



Professor Maurizio Porfiri

See:

<http://engineering.nyu.edu/people/maurizio-porfiri>

<http://faculty.poly.edu/~mporfiri/>

<http://faculty.poly.edu/~mporfiri/Group.htm>

<http://faculty.poly.edu/~mporfiri/Projects.htm>

<https://scholar.google.com/citations?user=1KQ1VqsAAAAJ&hl=en>

http://www.eurekalert.org/pub_releases/2013-10/pion-asm101713.php

Mechanical and Aerospace Engineering
New York University Polytechnic School of Engineering

Biography:

Maurizio Porfiri was born in Rome (Italy) and now happily resides in Brooklyn (New York). He received M.Sc. and Ph.D. degrees in engineering mechanics from Virginia Tech; a “Laurea” in electrical engineering and a Ph.D. in theoretical and applied mechanics from the University of Rome “La Sapienza” and the University of Toulon (dual degree program). Since 2006, he has been a member of the faculty of the Mechanical and Aerospace Engineering Department at NYU Polytechnic School of Engineering, where he is currently a Professor. His work is in the area of dynamical systems, specifically focusing on interdisciplinary underwater applications. He is the author of more than 150 journal publications, and his research has been featured in numerous major media outlets, including CNN, Discovery Channel, and NPR. He has received the National Science Foundation CAREER award, the Outstanding Young Alumnus award from the College of Engineering of Virginia Tech, the ASME Gary Anderson Early Achievement Award, and the ASME DSCD Young Investigator Award; and has been named to the Popular Science “Brilliant 10” list for young scientists as the “Water Wizard”.

Research Interests:

Dynamical Systems; Mechanics of Advanced Materials; Multiphysics Modeling; Smart Materials & Structures

Selected Publications:

U. Andreaus, R. C. Batra, and M. Porfiri, Vibrations of cracked Euler-Bernoulli beams using meshless local Petrov-Galerkin (MLPG) method, *Computer Modeling in Engineering and Sciences*, vol. 9, no. 2, pp. 111–131, 2005.

Porfiri, M. and N. Gupta, A review of research on impulsive loading of marine composites. *Major Accomplishments in Composite Materials and Sandwich Structures*, 2010: pp. 169–194

Adel Shams, M. Aureli and Maurizio Porfiri, “Nonlinear buckling of a spherical shell embedded in an elastic medium with imperfect interface”, *International Journal of Solids and Structures*, Vol. 50, Nos 14-15, pp 2310-2327, July 2013

Linfeng Shen, Youngsu Cha, Adel Shams and Maurizio Porfiri, “Fabrication and buckling analysis of ionic polymer metal composite pipes”, *Smart Materials and Structures*, Vol. 2, No. 10, 105032, 2013

Cellini F, Cha Y and Porfiri M 2014 Energy harvesting from fluid-induced buckling of ionic polymer metal composites *J. Intell. Mater. Syst. Struct.* 25 1496–510

Linfeng Shen ; Youngsu Cha ; Adel Shams ; Maurizio Porfiri, “Buckling of an ionic polymer metal composite shell under uniaxial compression”, *SPIE Proceedings*, Vol. 9056, *Conducting Polymers and IMPC, Electroactive Polymer Actuators and Devices (EAPAD) 2014*, 90561X (March 8, 2014)

Adel Shams and Maurizio Porfiri, “Axisymmetric static and dynamic buckling of hollow microspheres”, *International Journal of Non-linear Mechanics*, Vol. 61, pp 19-31, May 2014