Junhui Li

List of Publications by Year in descending order

97 papers	1,944 citations	304368 22 h-index	276539 41 g-index
98 all docs	98 docs citations	98 times ranked	1629 citing authors

#	Article	IF	Citations
1	Design and Fabrication of Leadless Package Structure for Pressure Sensors. Journal of Electronic Packaging, Transactions of the ASME, 2022, 144, .	1.2	3
2	Effect of Hexagonal-Boron Nitride/Epoxy and BNNS/Epoxy Composite Materials on the Reliability of Flip Chip. Journal of Electronic Packaging, Transactions of the ASME, 2022, 144, .	1.2	2
3	The Sintering Process and Vibration Characteristics for Leadless Package Structure of Pressure Sensors. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2022, 12, 209-216.	1.4	2
4	Research on Flip-Chip Bonding Process and Thermal Cycle Reliability Simulation of 3-D Stacked Structure. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2022, 12, 51-58.	1.4	6
5	Research on Reliability of Ni/Sn/Cu(Ni) Copper Pillar Bump Under Thermoelectric Loading. Journal of Electronic Packaging, Transactions of the ASME, 2022, 144, .	1.2	2
6	Mechanisms and Performance Analysis of GaN-Based Micro-LED Grown on Pattern Sapphire Substrate by Laser Lift-Off Process. ECS Journal of Solid State Science and Technology, 2022, 11, 046001.	0.9	8
7	Electromechanical Performance of Microprobe Test With Cuboid Magnetorheological Damper in Microelectronic Packaging. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2022, 12, 723-730.	1.4	0
8	Thermo-compression bonding process characteristics and shape control of Cu-pillar microbump joints by optimizing of solder melting. Journal of Materials Science: Materials in Electronics, 2022, 33, 10471-10485.	1.1	5
9	Enhanced thermal conduction of hybrid filler/polydimethylsiloxane composites via a continuous spatial confining process. Composites Science and Technology, 2022, 226, 109536.	3.8	20
10	Opticalâ€“electrical characteristic of green based on GaN micro-LED arrays. Applied Optics, 2022, 61, 5666.	0.9	0
11	Interfacial thermal transport properties and its effect on thermal conductivity of functionalized BNNS/epoxy composites. International Journal of Heat and Mass Transfer, 2022, 195, 123031.	2.5	9
12	Effects of Kovar-4J29 Cylinder Resonance on Ultrasonic Wire Bonding. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2021, 11, 153-160.	1.4	4
13	Full-color micro-LED displays with cadmium-free quantum dots patterned by photolithography technology: retraction. Applied Optics, 2021, 60, 2281.	0.9	1
14	Nanohole array structured GaN-based white LEDs with improved modulation bandwidth via plasmon resonance and non-radiative energy transfer. Photonics Research, 2021, 9, 1213.	3.4	21
15	Enhanced electric-field-induced strains in (K,Na)NbO3 piezoelectrics from heterogeneous structures. Materials Today, 2021, 46, 44-53.	8.3	36
16	High-G Shock Reliability of 3-D Integrated Structure Microsystem Based on Finite Element Simulation. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2021, 11, 1243-1249.	1.4	1
17	Structure design and optimization of SOI high-temperature pressure sensor chip. Microelectronics Journal, 2021, 118, 105245.	1.1	12
18	Growth and morphology tuning of ordered nickel nanocones routed by one-step pulse electrodeposition. Applied Surface Science, 2020, 508, 145291.	3.1	18

