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Raymond J. Wean Professor Emeritus of Engineering & Applied Science
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PERSONAL

Born 1930 in Vienna, Austria
Naturalized U.S. Citizen (emigrated to the U.S. in 1963)

EDUCATION

1951	BA	University of Oxford, Physics (First Class Honours)
1954	DPhil	University of Oxford, Physics Thesis: <i>Some Properties of Paramagnetic Salts at Very Low Temperatures</i> " Supervisor: A. H. Cooke
1954	MA	University of Oxford
1965	MA (Hon)	Yale University

ACADEMIC POSITIONS

Oxford University

Oct 1952 - Sept 1959	Departmental Demonstrator, Clarendon Lab
Oct 1954 - Aug 1956	Research Associate, Clarendon Lab
Oct 1957 - Sept 1959	Imperial Chemical Industries Research Fellowship, Clarendon Lab
Oct 1959 - Dec 1962	University Demonstrator and Lecturer
Oct 1957 - Sept 1961	Extraordinary Lecturer, New College
Oct 1961 - Dec 1962	Lecturer, New College
May 1980	Senior Visiting Fellow, Dept of Theoretical Physics
Jan - July 1984	Visiting Fellow, Corpus Christi College
Jan - July 1984	Senior Visiting Fellow, Clarendon Lab
Jan - July 1987	Visiting Fellow, Corpus Christi College

Harvard University

Sept 1956 - Sept 1957	Research Fellow, Division of Engineering and Applied Physics
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Technische Universität München

Jan - June 1969	Visiting Professor, Department of Physics
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Yale University

Jan 1963 - June 1965	Associate Professor, Department of Engineering and Applied Science and Department of Physics
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Nov 1964 - Present	Fellow, Morse College
July 1965 - June 1976	Professor, Physics and Applied Science
June 1973 - May 1976	Director of Graduate Studies, Department of Engineering and Applied Science
July 1976 - June 1981	Becton Professor and Chairman, Department of Engineering and Applied Science
July 1981 - June 1984	Becton Professor of Engineering and Applied Science, and Chairman, Council of Engineering
July 1984 - Dec 2001	Raymond J. Wean Professor of Engineering and Applied Science, and Professor of Physics
July 1987 - June 1994	Director of Undergraduate Studies, Department of Applied Physics
Jan 1989 - Dec 1989	Director of Graduate Studies, Engineering and Applied Science
July 1990 - June 1997	Chairman, Department of Applied Physics
Oct 1990 - May 1992	Chairman, Committee on the Economic Status of the Faculty, Yale College
July 1994 - Dec 1999	Director of Educational Affairs, Faculty of Engineering
Jan 2002 –May 2003	Special Assistant to the Dean of Engineering
Jan 2002- Present	Raymond J. Wean Professor Emeritus of Engineering & Applied Science and Professor Emeritus of Physics

CONSULTING

Industrial

Dupont Experimental Station, Wilmington, Delaware, 1957
 Hughes Aircraft, Culver City, California, 1957
 General Electric Research Lab, Schenectady, New York, 1960
 Mullard Research Labs, Salfords, England, 1961
 IBM, Yorktown Heights, New York, 1962-1966
 Brookhaven National Lab, Research Collaborator, 1966-1980
 General Electric R & D Center, Schenectady, New York, 1966-1993

Academic

New Haven Teachers Institute, University Advisory Board, 1994-2007
 National University of Singapore, Department of Physics, 1994-1996
 University of Bridgeport, Science and Engineering Programs, 1995-1996
 Fairfield University, Advisory Board, School of Engineering 1997-2005
 Visiting Committee, University of Delaware, Department of Physics, member 1980, 1984, chairman 1986

PROFESSIONAL SOCIETIES, HONORS, AWARDS

Open Scholarship to New College, University of Oxford, 1948-1951
 DSIR Research Studentship, Clarendon Lab, University of Oxford, 1951-1954
 Fulbright Travel Fellowship, Harvard University, 1956-1957
 American Physical Society:
 Fellow, 1963 - present
 Member, Education Committee, 1977-1980
 Director, Industrial Graduate Intern Program, 1979

