System structure for software fault tolerance

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Citation Report

#	Article	IF	CITATIONS
1	A co-operative object-oriented architecture for adaptive systems. , 0, , .		4
3	Fault-Tolerant Systems. IEEE Transactions on Computers, 1976, C-25, 1304-1312.	2.4	144
4	Fault Tolerant Operating Systems. ACM Computing Surveys, 1976, 8, 359-389.	16.1	157
5	Process backup in producer-consumer systems. Operating Systems Review (ACM), 1977, 11, 151-157.	1.5	7
6	Recovery and crash resistance in a filing system. , 1977, , .		7
7	A Survey of Methods for Improving Computer Network Reliability and Availability. Computer, 1977, 10, 42-50.	1.2	22
8	Special Feature The Total Computer Security Problem: an Oveview. Computer, 1977, 10, 50-73.	1.2	13
9	Exploring a Stack Architecture. Computer, 1977, 10, 30-39.	1.2	21
10	Sequential pascal with recovery blocks. Software - Practice and Experience, 1978, 8, 177-185.	2.5	14
11	Reliability and Availability Models for Maintained Systems Featuring Hardware Failures and Design Faults. IEEE Transactions on Computers, 1978, C-27, 548-560.	2.4	56
12	A scheme for tolerating faulty data in real-time systems. , 0, , .		1
13	Strategies for structured and fault-tolerant design of recovery programs. , 0, , .		5
14	Fault-tolerance: The survival attribute of digital systems. Proceedings of the IEEE, 1978, 66, 1109-1125.	16.4	162
15	Reliable Resource Allocation Betvveen Unreliable Processes. IEEE Transactions on Software Engineering, 1978, SE-4, 230-241.	4.3	35
16	A Model of Recoverability in Multilevel Systems. IEEE Transactions on Software Engineering, 1978, SE-4, 486-494.	4.3	28
17	The Oregon Report Software Engineering: The Turning Point. Computer, 1978, 11, 30-41.	1.2	18
18	SIFT: Design and analysis of a fault-tolerant computer for aircraft control. Proceedings of the IEEE, 1978, 66, 1240-1255.	16.4	444
19	Reliability Issues in Computing System Design. ACM Computing Surveys, 1978, 10, 123-165.	16.1	318

#	Article	IF	Citations
20	Application of pattern recognition techniques to fault tolerant software systems. , 0, , .		1
21	System recovery in distributed databases. , 0, , .		1
22	On reliability of a computer network. Microelectronics Reliability, 1979, 19, 237-241.	0.9	1
23	Concurrent Pascal with backward error recovery: Language features and examples. Software - Practice and Experience, 1979, 9, 1001-1020.	2.5	15
24	Fault tolerance and digital systems. Microprocessors and Microsystems, 1979, 3, 365-373.	1.8	1
25	Fault-Tolerant Software. IEEE Transactions on Reliability, 1979, R-28, 227-232.	3.5	62
26	Software Failure Modes and Effects Analysis. IEEE Transactions on Reliability, 1979, R-28, 247-249.	3.5	102
27	Exception Handling in CLU. IEEE Transactions on Software Engineering, 1979, SE-5, 546-558.	4.3	149
28	A Recovery Cache for the PDP-11. IEEE Transactions on Computers, 1980, C-29, 546-549.	2.4	42
29	Atomicity of activities. Lecture Notes in Computer Science, 1980, , 225-250.	1.0	4
30	State Restoration in Systems of Communicating Processes. IEEE Transactions on Software Engineering, 1980, SE-6, 183-194.	4.3	123
31	Structuring Distributed Systems for Recoverability and Crash Resistance. IEEE Transactions on Software Engineering, 1981, SE-7, 436-447.	4.3	24
32	Program Fall Back Method in Real Time Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1981, 14, 57-62.	0.4	0
33	Language Structures and Management Method in a Distributed Real-Time Environment. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1981, 14, 103-113.	0.4	2
34	A Survey of Microprocessor Software Reliability with an Illustrative Example. International Journal of Electrical Engineering and Education, 1981, 18, 159-174.	0.4	0
35	Cost analysis of recovery block scheme and its implementation issues. International Journal of Computer & Information Sciences, 1981, 10, 359-382.	0.2	1
36	A formal model of atomicity in asynchronous systems. Acta Informatica, 1981, 16, 93-124.	0.5	61
37	SKALP: Skeleton architecture for fault-tolerant distributed processing. Microprocessing and Microprogramming, 1981, 7, 312-325.	0.3	2

#	Article	IF	Citations
38	Program fall-back method in real time systems. Annual Review in Automatic Programming, $1981, 11, 57-62$.	0.2	0
39	Computer-communication network reliability: Trends and issues. Microelectronics Reliability, 1981, 21, 79-95.	0.9	1
40	A Survey of Techniques for Synchronization and Recovery in Decentralized Computer Systems. ACM Computing Surveys, 1981, 13, 149-183.	16.1	136
41	Rollback propagation detection and performance evaluation of FTMR 2 M—a fault-tolerant multiprocessor. Computer Architecture News, 1982, 10, 171-180.	2.5	3
42	Software and Protocols in Rebus. A Distributed Real-Time Control System. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1982, 15, 147-153.	0.4	0
43	Software Issues In Redundant Sequential Control. IEEE Transactions on Industrial Electronics, 1982, IE-29, 273-278.	5. 2	7
44	Approaches to Mechanization of the Conversation Scheme Based on Monitors. IEEE Transactions on Software Engineering, 1982, SE-8, 189-197.	4.3	87
45	On Linguistic Support for Distributed Programs. IEEE Transactions on Software Engineering, 1982, SE-8, 203-210.	4.3	66
46	A mechanism for exception handling and its verification rules. Computer Languages, Systems and Structures, 1982, 7, 89-102.	0.3	12
47	Principles of Data Structure Error Correction. IEEE Transactions on Computers, 1982, C-31, 602-608.	2.4	15
48	Self-Stabilizing Programs: The Fault-Tolerant Capability of Self-Checking Programs. IEEE Transactions on Computers, 1982, C-31, 685-689.	2.4	1
49	Software reliability - bibliography. Microelectronics Reliability, 1982, 22, 625-640.	0.9	2
50	Microcomputer real time software reliability and fault recovery. Microelectronics Reliability, 1982, 22, 693-697.	0.9	1
51	DTL: A language for the design and implementation of concurrent programs as structured networks. Software - Practice and Experience, 1983, 13, 1099-1112.	2.5	2
52	Software reliability. Reliability Engineering, 1983, 4, 199-234.	0.4	10
53	A model for error recovery with global checkpointing. Information Sciences, 1983, 30, 225-239.	4.0	2
54	Software fault tree analysis. Journal of Systems and Software, 1983, 3, 173-181.	3.3	45
55	Recovery blocks for communicating systems. Microprocessing and Microprogramming, 1983, 11, 287-294.	0.3	1

#	Article	IF	CITATIONS
56	A Framework for Software Fault Tolerance in Real-Time Systems. IEEE Transactions on Software Engineering, 1983, SE-9, 355-364.	4.3	81
57	Implementing atomic actions on decentralized data. ACM Transactions on Computer Systems, 1983, 1, 3-23.	0.6	213
58	Combining tags with error codes. , 1983, , .		8
59	Guardians and Actions: Linguistic Support for Robust, Distributed Programs. ACM Transactions on Programming Languages and Systems, 1983, 5, 381-404.	1.7	404
60	Combining tags with error codes. Computer Architecture News, 1983, 11, 160-165.	2.5	1
61	Efficient local checkpointing for software fault tolerance. Operating Systems Review (ACM), 1983, 17, 11-13.	1.5	0
62	Practical Fault Tolerant Software for Asynchronous Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1983, 16, 59-65.	0.4	7
63	The Impact of Software Fault Tolerant Techniques on Software Complexity in Real Time Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1983, 16, 67-73.	0.4	2
64	TREX/MCS: A Fault Tolerant Multicomputer System. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1983, 16, 255-260.	0.4	1
65	The Application of Fault Tolerant Techniques to a Real Time System. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1983, 16, 75-82.	0.4	5
66	Performance evaluation of reliability control algorithms for distributed database systems. Journal of Systems and Software, 1984, 4, 239-264.	3.3	6
67	An efficient strategy for the detection of faults and a domino-free recovery in distributed systems. Microprocessing and Microprogramming, 1984, 14, 29-34.	0.3	1
68	Reliability and failure analyses of computing systems. Computers and Electrical Engineering, 1984, 11, 151-157.	3.0	2
69	Exception handling—A static approach. Software - Practice and Experience, 1984, 14, 429-449.	2.5	11
70	Design and Evaluation of a Fault-Tolerant Multiprocessor Using Hardware Recovery Blocks. IEEE Transactions on Computers, 1984, C-33, 113-124.	2.4	32
71	Error Detection Process—Model, Design, and Its Impact on Computer Performance. IEEE Transactions on Computers, 1984, C-33, 529-540.	2.4	55
72	Implementing Language Support in High-Level Languages. IEEE Transactions on Software Engineering, 1984, SE-10, 227-236.	4.3	3
73	Resilient Distributed Computing. IEEE Transactions on Software Engineering, 1984, SE-10, 257-268.	4.3	39

#	Article	IF	CITATIONS
74	A Scheme for Batch Verification of Integrity Assertions in a Database System. IEEE Transactions on Software Engineering, 1984, SE-10, 664-680.	4.3	7
75	Evaluation of Error Recovery Blocks Used for Cooperating Processes. IEEE Transactions on Software Engineering, 1984, SE-10, 692-700.	4.3	30
76	Dependability Evaluation of Software Systems in Operation. IEEE Transactions on Software Engineering, 1984, SE-10, 701-714.	4.3	128
77	Fault Tolerant Software Techniques for a Railway Electronic Interlocking Device. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1985, 18, 147-151.	0.4	0
78	Software Fault-Tolerance and Design Diversity: Past Experience and Future Evolution. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1985, 18, 167-172.	0.4	5
79	Reliability Versus Safety. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1985, 18, 141-146.	0.4	21
80	Application of distributed and dependable computer systems in power systems. International Journal of Electrical Power and Energy Systems, 1985, 7, 67-74.	3.3	0
81	Availability analysis for the design of distributed processing networks. Journal of Systems and Software, 1985, 5, 221-227.	3.3	2
82	A mechanism for detection and recovery from transient failures in industrial controllers. Microprocessing and Microprogramming, 1985, 15, 11-15.	0.3	0
83	A critique of unix. Software - Practice and Experience, 1985, 15, 1125-1139.	2.5	2
84	Fault-tolerant software - Experiment with the sift operating system. , 1985, , .		5
85	The N-Version Approach to Fault-Tolerant Software. IEEE Transactions on Software Engineering, 1985, SE-11, 1491-1501.	4.3	769
86	A Theoretical Basis for the Analysis of Multiversion Software Subject to Coincident Errors. IEEE Transactions on Software Engineering, 1985, SE-11, 1511-1517.	4.3	273
87	Dependable computing: From concepts to design diversity. Proceedings of the IEEE, 1986, 74, 629-638.	16.4	162
88	Bounds on Algorithm-Based Fault Tolerance in Multiple Processor Systems. IEEE Transactions on Computers, 1986, C-35, 296-306.	2.4	71
89	On selecting rollback points for error recovery. Information Sciences, 1986, 38, 283-292.	4.0	2
90	Heuristic Assignments of Redundant Software Versions and Processors in Fault-tolerant Computer Systems for Maximum Reliability. Probability in the Engineering and Informational Sciences, 1987, 1, 457-479.	0.6	0
91	The dependability approach to critical computing systems. , 1987, , 231-243.		6

#	Article	IF	CITATIONS
92	Checkpointing and Rollback-Recovery for Distributed Systems. IEEE Transactions on Software Engineering, 1987, SE-13, 23-31.	4.3	633
93	Inserting state restoration requests in systems of distributed processes. Microprocessing and Microprogramming, 1987, 21, 481-487.	0.3	1
94	Software fault tolerance in real-time systems. Information Sciences, 1987, 42, 255-282.	4.0	7
95	Using different language levels for implementing fault tolerant programs. Microprocessing and Microprogramming, 1987, 20, 33-38.	0.3	6
96	Attempto: An experimental fault-tolerant multiprocessor system. Microprocessing and Microprogramming, 1987, 20, 301-308.	0.3	4
97	Structured program lookahead. Computer Languages, Systems and Structures, 1987, 12, 95-108.	0.3	4
98	A tutorial on the principles of fault tolerance. Sadhana - Academy Proceedings in Engineering Sciences, 1987, 11, 7-22.	0.8	0
99	A survey of software dependability. Sadhana - Academy Proceedings in Engineering Sciences, 1987, 11, 23-48.	0.8	1
100	Enforcement of data consistency in database systems. Sadhana - Academy Proceedings in Engineering Sciences, 1987, 11, 49-80.	0.8	1
101	Optimal checkpointing and local recording for domino-free rollback recovery. Information Processing Letters, 1987, 25, 295-303.	0.4	61
102	Optimal Checkpointing of Real-Time Tasks. IEEE Transactions on Computers, 1987, C-36, 1328-1341.	2.4	94
103	The design of distributed, software fault tolerant, real-time systems incorporating decision mechanisms. Microprocessing and Microprogramming, 1988, 24, 801-806.	0.3	1
104	Communication Kernels - a high level synchronization primitive supporting error handling. Microprocessing and Microprogramming, 1988, 23, 233-237.	0.3	0
105	On the implications of computer viruses and methods of defense. Computers and Security, 1988, 7, 167-184.	4.0	21
106	Fundamental differences in the reliability of N-modular redundancy and N-version programming. Journal of Systems and Software, 1988, 8, 313-318.	3.3	14
107	State space modelling in the design of robust software for distributed systems: A case study. Microprocessing and Microprogramming, 1988, 24, 793-799.	0.3	0
108	The design and simulation of software fault tolerant mechanisms for application in distributed processing systems. Microprocessing and Microprogramming, 1988, 22, 175-185.	0.3	4
109	Algorithms of placing recovery points. Information Processing Letters, 1988, 28, 177-181.	0.4	3

