

## PUBLICATIONS

### SUMMARY OF PUBLICATIONS AND PRESENTATIONS

#### Google Scholar indices

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as of 10/08/2018

<u>Citation indices</u>	All	Since 2013
<u>Citations</u>	6036	4794
<u>h-index</u>	40	37
<u>i10-index</u>	122	109

Note: underlined are students/researchers under my supervision

#### JOURNALS PUBLISHED (223, As of October 2018):

1. Peng, C., Chen, P., You, Z., Lv, S., Xu, F., Zhang, W., Yu, J. and Zhang, H., 2018. The anti-icing and mechanical properties of a super hydrophobic coating on asphalt pavement. *Construction and Building Materials*, 190, pp.83-94.
2. Zhang, R., You, Z., Wang, H., Chen, X., Si, C. and Peng, C., 2018. Using bio-based rejuvenator derived from waste wood to recycle old asphalt. *Construction and Building Materials*, 189, pp.568-575.
3. Gong, F., Zhou, X., You, Z., Liu, Y. and Chen, S., 2018. Using discrete element models to track movement of coarse aggregates during compaction of asphalt mixture. *Construction and Building Materials*, 189, pp.338-351.
4. Peng, C., Zhang, H., You, Z., Xu, F., Jiang, G., Lv, S., Zhang, R. and Yang, H., 2018. Preparation and anti-icing properties of a super hydrophobic silicone coating on asphalt mixture. *Construction and Building Materials*, 189, pp.227-235.
5. You, L., You, Z., Dai, Q. and Zhang, L., 2018. Assessment of nanoparticles dispersion in asphalt during bubble escaping and bursting: Nano hydrated lime modified foamed asphalt. *Construction and Building Materials*, 184, pp.391-399.
6. Gao, J., Wang, H., Bu, Y., You, Z., Hasan, M.R.M. and Irfan, M., 2018. Effects of coarse aggregate angularity on the microstructure of asphalt mixture. *Construction and Building Materials*, 183, pp.472-484.
7. Zhang, R., Dai, Q., You, Z., Wang, H. and Peng, C., 2018. Rheological Performance of Bio-Char Modified Asphalt with Different Particle Sizes. *Applied Sciences*, 8(9), p.1665.
8. Gong, F., Liu, Y., Zhou, X. and You, Z., 2018. Lab assessment and discrete element modeling of asphalt mixture during compaction with elongated and flat coarse aggregates. *Construction and Building Materials*, 182, pp.573-579.

9. Liu, F., You, Z., Yang, X. and Wang, H., 2018. Macro-micro degradation process of fly ash concrete under alternation of freeze-thaw cycles subjected to sulfate and carbonation. *Construction and Building Materials*, 181, pp.369-380.
10. You, Z., Diab, A., Chen, Y., Wang, Y. and Wang, C., 2018. Characterizing the Temperature Effects on Rutting and Fatigue Properties of Asphalt Binders Based on Time-Temperature Superposition Principle. *Journal of Testing and Evaluation*, 47(4).
11. You, L., You, Z., Dai, Q., Guo, S., Wang, J. and Schultz, M., 2018. Characteristics of Water-Foamed Asphalt Mixture under Multiple Freeze-Thaw Cycles: Laboratory Evaluation. *Journal of Materials in Civil Engineering*, 30(11), p.04018270.
12. Yang, X., You, Z., Jin, C., Diab, A. and Mohd Hasan, M.R., 2018. Aggregate Morphology and Internal Structure for Asphalt Concrete: Prestep of Computer-Generated Microstructural Models. *International Journal of Geomechanics*, 18(10), p.06018024.
13. Lv, S., Liu, C., Chen, D., Zheng, J., You, Z. and You, L., 2018. Normalization of fatigue characteristics for asphalt mixtures under different stress states. *Construction and Building Materials*, 177, pp.33-42.
14. Hasan, M., You, Z., Satar, M., Warid, M., Kamaruddin, N., Ge, D. and Zhang, R., 2018. Effects of Titanate Coupling Agent on Engineering Properties of Asphalt Binders and Mixtures Incorporating LLDPE-CaCO<sub>3</sub> Pellet. *Applied Sciences*, 8(7), p.1029.
15. Lei, Y., Wang, H., Chen, X., Yang, X., You, Z., Dong, S. and Gao, J., 2018. Shear property, high-temperature rheological performance and low-temperature flexibility of asphalt mastics modified with bio-oil. *Construction and Building Materials*, 174, pp.30-37.
16. Gao, J., Wang, H., You, Z., Mohd Hasan, M., Lei, Y. and Irfan, M., 2018. Rheological Behavior and Sensitivity of Wood-Derived Bio-Oil Modified Asphalt Binders. *Applied Sciences*, 8(6), p.919.
17. Lv, S., Liu, C., Zheng, J., You, Z. and You, L., 2018. Viscoelastic Fatigue Damage Properties of Asphalt Mixture with Different Aging Degrees. *KSCE Journal of Civil Engineering*, 22(6), pp.2073-2081.
18. Zhang, C., Wang, H., Yang, X. and You, Z., 2018. A Combinational Prediction Model for Transverse Crack of Asphalt Pavement. *KSCE Journal of Civil Engineering*, 22(6), pp.2109-2117.
19. You, L., You, Z., Yang, X., Ge, D. and Lv, S., 2018. Laboratory Testing of Rheological Behavior of Water-Foamed Bitumen. *Journal of Materials in Civil Engineering*, 30(8), p.04018153.
20. Lv, S., Liu, C., Lan, J., Zhang, H., Zheng, J. and You, Z., 2018. Fatigue Equation of Cement-Treated Aggregate Base Materials under a True Stress Ratio. *Applied Sciences* (2076-3417), 8(5).

