

Avner Friedman
Professor of Mathematics
Ohio State University
Email: afriedma@math.ohio-state.edu

BIBLIOGRAPHY

1. *On the mean value theorem.* Bull. Res. Counc. Israel, Vol. 6A, (1956), 47--49.
2. *Mean values and polyharmonic polynomials.* Michigan Math. , Vol. 4 (1957), 67--74.
3. *Bilinear integrals of polyharmonic functions and of analytic functions.* Michigan Math. J., Vol. 4 (1957), 77--84.
4. *On n -metaharmonic functions and harmonic functions of infinite order.* Proc. Amer. Math. Soc., Vol. 8 (1957), 223--229.
5. *On classes of solutions of elliptic linear partial differential equations.* Proc. Amer. Math. Soc., Vol. 8 (1957), 418--427.
6. *On the properties of a singular Sturm-Liouville equation determined by its spectral functions.* Michigan Math. J., Vol. 4 (1957), 137--145.
7. *Classes of solutions of linear systems of partial differential equations of parabolic type.* Duke Math. J., Vol. 24 (1957), 433--442.
8. *On n -metacaloric functions.* Proc. Amer. Math. Soc., Vol. 8 (1957), 770--776.
9. *Oscillatory solutions of nonlinear autonomous differential equations or order higher than two.* Duke Math. J., Vol. 24 (1957), 561--566.
10. *On two theorems of Phragmen-Lindelof for linear elliptic and parabolic differential equations of the second order.* Pacific J. Math., Vol. 7 (1957), 1563--1575.
11. *On the regularity of the solutions of nonlinear elliptic and parabolic systems of partial differential equations.* J. Math. and Mech., Vol. 7 (1958), 43--59.
12. *Uniqueness properties in the theory of differential operators of elliptic type.* J. Math. and Mech., Vol. 7 (1958), 61--67.
13. *Linear partial differential systems with an additional differential equation at one point.* J. Math. and Mech., Vol. 7 (1958), 173--190.
14. *Interior estimates for parabolic systems of partial differential equations.* J. Math. and Mech., Vol. 7 (1958), 393--417.
15. *Liouville's theorem for parabolic equations of the second order with constant coefficients.* Proc. Amer. Math. Soc., Vol. 9 (1958), 272--277.
16. *Boundary estimates for second order parabolic equations and their applications.* J. Math. and Mech., Vol. 7 (1958), 771--791.
17. *On quasi-linear parabolic equations of the second order.* J. Math. and Mech., Vol. 7 (1958), 793--809.
18. *Remarks on the maximum principle for parabolic equations and its applications.* Pacific J. Math., Vol. 8 (1958), 201--211.
19. *Convergence of solutions of parabolic equations to a steady state.* J. Math. and Mech., Vol. 8 (1959), 57--76.
20. *Generalized heat transfer between solids and gases under nonlinear boundary conditions.* J. Math. and Mech., Vol. 8 (1959), 161--183.

21. *Asymptotic behavior of solutions of parabolic equations.* J. Math. and Mech., Vol. 8 (1959), 387--392.
22. *On the uniqueness of the Cauchy problem for parabolic equations.* Amer. J. Math., Vol. 81 (1959), 503--511.
23. *Free boundary problems for parabolic equations I: Melting of solids.* J. Math. and Mech., Vol. 8 (1959), 499--517.
24. *Parabolic equations of the second order.* Trans. Amer. Math. Soc., Vol. 93 (1959), 509--530.
25. *Free boundary problems for parabolic equations II: Condensation and evaporation of a liquid drop.* J. Math. and Mech., Vol. 9 (1960), 19--66.
26. *Free boundary problems for parabolic equations III: Dissolution of a gas bubble in liquid.* J. Math. and Mech., Vol. 9 (1960), 327--345.
27. *Mildly nonlinear parabolic equations with application to flow of gases through porous media.* Archive Rat. Mech. and Anal., Vol. 5 (1960), 238--248.
28. *On quasi-linear parabolic equations of the second order II.* J. Math. and Mech., Vol. 9 (1960), 539--558.
29. *Remarks on Stefan-type free boundary problems for parabolic equations.* J. Math. and Mech., Vol. 9 (1960), 885--903.
30. *A new proof and generalizations of the Cauchy-Kowaleski theorem.* Trans. Amer. Math. Soc., Vol. 98 (1961), 1--20.
31. *A strong maximum principle for weakly subparabolic functions.* Pacific J. Math., Vol. 11 (1961), 175--184.
32. *Simplifying the structure of second order partial differential equations.* Trans. Amer. Math. Soc., Vol. 99 (1961), 303--307.
33. *Local isometric imbedding of Riemannian manifolds with indefinite metric.* J. Math. and Mech., Vol. 10 (1961), 625--649.
34. *On fundamental solutions of elliptic equations.* Proc. Amer. Math. Soc., Vol. 12 (1961), 533-537.
35. *Asymptotic behavior of solutions of parabolic equations of any order.* Acta. Math., Vol. 106 (1961), 1--43.
36. *Function-theoretic characterization of Einstein spaces and harmonic spaces.* Trans. Amer. Math. Soc., Vol. 101 (1961), 240--258.
37. *The wave equation for differential forms.* Pacific J. Math., Vol. 11 (1961), 1267--1279.
38. *A new proof and generalizations of the Cauchy-Kowalewski theorem to nonanalytic and to non-normal systems.* Symposia in Pure Mathematics, Vol. 4 (1961), 115--119.
39. (with W. Littman) *Bodies for which harmonic functions satisfy the mean value property.* Trans. Amer. Math. Soc., Vol. 102 (1962), 147--166.
40. (with W. Littman) *Functions satisfying the mean value property.* Trans. Amer. Math. Soc., Vol. 102 (1962), 167--180.
41. *Mixed problems for hyperbolic systems.* Archive Rat. Mech. and Anal., Vol. 10 (1962), 180--188.
42. *Cauchy problem in several time variables.* J. Math. and Mech., Vol. 11 (1962), 859--889.
43. *A difference-differential scheme for the general Cauchy problem.* J. Math. and Mech., Vol. 11 (1962), 891--905.
44. *Regularity of fundamental solutions for hyperbolic equations.* Archive Rat. Mech. and Anal., Vol. 11 (1962), 62--96.

45. (with W. Littman) *Partially characteristic boundary problems for hyperbolic equations.* J. Math. and Mech., Vol. 12 (1963), 213--224.
46. *Existence of smooth solutions of the Cauchy problem for differential systems of any type.* J. Math. and Mech., Vol. 12 (1963), 335--374.
47. *On integral equations of Volterra type.* J. d'Analyse Math., Vol. 11 (1963), 381--413.
48. *Optimal control for hereditary processes.* Archive Rat. Mech. and Anal., Vol. 15 (1964), 396--416.
49. *Entire solutions of partial differential equations with constant coefficients.* Duke Math. J., Vol. 31 (1964), 235--240.
50. *Uniqueness of solutions of ordinary differential inequalities in Hilbert space.* Archive Rat. Mech. and Anal., Vol. 17 (1964), 353--357.
51. *Isometric imbedding of Riemannian manifolds in Euclidean spaces.* Review Modern Physics, Vol. 37 (1965), 201--203.
52. *Integral representation of even positive definite functions.* Ann. Polon. Math., Vol. 16 (1965), 267--283.
53. *Periodic behavior of solutions of Volterra integral equations.* J. d'Analyse Math., Vol. 15 (1964), 287--303.
54. *On the Cousin problems.* Bull. Amer. Math. Soc., Vol. 71 (1965), 737--741.
55. *Solvability of the first Cousin problem and vanishing of higher cohomology groups for domains which are not domains of holomorphy.* Bull. Amer. Math. Soc., Vol. 71 (1965), 742--746.
56. *Remarks on nonlinear parabolic equations.* Proc. Sympos. Appl. Math., Vol. 17 (1965), 3--23.
57. *Weak Levi conditions in several complex variables.* Bull. Amer. Math. Soc., Vol. 71 (1965), 908--912.
58. *Differentiability of solutions of ordinary differential equations in Hilbert space.* Pacific J. Math., Vol. 16 (1966), 267--271.
59. *Solvability of the first Cousin problem and vanishing of higher cohomology groups for domains which are not domains of holomorphy II.* Bul. Amer. Math. Soc., Vol. 72 (1966), 505--507.
60. (with M. Shinbrot) *Volterra integral equations in Banach space.* Trans. Amer. Math. Soc., Vol. 126 (1967), 131--179.
61. *Asymptotic behavior of solutions of parabolic differential equations and of integral equations, differential equations, and dynamical systems.* Academic Press, New York (1967), 409--426.
62. *Optimal control for parabolic equations.* J. Math. Anal. and Appl., Vol. 19 (1967), 479--491.
63. *Optimal control in Banach spaces.* J. Math. Anal. and Appl., Vol. 19 (1967), 35--55.
64. (with M. Shinbrot) *The initial value problem for the linearized equations of water waves.* J. Math. and Mech., Vol. 17 (1967), 107--180.
65. *On some inequalities and their application to the Cauchy problem.* Symposium on Inequalities, Academic Press, N.Y. (1967), 119--126.
66. *Boundary behavior of solutions of variational inequalities for elliptic operators.* Archives Rat. Mech. and Anal., Vol. 27 (1968), 95--107.
67. *Singular perturbations for partial differential equations.* Archive Rat. Mech. and Anal., Vol. 29 (1968), 289--303.