#	Article	IF	Citations
110	Designing fault tolerance capabilities into real-time distributed computer systems. , 0, , .		2
111	Violation detection and recovery of distributed programs' safety properties. , 0, , .		0
112	Data diversity: an approach to software fault tolerance. IEEE Transactions on Computers, 1988, 37, 418-425.	2.4	274
113	New conditions for N-version programming. , 0, , .		2
114	Concurrent robust checkpointing and recovery in distributed systems. , 0, , .		51
115	The Delta-4 approach to dependability in open distributed computing systems. , 1988, , .		128
116	Checkpointing and rollback recovery in a distributed system using common time base. , 0 , , .		14
117	An analysis of the performance impacts of lookahead execution in the conversation scheme. , 0, , .		6
118	The commit/abort problem in type-specific locking. , 0, , .		2
119	A model for adaptable systems for transaction processing. , 0, , .		3
120	Asynchronous recovery protocols for distributed systems. , 0, , .		2
121	On fault tolerance in manufacturing systems. IEEE Network, 1988, 2, 32-39.	4.9	24
122	Verification of concurrent control flow in distributed computer systems. IEEE Transactions on Software Engineering, 1988, 14, 405-417.	4.3	4
123	Programmer-transparent coordination of recovering concurrent processes: philosophy and rules for efficient implementation. IEEE Transactions on Software Engineering, 1988, 14, 810-821.	4.3	34
124	Software complexity and its impact on software reliability. IEEE Transactions on Software Engineering, 1988, 14, 1645-1655.	4.3	52
125	Software fault tolerance in architectures with hierarchical protection levels. IEEE Micro, 1988, 8, 30-43.	1.8	15
126	Concurrent error detection using watchdog processors-a survey. IEEE Transactions on Computers, 1988, 37, 160-174.	2.4	443
127	The implementation of software fault tolerance in the Intel 80286 processor. , 0, , .		0

#	Article	IF	CITATIONS
128	Independent checkpointing and concurrent rollback for recovery in distributed systems-an optimistic approach. , 0 , , .		134
129	Executable assertion development for the distributed parallel environment., 0,,.		11
130	IGOR: a system for program debugging via reversible execution. , 1988, , .		111
131	Implementing Reliable Conversation in Concurrent Software Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1988, 21, 47-52.	0.4	1
132	Software Diversity and Fail-safe Programs. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1988, 21, 149-156.	0.4	0
133	An Empirical Exploration of Five Software Fault Detection Methods 1. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1988, 21, 79-85.	0.4	1
134	Replication within atomic actions and conversations: a case study in fault-tolerance duality. , 0, , .		10
135	Implementation of the conversion scheme in loosely coupled distributed computer systems. , 0, , .		2
136	A study of time-redundant fault tolerance techniques for high-performance pipelined computers. , 0, , .		50
137	On the provision of backward error recovery in production programming languages. , 0, , .		10
138	IGOR: a system for program debugging via reversible execution. ACM SIGPLAN Notices, 1989, 24, 112-123.	0.2	44
139	Demonic memory for process histories. , 1989, , .		24
140	Sheaved memory: architectural support for state saving and restoration in pages systems. , 1989, , .		10
141	A model for adaptable systems for transaction processing. IEEE Transactions on Knowledge and Data Engineering, 1989, 1, 433-449.	4.0	18
142	Real-time Ada: outstanding problem areas. , 1989, , .		3
143	Performance issues in C language fault-tolerant software. Computer Languages, Systems and Structures, 1989, 14, 1-9.	0.3	1
144	Model and algorithm of backward error recovery of distributed software. Journal of Computer Science and Technology, 1989, 4, 275-285.	0.9	0
145	Converstion modules: A methodological approach to the design of real-time applications. Microprocessing and Microprogramming, 1989, 27, 521-526.	0.3	0

#	Article	IF	CITATIONS
146	Fault tolerant processes. Distributed Computing, 1989, 3, 187-195.	0.7	29
147	Performance analysis of fault-tolerant systems in parallel execution of conversations. IEEE Transactions on Reliability, 1989, 38, 96-102.	3.5	1
148	The fault-tolerant architecture of the safe system. Microprocessing and Microprogramming, 1989, 27, 705-712.	0.3	6
149	Performance evaluation of a new design-tool for microprocessor transient fault recovery. Microprocessing and Microprogramming, 1989, 27, 801-808.	0.3	8
150	Hardware voter for fault-tolerant transputer systems. Microprocessors and Microsystems, 1989, 13, 588-596.	1.8	9
151	Distributed execution of recovery blocks: an approach for uniform treatment of hardware and software faults in real-time applications. IEEE Transactions on Computers, 1989, 38, 626-636.	2.4	154
152	Performance impacts of look-ahead execution in the conversation scheme. IEEE Transactions on Computers, 1989, 38, 1188-1202.	2.4	12
153	A simplification of a conversation design scheme using Petri nets. IEEE Transactions on Software Engineering, 1989, 15, 658-660.	4.3	3
154	An overview of the Nexus distributed operating system design. IEEE Transactions on Software Engineering, 1989, 15, 686-695.	4.3	19
155	An approach to experimental evaluation of real-time fault-tolerant distributed computing schemes. IEEE Transactions on Software Engineering, 1989, 15, 715-725.	4.3	15
156	Recovery point selection on a reverse binary tree task model. IEEE Transactions on Software Engineering, 1989, 15, 963-976.	4.3	3
157	Conceptual modeling of coincident failures in multiversion software. IEEE Transactions on Software Engineering, 1989, 15, 1596-1614.	4.3	191
158	Using checkpoints to localize the effects of faults in distributed systems. , 0, , .		13
159	A distributed fault tolerant architecture for nuclear reactor control and safety functions. , 0, , .		13
160	Modeling of fault-tolerant techniques in hierarchical systems. , 0, , .		4
161	Hardware rollback recovery schemes for multiprocessor systems. , 0, , .		1
162	Application of Petri net models for the evaluation of fault-tolerant techniques in distributed systems. , 0, , .		5
163	A system for supporting multi-language versions for software fault tolerance. , 1989, , .		5

#	Article	IF	CITATIONS
164	Formal verification of programs with exceptions. , 0, , .		2
165	An experimental study investigating models for N-version programming. , 0, , .		2
166	A non-intrusive checkpointing protocol. , 0, , .		6
167	A low overhead checkpointing and rollback recovery scheme for distributed systems. , 0, , .		26
168	Sheaved memory: architectural support for state saving and restoration in pages systems. Computer Architecture News, 1989, 17, 96-102.	2.5	4
169	Demonic memory for process histories. ACM SIGPLAN Notices, 1989, 24, 330-343.	0.2	4
170	A system architecture for fault tolerance in concurrent software. Computer, 1990, 23, 23-32.	1.2	27
171	The effect of statically and dynamically replicated components on system reliability. IEEE Transactions on Reliability, 1990, 39, 209-216.	3.5	17
172	A distributed error recovery technique and its implementation and application on UNIX. Journal of Computer Science and Technology, 1990, 5, 127-138.	0.9	1
173	Formal verification of safety-critical systems. Software - Practice and Experience, 1990, 20, 799-821.	2.5	24
174	Functional semantics of programs with exceptions. Computer Languages, Systems and Structures, 1990, 15, 251-265.	0.3	0
175	On specification of multiprocessor computing. Acta Informatica, 1990, 27, 685.	0.5	5
176	Recovery in distributed systems using optimistic message logging and checkpointing. Journal of Algorithms, 1990, 11, 462-491.	0.9	220
177	Using conversations to implement resilient objects in distributed systems. Annual Review in Automatic Programming, 1990, 15, 47-52.	0.2	0
178	Recovery meta program in Unix based environment. Microprocessing and Microprogramming, 1990, 30, 371-378.	0.3	1
179	The synthesis of deadlock-free interprocess communications. Microprocessing and Microprogramming, 1990, 30, 695-701.	0.3	0
180	Mechanism for evaluating the effectiveness of software fault-tolerant structures. Microprocessors and Microsystems, 1990, 14, 505-510.	1.8	4
181	Software fault tolerance in telecommunications systems. , 1990, , .		3

#	Article	IF	CITATIONS
182	Real-time, concurrent checkpoint for parallel programs. , 1990, , .		64
183	A highly decentralized implementation model for the programmer-transparent coordination (PTC) scheme for cooperative recovery. , 0, , .		10
184	On the modeling of workload dependent memory faults. , 0, , .		3
185	Fault-tolerance in the Advanced Automation System. , 0, , .		42
186	Analysis of faults detected in a large-scale multi-version software development experiment. , 0, , .		9
187	On the fault-tolerant support of the Distributed Logical Machine System. , 0, , .		0
188	Designing fault tolerant software with a recovery meta program. , 1990, , .		1
189	Correspondent computing for software implementation fault tolerance. , 0, , .		0
190	Fault-tolerance in the advanced automation system. , 1990, , .		42
191	Real-time Ada: outstanding problem areas. ACM SIGAda Ada Letters, 1990, X, 5-14.	0.1	1
192	Real-time, concurrent checkpoint for parallel programs. ACM SIGPLAN Notices, 1990, 25, 79-88.	0.2	7
193	Checkpointing and rollback-recovery in distributed object based systems. , 0, , .		17
194	Combined application/datafault recovery. , 0, , .		0
195	A software fault tolerance experiment for space applications. , 0, , .		2
196	Integrating error recovery in a mobile robot control system. , 0, , .		22
197	Using certification trails to achieve software fault tolerance. , 0, , .		17
198	Integrating fault-tolerant and real-time requirements of distributed systems. , 0, , .		4
199	Extending n-version programming to concurrent software., 0, , .		0

#	Article	IF	CITATIONS
200	On the modelling and testing of recovery block structures. , 0, , .		4
201	Modeling execution time of multi-stage N-version fault-tolerant software. , 0, , .		4
202	A design tool for fault tolerant software. , 0, , .		2
203	Fault-tolerance operators for distributed real-time control systems. , 0, , .		1
204	Adaptive fault tolerance: issues and approaches. , 0, , .		13
205	Event abstraction for debugging distributed programs. , 0, , .		0
206	Transparent structurization of parallel processes for backward recovery. , 0, , .		0
207	A basic unit of computation in distributed systems. , 0, , .		22
208	Dependability modeling and evaluation of software fault-tolerant systems. IEEE Transactions on Computers, 1990, 39, 504-513.	2.4	79
209	Performance analysis of real-time software supporting fault-tolerant operation. IEEE Transactions on Computers, 1990, 39, 906-918.	2.4	8
210	Cache-aided rollback error recovery (CARER) algorithm for shared-memory multiprocessor systems. , 0, , .		50
211	Tradeoffs in the design of efficient algorithm-based error detection schemes for hypercube multiprocessors. IEEE Transactions on Software Engineering, 1990, 16, 183-196.	4.3	18
212	Modeling of correlated failures and community error recovery in multiversion software. IEEE Transactions on Software Engineering, 1990, 16, 350-359.	4.3	68
213	The use of self checks and voting in software error detection: an empirical study. IEEE Transactions on Software Engineering, 1990, 16, 432-443.	4.3	98
214	Modeling of hierarchical distributed systems with fault-tolerance. IEEE Transactions on Software Engineering, 1990, 16, 444-457.	4.3	9
215	A comparison of voting algorithms for n-version programming. , 0, , .		16
216	An environment for developing fault-tolerant software. IEEE Transactions on Software Engineering, 1991, 17, 153-159.	4.3	25
217	An approach to the reliability optimization of software with redundancy. IEEE Transactions on Software Engineering, 1991, 17, 310-312.	4.3	39

#	ARTICLE	IF	CITATIONS
218	An experimental evaluation of software redundancy as a strategy for improving reliability. IEEE Transactions on Software Engineering, 1991, 17, 692-702.	4.3	131
219	Specification of fault-tolerant system issues by predicate/transition nets and regular expressions-approach and case study. IEEE Transactions on Software Engineering, 1991, 17, 513-526.	4.3	24
220	A distributed fault tolerant architecture for nuclear reactor and other critical process control applications. , 0 , , .		25
221	Software reliability modelling: achievements and limitations. , 0, , .		2
222	A new low cost distributed fault tolerant architecture for process control applications. , 0, , .		0
223	A timestamp-based checkpointing protocol for long-lived distributed computations. , 0, , .		55
224	Approaches to implementation of multiple DRB stations in tightly-coupled computer networks. , 0, , .		0
225	Fault tolerance in parallel implementations of functional languages. , 0, , .		7
226	Time warp simulation of stochastic Petri nets. , 0, , .		11
227	Implementing design diversity to achieve fault tolerance. IEEE Software, 1991, 8, 61-71.	2.1	46
228	Restoring consistent global states of distributed computations. ACM SIGPLAN Notices, 1991, 26, 144-154.	0.2	7
229	Lessons from Norstar's distributed call processing system. Operating Systems Review (ACM), 1991, 25, 108-111.	1.5	0
230	Software fault tolerance in telecommunications systems. Operating Systems Review (ACM), 1991, 25, 112-116.	1.5	0
231	Session D2: Fault tolerant parallel software. Microprocessing and Microprogramming, 1991, 32, 365-372.	0.3	4
232	Design fault tolerance. Reliability Engineering and System Safety, 1991, 32, 25-49.	5.1	12
233	Fault-tolerant software reliability modeling using Petri nets. Microelectronics Reliability, 1991, 31, 645-667.	0.9	4
234	Fault tolerance of onâ€board digital signal processing circuits. International Journal of Satellite Communications and Networking, 1991, 9, 399-413.	0.6	1
235	Session D2: Fault tolerant parallel software. Microprocessing and Microprogramming, 1991, 32, 373-380.	0.3	1

