

Biographical Sketch
of
JACEK K. FURDYNA

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- Date of Birth:** September 6, 1933
- Place of Birth:** Kamionka Strumilowa, Poland
- Education:** B. S. in Physics (*Summa cum Laude*), 1955, Loyola University,
Chicago, Illinois.

Ph.D. in Physics, 1960, Northwestern University, Evanston,
Illinois. Thesis: "Microwave Faraday Effect in Silicon and
Germanium." Thesis Advisor: Prof. Sybrand Broersma.
- Positions Held:**
1. Research Associate, Department of Electrical Engineering,
Northwestern University (1960-1962).
 2. Staff Member, Francis Bitter National Magnet Laboratory,
M.I.T. (1962-1966).
 3. Associate Professor, Department of Physics, Purdue University
(1966-1972).
 4. Professor, Department of Physics, Purdue University (1972-
1986).
 5. Chairman, Materials Sciences Council, Purdue University
(1982-1984)
 6. Director, Materials Research Laboratory, Purdue University
(1984-1985).
 7. Professor, Marquez Chair of Information Theory and Computer
Technology, Department of Physics, University of Notre Dame
(1987-present).

Societies: Fellow of the American Physical Society
Fellow of the Institute of Physics (IOP), United Kingdom

Special Appointments

1. U. S. National Academy of Sciences Exchange Scholar, Institute of Physics of the Polish Academy of Sciences, Warsaw, Poland (1972-1973).
2. Visiting Scientist, National Research Council of Canada, Ottawa, Canada, (July-December 1981).
3. Program Committee, 29th International Conference on Magnetism and Magnetic Materials, Pittsburgh, November 1983.
4. Program Committee, U. S. Workshop on the Physics and Chemistry of Mercury Cadmium Telluride (1984-1995).
5. Chairman, Symposium on Diluted Magnetic Semiconductors, March meeting of the American Physics Society, New York, NY, March 20, 1987.
6. Co-editor, "Diluted Magnetic (Semimagnetic) Semiconductors," Vol. 89, Materials Research Society Symposia Proceedings, Pittsburgh, PA 1987).
7. Editor, "Diluted Magnetic Semiconductors," Vol. 25 in the series Semiconductors and Semimetals (Academic Press, Boston, MA, 1988).
8. Chairman, NRC Panel on Diluted Magnetic Semiconductors, 1991.
9. International Editorial Board, Acta Physica Polonica (1993-present).
10. Program Committee, International Conference on II-VI Semiconductors, Edinburgh, 1994.
11. Program Committee, International Conference on II-VI Semiconductors, Grenoble, 1997.

Principal Scientific Interests

1. Materials preparation (bulk crystal growth and molecular beam epitaxy) of compound semiconductors, with emphasis on II-VI compounds and on magnetic semiconductors.
2. Far infrared magnetospectroscopy of semiconductors.
3. The physics of semiconductor superlattices and quantum wells.
4. Plasma effects in solids (helicon and Alfvén waves in semiconductors and semimetals; interaction of electromagnetic waves with bounded plasmas).

5. Electron spin resonance.
6. Neutron scattering (as a tool for determining magnetic structure of magnetic semiconductors).

Collaborations with Outside Institutions

1. Neutron diffraction in diluted magnetic semiconductors (G. Dolling and T.M. Holden: Chalk River Nuclear Laboratories; J. J. Rhyne: National Bureau of Standards).
2. Preparation of lattice-matched MBE substrates (J.F. Schetzina, North Carolina State University; Gary Prinz, Naval Research Laboratory).
3. Synchrotron radiation studies of deep-lying states and bands in diluted magnetic semiconductors (A. Franciosi: University of Minnesota and W. E. Spicer: Stanford University).
4. Extended X-ray absorption fine structure (EXAFS) studies of II-VI semiconductors (B. A. Bunker: University of Notre Dame).
5. Far-infrared spin-flip magneto-spectroscopy and de transport in n-type $\text{Cd}_{1-x}\text{Mn}_x\text{Se}$ (H.D. Drew and J. R. Anderson: University of Maryland).
6. Electron paramagnetic resonance in diluted magnetic semiconductors (S.M. Bhagat: University of Maryland).
7. Electroreflectance in $\text{Hg}_{1-x}\text{Mn}_x\text{Te}$ (F.H. Pollak: Brooklyn College).
8. Magnetization and de magnetic susceptibility of $\text{Zn}_{1-x}\text{Mn}_x\text{Te}$ (S.P. McAlister: National Research Council of Canada).
9. Materials preparation of high-melting point semiconducting compounds (W. Giriat: Instituto Venezolano de Investigaciones Cientificas, Caracas, Venezuela).
10. Interband Magnetotransmission in $\text{Hg}_{1-x}\text{Mn}_x\text{Te}$, $\text{Hg}_{1-x}\text{Fe}_x\text{Te}$, and $\text{Hg}_{1-x}\text{Fe}_x\text{Se}$ (C. Rigaux: Ecole Normale Superieure, Paris, France).
11. Time-resolved studies of $\text{Zn}_{1-x}\text{Mn}_x\text{Te}$ and $\text{Cd}_{1-x}\text{Mn}_x\text{Se}$ (A. Nurmikko: Brown University and R. R. Alfano: City University of New York).
12. Faraday rotation in $\text{Cd}_{1-x}\text{Mn}_x\text{Te}$ (W. Gebhardt: University of Regensburg, West Germany).

Publications

1960

1. Microwave Faraday Effect in Silicon and Germanium. J.K. Furdyna and S. Broersma. *Phys. Rev.* **120**, 1995-2003 (1960).

1961

2. Dependence of the Free-Carrier Faraday Ellipticity in Semiconductors on Scattering Mechanisms. J.K. Furdyna and M.E. Brodwin. *Phys. Rev.* **124**, 740-744 (1961).

1963

3. Magnetic-Field Dependence of Free-Carrier Absorption in Semiconductors. J.K. Furdyna and M.E. Brodwin, *Phys. Rev.* **132**, 97-104 (1963).

1964

4. Nonlinear Anisotropic Terms in the Free-Carrier Faraday Rotation in Cubic Semiconductors. J.K. Furdyna. *Phys. Rev. Letters* **13**, 426-429 (1964).
5. Alfvén-Wave Propagation in Pyrolytic and Single-Crystal Graphite. M. Surma, J.K. Furdyna, and H.C. Praddaude. *Phys. Rev. Letters* **13**, 710-712 (1964).

1965

6. Free Carrier Birefringence and Dichroism in Semiconductors. J.K. Furdyna and G.P. Soardo. *Proc. 7th Int. Conf. on the Physics of Semiconductors* (Dunod, Paris, 1965), pp. 171-173.
7. Microwave Galvanomagnetic Measurements in Semiconducting Powders. J.K. Furdyna. *Proc. 7th Int. Conf. on the Physics of Semiconductors* (Dunod, Paris, 1965), pp. 335-338.
8. Interferometric Measurement of Microwave Helicon Dispersion and the Hole Damping Effect in Intrinsic InSb. J.K. Furdyna. *Phys. Rev. Letters* **14**, 635-638 (1965).
9. Microwave Propagation Experiments in Semiconductor Plasmas at High Magnetic Fields. J.K. Furdyna. *Proc. Int. Conf. on Microwave Behavior of Ferrimagnetics and Plasmas*, (IEE Conf. Publication No. 13, London, 1965), p. 635.

1966

10. Cyclotron Resonance in Pyrolytic and Single Crystal Graphite. S.J. Williamson, M. Surma, H.C. Praddaude, R.A. Patten, and J.K. Furdyna. *Solid State Commun.* **4**, 37-41 (1966).
11. Quantum Effects in Microwave Helicon Propagation in Degenerate Semiconductor Plasmas. J.K. Furdyna. *Phys. Rev. Letters* **16**, 646-650 (1966).
12. Microwave Helicon Interferometry in Semiconductor Plasmas. J.K. Furdyna. *Rev. Sci. Instr.* **37**, 462-467 (1966).
13. Orientation Dependence of the Resistive Transition Near H_{c2} in High Field Superconductors. S.J. Williamson and J.K. Furdyna. *Phys. Letters* **21**, 376-378 (1966).
14. Observation of Quantum, Spin, and High Field Damping Effects in Microwave Helicon Propagation in Degenerate Semiconductor Plasmas. J.K. Furdyna. *Proc. 8th Int. Conf. on the Physics of Semiconductors, Kyoto, J. Phys. Soc. of Japan* **2**, 713-717 (1966).

1967

15. Helicons, Magnetoplasma Edge, and Faraday Rotation in Solid State Plasmas at Microwave Frequencies. J.K. Furdyna. *Appl Optics* **6**, 675-684 (1967).
16. Microwave Faraday Rotation in Semiconductor Plasmas in the High Magnetic Field Limit. J.K. Furdyna. *Solid State Commun.* **5**, 539-542 (1967).
17. A New Magnetoplasma Mode of Electromagnetic Wave Propagation in Semiconducting Powders. J.K. Furdyna and F. L. Galeener. *Proc. 9th Int. Conf. on the Physics of Semiconductors, Moscow (Nauka, Leningrad, 1968)*, pp. 870-875.

1969

18. Propagation and Dimensional Resonances of Helicon-Like Waves in Powdered Semiconductors and Semimetals. F.L. Galeener and J.K. Furdyna. *Appl Phys. Letters* **14**, 163-166 (1969).

1970

19. Magnetoplasma Resonance in Semiconductor Powders. K.K. Chen, J.K. Furdyna, and F.L. Galeener. *Appl. Phys. Letters* **16**, 387 (1970).
20. Quantum Oscillations of Microwave Helicon Dispersion in n-type InSb and InAs. J.K. Furdyna and A.R. Krauss. *Phys. Rev. B* **2**, 3183-3192 (1970).

21. Electric and Magnetic Resonances of a Particulate Magnetoplasma: Identification by Microwave Propagation in Voigt Configuration. F.L. Galeener, A.A. Saralkar, and J.K. Furdyna. *Appl. Phys. Letters* **17**, 486 (1970).
22. Infrared and Microwave Magnetoplasma Effects in Semiconductors. E.D. Palik and J.K. Furdyna. *Reports on Progress in Physics* **33**, 1193-1322 (1970).

