Federico C Buroni

List of Publications by Year
in descending order

24	305	933447 10	888059 17
papers	citations	h-index	g-index

24	24	24	184
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Multiscale design of nanoengineered matrices for lead-free piezocomposites: Improved performance via controlling auxeticity and anisotropy. Composite Structures, 2021, 255, 112909.	5.8	8
2	Closed-form solutions for the piezoresistivity properties of short-fiber reinforced composites with percolation-type behavior. Carbon, 2021, 184, 923-940.	10.3	10
3	Design of lead-free PVDF/CNT/BaTiO₃ piezocomposites for sensing and energy harvesting: the role of polycrystallinity, nanoadditives, and anisotropy. Smart Materials and Structures, 2020, 29, 015021.	3.5	18
4	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
5	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
6	Design of polymeric auxetic matrices for improved mechanical coupling in lead-free piezocomposites. Smart Materials and Structures, 2020, 29, 054002.	3.5	24
7	Advanced modeling of lead-free piezocomposites: The role of nonlocal and nonlinear effects. Composite Structures, 2020, 238, 111967.	5.8	7
8	Size dependent electro-elastic enhancement in geometrically anisotropic lead-free piezocomposites. International Journal of Mechanical Sciences, 2020, 182, 105745.	6.7	10
9	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
10	Lead-free piezocomposites with CNT-modified matrices: Accounting for agglomerations and molecular defects. Composite Structures, 2019, 224, 111033.	5.8	21
11	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
12	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
13	Boundary element analysis of the frictionless indentation of piezoelectric films. European Journal of Computational Mechanics, 2016, 25, 24-37.	0.6	3
14	3D explicit-BEM fracture analysis for materials with anisotropic multifield coupling. Applied Mathematical Modelling, 2016, 40, 2897-2912.	4.2	15
15	Quasistatic Electro-Elastic Contact Modeling Using the Boundary Element Method. Key Engineering Materials, 2016, 681, 185-196.	0.4	1
16	3D BEM for orthotropic frictional contact of piezoelectric bodies. Computational Mechanics, 2015, 56, 491-502.	4.0	20
17	A formalism for anisotropic heat transfer phenomena: Foundations and Greenâ€™s functions. International Journal of Heat and Mass Transfer, 2014, 75, 399-409.	4.8	7
18	Analysis of FRP composites under frictional contact conditions. International Journal of Solids and Structures, 2013, 50, 3947-3959.	2.7	16

#	Article	IF	Citations
19	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
20	Multiple pole residue approach for 3D BEM analysis of mathematical degenerate and nonâ€degenerate materials. International Journal for Numerical Methods in Engineering, 2011, 86, 1125-1143.	2.8	10
21	3D frictional contact of anisotropic solids using BEM. European Journal of Mechanics, A/Solids, 2011, 30, 95-104.	3.7	23
22	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
23	Effective properties of materials with random micro-cavities using special boundary elements. Journal of Materials Science, 2008, 43, 3510-3521.	3.7	6
24	A family of hole boundary elements for modeling materials with cylindrical voids. Engineering Analysis With Boundary Elements, 2008, 32, 578-590.	3.7	10