<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extended Kalman Filter - Finite Element for Geotechnical Problems</td>
<td>128</td>
</tr>
<tr>
<td>Dynamic Response of Uncertain Two-Dimensional Structures</td>
<td>132</td>
</tr>
<tr>
<td>Random Pulse Excitations</td>
<td></td>
</tr>
<tr>
<td>Vibration of a Bridge under a Random Train of Moving Loads</td>
<td>136</td>
</tr>
<tr>
<td>On the Approximated Solution of Non-Linear Systems under Non Gaussian Excitations</td>
<td>140</td>
</tr>
<tr>
<td>Responses of Nonlinear Oscillators Excited by Non-Gaussian Pulse Processes</td>
<td>144</td>
</tr>
<tr>
<td>Nonlinear Systems under Non-Gaussian Impulsive Noise Excitation</td>
<td>148</td>
</tr>
<tr>
<td>Random Vibration of the Viscoelastic Structure under Series of Stochastic Excitations</td>
<td>152</td>
</tr>
<tr>
<td>Reliability Analysis in Design</td>
<td></td>
</tr>
<tr>
<td>Probabilistic Evaluation of Redundancy of Bridge Structures</td>
<td>156</td>
</tr>
<tr>
<td>Incorporating Corrosion in Reliability-Based Design of Anchored Bulkheads</td>
<td>160</td>
</tr>
<tr>
<td>Safety of Highway Bridges Under Earthquake Loads</td>
<td></td>
</tr>
<tr>
<td>Development of a Limit-State Seismic Code for Bridges</td>
<td>164</td>
</tr>
<tr>
<td>Reliability Model for Bridge Columns under Seismic Loads</td>
<td>168</td>
</tr>
<tr>
<td>Spatial Variability Effects on the Seismic Response of Models of Bridges</td>
<td>172</td>
</tr>
<tr>
<td>Vibration Control of Highway Bridges under Earthquakes</td>
<td>176</td>
</tr>
<tr>
<td>Random Vibration</td>
<td></td>
</tr>
<tr>
<td>Pre-Envelope Covariance Differential Equations</td>
<td>180</td>
</tr>
<tr>
<td>Surface Motion due to Stochastic Plane Source in a Layered Medium</td>
<td>184</td>
</tr>
<tr>
<td>In-Plane Non-Linear Random Vibration of Composite Plates</td>
<td>188</td>
</tr>
<tr>
<td>Linear System Spectral Moments Determination</td>
<td>192</td>
</tr>
<tr>
<td>Probabilistic Characteristics of a Sliding Structure via New Stochastic Linearization Methods</td>
<td>196</td>
</tr>
<tr>
<td>Stochastic Structural Mechanics</td>
<td></td>
</tr>
<tr>
<td>Experimental Study of the Transient Temperature Distributions in Concrete</td>
<td>200</td>
</tr>
<tr>
<td>Reliability Consideration in Shakedown Analysis</td>
<td>204</td>
</tr>
<tr>
<td>Probability Model of Load Exceedances under Cyclic Loadings</td>
<td>208</td>
</tr>
<tr>
<td>Parameter Estimations of Structural Dynamic Systems</td>
<td>212</td>
</tr>
<tr>
<td>Geotechnical Engineering I</td>
<td></td>
</tr>
<tr>
<td>Quantifying Uncertainty in Site Characterization</td>
<td>216</td>
</tr>
<tr>
<td>Evaluation of Expansive Clay Soils in Tucson, Arizona</td>
<td>220</td>
</tr>
<tr>
<td>Geotechnical Database Manipulation to Effect Stochastic Analysis</td>
<td>224</td>
</tr>
<tr>
<td>Offshore Pile System Reliability</td>
<td>228</td>
</tr>
<tr>
<td>Reliability Analysis Methods</td>
<td></td>
</tr>
<tr>
<td>A Criticism of Statistical Methods in Probabilistic Models in Structural Reliability</td>
<td>236</td>
</tr>
<tr>
<td>Sensitivity Evaluation of Simulation Methods for Reliability Assessment</td>
<td>240</td>
</tr>
<tr>
<td>High Order Statistics in Structural Reliability</td>
<td>244</td>
</tr>
<tr>
<td>A Mathematical Tool Set for SORM Reliability Methods</td>
<td>248</td>
</tr>
</tbody>
</table>
Experiences with Experimental Design Schemes for Failure Surface Estimation and Reliability

