

SCI-cited journal papers (Web of Science Core Collection): >290;

Citations (Web of Science Core Collection): >9,000;

Non-self citations (Web of Science Core Collection) >8,000;

H-index (Web of Science Core Collection): 51;

Highly Cited Papers (ISI Web of Knowledge): 3;

International conference papers: >340;

Books and edited proceedings: 4;

Book chapters: 12;

Citations in Google Scholar: >16,700;

H-index in Google Scholar: 64.

Books and edited proceedings:

1. Qian, G.Z., Sun, Z.G. and Ni, Y.Q. (2015), *Applied Technology for Seismic Design of Tall Buildings beyond the Scope of Design Codes*, China Architecture and Building Press, Beijing, China.
2. Xu, Y.L., Zhu, S., Xia, Y., Ni, Y.Q., Law, S.S., Yin, J.H., and Su, Z.Q. (eds.) (2013), *Proceedings of the 6th International Conference on Structural Health Monitoring of Intelligent Infrastructure*, The Hong Kong Polytechnic University, Hong Kong.
3. Ni, Y.Q., and Ye, X.W. (eds.) (2012), *Proceedings of the 1st International Workshop on High-speed and Intercity Railways*, Vols. 1 and 2, Springer-Verlag, Heidelberg, Germany.
4. Ni, Y.Q., Yin, J.H., and Ye, X.W. (eds.) (2011), *Proceedings of the 5th Cross-Strait Conference on Structural and Geotechnical Engineering*, Vols. 1 and 2, The Hong Kong Polytechnic University, Hong Kong.

Book chapters:

1. Zhou, L., Liu, X.Z., and Ni, Y.Q. (2022), “Sensing Solutions for Assessing and Monitoring High-Speed Railroads”, Chapter 10 of *Sensor Technologies for Civil Infrastructures ¾ Volume 2: Applications in Structural Health Monitoring*, 2nd Edition, edited by M.L. Wang, J.P. Lynch, and H. Sohn, Woodhead Publishing, Cambridge, UK.
2. Ni, Y.Q., and Wang, Y.W. (2022), “Sensing Solutions for Assessing and Monitoring Super-Tall Towers”, Chapter 2 of *Sensor Technologies for Civil Infrastructures ¾ Volume 2: Applications in Structural Health Monitoring*, 2nd Edition, edited by M.L. Wang, J.P. Lynch, and H. Sohn, Woodhead Publishing, Cambridge, UK. (Grant Nos. PolyU 152024/17E, 1-ZVNF and K-BBY1)

