CONTRIBUTED PAPERS

1. V. Barbu, Sur une equation integrale non-lineaire, Anal.St.Univ. "Al.I.Cuza", X (1964), 61-65.
2. V. Barbu, Operateurs differentiels partiellment hypoelliptiques, Anal.St.Univ. "Al.I.Cuza", XII (1966), 293-301.
3. V. Barbu, Solutions presque-periodiques pour un systeme d'equations lineaires aux derivees partielles, Ricerche di Matematica, XV (1966), 207-222.
4. V. Barbu, Sur la propagation de l'analyticite des solutions des equations differentielles a coefficients constants, Revue Roumaine Math. Pures Appl. 10 (1967), 1419-1423.
5. V. Barbu, Sur la propagation de l'hypoanaliticite des equations a coefficients constants, C.R.Acad.Sci.Paris, 266 (1988), 419-421.
6. V. Barbu, On the regularity of solutions of linear partial differential equations, Anal. St. Univ."Al.I.Cuza", XIV (1968), 321-325.
7. V. Barbu, Partially hypoanalytic distributions and pseudo-differential operators, Atti Acad. Naz. Lincei, vol. XLV (1968), 84-90.
8. V. Barbu, On the regularity of weak solutions of abstract differential equations in Hilbert spaces, Atti Acad. Naz. Lincei, vol. XLV (1968), 129-134.
9. V. Barbu, Les semi-groupes distribution differentiables, C.R. Acad. Sci. Paris, 267 (1968), 875-878.
10. V. Barbu, Ecuatii functionale neliniare in spatii Banach si probleme la limita, Studii si Cercetari Matematice, 20 (1968), 137-164.
11. V. Barbu, On the propagation of hypoanaliticity for solutions of differential equations with constant coefficients, Revue Roumaine Math. Pures Appl., 2 (1969), 157-167.
12. V. Barbu, On local properties of pseudo-differential operators, Acta Scient. Math., XXX (1969), 263-270.
13. V. Barbu, Differentiable distribution semigroups, Annali Scuola Normale Sup. Pisa, vol. XXIII (1969), 413-429.
14. V. Barbu, On the regularity of the weak solutions of abstract differential equations, Osaka J. Math., 6 (1969), 49-56.
15. V. Barbu, Sur la perturbation du generateur d'un semi-groupe non lineaire de contraction, C.R. Acad. Sci. Paris, 268 (1969), 1544-1547.
16. V. Barbu, Weak solutions for nonlinear functional equations in Banach spaces, Annali Mat. Pura Applicata, vol. LXXXVII (1970), 87-110.
17. V. Barbu, A. Cellina, On the surjectivity of multi-valued dissipative mappings, Bolletino Unione Mat. Ital., 5 (1970), 817-826.
18. V. Barbu, Dissipative sets and nonlinear perturbed equations in Banach spaces, Annali Scuola Normale Sup.Pisa, vol. XXVI (1972), 365-390.
19. V. Barbu, Sur un probleme aux limites pour une classe d'equations differentielles nonlineaires abstraites du deuxieme order en t, C.R .Acad. Sci. Paris, 274 (1972), 459-462.
20. V. Barbu, A class of boundary problems for second order abstract differential equations, J. Faculty Science Univ.Tokyo, vol.19 (1972), 295-319.
21. V. Barbu, Continuous perturbations of nonlinear m-accretive operators in Banach spaces, Bolletino Unione Mat. Ital., 6 (1972), 270-278.
22. V. Barbu, S. Grossman, Asymptotic behaviour of linear integro-differential systems, Trans. Amer. Math. Soc., 173 (1972), 277-288.

23. V. Barbu, Regularity properties of some nonlinear evolution equations, Revue Roumaine Math. Pures Appl., 16 (1973), 1503-1514.
24. V. Barbu, On the regularity of solutions of hyperbolic nonlinear equations, Annali Mat. Pura Applicata, vol. XCV (1973), 303-319.
25. V. Barbu, Integro-differential equations in Hilbert space, Anal. St. Univ. "Al. I. Cuza", T. XIX (1973), 365-383.
26. V. Barbu, Existence theorems for a class of two point boundary problems, J. Diff. Equations, vol.17 (1975), 236-257.
27. V. Barbu, Convex control problem of Bolza in Hilbert spaces, SIAM J.Control, 13 (1975), 751-771.
28. V. Barbu, On the control problem of Bolza in Hilbert spaces, SIAM J. Control, 13 (1975), 1062-1076.
29. V. Barbu, Nonlinear Volterra equations in Hilbert space, SIAM J. Math. Anal., 5 (1975), 728-741.
30. V. Barbu, Constrained control problems with convex cost in Hilbert spaces, J. Math. Anal. Appl.,56 (1976), 502-528.
31. V. Barbu, Nonlinear Volterra integro-differential equations in Hilbert spaces, Conferenze Seminario Matematico Bari, 143 (1976).