1971

23. Alfvén Wave Propagation and Damping in Pyrolytic Graphite in the Quantum Limit. J.K. Furdyna and A.R. Krauss. *Phys. Chem. Solids, as the Proc. of the Conf. on the Physics of Semimetals and Narrow Band Semiconductors*, Dallas, March 20-21, 1970, pp. 165-175 (1971).
24. Helicon-Like Wave Propagation in Powdered Semiconductors at Microwave Frequencies. F.L. Galeener and J.K. Furdyna. *Phys. Rev. B* **4**, 1953-1968 (1971).

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25. Recent Microwave Studies of Electromagnetic Wave Propagation in Semiconductor and Semimetal Magnetoplasmas. J.K. Furdyna. *Proc. of Symposium on the Physics of Plasma and Electric Instabilities in Solids*, Vilnius, June 10-12, 1971 (Mintis Publishing House, Vilnius, 1972) p. 73.
26. Temperature Dependence of Intrinsic Carrier Concentration in InSb: Direct Determination by Helicon Interferometry. K.K. Chen and J.K. Furdyna. *J. Appl. Phys.* **43**, 1825-1829 (1972).
27. Induction Cyclotron Resonance. F.L. Galeener, T.A. Evans, and J.K. Furdyna, *Phys. Rev. Letters* **29**, 728 (1972).
28. Cyclotron-Resonance-Like Absorption by the Induced Magnetic Moment in Small InSb Spheres. T.A. Evans, F.L. Galeener, and J.K. Furdyna. *Proc 11th Int. Conf. on the Physics of Semiconductors*, Warsaw, July 25-29, 1972. (PWN-Polish Scientific Publishers, Warsaw 1972), p. 357.

1973

29. Alfvén Wave Propagation and Damping in Pyrolytic and Single Crystal Graphite. A.R. Krauss and J.K. Furdyna. *Phys. Rev. B* **7**, 2520 (1973).
30. Microwave Magnetic Dipole Interaction in Small InSb Spheres: Induced Cyclotron-Resonance-Like Absorption in the Rayleigh Limit. T.A. Evans and J.K. Furdyna. *Phys. Rev. B* **8**, 1461 (1973).

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31. Feasibility of Cyclotron Resonance Studies in Semiconductors with High Carrier Concentrations. J.K. Furdyna, *Postepy Fyzyki* **25**, 67 (1974).
32. Cyclotron-Plasma Mode Transitions as a Possible Tool for Effective Mass Determination. J.K. Furdyna and J. Mycielski. *Proc. Conf. on II-VI Semiconductor Compounds, Jaszowiec 1973 (IF-PAN, Warsaw, 1974)*, p. 178.
33. Free Carrier Motion and Conductivity Tensor in Materials with an Effective Mass Gradient in the Presence of a Magnetic Field. J.K. Furdyna and J. Mycielski, *Proc. Conf. on II-VI Semiconductor Compounds, Jaszowiec 1973 (IF-PAN, Warsaw, 1974)*, p. 196.
34. Excitation of EPR in $\text{Hg}_{1-x}\text{Mn}_x\text{Te}$ by Helicon Waves. R.T. Holm and J.K. Furdyna. *Proc. Conf. on II-VI Semiconductor Compounds, Jaszowiec 1973 (IF-PAN, Warsaw, 1974)* p. 185.
35. Observation of Helicon-Excited Electron Paramagnetic Resonance in a High-Mobility Semiconductor. R.T. Holm and J.K. Furdyna, *Solid State Communications* **15**, 1459 (1974).
36. Nonlinear Electric and Optical Effects in Graded Mixed Semiconductors. J.K. Furdyna, L. Leibler, and J. Mycielski. *Proc. Twelfth Int. Conf. on the Physics of Semiconductors (B.G. Teubner, Stuttgart, 1974)*, p. 1171.

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37. Nonlinear Conductivity Tensor in Graded Mixed Semiconductors. L. Leibler, J. Mycielski, and J.K. Furdyna. *Phys. Rev. B* **11**, 3037 (1975).
38. Electromagnetic Excitations of a Small Gyrotropic Sphere. G.W. Ford, J.K. Furdyna, and S.A. Werner. *Phys. Rev. B* **12**, 1452 (1975).
39. Dimensional Electric Dipole Resonances in InSb Spheres. J.R. Dixon, Jr. and J.K. Furdyna, *Phys. Letters* **54A**, 59 (1975).
40. Landau Levels in Cyclotron Resonance in Graded Mixed Semiconductors. G. Bastard, J.K. Furdyna, and J. Mycielski. *Phys. Rev. B* **12**, 4356 (1975).

1976

41. Microwave Dimensional Resonances in Electron-Hole Drops. J.R. Dixon, Jr. and J.K. Furdyna. *Phys. Rev. B* **13**, 3657 (1976).
42. Comparison of the Major Magnetic Dimensional Resonances in Single-Carrier and in Compensated Two-Carrier Magnetoplasma Spheres. J.R. Dixon, Jr. and J.K. Furdyna. *Phys. Rev. B* **12**, 4626 (1976).

43. Microwave Resonance in Electron-Hole Drops. J.R. Dixon, Jr. and J.K. Furdyna. Proc. 13th Int. Conf. on the Physics of Semiconductors. Edited by F. G. Fumi (Tipografia, Rome, 1976), p. 918.

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44. The Influence of Sample Shape on Microwave Magnetoplasma and Helicon-Like Resonances in n-type InSb. R.S. Brazis and J.K. Furdyna. J. Appl. Phys. **48**, 2927 (1977).
45. Microwave Helicon Propagation and Helicon-Excited Electron Paramagnetic Resonance in $\text{Hg}_{1-x}\text{Mn}_x\text{Te}$. R.T. Holm and J.K. Furdyna. Phys. Rev. B **15**, 844 (1977).
46. Investigation of the Microwave Magnetoplasma Matching Effect in Indium Antimonide. R.S. Brazis and J.K. Furdyna. J. Appl. Phys. **48**, 4267 (1977).
47. Electromagnetic Excitations of a Small Gyromagnetic Sphere. R.S. Brazis and J.K. Furdyna. Phys. Rev. B **16**, 3273 (1977).
48. Giant Phase Anomaly in Microwave Magnetoplasma Reflection. R.S. Brazis and J.K. Furdyna. Proc. Third Symposium on Electrical Instabilities and Plasma Effects in Solids. Vilnius, U.S.S.R., 1977.
49. Microwave Magnetoplasma Spectroscopy in Semiconductors. Proc. Int. Symposium on Microwave Diagnostics in Semiconductors. Edited by R. Paananen (Swedish Academy of Engineering Sciences in Finland, Helsinki, 1977), p. 287.

1978

50. Microwave Propagation in Powdered Semiconductors. J.E. Sansonetti and J.K. Furdyna. Proc. Conf. on Electrical Transport and Optical Properties of Inhomogeneous Media, Ohio State University, September 1977 (American Institute of Physics Conference Proceedings Series, No. 40, New York, 1978), p. 269.
51. Magnetic-Field-Induced Microwave Transparency of HgTe and its Ternary Compounds. D. P. Mullin, J. R. Dixon, Jr., and J.K. Furdyna. Proc. 3rd Int. Conf. on the Physics of Narrow-Gap Semiconductors. Edited by J. Rauluszkiewicz (PWN-Elsevier, Warsaw, 1978), p. 221.
52. Microwave Propagation in InSb Powder: Magnetoplasma and Helicon-Wave Excitations. K.K. Chen and J.K. Furdyna. J. Appl. Phys. **49** (6), 3363 (1978).
53. Gyrotropic Sphere: Selected Examples of Resonance Spectra. J.R. Dixon, Jr. and J.K. Furdyna. Phys. Rev. B **18**, 6770 (1978).

1979

54. Microwave Propagation in Semiconductor Powders: The Rayleigh Limit. J.E. Sansonetti and J.K. Furdyna. *J. Appl. Phys.* **50**, 2889 (1979).
55. Radius-Independent Resonance in Electron-Hole Drop Magnetoplasmas. J.R. Dixon, Jr. and J.K. Furdyna. *Phys. Rev. B* **19**, 4167 (1979).
56. Electron Paramagnetic Resonance in Powdered Semiconductors and Semimetals. J.E. Sansonetti, D.P. Mullin, J.R. Dixon, Jr., and J.K. Furdyna. *J. Appl. Phys.* **50**, 5431 (1979).
57. Microwave Effects in Narrow-Gap Semiconductors, I. R.S. Brazis, J.K. Furdyna, and J.K. Pozela. *Phys. Stat. Solidi (a)* **53**, 11 (1979).
58. Microwave Effects in Narrow-Gap Semiconductors, II. R.S. Brazis, J.K. Furdyna, and J.K. Pozela, *Phys. Stat. Solidi (a)* **54**, 11 (1979).

1980

59. Effect of Magnetoresistance on EPR Lineshape in Conducting Media. D.P. Mullin and J.K. Furdyna. *J. Appl. Phys.* **51**, 2799 (1980).
60. Magneto-optical Evidence of Exchange Interactions in Zero Gap $\text{Hg}_{1-x}\text{Fe}_x\text{Te}$ Mixed Crystals. Y. Guldner, C. Rigaux, M. Menant, D.P. Mullin, and J.K. Furdyna. *Solid State Commun.* **33**, 133 (1980).
61. Microwave Helicon Resonances in n-InSb Spheres. J.R. Dixon, Jr. and J.K. Furdyna. *J. Appl. Phys.* **51**, 3762 (1980).
62. Depolarization Effects in Arrays of Spheres. J.E. Sansonetti and J.K. Furdyna. *Phys. Rev. B* **22**, 2866 (1980).
63. Measurement of the Static Dielectric Constant of the InSb Lattice via Gyrotropic Sphere Resonances. J.R. Dixon, Jr. and J.K. Furdyna. *Solid State Commun.* **35**, 195 (1980).
64. Cyclotron and Other Resonances in HgSe and $\text{Hg}_{1-x}\text{Mn}_x\text{Se}$. K. Pastor, M. Jaczynski, and J.K. Furdyna. *Proc. 15th Int. Conf. on the Physics of Semiconductors, Kyoto, 1980*, *J. Phys. Soc. Japan* **49**, Suppl. A. p. 779 (1980).
65. Magneto-optics in Semimagnetic Semiconducting $\text{Hg}_{1-x}\text{Mn}_x\text{Te}$ Mixed Crystals. C. Rigaux, G. Bastard, Y. Guldner, G. Rebmann, A. Mycielski, J.K. Furdyna, and D.P. Mullin. *Proc. 15th Int. Conf. on the Physics of Semiconductors, Kyoto, 1980*, *J. Phys. Soc. Japan* **49**, Suppl. A (1980).
66. Magnetic Susceptibility, Specific Heat, and the Spin-Glass Transition in $\text{Hg}_{1-x}\text{Mn}_x\text{Te}$. S. Nagata, R.R. Galazka, D.P. Mullin, H. Akbarzadeh, G.D. Khattak, J.K. Furdyna, and P.H. Keesom. *Phys. Rev. B* **22**, 331 (1980).

