



CURRICULUM VITAE

GIACOMO MANTRIOTA

Posizione accademica

Settore Concorsuale	dal 17/10/2011 09/A2 - MECCANICA APPLICATA ALLE MACCHINE
Settore Scientifico Disciplinare	dal 19/04/2001 ING-IND/13 - MECCANICA APPLICATA ALLE MACCHINE
Qualifica	Professore Ordinario
Anzianità nel ruolo di professore di I fascia	31/12/2002
Sede universitaria	Politecnico di BARI
Dipartimento	Dipartimento di INGEGNERIA MECCANICA E GESTIONALE

Posizioni ricoperte precedentemente nel medesimo ateneo o in altri:

dal 11/01/1993	Ricercatore Universitario	Politecnico di BARI
dal 01/11/1998	Professore II Fascia	Università degli Studi della BASILICATA
dal 01/11/2001	Professore II Fascia	Politecnico di BARI
dal 31/12/2002	Professore I Fascia	Politecnico di BARI

Pubblicazioni scientifiche

Pubblicazioni principali

- 2009 - Articolo in rivista
BOTTIGLIONE F, CARBONE G, MANTRIOTA G (2009). *Fluid Leakage In Seals: An Approach Based On Percolation Theory*. *TRIBOLOGY INTERNATIONAL*, vol. 42 (5), p. 731-737, ISSN: 0301-679X, doi: 10.1016/j.triboint.2008.10.002
- 2009 - Articolo in rivista
BOTTIGLIONE F, CARBONE G, MANGIALARDI L, MANTRIOTA G (2009). *Leakage mechanism in fl. t seals*. *JOURNAL OF APPLIED PHYSICS*, vol. 106, ISSN: 0021-8979, doi: 10.1063/1.3254187
- 2008 - Articolo in rivista
BOTTIGLIONE F, MANTRIOTA G (2008). *MG-IVT: AN INFINITELY VARIABLE TRANSMISSION WITH OPTIMAL POWER FLOWS*. *JOURNAL OF MECHANICAL DESIGN*, vol. 130 (11), p. 112603-1-112603-3-10,

- ISSN: 1050-0472, doi: 10.1115/1.2976802
4. 2007 - Articolo in rivista
MANTRIOTA G (2007). *Theoretical Model Of The Grasp With Vacuum Gripper. MECHANISM AND MACHINE THEORY*, vol. 42 (1), p. 2-17, ISSN: 0094-114X, doi: 10.1016/j.mechmachtheory.2006.03.003
 5. 2005 - Articolo in rivista
MANTRIOTA G (2005). *FUEL CONSUMPTION OF A VEHICLE WITH POWER SPLIT CVT SYSTEM. INTERNATIONAL JOURNAL OF VEHICLE DESIGN*, vol. 37 (4), p. 327-342, ISSN: 0143-3369, doi: 10.1504/IJVD.2005.006598
 6. 2002 - Articolo in rivista
MANTRIOTA G (2002). *PERFORMANCES OF A SERIES INFINITELY VARIABLE TRANSMISSIONS WITH A TYPE I POWER FLOW. MECHANISM AND MACHINE THEORY*, vol. 37, 6, p. 579-597, ISSN: 0094-114X, doi: [http://dx.doi.org/10.1016/S0094-114X\(02\)00017-4](http://dx.doi.org/10.1016/S0094-114X(02)00017-4)
 7. 2001 - Articolo in rivista
MANTRIOTA G (2001). *Theoretical and experimental study of a power split continuously variable transmission system Part 1. PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS. PART D, JOURNAL OF AUTOMOBILE ENGINEERING*, vol. 215 (7), p. 837-850, ISSN: 0954-4070, doi: 10.1243/0954407011528428
 8. 1999 - Articolo in rivista
MANGIALARDI L, MANTRIOTA G (1999). *Power flows and efficiency in infinitely variable transmissions. MECHANISM AND MACHINE THEORY*, vol. 34 (7), p. 973-994, ISSN: 0094-114X, doi: [http://dx.doi.org/10.1016/S0094-114X\(98\)00089-5](http://dx.doi.org/10.1016/S0094-114X(98)00089-5),
 9. 1999 - Articolo in rivista
Mantriota G (1999). *Communication on Optimal Grip Points for Contact Stability. INTERNATIONAL JOURNAL OF ROBOTICS RESEARCH*, vol. 18 (5), p. 502-513, ISSN: 0278-3649, doi: 10.1177/027836499901800506

