JuliÃ¡n A Norato

List of Publications by Year
in descending order

43 papers	2,111 citations	331670 21 h-index	414414 32 g-index
44 all docs	44 docs citations	44 times ranked	1202 citing authors

#	Article	IF	Citations
1	Stress-based topology optimization for continua. Structural and Multidisciplinary Optimization, 2010, 41, 605-620.	3.5	557
2	A geometry projection method for continuum-based topology optimization with discrete elements. Computer Methods in Applied Mechanics and Engineering, 2015, 293, 306-327.	6.6	233
3	Stress-based shape and topology optimization with the level set method. Computer Methods in Applied Mechanics and Engineering, 2018, 329, 1-23.	6.6	149
4	A topological derivative method for topology optimization. Structural and Multidisciplinary Optimization, 2007, 33, 375-386.	3.5	118
5	A geometry projection method for shape optimization. International Journal for Numerical Methods in Engineering, 2004, 60, 2289-2312.	2.8	110
6	Component and system reliability-based topology optimization using a single-loop method. Structural and Multidisciplinary Optimization, 2010, 41, 87-106.	3.5	94
7	A geometry projection method for the topology optimization of plate structures. Structural and Multidisciplinary Optimization, 2016, 54, 1173-1190.	3.5	94
8	3D cellular metamaterials with planar anti-chiral topology. Materials and Design, 2018, 145, 226-231.	7.0	87
9	A review on feature-mapping methods for structural optimization. Structural and Multidisciplinary Optimization, 2020, 62, 1597-1638.	3.5	72
10	Stress-based topology optimization with discrete geometric components. Computer Methods in Applied Mechanics and Engineering, 2017, 325, 1-21.	6.6	65
11	Sandwich Structures with Prismatic and Foam Cores: A Review. Advanced Engineering Materials, 2019, 21, 1800036.	3.5	61
12	Multi-material topology optimization of lattice structures using geometry projection. Computer Methods in Applied Mechanics and Engineering, 2020, 363, 112895.	6.6	49
13	Topology Optimization of Structures Made of Discrete Geometric Components With Different Materials. Journal of Mechanical Design, Transactions of the ASME, 2018, 140, .	2.9	44
14	Optimal Design of Panel Reinforcements With Ribs Made of Plates. Journal of Mechanical Design, Transactions of the ASME, 2017, 139, .	2.9	35
15	A geometry projection method for the topology optimization of curved plate structures with placement bounds. International Journal for Numerical Methods in Engineering, 2018, 114, 128-146.	2.8	32
16	Fatigue-based topology optimization with non-proportional loads. Computer Methods in Applied Mechanics and Engineering, 2019, 345, 805-825.	6.6	31
17	Adaptive mesh refinement for topology optimization with discrete geometric components. Computer Methods in Applied Mechanics and Engineering, 2020, 364, 112930.	6.6	31
18	Direct process feedback in extrusion-based 3D bioprinting. Biofabrication, 2020, 12, 015017.	7.1	30

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19	A MATLAB code for topology optimization using the geometry projection method. Structural and Multidisciplinary Optimization, 2020, 62, 1579-1594.	3.5	30
20	Topology optimization with supershapes. Structural and Multidisciplinary Optimization, 2018, 58, 415-434.	3.5	26
21	A Computational and Cellular Solids Approach to the Stiffness-Based Design of Bone Scaffolds. Journal of Biomechanical Engineering, 2011, 133, 091003.	1.3	24
22	Topology optimization with discrete geometric components made of composite materials. Computer Methods in Applied Mechanics and Engineering, 2021, 376, 113582.	6.6	21
23	Computational design of curvilinear bone scaffolds fabricated via direct ink writing. CAD Computer Aided Design, 2018, 95, 1-13.	2.7	20
24	A Geometry Projection Method for Continuum-Based Topology Optimization of Structures. , 2012, , .		16
25	Effect of geometrical parameters on the performance of conventional Savonius VAWT: A review. Renewable and Sustainable Energy Reviews, 2022, 161, 112314.	16.4	16
26	Blast-resilience of honeycomb sandwich panels. International Journal of Mechanical Sciences, 2018, 144, 1-9.	6.7	9
27	Geometric Constraints for the Topology Optimization of Structures Made of Primitives. , 2019, , .		9
28	Bone Adaptation-Driven Design of Periodic Scaffolds. Journal of Mechanical Design, Transactions of the ASME, 2021, 143, .	2.9	8
29	Topology optimization of lattices with anisotropic struts. Structural and Multidisciplinary Optimization, 2021, 63, 1653-1668.	3.5	5
30	Topology optimization of structures made of fiber-reinforced plates. Structural and Multidisciplinary Optimization, 2022, 65, 1.	3.5	5
31	Optimal shape design of axisymmetric structures subject to asymmetric loading. Computer Methods in Applied Mechanics and Engineering, 2015, 293, 283-305.	6.6	4
32	Finding Better Local Optima in Topology Optimization via Tunneling. , 2018, , .		4
33	An error-in-constitutive equations strategy for topology optimization for frequency-domain dynamics. Computer Methods in Applied Mechanics and Engineering, 2020, 372, 113330.	6.6	4
34	Topology Optimization of Multi-Material Lattices for Maximal Bulk Modulus. , 2019, , .		4
35	A Geometry Projection Method for the Design Exploration of Wing-box Structures. , 2019, , .		3
36	Topology optimization of programmable lattices with geometric primitives. Structural and Multidisciplinary Optimization, 2022, 65, 1.	3.5	3

#	Article	IF	Citations
37	Stress Minimization Using The Level Set Topology Optimization. , 2017, , .		2
38	Topology Optimization of Fail-Safe Structures via Geometry Projection. , 2021, , .		2
39	Topology Optimization for Buckling via Geometry Projection. , 2022, , .		2
40	Topology Optimization Under Stochastic Loads via the Single Loop Method. , 2008, , .		1
41	A Geometry Projection Method for the Optimal Design of Panel Reinforcements With Ribs Made of Plates. , 2016, , .		0
42	Special issue dedicated to Founding Editor George Rozvany. Structural and Multidisciplinary Optimization, 2016, 54, 1107-1111.	3.5	0
43	A Topology Optimization Method for the Design of Orthotropic Plate Structures. , 2020, , .		0