Irith Pomeranz

List of Publications by Year in descending order

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267 papers 1,414 citations

623188 14 h-index 752256 20 g-index

267 all docs

 $\begin{array}{c} 267 \\ \text{docs citations} \end{array}$

267 times ranked

191 citing authors

#	Article	IF	CITATIONS
1	On static compaction of test sequences for synchronous sequential circuits., 1996,,.		101
2	On the generation of small dictionaries for fault location. , 1992, , .		82
3	On the generation of scan-based test sets with reachable states for testing under functional operation conditions. , 2004, , .		54
4	Primary Input Vectors to Avoid in Random Test Sequences for Synchronous Sequential Circuits. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2008, 27, 193-197.	1.9	42
5	Transition Path Delay Faults: A New Path Delay Fault Model for Small and Large Delay Defects. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2008, 16, 98-107.	2.1	36
6	On Selecting Testable Paths in Scan Designs. Journal of Electronic Testing: Theory and Applications (JETTA), 2003, 19, 447-456.	0.9	32
7	Static test compaction for delay fault test sets consisting of broadside and skewed-load tests. , 2011, , .		29
8	A Functional Coverage Metric for Estimating the Gate-Level Fault Coverage of Functional Tests. IEEE International Test Conference (TC), 2006, , .	0.0	25
9	Unspecified Transition Faults: A Transition Fault Model for At-Speed Fault Simulation and Test Generation. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2008, 27, 137-146.	1.9	22
10	A Multicycle Test Set Based on a Two-Cycle Test Set With Constant Primary Input Vectors. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2015, 34, 1124-1132.	1.9	22
11	Hazard-Based Detection Conditions for Improved Transition Fault Coverage of Scan-Based Tests. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2010, 18, 333-337.	2.1	21
12	Improving the Accuracy of Defect Diagnosis by Considering Fewer Tests. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2014, 33, 2010-2014.	1.9	21
13	ATPG Heuristics Dependant Observation Point Insertion for Enhanced Compaction and Data Volume Reduction., 2008,,.		20
14	Generation of Multi-Cycle Broadside Tests. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2011, 30, 1253-1257.	1.9	20
15	OBO: An Output-by-Output Scoring Algorithm for Fault Diagnosis. , 2014, , .		19
16	Estimating the Fault Coverage of Functional Test Sequences Without Fault Simulation., 2007,,.		18
17	On the Computation of Common Test Data for Broadside and Skewed-Load Tests. IEEE Transactions on Computers, 2012, 61, 578-583.	2.4	18
18	On Test Generation With Test Vector Improvement. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2010, 29, 502-506.	1.9	17

#	Article	IF	CITATIONS
19	Static test compaction procedure for large pools of multicycle functional broadside tests. IET Computers and Digital Techniques, 2018, 12, 233-240.	0.9	15
20	On reset based functional broadside tests. , 2010, , .		14
21	Static Test Data Volume Reduction Using Complementation or Modulo-\$M\$ Addition. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2011, 19, 1108-1112.	2.1	14
22	Low-Power Test Generation by Merging of Functional Broadside Test Cubes. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2014, 22, 1570-1582.	2.1	14
23	Computation of Seeds for LFSR-Based Diagnostic Test Generation. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2015, 34, 2004-2012.	1.9	14
24	Reduction of diagnostic fail data volume and tester time using a dynamic N-cover algorithm. , 2016, , .		14
25	Improving the Resolution of Multiple Defect Diagnosis by Removing and Selecting Tests. , 2018, , .		13
26	On Complete Functional Broadside Tests for Transition Faults. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2008, 27, 583-587.	1.9	12
27	Switching Activity as a Test Compaction Heuristic for Transition Faults. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2010, 18, 1357-1361.	2.1	12
28	Augmenting Functional Broadside Tests for Transition Fault Coverage with Bounded Switching Activity. , $2011,\ldots$		12
29	Input Necessary Assignments for Testing of Path Delay Faults in Standard-Scan Circuits. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2011, 19, 333-337.	2.1	12
30	TOV: Sequential Test Generation by Ordering of Test Vectors. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2010, 29, 454-465.	1.9	11
31	Output-Dependent Diagnostic Test Generation. , 2010, , .		11
32	Gradual Diagnostic Test Generation and Observation Point Insertion Based on the Structural Distance Between Indistinguished Fault Pairs. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2012, 20, 1026-1035.	2.1	11
33	Concatenation of Functional Test Subsequences for Improved Fault Coverage and Reduced Test Length. IEEE Transactions on Computers, 2012, 61, 899-904.	2.4	11
34	Piecewise-Functional Broadside Tests Based on Reachable States. IEEE Transactions on Computers, 2015, 64, 2415-2420.	2.4	11
35	Maximal Independent Fault Set for Gate-Exhaustive Faults. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2021, 40, 598-602.	1.9	11
36	\$z\$-Diagnosis: A Framework for Diagnostic Fault Simulation and Test Generation Utilizing Subsets of Outputs. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2007, 26, 1700-1712.	1.9	10

