Curriculum Vitae

Masahiro Kurata

Address:
S-308D, Main Building
Disaster Prevention Research Institute
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Nationality:
Japanese
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(As of May, 2022)

EDUCATIONS

PhD. in Civil and Environmental Engineering, Georgia Institute of Technology, Georgia, USA
Completion Date: September 2009, Graduation Date: December 2009
Dissertation: *Strategies for Rapid Seismic Hazard Mitigation for Sustainable Infrastructure Systems*
Advisors: Dr. Reginald DesRoches and Dr. Roberto T. Leon
Master of Science, Georgia Institute of Technology, Georgia, USA
Date: December 2007
Master of Architectural System, Kyoto University, Kyoto, Japan
Date: March 2005
Thesis: *Test and Analysis of Steel Column Bases for Assessment of Earthquake Responses of Steel Moment Frames*
Advisors: Dr. Masayoshi Nakashima and Dr. Keiichiro Suita
Master of Earthquake Engineering, University of Pavia, Pavia, Italy: Centre for Post-Graduate Training and Research in Earthquake Engineering and Engineering Seismology (ROSE School)
Date: June 2004
Thesis: *Effect of Column Base Behavior on Seismic Response of Steel Moment Frames*
Advisor: Dr. Masayoshi Nakashima and Dr. Rui Pinho
Bachelor of Architectural Engineering, Kyoto University, Kyoto, Japan
Date: March 2002
Advisor: Dr. Keiichiro Suita and Dr. Masayoshi Nakashima

RESEARCH AREAS

Structural Engineering, Earthquake Engineering, Seismic Rehabilitation, Structural Health Monitoring, Sustainable structural system

WORK EXPERIENCES

Instructor, Kyoto Prefectural University
Date: July 2015 – current
Associate Professor, Kyoto University
Date: January 2015 – current
Assistant Professor, Kyoto University
Date: October 2011 – December 2014
Post-doctorate Research Fellow, University of Michigan
Date: September 2009 – September 2011
Instructor, Georgia Institute of Technology
Undergraduate Level Class: Statics, Date: Spring 2009 and Summer 2009
Graduate Research Assistant, Georgia Institute of Technology
Date: August 2005 - May 2009
Graduate Teaching Assistant, Georgia Institute of Technology
Graduate Level Class: Earthquake Engineering, Date: Spring 2007 and Spring 2008

HONOWR and AWARDS

Top Downloaded Paper 2018-2019 in Earthquake Engineering and Structural Dynamics "Fragility function development and seismic loss assessment of expansion joints", 2020
Encouragement Prize of AIJ, 2017
Best Speaker Award, the 11th Japan-America Frontier of Engineers jointly organized by Engineering Academy of Japan and National Science Foundation, Oct. 31, 2012
Invited Speaker, the 11th Japan-America Frontier of Engineers, Oct. 29-31, 2012
Invited Speaker, Engineers Week 2011, February 26, 2011.
Distinguished Master Thesis Award, Kyoto University Architectural Association (Kenchiku Kai), 2006
Japan Society for the Promotion of Science Doctoral Fellowship, 2005
Japanese Student Services Organization Scholarship for Master study at Kyoto Univ., 2002 and 2004
Instituto Universitario di Studi Superiori Scholarship for Master study at ROSE School, 2003

The Japan Iron and Steel Federation Research Award for Master study, 2004

PROFESSIONAL AFFILIATION

Architectural Institute of Japan (AIJ), Japan
Japan Society of Steel Construction (JSSC), Japan
Earthquake Engineering Research Institute (EERI), CA, USA
American Society of Civil Engineers (ASCE), VA, USA
American Institute of Steel Construction (AISC), IL, USA
International Society for optics and photonics (SPIE), USA
International Association for Bridge and Structural Engineering (IABSE), Switzerland

ACTIVITIES

Professional:

