

List of publications of Chandan Dasgupta

(a) Research papers published in refereed journals:

1. A. B. Harris, T. C. Lubensky, W. K. Holcomb and C. Dasgupta (1975), **Renormalization group approach to percolation problems**, Phys. Rev. Lett. **35**, 327.
2. C. Dasgupta (1976), **Renormalization group calculation of the critical exponents for percolation**, Phys. Rev. B **14**, 1221.
3. C. Dasgupta (1977), **Renormalization-group study of the Ashkin-Teller-Potts model in two dimensions**, Phys. Rev. B **15**, 3460.
4. C. Dasgupta, A. B. Harris and T. C. Lubensky (1978), **Renormalization-group treatment of the random resistor network in $6 - \epsilon$ dimensions**, Phys. Rev. B **17**, 1375.
5. T. C. Lubensky, C. Dasgupta and C. M. Chaves (1978), **Statistics of trees and branched polymers from a generalized Hilhorst model**, J. Phys. A **11**, 2219.
6. C. Dasgupta, S. K. Ma and C. K. Hu (1979), **Dynamic properties of a spin-glass model at low temperatures**, Phys. Rev. B **20**, 3837.
7. S. K. Ma, C. Dasgupta and C. K. Hu (1979), **The random antiferromagnetic chain**, Phys. Rev. Lett. **43**, 1434.
8. C. Dasgupta and S. K. Ma (1980), **Low-temperature properties of the random Heisenberg antiferromagnetic chain**, Phys. Rev. B **22**, 1305.
9. S. Chakravarty and C. Dasgupta (1980), **Absence of crystalline order in two dimensions**, Phys. Rev. B **22**, 369.
10. C. Dasgupta and P. Pfeuty (1981), **Real-space renormalization-group study of the one-dimensional Hubbard model**, J. Phys. C **14**, 717.
11. C. Dasgupta and B. I. Halperin (1981), **Phase transition in a lattice model of superconductivity**, Phys. Rev. Lett. **47**, 1556.
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13. C. Dasgupta (1983), **Duality maps for a lattice model of the smectic-A-nematic transition**, Phys. Rev. A (Rapid Communications) **27**, 1262.
14. C. Dasgupta and K. L. Yao (1984), **Macroscopic anisotropy in transition-metal spin-glass alloys**, Phys. Rev. B **29**, 4071.
15. C. Dasgupta (1985), **Monte Carlo study of the nematic-to-smectic-A transition**, Phys. Rev. Lett. **55**, 1771.

16. C. Dasgupta and R. Pandit (1986), **Kinetics of domain growth: The relevance of two-step quenches**, Phys. Rev.B **33**, 4752.
17. A. Chakrabarti and C. Dasgupta (1985), **Phase transition in the Ruderman-Kittel-Kasuya-Yosida model of spin-glass**, Phys. Rev. Lett. **56**, 1404.
18. M. H. Lau and C. Dasgupta (1987), **Critical behaviour of the n -vector model for $1 < n < 2$** , Phys. Rev. B **35**, 329.
19. A. Chakrabarti and C. Dasgupta (1987), **Anisotropy-induced phase transition in metallic spin-glass alloys**, Phys. Rev. B **36**, 793.
20. C. Dasgupta (1987), **Critical behaviour of a lattice model of the nematic to smectic-A transition**, J. Physique (Paris) **48**, 957.
21. C. Dasgupta and R. Pandit (1987), **Testing approximate theories of first-order phase-transitions on the two-dimensional Potts model**, J. Stat. Phys. **47**, 375.
22. M. H. Lau and C. Dasgupta (1988), **Role of topological defects in the phase transition of the three-dimensional Heisenberg model**, J. Phys. A **21**, L 51.
23. A. Chakrabarti and C. Dasgupta (1988), **A Monte Carlo study of realistic models of metallic spin glass**, J. Phys. C **21**, 1613.
24. A. Chakrabarti and C. Dasgupta (1988), **Phase transition in positionally disordered Josephson-junction arrays in a transverse magnetic field**, Phys. Rev. B **37**, 7557.
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26. M. H. Lau and C. Dasgupta (1989), **Numerical investigation of the role of topological defects in the three-dimensional Heisenberg transition**, Phys. Rev. B **39**, 7212.
27. C. Dasgupta (1989), **Variational calculation for the spin-1/2 Heisenberg antiferromagnet on a square lattice**, Phys. Rev. B **39**, 386.
28. V. Deshpande and C. Dasgupta (1991), **Heirarchical neural networks for the storage of correlated memories**, J. Stat. Phys. **64**, 755.
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31. V. Deshpande and C. Dasgupta (1991), **A neural network for storing individual memories in limit cycles**, J. Phys. A. **24**, 5105.

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