

Dimitrios E. MANOLAKOS, Professor

Born: 14.10.1955 in Piraeus, Greece
Address: National Technical University of Athens,
Heron Polytechniou 9, 15780 Zografou, Athens, Greece,
School of Mechanical Engineering,
Manufacturing Technology Division.
Tel. (+30) 210 772 3690
Fax: (+30) 210 772 3689
email: manolako@central.ntua.gr
Personal Homepage: <http://users.ntua.gr/manolako>

Studies

- First degree in Naval Architecture and Marine Engineering, National Technical University of Athens (NTUA), Greece, 1979.
- PhD, School of Naval Architecture and Marine Engineering, NTUA, Greece, 1984.

Professional Experience

- 1984-1987: Research Assistant, NTUA, School of Mechanical Engineering, Manufacturing Technology Division.
- 1987-1988: Adjunct Professor, NTUA, School of Mechanical Engineering, Manufacturing Technology Division.
- 1989-1999: Assistant Professor NTUA, School of Mechanical Engineering, Manufacturing Technology Division.
- 1999-2006: Associate Professor, NTUA, School of Mechanical Engineering, Manufacturing Technology Division.
- 2006-today: Professor, NTUA, School of Mechanical Engineering, Manufacturing Technology Division.

Research Activities

Through a number of european, national and under bilateral agreement projects (see hereunder with) dealing with the following areas of research:

- Manufacturing processes (rolling, forging, extrusion, sheet metal forming, metal removal processing, welding, casting, explosive cladding).
- Precision and ultra precision manufacturing. Nanotechnology.
- Powder processing of metals, ceramics and advanced high-Tc superconducting materials.
- Structural plasticity pertaining to the crashworthy deformation of thin-wall structures of metal, polymers, composites and bi-materials for the application in the automotive, rail and aircraft industry.
- Numerical modelling and simulation (FEM) of processing and constitutive behaviour of materials. Theoretical aspects of plasticity and stress wave propagation.
- Manufacturing automation. Advanced Manufacturing.

Current Duties

Director of the Laboratory of Manufacturing Technology, NTUA, Greece.

Teaching at NTUA

Undergraduate: Manufacturing Processes (Forming and Cutting), Metallic Materials, Advanced Materials, Welding, Dynamic Straining, Non-Conventional Manufacturing Processes, Tools and Dies, Micro- and Nano- Processes, Structural Plasticity.

Postgraduate: Manufacturing Processes (Metal Forming and Casting), Surface Engineering, Smart Materials, Biomaterials.

Publications (see hereunder with)

- 5 Books/Monographs
- 106 papers in refereed Journals
- 77 papers in refereed Conference Proceedings.
- 1 PhD thesis.

h-index: 16

PUBLICATIONS

Συνοψίζονται σε:

- 1 Διατριβή
- 106 Δημοσιεύσεις σε έγκριτα διεθνή περιοδικά
- 77 Δημοσιεύσεις σε Συνέδρια/Ημερίδες
- 3 Βιβλία / Μονογραφίες
- 2 Διδακτικά βοηθήματα.

A. Theses

1. Δ.Ε. Μανωλάκος
“Ερευνα επί της δυνατότητας εφαρμογής των μεθόδων πλαστικής αναλύσεως στη μελέτη του φαινομένου των συγκρούσεων πλοίων”
Διατριβή επί Διδακτορία, ΕΜΠ, Αθήνα, 1983, σελ. 460.

B. Journal publications

1. D.E. Manolakos
“Lower-bound solutions for laterally loaded rectangular plates”
IABSE Proceedings, P-78/84, pp. 109/116, 1984
2. D.E. Manolakos and A.G. Mamalis
“On ship collisions: The plastic collapse of longitudinally framed shell plating subjected to oblique loading”
International Journal of Impact Engineering, Vol. 3, pp. 41/55, 1985
3. A.G. Mamalis, D.E. Manolakos, G.L. Viegelaahn, N.M. Vaxevanidis and W. Johnson
“On the inextentional axial collapse of thin PVC conical shells”
International Journal of Mechanical Sciences, Vol. 28, pp. 323/335, 1986
4. A.G. Mamalis, D.E. Manolakos, F. Saigal, G.L. Viegelaahn and W. Johnson
“Extensible plastic collapse of thin wall frusta as energy absorbers”
International Journal of Mechanical Sciences, Vol. 28, pp. 219/229, 1986
5. A.G. Mamalis, D.E. Manolakos, G.L. Viegelaahn, N.M. Vaxevanidis and W. Johnson
“The inextentional collapse of grooved thin-walled cylinders of PVC under axial loading”

- International Journal of Impact Engineering, Vol. 4, pp. 41/56, 1986
6. A.G. Mamalis, G.L. Viegeln, D.E. Manolacos and W. Johnson
“Experimental investigation into the axial plastic collapse of steel thin-walled grooved tubes”
International Journal of Impact Engineering, Vol. 4, pp. 117/126, 1986
 7. D.E. Manolacos and A.G. Mamalis
“Upper and lower bounds for rectangular plates transversely loaded”
International Journal of Mechanical Sciences, Vol. 28, pp. 815/824, 1986
 8. A.G. Mamalis, D.E. Manolacos, G.L. Viegeln and W. Johnson
“The modelling of the progressive extensible plastic collapse of thin-wall shells”
International Journal of Mechanical Sciences, Vol. 30, pp. 249/261, 1988
 9. D.E. Manolacos and A.G. Mamalis
“Limit analysis for laterally loaded stiffened plates”
International Journal of Mechanical Sciences, Vol. 30, pp. 441/447, 1988
 10. A.G. Mamalis, D.E. Manolacos, G.L. Viegeln and W. Johnson
“On the crumpling of thin plastic closed top-hat sections by compressive loading”
International Journal of Vehicle Design, Vol. 9, pp. 675/686, 1988
 11. A.G. Mamalis, D.E. Manolacos, G.L. Viegeln and W. Johnson
“Energy absorption and deformation modes of thin PVC tubes internally grooved when subjected to axial plastic collapse”
Proc. Institution of Mechanical Engineers, Vol. 203, pp. 1/8, 1989
 12. A.G. Mamalis, D.E. Manolacos and G.L. Viegeln
“The axial crushing of thin PVC tubes and frusta of square cross-section”
International Journal of Impact Engineering, Vol. 8, pp. 241/264, 1989
 13. A.G. Mamalis, D.E. Manolacos, G.L. Viegeln and S. Minarecioglu
“Knautschverhalten dünnwandiger Rohre aus Kolhenstoffarmen Stahl”
Bänder-Bleche-Rohre, Vol. 30, No. 4, pp. 20/24, 1989
 14. A.G. Mamalis, D.E. Manolacos and G.L. Viegeln
“Crashworthy characteristics of thin fibre-reinforced composite frusta under axial collapse”
International Journal of Vehicle Design, Vol. 10, pp. 165/174, 1989
 15. A.G. Mamalis, D.E. Manolacos, G.L. Viegeln and S. Minarecioglu
“The inextentional axial collapse of thin plastic double top-hat sections”
International Journal of Vehicle Design, Vol. 10, pp. 269/283, 1989
 16. A.G. Mamalis, D.E. Manolacos, A.K. Baldoukas and G.L. Viegeln
“Deformation characteristics of crashworthy thin-walled steel tubes subjected to bending”
Proc. Institution of Mechanical Engineers, Part C, Journal of Mechanical Engineering Science, Vol. 203, pp. 411/417, 1989
 17. A.G. Mamalis, D.E. Manolacos and G.L. Viegeln
“Crashworthy behaviour of thin-walled tubes of fiberglass composite materials subjected to axial loading”
Journal of Composite Materials, Vol. 24, pp. 72/91, 1990
 18. A.G. Mamalis, D.E. Manolacos, A.K. Baldoukas and G.L. Viegeln
“Bending of fibre-reinforced composite thin-walled tubes”
Composites, Vol. 21, pp. 431/438, 1990
 19. A.G. Mamalis, D.E. Manolacos, A.K. Baldoukas and G.L. Viegeln
“Energy dissipation and associated failure modes when axially loading polygonal thin-walled cylinders”
Thin-Walled Structures, Vol. 12, pp. 17/34, 1991
 20. A.G. Mamalis, D.E. Manolacos, G.A. Demosthenous and W. Johnson
“Axial plastic collapse of thin bi-material tubes as energy dissipating systems”
International Journal of Impact Engineering, Vol. 11, pp. 185/196, 1991
 21. A.G. Mamalis, D.E. Manolacos, G.L. Viegeln, Sin Min Yap and G.A. Demosthenous
“On the axial crumpling of fibre-reinforced composite thin-walled conical shells”