21. Peng, C., Chen, P., You, Z., Lv, S., Zhang, R., Xu, F., Zhang, H. and Chen, H., 2018. Effect of silane coupling agent on improving the adhesive properties between asphalt binder and aggregates. *Construction and Building Materials*, 169, pp.591-600.
22. You, Z., Yang, X., Wang, Q., Wang, H. and Chen, X., 2018. Optimization of Laboratory Preparation of the Emulsified Bioasphalt with Two Emulsifiers. *Journal of Testing and Evaluation*, 46(4).
23. Wang, C., Xue, L., Xie, W., You, Z. and Yang, X., 2018. Laboratory investigation on chemical and rheological properties of bio-asphalt binders incorporating waste cooking oil. *Construction and Building Materials*, 167, pp.348-358.
24. Yang, X., You, Z., Hiller, J. and Watkins, D., 2018. Pavement performance zone based on mechanistic-empirical design and temperature indices. *Transportmetrica A: Transport Science*, pp.1-23.
25. Zhang, R., Wang, H., Jiang, X., You, Z., Yang, X. and Ye, M., 2018. Thermal Storage Stability of Bio-Oil Modified Asphalt. *Journal of Materials in Civil Engineering*, 30(4), p.04018054.
26. Wang, H., Wang, C., You, Z., Yang, X. and Huang, Z., 2018. Characterising the asphalt concrete fracture performance from X-ray CT Imaging and finite element modelling. *International Journal of Pavement Engineering*, 19(3), pp.307-318.
27. Gao, J., Wang, H., You, Z. and Yang, X., 2018. Gray relational entropy analysis of high temperature performance of bio-asphalt binder and its mixture. *International Journal of Pavement Research and Technology*.
28. Yao, H., Dai, Q., You, Z., Bick, A. and Wang, M., 2018. Modulus simulation of asphalt binder models using Molecular Dynamics (MD) method. *Construction and Building Materials*, 162, pp.430-441.
29. Gao, J., Wang, H., You, Z. and Hasan, M.R.M., 2018. Research on properties of bio-asphalt binders based on time and frequency sweep test. *Construction and Building Materials*, 160, pp.786-793.
30. Jin, C., Yang, X., You, Z. and Liu, K., 2018. Aggregate Shape Characterization Using Virtual Measurement of Three-Dimensional Solid Models Constructed from X-Ray CT Images of Aggregates. *Journal of Materials in Civil Engineering*, 30(3), p.04018026.
31. Lv, S., Fan, X., Yao, H., You, L., You, Z. and Fan, G., 2018. Analysis of performance and mechanism of Buton rock asphalt modified asphalt. *Journal of Applied Polymer Science*, p.46903.
32. Diab, A. and You, Z., 2017. Linear and Nonlinear Rheological Properties of Bituminous Mastics under Large Amplitude Oscillatory Shear Testing. *Journal of Materials in Civil Engineering*, 30(3), p.04017303.