Member-at-Large, Executive Committee, Division of Condensed Matter
Physics, 1980-1983

Chairman, Fellowship Committee, Division of Condensed Matter
Physics, 1981-1983

Sigma Xi, 1964

Institute of Electrical and Electronic Engineers (IEEE):

- Senior Member, 1965-1983
- Fellow, 1984-1996
- Life Fellow 1996-present
- Member, Magnetism Society, 1965-present

Connecticut Academy of Science and Engineering:

- Member, 1982-present
- Editor, CASE Reports, 1988-1990
- Member, Nominating Committee, 1995-1997

Conference on Magnetism and Magnetic Materials (joint AIP and IEEE)

- Program Committee, member 1963, 1965, 1986, and co-chairman 1968
- Advisory Committee, member 1964-65, 1970-75, 1985-88,
chairman 1971-72
- Steering Committee, member 1970-71,
- Conference Chairman 1971

International Conference on Magnetism (sponsored by IUPAP, AIP, and IEEE Magnetism
Society):

- Organizing, Program, and Foreign Visitor Committees 1967
- International Program Committee, member 1978-79
- Planning Committee, member 1979-85
- Program Committee, member 1984-85

NATO Advanced Study Institute, Geilo, Norway

- Program Committee, member 1983, 1985

Senior U.S. Scientist Award, Alexander von Humboldt Foundation, 1983

- Universität Karlsruhe 1984, 1985, 1988

Yale Scientific Magazine, faculty advisor, 1985-2002

Yale Science and Engineering Association Award for Meritorious Service to Yale, 1985

Royal Society, London, Guest Research Fellowship, 1987

American Institute of Physics, Subcommittee on Journals, 1988-1997

Sheffield Distinguished Teaching Award, Yale Faculty of Engineering, 2000

PUBLICATIONS

1. "Cerium Magnesium Nitrate. I: The Magnetic Properties and Specific Heat above 1°K" (with A.H. Cooke and H.J. Duffus). *Phil. Mag.* 44, 623 (1953).
2. "The Magnetic Susceptibility of Oxygen in a Clathrate Compound" (with A.H. Cooke, H. Meyer, D.F. Evans, and R.E. Richards). *Proc. Royal Society A* 225, 112 (1954).
3. "Demagnetization Experiments on Cerium Ethyl Sulphate" (with A.H. Cooke and S. Whitley). *Proc. Phys. Soc. B* 68, 415 (1955).
4. "A New Method of Correlating Magnetic Temperature Scales below 1°K." *Low Temperature Conference, Paris, No. 80* (1955).
5. "A New Method of Correlating the Magnetic Temperature Scales of Paramagnetic Salts below 1°K" (with A.H. Cooke and H. Meyer). *Proc. Royal Society A* 233, 536 (1956).
6. "The Specific Heats of Three Paramagnetic Salts at Very Low Temperatures" (with A.H. Cooke and H. Meyer). *Proc. Royal Society A* 237, 395 (1956).
7. "Thermal and Magnetic Properties of Ferric Methylammonium Sulphate" (with A.H. Cooke and H. Meyer). *Proc. Royal Society A* 237, 404 (1956).
8. "An Improved Inductance Method of Measuring Susceptibilities of Small Paramagnetic Specimens at Low Temperatures" (with F.R. McKim). *J. Sci. Instrum.* 34, 64 (1957). See also, *Bull. Amer. Phys. Soc. II* 2, 7 (1957).
9. "The Susceptibility and Magnetic Specific Heat of Potassium Ferricyanide at Low Temperatures" (with F.R. McKim). *Proc. Phys. Soc. B* 69, 1231 (1956).
10. "Effect of Crystalline Electric Fields on Ferromagnetic Anisotropy." *Phys. Rev.* 108, 1152 (1957). See also, *Bull. Amer. Phys. Soc.* 11 2, 117 (1957); *Scientific Report No. 12, Harvard University, AFORC-TN-57-594.*
11. "The Force on an Anisotropic Paramagnetic Crystal by an Inhomogeneous Magnetic Field." *J. Appl. Phys.* 28, 780 (1957).
12. "Thermal and Magnetic Properties of Ytterbium Ethyl Sulphate between 20°K and 1°K" (with A.H. Cooke, F.R. McKim, and H. Meyer). *Phil. Mag.* 2, 928 (1957). See also, *Proc. 5th Int. Conf. on Low Temperature Physics and Chemistry, Madison, p. 567* (1957).
13. "Ferrimagnetic Resonance in Some Polycrystalline Rare Earth Garnets" (with G.P. Rodrigue, J.E. Pippin, and C.L. Hogan). *Trans. IRE, MTT-6*, 83 (1958).
14. "Ferrimagnetic Resonance in Single Crystals of Rare Earth Garnet Materials" (with R.V. Jones and G.P. Rodrigue). *J. Appl. Phys.* 29, 434 (1958).
15. "Preparation of Polycrystalline Ferrimagnetic Garnet Materials for Microwave Applications" (with G.P. Rodrigue). *J. Appl. Phys.* 29, 105 (1958).

