

# Junhui Li

## List of Publications by Year in descending order

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97  
papers

1,944  
citations

304743

22  
h-index

276875

41  
g-index

98  
all docs

98  
docs citations

98  
times ranked

1629  
citing authors

#	ARTICLE	IF	CITATIONS
1	Novel Functionalized BN Nanosheets/Epoxy Composites with Advanced Thermal Conductivity and Mechanical Properties. ACS Applied Materials & Interfaces, 2020, 12, 6503-6515.	8.0	314
2	Metal-Organic Framework Hexagonal Nanoplates: Bottom-up Synthesis, Topotactic Transformation, and Efficient Oxygen Evolution Reaction. Journal of the American Chemical Society, 2020, 142, 7317-7321.	13.7	140
3	Study on a cooling system based on thermoelectric cooler for thermal management of high-power LEDs. Microelectronics Reliability, 2011, 51, 2210-2215.	1.7	123
4	New Applications of an Automated System for High-Power LEDs. IEEE/ASME Transactions on Mechatronics, 2016, 21, 1035-1042.	5.8	93
5	Interfacial Microstructures and Thermodynamics of Thermosonic Cu-Wire Bonding. IEEE Electron Device Letters, 2011, 32, 1433-1435.	3.9	78
6	A molecular dynamics study on thermal and rheological properties of BNNS-epoxy nanocomposites. International Journal of Heat and Mass Transfer, 2018, 126, 353-362.	4.8	58
7	A Novel High-Speed Jet Dispenser Driven by Double Piezoelectric Stacks. IEEE Transactions on Industrial Electronics, 2017, 64, 412-419.	7.9	52
8	An effective and efficient numerical method for thermal management in 3D stacked integrated circuits. Applied Thermal Engineering, 2017, 121, 200-209.	6.0	49
9	Structural Design and Control of a Small-MRF Damper Under 50 N Soft-Landing Applications. IEEE Transactions on Industrial Informatics, 2015, 11, 612-619.	11.3	47
10	The soft-landing features of a micro-magnetorheological fluid damper. Applied Physics Letters, 2015, 106, .	3.3	44
11	Hollow spherical rare-earth-doped yttrium oxysulfate: A novel structure for upconversion. Nano Research, 2014, 7, 1093-1102.	10.4	42
12	Enhanced electric-field-induced strains in (K,Na)NbO <sub>3</sub> piezoelectrics from heterogeneous structures. Materials Today, 2021, 46, 44-53.	14.2	36
13	Effects of dimension parameters and defect on TSV thermal behavior for 3D IC packaging. Microelectronics Reliability, 2017, 70, 97-102.	1.7	35
14	Size-dependent optical-electrical characteristics of blue GaN/InGaN micro-light-emitting diodes. Applied Optics, 2020, 59, 9225.	1.8	35
15	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.	2.5	34
16	Theoretical and experimental analyses of atom diffusion characteristics on wire bonding interfaces. Journal Physics D: Applied Physics, 2008, 41, 135303.	2.8	33
17	Two-dimensional NiSe <sub>2</sub> nanosheets on carbon fiber cloth for high-performance lithium-ion batteries. Journal of Alloys and Compounds, 2020, 821, 153218.	5.5	30
18	Thermal boundary resistance measurement and analysis across SiC/SiO <sub>2</sub> interface. Applied Physics Letters, 2019, 115, .	3.3	28

