

# H Puga

## List of Publications by Year in descending order

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87  
papers

1,705  
citations

279798

23  
h-index

315739

38  
g-index

88  
all docs

88  
docs citations

88  
times ranked

1577  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of Ultrasonic Melt Treatment on Solidification Behavior of Al7SiMg Alloy. International Journal of Metalcasting, 2023, 17, 1034-1048.	1.9	4
2	Ball Milled Al Spheres for the Manufacturing of Casting-Based Al-CNT Composites. Lecture Notes in Mechanical Engineering, 2022, , 46-56.	0.4	0
3	Magnesium stents manufacturing: Experimental application of a novel hybrid thin-walled investment casting approach. Journal of Materials Processing Technology, 2022, 299, 117339.	6.3	10
4	Casting A356+SiCp with ultrasonically treated melts. , 2022, 1, 15-19.		0
5	The Influence of Precipitation Hardening on the Damping Capacity in Al-Si-Mg Cast Components at Different Strain Amplitudes. Metals, 2022, 12, 804.	2.3	1
6	Valorizing Coffee Silverskin Based on Its Phytochemicals and Antidiabetic Potential: From Lab to a Pilot Scale. Foods, 2022, 11, 1671.	4.3	6
7	Light-Alloy Melt Ultrasonication: Shorter T6 with Higher Precipitation Strengthening. Metals and Materials International, 2021, 27, 3195-3204.	3.4	8
8	Ceramic Sonotrodes for Light Alloy Melt Treatment. International Journal of Metalcasting, 2021, 15, 459-469.	1.9	10
9	Enhanced mechanical properties in cellular solids using axisymmetric configurations. Composite Structures, 2021, 255, 112972.	5.8	0
10	Numerical inverse engineering as a route to determine the dynamic mechanical properties of metallic cellular solids. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 800, 140428.	5.6	7
11	Manufacturing Methodology on Casting-Based Aluminium Matrix Composites: Systematic Review. Metals, 2021, 11, 436.	2.3	20
12	Macro-, meso- and microstructural characterization of metallic lattice structures manufactured by additive manufacturing assisted investment casting. Scientific Reports, 2021, 11, 4974.	3.3	17
13	Vibration Damping and Acoustic Behavior of PU-Filled Non-Stochastic Aluminum Cellular Solids. Metals, 2021, 11, 725.	2.3	2
14	Influence of melt treatment of AZ91D alloy on phase morphology and corrosion behaviour in Hank's solution. Corrosion Engineering Science and Technology, 2021, 56, 504-512.	1.4	2
15	Design, simulation, and fabrication of an ingestible capsule with gastric balloon for obesity treatment. Biomedical Physics and Engineering Express, 2021, 7, 055024.	1.2	2
16	Ultrasonic Treatment as the Route for Grain Refinement of Mg-Al Alloys: A Systematic Review. Metals, 2021, 11, 1529.	2.3	2
17	Optimizing high-volume ultrasonic melt degassing using synchronized kinematic translation. Journal of Materials Research and Technology, 2021, 14, 2832-2844.	5.8	6
18	Analysis of finite element and finite volume methods for fluid-structure interaction simulation of blood flow in a real stenosed artery. International Journal of Mechanical Sciences, 2021, 207, 106650.	6.7	25

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19	Effect of Yttria Mould Coating on the Investment Casting of AZ91D-1 wt% CaO Magnesium Alloy. International Journal of Metalcasting, 2020, 14, 98-107.	1.9	7
20	Blood flow simulations in patient-specific geometries of the carotid artery: A systematic review. Journal of Biomechanics, 2020, 111, 110019.	2.1	61
21	Effect of Hybrid Ultrasonic and Mechanical Stirring on the Distribution of m-SiCp in A356 Alloy. Metals, 2020, 10, 610.	2.3	5
22	Influence of the Adopted Balloon Modeling Strategies in the Stent Deployment Procedure: An In-Silico Analysis. Cardiovascular Engineering and Technology, 2020, 11, 469-480.	1.6	4
23	Additive manufacturing assisted investment casting: A low-cost method to fabricate periodic metallic cellular lattices. Additive Manufacturing, 2020, 33, 101085.	3.0	41
24	Casting and Forming of Advanced Aluminum Alloys. Metals, 2020, 10, 494.	2.3	6
25	Fluid-Structure Interaction study of carotid blood flow: Comparison between viscosity models. European Journal of Mechanics, B/Fluids, 2020, 83, 226-234.	2.5	18
26	Ultrasonic Melt Treatment of Light Alloys. International Journal of Metalcasting, 2019, 13, 180-189.	1.9	21
27	New Vibratory Device for Wrist Rehabilitation. Lecture Notes in Electrical Engineering, 2019, , 221-228.	0.4	0
28	Ultrasonic grain refinement of die cast copper alloys. Journal of Materials Processing Technology, 2019, 263, 336-342.	6.3	14
29	Positive, zero and negative Poisson's ratio non-stochastic metallic cellular solids: Dependence between static and dynamic mechanical properties. Composite Structures, 2019, 226, 111239.	5.8	34
30	Ultrasonic Vibration as a Primary Mixing Tool in Accelerating Aluminum-Copper Alloys Preparation from Their Pure Elements. Metals, 2019, 9, 781.	2.3	5
31	Numerical Simulation of the Deployment Process of a New Stent Produced by Ultrasonic-Microcasting: The Role of the Balloon's Constitutive Modeling. Lecture Notes in Computational Vision and Biomechanics, 2019, , 65-74.	0.5	0
32	T6 Heat Treatment Impact on the Random Frequency Vibration Stress of Al-Si-Mg Alloys. Metals and Materials International, 2019, 25, 880-887.	3.4	9
33	Influence of arterial mechanical properties on carotid blood flow: Comparison of CFD and FSI studies. International Journal of Mechanical Sciences, 2019, 160, 209-218.	6.7	69
34	Ultrasonic Assisted Turning of Al alloys: Influence of Material Processing to Improve Surface Roughness. Surfaces, 2019, 2, 326-335.	2.3	19
35	Numerical study of blood flow in stented arteries: comparison of stent designs and viscosity models. , 2019, , .		2
36	Effect of the ultrasonic melt treatment on the deployment outcomes of a magnesium stent manufactured by microcasting: a finite element analysis. , 2019, , .		0

