Fenglian Sun

List of Publications by Year
in descending order

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50	516	13	21
papers	citations	h-index	g-index

687220

713332

50	50	50	340
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Wetting characteristics of Sn-5Sb-CuNiAg lead-free solders on the copper substrate. Soldering and Surface Mount Technology, 2022, 34, 96-102.	0.9	3
2	Flexible boron nitride composite membranes with high thermal conductivity, low dielectric constant and facile mass production. Composites Science and Technology, 2022, 222, 109400.	3.8	19
3	Formation mechanism of Cu/Cu₃Snâ€“Cu/Cu interconnections based on solder-filled microporous copper as interlayer via a current-assisted thermal compression bonding. Modern Physics Letters B, 2021, 35, 2150322.	1.0	1
4	Effects of Trace Elements Ag, Bi and Ni on Solidâ€“Liquid Electromigration Interface Diffusion in Solder Joints. Journal of Electronic Materials, 2021, 50, 5312.	1.0	1
5	Self-cleaning, underwater writable, heat-insulated and photocatalytic cellulose membrane for high-efficient oil/water separation and removal of hazardous organic pollutants. Progress in Organic Coatings, 2021, 157, 106311.	1.9	27
6	Multi-particle molecular dynamics simulation: shell thickness effects on sintering process of Cu-Ag core-shell nanoparticles. Journal of Nanoparticle Research, 2021, 23, 1.	0.8	14
7	Effect of porous Cu addition on the microstructure and mechanical properties of SnBi-xAg solder joints. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	1.1	4
8	Effects of Ni Nanoparticles on the Growth Rate of Intermetallic Compounds (IMCs) Between Sn-3.0Ag-0.5Cu (SAC305) Solder and Cu-2.0Be Substrate. Journal of Electronic Materials, 2020, 49, 6721-6726.	1.0	2
9	Effect of Doped Nano-Ni on Microstructure Evolution and Mechanical Behavior of Sn-3.0Ag-0.5Cu (SAC305)/Cu-2.0Be Solder Joint during Isothermal Aging. Journal of Materials Engineering and Performance, 2020, 29, 3315-3323.	1.2	9
10	Rationally designed C/Co₉S₈@SnS₂ nanocomposite as a highly efficient anode for lithium-ion batteries. Nanotechnology, 2020, 31, 395401.	1.3	7
11	Effect of ferric chloride concentration on the surface micro-nano structure and superhydrophobic property of filter paper. Chemical Physics Letters, 2020, 754, 137694.	1.2	9
12	Effect of doping Ni nanoparticles on microstructure evolution and shear behavior of Snâ€“3.0Agâ€“0.5Cu(SAC305)/Cuâ€“2.0Be solder joints during reflowing. Journal of Materials Science: Materials in Electronics, 2020, 31, 4905-4914.	1.1	7
13	Microstructure, mechanical, and thermal behaviors of SnBi/Cu solder joint enhanced by porous Cu. Journal of Materials Science: Materials in Electronics, 2020, 31, 8258-8267.	1.1	16
14	Microstructure and mechanical properties of nano-Ag sintered joint enhanced by Cu foam. Journal of Materials Science: Materials in Electronics, 2019, 30, 15795-15801.	1.1	7
15	The effect of temperature gradient on interfacial Cu6Sn5 growth during thermal compression bonding. Journal of Materials Science: Materials in Electronics, 2019, 30, 13957-13963.	1.1	3
16	Microstructure and shear behavior of solder joint with Sn58Bi/Sn3.0Ag0.5Cu/Cu superposition structure. Journal of Materials Science: Materials in Electronics, 2019, 30, 14077-14084.	1.1	11
17	Effect of porous Cu addition on the microstructure and properties of Sn58Bi solder joints. Materials Research Express, 2019, 6, 116301.	0.8	1
18	Microstructure, hardness, and shear behavior of Sn3.0Ag0.5Cuâ€“Sn58Bi composite solder joint. Materials Research Express, 2019, 6, 116328.	0.8	6