- International Journal of Vehicle Design, Vol. 12, pp. 450/467, 1991
22. A.G. Mamalis, D.E. Manolakos, G.L. Viegelahm, G.A. Demosthenous and Sin Min Yap
 “Microscopic failure mechanism of thin-walled fibre-reinforced composite frusta under static axial collapse”
 International Journal of Vehicle Design, Vol. 12, pp. 557/578, 1991
 23. A.G. Mamalis, D.E. Manolakos, G.L. Viegelahm, D.M. Johnson and A.K. Baldoukas
 “On the effect of shear when bending crashworthy thin-walled steel tubes”
 Thin-Walled Structures, Vol. 14, pp. 153/165, 1992
 24. A.G. Mamalis, D.E. Manolakos and G.A. Demosthenous
 “Crushing behaviour of thin-walled non-circular fibreglass composite tubular components due to bending”
 Composites, Vol. 23, pp. 425/433, 1992
 25. A.G. Mamalis, D.E. Manolakos, G.A. Demosthenous and M.B. Ioannidis
 “On the bending of automotive fibre-reinforced composite thin-walled structures”
 Composites, Vol. 25, pp. 47/57, 1994
 26. A.G. Mamalis, D.E. Manolakos, G.A. Demosthenous and M.B. Ioannidis
 “Axial collapse of thin-walled fibreglass composite tubular components at elevated strain rates”
 Composites Engineering, Vol. 4, pp. 653/677, 1994
 27. A.G. Mamalis, D.E. Manolakos, G.A. Demosthenous and M.B. Ioannidis
 “The deformation mechanism of thin-walled non-circular composite tubes subjected to bending”
 Composite Structures, Vol. 30, pp. 131/146, 1995
 28. A.G. Mamalis, D.E. Manolakos, G.A. Demosthenous and M.B. Ioannidis
 “Analytical and experimental approach to damage and residual strength of fibreglass composite automotive frame rails during manufacturing”
 Composite Structures, Vol. 32, pp.325/330, 1995
 29. A.G. Mamalis, D.E. Manolakos, G.A. Demosthenous and M.B. Ioannidis
 “Analysis of failure mechanisms observed in axial collapse of thin-walled circular fibreglass composite tubes”
 Thin-Walled Structures, Vol. 24, pp. 335/352, 1996
 30. A.G. Mamalis, D.E. Manolakos, G.A. Demosthenous and M.B. Ioannidis
 “The static and dynamic axial collapse of fibreglass composite automotive frame rails”
 Composite Structures, Vol. 34, pp. 77/90, 1996
 31. A.G. Mamalis, D.E. Manolakos and A.K. Baldoukas
 “Finite element simulation of axisymmetric preforms for precision forming at elevated temperatures”
 Journal of Materials Processing Technology, Vol. 57, pp. 103/111, 1996
 32. A.G. Mamalis, D.E. Manolakos and A.K. Baldoukas
 “On the finite element modelling of the deep-drawing of square sections of coated sheet steels”
 Journal of Materials Processing Technology, Vol. 58, pp. 153/159, 1996
 33. A.G. Mamalis, D.E. Manolakos and A.K. Baldoukas
 “Simulation of the precision forging of bevel gears using implicit and explicit FE techniques”
 Journal of Materials Processing Technology, Vol. 57, pp. 164/171, 1996
 34. A.G. Mamalis, D.E. Manolakos, G.A. Demosthenous and M.B. Ioannidis
 “Energy absorption capability of fibreglass composite square frusta subjected to static and dynamic axial collapse”
 Thin-Walled Structures, Vol. 25, pp. 269/295, 1996
 35. A.G. Mamalis, G. Pantazopoulos, A. Szalay, I. Kotsis, I. Vajda and D.E. Manolakos
 “Multi-pass warm extrusion of explosively compacted ceramic superconductive (Y-Ba-K-Cu-O)/metal billets”

- Applied Superconductivity, Vol. 4, pp. 213/229, 1996
36. A.G. Mamalis, D.E. Manolakos and A.K. Baldoukas
“Finite-element modelling of the stretch forming of coated steels”
Journal of Materials Processing Technology, Vol. 68, pp. 71/75, 1997
 37. A.G. Mamalis, M. Robinson, D.E. Manolakos, G.A. Demosthenous, M.B. Ioannidis and J. Carruthers
“Crashworthy capability of composite material structures”
Composite Structures, Vol. 37, pp. 109/134, 1997
 38. A.G. Mamalis, I. Kotsis, G. Pantazopoulos, M. Enisz, A. Szalay and D.E. Manolakos
“The effect of heat treatment on explosively compacted (Y-Ba-K-Cu-O) superconductive powders”
Physica C, Vol. 280, pp. 289/296, 1997
 39. A.G. Mamalis, D.E. Manolakos, G.A. Demosthenous and M.B. Ioannidis
“The static and dynamic axial crumbling of thin-walled fibreglass composite square tubes”
Composites Part B, Vol. 28B, pp. 439/451, 1997
 40. A.G. Mamalis, D.E. Manolakos, G.A. Demosthenous and M.B. Ioannidis
“Analytical modelling of the static and dynamic axial collapse of thin-walled fibreglass composite conical tubes”
International Journal of Impact Engineering, Vol. 19, pp. 477/492, 1997
 41. A.G. Mamalis, D.E. Manolakos and A.K. Baldoukas
“Simulation of sheet metal forming using explicit finite-element techniques: Effect of material and forming characteristics. Part 1. Deep-drawing of cylindrical cups”
Journal of Materials Processing Technology, Vol. 72, pp. 48/60, 1997
 42. A.G. Mamalis, D.E. Manolakos and A.K. Baldoukas
“Simulation of sheet metal forming using explicit finite-element techniques: Effect of material and forming characteristics. Part 2. Deep-drawing of square cups”
Journal of Materials Processing Technology, Vol. 72, pp. 110/116, 1997
 43. A.G. Mamalis, D.E. Manolakos, G.A. Demosthenous and M.B. Ioannidis
“Experimental determination of splitting in axially collapsed thick-walled fibre-reinforced composite frusta”
Thin-Walled Structures, Vol. 28, pp. 279/296, 1997
 44. A.G. Mamalis, A. Szalay, N.M. Vaxevanidis and D.E. Manolakos
“Fabrication of bi-metallic rods by explosive cladding and warm-extrusion”
Journal of Materials Processing Technology, Vol. 43, pp. 48/53, 1998
 45. A.G. Mamalis, G.L. Petrossian and D.E. Manolakos
“The effect of porosity and microdefects on plastically deformed porous materials”
Journal of Materials Processing Technology, Vol. 96, pp. 117/123, 1999
 46. A.G. Mamalis, G.L. Petrossian and D.E. Manolakos
“Open-die forging of sintered cylindrical billets : An analytical approach”
Journal of Materials Processing Technology, Vol. 96, pp. 112/116, 1999
 47. A.G. Mamalis, G.L. Petrossian and D.E. Manolakos
“Limit design of porous sintered metal powder machine elements”
Journal of Materials Processing Technology, Vol. 98, pp. 335/342, 2000
 48. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis and P.K. Kostazos
“The bending of fibre-reinforced composite thin-walled tubular components: Numerical modeling”
International Journal of Crashworthiness, Vol. 5, pp. 193/206, 2000
 49. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis and P.K. Kostazos
“Axial collapse of hybrid square sandwich composite tubular components with corrugated core: Experimental”
International Journal of Crashworthiness, Vol. 5, pp. 315/332, 2000
 50. A.G. Mamalis, I. Vottea and D.E. Manolakos