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37	Inverse engineering approach to determine the elastic properties of lightweight expanded clay. <i>Construction and Building Materials</i> , 2019, 216, 11-18.	7.2	5
38	The Role of Acoustic Pressure during Solidification of AlSi7Mg Alloy in Sand Mold Casting. <i>Metals</i> , 2019, 9, 490.	2.3	9
39	Thin-Rib and High Aspect Ratio Non-Stochastic Scaffolds by Vacuum Assisted Investment Casting. <i>Journal of Manufacturing and Materials Processing</i> , 2019, 3, 34.	2.2	0
40	Influence of external loading on the resonant frequency shift of ultrasonic assisted turning: numerical and experimental analysis. <i>International Journal of Advanced Manufacturing Technology</i> , 2019, 101, 2487-2496.	3.0	5
41	Influence of particle diameter in mechanical performance of Al expanded clay syntactic foams. <i>Composite Structures</i> , 2018, 184, 698-703.	5.8	38
42	Shape and functional optimization of biodegradable magnesium stents for manufacturing by ultrasonic-microcasting technique. <i>International Journal on Interactive Design and Manufacturing</i> , 2018, 12, 1059-1069.	2.2	6
43	Effect of Internal Structure in the Compression Behavior of Casted Al/LECA Composite Foams. <i>Journal of Composites Science</i> , 2018, 2, 64.	3.0	0
44	Temperature Variability of Poisson's Ratio and Its Influence on the Complex Modulus Determined by Dynamic Mechanical Analysis. <i>Technologies</i> , 2018, 6, 81.	5.1	8
45	Solution Treatment Enhances Both Static and Damping Properties of Al-Si-Mg alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 5942-5945.	2.2	10
46	Heat treatment as a route to tailor the yield-damping properties in A356 alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 729, 1-8.	5.6	26
47	Olive pomace as a valuable source of bioactive compounds: A study regarding its lipid- and water-soluble components. <i>Science of the Total Environment</i> , 2018, 644, 229-236.	8.0	126
48	Low-Temperature Brazing of Titanium Using Al-Based Filler Alloys. <i>Advances in Materials Science and Engineering</i> , 2018, 2018, 1-16.	1.8	14
49	Axisymmetric auxetics. <i>Composite Structures</i> , 2018, 204, 438-444.	5.8	27
50	Design and fabrication of thin-walled reservoir based on microcasting assisted by vacuum for neutral argon plasma system in minimally invasive medical devices. <i>Sensors and Actuators A: Physical</i> , 2018, 279, 216-222.	4.1	1
51	Hardy kiwi leaves extracted by multi-frequency multimode modulated technology: A sustainable and promising by-product for industry. <i>Food Research International</i> , 2018, 112, 184-191.	6.2	35
52	Ultrasonic melt processing in the low pressure investment casting of Al alloys. <i>Journal of Materials Processing Technology</i> , 2017, 244, 150-156.	6.3	36
53	Magnesium alloy biodegradable scaffolds: Simulation of casting and manufacturing. , 2017, , .		0
54	Finite element analysis of stent expansion: Influence of stent geometry on performance parameters. , 2017, , .		6

