SÃ³nia SimÃµes

List of Publications by Year
in descending order

72 papers	1,229 citations	430874 18 h-index	414414 32 g-index
76 all docs	76 docs citations	76 times ranked	1050 citing authors

#	Article	IF	Citations
1	In situTEM study of grain growth in nanocrystalline copper thin films. Nanotechnology, 2010, 21, 145701.	2.6	115
2	Improved dispersion of carbon nanotubes in aluminum nanocomposites. Composite Structures, 2014, 108, 992-1000.	5.8	74
3	Production of intermetallic compounds from Ti/Al and Ni/Al multilayer thin filmsâ€"A comparative study. Journal of Alloys and Compounds, 2009, 484, 335-340.	5.5	67
4	Multilayered ZrN/CrN coatings with enhanced thermal and mechanical properties. Journal of Alloys and Compounds, 2019, 776, 679-690.	5.5	64
5	Influence of dispersion/mixture time on mechanical properties of Alâ€"CNTs nanocomposites. Composite Structures, 2015, 126, 114-122.	5.8	60
6	Diffusion bonding of TiAl using reactive Ni/Al nanolayers and Ti and Ni foils. Materials Chemistry and Physics, 2011, 128, 202-207.	4.0	58
7	Anisothermal solid-state reactions of Ni/Al nanometric multilayers. Intermetallics, 2011, 19, 350-356.	3.9	50
8	The influence of deposition conditions and bilayer thickness on physical-mechanical properties of CA-PVD multilayer ZrN/CrN coatings. Materials Characterization, 2018, 140, 189-196.	4.4	50
9	Recent Advances in EBSD Characterization of Metals. Metals, 2020, 10, 1097.	2.3	48
10	Diffusion bonding of TiAl using Ni/Al multilayers. Journal of Materials Science, 2010, 45, 4351-4357.	3.7	47
11	Aluminum and Nickel Matrix Composites Reinforced by CNTs: Dispersion/Mixture by Ultrasonication. Metals, 2017, 7, 279.	2.3	47
12	Joining of Superalloys to Intermetallics Using Nanolayers. Advanced Materials Research, 0, 59, 225-229.	0.3	39
13	Reaction zone formed during diffusion bonding of TiNi to Ti6Al4V using Ni/Ti nanolayers. Journal of Materials Science, 2013, 48, 7718-7727.	3.7	37
14	Joining of TiAl to Steel by Diffusion Bonding with Ni/Ti Reactive Multilayers. Metals, 2016, 6, 96.	2.3	31
15	Microstructure of Reaction Zone Formed During Diffusion Bonding of TiAl with Ni/Al Multilayer. Journal of Materials Engineering and Performance, 2012, 21, 678-682.	2.5	26
16	Reactive Commercial Ni/Al Nanolayers for Joining Lightweight Alloys. Journal of Materials Engineering and Performance, 2014, 23, 1536-1543.	2.5	25
17	Microstructural Characterization of Aluminum-Carbon Nanotube Nanocomposites Produced Using Different Dispersion Methods. Microscopy and Microanalysis, 2016, 22, 725-732.	0.4	24
18	EBSD Analysis of Metal Matrix Nanocomposite Microstructure Produced by Powder Metallurgy. Nanomaterials, 2019, 9, 878.	4.1	22

