Stanford

Anne Kiremidjian

The C.L. Peck, Class of 1906 Professor in the School of Engineering, Emerita
Civil and Environmental Engineering

CONTACT INFORMATION

- **Administrator**

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Bio

BIO

Kiremidjian's research focuses in two main areas. The first is in earthquake hazard, risk, and resilience modeling. She works on structural component and systems reliability methods; structural damage evaluation models; and regional damage, loss and casualty estimation methods utilizing geographic information and database management systems for portfolios of buildings or spatially distributed lifeline systems assessment with ground motion and structure correlations. Her current research has focused on the development of time dependent hazard and risk models for resilience evaluation of hospitals, schools and financial instruments. In the area of time dependent risk assessment, she has developed models for damage estimation of deteriorating structures in varying environmental conditions.

The second area of research focuses on the design and implementation of wireless sensor networks for health monitoring of structures under every-day loading conditions, and the development of robust and computationally efficient algorithms for structural damage diagnosis following extreme events that can be embedded in wireless sensing units. The damage algorithms utilize modern data science, machine learning and artificial intelligence methods.

ACADEMIC APPOINTMENTS

- Emeritus Faculty, Acad Council, Civil and Environmental Engineering

ADMINISTRATIVE APPOINTMENTS

- Co-Director, The John A. Blume Earthquake Engineering Research Center at Stanford, (1987-1995)
- Director, The John A. Blume Earthquake Engineering Research Center at Stanford, (1995-2002)
- Co-Founder and Chair of the Board, K2 Technologies, Inc., (1994-1998)
- Co-Founder and Chair of the Board, Sensametrics, Inc., (2004-2008)

HONORS AND AWARDS

- The Thomas Egleston Medal, Columbia University School of Engineering (2023)
- Member, National Academy of Engineering (2021)
- Honorary Memer, Earthquake Engineering Research Institute (2020)

- The John Fritz Medal, American Association of Engineering Societies (2018)
- Lifetime Achievement Award, International Workshop on Structural Health Monitoring (2017)
- Distinguished Member, American Society of Civil Engineers (2014)
- The Otto Monstead Visiting Professor, Denmark Technical University (2013)
- Emilio Rosenblueth Distinguished Lecture, Universidad Nacional (2008)
- The C. Martin Duke Award, American Society of Civil Engineer (2003)
- Best Paper Award - with Dimitris Pachakis, McLeod Institute of Simulation Science (2002)
- Award for Excellence in Loss Estimation, Applied Technology Council (1998)
- Technical Council on Lifeline Earthquake Engineering Distinguished Service Award, American Society of Civil Engineers (1995)
- Distinguished Educator Award, Society for Women Engineers (1992)
- Faculty Award for Women, National Science Foundation (1991-1995)
- School of Engineering Distinguished Advisor Award, Stanford University (1989)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member of the Scientific Advisory Board, National Center on Earthquake Engineering Research (1992 - 1996)
- Member of the Board of Directors, Treasurer, California Universities for Research in Earthquake Engineering (1994 - 1998)
- Member of the Committee on Building Instrumentation, California Seismic Safety Commission (1996 - 2002)
- Committee on Stochastic Methods in Structural Engineering, International Association on Structural Safety and Reliability (1996 - present)
- Member of the Committee on Assessing the Cost of Natural Disasters, National Academy of Sciences, Board on Natural Disaster (1997 - 1999)
- Member of the Committee of Visitors for the Civil and Mechanical Engineering, National Science Foundation (1998 - 1999)
- Member of the Research Board, The Pacific Earthquake Engineering Center (1998 - 2002)
- Member, Secretary, Vice Chair and Chair, Executive Committee of the Technical Council on Lifeline Earthquake Engineering, American Society of Civil Engineers (1998 - 2003)
- Member of the Institutional Board of Directors, Pacific Earthquake Engineering Research Center (2000 - 2022)
- Member of the Committee on the Development of Long-Term Research Agenda for the Network for Earthquake Engineering Simulation (NEES), National Academy of Engineering (2001 - 2004)
- Member of the External Advisory Board, Mid-America Earthquake Center (2003 - 2008)
- Member of the Executive Committee of Engineering Mechanics Division, American Society of Civil Engineers (2004 - 2006)
- Member of the Board of Trustees Committee on Building and Land Development, Stanford University (2005 - 2007)
- Member of the Board of Directors, Consortium of Universities on Research in Earthquake Engineering (2005 - 2009)
- Member, Past Vice President, The John and Jene Blume Foundation (2005 - present)
- Chair of the Executive Council on Disaster Reduction and Mitigation, American Society of Civil Engineers (2007 - 2011)
- Member of the National Construction Safety Team Advisory Committee, National Institute on Standards and Technology (2011 - 2016)
- Member, Infrastructure and Research Policy Committee, American Society of Civil Engineers (2011 - 2022)
- Chair of the Institutional Board, Pacific Earthquake Engineering Center (2017 - 2020)
- Past-Chair of the Institutional Board of Directors, Pacific Earthquake Engineering Research Center (2020 - 2022)

