

Kim Shyong Siow

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8387501/publications.pdf>

Version: 2024-02-01

69
papers

2,663
citations

394286

19
h-index

206029

48
g-index

72
all docs

72
docs citations

72
times ranked

2710
citing authors

#	ARTICLE	IF	CITATIONS
1	Improvement of Bondability by Addition of Carboxylic Acid to the Sinter-Bonding Paste Containing Bimodal-Sized Cu Particles and Rapid Bonding in Air. <i>Metals and Materials International</i> , 2023, 29, 457-466.	1.8	3
2	Pulsed plasma polymerisation of carvone: characterisations and antibacterial properties. <i>Surface Innovations</i> , 2023, 11, 339-351.	1.4	7
3	Effects of Oxygen (O ₂) Plasma Treatment in Promoting the Germination and Growth of Chili. <i>Plasma Chemistry and Plasma Processing</i> , 2022, 42, 91-108.	1.1	17
4	Constitutive, creep, and fatigue behavior of sintered Ag for finite element simulation of mechanical reliability: a critical review. <i>Journal of Materials Science: Materials in Electronics</i> , 2022, 33, 2293-2309.	1.1	10
5	Germination and growth improvement of papaya utilizing oxygen (O ₂) plasma treatment. <i>Journal Physics D: Applied Physics</i> , 2022, 55, 255205.	1.3	8
6	Tunable Coefficient of Thermal Expansion of Composite Materials for Thin-Film Coatings. <i>Coatings</i> , 2022, 12, 836.	1.2	1
7	Nitrogen incorporation by plasma polymerization of heptylamine on PES membrane for removal of anionic dye (Congo red). <i>International Journal of Environmental Science and Technology</i> , 2021, 18, 1443-1452.	1.8	7
8	Effect of H ₂ O-Based Low-Pressure Plasma (LPP) Treatment on the Germination of Bambara Groundnut Seeds. <i>Agronomy</i> , 2021, 11, 338.	1.3	15
9	Comparing the mechanical and thermal-electrical properties of sintered copper (Cu) and sintered silver (Ag) joints. <i>Journal of Alloys and Compounds</i> , 2021, 866, 158783.	2.8	88
10	Ratcheting Behavior of Sintered Copper Joints for Electronic Packaging. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2021, 11, 983-989.	1.4	0
11	3-D Finite Element Modeling of Nanoindentation on Sn-3.5Ag Lead-Free Solder. , 2021, , .		0
12	Sulfur and nitrogen containing plasma polymers reduces bacterial attachment and growth. <i>Materials Science and Engineering C</i> , 2020, 107, 110225.	3.8	9
13	Thermal Ageing Studies of Sintered Micron-Silver (Ag) Joint as a Lead-Free Bonding Material. <i>Metals and Materials International</i> , 2020, 26, 1404-1414.	1.8	7
14	Public benefit and risk perceptions of nanotechnology development: Psychological and sociological aspects. <i>Technology in Society</i> , 2020, 62, 101329.	4.8	15
15	Experimental Demonstration of a Multichannel Elastic Wave Filter in a Phononic Crystal Slab. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 4594.	1.3	18
16	Understanding Public Benefit and Risk Perceptions Through Psychological and Sociological Aspects for Sustainable Nanotechnology Development in Malaysia. <i>Advances in Science, Technology and Innovation</i> , 2020, , 1-22.	0.2	0
17	Psychological and sociological perspectives for good governance of sustainable nanotechnology development in Malaysia. <i>Journal of Nanoparticle Research</i> , 2019, 21, 1.	0.8	5
18	Reliability and Failure Mechanisms of Sintered Silver as Die Attach Joint. , 2019, , 125-150.		3

