

Publications

Refereed Journals

1. M. C. Cross, "Impulse Given to a Plate by a Quantized Vortex Ring," *Phys. Rev.* **A10**, 1442 (1974).
2. M. C. Cross, "Generalized Ginzburg-Landau Approach to the Superfluidity of Helium 3", *J. Low Temp. Phys.* **21**, 525 (1975).
3. M. C. Cross and W.F. Brinkman, "Textural Singularities in the Superfluid A Phase of ^3He ", *J. Low Temp. Phys.* **27**, 165 (1977).
4. M. C. Cross, "Orbital Dynamics of the Anderson-Brinkman-Morel Phase of Superfluid ^3He ", *J. Low Temp. Phys.* **26**, 165 (1977).
5. M. C. Cross, "Charge States of Fast Protons in Solids", *Phys. Rev.* **B15**, 602 (1977).
6. D.D. Osheroff and M. C. Cross, "Interfacial Surface Energy Between the Superfluid Phases of ^3He ", *Phys. Rev. Lett.* **38**, 905 (1977).
7. M. C. Cross, "Relaxation of the Dynamics Magnetism $^3\text{He-B}$: A Simple Study of the Wallpinned Mode", *J. Low Temp. Phys.* **30**, 481 (1978).
8. M. C. Cross and M. Liu, "Stability of the Aligned State of $^3\text{He-A}$ in a Superflow", *J. Phys.* **C11**, 1795 (1978).
9. M. C. Cross and D.S. Fisher, "A New Theory of the Spin Peierls Transition with Special Relevance to the Experiments on TTFCuBDT", *Phys. Rev.* **B19**, 402 (1979).
10. M. Liu and M. C. Cross, "Broken Spin-Orbit Symmetry in Superfluid He^3 and the B-Phase Dynamics", *Phys. Rev. Lett.* **41**, 250 (1978).
11. M.A. Paalanen, M. C. Cross, W.O. Sprenger, W. van Roosbroeck, and D.D. Osheroff, "Study of the Orientational Electric Field Effect in $^3\text{He B}$ ", *J. Low Temp. Phys.* **34** (1979).
12. M. Liu and M. C. Cross, "Gauge Wheel of Superfluid ^3He ", *Phys. Rev. Lett.* **43**, 296 (1979).
13. T.M. Rice, P.A. Lee and M. C. Cross, "Dynamics of Charge Density Waves in the Presence of Free Carriers", *Phys. Rev.* **B20**, 1345 (1979).
14. D.L. Stein and M. C. Cross, "Phase Transitions in Two-Dimensional Superfluid ^3He ", *Phys. Rev. Lett.* **42**, 504 (1979).
15. J. Stamatoff, P.E. Cladis, D. Guillon, M. C. Cross and T. Bilash, "The X-Ray Diffracted Intensities of a Smectic A Liquid Crystal", *Phys. Rev. Lett.* **44**, 1509 (1980).
16. M. C. Cross, "Effect of magnetic Fields on a Spin Peierls Transition", *Phys. Rev.* **B20**, 4606 (1979).
17. M. C. Cross, "Derivation of the Amplitude Equation at the Rayleigh Benard Instability", *Physics of Fluids* **23**, 1727 (1980).
18. D.D. Osheroff, M. C. Cross and D.S. Fisher, "Nuclear Antiferromagnetic Resonance in Solid ^3He ", *Phys. Rev. Lett.* **44**, 792 (1980).
19. Guenter Ahlers, M. C. Cross, P.C. Hohenberg, S.A. Safran, "The Amplitude Equation Near the Convection Threshold: Application to Time-Dependent Heating Experiments", *J. Fluid Mech.* **110**, 297 (1981).