PROFESSIONAL EDUCATION

- BA, Queens College of the City University of New York , Physics (1972)
- BS, Columbia University , Civil Engineering (1972)
- MS, Stanford University , Structural Engineering (1973)

- PhD, Stanford University , Structural Engineering (1977)

PATENTS

- Allen Cheung, Anne Kiremidjian, Garo Kiremidjian, Pooya Sarabandi. "United States Patent 61/668,989 Prov. Rotation Algorithm for Direct Earthquake Damage Detection", Leland Stanford Junior University, Jul 6, 2013
- Anne Kiremidjian, Erik Straser, Teresa Meng. "United States Patent 6292108 Modular, Wireless, Structural Monitoring System", Leland Stanford Junior University, Sep 18, 2001
- Anne Kiremidjian,Mark G. Mollineaux, Ram Rajagopal. "United States Patent S13-076 Prov. Oriented Wireless Structural Health and Seismic Monitoring", Leland Stanford Junior University, Apr 18, 0201

Teaching

COURSES

2024-25

- Decision Analysis for Civil and Environmental Engineers: CEE 206 (Sum)
- Structural Analysis: CEE 180 (Spr)

2023-24

- Decision Analysis for Civil and Environmental Engineers: CEE 206 (Sum)
- Structural Analysis: CEE 180 (Spr)

Publications

PUBLICATIONS

- **A Metastructure Approach to Smart and Sustainable Cities** *The Bridge, Special Issue on Smart Cities*
  Kiremidjian, A. S., Lepech, M.
  2023: 7-17
- **Prioritized reconstruction of healthcare facilities after earthquakes based on recovery of emergency services.** *Risk analysis : an official publication of the Society for Risk Analysis*
  Alisjahbana, I., Ceferino, L., Kiremidjian, A.
  2022
- **On the development of data-based damage diagnosis algorithms for structural health monitoring** *SMART STRUCTURES AND SYSTEMS*
  Kiremidjian, A. S.
  2022; 30 (3): 263-271
- **An agent-based financing model for post-earthquake housing recovery: Quantifying recovery inequalities across income groups** *EARTHQUAKE SPECTRA*
  Alisjahbana, I., Moura-Cook, A., Costa, R., Kiremidjian, A.
  2022; 38 (2): 1254-1282
- **Optimizing strategies for post-disaster reconstruction of school systems** *RELIABILITY ENGINEERING & SYSTEM SAFETY*
  Alisjahbana, I., Graur, A., Lo, I., Kiremidjian, A.
  2022; 219
- **On the Development of Data-based Structural Diagnosis Algorithms for Structural Health Monitoring** *Smart Structures and Systems, An International Journal*
  Kiremidjian, A. A.
  2022; 30 (3)
- **On the Development of Data-based Structural Diagnosis Algorithms for Structural Health Monitoring** *Smart Structures and Systems, An International Journal*
  Kiremidjian, A. S.
  2022; 30 (3)

