Asisa Kumar Panigrahi

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6937036/publications.pdf

Version: 2024-02-01

53	703	14	23
papers	citations	h-index	g-index

623188 642321

54	54	54	315
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Low Temperature Cuâ€“Cu Bonding Technology in Three-Dimensional Integration: An Extensive Review. Journal of Electronic Packaging, Transactions of the ASME, 2018, 140, .	1.2	59
2	An automated detection of heart arrhythmias using machine learning technique: SVM. Materials Today: Proceedings, 2021, 45, 1393-1398.	0.9	55
3	A multi-walled carbon nanotubeâ€“zinc oxide nanofiber based flexible chemiresistive biosensor for malaria biomarker detection. Analyst, The, 2017, 142, 2128-2135.	1.7	53
4	Ultra-thin Ti passivation mediated breakthrough in high quality Cu-Cu bonding at low temperature and pressure. Materials Letters, 2016, 169, 269-272.	1.3	45
5	Demonstration of sub 150 Â°C Cu-Cu thermocompression bonding for 3D IC applications, utilizing an ultra-thin layer of Manganin alloy as an effective surface passivation layer. Materials Letters, 2017, 194, 86-89.	1.3	40
6	Interface and Reliability Analysis of Au-Passivated Cuâ€“Cu Fine-Pitch Thermocompression Bonding for 3-D IC Applications. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 1227-1234.	1.4	36
7	Oxidation Resistive, CMOS Compatible Copper-Based Alloy Ultrathin Films as a Superior Passivation Mechanism for Achieving 150 Â°C Cuâ€“Cu Wafer on Wafer Thermocompression Bonding. IEEE Transactions on Electron Devices, 2017, 64, 1239-1245.	1.6	29
8	Performance Analysis of Ion-Sensitive Field Effect Transistor with Various Oxide Materials for Biomedical Applications. Silicon, 2022, 14, 6329-6339.	1.8	27
9	Facile non thermal plasma based desorption of self assembled monolayers for achieving low temperature and low pressure Cuâ€“Cu thermo-compression bonding. RSC Advances, 2015, 5, 103643-103648.	1.7	26
10	A Novel Teeth Junction Less Gate All Around FET for Improving Electrical Characteristics. Silicon, 2022, 14, 1979-1984.	1.8	26
11	A Study of an Ultrasensitive Label Free Silicon Nanowire FET Biosensor for Cardiac Troponin I Detection. Silicon, 2022, 14, 5683-5690.	1.8	26
12	Nonlithographic Fabrication of Plastic-Based Nanofibers Integrated Microfluidic Biochip for Sensitive Detection of Infectious Biomarker. ACS Applied Materials & Interfaces, 2017, 9, 39994-40005.	4.0	21
13	Design and Modelling of Highly Sensitive Glucose Biosensor for Lab-on-chip Applications. Silicon, 2022, 14, 8621-8627.	1.8	18
14	Low temperature, low pressure CMOS compatible Cu -Cu thermo-compression bonding with Ti passivation for 3D IC integration. , 2015, , .		17
15	Surface Density Gradient Engineering Precedes Enhanced Diffusion; Drives CMOS In-Line Process Flow Compatible Cuâ€“Cu Thermocompression Bonding at 75 Â°C. IEEE Transactions on Device and Materials Reliability, 2019, 19, 791-795.	1.5	17
16	Direct, CMOS In-Line Process Flow Compatible, Sub 100ÂÂ°C Cuâ€“Cu Thermocompression Bonding Using Stress Engineering. Electronic Materials Letters, 2018, 14, 328-335.	1.0	16
17	Feature Extraction and Detection of Obstructive Sleep Apnea from Raw EEG Signal. Advances in Intelligent Systems and Computing, 2020, , 425-433.	0.5	14
18	Optimized ultra-thin manganin alloy passivated fine-pitch damascene compatible bump-less Cuâ€“Cu bonding at sub 200 Â°C for three-dimensional Integration applications. Japanese Journal of Applied Physics, 2018, 57, 02BC04.	0.8	13

