REFERENCES

Aizenman, M. (1982) Geometric analysis of ϕ^4 fields and Ising models, part III, to appear.

Aizenman, M., Delyon, F., and Souillard, B. (1980) Lower bounds on the cluster size distributions, J. Stat. Phys. $\underline{23}$, 267-280.

Aizenman, M. and Fröhlich, J. (1982) to appear.

Batty, C.J.K. and Bollman, H.W. (1980) Generalized Holley-Preston inequalities on measure spaces and their products, Z. Wahrsch. verw. Geb. $\underline{53}$, 157-173.

Bollobás, B. (1979) Graph theory. An introductory course, Springer Verlag.

Brånvall, G. (1980) A note on limit theorems in percolation, Z. Wahrsch. verw. Geb. $\underline{53}$, 317-328.

Breiman, L. (1968) Probability, Addison-Wesley Publ. Co.

Broadbent, S.R. (1954) In discussion of Symposium on Monte Carlo methods, J. Roy. Stat. Soc. (B) $\underline{16}$, 68.

Broadbent, S.R., and Hammersley, J.M. (1957) Percolation processes, Proc. Cambr. Phil. Soc. $\underline{53}$, 629-641 and 642-645.

Cox, J.T., and Grimmett, G. (1981) Central limit theorems for percolation models, J. Stat. Phys. $\underline{25}$, 237-251.

Delyon, F. (1980) Taille, forme et nombre des amas dans les problèmes de percolation,Thèse de 3me cycle,Université Pierre et Marie Curie,Paris.

Doyle, P., and Snell, J.L. (1982) Random walk and electric networks; Dartmouth College preprint.

Dunford, N. and Schwartz, J.T. (1958) Linear Operators, vol. I., Interscience Publishers.

Durrett, R. and Griffeath, D. (1983) Supercritical contact processes on $\mathbb{Z}$, Ann. Prob. $\underline{11}$.

Essam, J.W. (1972) Percolation and cluster size, pp. 197-270 in Phase transitions and critical phenomena, Vol. II, Domb, C. and Green, M.S. eds, Academic Press.

Essam, J.W. (1980) Percolation theory, Reports on Progress in Physics, $\underline{43}$, 833-912.

Feynman, R.P., Leighton, R.B., and Sands, M. (1963) The Feynman
    lectures on Physics, Vol. I-III, Addison-Wesley Publ. Co.

Fisher, M.E. (1961) Critical probabilities for cluster size and
    percolation problems, J. Math. Phys. $\underline{2}$, 620-627.

Fisher, M.E. and Essam, J.W. (1961) Some cluster size and percolation
    problems, J. Math. Phys. $\underline{2}$, 609-619.

Fortuin, C.M., Kasteleyn, P.W., and Ginibre, J. (1971) Correlation
    inequalities on some partially ordered sets, Comm. Math.
    Phys. $\underline{22}$, 89-103.

Freedman, D. (1973) Another note on the Borel-Cantelli lemma and
    the strong law, with the Poisson approximation as a by-product,
    Ann. Prob. $\underline{1}$, 910-925.

Frisch, H.L. and Hammersley, J.M. (1963) Percolation processes and
    related topics, J. Soc. Ind. Appl. Math. $\underline{11}$, 894-918.

Golden, K. and Papanicolaou, G. (1982) Bounds for effective para-
    meters of heterogeneous media by analytic continuation, to
    appear in Comm. Pure. Appl. Math.

Griffeath, D. (1981) The basic contact processes, Stochastic
    Process. Appl. $\underline{11}$, 151-185.

Griffeath, D. and Liggett, T.M. (1983) Critical phenomena for
    Spitzer's reversible nearest particle systems, Ann. Prob. $\underline{11}$.

Grimmett, G.R. (1976) On the number of clusters in the percolation
    model, J. London Math. Soc. (2) $\underline{13}$, 346-350.

Grimmett, G.R. (1981) On the differentiablility of the number of
    clusters per vertex in the percolation model, J. London Math.
    Soc. (2) $\underline{23}$, 372-384.

Grimmett, G.R. and Kesten, H. (1982) First-passage percolation,
    network flows and electrical resistances, to appear.

Hammersley, J.M. (1957) Percolation processes. Lower bounds
    for the critical probability Ann. Math. Statist. $\underline{28}$, 790-795.

Hammersley, J.M. (1959) Bornes supérieures de la probabilité
    critique dans un processus de filtration, pp. 17-37 in Le
    calcul des probabilites et ses applications, CNRS, Paris.

Hammersley, J.M. (1961) Comparison of atom and bond percolation, J. Math. Phys. $\underline{2}$, 728-733.

Hammersley, J.M. (1980) A generalization of McDiarmid's theorem for mixed Bernoulli percolation, Proc. Cambr. Phil. Soc. $\underline{88}$, 167-170.

Hammersley, J.M. and Welsh, D.J.A. (1980) Percolation theory and its ramifications, Contemp. Phys. $\underline{21}$, 593-605.

Harris, T.E. (1960) A lower bound for the critical probability in a certain percolation process, Proc. Cambr. Phil. Soc. $\underline{56}$, 13-20.

Helms, L.L. (1969) Introduction to potential theory, Wiley-Interscience

Higuchi, Y. (1982) Coexistence of the infinite (*) clusters; a remark on the square lattice site percolation, Z. Wahrsch. verw. Geb.

Hille, E. (1959) Analytic function theory, Vol. I., Ginn and Co.

Hille, E. (1962) Analytic function theory, Vol. II., Ginn and Co.

