

Journal Publications :

1. Dung-An Wang*, Nine-Zeng Liu, 2011, A Shear Mode Piezoelectric Energy Harvester Based on a Pressurized Water Flow, Sensors and Actuators A-Physical, June 2011, v. 167, n. 2, pp. 449-458. (SCI impact factor: 1.941, Engineering/Electrical & Electronic 47/247, Times Cited: 0, Cited by self: 0, Cited in recent 5 years: 0, NSC 99-2221-E-005-075-)
2. Huy-Tuan Pham, Dung-An Wang*, 2011, A quadristable compliant mechanism with a bistable structure embedded in a surrounding beam structure, Sensors and Actuators A-Physical, June 2011, v. 167, n. 2, pp. 438-448. (SCI impact factor: 1.941, Engineering/Electrical & Electronic 47/247, Times Cited: 0, Cited by self: 0, Cited in recent 5 years: 0, NSC 96-2221-E-005-095-)
3. Huy-Tuan Pham, Dung-An Wang*, 2011, A constant-force bistable mechanism for force regulation and overload protection, Mechanism and Machine Theory, July 2011, v. 46, n. 7, pp. 899-909. (SCI impact factor: 1.210, Engineering/Mechanical 32/122, Times Cited: , Cited by self: , Cited in recent 5 years: , NSC 96-2221-E-005-095-)
4. Dung-An Wang*, Fang-Wen Sheu, Yen-Sih Chiu, 2011, In-plane vibration characterization of microelectromechanical systems using acousto-optic modulated partially incoherent stroboscopic imaging, Optics and Lasers in Engineering, July 2011, v. 49, n. 7, pp. 954-961. (SCI impact factor: 1.576, Optics 29/78, Times Cited: 0, Cited by self: , Cited in recent 5 years: , NSC 96-2221-E-005-095-)
5. Dung-An Wang*, Wei-Yang Chuang, Kei Hsu, Huy-Tuan Pham, 2011, Design of a Bézier-Profile Horn for High Displacement Amplification, Ultrasonics, February 2011, v. 51, pp. 148-156. (SCI impact factor: 1.599, Acoustics 7/30, Times Cited: , Cited by self: , Cited in recent 5 years: , NSC 96-2221-E-005-095-)
6. Dung-An Wang*, Chia-Wei Chao, Pai-Chen Lin, Jun-Yen Uan, 2010, Mechanical Characterization of Friction Stir Spot Microwelds, Journal of Materials Processing Technology, November 2010, v. 210, pp. 1942-1948. (SCI impact factor: 1.570, Engineering/Manufacturing 8/38, Times Cited: , Cited by self: , Cited in recent 5 years: , NSC 95-2221-E-005-015-)
7. Dung-An Wang*, Kai-Hun Chang, 2010, Electromagnetic Energy Harvesting from Flow Induced Vibration, Microelectronics Journal, June 2010, v. 41, pp. 356-364. (SCI impact factor: 0.789, Engineering, Electrical & Electronic 152/247, Times Cited: 2, Cited by self: 0, Cited in recent 5 years: 2, NSC 96-2221-E-005-095-)
8. Dung-An Wang*, Hong-Hua Ko, 2010, Piezoelectric energy harvesting from flow induced vibration, Journal of Micromechanics and Microengineering, Feb. 2010, v. 20, 025019. (SCI impact factor: 2.281, Mechanics 11/133, Times Cited: 6, Cited by self: 0, Cited in recent 5 years: 6, NSC 96-2221-E-005-095-)
9. Pai-Chen Lin*, Duan-An Wang, 2010, Geometric Functions of Stress Intensity Factor Solutions for Spot Welds in U-Shape Specimens, International Journal of Solids and Structures, March 2010, v. 47, pp. 691-704. (SCI impact factor: 1.677, Mechanics 27/133, Times Cited: 1, Cited by self: , Cited in recent 5 years: 1)
10. D.-A. Wang*, Ben Liao, 2010, Shaking assisted self-assembly of rectangular-shaped parts, Journal of Materials Processing Technology, Jan 2010, v. 210, pp. 343-350. (SCI impact factor: 1.570, Engineering/Manufacturing 8/38, Times Cited: 1, Cited by self: 0, Cited in recent 5 years: 1, NSC 96-2221-E-005-095-)
11. Dung-An Wang*, Wei-Yang Chuang, Kei Hsu, Huy-Tuan Pham, 2009, Design and analysis of a Bezier-profile horn, Journal of Engineering, National Chung Hsing University, Nov. 2009, v. 20, pp. 161-169.
12. Rong-Hua Ma, Dung-An Wang, Tzu-Han Hsueh, Chia-Yen Lee*, 2009, A MEMS-based flow rate and flow direction sensing platform with integrated temperature compensation scheme,

