Federico C Buroni

List of Publications by Year
in descending order

24 papers	305 citations	10 h-index 933447	17 g-index 888059
24 all docs	24 docs citations	24 times ranked	184 citing authors

#	ARTICLE	IF	CITATIONS
1	Three-dimensional Green's function and its derivative for materials with general anisotropic magneto-electro-elastic coupling. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2010, 466, 515-537.	2.1	43
2	Design of polymeric auxetic matrices for improved mechanical coupling in lead-free piezocomposites. Smart Materials and Structures, 2020, 29, 054002.	3.5	24
3	3D frictional contact of anisotropic solids using BEM. European Journal of Mechanics, A/Solids, 2011, 30, 95-104.	3.7	23
4	Improving the performance of lead-free piezoelectric composites by using polycrystalline inclusions and tuning the dielectric matrix environment. Smart Materials and Structures, 2019, 28, 075032.	3.5	22
5	Lead-free piezocomposites with CNT-modified matrices: Accounting for agglomerations and molecular defects. Composite Structures, 2019, 224, 111033.	5.8	21
6	3D BEM for orthotropic frictional contact of piezoelectric bodies. Computational Mechanics, 2015, 56, 491-502.	4.0	20
7	Design of lead-free PVDF/CNT/BaTiO$_3$ piezocomposites for sensing and energy harvesting: the role of polycrystallinity, nanoadditives, and anisotropy. Smart Materials and Structures, 2020, 29, 015021.	3.5	18
8	Analysis of FRP composites under frictional contact conditions. International Journal of Solids and Structures, 2013, 50, 3947-3959.	2.7	16
9	3D explicit-BEM fracture analysis for materials with anisotropic multifield coupling. Applied Mathematical Modelling, 2016, 40, 2897-2912.	4.2	15
10	Design of nano-modified PVDF matrices for lead-free piezocomposites: Graphene vs carbon nanotube nano-additions. Mechanics of Materials, 2020, 142, 103275.	3.2	14
11	Unique and Explicit Formulas for Green's Function in Three-Dimensional Anisotropic Linear Elasticity. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	2.2	11
12	A family of hole boundary elements for modeling materials with cylindrical voids. Engineering Analysis With Boundary Elements, 2008, 32, 578-590.	3.7	10
13	Multiple pole residue approach for 3D BEM analysis of mathematical degenerate and non‐degenerate materials. International Journal for Numerical Methods in Engineering, 2011, 86, 1125-1143.	2.8	10
14	Closed-form solutions for the piezoresistivity properties of short-fiber reinforced composites with percolation-type behavior. Carbon, 2021, 184, 923-940.	10.3	10
15	Size dependent electro-elastic enhancement in geometrically anisotropic lead-free piezocomposites. International Journal of Mechanical Sciences, 2020, 182, 105745.	6.7	10
16	Multiscale design of nanoengineered matrices for lead-free piezocomposites: Improved performance via controlling auxeticity and anisotropy. Composite Structures, 2021, 255, 112909.	5.8	8
17	A formalism for anisotropic heat transfer phenomena: Foundations and Green's functions. International Journal of Heat and Mass Transfer, 2014, 75, 399-409.	4.8	7
18	Advanced modeling of lead-free piezocomposites: The role of nonlocal and nonlinear effects. Composite Structures, 2020, 238, 111967.	5.8	7

#	Article	IF	Citations
19	Effective properties of materials with random micro-cavities using special boundary elements. Journal of Materials Science, 2008, 43, 3510-3521.	3.7	6
20	Analytical expressions to estimate the effective piezoelectric tensor of a textured polycrystal for any crystal symmetry. Mechanics of Materials, 2020, 151, 103604.	3.2	5
21	Boundary element analysis of the frictionless indentation of piezoelectric films. European Journal of Computational Mechanics, 2016, 25, 24-37.	0.6	3
22	Quasistatic Electro-Elastic Contact Modeling Using the Boundary Element Method. Key Engineering Materials, 2016, 681, 185-196.	0.4	1
23	A fast and non-degenerate scheme for the evaluation of the 3D fundamental solution and its derivatives for fully anisotropic magneto-electro-elastic materials. Engineering Analysis With Boundary Elements, 2019, 105, 94-103.	3.7	1
24	An XFEM-based numerical scheme to compute crack-induced electrical resistivity changes in cracked CNT-reinforced composites using ANSYS. AIP Conference Proceedings, 2020, , .	0.4	0