

1. MIXED TYPE PARTIAL DIFFERENTIAL EQUATIONS

Books Authored

1. *Mixed type Equations and Maximum Principles in fluid dynamics* , 1983 , Greece
2. *Applied Analysis : Partial Differential Equations* , Vol. II , 2003 ,
Symmetry Publ. , Greece
3. *Lecture Notes on Mixed Type Partial Differential Equations* ,
World Scientific , 144 pp,1990
4. *Counter Examples in Differential Equations and Related Topics* ,
World Scientific , 192 pp,1991

Books Edited

- *Mathematics – Space Technology* , Greece ,1980
- *Mathematical Analysis* , Teubner–Texte zur Mathematik ,Vol. 79 , 1985
- *Mixed type Equations*, Teubner–Texte zur Mathematik , Vol. 90 , 1986
- *Mathematical Equations and Inequalities* , Vol. I , Greece ,1999
- *Mathematical Equations and Inequalities* , Vol. II , Greece ,1999

Published Papers

1. *Weak solutions of the Frankl – Morawetz problem in R^{n+1} ($n \geq 2$)* ,
(with G. Rassias , Th. Rassias) , Tamkang J. Math. **10** (1979) , no. 1 , 81-91
2. *On the Frankl problem of second kind* , Tamkang J. Math. **10** (1979) , no. 2 ,
231-236
3. *The 3-dimensional Frankl problem* , Bull. Soc. Roy. Sci. Liege **48** (1979) ,
no. 11-12 , 422-423
4. *The Bitsadze-Lavrentjev problem* , Bull. Soc. Roy. Sci. Liege **48** (1979) , no.
11-12 , 424-425
5. *A new mixed type boundary value problem* , Bull. Soc. Roy. Sci. Liege **48**
(1979) , no. 11-12 , 420-421
6. *The survey on equations of mixed type* , “Functional differential systems and
related topics” (Proc. First Internat. Conf. , B \ I a\zejewko,1979) , 295-301 ,
Higher College Engrg. , Zielona Gora , (1980)
7. *A maximum principle in R^3* , C. R. Math. Rep. Acad. Sci. Canada **2** (1980) ,
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8. *New uniqueness theorems* , Bull. Acad. Polon. Sci. Ser. Sci. Math. **28** (1980) ,
no. 11-12 , 569-571
9. *A new bi-hyperbolic boundary value problem in the Euclidean space* , Bull.
Acad. Polon. Sci. Ser. Sci. Math. **28** (1980) , no. 11-12 , 565-568
10. *On a defective theorem on elliptic – hyperbolic equations* , Bull. Soc.
Roy. Sci. Liege **49** (1980) , no. 9-10 , 307-309
11. *Weak solutions for a mixed type problem* , Bull. Soc. Roy. Sci. Liege **49**
(1980) , no. 5-8 , 278-280
12. *On a Goursat type problem*,C. R. Math. Rep. Acad. Sci. Canada **2** (1980/81) ,

