

### **Invited Presentations**

1. A.M. Naguib, "Unsteady wall pressure and heat transfer associated with near-wall vortex-pairing," presented to students and faculty at Ohio State University, Aerospace Research Center, as part of the center's seminar series, Columbus, Ohio, November 2018
2. A.M. Naguib, "A vortex array model of the unsteady wake of a periodically pitching airfoil," presented to students and faculty at University of Toronto Institute of Aerospace Studies, as part of the Centre for Aerial Robotics Research and Education, Distinguished Speaker Series, Toronto, Canada, October 2016
3. A.M. Naguib, "Reactive control of bypass boundary layer transition using plasma actuators," presented to students and faculty at the Institute of Fluid Mechanics, University of Rostock, Rostock, Germany, July 2016
4. A.M. Naguib, "Reactive control of bypass boundary layer transition using plasma actuators," presented to students and faculty of Aerospace Engineering, University of Michigan, Ann Arbor, MI, December 2015
5. A.M. Naguib, "Spatio-temporal characteristics of the wall-stress-producing structures in an axisymmetric backward-facing-step flow," presented to students and faculty of Institute of Aerodynamics, TU Berlin, Berlin, Germany, February 2015
6. A.M. Naguib, "A study of the wall-pressure sources in an impinging axisymmetric jet," presented to students and faculty of the Institute of Fluid Mechanics and Aerodynamics at Technical University of Darmstadt, Darmstadt, Germany, October 2014
7. A.M. Naguib, "A study of the wall-pressure sources in an impinging axisymmetric jet," presented to students and faculty of the Aerodynamics and Flight Mechanics group at Southampton University, Southampton, UK, September 2014
8. A.M. Naguib, "On the use of large wall-microphone arrays to study the unsteady surface-pressure field," presented to students and faculty of the Institute of Aeronautics and Applied Mechanics, Warsaw Technical University, Warsaw, Poland, June 2014
9. A.M. Naguib, "On the wall pressure signature of vortical structures in unsteady separated flows," presented to students and faculty of the Department of Mechanical Science and Engineering, University of Illinois at Urbana-Champaign, Urbana, USA, November 2013

10. A.M. Naguib, "A vortex array mode of the unsteady wake of a periodically pitching airfoil," presented to students and faculty of the Department of Fluid Mechanics and Aerodynamics, Technical University of Darmstadt, Darmstadt, Germany, August 2013
11. A.M. Naguib, "A vortex array model of the unsteady wake of a periodically pitching airfoil," presented to students and faculty of the Mechanical Engineering Department, Ain Shams University, Cairo, Egypt, June 2013
12. A.M. Naguib, "On the use of large wall-microphone arrays to study the unsteady surface-pressure field," presented to students and faculty of the Mechanical Engineering Department, Ain Shams University, Cairo, Egypt, June 2013
13. A.M. Naguib, "Spatio-temporal characteristics of the wall-stress-producing structures in an axisymmetric backward-facing-step flow," presented to researchers at the Laboratoire de Mécanique de Lille, rotating and turbulent flows group, Lille, France, March 2013
14. P. Hammer, S. Pouya, A.M. Naguib and M.M. Koochesfahani, "Progress in analysis and implementation of single-component Molecular Tagging Velocimetry," presented at the 51<sup>st</sup> AIAA Aerospace Sciences Meeting, Grapevine, TX, USA, January 2013
15. A.M. Naguib, "On the use of large wall-microphone arrays to study the unsteady-surface-pressure field," presented at the 51<sup>st</sup> AIAA Aerospace Sciences Meeting, Grapevine, TX, USA, January 2013
16. A.M. Naguib, "Array measurements of the unsteady surface pressure in a sharp-edged impinging jet," presented to the Flow Control Group, Department of Aeronautics, Imperial College, London, UK, July 2010
17. A.M. Naguib, "Spatio-temporal characteristics of the wall-stress-producing structures in an axisymmetric backward-facing-step flow," presented to the Graduate Aerospace Laboratories, California Institute of Technology, USA, spring 2009
18. A.M. Naguib, "Wall-pressure-array and PIV measurements in an axi-symmetric separating/reattaching flow," presented to the Faculty of Engineering and the Environment, University of Southampton, Southampton, UK, spring 2007
19. A.M. Naguib, "Wall-pressure-array and PIV measurements beneath an axi-symmetric separating/reattaching flow," presented to the school of Mechanical, Aerospace, and Civil Engineering, University of Manchester, Manchester, UK, spring 2007