#	ARTICLE	IF	Citations
236	Distributed collection of message exchange sequences in each process for efficient recovery from protocol errors. Systems and Computers in Japan, 1991, 22, 1-9.	0.2	1
237	An asynchronous checkpointing service. Microprocessing and Microprogramming, 1991, 31, 117-120.	0.3	0
238	Basic concepts and issues in fault-tolerant distributed systems. , 1991, , 118-149.		4
239	Principles and realization strategies of multilevel transaction management. ACM Transactions on Database Systems, 1991, 16, 132-180.	1.5	188
240	Restoring consistent global states of distributed computations. , 1991, , .		31
241	Efficient communication of commitment-dependency information in the programmer-transparent coordination (PTC) scheme for cooperative recovery. , 0, , .		2
242	Comparative analysis of concurrent fault tolerance techniques for real-time applications. , 0, , .		4
243	Software fault tolerance using hierarchical N-version programming. , 0, , .		0
244	Approaches to design of temporary blackout handling capabilities and an evaluation with a real-time tightly coupled network testbed. , 0 , , .		0
245	Certification trails for data structures. , 0, , .		14
246	Experimental validation of distributed recovery block., 1991,,.		0
247	Evaluation of combined approaches to distributed software-based fault tolerance., 1991,,.		5
248	Fault tolerance assurance methodology of the SXO operating system for continuous operation. , 1991 , , \cdot		1
249	A checkpointing recovery approach in a distributed system on the CSMA/CD network., 1992,,.		0
250	SUVS: a distributed real-time system testbed for fault-tolerant computing. , 1992, , .		3
251	Global checkpointing for distributed programs. , 0, , .		85
252	Rollback recovery in distributed systems using loosely synchronized clocks. IEEE Transactions on Parallel and Distributed Systems, 1992, 3, 246-251.	4.0	32
253	The multi-layered design diversity architecture: application of the design diversity approach to multiple system layers. , 0, , .		5

#	Article	IF	CITATIONS
254	A recovery method for communication control processors. , 0, , .		0
255	Recovery in Distributed Systems from Solid Faults. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1992, 25, 57-62.	0.4	0
256	Survivability in Satellite Instrument Control Applications. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1992, 25, 485-490.	0.4	0
257	The Redundancy Specification in Configuration Languages. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1992, 25, 13-18.	0.4	0
258	An abstract model of rollback recovery control in distributed systems. Operating Systems Review (ACM), 1992, 26, 62-76.	1.5	9
259	Scheduling message processing for reducing rollback propagation. , 0, , .		26
260	The performance of consistent checkpointing. , 0, , .		236
261	Implementation of the conversation scheme in message-based distributed computer systems. IEEE Transactions on Parallel and Distributed Systems, 1992, 3, 555-572.	4.0	12
262	On reducing test time and meeting deadlines in real-time systems. , 0, , .		2
263	Designing fault tolerant application in Maruti. , 0, , .		3
264	Closure and convergence: a formulation of fault-tolerant computing. , 0, , .		8
265	Optimistic message logging for independent checkpointing in message-passing systems. , 0, , .		56
266	Experimental evaluation of certification trails using abstract data type validation., 0,,.		2
267	Fault-tolerant CSP., 0,,.		0
268	Software fault-tolerance in functional programming. , 0, , .		1
269	A new approach to the modeling of recovery block structures. IEEE Transactions on Software Engineering, 1992, 18, 159-167.	4.3	13
270	A case study of CES: a distributed collaborative editing system implemented in Argus. IEEE Transactions on Software Engineering, 1992, 18, 827-839.	4.3	31
271	Manetho: transparent roll back-recovery with low overhead, limited rollback, and fast output commit. IEEE Transactions on Computers, 1992, 41, 526-531.	2.4	230

#	Article	IF	Citations
272	The PTC scheme for designing loosely coupled recoverable processes: issues in realizing bounded recovery time. , 0 , , .		0
273	Transformation of programs for fault-tolerance. Formal Aspects of Computing, 1992, 4, 442-469.	1.4	68
274	Process checkpointin primitives for fault tolerance: definitions and examples. Microprocessors and Microsystems, 1992, 16, 15-23.	1.8	6
275	Adaptive fault-tolerance in complex real-time distributed computer system applications. Computer Communications, 1992, 15, 243-251.	3.1	24
276	Responding to catastrophic errors: A design technique for fault-tolerant software. Journal of Systems and Software, 1992, 17, 243-251.	3.3	3
277	The conversation deadlock problem in client-server model. Microprocessing and Microprogramming, 1992, 34, 67-71.	0.3	0
278	The specification and design of atomic actions for fault tolerant concurrent software. Microprocessing and Microprogramming, 1992, 35, 363-368.	0.3	3
279	S-nets: A Petri net based model for performance evaluation of real-time scheduling algorithms. Journal of Parallel and Distributed Computing, 1992, 15, 225-237.	2.7	8
280	Synchronous and asynchronous handling of abnormal events in the \hat{l} 4system. Software - Practice and Experience, 1992, 22, 735-776.	2.5	7
281	Checkpointing and recovery in a pipeline of transputers. Microprocessing and Microprogramming, 1992, 35, 141-147.	0.3	0
282	Analyzing concurrent and fault-tolerant software using stochastic reward nets. Journal of Parallel and Distributed Computing, 1992, 15, 255-269.	2.7	49
283	Supporting fault-tolerant distributed computations under real-time requirements. Computer Communications, 1992, 15, 252-260.	3.1	4
284	Applying 'design by contract'. Computer, 1992, 25, 40-51.	1.2	1,371
285	Performability of integrated software-hardware components of real-time parallel and distributed systems. IEEE Transactions on Reliability, 1992, 41, 352-362.	3.5	8
286	Transaction management in design databases. Journal of Systems and Software, 1993, 22, 3-15.	3.3	1
287	The design of time-critical conversations. Microprocessing and Microprogramming, 1993, 38, 785-792.	0.3	0
288	Design of loosely coupled processes capable of time-bounded cooperative recovery: the PTC/SL scheme. Computer Communications, 1993, 16, 305-316.	3.1	1
289	Processor- and memory-based checkpoint and rollback recovery. Computer, 1993, 26, 22-31.	1.2	59

#	Article	IF	CITATIONS
290	Reliability analysis of recovery blocks with nested clusters of failure points. IEEE Transactions on Reliability, 1993, 42, 34-43.	3.5	2
291	Reliability growth of fault-tolerant software. IEEE Transactions on Reliability, 1993, 42, 205-219.	3.5	28
292	Performability enhancement of fault-tolerant software. IEEE Transactions on Reliability, 1993, 42, 227-237.	3.5	60
293	Measurement-based evaluation of operating system fault tolerance. IEEE Transactions on Reliability, 1993, 42, 238-249.	3.5	33
294	Robotic surgery. IEEE Engineering in Medicine and Biology Magazine, 1993, 12, 120-125.	1.1	48
295	Structuring conversation in operation/procedure oriented programming languages. Computer Languages, Systems and Structures, 1993, 18, 153-168.	0.3	12
296	Comparative study of quantitative models for hardware, software and human reliability assessment. Quality and Reliability Engineering International, 1993, 9, 501-518.	1.4	7
297	The duality of fault-tolerant system structures. Software - Practice and Experience, 1993, 23, 773-798.	2.5	16
298	A hierarchical program structure for concurrent fault tolerant software. Microprocessing and Microprogramming, 1993, 37, 179-182.	0.3	0
299	Use of common time base for checkpointing and rollback recovery in a distributed system. IEEE Transactions on Software Engineering, 1993, 19, 571-583.	4.3	28
300	Exception handlers in functional programming languages. IEEE Transactions on Software Engineering, 1993, 19, 826-834.	4.3	3
301	Closure and convergence: a foundation of fault-tolerant computing. IEEE Transactions on Software Engineering, 1993, 19, 1015-1027.	4.3	191
302	Modeling correlation in software recovery blocks. IEEE Transactions on Software Engineering, 1993, 19, 1071-1086.	4.3	53
303	Functional paradigm for designing dependable large-scale parallel computing systems. , 0, , .		7
304	Control reconfiguration in the presence of software failures. , 0, , .		8
305	A uniform approach to software and hardware fault tolerance. , 0, , .		1
306	FTCS-23 The Twenty-Third International Symposium on Fault-Tolerant Computing. , 1993, , .		0
307	Reducing message logging overhead for log-based recovery. , 0, , .		5

#	Article	IF	CITATIONS
308	Adaptive independent checkpointing for reducing rollback propagation., 0,,.		38
309	Identification with modeling uncertainty and reconfigurable control. , 0, , .		7
310	Lazy checkpoint coordination for bounding rollback propagation. , 0, , .		41
311	Increasing system availability through on-line software version change. , 0, , .		4
312	Fair distribution of concerns in design and evaluation of fault-tolerant distributed computer systems. , 0, , .		0
313	Network multicomputing using recoverable distributed shared memory. , 0, , .		16
314	Total reliability management for telecommunications software. , 0, , .		2
315	Structuring DRB computing stations in highly decentralized LAN systems. , 0, , .		7
316	Faults, symptoms, and software fault tolerance in the Tandem GUARDIAN90 operating system. , 0, , .		61
317	System reliability analysis of an N-version programming application. , 0, , .		9
318	Progressive retry for software error recovery in distributed systems. , 0, , .		25
319	Fault-tolerant robotic system for critical applications. , 0, , .		14
320	Reliability prediction of distributed embedded fault-tolerant systems. , 0, , .		2
321	Development of a benchmark to measure system robustness. , 0, , .		32
322	Reducing message logging overhead for log-based recovery. , 0, , .		0
323	Efficient and fault-tolerant checkpointing procedures for distributed systems. , 0, , .		3
324	A hierarchical object-oriented approach to fault tolerance in distributed systems. , 0, , .		3
325	Simple models of fault tolerant software. , 0, , .		6

#	Article	IF	CITATIONS
326	UTARK: an object-based real-time kernel for distributed embedded systems. , 0, , .		2
327	Tolerating communication failures. , 0, , .		0
328	Supporting fault tolerance in formal service design. , 0, , .		0
329	An object-oriented approach for implementing algorithm-based fault tolerance. , 0, , .		4
330	Fault tolerance. Operating Systems Review (ACM), 1993, 27, 58-66.	1.5	21
331	Distributed fault tolerance â€" Lessons learnt from Delta-4. , 1993, , 199-217.		14
332	A real time fault tolerant microprocessor based On-Board Computer System for INSAT-2 spacecraft. Lecture Notes in Computer Science, 1994, , 476-487.	1.0	0
333	Dependable flight control system by data diversity and self-checking components. Microprocessing and Microprogramming, 1994, 40, 207-222.	0.3	3
334	Efficient algorithms for optimistic crash recovery. Distributed Computing, 1994, 8, 105-114.	0.7	20
335	Optimistic crash recovery without rolling back nonfaulty processors. Information Sciences, 1994, 78, 49-68.	4.0	0
336	Software diversity. Reliability Engineering and System Safety, 1994, 43, 103-110.	5.1	2
337	Critical system properties: survey and taxonomy. Reliability Engineering and System Safety, 1994, 43, 189-219.	5.1	94
338	Fair distribution of concerns in design and evaluation of fault-tolerant distributed computer systems. Computer Communications, 1994, 17, 699-707.	3.1	2
339	An efficient recovery procedure for fault tolerance in distributed systems. Journal of Systems and Software, 1994, 25, 39-50.	3.3	5
340	Reliability evaluation of fly-by-wire computer systems. Journal of Systems and Software, 1994, 25, 109-120.	3.3	14
341	A uniform approach to software and hardware fault tolerance. Journal of Systems and Software, 1994, 26, 117-127.	3.3	3
342	On the optimal design of N-version software systems subject to constraints. Journal of Systems and Software, 1994, 27, 55-61.	3.3	4
343	Efficient checkpointing procedures for fault tolerant distributed systems. Microprocessing and Microprogramming, 1994, 40, 427-438.	0.3	1

#	Article	IF	CITATIONS
344	A debugger for distributed programs. Software - Practice and Experience, 1994, 24, 507-525.	2.5	6
345	A multi-level view of dependable computing. Computers and Electrical Engineering, 1994, 20, 347-368.	3.0	7
346	Modeling, analysis and simulation of failures in a materials handling system with extended Petri nets. IEEE Transactions on Systems, Man, and Cybernetics, 1994, 24, 1358-1373.	0.9	29
347	Optimal design of large software-systems using N-version programming. IEEE Transactions on Reliability, 1994, 43, 344-350.	3.5	31
348	System reliability analysis of an N-version programming application. IEEE Transactions on Reliability, 1994, 43, 513-519.	3.5	34
349	Reliable software and communication III: congestion control and network reliability. IEEE Journal on Selected Areas in Communications, 1994, 12, 40-45.	9.7	9
350	Linear complexity assertions for sorting. IEEE Transactions on Software Engineering, 1994, 20, 424-431.	4.3	4
351	Observer-a concept for formal on-line validation of distributed systems. IEEE Transactions on Software Engineering, 1994, 20, 900-913.	4.3	76
352	Implementing fault tolerance with an attribute and functional based model. , 0, , .		4
353	Systematic incorporation of efficient fault tolerance in systems of cooperating parallel programs. , 0,		9
354	Evaluation Of Fault Tolerant Structures For Parallel Systems. , 0, , .		0
355	Performability-driven adaptive fault tolerance. , 0, , .		4
356	Low-latency, concurrent checkpointing for parallel programs. IEEE Transactions on Parallel and Distributed Systems, 1994, 5, 874-879.	4.0	88
357	Checking mergeable priority queues. , 0, , .		9
358	Failure-Resilient Computations in the EcliPSe System. , 1994, , .		3
359	Checkpointing SPMD applications on transputer networks. , 0, , .		13
360	Accelerating conversations for fault-tolerant concurrent software. , 0, , .		0
361	Effects of resource utilization monitoring in fault recovery. , 0, , .		0

#	Article	IF	CITATIONS
362	Applying object-oriented construction to fault tolerant systems. , 0, , .		0
363	Simple models of hardware and software fault tolerance. , 0, , .		9
364	Checking linked data structures., 0,,.		22
365	Experimental analysis of models for correlation in multiversion software. , 0, , .		4
366	Using Petri nets for the design of conversation boundaries in fault-tolerant software. IEEE Transactions on Parallel and Distributed Systems, 1994, 5, 1106-1112.	4.0	1
367	On the use and implementation of message logging. , 0, , .		70
368	The performance of cache-based error recovery in multiprocessors. IEEE Transactions on Parallel and Distributed Systems, 1994, 5, 1033-1043.	4.0	23
369	Two techniques for transient software error recovery. , 1993, , 159-170.		11
370	Software diversity as a way to well-structured concurrent software. Operating Systems Review (ACM), 1995, 29, 85-90.	1.5	1
371	A General Framework for Building Dependable Software. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1995, 28, 7-12.	0.4	O
372	An optimality proof for asynchronous recovery algorithms in distributed systems. Information Processing Letters, 1995, 55, 117-121.	0.4	7
373	Semantics of recovery lines for backward recovery in distributed systems. Annales Des Telecommunications/Annals of Telecommunications, 1995, 50, 874-887.	1.6	2
374	N-VERSION PROGRAMMINC: A FAULT-TOLERANCE APPROACH TO RELIABILITY OF SOFTWARE OPERATION. , 0,		106
375	OBSERVER A CONCEPT FOR ON-LINE DETECTION OF CONTROL ERRORS IN CONCURRENT SYSTEMS. , 0, , .		15
376	Robust parallel resource management in shared memory multiprocessor systems. , 0, , .		1
377	DEPENDABLE COMPUTING AND FAULT TOLERANCE : CONCEPTS AND TERMINOLOGY. , 0, , .		215
378	DEPENDABILITY EVALUATION OF SOFTWARE FAULT-TOLERANCE., 0, , .		3
379	STATE RESTORATION IN DISTRIBUTED SYSTEMS. , 0, , .		21

