

Curriculum Vitae

Enzo Mitidieri

Biographical Summary

Enzo Mitidieri is a mathematician and professor with a focus on mathematical analysis. His career spans several decades and includes significant contributions in the fields of nonlinear differential equations. He is noted for pioneering results in the existence, nonexistence, and qualitative behavior of solutions to nonlinear PDEs.

Academic Positions

- CNR Research Fellowship, Institute of Mathematics, University of Trieste, 1979–1983
- Researcher (Ricercatore Universitario), Mathematical Analysis, Department of Mathematical Sciences, University of Trieste, 1983–1987
- Associate Professor of Mathematical Analysis, Department of Mathematics and Informatics, University of Udine, 1988–1991
- Associate Professor of Higher Analysis, Department of Mathematical Sciences, University of Trieste, 1991–1994
- Extraordinary Professor, University of Trieste, 1993–1994
- Full Professor of Mathematical Analysis, University of Trieste

Research Themes and Impact

- **Liouville-type theorems and rigidity.** Fundamental nonexistence and classification principles for entire solutions, with applications to elliptic and parabolic problems, frequently via integral identities and comparison principles.
- **A priori estimates and blow-up.** Development of methods to derive universal bounds or to exclude nontrivial solutions, including Rellich-type identities and capacity techniques; analysis of blow-up scenarios and qualitative properties.
- **Hardy–Rellich inequalities and higher-order systems.** Sharp functional inequalities and their role in existence/nonexistence and regularity theory for quasilinear and higher-order PDE systems.
- **Nonlinear potential theory and sub-elliptic operators.** Kato inequality, capacity methods, operators on Carnot groups, Hardy–Littlewood–Sobolev systems.

Publications and Monographs

- Author of over 120 scientific papers in international journals
- Five monographs:
 - **A Priori Estimates and the Absence of Solutions of Nonlinear Partial Differential Equations and Inequalities** (2001, with S. I. Pokhozhaev)
 - **Blow-up for Higher-Order Parabolic, Hyperbolic, Dispersion and Schrödinger Equations** (CRC Press, 2015, with V. A. Galaktionov and S. I. Pokhozhaev)

- **The Pokhozhaev Legacy: The Art of Nonexistence in Nonlinear PDEs and Inequalities** (with V. A. Galaktionov), August 2015/April 2026 - 298 pages.
 - **Liouville Theorems in Nonlinear Partial Differential Equations and Inequalities** (in preparation, with L. D’Ambrosio)
 - **Lecture Notes in Nonlinear Analysis.** *Differential Identities and Applications: Euclidean Theory, Riemannian Generalizations, and the Noether Approach to Pokhozhaev Identities*, 140 pages Spring 2026.
- Edited volumes on functional analysis and PDEs:
 1. *Semigroup Theory and Applications*, Lecture Notes in Pure and Applied Mathematics, N. 116 (1989), Ph. Clément, S. Invernizzi, E. Mitidieri, I. I. Vrabie – eds., M. Dekker.
 2. *Semigroup Theory and Evolution Equations: The 2nd International Conference*, Lecture Notes in Pure and Applied Mathematics, N. 135 (1991), Ph. Clément, E. Mitidieri, B. de Pagter – eds., M. Dekker.
 3. *Reaction Diffusion Systems*, Lecture Notes in Pure and Applied Mathematics, N. 194 (1997), G. Caristi and E. Mitidieri – eds., M. Dekker.
 4. Dedicated to the memory of Pierre Grisvard, Special Issue of *Rendiconti dell’Istituto di Matematica dell’Università di Trieste*, Vol. XXVIII (1996), 1–506, Ph. Clément, S. Invernizzi, and E. Mitidieri – eds.
 5. Workshop on Blow-up and Global Existence of Solutions for Parabolic and Hyperbolic Problems, Trieste, 27–29 September 1999. *Rend. Istit. Mat. Univ. Trieste* **31** (2000), suppl. 2, iv+278 pp. D. Del Santo, V. Georgiev and E. Mitidieri – eds.
 6. *Liouville Theorems and Detours*, edited by E. Mitidieri, E. Lanconelli and S. I. Pokhozhaev, *Nonlinear Analysis: Theory, Methods & Applications*, 70(8): 2825–3056 (2009).
 7. *Variational Analysis and Its Applications*, edited by E. Mitidieri and B.S. Mordukhovich, *Nonlinear Analysis: Theory, Methods & Applications*, 75(3): 983–1736 (2012).
 8. *In Honor of Professor V. Lakshmikantham*, edited by Sh. Ahmad, S. Carl and E. Mitidieri, *Nonlinear Analysis: Theory, Methods & Applications*, 75(12): 4383–4728 (2012).
 9. *Recent Trends in Nonlinear Partial Differential Equations I: Evolution Problems*, edited by J.B. Serrin, E.L. Mitidieri, and V.D. Radulescu, *Contemporary Mathematics*, 2013, approx. 307 pp.
 10. *Recent Trends in Nonlinear Partial Differential Equations II: Stationary Problems*, edited by J.B. Serrin, E. Mitidieri, and V.D. Radulescu, *Contemporary Mathematics*, 2013, approx. 340 pp.

