Hamid Garmestani

List of Publications by Year
in descending order

53 papers	1,404 citations	279487 23 h-index	344852 36 g-index
55 all docs	55 docs citations	55 times ranked	1664 citing authors

#	Article	IF	Citations
1	Hydroxyapatite Modified with Carbon‑Nanotube‑Reinforced Poly(methyl methacrylate): A Nanocomposite Material for Biomedical Applications. Advanced Functional Materials, 2008, 18, 694-700.	7.8	109
2	Analytical Modeling of In-Process Temperature in Powder Bed Additive Manufacturing Considering Laser Power Absorption, Latent Heat, Scanning Strategy, and Powder Packing. Materials, 2019, 12, 808.	1.3	92
3	Prediction of machining-induced phase transformation and grain growth of Ti-6Al-4ÂV alloy. International Journal of Advanced Manufacturing Technology, 2016, 87, 859-866.	1.5	75
4	Tin dioxide nanoparticles with high sensitivity and selectivity for gas sensors at sub-ppm level of hydrogen gas detection. Journal of Materials Science: Materials in Electronics, 2019, 30, 14687-14694.	1.1	72
5	Analytical modeling of 3D temperature distribution in selective laser melting of Ti-6Al-4V considering part boundary conditions. Journal of Manufacturing Processes, 2019, 44, 319-326.	2.8	68
6	Analytical modeling of part porosity in metal additive manufacturing. International Journal of Mechanical Sciences, 2020, 172, 105428.	3.6	67
7	Heat Source Modeling in Selective Laser Melting. Materials, 2019, 12, 2052.	1.3	65
8	Comparison of chemical vapor deposition and chemical grafting for improving the mechanical properties of carbon fiber/epoxy composites with multi-wall carbon nanotubes. Journal of Materials Science, 2013, 48, 4834-4842.	1.7	64
9	A screen printed carbon electrode modified with carbon nanotubes and gold nanoparticles as a sensitive electrochemical sensor for determination of thiamphenicol residue in milk. RSC Advances, 2018, 8, 2714-2722.	1.7	54
10	Magnetic alignment of cellulose nanowhiskers in an all-cellulose composite. Polymer Bulletin, 2010, 65, 635-642.	1.7	53
11	Statistical, morphological, and corrosion behavior of PECVD derived cobalt oxide thin films. Journal of Materials Science: Materials in Electronics, 2019, 30, 21185-21198.	1.1	51
12	An Experimental Insight into the Structural and Electronic Characteristics of Strontium‑Doped Titanium Dioxide Nanotube Arrays. Advanced Functional Materials, 2014, 24, 6783-6796.	7.8	49
13	Opposite Sensing Response of Heterojunction Gas Sensors Based on SnO_2‑Cr_2O_3 Nanocomposites to H_2 against CO and Its Selectivity Mechanism. Langmuir, 2021, 37, 13548-13558.	1.6	42
14	Thermo-mechanical modeling of thermal stress in metal additive manufacturing considering elastoplastic hardening. CIRP Journal of Manufacturing Science and Technology, 2020, 28, 52-67.	2.3	38
15	Analytical modeling of transient temperature in powder feed metal additive manufacturing during heating and cooling stages. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	1.1	36
16	Finite element simulation of residual stress in machining of Ti-6Al-4V with a microstructural consideration. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2019, 233, 1103-1111.	1.5	34
17	Modeling of Ti-6Al-4V machining force considering material microstructure evolution. International Journal of Advanced Manufacturing Technology, 2017, 91, 2673-2680.	1.5	33
18	Influence of nitrogen concentration on electrical, mechanical, and structural properties of tantalum nitride thin films prepared via DC magnetron sputtering. Applied Physics A: Materials Science and Processing, 2022, 128, .	1.1	33