#	Article	IF	Citations
380	The Delta-4 Approach to Dependability in Open Distributed Computing Systems. , 0, , .		2
381	Characterization of consistent global checkpoints in large-scale distributed systems. , 0, , .		4
382	Cooperating diverse experts: a methodology to develop quality software for critical decision support systems. , 0 , , .		0
383	Completely asynchronous optimistic recovery with minimal rollbacks. , 0, , .		35
384	Application layer software fault tolerance for distributed object-oriented systems. , 0, , .		1
385	Fault Tolerance in Parallel Implementations of Functional Languages. , 0, , .		8
386	Certification of computational results. IEEE Transactions on Computers, 1995, 44, 833-847.	2.4	21
387	Checkpointing and its applications. , 0, , .		79
388	Analysis of software rejuvenation using Markov Regenerative Stochastic Petri Net., 0,,.		158
389	Fault tolerance in concurrent object-oriented software through coordinated error recovery. , 0, , .		52
390	Designing masking fault-tolerance via nonmasking fault-tolerance. , 0, , .		7
391	Dependability models for iterative software considering correlation between successive inputs. , 0, , .		5
392	Evaluation of software dependability based on stability test data., 0, , .		18
393	How to commit concurrent, non-isolated computations. , 0, , .		3
394	Adaptive redundancy for fault-tolerant real-time systems. , 0, , .		3
395	Flight test and certification plans for low-cost distributed control-by-light systems. , 0, , .		0
396	On-line error monitoring for several data structures. , 0, , .		3
397	Failure detection algorithms for a reliable execution of parallel programs. , 0, , .		8

#	Article	IF	Citations
398	Toward an object-oriented approach to software fault tolerance., 0,,.		7
399	Toward new-generation real-time object-oriented computing. , 0, , .		8
400	The performance of consistent checkpointing in distributed shared memory systems. , 0, , .		34
401	Smart objects for dependable real-time systems. , 0, , .		3
402	Design fault tolerance in operating systems based on a standardization project., 0,,.		10
403	Checking the integrity of trees. , 0, , .		10
404	An Evaluation of Software Fault Tolerance in a Practical System. , 0, , .		8
405	Bylands: reverse engineering safety-critical systems. , 0, , .		15
406	Recovery blocks and algorithm-based fault tolerance. , 0, , .		5
407	Enhancing real-time schedules to tolerate transient faults. , 0, , .		45
408	Dependable computing depends on structured fault tolerance., 0,,.		5
409	Conversations of objects. Computer Languages, Systems and Structures, 1995, 21, 147-163.	0.3	4
410	Software dependability in the Tandem GUARDIAN system. IEEE Transactions on Software Engineering, 1995, 21, 455-467.	4.3	102
411	CSP methods for identifying atomic actions in the design of fault tolerant concurrent systems. IEEE Transactions on Software Engineering, 1995, 21, 629-639.	4.3	5
412	Design of reliable software via general combination of N-version programming and acceptance testing. , 0 , , .		4
413	Minimizing timestamp size for completely asynchronous optimistic recovery with minimal rollback. , 0,		6
414	Implementation and performance of a stable-storage service in Unix. , 0, , .		4
415	Executable assertions and timed traces for on-line software error detection. , 0, , .		14

#	Article	IF	CITATIONS
416	Automatic Incremental State Saving. , 0, , .		23
417	An empirical evaluation of maximum likelihood voting in failure correlation conditions., 0,,.		7
418	Independent node and process recovery in message passing distributed systems. , 0, , .		3
419	Ada95 object-oriented and real-time support for development of software fault tolerance reusable components. , 0, , .		4
420	Primary-shadow consistency issues in the DRB scheme and the recovery time bound. , 0, , .		5
421	Designing a real-time recoverable action. , 0, , .		5
422	Toward dependable safety-critical software. , 0, , .		11
423	Verification of fault tolerance and real time. , 0, , .		9
424	Development of software fault-tolerant applications with Ada95 object-oriented support., 0,,.		2
425	A replication technique based on a functional and attribute grammar computation model. , 0 , , .		1
426	Automatic incremental state saving. ACM SIGSIM Simulation Digest, 1996, 26, 78-85.	0.1	4
427	Feasibility analysis of fault-tolerant real-time task sets. , 0, , .		94
428	Fail-safety techniques and their extensions to concurrent systems. Computer Languages, Systems and Structures, 1996, 22, 193-203.	0.3	1
429	Fail-safe concurrency in the EcliPSe system. Concurrency and Computation: Practice and Experience, 1996, 8, 283-312.	0.6	6
430	Design and modeling of hybrid fault-tolerant software with cost constraints. Journal of Systems and Software, 1996, 35, 141-149.	3.3	2
431	An object-oriented approach to develop software fault-tolerant mechanisms for parallel programming systems. Journal of Systems and Software, 1996, 32, 215-225.	3.3	2
432	Application specific conversation schemes for ADA programs. Microprocessing and Microprogramming, 1996, 41, 703-713.	0.3	2
433	Object-oriented design: exception handling and copying. Information and Software Technology, 1996, 38, 499-506.	3.0	0

#	Article	IF	Citations
434	On safety enhancements for medical robots. Reliability Engineering and System Safety, 1996, 54, 35-45.	5.1	22
435	Optimal software rejuvenation for tolerating soft failures. Performance Evaluation, 1996, 27-28, 491-506.	0.9	43
436	Supporting fault-tolerant and open distributed processing using RPC. Computer Communications, 1996, 19, 528-538.	3.1	4
437	A methodology for cost-effective software fault tolerance for mission-critical systems. , 0, , .		1
438	Roll-forward error recovery in embedded real-time systems. , 0, , .		5
439	Exception handling and resolution in distributed object-oriented systems. , 0, , .		18
440	Adaptive checkpointing in message passing distributed systems. International Journal of Systems Science, 1997, 28, 1145-1161.	3.7	4
441	Reliability simulation of fault-tolerant software and systems. , 0, , .		11
442	An implementation of the FTAG model in concurrent ML. , 0, , .		1
443	Increasing software reliability through rollback and on-line fault repair. , 0, , .		1
444	Hardware support for backward error recovery. , 0, , .		0
445	Adaptive recovery for mobile environments. , 0, , .		10
446	An index-based checkpointing algorithm for autonomous distributed systems. , 0, , .		7
447	Optimistic crash recovery without changing application messages. IEEE Transactions on Parallel and Distributed Systems, 1997, 8, 263-271.	4.0	22
448	Adaptive recovery for mobile environments. Communications of the ACM, 1997, 40, 68-74.	3.3	81
449	Fault tolerance in distributed Ada 95. ACM SIGAda Ada Letters, 1997, XVII, 106-110.	0.1	3
450	Fault recovery for distributed shared memory systems. , 0, , .		1
451	Analysis of checkpointing for schedulability of real-time systems. , 0, , .		17

#	Article	IF	Citations
452	ReSoFT: a reusable testbed for development and evaluation of software fault-tolerant systems. , 0, , .		3
453	Incorporating code coverage in the reliability estimation for fault-tolerant software. , 0, , .		2
454	A survey of recoverable distributed shared virtual memory systems. IEEE Transactions on Parallel and Distributed Systems, 1997, 8, 959-969.	4.0	54
455	An approach for adaptive fault-tolerance in object-oriented open distributed systems. , 0, , .		15
456	Xept: a software instrumentation method for exception handling. , 0, , .		13
457	Adaptive fault-tolerance with statically scheduled real-time systems. , 0, , .		15
458	Reliability and availability issues in distributed component object model (DCOM)., 0,,.		11
459	Time-bounded cooperative recovery with the distributed real-time conversation scheme. , 0, , .		3
460	A new method for transparent fault tolerance of distributed programs on a network of workstations using alternative schedules. , 0, , .		1
461	Research on cluster of workstations. , 0, , .		0
462	Preventing useless checkpoints in distributed computations., 0,,.		32
463	Methodology for cost-effective software fault tolerance for mission-critical systems. IEEE Aerospace and Electronic Systems Magazine, 1997, 12, 25-30.	2.3	4
464	A communication-induced checkpointing protocol that ensures rollback-dependency trackability. , 0, , .		59
465	Consistent state restoration in shared memory systems. , 0, , .		1
466	An object-oriented testbed for the evaluation of checkpointing and recovery systems. , 0, , .		11
467	On the effect of recovery block scheme on system performance. , 0, , .		0
468	Checkpoint and rollback in asynchronous distributed systems. , 0, , .		6
469	PSRR: a scheme for time-bounded fault tolerance in distributed object-based systems. , 0, , .		3

#	Article	IF	Citations
470	Progressive retry for software failure recovery in message-passing applications. IEEE Transactions on Computers, 1997, 46, 1137-1141.	2.4	17
471	A formally verified sorting certifier. IEEE Transactions on Computers, 1997, 46, 1304-1312.	2.4	9
472	Performance optimization of checkpointing schemes with task duplication. IEEE Transactions on Computers, 1997, 46, 1381-1386.	2.4	46
473	Fault-tolerance through scheduling of aperiodic tasks in hard real-time multiprocessor systems. IEEE Transactions on Parallel and Distributed Systems, 1997, 8, 272-284.	4.0	155
474	Implementing atomic actions in Ada 95. IEEE Transactions on Software Engineering, 1997, 23, 107-123.	4.3	29
475	Coordinated backward recovery between client processes and data servers. IEE Proceedings Software Engineering, 1997, 144, 134.	1.1	4
476	Modelling the effects of input correlation in iterative software. Reliability Engineering and System Safety, 1997, 57, 189-202.	5.1	5
477	Synchronous sessions and fixed priority scheduling. Journal of Systems Architecture, 1997, 44, 107-118.	2.5	3
478	Implementation of blocking coordinated atomic actions based on forward error recovery. Journal of Systems Architecture, 1997, 43, 687-699.	2.5	6
479	Software fault tolerance for distributed object based computing. Journal of Systems and Software, 1997, 39, 103-117.	3.3	2
480	Implementation of design fault tolerance based on a standardization project for operating systems. Systems and Computers in Japan, 1997, 28, 113-120.	0.2	0
481	Units of Computation in Fault-Tolerant Distributed Systems. Journal of Parallel and Distributed Computing, 1997, 40, 194-209.	2.7	1
482	Scheduling of distributed tasks for survivability of the application. Information Sciences, 1997, 97, 179-198.	4.0	2
483	Analysis of conditional MTTF of fault-tolerant systems. Microelectronics Reliability, 1998, 38, 393-401.	0.9	15
484	A framework for viewing atomic events in distributed computations. Theoretical Computer Science, 1998, 196, 45-70.	0.5	25
485	A study of atomic action schemes intended for standard Ada. Journal of Systems and Software, 1998, 43, 29-44.	3.3	3
486	Analysis and evaluation of distributed checkpoint algorithms to avoid rollback propagation. IET Software, 1998, 145, 212.	1.0	0
487	Designing masking fault-tolerance via nonmasking fault-tolerance. IEEE Transactions on Software Engineering, 1998, 24, 435-450.	4.3	33

#	Article	IF	CITATIONS
488	Replica management for fault-tolerant systems. IEEE Micro, 1998, 18, 54-65.	1.8	8
489	On the effectiveness of distributed checkpoint algorithms for domino-free recovery. , 0, , .		6
490	Checkpoint-recovery protocol for reliable mobile systems. , 0, , .		25
491	Recovery protocol for mobile checkpointing., 0, , .		1
492	Exception handling in object-oriented real-time distributed systems. , 0, , .		6
493	Detectors and correctors: a theory of fault-tolerance components. , 0, , .		55
494	How fail-stop are faulty programs?., 0, , .		31
495	Coordinated atomic actions in modelling object cooperation. , 0, , .		7
496	Theoretical analysis for communication-induced checkpointing protocols with rollback-dependency trackability. IEEE Transactions on Parallel and Distributed Systems, 1998, 9, 963-971.	4.0	39
497	ROAFTS: a middleware architecture for real-time object-oriented adaptive fault tolerance support. , 0, ,		29
498	Statecharts supervision models for soft real-time systems. , 0, , .		2
499	A VP-accordant checkpointing protocol preventing useless checkpoints. , 0, , .		15
500	Analysis of preventive maintenance in transactions based software systems. IEEE Transactions on Computers, 1998, 47, 96-107.	2.4	183
501	Damage assessment for optimal rollback recovery. IEEE Transactions on Computers, 1998, 47, 603-613.	2.4	2
502	A case for two-level recovery schemes. IEEE Transactions on Computers, 1998, 47, 656-666.	2.4	42
503	Dependable system upgrade. , 0, , .		22
504	Architecture of ROAFTS/Solaris: a Solaris-based middleware for real-time object-oriented adaptive fault tolerance support. , 0 , , .		8
505	Coordinated exception handling in distributed object systems: from model to system implementation. , 0, , .		22