#	Article	IF	Citations
37	Diagnostic Test Generation Based on Subsets of Faults. Proceedings of the IEEE European Test Workshop, 2007, , .	0.0	10
38	Forming multi-cycle tests for delay faults by concatenating broadside tests., 2010,,.		10
39	Path Selection for Transition Path Delay Faults. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2010, 18, 401-409.	2.1	10
40	Generation of Mixed Broadside and Skewed-Load Diagnostic Test Sets for Transition Faults. , 2011, , .		10
41	Generation of Mixed Test Sets for Transition Faults. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2012, 20, 1895-1899.	2.1	10
42	On Test Compaction of Broadside and Skewed-Load Test Cubes. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2013, 21, 1705-1714.	2.1	10
43	Generation of close-to-functional broadside tests with equal primary input vectors. , 2015, , .		10
44	Equivalence and Dominance Relations Between Fault Pairs and Their Use in Fault Pair Collapsing for Fault Diagnosis., 2007,,.		9
45	Hazard-Based Detection Conditions for Improved Transition Path Delay Fault Coverage. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2010, 29, 1449-1453.	1.9	9
46	On the detection of path delay faults by functional broadside tests. , 2012, , .		9
47	Multicycle Tests With Constant Primary Input Vectors for Increased Fault Coverage. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2012, 31, 1428-1438.	1.9	9
48	Generation of Functional Broadside Tests for Logic Blocks With Constrained Primary Input Sequences. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2013, 32, 442-452.	1.9	9
49	Built-In Generation of Functional Broadside Tests Using a Fixed Hardware Structure. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2013, 21, 124-132.	2.1	9
50	Input Test Data Volume Reduction for Skewed-Load Tests by Additional Shifting of Scan-In States. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2014, 33, 638-642.	1.9	9
51	A Test Selection Procedure for Improving the Accuracy of Defect Diagnosis. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2016, 24, 2759-2767.	2.1	9
52	Skewed-Load Tests for Transition and Stuck-at Faults. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2019, 38, 1969-1973.	1.9	9
53	Scan Shift Power of Functional Broadside Tests. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2011, 30, 1416-1420.	1.9	8
54	Static Test Compaction for Scan Circuits by Using Restoration to Modify and Remove Tests. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2014, 33, 1955-1964.	1.9	8

#	Article	IF	Citations
55	Sequential Test Generation Based on Preferred Primary Input Cubes. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2017, 36, 351-355.	1.9	8
56	Test Compaction Under Bounded Transparent-Scan. , 2019, , .		8
57	Extra Clocking of LFSR Seeds for Improved Path Delay Fault Coverage. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2020, 28, 544-552.	2.1	8
58	Storage-Based Built-In Self-Test for Gate-Exhaustive Faults. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2021, 40, 2189-2193.	1.9	8
59	On Clustering of Undetectable Single Stuck-At Faults and Test Quality in Full-Scan Circuits. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2010, 29, 1135-1140.	1.9	7
60	Hyper-graph based partitioning to reduce DFT cost for pre-bond 3D-IC testing., 2011,,.		7
61	Signal-Transition Patterns of Functional Broadside Tests. IEEE Transactions on Computers, 2013, 62, 2544-2549.	2.4	7
62	On the use of multi-cycle tests for storage of two-cycle broadside tests. , 2014, , .		7
63	Skewed-Load Test Cubes Based on Functional Broadside Tests for a Low-Power Test Set. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2015, 23, 593-597.	2.1	7
64	Diagnostic Fail Data Minimization Using an N-Cover Algorithm. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2016, 24, 1198-1202.	2.1	7
65	A Joint Diagnostic Test Generation Procedure with Dynamic Test Compaction. , 2016, , .		7
66	Enhanced Broadside Testing for Improved Transition Fault Coverage., 2007,,.		6
67	Generation of Broadside Transition-Fault Test Sets That Detect Four-Way Bridging Faults. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2007, 26, 1311-1319.	1.9	6
68	Improving the Transition Fault Coverage of Functional Broadside Tests by Observation Point Insertion. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2008, 16, 931-936.	2.1	6
69	Safe Fault Collapsing Based on Dominance Relations. , 2008, , .		6
70	Forward-Looking Reverse Order Fault Simulation for \$n\$-Detection Test Sets. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2009, 28, 1424-1428.	1.9	6
71	Restoration-Based Procedures With Set Covering Heuristics for Static Test Compaction of Functional Test Sequences. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2014, 22, 779-791.	2.1	6
72	Close-to-Functional Broadside Tests With a Safety Margin. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2017, 36, 2139-2143.	1.9	6