20. A.M. Naguib, "Wall-pressure-array and PIV measurements beneath an axisymmetric separating/reattaching flow," presented to the Aeronautics department, Imperial College, London, UK, fall 2006
21. A.M. Naguib, "Measurements of the wall-stress in a two-dimensional separating/reattaching flow," presented to the Department of Mechanical Engineering, Ain Shams University, Cairo, Egypt, fall 2003
22. A.M. Naguib, "Two-point measurements of the wall-shear stress in an axisymmetric backward-facing step using high-frequency oscillating-hot-wire sensors," presented to the Advanced Measurement and Diagnostics Branch at NASA Langley, Hampton, Virginia, USA, summer 2003
23. A.M. Naguib, "Stationary and propagating low-frequency wall-pressure disturbances in a separating/reattaching flow," presented at Wright Patterson Air Force Research Labs, Dayton, Ohio, USA, winter 2003
24. L.M. Hudy and A.M. Naguib, "Wall-pressure-array measurements in a separating/reattaching flow region," presented at NASA Langley Research Center by both authors, Hampton, Virginia, USA, May 10, 2001
25. A.M. Naguib, "Stochastic estimation and flow sources of the turbulent wall pressure," presented to ICASE, at NASA Langley Research, Hampton, Virginia, USA, summer 1999
26. A.M. Naguib, "Characterization of MEMS sensors and actuators for control of high-speed jets," presented to the Measurement Science and Technology Branch- Aerodynamics Competency, at NASA Langley, Hampton, Virginia, USA, summer 1999
27. A.M. Naguib, "An investigation of surface-pressure flow sources in a turbulent boundary layer," presented to the Office of Naval Research (ONR), Arlington, Virginia, USA, fall 1998
28. A.M. Naguib, "On the turbulent wall pressure and associated flow structure," presented to the Mechanical and Aeronautical Engineering Department at Western Michigan University, Kalamazoo, Michigan, USA, fall 1998
29. A.M. Naguib, "On the separation of the scales of motion in a turbulent boundary layer," presented at DLR Research Center at Goettingen, Germany, fall 1997

30. A.M. Naguib, "Arrays of MEMS actuators for control of high-speed free shear flows," presented to the Aeroacoustic Division, Boeing, Seattle, Washington, USA, fall 1997
31. A.M. Naguib, "On the separation of the scales of motion in a turbulent boundary layer" presented to the department of Mechanical Engineering, Michigan State University, East Lansing, USA, fall 1997
32. A.M. Naguib, "On the turbulent wall pressure and its relation to the boundary layer scales of motion," presented to the Fluid Mechanics faculty and students in the department of Mechanical Engineering, Michigan State University, East Lansing, fall 1996
33. A.M. Naguib, "Inner and outer layer effects on the dynamics of a turbulent boundary layer," presented to Flow Physics Branch, NASA Langley Research Center, Hampton, Virginia, USA, spring 1993

#### Patents

1. E. Radcliffe, A.M. Naguib and W.M. Humphreys Jr., "Acoustic beamforming array using feedback-controlled microphones for tuning and self-matching of frequency response," **US Patent No: 8,848,942**. Application Date, 09/13/2011. Issue Date, 09/31/2014 (Assignees: U.S. of America as represented by the Administrator of the National Aeronautics and Space Administration, NASA, Washington, DC, US)
2. A.M. Naguib, A. Aditjandra, B. Trosin, H. Schock, T. Stuecken and E. Timm, "Mass air flow sensor having off axis converging and diverging nozzles," **US Patent No: 7,555,945 B2**. Application Date, 08/14/2007. Issue Date, 07/07/2009 (Assignees: Board of Trustees of Michigan State University, East Lansing, MI, US)
3. A.M. Naguib and Y. Li, "Oscillating hot wire or hot film flow sensor," **US Patent No: 6,901,795 B2**. Application Date 04/28/2004. Issue Date, 06/07/2005 (Assignees: Board of Trustees of Michigan State University, East Lansing, MI, US)