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67. Microwave Helicon Propagation and the Dynamic Magnetic Susceptibility in $\text{Hg}_{1-x}\text{Mn}_x\text{Se}$. D.P. Mullin, R.R. Galazka, and J.K. Furdyna. *Phys. Rev. B* **24**, 355 (1981).
68. Interband Magnetoabsorption in Semimagnetic Semiconductor Alloys $\text{Hg}_{1-x}\text{Mn}_x\text{Te}$ with a Positive Energy Gap. G. Bastard, C. Rigaux, Y. Guldner, A. Mycielski, J.K. Furdyna, and D.P. Mullin. *Phys. Rev. B* **24**, 1961 (1981).
69. Spin Glass Transition in a Diluted Frustrated Lattice. S. Nagata, R.R. Galazka, G.D. Kattak, C.D. Amarasekara, J.K. Furdyna, and P.H. Keesom. *Physics* **107B**, 311 (1981).
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71. Magnetic Correlations in Disordered $\text{Mn}_c\text{Zn}_{1-c}\text{Te}$ Alloys. T.M. Holden, G. Dolling, V.F. Sears, J.K. Furdyna, and W. Giriat. *Solid State Commun.* **40**, 281 (1981).
72. Far-Infrared Observation of Cyclotron and Spin-Flip Resonances in HgSe . K. Pastor, M. Jaczynski, and J.K. Furdyna, *Phys. Rev.* **24**, 7313 (1981).
73. Magnetic Phases of a Heisenberg Spin Glass in Strong Magnetic Fields: High Field Faraday Rotation in $\text{Cd}_{1-x}\text{Mn}_x\text{Te}$. H. Kett, W. Gebhardt, U. Krey, and J.K. Furdyna. *J. Mag. Materials* **25**, 215 (1981).

1982

74. The Effects of Pressure on the Elastic Constants of Mercury Selenide up to the Phase Transition. P.J. Ford, A.J. Miller, G.A. Saunders, Y.K. Yogurtcu, J.K. Furdyna and M.J. Jaczynski. *J. Phys. C: Solid State Phys.* **15**, 657 (1982).
75. The Influence of Exchange Interaction on Far-Infrared Spin-Flip Resonances in Zero-Gap $\text{Hg}_{1-x}\text{Mn}_x\text{Se}$. A. Witowski, K. Pastor, and J.K. Furdyna. *Phys. Rev. B* **26**, 931 (1982).
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82. Electric Dipole Spin Resonance of Bound Electronic States in $\text{Cd}_{1-x}\text{Mn}_x\text{Se}$. M. Dobrowolska, H.D. Drew, J.K. Furdyna, T. Ichiguchi, A. Witowski, and P.A. Wolff. Phys. Rev. Letters **49**, 845 (1982).
83. Spin Correlations in $\text{Zn}_{1-c}\text{Mn}_c\text{Te}$. T.M. Holden, G. Dolling, V.F. Sears, J.K. Furdyna, and W. Giriat. Phys. Rev. B **26**, 4074 (1982).

1983

84. The Dependence of the Lattice Parameter and Density of $\text{Zn}_{1-x}\text{Mn}_x\text{Te}$ on Composition. J.K. Furdyna, W. Giriat, D.F. Mitchell, and G.I. Sproule. J. Solid State Chem. **46**, 349 (1983).
85. D- Levels in $\text{Cd}_{1-x}\text{Mn}_x\text{Se}$. T. Ichiguchi, H.D. Drew, and J.K. Furdyna. Phys. Rev. Letters **50**, 612 (1983).
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87. Magnetic Susceptibility and the Spin Glass Transition of $\text{Cd}_{1-x}\text{Mn}_x\text{S}$ and $\text{Zn}_{1-x}\text{Mn}_x\text{S}$ at Low Temperatures. Y.Q. Yang, P.H. Keesom, J.K. Furdyna, and W. Giriat. J. Solid State Chemistry **49**, 20 (1983).
88. EPR Measurements in $\text{Cd}_{1-x}\text{Mn}_x\text{Te}$ Under Extreme Line Broadening Using Microwave Faraday Rotation. R.E. Kremer and J.K. Furdyna. J. Magnetism and Mag. Materials **40**, 185 (1983).
89. $\text{Hg}_{1-x}\text{Mn}_x\text{Te}$: A New Candidate for Infrared Detectors. J.K. Furdyna. Proc. SPIE - The Int. Soc. for Optical Engrg., Vol. 409, p. 42 (1983).

90. Diluted Magnetic Semiconductors. J.K. Furdyna. *Physics News in 1983*, edited by P.F. Schewe (American Institute of Physics 1983), p. 48.
91. Metals. J.K. Furdyna. *Encyklopedia Fizyki Wspolczesnej (Encyclopedia of Modern Physics)*, Polish Scientific Publishers PWN (Warsaw, 1983), pp. 505-516.
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94. Diluted Magnetic Semiconductors. J.K. Furdyna. *Physics Today*, January 1984, pp. 5-19.
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96. Far-Infrared Observation of the Electric Dipole Spin Resonance of Donor Electrons in $Cd_{1-x}Mn_xSe$. M. Dobrowolska, A. Witowski, J.K. Furdyna, T. Ichiguchi, H.D. Drew, and P.A. Wolff. *Phys. Rev. B* **29**, 6652 (1984).
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571. "Time-resolved photoluminescence in CdSe/CdZnSe and CdSe/CdMnSe coupled quantum dot structures," E. Oh, D.G. Choi, S. Kim, T.K. Lee, J.H. Park, S. Lee, J.K. Furdyna, *Journal of the Korean Physical Society* **49**, 614-618 (2006).
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575. "Magnetic and chemical nonuniformity in Ga_{1-x}MnxAs films as probed by polarized neutron and x-ray reflectometry," B. J. Kirby, J. A. Borchers, J. J. Rhyne, K. V. O'Donovan, S. G. E. te Velthuis, S. Roy, C. Sanchez-Hanke, T. Wojtowicz, X. Liu, W. L. Lim, M. Dobrowolska, and J. K. Furdyna, *Physical Review B* **74**, Art. No. 245304 (2006).

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576. "Magnetization reversal in(Ga,Mn)As/MnO exchange-biased structures: Investigation by planar Hall effect," Z. Ge, W.L. Lim, S. Shen, Y.Y. Zhou, X. Liu, J.K. Furdyna, and M. Dobrowolska, *Physical Review B* **75**, 014407(2007).

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583. "Strain-engineered magnetic anisotropy of GaMnAs ferromagnetic semiconductors," T. Kim, S.J. Chung, D.Y. Shin, I.S. Choi, S. Lee, X. Liu, and J.K. Furdyna, *Journal of the Korean Physical Society* **50**, 829-833 (2007).
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585. "Magnetization-induced optical nonlinearity in ferromagnetic GaMnAs," K.J. Han, J.H. Kim, K.J. Yee, J.K. Furdyna, X. Liu, and F. Hache, *Journal of Applied Physics* **101**, 063519 (2007).
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589. "Ultrafast optical study of magnons in the ferromagnetic semiconductor GaMnAs," D.M. Wang, Y.H. Ren, X. Liu, J.K. Furdyna, M. Grimsditch, R. Merlin, *Superlattices and Microstructures* **41**, 372–375 (2007).
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594. "Precise investigation of domain pinning energy in GaMnAs using planar Hall effect and magnetoresistance measurements," D.Y. Shin, S.J. Chung, S. Lee, X. Liu, and J.K. Furdyna, *IEEE Transactions on Magnetism* **43**, 3025-3027 (2007).
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598. "Photoluminescence of Zn_{1-x}BexSe films grown by using molecular beam epitaxy," Y. Hwang, H. Kim, Y. Um, and J.K. Furdyna, *Journal of the Korean Physical Society* **50**, 858-861 (2007).

599. "Electroluminescence studies of (Ga,Mn)As-based p-i-n structures," Z. Ge, W. L. Lim, R. Chakarvorty, S. Shen, X. Liu, J.K. Furdyna, and M. Dobrowolska, *J. Appl. Phys.* **102**, 054507 (2007).
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602. "Temperature dependence of magnetic anisotropy in ferromagnetic (Ga,Mn)As films: Investigation by the planar Hall effect," D.Y. Shin, S.J. Chung, S. Lee, X. Liu, and J.K. Furdyna, *Physical Review B* **76**, 035327 (2007).
603. "Ultrafast optical study of magnons in the ferromagnetic semiconductor GaMnAs," D.M. Wang, Y.H. Ren, X. Liu, J.K. Furdyna, and M. Grimsditch, *Superlattices and Microstructures* **41**, 372-375 (2007).
604. "Enhancement of magnetic field in superconductor and magnetic semiconductor quantum well hybrid structure," S. Lee, D.Y. Shin, E.K. Hyun, S.R. Lee, M. Dobrowolska, and J.K. Furdyna, *Journal of Crystal Growth* **301**, 906-909 (2007).
605. "Pinned spin depth profile of an oxidized-Mn/Ga_{1-x}MnxAs exchange bias bilayer - The effects of overannealing," B.J. Kirby, M.R. Fitzsimmons, J.A. Borchers, Z. Ge, X. Liu, and J.K. Furdyna, *IEEE Transactions on Magnetics*, **43**, 3016-3018 (2007).
606. "Time stability of multi-domain states formed in the magnetization reversal process of GaMnAs film," S.J. Chung, D.Y. Shin, H. Son, S. Lee, X. Liu, and J.K. Furdyna, *Solid State Communications* **143**, 232-235 (2007).
607. "Light-induced magnetic precession in (Ga,Mn)As slabs: Hybrid standing-wave Damon-Eshbach modes," D.M. Wang, Y.H. Ren, X. Liu, J.K. Furdyna, M. Grimsditch, and R. Merlin, *Phys. Rev. B* **75**, 233308 (2007).
608. "Investigation of magnetic and electronic coupling between two (Ga,Mn)As layers in (Ga,Mn)As/GaAs/(Ga,Mn)As magnetic tunnel junctions," Z. Ge, Y.Y. Zhou, Y.-J. Cho, X. Liu, J.K. Furdyna, and M. Dobrowolska, *Applied Physics Letters* **91**, Art. No. 152109 (2007).
609. "Common origin of ferromagnetism and band edge Zeeman splitting in GaMnAs at low Mn concentrations," R. Chakarvorty, S. Shen, K.J. Yee, T. Wojtowicz, R. Jakiela, A. Barcz, X. Liu, J.K. Furdyna, and M. Dobrowolska, *Applied Physics Letters* **91**, Art. No. 171118 (2007).
610. "Definitive evidence of interlayer coupling between Ga_{1-x}MnxAs layers separated by a nonmagnetic spacer," B.J. Kirby, J.A. Borchers, X. Liu, Z. Ge, Y.-

