## Marcelo Areias Trindade

List of Publications by Year in descending order

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63 papers 1,437 citations

20 h-index 330143 37 g-index

66 all docs

66
docs citations

66 times ranked 765 citing authors

| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Finite element modeling and analysis of adhesive layer effects in surface-bonded piezoelectric sensors and actuators including non-uniform thickness. Mechanics of Advanced Materials and Structures, 2022, 29, 3658-3673. | 2.6 | 4         |
| 2  | Simplified robust and multiobjective optimization of piezoelectric energy harvesters with uncertain parameters. International Journal of Mechanics and Materials in Design, 2022, 18, 63-85.                               | 3.0 | 3         |
| 3  | Effect of parametric uncertainties on vibration mitigation with periodically distributed and interconnected piezoelectric patches. Journal of Intelligent Material Systems and Structures, 2021, 32, 971-985.              | 2.5 | 3         |
| 4  | Robust evaluation of stability regions of oil-well drilling systems with uncertain bit-rock nonlinear interaction. Journal of Sound and Vibration, 2020, 483, 115481.  | 3.9 | 6         |
| 5  | Design and Analysis of a Geometrically Nonlinear Dynamic Vibration Absorber. Journal of Computational and Nonlinear Dynamics, 2020, $15$ , .   | 1.2 | 1         |
| 6  | On the noncollocated control of structures with optimal static output feedback: Initial conditions dependence, sensors placement, and sensitivity analysis. Structural Control and Health Monitoring, 2019, 26, e2407.     | 4.0 | 5         |
| 7  | Finite element modeling and parametric analysis of a dielectric elastomer thin-walled cylindrical actuator. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.                          | 1.6 | 9         |
| 8  | DESIGN AND ANALYSIS OF ACTIVE CONTROL TECHNIQUES FOR STICK-SLIP SUPPRESSION IN ROTARY DRILLING SYSTEMS. , 2019, , .  |     | 0         |
| 9  | Effect of piezoelectric patches segmentation and adhesive layer properties on the electromechanical coupling of smart structures., 2019,,.   |     | O         |
| 10 | ROBUST DESIGN OF ENERGY HARVESTING RESONANT DEVICES BY MULTI-OBJECTIVE OPTIMIZATION. , 2019, , .   |     | 0         |
| 11 | Evaluation of Effective Electromechanical Coupling Coefficient of Piezoelectric Structures Considering Viscoelastic Properties of Adhesive Layer., 2019,,.   |     | 0         |
| 12 | Closed-loop multiobjective optimization of piezoelectric patches for active vibration control of a rectangular plate. , $2019$ , , .   |     | 0         |
| 13 | Special Section on Risk Analysis and Management of Complex Systems. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering, 2019, 5, .   | 1.1 | 0         |
| 14 | Finite element modeling and analysis of an atomic force microscope cantilever beam coupled to a piezoceramic base actuator. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1.          | 1.6 | 4         |
| 15 | Performance analysis of proportional-integral feedback control for the reduction of stick-slip-induced torsional vibrations in oil well drillstrings. Journal of Sound and Vibration, 2017, 398, 28-38.                    | 3.9 | 44        |
| 16 | Analysis of piezoelectric sensor networks for spatial modal filters and active vibration control. , 2017, , .  |     | 0         |
| 17 | Robust design and uncertainty analysis of an energy harvesting resonant device. , 2017, , .  |     | 0         |
| 18 | Optimal placement of sensors for the output feedback control of structures using quadratic performance criterion., 2017,,.   |     | 0         |