#	Article	IF	CITATIONS
506	A modular implementation model of the Primary-Shadow TMO replication scheme and a testing approach using a real-time environment simulator. , 0 , , .		2
507	Reliability simulation of component-based software systems. , 0, , .		65
508	High performance technique for ultrareliable execution of tasks under both hardware and software faults. , 0, , .		3
509	A framework for dependability driven software integration. , 0, , .		7
510	Extended recovery protocol in distributed systems. , 0, , .		0
511	Approaches to Designing Complex Dependable Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 69-76.	0.4	0
512	Reliability Analysis of Fault Tolerant Recovery Blocks. Opsearch, 1998, 35, 281-294.	1.1	9
513	Specification and verification of fault-tolerance, timing, and scheduling. ACM Transactions on Programming Languages and Systems, 1999, 21, 46-89.	1.7	54
514	Distributed applet-based certifiable processing in client/server environments. , 1999, , .		0
515	Fault-tolerance using cache-coherent distributed shared memory systems. , 0, , .		0
516	Toward more reliable telecom systems., 0,,.		1
517	Diversity against accidental and deliberate faults. , 0, , .		25
518	Testing-resource allocation for redundant software systems. , 0, , .		10
519	Optimization models for recovery block schemes. European Journal of Operational Research, 1999, 115, 368-379.	3.5	28
520	Class diversity support in object-oriented languages. Journal of Systems and Software, 1999, 48, 43-57.	3.3	7
521	Evaluations of domino-free communication-induced checkpointing protocols. Information Processing Letters, 1999, 69, 31-37.	0.4	26
522	Selective checkpointing and rollbacks in multi-threaded object-oriented environment. IEEE Transactions on Reliability, 1999, 48, 325-337.	3.5	7
523	Approximate correctness-checking of computational results. IEEE Transactions on Reliability, 1999, 48, 338-350.	3.5	1

#	Article	IF	CITATIONS
524	Using coordinated atomic actions to design safety-critical systems: a production cell case study. Software - Practice and Experience, 1999, 29, 677-697.	2.5	16
525	A contribution to the evaluation of the reliability of iterative-execution software. Software Testing Verification and Reliability, 1999, 9, 145-166.	1.7	7
527	Starfish: fault-tolerant dynamic MPI programs on clusters of workstations. , 0, , .		78
528	Engineering look-ahead in distributed conversations. , 0, , .		0
529	The performance of coordinated and independent checkpointing. , 0, , .		3
530	Formal development and validation of Java dependable distributed systems. , 0, , .		3
531	Performance benefits of optimism in fossil collection., 0,,.		1
532	Error recovery using forced validity assisted by executable assertions for error detection: an experimental evaluation. , $1999, \dots$		5
533	A responsiveness approach for scheduling fault recovery in real-time systems. , 0, , .		18
534	Fault tolerance in decentralized systems. , 0, , .		3
535	On-board guarded software upgrading for space missions. , 0, , .		2
536	Incorporating error recovery into the imprecise computation model. , 0, , .		5
537	Reliability analysis of real-time controllers with dual-modular temporal redundancy. , 0, , .		4
538	Real-time supervisor modeling for telecom systems. , 0, , .		1
539	An index-based checkpointing algorithm for autonomous distributed systems. IEEE Transactions on Parallel and Distributed Systems, 1999, 10, 181-192.	4.0	37
540	Partition testing vs. random testing: the influence of uncertainty. IEEE Transactions on Software Engineering, 1999, 25, 661-674.	4.3	103
541	Improving design dependability by exploiting an open model-based specification. IEEE Transactions on Computers, 1999, 48, 24-37.	2.4	6
542	Communication-induced determination of consistent snapshots. IEEE Transactions on Parallel and Distributed Systems, 1999, 10, 865-877.	4.0	39

#	Article	IF	CITATIONS
544	Reliability analysis of Nâ€version programming with deadline mechanism. International Journal of Quality and Reliability Management, 2000, 17, 276-284.	1.3	0
545	Measure-driven processes and architecture for the empirical evaluation of software technology. Journal of Software: Evolution and Process, 2000, 12, 47-78.	0.5	10
546	A Fault-Tolerance Model for Multiprocessor Real-Time Systems. Journal of Computer and System Sciences, 2000, 61, 457-477.	0.9	3
547	On the No-Z-Cycle Property in Distributed Executions. Journal of Computer and System Sciences, 2000, 61, 400-427.	0.9	19
548	Evaluation of rollback points on multiprocessor systems. Systems and Computers in Japan, 2000, 31, 24-30.	0.2	0
549	State restoration in Ada 95: a portable approach to supporting software fault tolerance. Journal of Systems and Software, 2000, 50, 237-255.	3.3	2
550	On Persistent and Reliable Streaming in Ada. Lecture Notes in Computer Science, 2000, , 82-95.	1.0	5
551	A survey of checkpointing algorithms for parallel and distributed computers. Sadhana - Academy Proceedings in Engineering Sciences, 2000, 25, 489-510.	0.8	36
552	An exception handling framework for N-version programming in object-oriented systems., 0,,.		2
553	Experimentally evaluating an automatic approach for generating safety-critical software with respect to transient errors. IEEE Transactions on Nuclear Science, 2000, 47, 2231-2236.	1.2	90
554	Adaptive fault tolerance for spacecraft. , 0, , .		5
555	Optimal scheduling of imprecise computation tasks in the presence of multiple faults. , 0, , .		4
556	An experimental evaluation of the effectiveness of automatic rule-based transformations for safety-critical applications. , 0 , , .		11
557	An asynchronous recovery scheme based on optimistic message logging for mobile computing systems. , 0, , .		26
558	Issues insufficiently resolved in Century 20 in the fault-tolerant distributed computing field., 0,,.		11
559	On low-cost error containment and recovery methods for guarded software upgrading. , 0, , .		13
560	A framework to model dependable real-time systems based on real-time object model. , 0, , .		1
561	Evaluating the effectiveness of a software fault-tolerance technique on RISC- and CISC-based architectures., 0,,.		5

#	Article	IF	CITATIONS
562	Whither generic recovery from application faults? A fault study using open-source software. , 0 , , .		49
563	Real-time scheduling for dependable multimedia tasks in multiprocessor systems. , 0, , .		0
564	Concurrent exception handling and resolution in distributed object systems. IEEE Transactions on Parallel and Distributed Systems, 2000, 11, 1019-1032.	4.0	44
565	The PSTR/SNS scheme for real-time fault tolerance via active object replication and network surveillance. IEEE Transactions on Knowledge and Data Engineering, 2000, 12, 145-159.	4.0	16
566	Towards the fault tolerant software: fuzzy extension of crisp equivalence voters. , 0, , .		3
567	Highly reliable relational control programs for robust rapid transit systems. , 0, , .		2
568	The recovery language approach for software-implemented fault tolerance. , 0, , .		2
569	System safety through automatic high-level code transformations: an experimental evaluation. , 0, , .		7
570	Quantifying rollback propagation in distributed checkpointing., 0, , .		5
571	Checkpoint processing in distributed systems software using synchronized clocks. , 0, , .		7
572	Effectiveness and limitations of various software techniques for "soft error" detection: a comparative study. , 0 , , .		10
573	ESFFI-a novel technique for the emulation of software faults in COTS components., 0,,.		8
574	A source-to-source compiler for generating dependable software. , 0, , .		60
575	Checkpoint-recovery for mobile computing systems. , 0, , .		4
576	Low-cost flexible software fault tolerance for distributed computing. , 0, , .		3
577	Middleware of real-time object based fault tolerant distributed computing systems: issues and some approaches. , 0, , .		6
578	An efficient recovery scheme for mobile computing environments. , 0, , .		17
579	Conversations with fixed and potential participants. Journal of Systems Architecture, 2001, 47, 193-196.	2.5	O

#	Article	IF	CITATIONS
580	A systematic approach for the design of post-transaction input error handling. Information and Software Technology, 2001, 43, 641-649.	3.0	1
581	Impossibility of scalar clock-based communication-induced checkpointing protocols ensuring the RDT property. Information Processing Letters, 2001, 80, 105-111.	0.4	8
582	A study of failure models in feedback control systems. , 0, , .		19
583	A generic approach to structuring and implementing complex fault-tolerant software. , 0, , .		6
584	A survey of rollback-recovery protocols in message-passing systems. ACM Computing Surveys, 2002, 34, 375-408.	16.1	1,331
585	Containment units., 2002, , .		25
586	Containment units. Software Engineering Notes: an Informal Newsletter of the Special Interest Committee on Software Engineering / ACM, 2002, 27, 159-165.	0.5	12
587	ReVive. Computer Architecture News, 2002, 30, 111-122.	2.5	91
588	Distributed checkpointing using synchronized clocks., 0,,.		6
589	Anomaly detection in embedded systems. IEEE Transactions on Computers, 2002, 51, 108-120.	2.4	56
590	Low-cost error containment and recovery for onboard guarded software upgrading and beyond. IEEE Transactions on Computers, 2002, 51, 121-137.	2.4	11
591	Rigorous development of an embedded fault-tolerant system based on coordinated atomic actions. IEEE Transactions on Computers, 2002, 51, 164-179.	2.4	27
592	A software fault tolerance method for safety-critical systems: effectiveness and drawbacks. , 0, , .		21
593	A discrete-event systems approach to communication induced checkpointing. , 0, , .		0
594	On characteristics of DEF communication-induced checkpointing protocols. , 0, , .		5
595	Framework based on design patterns for providing persistence in object-oriented programming languages. IET Software, 2002, 149, 77.	1.0	8
596	A distributed parallel programming framework. IEEE Transactions on Software Engineering, 2002, 28, 478-493.	4.3	21
597	ReVive: cost-effective architectural support for rollback recovery in shared-memory multiprocessors. , 0, , .		54

#	Article	IF	CITATIONS
598	Interval Consistency of Asynchronous Distributed Computations. Journal of Computer and System Sciences, 2002, 64, 329-349.	0.9	13
599	A model for availability analysis of distributed software/hardware systems. Information and Software Technology, 2002, 44, 343-350.	3.0	71
600	An adaptive approach to achieving hardware and software fault tolerance in a distributed computing environment. Journal of Systems Architecture, 2002, 47, 763-781.	2.5	14
601	Designing a resourceful fault-tolerance system. Journal of Systems and Software, 2002, 62, 47-57.	3.3	2
602	Experimental analysis of specification language diversity impact on NPP software diversity. Journal of Systems and Software, 2002, 62, 111-122.	3.3	7
603	Performance comparison of checkpoint and recovery protocols. Concurrency Computation Practice and Experience, 2003, 15, 1363-1386.	1.4	9
604	Why software writing is difficult and will remain so. Information Processing Letters, 2003, 88, 13-25.	0.4	10
605	Optimal checkpointing interval of a communication system with rollback recovery. Mathematical and Computer Modelling, 2003, 38, 1303-1311.	2.0	0
606	Software Fault Tolerance: An Overview. Lecture Notes in Computer Science, 2003, , 45-67.	1.0	3
607	A nonpreemptive real-time scheduler with recovery from transient faults and its implementation. IEEE Transactions on Software Engineering, 2003, 29, 752-767.	4.3	28
608	Detecting soft errors by a purely software approach: method, tools and experimental results. , 0, , .		52
609	On properties of rdt communication-induced checkpointing protocols. IEEE Transactions on Parallel and Distributed Systems, 2003, 14, 755-764.	4.0	10
610	SIED: software implemented error detection. , 0, , .		23
611	A special checkpointing object method based primary-passive TMO replication scheme and middleware support. , 0, , .		1
612	Efficiency of transient bit-flips detection by software means: a complete study., 0,,.		3
613	A low-cost recovery protocol for mobile computation. , 0, , .		0
614	Low-cost coordinated nonblocking checkpointing in mobile computing systems. , 0, , .		5
615	Control and safety aspects of medical robots for treatment of diseases of the prostate. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2003, 217, 155-167.	0.7	1

#	Article	IF	Citations
616	A scalable task duplication based algorithm for improving the schedulability of real-time heterogeneous multiprocessor systems. , 0, , .		11
617	Protecting distributed software upgrades that involve message-passing. , 0, , .		1
618	An adaptive approach for n-version systems. , 2003, , .		5
619	Randomized instruction set emulation to disrupt binary code injection attacks. , 2003, , .		230
620	Role-based authorization in decentralized health care environments., 2003,,.		4
621	Software Fault Tolerance. , 2003, , 585-611.		3
622	ToolBus: The Next Generation. Lecture Notes in Computer Science, 2003, , 220-241.	1.0	7
623	Detecting Soft Errors by a Purely Software Approach: Method, Tools and Experimental Results. , 2003, , 39-51.		29
624	Undo for anyone, anywhere, anytime. , 2004, , .		9
625	Dependability and Its Threats: A Taxonomy. , 2004, , 91-120.		116
626	A model for correlated failures in N-version programming. IIE Transactions, 2004, 36, 1183-1192.	2.1	50
627	Review and analysis of synthetic diversity for breaking monocultures. , 2004, , .		20
628	Efficient overloading techniques for primary-backup scheduling in real-time systems. Journal of Parallel and Distributed Computing, 2004, 64, 629-648.	2.7	45
629	Robust assertions and fail-bounded behavior. Journal of the Brazilian Computer Society, 2004, 10, 18-30.	0.8	0
630	Analysing failure behaviours in component interaction. Journal of Systems and Software, 2004, 71, 97-115.	3.3	9
631	Codesign methodology for computer vision applications. Microprocessors and Microsystems, 2004, 28, 303-316.	1.8	3
632	Quantifying rollback propagation in distributed checkpointing. Journal of Parallel and Distributed Computing, 2004, 64, 370-384.	2.7	7
633	Reliability and performance analysis for fault-tolerant programs consisting of versions with different characteristics. Reliability Engineering and System Safety, 2004, 86, 75-81.	5.1	18

#	Article	IF	Citations
634	Systematic comparisons of RDT communication-induced checkpointing protocols., 0,,.		3
635	Structural analysis of explicit fault-tolerant programs. , 0, , .		2
636	Improving system dependability with functional alternatives. , 2004, , .		15
637	An Empirical Study on Reliability Modeling for Diverse Software Systems. , 0, , .		3
638	FTC-Charm++: an in-memory checkpoint-based fault tolerant runtime for Charm++ and MPI., 0,,.		52
639	On dependability driven software and hardware integration. , 0, , .		O
640	Performance evaluation and failure rate prediction for the soft implemented error detection technique. , 0, , .		3
641	Checkpointing in hybrid distributed systems. , 2004, , .		4
642	On Fault-Sensitive Feasibility Analysis of Real-Time Task Sets. , 0, , .		6
643	Checkpointing for peta-scale systems: a look into the future of practical rollback-recovery. IEEE Transactions on Dependable and Secure Computing, 2004, 1, 97-108.	3.7	143
644	Towards a control-theoretical approach to software fault-tolerance. , 0, , .		0
645	Basic concepts and taxonomy of dependable and secure computing. IEEE Transactions on Dependable and Secure Computing, 2004, 1 , 11 -33.	3.7	3,670
646	The guardian model and primitives for exception handling in distributed systems. IEEE Transactions on Software Engineering, 2004, 30, 1008-1022.	4.3	23
647	On Building Robust Web Service-Based Applications. , 2004, , 293-310.		8
648	Reliability of Cluster System with a Lot of Software Instances. Lecture Notes in Computer Science, 2004, , 417-420.	1.0	0
649	The atomic manifesto. SIGMOD Record, 2005, 34, 63-69.	0.7	9
650	COMPREHENSIVE MODELING OF COMPUTER CONTROL SYSTEMS' FUNCTIONALITY AND FAULT-TOLERANCE UML. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 123-128.	IN 0.4	0
651	The atomic manifesto. Operating Systems Review (ACM), 2005, 39, 41-46.	1.5	2

