Shengyan Shang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7742508/publications.pdf

Version: 2024-02-01

31	244	933447 10	996975 15
papers	citations	h-index	g-index

31	31	31	159
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Heat and mass transfer effects of laser soldering on growth behavior of interfacial intermetallic compounds in Sn/Cu and Sn-3.5Ag0.5/Cu joints. Microelectronics Reliability, 2018, 80, 55-67.	1.7	34
2	A data-driven framework to predict the morphology of interfacial Cu6Sn5 IMC in SAC/Cu system during laser soldering. Journal of Materials Science and Technology, 2020, 50, 115-127.	10.7	31
3	Synthesis of Cu@Ag coreâ€"shell nanoparticles for characterization of thermal stability and electric resistivity. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	25
4	Evolution behavior and growth kinetics of intermetallic compounds at Sn/Cu interface during multiple reflows. Intermetallics, 2018, 96, 1-12.	3.9	22
5	Roles of interfacial heat transfer and relative solder height on segregated growth behavior of intermetallic compounds in Sn/Cu joints during furnace cooling. Intermetallics, 2018, 93, 186-196.	3.9	17
6	Enhancement of hardness of bulk solder by doping Cu nanoparticles at the interface of Sn/Cu solder joint. Microelectronic Engineering, 2019, 208, 47-53.	2.4	15
7	Size effect on interface reaction of Snâ€"xCu/Cu solder joints during multiple reflows. Journal of Materials Science: Materials in Electronics, 2019, 30, 4359-4369.	2.2	13
8	Effect of initial Cu concentration on the IMC size and grain aspect ratio in Snâ€"xCu solders during multiple reflows. Journal of Materials Science: Materials in Electronics, 2018, 29, 602-613.	2.2	12
9	Electrochemical migration behavior of Sn-based lead-free solder. Journal of Materials Science: Materials in Electronics, 2019, 30, 14695-14702.	2.2	12
10	Effect of the $$ext {TiO}_2$$ TiO 2 Nanoparticles on the Growth Behavior of Intermetallics in Sn/Cu Solder Joints. Metals and Materials International, 2019, 25, 499-507.	3.4	10
11	Geometrical Effects of Cu@Ag Coreâ€"Shell Nanoparticles Treated Flux on the Growth Behaviour of Intermetallics in Sn/Cu Solder Joints. Electronic Materials Letters, 2019, 15, 253-265.	2.2	9
12	Pronounced electromigration of GaInSn/Cu interconnects under super low critical current density. Materials Letters, 2021, 300, 130137.	2.6	7
13	Formation of Nanoporous Anodized Tin Oxide Films in Electrolyte Containing Fâˆ' and S2âˆ'. ECS Journal of Solid State Science and Technology, 2020, 9, 104010.	1.8	7
14	Effect of polycrystalline Cu microstructures on IMC growth behavior at Sn/Cu soldering interface. Journal of Materials Science: Materials in Electronics, 2019, 30, 15964-15971.	2.2	5
15	Growth behavior of preferentially scalloped intermetallic compounds at extremely thin peripheral Sn/Cu interface. Journal of Materials Science: Materials in Electronics, 2019, 30, 2872-2887.	2.2	5
16	Geometrical effects on growth kinetics of interfacial intermetallic compounds in Sn/Cu joints reflowed with Cu nanoparticles doped flux. Thin Solid Films, 2019, 669, 198-207.	1.8	5
17	Modelling the melting of Sn0.7Cu solder using the enthalpy method. , 2016, , .		4
18	Effects of Cu nanoparticles doped flux on the microstructure of IMCs between Sn solder and Cu substrate. , 2017, , .		3

#	Article	IF	Citations
19	All-round suppression of Cu6Sn5 growth in Sn/Cu joints by utilizing TiO2 nanoparticles. Journal of Materials Science: Materials in Electronics, 2018, 29, 15966-15972.	2.2	3
20	Effects of TiO2 nanoparticles addition on physical and soldering properties of Snâ€“xTiO2 composite solder. Journal of Materials Science: Materials in Electronics, 2019, 30, 18828-18837.	2.2	3
21	Quantitative polynomial free energy based phase field model for void motion and evolution in Sn under thermal gradient. , 2017, , .		1
22	Effect of TiO2 nanoparticle on intermetallic compounds growth of Cu/Sn/Cu Solder Joint. , 2019, , .		1
23	A Computational Model for Simulation of Temperature During Radio-Frequency Ablation of Biological Tissue. , 2018, , .		0
24	Study on Electrochemical Migration of Sn-0.7Cu. , 2018, , .		0
25	A Numerical Model for Joule heating in Sn Solder Balls of Two Different Sizes. , 2018, , .		0
26	Influence of Cu nanoparticles on Cu<inf>6</inf>Sn<inf>5</inf> growth behavior at the interface of Sn/Cu solder joints. , 2018, , .		0
27	Effect of Ag content on Cu<inf>6</inf>Sn<inf>5</inf> growth behavior at Sn-Ag/Cu solder interface during multiple reflows. , 2018, , .		0
28	Electrochemical Migration behavior of Sn9Zn. , 2019, , .		0
29	Size effects on segregated growth kinetics of interfacial IMC between Sn solder and Cu substrate. , 2019, , .		0
30	Growth behavior of Cu6Sn5 Grains at Sn3.0Ag/(001)Cu Soldering Interface. , 2019, , .		0
31	Study on the coordination agent system of Sn-Ag-Cu ternary alloy co-deposition. , 2020, , .		0