#	Article	IF	CITATIONS
73	Test Modification for Reduced Volumes of Fail Data. ACM Transactions on Design Automation of Electronic Systems, 2017, 22, 1-17.	1.9	6
74	LFSR-Based Test Generation for Path Delay Faults. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2019, 38, 345-353.	1.9	6
75	Input Test Data Volume Reduction Using Seed Complementation and Multiple LFSRs. , 2020, , .		6
76	Fault Detection by Output Response Comparison of Identical Circuits Using Half-Frequency Compatible Sequences. IEEE International Test Conference (TC), 2006, , .	0.0	5
77	Design-for-Testability for Improved Path Delay Fault Coverage of Critical Paths. , 2008, , .		5
78	Hazard-Based Detection Conditions for Improved Transition Fault Coverage of Functional Test Sequences., 2009,,.		5
79	Double–Single Stuck-at Faults: A Delay Fault Model for Synchronous Sequential Circuits. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2009, 28, 426-432.	1.9	5
80	Gradual Diagnostic Test Generation Based on the Structural Distance between Indistinguished Fault Pairs. , 2010, , .		5
81	Functional Broadside Tests With Incompletely Specified Scan-In States. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2013, 32, 1445-1449.	1.9	5
82	-Based Generation of Partially-Functional Broadside Tests. IEEE Transactions on Computers, 2016, 65, 2659-2664.	2.4	5
83	Resynthesis for Avoiding Undetectable Faults Based on Design-for-Manufacturability Guidelines. , 2019,		5
84	Iterative Test Generation for Gate-Exhaustive Faults to Cover the Sites of Undetectable Target Faults. , 2019, , .		5
85	Test Compaction by Test Removal Under Transparent Scan. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2019, 27, 496-500.	2.1	5
86	Hybrid Pass/Fail and Full Fail Data for Reduced Fail Data Volume. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2021, 40, 1711-1720.	1.9	5
87	Fast Test Generation for Structurally Similar Circuits. , 2022, , .		5
88	Diagnostic Test Generation Targeting Equivalence Classes. , 2007, , .		4
89	On the saturation of n-detection test sets with increased n. , 2007, , .		4
90	Robust Fault Models Where Undetectable Faults Imply Logic Redundancy. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2010, 18, 1230-1234.	2.1	4