#	Article	IF	CITATIONS
652	Optimal structure of fault-tolerant software systems. Reliability Engineering and System Safety, 2005, 89, 286-295.	5.1	21
653	Formal verification of fault-tolerant software design: the CSP approach. Microprocessors and Microsystems, 2005, 29, 197-209.	1.8	6
654	A novel min-process checkpointing scheme for mobile computing systems. Journal of Systems Architecture, 2005, 51, 45-61.	2.5	14
655	An adaptive scheme for fault-tolerant scheduling of soft real-time tasks in multiprocessor systems. Journal of Parallel and Distributed Computing, 2005, 65, 595-608.	2.7	47
656	Robust assertions and fail-bounded behavior. Journal of the Brazilian Computer Society, 2005, 10, 20-32.	0.8	1
657	Rx., 2005, , .		206
658	Dependability, Structure, and Infrastructure., 2005, , 143-160.		1
659	Randomized instruction set emulation. ACM Transactions on Information and System Security, 2005, 8, 3-40.	4.5	117
660	Automated Harvesting of Test Oracles for Reliability Testing. , 0, , .		3
661	A multi-agent based fault tolerance system for distributed multimedia object oriented environment: MAFTS., 2005,,.		0
662	The Lam/Mpi Checkpoint/Restart Framework: System-Initiated Checkpointing. International Journal of High Performance Computing Applications, 2005, 19, 479-493.	2.4	159
663	Rx. Operating Systems Review (ACM), 2005, 39, 235-248.	1.5	76
664	A Low-Latency Checkpointing Scheme for Mobile Computing Systems. , 0, , .		4
665	Prediction-Based Software Availability Enhancement. Lecture Notes in Computer Science, 2005, , 143-157.	1.0	6
666	A simulation approach to structure-based software reliability analysis. IEEE Transactions on Software Engineering, 2005, 31, 643-656.	4.3	57
667	On the Fully-Informed Communication-Induced Checkpointing Protocol. , 0, , .		4
668	Software reliability analysis with component-level fault tolerance., 0,,.		3
669	Surviving Errors in Component-Based Software., 0, , .		3

#	Article	IF	CITATIONS
670	An adaptive fault tolerance for situation-aware ubiquitous computing., 2005, , .		1
671	An Efficient Index-Based Checkpointing Protocol with Constant-Size Control Information on Messages. IEEE Transactions on Dependable and Secure Computing, 2005, 2, 287-296.	3.7	6
672	Optimal Asynchronous Garbage Collection for RDT Checkpointing Protocols. , 0, , .		2
673	Cloning-Based Checkpoint for Localized Recovery. , 0, , .		4
674	On-Line Detection of Control-Flow Errors in SoCs by Means of an Infrastructure IP Core. , 0, , .		10
675	Blocking vs. Non-Blocking Coordinated Checkpointing for Large-Scale Fault Tolerant MPI., 2006, , .		27
676	A Framework of Multiple-Aspect Component-Testing for Trusted Collaboration in Mission-Critical Systems. , 2006, , .		3
677	A Locality-Driven Atomic Group Checkpoint Protocol. , 2006, , .		3
678	Non-Blocking Synchronous Checkpointing Based on Rollback-Dependency Trackability. Proceedings of the IEEE Symposium on Reliable Distributed Systems, 2006, , .	0.0	4
679	A new hybrid fault detection technique for systems-on-a-chip. IEEE Transactions on Computers, 2006, 55, 185-198.	2.4	60
680	A fault-tolerant architectural approach for dependable systems. IEEE Software, 2006, 23, 80-87.	2.1	33
681	Performance comparisons of indexâ€based communicationâ€induced checkpointing protocols. Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers, Series A/Chung-kuo Kung Ch'eng Hsuch K'an, 2006, 29, 1113-1118.	0.6	3
682	The role of structure: a software engineering perspective. , 2006, , 16-45.		0
683	EVOLUTIONARY ALGORITHMS FOR SAFETY-COST TRADE-OFFS IN CONTROL SYSTEM DESIGN. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 249-254.	0.4	0
684	Quasi-atomic recovery for distributed agents. Parallel Computing, 2006, 32, 733-758.	1.3	7
685	Reliability and performance analysis of hardware–software systems with fault-tolerant software components. Reliability Engineering and System Safety, 2006, 91, 570-579.	5.1	14
686	Software Reliability Experimentation and Control. Journal of Computer Science and Technology, 2006, 21, 697-707.	0.9	21
687	Notice of Violation of IEEE Publication Principles: Design, analysis and performance evaluation of a new algorithm for developing a fault tolerant distributed system., 2006,,.		2

#	Article	IF	CITATIONS
688	Architectural reconfiguration using coordinated atomic actions. , 2006, , .		4
689	MPI tools and performance studiesBlocking vs. non-blocking coordinated checkpointing for large-scale fault tolerant MPI., 2006,,.		30
690	Trustworthy software systems. Software Engineering Notes: an Informal Newsletter of the Special Interest Committee on Software Engineering / ACM, 2006, 31, 1-18.	0.5	33
691	Performance distribution of a fault-tolerant system in the presence of failure correlation. IIE Transactions, 2006, 38, 499-509.	2.1	13
692	Monitoring Distributed Systems for Safety Critical Software: A Goal-Driven Approach and Prototype-Tool. Lecture Notes in Computer Science, 2006, , 241-250.	1.0	0
693	CIC: an integrated approach to checkpointing in mobile agent systems. , 2006, , .		6
694	Looking Ahead in Open Multithreaded Transactions. , 0, , .		0
695	Hybrid Fault Detection Technique: A Case Study on Virtex-II Pro's PowerPC 405. IEEE Transactions on Nuclear Science, 2006, 53, 3550-3557.	1.2	11
696	Architectural description of dependable software systems. , 2006, , 127-142.		8
697	CAA-DRIP: a framework for implementing Coordinated Atomic Actions. Software Reliability Engineering (ISSRE), Proceedings of the IEEE International Symposium on, 2006, , .	0.0	11
698	Application-Transparent Checkpoint/Restart for MPI Programs over InfiniBand. , 0, , .		29
699	An efficient fault-tolerant scheduling algorithm for precedence constrained tasks in heterogeneous distributed systems., 2007,, 301-307.		7
700	Rx. ACM Transactions on Computer Systems, 2007, 25, 7.	0.6	46
701	Applying aspects to a real-time embedded operating system. , 2007, , .		14
702	An optimized hybrid approach to provide fault detection and correction in SoCs., 2007,,.		2
703	Fault Tolerant Planning for Critical Robots. , 2007, , .		12
704	Preliminary Models of the Cost of Fault Tolerance. , 2007, , .		2
705	Modeling and Integrating Aspects into Component Architectures., 2007,,.		0

#	Article	IF	Citations
706	Decoupling Constraint Validation from Business Activities to Improve Dependability in Distributed Object Systems. , 2007, , .		2
708	Service-Oriented Operating System: A Key Element in Improving Service Availability. Lecture Notes in Computer Science, 2007, , 31-42.	1.0	14
709	On the Complexity of Removing Z-Cycles from a Checkpoints and Communication Pattern. IEEE Transactions on Computers, 2007, 56, 853-858.	2.4	3
710	Exact Fault-Sensitive Feasibility Analysis of Real-Time Tasks. IEEE Transactions on Computers, 2007, 56, 1372-1386.	2.4	32
711	SOA-Trust: Towards Developing Trustworthy RFID Enabled Intelligent Service Solutions., 2007,,.		3
712	Pattern-Based Modeling and Analysis of Failsafe Fault-Tolerance in UML. , 2007, , .		5
713	A New Concurrent Detection of Control Flow Errors Based on DCT Technique. , 2007, , .		2
714	An Adaptable Fault-Tolerance for SOA using a Peer-to-Peer Framework. , 2007, , .		2
715	A Hybrid Approach to Fault Detection and Correction in SoCs. , 2007, , .		6
716	A Fast Rejuvenation Technique for Server Consolidation with Virtual Machines., 2007,,.		58
717	Coordinated Atomic Actions for Dependable Distributed Systems: the Current State in Concepts, Semantics and Verification Means., 2007,,.		4
718	On the Integration of Mobility in a Fault-Tolerant e-Health Web Information System. , 2007, , .		0
719	Self-Adjusting Indexing Techniques for Communication-Induced Checkpointing Protocols., 2007,,.		3
720	Reliability of fault-tolerant systems with parallel task processing. European Journal of Operational Research, 2007, 177, 420-430.	3.5	20
721	Analysis and framework-based design of a fault-tolerant web information system for m-health. Service Oriented Computing and Applications, 2008, 2, 111-144.	1.3	4
722	Computer systems availability evaluation using a segregated failures model. Quality and Reliability Engineering International, 2008, 24, 447-465.	1.4	4
723	Efficient global checkpointing algorithms for mobile agents. Concurrency Computation Practice and Experience, 2008, 20, 825-838.	1.4	2
724	Setting checkpoints in legacy code to improve fault-tolerance. Journal of Systems and Software, 2008, 81, 920-928.	3.3	2

#	ARTICLE	IF	CITATIONS
725	Reliability of malfunction tolerance. Proceedings of the International Multiconference on Computer Science and Information Technology, 2008, , .	0.0	14
726	Application-level fault tolerance in real-time embedded systems. , 2008, , .		9
727	Reliability Improvement of Real-Time Embedded System Using Checkpointing., 2008,,.		1
728	Coping with Obsolescence of Processor Cores in Critical Applications. , 2008, , .		3
729	Dynamic Performance Analysis for Software System Considering Real-Time Property in Case of NHPP Task Arrival., 2008,,.		2
730	Communication Aware Recovery Configurations for Networks-on-Chip. , 2008, , .		2
732	Coordinated versus Uncoordinated Checkpoint Recovery for Network-on-Chip Based Systems. , 2008, , .		1
733	Improving the Dependability of Web Services Integration. IT Professional, 2008, 10, 29-35.	1.4	15
734	Methodology for Reliability Evaluation of N-Version Programming Software Fault Tolerance System. , 2008, , .		2
735	PERFORMANCE ANALYSIS BASED ON THE NUMBER OF DEBUGGINGS FOR SOFTWARE SYSTEM WITH PROCESSING TIME LIMIT USING RELIABILITY GROWTH MODEL. Asia-Pacific Journal of Operational Research, 2008, 25, 765-780.	0.9	1
736	A survey of linguistic structures for application-level fault tolerance. ACM Computing Surveys, 2008, 40, 1-37.	16.1	28
737	A Hybrid Fault Tolerance Method for Recovery Block with a Weak Acceptance Test. , 2008, , .		4
738	Towards practical intrusion tolerant systems. , 2008, , .		5
739	Robust Design-for-Productization Practices for High Quality Automotive Products. , 2008, , .		0
740	A new way of calculating the recovery line through eliminating useless checkpoints in distributed systems. , 2008, , .		0
741	Refinement Patterns for Fault Tolerant Systems. , 2008, , .		2
742	Improving the scalability of checkpoint recovery for networks-on-chip. , 2008, , .		4
743	Developing Aerospace Applications with a ReliableWeb Services Paradigm. Aerospace Conference Proceedings IEEE, 2008, , .	0.0	0

#	Article	IF	Citations
744	Aspect-oriented fault tolerance for real-time embedded systems. , 2008, , .		22
745	Recovery scheme for hardening system on programmable chips. , 2009, , .		0
746	An Efficient Forward Recovery Checkpointing Scheme in Dissimilar Redundancy Computer System. , 2009, , .		2
747	A survey and review of the current state of rollbackâ€recovery for cluster systems. Concurrency Computation Practice and Experience, 2009, 21, 1632-1666.	1.4	13
748	Frameworks for designing and implementing dependable systems using Coordinated Atomic Actions: A comparative study. Journal of Systems and Software, 2009, 82, 207-228.	3.3	7
749	A mobile agent platform for distributed network and systems management. Journal of Systems and Software, 2009, 82, 355-371.	3.3	51
750	Global-to-Local Approach to Rigorously Developing Distributed System with Exception Handling. Journal of Computer Science and Technology, 2009, 24, 238-249.	0.9	1
751	Single element correction in sorting algorithms with minimum delay overhead., 2009,,.		9
752	Communication-Based Prevention of Non-P-Pattern. , 2009, , .		0
753	Area failures and reliable distributed applications. , 2009, , .		O
754	Exploiting embedded FPGA in on-line software-based test strategies for microprocessor cores. , 2009, , .		2
755	Changes and bugs — Mining and predicting development activities., 2009,,.		2
756	Performability Modeling for Software System with Performance Degradation and Reliability Growth. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2009, E92-A, 1563-1571.	0.2	3
757	Modelling dependable collaborative time-constrained business processes. Enterprise Information Systems, 2010, 4, 153-214.	3.3	27
758	E unibus pluram. , 2010, , .		73
759	The role of mobile agents in increasing speed up repair failure in the mobile database systems. , 2010, , .		0
760	A Hybrid Approach for Detection and Correction of Transient Faults in SoCs. IEEE Transactions on Dependable and Secure Computing, 2010, 7, 439-445.	3.7	16
761	An on-line fault detection technique based on embedded debug features. , 2010, , .		18

