

# Alvaro RodrÃ-iguez-Prieto

## List of Publications by Year in descending order

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31  
papers

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citations

1040056

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h-index

940533

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31  
all docs

31  
docs citations

31  
times ranked

161  
citing authors

#	ARTICLE	IF	CITATIONS
1	Can Accelerated Aging Procedures Predict the Long Term Behavior of Polymers Exposed to Different Environments?. <i>Polymers</i> , 2021, 13, 2688.	4.5	39
2	Analysis of Favorable Process Conditions for the Manufacturing of Thin-Wall Pieces of Mild Steel Obtained by Wire and Arc Additive Manufacturing (WAAM). <i>Materials</i> , 2018, 11, 1449.	2.9	37
3	Prediction of Mechanical Properties by Artificial Neural Networks to Characterize the Plastic Behavior of Aluminum Alloys. <i>Materials</i> , 2020, 13, 5227.	2.9	37
4	Comparative analysis of artificial intelligence techniques for material selection applied to manufacturing in Industry 4.0. <i>Procedia Manufacturing</i> , 2019, 41, 42-49.	1.9	22
5	Materials Selection Criteria for Nuclear Power Applications: A Decision Algorithm. <i>Jom</i> , 2016, 68, 496-506.	1.9	21
6	Prediction of the Bilinear Stress-Strain Curve of Aluminum Alloys Using Artificial Intelligence and Big Data. <i>Metals</i> , 2020, 10, 904.	2.3	16
7	Polymers Selection for Harsh Environments to Be Processed Using Additive Manufacturing Techniques. <i>IEEE Access</i> , 2018, 6, 29899-29911.	4.2	13
8	Prediction of Physical and Mechanical Properties for Metallic Materials Selection Using Big Data and Artificial Neural Networks. <i>IEEE Access</i> , 2020, 8, 13444-13456.	4.2	13
9	An educational software to reinforce the comprehensive learning of materials selection. <i>Computer Applications in Engineering Education</i> , 2018, 26, 125-140.	3.4	12
10	Multicriteria materials selection for extreme operating conditions based on a multiobjective analysis of irradiation embrittlement and hot cracking prediction models. <i>International Journal of Mechanics and Materials in Design</i> , 2018, 14, 617-634.	3.0	10
11	Topological Optimization of Artificial Neural Networks to Estimate Mechanical Properties in Metal Forming Using Machine Learning. <i>Metals</i> , 2021, 11, 1289.	2.3	9
12	An Experimental and Numerical Analysis of the Compression of Bimetallic Cylinders. <i>Materials</i> , 2019, 12, 4094.	2.9	8
13	Prediction of the Mechanical Behaviour of Cladding Materials for Nuclear Reactor Pressure Vessels Based on the Analysis of Technological Requirements. <i>Procedia Engineering</i> , 2015, 100, 1301-1308.	1.2	7
14	Effect of Process Parameters and Definition of Favorable Conditions in Multi-Material Extrusion of Bimetallic AZ31B-Ti6Al4V Billets. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 8048.	2.5	7
15	Reliability Prediction of Acrylonitrile O-Ring for Nuclear Power Applications Based on Shore Hardness Measurements. <i>Polymers</i> , 2021, 13, 943.	4.5	6
16	Quantitative analysis of prediction models for hot cracking in industrial stainless steels using standardized requirements. <i>Sadhana - Academy Proceedings in Engineering Sciences</i> , 2017, 42, 2147-2155.	1.3	5
17	Selection of Die Material and Its Impact on the Multi-Material Extrusion of Bimetallic AZ31B-Ti6Al4V Components for Aeronautical Applications. <i>Materials</i> , 2021, 14, 7568.	2.9	4
18	Development of a Computer Tool to Support the Teaching of Materials Technology. <i>Materials Science Forum</i> , 2017, 903, 17-23.	0.3	3

#	ARTICLE	IF	CITATIONS
19	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
20	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
21	Analysis of the Technological Evolution of Materials Requirements Included in Reactor Pressure Vessel Manufacturing Codes. Sustainability, 2021, 13, 5498.	3.2	3
22	Evolution of Standardized Specifications on Materials, Manufacturing and In-Service Inspection of Nuclear Reactor Vessels. Sustainability, 2021, 13, 10510.	3.2	3
23	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
24	Reliability-Based Evaluation of the Suitability of Polymers for Additive Manufacturing Intended for Extreme Operating Conditions. Polymers, 2020, 12, 2327.	4.5	2
25	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
26	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
27	New Decision Methodology for Selecting Manufacturing Codes of Nuclear Reactor Pressure-Vessels. Annals of DAAAM & Proceedings, 2016, , 0693-0698.	0.1	1
28	Reliability and Thermal Aging of Polymers Intended to Severe Operating Conditions. , 2020, 69, .		1
29	Special Issue of the Manufacturing Engineering Society 2021 (SIMES-2021). Materials, 2022, 15, 4772.	2.9	1
30	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
31	Multicriteria Analytical Model for Mechanical Integrity Prognostics of Reactor Pressure Vessels Manufactured from Forged and Rolled Steels. Mathematics, 2022, 10, 1779.	2.2	0