

# **Author Index**

- Amabili, M., 293  
Araújo dos Santos, J.V., 1  
Barros, R.C., 267  
Bradford, M.A., 197  
Braz-Cesar, M.T., 267  
Cognard, J.Y., 223  
Créac'hcadec, R., 223  
Ernst, G., 151  
Frangopol, D.M., 55  
Gattulli, V., 97  
Hühne, C., 151  
Hussein, B.A., 247  
Kaczmarczyk, Ł, 75  
Kotsovos, M.D., 173  
Maia, N.M.M., 1  
Maqueda, L.G., 247  
Mota Soares, C.A., 1  
Mota Soares, C.M., 1  
Muscolino, G., 125  
Neves, L.A.C., 55  
Oliveira, D.V., 267  
Pearce, C.J., 75  
Pellisetti, M.F., 25  
Pi, Y.-L., 197  
Rolfes, R., 151  
Schuëller, G.I., 25  
Shabana, A.A., 247  
Sofi, A., 125  
Sohier, L., 223  
Vogler, M., 151



# Keyword Index

- absolute nodal coordinate formulation, finite elements, 75
- 247
- adhesive testing, 223
- advanced simulation, 25
- anisotropy, 151
- arches, 197
- bifurcation, 197
- bridge management, 55
- bridges, 55
- brittle behaviour, 173
- buckling, 197
- cable, 97
- cable-stayed bridges, 97
- component-mode synthesis, 125
- concrete, 75, 173
- constitutive law, 173
- cost, 55
- cyclic response of reinforced concrete frames, 267
- damage, 151
- damage identification, 1
- deterioration, 55
- dynamic interaction, 125
- dynamic loading, 173
- dynamics, 97
- earthquake loading, 173
- edge effects, 223
- elastic supports, 197
- existing structures, 55
- failure, 151
- finite beam elements, 247
- finite curved-beam element, 197
- Flügge, 293
- fluid-structure interaction, 293
- fracturing, 75
- hybrid bonded assemblies, 223
- hybrid-Trefftz, 75
- impact loading, 173
- infill reinforced concrete frames, 267
- inverse problems, 1
- joint design, 223
- large deformations, 247
- life-cycle performance, 55
- linear constitutive models, 247
- maintenance, 55
- material model, 151
- model updating, 1
- monotonic and cyclic loading, 173
- multi-grid, 75
- multi-scale analysis, 151
- non-linear analysis, 267
- non-linear behaviour, 223
- non-linear constitutive models, 247
- non-linear elasticity, 247
- non-linear finite element analysis, 173
- non-linear phenomena, 97
- non-linear shell theory, 293
- non-linear vibrations, 293
- optimization, 55
- parallel processing, 25
- Poisson modes, 247
- preconditioner, 75

- rail irregularities, 125
- railway bridge, 125
- railway track, 125
- running train, 125
- Sanders-Koiter, 293
- shells, 293
- simulation, 55
- static loading, 173
- stay, 97
- stochastic structural analysis, 25
- stress analysis, 223
- structural analysis software, 25
- structural concrete, 173
- structural dynamics, 1
- substructures, 125
- textile composites, 151
- uncertainty, 55
- uniform temperature field, 197
- updating, 55
- visco-elastic foundation, 125
- voxel meshing, 151