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19	Three-dimensional semi-elliptical modeling of melt pool geometry considering hatch spacing and time spacing in metal additive manufacturing. Journal of Manufacturing Processes, 2019, 45, 532-543.	2.8	30
20	Analytical Thermal Modeling of Metal Additive Manufacturing by Heat Sink Solution. Materials, 2019, 12, 2568.	1.3	28
21	Analytical modeling of in-process temperature in powder feed metal additive manufacturing considering heat transfer boundary condition. International Journal of Precision Engineering and Manufacturing - Green Technology, 2020, 7, 585-593.	2.7	28
22	Residual stress modeling considering microstructure evolution in metal additive manufacturing. Journal of Manufacturing Processes, 2021, 68, 383-397.	2.8	27
23	Stress Corrosion Cracking Behavior of Peened Friction Stir Welded 2195 Aluminum Alloy Joints. Journal of Materials Engineering and Performance, 2009, 18, 406-413.	1.2	25
24	A modified strong-contrast expansion for estimating the effective thermal conductivity of multiphase heterogeneous materials. Journal of Applied Physics, 2012, 112, .	1.1	25
25	Inhibition of stress corrosion cracking in 304 stainless steel through titanium ion implantation. Materials Science and Technology, 2020, 36, 284-292.	0.8	24
26	Residual stress prediction for turning of Ti-6Al-4V considering the microstructure evolution. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2019, 233, 109-117.	1.5	22
27	Efficient three‐phase reconstruction of heterogeneous material from 2D cross‐sections via phase‐recovery algorithm. Journal of Microscopy, 2016, 264, 384-393.	0.8	20
28	Modeling of texture development in additive manufacturing of Ni-based superalloys. International Journal of Advanced Manufacturing Technology, 2019, 103, 1057-1066.	1.5	20
29	The effects of dynamic evolution of microstructure on machining forces. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2018, 232, 2677-2681.	1.5	15
30	Prediction of Upper Surface Roughness in Laser Powder Bed Fusion. Metals, 2022, 12, 11.	1.0	14
31	Analytical Thermal Modeling of Powder Bed Metal Additive Manufacturing Considering Powder Size Variation and Packing. Materials, 2020, 13, 1988.	1.3	13
32	High-Throughput Exploration of the Process Space in 18% Ni (350) Maraging Steels via Spherical Indentation Stress‐Strain Protocols and Gaussian Process Models. Integrating Materials and Manufacturing Innovation, 2020, 9, 199-212.	1.2	10
33	Residual stress prediction based on MTS model during machining of Ti-6Al-4V. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 3743-3750.	1.1	8
34	Study on Wear Model and Adhesive Wear Mechanism of Brass under Boundary Lubrication. Protection of Metals and Physical Chemistry of Surfaces, 2021, 57, 367-373.	0.3	8
35	FeCo nanoalloy formation by decomposition of their carbonyl precursors. Journal of Materials Chemistry, 2005, , .	6.7	7
36	Evaluation of the influence of B and Nb microalloying on the microstructure and strength of 18% Ni maraging steels (C350) using hardness, spherical indentation and tensile tests. Acta Materialia, 2021, 215, 117071.	3.8	7

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37	Analytical Modeling of Residual Stress in Laser Powder Bed Fusion Considering Volume Conservation in Plastic Deformation. Modelling, 2020, 1, 242-259.	0.8	6
38	MTS model based force prediction for machining of Ti-6Al-4V. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2017, 11, JAMDSM0033-JAMDSM0033.	0.3	5
39	Biomimetic synthesis of two different types of renewable cellulosic nanomaterials for scaffolding in tissue engineering. Green Processing and Synthesis, 2018, 7, 181-190.	1.3	4
40	Grain size sensitive–MTS model for Ti-6Al-4V machining force and residual stress prediction. International Journal of Advanced Manufacturing Technology, 2019, 102, 2173-2181.	1.5	4
41	Prediction of molten pool size and vapor depression depth in keyhole melting mode of laser powder bed fusion. International Journal of Advanced Manufacturing Technology, 2022, 119, 6215-6223.	1.5	4
42	Prediction of the deformation behavior of a selective laser-melted Ti-6Al-4V alloy as a function of process parameters. International Journal of Advanced Manufacturing Technology, 2020, 107, 4069-4076.	1.5	3
43	Surfactant Effects on the Particle Size and Formation of Iron Oxides via a Sol–Gel Process. ACS Symposium Series, 2008, , 124-138.	0.5	2
44	Qualitative Equivalence Between Electrical Percolation Threshold and Effective Thermal Conductivity in Polymer/Carbon Nanocomposites. Journal of Engineering Materials and Technology, Transactions of the ASME, 2012, 134, .	0.8	2
45	Microstructure affected residual stress prediction based on mechanical threshold stress in direct metal deposition of Ti-6Al-4 V. International Journal of Advanced Manufacturing Technology, 2021, 112, 1705-1712.	1.5	2
46	Modeling of Biologically Inspired Adhesive Pads Using Monte Carlo Analysis. Journal of Adhesion Science and Technology, 2010, 24, 1207-1220.	1.4	1
47	Effect of Moderate Magnetic Annealing on the Microstructure, Quasi-Static, and Viscoelastic Mechanical Behavior of a Structural Epoxy. Journal of Engineering Materials and Technology, Transactions of the ASME, 2012, 134, .	0.8	1
48	Nanotubes: An Experimental Insight into the Structural and Electronic Characteristics of Strontium-Doped Titanium Dioxide Nanotube Arrays (Adv. Funct. Mater. 43/2014). Advanced Functional Materials, 2014, 24, 6782-6782.	7.8	1
49	Through-Thickness Strain Gradient in a Hot-Rolled Al-Mg Alloy Obtained by Nanoindentation and Glancing Angle X-Ray Diffraction. Journal of Materials Engineering and Performance, 2019, 28, 6897-6903.	1.2	1
50	Investigation of Effects of Copper, Zinc, and Strontium Doping on Electrochemical Properties of Titania Nanotube Arrays for Neural Interface Applications. Processes, 2021, 9, 2099.	1.3	1
51	Controlling Residual Stress in Metal Matrix Ceramic Fiber Composite. Materials Research Society Symposia Proceedings, 2006, 977, 1.	0.1	0
52	Anodically Fabricated Sr-doped TiO2 Nanotube Arrays for Photoelectrochemical Water Splitting Applications. Materials Research Society Symposia Proceedings, 2011, 1352, 151.	0.1	0
53	Prediction of Yield Strength of Selective Laser Melted Ti–6Al–4V Alloy Using Melt Pool Geometry. Journal of Engineering Materials and Technology, Transactions of the ASME, 2022, 144, .	0.8	0