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611. “Spatially resolved pump-probe second harmonic generation study of multilayer semiconductor heterostructures,” Y.D. Glinka, N.H. Tolk, X. Liu, Y. Sasaki, and J.K. Furdyna, *Applied Physics Letters* **91**, Art. No. 231104 (2007).
 612. “Weak localization in Ga_{1-x}Mn_xAs: Evidence of impurity band transport,” L.P. Rokhinson, Y. Lyanda-Geller, Z. Ge, S. Shen, X. Liu, M. Dobrowolska, and J.K. Furdyna, *Physical Review B* **76**, Art. No. 161201 (2007).
 613. “Ferromagnetic resonance study of exchange coupled (Ga,Mn)As/GaAs/(Ga,Mn)As heterostructures,” K. Dziatkowski, Z. Ge, X. Liu, J.K. Furdyna, B. Clerjaud, and A. Twardowski, *Acta Physica Polonica A* **112**, 227-232 (2007).
 614. “Inelastic scattering and spin polarization in dilute magnetic semiconductor (Ga,Mn)Sb,” Raghava P. Panguluri, B. Nadgorny, T. Wojtowicz, X. Liu, and J.K. Furdyna, *Applied Physics Letters* **91**, 252502 (2007).

Books edited:

1. Diluted Magnetic (Semimagnetic) Semiconductors, edited by R.L. Aggarwal, J.K. Furdyna, and S. von Molnar (Vol. 89, Materials Research Society Symposia Series, Pittsburgh, 1987).
2. Diluted Magnetic Semiconductors, edited by J.K. Furdyna and J. Kossut (Vol. 25, Semiconductors and Semimetals, Academic Press, Boston, 1988).

Comments on Publications:

Items 23, 24, 31, 57, 58, 76, 80, 81, 90, 92, 97, 98, and 105 are review articles solicited by the respective editors. Item 55 was selected by The Physical Society of Japan to be included in their volume of reprints "Selected Papers in Physics" as one of 10 key papers on the subject of electron-hole drops in semiconductors. Item 38 was singled out by the MITRE Corporation in its report prepared for the NSF "Evaluative Study of the Materials Research Laboratory Program" (Report MTR 7764, McLean, VA 1978) as an achievement of major importance. Item 91 is a section written for an encyclopedia. Invitation has also been received to prepare a review article on diluted magnetic semiconductors (ca. 50 pages) for *Applied Physics Reviews*, and to write two chapters ("Crystal Structure, Composition, and Materials Preparation of Diluted Magnetic Semiconductors" and "Helicon-Excited Electron Spin Resonance in Diluted-Magnetic Semiconductors") for the series *Semiconductors and Semimetals* (Academic Press).

Recent Invited Talks at Professional Meetings (since 1981)

1. "Spin-Spin Exchange Interactions in Semimagnetic Semiconductors," Meeting of the American Physical Society, March 16-20, 1981, Phoenix, Arizona.
2. "Far-Infrared and Microwave Magnetoplasma Effects in Narrow-Gap Semiconductors," 11th Conf. on the Physics of Semiconducting Compounds, Jaszowiec, Poland, April 17-May 2, 1981.
3. "Electrical, Optical, and Magnetic Properties of $\text{Hg}_{1-x}\text{Mn}_x\text{Te}$," U.S. Workshop on the Physics and Chemistry of HgCdTe , Minneapolis, October 28-30, 1981.
4. "Diluted Magnetic Semiconductors: an Interface of Semiconductor Physics and Magnetism," 3rd Joint Intermag/Magnetism and Magnetic Materials Conf., Montreal, July 20-23, 1982.
5. "Neutron Scattering in Diluted Magnetic Semiconductors," (with G. Dolling, T.M. Holden, V. F. Sears, and W. Girit), 3rd Joint Intermag/Magnetism and Magnetic Materials Conf., Montreal, July 20-23, 1982 (presented by G. Dolling).

6. "HgMnTe: A New Candidate for Infrared Detector," Technical Symposium of the Soc. of Photo-Optical Instrumentation Engineers (SPIE), Arlington, Virginia, April 15, 1983.
7. "Shallow Centers in Diluted Magnetic Semiconductors," First Int. Conf. on Spectroscopy of Shallow Centers in Semiconductors, Berkeley, CA, August 2-3, 1984.
8. "Diluted Magnetic Semiconductor Superlattices and Heterostructures," (with S. Datta and R. L. Gunshor), First Int. Conf. on Superlattices, Heterostructures and Microdevices, Champaign, IL, August 1984 (presented by J.K. Furdyna).
9. "Diluted Magnetic Semiconductors: Issues and Trends," J.K. Furdyna, M.I.T. Workshop on Semimagnetic Semiconductors, Cambridge, MA, October 1984.
10. "Diluted Magnetic Semiconductor Superlattices," (with R.L. Gunshor, *et al.*), 2nd Int. Conf. on II-VI Compounds, Aussois, France, March 4-8, 1985 (presented by R. L. Gunshor).
11. "Diluted Magnetic Semiconductor Superlattices and Quantum Wells," a set of lectures presented at the Regional School on Superlattices, University of Sherbrooke, Sherbrooke, Quebec, June 11 and 12, 1985.
12. "New Developments in Semimagnetic Semiconductors," International Conference on Magnetism (ICM'85), San Francisco, August 1985.
13. "Diluted Magnetic Semiconductors: Issues and Opportunities," U.S. Workshop on the Physics and Chemistry of Mercury Cadmium Telluride, San Diego, October 1985.
14. "Diluted Magnetic Semiconductors and Their Applications," J.K. Furdyna, ARO Workshop on Infrared Materials, February 11-12, 1986, Raleigh, NC.
15. "Optical Device Applications of Diluted Magnetic Semiconductors," J.K. Furdyna, Int. Conf. of the Society for Optical Engineering (SPIE), April 7-18, 1986, Innsbruck, Austria.
16. "Device Applications of Diluted Magnetic Semiconductors," J.K. Furdyna, ONR Workshop on Research Opportunities in Magnetism for Naval Applications, June 2-4, 1986, West Lafayette, IN.
17. "Quantum Wells and Superlattices of Diluted Magnetic Semiconductors," J.K. Furdyna, J. Kossut, and A. K. Ramdas, NATO Advanced Research Workshop on Optical Properties of Narrow Gap Low Dimensional Structures, St. Andrews (U.K.), July 29-August 1, 1986.
18. "Diluted Magnetic Ternary and Multinary Compounds," J.K. Furdyna, 7th Int. Conf. on Ternary and Multinary Compounds, Sept. 10-12, 1986, Snowmass, Colorado.

19. "Magnetic Properties of Diluted Magnetic Semiconductors," J.K. Furdyna and N. Samarth, 31st Annual Conf. on Magnetism and Magnetic Materials, November 17-20, 1986, Baltimore, MD.
20. "DMS: Some Speculations for the Future," J.K. Furdyna, Diluted Magnetic (Semimagnetic) Semiconductors of the MRS, Dec. 1-3, 1986, Boston.
21. "Optical Electronic and Magnetic Properties of Diluted Magnetic Semiconductors," J.K. Furdyna, Meeting of the Illinois Chapter of the American Vacuum Society, University of Illinois, Urbana-Champaign, April 1987.
22. "Challenges and Opportunities in Diluted Magnetic Semiconductor Superlattices and Heterostructures," J.K. Furdyna, International Workshop on Superlattice Structures and Devices, University of Minnesota, MN, May 18-20, 1987.
23. "The Effect of Spin-Spin Exchange Interaction on Electrical and Optical Properties of Diluted Magnetic Semiconductors," J.K. Furdyna, Midwest Solid State Conference, University of Notre Dame, October, 19-20, 1987.
24. "Iron-Based Narrow-Gap and Zero-Gap Semiconductors," J.K. Furdyna, St. Louis Meeting of the American Physical Society, St. Louis, MO, March 20-24, 1989.
25. "Novel Magnetic and Opto-Electronic Phenomena in Diluted Magnetic Semiconductor Multilayers," J.K. Furdyna and N. Samarth, Spring Meeting of the Materials Research Society, San Diego, CA, April 24-29, 1989.
26. "Diluted Magnetic Semiconductor Quantum Wells and Superlattices," J.K. Furdyna, Symposium on Thin Magnetic Layers and Superlattices, AT&T Bell Labs, Murray Hill, NJ, June 14, 1989.
27. "New Developments in II-VI-Based Diluted Magnetic Semiconductors," N. Samarth and J.K. Furdyna, Meeting of the Materials Research Society, Boston, MA, December 1, 1989
28. "Inelastic Neutron Scattering Studies of II-VI Diluted Magnetic Semiconductors," T.M. Giebultowicz, J.J. Rhyne, J.K. Furdyna, and P. Klosowski, 34th Annual Conference on Magnetism and Magnetic Materials, Boston, MA November 29, 1989.
29. "Electronic and Magnetic Properties of Diluted Magnetic Semiconductor Thin Films and Multilayers," J.K. Furdyna, Solid State Physics Seminar, Purdue University, W. Lafayette, IN, April 21, 1989.
30. "Iron-Based Narrow Gap and Zero-Gap Semiconductors," J.K. Furdyna, Solid State Seminar, San Diego State University, April 27, 1989.
31. "Diluted Magnetic Semiconductor Thin Films and Multilayers," J.K. Furdyna, Solid State Physics Seminar, University of Nebraska, Lincoln, NE, June 27, 1989.