16. "Exchange Interactions in Antiferromagnetic Salts of Iridium. II: The Magnetic Susceptibility Measurements" (with A.H. Cooke, F.R. McKim, R. Lazenby, and J. Owen). Proc. Royal Society A 250, 97 (1959).
17. "Magnetic Dipole Interactions in Dysprosium Ethyl Sulphate. I: Susceptibility and Specific Heat between 20°K and 1°K" (with A.H. Cooke, D.T. Edmonds, and F.R. McKim). Proc. Royal Society A 252, 246 (1959).
18. "Dipolar Ferromagnetism in Dysprosium Ethyl Sulphate: (with A.H. Cooke, D.T. Edmonds, and C.B.P. Finn). Proc. Phys. Soc. 74, 791 (1959).
19. "Paramagnetic Resonance of Yb³⁺ in Yttrium Gallium Garnet" (with D. Boakes, G. Garton, and D. Ryan). Proc. Phys. Soc. B 74, 663 (1959).
20. "Magnetic Properties of Rare Earth ions in Garnets." Proc. Phys. Soc. B 74, 665 (1959).
21. "A Magnetic Method of Temperature Measurement between 4°K and 14°K" (with M.J.M. Leask). Proc. Int. Congress of Refrigeration, Copenhagen 1, 179 (1959).
22. "Cooling by Adiabatic Magnetization." Phys. Rev. 115, 1196 (1959).
23. "The Magnetic Susceptibility of Ytterbium Gallium and Ytterbium Aluminum Garnets" (with M. Ball, G. Garton, and M.J.M. Leask). Proc. VII Int. Conf. Low Temp. Physics, Toronto, 128 (1960).
24. "Low Temperature Magnetic Properties of Some Rare Earth Garnet Compounds" (with M. Ball, G. Garton, M.J.M. Leask, and D. Ryan). J. Appl. Phys. 32, 267 (1961).
25. "Magnetic Properties of Uranium Tetrafluoride" (with M.J.M. Leask and D.W. Osborne). J. Chem. Phys. 34, 2090 (1961).
26. "Spin-Lattice Relaxation in Cerium Magnesium Nitrate at Liquid Helium Temperature: A New Process" (with C.B.P. Finn and R. Orbach). Proc. Phys. Soc. 77, 261 (1961). See also, Proc. VII Int. Conf. Low Temp. Physics, Toronto, 54 (1960).
27. "Ferromagnetic Alignment by Antiferromagnetic Exchange Interaction: Note on the Magnetic Behavior of Neodymium Garnet." J. Appl. Phys. 32, 742 (1961).
28. "Ferrimagnetism." Reports on Progress in Physics 24, 212 (1961).
29. "On the Ferromagnetic Resonance of Europium Iron Garnet." J. Phys. Soc. Japan 15, 2104 (1960).
30. "Magnetism of Europium Garnet" (with J.H. Van Vleck). Phys. Rev. 118, 1490 (1960).
31. "The Susceptibility of Gadolinium Iron Garnet below the Néel Point" (with R.M. Bozorth). Phys. Rev. 124, 449 (1961).