32. V. Barbu, Convex control problems for linear differential systems of retarded type, Ricerche di Matematica, XXVI (1976), 502-528.
33. V. Barbu, Nonlinear boundary value problems for a class of hyperbolic systems, Revue Roumaine Math. Pures Appl., 22 (1977), 155-168.
34. V. Barbu, On a nonlinear Volterra equation on a Hilbert space, SIAM J. Math. Anal., 8 (1977), 346-355.
35. V. Barbu, Ecuatii neliniare de evolutie pe spatii Hilbert, Analiza neliniara si aplicatii, 115-179, D. Pascali ed., Editura Academiei,Bucuresti 1977.
36. V. Barbu, Hamiltonian systems in a neighborhoud of a saddle point, Trans. Amer. Math. Soc., 245 (1978), 291-307.
37. V. Barbu, Convex control problems and hamiltonian systems on an infinite interval, SIAM J. Control & Optimiz., 16 (1978), 687-702.
38. V. Barbu, M.A. Malik, Semilinear integro-differential equations in Hilbert spaces, J. Math. Anal. Appl., 67 (1979), 452-475.
39. V. Barbu, Existence for nonlinear Volterra equations in Hilbert spaces, SIAM J. Math. Anal., 10 (1979), 552-569.
40. V. Barbu, Degenerate nonlinear Volterra integral equations in Hilbert spaces, Volterra Equations, Lectures Notes in Math., vol.137, S. Londen ed., 2-23, Springer-Verlag, Berlin, 1979.
41. V. Barbu, G. Da Prato, Local existence for a nonlinear operator equations arising in synthesis of optimal control, Numerical Funct. Anal. & Optimiz., 1 (1979), 665-677.
42. V. Barbu, G. Da Prato, Global existence for a nonlinear operator equation arising in synthesis of optimal control, Nonlinear Anal., 4 (1980), 1157-1166
43. V. Barbu, Boundary control problems with convex cost criterion, SIAM J. Control and Optimiz., 18 (1980), 227-254.
44. V. Barbu, Necessary conditions for boundary control problems governed by parabolic variational inequalities, Anal.St.Univ. "Al.I.Cuza", XXVI (1980), 47-66.
45. V. Barbu, Necessary conditions for nonconvex distributed control problems governed by elliptic variational inequalities, J. Math. Anal. Appl., 80 (1981), 566-597.

46. V. Barbu, Necessary conditions for distributed control problems governed by parabolic variational inequalities, SIAM J .Control & Optimiz., 19 (1981), 64-86.
47. V. Barbu, G. Da Prato, Global existence for the Hamilton-Jacobi equations in Hilbert spaces, Annali Scuola Norm. Sup.Pisa, VIII (1981), 257-284.
48. V. Barbu, G. Da Prato, Existence and approximation for stationary Hamilton-Jacobi equations, Nonlinear Anal., 5 (1981), 1213-1224.
49. V. Barbu, G. Morosanu, Existence for a nonlinear hyperbolic system, Nonlinear Anal., 5 (1981), 341-353.
50. V. Barbu, A semigroup approach to an infinite delay equation in Hilbert space, Abstract Cauchy Problems and Functional Differential Equations, Eds. F.Kappel et al., Research Notes in Mathematics 48, Pitman, Boston, London, 1981.
51. V. Barbu, Boundary control problems with nonlinear state equations , SIAM J. Control & Optimiz., 20 (1982), 125-143.
52. V. Barbu, Necessary conditions for control problems governed by nonlinear partial differential equations, Nonlinear Partial Differential Equations, 19-47, College de France Seminar vol. II, Eds. H. Brezis and J.L. Lions, Research Notes in Mathematics, 60, Pitman, Boston, London, 1982.
53. V. Barbu, Invariant manifolds for Hamiltonian systems in Hilbert spaces, Evolution Equations and Their Applications, 1-15, Eds. F. Kappel et al., Research Notes in Mathematics 68, Pitman, Boston, London, 1982.
54. V. Barbu, Optimal feedback controls for a class of nonlinear distributed parameter systems, SIAM J. Control & Optimiz., 21 (1983), 871-894.
55. V. Barbu, Boundary control of some free boundary problems, Control Theory for Distributed Parameter Systems, F. Kappel et al. eds., 45-59, Lectures Notes in Control and Information Sciences, Springer-Verlag, Berlin, Heidelberg, New York, 1983.
56. V. Barbu, A variational inequality modelling the non-Fourier melting of a solid, Anal. St. Univ."Al. I. Cuza", T. XXVIII (1983), 35-42.
57. V. Barbu, G. Da Prato, C. Popa, Existence and uniqueness of the dynamic programming equation in Hilbert space, Nonlinear Anal., 7 (1983), 283-299.