- **Bayesian Parameter Estimation for Space and Time Interacting Earthquake Rupture Model Using Historical and Physics-Based Simulated Earthquake Catalogs** *BULLETIN OF THE SEISMOLOGICAL SOCIETY OF AMERICA*
  Ceferino, L., Galvez, P., Ampuero, J., Kiremidjian, A., Deierlein, G., Villegas-Lanza, J. C.
  2021; 111 (6): 3356-3373
- **The disaster resilience value of shared rooftop solar systems in residential communities** *EARTHQUAKE SPECTRA*
  Patel, S., Ceferino, L., Liu, C., Kiremidjian, A., Rajagopal, R.
  2021; 37 (4): 2638-2661
- **Performance-Based Engineering Framework to Quantify Micrometeoroid Damage to Lunar Surface Structures** *JOURNAL OF AEROSPACE ENGINEERING*
  Allende, M., Kiremidjian, A. S., Lepech, M. D., Loftus, D. J.
  2021; 34 (5)
- **Modeling housing recovery after the 2018 Lombok earthquakes using a stochastic queuing model** *EARTHQUAKE SPECTRA*
  Alisjahbana, I., Kiremidjian, A.
  2021; 37 (2): 587-611
- **Probabilistic Space- and Time-Interaction Modeling of Mainshock Earthquake Rupture Occurrence** *BULLETIN OF THE SEISMOLOGICAL SOCIETY OF AMERICA*
  Ceferino, L., Kiremidjian, A., Deierlein, G.
  2020; 110 (5): 2498–2518
- **Effective plans for hospital system response to earthquake emergencies.** *Nature communications*
  Ceferino, L., Mitrani-Reiser, J., Kiremidjian, A., Deierlein, G., Bambaren, C.
  2020; 11 (1): 4325
- **Application of vibration-based damage detection algorithms to experimental data from multi-storey steel structures** *Special Issue of the International Journal of Sustainable Materials and Structural Systems*
  Liao, Y., Balafas, K., Kiremidjian, A., Rajagopal, R., Loh, C.
  2020; 4 (2-4)
- **Structural Damage Detection and Localization with Unknown Postdamage Feature Distribution Using Sequential Change-Point Detection Method** *JOURNAL OF AEROSPACE ENGINEERING*
  Liao, Y., Kiremidjian, A. S., Rajagopal, R., Loh, C.
  2019; 32 (2)
- **Regional Multiseverity Casualty Estimation Due to Building Damage Following a Mw 8.8 Earthquake Scenario in Lima, Peru** *EARTHQUAKE SPECTRA*
  Ceferino, L., Kiremidjian, A., Deierlein, G.
  2018; 34 (4): 1739–61
- **Probabilistic Model for Regional Multiseverity Casualty Estimation due to Building Damage Following an Earthquake** *ASCE-ASME JOURNAL OF RISK AND UNCERTAINTY IN ENGINEERING SYSTEMS PART A-CIVIL ENGINEERING*
  Ceferino, L., Kiremidjian, A., Deierlein, G.
  2018; 4 (3)
- **Statistical Modeling of Time Series for Ice Accretion Detection on Bridge Cables** *JOURNAL OF COLD REGIONS ENGINEERING*
  Andre, J., Kiremidjian, A., Georgakis, C.
  2018; 32 (2)
- **The wavelet transform as a Gaussian process for damage detection** *STRUCTURAL CONTROL & HEALTH MONITORING*
  Balafas, K., Kiremidjian, A. S., Rajagopal, R.
  2018; 25 (2)
- **A Framework and Case Study for Earthquake Vulnerability Assessment of Incrementally Expanding Buildings** *EARTHQUAKE SPECTRA*
  Lallemant, D., Burton, H., Ceferino, L., Bullock, Z., Kiremidjian, A.
  2017; 33 (4): 1369–84
- **Development of time-dependent fragility functions for deteriorating reinforced concrete bridge piers** *STRUCTURE AND INFRASTRUCTURE ENGINEERING*