32. "Demagnetization Experiments on Substances with Large Magnetic Dipole Interactions" (with A.H. Cooke, D.T. Edmonds, and C.B.P. Finn). *J. Phys. Soc. Japan* 17 B-1, 481 (1962). See also, *Proc. VII Int. Conf. Low Temp. Physics, Toronto*, 107 (1960).
33. "Ferromagnetism in Gadolinium Trichloride" (with M.J.M. Leask, B. Mangum, and A.F.G. Wyatt). *J. Phys. Soc. Japan* 17 B-1, 487 (1961).
34. "The Magnetic Properties of Rare Earth Ions in Garnets" (with M. Ball, M.T. Hutchings, M.J.M. Leask, and A.F.G. Wyatt). *J. Phys. Soc. Japan* 17 B-1, 443 (1962).
35. "The Raising of Angular Momentum Degeneracy of f-Electron Terms by Cubic Crystal Fields" (with K.R. Lea and M.J.M. Leask). *J. Phys. Chem. Solids* 23, 1381 (1962).
36. "Report on the International Conference on Magnetism and Crystallography," Kyoto, 1961. *Brit. J. Appl. Phys.* 13, 257 (1962).
37. "Crystalline-Field Splittings in Cerous Magnesium Nitrate" (with M.J.M. Leask, R. Orbach, and M.J.D. Powell). *Proc. Royal Society A* 272, 371 (1963). See also, *Paramagnetic Resonance 1*, W. Low (editor) (Academic Press, New York, 1963), p. 261.
38. "Structural Information from Magnetic Measurements on Lanthanum Cobalt Nitrate" (with M.J.M. Leask). *Proc. Phys. Soc.* 81, 252 (1963).
39. "Magneto-Caloric Effects in Gadolinium Trichloride" (with G. Garton, M.J.M. Leask, and A.F.G. Wyatt). *J. Appl. Phys.* 34, 1083 (1963).
40. "Thermal Properties of Dysprosium Aluminum Garnet near the Néel Temperature" (with M. Ball, M.J.M. Leask, and A.F.G. Wyatt). *J. Appl. Phys.* 34, 1104 (1963).
41. "Antiferromagnetic Ordering in Dysprosium Aluminum Garnet" (with M. Ball, M.T. Hutchings, and M.J.M. Leask). *Proc. 8th Int. Conf. on Low Temperature Physics* (Butterworth, London, 1963), p. 248.
42. "Thermal Properties of Gadolinium Trichloride near Its Curie Point" (with M.J.M. Leask and A.F.G. Wyatt). *Proc. 8th Int. Conf. on Low Temperature Physics* (Butterworth, London, 1963), p. 230.
43. "Thermal Properties of Magnetic Materials," Section 16 of *Magnetic Materials Digest 1962* (M.W. Lads Publishing Co., 1963), p. 154.
44. "Observation of Paramagnetic g-Value Shifts by Exchange Interactions" (with M.T. Hutchings). *Phys. Rev. Lett.* 11, 187 (1963).
45. "Low Temperature Magnetic Properties of Some Uranium Oxides" (with M.J.M. Leask, L.E.J. Roberts, and A.J. Walter). *J. Chem. Soc.* 916, 4788 (1963).
46. "Magnetic Transitions in Dysprosium Aluminum Garnet" (with M. Ball and A.F.G. Wyatt). *J. Appl. Phys.* 35, 937 (1964).