2009 – Current	Committee, Structural and Health Monitoring and Control Committee Engineering Mechanics Institute, American Society of Civil Engineers, 2013
2013 – Current	Staff, Central Office, International Association of Earthquake Engineering
2013 – 2016	Committee, Program Committee for SPIE Smart Structures /NDE
2012 – 2016	Committee, Structural Health Monitoring Sub-Committee of Special Project for Reducing Vulnerability for Urban Mega Earthquake Disasters (ii) Maintenance and Recovery of Functionality in Urban Infrastructures, MEXT
2013	Executive Committee Chairperson and Facilitator, NEES/E-Defense Collaborative Earthquake Research Program 10th Planning Meeting
2014 – 2015	Committee, Working Group to Prepare English Versions of Design Provisions for Steel Structures, AIJ
2014 – Current	Committee, Committee on Stability Design of Steel Structures, AIJ
2015 – 2017	Committee, Committee to Prepare English Versions of Design Provisions for Steel Structures, AIJ
2014 – 2015	Executive Secretary, Executive Committee for IABSE conference in Nara 2015
2014 – 2015	Committee, Scientific Committee for IABSE conference in Nara 2015
2014 – Current	Staff, Central Office, Group of Young Earthquake Engineers
2015 – Current	Staff, NPO International Association of Earthquake Engineering
2015 – 2017	Executive Secretary, Special Task Committee for Educating Architects and Architectural Engineers Capable of Surviving Globalization, AIJ
2015	Leading Facilitator, Japan-U.S. Planning Meeting for Collaborative Researches on Earthquake Engineering at E-Defense
2015－2016	Committee, WG for Evaluating Performance of Buckling Suspected Steel Members
2016 – 2018	Committee, Committee on Ultimate State Evaluation and Damage Detection of Steel Buildings, Japan Society of Steel Construction
2016 – 2019	Treasurer, Steel Structures Group, AIJ Kinki Branch
2016 – 2018	Ordinary Councilor, AIJ Kinki Branch
2017	Committee, Scientific Committee for ANCRiSST2017
2017 –Current	Evaluation Committee, Japan Steel-fabrication Appraisal Organization
2017 – 2022	Chair of Sub-committee, A Project on Holistic Resilience Enhancement in the Tokyo Metropolitan Area: - Evaluation of special equipment and functionality loss for disaster-base facilities
2017 –Current	Committee, Committee on Monitoring of Steel Structures, Japan Society of Steel Construction
2018-–Current	Committee, City Master Plan Committee of Joyo City Council
2018 – 2020	Delegate, AIJ Kinki Branch

Journal Service:

2016－2017	Computer-Aided Civil and Infrastructure Engineering, Guest Editor for 2017 Special Issue on "Innovations in Structural Health Monitoring."
2017－現在	AIJ Japan Architectural Review, Editorial Board Member
2017－2018	Computer-Aided Civil and Infrastructure Engineering, Guest Editor for 2018 Special Issue on "Innovations in Structural Health Monitoring."
2018－2019	Computer-Aided Civil and Infrastructure Engineering, Guest Editor for 2019 Special Issue on "Innovations in Structural Health Monitoring."
2019－2023	Earthquake Engineering and Structural Dynamics, Associate Editor

Social:

President, Earthquake Engineering Research Institute, Georgia Tech Student Chapter, 2007
Vice President, Earthquake Engineering Research Institute, Georgia Tech Student Chapter, 2006

President, Georgia Tech Japan Society, 2007 and 2008
Panelist, Briefing Sessions in Kyoto University, Japanese Graduate Student Association in the US, 2012, 2013, 2014

LANGUAGES

English: fluent in writing, reading and speaking
Italian: fair for daily communications
Japanese: native

SEMINAR AND TALK

Holistic Seismic Assessment of Critical Buildings with due Consideration of Non-Structural Components and Equipment, Seminar at National Institute of Standards and Technology, USA, March 21, 2019.