32. "Diluted Magnetic Semiconductor Thin Films and Multilayers," J.K. Furdyna, Solid State Physics Seminar, Solar Energy Research Institute, Golden, CO, June 30, 1989.
33. "Semimagnetic Thin Films and Superlattices," J.K. Furdyna, Solid State Physics Seminar, Institute of Physics of the Polish Academy of Sciences, Warsaw, Poland, July 20, 1989.
34. "Diluted Magnetic Semiconductors and their Layered Structures," J.K. Furdyna, Condensed Matter and Surface Sciences Seminar, Ohio University, Athens, OH, October 19, 1989.
35. "Diluted Magnetic Semiconductors and Their Device Applications," J.K. Furdyna, Physics Colloquium, National Research Council of Canada, Ottawa, Canada, November 3, 1989.
36. "Magnetic Ordering in Diluted Magnetic Semiconductors," Colloquium, Naval Research Laboratory, presented by J.K. Furdyna in December 1990.
37. "Novel Optical and Magnetic Phenomena in Diluted Magnetic Semiconductor Superlattices and Quantum Wells," Colloquium, Department of Electrical and Computer Engineering, University of Missouri, Columbia, Missouri, presented by N. Samarth in June 1990.
38. "Recent Developments in II-VI and Magnetic Semiconductor Heterostructures," IBM T. J. Watson Research Center, Yorktown Heights, New York, presented by N. Samarth in October 1990.
39. "Strain, Dimensionality and Dilution Effects in Epitaxial FCC Antiferromagnets," Solid State Seminar, Department of Physics, University of Notre Dame, Indiana, presented by N. Samarth in November 1990.
40. "Quasi-2D Confinement of Excitons and Magnetic Polarons in Wide-Gap Semiconductor Quantum Wells," Colloquium, Department of Physics, University of Notre Dame, Indiana, presented by N. Samarth in March 1991.
41. "Exciton Confinement and Stimulated Emission in Wide-gap II-VI Semiconductor Quantum Well Structures," Colloquium, Center for Electronic and Electro-optic Materials, State University of New York, Buffalo, New York, presented by N. Samarth in April 1991.
42. "Diluted Magnetic Semiconductor," Meeting of the Solid State Sciences Committee of the National Academy of Sciences, presented by J.K. Furdyna, Washington, DC, October 15, 1991.
43. "Magnetic Semiconductor Films: Properties and Applications," Workshop on Thin Film Technology for the 21st Century, Northwestern University, August 2, 1991, presented by J.K. Furdyna.

44. "Magnetic Semiconductors," Lecture series at International School on Magnetism, Bialowierza, Poland, June 17 and 18, 1991, presented by J.K. Furdyna.
45. "The Semiconductor Blue Laser," Solid State Seminar, Institute of Physics of the Polish Academy of Sciences, Warsaw, Poland, June 11, 1991, presented by J.K. Furdyna.
46. "Stimulated Emission and Exciton Confinement at Blue-green Wavelengths in ZnSe/ZnCdSe Quantum Well Structures," IBM T. J. Watson Research Center, Yorktown Heights, New York, August 1991. Presented by N. Samarth.
47. "New II-VI and Diluted Magnetic Semiconductor Heterostructures: Opportunities for Novel Physics and Applications," Riber Users Meeting, Austin, Texas, September 1991. Presented by N. Samarth.
48. "Stimulated Emission and Exciton Confinement at Blue-green Wavelengths in ZnSe/ZnCdSe Quantum Well Structures," Amoco Research Corporation, Naperville, Illinois, September 1991. Presented by J.K. Furdyna, H. Luo, and N. Samarth.
49. "Spin Organization in Magnetic Semiconductor Quantum Structures," Bellcore, Red Bank, New Jersey, September 1991. Presented by N. Samarth.
50. "Spin Organization in Magnetic Semiconductor Quantum Structures," General Colloquium, Center for Electronic and Electro-optic Materials, SUNY, Buffalo, New York, November 1991. Presented by N. Samarth.
51. "Spin-dependent Localization in Magnetic Quantum Wells," Condensed Matter Seminar, Pennsylvania State University, University Park, Pennsylvania, February 1992. Presented by N. Samarth.
52. "Static and Dynamic Spin Organization in Magnetic Semiconductor Quantum Structures," XXI International School of Physics of Semiconductor Compounds, Jaszowiec, Poland, May 1992. Presented by N. Samarth.
53. "Magnetic Semiconductor Heterostructures: From 3D to 2D Magnetism," Introductory School on Physics of 2D Systems, Jaszowiec, Poland, May 1992. Presented by N. Samarth.
54. "The Blue Semiconductor Laser," Am. Phys. Soc. Meeting, May 20-22, 1992, Chicago, IL. Presented by J.K. Furdyna.
55. "Strain-engineered Magnetic Phenomena in MnSe/ZnTe Superlattices", 1993 APS March meeting, Seattle, WA. Presented by T.M. Giebultowicz.

56. "II-VI-based DMS heterostructures", French-American Workshop on II-VI and III-V Semiconductor Compounds, Chicago, IL, Oct. 9, 1992. Presented by M. Dobrowolska.
57. "II-VI-based semiconductor blue laser", Physics Colloquium, Purdue University, Feb. 4, 1993. Presented by J.K. Furdyna.
58. "Growth and optical properties of II-VI semiconductor nanostructures", Physics Colloquium, Brooklyn College CUNY, April, 1993. Presented by H. Luo.

Invited talks (for 2002)

1. "Ferromagnetic III-Mn-V Semiconductors: Challenges and Opportunities," J.K. Furdyna, Symposium on the Application of Neutron Scattering Methods to Nanoscience, Argonne National Laboratory, Argonne, IL, March 28-30, 2002.
2. "Ferromagnetic III-Mn-V Semiconductors: Manipulation of Magnetic Properties by Annealing, Extrinsic Doping, and Multilayer Design," J.K. Furdyna, International School on the Physics and Applications of Semiconductor Compounds, Jaszowiec, Poland, June 10-14, 2002.
3. "Coherent superposition of electric- and magnetic-dipolespin-slip transitions in zinc-blende semiconductors," J.K. Furdyna and M. Dobrowolska, Symposium in Honor of Prof. Emmanuel Rashba, Cambridge, MA, June 20-22, 2002.
4. "Ferromagnetic III-Mn-V Semiconductors: Manipulation of Magnetic Properties by Annealing, Extrinsic Doping, and Multilayer Design," J.K. Furdyna, 11th Seoul International Symposium on Semiconductors and their Applications, Jeju, Korea, August 20-23, 2002.
5. "Ferromagnetic III-Mn-V Semiconductors: New Issues and Opportunities," Spintronics Workshop, Michigan State University, East Lansing, MI, October 5, 2002.
6. "Magnetic Proximity Effects Occurring at (II-Mn-V)/(III-Mn-V) Interfaces," J.K. Furdyna, 3rd International Workshop on Advances in Growth and Characterization of II-VI Heterostructures, Wuerzburg, Germany, October 9-11, 2002.
7. Honorary Doctorate Lecture, Warsaw University, Warsaw, Poland, October 14, 2002.
8. "II-VI-based Self-Organized Quantum Structures: Formation Dynamics and Electronic Properties," J.K. Furdyna and M. Dobrowolska, Annual Meeting of the European Materials Research Society, Zakopane, Poland, October 14-18, 2002.

Invited talks (for 2003)

1. “Mechanisms limiting the Curie temperature in GaMnAs,” Invited Talk, T. Wojtowicz, W.L. Lim, X. Liu, M. Dobrowolska, J.K. Furdyna, K.M. Yu, and W. Walukiewicz, APS March Meeting, Austin, Texas, March 3-7, 2003.
2. “Growth and properties of ferromagnetic $\text{In}_{1-x}\text{Mn}_x\text{Sb}$ alloys,” Invited Talk, T. Wojtowicz, W.L. Lim, X. Lim, G. Cywinski, M. Kutrowski, L.V. Titova, K. Yee, M. Dobrowolska, J.K. Furdyna, K.M. Yu, W. Walukiewicz, G.B. Kim, M. Cheon, X. Chen, S.M. Wang, H. Luo, I. Furgaftman, and J.R. Meyer, 11th International Conference on Narrow Gap Semiconductors, NGS11, Buffalo, New York, June 16-20, 2003.
3. “Mechanisms limiting the Curie temperature in GaMnAs,” Invited Talk, T. Wojtowicz, W.L. Lim, X. Liu, M. Dobrowolska, J.K. Furdyna, K.M. Yu, W. Walukiewicz, I. Furgaftman and J.R. Meyer, International Conference and School on Semiconductor Spintronics and Quantum Information Technology, Spintech II, Brugge, Belgium, August 4-8, 2003.

Invited talks (for 2004)

1. “Electronic Effects on the Growth and Composition of Ferromagnetic $\text{III}_{1-x}\text{Mn}_x\text{V}$ semiconductors,” International Conference on Low-Dimensional Semiconductor Structures, Mautendorf, Austria, February 15-21, 2004.
2. “Magnetic Anisotropy in Ferromagnetic III-Mn-V Semiconductors: Issues and observations,” Invited Talk at the Annual Meeting of the German Physical Society, Regensburg, Germany, March 7-12, 2004.
3. “Electronic Effects on the Growth and Composition of Ferromagnetic $\text{III}_{1-x}\text{Mn}_x\text{V}$ semiconductors,” University of Michigan, Materials Engineering Seminar, April 2, 2004.
4. “Controlling ferromagnetic properties of ultra-thin $\text{Ga}(1-x)\text{Mn}(x)\text{As}$ films by remote p-type doping,” Invited Talk at Argonne Workshop on Nanomagnetism, Argonne, IL, May 4, 2004.
5. “Fermi Level Effects on Mn Incorporation in Modulation-Doped Ferromagnetic $\text{III}_{1-x}\text{Mn}_x\text{V}$ Heterostructures,” Invited Talk at the International Conference on Nanospintronics Design and Realization (ICNDR2004), Kyoto, Japan, May 24-28, 2004.
6. Invited Overview on Ferromagnetic Semiconductors at the Gordon Conference on Defects in Semiconductors, New London, New Hampshire, July 18-23, 2004.
7. “Magneto-optical study of nonmagnetic quantum dots coupled to a magnetic semiconductor quantum well,” Invited Talk at the Annual Meeting of the

European Materials Research Society (E-MRS), Warsaw, Poland, September 5-11, 2004.