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19	Two-dimensional NiSe2 nanosheets on carbon fiber cloth for high-performance lithium-ion batteries. Journal of Alloys and Compounds, 2020, 821, 153218.	2.8	30
20	Characterization of a Probe Test System With Micro-Magnetorheological Flexible Loading. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2020, 10, 1666-1673.	1.4	2
21	Metalâ€“Organic Framework Hexagonal Nanoplates: Bottom-up Synthesis, Topotactic Transformation, and Efficient Oxygen Evolution Reaction. Journal of the American Chemical Society, 2020, 142, 7317-7321.	6.6	140
22	Composition Tuning of Ultrafine Cobalt-Based Spinel Nanoparticles for Efficient Oxygen Evolution. ACS Sustainable Chemistry and Engineering, 2020, 8, 5534-5543.	3.2	16
23	Multi-shelled cobaltâ€“nickel oxide/phosphide hollow spheres for an efficient oxygen evolution reaction. Dalton Transactions, 2020, 49, 10918-10927.	1.6	6
24	Novel Functionalized BN Nanosheets/Epoxy Composites with Advanced Thermal Conductivity and Mechanical Properties. ACS Applied Materials & Interfaces, 2020, 12, 6503-6515.	4.0	314
25	Size-dependent optical-electrical characteristics of blue GaN/InGaN micro-light-emitting diodes. Applied Optics, 2020, 59, 9225.	0.9	35
26	Phosphor-free single chip GaN-based white light emitting diodes with a moderate color rendering index and significantly enhanced communications bandwidth. Photonics Research, 2020, 8, 1110.	3.4	17
27	SiO2-coated Cu nanoparticle/epoxy resin composite and its application in the chip packaging field. High Performance Polymers, 2019, 31, 417-424.	0.8	0
28	An Efficient and High Quality Chemical Mechanical Polishing Method for Copper Surface in 3D TSV Integration. IEEE Transactions on Semiconductor Manufacturing, 2019, 32, 346-351.	1.4	4
29	Alternate Restacking of 2â€‰D CoNi Hydroxide and Graphene Oxide Nanosheets for Energetic Oxygen Evolution. ChemSusChem, 2019, 12, 5274-5281.	3.6	6
30	Thermal boundary resistance measurement and analysis across SiC/SiO2 interface. Applied Physics Letters, 2019, 115, .	1.5	28
31	Temperature prediction approach of piezo stacks used in jet valve. Optik, 2019, 198, 163234.	1.4	1
32	Thermal behaviors of nanoparticle reinforced epoxy resins for microelectronics packaging. Microelectronics Reliability, 2019, 93, 39-44.	0.9	16
33	A Multiparameter Numerical Modeling and Simulation of the Dipping Process in Microelectronics Packaging. IEEE Transactions on Industrial Informatics, 2019, 15, 3808-3820.	7.2	11
34	New underfill material based on copper nanoparticles coated with silica for high thermally conductive and electrically insulating epoxy composites. Journal of Materials Science, 2019, 54, 6258-6271.	1.7	21
35	High-performance ultra-low-k fluorine-doped nanoporous organosilica films for inter-layer dielectric. Journal of Materials Science, 2019, 54, 2379-2391.	1.7	16
36	Theoretical Analysis of Lattice-Mediated Plasmon Resonance Using Finite-Difference Time-Domain Method. Journal of Nanoscience and Nanotechnology, 2019, 19, 40-46.	0.9	1