Teaching Activity

Undergraduate Courses

- A.A. 1980/81–1992/93 – Analisi Matematica I, II, Analisi Superiore, Analisi Funzionale, Analisi Reale (Univ. Trieste)
item A.A. 1988/89 – Analisi Superiore (Univ. Trieste); Analisi Matematica II (Univ. Udine)
- A.A. 1990/91 – Analisi Matematica II (Univ. Udine)
- A.A. 1991/92 – Analisi Matematica II (Univ. Udine), Analisi Superiore (Univ. Trieste);
- A.A. 1992/93 –2022/23– Analisi Matematica I, II, Analisi Superiore, Analisi Funzionale, Analisi Reale, Analisi di Fourier, Istituzioni di Analisi Superiore II, Equazioni differenziali, Metodi matematici per l’ingegneria, (Univ. Trieste).

Doctoral Teaching

- A.A. 1993/94 – Maximum principles for elliptic systems (SISSA)
- A.A. 1999/2000 – Stime a priori per soluzioni di equazioni e sistemi ellittici (SISSA)
- A.A. 2000/2001 – Teoremi di non esistenza e applicazioni alla teoria delle equazioni alle derivate parziali (Università di Pisa)
- Special seminars at SISSA and ICTP on: evolution equations associated to monotone operators; sum of maximal monotone operators; periodic solutions of the semilinear wave equation (Brezis–Coron theorems); Volterra integral equations in Hilbert spaces; existence and asymptotic behaviour of solutions to Volterra equations in infinite-dimensional spaces.

PhD Supervision

Lorenzo D’Ambrosio

SISSA PhD in Functional Analysis and Applications, discussed 23 October 2002.

Thesis: *Hardy Inequalities and Liouville Type Theorems Associated to Degenerate Operators.*

Supervisor: Enzo Mitidieri.

Fabio Pezzolo

University of Trieste PhD in Mathematics, discussed 25 March 2022.

Thesis: *On Some Multilinear Type Integral Systems.*

Supervisor: Enzo Mitidieri.

Undergraduate Students Supervised

- Ramon Soranzo – Università degli Studi di Trieste, 1989
- Massimo Iengo – Università degli Studi di Trieste, 1995
- Omar Lakkis – Università degli Studi di Trieste, 1996
- Sandro Curzola – Università degli Studi di Trieste, 1997
- Atanasio Pantarrotas – Università degli Studi di Trieste, 1997
- Caterina Cusulin – Università degli Studi di Trieste, 2001
- Anna Dall’Acqua – Università degli Studi di Trieste, 2001
- Sara Noviello – Università degli Studi di Trieste, 2003
- Valentina Sanabor – Università degli Studi di Trieste, 2005
- Giulia Elena Bozzao – Università degli Studi di Trieste, 2023