8. "Coupled Magnetic Quantum Dots," Colloquium at the Institute of Physics, Polish Academy of Sciences, Warsaw, Poland, September 16, 2004.
9. "Spintronics and Spin-Photonics in InAs/GaSb-Based Heterostructures," Spins in Semiconductor Program Review of the Defense Advanced Research Programs Agency, San Francisco, CA, October 24-29, 2004.

Invited talks (for 2005)

1. "Ferromagnetic Resonance Studies of Dilute Magnetic Semiconductors," Invited Talk at March Meeting of the American Physical Society, Los Angeles, CA, 03/21/05-03/25/05.
2. "Coupled II-VI semiconductor quantum dots: manipulation of spin polarization by inter-dot exchange interaction," Invited Talk, with M. Dobrowolska and S. Lee at 4th International Workshop on Advances in II-VI Semiconductors, Wuerzburg, Germany, 07/18/05-07/20/05.
3. "Inter-Dot spin Exchange Interaction in Coupled II-VI Semiconductor Quantum Dots," Invited Talk with S. Lee and M. Dobrowolska at 12th International Conference on II-VI Compounds, Warsaw, Poland, 09/12/05-09/16/05.
4. "Electron paramagnetic resonance study of spin-spin interactions in strongly-coupled II(1-x)Mn(x)VI magnetic semiconductors," contributed talk at the Conference on Magnetism and Magnetic Materials, San Jose, CA, 10/03/05-11/03/05.
5. "Effects Limiting the Formation of Ferromagnetic III_{1-x}Mn_xV Alloys by Epitaxial Growth," Invited Talk at Annual Meeting of the American Vacuum Society, 10/30/05-11/03/05.
6. "Controlling the Easy Axis of Magnetization in Ferromagnetic III_{1-x}Mn_xV Semiconductors," Invited Talk at International Symposium on Structure and Dynamics on the Nanometer Scale, Duisburg-Essen, Germany, 11/10/05-11/13/05.

Invited talks (for 2006)

1. “In search of ferromagnetic semiconductors with a high Curie temperature,” Invited Talk at the French - U.S. Workshop on Spin Electronics, June 12, 2006, St. Pierre de Chartreuse, France.
2. “The effect of electronic parameters on fabrication of ferromagnetic semiconductors,” Invited Talk at “Spins in Solids” Conference, Charlottesville, VA, June 19, 2006.
3. “Ferromagnetic semiconductors for spintronic applications,” Invited Talk at The International Workshop on Nanostructured Materials, Jeju, Korea, August 23, 2006.
4. “Optically-generated multi-spin entanglement in semiconductor quantum wells,” Invited Talk at the 6th International conference on Light-Matter Coupling in Nanostructures, Magdeburg, Germany, September 28, 2006.
5. “Ferromagnetic semiconductor nanostructures: candidates for new type of non-volatile magnetic memories,” Invited talk at International Conference on Nano-electronics, Gyeonngju, Korea, October 23, 2006.

Invited talks (for 2007)

1. “Making Semiconductors Ferromagnetic,” Spring Meeting of the Materials Research Society, San Francisco, 04/11/07.
2. “Limits in Achieving Room Temperature Ferromagnetism in Semiconductors,” presentation at Meeting of the Panel on U.S.-Polish Committee on Scientific Collaboration, Warsaw Polytechnic, Warsaw, Poland.
3. “Ferromagnetic Semiconductor: an Interface of Magnetism and Semiconductor Physics,” International Workshop on Spintronics, Tbilisi, Georgia, 10/22/07.

Recent Colloquia and Seminars (since 1981)

1. "Spin-Spin Exchange Interaction in Diluted Magnetic Semiconductors," Physics Colloquium, Bell Telephone Laboratories, Murray Hill, New Jersey, April 14, 1981.
2. "Magnetoplasma Effects in Narrow-Gap Semiconductors," Physics Colloquium, Ecole Normale Superieure, Paris, France, May 18, 1981.
3. "Electrical and Optical Properties of Diluted Magnetic Narrow-Gap Semiconductors," Solid State Physics Seminar, Martin Marietta Laboratories, Baltimore, Maryland, June 10, 1981.
4. "Electrical and Optical Properties of Diluted Magnetic Semiconductors," Solid State Physics Seminar, University of Maryland, July 23, 1981.
5. "Far-Infrared Magnetoplasma Effects in Narrow Gap Semiconductors," Solid State Physics Seminar, University of Maryland, July 30, 1981.
7. "Diluted Magnetic Semiconductors," Physics Seminar, McMaster University, Hamilton, Ontario, November 4, 1981.
8. "Diluted Magnetic Semiconductors," Physics Seminar, University of Sherbrooke, Sherbrooke, Quebec, November 26, 1981.
9. "Electrical and Optical Properties of Diluted Magnetic Semiconductors," University of Montreal, Montreal, December 8, 1981.
10. "Electrical, Optical, and Magnetic Properties of Diluted Magnetic Semiconductors," Physics Seminar, National Research Council of Canada, Ottawa, December 15, 1981.
11. "Electrical, Optical, and Magnetic Properties of Diluted Magnetic Semiconductors," National Magnet Laboratory Colloquium Series, M.I.T., Cambridge, MA, March 29, 1982.
12. "Electrical, Optical, and Magnetic Properties of Diluted Magnetic Semiconductors," Physics Colloquium, Worcester Polytechnic Institute, Worcester, MA, March 31, 1982.
13. "Donors and Acceptors in Diluted Magnetic Semiconductors," Instituto Venezolano de Investigaciones Cientificas, Caracas, Venezuela, June 16, 1982.
14. "Magnetic Semiconductors," DARPA Materials Research Council Workshop, La Jolla, July 13-17, 1982.
15. "EPR and Microwave Magneto-Optics in Diluted Magnetic Semiconductors," Solid State Physics Seminar, Purdue University, September 29, 1982.

16. "How Magnetic Fields can Expand a Wave Function," Solid State Theory Journal Club Workshop, Physics Department, Purdue University, October 4, 1982.
17. "Diluted Magnetic Semiconductors," Physics Colloquium, Northwestern University, November 17, 1982.
18. "Diluted Magnetic Semiconductors: An Interface of Semiconductor Physics and Magnetism," Greater Washington Solid State Colloquium, presented at the University of Maryland, College Park, MD, May 5, 1983.
19. "Diluted Magnetic Semiconductors: An Interface of Semiconductor Physics and Magnetism," Physics Colloquium at Argonne National Laboratory, Argonne, IL, May 16, 1984.
20. "Electrical Magnetic, and Optical Properties of Diluted Magnetic Semiconductors," Solid State Physics Seminar, Harvard University, March 8, 1985.
21. "Diluted Magnetic Semiconductors," Physics Colloquium, North Carolina State University, Raleigh, NC, April 15, 1985.
22. "Diluted Magnetic Semiconductors: An Interface of Semiconductor Physics and Magnetism," Physics Colloquium, University of Notre Dame, Notre Dame, IN, April 24, 1985.
23. "Physics and Technology of Diluted Magnetic Semiconductors," *Frontiers-in-Science* Colloquium Series, Minneapolis-Honeywell, Bloomington, MN, July 23, 1985.
24. "The Effect of Photon Momentum on Electron Spin Resonance in Solids," Physics Colloquium, North Carolina State University, Raleigh, NC, August 19, 1985.
25. "Basic Science and Technology of Diluted Magnetic Semiconductors," a lecture series presented in the Physics Department, North Carolina State University, Raleigh, NC, August 20, 21, and 22, 1985.
26. "Helicon-Excited Electron Paramagnetic Resonance," Physics Seminar, University of Notre Dame, October 10, 1985.
27. "Observation of Time Reversal Symmetry in Spin Resonance in Solids", Physics Colloquium, Northwestern University, March 11, 1987.
28. "Device Opportunities for Diluted Magnetic Semiconductors," Eastman Kodak Company, Rochester, NY, December 15, 1987.

29. "Diluted Magnetic Semiconductors: an interface of Semiconductor Physics and Magnetism," Physics Colloquium, Goshen college, Goshen, IN, February 17, 1988.
30. "Diluted Magnetic Semiconductors and their Applications," Honeywell, Bloomington, MN, December 8, 1988.
31. "Diluted Magnetic Semiconductors," Minneapolis Chapter of IEEE on Magnetic, Minneapolis, MN, December 8, 1988.
32. "Diluted Magnetic Semiconductors and their Device Application," Distinguished Scientist Colloquium Series, For Research Laboratories, Dearborn, MI, February 17, 1989.
33. "Diluted Magnetic Semiconductors: an Interface of Semiconductor Physics and Magnetism," Physics Colloquium at State University of New York, Buffalo, NY, November 17, 1988.
34. "Electronic and Magnetic Properties of Diluted Magnetic Semiconductor Thin Films and Multilayers," Solid State Physics Seminar, Purdue University, W. Lafayette, IN, April 21, 1989.
35. "Iron-Based Narrow Gap and Zero-Gap Semiconductors," Solid State Seminar, San Diego State University, April 27, 1989.
36. "Diluted Magnetic Semiconductor Thin Films and Multilayers," Solid State Physics Seminar, University of Nebraska, Lincoln, NE, June 27, 1989.
37. "Diluted Magnetic Semiconductor Thin Films and Multilayers," Solid State Physics Seminar, Solar Energy Research Institute, Golden, CO, June 30, 1989.
38. "Semimagnetic Thin Films and Superlattices," Solid State Physics Seminar, Institute of Physics of the Polish Academy of Sciences, Warsaw, Poland, July 20, 1989.
39. "Diluted Magnetic Semiconductors and their Layered Structures," Condensed Matter and Surface Sciences Seminar, Ohio University, Athens, OH, October 19, 1989.
40. "Diluted Magnetic Semiconductors and Their Device Applications," Physics Colloquium, National Research Council of Canada, Ottawa, Canada, November 3, 1989.
41. "Spin dynamics in a diluted Heisenberg NN antiferromagnet on a HCP lattice: $Zn_{1-x}Mn_xSe$," T.M. Giebultowicz, J.A. Fernandez-Baca, R.M. Nicklow, J.K. Furdyna, and U. Debska, J. Applied Phys. (Abstract).