#### Reviewed Archival Journal Publications

1. D.A. Olson, A.M. Naguib and M.M. Koochesfahani, "Development of low-turbulence transverse-gust generator in a wind tunnel," *AIAA J.* online first (10 pp), DOI: 10.2514/1.J059962 (2020)
2. M.A. Feero, A.M. Naguib and M.M. Koochesfahani, "Effect of surface topology on the galloping instability of rectangular cylinders," *Int. J. Heat Fluid Fl.* **86**, 108721 (10 pp), DOI: 10.1016/j.ijheatfluidflow.2020.108721 (2020)

3. B. Abdelmegied and A.M. Naguib, "Flow visualization of an impinging jet subjected to bimodal forcing," *AIAA J.* **58** (9), 4170 (4 pp), DOI:10.2514/1.J059555 (2020)
4. M.A. Feero, A.M. Naguib and M.M. Koochesfahani, "Influence of geometry on the galloping instability of rectangular cylinders in the Reynolds number range 1,000-10,000," *J. Fluids Struct.* **94**, 102881 (15 pp), DOI:10.1016/j.jfluidstructs.2020.102881 (2020)
5. A.M. Naguib and M.M. Koochesfahani, "Inviscid flow analysis of a circular cylinder traversing across an unbounded uniform-shear stream," *J. Fluid Mech.* **882** (A21), (24 pp), DOI:10.1017/jfm.2019.820 (2020)
6. P.R. Hammer, D.A. Olson, M.R. Visbal, A.M. Naguib and M.M. Koochesfahani, "Joint computational-experimental investigation of harmonically pitching airfoil aerodynamics in uniform-shear approach flow," *AIAA J.*, **57** (8), 3290 (9 pp), DOI:10.2514/1.J058232 (2019)
7. M.A. Feero, A.M. Naguib and M.M. Koochesfahani, "Single-component force balance for the measurement of low-magnitude mean aerodynamic loads," *Meas. Sci. Technol.* **30**, 115301 (12 pp), DOI:10.1088/1361-6501/ab2dd6 (2019)
8. H.H. Jabbar and A.M. Naguib, "A computational study of vortex rings interacting with a constant temperature heated wall," *Int. J. Heat and Fluid Flow* **76**, 197 (18 pp), DOI:10.1016/j.ijheatfluidflow.2019.02.006 (2019)
9. K. Zhang, A.M. Naguib and M.M. Koochesfahani, "Structure-based model of a forced Shear Layer," *AIAA J.* **57**(3), DOI: 10.2514/1.J057422 (2018)
10. P.R. Hammer, M.R. Visbal, A.M. Naguib and M.M. Koochesfahani, "Lift on a steady 2-D symmetric airfoil in viscous uniform shear flow," *J. Fluid Mech.*, **837**, R2, DOI: 10.1017/jfm.2017.895 (2018)
11. K. Bade, R. Hanson, B. Belson, A.M. Naguib, P. Lavoie and C. Rowley, "Reactive control of isolated unsteady streaks in a laminar boundary layer," *J. Fluid Mech.*, **795**, 808 (38 pp), DOI: 10.1017/jfm.2016.200 (2016)

12. D. Olson, A.M. Naguib, and M.M. Koochesfahani, "Measurement of the Wall Pressure and Shear Stress Distribution Using Molecular Tagging Diagnostics," *Exp. Fluids*, **56**, 171 (6 pp), DOI: 10.1007/s00348-015-2039-y (2015)
13. B. Monnier, A.M. Naguib and M.M. Koochesfahani, "Influence of structural flexibility on the wake vortex pattern of airfoils undergoing harmonic pitch oscillation," *Exp. Fluids*, **56**, 80 (17 pp), DOI 10.1007/s00348-015-1946-2 (2015)
14. R.E. Hanson, K.M. Bade, B.A. Belson, P.L. Lavoie, A.M. Naguib and C.W. Rowley, "Feedback control of slowly-varying transient growth by an array of plasma actuators," *Phys. Fluids* **26**, 024102, DOI 10.1063/1.4863178 (2014)
15. P. Hammer, S. Pouya, A. Naguib and M. Koochesfahani, "A multi-time-delay approach for correction of the inherent error in single-component molecular tagging velocimetry," *Meas. Sci. Technol.* **24**, 105302, DOI 10.1088/0957-0233/24/10/105302, (2013)
16. D.A. Olson, A.W. Katz, A.M. Naguib, M.M. Koochesfahani, D.P. Rizzetta and M.R. Visbal, "On the challenges in experimental characterization of flow separation over airfoils at low Reynolds number," *Exp. Fluids* **54** (2), 1470, DOI 10.1007/s00348-013-1470-1 (2013)
17. A.M. Naguib, W. Jiang and K. Zhang, "Source advection effects on unsteady-surface-pressure asymmetry in oblique impinging jets," *AIAA J.* **50** (7), pp. 1878 – 1880 (2012)
18. K. Zhang and A.M. Naguib, "Effect of finite cavity width on flow oscillation in a low-Mach-number cavity flow," *Exp. Fluids* **51** (5), pp. 1209 – 1229 (2011)
19. A.M. Naguib, J. Vitek and M.M. Koochesfahani, "Finite-core vortex array model of the wake of a periodically pitching airfoil," *AIAA J.* **49** (7), pp. 1542-1550 (2011)
20. R. Hanson, P. Lavoie, A.M. Naguib and J. Morrison, "Transient growth instability cancelation by a plasma actuator array," *Exp. Fluids* **48** (2), pp. 183-188 (2010)
21. A.M. Naguib, J. Morrison and T. Zaki, "On the relationship between the wall-shear-stress and transient-growth disturbances in a laminar boundary layer," *Phys. Fluids* **22**, 054103 (2010)