- Sensors, July 2009, v. 9, pp. 5460-5476. (SCI impact factor: 1.774, Instruments & Instrumentation 14/61, Times Cited: 3, Cited by self: 0, Cited in recent 5 years: 3, NSC 96-2221-E-005-095-)
13. Dung-An Wang*, Hong-Hua Ko, 2009, Magnetic-assisted self-assembly of rectangular-shaped parts, Sensors and Actuators A-Physical, April 2009, v. 151, pp. 195-202. (SCI impact factor: 1.941, Engineering/Electrical & Electronic 47/247, Times Cited: 1, Cited by self: 0, Cited in recent 5 years: 1, NSC 96-2221-E-005-095-)
 14. Dung-An Wang*, Huy-Tuan Pham, Yi-Han Hsieh, 2009, Dynamical switching of an electromagnetically driven compliant bistable mechanism, Sensors and Actuators A-Physical, Jan. 2009, v. 149, pp. 143-151. (SCI impact factor: 1.941, Engineering/Electrical & Electronic 47/247, Times Cited: 10, Cited by self: 2, Cited in recent 5 years: 10, NSC 96-2221-E-005-095-)
 15. Dung-An Wang*, Cheng-Hua Chen, 2009, Fatigue Lives of Friction Stir Spot Welds in Aluminum 6061-T6 Sheets, Journal of Materials Processing Technology, Jan 2009, v. 209, pp. 367-375. (SCI impact factor: 1.420, Engineering/Manufacturing 8/37, Times Cited: 9, Cited by self: 0, Cited in recent 5 years: 9, NSC 95-2221-E-005-015-)
 16. Dung-An Wang*, Chiang-Ho Cheng, Yi-Han Hsieh, Zou-Xing Zhang, 2007, Analysis of an annular PZT actuator for a droplet ejector, Sensors and Actuators A-Physical, July 2007, v. 137, pp. 330-337. (SCI impact factor: 1.941, Engineering/Electrical & Electronic 47/247, Times Cited: 5, Cited by self: 0, Cited in recent 5 years: 5, NSC 94-2212-E-212-003-)
 17. Dung-An Wang*, Sheng-Chiang Lee, 2007, Microstructures and Failure Mechanisms of Friction Stir Spot Welds of Aluminum 6061-T6 Sheets, Journal of Materials Processing Technology, May 2007, v. 186, pp. 291-297. (SCI impact factor: 1.570, Engineering/Manufacturing 8/38, Times Cited: 13, Cited by self: 1, Cited in recent 5 years: 13, NSC 94-2212-E-212-003-)
 18. P.-C. Lin, D.-A. Wang, J. Pan*, 2007, Mode I Stress Intensity Factor Solutions for Spot Welds in Lap-Shear Specimens, International Journal of Solids and Structures, Feb 2007, v. 44, pp. 1013-1037. (SCI impact factor: 1.677, Mechanics 27/133, Times Cited: 13, Cited by self: 9, Cited in recent 5 years: 13)
 19. D.-A. Wang and J. Pan*, 2006, A Non-Quadratic Yield Function for Polymeric Foams, International Journal of Plasticity, March 2006, v. 22, pp. 434-458. (SCI impact factor: 5.082, Mechanics 2/133, Times Cited: 8, Cited by self: 0, Cited in recent 5 years: 8)
 20. P.-C. Lin, D.-A. Wang and J. Pan*, 2006, Analytical Solution of Mode I Stress Intensity Factor for Spot Welds in Lap-Shear Specimens. Paper no. 2006-01-0535, SAE 2006 Transactions Journal of Materials and Manufacturing, v. 115-5, pp. 517-524. (EI)
 21. D.-A. Wang and J. Pan*, 2005, A Computational Study of Local Stress Intensity Factor Solutions for Kinked Cracks near Spot Welds in Lap-Shear Specimens, International Journal of Solids and Structures, Dec 2005, v. 42, pp. 6277-6298. (SCI impact factor: 1.677, Mechanics 27/133, Times Cited: 13, Cited by self: 6, Cited in recent 5 years: 12)
 22. D.-A. Wang, P.-C. Lin and J. Pan*, 2005, Geometry Functions of Stress Intensity Factor Solutions for Spot Welds in Lap-Shear Specimens, International Journal of Solids and Structures, Dec 2005, v. 42, pp. 6299-6318. (SCI impact factor: 1.677, Mechanics 27/133, Times Cited: 15, Cited by self: 12, Cited in recent 5 years: 14)
 23. D.-A. Wang, S.-H Lin and J. Pan*, 2005, Stress Intensity Factors for Spot Welds and Associated Kinked Cracks in Cup Specimens, International Journal of Fatigue, May 2005, v. 27, pp. 581-598. (SCI impact factor: 1.806, Engineering/Mechanical 10/122, Times Cited: 20, Cited by self: 15, Cited in recent 5 years: 16)