20. M. C. Cross, P.G. Daniels, P.C. Hohenberg and E.D. Siggia, "Effect of Distant Sidewalls on Wavenumber Selection in Rayleigh Benard Convection", *Phys. Rev. Lett.* **45**, 898 (1980).
21. M. C. Cross and P.C. Hohenberg, "Wave Number Selection in Rayleigh-Bénard Convection: A Numerical Study", *Physica* **D5**, 75 (1982).
22. M. C. Cross, "Ingredients of a Theory of Convective Textures Close to Onset", *Physical Review* **A25**, 1065 (1982).
23. M. C. Cross, "Boundary Conditions on the Envelope Function of Convective Rolls Close to Onset", *Physics of Fluids* **25**, 936 (1982).
24. Leigh Sneddon, M. C. Cross and D.S. Fisher, "Sliding Conductivity of Charge Density Waves", *Phys. Rev. Lett.* **49**, 292 (1982).
25. L. Kramer, E. Ben-Jacobs, H. Brand and M. C. Cross, "Wavelength Selection in Systems Far From Equilibrium", *Phys. Rev. Lett.* **49**, 1891 (1982).
26. M. C. Cross, P.G. Daniels, P.C. Hohenberg and E.D. Siggia, "Phase-winding Solutions in a Finite Container Above the Convective Threshold", *J. of Fluid Mechanics* **127**, 155 (1983).
27. M. C. Cross, "Phase Dynamics of Convective Rolls", *Phys. Rev.* **A27**, 490 (1983).
28. H. Brand and M. C. Cross, "Explanation of Flow Dissipation in $^3\text{He-B}$ ", *Phys. Rev. Lett.* **49**, 1959 (1982).
29. H. Brand and M. C. Cross, "Phase Dynamics of the Wavy Vortex State of the Taylor Instability", *Phys. Rev.* **A27**, 1237 (1983).
30. M. C. Cross, P.C. Hohenberg and M. Lucke, "Forcing of Convection due to Time-Dependent Heating Near Threshold", *J. Fluid Mech.* **136**, 269 (1983).
31. M. C. Cross and R. N. Bhatt, "Diagonalization of an Exchange Hamiltonian for 16 ^3He Spins", *J. Low. Temp. Phys.* **57**, 573 (1984).
32. M. C. Cross and A.C. Newell, "Convective Patterns in Large Aspect Ratio Systems", *Physics* **10D**, 299 (1984).
33. M. C. Cross, "Wavenumber Selection by Soft Boundaries Near Threshold", *Phys. Rev.* **A29**, 391 (1984).
34. H.S. Greenside and M. C. Cross, "Stability Analysis of Two-Dimensional Models of Three-Dimensional Convection", *Phys. Rev.* **A31**, 2492 (1985).
35. M. C. Cross, G. Tesauro and H.S. Greenside, "Wavenumber Selection and Persistent Dynamics in Models of Convection", *Physica* **23D**, 12 (1986).
36. G. Tesauro and M. C. Cross, "Climbing of Dislocations in Non-equilibrium Patterns", *Phys. Rev.* **A34**, 1363 (1986).
37. M. C. Cross, "Monte Carlo Calculation of Quantum Tunneling in the Dilute Instanton Limit", *Phys. Rev.* **A34**, 3531 (1986).
38. M. C. Cross, "An Eight-Mode Lorenz Model of Travelling Waves in Binary Fluid Convection", *Phys. Lett.* **A119**, 21 (1986).

39. M. C. Cross and R.N. Bhatt, "Nearest-neighbor exchange in solid ^3He ", Phys. Rev. **B33**, 7809 (1986).
40. M. C. Cross, "Traveling and Standing Waves in Binary-Fluid Convection in Finite Geometries", Phys. Rev. Lett. **57**, 2935 (1986).
41. L.J. Friedman, S.N. Ytterboe, H.M. Bozler, A.L. Thomson and M. C. Cross, "Detection of Ferromagnetic Domains in a Two-dimensional Nuclear Spin System", Phys. Rev. Lett. **57**, 2943 (1986).
42. G. Tesauro and M. C. Cross, "Grain Boundaries in Models of Convective Patterns", Phil. Mag. **B56**, 703 (1987).
43. D. D. Osheroff and M. C. Cross, "Magnetostatic Modes in Highly Polarized Solid Helium-Three", Phys. Rev. Lett. **59**, 94 (1987).
44. M. C. Cross and K. Kim, "Linear Instability and the Codimension-2 Region in Binary Fluid Convection Between Rigid Impermeable Boundaries", Phys. Rev. **A37**, 3909 (1988).
45. M. C. Cross and K. Kim, "Existence of Codimension-2 Point at Threshold of Binary Fluid Convection", Phys. Rev. **A38**, 529 (1988).
46. M. C. Cross, "Structure of Non-linear Travelling Wave States in Finite Geometries", Phys. Rev. **A38**, 3593 (1988).
47. H.S. Greenside, M. C. Cross and W.M. Coughran, "Mean Flows and the Onset of Chaos in Large Cell Convection", Phys. Rev. Lett. **60**, 2269 (1988).
48. J.E. Avron and M. C. Cross, "Integer Charge Transport in Josephson Junctions", Phys. Rev. **B39**, 756 (1989).
49. L.J. Friedman, A.L. Thomson, C.M. Gould, H.M. Bozler, P.B. Weichman and M. C. Cross, "Zero Field Magnetic Order in the Boundary Layers of ^3He on Grafoil", Phys. Rev. Lett. **62**, 1635 (1989).
50. M. C. Cross and E.Y. Kuo, "One dimensional spatial structure near a Hopf bifurcation at finite wavenumber", Physica **D 59**, 90 (1992).
51. M.S. Bourzutschky and M. C. Cross, "Coupled map models for chaos in extended systems", Chaos **2**, 173 (1992).
52. J. Miller, P.B. Weichman and M. C. Cross, "Statistical mechanics, Euler's equation, and Jupiter's Red Spot", Phys. Rev. **A45**, 2328 (1992).
53. M.S. Bourzutschky and M. C. Cross, "Reflection of traveling waves near the onset of binary fluid convection", Phys. Rev. **A45**, R8317 (1992).
54. Yuhai Tu and M. C. Cross, "Chaotic domain structure in rotating convection", Phys. Rev. Lett. **69**, 2515 (1992).
55. E.Y. Kuo and M. C. Cross, "Traveling-wave wall states in rotating Rayleigh-Benard convection", Phys. Rev. **E47**, R2245 (1993).
56. M. C. Cross, D. Meiron, and Yuhai Tu, "Chaotic domains: A numerical investigation", Chaos **4**, 607 (1994).
57. Yih-Yuh Chen and M. C. Cross, "Pattern formation in finite size non-equilibrium systems and models of morphogenesis", Nonlinearity **7**, 1125 (1994).