#	ARTICLE	IF	CITATIONS
19	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.	5.8	27
20	Layered Co/Mn hydroxide nanoflakes grown on carbon cloth as binder-free flexible electrodes for supercapacitors. Journal of Materials Science, 2016, 51, 3784-3792.	3.7	24
21	A piezoelectric jetting dispenser with a pin joint. Optik, 2018, 175, 163-171.	2.9	24
22	Flow Channel Influence of a Collision-Based Piezoelectric Jetting Dispenser on Jet Performance. Sensors, 2018, 18, 1270.	3.8	23
23	Controllable Fabrication and Optical Properties of Uniform Gadolinium Oxysulfate Hollow Spheres. Scientific Reports, 2016, 5, 17934.	3.3	22
24	The Mathematical Model and Novel Final Test System for Wafer-Level Packaging. IEEE Transactions on Industrial Informatics, 2017, 13, 1817-1824.	11.3	21
25	Improved thermal characteristics of a novel magnetostrictive jet dispenser using water-cooling approach. Applied Thermal Engineering, 2017, 112, 1-6.	6.0	21
26	Direct-Acting Piezoelectric Jet Dispenser With Rhombic Mechanical Amplifier. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2018, 8, 910-913.	2.5	21
27	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.	3.7	21
28	Nanohole array structured GaN-based white LEDs with improved modulation bandwidth via plasmon resonance and non-radiative energy transfer. Photonics Research, 2021, 9, 1213.	7.0	21
29	An Electromechanical Model and Simulation for Test Process of the Wafer Probe. IEEE Transactions on Industrial Electronics, 2017, 64, 1284-1291.	7.9	20
30	Enhanced thermal conduction of hybrid filler/polydimethylsiloxane composites via a continuous spatial confining process. Composites Science and Technology, 2022, 226, 109536.	7.8	20
31	A Simplified Analysis Method for the Piezo Jet Dispenser with a Diamond Amplifier. Sensors, 2018, 18, 2115.	3.8	19
32	Study on Dipping Mathematical Models for the Solder Flip-Chip Bonding in Microelectronics Packaging. IEEE Transactions on Industrial Informatics, 2018, 14, 4746-4754.	11.3	18
33	Growth and morphology tuning of ordered nickel nanocones routed by one-step pulse electrodeposition. Applied Surface Science, 2020, 508, 145291.	6.1	18
34	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.	7.0	17
35	Thermal behaviors of nanoparticle reinforced epoxy resins for microelectronics packaging. Microelectronics Reliability, 2019, 93, 39-44.	1.7	16
36	High-performance ultra-low-k fluorine-doped nanoporous organosilica films for inter-layer dielectric. Journal of Materials Science, 2019, 54, 2379-2391.	3.7	16

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37	Composition Tuning of Ultrafine Cobalt-Based Spinel Nanoparticles for Efficient Oxygen Evolution. ACS Sustainable Chemistry and Engineering, 2020, 8, 5534-5543.	6.7	16
38	Dipping Process Characteristics Based on Image Processing of Pictures Captured by High-speed Cameras. Nano-Micro Letters, 2015, 7, 1-11.	27.0	15
39	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.	5.6	15
40	Binder-Free Co <sub>4</sub> N Nanoarray on Carbon Cloth as Flexible High-Performance Anode for Lithium-Ion Batteries. ACS Applied Energy Materials, 2018, 1, 4432-4439.	5.1	13
41	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.	2.5	12
42	Electromechanical characteristics and numerical simulation of a new smaller magnetorheological fluid damper. Mechanics Research Communications, 2018, 92, 81-86.	1.8	12
43	Structure design and optimization of SOI high-temperature pressure sensor chip. Microelectronics Journal, 2021, 118, 105245.	2.0	12
44	Mathematical model of a novel small magnetorheological damper by using outer magnetic field. AIP Advances, 2017, 7, .	1.3	11
45	A Multiparameter Numerical Modeling and Simulation of the Dipping Process in Microelectronics Packaging. IEEE Transactions on Industrial Informatics, 2019, 15, 3808-3820.	11.3	11
46	Dynamic and Electrical Characteristics of Microprobe Testing in Microelectronics Packaging. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2014, 4, 216-222.	2.5	10
47	Real-Time Voltage and Resistance Features in Microprobe Testing Process. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2015, 5, 274-278.	2.5	10
48	Short-circuit diffusion of ultrasonic bonding interfaces in microelectronic packaging. Surface and Interface Analysis, 2008, 40, 953-957.	1.8	9
49	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.	3.3	9
50	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.	4.8	9
51	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.	1.8	8
52	Interface features of ultrasonic flip chip bonding and reflow soldering in microelectronic packaging. Surface and Interface Analysis, 2007, 39, 783-786.	1.8	6
53	Investigation of the characteristics of overhang bonding for 3-D stacked dies in microelectronics packaging. Microelectronics Reliability, 2011, 51, 2236-2242.	1.7	6
54	Study of a dipping method for flip-chip flux coating. Microelectronics Reliability, 2014, 54, 2479-2486.	1.7	6