- “Numerical simulation of explosively compacted superconducting powders”
Physica C, Vol. 341-348, pp. 2433/2434, 2000
51. A.G. Mamalis, I.N. Vottea and D.E. Manolakos
“On the modeling of the compaction mechanism of shock compacted powders”
Journal of Materials Processing Technology, Vol. 108, pp. 165/178, 2001
 52. A.G. Mamalis, M. Horváth, A.S. Branis and D.E. Manolakos
“Finite element simulation of chip formation in orthogonal metal cutting”
Journal of Materials Processing Technology, Vol. 110, pp. 19/27, 2001
 53. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis, P.K. Kostazos and G. Hassiotis
“Finite element simulation of the axial collapse of thin-wall square frusta”
International Journal of Crashworthiness, Vol. 6, pp. 155/164, 2001
 54. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis and P.K. Kostazos
“Axial crushing of hybrid square sandwich composite vehicle hollow bodysshels with reinforced core: Experimental”
International Journal of Crashworthiness, Vol. 6, pp. 363/376, 2001
 55. A.G. Mamalis, A.S. Branis and D.E. Manolakos
“Modelling of precision hard cutting using implicit finite element techniques”
Journal of Materials Processing Technology, Vol.123, pp. 464/475, 2002
 56. A.G. Mamalis, I.N. Vottea and D.E. Manolakos
“Fabrication of metal/sheathed high- T_c superconducting composites by explosive compaction/cladding: Numerical simulation”
Materials Science and Engineering B, Vol. 90, pp.254/260, 2002
 57. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis, D.P. Papapostolou, P.K. Kostazos and D.G. Konstantinidis
“On the compression of hybrid sandwich composite panels reinforced with internal tube inserts: Experimental”
Composite Structures, Vol.56, pp. 191/199, 2002
 58. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis, P.K. Kostazos and D.P. Papapostolou
“Axial collapse of hybrid square sandwich composite tubular components with corrugated core: Numerical modelling”
Composite Structures, Vol. 58, pp.571/582, 2002
 59. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis, P.K. Kostazos and C. Chirwa
“Static and dynamic axial collapse of fiberglass composite thin-walled tubes: Finite element modeling of the crush zone”
International Journal of Crashworthiness, Vol. 8, pp.247/254, 2003
 60. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis and P.K. Kostazos
“Crushing of hybrid square sandwich composite vehicle hollow bodysshells with reinforced core subjected to axial loading: Numerical simulation”
Composite Structures, Vol.61, pp.175/186, 2003
 61. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis, P.K. Kostazos and C. Dimitriou
“Finite element simulation of the axial collapse of metallic thin-walled tubes with octagonal cross-section”
Thin-Walled Structures, Vol.41, pp.891/900, 2003
 62. A.G. Mamalis, J. Kundrák, D.E. Manolakos, K. Gyáni and A. Markopoulos
“Thermal modelling of surface grinding using implicit finite element techniques”
International Journal of Advanced Manufacturing Technology, Vol. 21, pp.929/934, 2003
 63. A.G. Mamalis, J. Kundrák, D.E. Manolakos, A. Markopoulos and M. Horváth
“Effect of the workpiece material on the heat affected zones during grinding: Numerical simulation”
International Journal of Advanced Manufacturing Technology, Vol. 22, pp.761/767, 2003
 64. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis, P.K. Kostazos and S.N. Kastanias

- “Numerical modelling of the axial plastic collapse of externally grooved steel thin-walled tubes”
International Journal of Crashworthiness, Vol. 8, pp. 583/590, 2003
65. A.G. Mamalis, I.N. Vottea, D.E. Manolakos, A. Szálay and A. Kladas
“Numerical simulation of explosive consolidation of superconducting bulk components”
International Journal of Modern Physics B, Vol.17, pp. 3563/3568, 2003
 66. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis, A. Markopoulos and I.N. Vottea
“Simulation of advanced manufacturing of solids and porous materials”
International Journal for Manufacturing Science and Production, Vol. 5, pp. 111/130, 2003.
 67. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis and D.P. Papapostolou
“Crashworthy characteristics of axially statically compressed thin-walled square CFRP composite tubes: Experimental”
Composite Structures, Vol. 63, pp.347/360, 2004
 68. A.G. Mamalis, D.E. Manolakos, A.G. Kladas and A.K. Koumoutsos
“Electromagnetic forming and powder processing: Trends and developments”
Applied Mechanics Reviews, Vol. 57, pp.299/324, 2004
 69. A. Giannoglou, A. Kladas, J. Tegopoulos, A. Koumoutsos, D.E. Manolakos and A.G. Mamalis
“Electromagnetic forming: A coupled numerical electromagnetic-mechanical-electrical approach compared to measurements”
COMPEL: The International Journal for Computation and Electronic Engineering, Vol. 23, pp. 789/799, 2004
 70. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis, P.K. Kostazos, A. Goulielmos and G. Demosthenous
“Finite element simulation of internally grooved thin-wall PVC tubes subjected to axial collapse”
International Journal of Crashworthiness, Vol. 9, pp. 433/441, 2004
 71. A.G. Mamalis, I.N. Vottea and D.E. Manolakos
“Application of explicit FE techniques on the explosive compaction/cladding of high-temperature superconductors”
Materials Science Forum, Vols. 465-466, pp. 101/106, 2004
 72. A.G. Mamalis, I.N. Vottea and D.E. Manolakos
“Explosive compaction/cladding of metal sheathed/superconducting grooved plates: FE modeling and validation”
Physica C, Vols. 408-410, pp. 881/883, 2004
 73. N.M. Vaxevanidis, D.E. Manolakos and G.B. Petropoulos
“Surface integrity and tribological behavior of plasma sprayed alumina coatings on steel and aluminum substrates”
Tribology in Industry, Vol. 26, pp. 42/47, 2004
 74. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis and D.P. Papapostolou
“On the response of thin-walled CFRP composite tubular components subjected to static and dynamic axial compressive loading: Experimental”
Composite Structures, Vol. 69, pp. 407/420, 2005
 75. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis and D.P. Papapostolou
“On the experimental investigation of crash energy absorption in laminate splaying collapse mode of FRP tubular components”
Composite Structures, Vol. 70, pp. 413/429, 2005
 76. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis and D.P. Papapostolou
“On the crushing response of composite sandwich panels subjected to edgewise compression: Experimental”
Composite Structures, Vol. 71, pp. 246/257, 2005
 77. A.G. Mamalis, A. Markopoulos and D.E. Manolakos