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37	Simultaneously improve the luminous efficiency and color-rendering index of GaN-based white-light-emitting diodes using metal localized surface plasmon resonance. Optics Letters, 2019, 44, 4155.	1.7	9
38	Improved Image Processing Algorithms for Microprobe Final Test. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2018, , 1-7.	1.4	2
39	Real-Time Electrical Characteristics of Microprobe Testing Process in Microelectronics Packaging. IEEE Transactions on Semiconductor Manufacturing, 2018, 31, 166-172.	1.4	4
40	Study on Dipping Mathematical Models for the Solder Flip-Chip Bonding in Microelectronics Packaging. IEEE Transactions on Industrial Informatics, 2018, 14, 4746-4754.	7.2	18
41	Intermetallic Growth Induced Large-Scale Void Growth and Cracking Failure in Line-Type Cu/Solder/Cu Joints Under Current Stressing. Journal of Electronic Materials, 2018, 47, 2499-2506.	1.0	6
42	Study on the law of multiparameter in dipping process. Optik, 2018, 152, 84-91.	1.4	0
43	Investigation on the Joule heat and thermal expansion in flip chip package by electro-thermo-mechanical coupling analysis. , 2018, , .		1
44	Flow Channel Influence of a Collision-Based Piezoelectric Jetting Dispenser on Jet Performance. Sensors, 2018, 18, 1270.	2.1	23
45	Electromigration in flip chip with Cu pillar having a shallow Sn-3.5Ag solder interconnect. , 2018, , .		4
46	Sintering Of Hybrid Nano Sliver Paste Achieve Cone-Structured Cu Bonding in die attachment. , 2018, , .		0
47	A piezoelectric jetting dispenser with a pin joint. Optik, 2018, 175, 163-171.	1.4	24
48	A Simplified Analysis Method for the Piezo Jet Dispenser with a Diamond Amplifier. Sensors, 2018, 18, 2115.	2.1	19
49	Direct-Acting Piezoelectric Jet Dispenser With Rhombic Mechanical Amplifier. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2018, 8, 910-913.	1.4	21
50	Electromechanical characteristics and numerical simulation of a new smaller magnetorheological fluid damper. Mechanics Research Communications, 2018, 92, 81-86.	1.0	12
51	Binder-Free Co₄N Nanoarray on Carbon Cloth as Flexible High-Performance Anode for Lithium-Ion Batteries. ACS Applied Energy Materials, 2018, 1, 4432-4439.	2.5	13
52	Kapitza resistance for nanoscale crystalline and amorphous silicon carbide. , 2018, , .		1
53	A molecular dynamics study on thermal and rheological properties of BNNS-epoxy nanocomposites. International Journal of Heat and Mass Transfer, 2018, 126, 353-362.	2.5	58
54	The Mathematical Model and Novel Final Test System for Wafer-Level Packaging. IEEE Transactions on Industrial Informatics, 2017, 13, 1817-1824.	7.2	21

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55	Speed and depth effect of the dipping process for microelectronics packaging. Optik, 2017, 130, 1285-1294.	1.4	1
56	Effects of dimension parameters and defect on TSV thermal behavior for 3D IC packaging. Microelectronics Reliability, 2017, 70, 97-102.	0.9	35
57	An effective and efficient numerical method for thermal management in 3D stacked integrated circuits. Applied Thermal Engineering, 2017, 121, 200-209.	3.0	49
58	Layered rare-earth hydroxide nanocones with facile host composition modification and anion-exchange feature: topotactic transformation into oxide nanocones for upconversion. Nanoscale, 2017, 9, 8185-8191.	2.8	15
59	Mathematical model of a novel small magnetorheological damper by using outer magnetic field. AIP Advances, 2017, 7, .	0.6	11
60	Improved thermal characteristics of a novel magnetostrictive jet dispenser using water-cooling approach. Applied Thermal Engineering, 2017, 112, 1-6.	3.0	21
61	An Electromechanical Model and Simulation for Test Process of the Wafer Probe. IEEE Transactions on Industrial Electronics, 2017, 64, 1284-1291.	5.2	20
62	A Novel High-Speed Jet Dispenser Driven by Double Piezoelectric Stacks. IEEE Transactions on Industrial Electronics, 2017, 64, 412-419.	5.2	52
63	A novel cooling system based on heat pipe with fan for thermal management of high-power LEDs. Journal of Optics (India), 2017, 46, 269-276.	0.8	5
64	Effect of electromigration and aging on evolution of interfacial intermetallic compounds in Cu-Solder-Cu solder joints. , 2017, , .		1
65	Controllable Fabrication and Optical Properties of Uniform Gadolinium Oxysulfate Hollow Spheres. Scientific Reports, 2016, 5, 17934.	1.6	22
66	Investigation on the defect induced thermal mechanical stress for TSV. , 2016, , .		4
67	Copper Pulse-Reverse Current Electrodeposition to Fill Blind Vias for 3-D TSV Integration. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2016, 6, 1899-1904.	1.4	12
68	Investigation on the effect of multiple parameters towards thermal management in 3D Stacked ICs. , 2016, , .		1
69	Automatic alignment and testing system for wafer with ball grid array. Optik, 2016, 127, 4656-4660.	1.4	4
70	Analysis of the influence of different parameters on dipping. , 2016, , .		0
71	A novel testing system based on microprobe and machine vision for IC testing. Optik, 2016, 127, 3664-3668.	1.4	1
72	A Measurement Method on Nanoscale Thickness of the Ti Barrier Layer of TSV Structure for 3-D IC. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2016, 6, 954-958.	1.4	5

