J Wei

List of Publications by Year
in descending order

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	A modified constitutive model of Ag nanoparticle-modified graphene/Snâ€“Agâ€“Cu/Cu solder joints. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 777, 139080.	5.6	15
2	Selective laser melting enabling the hierarchically heterogeneous microstructure and excellent mechanical properties in an interstitial solute strengthened high entropy alloy. Materials Research Letters, 2019, 7, 453-459.	8.7	129
3	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
4	Interplay between microstructure and deformation behavior of a laser-welded CoCrFeNi high entropy alloy. Materials Research Express, 2019, 6, 046514.	1.6	14
5	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
6	The role of powder layer thickness on the quality of SLM printed parts. Archives of Civil and Mechanical Engineering, 2018, 18, 948-955.	3.8	112
7	Indentation Size Effect on Ag Nanoparticle-Modified Graphene/Sn-Ag-Cu Solders. Journal of Electronic Materials, 2018, 47, 612-619.	2.2	11
8	Friction-stir welding of a ductile high entropy alloy: microstructural evolution and weld strength. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 711, 524-532.	5.6	82
9	Multicomponent intermetallic nanoparticles and superb mechanical behaviors of complex alloys. Science, 2018, 362, 933-937.	12.6	950
10	Hierarchical microstructure and strengthening mechanisms of a CoCrFeNiMn high entropy alloy additively manufactured by selective laser melting. Scripta Materialia, 2018, 154, 20-24.	5.2	412
11	Development of WC-Inconel composites using selective laser melting. Archives of Civil and Mechanical Engineering, 2018, 18, 1410-1420.	3.8	35
12	Influence of Ag-modified graphene nanosheets addition into Snâ€“Agâ€“Cu solders on the formation and growth of intermetallic compound layers. Journal of Alloys and Compounds, 2017, 702, 669-678.	5.5	39
13	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
14	Friction stir welding of a CoCrFeNiAl0.3 high entropy alloy. Materials Letters, 2017, 205, 142-144.	2.6	72
15	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
16	Aluminiumâ€carbon nanotubes composites produced from friction stir processing and selective laser melting. Materialwissenschaft Und Werkstofftechnik, 2016, 47, 539-548.	0.9	14
17	Effect of graphene nanosheets on the corrosion behavior of Snâ€“Agâ€“Cu solders. Journal of Materials Science: Materials in Electronics, 2015, 26, 5625-5634.	2.2	24
18	Low cycle fatigue behavior of a eutectic 80Au/20Sn solder alloy. International Journal of Fatigue, 2015, 75, 100-107.	5.7	11

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19	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
20	Friction stir welding of dissimilar materials between AA6061 and AA7075 Al alloys effects of process parameters. Materials & Design, 2014, 56, 185-192.	5.1	281
21	Effects of nano-Al2O3 particle addition on grain structure evolution and mechanical behaviour of friction-stir-processed Al. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 602, 143-149.	5.6	84
22	Agâ€"graphene hybrid conductive ink for writing electronics. Nanotechnology, 2014, 25, 055201.	2.6	89
23	Pressure-assisted low-temperature sintering for paper-based writing electronics. Nanotechnology, 2013, 24, 355204.	2.6	30
24	Micro-structure and Mechanical Properties of Nano-TiC Reinforced Inconel 625 Deposited using LAAM. Physics Procedia, 2013, 41, 828-834.	1.2	37
25	Cu passivation for enhanced low temperature (â©½300Â°C) bonding in 3D integration. Microelectronic Engineering, 2013, 106, 144-148.	2.4	24
26	Effect of graphene nanosheets reinforcement on the performance of Snî—¸Agî—¸Cu lead-free solder. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 562, 25-32.	5.6	130
27	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
28	Interfacial reaction and shear strength of Ni-coated carbon nanotubes reinforced Snâ€"Agâ€"Cu solder joints during thermal cycling. Intermetallics, 2012, 31, 72-78.	3.9	75
29	Positive Bias-Induced $V_{m th}$ Instability in Graphene Field Effect Transistors. IEEE Electron Device Letters, 2012, 33, 339-341.	3.9	15
30	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
31	Creep mitigation in Snâ€"Agâ€"Cu composite solder with Ni-coated carbon nanotubes. Journal of Materials Science: Materials in Electronics, 2012, 23, 1108-1115.	2.2	31
32	Low temperature CuCu thermo-compression bonding with temporary passivation of self-assembled monolayer and its bond strength enhancement. Microelectronics Reliability, 2012, 52, 321-324.	1.7	62
33	Development of a Snâ€"Agâ€"Cu solder reinforced with Ni-coated carbon nanotubes. Journal of Materials Science: Materials in Electronics, 2011, 22, 315-322.	2.2	74
34	Nanotubes-/nanowires-based, microfluidic-integrated transistors for detecting biomolecules. Microfluidics and Nanofluidics, 2010, 9, 1185-1214.	2.2	28
35	Temperature Dependence of Creep and Hardness of Sn-Ag-Cu Lead-Free Solder. Journal of Electronic Materials, 2010, 39, 223-229.	2.2	58
36	Direct Detection of Heroin Metabolites Using a Competitive Immunoassay Based on a Carbonâ€Nanotube Liquidâ€Gated Fieldâ€Effect Transistor. Small, 2010, 6, 993-998.	10.0	43