- “Micro and nanoprocessing techniques and applications”
Nanotech Perception, Vol. 1, pp. 31/52, 2005
78. A.G. Mamalis, I.N. Vottea, D.E. Manolakos, A.Szálay and F. Marquis
“Exposive compaction/cladding of YBCO discs: A numerical approach”
Journal of Materials Processing Technology, Vol.161, pp.36/41, 2005
 79. A. G. Mamalis, D.E. Manolakos, A. G. Kladas and A. K. Koumoutsos
“Physical principles of electromagnetic forming process: a constitutive finite element model”
Journal of Materials Processing Technology, Vol.161, pp.294/299, 2005
 80. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis and P.K. Kostazos
“Numerical simulation of thin-walled metallic circular frusta subjected to axial loading”
International Journal of Crashworthiness, Vol. 10, pp. 505/513, 2005
 81. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis and P.K. Kostazos
“Bending of cylindrical steel tubes: Numerical modeling”
International Journal of Crashworthiness, Vol. 11, pp. 37/47, 2006
 82. A.G. Mamalis, I.N. Vottea and D.E. Manolakos
“Development of numerical modeling to simulate the explosive compaction/cladding of YBCO ceramic powders”
Modelling and Simulation in Materials Science and Engineering, Vol.14, pp.313/329, 2006
 83. A.G. Mamalis, D.E. Manolakos, A. Kladas and A. Koumoutsos
“Electromagnetic forming tools and processing conditions: Numerical simulation”
Materials and Manufacturing Processes, Vol.21, pp.411/423, 2006
 84. A.G. Mamalis, D.E. Manolakos, A.G. Kladas and A.K. Koumoutsos
“Electromagnetic forming of aluminium alloy sheet using a grooved die: Numerical modelling”
The Physics of Metals and Metallography, Vol.102, Suppl. 1, pp.S90/S93, 2006
 85. A.G. Mamalis, G.L. Petrosyan, D.E. Manolakos and A.F. Hambardzumyan
“Mathematical modelling of plastic deformation processes of bimetallic tubes with porous internal layer in conical dies”
Journal of Materials Processing Technology, Vol.172, pp.243/248, 2006
 86. A.G. Mamalis, G.L. Petrosyan, D.E. Manolakos and H.G. Petrosyan
“Determination of initial compression stresses when extruding bimetallic tubes with porous internal layer”
Journal of Materials Processing Technology, Vol.172, pp.277/282, 2006
 87. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis and D.P. Papapostolou
“Finite element modelling of the crushing response of composite sandwich panels with FRP tubular reinforcements”
International Journal of Crashworthiness, Vol.11, pp.177/188, 2006
 88. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis and D.P. Papapostolou
“The static and dynamic axial collapse of CFRP square tubes: Finite element modelling”
Composite Structures, Vol.74, pp.213/225, 2006
 89. N.M. Vaxevanidis, D.E. Manolakos and G.P. Petropoulos
“Tribological behaviour and surface integrity states of plasma-sprayed Al₂O₃ coatings on steel and aluminum substrates”
Journal of the Balkan Tribological Association, Vol. 12, pp. 95/103, 2006
 90. S. Theodoropoulou, D. Papadimitriou, A.G. Mamalis, D.E. Manolakos, R. Klenk and M-Ch. Lux-Steiner
“Band-gap energies and strain effects on CuIn_{1-x}Ca_xS₂ based solar cells”
Semiconductor Science and Technology, Vol. 22, pp. 933/940, 2007
 91. A.G. Mamalis, G.L. Petrosyan, D.E. Manolakos and A.F. Hambardzumyan
“The effect of strain hardening in the extrusion of bimetallic tubes of porous internal layer”
Journal of Materials Processing Technology, Vol.181, pp.241/245, 2007
 92. A.G. Mamalis, J. Kunderák, A. Markopoulos, D.E. Manolakos

- “On the finite element modelling of high speed hard turning”
International Journal of Advanced Manufacturing Technology, 38 (5 & 6), pp. 441/446, 2008
93. A.G. Mamalis, T.A. Varvarigou, A.O. Litke, D.E. Manolakos, M.B. Ioannidism P.K. Kostazos, V.I. Andronikou and E.A. Karanastasis
“Bending of cylindrical steel tubes: numerical simulation using Grid computing”
International Journal of Crashworthiness, Vol.13, pp.109/116, 2008
 94. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis, K.N. Spentzas and S. Koutroubakis
“Static axial collapse of foam-filled steel thin-walled rectangular tubes: experimental and numerical simulation”
International Journal of Crashworthiness, Vol.13, pp.117/126, 2008
 95. A.G. Mamalis, K.N. Spentzas, D.E. Manolakos, N. Pantelelis and M.B. Ioannidis
“Structural and impact behaviour of an innovative low-cost sandwich panel”
International Journal of Crashworthiness, Vol.13, pp.231/236, 2008
 96. A. Markopoulos, D.E. Manolakos, N.M. Vaxevanidis
“Artificial neural network models for the prediction of surface roughness in electrical discharge machining”
Journal of Intelligent Manufacturing, Vol. 19, pp. 283/292, 2008
 97. A.G. Mamalis, K.N. Spentzas, N.G. Pantelelis, D.E. Manolakos and M.B. Ioannidis
“A new hybrid concept for sandwich structures”
Composite Structures, Vol.83, pp.335/340, 2008
 98. A.G. Mamalis, E. Hristoforou, D.E. Manolakos, P. Svec, T. Prikhna, J.D. Theodorakopoulos and G. Kouzilos
“Explosive compaction and synthesis of MgB₂ superconductor using the powder in tube technique”
Journal of Optoelectronics and Advanced Materials, Vol. 10, pp. 1000/1004, 2008
 99. A.G. Mamalis, E. Hristoforou, D.E. Manolakos, T. Prikhna, J.D. Theodorakopoulos and G. Kouzilos
“Explosively consolidated powder-in-tube MgB₂ superconductor aided by post-thermal treatment”
IEEE Transactions on Applied Superconductivity, Vol. 19, pp. 20/27, 2009
 100. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis, D.G. Chronopoulos and P.K. Kostazos
“On the crashworthiness of composite rectangular thin-walled tubes internally reinforced with aluminium or polymeric foams: Experimental and numerical simulation”
Composite Structures, Vol. 89, pp. 416/423, 2009
 101. A.P. Markopoulos, D.E. Manolakos
“Modeling and simulation techniques used in micro and nanotechnology and manufacturing”
Micro and Nanosystems, Vol.1, pp. 105/115, 2009
 102. N.I. Galanis and D.E. Manolakos
“Surface roughness of manufactured femoral heads with high speed turning”
International Journal of Machining and Machinability of Materials, Vol. 5, pp. 371/382, 2009
 103. A.G. Mamalis, D.E. Manolakos, K.N. Spentzas, M.B. Ioannidis, S. Koutroubakis and P.K. Kostazos
“The affect of the implementation of circular holes as crash initiators to the crushing characteristics of mild steel square tubes: Experimental and numerical simulation”
International Journal of Crashworthiness, Vol.14, pp. 489/501, 2009
 104. N.I. Galanis and D.E. Manolakos
“Surface roughness prediction in turning of femoral head”
International Journal of Advanced Manufacturing Technology, Vol. 51, pp. 79/86, 2010
 105. N.I. Galanis and D.E. Manolakos
“Forces measurement in turning of femoral heads from AISI 316l stainless steel” Journal of Manufacturing Technology Research, Vol. 2, pp. 1/15, 2010
 106. A.P. Markopoulos, K. Kantzavelos, N. Galanis and D.E. Manolakos