24. D.-A. Wang and J. Pan*, 2005, Stress Intensity Factors for Kinked Cracks near Spot Welds in Lap-Shear Specimens, Paper No. 2005-01-0900, SAE 2005 Transactions Journal of Materials and Manufacturing, v. 114-5, pp. 462-468. (EI)
25. D.-A. Wang and J. Pan*, 2005, Effects of Specimen Width and Overlap Length on Stress Intensity Factors of Spot Welds in Lap-Shear Specimens, Paper No. 2005-01-0902, SAE 2005 Transactions Journal of Materials and Manufacturing, v. 114-5, pp. 469-474. (EI)
26. D.-A. Wang and J. Pan*, 2004, Development of a Macroscopic Yield Function for Polymeric Foams, Paper No. 2004-01-0465, SAE 2004 Transactions Journal of Materials and Manufacturing, v. 5, pp. 178-184. (EI)
27. D.-A. Wang, J. Pan* and S-D. Liu, 2004, Modified Anisotropic Gurson Yield Criterion for Porous Ductile Sheet Metals with Planar Anisotropy, International Journal of Damage Mechanics, January 2004, v. 13, pp. 7-33. (SCI impact factor: 1.958, Mechanics 16/133, Times Cited: 17, Cited by self: 1, Cited in recent 5 years: 12)
28. J. Pan*, S. Oh, D-A Wang, W.-Y. Chien, T.-Y. Pan and J. Wang, 2003, Failure Mechanisms of Sandwich Specimens with Epoxy Foam Cores under Bending Conditions, Paper No. 2003-01-0327, SAE 2003 Transactions Journal of Materials and Manufacturing, v. 4, pp. 64-72. (EI)
29. D.-A. Wang, W.Y. Chien, K.C. Liao, J. Pan* and S.C. Tang, 2003, A Gurson Yield Function for Anisotropic Porous Sheet Metals and its Applications to Failure Prediction of Aluminum Sheets, Journal of Mechanics. Formerly The Chinese Journal of Mechanics-Series A, March 2003, v. 19, pp. 161-168. (SCI impact factor: 0.408, Mechanics 113/133, Times Cited: 5, Cited by self: 0, Cited in recent 5 years: 4)
30. K. Saitou*, D.-A. Wang and S.J. Wou, 2000, Externally Resonated Linear Microvibromotor for Microassembly, Journal of Microelectromechanical Systems, September 2000, v. 9, pp. 336-346. (SCI impact factor: 2.157, Engineering/Mechanical 5/122, Times Cited: 18, Cited by self: 0, Cited in recent 5 years: 4)

Conference Publications:

