



Gregory Deierlein

John A. Blume Professor in the School of Engineering
Civil and Environmental Engineering

CONTACT INFORMATION

- **Administrator**

Racquel Hagen - Administrative Associate

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Bio

BIO

Deierlein's research focuses on improving limit states design of constructed facilities through the development and application of nonlinear structural analysis methods and performance-based design criteria. Recent projects include the development and application of strength and stiffness degrading models to simulate steel and reinforced concrete structures, seismic design and behavior of composite steel-concrete buildings, analysis of inelastic torsional-flexural instability of steel members, and a fracture mechanics investigation of seismically designed welded steel connections.

ACADEMIC APPOINTMENTS

- Professor, Civil and Environmental Engineering

ADMINISTRATIVE APPOINTMENTS

- Director, John A. Blume Earthquake Engineering Center, (2002- present)

HONORS AND AWARDS

- Shortridge Hardesty Award, American Society of Civil Engineers (2018)
- Academy of Distinguished Alumni, Department of Civil and Environmental Engineering, UC Berkeley (2016)
- Distinguished Lectureship, Earthquake Engineering Research Institute (2016)
- Krawinkler Award, Structural Engineers Association of Northern California (2016)
- Lifetime Achievement Award, American Institute of Steel Construction (2016)
- Mosseiff Award, American Society of Civil Engineers (2016)
- Academy of Distinguished Alumni, Department of Civil and Environmental Engineering, UT Austin (2014)
- Elected Member, National Academy of Engineering (2013)
- Breakthrough Award, Popular Mechanics (2010)
- Earthquake Spectra - Outstanding Paper Award, Earthquake Engineering Research Institute (2009, 2013)
- Top 25 Newsmakers of 2009, Engineering News-Record (2009)
- Special Achievement Award, American Institute of Steel Construction (2003)

- Huber Research Prize, American Society of Civil Engineers (2000)
- State-of-the-Art Award, American Society of Civil Engineers (1995, 2000)
- Norman Medal, American Society of Civil Engineers (1994, 2002, 2008)
- Raymond Reese Research Prize, American Society of Civil Engineers (1991, 2003)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, National Academy of Engineering (2013 - present)
- Member, Board of Directors, Earthquake Engineering Research Institute (2016 - present)
- Member, Board of Trustees, Geohazards International (2016 - present)
- Member, Specification Committee, American Institute of Steel Construction (1992 - present)

PROFESSIONAL EDUCATION

- PhD, University of Texas, Austin (1988)
- MS, University of California at Berkeley (1982)
- BS, Cornell University (1981)

Teaching

COURSES

2017-18

- Advanced Structural Analysis: CEE 280 (Aut)
- Integrated Civil Engineering Design Project: CEE 183 (Spr)
- Nonlinear Structural Analysis: CEE 282 (Win)
- Seismic Design Workshop: CEE 83 (Aut)

2016-17

- Advanced Structural Analysis: CEE 280 (Aut)
- Integrated Civil Engineering Design Project: CEE 183 (Spr)
- Nonlinear Structural Analysis: CEE 282 (Win)

2015-16

- Advanced Structural Analysis: CEE 280 (Aut)
- Integrated Civil Engineering Design Project: CEE 183 (Spr)
- Nonlinear Structural Analysis: CEE 282 (Win)
- Structural Engineering and Geomechanics Seminar: CEE 298 (Win)

2014-15

- Advanced Structural Analysis: CEE 280 (Aut)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Pablo Camilo Heresi Venegas

Postdoctoral Faculty Sponsor

David Welch

Master's Program Advisor

Pablo Camilo Heresi Venegas

Doctoral (Program)