#	ARTICLE	IF	CITATIONS
19	Process Control of Sintered Ag Joint in Production for Die Attach Applications. , 2019, , 67-105.		3
20	Doctrine of Equivalents and Sintered Silver (Ag) Paste as Bonding Materials. , 2019, , 165-180.		2
21	Finite element modeling of nano porous sintered silver material using computed tomography images. Materialwissenschaft Und Werkstofftechnik, 2019, 50, 533-538.	0.5	3
22	Stress analysis of nano porous material using computed tomography images. Materialwissenschaft Und Werkstofftechnik, 2019, 50, 234-239.	0.5	4
23	Thermal Cycling of Sintered Silver (Ag) Joint as Die-Attach Material. Jom, 2019, 71, 3066-3075.	0.9	21
24	Influence of sintering environment on silver sintered on copper substrate. Journal of Materials Science: Materials in Electronics, 2019, 30, 6212-6223.	1.1	15
25	QCM-D and XPS study of protein adsorption on plasma polymers with sulfonate and phosphonate surface groups. Colloids and Surfaces B: Biointerfaces, 2019, 173, 447-453.	2.5	43
26	Rapid sintering of nano-Ag paste at low current to bond large area ($>100\text{â€}^2$) power chips for electronics packaging. Journal of Materials Processing Technology, 2018, 255, 644-649.	3.1	41
27	Stress analysis of perforated graphene nano-electro-mechanical (NEM) contact switches by 3D finite element simulation. Microsystem Technologies, 2018, 24, 1179-1187.	1.2	8
28	Characterization of Permittivity and Conductivity for ESKAPE Pathogens Detection. , 2018, , .		1
29	Interfacial TEM Analysis of Sintered Silver in Air and N ₂ /H ₂ Gases Environment. , 2018, , .		0
30	Voltage Characterization on Dielectrophoretic Force Response to Hematologic Cell Manipulation. , 2018, , .		3
31	Low pressure plasma modifications for the generation of hydrophobic coatings for biomaterials applications. Plasma Processes and Polymers, 2018, 15, 1800059.	1.6	21
32	XPS Study of Sulfur and Phosphorus Compounds with Different Oxidation States. Sains Malaysiana, 2018, 47, 1913-1922.	0.3	94
33	Peranti Suis Sistem Nanoelektromekanikal (NEMS) Berunsurkan Grafir dan Tiub Nano Karbon (CNT). Sains Malaysiana, 2018, 47, 619-633.	0.3	0
34	Roles of palladium particles in enhancing the electrochemical migration resistance of sintered nano-silver paste as a bonding material. Materials Letters, 2017, 206, 1-4.	1.3	12
35	Enhancing the biocompatibility of the polyurethane methacrylate and off-stoichiometry thiol-ene polymers by argon and nitrogen plasma treatment. Materials Science and Engineering C, 2017, 79, 613-621.	3.8	21
36	High-temperature Pb-free die attach material project phase 1: Survey result. , 2017, , .		5

