

# Su Ding

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/4036847/su-ding-publications-by-year.pdf>

**Version:** 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

101  
papers

1,247  
citations

19  
h-index

31  
g-index

149  
ext. papers

1,670  
ext. citations

5  
avg, IF

4.9  
L-index

#	Paper	IF	Citations
101	Recent Developments in the Electrochemical Determination of Sulfonamides. <i>Current Pharmaceutical Analysis</i> , <b>2022</b> , 18, 4-13	0.6	2
100	Evolution of Wafer Bonding Technology and Applications from Wafer-Level Packaging to Micro/Nanofluidics-Enhanced Sensing <b>2022</b> , 187-215		
99	Relationship between dynamic resistance and welding quality during resistance spot welding for micron AuNi9 wire. <i>International Journal of Advanced Manufacturing Technology</i> , <b>2022</b> , 120, 6605	3.2	
98	Silver flake/polyaniline composite ink for electrohydrodynamic printing of flexible heaters. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2021</b> , 32, 27373	2.1	4
97	Highly stretchable conductors comprising composites of silver nanowires and silver flakes. <i>Journal of Nanoparticle Research</i> , <b>2021</b> , 23, 1	2.3	4
96	Highly stable and printable Ag NWs/GO/PVP composite ink for flexible electronics. <i>Flexible and Printed Electronics</i> , <b>2021</b> , 6, 024002	3.1	2
95	Ratcheting Behavior of Sintered Copper Joints for Electronic Packaging. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2021</b> , 11, 983-989	1.7	
94	Ultrafast Parallel Micro-Gap Resistance Welding of an AuNi Microwire and Au Microlayer. <i>Micromachines</i> , <b>2021</b> , 12,	3.3	2
93	Joining of copper nanowires by electrodepositing silver layer for high-performance transparent electrode. <i>Welding in the World, Le Soudage Dans Le Monde</i> , <b>2021</b> , 65, 1021-1030	1.9	3
92	Comparative study between the SnAgCu/ENIG and SnAgCu/ENEPIG solder joints under extreme temperature thermal shock. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2021</b> , 32, 6890-6899	2.1	3
91	Low-Temperature Co-hydroxylated Cu/SiO Hybrid Bonding Strategy for a Memory-Centric Chip Architecture. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 38866-38876	9.5	6
90	Robust Cu-Au alloy nanowires flexible transparent electrode for asymmetric electrochromic energy storage device. <i>Chemical Engineering Journal</i> , <b>2021</b> , 426, 131438	14.7	5
89	High-Performance Magnesium-Carbon Nanofiber Hygroelectric Generator Based on Interface-Mediation-Enhanced Capacitive Discharging Effect. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 24289-24297	9.5	11
88	Recording the Electrochemical Profile of Pueraria Leaves for Polyphyly Analysis. <i>ChemistrySelect</i> , <b>2020</b> , 5, 5035-5040	1.8	16
87	Intrinsically Stretchable, Transient Conductors from a Composite Material of Ag Flakes and Gelatin Hydrogel. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 27572-27577	9.5	13
86	Morphological evolution of atomically thin MoS2 flakes synthesized by a chemical vapor deposition strategy. <i>CrystEngComm</i> , <b>2020</b> , 22, 4174-4179	3.3	3
85	Rapid pressureless and low-temperature bonding of large-area power chips by sintering two-step activated Ag paste. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2020</b> , 31, 6497-6505	2.1	5