Conference Organisation

- Variational Methods in Differential Problems, Trieste, September 1985
- Trends in Semigroup Theory and Applications, Trieste, September 1987
- Semigroup Theory and Evolution Equations – 2nd International Conference, Delft (Netherlands), September 1989

- Reaction Diffusion Systems, Trieste, 2–7 October 1995
- Blow-up and Global Existence of Solutions of Nonlinear Parabolic and Hyperbolic Problems, University of Trieste, 27–29 September 1999
- Matematica 2000, Università di Trieste, 1998, 1999, 2000
- Linear and Nonlinear Hyperbolic Equations (with F. Colombini and D. Del Santo), Grado, September 2001
- Liouville Theorems and Detours, INdAM Conference, Cortona, 18–24 May 2008
- Representative of the Boards of Deans on the Promotion PhD Committee, University of Delft, The Netherlands

Invited Research Talks (selected)

- Workshop on Recent Advances on the Theory of Evolution Equations, Trieste, June 1980
- Conference on Differential Equations and Applications, Graz, June 1981
- Annual Meeting GNAFA, Rimini, September 1981
- Autumn Course on Variational Methods and Mathematical Physics, Trieste, October–December 1981
- Department of Mathematics, University at Buffalo (New York), 1982
- Department of Mathematics, Vanderbilt University, Nashville, 1982
- International Conference on Operator Semigroups, Graz, June 1983
- Congress UMI, Perugia, September 1983
- Colloquium on Topological Methods in Nonlinear BVP for ODE, Trieste, May 1984
- Equazioni differenziali e calcolo delle variazioni, Pisa, 1985
- Variational Methods in Differential Problems, Trieste, September 1985
- Nonlinear Variational Problems, Isola d'Elba – Lacona, September 1985
- Volterra Integrodifferential Equations in Banach Spaces, Trento, February 1987
- Trends in Semigroup Theory and Applications, Trieste, September 1987
- College on Variational Problems in Analysis, ICTP Trieste, February 1988
- Mathematisches Institut, Zürich, February 1988
- Reaction Diffusion Systems, Heriot-Watt University, Edinburgh, 1988
- Workshop on PDE, Campinas (Brazil), August 1988
- Departamento de Matemática, Universidade de Brasília, September 1988
- Colloquium, Universiteit Leiden, October 1988
- Oberwolfach Meeting (H. Amann and P. Hess), May 1989

- Semigroup Theory and Evolution Equations: 2nd International Conference, Delft, September 1989
- Workshop on Nonlinear Differential Equations, Leiden, November 1989
- Universidad Complutense de Madrid, September 1990
- Differential Equations in Banach Spaces, Bologna, July 1991
- Semigroups of Operators and Evolution Equations, Curaçao, June 1992
- World Congress of Nonlinear Analysis, Tampa (USA), August 1992
- Workshop on Nonlinear Differential Equations, Campinas (Brazil), June 1993
- Symmetry and Asymptotics for Nonlinear Systems, Ohio University, August 1993
- Conference on Schrödinger Operators, Erwin Schrödinger Institute, Vienna, December 1993
- Semigroups and Evolution Equations, Scuola Normale Superiore, Pisa, September 1994
- Analysis Year in Finland, Helsinki, February 1995
- Non-linear Parabolic Equations, Trento, June 1995
- Fifth International Conference on Evolution Equations and their Applications to Technology, Hiroshima, October 1996
- The Delft Meeting on Functional Analysis and Nonlinear Partial Differential Equations, Delft, May 1998
- Third School on Nonlinear Functional Analysis and Applications to Differential Equations, ICTP Trieste, October 1998
- Functional Analysis and PDE, Oberwolfach, March 2000
- Partial Differential Equations and Related Topics, Università di Pisa, May 2000
- Function Spaces, Approximation Theory: Steklov Mathematical Institute, Moscow, May 2001
- Symposium on PDE in celebration of James Serrin's 75th birthday, Perugia, June 2002
- **Plenary lecture:** Function Spaces, Approximation Theory, Nonlinear Analysis, Moscow, 23–29 May 2005 (100th birthday of Academician S. M. Nikol'skii)
- Harnack Inequalities and Positivity for PDE, Cortona, June 2005
- Liouville Theorems in Riemannian and Sub-Riemannian Settings, University of Bologna, November 2006
- Geometric Methods in PDE's (65th birthday of E. Lanconelli), Bologna, May 2008
- International Workshop on PDE for the 80th birthday of James Serrin, Perugia, June 2008
- Conferenze Scientifiche di Analisi Matematica. Omaggio a Calogero Vinti, Perugia, December 2008
- Second Meeting of the Women of the Laplacian, Monopoli, June 2010
- Workshop in Honor of Patrizia Pucci's 60th Birthday, Perugia, May–June 2012

