

Publications

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Book

Y. Deng, *Conformal Symmetries and Constrained Critical Phenomena*, ISBN 90-407-2548-9, (Delft University Press, Delft, 2004).

In peer-reviewed journals

Since 2002, we have published about 163 articles in peer-reviewed journals. These include: Nature (1), Science (3), Nature Photonics (1), Nature Physics (1), National Science Review (3), Physical Review X (1), Science Bulletin (2), Physical Review Letters (30), Physical Review Research (2), Scientific Reports (1), Computer Physics Communications (1), Physical Review B (18), Physica A (3), Nuclear Physics B (6), Physical Review A (11), Frontiers of Physics (3), Physical Review E (62), Chinese Physics Letters (1), Journal of Statistical Mechanics: Theory and Experiment (2), Journal of Physics A: Mathematical and Theoretical (6), Europhysics Letters (1), Chinese Physics B (2), Acta Physica Sinica (1), Differential Geometry and Physics (1), Journal of Physics: Conference Series (1).

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1. Wei Zhong, Youjin Deng and Daxing Xiong *Burstiness and information spreading in active particle systems*, Soft Matter **19**, 2962 (2023).
2. Sheng Fang, Zongzheng Zhou, and Youjin Deng, *Geometric scaling behaviors of the Fortuin-Kasteleyn Ising model in high dimensions*, Phys. Rev. E **107**, 044103 (2023).
3. Ming Li, Junfeng Wang, and Youjin Deng, *Explosive Percolation Obeys Standard Finite-Size Scaling in an Event-Based Ensemble*, Phys. Rev. Lett. **130**, 147101 (2023).

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4. Youjin Deng, Timothy M Garoni, Jens Grimm, and Zongzheng Zhou, *Unwrapped two-point functions on high-dimensional tori*, J. Stat. Mech. (2022) 053208.
5. Xibo Zhang, Yang-Yang Chen, Longxiang Liu, Youjin Deng, and Xiwen Guan, *Interaction-induced particle-hole symmetry breaking and fractional exclusion statistics*, National Science Review **9**, nwac027 (2022).

¹“*” represents that Youjin Deng contributed equally to the work, and “†” represents that Youjin Deng is a (co-)corresponding author of the articles (this rule applies to the articles since 2008, in which year he got a professorship in USTC).

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7. Xiang-Pei Liu, Xing-Can Yao, Xiaopeng Li, Yu-Xuan Wang, Chun-Jiong Huang, Youjin Deng, Yu-Ao Chen, and Jian-Wei Pan, *Temperature-Dependent Decay of Quasi-Two-Dimensional Vortices across the BCS-BEC Crossover*, Phys. Rev. Lett. **129**, 163602 (2022).
8. Pengcheng Hou, Bao-Zong Wang, Kristjan Haule, Youjin Deng, and Kun Chen, *Exchange-correlation effect in the charge response of a warm dense electron gas*, Phys. Rev. B **106**, L081126 (2022).
9. Hao Chen, Pengcheng Hou, Sheng Fang, and Youjin Deng[†], *Monte Carlo study of duality and the Berezinskii-Kosterlitz-Thouless phase transitions of the two-dimensional q-state clock model in flow representations*, Phys. Rev. E **106**, 024106 (2022).
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12. **Youjin Deng**[†] and Robert M. Ziff, *The elastic and directed percolation backbone*, J. Phys. A: Math. Theor. **55** 244002 (2022).
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14. Sheng Fang, Da Ke, Wei Zhong, and **Youjin Deng**[†], *Backbone and shortest-path exponents of the two-dimensional Q-state Potts model*, Phys. Rev. E **105**, 044122 (2022).
15. Junyin Zhang, Bo Zhang, Junyi Xu, Wanzhou Zhang, and **Youjin Deng**[†], *Machine learning for percolation utilizing auxiliary Ising variables*, Phys. Rev. E **105**, 024144 (2022).

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