.Q. Ni, K.T. Hsu, and T.T. Wai “Preliminary Study on Assessing Delaminated Cracks in Cement Asphalt Mortar Layer of High-Speed Rail Track Using Traditional and Normalized Impact–Echo Methods” Sensors 2020, vol. 20(11), 3022.
  11. **Y.C. Lin**, Y. Lin\* and C.C. Chan “Use of ultrasonic pulse velocity to establish strength of concrete at various ages”, Magazine of Concrete Research, Vol. 68.14, pp.739-749.
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### Conference paper

1. Y.T. Ke, C.C. Cheng, Y.C. Lin, K.T. Hsu, D.L. Jiang, T.Y. Lin “Using the 3-D velocities contour plot of surface waves to evaluate the fire-damaged concrete slabs” Proceedings Volume 12487, SPIE Smart

2. D. Kumar, C.H. Chiang, Y.C. Lin "Identification and correlation of natural patterns using a hybrid BRISK-DIC method" Proceedings Volume 11592, SPIE Smart Structures + Nondestructive Evaluation, 2021.
  3. D. Kumar, C.H. Chiang, Y.C. Lin, and Keng-Tsang Hsu "3D vibration studies of large rotating structures using DIC", Proc. SPIE 11381, SPIE Smart Structures + Nondestructive Evaluation, 2020.
  4. Y.C. Lin, C.C. Cheng\*, C.H. Chiang and K.T. Hsu "Quantitative assessment of interfacial condition of cold joint using surface wave group velocity profile", 7th International Conference of Euro Asia Civil Engineering Forum 2019, 108.09.30-108.10.02.
  5. Y.C. Lin\*, C.H. Chiang, C.P. Yu, K.T. Hsu "Identifying the stiffness reduction in the supporting tower of wind turbines: a numerical approach", SPIE Smart Structures + Nondestructive Evaluation, 2019, 108.03.03-108.03.07
  6. Y. Lin, Y.C. Lin, Y.F. Lin and Y.L. Hsiao "Influence of moisture content on prediction of hardened concrete strength using the ultrasonic pulse velocity," Proceedings of the Fourth ACF International Conference, 2010.11.28-12.01, Taipei, Taiwan, CDROM. (2010).
  7. Lin, Y.C., Lin, Y., Lin Y.F. "Establishment of the relationship between the plus velocity and strength of concrete at various ages," 4th International Conference on Construction Materials, compact disc, S1-3-4, Nagoya, Japan. (2009)
  8. 林永強、王啟明、余志鵬 “損傷構件振動行為模擬之動力勁度折減研究” ，中華民國第八屆結構工程研討會，2006 年 9 月 2-4 日，南投縣日月潭青年活動中心。(2006)
  9. 林永強，余志鵬，賴俊仁 “以低頻波動反應推估軸向桿件局部勁度性質之數值研究” ，中華民國力學學會第 29 屆全國力學會議，2005 年 12 月 16-17，清華大學。 (2005)
  10. 林永強，余志鵬，陳鴻智 “以阻抗傳遞矩陣估計基樁動力性質之研究” ，第 12 屆非破壞檢測技術研討會，中華民國非破壞檢測協會年度會議，2004 年 4 月 30 日至 5 月 1 日，論文集 pp 198-205，南投縣日月潭青年活動中心。 (2004)
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