- Liouville Theorems Old and New, Martin-Luther-Universität Halle-Wittenberg, July 2014
- **Plenary lecture:** Nonlinear Phenomena in Mathematics and Economics (tribute to John Forbes Nash), RISM Varese, 14–18 September 2015
- Liouville Theorems in PDE's: Old and New, Seminario Matematico e Fisico di Milano, March 2016
- INdAM Workshop Geometric Properties for Parabolic and Elliptic PDE's (2nd Italian-Japanese Workshop), Cortona, June 2016
- 3rd Conference on Recent Trends in Nonlinear Phenomena, Università di Perugia, September 2016
- James Serrin: From His Legacy to the New Frontiers, Perugia, January–February 2017
- Recent Advances in Nonlinear Analysis (Vc. Radulescu 60th birthday), Levico Terme, May 2018
- Two Nonlinear Days in Urbino, July 2018
- RISM Workshop "Analysis and PDEs" on the occasion of Vicentiu Radulescu's 65th birthday 28-31 May 2023, Riemann International School of Mathematics, Varese, Italy
- Two nonlinear days in Urbino 2024 Università degli Studi di Urbino Carlo Bo July 4-5, 2024
- XIII Brazilian-Italian Workshop in Nonlinear Differential Equations, Modena 1-5 September 2025

Visiting Professorships

- University of Tennessee, Knoxville (USA), August–September 1982
- University of Delft (Netherlands), May 1986
- Universidade Estadual de Campinas – UNICAMP (Brazil), August–September 1988
- Universidad Autónoma de Madrid (Spain), September 1990
- Universiteit Leiden (Netherlands), February 1992
- UNICAMP (Brazil), June 1993
- Universidad de Chile, Santiago (Chile), July 1993
- University of Helsinki (Finland), February 1995
- Universiteit Delft (Netherlands), May 1995
- UNICAMP (Brazil), June 1996
- Université Toulouse III (France), 1998
- University of Houston (USA), July 1998
- Steklov Mathematical Institute, Moscow, May 2001
- Steklov Mathematical Institute, Moscow, May 2005

Editorial Roles

- Associate Editor: *Journal of Mathematical Sciences*, 2026.
<https://link.springer.com/journal/10958/editorial-board>
- Editor-in-Chief: *Nonlinear Analysis A: Theory, Methods and Applications* (2009–2019)
- Associate Editor: *Nonlinear Analysis A: Theory, Methods and Applications* (2006–2009)
- Associate Editor: *Nonlinear Analysis B: Real World Applications* (2006–2012)
- Associate Editor: *Abstract and Applied Analysis* (2000–2002)
- Associate Editor: *ISRN Mathematical Analysis* (2010–2011)
- Editor-in-Chief: *Rendiconti dell'Istituto Matematico dell'Università di Trieste* (1997–2003)
- Honorary member of the Editorial Board: *Nonlinear Analysis: Theory, Methods and Applications*, since 2019
- Honorary member of the Editorial Board: *Rendiconti dell'Istituto Matematico dell'Università di Trieste*, since 2013

Referee Activity (selected journals)