Rao, A. S., Lepech, M. D., Kiremidjian, A.
2017; 13 (1): 67-83

- **Simplified structural deterioration model for reinforced concrete bridge piers under cyclic loading** *STRUCTURE AND INFRASTRUCTURE ENGINEERING*
  Rao, A. S., Lepech, M. D., Kiremidjian, A. S., Sun, X.
  2017; 13 (1): 55-66
- **A Beta Distribution Model for Characterizing Earthquake Damage State Distribution** *EARTHQUAKE SPECTRA*
  Lallemant, D., Kiremidjian, A.
  2015; 31 (3): 1337-1352
- **Statistical procedures for developing earthquake damage fragility curves** *EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS*
  Lallemant, D., Kiremidjian, A., Burton, H.
  2015; 44 (9): 1373-1389
- **Development of empirical and analytical fragility functions using kernel smoothing methods** *EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS*
  Noh, H. Y., Lallemant, D., Kiremidjian, A. S.
  2015; 44 (8): 1163-1180
- **Development and validation of a novel earthquake damage estimation scheme based on the continuous wavelet transform of input and output acceleration measurements** *EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS*
  Balafas, K., Kiremidjian, A. S.
  2015; 44 (4): 501-522
- **Reliability assessment of the rotation algorithm for earthquake damage estimation** *STRUCTURE AND INFRASTRUCTURE ENGINEERING*
  Balafas, K., Kiremidjian, A. S.
  2015; 11 (1): 51-62
- **Development of a Rotation Algorithm for Earthquake Damage Diagnosis** *EARTHQUAKE SPECTRA*
  Cheung, A., Kiremidjian, A. S.
  2014; 30 (4): 1381-1401
- **Extraction of a series of Novel Damage Sensitive Features derived from the Continuous Wavelet Transform of input and output acceleration measurements** *Conference on Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems*
  Balafas, K., Kiremidjian, A. S.
  SPIE-INT SOC OPTICAL ENGINEERING.2014
- **Sequential structural damage diagnosis algorithm using a change point detection method** *JOURNAL OF SOUND AND VIBRATION*
  Noh, H., Rajagopal, R., Kiremidjian, A. S.
  2013; 332 (24): 6419-6433
- **Oriented Wireless Sensing for Structural Health Monitoring** *9th International Workshop on Structural Health Monitoring (IWSHM)*
  Mollineaux, M., Rajagopal, R., Kiremidjian, A., Balafas, K.
  DESTECH PUBLICATIONS, INC.2013: 73–80
- **Validation of the Rotation Algorithm for Earthquake Damage Estimation** *9th International Workshop on Structural Health Monitoring (IWSHM)*
  Balafas, K., KIREMIDJIAN, A.
  DESTECH PUBLICATIONS, INC.2013: 662–669
- **Extension of the Rotation Algorithm for Earthquake Damage Estimation of Complex Structures** *Conference on Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems*
  Balafas, K., Kiremidjian, A. S.
  SPIE-INT SOC OPTICAL ENGINEERING.2013
- **A wavelet-based damage diagnosis algorithm using principal component analysis** *STRUCTURAL CONTROL & HEALTH MONITORING*
  Kesavan, K. N., Kiremidjian, A. S.
  2012; 19 (8): 672-685

- **Development of fragility functions as a damage classification/prediction method for steel moment-resisting frames using a wavelet-based damage sensitive feature** *EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS*
  Noh, H. Y., Lignos, D. G., Nair, K. K., Kiremidjian, A. S.
  2012; 41 (4): 681-696

- **Damage diagnosis algorithm using a sequential change point detection method with an unknown distribution for damage** *Conference on Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems*
  Noh, H. Y., Rajagopal, R., Kiremidjian, A. S.
  SPIE-INT SOC OPTICAL ENGINEERING.2012

- **Structural modeling of corroded reinforced concrete bridge columns** *6th International Conference on Bridge Maintenance, Safety and Management (IABMAS)*
  Rao, A. S., Lepech, M. D., Kiremidjian, A. S.
  CRC PRESS-TAYLOR & FRANCIS GROUP.2012: 1008–1014

- **Use of Wavelet-Based Damage-Sensitive Features for Structural Damage Diagnosis Using Strong Motion Data** *JOURNAL OF STRUCTURAL ENGINEERING-ASCE*
  Noh, H. Y., Nair, K. K., Lignos, D. G., Kiremidjian, A. S.
  2011; 137 (10): 1215-1228

- **Implementation of a bio-inspired two-mode structural health monitoring system** *SMART STRUCTURES AND SYSTEMS*
  Lin, T., Yu, L., Ku, C., Chang, K., Kiremidjian, A.
  2011; 8 (1): 119-137

- **Application of a sparse representation method using K-SVD to data compression of experimental ambient vibration data for SHM** *Conference on Sensors and Smart Structures Technologies for Civil, Mechanical, and Aerospace Systems 2011*
  Noh, H. Y., Kiremidjian, A. S.
  SPIE-INT SOC OPTICAL ENGINEERING.2011