“3D modelling of precision high speed turning and milling for the prediction of chip morphology using FEM”
Journal of Machining and Forming Technologies, Vol. 3, Issue 3-4, pp. 1-13, 2011

C. Conference publications

1. A.G. Mamalis, L.P. Hatzikonstantis, A.J. Zavaliangos, G.C. Vosniakos and D.E. Manolakos
“Evaluation of the m-yield criterion of anisotropic sheet metals in predicting limit strains”
Proc. 3rd International Conference in CAD/CAM and FEM in Metal Working, Stafford, U.K., April 1987; “CAD/CAM and FEM in Metal Working”, Eds. S.K. Ghosh and A. Niku'Lari, Pergamon Press, 1988, pp. 121/141
2. A.G. Mamalis, D.E. Manolakos, G.L. Viegelaahn and W. Johnson
“The modelling of the progressive extensible plastic collapse of thin-wall shells”
International Symposium on Structural Failure, MIT, Boston, June 1988.
3. A.G. Mamalis, D.E. Manolakos, G.A. Demosthenous and M.B. Ioannidis
“Crashworthy characteristics of fibreglass composite automotive frame rails subjected to bending and axial collapse”
Proc. 27th ISATA Conference on New and Alternative Materials for the Transportation Industries, Aachen, Germany, October 1994, pp. 371/379
4. A.G. Mamalis, D.M. Manolakos and A.K. Baldoukas
“Application of an explicit finite element model in deep-drawing of cylindrical cups of coated steels”
Proc. 2nd International Conference on Sheet Metal Forming, Belfast, April 1994, Eds. V.P. Singh, B. Shirvani and H.J.J. Kals, pp. 153/163
5. A.G. Mamalis, D.E. Manolakos and A.K. Baldoukas
“On the finite element modelling of the deep-drawing of square sections of coated sheet steels”
2nd Asia-Pasific Conference on Materials Processing, Singapore, November 1994
6. Α.Γ. Μάμαλης, Δ.Ε. Μανωλάκος και Ν.Μ. Βαξεβανίδης
“Πιστότητα επιφανείας κατεργασίμου υλικού με μηχανική επιφανειακή πλαστική παραμόρφωση”
ΤΕΕ, Ημερίδα “Ειδικές Επιφανειακές Κατεργασίες: Τεχνολογία και εφαρμογές στην Ελλάδα”, Μάρτιος 1995
Τεχνικά, τεύχος 117, σελ. 19/27, 1996.
7. A.G. Mamalis, D.E. Manolakos, G.A. Demosthenous and M.B. Ioannidis
“Analytical and experimental approach to damage and residual strength of fibreglass composite automotive frame rails during manufacturing”
Proc. 8th International Conference on Composite Structures, Paisley, Scotland, September 1995
8. A.G. Mamalis, D.E. Manolakos, G.A. Demosthenous and M.B. Ioannidis
“Experimental determination of splitting in axially collapsed thick-walled fibre-reinforced composite frusta”
Proc. Bicentenary Conference on Thin-Walled Structures, University of Strathclyde, Glasgow, U.K., December 1996;
9. A. Barbagelata, A.G. Mamalis, D.E. Manolakos, A.M. Robinson, A.E.D. Walters
“Hybrid composite structures for crashworthy safe transportation systems”
Proc. 30th ISATA Conference on Crash Behaviour of Lightweight Materials and Structures, Florence, Italy, June 1997, pp. 657/664
10. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis and P.K. Kostazos

- “Modelling of the crush zone of axially loaded thin-walled tubular components using explicit finite element techniques”
Proc. 31st ISATA Conference on Materials for Energy-Efficient Vehicles, Düsseldorf, Germany, June 1998, pp. 113/121
11. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis and P.K. Kostazos
“Finite element modelling of the crush zone of fibreglass composite thin-walled tubes subjected to static and dynamic axial loading”
Proc. 5th International Conference on Composites Engineering (ICCE/5), Las Vegas, Nevada, USA, July 1998
 12. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis, P.K. Kostazos and M. Robinson
“On the static axial collapse of square composite rail vehicle hollow body shells”
Proc. 4th Seminar on Experimental Techniques and Design in Composite Materials, Sheffield, U.K., September 1998;
In: “Experimental Techniques and Design in Composite Materials 4”, Ed. M. Found, Swets and Zeitlinger, Lisse, Holland, 2002, pp. 87/92
 13. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis and P.K. Kostazos
“Simulation of bending of fibreglass composite thin-walled tubular components using implicit finite element techniques”
Proc. 6th International Conference on Composites, ICCE/6, Orlando, USA, June 1999, pp. 541/542.
 14. A.G. Mamalis, A. Szalay, D.E. Manolakos and N.M. Vaxevanidis
“Fabrication of Ni-Ti bimetallic rods by explosive powder compaction and extrusion”
Proc. 6th International Conference on Technology of Plasticity (ICTP), Nürnberg, Germany, September 1999, “Advanced Technology of Plasticity”, Ed. M. Geiger, Springer Verlag, Vol. 2, pp. 1339/1344, 1999
 15. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis, P.K. Kostazos and K. Dedes
“Finite element simulation of the collapse modes of axially dynamically loaded thin-walled metallic rectangular tubular components”
Proc. 32nd ISATA Conference on Materials for Energy Efficient Vehicles, Vienna, Austria, June 1999, pp. 253/259
 16. A.G. Mamalis, I.N. Vottea and D.E. Manolakos
“Finite element modelling of the explosive compaction of powders”
Proc. 5th International Summer School on High Temperature Superconductivity (5th ISSHTS), Eger, Hungary, July 1999
 17. A.G. Mamalis, I.N. Vottea and D.E. Manolakos
“On the modeling of the compaction mechanism of shock compacted powders”
Proc. 1st Japanese-Greek Workshop on Superconductivity and Magnetic Materials (JGNSM’99), Athens, Greece, May 1999, pp.71/92.
 18. A.G. Mamalis, D.E. Manolakos and M.B. Ioannidis
“Bending fatigue of fibre-reinforced epoxy composites”
Proc. ISATA 2000 Conference, Dublin, Ireland, September 2000, pp. 209/215
 19. A.G. Mamalis, I. Vottea and D. Manolakos
“Numerical simulation of explosively compacted superconducting powders”
Proc. 6th International Conference on Materials and Mechanisms of Superconductivity and High Temperature Superconductors, Houston, Texas, USA, February 2000
 20. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis, P.K. Kostazos and G. Hassiotis
“Finite element simulation of the axial collapse of thin-wall square frusta”
Proc. International Conference ICrash 2000, London, U.K., September 2000, pp. 483/492
 21. A.G. Mamalis, I.N. Vottea and D.E. Manolakos
“Simulation of the explosive compaction of superconducting powders using explicit finite element techniques”