Altre Pubblicazioni

1. 2012 - Articolo in rivista
BOTTIGLIONE F, MANTRIOTA G (2012). *Field tests and validation of dynamical models of tank vehicles Part II: experimental tests and results. INTERNATIONAL JOURNAL OF HEAVY VEHICLE SYSTEMS*, vol. 19 (1), p. 23-39, ISSN: 1744-232X, doi: 10.1504/IJHVS.2012.045758
2. 2012 - Articolo in rivista
BOTTIGLIONE F, MANTRIOTA G (2012). *Field tests and validation of dynamical models of tank vehicles Part I: mathematical model and experimental apparatus. INTERNATIONAL JOURNAL OF HEAVY VEHICLE SYSTEMS*, vol. 19 (1), p. 1-22, ISSN: 1744-232X, doi: 10.1504/IJHVS.2012.045757
3. 2011 - Articolo in rivista
BOTTIGLIONE F, MANTRIOTA G (2011). *REVERSIBILITY OF POWER-SPLIT TRANSMISSIONS. JOURNAL OF MECHANICAL DESIGN*, vol. 133 (8), ISSN: 1050-0472, doi: 10.1115/1.4004586
4. 2011 - Articolo in rivista
MANTRIOTA G, MESSINA A (2011). *Theoretical and experimental study of the performance of flat suction cups in the presence of tangential loads. MECHANISM AND MACHINE THEORY*, vol. 46, N. 5, p. 607-617, ISSN: 0094-114X, doi: 10.1016/j.mechmachtheory.2011.01.003
5. 2007 - Articolo in rivista
MANTRIOTA G (2007). *Optimal grasp of vacuum grippers with multiple suction cups. MECHANISM AND MACHINE THEORY*, vol. 42 (1), p. 18-33, ISSN: 0094-114X, doi: 10.1016/j.mechmachtheory.2006.02.007
6. 2007 - Articolo in rivista
BOTTIGLIONE F, FOGLIA M, MANTRIOTA G, MASTROVITO M (2007). *Liquid slosh in articulated tank vehicles: image based investigation in field test. INTERNATIONAL JOURNAL OF HEAVY VEHICLE SYSTEMS*, vol. 14 (4), p. 441-459, ISSN: 1744-232X, doi: 10.1504/IJHVS.2007.015711
7. 2005 - Articolo in rivista
CARBONE G, MANGIALARDI L, MANTRIOTA G (2005). *The Influence Of Pulley Deformations On The Shifting Mechanism Of Metal Belt Cvt. JOURNAL OF MECHANICAL DESIGN*, vol. 127, p. 103-114, ISSN: 1050-0472, doi: 10.1115/1.1825443
8. 2005 - Articolo in rivista

