

# Naoya Watanabe

## List of Publications by Year in descending order

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docs citations

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times ranked

179  
citing authors

#	ARTICLE	IF	CITATIONS
1	3-D CMOS Chip Stacking for Security ICs Featuring Backside Buried Metal Power Delivery Networks With Distributed Capacitance. IEEE Transactions on Electron Devices, 2021, 68, 2077-2082.	3.0	14
2	Si-Backside Protection Circuits Against Physical Security Attacks on Flip-Chip Devices. IEEE Journal of Solid-State Circuits, 2020, 55, 2747-2755.	5.4	17
3	Material effect on thermal stress of annular-trench-isolated through silicon via (TSV). Japanese Journal of Applied Physics, 2020, 59, SLLH01.	1.5	3
4	Fully epitaxial giant magnetoresistive devices with half-metallic Heusler alloy fabricated on poly-crystalline electrode using three-dimensional integration technology. Acta Materialia, 2020, 200, 1038-1045.	7.9	11
5	Fabrication and stacking of through-silicon-via array chip formed by notchless Si etching and wet cleaning of first metal layer. Japanese Journal of Applied Physics, 2019, 58, SDDL09.	1.5	1
6	A Thick Cu Layer Buried in Si Interposer Backside for Global Power Routing. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 502-510.	2.5	11
7	Stress investigation of annular-trench-isolated TSV by polarized Raman spectroscopy measurement and finite element simulation. Microelectronics Reliability, 2019, 99, 125-131.	1.7	8
8	Thermal Stress Comparison of Annular-Trench-Isolated (ATI) TSV with Cu and Solder Core. , 2019, , .		3
9	A Si-Backside Protection Circuits Against Physical Security Attacks on Flip-Chip Devices. , 2019, , .		5
10	Over-the-top Si Interposer Embedding Backside Buried Metal PDN to Reduce Power Supply Impedance of Large Scale Digital ICs. , 2019, , .		2
11	Development of Three-Dimensional Integration Technology for Magnetic Random Access Memories. Journal of Japan Institute of Electronics Packaging, 2019, 22, 495-500.	0.1	0
12	Residual stress investigation of via-last through-silicon via by polarized Raman spectroscopy measurement and finite element simulation. Japanese Journal of Applied Physics, 2018, 57, 07MF02.	1.5	9
13	Three-dimensional integration technology of magnetic tunnel junctions for magnetoresistive random access memory application. Applied Physics Express, 2017, 10, 063002.	2.4	10
14	Thermal impact of extreme die thinning in bump-bonded three-dimensional integrated circuits. Microelectronics Reliability, 2017, 79, 380-386.	1.7	1
15	Development of a high-yield via-last through silicon via process using notchless silicon etching and wet cleaning of the first metal layer. Japanese Journal of Applied Physics, 2017, 56, 07KE02.	1.5	10
16	Fabrication and stress analysis of annular-trench-isolated TSV. Microelectronics Reliability, 2016, 63, 142-147.	1.7	12
17	Impact of thinning stacked dies on the thermal resistance of bump-bonded three-dimensional integrated circuits. Microelectronics Reliability, 2016, 67, 2-8.	1.7	2
18	Validation of TSV thermo-mechanical simulation by stress measurement. Microelectronics Reliability, 2016, 59, 95-101.	1.7	13

#	ARTICLE	IF	CITATIONS
19	Copper-Filled Through-Silicon Vias With Parylene-HT Liner. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2016, 6, 510-517.	2.5	9
20	Investigation of metal contamination induced by a through silicon via reveal process using direct Si/Cu grinding and residual metal removal. Japanese Journal of Applied Physics, 2016, 55, 06GP06.	1.5	1
21	High-speed optical three dimensional measurement method for micro bump inspection in 3D LSI chip stacking technology. , 2015, , .		1
22	Novel through silicon via exposure process comprising Si/Cu grinding, electroless Niâ€“B plating, and wet etching of Si. Japanese Journal of Applied Physics, 2014, 53, 05GE02.	1.5	7
23	Fabrication and electrical characterization of Parylene-HT liner bottom-up copper filled through silicon via (TSV). , 2014, , .		10
24	15-Âµm-pitch Cu/Au interconnections relied on self-aligned low-temperature thermosonic flip-chip bonding technique for advanced chip stacking applications. Japanese Journal of Applied Physics, 2014, 53, 04EB04.	1.5	10
25	Fabrication of a membrane probe card using transparent film for three-dimensional integrated circuit testing. Japanese Journal of Applied Physics, 2014, 53, 06JM06.	1.5	4
26	Damage Evaluation of Wet-Chemical Si-Wafer Thinning/Backside Via Exposure Process. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2014, 4, 741-747.	2.5	7
27	3D IC testing using a chip prober and a transparent membrane probe card. , 2014, , .		2
28	Small-diameter TSV reveal process using direct Si/Cu grinding and metal contamination removal. , 2014, , .		4
29	Modified thermosonic flip-chip bonding based on electroplated Cu microbumps and concave pads for high-precision low-temperature assembly applications. , 2013, , .		6
30	Development of a chip prober for pre-bond testing of a 3D-IC. , 2013, , .		5
31	New optical three dimensional structure measurement method of cone shape micro bumps used for 3D LSI chip stacking. , 2013, , .		4