Laura Maria Vergani

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8307895/publications.pdf

Version: 2024-02-01

35	786	516710 16	526287 27
papers	citations	h-index	g-index

37	37	37	905
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Boneâ€Inspired Materials by Design: Toughness Amplification Observed Using 3D Printing and Testing. Advanced Engineering Materials, 2016, 18, 1354-1363.	3.5	138
2	Optimization of filament winding parameters for the design of a composite pipe. Composites Part B: Engineering, 2018, 148, 207-216.	12.0	57
3	Understanding the structureâ€“property relationship in cortical bone to design a biomimetic composite. Composite Structures, 2016, 139, 188-198.	5.8	52
4	Fatigue behavior of hydrogen pre-charged low alloy Crâ€“Mo steel. International Journal of Fatigue, 2016, 83, 2-9.	5.7	48
5	Influence of delamination on fatigue properties of a fibreglass composite. Composite Structures, 2014, 107, 325-333.	5.8	38
6	Bone-inspired enhanced fracture toughness of de novo fiber reinforced composites. Scientific Reports, 2019, 9, 3142.	3.3	37
7	Fracture mechanics of hydroxyapatite single crystals under geometric confinement. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 20, 184-191.	3.1	31
8	A new finite element based parameter to predict bone fracture. PLoS ONE, 2019, 14, e0225905.	2.5	27
9	A review of thermographic techniques for damage investigation in composites. Frattura Ed Integrita Strutturale, 2014, 8, 1-12.	0.9	26
10	Crack Propagation in Cortical Bone: A Numerical Study. , 2014, 3, 1524-1529.		26
11	Determinants of bone damage: An ex-vivo study on porcine vertebrae. PLoS ONE, 2018, 13, e0202210.	2.5	26
12	Bone Toughness and Crack Propagation: An Experimental Study. Procedia Engineering, 2014, 74, 464-467.	1.2	25
13	Computational Framework to Predict Failure and Performance of Bone-Inspired Materials. ACS Biomaterials Science and Engineering, 2017, 3, 3236-3243.	5.2	22
14	A multiscale XFEM approach to investigate the fracture behavior of bio-inspired composite materials. Composites Part B: Engineering, 2018, 141, 258-264.	12.0	20
15	Effect of delamination on the fatigue life of GFRP: A thermographic and numerical study. Composite Structures, 2019, 218, 152-161.	5.8	20
16	Hydrogen Effect on Fatigue Behavior of a Quenched&tempered Steel. Procedia Engineering, 2014, 74, 468-471.	1.2	18
17	A Review on Multiscale Bone Damage: From the Clinical to the Research Perspective. Materials, 2021, 14, 1240.	2.9	17
18	Thermographic stepwise assessment of impact damage in sandwich panels. Composite Structures, 2018, 184, 279-287.	5.8	16

#	Article	IF	Citations
19	Multi-axial fatigue life estimation of unidirectional GFRP composite. International Journal of Fatigue, 2011, 33, 1032-1039.	5.7	12
20	Thermographic applications for the rapid estimation of fatigue limit. Procedia Structural Integrity, 2019, 24, 658-666.	0.8	12
21	Fatigue-caused damage in trabecular bone from clinical, morphological and mechanical perspectives. International Journal of Fatigue, 2020, 133, 105451.	5.7	12
22	2D and 3D numerical models to evaluate trabecular bone damage. Medical and Biological Engineering and Computing, 2021, 59, 2139-2152.	2.8	11
23	Impact behaviour of 3-layered metal-polymer-metal sandwich panels. Composite Structures, 2015, 133, 140-147.	5.8	10
24	Torsionâ€"Resistant Structures: A Nature Addressed Solution. Materials, 2021, 14, 5368.	2.9	10
25	Failure analysis of a non-integral pipeline collet connector. Engineering Failure Analysis, 2005, 12, 711-719.	4.0	9
26	Assessing the intimate mechanobiological link between human bone micro-scale trabecular architecture and micro-damages. Engineering Fracture Mechanics, 2022, 270, 108582.	4.3	9
27	Squeeze-winding: A new manufacturing route for biomimetic fiber-reinforced structures. Composites Part A: Applied Science and Manufacturing, 2020, 132, 105839.	7.6	8
28	Rapid estimation of fatigue limit for C45 steel by thermography and digital image correlation. Journal of Strain Analysis for Engineering Design, 2021, 56, 478-491.	1.8	8
29	Heat Treatments for Stress Relieving AlSi9Cu3 Alloy Produced by Laser Powder Bed Fusion. Materials, 2021, 14, 4184.	2.9	8
30	Reproducibility of DXA-based bone strain index and the influence of body mass: an in vivo study. Radiologia Medica, 2020, 125, 313-318.	7.7	7
31	Down to the Bone: A Novel Bio-Inspired Design Concept. Materials, 2021, 14, 4226.	2.9	7
32	Design of an ankle prosthesis for swimming and walking. Procedia Engineering, 2011, 10, 3503-3509.	1.2	6
33	Influence of manufacturing process on fatigue resistance of high strength steel bolts for connecting rods. Engineering Failure Analysis, 2020, 109, 104330.	4.0	5
34	Mapping local mechanical properties of human healthy and osteoporotic femoral heads. Materialia, 2021, 20, 101229.	2.7	4
35	Mechanical Design Optimization of Prosthetic Handâ€™s Fingers: Novel Solutions towards Weight Reduction. Materials, 2022, 15, 2456.	2.9	4