Andres Acosta Vera, Francisco Galvis

Publications

PUBLICATIONS

- **Calibration of Continuum Cyclic Constitutive Models for Structural Steel Using Particle Swarm Optimization** *JOURNAL OF ENGINEERING MECHANICS*
Smith, C., Kanvinde, A., Deierlein, G.
2017; 143 (5)
- **A local criterion for ductile fracture under low-triaxiality axisymmetric stress states** *ENGINEERING FRACTURE MECHANICS*
Smith, C., Kanvinde, A., Deierlein, G.
2017; 169: 321-335
- **Calibration of Model to Simulate Response of Reinforced Concrete Beam-Columns to Collapse** *ACI STRUCTURAL JOURNAL*
Haselton, C. B., Liel, A. B., Taylor-Lange, S. C., Deierlein, G. G.
2016; 113 (6): 1141-1152
- **Rocking Spine for Enhanced Seismic Performance of Reinforced Concrete Frames with Infills** *JOURNAL OF STRUCTURAL ENGINEERING*
Burton, H. V., Deierlein, G. G., Mar, D., Mosalam, K. M., Rodgers, J., Gunay, S.
2016; 142 (11)
- **Full-Scale Dynamic Testing of a Sliding Seismically Isolated Unibody House** *EARTHQUAKE SPECTRA*
Jampole, E., Deierlein, G., Miranda, E., Fell, B., Swensen, S., Acevedo, C.
2016; 32 (4): 2245-2270
- **Seismic Loss and Downtime Assessment of Existing Tall Steel-Framed Buildings and Strategies for Increased Resilience** *JOURNAL OF STRUCTURAL ENGINEERING*
Hutt, C. M., Almufti, I., Willford, M., Deierlein, G.
2016; 142 (8)
- **Quantifying the impacts of modeling uncertainties on the seismic drift demands and collapse risk of buildings with implications on seismic design checks** *EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS*
Gokkaya, B. U., Baker, J. W., Deierlein, G. G.
2016; 45 (10): 1661-1683
- **Framework for Incorporating Probabilistic Building Performance in the Assessment of Community Seismic Resilience** *JOURNAL OF STRUCTURAL ENGINEERING*
Burton, H. V., Deierlein, G., Lallemand, D., Lin, T.
2016; 142 (8)
- **Impact of hazard-consistent ground motion duration in structural collapse risk assessment** *EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS*
Chandramohan, R., Baker, J. W., Deierlein, G. G.
2016; 45 (8): 1357-1379
- **Quantifying the Influence of Ground Motion Duration on Structural Collapse Capacity Using Spectrally Equivalent Records** *EARTHQUAKE SPECTRA*
Chandramohan, R., Baker, J. W., Deierlein, G. G.
2016; 32 (2): 927-950
- **Behavior of Screw and Adhesive Connections to Gypsum Wallboard in Wood and Cold-Formed Steel-Framed Wallettes** *JOURNAL OF STRUCTURAL ENGINEERING*
Swensen, S., Deierlein, G. G., Miranda, E.
2016; 142 (4)
- **Design Concepts for Controlled Rocking of Self-Centering Steel-Braced Frames** *JOURNAL OF STRUCTURAL ENGINEERING*