68. *The Stefan problem in several space variables.* Trans. Amer. Math. Soc., Vol. 133 (1968), 51--87.
69. *One dimensional Stefan problems with non-monotone free boundary.* Trans. Amer. Math. Soc., Vol. 133 (1968), 89--114.
70. (with M. Shinbrot) *Nonlinear eigenvalue problems.* Acta Math., Vol. 121 (1968), 77--125.
71. *Optimal control in Banach space with fixed end-points.* J. Math. Anal. Appl., Vol. 24 (1968) 161--181.
72. *Differential games of pursuit in Banach space.* J. Math. Anal. Appl., Vol. 25 (1969), 93--113.
73. *Singular perturbation for the Cauchy problem and for boundary value problems.* J. Dif. Eq., Vol. 5 (1969), 226--261.
74. *Monotonicity of solutions of Volterra integral equations in Banach space.* Trans. Amer. Math. Soc., Vol. 138 (1969), 129--148.
75. (with M. Shinbrot) *The initial value problem for the linearized equations of water waves, II.* J. Math. and Mech., Vol. 12 (1969), 1177--1193.
76. *Linear quadratic differential games with non-zero sum and with N players.* Archive Rat. Mech., Anal., Vol. 34 (1969), 165--187.
77. *Nonlinear eigenvalue problems. Studies in Applied Math. Advances in Differential and Integral Equations,* SIAM, Philadelphia (1970), 9--13.
78. *On the definition of differential games and the existence of value and saddle points.* J. Diff. Eq., Vol. 7 (1970), 69--91.
79. *Existence of value and of saddle point for differential games of pursuit and evasion.* J. Diff. Eq., Vol. 7 (1970), 92--110.
80. *Existence of value and of saddle point for differential games of survival.* J. Diff. Eq., Vol. 7 (1970), 111--125.
81. *Optimal play for a class of differential games with fixed duration.* J. D'Analyse Math., Vol. 13 (1970), 113--131.
82. *Differential games with restricted phase coordinates.* J. Diff. Eq., Vol. 8 (1970), 934--162.
83. *Free boundary problems for parabolic equations.* Bull, Amer. Math. Soc., Vol. 76 (1970), 934--941.
84. *Computation of saddle points for differential games of pursuit and evasion.* Archive Rat. Mech. Anal., Vol. 40 (1970), 79--119.
85. *Lectures on differential games, differential games and related topics.* North-Holland, Amsterdam (1971), 83--107.
86. (with Z. Schuss) *Degenerate evolution equations in Hilbert space.* Trans. Amer. Math. Soc., Vol. 161 (1971), 401--427.
87. *Stochastic differential games.* J. Diff. Eq., Vol. 11 (1972), 79--108.
88. *Stochastic differential games.* Optimization Techniques, Academic Press (1972), 299--307.
89. *Comparison theorems for differential games I.* J. Diff. Eq., Vol. 12 (1972), 162--172.
90. *Comparison theorems for differential games II.* J. Diff. Eq., Vol. 12 (1972), 396--416.
91. *Limit behavior of solutions of stochastic differential equations.* Trans. Amer. Math. Soc., Vol. 170 (1972), 359--384.

92. *Upper and lower values of differential games.* J. Diff. Eq., Vol. 12 (1972), 462-473.
Correction, same Journal, Vol. 14 (1973), 395--396.
93. *Stability and angular behavior of solutions of stochastic differential equations.* Stability and Stochastic Dynamical Systems, Lecture Notes in Mathematics, No. 294, Springer-Verlag, Berlin (1972), 14--20.
94. *Probabilistic methods in partial differential equations.* Israel J. Math., Vol. 13 (1972), 56--64.
95. *Existence of extended value for differential games of generalized pursuit-evasion.* J. Diff. Eq., Vol. 13 (1973), 172--181.
96. *The asymptotic behavior of the first eigenvalue of a second order elliptic operator with a small parameter in the highest derivatives.* Indiana U. Math. J., Vol. 22 (1973), 1005--1015.
97. *Bounded entire solutions of elliptic equations.* Pacific J. Math., Vol. 44 (1973), 497--507.
98. *The Cauchy problem for first order partial differential equations.* Indiana U. Math. J., Vol. 23 (1973), 27--40.
99. *Uniqueness for the Cauchy problem for degenerate parabolic equations.* Pacific J. Math., Vol. 46 (1973), 131--147.
100. *Remarks on differential games of survival.* J. Diff. Eq., Vol. 14 (1973), 121--128
101. *Stochastic games and variational inequalities.* Archive Rat. Mech. and Anal., Vol. 51 (1973), 321--346.
102. (with M. A. Pinsky) *Asymptotic behavior of solutions of linear stochastic differential equations.* Trans. Amer. Math. Soc., Vol. 181 (1973), 1--22.
103. *Regularity theorems for variational inequalities in unbounded domains and applications to stopping time problems.* Archive Rat. Mech. and Anal., Vol. 52 (1973), 134--160.
104. *Wandering out to infinity of diffusion processes.* Trans. Amer. Math. Soc., Vol. 184 (1973), 185--203.
105. (with M. A. Pinsky) *Asymptotic stability and spiraling properties of solutions of stochastic equations.* Trans. Amer. Math. Soc., Vol. 186 (1973), 331--358.
106. (with M. A. Pinsky) *Dirichlet problem for degenerate elliptic equations.* Trans. Amer. Math. Soc., Vol. 186 (1973), 359--383.
107. *Differential games.* A.M.S., Providence, R.I., (Regional Conference Series in Math., No. 18), (1974).
108. (with R. J. Elliott and N. J. Kalton) *Alternate play in differential games.* J. Diff. Eq., Vol. 15 (1974), 560--588.
109. (with A. Devinatz and R. Ellis) *The asymptotic behavior of the first real eigenvalue of second order elliptic operators with a small parameter in the highest derivatives, II.* Indiana U. Math. J., Vol. 23 (1974), 991--1011.
110. (with A. Bensoussan) *Nonlinear variational inequalities and differential games with stopping times.* J. Func. Anal., Vol. 16 (1974), 305--352.
111. *Non-attainability of a set by a diffusion process.* Trans. Amer. Math. Soc., Vol. 197 (1974), 245--271.
112. *Fundamental solutions for degenerate parabolic equations.* Ordinary and Partial Differential Equations, Lecture Notes in Mathematics, No. 415, Springer-Verlag, Berlin (1974), 144--148.