#	Article	IF	Citations
19	Recent Progress in the Joining of Titanium Alloys to Ceramics. Metals, 2018, 8, 876.	2.3	21
20	Strengthening Mechanisms in Carbon Nanotubes Reinforced Metal Matrix Composites: A Review. Metals, 2021, 11, 1613.	2.3	18
21	Reaction-Assisted Diffusion Bonding of Advanced Materials. Defect and Diffusion Forum, 2010, 297-301, 972-977.	0.4	17
22	Reaction-assisted diffusion bonding of TiAl alloy to steel. Materials Chemistry and Physics, 2016, 171, 73-82.	4.0	17
23	Cold rolled versus sputtered Ni/Ti multilayers for reaction-assisted diffusion bonding. Welding in the World, Le Soudage Dans Le Monde, 2016, 60, 337-344.	2.5	14
24	TEM and HRTEM Characterization of TiAl Diffusion Bonds Using Ni/Al Nanolayers. Microscopy and Microanalysis, 2015, 21, 132-139.	0.4	13
25	Ni/Al Multilayers Produced by Accumulative Roll Bonding and Sputtering. Journal of Materials Engineering and Performance, 2016, 25, 4394-4401.	2.5	13
26	Raman spectroscopy fingerprint of stainless steel-MWCNTs nanocomposite processed by ball-milling. AIP Advances, 2018, 8, .	1.3	13
27	Joining of Î³-TiAl Alloy to Ni-Based Superalloy Using Ag-Cu Sputtered Coated Ti Brazing Filler Foil. Metals, 2018, 8, 723.	2.3	13
28	Effect of Morphology and Structure of MWCNTs on Metal Matrix Nanocomposites. Materials, 2020, 13, 5557.	2.9	13
29	TiAl diffusion bonding using Ni/Ti multilayers. Welding in the World, Le Soudage Dans Le Monde, 2017, 61, 1267-1273.	2.5	12
30	Characterization of Niâ€“CNTs Nanocomposites Produced by Ball-Milling. Metals, 2020, 10, 2.	2.3	12
31	Preliminary tribo-electrochemical and biological responses of the Ti-TiB-TiCx in-situ composites intended for load-bearing biomedical implants. Journal of Alloys and Compounds, 2022, 896, 162965.	5.5	12
32	Microstructural Characterization of Dissimilar Titanium Alloys Joints Using Ni/Al Nanolayers. Metals, 2018, 8, 715.	2.3	10
33	Investigation on the Strengthening Mechanisms of Nickel Matrix Nanocomposites. Nanomaterials, 2021, 11, 1426.	4.1	10
34	TEM Characterization of As-Deposited and Annealed Ni/Al Multilayer Thin Film. Microscopy and Microanalysis, 2010, 16, 662-669.	0.4	9
35	Multiwall carbon nanotubes filled with Al4C3: Spectroscopic signatures for electron-phonon coupling due to doping process. Carbon, 2017, 124, 348-356.	10.3	9
36	Diffusion Bonding and Brazing of Advanced Materials. Metals, 2018, 8, 959.	2.3	9

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37	Microstructural Characterization of Carbon Nanotubes (CNTs)-Reinforced Nickel Matrix Nanocomposites. Microscopy and Microanalysis, 2019, 25, 180-186.	0.4	9
38	Joining Alumina to Titanium Alloys Using Ag-Cu Sputter-Coated Ti Brazing Filler. Materials, 2020, 13, 4802.	2.9	9
39	Diffusion Bonding of TiAl to Ti6Al4V Using Nanolayers. Journal of Materials Engineering and Performance, 2018, 27, 5064-5068.	2.5	8
40	Strengthening Mechanisms of Aluminum Matrix Nanocomposites Reinforced with CNTs Produced by Powder Metallurgy. Metals, 2021, 11, 1711.	2.3	8
41	Effect of Annealing Conditions on the Grain Size of Nanocrystalline Copper Thin Films. Materials Science Forum, 0, 587-588, 483-487.	0.3	7
42	Microstructural Characterization of Diffusion Bonds Assisted by Ni/Ti Nanolayers. Journal of Materials Engineering and Performance, 2016, 25, 3245-3251.	2.5	7
43	Diffusion Bonding of Ti6Al4V to Al2O3 Using Ni/Ti Reactive Multilayers. Metals, 2021, 11, 655.	2.3	6
44	Joining Ti6Al4V to Alumina by Diffusion Bonding Using Titanium Interlayers. Metals, 2021, 11, 1728.	2.3	6
45	TEM and SEM in-situ annealing of nanocrystalline copper thin films. Microscopy and Microanalysis, 2008, 14, 49-52.	0.4	4
46	Intermixing in Ni/Al multilayer thin films. Microscopy and Microanalysis, 2009, 15, 75-76.	0.4	4
47	Effect of dispersion method in the production of Al-CNTs nanocomposites. Microscopy and Microanalysis, 2016, 22, 52-53.	0.4	4
48	Electrical and Tensile Properties of Carbon Nanotubes-Reinforced Aluminum Alloy 6101 Wire. Journal of Nanoscience and Nanotechnology, 2017, 17, 4837-4841.	0.9	4
49	Characterization of multilayered ZrN/CrN coatings deposited by vacuum arc technology. , 2017, , .		4
50	Ni/Ti and Ni/Al Laminated Composites Produced by ARB and Annealing: Microstructural Aspects. Microscopy and Microanalysis, 2015, 21, 23-24.	0.4	3
51	Joining of TiAl Alloy Using Novel Agâ€“Cu Sputtered Coated Ti Brazing Filler. Microscopy and Microanalysis, 2019, 25, 192-195.	0.4	3
52	Effect of Deposition Parameters on the Reactivity of Al/Ni Multilayer Thin Films. Coatings, 2020, 10, 721.	2.6	3
53	Seedless Cu Electroplating on Co-W Thin Films in Low pH Electrolyte: Early Stages of Formation. Nanomaterials, 2021, 11, 1914.	4.1	3
54	Heat-Treated Ni-CNT Nanocomposites Produced by Powder Metallurgy Route. Materials, 2021, 14, 5458.	2.9	3