58. V. Barbu, G. Da Prato, Hamilton-Jacobi equations and synthesis of nonlinear control processes in Hilbert spaces, J. Differential Equations, vol. 48 (1983), 350-372.
59. V. Barbu, Necessary conditions for multiple integral problem in the calculus of variations, Math. Annalen, 260 (1983), 175-189.
60. V. Barbu, Optimal feedback controls for semilinear parabolic equations, Mathematical Theories of Optimization, Ed. J.P. Cecconi, 43-70, Lectures Notes in Mathematics 979 (1983), Springer-Verlag, Berlin, Heidelberg, New York.
61. V. Barbu, Solution of the Bellman equation associated with an infinite dimensional stochastic problem, SIAM J. Control & Optimiz., 21 (1983), 531- 550.
62. V. Barbu, The time optimal control problem for parabolic variational inequalities, Applied Math. & Optimiz., 22 (1984), 43-70.
63. V. Barbu, Global existence for Hamilton-Jacobi equations in Hilbert spaces, Revue Roumaine Math. Pures Appl., 29 (1984), 85-101.
64. V. Barbu, The time optimal control of variational inequalities: Dynamic programming and the maximum principle, Recent Mathematical Methods in Dynamic Programming, 1-19,Capuzzo Dolceta ed., Lectures Notes in Math. 1119, Springer-Verlag, 1985.
65. V. Barbu, G. Da Prato, Hamilton-Jacobi equations in Hilbert spaces; variational and semigroup approach, Annali Mat. Pura ed Applicata, 142 (1985), 303-349.

66. V. Barbu, Optimal control for free boundary problems, Conferenze Seminario Matem. Bari, 206 (1985).
67. V. Barbu, A note on a Hamilton-Jacobi equation in Hilbert space, Nonlinear Anal., 9 (1985), 1337-1345.
68. V. Barbu, A semigroup approach to Hamilton-Jacobi equation in Hilbert space, Semigroup Theory and Applications, 9-18, Research Notes in Mathematics 141, Longman-Pitman, Boston, London, 1986.
69. V. Barbu, T. Seidman, Existence for minimization problem in Banach spaces with some applications, J. Math. Anal. Appl., 121 (1987), 96-108.
70. V. Barbu, The time optimal problem for a class of nonlinear systems, Control Problems for Systems Described by Partial Differential Equations, 16-39, I. Lasiecka and R. Triggiani eds., Lecture Notes in Control and Information Science 97, Springer-Verlag, Berlin, New York, 1987.
71. V. Barbu, N. Barron, Bang-bang controllers for an optimal cooling problem, Control and Cybernetics, 16 (1987), 91-102.
72. V. Barbu, N. Barron, R. Jensen, The necessary conditions for optimal control in Hilbert space, J. Math. Anal. Appl., 133 (1988), 151-162.
73. V. Barbu, Approximation of the Hamilton-Jacobi equations via Lie-Trotter product formula, Control Theory and Advanced Technology, 4 (1988), 189-208.
74. V. Barbu, A product formula approach to nonlinear optimal control problems, SIAM J. Control & Optimiz., 29 (1988), 497-520.
75. V. Barbu, A semigroup approach to Hamilton-Jacobi equations in Hilbert spaces, Studia Univ. Babes-Bolyai, Mathematica, XXXIII (1988), 63-78.
76. V. Barbu, Distributed parameter systems, Variational inequalities, Optimal control of variational inequalities, Encyclopedia of Control and Systems, 1182-1186, 5031-5036, 5036-5041, Ed. M. Singh, Pergamon Press, London 1988.
77. V. Barbu, V. Arnautu, V. Capasso, Controlling the spread of a class of epidemics, Appl. Math. Optimiz., 20 (1989), 297-318.
78. V. Barbu, The inverse one phase Stefan problem, Differential and Integral Equations, 3 (1990), 209-218.
79. V. Barbu, The dynamic programming equation for the time optimal control problem in infinite dimension, SIAM J. Control Optimiz., 29 (1991), 445-456.
80. V. Barbu, The approximate solvability of the inverse one Stefan problem, Numerical Problems for Free Boundaries, 33-43, Ed. P. Neitnammakki, Birkhauser, Bassel, 1991.
81. V. Barbu, The fractional step method for the nonlinear distributed control problem, Differential Equations and Control Theory, 7-17, Ed. V.Barbu, Research Notes in Mathematics 250, Pitman-Longman, Boston, London, 1991.
82. V. Barbu, A. Friedman, Optimal design of domains with free boundaries, SIAM J. Control Optimiz., 29 (1991), 623-637.
83. V. Barbu, G. Da Prato, J.P. Zolessio, Feedback controllability of the free boundary of the one phase Stefan problem, Differential & Integral Equations., 4 (1991), 225-239.
84. V. Barbu, D. Tiba, Boundary controllability for the coincidence set in the obstacle problem, SIAM J. Control Optimiz., 29 (1991), 1150-1159.