Connections in Steel Structures with HSS columns: Design, Fabrication and Researches in Japan, XV International Symposium of Steel Structure, Instituto Mexicano de la Construcción en Acero (IMCA), Puerto Vallarta, Jalisco, Mexico, March 7, 2019

新生児看護学会の教育講演会：災害について一緒に考えよう 備えあれば憂いなし　備えるべき『知識』『意識』“大地震時に病院は－特に NICU は－”January 27, 2018 (in Japanese)

“Damage Prevention, Evaluation and Decision-Making: Challenges in Structural Engineering against Megaquakes,” Departmental Seminar, University of Canterbury, September 11, 2017

“Damage Evaluation and Residual Performance Estimates of Steel Structures after Earthquakes,” Departmental Seminar, University of Auckland, September 7, 2017

“Needs on Seismic Retrofit of Steel Buildings Considering Consequences”, 2nd Huixian International Forum on Earthquake Engineering for Young Researchers, August 19-21, 2016, Beijing, China

“余震による事業中断を考慮した重要施設の事業継続性評価”, IT 強震計研究会第 26 回定例会 January 24, 2017 (in Japanese)

地域の拠点建物の使用継続性を担保する, 第 22 回京都大学宇治キャンパス産学交流会, Dec. 6, 2016 (in Japanese)

“熊本地震の教訓：建築構造の観点から”, 南防火協会講演会, Sept 21, 2016 (in Japanese)

“Advanced Architecture B”, invited lecture for graduate level class, graduate school of architecture, Waseda University, November 26, 2014

“Structural Health Monitoring and Decision Making of Seismically Damaged Buildings,” the Special Seminar at the 29th General Assembly Meeting, the Committee of Earthquake Observation and Research in the Kansai Area: CEORKA, July 1, 2014.

“Responses to Non-Physical Performance Requirements in Structural Engineering,” Seminar for the Structural Control Committee (157 Committee), Japan Society for the Promotion of Science, January 14, 2014.

“Ultimate Behavior of Hollow Steel Section Columns and Collapse Margin of Steel Buildings,” Seminar for Steel Research Section, Kinki Branch, Architectural Institute of Japan, January 1, 2014.

“Development of Local Damage Detection Techniques for Improving Earthquake Preparedness of Steel Structures,” Global COE Program: International Urban Earthquake Engineering Center for Mitigating Seismic Mega Risk, Center for Earthquake Engineering (CUEE), Tokyo Institute of Technology, February 23, 2013.

“Post-Earthquake Damage Screening of Structures,” the 11th Japan-America Frontiers of Engineering (JAFOE), Engineering Academy of Japan (EAJ) and National Science Foundation (NSF), Arnold and Mabel Beckman Center in Irvine, California, October 29-31, 2012.

"Resilient City: Functions Required for Structural Engineering and Design," Closed Seminar for Structural Health Monitoring, Steel Structure Development Center, Steel Research Laboratories, Nippon Steel Corporation, March 15, 2012

"Smart Bridges…How Wireless Sensors Can Detect a Sick Bridge: Multi-Scale Approaches to Monitoring and Assessing the Structural Integrity of Bridges Using Next-Generation Sensor Technologies," Engineers Week 2011: Dinner Banquet Program, Windsor Park Conference Center, Mishawaka, IN, February 26, 2011.

"Strategies for Seismic Hazard Mitigation in Sustainable Urban Systems through Large Scaling Testing", Earthquake Protection System, California, June 19, 2009

"Strategies for Seismic Hazard Mitigation in Sustainable Urban Systems through Large Scaling Testing", Department of Civil and Environmental Engineering, University of Michigan, May 26, 2009

"Strategies for Seismic Hazard Mitigation in Sustainable Urban Systems through Large Scaling Testing", Department of Civil and Environmental Engineering, Oregon State University, April 8, 2009

PATENT

"Cable Bracing System with Central Energy Dissipater", *U.S. Provisional Patent Application*, GTRC ID 4754 (elapsed in April 17, 2010)

PUBLICATIONS

SCI Journal Papers (51):

1. Shimoto, M., Cho, K., Kurata, M., Hitomi, M., Kato, Y., Aida, S., Sugiyama, O., Maki, N., Ohtsuru, S. (2022). "Hospital Evacuation Implications After the 2016 Kumamoto Earthquake." *Disaster Medicine and Public Health Preparedness*, 1-3. doi:10.1017/dmp.2022.25 (Report from the Field)