58. P. Chen and M. C. Cross: “Phase diagram for coherent vortex formation in the 2-dimensional inviscid fluid in circular geometries”, *Physical Review* **E50** 2022 (1994).
59. M. C. Cross and D.I. Meiron: “Domain coarsening in systems far from equilibrium”, *Phys. Rev. Lett.* **75**, 2152 (1995).
60. M. C. Cross and Y. Tu: “Defect dynamics for spiral chaos in Rayleigh-Benard convection”, *Phys. Rev. Lett.* **75**, 834 (1995).
61. N.F. Schwabe, A.N. Cleland, M. C. Cross, and M.L. Roukes: “Perturbation of tunneling processes by mechanical degrees of freedom in mesoscopic junctions”, *Phys. Rev.* **B52**, 12911 (1995)
62. P. Chen and M. C. Cross: “Mean field equilibrium of single coherent vortex”, *Physical Review* **E54**, 6356 (1996).
63. P. Chen and M. C. Cross: “Statistical two-vortex equilibrium and vortex merger”, *Phys. Rev.* **E53**, R3032 (1996).
64. P. Chen and M. C. Cross: “Mixing and thermal equilibrium in the dynamical relaxation of a vortex ring”, *Phys. Rev. Lett.* **77**, 4174 (1996).
65. M.C.Cross: “Theoretical modeling of spiral chaos in Rayleigh-Benard convection”, *Physica* **D97**, 65 (1996).
66. P. Chen and M. C. Cross: “Complete Phase diagram for coherent vortex formation in the 2-dimensional inviscid fluid in an annulus”, *Physical Review* **E56** 2284 (1997).
67. R. Grigoriev and M. C. Cross: “Dynamics of coupled maps with a conservation law”, *Chaos* **7**, 311 (1997).
68. R.O. Grigoriev, M. C. Cross and H.G. Shuster: “Pinning Control of Spatiotemporal Chaos”, *Phys. Rev. Lett.* **79**, 2795 (1997).
69. D. Engin, M. C. Cross and A. Yariv “Amplitude Equation Formalism for 4-wave Mixing Geometry with Transmission Gratings”, *J. Opt. Soc. Am.* **14**, 3349 (1997).
70. R.O. Grigoriev and M. C. Cross: “Controlling Physical Systems with Symmetries”, *Phys. Rev.* **E57**, 1550 (1998).
71. Sima Setayeshgar and M. C. Cross: “Turing Instability in a Boundary Fed System”, *Phys. Rev.* **E58**, 4485 (1998).
72. D.E. Angelescu, M. C. Cross and M.L. Roukes: “Heat Transport in Mesoscopic Systems”, *Superlattices and Microstructures* **23**, 673 (1998).
73. Sima Setayeshgar and M. C. Cross: “Numerical Bifurcation Diagram for the Two Dimensional Boundary Fed CDIMA Reaction”, *Phys. Rev.* **E59**, 4258 (1999)
74. H. X. Tang, F. G. Monzon, Ron Lifshitz, M. C. Cross, and M. L. Roukes: “Ballistic Spin Transport in a Two-dimensional Electron Gas”, *Phys. Rev.* **B61**, 4437 (2000)
75. M. C. Cross, M. Louie, and D. Meiron: “Finite Size Scaling of Domain Chaos”, *Phys. Rev.* **E63**, 45201 (2001).