22. E. Radcliffe, A.M. Naguib and W.M. Humphreys Jr., "A novel design of a feedback-controlled optical microphone for aeroacoustics research," *Meas. Sci. Technol.* **21**, 105208 (2010)
23. R. Basu, A.M. Naguib and M.M. Koochesfahani, "Feasibility study of whole-field pressure measurements in gas flows: molecular tagging manometry," *Exp. Fluids* **49 (1)**, pp. 67-75 (2010)
24. A. Aditjandra, B.J. Trosin and A.M. Naguib, "Array measurements of the surface pressure beneath a forced axi-symmetric separation bubble," *Exp. Fluids* **46 (2)**, pp. 297-308 (2009)
25. Y. Li, A.M. Naguib and L.M. Hudy, "Two-point measurements of wall shear stress beneath an axisymmetric separating/reattaching flow," *AIAA J.* **46 (10)**, pp. 2649-2652 (2008)
26. K. Zhang and A.M. Naguib, "Effect of cavity width on the unsteady pressure in a low-Mach-number cavity," *AIAA J.* **46 (7)**, pp. 1878-1880 (2008)
27. L.M. Hudy, A.M. Naguib and W.M. Humphreys, "Stochastic estimation of a separated-flow field using wall-pressure-array measurements," *Phys. Fluids* **19 (2)**, 024103 (2007)
28. M. Daoud, A.M. Naguib, I. Bassioni, M. Abdelkhalek and Z. Ghoneim, "Microphone-array measurements of the floor pressure in a low-speed cavity flow," *AIAA J.* **44 (9)**, pp. 2018-2023 (2006)
29. Y. Li and A.M. Naguib, "High-frequency oscillating-hotwire sensor for near-wall diagnostics in separated flows," *AIAA J.* **43 (3)**, pp. 520-529 (2005)
30. A.M. Naguib and M.M. Koochesfahani, "On wall-pressure sources associated with unsteady separation in a vortex-ring/wall interaction," *Phys. Fluids*, **16 (7)**, pp. 2613 – 2622 (2004)
31. M. Daoud and A. Naguib, "A Doppler sensor for high spatial resolution measurements of unsteady surface pressure," *Meas. Sci. Technol.*, **14 (1)**, pp. 13 – 23 (2003)