-
- Eatherton, M. R., Ma, X., Krawinkler, H., Mar, D., Billington, S., Hajjar, J. F., Deierlein, G. G.
2014; 140 (11)
- **Quasi-Static Cyclic Behavior of Controlled Rocking Steel Frames** *JOURNAL OF STRUCTURAL ENGINEERING*
Eatherton, M. R., Ma, X., Krawinkler, H., Deierlein, G. G., Hajjar, J. F.
2014; 140 (11)
 - **Simulation of Seismic Collapse in Nonductile Reinforced Concrete Frame Buildings with Masonry Infills** *JOURNAL OF STRUCTURAL ENGINEERING*
Burton, H., Deierlein, G.
2014; 140 (8)
 - **Probabilistic Formulation of the Cyclic Void Growth Model to Predict Ultralow Cycle Fatigue in Structural Steel** *JOURNAL OF ENGINEERING MECHANICS*
Myers, A. T., Kanvinde, A. M., Deierlein, G. G., Baker, J. W.
2014; 140 (6)
 - **Component model calibration for cyclic behavior of a corrugated shear wall** *THIN-WALLED STRUCTURES*
Vigh, L. G., Liel, A. B., Deierlein, G. G., Miranda, E., Tipping, S.
2014; 75: 53-62
 - **Component Model Calibration for Cyclic Behaviour of a Corrugated Shear Wall** *Thin Walled Structures*
Vigh, L., G., Deierlein, G., G., Miranda, E., Liel, A., B.
2014; 75: 53-62
 - **Cost-Benefit Evaluation of Seismic Risk Mitigation Alternatives for Older Concrete Frame Buildings** *EARTHQUAKE SPECTRA*
Liel, A. B., Deierlein, G. G.
2013; 29 (4): 1391-1411
 - **Seismic performance assessment of steel corrugated shear wall system using non-linear analysis** *JOURNAL OF CONSTRUCTIONAL STEEL RESEARCH*
Vigh, L. G., Deierlein, G. G., Miranda, E., Liel, A. B., Tipping, S.
2013; 85: 48-59
 - **A Probabilistic Formulation of the Cyclic Void Growth Model to Predict Ultra-Low Cycle Fatigue in Structural Steel** *J. Eng. Mech., 10.1061/(ASCE)EM.1943-7889.0000728*
Myers, A., Kanvinde, A., Deierlein, G., Baker, J.
2013
 - **Cost-Benefit Evaluation of Seismic Mitigation Alternatives for Older Reinforced Concrete Frame Buildings** *Earthquake Spectra*
Liel, A., B., Deierlein, G., G.
in press.2013: 1
 - **Quasi-Static Cyclic Behavior of Controlled Rocking Steel Frames** *J. Struct. Eng., accepted for publication*
Eatherton, M., R., Ma, X., Krawinkler, H., Deierlein, G., G., Hajjar, J., F.
2013
 - **Simulation of Seismic Collapse in Non-Ductile Reinforced Concrete Frame Buildings with Masonry Infills** *J. Struct. Eng., 10.1061/(ASCE)ST.1943-541X.0000921*
Burton, H., Deierlein, G.
2013
 - **Seismic Performance Assessment of a Steel Corrugated Shear Wall System Using Non-linear Analysis** *Jl. of Constr. Steel Research*
Vigh, L., G., Deierlein, G., G., Miranda, E., Liel, A., B., Tipping, S.
2013; 85: 48-59
 - **Using Collapse Risk Assessments to Inform Seismic Safety Policy for Older Concrete Buildings** *EARTHQUAKE SPECTRA*
Liel, A. B., Deierlein, G. G.
2012; 28 (4): 1495-1521
 - **Expected earthquake damage and repair costs in reinforced concrete frame buildings** *EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS*
Ramirez, C. M., Liel, A. B., Mitrani-Reiser, J., Haselton, C. B., Spear, A. D., Steiner, J., Deierlein, G. G., Miranda, E.
2012; 41 (11): 1455-1475

- **Seismic Assessment of Typical 1970's Tall Steel Moment Frame Buildings in Downtown San Francisco**
Ibrahim, A., Molina-Hutt, C., Willford, M., Deierlein, G., G.
2012
- **Toward a Performance-Based Design Framework for Self-Centering Rocking Braced-Frame Spine systems**
Eatherton, M., R., Deierlein, G., G., Ma, X., Krawinkler, H., Hajjar, J., F.
2012
- **Seismic Retrofit of Non-Ductile Reinforced Concrete Infill Frame Building Using Rocking Spines**
Burton, H., Deierlein, G., G.
2012
- **Preliminary Assessment of Ground Motion Duration Effects on Structural Collapse**
Foschaar, J., C., Baker, J., W., Deierlein, G., G.
2012
- **On the Role of Nonlinear Analysis in the Seismic Performance Assessment of Buildings**
Deierlein, G., G.
2012
- **Novel Design Methods for Improved Damage Resistance of Light-Weight Framed Structures**
Swensen, S., Miranda, M., Deierlein, G., G.
2012
- **Towards Creating Earthquake-Safe Communities: Seismic Retrofit of an Adobe School Building in Rural Peru Using Geomesh**
Cedillos, V., Tucker, B., Blondet, M., Carpio, J., Quispe, J., Rondon, S., Deierlein, Gregory, G.
2012
- **Performance-Based Earthquake Engineering: Innovations for Resilient Buildings and Communities** *Invited Plenary Lecture for Performance-Based and Life-Cycle Structural Engineering, Hong Kong*
Deierlein, G., G.
2012
- **Design Features and Criteria For Controlled Rocking Braced-Frame Systems**
Deierlein, G., G., Eatherton, M., Ma, X., Hajjar, J., F.
2012
- **Seismic Collapse Safety of Reinforced Concrete Buildings. II: Comparative Assessment of Nonductile and Ductile Moment Frames** *JOURNAL OF STRUCTURAL ENGINEERING-ASCE*
Liel, A. B., Haselton, C. B., Deierlein, G. G.
2011; 137 (4): 492-502
- **Seismic Collapse Safety of Reinforced Concrete Buildings. I: Assessment of Ductile Moment Frames** *JOURNAL OF STRUCTURAL ENGINEERING-ASCE*
Haselton, C. B., Liel, A. B., Deierlein, G. G., Dean, B. S., Chou, J. H.
2011; 137 (4): 481-491
- **Accounting for Ground-Motion Spectral Shape Characteristics in Structural Collapse Assessment through an Adjustment for Epsilon** *JOURNAL OF STRUCTURAL ENGINEERING-ASCE*
Haselton, C. B., Baker, J. W., Liel, A. B., Deierlein, G. G.
2011; 137 (3): 332-344
- **Experimental Investigation of Shear Transfer in Exposed Column Base Connections** *ENGINEERING JOURNAL-AMERICAN INSTITUTE OF STEEL CONSTRUCTION*
Gomez, I. R., Kanvinde, A. M., Deierlein, G. G.
2011; 48 (4): 245-264
- **Earthquake Resilient Steel Braced Frames with Controlled Rocking and Energy Dissipating Fuses** *Steel Construction: Design and Research*
Deierlein, G., G., Ma, X., Eatherton, M., Hajjar, J., Krawinkler, H., Takeuchi, T.
Wiley.2011: 171-175