2. Ikeda, Y., Kurata, M., Xie, J. "Verification of multi-degree-of-freedom building modelling for seismic response prediction based on microtremor measurement," *Earthquake Engng Struct Dyn*. 2022; 00 1– 26, https://doi.org/10.1002/eqe.3630

3. Skalomenos, K., Whittall, T., Kurata, M., Pickering J. "Component testing and multi-level seismic design of steel braced frames with high post-yielding stiffness and two-phase yielding," *Soil Dynamics and Earthquake Engineering* 157, 107248, 2022.6, https://doi.org/10.1016/j.soildyn.2022.107248

4. Hamauzu, S., Skalomenos, K., Kurata, M., Theofanous M. "Local buckling behaviour of high-strength steel tubular columns subjected to one-sided cyclic loading and implications in seismic design of steel MRFs," *Soil Dynamics and Earthquake Engineering* 154, 107115, 2022.3, https://doi.org/10.1016/j.soildyn.2021.107115

5. Qi, L., Kurata, M., Ikeda Y. "Seismic damage thresholds and design methods for two-elevation continuous ceiling systems," *Engineering Structures*, 251, 113530, 2022, https://doi.org/10.1016/j.engstruct.2021.113530

6. Shen, SD., Kurata, M., Pan, P., He, ZZ. "Test, analysis, and design of ovally‐perforated vertically‐flexible steel plate shear wall (OVSPW)," *Earthquake Engineering & Structural Dynamics*, 51(1), pp. 66-85, 2022.1, https://doi.org/10.1002/eqe.3556

7. Ammons, M., Shimada, H., McCormick, J., Kurata, M. "Experimental Investigation of Foam Filled CHS Braces under Cyclic Loading," *Journal of Structural Engineering*, 147(5), 04021044, 2021.5, https://doi.org/10.1061/(asce)st.1943-541x.0002993

8. Li, X., Kurata, M., Wang, Y-H., Nakashima, M. "Estimating Earthquake-Induced Displacement Responses of Building Structures Using Time-Varying Model and Limited Acceleration Data," *Journal of Structural Engineering*, 147(4), 04021014, 2021.4, https://doi.org/10.1061/(asce)st.1943-541x.0002973

9. Qi, L., Kurata, M., Ikeda, Y., Kunitomo, K., Takaoka, M. "Seismic evaluation of two‐elevation ceiling system by shake table tests," *Earthquake Engineering and Structural Dynamics*, 50(4), pp. 11447-1166, 2021.4, https://doi.org/10.1002/eqe.3390

10. Arfin, F.A., Sullivan, T., MacRae, G., Kurata, M., Takeda, T. "Lessons for loss assessment from the Canterbury earthquakes: a 22-storey building," *Bulletin of Earthquake Engineering*, 19(5), pp. 2081-2104, 2021.3, https://doi.org/10.1007/s10518-021-01055-7

11. Otsuki, Y., Li, D., Dey, S.S., Kurata, M., Wang, Y. "Finite Element Model Updating of an 18-Story Structure using Branch-and-Bound Algorithm with Epsilon-Constraint," *Journal of Civil Structural Health Monitoring*, 2020.12, https://doi.org/10.1007/s13349-020-00468-3

12. Liu, Y., Nishiyama, M., Tani, M., Kurata, M., Iwata, K. "Steel beam with web opening reinforced by induction heating," *Journal of Constructional Steel Research*, Volume, 176, 106399, https://doi.org/10.1016/j.jcsr.2020.106399, 2021.1

13. Marzano, G., Skalomenos, K.A., Kurata, M. "Multiple-Damage State Retrofit of Steel Moment-Resisting Frames with Minimal Disturbance Arm Damper," *Journal of Structural Engineering*, https://doi.org/10.1061/(ASCE)ST.1943-541X.0002697, 2020.9

14. Zeng, X., Deng, K., Kurata, M., Duan, J., Zhao, C. "Seismic performance evaluation of damage-controlled composite steel frame with flexible-gel-covered studs," *Engineering Structures*, 219, 110855, https://doi.org/10.1016/j.engstruct.2020.110855, 2020.9

