



**Professor Suchao Xie**

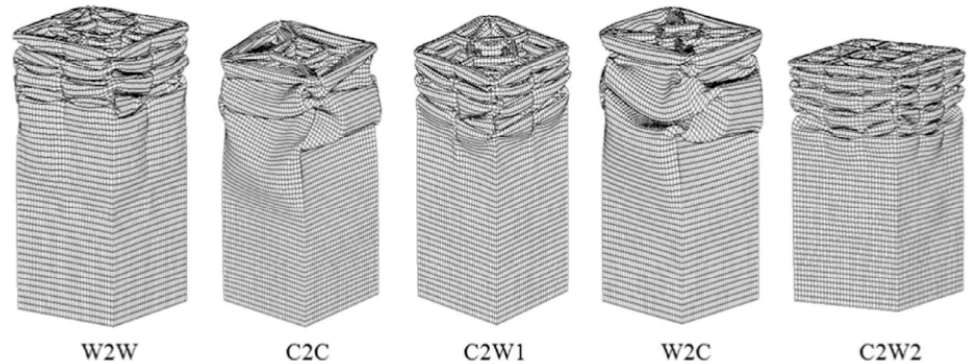


Fig. 4. Final deformed structures.

From: Suchao Xie, Weilin Yang, Ning Wang and Haihong Li, “Crashworthiness analysis of multi-cell square tubes under axial loads”, *International Journal of Mechanical Sciences*, Vol. 121, pp 106-118, February 2017

See:

[https://www.researchgate.net/scientific-contributions/2064340483\\_Suchao\\_Xie](https://www.researchgate.net/scientific-contributions/2064340483_Suchao_Xie)

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### **Selected Publications:**

- Suchao Xie and Hui Zhou, “Impact characteristics of a composite energy absorbing bearing structure for railway vehicles”, *Composites Part B: Engineering*, Vol. 67, pp 455-463, December 2014
- Suchao Xie and Hui Zhou, “Analysis and optimization of parameters influencing the out-of-plane energy absorption of an aluminium honeycomb”, *Thin-Walled Structures*, Vol. 89, pp 169-177, April 2015
- Hui Zhou, Ping Xu and Suchao Xie, “Composite energy-absorbing structures combining thin-walled metal and honeycomb structures”, *Journal of Rail and Rapid Transit*, February 9, 2016
- Jian Li, Guangjun Gao, Haipeng Dong, Suchao Xie and Weiyuan Guan, “Study on the energy absorption of the expanding-splitting circular tube by experimental investigations and numerical simulations”, *Thin-Walled Structures*, Vol. 103, pp 105-114, June 2016
- Xiang Zou, Guangjun Gao, Haipeng Dong, Suchao Xie, Gong Chen and Tan Tan, “Crashworthiness analysis and structural optimization of multi-cell square tubes under axial loads”, *International Journal of Crashworthiness*, Vol. 22, No. 2, pp 129-147, 2017
- Suchao Xie, Weilin Yang, Ning Wang and Haihong Li, “Crashworthiness analysis of multi-cell square tubes under axial loads”, *International Journal of Mechanical Sciences*, Vol. 121, pp 106-118, February 2017
- Guowei Liu, Jun Xie and Suchao Xie, “Experimental and numerical investigations of a new U-shaped thin plate energy absorber subjected to bending and friction”, *Thin-Walled Structures*, Vol. 115, pp 215-224, June 2017
- Suchao Xie, Weilin Yang, Haihong Li and Ning Wang, “Impact characteristics and crashworthiness of multi-cell, square, thin-walled structures under axial loads”, *International Journal of Crashworthiness*, Vol. 22, No. 5, pp 503-517, 2017
- Suchao Xie, Haihong Li, Weilin Yang and Ning Wang, “Crashworthiness optimization of a composite energy-absorbing structure for railway vehicles”, *Structural and Multidisciplinary Optimization*, October 2017
- Hui Zhou, Ping Xu, Suchao Xie, Zhejun Feng, Da Wang, “Mechanical performance and energy absorption properties of structures combining two Nomex honeycombs”, *Composite Structures*, Vol. 185, pp 524-536, February 2018

Chengxing Yang, Ping Xu, Shuguang Yao, Suchao Xie, Qingming Li and Yong Peng, "Optimization of honeycomb strength assignment for a composite energy-absorbing structure", *Thin-Walled Structures*, Vol. 127, pp 741-755, June 2018

Suchao Xie, Ning Wang, Weilin Yang and Haihong Li, "Energy absorption performance of thin-walled metal plate due to upheaval deformation based on experiments and numerical simulation", *Thin-Walled Structures*, Vol. 131, pp 258-273, October 2018

Wen Ma, Zhixiang Li and Suchao Xie, "Crashworthiness analysis of thin-walled bio-inspired multi-cell corrugated tubes under quasi-static axial loading", *Engineering Structures*, Vol. 204, Article 110069, 1 February 2020

Suchao Xie, Kunkun Jing, Hui Zhou and Xiang Liu, "Mechanical properties of Nomex honeycomb sandwich panels under dynamic impact", *Composite Structures*, Vol. 235, Article 111814, 1 March 2020