76. M. C. Cross and Ron Lifshitz: “Elastic Wave Transmission at an Abrupt Junction in a Thin Plate, with Application to Heat Transport and Vibrations in Mesoscopic Systems”, *Phys. Rev.* **B64**, 085324 (2001).
77. D. H. Santamore and M. C. Cross: “Effect of Surface Roughness on the Universal Thermal Conductance”, *Phys. Rev.* **B63**, 184306 (2001).
78. M. R. Paul, M. C. Cross, P. F. Fischer, and H. S. Greenside: “Power-Law Behavior of Power Spectra in Low Prandtl Number Rayleigh-Bénard Convection”, *Phys. Rev. Lett.* **87**, 154501 (2001).
79. D. H. Santamore and M. C. Cross: “Effect of Phonon Scattering by Surface Roughness on the Universal Thermal Conductance”, *Phys. Rev. Lett.* **87**, 115502 (2001).
80. S. Puri, S. K. Das, and M. C. Cross: “Nonequilibrium Dynamics in the Complex Ginzburg-Landau Equation”, *Phys. Rev.* **E64**, 056140 (2001).
81. S. Puri, S. K. Das, and M. C. Cross: “Nonequilibrium Dynamics of the Complex Ginzburg-Landau Equation: Analytical Results”, *Phys. Rev.* **E64**, 046206 (2001).
82. D. H. Santamore and M. C. Cross: “Surface Scattering Analysis of Phonon Transport in the Quantum Limit Using an Elastic Model”, *Phys. Rev.* **B66**, 144302 (2002).
83. Z. Zheng, X. Wang, M. C. Cross: “Transitions from Partial to Complete Generalized Synchronization in Bidirectionally Coupled Chaotic Oscillators”, *Phys. Rev.* **E65**, 056211 (2002).
84. Z. Zheng, M. C. Cross, and G. Hu: “Collective Directed Transport of Symmetrically Coupled Lattices in Symmetric Periodic Potentials”, *Phys. Rev. Lett.* **89**, 154102 (2002).
85. M. R. Paul, M. C. Cross, P. F. Fischer: “Rayleigh-Bénard Convection with a Radial Ramp in Plate Separation” *Phys. Rev.* **E66**, 046210 (2002).
86. R. Lifshitz and M. C. Cross: “Response of Parametrically Driven Nonlinear Coupled Oscillators with Application to Micromechanical and Nanomechanical Resonator Arrays”, *Phys. Rev.* **B67**, 134302 (2003).
87. Z. Zheng and M. C. Cross: “Defect-Induced Propagation in Excitable Media”, *Int. J. Bif. and Chaos* **13**, 3125 (2003)
88. K. H. Chiam, M. R. Paul, M. C. Cross, and H. S. Greenside: “Mean Flow and Spiral Defect Chaos in Rayleigh-Bénard Convection”, *Phys. Rev.* **E67**, 056206 (2003)
89. J. D. Scheel, M. R. Paul, M. C. Cross, and P. F. Fischer, “Traveling waves in rotating Rayleigh-Bénard convection: Analysis of modes and mean flow”, *Phys. Rev.* **E66**, 06621 (2003)
90. D. H. Santamore, A. C. Doherty, and M. C. Cross: “Quantum Nondemolition Measurement of Fock States of Mesoscopic Mechanical Oscillators”, *Phys. Rev.* **B70**, 144301 (2004)
91. M. R. Paul and M. C. Cross, “The Stochastic Dynamics of Nanoscale Mechanical Oscillators Immersed in a Viscous Fluid”, *Phys. Rev. Lett.* **92**, 235501 (2004)
92. M. R. Paul, K-H. Chiam, M. C. Cross, P. F. Fischer, “Rayleigh-Bénard Convection in large-aspect-ratio domains”, *Phys. Rev. Lett.* **93**, 064503 (2004)
93. M. C. Cross, A. Zumdieck, R. Lifshitz, and J. L. Rogers, “Synchronization by Nonlinear Frequency Pulling”, *Phys. Rev. Lett.* **93**, 224101 (2004)