113. *Small random perturbations of dynamical systems and applications to parabolic partial differential equations.* Indiana U. Math. J., Vol. 24 (1974), 533--553. Erratum 903.
114. *Fundamental solutions for degenerate parabolic equations.* Acta. Math., Vol. 133 (1974), 171--217.
115. *Parabolic variational inequalities in one-space dimension and smoothness of the free boundary.* J. Func. Anal., Vol. 18 (1975), 151--176.
116. (with R. E. Elliott) *A note on generalized pursuit-evasion games.* SIAM J. Control, Vol. 13 (1975), 105--109.
117. *Stopping time problems and the shape of the domain of continuation.* Lecture Notes in Economics and Mathematical Systems, Vol. 107, Springer-Verlag, Berlin (1975), 559--566.
118. (with D. Kinderlehrer) *A one-phase Stefan problem.* Indiana U. Math. J., Vol. 24 (1975), 1005--1035.
119. *Stochastic differential games with stopping times and variational inequalities.* Proceedings of the International Congress of Mathematicians, Vol. 2 (1975), 339--342.
120. (with R. Jensen) *A parabolic quasi-variational inequality arising in hydraulics.* Ann. Scu. Norm. Sup. Pisa, Vol. 2 (Ser. 4) (1975), 421--468.
121. (with H. Brezis) *Estimates on the support of solutions of parabolic variational inequalities.* Illinois J. Math., Vol. 20 (1976), 82--97.
122. *Analyticity of the free boundary for the Stefan problem.* Archive Rat. Mech. Anal., Vol. 61 (1976), 97--125.
123. *The shape and smoothness of the free boundary for some elliptic variational inequalities.* Indiana U. Math. J., Vol. 25 (1976), 103--118.
124. (with R. Jensen) *Elliptic quasi-variational inequalities and application to a non-stationary problem in hydraulics.* Ann. Scu. Norm. Sup. Pisa, Vol. 3(4) (1976), 47--88.
125. *Two-person nonzero sum stochastic differential games with stopping time.* Symposium on Stochastic Optimization. Mathematical Programming Study 67, North-Holland Pub. Co. (1976), 15--18.
126. *A problem in hydraulics with non-monotone free boundary.* Indiana U. Math. J., Vol. 25 (1976), 577--592.
127. (with D. Kinderlehrer) *A class of parabolic quasi-variational inequalities.* J. Diff. Eq., Vol. 21 (1976), 396--416.
128. *A class of parabolic quasi-variational inequalities II.* J. Diff. Eq., Vol. 22 (1976), 379--401.
129. (with R. F. Anderson) *A quality control problem and quasi-variational inequalities.* Archive Rat. Mech. Anal., Vol. 63 (1977), 205--252.
130. (with A. Bensoussan and H. Brezis) *Estimates on the free boundary for quasi-variational inequalities.* Comm. in P.D.E., Vol. 2 (1977), 297--321.
131. *Optimal stopping and quasi-variational equalities.* Conference on Stochastic Differential Equations and Applications, Academic Press, N. Y. (1977), 5--24.
132. (with A. Bensoussan) *Nonzero sum stochastic differential games with stopping times and new free boundary problems.* Trans. Amer. Math. Soc., Vol. 231 (1977), 275--327.
133. (with A. Torelli) *A free boundary problem connected with non-steady filtration in porous media.* J. Nonlinear Analysis Theory Methods and Applications, Vol. 1 (1977), 503-545. Correction, Vol. 2 (1978), 513--518.

134. (with R. F. Anderson) *Optimal inspections in a stochastic control problem with costly observations*. Math. of Operations Research, Vol. 2 (1977), 155--190.
135. (with A. Devinatz) *The asymptotic behavior of the first eigenvalue of differential operators degenerating on the Boundary*. Trans. Amer. Math. Soc., Vol. 234 (1977), 505--529.
136. (with C. Baiocchi) *A filtration problem in a porous medium with variable permeability*. Ann. Math. Pura. Appl., Vol. 114 (1977), 377--394.
137. (with A. Devinatz) *The asymptotic behavior of the principal eigenvalue of singularity perturbed elliptic operators*. Illinois J. Math., Vol. 21 (1977), 853--870.
138. *Singular perturbations of the principal eigenvalue of elliptic operators, differential equations*. Proceedings from the Uppsala 1977 International Conference on Differential Equations, Uppsala (1977), 82--90.
139. (with A. Devinatz) *Asymptotic behavior of the principal eigenfunction for singularly perturbed Dirichlet problem*. Indiana U. Math. J., Vol. 27 (1978), 143--157.
140. (with M. Robin) *The free boundary for variational inequalities with nonlocal operators*. SIAM J. Control and Optimization, Vol. 16 (1978), 347--372.
141. (with R. Jensen) *Convexity of the free boundary in the Stefan problem and in the dam problem*. Archive Rat. Mech. Anal., Vol. 67 (1978), 1--24.
142. *Quality control and quasi-variational inequalities*. Proceedings of the International Conference on Stochastic Differential Equations. Kyoto, Japan 1976, Kinokuniya Bookstore, Tokyo (1978), 49--56.
143. *One phase moving boundary problems*. Conference on Moving Boundary Problems, Academic Press (1978), 25--40.
144. (with A. Devinatz) *The asymptotic behavior of the solution of a singularly perturbed Dirichlet problem*. Indiana U. Math. J., Vol. 27 (1978), 527--537.
145. (with R. F. Anderson) *Optimal inspections in a stochastic control problem with costly observations II*. Math. of Operations Research, Vol. 3 (1978), 67--81.
146. (with L. A. Caffarelli) *The one phase Stefan problem and the porous medium diffusion equation: Continuity of the solution in n-space dimensions*. Proc. Nat. Acad. Sci., Vol. 75 (1978), 2084.
147. (with L. A. Caffarelli) *Asymptotic estimates for the dam problem with several layers*. Indiana U. Math. J., Vol. 27 (1978), 551--580.
148. (with L. A. Caffarelli) *Regularity of the solution of the quasi-variational inequality for the impulse control problem*. Comm. in P.D.E., Vol. 3 (1978), 745--753.
149. *Optimal stopping for random evolution of multi-dimensional Poisson processes with partial observation, stochastic analysis*. Academic Press (1978), 109--126.
150. (with A. Bensoussan) *On the support of the solution of a system of quasi-variational inequalities*. J. Math. Anal. Appl., Vol. 65 (1978), 660--674.
151. (with L. A. Caffarelli) *The dam problem with two layers*. Archive Rat. Mech. Anal., Vol. 68 (1978), 125--154.
152. (with R. F. Anderson) *Multi-dimensional quality control problems and quasi-variational inequalities*. Trans. Amer. Math. Soc., Vol. 246 (1978), 31--76.
153. (with R. F. Anderson) *Quality control for Markov chains and free boundary problems*. Trans. Amer. Math. Soc., Vol. 246 (1978), 77--94.
154. *On the free boundary of quasi-variational inequality arising in a problem of quality control*. Trans. Amer. Math. Soc., Vol. 246 (1978), 95--110.

155. *Optimal stopping problems in stochastic control*. SIAM Review, Vol. 21 (1979), 71--80.
156. (with L. A. Caffarelli) *Regularity of the solution of the quasi-variational inequality for the impulse control problem, II*. Comm. in P.D.E., Vol. 3 (1979), 279--292.
157. (with L. A. Caffarelli) *Continuity of the temperature in the Stefan problem*. Indiana U. Math. J., Vol. 28 (1979), 53--70.
158. (with L. A. Caffarelli) *The obstacle problem for the biharmonic operator*. Ann. Scu. Norm. Sup. Pisa, Vol. 6(4) (1979), 151--184.
159. *The flow of gas in a porous medium*. Proceeding of the International Meeting on Recent Methods in Nonlinear Analysis, Pitagora Editrice, Bologna (1979), 34--44.
160. *Time dependent free boundary problems*. SIAM Review, Vol. 21(1979), 213--222.
161. (with C. Evans) *The flow of two immiscible fluids in one dimensional porous medium*. J. Diff. Eq., Vol. 31 (1979), 366--291.
162. (with L. A. Caffarelli) *The free boundary in the Thomas-Fermi atomic model*. J. Diff. Eq., Vol. 32 (1979), 335--356.
163. (with L. A. Caffarelli) *The free boundary for elastic-plastic problems*. Trans. Amer. Math. Soc., Vol. 252 (1979), 65--97.
164. (with L. A. Caffarelli) *Continuity of the density of a gas flow in a porous medium*. Trans. Amer. Math. Soc., Vol. 252 (1979), 99--113.
165. (with C. Evans) *Optimal stochastic switching and the Dirichlet problem for the Bellman equation*. Trans. Amer. Math. Soc., Vol. 253 (1979), 365--389.
166. (with L. A. Caffarelli) *Regularity of the free boundary for the one dimensional flow of gas in a porous medium*. Amer. J. Math., Vol. 101 (1979), 1193--1218.
167. (with R. Jensen) *A non-steady flow of liquid in a porous pipe with variational permeability*. J. Diff. Eq., Vol. 34 (1979), 1--24.
168. *Interaction between stochastic differential equations and partial differential equations, stochastic control theory and stochastic differential systems*. Lecture Notes in Control and Information Sciences, Vol. 16, Springer-Verlag, Berlin (1979), 156--171.
169. (with G. A. Pozzi) *The free boundary for elastic-plastic torsion problems*. Trans. Amer. Math. Soc., Vol. 257 (1980), 411--425.
170. (with P. L. Lions) *The optimal strategy in the control problem associated with the Hamilton-Jacobi-Bellman equation*. SIAM J. Control & Optimization, Vol. 18 (1980), 191--198.
171. (with L. A. Caffarelli) *The shape of axisymmetric rotating fluids*. J. Func. Anal. Vol. 35 (1980), 109--142.
172. (with L. A. Caffarelli and G. A. Pozzi) *Reflection methods in the elastic-plastic torsion problem*. Indiana U., Math. J., Vol. 29 (1980), 205--228.
173. *Reinforcement of the principal eigenvalue of an elliptic operator*. Archive Rat. Mech. Anal., Vol. 73 (1980), 1--18.
174. *Quality control and free boundary problems*. Extremal Methods and Systems Analysis, Austin, TX, September 1977. Lecture Notes in Economics and Mathematical Systems, Springer-Verlag (1980), 506--621.
175. *The dam problem with variable permeability, variational inequalities and complimentary conditions*. Eds. Cottle, Gianessi and Lions, J. Wiley, New York (1980), 135--141.