84	In Situ Probing the Localized Optoelectronic Properties of Defective Monolayer WS <sub>2</sub> . <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 7591-7596	3.8	3
83	Electrodeposition fabrication of Cu@Ni core shell nanowire network for highly stable transparent conductive films. <i>Chemical Engineering Journal</i> , <b>2020</b> , 390, 124495	14.7	17
82	Progress in wafer bonding technology towards MEMS, high-power electronics, optoelectronics, and optofluidics. <i>International Journal of Optomechatronics</i> , <b>2020</b> , 14, 94-118	3.5	10
81	Optical performance and growth mechanism of a 2D WS <sub>2</sub> /MoS <sub>2</sub> hybrid heterostructure fabricated by a one-step CVD strategy. <i>CrystEngComm</i> , <b>2020</b> , 22, 660-665	3.3	6
80	The fabrication and tunable optical properties of 2D transition metal dichalcogenides heterostructures by adjusting the thickness of Mo/W films. <i>Applied Surface Science</i> , <b>2020</b> , 505, 144192	6.7	12
79	Stoichiometry-Modulated Resonant Raman Spectroscopy of WS <sub>2</sub> (1-x)Se <sub>2x</sub> -Alloyed Monolayer Nanosheets. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 20547-20554	3.8	
78	Highly conductive and transient tracks based on silver flakes and a polyvinyl pyrrolidone composite.. <i>RSC Advances</i> , <b>2020</b> , 10, 33112-33118	3.7	1
77	Nanometer-Scale Heterogeneous Interfacial Sapphire Wafer Bonding for Enabling Plasmonic-Enhanced Nanofluidic Mid-Infrared Spectroscopy. <i>ACS Nano</i> , <b>2020</b> , 14, 12159-12172	16.7	22
76	High-efficiency extraction synthesis for high-purity copper nanowires and their applications in flexible transparent electrodes. <i>Nano Materials Science</i> , <b>2020</b> , 2, 164-171	10.2	13
75	Highly stable flexible transparent electrode via rapid electrodeposition coating of Ag-Au alloy on copper nanowires for bifunctional electrochromic and supercapacitor device. <i>Chemical Engineering Journal</i> , <b>2020</b> , 399, 125075	14.7	24
74	Recent progress of solution-processed Cu nanowires transparent electrodes and their applications.. <i>RSC Advances</i> , <b>2019</b> , 9, 26961-26980	3.7	7
73	Direct Heterogeneous Bonding of SiC to Si, SiO <sub>2</sub> , and Glass for High-Performance Power Electronics and Bio-MEMS <b>2019</b> ,		2
72	Fabrication of high performance printed flexible conductors by doping of polyaniline nanomaterials into silver paste. <i>Journal of Materials Chemistry C</i> , <b>2019</b> , 7, 1188-1197	7.1	23
71	Atypical Defect-Mediated Photoluminescence and Resonance Raman Spectroscopy of Monolayer WS <sub>2</sub> . <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 3900-3907	3.8	24
70	Growth and optical properties of large-scale MoS <sub>2</sub> films with different thickness. <i>Ceramics International</i> , <b>2019</b> , 45, 15091-15096	5.1	12
69	SAC305 Solder Reflow: Identification of Melting and Solidification Using In-Process Resistance Monitoring. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2019</b> , 9, 1623-1631	1.7	2
68	Laser sintering mechanism and shear performance of Cu/Ag/Cu joints with mixed bimodal size Ag nanoparticles. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2019</b> , 30, 7787-7793	2.1	3
67	TiO <sub>2</sub> -Coated Core/Shell Ag Nanowire Networks for Robust and Washable Flexible Transparent Electrodes. <i>ACS Applied Nano Materials</i> , <b>2019</b> , 2, 2456-2466	5.6	15