#	ARTICLE	IF	CITATIONS
37	Plasma Polymers Containing Sulfur and Their Co-polymers With 1,7-Octadiene: Chemical and Structural Analysis. Plasma Processes and Polymers, 2017, 14, 1600044.	1.6	7
38	Three-Dimensional Finite Element Method Simulation of Perforated Graphene Nano-Electro-Mechanical (NEM) Switches. Micromachines, 2017, 8, 236.	1.4	15
39	Pengelupasan Grafit untuk Mengkomersilkan Teknologi Grafin. Sains Malaysiana, 2017, 46, 1047-1059.	0.3	3
40	Guiding and confinement of interface acoustic waves in solid-fluid pillar-based phononic crystals. AIP Advances, 2016, 6, 121703.	0.6	7
41	Patent landscape and market segments of sintered silver as die attach materials in microelectronic packaging. , 2016, , .		1
42	Identifying the Development State of Sintered Silver (Ag) as a Bonding Material in the Microelectronic Packaging Via a Patent Landscape Study. Journal of Electronic Packaging, Transactions of the ASME, 2016, 138, .	1.2	108
43	Solid-fluid interaction in a pillar-based phononic crystal. , 2016, , .		0
44	Optimization of beam length and air gap of suspended graphene NEMS switch for low pull-in voltage application. , 2016, , .		2
45	Plasma polymerized carvone as an antibacterial and biocompatible coating. Materials Science and Engineering C, 2016, 68, 861-871.	3.8	40
46	Microstructural studies and bonding strength of pressureless sintered nano-silver joints on silver, direct bond copper (DBC) and copper substrates aged at 300°C. Journal of Alloys and Compounds, 2016, 687, 486-498.	2.8	147
47	Ageing properties of polyurethane methacrylate and off-stoichiometry thiol-ene polymers after nitrogen and argon plasma treatment. Journal of Applied Polymer Science, 2016, 133, .	1.3	15
48	Characterization of silicone gel properties for high power IGBT modules and MEMS. , 2015, , .		11
49	TRIZ technique to produce stable plasma modified surfaces with high density of reactive chemical functionalities. , 2015, , .		1
50	Electrical conductivity of porous silver made from sintered nanoparticles. Electronic Materials Letters, 2015, 11, 308-314.	1.0	26
51	Low-Pressure Plasma Methods for Generating Non-Reactive Hydrophilic and Hydrogel-Like Bio-Interface Coatings – A Review. Plasma Processes and Polymers, 2015, 12, 8-24.	1.6	56
52	Setting up an intellectual properties intermediary service: DMAIC way. , 2014, , .		0
53	Effect of sintering atmosphere on the shear properties of pressureless sintered silver joint. , 2014, , .		4
54	Deposition and XPS and FTIR Analysis of Plasma Polymer Coatings Containing Phosphorus. Plasma Processes and Polymers, 2014, 11, 133-141.	1.6	45

#	ARTICLE	IF	CITATIONS
55	Are Sintered Silver Joints Ready for Use as Interconnect Material in Microelectronic Packaging?. Journal of Electronic Materials, 2014, 43, 947-961.	1.0	249
56	Synthesizing SnAgCu nanoparticles by electrodeposition of reverse microemulsion electrolyte. , 2014, , .		0
57	Sintered silver (Ag) as lead-free die attach materials. , 2012, , .		2
58	Mechanical properties of nano-silver joints as die attach materials. Journal of Alloys and Compounds, 2012, 514, 6-19.	2.8	335
59	Sulfonated Surfaces by Sulfur Dioxide Plasma Surface Treatment of Plasma Polymer Films. Plasma Processes and Polymers, 2009, 6, 583-592.	1.6	50
60	Plasma Methods for the Generation of Chemically Reactive Surfaces for Biomolecule Immobilization and Cell Colonization - A Review. Plasma Processes and Polymers, 2006, 3, 392-418.	1.6	887
61	Characterization of sulfate and phosphate containing plasma polymer surfaces. , 2006, , .		2
62	Mixed mode fracture toughness of lead-tin and tin-silver solder joints with nickel-plated substrate. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 404, 244-250.	2.6	22
63	A STUDY ON MICROSTRUCTURAL AND MECHANICAL PROPERTIES OF NANOCRYSTALLINE NICKEL. International Journal of Nanoscience, 2005, 04, 615-622.	0.4	1
64	Mechanical properties of nanocrystalline copper and nickel. Materials Science and Technology, 2004, 20, 285-294.	0.8	62
65	Correlation between intermetallic thickness and roughness during solder reflow. Journal of Electronic Materials, 2001, 30, 997-1000.	1.0	14
66	Pitting corrosion of duplex stainless steels. Anti-Corrosion Methods and Materials, 2001, 48, 31-37.	0.6	33
67	Fracture of a Lead-Tin and a Tin-Silver Solder Under Combined Tensile Shear Loading. Materials Research Society Symposia Proceedings, 1999, 563, 15.	0.1	1
68	On the Shear Strength and Mixed-mode Fracture Toughness of a Lead-Tin and a Tin-Silver Solder. Materials Research Society Symposia Proceedings, 1998, 515, 111.	0.1	2
69	The Hydrophilization and Subsequent Hydrophobic Recovery Mechanism of Cold Plasma (CP) Treated Bambara Groundnuts. Materials Science Forum, 0, 1055, 161-169.	0.3	4