- Annali della Scuola Normale Superiore di Pisa
- Bollettino della Unione Matematica Italiana
- Journal of Mathematical Analysis and Applications
- Journal of Differential Equations
- Advances in Differential Equations
- Advances in Nonlinear Analysis
- Mathematische Annalen
- Transactions of the American Mathematical Society
- Rocky Mountain Journal of Mathematics
- Differential and Integral Equations
- SIAM Journal on Mathematical Analysis
- Journal of Functional Analysis
- Annales Academiae Scientiarum Fennicae, Mathematica
- Communications in Partial Differential Equations
- Proceedings of the Royal Society of Edinburgh
- Mathematische Zeitschrift
- Bulletin of the Belgian Mathematical Society
- Proceedings of the American Mathematical Society
- Advanced Nonlinear Studies
- Annales de l'Institut Henri Poincaré
- Mathematical Methods in the Applied Sciences
- Nonlinear Analysis: Theory, Methods and Applications
- Nonlinear Analysis: Real World Applications
- Lecture Notes in Pure and Applied Mathematics (M. Dekker)
- Quarterly of Applied Mathematics
- Proceedings of the Steklov Mathematical Institute
- Advances in Mathematics
- Communications in Pure and Applied Mathematics
- Journal d'Analyse Mathématique

Administrative Roles

- Director, Department of Mathematics and Informatics, University of Trieste (1997–2002)
- Member of the Research Evaluation Committee (CVR), University of Trieste (2021–2024)
- PhD Committee Member (PHD09 – Scienze della Terra, Fluidodinamica e Matematica, XXXIII–XXXV Ciclo)

Research Projects

EC Human Capital and Mobility Scheme (1994–1995)

Network on Reaction-Diffusion Equations.

Partner institutions: Heriot-Watt University (Edinburgh), University of Crete (Herakleion), Universidad Complutense de Madrid, Technische Universiteit Delft, Université Toulouse III, Università di Trieste.

Permanent researchers at Trieste: G. Caristi, E. Mitidieri, K. Rybakowski, L. de Simon, M. Ughi.

Research areas: topological and functional-analytic methods for nonlinear problems, singular solutions of semilinear elliptic systems, maximum principles for non-cooperative systems, blow-up of solutions, classification and singular behaviour of parabolic systems.

Selected Recent Publications (last 5 years)

- *Liouville theorems of semilinear elliptic inequalities in a half-space* (with L. D'Ambrosio), *Journal of Differential Equations* **447** (2025), 113664.
- *Characterization of positive superharmonic functions in a half-space* (with L. D'Ambrosio), *Calculus of Variations and PDE*, in press (2026), 1–41.
- *A view on Liouville Theorems in PDEs, Analysis and Geometry in Metric Spaces*, Vol. 12, No. 1 (2024), 20240008. (*Dedicated to Ermanno Lanconelli on the occasion of his 80th birthday.*)

Metrics and Online Profiles

MathSciNet:

- Author ID: 125570
- Earliest indexed publication: 1982
- Total indexed publications: 108; related publications: 9
- Total citations: 4,366 in 2,520 publications
- Unique citing authors: 1,975

ResearchGate:

- h-index: 46
- Research Interest Score: 4,658
- Citations: 8,085
- Reads: 40,141
- Recommendations: 137

Web References

- https://topitalianscientists.org/tis/54219/Enzo_Mitidieri_-_Top_Italian_Scientist_in_Mathematics
- <https://research.com/u/enzo-mitidieri>
- <https://www.adscientificindex.com/scientist/enzo-mitidieri/1830676>
- <https://zbmath.org/authors/?ml=3&ml-1-f=any&ml-1-v=&ml-1-op=and&ml-2-f=ln&ml-2-v=Mitidieri&ml-2-op=and&ml-3-f=fn&ml-3-v=>
- <https://oneresearchcommunity.com/author/orcid-0000-0001-5042-9401>
- Enzo Mitidieri and Stanislav I. Pokhozhaev, **A Priori Estimates and the Absence of Solutions of Nonlinear Partial Differential Equations and Inequalities**, Tr. Mat. Inst. Steklova **234** (2001), 1–384; translation in Proc. Steklov Inst. Math., no. 3(234) (2001), 1–362. **Number of requests: 9,530.**
https://www.mathnet.ru/php/journal.phtml?jrnid=tm&wshow=statlist&option_lang=eng&speriod=alltime#r6