15. Qi, L., Kunitomo, K., Kurata, M., Ikeda, Y. "Investigating the Vibration Properties of Integrated Ceiling Systems Considering Interactions with Surrounding Equipment," *Earthquake Engineering and Structural Dynamics*, 49(8), 772-793, https://doi.org/10.1002/eqe.3264, 2020.7

16. Liu, Y., Tani, M., Kurata, M., Watase, C., Nishiyama, M. "Study on I-Shaped Section Steel Braces Partially Strengthened by Induction Heating," *Engineering Structures*, 210, 110341, https://doi.org/10.1016/j.engstruct.2020.110341, 2020.5

17. Skalomenos, K.A., Kurata, M., Nishiyama, M. "Induction-heat treated steel braces with intentional eccentricity," *Engineering Structures*, 211, 2020, 110461, https://doi.org/10.1016/j.engstruct.2020.110461, 2020.5

18. Deng, K., Zeng, X., Kurata, M., Zhao, C., Onishi, K. "Damage Control of Composite Steel Beams Using Flexible Gel-Covered Studs," *Journal of Structural Engineering*, 146 (3), https://doi.org/10.1061/(ASCE)ST.1943-541X.0002534, 2020.3.

19. Otsuki, Y., Kurata, M., Skalomenos, K.A., Ikeda, Y. [2019]. "Fragility Function Development and Seismic Loss Assessment of Expansion Joints," *Earthquake Engineering and Structural Dynamic* 48 (9), 1007-1029, https://doi.org/10.1002/eqe.3171.

20. Li, X., Kurata, M. [2019]. "Probabilistic updating of fishbone model for assessing seismic damage to beam-column connections in steel moment-resisting frames," *Computer-Aided Civil and Infrastructure Engineering*, 34(9), pp. 790-805, https://doi.org/10.1111/mice.12429.

21. Otsuki, Y., Kurata, M., Skalomenos, K.A., Ikeda, Y. [2019]. "Damage sequence and safety margin assessment of expansion joints by shake table testing," *Earthquake Engineering and Structural Dynamic*, 48: 3-26. https://doi.org/10.1002/eqe.31200.

22. Zhang, L., Marzano, G., Sasaki, Y., Kurata, M., Skalomenos, K. [2018]. "Force Redistribution of Steel Moment-Resisting Frame Retrofitted with a Minimal Disturbance Arm Damper," *Soil Dynamics and Earthquake Engineering*, 114, pp. 159-173, https://doi.org/10.1016/j.soildyn.2018.06.035

23. Skalomenos, K.S., Kurata, M., Shimada, H., Nishiyama, M. [2018]. "Use of Induction-Heating in Steel Structures: Material Properties and Novel Brace Design," *Journal of Constructional Steel Research*, 148, pp. 112-123, https://doi.org/10.1016/j.jcsr.2018.05.016

24. Skalomenos, K.S., Nakashima, M., Kurata, M. [2018]. "Seismic Capacity Quantification of Gusset-Plate Connections to Fracture for Ductility-Based Design," *Journal of Structural Engineering*, 144(10), https://doi.org/10.1061/(ASCE)ST.1943-541X.0002193

25. Zhang, L, Kurata, M., Marino, E.M., Takeda, T. [2018]. "Development of a Minimal-Disturbance Rehabilitation System for Sustaining Bidirectional Loading,", *Journal of Structural Engineering*, 144(6) https://doi.org/10.1061/(ASCE)ST.1943-541X.0002089.

26. Deng, D., Zhao, C., Wang, K, Kurata, M., Wang, T. [2018]. "Numerical Study on a Fully-prefabricated Damage-tolerant Beam to Column Connection for an Earthquake-resilient Frame," *Engineering Structures*, 159(15), pp. 320-331, https://doi.org/10.1016/j.engstruct.2018.01.011.

27. Skalomenos, K.S., Kurata, M. and Nakashima, M. [2018]. "On-line Hybrid Test Method for Evaluating the Performance of Structural Details to Failure," *Earthquake Engineering and Structural Dynamic*, 47(3), pp. 555-572, https://doi.org/10.1002/eqe.2979

28. Matarazzo, T.J., Kurata, M., Nishino, H., Suzuki, A. [2018]. "Post-earthquake Strength Assessment of a Steel Moment-Resisting Frame with Multiple Beam-Column Fractures using Local Monitoring Data," Journal of Structural Engineering, Vol. 144(2), https://doi.org/10.1061/(ASCE)ST.1943-541X.0001967.