3. Ding, S., Zhang, L., Yu, X., Ni, Y.Q., and Han, B. (2020), “Analysis and Modeling of Electromechanical Properties of Cement-Based Nanocomposites”, Chapter 6 of the book: *Nanotechnology in Cement-Based Construction*, edited by A. D'Alessandro, A.L. Materazzi, and F. Ubertini, Taylor & Francis Group, Singapore.
4. Zhou, L., Liu, X.Z., and Ni, Y.Q. (2019), “Contemporary Inspection and Monitoring for High-Speed Rail System”, Chapter 3 of the book: *High-Speed Rail*, edited by H. Yaghoubi, IntechOpen, London, UK. (Grant Nos. 2018YFE0190100 and K-BBY1)
5. Ni, Y.Q. (2014), “Sensing Solutions for Assessing and Monitoring Super-Tall Towers”, Chapter 9 of the book: *Sensor Technologies for Civil Infrastructures, Volume 2: Applications in Structural Health Monitoring*, edited by M.L. Wang, J.P. Lynch, and H. Sohn, Woodhead Publishing, Cambridge, UK, 246-274. (Grant Nos. PolyU 5263/08E and 1-BB68)
6. Ni, Y.Q., and Li, W.R. (2013), “Seismic Response Monitoring and Analysis of a Super-Tall Structure Instrumented with SHM System”, Chapter 11 of the book: *Earthquakes and Health Monitoring of Civil Structures*, edited by M. Garevski, Springer-Verlag, Heidelberg, Germany, 269-286. (Grant Nos. G-YH47 and 1-BB68)
7. Ni, Y.Q. (2013), “Guangzhou New TV Tower”, *Structural Identification of Constructed Systems*, edited by F.N. Catbas, T. Kijewski-Correa, and A.E. Aktan, American Society of Civil Engineers (ASCE), Reston, Virginia, USA, 140-148.
8. Wong, K.Y., and Ni, Y.Q. (2011), “Structural Health Monitoring of a Suspension Bridge”, Chapter 13 of the book: *Monitoring Technologies for Bridge Management*, edited by B. Bakht, A.A. Mufti and L.D. Wegner, Multi-Science Publishing, Essex, UK, 365-390.
9. Chan, T.H.T., Wong, K.Y., Li, Z.X., and Ni, Y.Q. (2011), “Structural Health Monitoring for Long-Span Bridges - Hong Kong Experience and Continuing Onto Australia”, Chapter 1 of the book: *Structural Health Monitoring in Australia*, edited by T.H.T. Chan and D.P. Thambiratnam, Nova Science Publishers, New York, USA, 1-32.
10. Ni, Y.Q., and Chen, Z.H. (2010), “A Magnetorheological Damper with Embedded Piezoelectric Force Sensor: Experiment and Modeling”, Chapter 3 of the book: *Vibration Control*, edited by M. Lallart, Sciyo Publishing, Vienna, Austria, 55-78.
11. Wong, K.Y., and Ni, Y.Q. (2009), “Modular Architecture of Structural Health Monitoring System for Cable-Supported Bridges”, Chapter 123 of the book: *Encyclopedia of Structural Health Monitoring*, edited by C. Boller, F.-K. Chang and Y. Fujino, John Wiley & Sons, Chichester, UK, Vol. 5, 2089-2105.
12. Wong, K.Y., and Ni, Y.Q. (2009), “Structural Health Monitoring of Cable-Supported Bridges in Hong Kong”, Chapter 12 of the book: *Structural Health Monitoring of Civil Infrastructure Systems*, edited by V.M. Karbhari and F. Ansari, Woodhead Publishing, Cambridge, UK, 371-411.

Refereed journal papers:

1. behavior of nonlinear particle damping by Fourier neural network with transfer learning”, provisionally accepted to *Mechanical Systems and Signal Processing*. (SCI)
2. Wang, C., Wang, C., Ji, Y., Li, G., Wen, G.L., Ni, Y.Q., and Lai, S.K. (2023), “Boosting output performance of tri-hybrid vibration-based generator via quin-stable nonlinearity and speed amplification”, provisionally accepted to *Mechanical Systems and Signal Processing*. (SCI)
3. Ye, X., Ni, Y.Q., Ao, W.K., and Yuan, L. (2023), “Modeling of the hysteretic Rui, E.Z., Zeng, G.Z., Ni, Y.Q., Chen, Z.W., and Hao, S. (2023), “Time-averaged flow field reconstruction based on a multi-fidelity model using physics-informed neural network (PINN) and nonlinear information fusion”, provisionally accepted to *International Journal of Numerical Methods for Heat & Fluid Flow*. (SCI) (Grants No. PolyU 152308/22E, K-BBY1, 1-WZ0C and 1-W16W)
4. Yan, Z., Deng, X., Ni, Y.Q., and Sun, L. (2023), “Numerical investigation on elastic layer effects in wheel-rail rolling contact”, provisionally accepted to *Lubricants*. (SCI)
5. Liu, C., Lai, S.K., Ni, Y.Q., and Chen, L. (2023), “A physics-driven strategy for vibration control of railway vehicles”, provisionally accepted to *International Journal of Mechanical Sciences*. (SCI)
6. Zhang, Q.H., and Ni, Y.Q. (2023), “A sample size-dependent prior strategy for bridging the Bayesian-frequentist gap in point null hypothesis testing”, provisionally accepted to *Communications in Statistics - Theory and Methods*. (SCI) (Grants No. PolyU 152014/18E, K-BBY1 and 1-W14J)
7. Wang, F., Xia, J., Zhu, X., Xu, X., and Ni, Y.Q. (2023), “An online predictive energy management strategy for multi-mode plug-in hybrid electric vehicle with mode transition schedule optimization”, *IEEE Transactions on Mechatronics*, in press. (SCI)
8. Jiang, G.F., Wang, S.M., Ni, Y.Q., and Liu, W.Q. (2023), “Unsupervised discrepancy-based domain adaptation network to detect rail joint condition”, *IEEE Transactions on Instrumentation and Measurement*, in press. (SCI)
9. Liu, W., Ni, Y.Q., Ikago, K., and Ao W.K. (2023), “Seismic control of base-isolated structures using rate-independent damping devices”, *Journal of Building Engineering*, <https://doi.org/10.1016/j.jobe.2023.107744>. (SCI) (Grants No. R-5020-18, K-BBY1 and 1-W21Q)
10. Liu, Y.K., Liu, X.Y., Deng, E., Ni, Y.Q., and Yue, H. (2023), “Methods for calculating aerodynamics inside high-speed railway tunnel lining cracks and predicating stress intensity factors”, *International Journal of Numerical Methods for Heat & Fluid Flow*, <https://www.emerald.com/insight/0961-5539.htm>. (SCI) (Grants No. R-5020-18, K-BBY1 and 1-W21Q)
11. Wang, Q.A., Dai, Y., Ma, Z.G., Wang, J.F., Lin, J.F., Ni, Y.Q., Ren, W.X., Jiang, J., Yang, X., and Yan, J.R. (2023), “Towards high-precision

