

J Wei

List of Publications by Year in descending order

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102
papers

5,805
citations

109321

35
h-index

76900

74
g-index

102
all docs

102
docs citations

102
times ranked

4490
citing authors

#	ARTICLE	IF	CITATIONS
1	Multicomponent intermetallic nanoparticles and superb mechanical behaviors of complex alloys. <i>Science</i> , 2018, 362, 933-937.	12.6	950
2	Hierarchical microstructure and strengthening mechanisms of a CoCrFeNiMn high entropy alloy additively manufactured by selective laser melting. <i>Scripta Materialia</i> , 2018, 154, 20-24.	5.2	412
3	Properties and deformation behaviour of Mg-Y ₂ O ₃ nanocomposites. <i>Acta Materialia</i> , 2007, 55, 5115-5121.	7.9	391
4	Friction stir welding of dissimilar materials between AA6061 and AA7075 Al alloys effects of process parameters. <i>Materials & Design</i> , 2014, 56, 185-192.	5.1	281
5	Development of novel carbon nanotube reinforced magnesium nanocomposites using the powder metallurgy technique. <i>Nanotechnology</i> , 2006, 17, 7-12.	2.6	261
6	Simultaneous enhancement in strength and ductility by reinforcing magnesium with carbon nanotubes. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006, 423, 153-156.	5.6	219
7	Ductility improvement and fatigue studies in Mg-CNT nanocomposites. <i>Composites Science and Technology</i> , 2008, 68, 1432-1439.	7.8	196
8	Improving the performance of lead-free solder reinforced with multi-walled carbon nanotubes. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2006, 423, 166-169.	5.6	139
9	Interfacial intermetallic growth and shear strength of lead-free composite solder joints. <i>Journal of Alloys and Compounds</i> , 2009, 473, 100-106.	5.5	135
10	Effect of graphene nanosheets reinforcement on the performance of Sn-Ag-Cu lead-free solder. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 562, 25-32.	5.6	130
11	Selective laser melting enabling the hierarchically heterogeneous microstructure and excellent mechanical properties in an interstitial solute strengthened high entropy alloy. <i>Materials Research Letters</i> , 2019, 7, 453-459.	8.7	129
12	Influence of ceramic reinforcements on the wettability and mechanical properties of novel lead-free solder composites. <i>Thin Solid Films</i> , 2006, 504, 401-404.	1.8	127
13	Low temperature wafer anodic bonding. <i>Journal of Micromechanics and Microengineering</i> , 2003, 13, 217-222.	2.6	125
14	The role of powder layer thickness on the quality of SLM printed parts. <i>Archives of Civil and Mechanical Engineering</i> , 2018, 18, 948-955.	3.8	112
15	Effect of Carbon Nanotubes on the Shear Strength and Electrical Resistivity of a Lead-Free Solder. <i>Journal of Electronic Materials</i> , 2008, 37, 515-522.	2.2	103
16	Ag-graphene hybrid conductive ink for writing electronics. <i>Nanotechnology</i> , 2014, 25, 055201.	2.6	89
17	Effects of nano-Al ₂ O ₃ particle addition on grain structure evolution and mechanical behaviour of friction-stir-processed Al. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 602, 143-149.	5.6	84
18	Friction-stir welding of a ductile high entropy alloy: microstructural evolution and weld strength. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 711, 524-532.	5.6	82