- **Tohoku Pacific Ocean Earthquake and Tsunami: Quick observations from the PEER/EERI/GEER/Tsunami Field Investigation Team**
Mahin, S., Deierlein, G., Mosqueda, G., Scawthorn, C., Youssef, H., Kramer, S.
2011
- **Seismic Design, Simulation and Shake Table Testing of Self-Centering Braced Frame with Controlled Rocking and Energy Dissipating Fuses**, *J.A. Blume Earthquake Engrg. Center, TR 174, Stanford Universit*
Ma, X., Krawinkler, H., Deierlein, G., G.
2011
- **Earthquake Engineering and Research Needs in the Planning, Design, Construction and Operation of Buildings** *Grand Challenges in Earthquake Engineering Research: A Community Workshop Report, National Research Council, invited and reviewed keynote presentation*
Deierlein, G., G.
2011: 58-64
- **Capacity Design in Seismic Resistant Steel Buildings – A Reliability-Based Methodology to Establish Capacity- Design Factors** *Eurosteel 2011, Budapest, Paper A-0380*
Victorsson, V., K., Deierlein, G., G., Baker, J., W.
2011: 6
- **Assessing the Scale of Environmental Impacts from a Major California Earthquake Recovery**
Burton, H., Deierlein, G., G., Lepech, M.
2011
- **Shaking Table Test of Controlled Rocking Frames Using Multipurpose Testbed** *Eurosteel 2011, Budapest, Hungary, Paper A-0301*
Takeuchi, T., Midorikawa, M., Kasai, K., Deierlein, G.
2011: 6
- **Nonlinear Structural Analysis for Seismic Design: A Guide for Practicing Engineers** *NEHRP Seismic Design Technical Brief 4, NIST GCR 10-917-5*
Deierlein, G., G., Reinhorn, A., M., Wilford, M., R.
2011
- **NEES 2011 vision Report on Computational and Hybrid Simulation: Needs and Opportunities** *Committee on Simulation, Network for Earthquake Engineering Simulation*
Deierlein, G., G., Arduino, P., Assimaki, D., Caicedo, J., Dyke, S., Hachem, M.
2011
- **Local Cyclic Void Growth Criteria for Ductile Fracture Initiation in Steel Structures with Significant Yielding** *Eurosteel 2011, Budapest, Paper A-0380*
Deierlein, G., G., Kanvinde, A., Myers, A., Fell, B.
2011: 6
- **Earthquake Engineering Research Needs in the Planning, Design, Construction and Operation of Buildings** *Invited white paper and keynote presentation, NRC Workshop on Grand Challenges in Earthquake Engineering Research, Beckman Center*
Deierlein, G., G.
2011: 13
- **Calibration of the SMCS Criterion for Ductile Fracture in Steels: Specimen Size Dependence and Parameter Assessment** *JOURNAL OF ENGINEERING MECHANICS-ASCE*
Myers, A. T., Kanvinde, A. M., Deierlein, G. G.
2010; 136 (11): 1401-1410
- **Benefit-Cost Evaluation of Seismic Risk Mitigation in Existing Non-ductile Concrete Buildings** *Workshop on Advances in Performances-Based Earthquake Engineering*
Deierlein, G., Liel, A.
SPRINGER.2010: 341–348
- **Large-Scale Shaking Table Test of Steel Braced Frame with Controlled Rocking and Energy-Dissipating Fuses**
Ma, X., Deierlein, G., G., Eatherton, M., Krawinkler, H., Hajjar, J., F., Takeuchi, T.
2010
- **Chapter 32: Benefit-Cost Evaluation of Seismic Risk Mitigation in Existing Non-Ductile Concrete Buildings** *Advances in Performance- Based Earthquake Engineering*