66	One-Step Fabrication of Copper Nanopillar Array-Filled AAO Films by Pulse Electrodeposition for Anisotropic Thermal Conductive Interconnectors. <i>ACS Omega</i> , <b>2019</b> , 4, 6092-6096	3.9	8
65	Chemical and thermal robust tri-layer rGO/Ag NWs/GO composite film for wearable heaters. <i>Composites Science and Technology</i> , <b>2019</b> , 174, 76-83	8.6	21
64	VUV/O <sub>3</sub> activated direct heterogeneous bonding towards high-performance LiNbO <sub>3</sub> -based optical devices. <i>Applied Surface Science</i> , <b>2019</b> , 495, 143576	6.7	4
63	Highly Stretchable Metallic Nanowire Networks Reinforced by the Underlying Randomly Distributed Elastic Polymer Nanofibers via Interfacial Adhesion Improvement. <i>Advanced Materials</i> , <b>2019</b> , 31, e1903446	24	56
62	Fabrication of Novel Printable Electrically Conductive Adhesives (ECAs) with Excellent Conductivity and Stability Enhanced by the Addition of Polyaniline Nanoparticles. <i>Nanomaterials</i> , <b>2019</b> , 9,	5.4	15
61	Flexible Electronics: Highly Stretchable Metallic Nanowire Networks Reinforced by the Underlying Randomly Distributed Elastic Polymer Nanofibers via Interfacial Adhesion Improvement (Adv. Mater. 37/2019). <i>Advanced Materials</i> , <b>2019</b> , 31, 1970265	24	3
60	Fast failure of highly conductive transient track using silver nanowire/PEDOT:PSS composite. <i>Materials Research Express</i> , <b>2019</b> , 6, 1150e4	1.7	
59	Position-Selective Growth of 2D WS <sub>2</sub> -Based Vertical Heterostructures via a One-Step CVD Approach. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 30519-30527	3.8	16
58	Easily Synthesized Polyaniline@Cellulose Nanowhiskers Better Tune Network Structures in Ag-Based Adhesives: Examining the Improvements in Conductivity, Stability, and Flexibility. <i>Nanomaterials</i> , <b>2019</b> , 9,	5.4	6
57	Fabrication of SiC/Si, SiC/SiO <sub>2</sub> , and SiC/glass heterostructures via VUV/O <sub>3</sub> activated direct bonding at low temperature. <i>Ceramics International</i> , <b>2019</b> , 45, 4094-4098	5.1	18
56	The synthesis and tunable optical properties of two-dimensional alloyed Mo <sub>1</sub> -W S <sub>2</sub> monolayer with in-plane composition modulations (0001). <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 784, 213-219	5.7	12
55	A facile method for direct bonding of single-crystalline SiC to Si, SiO <sub>2</sub> , and glass using VUV irradiation. <i>Applied Surface Science</i> , <b>2019</b> , 471, 196-204	6.7	16
54	Direct Homo/Heterogeneous Bonding of Silicon and Glass Using Vacuum Ultraviolet Irradiation in Air. <i>Journal of the Electrochemical Society</i> , <b>2018</b> , 165, H3093-H3098	3.9	18
53	Growth kinetics of CuSn intermetallic compound in Cu-liquid Sn interfacial reaction enhanced by electric current. <i>Scientific Reports</i> , <b>2018</b> , 8, 1775	4.9	18
52	Highly conductive and transparent copper nanowire electrodes on surface coated flexible and heat-sensitive substrates.. <i>RSC Advances</i> , <b>2018</b> , 8, 2109-2115	3.7	13
51	Cohesively enhanced electrical conductivity and thermal stability of silver nanowire networks by nickel ion bridge joining. <i>Scientific Reports</i> , <b>2018</b> , 8, 5260	4.9	20
50	Robust tuning of Kirkendall void density in circuit interconnections through substrate strain annealing. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2018</b> , 29, 8287-8292	2.1	
49	Mechanisms for low-temperature direct bonding of Si/Si and quartz/quartz VUV/O activation.. <i>RSC Advances</i> , <b>2018</b> , 8, 11528-11535	3.7	33