85. V. Barbu, Ph. Korman, Approximating optimal control for elliptic obstacle problem by monotone iteration scheme, Numerical Funct. Anal. Optimiz., 12 (1991), 429-442.
86. V. Barbu, Null controllability of first order quasilinear equations, Different. Integral Equations., 4 (1991), 673-681.

87. V. Barbu, A. Favini, Existence for implicit differential equations in Banach spaces, Rend. Mat. Acad. Naz. Lincei, 3 (1992), 203-215.
88. V. Barbu, G. Da Prato, A representation formula for the solutions to operator Riccati equation, Differential & Integral Equations., 5 (1992), 821-830.
89. V. Barbu, M. Iannelli, Approximating some nonlinear equations by fractional step scheme, Differential & Integral Equations., 6(1993), 15-26.
90. V. Barbu, N. Pavel, Optimal control with two point boundary conditions, JOTA, 77 (1993), 51-78.
91. V. Barbu, State space approach to nonlinear H^{∞}- control, Control and System Letters, 21 (1993), 65-72.
92. V. Barbu, S. Stojanovic, A variational approach to a free boundary problem arising in electrophotography, Numer. Funct. Anal. Optimiz., 14 (1993), 1-14.
93. V. Barbu, P. Neittanmaki, A. Niemisto, Approximating optimal control problems governed by variational inequalities, Numer. Funct. Anal. Optimiz. 15 (1994), 489-502.
94. V. Barbu, P. Neittanmaki, A. Niemisto, A penalty method for the identification of nonlinear elliptic differential operator, Numer. Funct. Anal. Optimiz., 15 (1994), 503-530.
95. V. Barbu, A. Favini, Convergence of solutions of implicit differential equations, Differential & Integral Equations., 7 (1994), 665-688.
96. V. Barbu, The H^{∞}- problem with control constraints, SIAM J. Control Optimiz., 32 (1994), 952-964.
97. V. Barbu, H^{∞}- boundary control with state feedback: the hyperbolic case, SIAM J. Control Optimiz., 32 (1994), 1023-1035.
98. V. Barbu, The H^{∞}- problem for infinite dimensional semilinear systems, SIAM J .Control Optimiz., 33 (1995), 1017-1027.
99. V. Barbu, K. Kunisch, Identification of nonlinear elliptic equations, Appl. Math. Optimiz., 33 (1996), 139-168.
100. V. Barbu, Optimal feedback controllers for periodic convex control problems, NoDEA, 3 (1996), 35-54.
101. V. Barbu, N. Pavel, Periodic optimal control in Hilbert space, Appl. Math. Optimiz., 33 (1996), 169-188.
102. V. Barbu, K. Kunisch, Identification of nonlinear parabolic equations, Control Theory and Advanced Technology, 10 (1995), 1959-1980.
103. V. Barbu, A. Aizicovici, Periodic solutions for a second order semilinear Volterra equation, Theory and Applications of Nonlinear Operators of Accretive and Monotone Type, 1-14, A. Kartsatos ed., Lectures Notes in Pure and Applied Mathematics 178, M. Dekker 1996.
104. V. Barbu, N. Pavel, Periodic solutions to nonlinear one dimensional wave equations with x-dependent coefficients, Trans. Amer. Math. Soc.
105. V. Barbu, K. Kunisch, Control and estimation of the boundary heat transfer function in Stefan problems, Mathematical Modelling and Numerical Analysis, vol. 30 (1996), 671-710.
106. V. Barbu, Abstract periodic Hamiltonian systems, Advances in Diff. Eqns., 1, 4 (1996), 675-688.
107. V. Barbu, N. Pavel, Periodic solutions to one dimensional wave equation with piecewise constant coefficients, Journal of Differential Equations, 112 (1996), 319-337.

108. V. Barbu, N. Pavel, Optimal control of thermal conductivity of a rod under periodic conditions, Ricerche di Matematica, XLV (1996), 205-217.
109. V. Barbu, Optimal control of the one dimensional wave equation, Appl. Math. Optimiz., 35 (1997), 77-90.
110. V. Barbu, N. Pavel, An inverse problem for the one dimensional wave equation, SIAM J. Control & Optimiz., 35 (1997), 1544-1556.
111. V. Barbu, Optimal control of linear resonant systems in Hilbert spaces, SIAM J. Control & Optimiz., 35 (1997), 2137-2156.
112. V. Barbu, The time optimal control of Navier-Stokes equations, Systems and Control Letters , 30 (1997), 93-100.
113. V. Barbu, Feedback control of dependent Stokes flows, SIAM Philadelphia 1998, Ed. S. Sritharan.
114. V. Barbu, S. Sritharan, H^{∞}-control theory of fluids dynamics, Proc. Royal Society London A (1998) 454, 3009-3033.