Deierlein, G., G., Liel, A., B.
edited by Fardis, Springer, M.
2010: 1

- **Seismic Resilience of Self-Centering Steel Braced Frames with Replaceable Energy-Dissipating Fuses – Part I: Large-Scale Cyclic Testing**
Hajjar, J., Eatherton, M., Ma, X., Deierlein, G., G., Krawinkler, H., Billington, S., B.
2010
- **Example Application of the FEMA P695 (ATC-63) Methodology for the Collapse Performance Evaluation of Reinforced Concrete Special Moment Frame Systems**
Haselton, C., B., Liel, A., B., Deierlein, G., G.
2010
- **Seismic Resilience of Self-Centering Steel Braced Frames with Replaceable Energy-Dissipating Fuses – Part II: E-Defense Shake Table Test**
Deierlein, G., G., Ma, X., Hajjar, J., Eatherton, M., Krawinkler, H., Takeuchi, T.
2010
- **Design and behavior of steel shear plates with openings as energy-dissipating fuses** *J.A. Blume Earthquake Engineering Center, TR 173, Stanford University*
Ma, X., Borchers, E., Peña, A., Krawinkler, H., Billington, S., Deierlein, G.
2010
- **Hybrid Simulation Testing of a Controlled Rocking Steel Braced Frame System**
Eatherton, M., Hajjar, J., F., Deierlein, G., G., Ma, X., Krawinkler, H.
2010
- **Hybrid Simulation Testing of a Controlled Rocking Steel Braced Frame System**
Eatherton, M., Hajjar, J., Deierlein, G., G., Ma, X., Krawinkler, H.
2010
- **Seismic Design and Behavior of Steel Frames with Controlled Rocking – Part II: Large Scale Shake Table Testing and System Collapse Analysis** *ASCE Structures Congress 2010*
Ma, X., Eatherton, M., Hajjar, J., Krawinkler, H., Deierlein, G., G.
2010: 10
- **Large-Scale Shaking Table Test of Steel Braced Frame with Controlled Rocking and Energy Dissipating Fuses**
Ma, X., Deierlein, M., Krawinkler, H., Hajjar, J., Takeuchi, T., Kasai, K.
2010
- **Nonlinear Analysis of Post-Tensioned Concrete Walls that Minimize Residual Drifts Under Seismic Loading**
Ohmura, T., Deierlein, G., G.
2010
- **Seismic Design and Behavior of Steel Frames with Controlled Rocking – Part I: Concepts and Quasi-Static Subassembly Testing** *ASCE Structures Congress 2010*
Eatherton, M., Hajjar, J., Ma, X., Krawinkler, H., Deierlein, G., G.
2010: 10
- **Modeling and Acceptance Criteria for Seismic Design and Analysis of Tall Buildings** *PEER/ATC Report 72-1, Applied Technology Council, Redwood City, CA*
Malley, J., O., Deierlein, G., G., Krawinkler, H., Maffei, J.R., Pourzanjani, M., Wallace, J.
2010: 242
- **Evaluation of the FEMA P-695 Methodology for Quantification of Building Seismic Performance Factors** *NIST GCR 10-917-8*
Kircher, C., Deierlein, G., G., Hooper, J., Krawinkler, H., Mahin, S., Shing, B.
2010: 268
- **ASCE-41 and FEMA-351 Evaluation of E-Defense Collapse Test** *EARTHQUAKE SPECTRA*
Maison, B. F., Kasai, K., Deierlein, G.
2009; 25 (4): 927-953
- **Effect of weld details on the ductility of steel column baseplate connections** *JOURNAL OF CONSTRUCTIONAL STEEL RESEARCH*
Myers, A. T., Kanvinde, A. M., Deierlein, G. G., Fell, B. V.