#	Article	IF	CITATIONS
91	On Transition Fault Diagnosis Using Multicycle At-Speed Broadside Tests., 2011, , .		4
92	Built-in generation of functional broadside tests. , 2011, , .		4
93	Reducing the Storage Requirements of a Test Sequence by Using One or Two Background Vectors. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2011, 19, 1755-1764.	2.1	4
94	Non-Uniform Coverage by \$n\$-Detection Test Sets. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2012, 20, 2138-2142.	2.1	4
95	A Metric for Identifying Detectable Path Delay Faults. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2012, 31, 1734-1742.	1.9	4
96	Transition Fault Simulation Considering Broadside Tests as Partially-Functional Broadside Tests. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2013, 21, 1359-1363.	2.1	4
97	Fault simulation with test switching for static test compaction. , 2014, , .		4
98	Improving the accuracy of defect diagnosis by considering reduced diagnostic information. , 2015, , .		4
99	Selecting Replacements for Undetectable Path Delay Faults. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2017, 25, 1988-1992.	2.1	4
100	Observation Points on State Variables for the Compaction of Multicycle Tests. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2018, 26, 2567-2571.	2.1	4
101	Zoom-In Feature for Storage-Based Logic Built-In Self-Test. , 2021, , .		4
102	Semi-Concurrent On-Line Testing of Transition Faults Through Output Response Comparison of Identical Circuits., 2007,,.		3
103	Selection of a Fault Model for Fault Diagnosis Based on Unique Responses. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2010, 18, 1533-1543.	2.1	3
104	Equivalence, Dominance, and Similarity Relations between Fault Pairs and a Fault Pair Collapsing Process for Fault Diagnosis. IEEE Transactions on Computers, 2010, 59, 150-158.	2.4	3
105	Subsets of Primary Input Vectors in Sequential Test Generation for Single Stuck-at Faults. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2011, 30, 1579-1583.	1.9	3
106	Performance aware partitioning for 3D-SOCs. , 2012, , .		3
107	Multi-Pattern \$n\$-Detection Stuck-At Test Sets for Delay Defect Coverage. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2012, 20, 1156-1160.	2.1	3
108	An Adjacent Switching Activity Metric under Functional Broadside Tests. IEEE Transactions on Computers, 2013, 62, 404-410.	2.4	3

#	Article	IF	CITATIONS
109	Reduced Power Transition Fault Test Sets for Circuits With Independent Scan Chain Modes. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2013, 21, 1354-1359.	2.1	3
110	Functional Broadside Templates for Low-Power Test Generation. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2013, 21, 2321-2325.	2.1	3
111	Static test compaction for mixed broadside and skewedâ€load transition fault test sets. IET Computers and Digital Techniques, 2013, 7, 21-28.	0.9	3
112	Simultaneous Generation of Functional and Low-Power Non-Functional Broadside Tests. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2014, 33, 1245-1257.	1.9	3
113	Modeling a Set of Functional Test Sequences as a Single Sequence for Test Compaction. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2015, 23, 2629-2638.	2.1	3
114	On the Switching Activity in Faulty Circuits During Test Application. , 2016, , .		3
115	Reordering Tests for Efficient Fail Data Collection and Tester Time Reduction. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2017, 25, 1497-1505.	2.1	3
116	Functional Broadside Test Generation Using a Commercial ATPG Tool., 2017,,.		3
117	A bridging fault model for line coverage in the presence of undetected transition faults. , 2017, , .		3
118	Covering undetected transition fault sites with optimistic unspecified transition faults under multicycle tests. , $2018, , .$		3
119	Partially Invariant Patterns for LFSR -Based Generation of Close-to-Functional Broadside Tests. ACM Transactions on Design Automation of Electronic Systems, 2018, 23, 1-18.	1.9	3
120	Improving the Diagnosability of Scan Chain Faults Under Transparent-Scan by Observation Points. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2018, 37, 1278-1287.	1.9	3
121	Test Scores for Improving the Accuracy of Logic Diagnosis for Multiple Defects. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2019, 27, 1720-1724.	2.1	3
122	TEA: A Test Generation Algorithm for Designs with Timing Exceptions. , 2019, , .		3
123	Selecting Close-to-Functional Path Delay Faults for Test Generation. , 2020, , .		3
124	A Delay Fault Model for At-Speed Fault Simulation and Test Generation. IEEE/ACM International Conference on Computer-Aided Design, Digest of Technical Papers, 2006, , .	0.0	2
125	Synthesis for Broadside Testability of Transition Faults. VLSI Test Symposium (VTS), Proceedings, IEEE, 2008, , .	1.0	2
126	Expanded Definition of Functional Operation Conditions and its Effects on the Computation of Functional Broadside Tests. VLSI Test Symposium (VTS), Proceedings, IEEE, 2008, , .	1.0	2