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19	Lead-free solder reinforced with multiwalled carbon nanotubes. Journal of Electronic Materials, 2006, 35, 1518-1522.	2.2	81
20	Interfacial reaction and shear strength of Ni-coated carbon nanotubes reinforced Sn-Ag-Cu solder joints during thermal cycling. Intermetallics, 2012, 31, 72-78.	3.9	75
21	Development of a Sn-Ag-Cu solder reinforced with Ni-coated carbon nanotubes. Journal of Materials Science: Materials in Electronics, 2011, 22, 315-322.	2.2	74
22	Friction stir welding of a CoCrFeNiAl _{0.3} high entropy alloy. Materials Letters, 2017, 205, 142-144.	2.6	72
23	TEM, XPS and FTIR characterization of sputtered carbon nitride films. Surface and Interface Analysis, 1999, 28, 208-211.	1.8	68
24	Creep behavior of eutectic 80Au/20Sn solder alloy. Journal of Alloys and Compounds, 2009, 476, 138-141.	5.5	64
25	Influence of silane partial pressure on the properties of amorphous SiCN films prepared by ECR-CVD. Thin Solid Films, 2000, 377-378, 607-610.	1.8	63
26	Low temperature Cu-Cu thermo-compression bonding with temporary passivation of self-assembled monolayer and its bond strength enhancement. Microelectronics Reliability, 2012, 52, 321-324.	1.7	62
27	High mechanical strengths and ductility of stainless steel 304L fabricated using selective laser melting. Journal of Materials Science and Technology, 2019, 35, 388-394.	10.7	60
28	Temperature Dependence of Creep and Hardness of Sn-Ag-Cu Lead-Free Solder. Journal of Electronic Materials, 2010, 39, 223-229.	2.2	58
29	Ultrathin Single-Layered Membranes from Double-Walled Carbon Nanotubes. Advanced Materials, 2006, 18, 1695-1700.	21.0	57
30	Multifunctional Macroarchitectures of Double-Walled Carbon Nanotube Fibers. Advanced Materials, 2007, 19, 1719-1723.	21.0	52
31	Effects of nitrogen fraction on the structure of amorphous silicon-carbon-nitrogen alloys. Thin Solid Films, 2000, 377-378, 562-566.	1.8	45
32	Direct Detection of Heroin Metabolites Using a Competitive Immunoassay Based on a Carbon-Nanotube Liquid-Gated Field-Effect Transistor. Small, 2010, 6, 993-998.	10.0	43
33	Influence of Ag-modified graphene nanosheets addition into Sn-Ag-Cu solders on the formation and growth of intermetallic compound layers. Journal of Alloys and Compounds, 2017, 702, 669-678.	5.5	39
34	Micro-structure and Mechanical Properties of Nano-TiC Reinforced Inconel 625 Deposited using LAAM. Physics Procedia, 2013, 41, 828-834.	1.2	37
35	Structure and tribological behaviour of carbon nitride films. Wear, 1999, 225-229, 1141-1147.	3.1	36
36	Development of WC-Inconel composites using selective laser melting. Archives of Civil and Mechanical Engineering, 2018, 18, 1410-1420.	3.8	35

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37	DFT Study on Nano Structures of Sn/CNT Complex for Potential Li-Ion Battery Application. Journal of Physical Chemistry C, 2009, 113, 14015-14019.	3.1	33
38	Creep mitigation in Sn-Ag-Cu composite solder with Ni-coated carbon nanotubes. Journal of Materials Science: Materials in Electronics, 2012, 23, 1108-1115.	2.2	31
39	Study of mechanical properties of Ag nanoparticle-modified graphene/Sn-Ag-Cu solders by nanoindentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 761, 138051.	5.6	31
40	Using carbon nanotubes to enhance creep performance of lead free solder. Materials Science and Technology, 2008, 24, 443-448.	1.6	30
41	Formation and assembly of carbon nanotube bumps for interconnection applications. Diamond and Related Materials, 2009, 18, 1109-1113.	3.9	30
42	Pressure-assisted low-temperature sintering for paper-based writing electronics. Nanotechnology, 2013, 24, 355204.	2.6	30
43	Glass-to-glass anodic bonding process and electrostatic force. Thin Solid Films, 2004, 462-463, 487-491.	1.8	28
44	Nanotubes-/nanowires-based, microfluidic-integrated transistors for detecting biomolecules. Microfluidics and Nanofluidics, 2010, 9, 1185-1214.	2.2	28
45	Formation of β -C ₃ N ₄ crystals at low temperature. Journal of Applied Physics, 2001, 89, 4099-4104.	2.5	27
46	Temperature and pressure dependence in thermocompression gold stud bonding. Thin Solid Films, 2006, 504, 379-383.	1.8	25
47	Microstructure of eutectic 80Au/20Sn solder joint in laser diode package. Microelectronic Engineering, 2008, 85, 512-517.	2.4	25
48	Cu passivation for enhanced low temperature ($\approx 1/2 300^\circ\text{C}$) bonding in 3D integration. Microelectronic Engineering, 2013, 106, 144-148.	2.4	24
49	Effect of graphene nanosheets on the corrosion behavior of Sn-Ag-Cu solders. Journal of Materials Science: Materials in Electronics, 2015, 26, 5625-5634.	2.2	24
50	A modified constitutive model for creep of Sn-3.5Ag-0.7Cu solder joints. Journal Physics D: Applied Physics, 2009, 42, 125411.	2.8	23
51	Self-assembled monolayers for reduced temperature direct metal thermocompression bonding. Applied Physics Letters, 2007, 91, 061913.	3.3	22
52	Effect of Ni-Coated Carbon Nanotubes on Interfacial Reaction and Shear Strength of Sn-Ag-Cu Solder Joints. Journal of Electronic Materials, 2012, 41, 2478-2486.	2.2	21
53	Electrical properties of reactively sputtered carbon nitride films. Thin Solid Films, 2002, 410, 21-27.	1.8	20
54	Formation of hydrogenated carbon nitride films by reactive sputtering. Journal of Applied Physics, 2002, 92, 6525-6530.	2.5	19

