

Publications

1. An abstract Cauchy Kovalevska theorem in Gevrey classes, Symposia Math (VII) INDAM, Acad. Press, 1971 (with F. Trèves)
2. New proofs and generalizations of theorems of existence and uniqueness for Goursat problems, *Applic. Anal.*, 1972
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5. A method of determining unknown rate constants in chemical reactions in the presence of diffusion, *Math BioSci* 9, 1970 (with J R Cannon and D Filmer)
6. A numerical experiment for the determination of kinetic rate constants in the presence of diffusion, *Math Biophysics* 34, 1972 (with J R Cannon)
7. Experimental curves and rates of change from piecewise parabolic fits, *Agronomy Journal* 64, 1972 (with D Nofziger, L Ahuja, and D Swartzendruber)
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9. Determining unknown coefficients in a nonlinear heat conduction problem, *SIAM JAP*, 3, 1973 (with J R Cannon)
10. Determination of the conductivity of an isotropic medium, *JMAA*, 48, 1974 (with J R Cannon)
11. An approximate solution to the Cauchy problem for Laplace's equation, *SIAM J Num Anal*, 14 (3) 1977 (with J R Cannon)
12. Determination of unknown coefficients in parabolic operators from over specified initial and boundary data, *Jour Heat Transfer*, 1978 (with J R Cannon)
13. Some asymptotic boundary behavior of solutions of nonlinear parabolic initial boundary value problems, *JMAA* 68 (2), 1979 (with J R Cannon)
14. An inverse problem for a nonlinear diffusion equation, *SIAM JAP*, 1980 (with J R Cannon)
15. A mathematical treatment of the initial stages of drying of a soil column, *Jour of SSSA*, 1980 (with H Gardner and D Zachmann)
16. An inverse problem for an unknown source term in a heat equation, *JMAA*, 75 (2) 1980 (with J R Cannon)
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21. Inverse and identification problems associated with flow in porous media, *Proc Int Conf on ill posed problems*, 1981 (with D Zachmann)
22. Weak solutions to parabolic partial differential equations with coefficients that depend on ... , *JDE*, 42 (3) 1981 (with J R Cannon)

23. Identification of soil hydraulic properties from experimental discharge data, Soil Science, 1982 (with A Klute and D Zachmann)
24. An inverse problem for an unknown source term in a wave equation, SIAM JAP, 43 (3) 1983 (with J R Cannon)
25. Boundary behavior and monotonicity estimates for solutions to nonlinear diffusion equations, Rocky Mtn J Math, 15,(4) 1985
26. Unicity in an inverse problem for an unknown source term in a reaction diffusion equation, JDE, 59 (2) 1985 (with W Rundell)
27. Partial Differential Equations, Schaum's Outline Series, McGraw-Hill Publishing Co. 1986 (with D Zachmann)
28. Inverse problems for parabolic partial differential equations, ISNM 77, Inverse Problems, Birkhauser, 1986
29. Design of an experiment for the determination of a coefficient in a nonlinear diffusion equation, Int J Eng Sci, 25 (8) (with J R Cannon)
30. Applied Partial Differential Equations, Harper and Row Publishing Co., 1989, (with D Zachmann)
31. Unknown ingredient inverse problems and trace type functional differential equations, Inverse Problems in Partial Differential Equations SIAM 1990
32. Trace type functional differential equations and the determination of unknown hydraulic properties of soils, Transport in Porous Media, 6 1991 (with J R Cannon and K Steube)
33. Identifying an unknown time dependent coefficient in a nonlinear heat equation, Progress in Nonlinear Differential Equations, Lloyd, Ni, Peletier and Serrin, eds, Birkhauser Boston, 1992 (with J R Cannon)
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37. Indirect determination of hydraulic properties of porous media, Int Series of Numerical Mathematics, vol 114, Birkhauser 1993 (with J R Cannon)
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40. An inverse problem for the hydraulic properties of a porous medium, Proc. Groundwater Modeling Conference, 1994
41. Monotonicity and invertibility of coefficient to data mappings, SIAM JMA, 26 (6) 1995
42. Parameter Identification and Inverse Problems in Hydrology, Geology and Ecology, Gottlieb and DuChateau eds, Kluwer Academic Publishers, 1996
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44. An inverse problem for nonlinear source terms, Bol. Soc. Mat. Mexicana 3 (3) 1997 (with J R Cannon)

45. An inverse problem for the hydraulic properties of porous media, SIAM JMA 28 (3), 1997
46. Structural identification of an unknown source term in a heat equation, Inverse Problems, 14, 1998 (with J R Cannon)
47. Analytical model for aquifer response incorporating distributed pumping induced stream leakage, Ground Water, 40(4) 2002 (with G Fox and D Durnford)
48. Identification of spatially dependent coefficients in partial differential equations, Dynamics of Continuous, Discrete and Impulsive Systems, ser A: Mathematical Analysis, 10, 2003 (with A Badran)
49. A continuous flow method for rapid measurement of soil hydraulic properties I, Experimental Considerations, Vadose Zone Journal 1 (2), 2003 (with G Butters)
50. Analysis of an adjoint problem approach to the identification of an unknown diffusion coefficient, Inverse Problems 20 (2) 2003, (with R Thelwell and G Butters)
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53. Exact solution for the two-phase non-equilibrium mass transfer of air sparging, submitted to Water Resources Research 2007, (with Osama Ogahtani and James Warner)
54. The Relative-Biologic-Effectiveness versus Linear-Energy-Transfer curve as an output-input relation for linear cellular systems, to appear in, Mathematical BioSciences & Engineering ,2008, (with Dr Quoc Luu)
55. On a simplified Analytical Model for Acousto-Optic Modulation submitted to Optics Letters, 2009,(with Joseph Paul, Socrates Dokos)