#	Article	IF	Citations
127	Random Test Generation With Input Cube Avoidance. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2009, 17, 45-54.	2.1	2
128	Selecting state variables for improved on-line testability through output response comparison of identical circuits. , $2010, \dots$		2
129	Functional and partially-functional skewed-load tests. , 2010, , .		2
130	On multiple bridging faults. , 2010, , .		2
131	On Functional Broadside Tests With Functional Propagation Conditions. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2011, 19, 1094-1098.	2.1	2
132	Broadside and Functional Broadside Tests for Partial-Scan Circuits. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2011, 19, 1104-1108.	2.1	2
133	TSV and DFT cost aware circuit partitioning for 3D-SOCs. , 2012, , .		2
134	On the Switching Activity and Static Test Compaction of Multicycle Scan-Based Tests. IEEE Transactions on Computers, 2012, 61, 1179-1188.	2.4	2
135	Reducing the input test data volume under transparent scan. IET Computers and Digital Techniques, 2014, 8, 1-10.	0.9	2
136	Multiâ€eycle broadside tests with runs of constant primary input vectors. IET Computers and Digital Techniques, 2014, 8, 90-96.	0.9	2
137	Test Compaction by Sharing of Transparent-Scan Sequences Among Logic Blocks. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2014, 22, 792-802.	2.1	2
138	Test compaction by test cube merging for four-way bridging faults. , 2015, , .		2
139	Static Test Compaction for Low-Power Test Sets by Increasing the Switching Activity. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2015, 23, 1936-1940.	2.1	2
140	Two-Dimensional Static Test Compaction for Functional Test Sequences. IEEE Transactions on Computers, 2015, 64, 3009-3015.	2.4	2
141	A Compact Set of Seeds for LFSR-Based Test Generation from a Fully-Specified Compact Test Set. , 2016, , .		2
142	Improving the Accuracy of Defect Diagnosis with Multiple Sets of Candidate Faults. IEEE Transactions on Computers, 2016, 65, 2332-2338.	2,4	2
143	Restoration-Based Merging of Functional Test Sequences. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2017, 36, 1739-1749.	1.9	2
144	Clock Sequences for Increasing the Fault Coverage of Functional Test Sequences. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2017, 36, 1231-1235.	1.9	2

#	Article	IF	Citations
145	Test reordering for improved scan chain diagnosis using an enhanced defect diagnosis procedure., 2017,,.		2
146	POSTT: Path-oriented static test compaction for transition faults in scan circuits. , 2017, , .		2
147	An Initialization Process to Support Online Testing Based on Output Comparison for Identical Finite-State Machines. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2018, 37, 1494-1504.	1.9	2
148	Extended Transparent-Scan. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2019, 27, 2096-2104.	2.1	2
149	Multicycle Broadside and Skewed-Load Tests for Test Compaction. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 262-266.	1.9	2
150	Padding of <i>LFSR</i> Seeds for Reduced Input Test Data Volume. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2021, 40, 1004-1008.	1.9	2
151	GEPDFs: Path Delay Faults Based on Two-Cycle Gate-Exhaustive Faults. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2022, 41, 2315-2322.	1.9	2
152	Multicycle Tests With Fault Detection Test Data for Improved Logic Diagnosis. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2022, 41, 1587-1591.	1.9	2
153	Test data volume reduction by test data realignment. , 2003, , .		1
154	Scan-Based Delay Fault Tests for Diagnosis of Transition Faults. Defect and Fault Tolerance in VLSI Systems, Proceedings of the IEEE International Symposium on, 2006, , .	0.0	1
155	Invariant States and Redundant Logic in Synchronous Sequential Circuits. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2007, 26, 1171-1175.	1.9	1
156	A-Diagnosis: A Complement to Z-Diagnosis. , 2007, , .		1
157	Autoscan-Invert: An Improved Scan Design without External Scan Inputs or Outputs. VLSI Test Symposium (VTS), Proceedings, IEEE, 2007, , .	1.0	1
158	On Test Generation by Input Cube Avoidance. , 2007, , .		1
159	Functional Broadside Tests with Different Levels of Reachability. , 2007, , .		1
160	A Bridging Fault Model Where Undetectable Faults Imply Logic Redundancy. , 2008, , .		1
161	Input Cubes with Lingering Synchronization Effects and their Use in Random Sequential Test Generation., 2009,,.		1
162	Selection of a fault model for fault diagnosis based on unique responses. , 2009, , .		1