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55	Multi-frequency multimode modulated technology as a clean, fast, and sustainable process to recover antioxidants from a coffee by-product. <i>Journal of Cleaner Production</i> , 2017, 168, 14-21.	9.3	26
56	Mechanical behavior of honeycomb lattices manufactured by investment casting for scaffolding applications. <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , 2017, 231, 73-81.	1.1	3
57	MATLAB Simulation of Autonomous Servo Driven Oil-Hydraulic Power Unit. , 2016, , .		0
58	Deformation behaviour of self-expanding magnesium stents based on auxetic chiral lattices. <i>Ciência &amp; Tecnologia Dos Materiais</i> , 2016, 28, 14-18.	0.5	10
59	Effect of grain and secondary phase morphologies in the mechanical and damping behavior of Al7075 alloys. <i>Metals and Materials International</i> , 2016, 22, 863-871.	3.4	22
60	Low pressure sand casting of ultrasonically degassed AlSi7Mg0.3 alloy: Modelling and experimental validation of mould filling. <i>Materials and Design</i> , 2016, 94, 384-391.	7.0	24
61	Analysis of the geometrical dependence of auxetic behavior in reentrant structures by finite elements. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2016, 32, 295-300.	3.4	22
62	Effect of Ultrasonic Treatment in the Static and Dynamic Mechanical Behavior of AZ91D Mg Alloy. <i>Metals</i> , 2015, 5, 2210-2221.	2.3	24
63	Implementation of a multivibrational medical device to assist the removal of teeth and roots. , 2015, , .		0
64	Grain refinement of Al-Mg-Sc alloy by ultrasonic treatment. <i>Metals and Materials International</i> , 2015, 21, 72-78.	3.4	31
65	Modeling and elastic simulation of auxetic magnesium stents. , 2015, , .		3
66	Comparison of the Poisson's Ratio of Simulated Rigid and Elastic Auxetic Models Using Kinematic and Finite Element Analysis. , 2014, , .		1
67	A New Approach to Ultrasonic Degassing to Improve the Mechanical Properties of Aluminum Alloys. <i>Journal of Materials Engineering and Performance</i> , 2014, 23, 3736-3744.	2.5	20
68	Effect of ultrasonic degassing on performance of Al-based components. <i>Transactions of Nonferrous Metals Society of China</i> , 2014, 24, 3459-3464.	4.2	25
69	Physical modification of intermetallic phases in Al-Si-Cu alloys. <i>Materials Chemistry and Physics</i> , 2014, 148, 1163-1170.	4.0	19
70	Effects of substituting ytterbium for scandium on the microstructure and age-hardening behaviour of Al-Si alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 601, 70-77.	5.6	13
71	Auxetic materials – A review. <i>Materials Science-Poland</i> , 2013, 31, 561-571.	1.0	149
72	Influence of indirect ultrasonic vibration on the microstructure and mechanical behavior of Al-Si-Cu alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 560, 589-595.	5.6	56

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73	Sustainable Reverse Engineering Methodology Assisting 3D Modeling of Footwear Safety Metallic Components. , 2013, , .		0
74	A Novel Approach for the CAM-Follower Mechanism of High Frequency Cutting File Machine. Applied Mechanics and Materials, 2013, 333-335, 2085-2088.	0.2	0
75	Use of Acoustic Energy in the Processing of Molten Aluminium Alloys. Materials Science Forum, 2012, 730-732, 895-900.	0.3	0
76	The effect of Sc additions on the microstructure and age hardening behaviour of as cast Al-Sc alloys. Materials & Design, 2012, 42, 347-352.	5.1	106
77	Effect of melting pressure and superheating on chemical composition and contamination of yttria-coated ceramic crucible induction melted titanium alloys. Journal of Materials Science, 2011, 46, 4922-4936.	3.7	41
78	Evaluation of ultrasonic aluminium degassing by piezoelectric sensor. Journal of Materials Processing Technology, 2011, 211, 1026-1033.	6.3	23
79	Influence of ultrasonic melt treatment on microstructure and mechanical properties of AlSi9Cu3 alloy. Journal of Materials Processing Technology, 2011, 211, 1729-1735.	6.3	99
80	On assessment of processing variables in vertical centrifugal casting technique. International Journal of Cast Metals Research, 2009, 22, 382-389.	1.0	28
81	The influence of processing parameters on the ultrasonic degassing of molten AlSi9Cu3 aluminium alloy. Materials Letters, 2009, 63, 806-808.	2.6	56
82	The combined effect of melt stirring and ultrasonic agitation on the degassing efficiency of AlSi9Cu3 alloy. Materials Letters, 2009, 63, 2089-2092.	2.6	27
83	Recycling of aluminium swarf by direct incorporation in aluminium melts. Journal of Materials Processing Technology, 2009, 209, 5195-5203.	6.3	57
84	Characterisation of metal/mould interface on investment casting of $\text{TiAl}$ . International Journal of Cast Metals Research, 2006, 19, 331-338.	1.0	27
85	Factors Affecting the Metal Recovery Yield during Induction Melting of Aluminium Swarf. Materials Science Forum, 0, 730-732, 781-786.	0.3	0
86	Use of Acoustic Energy in Sand Casting of Aluminium Alloys. Advanced Materials Research, 0, 690-693, 2366-2370.	0.3	1
87	Comparison of CFD and FSI Simulations of Blood Flow in Stenotic Coronary Arteries. , 0, , .		3