1. Hai-Dang Tam Nguyen, Huy-Tuan Pham and Dung-An Wang, 2011, A Miniature Wind Generator Based on Pressure Fluctuation in Kármán Vortex Street, *International Workshop on Agricultural and Bio-systems Engineering*, December 2-3, 2011, HoChiMinh City, Vietnam.
2. Dung-An Wang, Huy-Tuan Pham, Chia-Wei Chao, Jerry M. Chen, 2011, A Piezoelectric Energy Harvester Based on Pressure Fluctuations in Kármán Vortex Street, *World Renewable Energy Congress 2011*, 8-11 May 2011, Linköping, Sweden.
3. Huy-Tuan Pham, Chun-Yuan Chiu, Dung-An Wang, 2011, An Electromagnetic Energy Harvester Based on Pressure Fluctuation in Kármán Vortex Street, *Proceedings of the 1st International Symposium on Automotive & Convergence Engineering*, pp. 34-36, Hochiminh City, Vietnam, January 19~21, 2011.
4. D.-A. Wang and K.-H. Chang, 2009, Energy Harvesting from Flow Induced Vibration by Electromagnetic Induction, *Proceedings of the 26th National Conference on Mechanical Engineering, The Chinese Society of Mechanical Engineers*, Nov 20-21 2009, Paper number A2-15, Tainan, Taiwan.
5. D.-A. Wang and H.-H. Ko, 2009, Design and Analysis of a Piezoelectric Energy Harvester, *Proceedings of the 33rd National Conference on Theoretical and Applied Mechanics, Society of Theoretical & Applied Mechanics*, November 13-14, Paper number E12-003, Miao-Li, Taiwan.

6. P.-C. Lin, and D.-A. Wang, 2009, Effects of specimen width and specimen length on stress intensity factor solutions for spot welds in u-shape specimens, *SAE Technical Paper 2009-01-0029*, April 2009, Society of Automotive Engineers, Warrendale, Pennsylvania.
7. B. Liao, D.-A. Wang, 2008, Self-Assembly of Rectangular-Shaped PZT Actuators on Glass Substrates with a Copper Hydrophobic Layer, *Asia-Pacific Conference on Transducers and Micro-Nano Technology 2008*, June 22-25, Tainan, Taiwan.
8. H.-T. Pham, D.-A. Wang, 2008, A Microswitch Actuated by Bistable Micromechanisms, *Asia-Pacific Conference on Transducers and Micro-Nano Technology 2008*, June 22-25, Tainan, Taiwan.
9. D.-A. Wang, H.-T. Pham, 2008, Vibration-Actuated Bistable Micromechanism for Microassembly, *Technical Proceedings of the 2008 Nanotechnology Conference and Trade Show*, June 1-5, 2008, Volume 3, pp. 639-642, Boston, Massachusetts.
10. D.-A. Wang, C.-H. Cheng, H.-T. Pham, Z.-B. Chou, 2007, A Shear Mode PZT Actuator for a Micro-Ejector, *The 2007 ASME Applied Mechanics and Materials Conference (McMat 2007)*, June 3-7, 2007, Austin, Texas.
11. D.-A. Wang, C.-H. Cheng, Y.-H. Hsieh, T.-H. Chang, 2007, An Angular PZT Actuator for a Micro-Ejector, *The 2007 ASME Applied Mechanics and Materials Conference (McMat 2007)*, June 3-7, 2007, Austin, Texas.
12. D.-A. Wang, Y.-P. Lee, 2007, Bond Strength and Fatigue Tests of Porcelain on Pure Titanium, *The International Society of Biomechanics 2007 Congress*, July 1-5, 2007, Taipei, Taiwan.
13. D.-A. Wang, 2006, Plastic Yielding of an Anisotropic Aluminum Alloy under Plane Stress Conditions, *The Twelfth International Symposium on Plasticity and Its Current Applications*, July 17-22, 2006, pp. 313-315, Halifax, Nova Scotia (Canada).
14. D.-A. Wang, S.-C. Lee and K.-Y. Hsieh, 2005, Microstructures and Failure Mechanisms of Spot Friction Welds in Lap-Shear Specimens of Aluminum 6061-T6 Sheets, *Proceedings of IMECE 2005: 2005 ASME International Mechanical Engineering Congress and Exposition, IMECE2005-82397*, November 5-11 2005, Orlando, Florida. (NSC 93-2212-E-212-019-).
15. D.-A. Wang, S.-C. Lee and C.-S. Hung, 2005, A Finite Element Analysis of a Microcantilever Impactor, *2005 Precision Machinery and Manufacturing Technology Conference*, May 20-22 2005, pp. 341-346, Pingtung, Taiwan.
16. D.-A. Wang, K.-Y. Hsieh and Y.-M. Hsu, 2005, A Pseudo-Rigid-Body Model of a Microcantilever Impactor, *2005 Precision Machinery and Manufacturing Technology Conference*, May 20-22 2005, pp. 334-340, Pingtung, Taiwan.
17. D.-A. Wang, K.-Y. Hsieh and C.-H. Cheng, 2005, Orienting Microparts Using Passive Fences and Vibratory Agitation, *Proceedings of Automation 2005, The Eighth International Conference on Automation Technology Conference*, May 5-6, 2005, Taichung, Taiwan.
18. D.-A. Wang, S.-C. Lee and C.-H. Cheng, 2005, Design of Microstructures for Out-of-Plane Actuation and In-Plane Displacement Amplification, *Proceedings of Automation 2005, The Eighth International Conference on Automation Technology Conference*, May 5-6 2005, Taichung, Taiwan.
19. D.-A. Wang and J. Pan, 2005, A Non-Quadratic Yield Function for Polymeric Foams, *The Eleventh International Symposium on Plasticity and Its Current Applications*, January 2005, pp. 562-564, Hawaii.
20. D.-A. Wang, 2004, Development of a Constitutive Model for Polymeric Foams, *Proceedings of CTAM28: The 28th National Conference on Theoretical and Applied Mechanics*, Dec 3-4, 2004, pp. 619-625, Taipei, Taiwan.
21. D.-A. Wang, 2004, Failure Mechanisms of Spot Welds in Square-Cup Specimens under Pure Opening Loading Conditions, *Proceedings of the 21st National Conference on Mechanical*

