Luttinger's Publications List

1. Dipole interactions in crystals, *Phys. Rev.* **70**:954 (1946).
2. Crystaline stark splitting (with C. Kittel), *Phys. Rev.* **73**:162 (1948).
3. Magnetic moment of the electron, *Phys. Rev.* **74**:893 (1948).
4. Magnetic moment of neutron and photon, *Helv. Phys. Acta* **21**:483 (1948).
5. Magnetic moment of nucleons in meson theory, *Phys. Rev.* **75**:1277 (1949).
6. A note on the quantum theory of ferromagnetic resonance (with C. Kittel), *Helv. Phys. Acta* **21**:480 (1948).
7. Corrections from radiation theory to pair production and bremsstrahlung (with R. Jost), *Helv. Phys. Acta* **22**:391 (1949).
8. Vacuum polarization and e^4 charge renormalization for electrons (with R. Jost), *Helv. Phys. Acta* **23**:201 (1950).
9. A note on Tisa's theory of superconductivity, *Phys. Rev.* **80**:727 (1950).
10. Distribution of recoil nucleus in pair production by photons (with R. Jost and M. Slotnick), *Phys. Rev.* **80**:189 (1950).
11. A note on the ground state in antiferromagnetics, *Phys. Rev.* **81**:1015 (1951).
12. Wave propagation in one-dimensional structures, *Phillips Res. Rep.* **6**:303 (1951).
13. The effect of a magnetic field on electrons in a periodic potential, *Phys. Rev.* **84**:814 (1951).
14. Pion production and charge independence, letter in *Phys. Rev.* **86**:571 (1952).
15. Angular momentum distribution in the Thomas–Fermi model (with J. H. D. Jensen), *Phys. Rev.* **86**:907 (1952).
16. Hall effect in ferromagnetics (with R. Korplus), *Phys. Rev.* **95**:1154 (1954).
17. Quantum theory of cyclotron resonances in semiconductors (with W. Kohn), letter in *Phys. Rev.* **96**:529 (1954).
18. Hyperfine splitting of donor states in silicon (with W. Kohn), letter in *Phys. Rev.* **96**:802 (1954).
19. Hyperfine splitting of donor states in silicon (with W. Kohn), *Phys. Rev.* **97**:883 (1955).
20. Theory of donor levels in silicon (with W. Kohn), letter in *Phys. Rev.* **97**:1721 (1955).
21. Theory of donor states in silicon (with W. Kohn), *Phys. Rev.* **98**:915 (1955).
22. Motion of electrons and holes in perturbed periodic fields (with W. Kohn), *Phys. Rev.* **97**:869 (1955).
23. Ferromagnetic and antiferromagnetic Curie temperatures (with H. A. Brown), *Phys. Rev.* **100**:685 (1955).
24. Classical theory of cyclotron resonance for holes in Ge (with R. R. Goodman), *Phys. Rev.* **100**:673 (1955).
25. Quantum theory of cyclotron resonance in semiconductors: General theory, *Phys. Rev.* **102**:1030 (1956).
26. Imperfect Bose gas with hard-sphere interaction, *Phys. Rev.* **105**:776 (1957).
27. Quantum theory of electrical transport I, *Phys. Rev.* **105**:590 (1957).
28. Quantum theory of electrical transport II, *Phys. Rev.* **109**:1892 (1958).

