Alvaro RodrÃ-guez-Prieto

List of Publications by Year
in descending order

31 papers	291 citations	1040056 9 h-index	940533 16 g-index
31 all docs	31 docs citations	31 times ranked	161 citing authors

#	Article	IF	Citations
1	Multicriteria Analytical Model for Mechanical Integrity Prognostics of Reactor Pressure Vessels Manufactured from Forged and Rolled Steels. Mathematics, 2022, 10, 1779.	2.2	0
2	Special Issue of the Manufacturing Engineering Society 2021 (SIMES-2021). Materials, 2022, 15, 4772.	2.9	1
3	Reliability Prediction of Acrylonitrile O-Ring for Nuclear Power Applications Based on Shore Hardness Measurements. Polymers, 2021, 13, 943.	4.5	6
4	Analysis of the Technological Evolution of Materials Requirements Included in Reactor Pressure Vessel Manufacturing Codes. Sustainability, 2021, 13, 5498.	3.2	3
5	Can Accelerated Aging Procedures Predict the Long Term Behavior of Polymers Exposed to Different Environments?. Polymers, 2021, 13, 2688.	4.5	39
6	Topological Optimization of Artificial Neural Networks to Estimate Mechanical Properties in Metal Forming Using Machine Learning. Metals, 2021, 11, 1289.	2.3	9
7	Evolution of Standardized Specifications on Materials, Manufacturing and In-Service Inspection of Nuclear Reactor Vessels. Sustainability, 2021, 13, 10510.	3.2	3
8	Selection of Die Material and Its Impact on the Multi-Material Extrusion of Bimetallic AZ31Bâ€“Ti6Al4V Components for Aeronautical Applications. Materials, 2021, 14, 7568.	2.9	4
9	Prediction of Physical and Mechanical Properties for Metallic Materials Selection Using Big Data and Artificial Neural Networks. IEEE Access, 2020, 8, 13444-13456.	4.2	13
10	Effect of Process Parameters and Definition of Favorable Conditions in Multi-Material Extrusion of Bimetallic AZ31Bâ€“Ti6Al4V Billets. Applied Sciences (Switzerland), 2020, 10, 8048.	2.5	7
11	Prediction of Mechanical Properties by Artificial Neural Networks to Characterize the Plastic Behavior of Aluminum Alloys. Materials, 2020, 13, 5227.	2.9	37
12	Prediction of the Bilinear Stress-Strain Curve of Aluminum Alloys Using Artificial Intelligence and Big Data. Metals, 2020, 10, 904.	2.3	16
13	Reliability-Based Evaluation of the Suitability of Polymers for Additive Manufacturing Intended for Extreme Operating Conditions. Polymers, 2020, 12, 2327.	4.5	2
14	Fitness for Service and Reliability of Materials for Manufacturing Components Intended for Demanding Service Conditions in the Petrochemical Industry. IEEE Access, 2020, 8, 92275-92286.	4.2	2
15	Reliability and Thermal Aging of Polymers Intended to Severe Operating Conditions. , 2020, 69, .		1
16	Computer-aided sensitivity analysis of a multicriteria decision-making methodology for the evaluation of materials requirements stringency in the nuclear components manufacturing. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2019, 233, 2094-2107.	1.1	1
17	Analytical and numerical study for selecting polymeric matrix composites intended to nuclear applications. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2019, 233, 2072-2083.	1.1	3
18	Analysis of mechanical and thermal properties of elastomers for manufacturing of components in the nuclear industry. Procedia Manufacturing, 2019, 41, 177-184.	1.9	2

#	Article	IF	Citations
19	Comparative analysis of artificial intelligence techniques for material selection applied to manufacturing in Industry 4.0. Procedia Manufacturing, 2019, 41, 42-49.	1.9	22
20	An Experimental and Numerical Analysis of the Compression of Bimetallic Cylinders. Materials, 2019, 12, 4094.	2.9	8
21	Selection of candidate materials for reactor pressure vessels: Application of irradiation embrittlement prediction models and a stringency level methodology. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2019, 233, 965-976.	1.1	3
22	An educational software to reinforce the comprehensive learning of materials selection. Computer Applications in Engineering Education, 2018, 26, 125-140.	3.4	12
23	Polymers Selection for Harsh Environments to Be Processed Using Additive Manufacturing Techniques. IEEE Access, 2018, 6, 29899-29911.	4.2	13
24	Analysis of Favorable Process Conditions for the Manufacturing of Thin-Wall Pieces of Mild Steel Obtained by Wire and Arc Additive Manufacturing (WAAM). Materials, 2018, 11, 1449.	2.9	37
25	Multicriteria materials selection for extreme operating conditions based on a multiobjective analysis of irradiation embrittlement and hot cracking prediction models. International Journal of Mechanics and Materials in Design, 2018, 14, 617-634.	3.0	10
26	Quantitative analysis of prediction models for hot cracking in industrial stainless steels using standardized requirements. Sadhana - Academy Proceedings in Engineering Sciences, 2017, 42, 2147-2155.	1.3	5
27	Analysis of the techno-economic implications generated by the selection of manufacturing codes of pressure vessels for high demanding applications. Procedia Manufacturing, 2017, 13, 235-242.	1.9	0
28	Development of a Computer Tool to Support the Teaching of Materials Technology. Materials Science Forum, 2017, 903, 17-23.	0.3	3
29	Materials Selection Criteria for Nuclear Power Applications: A Decision Algorithm. Jom, 2016, 68, 496-506.	1.9	21
30	New Decision Methodology for Selecting Manufacturing Codes of Nuclear Reactor Pressure-Vessels. Annals of DAAAM & Proceedings, 2016, , 0693-0698.	0.1	1
31	Prediction of the Mechanical Behaviour of Cladding Materials for Nuclear Reactor Pressureâ€“Vessels Based on the Analysis of Technological Requirements. Procedia Engineering, 2015, 100, 1301-1308.	1.2	7