115. V. Barbu, Semilinear periodic control problems, Revue Roumaine Math. Pures Appl., 1998.
116. V. Barbu, M. Iannelli, Optimal control of population dynamics, JOTA, 102 (1999), 1-14.
117. V. Barbu, Exact controllability of the superlinear heat equation, Applied Math. Optimiz., 2 (2000), 127-152.
118. S. Anita, V. Barbu, Internal null controllability of nonlinear heat equation, ESAIM COCV, 6 (2001), 271-280.
119. V. Barbu, I. Lasiecka, R. Triggianni, Riccati equations for boundary control systems, Nonlinear Analysis Theories and Applications, 40 (2000), 105-129.
120. V. Barbu, M. Iannelli, The controllability of the heat equation with memory, Differential and Integral Equations 13 (2001), 1393-1412.
121. V. Barbu, S. Sritharan, Flow invariance preserving feedback controllers for the Navier-Stokes equations, J..Math..Anal..Appl. 255 (2001), 281-307.
122. V. Barbu, M. Iannelli, M. Martcheva, On the controllability of the Lotka-McKendrick Model of Population Dynamic, J. Math. Anal. Appl., 253 (2001), 142-165.
123. V. Barbu, G. Da Prato, The two phase stochastic Stefan problem, Probab. Theory Related Fields, 124 (2002), 544-560.
124. V. Barbu, Controllability of parabolic and Navier-Stokes equations, Scientiae Math. Japonicae, 56 (2002), 143-211.
125. V. Barbu, Local controllability of the phase field system, Nonlinear Analysis, 50 (2002), 363-372.
126. V. Barbu, G. Da Prato, The Kolmogorov equation for stochastic variational inequalities, Probability Theory Relat. Fields, 124 (2002), 544-560.
127. V. Barbu, Feedback stabilizations of Navier-Stokes equations, ESAIM COCV 9 (2003), 197-207.
128. V. Barbu, A. Rascanu, M. Tessitore, Carleman inequalities and controllability of stochasic heat equations, Appl. Math. Optimiz. 5 (2003), 1-20.
129. V. Barbu, G. Wang, Internal stabilization of Semilinear Parabolic Systems, J. Math. Anal. Appl. 285 (2003), 387-407.
130. V. Barbu, N. Pavel, Flow invariant closed sets with respect to nonlinear semigroups flows, NODEA, 10 (2003), 57-72.

131. V. Barbu, T. Havarneanu, C. Popa, S. Sritharan, Exact controllability of MHD equations, Comm Pures Appl. Math, 56 (2003), 732-783.
132. V. Barbu, G. Da Prato, Elliptic problems with unbounded drift coefficients, Diff. Integral Equations, 16 (2003), 829-840.
133. V. Barbu, G. Marinoschi, Controlling the volumetric water content discontinuity in a stratified unsaturated soil, In: Nonlinear Analysis and Applications: To V. Lakshmikantham on his 80th birthday, (Eds. R.P. Agarwal, D. O'Regan), Kluwer Academic Publishers, vol. 1, 241-258, 2003.
134. V. Barbu, G. Marinoschi, Existence for a time dependent rainfall infiltration model with a blowing up diffusivity, Nonlinear Analysis Real World Applications, 5, 2, 231-245, 2004.
135. V. Barbu, R. Triggiani, Internal stabilization of Navier-Stokes equations with finite-dimensional controllers, Indiana Univ. Math. J. 53, 5, 1443-1494, 2004.
136. V. Barbu, G. Da Prato, A. Debussche, The Kolmogorov equation associated to the stochastic Navier-Stokes equations in 2D, Infinite Dimensional Analysis, Quantum Probability and Related Topics, 7 (2004), 163-182.
137. V. Barbu, G. Da Prato, The Neumann problem on unbounded domains and stochastic variational inequalities, Comm. P.D.E., 30 (2005), 1-32.
138. V. Barbu, V. Bogachev, M. Roeckner, The stochastic porous media, J. Funct. Anal., 237 (2006), 54-75.
139. V. Barbu, I. Lasiecka, A. Rammaha, On nonlinear wave equation with degenerate damping and source term, Trans. Amer. Math. Soc., 357 (2005), 2571-2611.
140. V. Barbu, I. Lasiecka, R. Triggiani, Abstract settings for tangential boundary stabilization of Navier-Stokes equations by high-and low-gain feedback controllers, Nonlinear Analysis 64 (2006), 2704-2746.
141. V. Barbu, V. Bogachev, G. Da Prato, M. Roeckner, Weak solutions to the stochastic porous media equations: the degenerate case, J. Funct. Anal., 235, 430-448 (2006).
142. V. Barbu, Z. Grujic, I. Lasiecka, A. Tuffaha, Existence of the energy-level weak solutions for a nonlinear fluid-structure interactions model, Contemporary Mathematics, 440 (2007), 55-82.
143. V. Barbu G. Da Prato, L. Tubaro, Stochastic wave equations with dissipative damping, Stochastic Processes and their Appl. 117 (2007), 1001-1013.