Kasteleyn, P.W. and Fortuin, C.M. (1969) Phase transition in lattice systems with random local properties, Proc. Intern. Conf. Stat. Mech. Kyoto, 1968 = J. Phys. Soc. Japan $\underline{26}$, Supplement, 11-14.

Kesten, H. (1980a) The critical probability of bond percolation on the square lattice equals $\frac{1}{2}$, Comm. Math. Phys. $\underline{74}$, 41-59.

Kesten, H. (1980b) On the time constant and path length of first passage percolation, Adv. Appl. Prob. $\underline{12}$, 848-863.

Kesten, H. (1981) Analyticity properties and power law estimates of functions in percolation theory, $\underline{25}$, 717-756.

Kirkpatrick, S. (1978) Models of disordered materials, Course 5 in La matière mal condensée/Ill condensed matter, Les Houches, Session XXXI, R. Balian et al. eds. North Holland Publ. Co., 1979.

Kunz, H. and Souillard, B. (1978) Essential singularity in percolation problems and asymptotic behavior of cluster size distribution, J. Stat. Phys. $\underline{19}$, 77-106.

McDiarmid, C. (1980) Clutter percolation and random graphs, Math. Progr. Study $\underline{13}$, 17-25.

Milton, G.W. (1981) Bounds on the complex permittivity
  of a two-component composite material, J. Appl. Phys. $\underline{52}$,
  5286-5293 (see also pp. 5294-5304).

Nerode, A. and Shank, H. (1961) An algebraic proof of Kirchhoff's
  network theorem, Amer. Math. Monthly $\underline{68}$, 244-247.

Newman, C.M. (1980) Normal fluctuations and the FKG inequalities,
  Comm. Math. Phys. $\underline{74}$, 119-128.

Newman, C.M., and Schulman, L.S. (1981) Infinite clusters in
  percolation models, J. Stat. Phys. $\underline{26}$, 613-628 (see also J. Phys.
  A: Math. Gen. $\underline{14}$ (1981) 1735-1743).

Newman, C.M. and Wright, A.L. (1981) An invariance principle for
  certain dependent sequences, Ann. Prob. $\underline{9}$, 671-675.

Newman, M.H.A. (1951) Elements of the topology of plane sets of
  points, 2nd ed., Cambridge Univ. Press.

Oxley, J.G. and Welsh, D.J.A. (1979) On some percolation results
  of J.M. Hammersley, J. Appl. Prob. $\underline{16}$, 526-540.

Papanicolaou, G.C. and Varadhan, S.R.S. (1979) Boundary value
  problems with rapidly oscillating random coefficients,
  pp. 835-873 in Colloquia Math. Soc. János Bolyai 27. Random
  fields, Esztergom (Hungary) North-Holland Publ. Co.

Renyi, A. (1970) Probability theory, North Holland/American Elsevier.

Rudin, W. (1966) Real and complex analysis, McGraw-Hill Book Co.

Russo, L.(1973) A note on percolation, Z. Wahrsch. verw. Geb. $\underline{43}$,
  39-48.

Russo, L. (1981) On the critical percolation probabilities, Z.
  Wahrsch. verw. Geb. $\underline{56}$, 229-237.

Russo, L. (1982) An approximate zero-one law, Z. Wahrsch. verw.
  Geb.

Seymour, P.D. and Welsh, D.J.A. (1978) Peroclation probabilities on
  the square lattice, Ann. Discrete Math. $\underline{3}$, 227-245.

Slepian, P. (1968) Mathematical foundations of network analysis,
  Springer-Verlag.

Smythe, R.T. and Wierman, J.C. (1978) First-passage percolation on the square lattice, Lecture notes in Mathematics, Vol. 671, Springer-Verlag.

Stauffer, D. (1979) Scaling theory of percolation clusters, Phys. Reports $\underline{54}$, No. 1, 1-74.

Straley, J.P. (1977) Critical exponents for the conductivity of random resistor lattice,s Phys. Rev. B $\underline{15}$, 5733-5737.

Sykes, M.F. and Essam, J.W. (1964) Exact critical percolation probabilities for site and bond problems in two dimensions, J. Math. Phys. $\underline{5}$, 1117-1127.

Tempel'man, A.A. (1972) Ergodic theorems for general dynamical systems, Trans. Moscow. Math. Soc. $\underline{26}$, 94-132.

Van der Berg, J. (1981) Percolation theory on pairs of matching lattices, J. Math. Phys. $\underline{22}$, 152-157.

Vasil'ev, N.B. (1970) Correlation equations for the stationary measure of a Markov chain, Theory Probab. Appl. $\underline{15}$, 521-525.

Walters, P. (1982) An introduction to ergodic theory, Springer-Verlag.

Whitney, H. (1932) Non-separable and planar graphs, Trans. Amer. Math. Soc. $\underline{34}$, 339-362.

Whitney, H. (1933) Planar graphs, Fund. Math. $\underline{21}$, 73-84.

Wierman, J.C. (1978) On critical probabilities in percolation theory, J. Math. Phys. $\underline{19}$, 1979-1982.

Wierman, J.C. (1981) Bond percolation on honeycomb and triangular lattices, Adv. Appl. Prob. $\underline{13}$, 293-313.

Wierman, J.C. (1982a) Percolation theory, Ann. Prob. $\underline{10}$, 509-524.

Wierman, J.C. (1982b) Duality in mixed percolation models, Abstract 180-27 in Bull. Inst. Math. Statist. $\underline{11}$, 149.