176. *Stochastic control with partial observations, variational inequalities and complimentary conditions.* Eds. Cottle, Gianessi, and Lions, J. Wiley, New York (1980), 143--149.
177. (with L. A. Caffarelli) *Regularity of the free boundary of a gas flow in an n -dimensional porous medium.* Indiana U. Math. J., Vol. 29 (1980), 361--369.
178. (with C. Baiocchi, L. C. Evans, & L. Frank) *Uniqueness for two immiscible fluids in one dimensional porous medium.* J. Diff. Eq., Vol. 36 (1980), 249--256.
179. (with B. Turkington) *Asymptotic estimates for axisymmetric rotating fluid.* J. Func. Anal., Vol. 37 (1980), 136--163.
180. (with L. A. Caffarelli) *A free boundary problem associated with a semilinear parabolic equation.* Comm. in P.D.E., Vol. 5 (1980), 969--981.
181. (with L. A. Caffarelli) *Asymptotic estimates for the plasma problem.* Duke Math. J., Vol. 47 (1980), 705--742.
182. (with B. Turkington) *The oblateness of an axisymmetric rotating fluid.* Indiana U. Math. J., Vol. 29 (1980), 777--792.
183. (with S. Kamin) *The asymptotic behavior of gas in an n -dimensional porous medium.* Trans. Amer. Math. Soc., Vol. 262 (1980), 551--563.
184. (with L. A. Caffarelli) *Reinforcement problems in elasto-plasticity.* Rocky Mountain J. of Math., Vol. 10 (1980), 155--184.
185. (with H. Brezis and L. A. Caffarelli) *Reinforcement problems in elliptic equations and variational inequalities.* Ann. Math. Pure Appl., Vol. 123 (1980), 219--246.
186. *Variational inequalities in sequential analysis.* SIAM J. of Math. Anal., Vol. 12 (1981), 385--397.
187. (with L. A. Caffarelli) *Sequential analysis of several simple hypotheses for a diffusion process and the corresponding free boundary problem.* Pacific J. Math., Vol. 93 (1981), 49--94.
188. (with L. A. Caffarelli and A. Visintin) *A free boundary problem describing transition in a superconductor.* SIAM J. Math. Anal., Vol. 12 (1981), 679--690.
189. (with L. A. Caffarelli and A. Torelli) *The free boundary for a fourth order elliptic operator.* Illinois J. Math., Vol. 25 (1981), 402--422.
190. *Free boundaries in elasto-plasticity.* J. Angew. Math. Mech., Vol. 61 (1981), 1--8.
191. (with L. A. Caffarelli) *Unloading in the elastic-plastic torsion problem.* Vol. 41 (1981), 186--217.
192. (with B. Turkington) *Existence and asymptotic estimates for vortex rings.* Trans. Amer. Math. Soc., Vol. 268 (1981), 1--37.
193. *Stochastic differential equations and application.* C.I.M.E. Stoc. Diff. Eq., Liguore Editore, via Mezzocannone, Napoli (1981), 75--148.
194. (with B. Turkington) *Existence and dimensions of a rotating white dwarf.* J. Diff. Eq., Vol. 42 (1981), 414--437.
195. (with L. A. Caffarelli) *Axially symmetric infinite cavities.* Indiana U. Math. J., Vol. 30 (1982), 135--160.
196. (with H. W. Alt and L. A. Caffarelli) *Asymmetric jet flows.* Comm. Pure App. Math., Vol. 35 (1982), 29--68.
197. (with H. W. Alt and L. A. Caffarelli) *Jet flows with gravity.* Reine Angew. Math., Vol. 331 (1982), 58--103.

198. *Asymptotic behavior for the free boundary of parabolic variational inequalities and applications to sequential analysis.* Illinois J. Math., Vol. 26 (1982), 653--697.
199. (with L. A. Caffarelli and A. Torelli) *The two-obstacle problem for the biharmonic operator.* Pacific J. Math., Vol. 103 (1982), 325--335.
200. *Some problems in sequential analysis, stochastic differential systems.* Springer Lecture Notes in Control and Information Science, No. 43 (1982), 85--93.
201. (with H. W. Alt and L. A. Caffarelli) *Axially symmetric jet flow.* Archive Rat. Mech. and Anal., Vol. 81 (1983), 97--149.
202. (with H. Brezis) *Nonlinear parabolic equations involving measures as initial conditions.* J. Math. Pure et Appl., Vol. 62 (1983), 73--97.
203. *Asymptotic estimates for variational inequalities.* Free Boundary Problems: Theory and Applications, Vol. 2 (ed. by A. Fasano and M. Primecricio) Pitman, London (1983), 658--663.
204. *Axially symmetric cavities in rotational flows.* Comm. P.D.E., Vol. 8 (1983), 949--997.
205. (with L. S. Jiang) *Nonlinear optimal control problems in heat conduction.* SIAM J. Control Optim., Vol. 21 (1983), 940--952.
206. (with T. Vogel) *Cavitation flows in a channel with oscillatory wall.* Nonlinear Anal., Vol. 7 (1983), 1175--1192.
207. (with L. S. Jiang) *A Stefan-Signorini problem.* J. Diff. Eq., Vol. 51 (1984), 213--231.
208. (with D. Phillips) *The free boundary of a semilinear elliptic equation.* Trans. Amer. Math. Soc., Vol. 282 (1984), 153--182.
209. (with E. DiBenedetto) *The ill-posed Hele-Shaw model and the Stefan problem for supercooled water.* Trans. Amer. Math. Soc., Vol. 282 (1984), 183--204.
210. (with H. W. Alt and L. A. Caffarelli) *Jets with two fluids, I.* Indiana U. Math. J., Vol. 33 (1984), 213--247.
211. (with H. W. Alt and L. A. Caffarelli) *Variational problems with two phases and their free boundaries.* Trans. Amer. Math. Soc., Vol. 282 (1984), 431--461.
212. (with H. W. Alt and L. A. Caffarelli) *Jets with two fluids, II.* Indiana U. Math. J., Vol. 33 (1984), 367--391.
213. (with H. W. Alt and L. A. Caffarelli) *A free boundary problem for quasi-linear elliptic equations.* Ann. Scu. Norm. Sup. Pisa, Vol. 11 (1984), 1--44.
214. (with J. Bemelmans) *Analyticity for the Navier-Stokes equations governed by surface tension on the free boundary.* J. Diff. Eqs., Vol. 55 (1984), 135--150.
215. *Nonlinear optimal control for parabolic equations.* SIAM J. Control and Optim., 22 (1984), 805--816.
216. (with D. DiBenedetto) *Nonlinear degenerate parabolic systems.* J. Reine Angew. Math., Vol. 349 (1984), 83--123.
217. (with H. W. Alt and L. A. Caffarelli) *The dam problem with two fluids.* Comm. Pure Appl. Math., Vol. 37 (1984), 601--646.
218. *Free boundary problems in fluid dynamics.* Revue Asterisque Proceeding of the Trento Conference, Vol. 118 (1984), 55--67.
219. (with H. W. Alt and L. A. Caffarelli) *Jets and cavities for compressible fluid.* J. Diff. Eq., Vol. 56 (1985), 82--141.