#	Article	IF	Citations
163	Functional Broadside Tests Under an Expanded Definition of Functional Operation Conditions. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2009, 28, 121-129.	1.9	1
164	On clustering of undetectable transition faults in standard-scan circuits., 2011,,.		1
165	Generation and compaction of mixed broadside and skewed-load n-detection test sets for transition faults. , 2012 , , .		1
166	Resolution of Diagnosis Based on Transition Faults. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2012, 20, 172-176.	2.1	1
167	Fast Identification of Undetectable Transition Faults under Functional Broadside Tests. IEEE Transactions on Computers, 2012, 61, 905-910.	2.4	1
168	Multipattern Scan-Based Test Sets With Small Numbers of Primary Input Sequences. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2012, 31, 322-326.	1.9	1
169	Path selection based on static timing analysis considering input necessary assignments. , 2013, , .		1
170	Generation of compact multi-cycle diagnostic test sets., 2013,,.		1
171	Classes of difficult-to-diagnose transition fault clusters. , 2013, , .		1
172	Non-Test Cubes for Test Generation Targeting Hard-to-Detect Faults. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2013, 32, 1957-1965.	1.9	1
173	Unknown Output Values of Faulty Circuits and Output Response Compaction. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2014, 33, 323-327.	1.9	1
174	Functional Broadside Tests for Multistep Defect Diagnosis. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2014, 33, 1429-1433.	1.9	1
175	Selection of Functional Test Sequences With Overlaps. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2014, 33, 1095-1099.	1.9	1
176	Low-Power Diagnostic Test Sets for Transition Faults Based on Functional Broadside Tests. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2014, 22, 2427-2431.	2.1	1
177	Computing Seeds for LFSR-Based Test Generation From Nontest Cubes. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2015, , 1-5.	2.1	1
178	Piecewise-functional broadside tests based on intersections of reachable states. , 2015, , .		1
179	LFSR-Based Generation of Multicycle Tests. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2016, , 1-1.	1.9	1
180	Static test compaction for circuits with multiple independent scan chains. IET Computers and Digital Techniques, 2016, 10, 12-17.	0.9	1

#	Article	IF	CITATIONS
181	Balancing the Numbers of Detected Faults for Improved Test Set Quality. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2016, 35, 337-341.	1.9	1
182	Identifying Biases of a Defect Diagnosis Procedure. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2017, 36, 1215-1225.	1.9	1
183	Selecting Functional Test Sequences for Defect Diagnosis. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2018, 26, 2160-2164.	2.1	1
184	Globally Functional Transparent-Scan Sequences. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 3012-3022.	1.9	1
185	Functional Broadside Tests Under Broadcast Scan. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 3139-3143.	1.9	1
186	Non-Masking Non-Robust Tests for Path Delay Faults. , 2020, , .		1
187	Broad-Brush Compaction for Sequential Test Generation. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2020, 28, 1940-1944.	2.1	1
188	LFSR-Based Test Generation for Reduced Fail Data Volume. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 5261-5266.	1.9	1
189	Direct Computation of LFSR-Based Stored Tests for Broadside and Skewed-Load Tests. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 5238-5246.	1.9	1
190	PRESERVE: Static Test Compaction that Preserves Individual Numbers of Tests. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2021, 40, 803-807.	1.9	1
191	Partitioning Functional Test Sequences Into Multicycle Functional Broadside Tests. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2021, 29, 89-99.	2.1	1
192	Efficient Identification of Undetectable Two-Cycle Gate-Exhaustive Faults. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2022, 41, 776-783.	1.9	1
193	Single Test Type to Replace Broadside and Skewed-Load Tests for Transition Faults. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2021, 29, 423-433.	2.1	1
194	Logic Diagnosis with Hybrid Fail Data. ACM Transactions on Design Automation of Electronic Systems, 2021, 26, 1-13.	1.9	1
195	Compact Set of LFSR Seeds for Diagnostic Tests. , 2021, , .		1
196	Topping Off Test Sets Under Bounded Transparent Scan. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2023, 42, 341-345.	1.9	1
197	Preponing Fault Detections for Test Compaction Under Transparent Scan. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2022, 30, 1543-1547.	2.1	1
198	A DFT approach for path delay faults in interconnected circuits. , 2003, , .		0