#	Article	IF	Citations
762	Roll-Forward Recovery with State Estimation. , 2011, , .		2
763	Self-Checking Components for Dependable Interactive Cockpits Using Formal Description Techniques. , 2011, , .		16
764	Fast Software Rejuvenation of Virtual Machine Monitors. IEEE Transactions on Dependable and Secure Computing, 2011, 8, 839-851.	3.7	49
765	Rebound. Computer Architecture News, 2011, 39, 153-164.	2.5	4
766	Codesign-Oriented Performability Modeling for Hardware-Software Systems. IEEE Transactions on Reliability, 2011, 60, 171-179.	3.5	19
767	Rebound., 2011,,.		14
768	A generic policy-free framework for fault-tolerant systems: Experiments on WSNs. , 2011, , .		2
769	A Redundancy Design Schema of Distributed Real-Time Database Applied in ISCS. Applied Mechanics and Materials, 0, 174-177, 2142-2146.	0.2	0
770	An improved schema of coordinated checkpointing protocol for distributed systems based on popular process. , $2012,$, .		2
771	A Dependent Model for Fault Tolerant Software Systems During Debugging. IEEE Transactions on Reliability, 2012, 61, 504-515.	3.5	10
772	On the use of embedded debug features for permanent and transient fault resilience in microprocessors. Microprocessors and Microsystems, 2012, 36, 334-343.	1.8	24
773	A multi-cycle checkpointing protocol that ensures strict 1-rollback. Information Processing Letters, 2012, 112, 788-793.	0.4	3
774	ChameleonSoft: Software Behavior Encryption for Moving Target Defense. Mobile Networks and Applications, 2013, 18, 271-292.	2.2	13
775	A survey of fault tolerance mechanisms and checkpoint/restart implementations for high performance computing systems. Journal of Supercomputing, 2013, 65, 1302-1326.	2.4	198
776	An efficient control-flow checking technique for the detection of soft-errors in embedded software. Computers and Electrical Engineering, 2013, 39, 1320-1332.	3.0	6
777	Towards analyzing and improving robustness of software applications to intermittent and permanent faults in hardware. , 2013, , .		4
778	Recovery within long-running transactions. ACM Computing Surveys, 2013, 45, 1-35.	16.1	17
779	An Application-Level Synchronous Checkpoint-Recover Method for Parallel CFD Simulation., 2013,,.		1

#	Article	IF	CITATIONS
780	2PACA: Two phases algorithm of checkpointing for Ad hoc mobile networks. , 2013, , .		2
781	A Programming Language Approach to Fault Tolerance for Fork-Join Parallelism. , 2013, , .		3
782	Byzantine Fault Tolerance for Services with Commutative Operations. , 2014, , .		13
783	A study of N-version programming and its impact on software availability. International Journal of Systems Science, 2014, 45, 2145-2157.	3.7	10
784	Enhanced n-version programming and recovery block techniques for web service systems. , 2014, , .		4
785	MITRA. SIGMOD Record, 2014, 43, 32-38.	0.7	7
786	Recovery block fault tolerance considering correlated failures. , 2014, , .		1
787	DIVERSIFY: Ecology-inspired software evolution for diversity emergence. , 2014, , .		8
788	Hope for the best, prepare for the worst: multi-tier control for adaptive systems. , 2014, , .		51
789	On the Practicality to Implement Byzantine Fault Tolerant Services Based on Tuple Space., 2014,,.		4
790	Improving Cyber Resiliency of Cloud Application Services by Applying Software Behavior Encryption (SBE). Procedia Computer Science, 2014, 28, 62-70.	1.2	3
791	A design framework for surgical robots: Example of the Araknes robot controller. Robotics and Autonomous Systems, 2014, 62, 1342-1352.	3.0	18
792	A Concurrent Partial Snapshot Algorithm for Large-Scale and Dynamic Distributed Systems. IEICE Transactions on Information and Systems, 2014, E97.D, 65-76.	0.4	4
793	Towards Trustworthy Integrated Clinical Environments. , 2015, , .		6
794	Optimal Checkpoint Selection with Dual-Modular Redundancy Hardening. IEEE Transactions on Computers, 2015, 64, 2036-2048.	2.4	6
795	An approach to architecture-based fault tolerance evaluation with fault propagation. , 2015, , .		1
796	Modeling fault tolerant architectures with design diversity for secure systems. , 2015, , .		2
797	Fault tolerance in cloud computing - survey. , 2015, , .		20

#	Article	IF	CITATIONS
798	Expanding the operational range of UAS with an onboard supervisory instance. , 2015, , .		1
799	FNB: Fast Non-Blocking Coordinated Checkpointing Protocol for Distributed Systems. Theory of Computing Systems, 2015, 57, 397-425.	0.7	4
800	Movement-Based Checkpointing and Message Logging for Recovery in MANETs. Wireless Personal Communications, 2015, 83, 1971-1993.	1.8	4
801	On the use of design diversity in fault tolerant and secure systems: A qualitative analysis. , 2015, , .		1
802	Dynamic groupâ€based fault tolerance technique for reliable resource management in mobile cloud computing. Concurrency Computation Practice and Experience, 2016, 28, 2756-2769.	1.4	16
803	Challenges in Autonomous Vehicle Testing and Validation. SAE International Journal of Transportation Safety, 0, 4, 15-24.	0.4	378
804	On designing and testing distributed virtual environments. Concurrency Computation Practice and Experience, 2016, 28, 3291-3312.	1.4	9
806	Using Redundancy to Detect Security Anomalies: Towards IoT security attack detectors. Ubiquity, 2016, 2016, 1-19.	0.2	3
807	Piccolo: A Fast and Efficient Rollback System for Virtual Machine Clusters. IEEE Transactions on Parallel and Distributed Systems, 2017, 28, 2328-2341.	4.0	10
808	Exploiting self-organization and fault tolerance in wireless sensor networks: A case study on wildfire detection application. International Journal of Distributed Sensor Networks, 2017, 13, 155014771770412.	1.3	19
809	A reliability-aware framework for service-based software development. , 2017, , .		1
810	Principles of Antifragile Software. , 2017, , .		13
811	Causal-consistent rollback in a tuple-based language. Journal of Logical and Algebraic Methods in Programming, 2017, 88, 99-120.	0.4	16
812	A Design Methodology for Developing Resilient Cloud Services. , 2017, , 177-197.		4
813	Integrated instruction set randomization and control reconfiguration for securing cyber-physical systems. , 2018, , .		5
814	Automatic Software Repair. ACM Computing Surveys, 2019, 51, 1-24.	16.1	196
815	An Adaptive Synchronous Parallel Strategy for Distributed Machine Learning. IEEE Access, 2018, 6, 19222-19230.	2.6	27
816	A Public Unified Bug Dataset for Java. , 2018, , .		30

#	Article	IF	Citations
817	An N-Modular Redundancy Framework Incorporating Response-Time Analysis on Multiprocessor Platforms. Symmetry, 2019, 11, 960.	1.1	3
818	Integrated data space randomization and control reconfiguration for securing cyber-physical systems. , 2019, , .		3
819	An Empirical Assessment of Error Masking Semantic Metric. Advances in Intelligent Systems and Computing, 2019, , 170-179.	0.5	0
820	An overview of radiation effects on electronic devices under severe accident conditions in NPPs, rad-hardened design techniques and simulation tools. Progress in Nuclear Energy, 2019, 114, 105-120.	1.3	28
821	Automation of fault-tolerant graceful degradation. Distributed Computing, 2019, 32, 1-25.	0.7	2
822	Rollback Mechanisms for Cloud Management APIs Using AI Planning. IEEE Transactions on Dependable and Secure Computing, 2020, 17, 148-161.	3.7	1
823	From Analyzing Operating System Vulnerabilities to Designing Multiversion Intrusion-Tolerant Architectures. IEEE Transactions on Reliability, 2020, 69, 22-39.	3.5	11
824	Integrated moving target defense and control reconfiguration for securing Cyber-Physical systems. Microprocessors and Microsystems, 2020, 73, 102954.	1.8	15
825	The development and reliability analysis environment of fault-tolerance multiversion software. IOP Conference Series: Materials Science and Engineering, 2020, 734, 012033.	0.3	2
826	A public unified bug dataset for java and its assessment regarding metrics and bug prediction. Software Quality Journal, 2020, 28, 1447-1506.	1.4	22
827	waLBerla: A block-structured high-performance framework for multiphysics simulations. Computers and Mathematics With Applications, 2021, 81, 478-501.	1.4	47
828	Diversity-By-Design for Dependable and Secure Cyber-Physical Systems: A Survey. IEEE Transactions on Network and Service Management, 2021, , 1-1.	3.2	0
829	A Survey on Security and Privacy Issues in Modern Healthcare Systems. ACM Transactions on Computing for Healthcare, 2021, 2, 1-44.	3.3	77
830	On misbehaviour and fault tolerance in machine learning systems. Journal of Systems and Software, 2022, 183, 111096.	3.3	11
831	Basic Aspects in Redundancy-Based Intrusion Tolerance. Advances in Intelligent Systems and Computing, 2022, , 192-202.	0.5	0
832	Robustness improvement of component-based cloud computing systems. Journal of Supercomputing, 2022, 78, 4977-5009.	2.4	0
833	Minimizing Energy and Computation in Long-Running Software. Applied Sciences (Switzerland), 2021, 11, 1169.	1.3	3
835	Architecting Web Services Applications for Improving Availability. Lecture Notes in Computer Science, 2005, , 69-91.	1.0	4

#	Article	IF	CITATIONS
836	Dependable Composite Web Services with Components Upgraded Online. Lecture Notes in Computer Science, 2005, , 92-121.	1.0	10
837	The Fault-Tolerant Insulin Pump Therapy. Lecture Notes in Computer Science, 2006, , 59-79.	1.0	11
838	Reliable computing systems. Lecture Notes in Computer Science, 1978, , 282-391.	1.0	21
839	On the duality of fault tolerant system structures. Lecture Notes in Computer Science, 1988, , 19-37.	1.0	15
840	An Approach to Software Assisted Recovery from Hardware Transient Faults for Real Time Systems. Lecture Notes in Computer Science, 2000, , 264-274.	1.0	5
841	An Adaptive Scheme for Fault-Tolerant Scheduling of Soft Real-Time Tasks in Multiprocessor Systems. Lecture Notes in Computer Science, 2001, , 68-78.	1.0	2
842	Modelling Coordinated Atomic Actions in Timed CSP. Lecture Notes in Computer Science, 2000, , 228-239.	1.0	3
843	Action-Oriented Exception Handling in Cooperative and Competitive Concurrent Object-Oriented Systems. Lecture Notes in Computer Science, 2001, , 147-164.	1.0	14
844	FANTOMAS Fault Tolerance for Mobile Agents in Clusters. Lecture Notes in Computer Science, 2000, , 1236-1247.	1.0	20
845	Reliability-Oriented Product Line Engineering of Embedded Systems. Lecture Notes in Computer Science, 2002, , 83-100.	1.0	8
846	Software Fault Tolerance of Concurrent Programs Using Controlled Re-execution. Lecture Notes in Computer Science, 1999, , 212-225.	1.0	10
847	Shared Recoverable Objects. Lecture Notes in Computer Science, 1999, , 397-411.	1.0	6
848	Efficient message logging for uncoordinated checkpointing protocols. Lecture Notes in Computer Science, 1996, , 353-364.	1.0	5
849	On programming atomic actions in Ada 95. Lecture Notes in Computer Science, 1997, , 254-265.	1.0	9
850	Checkpointing protocols in distributed systems with mobile hosts: A performance analysis. Lecture Notes in Computer Science, 1998, , 742-755.	1.0	5
851	Enhancing Fault Tolerance of Real-Time Systems through Time Redundancy. Kluwer International Series in Engineering and Computer Science, 1994, , 265-318.	0.2	11
852	Software-Level Soft-Error Mitigation Techniques. Frontiers in Electronic Testing, 2011, , 253-285.	0.3	10
853	Dependability: from Concepts to Limits. , 1993, , 157-168.		9

#	Article	IF	Citations
854	Specification and Verification of Recovery in Asynchronous Communicating Systems., 1993, , 137-165.		7
855	Software Abstractions and Human-Cyber-Physical Systems Architecture Modelling. Lecture Notes in Computer Science, 2020, , 159-219.	1.0	6
856	Engineering of Dependable Complex Business Processes Using UML and Coordinated Atomic Actions. Lecture Notes in Computer Science, 2004, , 468-482.	1.0	5
857	A Pattern-Based Approach for Modeling and Analyzing Error Recovery. Lecture Notes in Computer Science, 2007, , 115-141.	1.0	2
858	Architectural Fault Tolerance Using Exception Handling. Lecture Notes in Computer Science, 2007, , 142-162.	1.0	6
859	Implementing Fault Tolerance Using Aspect Oriented Programming. Lecture Notes in Computer Science, 2007, , 57-74.	1.0	8
860	Design Patterns for Graceful Degradation. Lecture Notes in Computer Science, 2009, , 67-93.	1.0	11
861	Architecting Dependable Systems with Proactive Fault Management. Lecture Notes in Computer Science, 2010, , 171-200.	1.0	3
862	Occurrence Nets Then and Now: The Path to Structured Occurrence Nets. Lecture Notes in Computer Science, 2011, , 1-16.	1.0	4
864	Asynchronous Distributed Checkpointing. , 2013, , 189-218.		2
865	Dependability Modeling and Evaluation of Software-and-Hardware Systems. Informatik-Fachberichte, 1984, , 202-215.	0.2	7
866	Reliable Resource Allocation Between Unreliable Processes. , 1985, , 298-321.		1
867	Recovery Control of Communicating Processes in a Distributed System., 1985,, 448-484.		5
869	A Reconsideration of the Recovery Block Scheme. , 1985, , 69-79.		1
870	Recovery Blocks in Action: A System Supporting High Reliability. , 1985, , 80-101.		20
871	Evaluation of Fault-Tolerant Software: A Performability Modeling Approach. Dependable Computing and Fault-tolerant Systems, 1993, , 113-135.	0.2	9
872	A Data-Driven Dependability Assurance Scheme with Applications to Data and Design Diversity. Dependable Computing and Fault-tolerant Systems, 1991, , 257-282.	0.2	9
873	Recovery Block Reliability Analysis with Failure Clustering. Dependable Computing and Fault-tolerant Systems, 1991, , 75-103.	0.2	9