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73	Control and Jetting Characteristics of an Innovative Jet Valve With Zoom Mechanism and Opening Electromagnetic Drive. IEEE/ASME Transactions on Mechatronics, 2016, 21, 1185-1188.	3.7	27
74	Layered Coâ€“Mn hydroxide nanoflakes grown on carbon cloth as binder-free flexible electrodes for supercapacitors. Journal of Materials Science, 2016, 51, 3784-3792.	1.7	24
75	A New Automatic Testing System Based on Image Processing and Microprobes for IC-Testing. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2016, 6, 645-652.	1.4	5
76	New Applications of an Automated System for High-Power LEDs. IEEE/ASME Transactions on Mechatronics, 2016, 21, 1035-1042.	3.7	93
77	Structural Design and Control of a Small-MRF Damper Under 50 N Soft-Landing Applications. IEEE Transactions on Industrial Informatics, 2015, 11, 612-619.	7.2	47
78	System design for anti-interference of smoke in metal liquid level detecting. , 2015, , .		1
79	Dipping Process Characteristics Based on Image Processing of Pictures Captured by High-speed Cameras. Nano-Micro Letters, 2015, 7, 1-11.	14.4	15
80	Real-Time Voltage and Resistance Features in Microprobe Testing Process. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2015, 5, 274-278.	1.4	10
81	The soft-landing features of a micro-magnetorheological fluid damper. Applied Physics Letters, 2015, 106, .	1.5	44
82	The analysis of heat pipe cooling in high power LED lighting system. , 2015, , .		4
83	High-Frequency and Low-Temperature Thermosonic Bonding of Lead-Free Microsolder Ball on Silver Pad Without Flux. Journal of Electronic Packaging, Transactions of the ASME, 2014, 136, .	1.2	3
84	Dynamic and Electrical Characteristics of Microprobe Testing in Microelectronics Packaging. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2014, 4, 216-222.	1.4	10
85	Hollow spherical rare-earth-doped yttrium oxysulfate: A novel structure for upconversion. Nano Research, 2014, 7, 1093-1102.	5.8	42
86	Study of a dipping method for flip-chip flux coating. Microelectronics Reliability, 2014, 54, 2479-2486.	0.9	6
87	Interfacial Characteristics and Dynamic Process of Au- and Cu-Wire Bonding and Overhang Bonding in Microelectronics Packaging. Journal of Microelectromechanical Systems, 2013, 22, 560-568.	1.7	34
88	Interfacial Microstructures and Thermodynamics of Thermosonic Cu-Wire Bonding. IEEE Electron Device Letters, 2011, 32, 1433-1435.	2.2	78
89	Study on a cooling system based on thermoelectric cooler for thermal management of high-power LEDs. Microelectronics Reliability, 2011, 51, 2210-2215.	0.9	123
90	Investigation of the characteristics of overhang bonding for 3-D stacked dies in microelectronics packaging. Microelectronics Reliability, 2011, 51, 2236-2242.	0.9	6

#	Article	IF	Citations
91	Shortâ€circuit diffusion of ultrasonic bonding interfaces in microelectronic packaging. Surface and Interface Analysis, 2008, 40, 953-957.	0.8	9
92	Power and Interface Features of Thermosonic Flip-Chip Bonding. IEEE Transactions on Advanced Packaging, 2008, 31, 442-446.	1.7	3
93	Theoretical and experimental analyses of atom diffusion characteristics on wire bonding interfaces. Journal Physics D: Applied Physics, 2008, 41, 135303.	1.3	33
94	Atom diffusion mechanism of thermo-sonic flip chip bonding interface. , 2007, , .		2
95	Interface features of ultrasonic flip chip bonding and reflow soldering in microelectronic packaging. Surface and Interface Analysis, 2007, 39, 783-786.	0.8	6
96	Effect of bonding parameters on thermosonic flip chip bonding under pressure constraint pattern. , 2006, , .		0
97	Research on the Mechanical Properties of Magnetorheological Damping and the Performance of Microprobe Test Process. Journal of Electronic Testing: Theory and Applications (JETTA), 0, , 1.	0.9	0