SHOCK AND VIBRATION

Subject Index • Volume 2 • 1995

Active slip brace device (ASBD), 133
Active vibration control, 15
Adaptive finite element methods, 193
Adaptive geometry, 143
Air bag, 99
Airbags, 237
Arched beams, 481
Aspiration, 99
Automatic dynamic balancer, 59
Automobile crash, 237
Automobile seatbelt inertial sensor, 227

Bridge structures, 373 Bridge vibrations, 259

Cable-stayed bridges, 259 Choi-Williams distributions, 437 Concrete targets, 355 Continuous sliding mode control, 365 Crashworthiness, 471 Curvature transformations, 143 Cylindrical shell structures, 297

Damping, of beams, 445
Deadband, 289
Debris cloud material characterization, 273
Dynamic analysis, of shells, 413
Dynamic transfer, 155
Dynamics and feedback control, 143
Dynamics Optimization, 471

Earthquake Effects, 133 Electrodynamic maglev systems, 339 Electrothermally coupled fields, 219 Explosive charge, 451

Finite element formulation, 247
Finite element model (FEM), 119
Flexible structures, 429
Flow-induced structural noise, of a sonar dome, 403
Flow-induced vibrations, 365
Framed structures, 481
Free vibration of multilayer thick cylinders, 393
Frequencies, natural, 43
Fuzzy logic, 493

H-adaptivity, 193
High capacity fluid damping devices, 373
Hydrodynamic thrust bearings, 1
Hypervelocity impacts, 273
Hysteresis, 289

Inverse eigensensitivity method (IESM), 119

Joint stiffness, 289

Kalman filters, 507

Laminates, 321

Machinery diagnostic, 437 Multiaxis vibration simulators, 461

Noise signals, 507 Nonlinear finite element simulations, 193 Nonlinear oscillators, 307

Nonlinear vibration, of arched beams and framed structures, 481

Nonlinearities, 173 Normal form theory, 307

Optimal damping of beams, 445 Oscillators, 205

Parametrically excited two-degree-of-freedom (2-DOF) systems,

Partial differential equations, 219
Passive constrained layer damping (PCLD) treatments, 33
Periodic structures, 69

Positive real zeros, in flexible beams, 429

projectiles, 355

Quadratic functional, 163

Random vibrations, of space shuttle weather protection systems,

Response function method (RFM), 119 Rotatory inertia, 321

Seatbelt inertial sensor design, automatic, 227

Seismic energy, 373

Self-compensating dynamic balancer (SCDB), 59

Shear deformation, 155, 321 Sinusoidal vibrations, 383 Solids, 173

Space shuttle weather protection systems, 111

Space-based devices, 493 Stiffness matrices, 155 Structural vibration control, 445 Structures, dynamic behavior of, 69 Suspension instabilities, 339

Thin steel sheet, 15
Thin target plates, 273
Thin-walled steel projectiles, 355
Thrust bearings, 1
Timoshenko pipes, 247
Timoshenko shear beam, 155
Toeplitz Jacobian matrices (TJM), 205
Top, dynamics of, 23

Underwater explosion shock, 451

Vibration damping, 33 Vibration dissipation, 429 Vibration isolation capabilities, 163 Vibration signals, 507 Vibratory disturbances, 493 Vibroisolating capability, 163 Vortex-induced vibrations, 365

Waves, 173

Shock and Vibration, Vol. 2 (1995)