- data modelling of SHM measurements using an improved sparse Bayesian learning scheme with strong generalization ability”, *Structural Health Monitoring*, <https://doi.org/10.1177/14759217231170316>. (SCI)
12. Wang, J., Liu, X.Y., Deng, E, Ni, Y.Q., Chan, P.W., Yang, W.C., and Tan, Y.K. (2023), “Acceleration and Reynolds effects of crosswind flow fields in gorge terrains”, *Physics of Fluids*, Vol. 35, No. 8, [Paper No. 085143](#). (SCI) (Grants No. R-5020-18, K-BBY1 and 1-W21Q)
 13. Ouyang, D.H., Deng, E, Ni, Y.Q., Yang, W.C., and Chen, Z.W., (2023), “Evolution of flow field around high-speed trains meeting at the tunnel entrance under strong wind-rain environments”, *Journal of Wind Engineering and Industrial Aerodynamics*, Vol. 241, Paper No. 105537. (SCI) (Grants No. R-5020-18, K-BBY1, 1-W21Q and 2021B1515130006)
 14. Liu, N., Wu, X., Deng, E, Ni, Y.Q., Yang, W.C., and Li, G.Z. (2023), “Dust diffusion laws during partition excavation by boom-type roadheader in a metro tunnel”, *Tunnelling and Underground Space Technology*, Vol. 141, Paper No. 105382. (SCI) (Grants No. R-5020-18, K-BBY1 and 1-W21Q)
 15. Yang, W.C., Yang, J.B., Deng, E, Ni, Y.Q., and Liu, Y.K. (2023), “Aerodynamic behavior of flaky spalled blocks in high-speed rail tunnel lining under slipstream”, *Tunnelling and Underground Space Technology*, Vol. 141, Paper No. 105377. (SCI) (Grants No. R-5020-18, K-BBY1 and 1-W21Q)
 16. Li, X.X., Deng, E, Wang, Y.W., and Ni, Y.Q. (2023), “3D laser scanning for predicting the alignment of large-span segmental precast assembled concrete cable-stayed bridges”, *Automation in Construction*, Vol. 155, Paper No. 105056. (SCI) (Grants No. U1934209, R-5020-18, K-BBY1, and 1-W21Q)
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 18. Siahkouhi, M., Wang, J., Han, X., Aela, P., Ni, Y.Q., and Jing, G. (2023), “Railway ballast track hanging sleeper defect detection using a smart CNT self-sensing concrete railway sleeper”, *Construction and Building Materials*, Vol. 399, Paper No. 132487. (SCI)
 19. Liu, Y.K., Deng, E, Yang, W.C., Ni, Y.Q., Zhou, Z., and Zhang, J.J. (2023), “Aerodynamic intensification effect and dynamic response of cracks on high-speed railway tunnel linings”, *Tunnelling and Underground Space Technology*, Vol. 140, Paper No. 105308. (SCI) (Grants No. R-5020-18, K-BBY1 and 1-W21Q)
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mitigation strategies for in-service elevated suburban rail”, *Measurement*, Vol. 219, Paper No. 113276. (SCI) (Grants No. ITS/096/21, U1934209 and K-BBY1)