- **Damage Diagnosis Algorithm for Civil Structures Using a Sequential Change Point Detection Method and Time-Series Analysis** *8th International Workshop on Structural Health Monitoring*
  Noh, H. Y., Rajagopal, R., Kiremidjian, A. S.
  DESTECH PUBLICATIONS, INC.2011: 55–62

- **Structural Health Monitoring for Civil Infrastructure-From Instrumentation to Decision Support** *8th International Workshop on Structural Health Monitoring*
  Kiremidjian, A. S.
  DESTECH PUBLICATIONS, INC.2011: 27–38

- **A wireless structural monitoring system with embedded damage algorithms and decision support system** *STRUCTURE AND INFRASTRUCTURE ENGINEERING*
  Kiremidjian, A. S., Kiremidjian, G., Sarabandi, P.
  2011; 7 (12): 881-894

- **A bio-inspired structural health monitoring system based on ambient vibration** *SMART MATERIALS AND STRUCTURES*
  Lin, T., Kiremidjian, A., Lei, C.
  2010; 19 (11)

- **Highway Network Retrofit under Seismic Hazard** *JOURNAL OF INFRASTRUCTURE SYSTEMS*
  Fan, Y., Liu, C., Lee, R., Kiremidjian, A. S.
  2010; 16 (3): 181-187

- **Risk assessment of transportation systems with network functionality losses** *STRUCTURE AND INFRASTRUCTURE ENGINEERING*
  Stergiou, E. C., Kiremidjian, A. S.
  2010; 6 (1-2): 111-125

- **Time varying risk modeling of deteriorating bridge infrastructure for sustainable infrastructure design** *5th International Conference on Bridge Maintenance, Safety and Management (IABMAS)*
  Rao, A. S., Lepech, M. D., Kiremidjian, A. S., Sun, X. Y.
  CRC PRESS-TAYLOR & FRANCIS GROUP.2010: 2501–2508

- **Derivation of a Damage Sensitive Feature Using the Haar Wavelet Transform** *JOURNAL OF APPLIED MECHANICS-TRANSACTIONS OF THE ASME*
  Nair, K. K., Kiremidjian, A. S.
  2009; 76 (6)

- **The application of statistical pattern recognition methods for damage detection to field data** *SMART MATERIALS & STRUCTURES*
  Cheung, A., Cabrera, C., Sarabandi, P., Nair, K. K., Kiremidjian, A., Wenzel, H.
  2008; 17 (6)

- **Algorithm for identification of damage on bridge piers** *1st International Symposium on Life-Cycle Civil Engineering*
  Kiremidjian, A. S., Sarabandi, P., Cheung, A., Cabrera, C., Nair, K. K., Kiremidjian, G.
  CRC PRESS-TAYLOR & FRANCIS GROUP.2008: 935–940

- **Uncertainty and correlation for loss assessment of spatially distributed systems** *EARTHQUAKE SPECTRA*
  Lee, R., Kiremidjian, A. S.
  2007; 23 (4): 753-770

- **Time series based structural damage detection algorithm using Gaussian mixtures modeling** *JOURNAL OF DYNAMIC SYSTEMS MEASUREMENT AND CONTROL-TRANSACTIONS OF THE ASME*
  Nair, K. K., Kiremidjian, A. S.
  2007; 129 (3): 285-293

- **Seismic risk assessment of transportation network systems** *JOURNAL OF EARTHQUAKE ENGINEERING*
  Kiremidjian, A., Moore, J., Fan, Y. Y., Yazlali, O., Basoz, N., Williams, M.
  2007; 11 (3): 371-382

- **Issues in seismic risk assessment of transportation networks** *4th International Conference on Earthquake Geotechnical Engineering*
  Kiremidjian, A. S., Stergiou, E., Lee, R.
  SPRINGER.2007: 461–480

- **Application of a time series based damage detection algorithm to the Taiwanese benchmark experiment** *10th International Conference on Application of Statistics and Probability in Civil Engineering*
  Noh, H., Nair, K. K., Kiremidjian, A. S., Loh, C.
  TAYLOR & FRANCIS LTD.2007: 551–552

- **Application of statistical pattern classification methods for damage detection to field data** *Conference on Nondestructive Characterization for Composite Materials, Aerospace Engineering, Civil Infrastructure, and Homeland Security 2007*
  Cabrera, C., Cheung, A., Sarabandi, P., Nair, K. K., Kiremidjian, A.
  SPIE-INT SOC OPTICAL ENGINEERING.2007