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55	Critical temperatures in thermocompression gold stud bonding. Journal of Applied Physics, 2007, 102, 063519.	2.5	19
56	Effect of chain length on low temperature gold-gold bonding by self-assembled monolayers. Applied Physics Letters, 2008, 92, .	3.3	18
57	Optical behavior of reactive sputtered carbon nitride films. Journal of Applied Physics, 2002, 91, 2812-2817.	2.5	17
58	The Cyclic Deformation Behavior of Mg ⁺ Y2O3 Nanocomposites. Journal of Composite Materials, 2008, 42, 2039-2050.	2.4	16
59	Low Temperature Copper-Copper Thermocompression Bonding. , 2008, , .		15
60	Positive Bias-Induced V_{th} Instability in Graphene Field Effect Transistors. IEEE Electron Device Letters, 2012, 33, 339-341.	3.9	15
61	Effect of Ni-Coated Carbon Nanotubes on the Corrosion Behavior of Sn-Ag-Cu Solder. Journal of Electronic Materials, 2013, 42, 3559-3566.	2.2	15
62	A modified constitutive model of Ag nanoparticle-modified graphene/Sn ⁺ Ag ⁺ Cu/Cu solder joints. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 777, 139080.	5.6	15
63	Aluminium-carbon nanotubes composites produced from friction stir processing and selective laser melting. Materialwissenschaft Und Werkstofftechnik, 2016, 47, 539-548.	0.9	14
64	Interplay between microstructure and deformation behavior of a laser-welded CoCrFeNi high entropy alloy. Materials Research Express, 2019, 6, 046514.	1.6	14
65	The Effects of Borides on the Mechanical Properties of TLPB Repaired Inconel 738 Superalloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 4622-4631.	2.2	13
66	INDENTATION SIZE EFFECT ON THE CREEP BEHAVIOR OF A SnAgCu SOLDER. International Journal of Modern Physics B, 2010, 24, 267-275.	2.0	12
67	Void Density Reduction at the Cu ⁺ Cu Bonding Interface by Means of Prebonding Surface Passivation with Self-Assembled Monolayer. Electrochemical and Solid-State Letters, 2010, 13, H412.	2.2	11
68	Low cycle fatigue behavior of a eutectic 80Au/20Sn solder alloy. International Journal of Fatigue, 2015, 75, 100-107.	5.7	11
69	Indentation Size Effect on Ag Nanoparticle-Modified Graphene/Sn-Ag-Cu Solders. Journal of Electronic Materials, 2018, 47, 612-619.	2.2	11
70	Improvement of anodic bond quality with the assistance of sputtered amorphous film. Sensors and Actuators A: Physical, 2004, 113, 218-225.	4.1	10
71	Synthesis of air stable silver nanoparticles and their application as conductive ink on paper based flexible electronics. Materials Research Innovations, 2014, 18, S4-723-S4-727.	2.3	10
72	Microstructure of diffusion-brazing repaired IN738LC superalloy with uneven surface defect gap width. Science and Technology of Welding and Joining, 2017, 22, 617-626.	3.1	10

