

Thomas Brunschwiler

List of Publications by Year in descending order

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33
papers

970
citations

516710

16
h-index

477307

29
g-index

35
all docs

35
docs citations

35
times ranked

747
citing authors

#	ARTICLE	IF	CITATIONS
1	Energy efficient hotspot-targeted embedded liquid cooling of electronics. Applied Energy, 2015, 138, 414-422.	10.1	157
2	Interlayer cooling potential in vertically integrated packages. Microsystem Technologies, 2009, 15, 57-74.	2.0	154
3	A novel method of energy efficient hotspot-targeted embedded liquid cooling for electronics: An experimental study. International Journal of Heat and Mass Transfer, 2015, 88, 684-694.	4.8	91
4	Microvortex-enhanced heat transfer in 3D-integrated liquid cooling of electronic chip stacks. International Journal of Heat and Mass Transfer, 2013, 65, 33-43.	4.8	62
5	3D Integrated Water Cooling of a Composite Multilayer Stack of Chips. Journal of Heat Transfer, 2010, 132, .	2.1	54
6	Study of non-isothermal liquid evaporation in synthetic micro-pore structures with hybrid lattice Boltzmann model. Journal of Fluid Mechanics, 2019, 866, 33-60.	3.4	53
7	Experimental investigation into vortex structure and pressure drop across microcavities in 3D integrated electronics. Experiments in Fluids, 2011, 51, 731-741.	2.4	51
8	Nocturnal Cough and Snore Detection in Noisy Environments Using Smartphone-Microphones. , 2019, , .		39
9	Computational modeling of vortex shedding in water cooling of 3D integrated electronics. International Journal of Heat and Fluid Flow, 2013, 44, 745-755.	2.4	27
10	Nanoparticle assembly and sintering towards all-copper flip chip interconnects. , 2015, , .		25
11	IoT-Based Home Monitoring: Supporting Practitionersâ€™ Assessment by Behavioral Analysis. Sensors, 2019, 19, 3238.	3.8	23
12	Controlled 3D nanoparticle deposition by drying of colloidal suspension in designed thin micro-porous architectures. International Journal of Heat and Mass Transfer, 2020, 158, 120000.	4.8	23
13	An Unsupervised Behavioral Modeling and Alerting System Based on Passive Sensing for Elderly Care. Future Internet, 2021, 13, 6.	3.8	21
14	Formulation of Percolating Thermal Underfills Using Hierarchical Self-Assembly of Microparticles and Nanoparticles by Centrifugal Forces and Capillary Bridging. Journal of Microelectronics and Electronic Packaging, 2012, 9, 149-159.	0.7	21
15	Vortex shedding from confined micropin arrays. Microfluidics and Nanofluidics, 2013, 15, 231-242.	2.2	19
16	Oxide-Free Copper Pastes for the Attachment of Large-Area Power Devices. Journal of Electronic Materials, 2019, 48, 6823-6834.	2.2	19
17	On the significance of developing boundary layers in integrated water cooled 3D chip stacks. International Journal of Heat and Mass Transfer, 2012, 55, 5222-5232.	4.8	17
18	Low-Temperature Dip-Based All-Copper Interconnects Formed by Pressure-Assisted Sintering of Copper Nanoparticles. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 1613-1622.	2.5	16

#	ARTICLE	IF	CITATIONS
19	All-Copper Flip Chip Interconnects by Pressureless and Low Temperature Nanoparticle Sintering. , 2016, , .		15
20	Steady-state low thermal resistance characterization apparatus: The bulk thermal tester. Review of Scientific Instruments, 2015, 86, 124903.	1.3	13
21	Review on Percolating and Neck-Based Underfills for Three-Dimensional Chip Stacks. Journal of Electronic Packaging, Transactions of the ASME, 2016, 138, .	1.8	13
22	Computational Modeling of Hot-Spot Identification and Control in 3-D Stacked Chips with Integrated Cooling. Numerical Heat Transfer; Part A: Applications, 2014, 65, 201-215.	2.1	12
23	Enhanced Percolating Thermal Underfills Achieved by Means of Nanoparticle Bridging Necks. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2016, 6, 1785-1795.	2.5	8
24	Enhanced Electrical and Thermal Interconnects by the Self-Assembly of Nanoparticle Necks Utilizing Capillary Bridging. Journal of Electronic Packaging, Transactions of the ASME, 2014, 136, .	1.8	6
25	A Telemonitoring and Hybrid Virtual Coaching Solution â€œCAirâ€•for Patients with Chronic Obstructive Pulmonary Disease: Protocol for a Randomized Controlled Trial. JMIR Research Protocols, 2020, 9, e20412.	1.0	6
26	Electrical and Thermal Characterization of an Inductor-Based ANPC-Type Buck Converter in 14 nm CMOS Technology for Microprocessor Applications. IEEE Open Journal of Power Electronics, 2020, 1, 456-468.	5.7	5
27	In Situ Assembly in Confined Spaces of Coated Particle Scaffolds as Thermal Underfills with Extraordinary Thermal Conductivity. ACS Applied Materials & Interfaces, 2015, 7, 838-844.	8.0	4
28	Thermally Conductive Composite Material With Percolating Microparticles Applied as Underfill. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2018, 8, 840-850.	2.5	4
29	Three influential factors on colloidal nanoparticle deposition for heat conduction enhancement in 3D chip stacks. Applied Thermal Engineering, 2021, 187, 116585.	6.0	4
30	Multisensory Home-Monitoring in Individuals With Stable Chronic Obstructive Pulmonary Disease and Asthma: Usability Study of the CAir-Desk. JMIR Human Factors, 2022, 9, e31448.	2.0	4
31	On the Evaporation of Colloidal Suspensions in Confined Pillar Arrays. Transport in Porous Media, 2018, 125, 173-192.	2.6	3
32	Experimental Efficiency Evaluation of Stacked Transistor Half-Bridge Topologies in 14 nm CMOS Technology. Electronics (Switzerland), 2021, 10, 1150.	3.1	1
33	Privacy preserving synthetic respiratory sounds for class incremental learning. Smart Health, 2022, 23, 100232.	3.2	0