- Proc. 6th International Summer School on High Temperature Superconductivity (Workshop), Eger, Hungary, July 2000
22. A.G. Mamalis, I. Vottea, D.E. Manolakos, A. Szalay and G. Desgardin
 “On the numerical simulation of shock compacted metal sheathed high-Tc superconducting billets”
 Proc. EXPLOMET 2000 Conference, Albuquerque, New Mexico, USA, June 2000, in:
 “Fundamental Issues and Applications of Shock-Wave and High-Strain-Rate Phenomena”,
 Eds K.P. Staudhammer, L.E. Murr, M.A. Meyers, Elsevier, New York, 2001, pp. 289/295
 23. G.-C. Vosniakos, D.E. Manolakos, T. Giannakakis and P.K. Kostazos
 “Manufacturing intelligence computing concepts in planning sheet metal forming operations”
 Proc. 1st National Conference on Recent Advances in Mechanical Engineering, ASME-Greek
 Section, Patras, Greece, September 2001, paper P-165
 24. A.G. Mamalis, I.N. Vottea and D.E. Manolakos
 “Numerical simulation of the explosive compaction/cladding of grooved YBCO metal/ plates”
 Proc. 2nd Japanese/Greek Joint Workshop on Superconductivity and Magnetic Materials, Oita,
 May 2001;
 In “Superconductivity and Magnetic Materials”, Eds. M. Enokizono and A.G. Mamalis,
 JAESM Studies in Applied Electromagnetics and Mechanics, Vol. 12, pp. 132/138, 2001
 25. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis and P.K. Kostazos
 “Axial crushing of hybrid square sandwich composite vehicle hollow bodysHELLS”
 Proc., Automotive and Transportation Technology Congress and Exhibition, ATTCE 2001,
 Barcelona, Spain, October 2001, Vol. 4, pp. 133/138
 26. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis, P.K. Kostazos, A. Goulielmos and G.
 Demosthenous
 “Finite element simulation of internally grooved thin-wall PVC tubes subjected to axial
 collapse”
 ICrash 2002, International Crashworthiness, Melbourne, Australia, February 2002
 27. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis, P.K. Kostazos and S.N. Kastanias
 “Numerical modelling of the axial plastic collapse of externally grooved steel thin-walled
 tubes”
 ICrash 2002, International Crashworthiness, Melbourne, Australia, February 2002
 28. A.K. Baldoukas, G.A. Demosthenous and D.E. Manolakos
 “Experimental evaluation of the 6xxx series aluminium alloys extrudability”
 Proc. JSME/ASME International Conference on Materials and Processing, Honolulu, Hawaii,
 Vol. 2, pp. 168/173, October 2002
 29. G.A. Demosthenous, D.E. Manolakos, A.K. Baldoukas and C.N. Kyriakou
 “The effect of moisture on the fatigue behaviour of fibre-reinforced composite materials”
 Proc. JSME/ASME International Conference on Materials and Processing, Honolulu, Hawaii,
 Vol. 1, pp. 517/522, October 2002
 30. A.G. Mamalis, I.N. Vottea, D.E. Manolakos, A. Szalay and A. Kladas
 “Numerical simulation of explosive consolidation of superconducting bulk components”
 Proc. 4th International Conference on New Theories, Discoveries and Applications of
 Superconductors and Related Materials (New 3SC-4), San Diego, California, USA, January
 2003.
 31. A.G. Mamalis, J. Kundrák, D.E. Manolakos, A. Markopoulos and G. Christoforou
 “Numerical analysis of surface grinding: Comparison between 2D and 3D modelling”
 Proc. International Scientific Conference MicroCAD 2003, Miskolc, Hungary, March 2003,
 pp.155/160
 32. A.G. Mamalis, I.N. Vottea, D.E. Manolakos, A.Szalay and F. Marquis
 “Explosive compaction/cladding of YBCO discs: A numerical approach”
 Proc. 3rd Japanese/Mediterranean Joint Workshop on Superconductivity and Magnetic
 Materials JAPMED '03, Athens, Greece, May 2003

33. A. G. Mamalis, D.E. Manolakos, A. G. Kladas and A. K. Koumoutsos
“Physical properties of electromagnetic forming process: A constitutive finite element model”
Proc. 3rd Japanese/Mediterranean Joint Workshop on Superconductivity and Magnetic Materials JAPMED’03, Athens, Greece, May 2003
34. A.G. Mamalis, I.N. Vottea and D.E. Manolakos
“Explosive compaction/cladding of metal sheathed/superconducting grooved plates: FE modelling and validation”
Proc. 7th International Conference on Materials and Mechanisms of Superconductors, Rio de Janeiro, Brasil, May 2003
35. A.G. Mamalis, F.S.D. Marquis, D.E. Manolakos and I.N. Vottea
“Explosive compaction / cladding of YBCO discs: A numerical approach”,
Proc. Symposium on Powder Materials: Current Research and Industrial Practices, Chicago, Illinois, USA, pp. 191/197, November 2003
36. A.G. Mamalis, I.N. Vottea and D.E. Manolakos
“Application of explicit FE techniques on the explosive compaction/cladding of high-temperature superconductors”
Proc. 1st International Symposium on Explosion, Shock Wave and Hypervelocity Phenomena, Kumamoto, Japan, March 2004
37. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis and P.K. Kostazos
“Numerical simulation of thin-walled metallic circular frusta subjected to axial loading”
ICrash 2004, International Crashworthiness, San Francisco, USA, July 2004
38. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis and P.K. Kostazos
“Bending of cylindrical steel tubes: Numerical modeling”
ICrash 2004, International Crashworthiness, San Francisco, USA, July 2004
39. A. G. Mamalis, D.E. Manolakos, A. G. Kladas and A. K. Koumoutsos
“Electromagnetic tooling for metal forming and powder compaction: Numerical simulation”
1st International Conference on High-Speed-Forming (ICHSF), Dortmund, Germany, April 2004.
40. A.G. Mamalis, D.E. Manolakos, A. G. Kladas and A. K. Koumoutsos
“On the electromagnetic sheet metal forming: numerical simulation”
8th International Conference on Numerical Methods and Industrial Forming Processes (NUMIFORM), Columbus, Ohio, USA, June 2004.
AIP Conference Proceedings, Vol. 712, 2004, pp. 778/783.
41. A.G. Mamalis, D.E. Manolakos, A.G. Kladas and A.K. Koumoutsos
“On the technological parameters of electromagnetic forming”
CoSME’04 Conference, 2004, pp. 553/562
42. A.G. Mamalis, D.E. Manolakos, A.G. Kladas and A.K. Koumoutsos
“Electromagnetic forming of aluminium alloy sheet using a grooved die: Numerical modelling”
Proc. EASTMAG-2004 Conference, Krasnoyarsk, Siberia, August 2004
43. A.G. Mamalis, J. Kunderák, D.E. Manolakos, A. Markopoulos, K. Tsimpidakis
“The effect of the heat source profile in the thermal modeling of surface grinding”
Proc. of the microCAD 2004 International Computer Science Conference, Miskolc, Hungary, March 2004, pp. 133/139.
44. A.G. Mamalis, J. Kunderák, D.E. Manolakos, A. Markopoulos, S. Georgiopoulos
“Development of artificial neural networks models for the simulation of the grinding process”
Proc. of the microCAD-2004-Kharkov, XII International Scientific & Practical Conference, Kharkov, Ukraine, May 2004, pp. 137/143
45. Σ.Β. Μόσιαλος, Γ.-Χ. Ν. Βοσνιάκος και Δ. Μανωλάκος
“Μοντέλα δυνάμεων κοπής στην τórνευση με βάση την ελαστική παραμόρφωση τεμαχίου”
2^ο Πανελλήνιο Συνέδριο Μεταλλικών Υλικών, ΕΜΠ, Αθήνα, Νοέμβ. 2004, σελ. 157/162