List of Publications

1. On the strong convergence of an iterative scheme related to subdifferentials, Bollettino UMI-6, 337–339 (1982).
2. Alcune osservazioni sul comportamento asintotico di una classe di equazioni di evoluzione del secondo ordine, Quaderno Matematico n. 45 (1982).
3. Asymptotic behaviour of some second order evolution equations, Nonlinear Analysis T.M.A. **6**, 1245–1252 (1982).
4. Some remarks on the asymptotic behaviour of the solutions of second order evolution equations, J. Math. Analysis and Appl. **107**, 211–221 (1985).
5. Standing wave solutions for a system derived from the Fitzhugh–Nagumo equations for nerve conduction (with G. Klaasen), SIAM J. Math. Anal. **4**, 74–83 (1986).
6. Asymptotic behaviour of the solutions of second order difference equations associated to monotone operators (with G. Morosanu), Numer. Functional Analysis and Optimization **8**(3–4), 419–434 (1985/86).
7. A maximum principle for an elliptic system and application to semilinear problems, SIAM J. Math. Anal. **17**, 836–849 (1986).
8. Existence for nonlinear functional differential equations (with I. Vrabie), Hiroshima Math. J. **17**, 627–649 (1987).
9. Volterra integral equations associated with a class of nonlinear operators in Hilbert Spaces (with M. Tosques), Annales Fac. des Sciences de Toulouse, Sér. V, N. 2, 23–40 (1987).
10. Positive solutions of some coercive anticoercive elliptic systems (with G. Mancini), Annales Fac. des Sciences de Toulouse, Vol. VIII, N. 3, 257–292 (1987).
11. Qualitative properties of solutions of Volterra equations in Banach Spaces (with Ph. Clément), Israel J. Math. **64**, N. 1, 1–24 (1988).
12. Asymptotic behaviour of the solutions of a class of functional differential equations: Remarks on a related Volterra equation, J. Math. Analysis and Appl. **127**, 423–434 (1987).
13. A class of strongly nonlinear functional differential equations (with I. Vrabie), Ann. Matematica Pura e Applicata (IV), Vol. CLI, 125–147 (1988).
14. Nonlinear integrodifferential equations in Hilbert spaces: The variational case (with M. Tosques), Pitman Research Notes in Mathematics, N. 190, 306–319 (1989).

