Kemal AygÃ¼n

List of Publications by Year
in descending order

41 papers	593 citations	1307594 7 h-index	1281871 11 g-index
42 all docs	42 docs citations	42 times ranked	337 citing authors

#	Article	IF	Citations
1	Co-Packaged Photonics For High Performance Computing: Status, Challenges And Opportunities. Journal of Lightwave Technology, 2022, 40, 379-392.	4.6	36
2	Low Loss Skip Layer Transmission Lines With Common Mode Filtering for Packages. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2022, 12, 839-846.	2.5	1
3	Machine Learning for Evaluating the Impact of Manufacturing Process Variations in High-Speed Interconnects. , 2021, , .		6
4	Foreword Special Section on â€œAdvances in Electrical Modeling and Validation of Electronic Packaging and Systemsâ€. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2021, 11, 1315-1316.	2.5	0
5	Impact of Measurement Uncertainty on Correlation Quality for High-Speed Interconnects. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2021, 11, 1380-1390.	2.5	2
6	The IEEE EPS Packaging Benchmark Suite. , 2021, , .		2
7	A parallel FFTâ€accelerated layeredâ€medium integralâ€equation solver for electronic packages. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2020, 33, e2684.	1.9	6
8	Causal and Passive Parameterization of S-Parameters Using Neural Networks. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 4290-4304.	4.6	25
9	Measurement Uncertainty Propagation in the Validation of High-Speed Interconnects. , 2020, , .		3
10	Assessment of 2x Thru De-embedding Accuracy for Package Transmission Line DUTs. , 2020, , .		6
11	Accurate BGA Package Solder Joint Modeling for High Speed SerDes Interfaces. , 2020, , .		3
12	Electrical Performance Limits of Fine Pitch Interconnects for Heterogeneous Integration. , 2019, , .		9
13	Impact of Use Conditions on Dielectric and Conductor Material Models for High-Speed Package Interconnects. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 1942-1951.	2.5	14
14	Enforcing Causality and Passivity of Neural Network Models of Broadband S-Parameters. , 2019, , .		6
15	Embedded Multidie Interconnect Bridgeâ€"A Localized, High-Density Multichip Packaging Interconnect. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2019, 9, 1952-1962.	2.5	54
16	Design of Low-Loss Transmission Lines with Common Mode Suppression for Packages. , 2018, , .		2
17	Robust Temperature and Humidity Dependent Electrical Package Material Characterization. , 2018, , .		4
18	Temperature Impact on Surface Roughness Modeling for On-Package High Speed Interconnects. , 2018, , .		6

#	Article	IF	Citations
19	Electrical Analysis of EMIB Packages. , 2018, , .		3
20	Flip-Chip Packaging for Nanoscale Silicon Logic Devices: Challenges and Opportunities. , 2018, , 921-956.		2
21	An Integral Equation Modeling of Lossy Conductors With the Enhanced Augmented Electric Field Integral Equation. IEEE Transactions on Antennas and Propagation, 2017, 65, 4181-4190.	5.1	27
22	A full wave conductor modeling using augmented electric field integral equation. , 2016, , .		1
23	Improved Package Modeling and Correlation Methodology for High Speed IO Design. , 2016, , .		5
24	Embedded Multi-die Interconnect Bridge (EMIB) -- A High Density, High Bandwidth Packaging Interconnect. , 2016, , .		204
25	Multimode High-Density Link Design Methodology and Implementation. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2016, 6, 1251-1260.	2.5	5
26	Fiber weave impact on crosstalk of high speed communication channels in glass epoxy packages. , 2016, , .		1
27	An Enhanced Augmented Electric-Field Integral Equation Formulation for Dielectric Objects. IEEE Transactions on Antennas and Propagation, 2016, 64, 2339-2347.	5.1	42
28	Impact of fiber weaves on 56 Gbps SerDes interface in glass epoxy packages. , 2015, , .		5
29	An augmented electric field integral equation formulation for dielectrics and conductors at low frequencies. , 2015, , .		3
30	Reliable and accurate characterization of frequency dependent electrical material properites. , 2015, , .		3
31	Embedded capacitors in the next generation processor. , 2013, , .		16
32	Circuit/channel co-design methodology for multimode signaling. , 2013, , .		4
33	S-parameter based multimode signaling. , 2012, , .		5
34	Microprocessor Package Embedded Thin Film Capacitor for Power Delivery Improvement. , 2011, , .		3
35	Multimode transceiver for high-density interconnects: Measurement and validation. , 2010, , .		11
36	Return loss optimization of the microprocessor package vertical interconnect. , 2009, , .		5

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37	Characterization of halogen-free package materials using cavity resonators. , 2008, , .		2
38	Multimode signaling on non-ideal channels. , 2008, , .		8
39	Analysis of inter-bundle crosstalk in multimode signaling for high-density interconnects. , 2008, , .		5
40	On-Package Continuous-Time Linear Equalizer using Embedded Passive Components. , 2007, , .		17
41	Transient analysis of multielement wire antennas mounted on arbitrarily shaped perfectly conducting bodies. Radio Science, 1999, 34, 781-796.	1.6	26