144. V. Barbu, Stabilization of a plane channel flow by wall normal controllers, Nonlinear Analysis 67 (2007), 2573-2588.
145. V. Barbu, I. Lasiecka, M.A. Rammaha, Blow up of generalized solutions to wave equations with nonlinear degenerate damping and source term, Indiana Univ. Math. J. 56, 3 (2007), 995-1022.
146. V. Barbu, G. Da Prato, Existence and ergodicity for the 2-d stochastic magneto-hydrodnamics equations, Appl. Math. Optimiz, 56 (2007), 145-168.
147. V. Barbu, Z. Grujic, I. Lasiecka, A. Tuffaha, Smoothness of weak solutions to a nonlinear fluid-structure interaction model. Indiana Univ. Math. J. 57 (2008), no. 3, 1173-1207.
148. V. Barbu, G. Da Prato, M. Roeckner, Existence and uniqueness of nonnegative solutions to the stochastic porous media equations, Indiana Univ. Math. J. 1(2008) , 187-211
149. V. Barbu, G. Da Prato, Some results for the reflection problems in Hilbert spaces, Control Cybernet. 37 (2008), no. 4, 797-810.

150. V. Barbu, Stabilization of Navier-Stokes equations, Bol. Soc. Parana. Mat. (3) 26 (2008), no. 1-2, 107-116.
151. V. Barbu, G. Da Prato, The Kolmogorov operator associated with a stochastic variational inequality in $\mathbf{R}^n$ with convex potential, Rev. Roumaine Math. Pures Appl. 53 (2008), no. 5-6, 377-388.
152. V. Barbu, S. Albeverio, B. Ferrario, Uniqueness of the generators of the 2D Euler and Navier-Stokes flows, Stochastic Process. Appl. 118 (2008), no. 11, 2071-2084.
153. V. Barbu, G. Da Prato, The generator of the transition semigroup corresponding to a stochastic variational inequality, Comm. Partial Differential Equations 33 (2008), no. 7-9, 1318-1338.
154. V. Barbu, G. Da Prato, The Kolmogorov equation for a 2D-Navier-Stokes stochastic flow in a channel, Nonlinear Anal. 69 (2008), no. 3, 940-949.
155. V. Barbu, C. Marinelli, Variational inequalities in Hilbert spaces with measures and optimal stopping problems, Appl. Math. Optim. 57 (2008), no. 2, 237-262.
156. V. Barbu, G. Da Prato, M. Roeckner, Some results on stochastic porous media equations. Boll. Unione Mat. Ital. (9) 1 (2008), no. 1, 1-15.
157. V. Barbu, Y. Yan, D. Coca, Internal optimal controller synthesis for Navier-Stokes equations, Numer. Funct. Anal. Optim. 29 (2008), no. 1-2, 225-242.
158. T. Barbu, V. Barbu, D. Coca, V. Biga, A PDE variational approach to image denoising and restoration, Nonlinear Analysis Nonlinear Anal. Real World Appl. 10 (2009), no. 3, 1351-1361.
159. V. Barbu, G. Da Prato, M. Roeckner, Stochastic porous media and self-organized criticality, Comm. Math. Phys. 285 (2009), no. 3, 901-923.
160. V. Barbu, G. Da Prato, M. Roeckner, Stochastic nonlinear diffusion equations with singular diffusivity, SIAM J. Math. Anal. 41 (2009), no. 3, 1106-1120.
161. V. Barbu, G. Da Prato, M. Roeckner, Finite time extinction for solutions to fast diffusion stochastic porous media equations, C. R. Math. Acad. Sci. Paris 347 (2009), no. 1-2, 81-84.
162. V. Barbu, G. Da Prato, M. Roeckner, Existence of strong solutions for stochastic porous media equation under general monotonicity conditions, Ann. Probab. 37 (2009), no. 2, 428-452.
163. V. Barbu, Y. Yan, D. Coca, Finite-dimensional controller design for semilinear parabolic systems, Nonlinear Anal. 70 (2009), no. 12, 4451-4475.
164. V. Barbu, M. Iannelli, Stabilization of the Gurtin-Mac-Camy population system, J. Evol. Equations, vol. 9, 4 (2009), 727-745.
165. V. Barbu, C. Marinelli, Strong solutions for stochastic porous media equations with jumps, Infinite Dim. Anal. Quantum Probability and Related Topics, vol. 12, 3 (2009), 413-426.
166. V. Barbu, G. Da Prato, L. Tubaro, Kolmogorov equation associated to the stochastic reflection problem on a smooth convex set of a Hilbert space, Annals of Probability, 37 (2009), 4, 1427-1458.
167. V. Barbu, Exponential stabilization of the linearized Navier-Stokes equation by pointwise feedback noise controllers , Automatica, 46 (2010), 12, 2022-2027.