Spatial Variability of Earthquake Ground Motion

Earthquake Ground Motion Modeling with Stochastic Line Source

Site-Dependence of Spatial Coherency

Response of Suspension and Deck Arch Bridges to Spatially Varying Ground Motion

Stochastic Modelling of Strong Ground Motions for the Istanbul, Turkey Area from Seismic Data for the Surrounding Region

F-K Spectra from a Haskell-Type Source in a Multiple-Layered Half-Space

Probabilistic Analysis of Wind Effects

Estimates of Extreme Wind Distribution Tails

Sampling Errors in U.S. Extreme Wind Records

Digital Simulation of Wind Load Effects

Comparison of Wind Cross-Spectral Data with Models

Slepian Processes

Non-Gaussian Vortex Induced Aeroelastic Vibrations under Gaussian Wind: A Slepian Model Approach to “Lock In”

Slepian Process of a Non-Stationary Process

Reliability of Degrading Dynamic Systems with Applications

Reliability Analysis of Degrading Elasto-Plastic Oscillators

Fatigue and Fracture Reliability Modeling

A Stochastic Model for Crack Initiation and Fatigue Life

Inspection Planning for Surface Fatigue Cracks

Some Remarks on BK-Models for Fatigue Crack Growth

A Fatigue Reliability Model for Railway Bridges

Stochastic Finite Element Methods, III

A Stochastic Approach to the Fatigue Reliability

Stochastic Finite Element Analysis of a Damped Beam on Random Foundation and Subjected to Fast Moving Loads

Finite Element Dynamic Reliability Analysis with Condensation

Reliability of Nonlinear Frame Structures by SFEM

Reliability-Based Methods for Design and Evaluation of Highway Bridges

Truck Loading Data for a Probabilistic Bridge Live Load Model

Calibration of Redundancy Factors for Highway Bridges

Structural Reliability and Proof Testing for Highway Bridges

Geotechnical Engineering II

Probabilistic Evaluation of Bearing Capacity of Shallow Foundations

Evaluation of Seismic Soil Response using Stochastic Linearization

Predicting Effects of Subsidence on Landfill Caps

A Knowledge Based System with Uncertainty for the Soil

Reliability of Controlled Structures

Reliability of Controlled Structures Subject to Real Parameter Uncertainties

Effect of Active Control to Structural Reliability
Wave Propagation in Random Media

Some Modeling and Analysis Techniques for Wave Propagation in Random Media

Wave Propagation in a Randomly Layered Medium

Wavefront Propagation in Random Granular Media

Earthquake Engineering

Stochastic Critical Excitations

Seismic Response Variability of Soil Sites

Soil/Structure Seismic Investigation of Safety-Related Structures

Differential Motions in Sedimentary Valleys

Nonlinear Random Vibration

Polynomial Chaos for Nonlinear Random Vibration

Exact Nonstationary Response of a Sliding Rigid Structure to a Modulated White Noise Base Excitation

Analytical Methods for the Determination of Correlations and Spectra of Nonlinear System Response

Truncation of Infinite Hierarchy for Hysteretic Systems

Probabilistic Order of Chaotic Dynamics

Stochastic Fatigue Life Prediction Under Non-Gaussian Loads

Fatigue Life Variability and Reliability Analysis of a Wind Turbine Blade

Fatigue Strength of Welded Joints under Broadband Loadings

Low-Cycle Fatigue Prediction for Ramberg-Osgood Type Materials

Fatigue/Fracture Reliability and Maintainability of Structural Systems: A Method of Analysis

Reliability of Mechanical Components

A Statistical Method for the Reliability of Mechanical Components

Experimental Validation of a Probabilistic Fracture Mechanics Model

Response of Secondary Systems to Short Duration Stochastic Input

On a Procedure to Estimate the Reliability of Mechanical Components

Probabilistic Analysis of Offshore Structures

TLP Fatigue due to Second-Order Springing

Nonlinear Diffraction of Random Waves by a Vertical Cylinder

A Non-Gaussian Fatigue Model for Offshore Structures

Stochastic Models for Material Behaviors

A New Probabilistic Model for the Fracture Toughness of Concrete

Probabilistic Particle-Related Constitutive Model for Clayey Material

Fabric Related Probabilistic Model for Granular Materials

Stochastic Modeling of Short Fiber Reinforced Composites - A Review

System Reliability I

Structural Reliability Analysis Methods for Implicit Performance Functions

An Advanced First-Order Method for System Reliability

Probabilistic Rotordynamics Analysis Using an Adaptive Importance Sampling Method

A Systems Reliability Approach to the Safety of Steel Connections