- Mantriota G (2005). A THEORETICAL STUDY ON THE STABILITY OF CAR-CARAVAN SYSTEMS UNDER THE INFLUENCE OF CROSSWIND. INTERNATIONAL JOURNAL OF VEHICLE SYSTEMS MODELLING AND TESTING, vol. 1 (1/2/3), p. 168-191, ISSN: 1745-6436, doi: 10.1504/IJVSMT.2005.008578
9. 2004 - Articolo in rivista
 CARBONE G, MANGIALARDI L, MANTRIOTA G (2004). A COMPARISON BETWEEN THE PERFORMANCE OF FULL AND HALF TOROIDAL TRACTION DRIVES. MECHANISM AND MACHINE THEORY, vol. 39, pp. 921-942, ISSN: 0094-114X, doi: 10.1016/j.mechmachtheory.2004.04.003
 10. 2004 - Articolo in rivista
 Carbone G, Mangialardi L, MANTRIOTA G, Soria L (2004). Performance of a City Bus equipped with a Toroidal Traction Drive. IASME TRANSACTIONS, vol. 1 (1), p. 16-23, ISSN: 1790-031X
 11. 2003 - Articolo in rivista
 FESTA P, MANGIALARDI L, MANTRIOTA G (2003). Dynamic behaviour of a closed loop driver-car-caravan system. INTERNATIONAL JOURNAL OF VEHICLE DESIGN, vol. 31 (4), p. 408-426, ISSN: 0143-3369, doi: 10.1504/IJVD.2003.003354
 12. 2003 - Articolo in rivista
 Mantriota G, Pennestri E (2003). Theoretical and Experimental Efficiency Analysis of Multi-Degrees-of-Freedom Epicyclic Gear Trains. MULTIBODY SYSTEM DYNAMICS, vol. 9 (4), p. 389-408, ISSN: 1384-5640, doi: 10.1023/A:1023319515306
 13. 2003 - Articolo in rivista
 CARBONE G, MANGIALARDI L, MANTRIOTA G (2003). EHL visco-plastic friction model in CVT shifting behaviour. INTERNATIONAL JOURNAL OF VEHICLE DESIGN, vol. 32 (3/4), p. 332-357, ISSN: 0143-3369, doi: 10.1504/IJVD.2003.003646
 14. 2003 - Articolo in rivista
 Mantriota G (2003). DIRECTIONAL STABILITY OF ARTICULATED TANK VEHICLE: A SIMPLIFIED MODEL. INTERNATIONAL JOURNAL OF VEHICLE DESIGN. HEAVY VEHICLE SYSTEMS, vol. 10 (1/2), p. 144-165, ISSN: 1351-7848, doi: 10.1504/IJHVS.2003.002438
 15. 2002 - Articolo in rivista
 MANTRIOTA G (2002). INFLUENCE OF SUSPENDED CARGOES ON DYNAMIC BEHAVIOUR OF ARTICULATED VEHICLES. INTERNATIONAL JOURNAL OF VEHICLE DESIGN. HEAVY VEHICLE SYSTEMS, vol. 9 (1), p. 52-75, ISSN: 1351-7848, doi: 10.1504/IJHVS.2002.001169
 16. 2002 - Articolo in rivista
 Carbone G, Mangialardi L, Mantriota G (2002). Influence of Clearance Between Plates in Metal Pulley V-Belt Dynamics. JOURNAL OF MECHANICAL DESIGN, vol. 124 (3), p. 543-557, ISSN: 1050-0472, doi: <http://dx.doi.org/10.1115/1.1486015>
 17. 2002 - Articolo in rivista
 Mantriota G (2002). PERFORMANCES OF A PARALLEL INFINITELY VARIABLE TRANSMISSIONS WITH A TYPE II POWER FLOW. MECHANISM AND MACHINE THEORY, vol. 37, 6, p. 555-578, ISSN: 0094-114X, doi: [http://dx.doi.org/10.1016/S0094-114X\(02\)00018-6](http://dx.doi.org/10.1016/S0094-114X(02)00018-6)
 18. 2001 - Articolo in rivista
 CARBONE G, MANGIALARDI L, MANTRIOTA G (2001). THEORETICAL MODEL OF METAL V-BELT DRIVES DURING RATIO CHANGING SPEED. JOURNAL OF MECHANICAL DESIGN, vol. 123 (1), p. 111-117, ISSN: 1050-0472, doi: <http://dx.doi.org/10.1115/1.1345521>
 19. 2001 - Articolo in rivista
 MANGIALARDI L, MANTRIOTA G (2001). STABILITY OF AN ARTICULATED VEHICLE WITH SUSPENDED CARGO. INTERNATIONAL JOURNAL OF VEHICLE DESIGN. HEAVY VEHICLE SYSTEMS, vol. 8 (1), p. 83-102, ISSN: 1351-7848, doi: 10.1504/IJHVS.2001.001153
 20. 2001 - Articolo in rivista
 MANTRIOTA G (2001). Theoretical and experimental study of a power split continuously variable transmission system Part 2. PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS. PART D, JOURNAL OF AUTOMOBILE ENGINEERING, vol. 215 (7), p. 851-864, ISSN: 0954-4070, doi: 10.1243/0954407011528437
 21. 2001 - Articolo in rivista
 MANTRIOTA G (2001). INFINITELY VARIABLE TRANSMISSIONS WITH AUTOMATICAL REGULATION. PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS. PART D, JOURNAL OF AUTOMOBILE ENGINEERING, vol. 215 (12), p. 1267-1280, ISSN: 0954-4070, doi: 10.1243/0954407011528806
 22. 2001 - Articolo in rivista