#	Article	IF	CITATIONS
199	On the Replacement of Scan Chain Inputs by Primary Input Vectors. Proceedings of the Asian Test Symposium, 2006, , .	0.0	О
200	Scan-Based Delay Test Types and Their Effect on Power Dissipation During Test. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2008, 27, 398-403.	1.9	0
201	Test vector chains for increased targeted and untargeted fault coverage. , 2008, , .		O
202	Circuit lines for guiding the generation of random test sequences for synchronous sequential circuits. , 2008, , .		0
203	Design-for-Testability for Synchronous Sequential Circuits that Maintains Functional Switching Activity. , 2008, , .		O
204	Semiconcurrent Online Testing of Transition Faults through Output Response Comparison of Identical Circuits. IEEE Transactions on Dependable and Secure Computing, 2009, 6, 231-240.	3.7	0
205	Fault Diagnosis under Transparent-Scan. , 2009, , .		O
206	The Effect of Filling the Unspecified Values of a Test Set on the Test Set Quality. , 2009, , .		0
207	Reducing the storage requirements of a test sequence by using a background vector. , 2010, , .		0
208	On Bias in Transition Coverage of Test Sets for Path Delay Faults. , 2010, , .		0
209	On Undetectable Faults and Fault Diagnosis. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2010, 29, 1832-1837.	1.9	О
210	Identifying Tests for Logic Fault Models Involving Subsets of Lines without Fault Enumeration. , 2010, , .		0
211	Test Strength: A Quality Metric for Transition Fault Tests in Full-Scan Circuits. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2011, 19, 1907-1911.	2.1	0
212	Static test compaction for transition faults under the hazard-based detection conditions., 2012,,.		0
213	Built-in generation of multi-cycle broadside tests. , 2012, , .		0
214	On Candidate Fault Sets for Fault Diagnosis and Dominance Graphs of Equivalence Classes. , 2013, , .		0
215	Computing Two-Pattern Test Cubes for Transition Path Delay Faults. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2013, 21, 475-485.	2.1	0
216	Broadside and Skewed-Load Tests Under Primary Input Constraints. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2013, 21, 776-780.	2.1	0

#	Article	IF	CITATIONS
217	On multiâ€cycle test cubes. IET Computers and Digital Techniques, 2013, 7, 182-189.	0.9	O
218	Test and non-test cubes for diagnostic test generation based on merging of test cubes. , 2014, , .		0
219	Substituting transition faults with path delay faults as a basic delay fault model. , 2014, , .		0
220	A distance-based test cube merging procedure for compatible and incompatible test cubes. , 2014, , .		0
221	Test and non-test cubes for diagnostic test generation based on merging of test cubes. , 2014, , .		0
222	FDPIC: Generation of Functional Test Sequences Based on Fault-Dependent Primary Input Cubes. , 2014, , .		0
223	Sharing Logic for Built-In Generationof Functional Broadside Tests. IEEE Transactions on Computers, 2014, 63, 1048-1054.	2.4	0
224	Reducing the Storage Requirements of a Set of Functional Test Sequences by Using a Background Sequence. , 2015, , .		0
225	Test Vector Omission for Fault Coverage Improvement of Functional Test Sequences. IEEE Transactions on Computers, 2015, 64, 3317-3321.	2.4	0
226	Test Compaction by Sharing of Functional Test Sequences Among Logic Blocks. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2015, 23, 3006-3014.	2.1	0
227	Use of input necessary assignments for test generation based on merging of test cubes. IET Computers and Digital Techniques, 2015, 9, 106-112.	0.9	0
228	A definition of the number of detections for faults with single tests in a compact scan-based test set. , 2015, , .		0
229	Test vector omission with minimal sets of simulated faults. , 2015, , .		0
230	Combined input test data volume reduction for mixed broadside and skewedâ€load test sets. IET Computers and Digital Techniques, 2016, 10, 138-145.	0.9	0
231	Improving the accuracy of defect diagnosis by adding and removing tests. IET Computers and Digital Techniques, 2016, 10, 47-53.	0.9	0
232	A convergent procedure for partially-reachable states. , 2016, , .		0
233	Static Test Compaction for Functional Test Sequences With Restoration of Functional Switching Activity. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2016, 35, 1755-1762.	1.9	0
234	Using piecewise-functional broadside tests for functional broadside test compaction. , 2017, , .		0