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|----|--|--------------|-----------|
| 19 | Piezoelectric Structural Vibration Control. , 2016, , 289-309.   |              | О         |
| 20 | Passive and Active Structural Vibration Control. , 2016, , 65-92.  |              | 4         |
| 21 | Finite element characterisation of multilayer <mml:math altimg="si1.gif" overflow="scroll" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mi>d</mml:mi></mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow< td=""><td>l::58<br/>31&lt;</td><td>/mml:mn&gt;</td></mml:mrow<></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:math> | l::58<br>31< | /mml:mn>  |
| 22 | Semi-modal active vibration control of plates using discrete piezoelectric modal filters. Journal of Sound and Vibration, 2015, 351, 17-28.  | 3.9          | 20        |
| 23 | Finite element characterization and parametric analysis of the nonlinear behaviour of an actual d 15 shear MFC. Acta Mechanica, 2013, 224, 2489-2503.  | 2.1          | 18        |
| 24 | EFFECT OF PARAMETRIC UNCERTAINTIES ON THE EFFECTIVENESS OF DISCRETE PIEZOELECTRIC SPATIAL MODAL FILTERS. , 2013, 3, 523-540.   |              | 4         |
| 25 | SPECIAL ISSUE DEDICATED TO THE 1ST INTERNATIONAL SYMPOSIUM ON UNCERTAINTY QUANTIFICATION AND STOCHASTIC MODELING (UNCERTAINTIES 2012)., 2013, 3, vii-viii.   |              | 0         |
| 26 | Parametric analysis of effective material properties of thickness-shear piezoelectric macro-fibre composites. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2012, 34, 352-361.  | 1.6          | 15        |
| 27 | Effect of parametric uncertainties on the performance of a piezoelectric energy harvesting device. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2012, 34, 552-560.   | 1.6          | 20        |
| 28 | Special Issue 2: Uncertainties 2012. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2012, 34, 543-544.   | 1.6          | 0         |
| 29 | Structural vibration control using extension and shear active-passive piezoelectric networks including sensitivity to electrical uncertainties. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2011, 33, 287-301.  | 1.6          | 22        |
| 30 | Modeling and analysis of laminate composite plates with embedded active–passive piezoelectric networks. Journal of Sound and Vibration, 2011, 330, 194-216.  | 3.9          | 31        |
| 31 | Finite element homogenization technique for the characterization of <i> d &lt; /i &gt; &lt; sub &gt; 15 &lt; /sub &gt; shear piezoelectric macro-fibre composites. Smart Materials and Structures, 2011, 20, 075012.</i>   | 3.5          | 29        |
| 32 | Optimization of modal filters based on arrays of piezoelectric sensors. Smart Materials and Structures, 2009, 18, 095046.  | <b>3.</b> 5  | 17        |
| 33 | Effective Electromechanical Coupling Coefficients of Piezoelectric Adaptive Structures: Critical Evaluation and Optimization. Mechanics of Advanced Materials and Structures, 2009, 16, 210-223.   | 2.6          | 85        |
| 34 | Refined sandwich model for the vibration of beams with embedded shear piezoelectric actuators and sensors. Computers and Structures, 2008, 86, 859-869.  | 4.4          | 23        |
| 35 | Multimodal passive vibration control of sandwich beams with shunted shear piezoelectric materials. Smart Materials and Structures, 2008, 17, 055015.   | 3.5          | 31        |
| 36 | Simultaneous Extension and Shear Piezoelectric Actuation for Active Vibration Control of Sandwich Beams. Journal of Intelligent Material Systems and Structures, 2007, 18, 591-600.  | 2.5          | 10        |

| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | Optimization of active–passive damping treatments using piezoelectric and viscoelastic materials. Smart Materials and Structures, 2007, 16, 2159-2168.  | 3.5 | 19        |
| 38 | On Higher-Order Modelling of Smart Beams with Embedded Shear-Mode Piezoceramic Actuators and Sensors. Mechanics of Advanced Materials and Structures, 2006, 13, 357-369.  | 2.6 | 14        |
| 39 | Reduced-Order Finite Element Models of Viscoelastically Damped Beams Through Internal Variables Projection. Journal of Vibration and Acoustics, Transactions of the ASME, 2006, 128, 501-508.                             | 1.6 | 27        |
| 40 | Karhunen–LoÔve decomposition of coupled axial/bending vibrations of beams subject to impacts. Journal of Sound and Vibration, 2005, 279, 1015-1036.   | 3.9 | 58        |
| 41 | Hybrid Active-Passive Damping Treatments Using Viscoelastic and Piezoelectric Materials: Review and Assessment. JVC/Journal of Vibration and Control, 2002, 8, 699-745.   | 2.6 | 110       |
| 42 | Dynamics of Beams Undergoing Large Rotations Accounting for Arbitrary Axial Deformation. Journal of Guidance, Control, and Dynamics, 2002, 25, 634-643.   | 2.8 | 22        |
| 43 | Obtaining Mode Shapes through the Karhunen-LoÃ've Expansion for Distributed-Parameter Linear Systems. Shock and Vibration, 2002, 9, 177-192.  | 0.6 | 21        |
| 44 | Frequency-Dependent Viscoelastic Models for Passive Vibration Isolation Systems. Shock and Vibration, 2002, 9, 253-264.   | 0.6 | 13        |
| 45 | PIEZOELECTRIC ACTIVE VIBRATION CONTROL OF DAMPED SANDWICH BEAMS. Journal of Sound and Vibration, 2001, 246, 653-677.  | 3.9 | 91        |
| 46 | Finite element modelling of hybrid active–passive vibration damping of multilayer piezoelectric sandwich beams—part I: Formulation. International Journal for Numerical Methods in Engineering, 2001, 51, 835-854.        | 2.8 | 6         |
| 47 | Finite element modelling of hybrid active–passive vibration damping of multilayer piezoelectric sandwich beams—part I: Formulation. International Journal for Numerical Methods in Engineering, 2001, 51, 835-854.        | 2.8 | 57        |
| 48 | Finite element modelling of hybrid active–passive vibration damping of multilayer piezoelectric sandwich beams—part II: System analysis. International Journal for Numerical Methods in Engineering, 2001, 51, 855-864.   | 2.8 | 1         |
| 49 | Finite element modelling of hybrid active–passive vibration damping of multilayer piezoelectric sandwich beams—part II: System analysis. International Journal for Numerical Methods in Engineering, 2001, 51, 855-864.   | 2.8 | 18        |
| 50 | The Role of Nonlinear Strain-Displacement Relation on the Geometric Stiffening of Rotating Flexible Beams., 2001,,.   |     | 1         |
| 51 | On the numerical integration of rigid body nonlinear dynamics in presence of parameters singularities. Revista Brasileira De Ciencias Mecanicas/Journal of the Brazilian Society of Mechanical Sciences, 2001, 23, 49-62. | 0.1 | 11        |
| 52 | Piezoelectric actuation mechanisms for intelligent sandwich structures. Smart Materials and Structures, 2000, 9, 328-335.   | 3.5 | 75        |
| 53 | Modeling of Frequency-Dependent Viscoelastic Materials for Active-Passive Vibration Damping. Journal of Vibration and Acoustics, Transactions of the ASME, 2000, 122, 169-174.  | 1.6 | 115       |
| 54 | Finite element analysis of frequency- and temperature-dependent hybrid active-passive vibration damping. Revue Europeenne Des Elements, 2000, 9, 89-111.  | 0.1 | 10        |

| #  | Article  | IF  | Citations |
|----|--|-----|-----------|
| 55 | Parametric Analysis of the Vibration Control of Sandwich Beams Through Shear-Based Piezoelectric Actuation. Journal of Intelligent Material Systems and Structures, 1999, 10, 377-385. | 2.5 | 36        |
| 56 | New Shear Actuated Smart Structure Beam Finite Element. AIAA Journal, 1999, 37, 378-383.   | 2.6 | 100       |
| 57 | Parametric Analysis of the Vibration Control of Sandwich Beams Through Shear-Based Piezoelectric Actuation. Journal of Intelligent Material Systems and Structures, 1999, 10, 377-385. | 2.5 | 5         |
| 58 | A Unified Beam Finite Element Model for Extension and Shear Piezoelectric Actuation Mechanisms. Journal of Intelligent Material Systems and Structures, 1997, 8, 1012-1025.            | 2.5 | 167       |
| 59 | On the choice of probability density function for the stochastic bonding stiffness of piezoelectric structures. , $0$ , , .  |     | 1         |
| 60 | ANÃLISE DO APROVEITAMENTO DE ENERGIA POR DISPOSITIVOS PIEZELÉTRICOS USANDO MODELO ELETROMECÃ,NICO DE PLACA E CIRCUITOS RESSONANTES. , 0, , .   |     | 1         |
| 61 | Minimização de vibrações torcionais em colunas de perfuração de poços de petróleo por leis de controle em função do peso na broca. , 0, , .  |     | O         |
| 62 | Quantification of Uncertainties in Experimental Modal Parameters Estimation: An Industrial Case Study. , 0, , .  |     | 0         |
| 63 | Effect of bit-rock interaction uncertainties on the torsional stability regions of an oil-well drilling system. , 0, , .   |     | O         |