- **Time series-based damage detection and localization algorithm with application to the ASCE benchmark structure** *JOURNAL OF SOUND AND VIBRATION*
  Nair, K. K., Kiremidjian, A. S., Law, K. H.
  2006; 291 (1-2): 349-368

- **A comparison of local damage detection algorithms based on statistical signal processing of vibration measurements** *2nd International Conference on Structural Health Monitoring of Intelligent Infrastructure*
  Nair, K. K., Kiremidjian, A. S.
  TAYLOR & FRANCIS LTD.2006: 173–182

- **Algorithms for time synchronization of wireless structural monitoring sensors** *EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS*
  Lei, Y., Kiremidjian, A. S., Nair, K. K., Lynch, J. P., Law, K. H.
  2005; 34 (6): 555-573

- **Embedding damage detection algorithms in a wireless sensing unit for operational power efficiency** *SMART MATERIALS AND STRUCTURES*
  Lynch, J. P., Sundararajan, A., Law, K. H., Kiremidjian, A. S., Carryer, E.
  2004; 13 (4): 800-810

- **Estimation of downtime-related revenue losses in seaports following scenario earthquakes** *EARTHQUAKE SPECTRA*
  Pachakis, D., Kiremidjian, A. S.

2004; 20 (2): 427-449

- **Design and performance validation of a wireless sensing unit for structural monitoring applications** *United States-Korea Workshop on Smart Infrastructural Systems*
  Lynch, J. P., Law, K. H., Kiremidjian, A. S., Carryer, E., Farrar, C. R., Sohn, H., Allen, D. W., Nadler, B., Wait, J. R.
  TECHNO-PRESS.2004: 393–408

- **Shadow detection and radiometric restoration in satellite high resolution images** *IEEE International Geoscience and Remote Sensing Symposium*
  Sarabandi, P., Yamazaki, F., Matsuoka, M., Kiremidjian, A.
  IEEE.2004: 3744–3747

- **Wireless structural monitoring for homeland security applications** *Conference on Nondestructive Detection and Measurement for Homeland Security II*
  KIREMIDJIAN, G. K., KIREMIDJIAN, A., Lynch, J. P.
  SPIE-INT SOC OPTICAL ENGINEERING.2004: 82–90

- **Design of a new power-efficient wireless sensor system for structural health monitoring** *Conference on Nondestructive Detection and Measurement for Homeland Security II*
  Mastroleon, L., Kiremidjian, A. S., Carryer, E., Law, K. H.
  SPIE-INT SOC OPTICAL ENGINEERING.2004: 51–60

- **Ship traffic Modeling methodology for ports** *JOURNAL OF WATERWAY PORT COASTAL AND OCEAN ENGINEERING-ASCE*
  Pachakis, D., Kiremidjian, A. S.
  2003; 129 (5): 193-202

- **Design of piezoresistive MEMS-based accelerometer for integration with wireless sensing unit for structural monitoring** *JOURNAL OF AEROSPACE ENGINEERING*
  Lynch, J. P., Partridge, A., Law, K. H., Kenny, T. W., Kiremidjian, A. S., Carryer, E.
  2003; 16 (3): 108-114

- **Simulation of the Fourier phase spectrum for the generation of synthetic accelerograms** *JOURNAL OF EARTHQUAKE ENGINEERING*
  Montaldo, V., Kiremidjian, A. S., Thrainsson, H., Zonno, G.
  2003; 7 (3): 427-445

- **Embedment of structural monitoring algorithms in a wireless sensing unit** *STRUCTURAL ENGINEERING AND MECHANICS*
  Lynch, J. P., Sundararajan, A., Law, K. H., Kiremidjian, A. S., Kenny, T., Carryer, E.
  2003; 15 (3): 285-297

- **Application of time series analysis in structural damage evaluation** *1st International Conference on Structural Health Monitoring and Intelligent Infrastructure*
  Nair, K. K., Kiremidjian, A. S., Lei, Y., Lynch, J. P., Law, K. H.
  A A BALKEMA PUBLISHERS.2003: 529–534