21. Wang, H.P., Chen, C., Ni, Y.Q., Jayawickrema, M., and Epaarachchi, J. (2023), “Computer-aided feature recognition of CFRP plates based on real-time strain fields reflected from FBG measured signals”, *Composites Part B: Engineering*, Vol. 263, Paper No. 110866. (SCI)
22. Zhang, D., Guo, Z.H., Ni, Y.Q., Chen, Z.W., Ao, W.K., Bordbar, A., and Zhou, F.R. (2023), “[Correlation between cargo properties and train overturning safety for a high-speed freight train under strong winds](#)”, *Engineering Applications of Computational Fluid Mechanics*, Vol. 17, No. 1, Paper No. 2221308. (SCI) (Grants No. R-5020-18, U1934209, K-BBY1, 2019WGALH15, 2019WGALH17, 2021WGALH15, 2021B1515130006, and 1-W21X)
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27. Chen, R., and Ni, Y.Q. (2023), “A nonparametric Bayesian approach for bridge reliability assessment using structural health monitoring data”, *Structural Control and Health Monitoring*, Vol. 2023, [Paper No.](#) 9271433. (SCI) (Grants No. PolyU 152241/15E, U1934209 and K-BBY1)
28. Deng, E, Yue, H., Ni, Y.Q., He, X.H., Yang, W.C., and Chen, Z.W. (2023), “Wake dynamic characteristics of windproof structures in embankment–bridge sections along a high-speed railway under natural strong crosswinds”, *Physics of Fluids*, Vol. 35, No. 5, [Paper No.](#) 055109. (SCI) (Grants No. U1934209, R-5020-18, K-BBY1 and 1-W21Q)
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 32. Zhou, K., Wang, Z., Ni, Y.Q., Zhang, Y., and Tang, J. (2023), “Unmanned aerial vehicle-based computer vision for structural vibration measurement and condition assessment: A concise survey”, *Journal of Infrastructure Intelligence and Resilience*, Vol. 2, No. 2, Paper No. 100031.
 33. Zhang, B.Y., and Ni, Y.Q. (2023), “A data-driven sensor placement strategy for reconstruction of mode shapes by using recurrent Gaussian process regression”, *Engineering Structures*, Vol. 284, Paper No. 115998. (SCI) (Grants No. PolyU 152014/18E, 2021B1515130006 and K-BBY1)
 34. Li, H.W., Xu Z.D., Gomez, D., Dyke, S.J., Wang, Y.W., and Ni, Y.Q. (2023), “Seismic analysis of 3D train-wheel-bridge-bearing systems: Illustrative examples”, *Earthquake Engineering and Structural Dynamics*, Vol. 52, No. 4, 1252-1266. (SCI) (Grant No. 1-W24B)
 35. Li, H.W., Xu Z.D., Gomez, D., Dyke, S.J., Ni, Y.Q., and Wang, Y.W. (2023), “Seismic analysis of 3D train-wheel-bridge-bearing systems: Modeling”, *Earthquake Engineering and Structural Dynamics*, Vol. 52, No. 4, 1205-1231. (SCI) (Grant No. 1-W24B)
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