168. V, Barbu, Stabilization of a plane periodic channel flow by noise wall normal controllers, Systems & Control Letters, 59 (2010), 10, 608-614.
169. S. Albeverio, V. Barbu, B. Ferrario, Uniqueness of the generators of 2D Euler and Stokes flows, Stochastic Processes and their Applications, 120 (2010), 10, 2102-2102.

170. V. Barbu, G. Da Prato, The invariant measure and the Kolmogorov equations for the stochastic fast diffusion equation, Stochastic Processes and their Applications, 120 (2010), 7, 1247-1266.
171. V. Barbu, Self-organized criticality and convergence to equilibrium of solutions to nonlinear diffusion equations, Annual Reviews in Control, 34 (2010),1, 52-61.
172. V. Barbu, A variational approach to stochastic nonlinear parabolic problems, J. Math. Anal. Appl., 384 (2011), 1, 2-15.
173. V. Barbu, M. Roeckner, On a random scaled porous media equation, J. Diff. Eqs, 251, 9 (2011), 2494-2514.
174. V, Barbu, M. Roeckner, F. Russo, Probabilistic representation for solutions of an irregular porous media type equation: the degenerate case Probability Theory and Related Fields, 151 (2011), 1-2, 1-43.
175. V. Barbu, G. Da Prato, L. Tubaro, Kolmogorov equation associated to the stochastic reflection problem on a smooth convex set of a Hilbert space II Annales de l'Institut Henri Poincare-Probabilites et Statistique, 47 (2011), 3, 699-724.
176. V. Barbu, Internal stabilization of the Oseen-Stokes equations by Stratonovich noise, Systems & Control Letters, 60 (2011), 8, 604-607.
177. V. Barbu, G. Da Prato, L. Tubaro, A reflection type problem for the syochastic 2D Navier-Stokes with periodic conditions, Electronic Communications in Probability, 16 (2011), 304-313.
178. V. Barbu, G. Da Prato, Ergodicity for the phase-field equations perturbed by Gaussian noise, Infinite Dimensional Analysis Quantum Probability and Related Topics, 14 (2011), 1, 35-55.
179. V. Barbu, S.Rodrigues, A. Shirikyan, Internal exponential stabilization to a nonstationary solution for 3D Navier-Stokes equations, SIAM J.on Control and Optimization, 49 (2011), 4, 1454-1478.
180. V. Barbu, G. Da Prato, Internal stabilization by noise of the Navier-Stokes equation, SIAM J. Control and Optimization, 49 (2011), 1, 1-20.
181. V. Barbu, The internal stabilization by noise of the linearized Navier-Stokes equation, ESAIM: COCV, 17 (2011), 1, 117-130.
182. V. Barbu, M. Röckner, Stochastic Porous Media Equations and Self-Organized Criticality: Convergence to the Critical State in all Dimensions, Commun. Math. Phys. 311, (2012) 539–555.
183. V. Barbu, Giuseppe Da Prato, Michael Röckner, Finite time extinction of solutions to fast diffusion equations driven by linear multiplicative noise, J. Math. Anal. Appl. 389 (2012) 147–164.
184. V. Barbu, Optimal Control Approach to Nonlinear Diffusion Equations Driven by Wiener Noise, J Optim Theory Appl. DOI 10.1007/s10957-011-9946-8 (2012).
185. V.Barbu, Stabilization of Navier–Stokes Equations By Oblique Boundary Feedback Controllers, Siam J. Control Optim. 50, No. 4 (2012) 2288–2307.
186. V. Barbu, G. Da Prato, L. Tubaro, The Stochastic Reflection Problem in Hilbert Spaces, Communications in Partial Differential Equations, 7 (2012), 352-367.
187. V. Barbu, The stochastic reflection problem with multiplicative noise, Nonlinear Analysis 75 (2012) 3964–3972.
188. V. Barbu, I. Lasiecka, The unique continuation property of eigenfunctions to Stokes–Oseen operator is generic with respect to the coefficients, Nonlinear Analysis 75 (2012), 4384–4397.

189. T. Barbu, V. Barbu**,** A PDE approach to image restoration problem with observation on a meager domain, Nonlinear Analysis -RWA, 13, 3 1206-1215, 2012.
190. V. Barbu, M. Roeckner, Localization of solutions to stochastic porous media equations: finite speed of propagation, Electronic Journal of Probability, 17, 1-11, 2012.
191. V. Barbu, Y. Guo, M. Rammaha, et al., Convex Integrals on Sobolev Spaces, Journal of Convex Analysis, 19, 3, 837-852, 2012.
192. V. Barbu, M. Roeckner, Stochastic variational inequalities and applications to the total variation flow perturbed by linear multiplicative noise, Archive Rat. Mech. Anal. 209, 797-834, 2013, FI=2.292, SRI=4.523
193. Viorel Barbu, The internal stabilization of the Stokes–Oseen equation by feedback point controllers, Systems&Control Letters, 62 (2013) 447–450. FI=2.054; SRI=2.03.
