Hamid Assadi

List of Publications by Year
in descending order

69 papers	6,659 citations	147726 31 h-index	98753 67 g-index
70 all docs	70 docs citations	70 times ranked	3079 citing authors

#	Article	IF	Citations
1	Features of ceramic nanoparticle deformation in aerosol deposition explored by molecular dynamics simulation. Surface and Coatings Technology, 2022, 429, 127886.	2.2	16
2	Numerical and Experimental Analysis of the Deformation Behavior of CoCrFeNiMn High Entropy Alloy Particles onto Various Substrates During Cold Spraying. Journal of Thermal Spray Technology, 2022, 31, 1085-1111.	1.6	7
3	Intermetallic Phase Evolution of Cold-Sprayed Ni-Ti Composite Coatings: Influence of As-Sprayed Chemical Composition. Journal of Thermal Spray Technology, 2021, 30, 119-130.	1.6	14
4	Bonding and microstructure evolution in electromagnetic pulse welding of hardenable Al alloys. Journal of Materials Processing Technology, 2021, 290, 116965.	3.1	9
5	Size Effects of Brittle Particles in Aerosol Depositionâ€"Molecular Dynamics Simulation. Journal of Thermal Spray Technology, 2021, 30, 503-522.	1.6	19
6	Modelling of Microstructure Evolution during Laser Processing of Intermetallic Containing Ni-Al Alloys. Metals, 2021, 11, 1051.	1.0	5
7	Dynamic microstructure evolution in cold sprayed Ni Ti composite coatings. Surface and Coatings Technology, 2021, 421, 127456.	2.2	10
8	Cold spray deformation and deposition of blended feedstock powders not necessarily obey the rule of mixture. Surface and Coatings Technology, 2021, 424, 127644.	2.2	19
9	Numerical modelling of melt-conditioned direct-chill casting. Applied Mathematical Modelling, 2020, 77, 1310-1330.	2.2	29
10	Effect of substrate on the properties of cold sprayed coating of WC-10Ni. Advances in Materials and Processing Technologies, 2020, , 1-14.	0.8	1
11	Solid-state additive manufacturing of porous Ti-6Al-4V by supersonic impact. Applied Materials Today, 2020, 21, 100865.	2.3	15
12	Particle Compression Test: A Key Step towards Tailoring of Feedstock Powder for Cold Spraying. Coatings, 2020, 10, 458.	1.2	20
13	Comparison of Stellite coatings on low carbon steel produced by CGS and HVOF spraying. Surface and Coatings Technology, 2019, 372, 299-311.	2.2	13
14	The effect of traverse speed on deposition efficiency of cold sprayed Stellite 21. Surface and Coatings Technology, 2019, 366, 24-34.	2.2	26
15	The role of deposition sequence in cold spraying of dissimilar materials. Surface and Coatings Technology, 2019, 367, 75-85.	2.2	27
16	Comment on â€˜Adiabatic shear instability is not necessary for adhesion in cold sprayâ€™. Scripta Materialia, 2019, 162, 512-514.	2.6	59
17	A Review of Advanced Composite and Nanostructured Coatings by Solid-State Cold Spraying Process. Critical Reviews in Solid State and Materials Sciences, 2019, 44, 109-156.	6.8	50
18	Asymmetrical bonding in cold spraying of dissimilar materials. Applied Surface Science, 2018, 444, 621-632.	3.1	37

#	Article	IF	Citations
19	Effect of Feedstock Powder Morphology on Cold-Sprayed Titanium Dioxide Coatings. Journal of Thermal Spray Technology, 2018, 27, 1542-1550.	1.6	7
20	Influence of thermal properties and temperature of substrate on the quality of cold-sprayed deposits. Acta Materialia, 2017, 127, 287-301.	3.8	79
21	Cold spraying â€“ A materials perspective. Acta Materialia, 2016, 116, 382-407.	3.8	607
22	Strainâ€Induced Phase Transformation of MCrAlY. Advanced Engineering Materials, 2015, 17, 723-731.	1.6	16
23	Determination of plastic constitutive properties of microparticles through single particle compression. Advanced Powder Technology, 2015, 26, 1544-1554.	2.0	31
24	Microstructure and mechanical properties of friction stir processed AISI 316L stainless steel. Materials & Design, 2015, 67, 82-94.	5.1	132
25	Prediction of solidification cracking in pulsed laser welding of 2024 aluminum alloy. Acta Materialia, 2015, 82, 491-502.	3.8	107
26	Cold Spraying of Amorphous Cu50Zr50 Alloys. Journal of Thermal Spray Technology, 2014, 24, 108.	1.6	10
27	Analysis of Thermal History and Residual Stress in Cold-Sprayed Coatings. Journal of Thermal Spray Technology, 2014, 23, 84-90.	1.6	60
28	Impact Behavior of Intrinsically Brittle Nanoparticles: A Molecular Dynamics Perspective. Journal of Thermal Spray Technology, 2014, 23, 541-550.	1.6	40
29	Improvement in cavitation erosion resistance of AISI 316L stainless steel by friction stir processing. Applied Surface Science, 2014, 308, 184-192.	3.1	89
30	Solidification crack initiation and propagation in pulsed laser welding of wrought heat treatable aluminium alloy. Science and Technology of Welding and Joining, 2014, 19, 250-255.	1.5	33
31	Effect of applied load on the dry sliding wear behaviour and the subsurface deformation on hybrid metal matrix composite. Wear, 2013, 305, 291-298.	1.5	130
32	Modeling of Grain Structure and Heat-Affected Zone in Laser Surface Melting Process. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2013, 44, 1041-1048.	1.0	8
33	Segregation engineering enables nanoscale martensite to austenite phase transformation at grain boundaries: A pathway to ductile martensite. Acta Materialia, 2013, 61, 6132-6152.	3.8	264
34	Microstructure and Mechanical Properties of a Dissimilar Friction Stir Weld between Austenitic Stainless Steel and Low Carbon Steel. Journal of Materials Science and Technology, 2013, 29, 367-372.	5.6	71
35	Intelligent driving in traffic systems with partial lane discipline. European Physical Journal B, 2013, 86, 1.	0.6	1
36	Modelling of electroreduction of porous oxides in molten salt. Computational Materials Science, 2012, 53, 1-5.	1.4	10