47. "Crystal Field for Yb^{3+} in Garnets" (with M.T. Hutchings). J. Chem. Phys. 41, 617 (1964). Also J. Appl. Phys. 35, 1060 (1964)
48. "Paramagnetic Resonance of Rare Earth ions in YCl_3 and LuCl_3 " (with G. Garton, M.T. Hutchings, and R. Shore). J. Chem. Phys. 41, 1970 (1964).
49. "EPR of Gd^{3+} Pairs in LaCl_3 " (with M.T. Hutchings and S. Itzkowitz). Proc. Int. Conf. on Magnetism, Nottingham (1964). See also, Bull. Am. Phys. Soc. 11, 225 (1964).
50. "Magnetization of a Highly Anisotropic Antiferromagnet" (with M. Ball and A.F.G. Wyatt). Phys. Lett. 10, 7 (1964).
51. "Energy-Susceptibility Relation for an Antiferromagnet with Long Range Interactions" (with A.F.G. Wyatt). Phys. Rev. Lett. 13, 368 (1964).
52. "Local Anisotropy in Rare Earth Garnets." Proc. Int. Conf. on Magnetism, Nottingham, (1964), p. 555.
53. "Determination of Exchange Constants from Relaxation Specific Heat Measurements on GdCl_3 " (with E.L. Boyd). J. Appl. Phys. 36, 1027 (1965).
54. "Curie Constants in Concentrated Magnetic Materials" (with J.F. Heintz). J. Appl. Phys. 36, 1127 (1965).
55. "Some Properties of the Antiferromagnetic-Ferromagnetic Transition in Dysprosium Aluminum Garnet" (with P.A. Albert, A.E. Berkowitz, E.L. Boyd, and E.A. Giess). IBM Research Report, RC-1334 (1965).
56. "Antiferromagnetism with Dominant Local Anisotropy" (with B.E. Keen, D.P. Landau, and B. Schneider). LT-10 Abstracts, 336, Moscow, (1966).
57. "Long and Short Range Order Effects on the Differential Susceptibility of an Anisotropic Antiferromagnet" (with B. Schneider). Bull. Am. Phys. Soc. 11, 109 (1966). (Abstract only.)
58. "Determination of g-Values and Internal Fields from Specific-Heat Measurements" (with B.E. Keen and D.P. Landau). Bull. Am. Phys. Soc. 11, 254 (1966). (Abstract only.)
59. "Torque Measurements on Dysprosium Aluminum Garnet (DAG)" (with B.A. Calhoun). Bull. Am. Phys. Soc. 11, 254 (1966). (Abstract only.)
60. "First and Higher Order Magnetic Phase Transitions in Dysprosium Aluminum Garnet" (with B.E. Keen, D.P. Landau, and B. Schneider). J. Appl. Phys. 37, 1120 (1966).
61. "Determination of Eu^{3+} - Fe^{3+} and Eu^{3+} - Gd^{3+} Exchange Interactions from EPR Shifts in Europium Gallium Garnet" (with M.T. Hutchings and C.G. Windsor), Phys. Rev. 148, 444 (1966).
62. "Soluble Extension of the Ising Model." (with D.C. Mathis) Phys. Rev. Lett. 16 899 (1966).