220. (with D. Yaniro) *Optimal control for the dam problem*. J. Optim. & Applied Math., Vol. 13 (1985), 59--78.
221. (with L. A. Caffarelli) *Regularity of the boundary of the support of a capillary drop on an inhomogeneous plane and related variational problems*. Revista Mat. Iberoamericana, Vol. 1 (1985), 61--84.
222. (with B. McLeod) *Blow-up of positive solutions of semilinear heat equations*. Indiana U. Math. J., Vol. 34 (1985), 425--447.
223. (with L. A. Caffarelli) *Convexity of solutions of semilinear elliptic equations*. Duke Math. J., Vol. 52 (1985), 431--457.
224. (with C. M. Elliott) *Analysis of a model of percolation in a gently sloping sand-bank*. SIAM Math. Anal., Vol. 16 (1985), 941--954.
225. (L. A. Caffarelli) *A nonlinear evolution problem associated with electropaint process*. SIAM J. Math. Anal., Vol. 16 (1985), 955--969.
226. (with E. DiBenedetto) *Holder estimates for nonlinear degenerate parabolic systems*. J. Reine Angew. Math., Vol. 357 (1985), 1--22.
227. (with L. A. Caffarelli) *Partial regularity of the zero-set of solutions of linear and superlinear elliptic equations*. J. Diff. Eq., 60 (1985), 420--433.
228. (with L. A. Caffarelli) *Differentiability of the blow-up curve for one dimensional nonlinear wave equations*. Archive Rat. Mech. Anal., Vol. 91 (1985), 83--98.
229. *Periodic behavior for the evolutionary dam problem and related free boundary problems*. „Free Boundary Problem.“ Vol. IV, Pittman, 1985, London. Editors A. Bossavit, A. Damlanian and M. Fremond, 243--247.
230. (with H. W. Alt and L. A. Caffarelli) *Abrupt and smooth separation of free boundaries in flow problems*. Scuol Norm. Sup. Pisa., Vol. 13 (1986), 137--172.
231. (with L. Veron) *Solution singulieres d'equations quasilineaires elliptiques*. C. R. Acad. Sci. Paris, Vol. 302 (1986), 147--150.
232. (with P. E. Souganidis) *Blow-up of solutions of Hamilton-Jacobi equations*. Comm. in P.D.E., Vol. 11 (1986), 397--443.
233. (with C. M. Elliott) *On the contact set of a rigid body partially supported by a membrane*. Nonlinear Analysis, Vol. 10 (1986), 251--276.
234. (with B. McLeod) *Strict inequalities for integrals of decreasingly rearranged functions*. Royal Society of Edinburgh, Vol. 102A (1986), 277--289.
235. (with A. D. Cocker and M. McLeod) *Liquid drop suspended by soap film*. Archive Rat. Mech. Anal., Vol. 93 (1986), 15--44.
236. (with E. DiBenedetto) *Conduction-convection problems with change of phase*. J. Diff. Eqs., Vol. 62 (1986), 129--185.
237. *Optimal control for variational inequalities*. SIAM J. Control Optim., Vol. 24 (1986), 439--451.
238. (with E. DiBenedetto) *Periodic behavior of the evolutionary dam problem and related free boundary problems*. Comm. in P.D.E., Vol. 11 (1986), 1297--1377.
239. (with E. DiBenedetto) *Bubble growth in porous media*. Indiana U. Math. J., Vol. 35 (1986), 573--606.
240. (with M. Sakai) *Characterization of null quadrature domains in R^N* . Indiana U. Math. J., Vol. 35 (1986), 607--610.
241. (with L. A. Caffarelli) *The blow-up boundary for nonlinear wave equations*. Trans. Amer. Math. Soc., Vol. 297 (1986), 223--241.

242. *Monotonic decay of solutions of parabolic equations with non-local boundary conditions.* Quart. Appl. Math., Vol. 44 (1986), 401--407.
243. *Injection of ideal fluid from a slot into a free stream.* Arch. Rat. Mech. Anal., Vol. 94 (1986), 335--361.
244. (with E. DiBenedetto and C. M. Elliott) *The free boundary of a flow in a porous body heated from its boundary.* Nonlinear Analysis, Vol. 10 (1986), 879--900.
245. *Free boundary problems in fluid dynamics;* in Proceedings of Equadiff 6, 1986, J. E. Purkyne University, Dept. of Math. Brno, Czechoslovakia, Edited by J. Vosmansky and M. Zlamal, 7--22.
246. (with B. McLeod) *Blow-up of solutions of nonlinear degenerate parabolic equations.* Archive Rat. Mech. and Anal., Vol. 96 (1986), 55--80.
247. (with L. Veron) *Singular solutions of some quasilinear elliptic equations.* Archive Rat. Mech. Anal., Vol. 96 (1986), 359--387.
248. (with S. Huang and J. Yong) *Bang-bang optimal control for the dam problem.* Appl. Math. and Optim., Vol. 15 (1987), 68--85.
249. *Detection of mines by electric measurements.* SIAM J. Appl. Math., Vol. 47 (1987), 201--212.
250. *Optimal control for parabolic variational inequalities.* SIAM J. Control and Optim, Vol. 25 (1987), 482--497.
251. (with Y. Giga) *A single point blow-up for solutions of semilinear parabolic systems.* J. Faculty Sci. Univ. Tokyo, Sec. IA, Math., Vol. 34 (1987), 65--79.
252. (with K. Hollig) *On the Mesa problem.* J. Math. Anal. Appl., Vol. 123 (1987), 564--571.
253. (with M. Herrero) *Extinction properties of semilinear heat equations with strong absorption.* J. Math. Anal. Appl., Vol. 124 (1987), 530--546.
254. (with A. Lacey) *The blow-up time for solutions of nonlinear heat equations with small diffusion.* SIAM J. Math. Anal., Vol. 18 (1987), 711--721.
255. (with B. Gustafsson) *Identification of the conductivity coefficient in an elliptic equation.* SIAM J. Math. Anal., Vol. 18 (1987), 777--787.
256. (with K. Tintarev) *Boundary asymptotics for solutions of the Poisson-Boltzmann equation.* J. Diff. Eqs., Vol. 69 (1987), 15--38.
257. (with S. Stojanovic) *A free boundary problem associated with icing in a channel.* Nonlinear Analysis, Vol. 11 (1987), 501--526.
258. (with L. A. Caffarelli) *A singular perturbation problem for semiconductors.* Boll. Unione Ital. Mat., (7) 1-B (1987), 409--421.
259. *Blow-up of solutions of nonlinear evolution equations.* In "Directions in Partial Differential Equations," edited by Crandall, Rabinowitz and Turner, Academic Press, 1987, 75--88.
260. (with B. McLeod) *Optimal design of an optical lens.* Archive Rat. Mech. Anal., Vol. 99 (1987), 147--164.
261. *Optimal control for variational inequalities.* Proceedings of Conference on "Nonlinear Parabolic Equations," edited by Boccardo and Tesei, Pittman, 1987, 110--113.
262. (with A. E. Tzarvaras) *A quasilinear parabolic system arising in modeling of catalytic reactors.* J. Diff. Eqs., Vol. 70 (1987), 167--196.
263. (with L. A. Caffarelli) *Asymptotic behavior of solutions of $u_t = (u_m \text{ as } m)$.* Indiana Univ. Math. J., Vol. 36 (1987), 711--728.

264. *Optimal control for free boundary problems in Control Problems for Systems Described by Partial Differential Equations and Applications*, Springer-Verlag, Lasciecka, Triggian, eds., 1987, 56--64.
265. (with S. Huang) *The inhomogeneous dam problem with discontinuous permeability*. Ann. Scu. Norm. Sup. Pisa, Vol. 14 (4) (1987), 49--77.
266. (with L. A. Caffarelli) *Blow-up of solutions of nonlinear heat equations*. J. Math. Anal. Appl., Vol. 129 (1988), 409--419.
267. (with S. Huang and J. Yong) *Optimal periodic control for the two-phase Stefan problem*. SIAM J. Control Optim., Vol. 26 (1988), 23--41.
268. (with K. H. Hoffmann) *Control of free boundary problems with hysteresis*. SIAM J. Control Optim., Vol. 26 (1988), 42--55.
269. (with L. S. Jiang) *Periodic solution for a thermostat control problem*. Comm. in PDE, Vol. 13 (1988), 515--550.
270. (with B. McLeod) *An optical lens for focusing two pairs of points*. Archive Rat. Mech. Anal., Vol. 101 (1988), 57--83.
271. (with A. E. Tzavaras) *Combustion in a porous medium*. SIAM J. Math. Anal., Vol. 19 (1988), 509--519.
272. (with S. Huang) *Asymptotic behavior of solutions of $u_t = (m(u))$ as $m \rightarrow \infty$ with inconsistent initial values*; Analyse Mathématique et Applications, Contributions in honor of J.L. Lions, Gauthier-Villars, 1988, Paris, pp. 165--180.
273. (with J. Friedman, B. McLeod) *Concavity of solutions of nonlinear ordinary differential equations*. J. Math. Anal. Appl., Vol. 131 (1988), 486--500.
274. (with H. Bellout) *Identification problems in potential theory*. Archive Rat. Mech. Anal., Vol 101 (1988), 143--160.
275. *Blow-up of solutions of nonlinear parabolic equations*. in „Nonlinear Diffusion Equations and their Equilibrium States”, edited by Ni, Peletier and Serrin, Vol. 1, pp. 301--318, MSRI Publications, no. 12, Springer-Verlag, 1988.
276. (with A. Lacey) *Blow-up of solutions of semilinear parabolic equations*. J. Math. Anal. Appl., Vol. 132 (1988), 171--186.
277. (with L. Oswald) *The blow-up surface of nonlinear wave equations with small spatial velocity*. Trans. Amer. Math. Soc., Vol. 308 (1988), 349--367.
278. (with L. Oswald) *The blow-up time for higher order semilinear parabolic equations with small leading coefficients*; J. Diff. Eqs., Vol. 75 (1988), 239--263.
279. (with J. Necas) *Systems of nonlinear wave equations with nonlinear viscosity*. Pacific J. Math.
280. (with L.A. Caffarelli) *A model of dislocations and the associated free boundary problem*, Indiana Univ. Math. J., Vol. 37 (1988), 451--479.
281. (with B. Ou) *A model of crystal precipitation*, J. Math. Anal. Appl., Vol. 137 (1989), 550--575
282. (with B. Ou and D. Ross) *Crystal precipitation with discrete initial data*, J. Math. Anal. Appl., Vol. 137 (1989), 576--590.
283. (with M. Vogelius) *Identification of small inhomogeneities of extreme conductivity by boundary measurements: a continuous dependence result*. Archive Rat. Mech. & Anal., Vol. 105 (1989), 299--326.
284. (with B. Hu) *The Stefan problem for a hyperbolic heat equation*. J. Math. Anal. & Appl., Vol 138 (1989), 249--279.