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73	Enhancing direct metal bonding with self-assembled monolayers. Thin Solid Films, 2006, 504, 367-370.	1.8	8
74	Magnesium and Aluminium Carbon Nanotube Composites. Key Engineering Materials, 2010, 425, 245-261.	0.4	8
75	Wafer Bonding Techniques for Microsystem Packaging. Journal of Physics: Conference Series, 2006, 34, 943-948.	0.4	7
76	A thermal and passivation study of self-assembled monolayers on thin gold films. Thin Solid Films, 2008, 516, 5721-5724.	1.8	7
77	Advanced high density interconnect materials and techniques. , 2009, , .		7
78	Fretting behaviour of TiN coatings. Surface Engineering, 1997, 13, 227-232.	2.2	6
79	Growth of SiCN films by magnetron sputtering. Surface Engineering, 2000, 16, 225-228.	2.2	6
80	Formation of $\text{Ti}^2\text{-C}_3\text{N}_4$ grains by sputtering. Surface Engineering, 2000, 16, 221-224.	2.2	5
81	Mechanism of sol-gel intermediate layer low temperature wafer bonding. Journal Physics D: Applied Physics, 2005, 38, 1308-1312.	2.8	5
82	Enhancing the properties of a lead-free solder with the addition of Ni-coated carbon nanotubes. , 2009, , .		5
83	Understanding the contact characteristics in single or multi-layer graphene devices: The impact of defects (carbon vacancies) and the asymmetric transportation behavior. , 2010, , .		5
84	NANOMECHANICAL PROPERTIES OF A Sn-Ag-Cu SOLDER REINFORCED WITH Ni-COATED CARBON NANOTUBES. International Journal of Nanoscience, 2010, 09, 283-287.	0.7	5
85	Low-temperature sol-gel intermediate layer wafer bonding. Thin Solid Films, 2006, 496, 560-565.	1.8	4
86	EFFECTS OF UNDER CNT METALLIZATION LAYERS ON CARBON NANOTUBES GROWTH. Modern Physics Letters B, 2008, 22, 1827-1836.	1.9	4
87	Low Temperature Anodic Bonding for MEMS Applications. , 2002, , .		4
88	Effect of Ni-coated carbon nanotubes on the microstructure and properties of a Sn-Ag-Cu solder. , 2010, , .		3
89	LOW TEMPERATURE SILICON WAFER BONDING BY SOL-GEL PROCESSING. International Journal of Computational Engineering Science, 2003, 04, 655-658.	0.1	2
90	Influence of Reinforcements on the Electrical Resistivity of Novel Sn-Ag-Cu Composite Solder. , 2007, , 39.		2

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91	ELECTRICAL PROPERTIES OF REACTIVELY-SPUTTERED HYDROGENATED CARBON NITRIDE FILMS. International Journal of Nanoscience, 2004, 03, 555-562.	0.7	1
92	Effects of Catalyst Layers on Carbon Nanotubes Growth. Materials Research Innovations, 2006, 10, 346-351.	2.3	1
93	Effect of Presence of Multi-Walled Carbon Nanotubes on the Creep Properties of Sn-Ag-Cu Solder. , 2006, , 161.		1
94	A New Creep Model for SnAgCu Lead-Free Composite Solders: Incorporating Back Stress. , 2008, , .		1
95	Ambient Copper-Copper Thermocompression Bonding using Self Assembled Monolayers. Materials Research Society Symposia Proceedings, 2008, 1112, 1.	0.1	1
96	Stability of Self-Assembled Monolayers on Gold for MEMS/NEMS Applications. , 2008, , .		1
97	Effect of Ni-coated carbon nanotubes on interfacial intermetallic layer growth. , 2009, , .		1
98	Ageing study of interfacial intermetallic growth in a lead-free solder reinforced with Ni-coated carbon nanotubes. , 2010, , .		1
99	Indentation creep and hardness of a Sn-Ag-Cu solder reinforced with Ni-coated carbon nanotubes. , 2010, , .		1
100	WAFER BONDING PROCESS BASED ON THE TAGUCHI ANALYSIS. International Journal of Computational Engineering Science, 2003, 04, 331-334.	0.1	0
101	Synthesis of Magnesium Reinforced With Nano-Size Y2O3 Using Disintegrated Melt Deposition Technique. , 2006, , 433.		0
102	Wafer bonding. , 2008, , 633-664.		0