46. A.K. Μπαλντούκας, Κ.Σ. Κοντουργιώτης, Γ.Α. Δημοσθένους, Α.Ε. Λόντος, Δ.Ε. Μανωλάκος και Π.Κ. Κωστάζος
 “Πειραματική και υπολογιστική διερεύνηση του μηχανισμού παραμόρφωσης παρεμβλημάτων μεταλλικών στηθαίων ασφαλείας με στόχο το σχεδιασμό βελτιωμένων μορφών”
 2^ο Πανελλήνιο Συνέδριο Μεταλλικών Υλικών, ΕΜΠ, Αθήνα, Νοέμβ. 2004, σελ. 153/168
47. Ν.Μ. Βαξεβανίδης, Δ.Ε. Μανωλάκος και Α. Κουμούτσος
 “Όμοιομορφία επιφάνειας και τριβολογική συμπεριφορά επιστρωμάτων Al_2O_3 σε υποστρώματα χάλυβα και αλουμινίου”
 2^ο Πανελλήνιο Συνέδριο Μεταλλικών Υλικών, ΕΜΠ, Αθήνα, Νοέμβ. 2004, σελ. 357/364
48. Α.Κ. Μπαλντούκας, Κ.Σ. Κοντουργιώτης, Δ.Ε. Μανωλάκος, Γ.Α. Δημοσθένους, Σ.Α. Μαυρομμάτης και Β.Δ. Τσουκαλάς
 “Διερεύνηση της φθοράς μεταλλικών χιτωνίων που φέρουν οι κύλινδροι κονιοποίησης υγρής αργίλου: Μέρος Ι: Πειραματική διάταξη”
 2^ο Πανελλήνιο Συνέδριο Μεταλλικών Υλικών, ΕΜΠ, Αθήνα, Νοέμβ. 2004, σελ. 433/438
49. A.K. Baldoukas, G.A. Demosthenous, D.E. Manolakos, P. Kostazos, A. Tsatsaris, S.A. Mavrommatis, B.D. Tsoukalas
 “Optimizing the crashworthy characteristics of guardrail spacers using the explicit FE code LS-DYNA”
 ICNAAM 2004, Proc. 2nd Int. Conf. of Numerical Analysis and Applied Mathematics, Chalkis, Greece, September 2004.
50. A.G. Mamalis, J. Kundrák, D.E. Manolakos, A. Markopoulos
 “Finite element modelling of hard cutting”
 Proc. of the microCAD 2005 International Scientific Conference, Miskolc, Hungary, March 2005
51. A.G. Mamalis, D.E. Manolakos, M.B. Ioannidis and D.P. Papapostolou
 “Finite element modeling on the crushing response of square carbon FRP tubes in static and dynamic axial compression”
 International Conference on Impact Loading of Lightweight Structures, Florianópolis, Brasil, May 2005.
52. Α.Γ. Μάμαλης, Δ.Ε. Μανωλάκος και Α.Κ. Βορτσέλας
 “Σύγχρονες τάσεις στην κατασκευή σφαιρικών κεφαλών εμφυτευμάτων αρθροπλαστικής τεχνητού ισχίου”
 1^ο Πανελλήνιο Συνέδριο ΠΣΔΜ-Η, Μάρτιος 2005.
53. A.G. Mamalis, G.L. Petrosyan, D.E. Manolakos, M.B. Safaryan and H.G. Petrosyan
 “On the processing through conical dies of bimetallic tubes under various contact conditions between layers”
 Proc. 8th ICTP Conference, Verona, Italy, October 2005
54. Ν.Μ. Βαξεβανίδης, Δ.Ε. Μανωλάκος και Γ.Β. Πετρόπουλος
 “Surface integrity and tribological behavior of plasma sprayed alumina coatings on steel and aluminum substrates”
 BALCANTRIB’05, Proc. 5th Int. Conf. on Tribology, Kragujevac, Serbia and Montenegro, June 2005, pp. 229/234
55. A.G. Mamalis, G.L. Petrosyan, D.E. Manolakos and A.F. Hambardzumyan
 “The effect of strain hardening in the extrusion of bimetallic tubes of porous internal layer”
 Proc. 4th Japanese/Mediterranean Joint Workshop on Applied Electromagnetic Engineering for Magnetic, Superconducting and Nanomaterials, JAPMED 4, Cairo, Egypt, September 2005
56. Α.Γ. Μάμαλης, Κ.Ν. Σπέντζας, Δ.Ε. Μανωλάκος, Μ.Β. Ιωαννίδης και Π.Κ. Κωστάζος
 “Υβριδικές προστατευτικές κατασκευές λεπτού πάχους ηλεκτροκίνητων σιδηροδρομικών συρμών”
 Πρακτικά Δημερίδας ΤΕΕ, “Ηλεκτροκίνητα μέσα μεταφοράς στην Ελλάδα – Υφιστάμενη κατάσταση και προοπτικές”, Αθήνα, Ιανουάριος 2006