48	Electroplating Enhanced Silver Nanowire Networks for Transparent Heaters <b>2018</b> ,		1
47	Influence of Interfacial Intermetallic Growth on the Mechanical Properties of Sn-37Pb Solder Joints under Extreme Temperature Thermal Shock. <i>Applied Sciences (Switzerland)</i> , <b>2018</b> , 8, 2056	2.6	5
46	VUV/O3 activated bonder for low-temperature direct bonding of Si-based materials <b>2018</b> ,		1
45	A Solution Processed Flexible Nanocomposite Substrate with Efficient Light Extraction via Periodic Wrinkles for White Organic Light-Emitting Diodes. <i>Advanced Optical Materials</i> , <b>2018</b> , 6, 1801015	8.1	19
44	CommunicationDefect-Free Direct Bonding for High-Performance Glass-On-LiNbO3 Devices. <i>Journal of the Electrochemical Society</i> , <b>2018</b> , 165, B727-B729	3.9	7
43	Recent Progress in Rapid Sintering of Nanosilver for Electronics Applications. <i>Micromachines</i> , <b>2018</b> , 9,	3.3	15
42	Facile fabrication of highly conductive tracks using long silver nanowires and graphene composite.. <i>RSC Advances</i> , <b>2018</b> , 8, 17739-17746	3.7	10
41	Direct bonding of silicon and quartz glass using VUV/O3 activation and a multistep low-temperature annealing process. <i>Applied Surface Science</i> , <b>2018</b> , 453, 416-422	6.7	21
40	Electrospun nanofibers and spin coated films prepared from side-chain copolymers with chemically bounded platinum (II) porphyrin moieties for oxygen sensing and pressure sensitive paints. <i>Talanta</i> , <b>2018</b> , 188, 124-134	6.2	9
39	Room-temperature direct bonding of silicon and quartz glass wafers. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 221602	3.4	22
38	Enhanced shear strength of CuSn intermetallic interconnects with interlocking dendrites under fluxless electric current-assisted bonding process. <i>Journal of Materials Science</i> , <b>2017</b> , 52, 1943-1954	4.3	17
37	Synthesis of polypyrrole nanoparticles and their applications in electrically conductive adhesives for improving conductivity. <i>RSC Advances</i> , <b>2017</b> , 7, 53219-53225	3.7	23
36	Mechanisms for Room-Temperature Fluorine Containing Plasma Activated Bonding. <i>ECS Journal of Solid State Science and Technology</i> , <b>2017</b> , 6, P373-P378	2	15
35	Study on preparation and rapid laser sintering process of nano silver pastes <b>2017</b> ,		1
34	Facile synthesis of CuAg hybrid nanowires with strong surface-enhanced Raman scattering sensitivity. <i>CrystEngComm</i> , <b>2016</b> , 18, 1200-1206	3.3	15
33	Facile fabrication of stretchable Ag nanowire/polyurethane electrodes using high intensity pulsed light. <i>Nano Research</i> , <b>2016</b> , 9, 401-414	10	113
32	One-Step Fabrication of Stretchable Copper Nanowire Conductors by a Fast Photonic Sintering Technique and Its Application in Wearable Devices. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 6190-6195	9.5	117
31	Sn3.0Ag0.5Cu nanocomposite solders reinforced by graphene nanosheets. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2016</b> , 27, 6809-6815	2.1	21