15. Nonlinear integrodifferential equations in a Banach space (with I. Vrabie), *Rend. Ist. Mat. Trieste*, Vol. XX, Fasc. II, 283–299 (1989).
16. Estimates from below for the solution to a class of second order evolution equations, *Diff. and Integral Equations* **3**, N. 6, 1101–1111 (1990).
17. Maximum principles for linear elliptic systems (with D. G. de Figueiredo), *Rend. Ist. Mat. Trieste*, Vol. XXII, Fasc. E, II, 36–66 (1990).
18. Maximum principles for cooperative elliptic systems (with D. G. de Figueiredo), *C.R. Acad. Sci. Paris*, t. 310, Série I, 49–52 (1990).
19. Differential inclusions governed by non convex perturbations of m -accretive operators (with I. Vrabie), *Diff. and Int. Eq.*, Vol. 2, N. 4, 525–531 (1989).
20. On the definition of critical dimension, 1–12 (unpublished manuscript, 1993).
21. Maximum principles for a class of non-cooperative elliptic systems (with G. Caristi), *Delft Prog. Rep.* **14**, 33–56 (1990).
22. Further results on maximum principles for non cooperative elliptic systems (with G. Caristi), *Nonlinear Analysis T.M.A.* **17**, N. 6, 547–558 (1991).
23. Positive solutions of semilinear elliptic systems (with Ph. Clément and D. G. de Figueiredo), *Commun. in Partial Differential Equations* **17**(5–6), 923–940 (1992).
24. On positive supersolutions of superlinear elliptic problems (with Ph. Clément), *Quaderno Matematico* n. 286 (1992).
25. A Rellich type identity and applications, *Commun. in Partial Differential Equations* **18**(1–2), 125–151 (1993). (Rapporti interni N. 25 (1990), Università di Udine, 1–35.)
26. Positive solutions for a quasilinear system via blow-up (with Ph. Clément and R. Manasevich), *Comm. P.D.E.* **18**, 2071–2106 (1993).
27. Blow-up of positive solutions of a non-cooperative parabolic system (with G. Caristi), *Differential Integral Equations* **6**(1993), no. 1, 93–110.
28. Critical curve for a non variational system, notes 1993. Unpublished manuscript (new version in *Singular eigenvalue problems and critical dimensions*, with S. Pokhozhaev).
29. Blow-up estimates of solutions of a parabolic system (with G. Caristi), *Journal of Differential Equations* **113**, N. 2, 265–271 (1994).
30. Existence of a maximal solution for quasimonotone elliptic system (with G. Sweers), *Differential and Integral Equations*, Vol. 7, N. 3–6, (1994).
31. Non existence theorems for systems of quasilinear partial differential equations (with R. van der Vorst and G. Sweers), *Differential and Integral Equations*, Vol. 8, N. 6, 1331–1354 (1995).
32. Nonexistence of positive solutions of systems of quasilinear differential inequalities (with G. Caristi), *Ann. Univ. Ferrara, Sez. VII, Sc. Mat. Suppl.* Vol. XLI (1995), pp. 151–165.
33. Weakly coupled elliptic systems and positivity (with G. Sweers), *Math. Nachr.* **173**, 259–286 (1995).
34. Solutions homoclines d’un système Hamiltonien non-borné et superquadratique (with Ph. Clément and P. Felmer), *C.R. Acad. Sci. Paris*, t. 320, Série I, 1481–1484 (1995).
35. Blow-up estimates for a class of weakly coupled parabolic systems (with G. Caristi), 1–10 (1995) (unpublished manuscript).
36. Nonexistence of positive solutions of a general class of quasilinear elliptic inequalities in unbounded domains (with S.I. Pokhozhaev), 1–35 (1995) (unpublished manuscript).
37. Nonexistence of positive solutions of semilinear elliptic systems in \mathbb{R}^n , *Differential Integral Equations*, Vol. 9, N. 3, 465–479 (1996).
38. Quasilinear elliptic equations with critical exponents (with D. de Figueiredo and Ph. Clément), *Topological Methods in Nonlinear Analysis*, Vol. 7, 133–170 (1996).