285. (with H. Bellout) *Blow-up estimates for nonlinear hyperbolic heat equation*. SIAM J. Math. Anal., Vol. 20 (1989), 354--366.
286. (with M. Brokate) *Optimal design for heat conduction problems with hysteresis*, SIAM J. Control and Optim., Vol. 27 (1989), 697--717.
287. (with R.A. Romero) *Functional differential equations for the determination of the viscosity function in a rheometer*, Archive Rat. Anal., Vol. 107 (1989), 85--97.
288. (with X. Chen) *A bubble is ideal fluid with gravity*, J. Diff. Eqs., Vol. 81 (1989), 136--166.
289. (with M. Vogelius) *Detection of cracks by boundary measurements*, Indiana Univ. Math. J., Vol. 38 (1989), 527--556.
290. (with M. Vogelius) *Identification of objects of extreme conductivity by boundary measurements*, International Series of Numerical Mathematics, 91 (1989), 135--144.
291. (with F. Bernis) *Higher order nonlinear degenerate parabolic equations*, J. Diff. Eqs., Vol. 83 (1990), 179--206.
292. (with M.A. Herrero) *A nonlocal wave equation arising in combustion theory*, Nonlinear Analysis, Vol. 14 (1990), 93--106.
293. (with C.J. Budd, B. McLeod and A.A. Wheeler) *The space change problem*, SIAM J. Appl. Math., Vol. 50 (1990), 181--198.
294. (with V. Isakov) *On the uniqueness in the inverse conductivity problem with one measurement*, Indiana Univ. Math. J., Vol. 38 (1989), 563--579.
295. (with H. Bellout) *Scattering by stripe grating*, J. Math. Anal. Appl., Vol. 147 (1990), 228--248.
296. (with M. Honig) *On the spread of continuous-time linear systems*, SIAM J. Math. Anal., Vol. 21 (1990), 757--770.
297. (with F. Reitich) *A hyperbolic inverse problem in aerosol modeling*, Archive Rat. Mech. Anal., Vol. 110 (1990), 313--350.
298. (with W. Liu) *A system of partial differential equations arising in electrophotography*, J. Diff. Eqs., Vol. 89 (1991), 272--304.
299. (with X. Chen) *Nonlocal diffusion equation arising in terminally attached polymer chains*, European J. Appl. Math., Vol. 1 (1990), 311--326.
300. (with J. Sprekels) *Steady states of Austenitic-Martensitic domains in the Ginzburg-Landau theory of shape memory alloys*, Continuum Mechanics and Thermodynamics, Vol. 2 (1990), 199--213.
301. (with B. Hu) *A free boundary problem arising in electrophotography*, Nonlinear Analysis, 9 (1991), 729--759.
302. (with J. Bell and A. Lacey) *On solutions to a quasilinear diffusion problem from the study of soft tissue*, SIAM J. Appl. Math., Vol. 51 (1991), 484--493.
303. *Blow-up of solutions of nonlinear heat and wave equations in „Asymptotic Analysis and Numerical Solution of Partial Differential Equations*, H.G. Kaper and M. Garbey, editors, Marcel Dekker, New York, 1991, pp. 217--224.
304. (with X. Chen) *Maxwell's equations in a periodic structure*, Trans. Amer. Math. Soc., Vol. 323 (1991), 465--507.
305. (with V. Barbu) *Optimal design of domains with free boundary problems*. SIAM J. Control Optim., Vol. 29 (1991), 623--637.
306. (with F. Reitich) *On the Stefan problem with small surface tension*, Trans. Amer. Math. Soc., 465--515.

307. (with D. Dobson), *The time-harmonic Maxwell equations in a doubly periodic structure*, J. Math. Anal. Appl., Vol. 166 (1992), 507--528.
308. (with F. Reitich) *Parameter identification in reaction diffusion models*, Inverse Problems, Vol. 8 (1992), 187--192.
309. (with M.H. Herrero) *Extinction and positivity for a system of semilinear parabolic variational inequalities*, J. Math. Anal. Appl., Vol. 167 (1992), 167--175.
310. (with H. Bellout and V. Isakov) *Stability for an inverse problem in potential theory*, Trans. Amer. Math. Soc., Vol. 332 (1992), 271--296.
311. (with P. Knaber) *A transport model with micro- and macro-structure*, J. Diff. Eqs., 98 (1992), 328--354.
312. (with B. Hu), *Homogenization approach to light scattering from polymer-dispersed liquid crystal film*, SIAM J. Appl. Math., Vol. 52 (1992), no. 1, 46--64.
313. (with W. Liu) *An augmented drift-diffusion model arising in semiconductor modeling*, J. Math. Anal. Appl., Vol. 168 (1992), 401--412.
314. (with B. Hu) *The Stefan problem with kinetic condition at the free boundary*, Scuol. Norm. Sup. Pisa, Vol. 19 (4), (1992), 615--636.
315. (with B. Hu), *A free boundary problem arising in superconductor modeling*, Asymptotic Analysis, Vol. 6 (1992), 109--133.
316. (with X. Chen) *A free boundary problem for a nonlinear degenerate elliptic system modeling a thermistor*, Ann. Scu. Norm. Sup. Pisa, Vol. 19 (4) (1992), 615--636.
317. (with B. Hu and J.J.L. Velazquez) *A free boundary problem modeling loop dislocations in crystals*, Archive Rat. Mech. Anal., Vol. 119 (1992), 229--291.
318. (with X. Chen and L.S. Jiang), *Mathematical modeling of semiconductor lasers*, SIAM J. Appl. Math., Vol. 53 (1993), 168--186.
319. (with X. Chen) *The thermistor problem for conductivity which vanishes at large temperatures*, Quart. Appl. Math., Vol. 60 (1993), 101--115.
320. *Free boundary problems arising in processing of semiconductor*, SPIE Proceedings, Vol. 1919, Mathematics in Smart Structures, 1--3 February 1993, Albuquerque, H.T. Banks ed., 336--344.
321. *Scattering of electromagnetic waves*, Delaware, in "Mathematical and Numerical Aspects of Wave Propagation," editors, R. Kleinman, T. Angell, D. Colton, F. Santosa, I. Stakgold, SIAM, Philadelphia (1993), pp. 229--236.
322. (with O. Bruno and F. Reitich), *Asymptotic behavior for a coalescence problem*, Trans. Amer. Math. Soc., Vol. 338 (1993), pp. 133--158.
323. *Free boundary problems arising in industry*, in „*Variational Problems*, A. Friedman and J. Spruck, eds., IMA Volumes in Mathematics and its Applications, Vol. 53 Springer-Verlag, New York, 1993, pp. 1--10.
324. (with J.J.L. Velazquez) *A time dependent free boundary problem modeling the visual image in electrophotography*, Archive Rational Mech. Anal. Vol. 123 (1993), 259--303.
325. (with C. Huang) *Diffusion in network*, J. Math. Anal. Appl. Vol. 183 (1994), 352--384.
326. (with X. Chen and T. Kimura), *Nonstationary filtration in partially saturated porous media*, European J. Appl. Math., 5 (1994), 405--429.
327. *Differential Games in „Handbook of Game Theory* Vol. 2, editors R. J. Aumann and S. Hart, Elsevier (1994), 781--799.