94. K.-H. Chiam, M. C. Cross, H. S. Greenside, and P. F. Fischer, “Enhanced Tracer Transport by the Spiral Defect Chaos State of a Convecting Fluid”, *Phys. Rev.* **E71**, 036205 (2005)
95. J. D. Scheel and M. C. Cross, “Scaling laws for rotating Rayleigh-Bénard convection”, *Phys. Rev.* **E72**, 056315 (2005)
96. Y. Bromberg, M. C. Cross, and R. Lifshitz, “Response of discrete nonlinear systems with many degrees of freedom”, *Phys. Rev.* **E73**, 016214 (2006)
97. M. C. Cross, J. L. Rogers, R. Lifshitz, and A. Zumdick, “Synchronization by reactive coupling and nonlinear frequency pulling”, *Phys. Rev.* **E73**, 036205 (2006)
98. R. Urban, A. Putilin, P. E. Wigen, S. H. Liou, M. C. Cross, P. C. Hammel, and M. L. Roukes, “Perturbation of magnetostatic modes observed by ferromagnetic resonance force microscopy”, *Phys. Rev.* **B73**, 212410 (2006)
99. N. Becker, J. D. Scheel, M. C. Cross, and G. Ahlers, “Effect of the centrifugal force on domain chaos in Rayleigh-Bénard convection”, *Phys. Rev.* **E73**, 066309 (2006)
100. M. R. Paul, M. T. Clark, and M. C. Cross, “The stochastic dynamics of micron and nanoscale elastic cantilevers in fluid: fluctuations from dissipation”, *Nanotechnology* **17**, 4502 (2006)
101. J. D. Scheel and M. C. Cross, “Lyapunov exponents for small aspect ratio Rayleigh-Bénard convection”, *Phys. Rev.* **E74**, 066301 (2006)
102. T. Carmon, M. C. Cross, and K. J. Vahala, “Chaotic quivering of micron-scaled on-chip resonators excited by centrifugal optical pressure”, *Phys. Rev. Lett.* **98**, 167203 (2007)
103. M. R. Paul, M. I. Einarsson, P. F. Fischer, and M. C. Cross, “Extensive chaos in Rayleigh-Bénard convection”, *Phys. Rev.* **E75**, 045203 (2007)
104. E. Kenig, M. C. Cross, and R. Lifshitz, “Pattern selection in parametrically-driven arrays of nonlinear resonators”, *Phys. Rev.* **E79**, 026203 (2009)
105. R. B. Karabalin, M. C. Cross, and M. L. Roukes, “Nonlinear dynamics and chaos in two coupled nanomechanical resonators”, *Phys. Rev.* **B79**, 165309 (2009)
106. E. Kenig, B. A. Malomed, M. C. Cross, R. Lifshitz, “Intrinsic localized modes in parametrically-driven arrays of nonlinear resonators”, *Phys. Rev.* **E80**, 046202 (2009)
107. O. Kogan, J. L. Rogers, M. C. Cross, and G. Refael, “Renormalization group approach to oscillator synchronization”, *Phys. Rev.* **E80**, 036206 (2009)
108. T. E. Lee, G. Refael, M. C. Cross, O. Kogan, and J. L. Rogers, “Universality in the one-dimensional chain of phase-coupled oscillators”, *Phys. Rev.* **E80**, 046210 (2009)
109. D. Chowdhury and M. C. Cross, “Synchronization of oscillators with long-range power law interactions”, *Phys. Rev.* **E82**, 016205 (2010)
110. T. E. Lee, H. Tam, G. Refael, J. L. Rogers and M. C. Cross, “Vortices and the entrainment transition in the 2D Kuramoto model”, to be published in *Phys. Rev.* **E82**, 036202 (2010)
111. R. B. Karabalin, R. Lifshitz, M. C. Cross, M. H. Matheny, S. C. Masmanidis, M. L. Roukes, “Signal amplification by sensitive control of bifurcation topology”, *Phys. Rev. Lett.* **106**, 094102 (2011)
112. T. E. Lee and M. C. Cross, “Pattern formation with trapped ions”, *Phys. Rev. Lett.* **106**, 143001 (2011)

113. T. E. Lee, H. Haffner, and M. C. Cross, “Antiferromagnetic phase transition in a nonequilibrium lattice of Rydberg atoms”, *Phys. Rev.* **A84**, 031402(R) (2011)