30	Interconnection of Cu wire/Au plating pads using parallel gap resistance microwelding process <b>2016</b> ,		1
29	Degradation behaviors of micro ball grid array (BGA) solder joints under the coupled effects of electromigration and thermal stress. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2016</b> , 27, 11583-11592		7
28	Sintering mechanism of the Cu <sub>3</sub> Ag core-shell nanoparticle paste at low temperature in ambient air. <i>RSC Advances</i> , <b>2016</b> , 6, 91783-91790	3.7	31
27	Electromigration-induced intermetallic growth and voids formation in symmetrical Cu/Sn/Cu and Cu/Intermetallic compounds (IMCs)/Cu joints. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2015</b> , 26, 2674-2681	2.1	19
26	Fast fabrication of copper nanowire transparent electrodes by a high intensity pulsed light sintering technique in air. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 31110-6	3.6	47
25	Rapid formation of full Cu-In intermetallic compounds (IMCs) joints under electric current <b>2015</b> ,		1
24	Joining of Silver Nanowires by Femtosecond Laser Irradiation Method. <i>Materials Transactions</i> , <b>2015</b> , 56, 981-983	1.3	8
23	Phase transformation and fracture behavior of Cu/In/Cu joints formed by solid-liquid interdiffusion bonding. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2014</b> , 25, 4170-4178	2.1	18
22	Fatigue life prediction for CBGA under random vibration loading by finite element method <b>2014</b> ,		1
21	Rapid formation of Cu-Sn intermetallic compounds by strong electric current <b>2014</b> ,		1
20	Phase transformation and grain orientation of Cu <sub>3</sub> Sn intermetallic compounds during low temperature bonding process. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2013</b> , 24, 3905-3913	2.1	42
19	Shearing properties of low temperature Cu-In Solid-Liquid Interdiffusion in 3D package <b>2013</b> ,		2
18	Formation of AuSn <sub>x</sub> IMCs in Sn <sub>3.5</sub> Ag <sub>0.75</sub> Cu micro-solder joints fabricated by laser and hot air reflow processes. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2013</b> , 24, 217-223	2.1	4
17	Surface-Tension-Driven Self-Assembly of 3-D Microcomponents by Using Laser Reflow Soldering and Wire Limiting Mechanisms. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , <b>2013</b> , 3, 168-176	1.7	5
16	Effect of intermetallic compounds on fracture behaviors of Sn <sub>3.0</sub> Ag <sub>0.5</sub> Cu lead-free solder joints during in situ tensile test. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2012</b> , 23, 136-147	2.1	16
15	Mechanism of low temperature Cu-In Solid-Liquid Interdiffusion bonding in 3D package <b>2012</b> ,		7
14	Effect of grain orientation on electromigration degradation in lead-free solder joints <b>2012</b> ,		1
13	Development of a three-dimensional integrated solder ball bumping & bonding method for MEMS devices <b>2011</b> ,		2

12	Analysis of Cu <sub>6</sub> Sn <sub>5</sub> grain orientations in Sn <sub>3.0</sub> Ag <sub>0.5</sub> Cu lead-free solder joints <b>2011</b> ,		1
11	Ultrasonic bondability and antioxidation property of Ti/Cu/Ag metallization on Si substrate <b>2010</b> ,		1
10	Modeling of an oblique impact of solder droplet onto a groove with the impact point to be offset from the groove surfaces interface. <i>Journal of Materials Science</i> , <b>2009</b> , 44, 1772-1779	4.3	1
9	Modeling thermal fatigue in anisotropic Sn-Ag-Cu/Cu solder joints <b>2009</b> ,		3
8	Determination of the Elastic Properties of Cu <sub>3</sub> Sn Through First-Principles Calculations. <i>Journal of Electronic Materials</i> , <b>2008</b> , 37, 477-482	1.9	22
7	Determination of the Elastic Properties of Au <sub>5</sub> Sn and AuSn from Ab Initio Calculations. <i>Journal of Electronic Materials</i> , <b>2008</b> , 37, 968-974	1.9	10
6	Evolution of Cu/Al Intermetallic Compounds in the Copper Bump bonds during Aging Process <b>2007</b> ,		4
5	In-situ observation on microfracture behavior ahead of the crack tip in 63Sn37Pb solder alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2006</b> , 37, 1017-1025 <sup>2,3</sup>		3
4	In-Situ observation on microfracture behavior ahead of the crack tip in 63Sn37Pb solder alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2006</b> , 37, 1017-1025 <sup>2,3</sup>		
3	Evolution of intermetallic compounds at interface between PBGA solder ball and pads during laser reflow soldering		1
2	Thermalmechanical behavior of PBGA package during laser and hot air reflow soldering		1
1	Hybrid Plasma Activation Strategy for the Protein-Coated Magnesium Implants in Orthopedic Applications. <i>Advanced Materials Interfaces</i> , 2101724	4.6	1