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55	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.	2.2	6
56	Alternate Restacking of 2D CoNi Hydroxide and Graphene Oxide Nanosheets for Energetic Oxygen Evolution. ChemSusChem, 2019, 12, 5274-5281.	6.8	6
57	Multi-shelled cobalt-nickel oxide/phosphide hollow spheres for an efficient oxygen evolution reaction. Dalton Transactions, 2020, 49, 10918-10927.	3.3	6
58	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.	2.5	6
59	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.	2.5	5
60	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.	2.5	5
61	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.	1.7	5
62	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.	2.2	5
63	The analysis of heat pipe cooling in high power LED lighting system. , 2015, , .		4
64	Investigation on the defect induced thermal mechanical stress for TSV. , 2016, , .		4
65	Automatic alignment and testing system for wafer with ball grid array. Optik, 2016, 127, 4656-4660.	2.9	4
66	Real-Time Electrical Characteristics of Microprobe Testing Process in Microelectronics Packaging. IEEE Transactions on Semiconductor Manufacturing, 2018, 31, 166-172.	1.7	4
67	Electromigration in flip chip with Cu pillar having a shallow Sn-3.5Ag solder interconnect. , 2018, , .		4
68	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.	1.7	4
69	Effects of Kovar-4J29 Cylinder Resonance on Ultrasonic Wire Bonding. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2021, 11, 153-160.	2.5	4
70	Power and Interface Features of Thermosonic Flip-Chip Bonding. IEEE Transactions on Advanced Packaging, 2008, 31, 442-446.	1.6	3
71	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, .	1.8	3
72	Design and Fabrication of Leadless Package Structure for Pressure Sensors. Journal of Electronic Packaging, Transactions of the ASME, 2022, 144, .	1.8	3

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73	Atom diffusion mechanism of thermo-sonic flip chip bonding interface. , 2007, , .		2
74	Improved Image Processing Algorithms for Microprobe Final Test. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2018, , 1-7.	2.5	2
75	Characterization of a Probe Test System With Micro-Magnetorheological Flexible Loading. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2020, 10, 1666-1673.	2.5	2
76	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, .	1.8	2
77	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.	2.5	2
78	Research on Reliability of Ni/Sn/Cu(Ni) Copper Pillar Bump Under Thermoelectric Loading. Journal of Electronic Packaging, Transactions of the ASME, 2022, 144, .	1.8	2
79	System design for anti-interference of smoke in metal liquid level detecting. , 2015, , .		1
80	Investigation on the effect of multiple parameters towards thermal management in 3D Stacked ICs. , 2016, , .		1
81	A novel testing system based on microprobe and machine vision for IC testing. Optik, 2016, 127, 3664-3668.	2.9	1
82	Speed and depth effect of the dipping process for microelectronics packaging. Optik, 2017, 130, 1285-1294.	2.9	1
83	Effect of electromigration and aging on evolution of interfacial intermetallic compounds in Cu-Solder-Cu solder joints. , 2017, , .		1
84	Investigation on the Joule heat and thermal expansion in flip chip package by electro-thermo-mechanical coupling analysis. , 2018, , .		1
85	Kapitza resistance for nanoscale crystalline and amorphous silicon carbide. , 2018, , .		1
86	Temperature prediction approach of piezo stacks used in jet valve. Optik, 2019, 198, 163234.	2.9	1
87	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
88	Full-color micro-LED displays with cadmium-free quantum dots patterned by photolithography technology: retraction. Applied Optics, 2021, 60, 2281.	1.8	1
89	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.	2.5	1
90	Effect of bonding parameters on thermosonic flip chip bonding under pressure constraint pattern. , 2006, , .		0

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91	Analysis of the influence of different parameters on dipping. , 2016, , .		0
92	Study on the law of multiparameter in dipping process. Optik, 2018, 152, 84-91.	2.9	0
93	Sintering Of Hybrid Nano Sliver Paste Achieve Cone-Structured Cu Bonding in die attachment. , 2018, , .		0
94	SiO <sub>2</sub> -coated Cu nanoparticle/epoxy resin composite and its application in the chip packaging field. High Performance Polymers, 2019, 31, 417-424.	1.8	0
95	Electromechanical Performance of Microprobe Test With Cuboid Magnetorheological Damper in Microelectronic Packaging. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2022, 12, 723-730.	2.5	0
96	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.	1.2	0
97	Opticalâ€electrical characteristic of green based on GaN micro-LED arrays. Applied Optics, 2022, 61, 5666.	1.8	0