Conference Proceedings

1. M. C. Cross and P.W. Anderson, "Orbit Waves in the ABM Phase of Superfluid ^3He ", Proc. of LT-14, Helsinki, Finland, eds. N. Krusius and M. Vuorio (North-Holland, Amsterdam, 1974).
2. M. C. Cross, "Calculation of Surface Energies in A and B Phases of ^3He ", in Quantum Fluids and Solids, edited by Trickey, Adams and Dufty (Plenum, London, (1977).
3. M. C. Cross and D.S. Fisher, "New Theory of the Spin Peierls Transition with Special Relevance to the Experiments on TTFCuBDT", Proc. Conf. on Quasi-One-Dimensional Conductors, Dubrovnik, Yugoslavia (Springer-Verlag, 1979, Lecture Notes in Physics 95).
4. P.E. Cladis, J. Stamatoff, D. Guillon, M. C. Cross, T. Bilash and P. Finn, "The X-Ray Diffracted Intensities of a Smectic A Liquid Crystal", Proceedings of Third Liquid Crystal Conference of Socialist Countries, Budapest, Hungary (1979).
5. L.J. Friedman, S.N. Ytterboe, H.M. Bozler, A.L. Thomson and M. C. Cross, in "Proceedings of Banff Conference on Quantum Fluids and Solids", 1986, Can. Jour. Phys. **65**, 1351 (1987).
6. M. C. Lai, K. H. Chiam, M. C. Cross, and H. S. Greenside: "Simulating Complex Dynamics In Intermediate And Large-Aspect-Ratio Convection Systems", Proceedings of the 18th Symposium on Energy Engineering Sciences, p73, (2000).

Text Book

M. C. Cross and H. S. Greenside, "Pattern Formation and Dynamics in Nonequilibrium Systems", Cambridge University Press (Cambridge, 2009)

Review Articles

1. M. C. Cross, "Electron Pickup by Fast Ions in Solids", Proc. Int. Workshop on Inelastic Ion-Surface Collisions (Academic, NY 1978).
2. W. F. Brinkman and M. C. Cross, "Spin and Orbital Dynamics of Superfluid ^3He ", in Progress in Low Temperature Physics, Vol. 7, edited by D.F. Brewer (North-Holland, Amsterdam, 1978).
3. P. C. Hohenberg and M. C. Cross, "An Introduction to Pattern Formation in Nonequilibrium Systems", Fluctuations and Stochastic Phenomena in Condensed Matter Physics, L. Garido Ed., Lecture Notes in Physics Vol. 268 p.55, Springer (New York), 1981.
4. M. C. Cross, "Magnetic Properties of Solid ^3He : What Do We Know and What Do We Learn", Proceedings LT16 Conference, Physics B & C **109**, 1796 (1982).
5. M. C. Cross, "Flow Dissipation in the ^3He Superfluids", AIP Conference Proceedings **103**, 325 (1983).
6. M. C. Cross and D. S. Fisher, "Magnetism in Solid ^3He , Confrontation Between Theory and Experiment", Rev. Mod. Phys. **57**, 881 (1985).
7. M. C. Cross and D. D. Osheroff, Physics Today **40**, 34 (1987).
8. M. C. Cross, "Magnetism in Solid ^3He : Today and Tomorrow", Proc. 18th Int. Conf. on Low Temperature Physics, Kyoto, 1987 Japanese Journal of Applied Physics, Vol. **26** (1987) Supplement 26-3.

9. M. C. Cross, "Theoretical Methods in Pattern Formation in Physics, Chemistry and Biology", Far from Equilibrium Phase Transitions, L. Garido Ed., Lecture Notes in Physics Vol. **319** p.45, Spring (New York), 1988.
10. M. C. Cross and P. C. Hohenberg, "Pattern Formation Outside of Equilibrium", Rev. Mod. Phys. **65**, 851 (1993).
11. M. C. Cross and P. C. Hohenberg, "Spatiotemporal Chaos", Science **263**, 18 March 1994.
12. R. Lifshitz and M. C. Cross "Nonlinear dynamics of nanomechanical and micromechanical resonators", Review of Nonlinear Dynamics and Complexity **1**, 52 (2008)

Non-technical Articles

1. M. C. Cross, "Problems with ^3He and ^4He ", Phys. Bulletin, p. 540 (Dec. 1976).
2. M. C. Cross, "New Phases of Helium 3", Science Progress (Oxford) **64**, 157 (1977).
3. M. C. Cross, "Spin Ordering in Solid ^3He ", in McGraw-Hill Yearbook (1981).