#	Article	IF	Citations
235	Static Compaction by Merging of Seeds for LFSR-Based Test Generation., 2017,,.		O
236	Reconstruction of a functional test sequence for increased fault coverage. IET Computers and Digital Techniques, 2017, 11, 91-99.	0.9	0
237	Test Compaction with Dynamic Updating of Faults for Coverage of Undetected Transition Fault Sites. , 2017, , .		0
238	Metric for the ability of functional capture cycles to ensure functional operation conditions. IET Computers and Digital Techniques, 2017, 11, 100-106.	0.9	0
239	On Close-to-Functional Test Sequences. , 2018, , .		0
240	Autonomous Multicycle Tests With Low Storage and Test Application Time Overheads. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2018, 37, 1881-1892.	1.9	0
241	Diagnostic Test Generation That Addresses Diagnostic Holes. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2019, 38, 335-344.	1.9	0
242	Padding of Multicycle Broadside and Skewed-Load Tests. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2019, 27, 2587-2595.	2.1	0
243	Extracting a Close-to-Minimum Multicycle Functional Broadside Test Set From a Functional Test Sequence. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2019, 27, 1428-1437.	2.1	0
244	Compaction of a Functional Broadside Test Set through the Compaction of a Functional Test Sequence without Sequential Fault Simulation. , 2019 , , .		0
245	Invisible-Scan: A Design-for-Testability Approach for Functional Test Sequences. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2019, 38, 2357-2365.	1.9	0
246	Reverse Low-Power Broadside Tests. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 742-746.	1.9	0
247	Switching Activity of Faulty Circuits in Presence of Multiple Transition Faults. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 936-945.	1.9	0
248	New Targets for Diagnostic Test Generation. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 3035-3043.	1.9	0
249	Broadside Tests for Transition and Stuck-At Faults. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2020, 39, 1739-1743.	1.9	0
250	Selection of Primary Output Vectors to Observe Under Multicycle Tests. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2020, 28, 156-162.	2.1	0
251	Improving a Test Set to Cover Test Holes by Detecting Gate-Exhaustive Faults. , 2020, , .		0
252	RETRO: Reintroducing Tests for Improved Reverse Order Fault Simulation. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2020, 28, 1930-1934.	2.1	0

#	Article	IF	CITATIONS
253	Test Compaction by Backward and Forward Extension of Multicycle Tests. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2021, 29, 242-246.	2.1	0
254	Static Test Compaction Using Independent Suffixes of a Transparent-Scan Sequence. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2022, 41, 1130-1141.	1.9	0
255	Equivalent Faults under Launch-on-Shift (LOS) Tests with Equal Primary Input Vectors. ACM Transactions on Design Automation of Electronic Systems, 2021, 26, 1-15.	1.9	0
256	Functional Constraints in the Selection of Two-Cycle Gate-Exhaustive Faults for Test Generation. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2021, 29, 1500-1504.	2.1	0
257	Substituting transition faults with path delay faults as a basic delay fault model. , 2014, , .		0
258	Dynamically Determined Preferred Values and a Design-for-Testability Approach for Multiplexer Select Inputs under Functional Test Sequences. ACM Transactions on Design Automation of Electronic Systems, 2018, 23, 1-16.	1.9	0
259	Pass/Fail Data for Logic Diagnosis Under Bounded Transparent Scan. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2022, 41, 4862-4872.	1.9	0
260	Storage-Based Logic Built-in Self-Test With Multicycle Tests. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2022, 41, 3553-3557.	1.9	0
261	Wrapping Paths of Undetected Transition Faults with Two-Cycle Gate-Exhaustive Faults. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2022, , 1-1.	1.9	0
262	Positive and Negative Extra Clocking of LFSR Seeds for Reduced Numbers of Stored Tests., 2021,,.		0
263	Diagnostic Test Generation Targeting Equivalence Classes. Proceedings of the Asian Test Symposium, 2007, , .	0.0	0
264	Enhanced Broadside Testing for Improved Transition Fault Coverage. Proceedings of the Asian Test Symposium, 2007, , .	0.0	0
265	Compaction of Compressed Bounded Transparent-Scan Test Sets. , 2022, , .		0
266	Algorithms for the Selection of Applied Tests when a Stored Test Produces Many Applied Tests. , 2022, , .		0
267	Test Sequences for Faults in the Scan Logic. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2022, 30, 1568-1572.	2.1	0