57. A.Γ. Μάμαλης, Κ.Ν. Σπέντζας, Δ.Ε. Μανωλάκος και Μ.Β. Ιωαννίδης
 “Ηλεκτροκίνητα οχήματα: Καταστροφική καταπόνηση διατομών λεπτού πάχους από σύνθετα υλικά”
 Πρακτικά Δημερίδας ΤΕΕ, “Ηλεκτροκίνητα μέσα μεταφοράς στην Ελλάδα – Υφιστάμενη κατάσταση και προοπτικές”, Αθήνα, Ιανουάριος 2006
58. A.Γ. Μάμαλης, Δ.Ε. Μανωλάκος και Α.Γ. Κλαδάς
 “Προηγμένο σύστημα εξοικονόμησης ενέργειας με χρήση υπεραγωγών υψηλών θερμοκρασιών σε ηλεκτροκίνητα μεταφορικά μέσα”
 Πρακτικά Δημερίδας ΤΕΕ, “Ηλεκτροκίνητα μέσα μεταφοράς στην Ελλάδα – Υφιστάμενη κατάσταση και προοπτικές”, Αθήνα, Ιανουάριος 2006
59. A.G. Mamalis, K.N. Spentzas, D.E. Manolakos, M.B. Ioannidis and G.P. Papapostolou
 “Experimental investigation of the collapse modes and the main crushing characteristics of composite sandwich panels subjected to flexural loading”
 Proc. ICrash 2006 International Crashworthiness Conference, Athens, Greece, July 2006
60. A.G. Mamalis, K.N. Spentzas, D.E. Manolakos, N. Pantelelis and M.B. Ioannidis
 “Structural and impact behaviour of an innovative low cost sandwich panel”
 Proc. ICrash 2006 International Crashworthiness Conference, Athens, Greece, July 2006
61. A. Markopoulos, N.M. Vaxevanidis, G. Petropoulos and D.E. Manolakos
 “Artificial neural networks modelling of surface finish in electro-discharge machining of tool steels”
 Proc. ESDA 2006, 8th Biennial ASME Conference on Engineering Systems Design and Analysis, Torino, Italy, July 2006
62. N.M. Vaxevanidis, D.E. Manolakos, A. Koutsomichalis, G. Petropoulos, A. Panagotas. I. Sideris, A. Mourlas and S.S. Antoniou
 “The effect of shot-peening on surface integrity and tribological behaviour of tool steels”
 AITC-AIT 2006, Proc. Int. Conf. on Tribology, Parma, Italy, September 2006
63. A.P. Markopoulos, D.E. Manolakos and N.M. Vaxevanidis
 “Prediction of the collapse modes of PVC cylindrical shells under compressive axial loads using Artificial Neural Networks”
 Proc. 4th Conf. on Artificial Intelligence Applications & Innovations (AIAI), Athens, Greece, September 2007 pp. 251-258
64. A.G. Mamalis, K.N. Spentzas, D.E. Manolakos, N. Pantelelis and M.B. Ioannidis
 “Crash behaviour of innovative metal/composite sandwich panels”
 COMAT 2007, Proc. 4th Int. Conf. on Science and Technology of Composite Materials, Rio de Janeiro, Brazil, December 2007
65. A.G. Mamalis, E. Hristoforou, D.E. Manolakos, P. Svec, T. Prikhna, J.D. Theodorakopoulos and G. Kouzilos
 “Explosive compaction and synthesis of MgB₂ superconductor using the powder in tube technique”
 Proc. 5th Japanese/Mediterranean Joint Workshop on Applied Electromagnetic Engineering for Magnetic, Superconducting and Nanomaterials, JAPMED 5, Larnaka, Cyprus, September 2007
66. A.G. Mamalis, D.E. Manolakos, K.N. Spentzas, M.B. Ioannidis, S. Koutroubakis and P.K. Kostazos
 “The affect of the implementation of circular holes as crash initiators to the crushing characteristics of mild steel square tubes: Experimental and numerical simulation”
 Proc. ICrash 2008 International Crashworthiness Conference, Athens, Japan, July 2008
67. K.N. Spentzas, A.G. Mamalis, D.E. Manolakos, G. Micael, M.B. Ioannidis and S.I. Koutroubakis
 “Automobile in the next generation”
 SynEnergy-2008, Spetses, Greece, July 2008
68. A.G. Mamalis, K.N. Spentzas, D.E. Manolakos and M.B. Ioannidis

- “Composite and hybrid materials for next generation road and rail vehicles”
SynEnergy-2008, Spetses, Greece, July 2008
69. Ν. Γαλάνης και Δ.Ε. Μανωλάκος
“Υλικά και μέθοδοι κατασκευής κεφαλών εμφυτευμάτων ισχίου”
3^η Δημερίδα Ελληνικής Εταιρείας Βιοϋλικών, Αθήνα, Νοέμβριος 2008
70. Ν.Ι. Galanis, D.E. Manolakos and N.M. Vaxevanidis
“Comparison between dry and wet machining of stainless steel”
Proc. 3rd Int. Conf. on Manufacturing Engineering (ICMEN), Chalkidiki, Greece, October 2008, pp. 91/98
71. Ν.Ι. Galanis, S.L. Afsaridis, S.N. Vlachostathopoulos and D.E. Manolakos
“Manufacturing process with the use of protocol step-NC”
Proc. 3rd Int. Conf. on Manufacturing Engineering (ICMEN), Chalkidiki, Greece, October 2008, pp. 721/728
72. A.G. Mamalis, A.K. Vortselas and D.E. Manolakos
“Multiscale modeling of wear by combined use of numerical and statistical methods”
Proc. 9th ICTP Conference, Gyeongju, Korea, September 2008
73. Ν.Ι. Galanis and D.E. Manolakos
“Design, numerical analysis and manufacturing of artificial hip joint implants”
SEECM 2009, Proc. 2nd South-East European Conference on Computational Mechanics, Rhodes, Greece, June 2009
74. Ν.Ι. Galanis and D.E. Manolakos
“Investigation of cutting parameters in manufacturing of femoral heads”
Proc. of the World Congress on Engineering (WCE 2009), London, UK, July 2009, pp. 1612/1617
75. Ν. Γαλάνης και Δ. Μανωλάκος
“Κατασκευή και έλεγχος κεφαλών εμφυτευμάτων ισχίου από κεραμική αλουμίνα”
5^ο Πανελλήνιο Συνέδριο Κεραμικών, Αθήνα, 22 – 23 Οκτωβρίου 2009
76. Ν. Γαλάνης και Δ. Μανωλάκος
“Έλεγχος κεφαλών εμφυτευμάτων ισχίου”
4^ο Συνέδριο Ελληνικής Εταιρείας Βιοϋλικών, Αθήνα, 27 – 29 Νοεμβρίου 2009
77. Ν.Ι. Galanis and D.E. Manolakos
“Manufacturing and examination of metallic femoral heads”
AIP Conference Proceedings, Vol. 1220, pp. 67/77, 2010

D. Monographs / books / teaching notes

1. A.G. Mamalis, D.E. Manolakos and G.L. Viegelahn
“Deformation Characteristics of Crashworthy Components”
Fortschritt-Berichte der VDI-Zeitschriften, Reihe 18, Nr. 62, Düsseldorf, 1989, pp. 343
2. A.G. Mamalis, D.E. Manolakos, G.A. Demosthenous and M.B. Ioannidis
“Crashworthiness of Composite Thin-Walled Structural Components”
Technomic Publishing Company, Inc., Lancaster, USA, 1998, pp. 283
3. A.G. Mamalis, G. Pantazopoulos, D.E. Manolakos and A. Szalay
“Processing of High-T_c Superconductors at High Strain Rates”
Technomic Publishing Company, Inc., Lancaster, USA, 1998.
4. Δ. Μανωλάκος
Δομή και στοιχεία αντοχής του αεροσκάφους.
(Διδακτικές Σημειώσεις στα πλαίσια του μαθήματος “Εισαγωγή στο Αεροσκάφος”)
ΕΜΠ, 2002.
5. Δ. Μανωλάκος

Καταστροφικές καταπονήσεις: Στοιχεία δυναμικής πλαστικής ανάλυσης.
(Διδακτικές Σημειώσεις στα πλαίσια του μαθήματος “Καταστροφικές Καταπονήσεις”)
ΕΜΠ, 2003.