32. L.M. Hudy, A.M. Naguib, and W.M. Humphreys Jr., "Wall-pressure-array measurements beneath a separating/reattaching flow region," *Phys. Fluids*, **15 (3)**, pp. 706 – 717 (2003)
33. Y. Li and A.M. Naguib, "An oscillating hot-wire technique for resolving the magnitude and direction of velocity measurements using single hot-wire sensors," *Exp. Fluids*, **34 (5)**, pp. 597 – 606, (2003)
34. A. Naguib, "Resolution enhancement of doppler frequency measurements using a centroid technique," *Exp. Fluids*, **32 (5)**, pp. 600 – 601 (2002)
35. W.M. Humphreys Jr. and A.M. Naguib, "Comparative study of image compression techniques for digital particle image velocimetry," *AIAA J.* **36 (1)**, pp. 1026 – 1036 (2002)
36. C. Huang, C. Christophorou, K. Najafi, A.M. Naguib and H.M. Nagib, "An electrostatic microactuator system for application in high-speed jets," *Journal of Microelectromechanical Systems*, **11 (3)**, pp. 222 – 235 (2002)
37. C. Huang, A. Naguib, E. Soupos and K. Najafi, "A silicon micromachined microphone for fluid mechanics research," *Journal of Micromechanics and Microengineering*, **12 (6)**, pp. 767 – 774 (2002)
38. A. Naguib, C. Wark and O. Juckenhoefel, "Stochastic estimation and flow sources associated with surface pressure events in a turbulent boundary layer," *Phys. Fluids*, **13 (9)**, pp. 2611 – 2616 (2001)
39. S. Gravante, A. Naguib, C. Wark and H. Nagib, "Characterization of the pressure fluctuations under a canonical turbulent boundary layer," *AIAA J.* **36 (10)**, pp. 1808 – 1816 (1998)
40. A.M. Naguib, S. Gravante and C. Wark, "Extraction of turbulent wall-pressure time-series using an optimal filtering scheme," *Exp. Fluids* **22 (1)**, pp. 14 – 22 (1996)
41. A.M. Naguib and C.E. Wark, "An investigation of wall-layer dynamics using a combined temporal filtering and correlation technique," *J. Fluid Mech.*, **243**, pp. 541 – 560 (1992)
42. C.E. Wark, A.M. Naguib and H.M. Nagib, "Effect of flat-plate manipulators on the coherent structures in turbulent boundary layers," *AIAA J.* **28 (11)**, pp. 1877 – 1884 (1990)



43. Z. Ghoneim, F. Tolba and A. Naguib, "Development of a fluid flow transducer for use with microprocessor based data acquisition systems," *J. of Egyptian Society of Engineers*, **26** (4), (1987)

#### **Book Chapters**

1. A.M. Naguib, "Towards MEMS autonomous control of free-shear flows," The MEMS Handbook – Second Edition, Chapter 41, Mohamed Gad-el-Hak (Ed.), CRC; 2005
2. A.M. Naguib, "Towards MEMS autonomous control of free-shear flows," The MEMS Handbook, Chapter 35, Mohamed Gad-el-Hak (Ed.), CRC, September 2001

#### **Refereed Conference Proceedings Based on Review of Extended Abstract**

1. K. Kalan, A. Safaripour, A.M. Naguib and M.M. Koochesfahani, "Characterization of the aerodynamics of rectangular cylinders with surface topology," AIAA paper AIAA 2021-1322, *AIAA SciTech Forum 2021*, Virtual (2020)
2. K. Kalan, M.A. Feero, A.M. Naguib and M.M. Koochesfahani, "Influence of surface topology on boundary layer and near-wake behavior of rectangular cylinders," AIAA paper 2020-2034, *AIAA SciTech Forum 2020*, Orlando, FL. (2020)
3. D. Olson, A.M. Naguib and M.M. Koochesfahani, "Development of a transverse low-turbulence gust generator in a wind tunnel," AIAA paper 2020-2041, *AIAA SciTech Forum 2020*, Orlando, FL. (2020)
4. M. Albrecht, A.M. Naguib and M.M. Koochesfahani, "Single-component molecular tagging velocimetry of the boundary layer on a NACA-0012 airfoil plunging across uniform-shear flow," AIAA paper 2020-2042, *AIAA SciTech Forum 2020*, Orlando, FL. (2020)
5. M.A. Feero, A.M. Naguib and M.M. Koochesfahani, "Surface topology effects on the transverse galloping behavior of rectangular cylinders," *11<sup>th</sup> International Symposium on Turbulence and Shear Flow Phenomena (TSFP 11)*, Southampton, UK, July 30 to August 2 (2019)
6. M.A. Feero, A.M. Naguib and M.M. Koochesfahani, "Geometry effects on the galloping instability of rectangular cylinders at low Reynolds number," AIAA paper 2019-1340, *AIAA SciTech Forum 2019*, San Diego, California. DOI: 10.2514/6.2019-1340 (2019)
7. B.A. Hamedani, A.M. Naguib and M.M. Koochesfahani, "Reynolds number effect on lift characteristics of an airfoil translating across a non-uniform approach