42. "Onset of helimagnetism in weakly strained epitaxial FCC antiferromagnet $\text{Cd}_{1-x}\text{Mn}_x\text{Se}$," T.M. Giebultowicz, V. Nunez, N. Samarth, H. Luo, and J.K. Furdyna, J. Appl. Phys. (Abstract).
43. "Magnetic Ordering in Diluted Magnetic Semiconductors," Colloquium, Naval Research Laboratory, presented by J.K. Furdyna in December 1990.
44. "Novel Optical and Magnetic Phenomena in Diluted Magnetic Semiconductor Superlattices and Quantum Wells," Colloquium, Department of Electrical and Computer Engineering, University of Missouri, Columbia, Missouri, presented by N. Samarth in June 1990.
45. "Recent Developments in II-VI and Magnetic Semiconductor Heterostructures," IBM T. J. Watson Research Center, Yorktown Heights, New York, presented by N. Samarth in October 1990.
46. "Strain, Dimensionality and Dilution Effects in Epitaxial FCC Antiferromagnets," Solid State Seminar, Department of Physics, University of Notre Dame, Indiana, presented by N. Samarth in November 1990.
47. "Quasi-2D Confinement of Excitons and Magnetic Polarons in Wide-Gap Semiconductor Quantum Wells," Colloquium, Department of Physics, University of Notre Dame, Indiana, presented by N. Samarth in March 1991.
48. "Exciton Confinement and Stimulated Emission in Wide-gap II-VI Semiconductor Quantum Well Structures," Colloquium, Center for Electronic and Electro-optic Materials, State University of New York, Buffalo, New York, presented by N. Samarth in April 1991.
49. "The Semiconductor Blue Laser," Solid State Seminar, Institute of Physics of the Polish Academy of Sciences, Warsaw, Poland, June 11, 1991, presented by J.K. Furdyna.
50. "Electronic Effects Determining the Formation of Ferromagnetic III_{1-x}MnxV Alloys During Epitaxial Growth", Physics Colloquium, Ohio University, Athens, Ohio, 09/29/2005.
51. "Making Semiconductors Ferromagnetic: Challenges and Opportunities," Physics Colloquium, Virginia Tech, Blacksburg, VA, April 7, 2006.
52. "Ferromagnetic semiconductors and their device applications," Physics Colloquium, Adam Mickiewicz University, Poznan, Poland, September 20, 2006.
53. "Magnetic Semiconductor Spintronics: Opportunities and Challenges," Physics Colloquium, Korea University, Seoul, Korea, October 26, 2006.
54. "Making Semiconductors Ferromagnetic: Challenges and Opportunities," Physic Colloquium, University of North Carolina, Chapel Hill, NC, November 16, 2006,.

55. "Spin effects in semiconductors," Physics Colloquium, University of British Columbia, Vancouver, BC, November 28, 2006,.
56. "Ferromagnetic semiconductors: candidates for new type of non-volatile magnetic memory," Seminar, Microsoft Corporation, Seattle, WA, December 1, 2006.
57. "The effect of unintended consequences in scientific discovery," Public Lecture, University of Washington, Seattle, WA, December 1, 2006.
58. "The Physics of Ferromagnetic Semiconductors," Physics Colloquium, Wayne State University, 02/02/07.
59. "Ferromagnetic Semiconductors: Opportunities and Challenges," Physics Colloquium, Purdue University, 05/11/07.
60. "Physics and Technology of II-VI Semiconductor Alloys," solid State Seminar, Department of electrical Engineering, Arizona State University.
61. "Electronic Effects in the Growth of GaMnAs," Condensed Matter Seminar, Department of Physics, University of Notre Dame, 12/07/07.

Recent Contributed Papers at Professional Meetings (since 1982)

1. "Investigation of the Annealing Effects in Bridgman-grown HgTe using Modulation Spectroscopy," P.M. Amirtharaj, F.H. Pollak, and J.K. Furdyna, Am. Phys. Soc. Meeting, March 8-12, 1982, Dallas (presented by P. M. Amirtharaj).
2. "Electric Dipole Excited Spin-Flip Resonance in Oriented HgSe," A. Witowski, M. Dobrowolska, and J.K. Furdyna, Am. Phys. Soc. Meeting, March 8-12, 1982, Dallas (presented by J.K. Furdyna).
3. "Transport Properties of $\text{Cd}_{0.9}\text{Mn}_{0.1}\text{Se}$," J.R. Anderson, W.B. Johnson, D.R. Stone, and J.K. Furdyna, Am. Phys. Soc. Meeting, March 8-12, 1982, Dallas (presented by J. R. Anderson).
4. "Magneto-Far-Infrared Transmission of $\text{Cd}_{0.9}\text{Mn}_{0.1}\text{Se}$," M. Dobrowolska, A. Witowski, J.K. Furdyna, T. Ichiguchi, and H.D. Drew, Am. Phys. Soc. Meeting, March 8-12, 1982, Dallas (presented by M. Dobrowolska).
5. "Microwave Faraday Rotation Measurements of EPR in $\text{Cd}_{1-x}\text{Mn}_x\text{Te}$ under Conditions of Extreme Line Broadening," R.E. Kremer and J.K. Furdyna, Am. Phys. Soc. Meeting, March 21-25, 1983, Los Angeles, Abstract BK 4 (presented by J.K. Furdyna).
6. "D- Levels in $\text{Cd}_{0.9}\text{Mn}_{0.1}\text{Se}$," T. Ichiguchi, H.D. Drew, and J.K. Furdyna, Am. Phys. Soc. Meeting, March 21-25, 1983, Los Angeles, Abstract BK 5 (presented by H. D. Drew).

7. "Photoresponse in $\text{Cd}_{0.9}\text{Mn}_{0.1}\text{Se}$ at Submillimeter Wavelengths," M. Leung, T. Ichiguchi, H.D. Drew, and J.K. Furdyna, Am. Phys. Soc. Meeting, March 21-25, 1983, Los Angeles, Abstract BK 6 (presented by H. D. Drew).
8. "Far-Infrared Magneto-Optics of $\text{Cd}_{1-x}\text{Mn}_x\text{Se}$ in the Vicinity of $1s \rightarrow 2p$ Transition," M. Dobrowolska, J.K. Furdyna, H.D. Drew, and T. Ichiguchi, Am. Phys. Soc. Meeting, March 21-25, 1983, Los Angeles, Abstract BK 8 (presented by M. Dobrowolska).
9. "Temperature Dependence of the Electron Spin Resonance in $\text{Cd}_{0.9}\text{Mn}_{0.1}\text{Se}$," H.A. Sayad, T. Ichiguchi, H.D. Drew, and J.K. Furdyna, Am. Phys. Soc. Meeting, March 21-25, 1983, Los Angeles, Abstract BK 9 (presented by T. Ichiguchi).
10. "Selection Rules for Electric-Dipole-Excited Spin-Flip Resonance in Oriented HgSe," M.H. Weiler, M. Dobrowolska, A.M. Witowski, and J.K. Furdyna, Am. Phys. Soc. Meeting, March 21-25, 1983, Los Angeles, Abstract GI 9 (presented by M. Weiler).
11. "Electron Paramagnetic Resonance Linewidths in Diluted Magnetic Semiconductors: $\text{Cd}_{1-x}\text{Mn}_x\text{Te}$," D.J. Webb, S.M. Bhagat, and J.K. Furdyna, 29th Conf. of Magnetism and Magnetic Materials, Pittsburgh, PA, November 8-11, 1983 (presented by S. M. Bhagat).
12. "Polarization Dependent Raman Scattering in HgTe," P.M. Amirtharaj, K.K. Tiong, F.H. Pollak, and J.K. Furdyna, Am. Phys. Soc. Meeting, March 26-30, 1984, Detroit, MI, Abstract DJ1 (presented by P. M. Amirtharaj).
13. "Submillimeter Magneto-Optics of $\text{Cd}_{0.9}\text{Mn}_{0.1}\text{Se}$ Single Crystal," H.D. Drew, V. Goldman, T. Ichiguchi, and J.K. Furdyna, Am. Phys. Soc. Meeting, March 26-30, 1984, Detroit, MI, Abstract EQ-5 (presented by H. D. Drew.)
14. "Dynamic Random Fields in Diluted Magnetic Semiconductors: $\text{Cd}_{1-x}\text{Mn}_x\text{Te}$," H.A. Sayad, S.M. Bhagat, and J.K. Furdyna, Am. Phys. Soc. Meeting, March 26-30, 1984, Detroit, MI, Abstract EQ-8 (presented by S. M. Bhagat).
15. "Monte Carlo Simulation of the Magnetic Properties of Diluted Magnetic Semiconductors," T. Giebultowicz and J.K. Furdyna, Am. Phys. Soc. Meeting, March 26-30, 1984, Detroit, MI, Abstract EQ-9 (presented by A. Franciosi).
16. "Surface and Interface Properties of $\text{Hg}_{1-x}\text{Mn}_x\text{Se}$," A. Franciosi, R. Reifenberger, and J.K. Furdyna, 1984 U.S. Workshop on the Physics and Chemistry of HgCdTe, May 15-17, 1984, San Diego, CA (presented by A. Franciosi).
17. "Raman Characterization of $\text{Hg}_{0.8}\text{Cd}_{0.2}\text{Te}$ and Related Materials," P.M. Amirtharaj, K.K. Tiong, P. Parayanthal, F.H. Pollak, and J.K. Furdyna, 1984 U.S. Workshop on the Physics and Chemistry of HgCdTe, May 15-18, 1984, San Diego, CA (presented by F. H. Pollak).