2009; 65 (6): 1366-1373

- **Experimental Investigation of Inelastic Cyclic Buckling and Fracture of Steel Braces** *JOURNAL OF STRUCTURAL ENGINEERING-ASCE*
Fell, B. V., Kanvinde, A. M., Deierlein, G. G., Myers, A. T.
2009; 135 (1): 19-32
- **Preliminary Results of a Cost-Benefit Assessment of Replacing Seismically Vulnerable Non-Ductile Reinforced Concrete Frame Structures**
Liel, A., B., Deierlein, G., G.
2009
- **Why are large-scale experiments of structural components and systems needed?** *Invited Paper: First Joint Planning Meeting for the Second Phase of NEES/E-Defense Collaborative Research on Earthquake Engineering, PEER 2009/101, NSF Arlington, VA*
Deierlein, G., G.
2009: 3
- **Testing and Probabilistic Simulation of Ductile Fracture Initiation in Structural Steel Components and Weldments** *Blume Technical Report 170*
Myers, A., T., Deierlein, G., G., Kanvinde, A.
2009: 386
- **International Collaborations on the Seismic Design and Behavior of Composite RCS Moment Frames**
Deierlein, G., G.
2009
- **Important Issues and Suggested Best Practices in Simulating Structural Collapse Due to Earthquakes: Modeling Decisions, Model Calibration and Numerical Solution Algorithms**
Haselton, C., B., Liel, A., B., Deierlein, G., G.
2009
- **Controlled Rocking of Steel-Framed Buildings with Replaceable Energy Dissipating Fuses** *Invited Presentations: (1) Disaster Prevention Research Institute of Kyoto University (12/21/09), (2) PEER Annual Meeting, San Francisco (12/16/09), (3) UC Berkeley Fall Seminar (9/2010), (4) NEES Annual meeting, San Francisco (10/2010), (5) NSF-CMMI Annual Meeting, Atlanta*
Deierlein, G., G.
2009, 2010, 2011
- **ATC 63 Project Team, FEMA P695, Federal Emergency Management Agency** *Quantification of Building Seismic Performance Factor*
Deierlein, G., G.
2009: 421
- **Seismically Resilient Steel Braced Frame Systems with Controlled Rocking and Energy Dissipating Fuses**
Deierlein, G., G., Hajjar, J., Eatherton, M., Billington, S., Krawinkler, H., Ma, X.
2009
- **Collaborative Research on Development of Innovative Steel Braced Frame Systems with Controlled Rocking and Replaceable Fuses**
Deierlein, G., G., Ma, X., Eatherton, M., Krawinkler, H., Billington, S., Hajjar, J.
2009
- **The Mw 7.6 Western Sumatra Earthquake of September, 30, 2009** *EERI Special Earthquake Report*
Deierlein, G., G., Alexander, N., Cedillos, V., Comfort, L., Hart, T., Hausler, E.
2009: 12
- **Engineering Challenges: Socio-economic considerations in earthquake engineering** *Invited Paper: First Joint Planning Meeting for the Second Phase of NEES/E-Defense Collaborative Research on Earthquake Engineering, PEER 2009/101, NSF Arlington, VA*
Deierlein, G., G.
2009: 3
- **Dynamic analysis based seismic performance quantification of steel corrugated shear wall system** *The Twelfth International Conf. on Civil, Structural and Environmental Engineering Computing (CC2009), Portugal, Civil-Com Press*
Vigh, L., G., Deierlein, G., G., Miranda, E., Liel, A., B., Tipping, S.
2009: 15
- **Incorporating modeling uncertainties in the assessment of seismic collapse risk of buildings** *STRUCTURAL SAFETY*