328. (with C. Huang) *Averaged motion of charged particles under their self-induced electric field*, Indiana University Mathematics Journal, 43 (1994), 1167--1225.
329. (with C. Huang and J. Yong) *Effective permeability of the boundary of a domain*, Comm PDE., Vol. 20 (1995), 59--102.
330. (with J. Zhang) *Swelling of a rubber ball in the presence of good solvent*, Nonlinear Analysis, Vol. 25 (1995), 547--568.
331. (with J.J.L. Velazquez) *The analysis of coating flows near the contact line*, J. Diff. Eqs., Vol. 119 (1995), 137--208.
332. (with J.J.L. Velazquez) *The analysis of coating flows in a strip*, J. Diff. Eqs., Vol. 121 (1995), 134--182.
333. (with D. Ross and T. Zhang) *A Stefan problem for reaction-diffusion system*, SIAM J. Math. Anal., Vol. 26 (1995), 1089--1112.
334. (with G. Bao) *Inverse problems for scattering by periodic structure*, Archive Rat. Mech. Anal., Vol. 132 (1995), 49--72.
335. (with Y. Liu) *A free boundary problem arising in magnetohydrodynamic system*, Ann. Scu. Norm. Sup. Pisa, Vol. 22 (Ser. 4) (1995), 375--448.
336. *Nonlinear PDE problems in electrophotography*, First Congress of Nonlinear World, August 1992, Florida, Walter de Gruyter, Berlin (1996), Vol. 1, 13--24.
337. (with B. Hu) *The Stefan problem for multi-dimensional reaction-diffusion system*, SIAM J. Math. Anal., Vol. 27 (1996), 1212--1234.
338. (with Y. Liu) *Propagation of cracks in elastic media*, Rat. Mech. Anal., Vol. 136 (1996), 235--290.
339. (with G. Rossi) *Phenomenological continuum equations to describe case II diffusion in polymeric materials*, Macromolecules, Vol. 30 (1997), 153--154.
340. (with B. Hu and Y. Liu) *A boundary value problem for the Poisson equation with multi-scale oscillating boundary*, J. Diff. Eqs., Vol. 137 (1997), 54--93.
341. (with B. Hu) *A non-stationary multi-scale oscillating free boundary for the Laplace and heat equations*, J. Diff. Eqs., Vol. 137 (1997), 119--165.
342. (with J.J.L. Velazquez) *Liouville type theorems for fourth order elliptic equations in a half space*, Trans. Amer. Math. Soc., Vol. 349 (1997), 2537--2603.
343. (with J.J.L. Velazquez) *Time dependent coating flows in a strip, Part I: The linearized problem*, Trans. Amer. Math. Soc., Vol. 349 (1997), 2981--3074.
344. (with C. Huang) *Averaged motion of charged particles in a curved strip*, SIAM Appl. Math., Vol. 57 (1997), 1557--1587.
345. (with B. Hu) *Head-media interaction in magnetic recording*, Archive Rat. Mech. Anal., Vol. 140, No. 1, (1997), 79-101.
346. (with B. Hu) *Optimal control of chemical vapor deposition reactor*, J. Optimization Theory & Applications, Vol. 97 (1998), 623-644.
347. (with F. Reitich) *Asymptotic behavior of solutions of coagulation-fragmentation models*, Indiana Univ. Math. J., Vol. 47 (1998), 563-591.
348. (with G.A. Chechkin and A.L. Piatinski) *The boundary-value problems in domains with rapidly oscillating boundary*, J. Math. Anal. Appl., 231 (1999), 213-234.
349. (with B. Hu and J.J.L. Velazquez) *Asymptotics for the biharmonic equation near the tip of a crack*, Indiana Univ. Math. J., Vol. 47 (1998), 1327-1395.

350. (with L. Wang and J. A. Cox), *Modal analysis of homogeneous optical wave guides by the boundary integral formulation and the nysrom method*, J. Opt. Soc. Ann. A, 15 (1998), 92-100.
351. (with F. Reitich) *Analysis of a mathematical model for the growth of tumors*, J. Math. Biology,, Vol. 38 (1999), 262-284.
352. (with B. Hu) *A Stefan problem for a protocell model*, SIAM J. Math. Anal., Vol. 30, No. 4 (1999), 912-926.
353. (with S. Cui) *Analysis of a mathematical moel of protocell*. J. Math. Anal. & Appl., Vol 236 (1999), 171-206.
354. (with B. Hu and J.J.L. Velazquez) *The evolution of stress intensity factors in the propagation of cracks in elastic media*. Archive Rat. Mech. Anal., Vol 136 (2000), 235-290.
355. *What is Industrial Mathematics?* Revista de la Real Academia de Ciencias, Rev. R. Acad. Exac. Fis. Nat, Vol. 93 (1999), 179-184.
356. (with S. Cui) *Analysis of a mathematical model of the effect of inhibitors on the growth of tumors*, Math. Biosciences, Vol 164 (2000), 103-137.
357. *Propagation of cracks in elastic media*, ICIAM '99: Proceedings of the 4th International Congress of Industrial & Applied Mathematics, eds. J.M. Ball and J.C.R. Hunt, Oxford University Press, Oxford UK (2000), 63-68.
358. (with M. Fontelos) *Stationary non-Newtonian fluid flows in channel-like and pipe-like domains*, Archive Rat. Mech. Anal., 151 (2000), 1-43.
359. *Free Boundary Problems in Science and Technology*, Notices of AMS, Vol. 47 (2000), 854-861.
360. (with B. Hu and J.J.L. Velazquez) *The evolution of stress intensity factors in propogation of cracks*, European J. Appl. Math., Vol 11 (2000), 453-472.
361. (with B.Hu and J.J.L. Velazquez) *On the Zeros of quotients of Bessel functions*, Chinese Annals of Mathematics, Vol. 21 (2000), 285-96.
362. (with M. Fontelos), *The flow of a class of Oldroyd fluids around a re-entrant corner*, J. Non-Newtonian Fluids, Vol. 95 (2000), 185-198.
363. (with F. Reitich) *Symmetry-breaking bifurcation of analytic solutions to free boundary problems: An application to a model of tumor growth.*, Trans AMS., Vol. 353 (2000), 1587-1634.
364. (with X. Chen) *A free boundary problem arising in a model of wound healing*, SIAM J. Math. Anal., Vol. 32 (2000), 778-800.
365. (with S. Cui) *Analysis of mathematical model of the growth of necrotic tumors*, submitted to J. Math. Analysis & Applications, Vol. 255 (2001), 636-677.
366. (with B.Hu and J.J.L. Velazquez), *A Stefan problem for a protocell model with symmetry-breaking bifurcations of analytic solutions*, Interfaces and Free Boundaries, Vol. 3 (2001), 143-199.
367. (with J.I. Tello), *Head-media interaction in magnetic recording*, J. Diff. Eqs., Vol. 171 (2001), 443-461.
368. (with F. Reitich) *On the existence of spatially patterned dormant malignancies in a model for the growth of non-necrotic tumors*, Mathematical Models & Methods in Applied Sciences, Vol. 11 (2001), 601-625.
369. (with M. Fontelos) *Analysis of the stick-slip problem for non-Newtonian flows*, Comm in PDE, Vol. 26 (2001), 461-536.