- **Two-tiered wireless sensor network architecture for structural health monitoring** *Smart Structures and Materials 2003 Conference*
  Kottapalli, V. A., Kiremidjian, A. S., Lynch, J. P., Carryer, E., Kenny, T. W., Law, K. H., Lei, Y.
  SPIE-INT SOC OPTICAL ENGINEERING.2003: 8–19

- **Time synchronization algorithms for wireless monitoring system** *Smart Structures and Materials 2003 Conference*
  Lei, Y., Kiremidjian, A. S., Nair, K. K., Lynch, J. P., Law, K. H.
  SPIE-INT SOC OPTICAL ENGINEERING.2003: 308–317

- **Hard X-ray polarimetry with the Ramaty High Energy Solar Spectroscopic Imager (RHESSI)** *Conference on Polarimetry in Astronomy*
  McConnell, M. L., Smith, D. M., Emslie, A. G., Lin, R. P., Ryan, J. M.
  SPIE-INT SOC OPTICAL ENGINEERING.2003: 8–19

- **Estimation of operating losses from earthquake damage to major sea ports** *9th International Conference on Applications of Statistics and Probability in Civil Engineering*
  Pachakis, D., KIREMIDJIAN, A.
  MILLPRESS SCIENCE PUBLISHERS.2003: 703–710

- **Power-efficient wireless structural monitoring with local data processing** *1st International Conference on Structural Health Monitoring and Intelligent Infrastructure*
  Lynch, J. P., Sundararajan, A., Law, K. H., Kiremidjian, A. S., Carryer, E.
  A A BALKEMA PUBLISHERS.2003: 331–338
- **Field validation of a wireless structural monitoring system on the Alamosa Canyon Bridge** *Smart Structures and Materials 2003 Conference*
  Lynch, J. P., Sundararajan, A., Law, K. H., Kiremidjian, A. S., Carryer, E., Sohn, H., Farrar, C. R.
  SPIE-INT SOC OPTICAL ENGINEERING.2003: 267–278
- **Statistical damage detection using time series analysis on a structural health monitoring benchmark problem** *9th International Conference on Applications of Statistics and Probability in Civil Engineering*
  Lei, Y., Kiremidjian, A. S., Nair, K. K., Lynch, J. P., Law, K. H., Kenny, T. W., Carryer, E., Kottapalli, A.
  MILLPRESS SCIENCE PUBLISHERS.2003: 581–587
- **Development of empirical building performance functions data from past earthquakes** *9th International Conference on Applications of Statistics and Probability in Civil Engineering*
  Sarabandi, P., Pachakis, D., King, S., KIREMIDJIAN, A.
  MILLPRESS SCIENCE PUBLISHERS.2003: 629–635
- **Simulation of digital earthquake accelerograms using the inverse discrete Fourier transform** *EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS*
  Thrainsson, H., Kiremidjian, A. S.
  2002; 31 (12): 2023-2048
- **A wireless modular monitoring system for civil structures** *20th IMAC Conference on Structural Dynamics*
  Lynch, J. P., Law, K. H., Kiremidjian, A. S., Kenny, T., Carryer, E.
  SOC EXPERIMENTAL MECHANICS INC.2002: 1–6
- **Validation of a wireless modular monitoring system for structures** *Smart Structures and Materials 2002 Conference*
  Lynch, J. P., Law, K. H., Kiremidjian, A. S., Carryer, E., Kenny, T. W., Partridge, A., Sundararajan, A.
  SPIE-INT SOC OPTICAL ENGINEERING.2002: 124–135
- **An experimental study of temperature effect on modal parameters of the Alamosa Canyon Bridge** *EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS*
  Sohn, H., Dzwonczyk, M., Straser, E. G., Kiremidjian, A. S., Law, K. H., Meng, T.
  1999; 28 (8): 879-897
- **Multiple earthquake event loss estimation methodology** *11th European Conference on Earthquake Engineering*
  Kiremidjian, A. S.
  A A BALKEMA PUBLISHERS.1999: 151–160
- **Development of empirical fragility curves for bridges** *5th United States Conference on Lifeline Earthquake Engineering*
  BASOZ, N., Kiremidjian, A. S.
  AMER SOC CIVIL ENGINEERS.1999: 693–702
- **Bayesian updating of fragilities with application to RC frames** *JOURNAL OF STRUCTURAL ENGINEERING-ASCE*
  Singhal, A., Kiremidjian, A. S.
  1998; 124 (8): 922-929
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