63. "Temperature Variation and Separation Dependence of Exchange Interactions of Gd^{3+} Pairs in $LaCl_3$ " (with R.J. Birgeneau and M.T. Hutchings). *Phys. Rev. Lett.* 17, 308 (1966).
64. "A Report on the Evening Symposium on Critical Phenomena in Magnetism" (with H. Callen and J.S. Kouvel). *J. Appl. Phys.* 37, 1172 (1966).
65. "Magnetic Transitions in a Multi-Axis Antiferromagnet" (with B.E. Keen and D.P. Landau), *Phys. Lett.* 23, 202 (1966).
66. "Non-Dipolar Interactions in Dysprosium Aluminum Garnet" (with B. Schneider, D.P. Landau, and B.E. Keen). *Phys. Lett.* 23, 210 (1966).
67. "Experimental Studies of Magnetic Ising Systems near the Critical Point." *Critical Phenomena*, NBS Misc. Publ., 273 (1966).
68. " Gd^{3+} - Gd^{3+} and Gd^{3+} - Eu^{3+} Interactions in $EuCl_3$ " (with R.J. Birgeneau and M.T. Hutchings). *J. Appl. Phys.* 38, 957 (1967).
69. "High-Resolution Specific Heat Measurements on DAG" (with B.E. Keen and D.P. Landau). *J. Appl. Phys.* 38, 967 (1967).
70. "Interaction Constants in $CeCl_3$ " (with D.P. Landau, R.J. Birgeneau, and M.T. Hutchings). *J. Appl. Phys.* 39, 975 (1968).
71. "Critical Magnetic Scattering from Dysprosium Aluminum Garnet (DAG)" (with J.C. Norvell). *J. Appl. Phys.* 39, 1232 (1968).
72. "Magnetic Properties of Rare Earth Hydroxides" (with H. Meissner and C.A. Catanese). *J. Appl. Phys.* 39, 1134 (1968).
73. "Electric Multipole Interactions between Rare-Earth Ions" (with R.J. Birgeneau). *Phys. Rev.* 166, 376 (1968).
74. "Magnetic Interactions between Rare Earth Ions in Insulators: I" (with M.T. Hutchings and R.J. Birgeneau). *Phys. Rev.* 168, 1026 (1968). See also, *Bull. Am. Phys. Soc.* 11, 15 (1966).
75. "Magnetic Dipole Interactions in Dysprosium Ethyl Sulphate: II" (with A.H. Cooke, D.T. Edmonds, and C.B. Finn). *Proc. Royal Society* 306, 335 (1968).
76. "Magnetic Dipole Interactions in Dysprosium Ethyl Sulphate: III" (with A.H. Cooke, D.T. Edmonds, and C.B. Finn). *Proc. Royal Society* 306, 335 (1968).
77. "High Frequency Specific Heat Measurements and Exchange Constants of $GdCl_3$ " (with R.B. Clover). *Solid State Commun.* 6, 331 (1968).
78. "Specific Heat of the Ferromagnets $Tb(OH)_3$, $Dy(OH)_3$, and $Ho(OH)_3$ " (with H.E. Meissner). *J. Appl. Phys.* 40, 1038 (1969).