- flow,” AIAA paper 2019-0639, *AIAA SciTech Forum 2019*, San Diego, California. DOI: 10.2514/6.2019-0639 (2019)
8. M.B. Albrecht, A.M. Naguib and M.M. Koochesfahani, “A study of the aerodynamics of a low Reynolds number airfoil translating across a uniform-shear approach flow,” AIAA paper 2019-2157, *AIAA SciTech Forum 2019*, San Diego, California. DOI: 10.2514/6.2019-2157 (2019)
  9. P.R. Hammer, D.A. Olson, M.R. Visbal, A.M. Naguib and M.M. Koochesfahani, “An investigation of the aerodynamics of a harmonically-pitching airfoil in uniform-shear approach flow,” AIAA paper 2018-0575, *AIAA SciTech Forum 2018*, Kissimmee, Florida (2018)
  10. H.H. Jabbar and A.M. Naguib, “A computational study of a vortex-ring pair interacting with a constant-wall-temperature heated wall,” AIAA paper 2018-1828, *AIAA SciTech Forum 2018*, Kissimmee, Florida (2018)
  11. K.A. Gouder, A.M. Naguib, P.L. Lavoie and J.F. Morrison, “Control of boundary layer streaks induced by freestream turbulence using plasma actuators,” *10<sup>th</sup> International Symposium on Turbulence and Shear Flow Phenomena (TSFP10)*, Chicago, USA, July (2017)
  12. K.A. Gouder, A.M. Naguib, P.L. Lavoie and J.F. Morrison, “Control of boundary layer streaks induced by freestream turbulence using plasma actuators,” *52<sup>nd</sup> 3AF International Conference on Applied Aerodynamics*, Lyon, France, 27-29 July (2017)
  13. P. Hammer, A. Naguib, M. Koochesfahani and M. Visbal, “Forces and Flow Structure on an Airfoil Pitching Asymmetrically at High Reduced Frequency,” *17<sup>th</sup> U.S. National Congress of Theoretical and Applied Mechanics*, East Lansing MI (2014)
  14. K. Zhang, A.M. Naguib and M.M. Koochesfahani, “Vortex-array model of a shear layer perturbed by a periodically pitching airfoil,” AIAA paper 2014-2503, *AIAA Aviation 2014*, Atlanta GA (2014)
  15. M. Mayank, H. Schock, R. Vedula and A. Naguib, “Establishment of a database by conducting intake manifold and in-cylinder flow measurements inside an internal combustion engine assembly,” SAE Technical Paper. DOI: 10.4271/2013-01-0565 (2013)
  16. B. Monnier, A.M. Naguib and M.M. Koochesfahani, “Investigation of the wake vortex pattern of rigid and flexible airfoils undergoing harmonic pitch