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19	The interfacial Cuâ€“Sn intermetallic compounds (IMCs) growth behavior of Cu/Sn/Cu sandwich structure via induction heating method. Journal of Materials Science: Materials in Electronics, 2019, 30, 18878-18884.	1.1	8
20	Shear strength, fracture mechanism and plastic performance of Cu/Sn5Sbâ€“xCuNiAg/Cu solder joints during thermal aging. Journal of Materials Science: Materials in Electronics, 2019, 30, 18342-18349.	1.1	1
21	Solder interconnects reliability subjected to thermal-vibration coupling loading. Journal of Materials Science: Materials in Electronics, 2019, 30, 11482-11492.	1.1	4
22	Effect of Cu, Ag on the microstructure and IMC evolution of Sn5Sbâ€“CuAgNi/Cu solder joints. Materials Research Express, 2019, 6, 086309.	0.8	5
23	Effect of Ni concentration on solderability, microstructure and hardness of SAC0705-xNi solder joints on Cu and graphene-coated Cu substrates. Modern Physics Letters B, 2019, 33, 1850425.	1.0	1
24	Evolution of the Microstructure of Sn58Bi Solder Paste with Sn-3.0Ag-0.5Cu Addition During Isothermal Aging. Journal of Electronic Materials, 2019, 48, 1758-1765.	1.0	19
25	Thermal and mechanical properties of micro Cu doped Sn58Bi solder paste for attaching LED lamps. Journal of Materials Science: Materials in Electronics, 2019, 30, 340-347.	1.1	16
26	The fast formation of full Cu3Sn solder joints in Cu/Sn/Cu system by thermal gradient bonding. Journal of Materials Science: Materials in Electronics, 2019, 30, 2146-2153.	1.1	6
27	Effect of Sn/Cu thickness ratio on the transformation law of Cu₆Sn₅ to Cu₃Sn in Sn/Cu interface during aging. Materials Research Express, 2018, 5, 086503.	0.8	10
28	Microstructure and hardness of SAC305-xNi solder on Cu and graphene-coated Cu substrates. Journal of Materials Science: Materials in Electronics, 2018, 29, 13167-13175.	1.1	5
29	Microstructure and hardness of SAC305-xNi solder on Cu and graphene-coated Cu substrates. , 2018, 29, 13167.		1
30	Effect of nano-Cu addition on microstructure evolution of Sn0.7Ag0.5Cu-BiNi/Cu solder joint. Soldering and Surface Mount Technology, 2017, 29, 92-98.	0.9	9
31	Effects of Micro Solder Joint Geometry on Interfacial IMC Growth Rate. Journal of Electronic Materials, 2017, 46, 4034-4038.	1.0	7
32	Microstructure, hardness, and shear behavior of the as-soldered SnBiâ€“SAC composite solder pastes. Journal of Materials Science: Materials in Electronics, 2017, 28, 19113-19120.	1.1	13
33	Solderability of SnBi-nano Cu solder pastes and microstructure of the solder joints. Journal of Materials Science: Materials in Electronics, 2016, 27, 2235-2241.	1.1	17
34	The indentation size effect in SnAgCu lead-free BGA solder joints at elevated temperatures. , 2015, , .		0
35	Failure analysis of solder interconnects under the electro-thermal-mechanical coupling tests. , 2015, , .		2
36	Geometric size effects on the elements consuming at the solder pad under current stressing. , 2015, , .		0

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37	Failure study of solder joints subjected to random vibration loading at different temperatures. Journal of Materials Science: Materials in Electronics, 2015, 26, 2374-2379.	1.1	21
38	Microstructure Evolution and Shear Behavior of the Solder Joints for Flip-Chip LED on ENIG Substrate. Journal of Electronic Materials, 2015, 44, 2450-2457.	1.0	15
39	Chip-on-Flexible Packaging for High-Power Flip-Chip Light-Emitting Diode by AuSn and SAC Soldering. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2014, 4, 1754-1759.	1.4	23
40	Formation and evolution of intermetallic layer structures at SAC305/Ag/Cu and SAC0705-Bi-Ni/Ag/Cu solder joint interfaces after reflow and aging. Journal of Materials Science: Materials in Electronics, 2014, 25, 4954-4959.	1.1	13
41	Effect of Ni, Bi concentration on the microstructure and shear behavior of low-Ag SACâ€“Biâ€“Ni/Cu solder joints. Journal of Materials Science: Materials in Electronics, 2014, 25, 2627-2633.	1.1	49
42	Geometrical size effect on the interface diffusion of micro solder joint in electro-thermal coupling aging. Journal of Materials Science: Materials in Electronics, 2014, 25, 3742-3746.	1.1	15
43	Study of surface quality in machining nickel-based alloy Inconel 718. International Journal of Advanced Manufacturing Technology, 2013, 69, 2659-2667.	1.5	49
44	Characterization of interfacial IMCs in low-Ag Snâ€“Agâ€“xCuâ€“Biâ€“Ni solder joints. Journal of Materials Science: Materials in Electronics, 2013, 24, 290-294.	1.1	9
45	Thermal behavior of flip chip LED packages using electrical conductive adhesive and soldering methods. , 2013, , .		3
46	Nanoindentation properties of as-soldered low-Ag SAC-Bi-Ni/Cu. , 2012, , .		0
47	Solderability, IMC evolution, and shear behavior of low-Ag Sn0.7Ag0.5Cu-BiNi/Cu solder joint. Journal of Materials Science: Materials in Electronics, 2012, 23, 1705-1710.	1.1	39
48	Nanoindentation for measuring mechanical properties of Sn-Ag-Cu-RE BGA solders joints. , 2011, , .		1
49	Effects of adding some elements on solderability of Sn-0.7Ag-0.5Cu solder. , 2010, , .		1
50	Effect of Ni addition on the Sn-0.3Ag-0.7Cu solder joints. , 2009, , .		7