18. "Raman Scattering in the Narrow Gap Alloy $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$," P.M. Ammiritharaj, K.K. Tiong, P. Parayanthal, F.H. Pollak, and J.K. Furdyna, 17th Int. Conf. on the Physics of Semiconductors, San Francisco, CA, August 6-10, 1984.
19. "Faraday Effect in Diluted Magnetic Semiconductors: $\text{Zn}_{1-x}\text{Mn}_x\text{Te}$," D.U. Bartholomew, J.K. Furdyna, and A.K. Ramdas, Am. Phys. Soc. Meeting, March 25-29, 1985, Baltimore, MD, Abstract AH5 (presented by D.U. Bartholomew).
20. "Inversion Asymmetry and Magneto-Optical Selection Rules in n-type Zinc Blende Semiconductors," S. Gopalan, J.K. Furdyna, and S. Rodriguez, APS Meeting, March 25-29, 1985, Baltimore, MD, Abstract KQ4 (presented by S. Gopalan).
21. "Interference of Electric Dipole and Magnetic Dipole Interactions in Conduction Electron Spin Resonance in InSb," Y.-F., Chen, M. Dobrowolska, J.K. Furdyna, and S. Rodriguez, APS Meeting, March 25-29, 1985, Baltimore, MD, Abstract KQ7 (presented by J.K. Furdyna).
22. "High Density Photo-Excited Free Carrier Spin Relaxation Processes in Wurtzite Semiconductors CdSe and $\text{Cd}_{1-x}\text{Mn}_x\text{Se}$," M.R. Junnarkar, R.R. Alfano, and J.K. Furdyna, APS Meeting, March 25-29, 1985, Baltimore, MD, Abstract KQ9 (presented by M. R. Junnarkar).
23. "Superexchange in Semimagnetic Semiconductors," A. Lewicki, J. Spalek, J.K. Furdyna, and R.R. Galazka, Int. Conf. on Magnetism (ICM'85), San Francisco, CA, August 26-30, 1985.
24. "Optical Determination of the Antiferromagnetic Exchange Constant Between Nearest-Neighbor Mn^{++} Ions in $\text{Zn}_{1-x}\text{Mn}_x\text{Te}$," R.L. Aggarwal, S.N. Jasperson, P. Bacia, and J.K. Furdyna, APS Meeting, March 31-April 4, 1986, Las Vegas, Nevada, Abstract AU5.
25. "Electron Paramagnetic Resonance in CdMnTe, CdMnSe and CdMnS," N. Samarth and J.K. Furdyna, APS Meeting, March 31-April 4, 1986, Las Vegas, Nevada, Abstract AU7.
26. "Neutron Diffraction Study of $\text{Zn}_{0.45}\text{Mn}_{0.55}\text{Se}$," T. M. Giebultowicz, J.J. Rhyne, J.K. Furdyna, and U. Debska, APS Meeting, March 31-April 4, 1986, Las Vegas, Nevada, Abstract AU13.
27. "Influence of Mn^{2+} Ions on Bound States of Carriers in Wurtzite Semiconductors: $\text{Cd}_{1-x}\text{Mn}_x\text{Se}$," M.R. Junnarkar, R.R. Alfano, and J.K. Furdyna, APS Meeting, March 31-April 4, 1986, Las Vegas, Nevada, Abstract AU18.
28. "Electronic Structure of New Narrow-Gap Ternary Semiconductors," A. Franciosi, A. Wall, C. Caprile, R. Reifengerger, and J.K. Furdyna, APS Meeting, March 31-April 4, 1986, Las Vegas, Nevada, Abstract JU2.

29. "Non-Reciprocal Optical Devices Based on Diluted Magnetic (Semimagnetic) Semiconductors," J. Krasinski, P. Papanestor, D.F. Heller, and J.K. Furdyna, CLEO '86 Conference, June 9-12, 1986, San Francisco, CA.
30. "Raman Scattering by Magnetic Excitations in $Cd_{1-x}Co_xSe$ and $Cd_{1-x}Fe_xSe$ ", E.K. Suh, D.U. Bartholomew, J.K. Furdyna, U. Debska, A.K. Ramdas, and S. Rodriguez, APS Meeting, New York, March 1987.
31. "Spin Dynamics in $Zn_{0.3}Mn_{0.7}Te$ ", T.M. Giebultowicz, J.J. Rhyne, W.Y. Ching, D.L. Huber, J.K. Furdyna, and W. Minor, APS Meeting, New York, March 1987.
32. Superhyperfine Structure in the ESR Spectrum of Divalent Manganese in Magnetically Dilute Zinc Selenide, S.A. Marshall, D.R. Yoder-Short, Y.N. Zhang, and J.K. Furdyna, 35th Midwest Solid State Conference, University of Notre Dame, Notre Dame, IN, October 19-20, 1987.
33. "Far Infrared (FIR) Magneto-absorption in In-doped CdTe Epitaxial Layer," H. Luo, M. Dobrowolska, Z. Yang, J.K. Furdyna, R.L. Harper, and J.F. Schetzina, March Meeting of the American Physical Society, New Orleans, Louisiana, March 21-25, 1988, Abstract C11-2.
34. "Electron Paramagnetic Resonance in $Cd_{1-x-y}Mn_xFe_ySe$," S. Rajagopalan, N. Samarth, and J.K. Furdyna, March Meeting of the American Physical Society, New Orleans, Louisiana, March 21-25, 1988, Abstract F16-9.
35. "EPR and Spin Dynamics in Diluted Magnetic Semiconductors," N. Samarth and J.K. Furdyna, March Meeting of the American Physical Society, New Orleans, Louisiana, March 21-25, 1988, Abstract G17-3.
36. "Preparation and Characterization of Single-Crystal n-type $Cd_{1-x}Mn_xTe$ Platelets," L.-X. Li, J.K. Furdyna, E.-K. Suh, Y.R. Lee, R.G. Alonso, and A.K. Ramdas, March Meeting of the American Physical Society, New Orleans, Louisiana, March 21-25, 1988, Abstract J11-5.
37. "Electric Field Effects in HgTe-based Quantum Wells," Z. Yang, and J.K. Furdyna, March Meeting of the American Physical Society, New Orleans, Louisiana, March 21-25, 1988, Abstract J13-2.
38. "Magnetic Resonances in Magnetite (Fe_3O_4) Spheres," S. Rajagopalan, and J.K. Furdyna, March Meeting of the American Physical Society, New Orleans, Louisiana, March 21-25, 1988, Abstract R22-10.
39. "Magnetic Susceptibility of Co-based Diluted Magnetic Semiconductors", A. Lewicki, A.I. Schindler, J.K. Furdyna, and W. Giritat, 36th Midwest Solid State Conf., Purdue Univ., W. Lafayette, IN, October 10-11, 1988.

40. “Optical Absorption Studies in $Zn_{1-x}Mn_xSe$ and $Zn_{1-x}Mn_xS$ ”, J.E. Morales, J.F. MacKay, B.I. Wang, W.M. Becker, U. Debska, J.W. Richardson, W. Giriat, and J.K. Furdyna, 36th Midwest Solid State Conf., Purdue Univ., W. Lafayette, IN, October 10-11, 1988.
41. Lattice Dynamics and Photoluminescence of $AgGaSe_2$ and $AgGaS_2$ ”, R.G. Alonso, E.K. Suh, A.K. Ramdas, and J.K. Furdyna, 36th Midwest Solid State Conf., Purdue Univ., W. Lafayette, IN, October 10-11, 1988.
42. “Faraday Effect and Birefringence in $Cd_{1-x}Mn_xSe$ ”, D.U. Bartholomew, E. Oh, A.K. Ramdas, J.K. Furdyna, and U. Debska, 36th Midwest Solid State Conf., Purdue Univ., W. Lafayette, IN, October 10-11, 1988.
43. “Interband Faraday Effect in $Cd_{1-x}Mn_xSe$ ”, E. Oh, D.U. Bartholomew, A.K. Ramdas, J.K. Furdyna, and U. Debska, 36th Midwest Solid State Conf., Purdue Univ., W. Lafayette, IN, October 10-11, 1988.
44. “Far Infrared Magnetoabsorption in p-type $Hg_{1-x}Mn_xTe$ in the hopping regime”, T. Wojtowicz, M. Dobrowolska, and J.K. Furdyna, 1989 March Meeting of the American Physical Society, St. Louis, MO, March 20-24, 1989.
45. “Electron Paramagnetic Resonance in $Zn_{1-x}Mn_xTe$, $Zn_{1-x}Mn_xSe$ and $Zn_{1-x}Mn_xS$ ”, S. Rajagopalan, and J.K. Furdyna, 1989 March Meeting of the American Physical Society, St. Louis, MO, March 20-24, 1989.
46. “Magnetic exchange in $Zn_{1-x}Co_xS$ and $Zn_{1-x}Co_xSe$ ”, T.M. Giebultowicz, P. Klosowski, J.J. Rhyne, T.J. Udovic, U. Debska, J.K. Furdyna, and W. Giriat, 1989 March Meeting of the American Physical Society, St. Louis, MO, March 20-24, 1989.
47. “Neutron diffraction in $Cd_{1-x}Mn_xSe$ epilayers”, P. Klosowski, T.M. Giebultowicz, J.J. Rhyne, N. Samarth, H. Luo, and J.K. Furdyna, 1989 March Meeting of the American Physical Society, St. Louis, MO, March 20-24, 1989.
48. “Molecular Beam Epitaxy of $CdSe$ on [100] $GaAs$ ”, N. Samarth, H. Luo, J.K. Furdyna, S.B. Qadri, Y.R. Lee, N. Otsuka, and A.K. Ramdas, 1989 March Meeting of the American Physical Society, St. Louis, MO, March 20-24, 1989.
49. “MBE Growth and Properties of $Cd_{1-x}Mn_xSe$ and $Cd_{1-x}Zn_xSe$ on [100] $GaAs$ ”, N. Samarth, H. Luo, J.K. Furdyna, S.B. Qadri, Y.R. Lee, A.K. Ramdas, and N. Otsuka, 1989 March Meeting of the American Physical Society, St. Louis, MO, March 20-24, 1989.

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