79. "Magnetic Interactions between Rare-Earth Ions in Insulators. II: Electron-Paramagnetic-Resonance Measurements of Gd^{3+} Pair and $Gd^{3+} - Eu^{3+}$ Interaction Constants in $EuCl_3$ " (with R.J. Birgeneau and M.T. Hutchings). *Phys. Rev.* 179, 275 (1969).
80. "Optical Measurements on Ferromagnetic $Tb(OH)_3$ " (with P.D. Scott). *J. Appl. Phys.* 40, 1031 (1969).
81. "Magnetic Properties of the Rare Earth Hydroxides" (with H.E. Meissner, C.A. Catanese, and P.D. Scott). *Colloq. Int. du Cent. Nat. de la Rec. Sci.* 180, 93 (1969).
82. "Spin Resonance in Some Rare-Earth Hydroxides" (with P.D. Scott, H.E. Meissner, and R.J. Birgeneau). *Bull. Am. Phys. Soc.* 14, 117 (1969). (Abstract only.)
83. "Magnetic Neutron Scattering in Dysprosium Aluminum Garnet. I: Long Range Order" (with J.C. Norvell, L.M. Corliss, J.M. Hastings, and R. Nathans). *Phys. Rev.* 26, 557 (1969).
84. "Magnetic Neutron Scattering in Dysprosium Aluminum Garnet. II: Short Range Order and Critical Scattering" (with J.C. Norvell, L.M. Corliss, J.M. Hastings, and R. Nathans). *Phys. Rev.* 186, 567 (1969).
85. "Magnetic Susceptibility Measurements with a Tunnel Diode Oscillator" (with R.B. Clover). *Rev. Sci. Instr.* 41, 617 (1970).
86. "Growth of Bulk Magnetic Crystals: Report on a Workshop Discussion," *J. Appl. Phys.* 41, 1281 (1970).
87. "Anisotropic Interactions between Magnetic Ions," Invited Paper at the International Conf. on Magnetism, Grenoble, 1970. *J. Physics C1-26* (1971).
88. " $Gd^{3+} - Gd^{3+}$ Interactions in Rare Earth Hydroxides" (with R.W. Cochrane and C.Y. Wu). *J. Appl. Phys.* 42, 1568 (1971).
89. "High Frequency Measurements of the Effective Spin-Spin Interactions in $Tb(OH)_3$ " (with A.J. Skjeltorp). *J. Appl. Phys.* 42, 1487 (1971).
90. "Comment on the Proposed Magnetic Cooling of He^3 " (with M.F. Thorpe and R. Alben). *Phys. Rev. Lett.* 26, 756 (1971).
91. "Magnetic and Thermal Properties of Dysprosium Aluminum Garnet. I: Experimental Results for the Two-Sublattice Phases" (with D.P. Landau, B.E. Keen, and B. Schneider). *Phys. Rev. B* 3, 2310 (1971).
92. "On the Use of Parameters in Crystal Field Theory and Related Calculations." *Intl. J. of Quantum Chem.* 5, 397 (1971).
93. " $Gd^{3+} - Gd^{3+}$ Exchange Coupling in Ionic Rare Earth Insulators" (with R.W. Cochrane). *Solid State Commun.* 9, 1997 (1971).

94. "High Frequency Specific Heat Measurements on Dysprosium Aluminum Garnet" (with A.T. Skjeltorp). AIP Conf. Proc. 5, 695 (1972).
95. "Magnetic and Thermal Properties of Dysprosium Aluminum Garnet. II: Characteristic Parameters of an Ising Antiferromagnet" (with B. Schneider, D.P. Landau, and B.E. Keen). Phys. Rev. B 5, 4472 (1972). See also Bull. Am. Phys. Soc. 11, 254 (1966).
96. " $\text{Na}_3\text{Ce}(\text{C}_7\text{H}_3\text{NO}_4)\cdot 15\text{H}_2\text{O}$: A New Material for Millikelvin Thermometry" (with J.C. Doran and U. Erich). Phys. Rev. Lett 28, 103 (1972).
97. "Magnetic and Thermal Properties of $\text{Gd}(\text{OH})_3$ " (with A.T. Skjeltorp, C.A. Catanese, and H.E. Meissner). Phys. Rev. B 7, 2062 (1973).
98. "High-Frequency-Relaxation Measurements of Magnetic Specific Heats" (with A.T. Skjeltorp). Phys. Rev. B 8, 215 (1973). See Also, Proc. 13th Low Temp. Conf. Boulder, Colorado (1972).
99. "Electron Paramagnetic Resonance of the Cerium Dipicolinate Compound CDP" (with C.Y. Wu and R. Alben). Solid State Commun. 11, 1599 (1972).
100. "Electron Paramagnetic Resonance of Gd^{3+} Pairs in Rare Earth Hydroxides" (with R.W. Cochrane and C.Y. Wu). Phys. Rev. B 8, 4348 (1973). See Also, Bull. Am. Phys. Soc. 18, 467 (1973).
101. "Magnetic and Thermal Properties of $\text{Tb}(\text{OH})_3$ " (with C.A. Catanese, A.T. Skjeltorp, and H.E. Meissner). Phys. Rev. B 8, 4223 (1973).
102. "Magnetic Systems with Weak Interactions" (with A.T. Skjeltorp). Proc. Int. Conf. Magnetism, Moscow, Vol. III, 7 (1973).
103. "Optical Studies of Antiferromagnetic-Paramagnetic Phase Transition in Dysprosium Aluminum Garnet (DAG)" (with J.F. Dillon, Jr. and E. Yi Chen). Proc. Int. Conf. on Magnetism, Moscow, Sept. 22-28 (1973).
104. "Magnetic Equation of State of DAG near the Tricritical Point" (with A.T. Skjeltorp and R. Alben). AIP Conf. Proc. 18, 770 (1974).
105. "Microscope Studies of the Mixed Phase Region of the Ising Antiferromagnet Dysprosium Aluminum Garnet (DAG)" (with J.F. Dillon, Jr. and E. Yi Chen). AIP Conf. Proc. 18, 334 (1974).
106. "DAG: An Example of an Unusual Kind of Ising Model" (with N. Giordano, J.F. Dillon, Jr., and E. Yi Chen). Proc. Conf. on Critical Phenomena in Multicomponent Systems, Athens, GA (1974).
107. "Practical Difficulties in the Determination of Magnetic Equations of State Near Tricritical Points" (with R. Alben and A.T. Skjeltorp). Proc. Conf. on Critical Phenomena in Multicomponent Systems, Athens, GA (1974).