39. On a Modified Capillary Equation (with Ph. Clément and R. Manasevich), *Journal of Differential Equations*, Vol. 124, No. 2, 343–358 (1996).
40. A priori estimates for positive solutions of semilinear elliptic systems via Hardy–Sobolev inequalities (with Ph. Clément and D. G. de Figueiredo), *Pitman Research Notes in Mathematics*, N. 343, 73–91 (1996).
41. Nonexistence of positive solutions of quasilinear equations (with G. Caristi), *Advances in Differential Equations*, Vol. 2, N. 3, 319–359 (1997).
42. On a class of semilinear elliptic systems (with Ph. Clément), *Nonlinear Evolution Equations and Applications*, RIMS Kyoto (1997), pp. 132–140.
43. Homoclinic Orbits for a class of infinite dimensional Hamiltonian systems (with Ph. Clément and P. Felmer), *Annali della Scuola Normale Superiore di Pisa, Ser. IV*, Vol. XXIV, Fasc. 2 (1997), pp. 367–393.
44. Existence and Non-existence of Positive Singular Solutions for a Class of Semilinear Elliptic Systems (with M. Garcia-Huidobro, R. Manasevich and C. Yarur), *Arch. Rational Mech. Anal.* **140** (1997), pp. 253–284.
45. Global existence of solutions and formation of singularities for a class of hyperbolic systems (with D. Del Santo and V. Georgiev), in *Geometrical Optics and Related Topics*, PNLDE 32, Birkhäuser, Boston (1997), pp. 117–140.
46. Strongly indefinite systems with critical Sobolev exponents (with J. Hulshof and R. C. A. M. van der Vorst), *Trans. Amer. Math. Soc.* **350** (1998), pp. 2349–2365.
47. Liouville Theorems for Elliptic Inequalities and Applications (with I. Birindelli), *Proc. of the Royal Society of Edinburgh* **128A**, 1217–1247 (1998).
48. Isolated Singularities of Polyharmonic Equations (with G. Caristi and R. Soranzo), *Atti del Seminario Matematico e Fisico dell’Università di Modena, Suppl. al Vol. XLVI* (1998), pp. 257–294.
49. Nonexistence of global solutions for a hyperbolic system: the critical case (with D. Del Santo), *Differential Equations* **34** (1998), pp. 1–7.
50. The absence of Global Positive Solutions to Quasilinear Elliptic Inequalities (with S. I. Pokhozhaev), *Doklady Mathematics, Russian Academy of Sciences*, Vol. 57, No. 2 (1998), pp. 250–253.
51. Some Existence and Non-existence results for a Homogeneous Quasilinear Problem (with Ph. Clément and R. Manasevich), *Asymptotic Analysis* **17** (1998), pp. 13–29.
52. Existence of the Principal Eigenvalue for Cooperative Elliptic Systems in a General Domain (with I. Birindelli and G. Sweers), *Differential Equations* **35**, no. 3 (1999), 325–333.
53. Nonexistence of positive solutions for quasilinear elliptic problems on \mathbb{R}^n (with S. I. Pokhozhaev), *Proceedings of the Steklov Institute of Mathematics*, Vol. 227 (1999), 186–216.
54. Nonexistence of Positive Solutions for a System of Quasilinear Elliptic Equations and Inequalities in \mathbb{R}^n (with S. I. Pokhozhaev), *Doklady Mathematics, Russian Academy of Sciences*, Vol. 59, No. 3 (1999), pp. 351–355.
55. A simple approach to Hardy inequalities, *Math. Notes* **67** (2000), 479–486; translation from *Mat. Zametki* **67** (2000), 563–572.
56. Existence of Positive Solutions for a Nonvariational Quasilinear Elliptic System (with Ph. Clément, J. Fleckinger, F. de Thélin), *Journal of Differential Equations* **166**, No. 2 (2000), 455–477.
57. Regularity results for positive weak solutions of a semilinear elliptic system (with A. Boccuto), *Annali di Matematica Pura e Applicata (IV)*, Vol. 179 (2001), 125–147.
58. Asymptotic Behaviour of Solutions of $\Delta^2 u = |x|^\sigma |u|^{p-1} u$ (with G. Caristi), *Quaderni Matematici, Università di Trieste*, n. 496 (2001).
59. Nonexistence of weak solutions for some degenerate elliptic and parabolic problems on \mathbb{R}^n (with S. I. Pokhozhaev), *Journal of Evolution Equations* **1**, Number 2 (2001), 189–220.
60. Nonexistence of weak solutions for some degenerate and singular hyperbolic problems on \mathbb{R}^n (with S. I. Pokhozhaev), *Proceedings of the Steklov Institute of Mathematics*, Vol. 232 (2001), 240–259.

61. Some Generalizations of Bernstein Theorem (with S. I. Pokhozhaev), *Differential Equations* **38**, No. 3 (2002), 373–378.
62. Existence and a-priori Estimates for Positive Solutions of p -Laplace Systems (with C. Azizieh and Ph. Clément), *Journal of Differential Equations* **184** (2002), 422–442.
63. Fujita type theorems for quasi-linear parabolic inequalities with nonlinear gradient (with S. I. Pokhozhaev), *Doklady Mathematics, Russian Academy of Sciences*, **386**, No. 2 (2002), 160–165.
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