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37	Understanding the contact characteristics in single or multi-layer graphene devices: The impact of defects (carbon vacancies) and the asymmetric transportation behavior. , 2010, , .		5
38	NANOMECHANICAL PROPERTIES OF A Snâ€"Agâ€"Cu SOLDER REINFORCED WITH Ni-COATED CARBON NANOTUBES. International Journal of Nanoscience, 2010, 09, 283-287.	0.7	5
39	INDENTATION SIZE EFFECT ON THE CREEP BEHAVIOR OF A SnAgCu SOLDER. International Journal of Modern Physics B, 2010, 24, 267-275.	2.0	12
40	Magnesium and Aluminium Carbon Nanotube Composites. Key Engineering Materials, 2010, 425, 245-261.	0.4	8
41	Void Density Reduction at the Cuâ€"Cu Bonding Interface by Means of Prebonding Surface Passivation with Self-Assembled Monolayer. Electrochemical and Solid-State Letters, 2010, 13, H412.	2.2	11
42	Ageing study of interfacial intermetallic growth in a lead-free solder reinforced with Ni-coated carbon nanotubes. , 2010, , .		1
43	Indentation creep and hardness of a Sn-Ag-Cu solder reinforced with Ni-coated carbon nanotubes. , 2010, , .		1
44	Effect of Ni-coated carbon nanotubes on the microstructure and properties of a Sn-Ag-Cu solder. , 2010, , .		3
45	Effect of Ni-coated carbon nanotubes on interfacial intermetallic layer growth. , 2009, , .		1
46	A modified constitutive model for creep of Snâ€"3.5Agâ€"0.7Cu solder joints. Journal Physics D: Applied Physics, 2009, 42, 125411.	2.8	23
47	Advanced high density interconnect materials and techniques. , 2009, , .		7
48	Interfacial intermetallic growth and shear strength of lead-free composite solder joints. Journal of Alloys and Compounds, 2009, 473, 100-106.	5.5	135
49	Creep behavior of eutectic 80Au/20Sn solder alloy. Journal of Alloys and Compounds, 2009, 476, 138-141.	5.5	64
50	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
51	Enhancing the properties of a lead-free solder with the addition of Ni-coated carbon nanotubes. , 2009, , .		5
52	Formation and assembly of carbon nanotube bumps for interconnection applications. Diamond and Related Materials, 2009, 18, 1109-1113.	3.9	30
53	A thermal and passivation study of self-assembled monolayers on thin gold films. Thin Solid Films, 2008, 516, 5721-5724.	1.8	7
54	Effect of Carbon Nanotubes on the Shear Strength and Electrical Resistivity of a Lead-Free Solder. Journal of Electronic Materials, 2008, 37, 515-522.	2.2	103

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55	Ductility improvement and fatigue studies in Mg-CNT nanocomposites. Composites Science and Technology, 2008, 68, 1432-1439.	7.8	196
56	Microstructure of eutectic 80Au/20Sn solder joint in laser diode package. Microelectronic Engineering, 2008, 85, 512-517.	2.4	25
57	Low Temperature Copper-Copper Thermocompression Bonding. , 2008, , .		15
58	Effect of chain length on low temperature gold-gold bonding by self-assembled monolayers. Applied Physics Letters, 2008, 92, .	3.3	18
59	EFFECTS OF UNDER CNT METALLIZATION LAYERS ON CARBON NANOTUBES GROWTH. Modern Physics Letters B, 2008, 22, 1827-1836.	1.9	4
60	A New Creep Model for SnAgCu Lead-Free Composite Solders: Incorporating Back Stress. , 2008, , .		1
61	Using carbon nanotubes to enhance creep performance of lead free solder. Materials Science and Technology, 2008, 24, 443-448.	1.6	30
62	The Cyclic Deformation Behavior of Mgâ€"Y2O3 Nanocomposites. Journal of Composite Materials, 2008, 42, 2039-2050.	2.4	16
63	Ambient Copper-Copper Thermocompression Bonding using Self Assembled Monolayers. Materials Research Society Symposia Proceedings, 2008, 1112, 1.	0.1	1
64	Wafer bonding. , 2008, , 633-664.		0
65	Stability of Self-Assembled Monolayers on Gold for MEMS/NEMS Applications. , 2008, , .		1
66	Self-assembled monolayers for reduced temperature direct metal thermocompression bonding. Applied Physics Letters, 2007, 91, 061913.	3.3	22
67	Critical temperatures in thermocompression gold stud bonding. Journal of Applied Physics, 2007, 102, 063519.	2.5	19
68	Influence of Reinforcements on the Electrical Resistivity of Novel Sn-Ag-Cu Composite Solder. , 2007, , 39.		2
69	Multifunctional Macroarchitectures of Double-Walled Carbon Nanotube Fibers. Advanced Materials, 2007, 19, 1719-1723.	21.0	52
70	Properties and deformation behaviour of Mgâ€"Y2O3 nanocomposites. Acta Materialia, 2007, 55, 5115-5121.	7.9	391
71	Development of novel carbon nanotube reinforced magnesium nanocomposites using the powder metallurgy technique. Nanotechnology, 2006, 17, 7-12.	2.6	261
72	Wafer Bonding Techniques for Microsystem Packaging. Journal of Physics: Conference Series, 2006, 34, 943-948.	0.4	7

