Multimedia
Towards Dynamics Animation on Object-Oriented Animation Database System "MOVE" p. 3
Relational Query Formulation by Pseudonatural Language Text Manipulation p. 11
Similarity Retrieval on Pictorial Databases Based upon Module Operation p. 19
Multidatabase Systems
Efficient Global Transaction Management in Multidatabase Systems p. 29
Schema Transformation Processors for Federated Objectbases p. 37
Determining Schema Interdependencies in Object-Oriented Multidatabase Systems p. 47
Object-Oriented Database Systems
PINOL: A Persistent Inferential Object Oriented Language for Databases p. 57
Object-Oriented Database with Rule-Based Query Interface for Genomic Computation p. 65
LRU-S: A New Buffer Allocation Approach for OODBMS p. 73
Distributed Database
Enhanced Tree Quorum Algorithm for Replicated Distributed Databases p. 83
Data Fragmentation and Allocation for PC-Based Distributed Database Design p. 90
Strategies for Selection from Heterogeneous Relations p. 97
Industrial Database Applications
Information Integration through Contract p. 107
The DiNG - A Parallel Multiatribute File System for Deductive Database Machines p. 115
Database User Interface Design Editor p. 123
Object-Oriented Data Models
An Object-Centered Data Model for Engineering Design Databases p. 133
Conceptual Layers in an Object Oriented Database. An Unified Model p. 141
Generating Object-Oriented Views from an ER-Based Conceptual Schema p. 148
Parallel Database
A Parallel Pattern Search Algorithm for Processing Object-Oriented Databases in a Cellular Array Architecture p. 159
Evaluation of a Parallel Database Machine for Caller Dependent Routing p. 170
A Design of a Transparent Backup System Using a Main Memory Database p. 178
Access Methods
Abstract Indexing Mechanism of the Extensible DBMS Modus p. 189
A New Indexing and Text Ranking Method for Japanese Text Databases Using Simple-Word Comounds as Keywords p. 197
B-Tree Concurrency Control Algorithm for Nested Transaction Systems p. 205
Real-Time Database
Scheduling and Concurrency Control for Real-Time Database Systems p. 219
A Protocol for Consistent Checkpointing Recovery for Time-Critical Distributed Database Systems p. 227
A Token-Based Synchronization Scheme Using Epsilon-Serializability and Its Performance for Real-Time Distributed Database Systems p. 235
Query Processing (I)
Query Processing Techniques in the Team-Oriented Database Query Language p. 245
Distributive Join Algorithm for Cube-Connected Multiprocessors p. 253
Optimization of Chain Queries
Rule Management
Database Updates Using Active Rules: A Unified Approach for Consistency Maintenance
A Database Rule Language Compiler Supporting Parallelism
A Knowledge Based System Converting ER Model into an Object-Oriented Database Schema

Temporal Database
Design of Historical Databases Using the 3-D Relational Data Model
Offstage Objects and their Renovations in the Temporal Object System TOS
Logical Data Independence Via Views: A Misapprehension?

Integrity
Optimizing Distributed Integrity Constraints
On Deriving Specialization Constraints over Complex Objects
Improving Integrity Checking for [actual symbol not reproducible]-Constraints

Deductive and Fuzzy Database
On Exclusive Disjunctions in Deductive Database
A Fuzzification of the Relational Data Model
Enhancing the Fuzzy Set Model with Positively Compensatory Operators

Concurrency Control and IO Schedulings
A Pessimistic Concurrency Control Algorithm in Multidatabase Systems
An Optimistic Concurrency Control Protocol for Real-Time Database Systems
New Disk Scheduling Algorithms for Reduced Rotational Latency

Query Processing (II)
Applying Intensional Query Processing Techniques to Object-Oriented Database Systems
Heterogeneous Query Optimization Using Maximal Sub-Queries
Temporal Query Processing for Scene Retrieval in Motion Image Databases
Efficient Processing of Time-Joins in Temporal Data Bases

Intelligent User Interface
Qualitative Behavior Modeling of Information Processing Components
A Multimedia Database for an Advanced Teleshopping Application

Author Index