33. Wang, C., Xie, W., Chen, Y., Diab, A. and You, Z., 2017. Refining the Calculation Method for Fatigue Failure Criterion of Asphalt Binder from Linear Amplitude Sweep Test. *Journal of Materials in Civil Engineering*, 30(2), p.04017286.
34. Ji, J., Yao, H., Zheng, W., Suo, Z., Shi, Y., Xu, Y., Wu, H. and You, Z., 2017. Preparation and Properties of Asphalt Binders Modified by THFS Extracted From Direct Coal Liquefaction Residue. *Applied Sciences*, 7(11), p.1155.
35. Guo, N., You, Z., Tan, Y. and Zhao, Y., 2017. Performance evaluation of warm mix asphalt containing reclaimed asphalt mixtures. *International Journal of Pavement Engineering*, 18(11), pp.981-989.
36. Zhang, C., Wang, H., You, Z., Liu, Y., Yang, X. and Xiao, J., 2017. Prediction on rutting decay curves for asphalt pavement based on the pavement-ME and matter element analysis. *International Journal of Pavement Research and Technology*, 10(6), pp.466-475.
37. Hasan, M.R.M., You, Z., Yang, X. and Heiden, P.A., 2017. Quantification of physicochemical properties, activation energy, and temperature susceptibility of foamed asphalt binders. *Construction and Building Materials*, 153, pp.557-568.
38. Liu, Y., Gong, F., You, Z. and Wang, H., 2017. Aggregate Morphological Characterization with 3D Optical Scanner versus X-Ray Computed Tomography. *Journal of Materials in Civil Engineering*, 30(1), p.04017248.
39. Diab, A., You, Z., Yang, X. and Mohd Hasan, M.R., 2017. Towards an alternate evaluation of moisture-induced damage of bituminous materials. *Applied Sciences*, 7(10), p.1049.
40. Zhou, X. Y., Ma, B., Wei, K., Bo, Y. Z., You, Z. P., & Yu, M. (2017). Curing process and properties of hydrogenated bisphenol a epoxy resin particles by an interfacial polymerization method for asphalt pavements. *Construction and Building Materials*, 147, 448-456.
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44. R. Zhang, H. Wang, J. Gao, X. Yang, Z. You, Comprehensive Performance Evaluation and Cost Analysis of SBS-Modified Bioasphalt Binders and Mixtures, *Journal of Materials in Civil Engineering* 29(12) (2017) 04017232.

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47. A. Diab, Z. You, A Bitumen-Based Prototype to Predict the Workability of Asphalt Concrete Mixtures, International Congress and Exhibition " Sustainable Civil Infrastructures: Innovative Infrastructure Geotechnology", Springer, 2017, pp. 14-30.
48. X. Yang, Z. You, J. Hiller, D. Watkins, Sensitivity of flexible pavement design to Michigan's climatic inputs using pavement ME design, *International Journal of Pavement Engineering* 18(7) (2017) 622-632.
49. D. Ge, Z. You, S. Chen, L. You, Using DSR and FTIR to Evaluate Asphalt Binder Extracted and Recovered from Asphalt Mixtures, *Congress on Technical Advancement 2017*, 2017, pp. 89-105.
50. H. Wang, Z. You, J. Han, Preface for the special issue on " Advanced Transportation Infrastructure and Materials, *Journal of Traffic and Transportation Engineering (English Edition)* 2 (2017) 001.
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52. Diab, A., & You, Z. (2017). Small and large strain rheological characterizations of polymer-and crumb rubber-modified asphalt binders. *Construction and Building Materials*, 144, 168-177.
53. Zhang, Ran, et al. "High temperature performance of SBS modified bio-asphalt." *Construction and Building Materials* 144 (2017): 99-105.
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55. Liu, Y., Zhou, X., You, Z., Yao, S., Gong, F., & Wang, H. (2017). Discrete element modeling of realistic particle shapes in stone-based mixtures through MATLAB-based imaging process. *Construction and Building Materials*, 143, 169-178.
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57. Hu, X., Lei, Y., Wang, H., Jiang, P., Yang, X., & You, Z. (2017). Effect of tack coat dosage and temperature on the interface shear properties of asphalt layers bonded with emulsified asphalt binders. *Construction and Building Materials*, 141, 86-93.

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61. Hofko, B., Cannone Falchetto, A., Grenfell, J., Huber, L., Lu, X., Porot, L. & You, Z. (2017). Effect of short-term ageing temperature on bitumen properties. *Road Materials and Pavement Design*, 1-10.
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66. Ji, J., Yao, H., Suo, Z., Zhang, H., Cao, D., You, Z., & Li, B. (2017). Rheological Properties of Modified Coal Tar Pitches. *Journal of Materials in Civil Engineering*, 29(3), D4016002.
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75. Guo N., You, Z., Tan Y., Zhao Y., & Jing H. Evaluation Method for Homogeneity of Asphalt Mixtures Based on CT Technique [J]. *China Journal of Highway and Transport*, 2017, 30(1): 1-9, 55. (In Chinese)
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#### **PEER REVIEWED PROCEEDINGS AND SPECIAL PUBLICATIONS (71):**

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3. Wang, Y., Wang, C., Xie, W., You, Z. and Yang, X., 2018. Laboratory Evaluation of Bio-Asphalt Binders Modified by Waste Cooking Oil (No. 18-05894). Transportation Research Board 97th Annual Meeting, 2018
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