#	Article	IF	Citations
37	Microstructural characterization in dissimilar friction stir welding between 304 stainless steel and st37 steel. Materials Characterization, 2012, 74, 28-41.	1.9	81
38	Phase-field modelling of self-propagating high-temperature synthesis of NiAl. Acta Materialia, 2012, 60, 4041-4053.	3.8	14
39	Evaluation of microstructure and wear behavior of friction stir processed cast aluminum alloy. Materials Characterization, 2012, 63, 90-97.	1.9	105
40	On Parameter Selection in Cold Spraying. Journal of Thermal Spray Technology, 2011, 20, 1161-1176.	1.6	300
41	Microstructure and tribological performance of an aluminium alloy based hybrid composite produced by friction stir processing. Materials & Design, 2011, 32, 2727-2733.	5.1	211
42	On the formation of grain structure during friction stir welding of duplex stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 6484-6488.	2.6	99
43	Modelling of microstructure evolution in transient-liquid-phase diffusion bonding under temperature gradient. Scripta Materialia, 2009, 60, 780-782.	2.6	23
44	From Particle Acceleration to Impact and Bonding in Cold Spraying. Journal of Thermal Spray Technology, 2009, 18, 794.	1.6	460
45	Influence of ordering kinetics on dendritic growth morphology. Acta Materialia, 2009, 57, 1639-1647.	3.8	27
46	Mechanical behavior of CrMo steel with tempered martensite and ferriteâ€“bainiteâ€“martensite microstructure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 483-484, 325-328.	2.6	39
47	A study on fracture properties of multiphase microstructures of a CrMo steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 492, 45-48.	2.6	20
48	Effect of friction stir welding speed on the microstructure and mechanical properties of a duplex stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 496, 262-268.	2.6	205
49	Effects of Induction and Convention Aging on Growth Kinetics and Distribution of Nanometric Î³Ê¹ Precipitates in an Ni-Based Superalloy. AIP Conference Proceedings, 2007, , .	0.3	0
50	A phase-field model for non-equilibrium solidification of intermetallics. Acta Materialia, 2007, 55, 5225-5235.	3.8	20
51	Phase-field modelling of electro-deoxidation in molten salt. Modelling and Simulation in Materials Science and Engineering, 2006, 14, 963-974.	0.8	19
52	Development of a generalized parameter window for cold spray deposition. Acta Materialia, 2006, 54, 729-742.	3.8	930
53	Kinetics of solidification of B2 intermetallic phase in the Niâ€“Al system. Acta Materialia, 2006, 54, 2793-2800.	3.8	53
54	Bonding mechanism in cold gas spraying. Acta Materialia, 2003, 51, 4379-4394.	3.8	1,388

#	Article	IF	Citations
55	Microstructural and macroscopic properties of cold sprayed copper coatings. Journal of Applied Physics, 2003, 93, 10064-10070.	1.1	213
56	Crystal nucleation in deeply undercooled melts of bulk metallic glass forming systems. Acta Materialia, 2002, 50, 89-100.	3.8	58
57	Deformation Microstructure of Cold Gas Sprayed Coatings. Materials Research Society Symposia Proceedings, 2001, 673, 1.	0.1	8
58	Transient liquid phase diffusion bonding under a temperature gradient: modelling of the interface morphology. Acta Materialia, 2001, 49, 31-39.	3.8	65
59	Interface evolution and bond strength when diffusion bonding materials with stable oxide films. Surface and Interface Analysis, 2001, 31, 609-618.	0.8	94
60	Kinetics of solidification of intermetallic compounds in the Niâ€“Al system. Acta Materialia, 1998, 46, 491-500.	3.8	41
61	Modelling of kinetics of solidification of intermetallic compounds. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 226-228, 70-74.	2.6	8
62	Rapid solidification of intermetallic compounds. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1997, 226-228, 133-141.	2.6	32
63	The interfacial undercooling in solidification. Journal of Crystal Growth, 1997, 172, 249-258.	0.7	18
64	Site-ordering effects on element partitioning during rapid solidification of alloys. Nature, 1996, 383, 150-152.	13.7	27
65	Development of Microstructure in Rapidly Solidified Intermetallics. Materials Research Society Symposia Proceedings, 1995, 398, 75.	0.1	1
66	Solidification of Intermetallic Compounds. Materials Research Society Symposia Proceedings, 1995, 400, 173.	0.1	1
67	Application of Disorder Trapping Theory to the Solidification of Ni3Al.. ISIJ International, 1995, 35, 574-579.	0.6	20
68	Competitive Phase Selection in Fe-Ni Alloy Droplets. Materials Research Society Symposia Proceedings, 1995, 398, 51.	0.1	1
69	Modelling of Microstructure Evolution during Thermal Processes â€“ A Hybrid Deterministic-Probabilistic Approach. Materials Science Forum, 0, 704-705, 63-70.	0.3	0