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55	TEM Characterization of a Mould Steel in Pre-hardened Condition and After Subsequent Heat Treatments. Microscopy and Microanalysis, 2015, 21, 51-52.	0.4	2
56	TEM and HRTEM characterization of nanocomposites reinforced with carbon nanotubes. Microscopy and Microanalysis, 2015, 21, 86-87.	0.4	2
57	Morphology, Structure and Thermal Properties of Multilayer ZrN/CrN Coatings. , 2018, , .		2
58	Joining of Zirconia to Ti6Al4V Using Ag-Cu Sputter-Coated Ti Brazing Filler. Metals, 2022, 12, 358.	2.3	2
59	Thermal Stability of Nanocrystalline Copper Thin Films. Microscopy and Microanalysis, 2007, 13, .	0.4	1
60	Characterization of Ni/Ti interlayer foil to assist diffusion bonding.. Microscopy and Microanalysis, 2015, 21, 120-121.	0.4	1
61	Effect of functionalization and size of CNTs in the production of nanocomposites. Microscopy and Microanalysis, 2017, 23, 1942-1943.	0.4	1
62	HIGH-TEMPERATURE IN SITU DSC STUDIES OF MULTILAYER ZrN/CrN COATINGS OBTAINED BY CA-PVD. High Temperature Material Processes, 2019, 23, 221-237.	0.6	1
63	In-Situ TEM Annealing of Nanocrystalline Copper Thin Films. Microscopy and Microanalysis, 2007, 13, .	0.4	0
64	Effect of Temperature in the Evolution of Ni/Al Nanolayers. Microscopy and Microanalysis, 2008, 14, 41-42.	0.4	0
65	Joining of TiAl alloys using Ni/Al multilayers. Microscopy and Microanalysis, 2009, 15, 73-74.	0.4	0
66	Microstructural Characterization of CNT/Al Nanocomposites Produced by Hot Extrusion. Microscopy and Microanalysis, 2015, 21, 53-54.	0.4	0
67	Diffusion Brazing of Ti6Al4V and Î³-TiAl alloy with Al/Cu multifoils fillers. Microscopy and Microanalysis, 2015, 21, 124-125.	0.4	0
68	Characterization of TiAl diffusion bonds using Ni/Ti nanolayers. Microscopy and Microanalysis, 2016, 22, 54-55.	0.4	0
69	Advances in Microstructural Characterization of Metals by EBSD. Metals, 2021, 11, 1452.	2.3	0
70	One-Step Synthesis and Characterization of a Nanocomposite Based on Carbon Nanotubes/Aluminum and Its Reinforcement Effect on the Metal Matrix. Journal of Materials Science and Engineering B, 2015, 5, .	0.3	0
71	Study of Advanced Nanoscale ZrN/CrN Multilayer Coatings. East European Journal of Physics, 2019, , .	0.8	0
72	Joining of Ti6Al4V to Al2O3 Using Nanomultilayers. Nanomaterials, 2022, 12, 706.	4.1	0