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B.S. in physics, 1975, American University in Beirut

Ph. D. in physics, 1982, Massachusetts Institute of Technology (MIT).

Experience:

1996-present: Professor, Physics Department, California State University, Los Angeles.

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1982-1986: Research Associate, Physics Department, Case Western Reserve University.

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6/19/95-8/25/95: Visiting Scientist, Naval Research Lab, Washington DC

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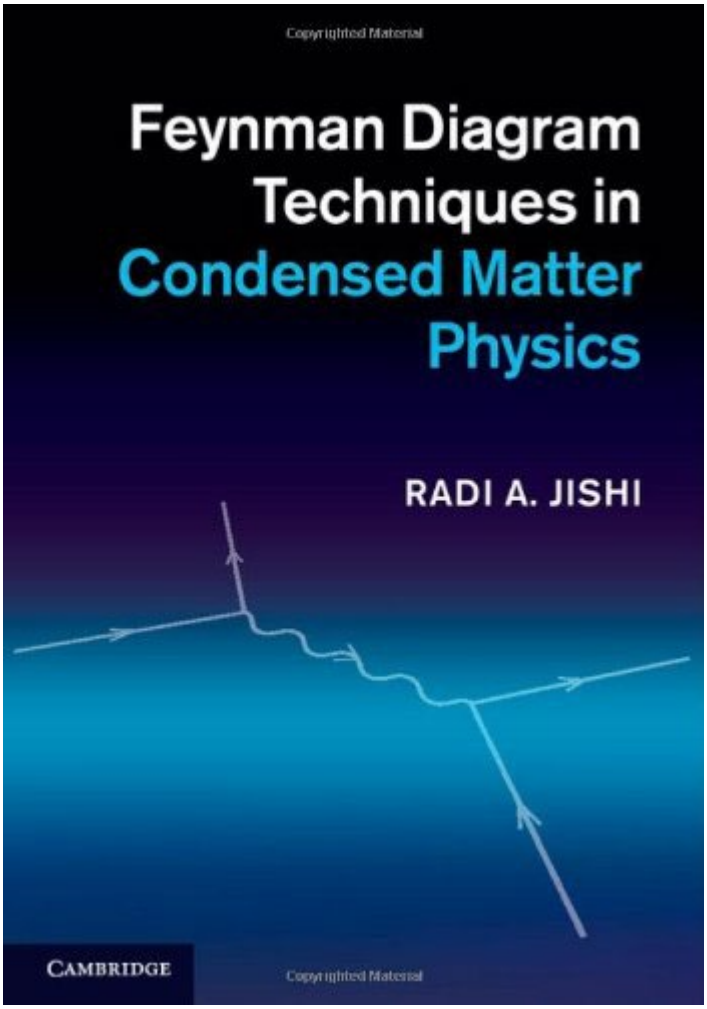
Publications:

A. Books:

1. *Feynman Diagram Techniques in Condensed Matter Physics*. Published by Cambridge University Press,2013.



A concise introduction to Feynman diagram techniques, this book shows how they can be applied to the analysis of complex many-particle systems, and offers a review of the essential elements of quantum mechanics, solid state physics and statistical mechanics. Alongside a detailed account of the method of second quantization, the book covers topics such as Green's and correlation functions, diagrammatic techniques, and superconductivity, and contains several case studies. Some background knowledge in quantum mechanics, solid state physics and mathematical methods of physics is assumed. Detailed derivations of formulas and in-depth examples and chapter exercises from various areas of condensed matter physics make this a valuable resource for both researchers and advanced undergraduate students in condensed-matter theory, many-body physics and electrical engineering. Solutions to exercises are made available online.

B. Articles

1. G. Dresselhaus, R.A. Jishi, J.D. Axe, C.F. Majktzak, L. Passell, and S.K. Satija. *Low frequency longitudinal lattice modes in graphite intercalation compounds,* Solid State Communications, **40**, 229 (1981).

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4. G. Timp, B.S. Elman, R.A. Jishi, and G. Dresselhaus. *Observation of superlattice-induced Raman modes in graphite-potassium-amalgam compounds,* Solid State Communications **44**, 987 (1982).

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6. J. Giergiel, P.C. Eklund, R.A. Jishi, and G. Dresselhaus. *A study of the temperature dependence of low-frequency Raman-active phonons in stage-2 graphite-K and graphite-Rb intercalation compounds,* Proceedings of the Materials Research Society, 1982, Volume 20, edited by M.S. Dresselhaus, G. Dresselhaus, J.E. Fisher, and M.J. Moran, p323.

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8. P. Lespade, R.A. Jishi, and M.S. Dresselhaus. *Model for Raman scattering from incompletely graphitized carbons,* Carbon **20**, 427 (1982).

9. R.A. Jishi. *Model for superconductivity in graphite intercalation compounds,* Physical Review B**29**, 112 (1983).

10. P.C. Eklund, V. Yeh, H.G. Smith, R. Nicklow, R.A. Jishi, and G. Dresselhaus. *Inelastic neutron scattering from low-frequency (00q) longitudinal lattice modes in graphite-$SbCl_5$ intercalation compounds,* Physical Review B**29**, 2138 (1983).

11. R.A. Jishi, G. Worrell, P.L. Taylor, M. Thakur, J.B. Lando, and Amitabha Das. *Electrical conductivity in a crystal of poly-acetylene-like chains,* Physical Review B**30**, 7281 (1984).

12. R.A. Jishi and P.L. Taylor. *Field sums for extended dipoles in ferroelectric polymers,* Journal of Applied Physics **57**, 897 (1985).

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16. R.A. Jishi, V.K. Datye, and P.L. Taylor. *Ionic permselectivity of perfluorinated ionomer membranes,* Macromolecules **18**, 297 (1985).

17. O. Heinonen and R.A. Jishi. *Electron-phonon interactions and charge density wave formation in strong magnetic fields,* Physical Review B**33**, 5461 (1986).

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References

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