370. (with F. Reitich) *Quasi-state motion of a capillary drop, I: The two dimensional case*, J. Diff. Eqs. Vol. 178 (2001), 212-263.
371. (with F. Reitich) *Nonlinear stability of a quasi-static Stefan problem with surface tension: a continuation approach*, Ann. Scuola Norm. Super. Pisa, Vol. 30 (4) (2001), 341-403.
372. (with J.J.L. Velazquez) *A free boundary problem associated with crystallization of polymers in a temperature field*, Indiana Univ. Math. J., Vol. 50 (2001), 1609-1649.
373. (with W. Shen) *A Variational Inequality Approach to Financial Valuation of Retirement Benefits Based on Salary*, Finance & Stochastics, Vol. 6 (2002), 273-302.
374. (with M.A. Fontelos and B. Hu) *Mathematical analysis of a model for the initiation of angiogenesis*, SIAM J. Math. Anal., Vol. 33 (2002), 1330-1355.
375. (with J. I. Tello) *Stability of solutions of chemotaxis equations in reinforced random walk*, J. Math. Anal. App., Vol. 272 (2002), 138-163.
376. (with F. Reitich) *Quasi-static motion of a capillary drop, II: the three-dimensional case*, J. Diff. Eqs., Vol. 186 (2002), 509-557.
377. (with Y. Tao) *Nonlinear stability of the Muskat problem with capillary pressure at the free boundary*, Nonlinear Analysis, Vol. 53 (2003), 45-80.
378. (with B. V. Bazaliy) *A free boundary problem for an elliptic-parabolic system: Application to a model of tumor growth*, Comm. in PDE, Vol. 28 (2003), 627-675.
379. (with S. Cui) *Free boundary problems for a singular system of differential equations: An application to a model of tumor growth*, Trans. AMS, Vol. 355 (2003), 3537-3590.
380. (with S. Cui) *A hyperbolic free boundary problem modeling tumor growth, Interfaces and free boundaries*, Vol. 5 (2003), 159-182.
381. (with B. Bazaliy) *Global existence and stability for an elliptic-parabolic free boundary problem: Application to a model with tumor growth*, Indiana Univ. Math. J., Vol. 52 (2003), 1265-1304.
382. (with Y. Tao) *Analysis of a model of virus that replicates selectively in tumor cells*, J. Math. Biology, Vol. 47 (2003), 391-423.
383. (with M.A. Fontelos) *Symmetry-breaking bifurcations of free boundary problems in three dimensions*, Asymptotic Analysis, Vol. 35 (2003), 187-206.
384. *A hierarchy of cancer models and their mathematical challenges*, Discrete and Continuous Dynamical Systems, Vol. 4 series B (2004), 147-160.
385. (with X. Chen) *A free boundary problem for an elliptic-hyperbolic system: An application to tumor growth*, SIAM J. Math. Analysis, Vol. 35 (2003), 974-986.
386. (with M. Fontelos) *Symmetry breaking bifurcations of charged drops*, Archive Rat. Mech. Anal., Vol. 172 (2004), 267-294.
387. (with G. Lolas) *Analysis of a mathematical model of tumor lymphangiogenesis*, Math. Models & Methods in Appl. Sciences, Vol. 15 (2005), 95-107.
388. *Symmetry-breaking bifurcations for free boundary problems*. In "Contemporary Mathematics:" Nonlinear Partial Differential Equations and Related Analysis, G. Q. Chen, G. Gasper & J. Jerome editors, pp. 153-162, 2005. Amer. Math. Soc. Providence, R. I.
389. *Free boundary problems arising in tumor models*. Rend. Mat. Acc. Lincei Vol. 15 (9) (2005), 161-168.

390. *Introduction to neurons*, in “*Tutorial in Mathematical Biosciences*,” Vol. 1, Mathematical Neuroscience, Springer Verlag, 2005, 1-20.
391. (with A. Borisovich) *Symmetry breaking bifurcations for free boundary problems*, Indiana Univ. Math J., Vol. 54 (2005), 927-947.
392. (with G. Craciun and B. Aguda), *A detailed mathematical analysis of a model that couples the cell cycle and apoptosis*, Mathematical Biosciences and Engineering, Vol 2 (2005), 473-485.
393. (with B. Bazaliy) *The Hele-Shaw problem with surface tension in a half-plane: A model problem*, J. Diff. Eqs., Vol. 216 (2005), 387-483.
394. (with B. Bazaliy) *The Hele-Shaw problem with surface tension in a half-plane*, J. Diff. Eqs., Vol. 216 (2005), 439-469.
395. (with G. Craciun) *A model of intercellular transport of particles in axon*, J. Math. Biology, 51 (2005), 217-246.
396. (with X. Chen and S. Cui) *A hyperbolic free boundary problem modeling tumor growth: Asymptotic behavior*, Trans. Amer. Math. Society, 357 (2005), 4771-4804.
397. *Free boundary problems with surface tension conditions*, Nonlinear Analysis, 63 (2005), 666-671.
398. (with J. J. Tian, G. Fulci, E. A. Chiocca and J. Wang) *Glioma virotherapy: The effects of innate immune suppression and increased viral replication capacity*, Cancer Research, 66 (2006), 2314-2319.
399. *Cancer models and their mathematical analysis*, in Tutorials in Mathematical Biosciences, Vol. 3, Springer-Verlag, 2005, 223-246.
400. (with B.V. Bazaliy, Ya.B. Bazaliy, and B. Hu) *Energy considerations in a model of nematode sperm crawling*. Mathematical Biosciences and Engineering, 2 (2006), 347-370.
401. (with B. Hu) *Bifurcation from stability to instability for a free boundary problem arising in a tumor model*, Archive Rat. Mech. & Anal, 180 (2006), 293-330.
402. (with G. Craciun and A. Brown) *A dynamical system model of transport of neurofilaments in axons*. J. Theoretical Biology, 237 (2006), 316-322.
403. *A free boundary problem for a coupled system of elliptic, hyperbolic, and Stokes equations modeling tumor growth*, Interface and Free Boundaries, Vol. 8 (2006), 247-261.
404. (with B. Hu) *Asymptotic stability for a free boundary problem arising in tumor model*, J. Diff. Eqs., 227 (2006), 598-639.
405. (with B. Hu) *Bifurcation from stability to instability for a free boundary problem modeling tumor growth by Stokes equation*, Math. Anal. & Appl., 327 (2007), 643-664.
406. (with P. Goel and J. Sneyd) *Homogenization of the cell cytoplasm: The calcium bidomain equations*, SIAM Multiscale Modeling and Simulations, Vol. 5 (2006), 1045-1062.
407. (with G. Craciun) *Approximate traveling waves in linear reaction-hyperbolic equations*, SIAM J. Math. Anal., Vol. 38 (2006), 741-758.
408. (with B. Bazaliy and Y. Bazaliy) *One-dimensional free boundary problem for actin-based propulsion of Listeria*, J. Math. Anal. Appl. Vol. 328 (2007), 84-100.
409. (with B. Hu) *Bifurcation for a free boundary problem modeling tumor growth by Stokes equation*, SIAM J. Math. Anal., Vol. 39 (2007), 174-194.
410. (with Y. Wang and B. D. Aguda) *A continuous mathematical model of endothelial layer maintenance and senescence*, Theoretical Biology and Medical Modelling 4:30 (2007), 1-10.

411. (with S. Roy, D. Patel, S. Khanna, G. M. Gordilly, S. Biswas and C. Sen) Genome wise analysis of blood vessels laser captured from human skin and chronic wound-edge tissue, *Proc. Nat. Acad. Sciences*, 104 (2007), 14472-14477.
412. Mathematical analysis and challenges arising from models of tumor growth, *Mathematical Models & Methods in Appl. Sciences*, Vol. 17, Suppl. (2007), 1751-1772.
413. (with B. Hu) *Uniform convergence for approximate traveling waves in linear reaction-hyperbolic system*, *Indiana Univ. Math. J.*, Vol. 56 (2007), 2133-2158.
414. (with B. Hu) Uniform convergence for approximate traveling waves in Linear reaction-diffusion-hyperbolic systems, *Archive Rat. Mech. Anal.* Vol. 186 (2007), 251-274.
415. (with P. Budu-Grajdeanu, R. Schugart, C. Valentine and B. H. Rovin) A mathematical model of venous neointimal hyperplasia formation. *Theoretical Biology & Medical Modeling*, 5:2 (2008), 1-17.
416. (with R. Schugart, R. Zhao, and C. Sen) Wound angiogenesis as function of tissue oxygen tension: A mathematical model. *Proc. Nat. Acad. Science*, (2008), 2628-2633.
417. (with J. Turner and B. Szomolay) A model on the influence of age on immunity to infection with Mycobacterium tuberculosis, *Experimental Gerontology*, accepted.
418. (with X. Chen and B. Hu) A parabolic-hyperbolic quasilinear system, *Comm. PDE*, accepted.
419. (with B. Hu) The role of oxygen in tissue maintenance: mathematical modeling and quantitative analysis. *Math. Model and Methods in App. Sciences*, accepted.
420. (with B. Hu) *Stability and instability of Liapounov-Schmidt and Hopf bifurcations for a free boundary problem arising in a tumor problem*. *Trans. Amer. Math. Soc.*, accepted.
421. A multiscale tumor model, *Interfaces and Free Boundaries*, accepted.
422. (with S. Lim, Y. Kim, S. Reman, D. Simonetti) Blood flow in compliant vessel by the immersed boundary method, submitted.
423. (with B. Dembele and A. A. Yakubo) Malaria model with periodic mosquito birth rate, to be submitted.
424. (with E. Green) The extensional flow of a thin sheet of incompressible, transversally isotropic flow, submitted to *European J. Appl. Math.*
425. Mathematical challenges in biological sciences, to appear.