- Liel, A. B., Haselton, C. B., Deierlein, G. G., Baker, J. W.
2009; 31 (2): 197-211
- **Validation of cyclic void growth model for fracture initiation in blunt notch and dogbone steel specimens** *JOURNAL OF STRUCTURAL ENGINEERING-ASCE*
Kanvinde, A. M., Deierlein, G. G.
2008; 134 (9): 1528-1537
 - **Comparing Seismic Collapse Safety of Modern and Existing Reinforced Concrete Frame Structures in California** *2008 ASCE-SEI Structure's Congress 2008: Crossing Borders, Paper 246*
Liel, A., B., Haselton, C., B., Deierlein, G., G.
2008: 8
 - **Quantification of Building System Performance and Response Parameters**
Deierlein, G., G.
2008
 - **Seismic Performance of Steel Corrugated Shear Wall: Analytical Model Calibration and Performance Qualification**
Vigh, L., G., Deierlein, G., G., Miranda, E., Tipping, S.
2008
 - **Assessing Building System Collapse Performance and Associated Design Requirements for Seismic Design**
Deierlein, G., G., Liel, A., B., Haselton, C., B., Kircher, C., A.
2008
 - **Comparative Assessment of Collapse Safety of Reinforced-Concrete Moment Frame Buildings**
Liel, A., B., Haselton, C., B., Deierlein, G., G.
2008
 - **Controlled Rocking of Steel Framed Buildings as a Sustainable New Technology for Seismic Resistance in Buildings** *Creating and Renewing Urban Structures, Chicago, Illinois, International Association for Bridge and Structural Engineering, Zurich, Switzerland*
Hajjar, J., F., Eatherton, M., Deierlein, G., G., Ma, X., Pena, A., Krawinkler, H.
in press.2008: 10
 - **Assessing the Collapse Risk of California's Existing Reinforced Concrete Frame Structures: Metrics for Seismic Safety Decisions** *Blume Technical Report 166*
Liel, A., B., Deierlein, G., G.
2008: 315
 - **Seismic Response of Steel Controlled Rocking Frames with Replaceable Energy-Dissipating Fuses**
Eatherton, M., Hajjar, J., F., Deierlein, G., G., Krawinkler, H., Billington, S., Ma, X.
2008
 - **Study of Building Collapse for Performance-Based Design Validation** *2008 ASCE-SEI Structure's Congress 2008: Crossing Borders, Paper 244*
Maison, B., Kasai, K., Deierlein, G., G.
2008: 10
 - **Example Evaluation of the ATC-63 Methodology for Reinforced Concrete Steel Moment Frame Buildings** *2008 ASCE-SEI Structure's Congress 2008: Crossing Borders, Paper 49*
Haselton, C., B., Liel, A., B., Deierlein, G., G.
2008: 10
 - **ATC 63 Methodology for Evaluating Seismic Collapse Safety of Archetype Buildings** *2008 ASCE-SEI Structure's Congress 2008: Crossing Borders, Paper 48*
Deierlein, G., G., Liel, A., B., Haselton, C., B., Kircher, C., A.
2008: 10
 - **Evaluation of the seismic performance of a code-conforming reinforced-concrete frame building - from seismic hazard to collapse safety and economic losses** *EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS*
Goulet, C. A., Haselton, C. B., Mitrani-Reiser, J., Beck, J. L., Deierlein, G. G., Porter, K. A., Stewart, J. P.
2007; 36 (13): 1973-1997

- **Strength design criteria for steel members at elevated temperatures** *JOURNAL OF CONSTRUCTIONAL STEEL RESEARCH*
Takagi, J., Deierlein, G. G.
2007; 63 (8): 1036-1050
- **Cyclic void growth model to assess ductile fracture initiation in structural steels due to ultra low cycle fatigue** *JOURNAL OF ENGINEERING MECHANICS-ASCE*
Kanvinde, A. M., Deierlein, G. G.
2007; 133 (6): 701-712
- **Finite-element simulation of ductile fracture in reduced section pull-plates using micromechanics-based fracture model** *JOURNAL OF STRUCTURAL ENGINEERING-ASCE*
Kanvinde, A. M., Deierlein, G. G.
2007; 133 (5): 656-664
- **A Cyclic Void Growth Model to Assess Ductile Fracture Initiation in Structural Steels Due to Ultra Low Cycle Fatigue** *EM, ASCE*
Kanvinde, A., Deierlein, G., G.
2007; 6 (133): 701-712
- **Seismic Collapse Safety and Behavior of Modern Reinforced Concrete Moment Frame Buildings** *ASCE Structures Congress 2007, Long Beach, CA*
Haselton, C., B., Liel, A., B., Dean, B., S., Chou, J., H., Deierlein, G., G.
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