29. Theory of the Hall effect in ferromagnetic substances, *Phys. Rev.* **112**:739 (1958).
30. Ground state energy of a many-fermion system (with W. Kohn), *Phys. Rev.* **118**:41 (1959).
31. Ground state energy of a many-fermion system II (with J. Ward), *Phys. Rev.* **118**:1417 (1960).
32. Variational method for studying the motion of classical vibrating systems (with R. Thomas), *J. Math. Phys.* **1**:121 (1960).
33. Fermi surface and some simple equilibrium properties of a system of interacting fermions, *Phys. Rev.* **119**:1153 (1960).
34. Analytic properties of single particle propagators for many-fermion systems, *Phys. Rev.* **121**:942 (1961).
35. Theory of the de Haas–van Alphen effect for a system of interacting fermions, *Phys. Rev.* **121**:1251 (1961).
36. Theory of fermi surface, in *The Fermi Surface*, Harrison and Webb, eds. (John Wiley and Sons, New York, 1960).
37. Theory of the magnetic susceptibility of holes in Ge, *J. Phys. and Chem. Solids* **17**:284 (1961).
38. Derivation of the Landau theory of Fermi liquids I. Formal preliminaries (with P. Nozieres), *Phys. Rev.* **127**:1413 (1962).
39. Derivation of the Landau theory of Fermi liquids II. Equilibrium properties and transport equation (with P. Nozieres), *Phys. Rev.* **127**:1431 (1962).
40. An exactly soluble model of a many-fermion system, *J. Math. Phys.* **4**:1154 (1963).
41. The orbital diamagnetic susceptibility of Bloch electrons (with J. E. Hebborn, E. H. Sondheimer, and P. J. Stiles), *J. Phys. and Chem. Solids* **25**:741 (1964).
42. Theory of thermal transport coefficients, *Phys. Rev.* **135**:A1505 (1964).
43. Thermal transport coefficients of a superconductor, *Phys. Rev.* **136**:A1481 (1964).
44. New mechanism for superconductivity (with W. Kohn), *Phys. Rev. Lett.* **15**:510 (1965).
45. An additional equation in the phenomenology of superconductivity: Resistive effects (with P. W. Anderson and N. R. Werthamer), *Phys. Rev.* **138**:A1157 (1965).
46. Some inequalities of interest in statistical mechanics, *Progress of Theoretical Physics*, Supplement Nos. 37 and 38 (1966).
47. A new mechanism for superconductivity, *Phys. Rev.* **150**:202 (1966).
48. Exact solution of the integral equations for the anomalous skin effect and cyclotron resonance in metals (with L. Hartmann), *Phys. Rev.* **151**:430 (1966).
49. Moan-occupation-number formalism in statistical mechanics, *Phys. Rev.* **174**:263 (1968).
50. Transport theory, in *Mathematical Methods in Solid State and Superfluid Theory*, R. C. Clark and G. H. Derrick, eds. (Plenum Press, New York, 1969), pp. 157–193.
51. Low-lying energy spectrum of a one-dimensional disordered system (with H. K. Sy), *Phys. Rev. A* **7**:701 (1973).
52. Bose–Einstein condensation in a one-dimensional model with random impurities (with H. K. Sy), *Phys. Rev. A* **7**:712 (1973).
53. Generalized isoperimetric inequalities, *Proc. Nat. Acad. Sci. U.S.A.* **70**:1005 (1973).
54. Generalized isoperimetric inequalities, *J. Math. Phys.* **14**:586 (1973).
55. Generalized isoperimetric inequalities II, *J. Math. Phys.* **14**:1444 (1973).
56. Generalized isoperimetric inequalities III, *J. Math. Phys.* **14**:1448 (1973).
57. Bose–Einstein condensation in the presence of impurities (with M. Kac), *J. Math. Phys.* **14**:1626 (1973).
58. Bose–Einstein condensation in the presence of impurities II (with M. Kac), *J. Math. Phys.* **15**:183 (1974).
59. Effective energy formulation for the random-impurity system (with T. Y. Liu), *Ann. of Phys.* **80**:1 (1973).

60. A formula for the pressure in statistical mechanics (with M. Kac), *J. Math. Phys.* **14**:583 (1973).
61. A general rearrangement inequality for multiple integrals (with H. J. Brascamp and E. H. Lieb), *J. Functional Analysis* **17**:227 (1974).
62. Density of electronic energy levels in disordered systems (with R. Friedberg), *Phys. Rev. B* **12**:4460 (1975).
63. Density of electronic energy levels in disordered systems II, *Phys. Rev. B* **13**:2596 (1976).
64. Asymptotic density of energy levels for a simple model of a disordered system, *Phys. Rev. B* **13**:4555 (1976).
65. Scattering length and capacity (with M. Kac), *Annales de L'Institut Fourier* **25**:317 (1975).
66. Rearrangement inequality for periodic functions (with R. Friedberg), *Archive for Rat. Mech. and Anal.* **61**:35 (1976).
67. A new rearrangement inequality for multiple integrals (with R. Friedberg), *Archive for Rat. Mech. and Anal.* **61**:45 (1976).
68. Some functional inequalities with applications to Green's functions (with R. Friedberg), *Archive for Rat. Mech. and Anal.* **61**:187 (1976).
69. New variational method with applications to disordered systems, *Phys. Rev. Lett.* **37**:609 (1976).
70. Exactly soluble spin–glass model, *Phys. Rev. Lett.* **37**:778 (1976).
71. Diamagnetism of a simple disordered system, *Phys. Rev. Lett.* **37**:1221 (1976).
72. Scattering length and diffusion, *J. Stat. Mech.* **15**:215 (1976).
73. Useful bounds on interesting quantities, in *Path Integrals*, G. Papadopoulos and J. T. Devreese, eds. (Plenum Publishing Corp., New York, 1978), p. 239.
74. Generalized path integral formalism for the polaron problem and its second-order semi-invariant correction to the ground-state energy (with C.-Y. Lu), *Phys. Rev. B* **21**:4251 (1980).
75. On the Lloyd model of a disordered system, in *Physics As Natural Philosophy*, A. Shimony, ed. (MIT Press, Cambridge, 1982), pp. 103–111.
76. A new method for the asymptotic evaluation of a class of path integrals, *J. Math. Phys.* **23**:1011 (1982).
77. The asymptotic evaluation of a class of path integrals II, *J. Math. Phys.* **24**:2070 (1983).
78. Electronic density of levels in a disordered system (with R. Too), *Ann. Phys. (USA)* **145**:185 (1983).
79. Exact evaluation of Green's functions for a class of one-dimensional disordered systems (with R. Tao), *Phys. Rev. B* **27**:935 (1983).
80. Low density of states in several disordered systems, (with R. Waxler), *Ann. of Phys.* **175**(2):319 (1987).