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73	Effects of Catalyst Layers on Carbon Nanotubes Growth. Materials Research Innovations, 2006, 10, 346-351.	2.3	1
74	Simultaneous enhancement in strength and ductility by reinforcing magnesium with carbon nanotubes. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 423, 153-156.	5.6	219
75	Improving the performance of lead-free solder reinforced with multi-walled carbon nanotubes. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 423, 166-169.	5.6	139
76	Low-temperature solâ€"gel intermediate layer wafer bonding. Thin Solid Films, 2006, 496, 560-565.	1.8	4
77	Influence of ceramic reinforcements on the wettability and mechanical properties of novel lead-free solder composites. Thin Solid Films, 2006, 504, 401-404.	1.8	127
78	Enhancing direct metal bonding with self-assembled monolayers. Thin Solid Films, 2006, 504, 367-370.	1.8	8
79	Temperature and pressure dependence in thermocompression gold stud bonding. Thin Solid Films, 2006, 504, 379-383.	1.8	25
80	Lead-free solder reinforced with multiwalled carbon nanotubes. Journal of Electronic Materials, 2006, 35, 1518-1522.	2.2	81
81	Ultrathin Singleâ€"Layered Membranes from Doubleâ€"Walled Carbon Nanotubes. Advanced Materials, 2006, 18, 1695-1700.	21.0	57
82	Effect of Presence of Multi-Walled Carbon Nanotubes on the Creep Properties of Sn-Ag-Cu Solder. , 2006, , 161.		1
83	Synthesis of Magnesium Reinforced With Nano-Size Y2O3 Using Disintegrated Melt Deposition Technique. , 2006, , 433.		0
84	Mechanism of solâ€"gel intermediate layer low temperature wafer bonding. Journal Physics D: Applied Physics, 2005, 38, 1308-1312.	2.8	5
85	ELECTRICAL PROPERTIES OF REACTIVELY-SPUTTERED HYDROGENATED CARBON NITRIDE FILMS. International Journal of Nanoscience, 2004, 03, 555-562.	0.7	1
86	Glass-to-glass anodic bonding process and electrostatic force. Thin Solid Films, 2004, 462-463, 487-491.	1.8	28
87	Improvement of anodic bond quality with the assistance of sputtered amorphous film. Sensors and Actuators A: Physical, 2004, 113, 218-225.	4.1	10
88	Low temperature wafer anodic bonding. Journal of Micromechanics and Microengineering, 2003, 13, 217-222.	2.6	125
89	LOW TEMPERATURE SILICON WAFER BONDING BY SOL-GEL PROCESSING. International Journal of Computational Engineering Science, 2003, 04, 655-658.	0.1	2
90	WAFER BONDING PROCESS BASED ON THE TAGUCHI ANALYSIS. International Journal of Computational Engineering Science, 2003, 04, 331-334.	0.1	0

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91	Formation of hydrogenated carbon nitride films by reactive sputtering. Journal of Applied Physics, 2002, 92, 6525-6530.	2.5	19
92	Optical behavior of reactive sputtered carbon nitride films. Journal of Applied Physics, 2002, 91, 2812-2817.	2.5	17
93	Electrical properties of reactively sputtered carbon nitride films. Thin Solid Films, 2002, 410, 21-27.	1.8	20
94	Low Temperature Anodic Bonding for MEMS Applications. , 2002, , .		4
95	Formation of Î²-C3N4 crystals at low temperature. Journal of Applied Physics, 2001, 89, 4099-4104.	2.5	27
96	Formation of Î²-C3N4grains by sputtering. Surface Engineering, 2000, 16, 221-224.	2.2	5
97	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
98	Effects of nitrogen fraction on the structure of amorphous siliconâ€“carbonâ€“nitrogen alloys. Thin Solid Films, 2000, 377-378, 562-566.	1.8	45
99	Growth of SiCN films by magnetron sputtering. Surface Engineering, 2000, 16, 225-228.	2.2	6
100	Structure and tribological behaviour of carbon nitride films. Wear, 1999, 225-229, 1141-1147.	3.1	36
101	TEM, XPS and FTIR characterization of sputtered carbon nitride films. Surface and Interface Analysis, 1999, 28, 208-211.	1.8	68
102	Fretting behaviour of TiN coatings. Surface Engineering, 1997, 13, 227-232.	2.2	6