- no. 1 , 49-51
13. *Uniqueness and existence theorems for a mixed type equation* , Tamkang J. Math. **12** , (1981) , no. 1 , 77-83
 14. *A new mixed type boundary value problem* , Bull. Sci. Math. (2) **105** (1981) , no. 3 , 329-336
 15. *Mixed type partial differential equations in R^n* , Tamkang J. Math. **12** (1981), no. 2 , 177-181
 16. *A uniqueness theorem for the generalized Frankl-Tricomi problem* , Bull. Sci. Math. (2) **105** (1981) , no. 3 , 321-327
 17. *A maximum principle in R^{n+1}* , J. Math. Anal. Appl. **85** (1982), no. 1, 106-113
 18. *Weak solutions of the Frankl problem in the 4- dimensional Euclidean space* , Bull. Acad. Polon. Sci. Ser. Sci. Math. **30** (1982) , no. 3-4 , 123-130
 19. *An application of the theory of positive symmetric systems to a degenerate multidimensional hyperbolic equation in R^3* ,Serdica **8** (1982), no. 3 , 235-242
 20. *An extended Chaplygin problem and a uniqueness theorem for the Chaplygin - Frankl problem* , Bull. Soc. Roy. Sci. Liege **51** (1982) , no. 3-4 , 156-160
 21. *The Bi-hyperbolic Degenerate Boundary Value Problem in R^3* , Discuss. Math., Vol. 5 , (1982), 101-104
 22. *The extended Bitsadze-Lavrentjev-Tricomi boundary value problem* , Rend. Circ. Mat. Palermo (2) **33** (1984) , no.2 , 255-264
 23. *On the Tricomi problem with two parabolic lines of degeneracy* , Bull. Inst. Math. Acad. Sinica **12** (1984) , no. 1 , 51-56
 24. *On the exterior mixed type boundary value problem in the Euclidean plane* , “Mathematical Analysis” , 269-284 , Teubner-Texte Math. , 79 , Teubner , Leipzig , (1985)
 25. *Extended Bitsadze-Lavrentjev problem with two parabolic lines of degeneracy and two elliptic arcs in Euclidean plane* , C. R. Acad. Bulgare Sci. **38** (1985) , no. 1 , 31-34
 26. *The mixed Bitsadze-Lavrentjev-Tricomi boundary value problem* , “Mixed Type Equations” , 6-21 , Teubner-Texte Math. , 90 , Teubner , Leipzig, (1986)
 27. *On three new uniqueness theorems of the Tricomi probem for nonlinear mixed type equations* , “Mixed Type Equations” , 269-279 , Teubner-Texte Math. , 90 , Teubner , Leipzig, (1986)
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 29. *On three new generalized uniqueness theorems of the Tricomi problem for nonlinear mixed type equations* , J. Math. Phys. Sci. **22** (1988), no. 6, 681-695
 30. *On the well-posedness of the extended Chaplygin problem in a multidimensional region* , C. R. Acad. Bulgare Sci. **41** (1988), no. 2 , 35-37
 31. *The well-posed Tricomi-Bitsadze-Lavrentjev problem in the Euclidean plane* , Atti Accad. Sci. Torino Cl. Sci. Fis. Mat. Natur. **124** (1990) , no. 3-4 , 73-83
 32. *The exterior Tricomi and Frankl problem* , J. Math. Res. Exposition **10** (1990) no. 4 , 485-493
 33. *On the well-posedness of the extended Tricomi-Chaplygin-Frankl problem in a multidimenional region* , Chinese. J. Math. **19** (1991) , no.3 , 187-203
 34. *On the well-posed Tricomi problem in R^2* , Discuss. Math. **12** (1992) , 85-93
 35. *The well-posed Tricomi problem of two kinds* , J. Math. Phys. Sci. **27** (1993),

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- 36. *The well-posed Tricomi problem in the Euclidean plane* , “Geometry, Analysis and Mechanics” , 189-195 , World Sci. Publishing, River Edge, NJ , (1994)
 - 37. *Uniqueness of quasi-regular solutions for a parabolic elliptic-hyperbolic Tricomi problem* , Bull. Inst. Math. Acad. Sinica **25** (1997) , no.4 , 277-287
 - 38. *Bitsadze-Lavrentjev Problem* , Encyclopaedia of Mathematics , Kluwer Academic Publishers , file: B: rassi 1 , March 28 , (1997) , 1-4 , The Netherlands
 - 39. *Existence of weak solutions for a parabolic elliptic-hyperbolic Tricomi problem* , Tsukuba J. Math. **23** (1999) , no. 1 , 37-54
 - 40. *Uniqueness of quasi-regular solutions for a bi-parabolic elliptic bi-hyperbolic Tricomi problem* , Complex Var. Theory Appl.(Taylor & Francis) **47** (2002) , no. 8 , 707-718