108. "Optical Studies of the Antiferromagnet DAG" (with J.F. Dillon and E. Yi Chen). Proc. Conf. on Critical Phenomena in Multicomponent Systems, Athens, GA (1974).
109. "Time Reversed (TR) Antiferromagnetic States in Dysprosium Aluminum Garnet (DAG)" (with J.F. Dillon, Jr., E. Yi Chen, and N. Giordano). Phys. Rev. Lett 33, 98 (1974).
110. "Multiple Spin Correlation Effects" (with N. Giordano). Invited paper, 20th MMM Conf., San Francisco, AIP Conf. Proc. 24, 333 (1974).
111. "Cerium Compounds with Very Low Magnetic Heat Capacities: The Casimir-du Pré Method Applied to Polycrystalline Samples" (with J. Albertsson and P.Y. Chen). Phys. Rev. B 11, 1943 (1973).
112. "Field Induced Magnetic Phase Transitions in DAG." Invited paper, 20th MMM Conf., San Francisco, AIP Conf. Proc. 24, 255 (1974).
113. "Antiferromagnetic Domain Structures in Dysprosium Aluminum Garnet (DAG)" (with J.F. Dillon, Jr. and E. Yi Chen). Bull. Am. Phys. Soc. 20, 501 (1975). (Abstract only.)
114. "New Method for Investigating Magnetic Tricritical Points" (with N. Giordano). Phys. Rev. Lett. 35, 799 (1975).
115. "Tricritical Behavior of Dysprosium Aluminum Garnet" (with N. Giordano). AIP Conf. Proc. 29, 459 (1975).
116. "Experimental Studies of Multicritical Points in Magnetic Systems." Invited Paper, Int. Conf. on Magnetism, Amsterdam, Physica 86-88B, 550 (1977).
117. "One-Dimensional Magnetic Variety in a Family of TTF-BIS-Dithiolene Metal Complex Compounds" (with I.S. Jacobs, H.R. Hart, Jr., L.V. Interrante, J.W. Bray, J.S. Kasper, G.D. Watkins, D.E. Prober, and J.C. Bonner). Int. Conf. on Magnetism, Amsterdam, Physica 86-88B, 665 (1977). See also, Bull. Am. Phys. Soc. 21, 253 (1976).
118. "Light Scattering from Metamagnetic Domains in Dysprosium Aluminum Garnet" (with N. Giordano). Int. Conf. on Magnetism, Amsterdam, Physica 86-88B, 593 (1977).
119. "Experimental Study of the Tricritical 'Wings' in Dysprosium Aluminum Garnet" (with N. Giordano). Phys. Rev. Lett. 39, 342 (1977).
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