#	Article	IF	Citations
19	An extensive survey on finger and palm vein recognition system. Materials Today: Proceedings, 2021, 45, 1804-1808.	0.9	10
20	Facile approach to mitigate thermal issues in 3D IC integration using effective FIN orientation. Materials Today: Proceedings, 2020, 33, 3085-3088.	0.9	9
21	Sleep Bruxism Disorder Detection and Feature Extraction Using Discrete Wavelet Transform. Lecture Notes in Electrical Engineering, 2020, , 833-840.	0.3	9
22	A Highly Sensitive Graphene-based Field Effect Transistor for the Detection of Myoglobin. Silicon, 2022, 14, 11741-11748.	1.8	9
23	High Quality Fine-Pitch Cu-Cu Wafer-on-Wafer Bonding with Optimized Ti Passivation at 160Â°C. , 2016, , .		8
24	Metal-Alloy Cu Surface Passivation Leads to High Quality Fine-Pitch Bump-Less Cu-Cu Bonding for 3D IC and Heterogeneous Integration Applications. , 2018, , .		8
25	Noise performance improvement in 3D IC integration utilizing different dielectric materials. Materials Today: Proceedings, 2020, 33, 3117-3123.	0.9	8
26	Implementation of Smart Energy Meter through Prepaid Transaction using IoT. , 2021, , .		8
27	Analysis of graphene and CNT based finned TTSV and spreaders for thermal management in 3D IC. , 2016, , .		7
28	Hand gesture recognition and voice controlled robot. Materials Today: Proceedings, 2020, 33, 4121-4123.	0.9	7
29	Design of approximate reverse carry select adder using RCPA. International Journal of Electronics Letters, 2023, 11, 146-156.	0.7	7
30	Long term efficacy of ultra-thin Ti passivation layer for achieving low temperature, low pressure Cu-Cu Wafer-on-Wafer bonding. , 2015, , .		6
31	Improved noise coupling performance using optimized Teflon liner with different TSV structures for 3D IC integration. , 2016, , .		5
32	Simplistic approach to alleviate noise coupling issues in 3D IC integration. Materials Today: Proceedings, 2020, 33, 4007-4011.	0.9	5
33	Performance evaluation of noise coupling on Germanium based TSV filled material for future IC integration technique. Materials Today: Proceedings, 2021, 45, 1494-1497.	0.9	5
34	Temperature Influence on Dielectric Tunnel FET Characterization and Subthreshold Characterization. Silicon, 2022, 14, 11483-11491.	1.8	5
35	Dual Damascene Compatible, Copper Rich Alloy Based Surface Passivation Mechanism for Achieving Cu-Cu Bonding at 150 Degree C for 3D IC Integration. , 2017, , .		4
36	Revival of cloaking effect in a driven bilayer graphene vector barrier. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 99, 330-334.	1.3	4

#	Article	IF	Citations
37	Diffusion Enhanced Drive Sub 100 Â°C Wafer Level Fine-Pitch Cu-Cu Thermocompression Bonding for 3D IC Integration. , 2019, , .		4
38	Thermal management in TSV based 3D IC Integration: A survey. Materials Today: Proceedings, 2021, 45, 1742-1746.	0.9	4
39	Enhancement in performance of DHTprecoding over WHT for EC companded OFDM in wireless networks. Applied Nanoscience (Switzerland), 2023, 13, 1515-1530.	1.6	4
40	Noise performance improvement through optimized stacked layer of liner structure around the TSV in 3D IC. , 2016, , .		3
41	An extensive survey on reduction of noise coupling in TSV based 3D IC integration. Materials Today: Proceedings, 2021, 45, 1471-1480.	0.9	3
42	Simplistic approach to reduce thermal issues in 3D IC integration technology. Materials Today: Proceedings, 2021, 45, 1399-1402.	0.9	3
43	Tunnel Field Effect Transistor Design and Analysis for Biosensing Applications. Silicon, 0, , 1.	1.8	3
44	Novel inter layer dielectric and thermal TSV material for enhanced heat mitigation in 3-D IC. , 2016, , .		2
45	Optimized ultra-thin Manganin alloy passivated fine-pitch damascene compatible Cu-Cu bonding at sub 200Â°C for 3D IC integration. , 2017, , .		2
46	Achieving of Intensified Conductive Interconnections for Flex-on-Flex by Using Metal Passivated Copper â€" Copper Thermocompression Bonding. , 2018, , .		2
47	Recent developments in code compression techniques for embedded systems. Materials Today: Proceedings, 2021, 46, 4128-4132.	0.9	2
48	Hardware Posit Numeration System primarily based on Arithmetic Operations. , 2022, , .		2
49	Low temperature CMOS compatible Cu-Cu thermo-compression bonding with constantan alloy passivation for 3D IC integration. , 2016, , .		1
50	Vanadium Pentoxide Nanofibers as IR Sensors for Bolometer Applications. ECS Transactions, 2018, 85, 1573-1583.	0.3	1
51	Design of area-efficient high speed 4â€¯Ã—â€¯4 Wallace tree multiplier using quantum-dot cellular automata. Materials Today: Proceedings, 2021, 45, 1514-1523.	0.9	1
52	Silicide Based Low Temperature and Low Pressure Bonding of TI/SI for Microfludic and Hermetic Selaling Application. , 2018, , .		0
53	Reduction of Electrical Signal Interference for future IC Integration-An Extensive Review. , 2021, , .		0