194. Viorel Barbu, Note on the internal stabilization of stochastic parabolic equations with linearly multiplicative Gaussian noise, ESAIM: COCV, 19, 4, 1055-1063, 2013, DOI: 10.1051/cocv/2012044. FI=1.282;SRI=2.32.
195. Viorel Barbu, The variational approach to Hamilton–Jacobi equations driven by a Gaussian noise, J. Diffferential Equations, 255 (2013) 3832–3847. FI=1.674; SRI=1.67.
196. Viorel Barbu**,** Self-organized criticality of cellular automata model; absorbtion in finite-time of supercritical region into the critical one, Mathematical Methods in the Applied Sciences, 36 (2013), 1726-1733, FI= 0.778; SRI=0.79.
197. Viorel Barbu**,** Boundary Stabilization of Equilibrium Solutions to Parabolic Equations, IEEE Transactions On Automatic Control, vol. 58, no. 9, (2013), 2416- 2420. FI=2.718; SRI=3.205.
198. Viorel Barbu**,** M. Röckner, The finite speed of propagation for solutions to nonlinear stochastic wave equations driven by multiplicative noise, J. Differential Equations, 255 (2013) 560–571. FI=1.674; SRI= 1.67.
199. Viorel Barbu**,** Zdzisław Brzezniak, Erika Hausenblas, Luciano Tubaro, Existence and convergence results for infinite dimensional nonlinear stochastic equations with multiplicative noise, Stochastic Processes and their Applications 123 (2013) 934–951. FI= 1.406; SRI=1.508.
200. V. Barbu, Nonlinear diffusion equations in image processing, Rev. Roumaine Math. Pures Appl., VOL. LVIII , 58, 2, 175-204, 2013.
201. V. Barbu, S. Bonaccorsi, L. Tubaro, A stochastic parabolic equation with nonlinear flux at the boundary driven by a Gaussian noise, SIAM J. Math. Anal. 46 (2014), 1, 780-802.
202. V. Barbu, S. Bonaccorsi, L. Tubaro, Existence and asymptotic behavior for hereditary stochastic evolution equations, Appl. Math. Optimiz. 69 (2014), 2, 273-314.
203. V. Barbu, Exact null internal controllability for the heat equation on unbounded domains, ESAIM COCV 20 (2014), 1, 220-235.
204. V. Barbu, M. Röckner, D. Zhang, Stochastic nonlinear Schrödinger equations with multiplicative noise: the rescaling approach, J. Nonlinear Sciences, 24, (2014) 3, 384-412.
205. V. Barbu, S. Bonaccorsi, L. Tubaro, A stochastic heat equation with nonlinear dissipation on the boundary, J. Optimiz. Theory Appl. 165 (2015), 317-343.
206. V. Barbu, M. Röckner, F. Russo, The stochastic porous media equations in R^d, J. Math. Pures Appl. 103(2015), 1024-1052.
207. V. Barbu, A. Favini, G. Marinoschi, Nonlinear parabolic flows with dynamic flux on the boundary, J. Differential Equations 258 (2015), 2160-2195.

208. V. Barbu, M. Röckner, An operatorial approach to stochastic partial differential equations driven by linear multiplicative noise, J. European Math. Soc.17 (2015), 1789-1815.
209. V. Barbu, G. Marinoschi, An optimal control approach to optical flow problem, System and Control Letters 87 (2016), 1-9.
210. V. Barbu, F. Cordoni, L. di Persio, Optimal control of stochastic FitzHugh-Nagumo equation, International J. Control 89 (2016), 746-756.
211. V. Barbu, M. Röckner, D. Zhang, Stochastic nonlinear Schrödinger equations, Nonlinear Analysis 136 (2016), 168-194.
212. V. Barbu**,** M. Röckner, Backward uniqueness of stochastic parabolic like equations driven by Gaussian multiplicative noise, Stochastic Processes and their Appl. 126 (2016), 2163-2179.
213. V. Barbu, L. Beznea, Measure-valued branching processes associated with Neumann nonlinear flows, J. Math. Anal. Appl. 441 (2016), 167-182.
214. V. Barbu, Generalized solutions to Fokker-Planck equations, J. Differential Equations 26 (2016), 2446-2471.
215. V. Barbu, S. Bonaccorsi, L. Tubaro, Stochastic differential equations with variable structure driven by multiplicative Gaussian noise and sliding mode dynamic, Math. Control Sign. Syst. 28 (2016).
216. V. Barbu, M. Röckner, D. Zhang, The stochastic logarithmic Schrödinger equation, J. Math. Pure Appl. (to appear).
217. V. Barbu, M. Roeckner, F. Russo, Double probabilistic representation for the stochastic porous media equation, Annals Inst. H. Poincaré (to appear)