Engineering, The Chinese Society of Mechanical Engineers, Nov 26-27 2004, pp. 2677-2682, Kaohsiung, Taiwan.

22. D.-A. Wang, L.-H. Lin and J. Pan, 2004, Local Stress Intensity Factors for Kinked Cracks in Spot Weld Cup Specimens, *SAE Technical Paper 2004-01-0816*, March 2004, Society of Automotive Engineers, Warrendale, Pennsylvania.
23. D.-A. Wang and J. Pan, 2004, Development of a Macroscopic Yield Function for Polymeric Foams, *SAE Technical Paper 2004-01-0465*, March 2004, Society of Automotive Engineers, Warrendale, Pennsylvania.
24. D.-A. Wang, W. Chien, J. Pan and S.-D. Liu, 2003, Modeling of Anisotropic Sheet with Consideration of Voids for Forming Applications, *SAE Technical Paper 2003-01-1156*, March 2003, Society of Automotive Engineers, Warrendale, Pennsylvania.
25. D.-A. Wang, J. Pan and S.-D. Liu, 2002, Modified Anisotropic Gurson Yield Criterion for Porous Ductile Sheet Metals with Planar Anisotropy, *IMECE 2002-33006, International Mechanical Engineering Congress and Exposition*, November 2002, pp. 17-22, New Orleans.
26. D.-A. Wang, 2001, Modeling Contact of Microparts with Fixed Fences subjected to External Vibration, *Proceedings of the IMEMS 2001: International MEMS Workshop 2001 Exhibition*, July 2001, pp. 619-625, Singapore.
27. K. Saitou, S. Wou and D.-A. Wang, 1999, Assembly and Disassembly of Bare Chips Using On-substrate Linear Microvibromotor Arrays, *Proceedings of the EcoDesign '99: 1st International Symposium on Environmentally Conscious Design and Inverse Manufacturing*, February 1999, pp. 818-823, Tokyo, Japan.