- CARBONE C, MANGIALARDI L, MANTRIOTA G (2001). FUEL CONSUMPTION OF A MID CLASS VEHICLE WITH INFINITELY VARIABLE TRANSMISSION. SAE TECHNICAL PAPER, p. 2474-2483, ISSN: 0148-7191, doi: 10.4271/2001-01-3692
23. 2001 - Articolo in rivista
Mantriota G (2001). Power split continuously variable transmission systems with high efficiency. PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS. PART D, JOURNAL OF AUTOMOBILE ENGINEERING, vol. 215 (3), p. 357-368, ISSN: 0954-4070, doi: 10.1243/0954407011525692
24. 2001 - Contributo in volume (Capitolo o Saggio)
Carbone G, Mangialardi L, Mantriota G (2001). Shifting dynamics of metal pushing V-belt: rapid speed ratio variations. In: Vaughan N D. Integrated Powertrains And Their Control. ISBN: 1860583342
25. 1998 - Articolo in rivista
MANGIALARDI L, MANTRIOTA G (1998). Comments on maximum mechanical efficiency infinitely variable transmissions. MECHANISM AND MACHINE THEORY, vol. 33 (4), p. 443-447, ISSN: 0094-114X, doi: [http://dx.doi.org/10.1016/S0094-114X\(97\)00037-2](http://dx.doi.org/10.1016/S0094-114X(97)00037-2)
26. 1996 - Articolo in rivista
MANGIALARDI L, MANTRIOTA G (1996). Dynamic behaviour of wind power systems equipped with automatically regulated Continuously Variable Transmission. RENEWABLE ENERGY, vol. 7, No. 2, p. 185-203, ISSN: 0960-1481, doi: [http://dx.doi.org/10.1016/0960-1481\(95\)00125-5](http://dx.doi.org/10.1016/0960-1481(95)00125-5),
27. 1996 - Articolo in rivista
MANGIALARDI L, MANTRIOTA G, TRENTADUE A (1996). A three-dimensional criterion for the determination of the optimal grip points. ROBOTICS AND COMPUTER-INTEGRATED MANUFACTURING, vol. 12 (2), p. 157-167, ISSN: 0736-5845, doi: [http://dx.doi.org/10.1016/0736-5845\(96\)00001-1](http://dx.doi.org/10.1016/0736-5845(96)00001-1),
28. 1995 - Articolo in rivista
Gentile A, Mangialardi L, Mantriota G, Trentadue A (1995). Measurement of the inertia tensor: An experimental proposal. MEASUREMENT, vol. 16, p. 241-254, ISSN: 0263-2241, doi: [http://dx.doi.org/10.1016/0263-2241\(94\)00030-B](http://dx.doi.org/10.1016/0263-2241(94)00030-B)
29. 1994 - Articolo in rivista
Mangialardi L, MANTRIOTA G (1994). Automatically regulated C.V.T. in wind power systems. RENEWABLE ENERGY, vol. 4 (3), p. 299-310, ISSN: 0960-1481, doi: [http://dx.doi.org/10.1016/0960-1481\(94\)90033-7](http://dx.doi.org/10.1016/0960-1481(94)90033-7),
30. 1994 - Articolo in rivista
MANGIALARDI L, MANTRIOTA G (1994). Continuously variable transmissions with a torque sensitive regulators in waterpumping windmills. RENEWABLE ENERGY, vol. 4 (7), p. 807-823, ISSN: 0960-1481, doi: [http://dx.doi.org/10.1016/0960-1481\(94\)90233-X](http://dx.doi.org/10.1016/0960-1481(94)90233-X)
31. 1992 - Articolo in rivista
Mangialardi L, Mantriota G (1992). The advantages of using continuously variable transmissions in wind power systems. RENEWABLE ENERGY, vol. 2 , p. 201-209, ISSN: 0960-1481, doi: [http://dx.doi.org/10.1016/0960-1481\(92\)90033-Y](http://dx.doi.org/10.1016/0960-1481(92)90033-Y)

Titoli

responsabilità scientifica per progetti di ricerca internazionali e nazionali, ammessi al finanziamento sulla base di bandi competitivi che prevedano la revisione tra pari

Progetto	Durata	TITOLO RISPONSA
PRIN 2000: L'innovazione nelle trasmissioni meccaniche per il miglioramento delle loro prestazioni	24	Responsabile Unità
PRIN 2004: Miglioramento della sicurezza, comfort e manovrabilità nei veicoli industriali	24	Coordinatore Progetto
Progetto Esplorativo nell'ambito dell'accordo di Programma Quadro in materia di "ricerca scientifica" nella Regione Puglia (anno 2006), dal titolo: Ottimizzazione delle prestazioni e riduzione dei consumi in trasportatori a	24	Coordinatore Progetto

nastro

Progetto Esplorativo nell'ambito dell'accordo di Programma Quadro in materia di "ricerca scientifica" nella Regione Puglia (anno 2006), dal titolo: Riduzione dell'inquinamento ambientale da vibrazione e rumore di un martello demolitore idraulico 24 Responsabile Unità

partecipazione a comitati editoriali di riviste, collane editoriali, enciclopedie e trattati di riconosciuto prestigio

Tip:	Titolo	Vol	An
Riviste	International Journal of Heavy Vehicle Systems	06/2003	08/2012
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Riviste	International Journal of Vehicle Systems Modelling and Testing	4/2009	03/2011