#	Article	IF	CITATIONS
874	Fault-Tolerant Distributed Sort Generated from a Verification Proof Outline. Dependable Computing and Fault-tolerant Systems, 1993, , 71-96.	0.2	4
875	Scheduling Fault Recovery Operations for Time-Critical Applications. Dependable Computing and Fault-tolerant Systems, 1995, , 411-432.	0.2	17
876	Towards Fault Tolerant Real-Time Process Control System. , 1987, , 309-326.		1
877	Virtual precedence in asynchronous systems: Concept and applications. Lecture Notes in Computer Science, 1997, , 170-184.	1.0	18
879	Optimal software rejuvenation for tolerating soft failures. Performance Evaluation, 1996, 27-28, 491-506.	0.9	41
880	PRACTICAL FAULT TOLERANT SOFTWARE FOR ASYNCHRONOUS SYSTEMS. , 1983, , 59-65.		10
881	THE APPLICATION OF FAULT TOLERANT TECHNIQUES TO A REAL TIME SYSTEM., 1983,, 75-82.		3
882	Evolutionary algorithms for safety-cost trade-offs in control system design. , 2006, 39, 247-252.		1
883	Federated machine learning for multi-domain operations at the tactical edge. , 2019, , .		12
885	Software based fault tolerance. Ubiquity, 2006, 2006, 1-1.	0.2	16
886	Minimizing completion time of a program by checkpointing and rejuvenation. Performance Evaluation Review, 1996, 24, 252-261.	0.4	46
888	A fault-tolerance shim for serverless computing. , 2020, , .		32
889	Orchestrating the Development Lifecycle of Machine Learning-based IoT Applications. ACM Computing Surveys, 2021, 53, 1-47.	16.1	46
890	Programming atomic actions in Ada. ACM SIGAda Ada Letters, 1989, IX, 67-79.	0.1	3
891	FlexFT: A Generic Framework for Developing Fault-Tolerant Applications in the Sensor Web. International Journal of Distributed Sensor Networks, 2013, 9, 385892.	1.3	5
892	Implementing Fault Tolerant Software in Distributed Environment. , 2000, , 341-358.		0
893	Fault-Tolerant Dynamic Scheduling of Object-Based Real-Time Tasks in Multiprocessor Systems. , 2000, , 433-462.		2
895	Overhead of Coordinated Checkpointing Protocols for Message Passing Parallel Systems. , 2000, , 359-378.		1

#	Article	IF	Citations
896	Diversely designed classes for use by multiple tasks. ACM SIGAda Ada Letters, 2000, XX, 25-37.	0.1	3
898	A recovery model for cooperative computations. , 2002, , 231-251.		0
899	Reset-Driven Fault Tolerance. Lecture Notes in Computer Science, 2002, , 102-120.	1.0	5
901	An Abstract Architecture for Dependable and Flexible Distributed Applications. , 2002, , 23-37.		O
902	TLA Specification of a Mechanism for Concurrent Exception Handling. , 2002, , 41-59.		1
903	Where, Exactly, Is Software Development?. Lecture Notes in Computer Science, 2003, , 115-131.	1.0	O
904	Transactions and Groups as Generic Building Blocks for Software Fault Tolerance. Lecture Notes in Computer Science, 2003, , 208-219.	1.0	0
905	Clock Synchronization Algorithms and Scheduling Issues. Lecture Notes in Computer Science, 2003, , 45-55.	1.0	1
906	On Failures and Faults. Lecture Notes in Computer Science, 2003, , 18-39.	1.0	7
907	An Efficient Protocol for Checkpoint-Based Failure Recovery in Distributed Systems. Lecture Notes in Computer Science, 2004, , 135-144.	1.0	2
910	Software fault tolerant computing. Ubiquity, 2007, 2007, 1-1.	0.2	1
911	An Adaptive Fault-Tolerance Agent Running on Situation-Aware Environment. Communications in Computer and Information Science, 2008, , 302-309.	0.4	0
912	User-Perceived Software Service Availability Modeling with Reliability Growth. Lecture Notes in Computer Science, 2008, , 75-89.	1.0	4
914	Atomicity. , 2009, , 143-146.		0
916	Fault-Tolerant System Technology. , 2011, , 143-200.		1
918	Fault Tolerant Systems. Springer Series in Reliability Engineering, 2011, , 451-512.	0.3	0
919	A Tolerant Approach to Faults. Lecture Notes in Computer Science, 2011, , 273-282.	1.0	0
920	Tolerance of Design Faults. Lecture Notes in Computer Science, 2011, , 428-452.	1.0	3

#	Article	IF	CITATIONS
921	Recovery Blocks. Lecture Notes in Computer Science, 2011, , 261-266.	1.0	1
922	System Structure for Dependable Software Systems. Lecture Notes in Computer Science, 2011, , 594-607.	1.0	2
923	Fault Tolerant Autonomic Computing Systems in a Chemical Setting. Lecture Notes in Computer Science, 2011, , 118-129.	1.0	0
924	Achieving Dependability in Service-Oriented Systems. Lecture Notes in Computer Science, 2011, , 504-522.	1.0	3
927	Data base recovery at CMIC., 1976,,.		8
928	Betrachtungen zum Entwurf interaktiver Systeme. Lecture Notes in Computer Science, 1977, , 38-92.	1.0	3
929	Grundprinzipien und Betriebserfahrungen mit Fehlererkennung und -Anzeige bei Fehlertoleranten Prozessrechnersystemen mit Funktionsbeteiligter Redundanz., 1980,, 329-352.		2
930	Konzepte zur Erhöhung der ZuverlÃssigkeit und Sicherheit von Software durch Rechnersysteme mit typengesteuerten Operationen. Informatik-Fachberichte, 1982, , 220-234.	0.2	O
931	The Introduction of Fault-Tolerance in a Hierarchical Operating System. Informatik-Fachberichte, 1984, , 77-88.	0.2	0
932	The Problem of Confidence in Fault-Tolerant Computer Design. Informatik-Fachberichte, 1984, , 347-361.	0.2	1
933	Strategien zur Festlegung von Rýcksetzpunkten in Prozeβ-Systemen unter Berücksichtigung der Programm-Redundanz zur Ausnahmebehandlung. Informatik-Fachberichte, 1984, , 105-117.	0.2	0
935	Chapter 6 Communications protocols. Lecture Notes in Computer Science, 1985, , 162-220.	1.0	O
936	A Framework for Software Fault Tolerance in Real-Time Systems. , 1985, , 358-377.		0
937	A Model of Recoverability in Multilevel Systems. , 1985, , 381-395.		1
938	Structuring Distributed Systems for Recoverability and Crash Resistance., 1985,, 410-432.		0
939	Fault-Tolerant Sequential Programming Using Recovery Blocks. , 1985, , 112-114.		1
940	State Restoration in Distributed Systems. , 1985, , 435-447.		4
941	Concurrent Pascal with Backward Error Recovery: Language Features and Examples. , 1985, , 322-343.		1

#	Article	IF	CITATIONS
942	A Formal Model of Atomicity in Asynchronous Systems. , 1985, , 266-297.		0
943	Recovery and Crash Resistance in a Filing System. , 1985, , 126-139.		0
944	Software Reliability: The Role of Programmed Exception Handling. , 1985, , 143-153.		3
945	A Recovery Cache for the PDP-11., 1985,, 115-125.		2
946	Sequential Pascal with Recovery Blocks. , 1985, , 102-111.		0
947	Guidelines for the Synthesis of Software for Distributed Processors. , 1986, , 164-175.		0
948	Analysis references., 1986,, 423-439.		0
949	Challenges and Directions in Fault-Tolerant Computing. , 1986, , 33-67.		1
950	The Development of Techniques for Safety and Reliability Assessment: Past, Present and Future., 1987,, 141-151.		0
951	Software Fault Tolerance in Safety-Critical Applications. Informatik-Fachberichte, 1987, , 1-12.	0.2	3
952	A System Architecture for Software Fault Tolerance. Informatik-Fachberichte, 1987, , 273-283.	0.2	8
953	Tolerating Software Design Faults in a Command and Control System. Dependable Computing and Fault-tolerant Systems, 1988, , 109-128.	0.2	1
954	Annotated Bibliography on Software Diversity. Dependable Computing and Fault-tolerant Systems, 1988, , 191-216.	0.2	0
955	Enhancing concurrency in layered systems. Lecture Notes in Computer Science, 1989, , 200-219.	1.0	4
956	Designing for high integrity: the software fault tolerance approach., 1989,, 39-68.		0
958	The Quest for Timeless Specifications Leads to Non-Stepping Automata. , 1990, , 399-409.		1
959	Fehlertoleranz in universellen Hochleistungs-Parallelrechnern. Informatik-Fachberichte, 1990, , 1-14.	0.2	0
960	Using Conversations to Implement Resilient Objects in Distributed Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1990, 23, 47-52.	0.4	0

#	Article	IF	CITATIONS
962	Software Fault Tolerance., 1991,, 5-25.		2
963	Integration Problems in Fault-Tolerant, Secure Computer Design. Dependable Computing and Fault-tolerant Systems, 1991, , 347-364.	0.2	1
964	RECOVERY IN DISTRIBUTED SYSTEMS FROM SOLID FAULTS., 1992,, 57-62.		0
965	The Redundancy Specification in Configuration Languages. , 1992, , 13-18.		0
967	MLDD(Multi-Layered Design Diversity) architecture for achieving high design fault tolerance capabilities. Lecture Notes in Computer Science, 1994, , 336-349.	1.0	5
968	A fault-tolerant mechanism for simple controllers. Lecture Notes in Computer Science, 1994, , 39-55.	1.0	5
969	About conversations for concurrent OO languages. ACM SIGPLAN Notices, 1994, 29, 17-21.	0.2	0
970	Fehlertolerante Architekturen. LeitfÃden Der Informatik, 1995, , 273-308.	0.0	0
971	On-line Software Error Detection by Executable Assertions: From Theory to Practice., 1995,, 390-402.		2
972	Fault-Tolerant Automatic Control. , 1995, , 209-223.		0
973	System-Level Reliability and Sensitivity Analyses for Three Fault-Tolerant System Architectures. Dependable Computing and Fault-tolerant Systems, 1995, , 459-477.	0.2	4
974	An Attempt to Evaluate Functional Diversity Employed in a Reactor Protection System., 1995,, 331-352.		0
975	Using Data Consistency Assumptions to Show System Safety. Dependable Computing and Fault-tolerant Systems, 1995, , 15-27.	0.2	0
976	A reuse framework for software fault tolerance. , 1995, , .		7
977	Communications are Everything: A Design Methodology for Fault-Tolerant Concurrent Systems. IFIP Advances in Information and Communication Technology, 1996, , 39-49.	0.5	1
978	A framework for viewing atomic events in distributed computations. Lecture Notes in Computer Science, 1996, , 496-505.	1.0	1
979	Hardware and Software Fault Tolerance. , 1997, , 341-348.		0
980	User-Transparent Checkpointing and Restart for Parallel Computers. , 1998, , 385-399.		1

#	Article	IF	CITATIONS
981	Guaranteed Mutually Consistent Checkpointing in Distributed Computations. Lecture Notes in Computer Science, 1998, , 157-168.	1.0	0
984	A Checkpointing-Recovery Scheme for Domino-Free Distributed Systems. , 1998, , 93-107.		3
986	Communication Patterns and Input Patterns in Distributed Computing. Lecture Notes in Computer Science, 2015, , 1-15.	1.0	1
987	ISA \$\$^2\$\$ R: Improving Software Attack and Analysis Resilience via Compiler-Level Software Diversity. Lecture Notes in Computer Science, 2015, , 362-371.	1.0	0
988	Recovery Preparation. , 2016, , 105-134.		0
989	Mitigating Soft Errors in Processors Cores Embedded in System-on Programmable-Chips. , 2016, , 219-238.		1
990	On the Dependability of Highly Heterogeneous and Open Distributed Systems. Journal of Software Engineering and Applications, 2018, 11, 28-68.	0.8	0
991	An Empirical Assessment of Functional Redundancy Semantic Metric. Advances in Intelligent Systems and Computing, 2020, , 253-263.	0.5	1
992	Recovery Preparation. , 2020, , 111-140.		0
993	Exception Handling in CLU., 1983,, 239-251.		1
994	THE IMPACT OF SOFTWARE FAULT TOLERANT TECHNIQUES ON SOFTWARE COMPLEXITY IN REAL TIME SYSTEMS. , 1983, , 67-73.		2
995	TREX/MCS: A FAULT TOLERANT MULTICOMPUTER SYSTEM. , 1983, , 255-260.		0
996	SOFTWARE AND PROTOCOLS IN REBUS. A DISTRIBUTED REAL-TIME CONTROL SYSTEM., 1983,, 147-153.		0
998	Achieving Fault Tolerance. , 2006, , 117-151.		0
999	The role of structure: a dependability perspective. , 2006, , 3-15.		1
1000	Analytic Redundancy for Software Fault-Tolerance In Hard Real-Time Systems. , 1994, , 183-212.		7
1001	Measurement-Based Dependability Evaluation of Operational Computer Systems. , 1994, , 195-234.		2
1002	Status and Trends in the Performance Assessment of Fault Tolerant Systems. , 2008, , 1087-1106.		1

#	Article	IF	CITATIONS
1003	Software Reliability and Fault-tolerant Systems: An Overview and Perspectives. , 2008, , 1193-1208.		1
1004	A Systematic Approach to Automatically Generate Multiple Semantically Equivalent Program Versions. , 2008, , 185-198.		0
1005	Distributed checkpoint algorithms to avoid roll-back propagation., 0,,.		0
1006	Support for dynamic binding in strongly typed languages. ACM SIGPLAN Notices, 1987, 22, 69-75.	0.2	1
1007	Synchronized forward and backward recovery for communicating processes. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1987, 20, 107-112.	0.4	0
1008	A Recovery Block Model and Its Analysis. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1986, 19, 21-26.	0.4	7
1009	Error Recovery in Multi-Version Software. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1986, 19, 35-41.	0.4	14
1010	Toward Fault-Tolerant User Interfaces. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1986, 19, 117-122.	0.4	4
1011	A Framework for Fault Tolerant Design Using Abstract Data Types. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1986, 19, 39-43.	0.4	0
1013	N-Version Programming for Enhancing Fault Tolerance in Fog-based IoT Systems. , 2020, , .		3
1014	Diversity: A Heuristic to Improve Robustness of Self-Adaptive Cloud Architectures., 2015,,.		0
1016	Fault-tolerant computing concepts for aerospace applicationsâ€"a survey. , 1980, 3, 89-128.		0
1017	Dependability., 2022,, 143-175.		0
1018	Software Fault Diagnosis via Intelligent Data Mining Algorithms. Lecture Notes in Networks and Systems, 2023, , 655-667.	0.5	0