- oscillation,” AIAA paper 2013-0841, *51<sup>st</sup> AIAA Aerospace Sciences Meeting*, Grapevine TX (2013)
17. H. Clark, P. Lavoie and A.M. Naguib, “Methodology and techniques for flow state estimation and their application to the backward-facing step,” AIAA paper 2012-0737, *50<sup>th</sup> AIAA Aerospace Sciences Meeting*, Nashville, TN (2012)
  18. R. Hanson, K. Bade, P. Lavoie and A.M. Naguib, “Steady-state closed-loop control of bypass boundary layer transition using plasma actuators,” AIAA paper 2012-1140, *50<sup>th</sup> AIAA Aerospace Sciences Meeting*, Nashville, TN (2012)
  19. M. Al-Aweni and A.M. Naguib, “Simultaneous flow visualization and unsteady-surface-pressure measurements in normal and oblique impinging jets,” AIAA paper 2012-1227, *50<sup>th</sup> AIAA Aerospace Sciences Meeting*, Nashville, TN (2012)
  20. H. Clark, P. Lavoie and A.M. Naguib, “Linear and quadratic stochastic estimation of flow over a backward-facing step via surface pressure measurements,” *Proceedings of 58<sup>th</sup> CASI Aeronautics Conference and AGM – Aero 2011*, Montreal, Canada (2011)
  21. R. Hanson, A.M. Naguib and P. Lavoie, “Assessment of dynamic plasma actuation for control of bypass transition,” *Proceedings of 58<sup>th</sup> CASI Aeronautics Conference and AGM – Aero 2011*, Montreal, Canada (2011)
  22. D. Olson, A. Katz, A.M. Naguib, M.M. Koochesfahani, D. Rizzetta and M. Visbal, “An investigation of the effect of freestream turbulence on the laminar separation bubble on an SD7003 airfoil,” AIAA Paper 2011-395, *49<sup>th</sup> AIAA Aerospace Sciences Meeting*, Orlando, FL (2011)
  23. W. Jiang, K. Zhang, A.M. Naguib, M. El-Anwar and A.M. Abouel-Fotouh, “Array measurements of the unsteady surface pressure in a sharp-edged impinging jet,” AIAA Paper 2010-4851, *40<sup>th</sup> Fluid Dynamics Conference and Exhibit*, 28 Jun-1 Jul, Chicago, IL (2010)
  24. R. Hanson, P. Lavoie and A.M. Naguib, “Effect of plasma actuator excitation for controlling bypass transition in boundary layers,” AIAA Paper 2010-1091, *48<sup>th</sup> AIAA Aerospace Sciences Meeting*, 4-7 Jan, Orlando, FL (2010)
  25. M. El-Anwar, K. Zhang, A.M. Naguib and A.M. Abouel-Fotouh, “Pressure fluctuation produced by a jet impinging on a wall at normal and oblique incidence,” *7<sup>th</sup> International Conference on Experimental Heat Transfer, Fluid Mechancis and Thermodynamics*, 28 June – 3 July, Krakow, Poland (2009)

26. R. Hanson, P. Lavoie and A.M. Naguib, "Control of transient growth induced boundary layer transition using plasma actuators," *IUTAM Symposium on Laminar-Turbulent Transition*, KTH Royal Institute of Technology, Stockholm, Sweden (2009)
27. A.M. Naguib and M.M. Koochesfahani, "A vortex array model of the unsteady wake of a pitching airfoil," AIAA paper 2009-393, *47<sup>th</sup> AIAA Aerospace Sciences Meeting*, 5-8 January, Orlando, Florida (2009)
28. A.M. Naguib and J.F. Morrison, "Low order estimation and modeling of transient growth in a laminar boundary layer," *XXII ICTAM*, 25-29 August, Adelaide, Australia (2008)
29. P. Lavoie, A.M. Naguib and J.F. Morrison, "Transient growth induced by surface roughness in a Blasius boundary layer," *XXII ICTAM*, 25-29 August, Adelaide, Australia (2008)
30. K. Zhang and A.M. Naguib, "Effect of cavity width on self-sustained oscillations in a low-Mach-number cavity flow," *38<sup>th</sup> AIAA Fluid Dynamics Conference and Exhibit*, AIAA paper no. 2008-4376, June 23 – 26, Seattle, WA (2008)
31. A.M. Naguib and J.F. Morrison, "Low-order flow-field estimation using surface-shear-stress information in a transitional boundary layer," *4<sup>th</sup> AIAA Flow Control Conference and Exhibit*, AIAA paper no. 2008-4209, June 23 – 26, Seattle, WA (2008)
32. K. Zhang and A.M. Naguib, "Dispersion relation and mode selectivity in low-Mach-number cavity flows," *36<sup>th</sup> AIAA Fluid Dynamics Conference and Exhibit*, AIAA paper no. 2006-3229, June 5 – 8, San Francisco, CA (2006)
33. L.M. Hudy, A.M. Naguib and W.M. Humphreys, "Stochastic estimation of a separated-flow field using wall-pressure-array measurements," *44<sup>th</sup> AIAA Aerospace Sciences Meeting and Exhibit*, AIAA paper no 2006-1115, January 9 – 12, Reno, NV (2006)
34. L.M. Hudy, A.M. Naguib, W.M. Humphreys and S.M. Bartram, "Particle Image Velocimetry measurements of a two/three-dimensional separating/reattaching boundary layer downstream of an axisymmetric backward-facing step," *43<sup>rd</sup> Aerospace Sciences and Exhibit*, AIAA paper no. 2005-0114, January 10 – 13, Reno, NV (2005)
35. I. Bassioni, M. Daoud, A.M. Naguib, M. Abdelkhalek and Z. Ghoneim, "Microphone-array measurements of acoustic and hydrodynamic wall-pressure

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