29. Burton, A., Lynch, J.P., Kurata, M., Law, K. [2017]. "Fully Integrated Carbon Nanotube Composite Thin Film Strain Sensors on Flexible Substrates for Structural Health Monitoring," *Smart Materials and Structures*, Vol. 26(9).

30. Suzuki, A., Kurata, M., Li, X., and Shimmoto, S. [2017]. "Residual Structural Capacity Evaluation of Steel Moment-Resisting Frames using Dynamic-strain-based Model Updating Method," *Earthquake Engineering and Structural Dynamics,* https://doi.org/10.1002/eqe.2882.

31. Inamasu, H., Skalomenos, AK., Hsiao, P-C., Hayashi K., Kurata, M., and Nakashima, M. [2017]. "Gusset plate connection for Naturally Buckling Brace," *Journal of Structural Engineering,* 143(8), https://doi.org/10.1061/(ASCE)ST.1943-541X.0001794.

32. Lavan, O., Sato, M., Kurata, M., Zhang, L. [2017]. "Local Deformation Based Design of Minimal-Disturbance Arm Damper for Retrofitting Steel Moment-Resisting Frames," *Earthquake Engineering and Structural Dynamics*, 46(9), https://doi.org/10.1002/eqe.2866.

33. Barbagallo, B., Hamashima, I., Hu, H., Kurata, M., Nakashima, M. [2017]. "Base Shear Capping Buildings with Graphite-Lubricated Bases for Collapse Prevention in Extreme Earthquakes," *Earthquake Engineering and Structural Dynamics*, 46(6), https://doi.org/10.1002/eqe.2842.

34. Li. X, Kurata, M., Suzuki, A. [2017]. "Decoupling Algorithm for Evaluating Multiple Beam Damages in Steel Moment-resisting Frames," *Earthquake Engineering and Structural Dynamics*, 46(7), pp. 1045-1064. https://doi.org/1064, 10.1002/eqe.2841.

35. Zhang, Y., Kurata, M., Lynch, J.P. [2017]. "Long-Term Modal Analysis of Wireless Structural Monitoring Data from a Suspension Bridge under Varying Environmental and Operational Conditions: System Design and Automated Modal Analysis," *Journal of Engineering Mechanics*, 143(4), https://doi.org/10.1061/(ASCE)EM.1943-7889.0001198, 04016124.

36. Yamaguchi, M., Kurata, M., Miyazawa, M. [2017]. "Building Damage Estimates using Slowness Change in Propagating Waves," *Journal of Structural Engineering*, 143(4), https://doi.org/10.1061/(ASCE)ST.1943-541X.0001683, 04016200.

37. He, L., Togo, T., Hayashi, K., Kurata, M., Nakashima, M. [2016]. "Cyclic Behavior of Multi-Row Slit Shear Walls Made from Low Yield Point Steel," *Journal of Structural Engineering* 142(11), https://doi.org/10.1061/(ASCE)ST.1943-541X.0001569, 04016094.

38. Bai, Y., Kurata, M., Nakashima, M., Florez, J. [2016]. "Macromodeling of Crack Damage in Steel Beams Subjected to Nonstationary Low Cycle Fatigue," *Journal of Structural Engineering*, 142(10), https://doi.org/10.1061/(ASCE)ST.1943-541X.0001536, 04016076.

39. Li, X., Kurata, M., Nakashima, M. [2016]. "Simplified Derivation of a Damage Curve for Seismically Induced Beam Fracture in Steel Moment-resisting Frames," *Journal of Structural Engineering*, 141(6), https://doi.org/10.1061/(ASCE)ST.1943-541X.0001473, 04016019.

40. Kurata, M., Sato, M., Zhang, L., Lavan, O., Becker, T., Nakashima, M. [2016]. "Minimal-Disturbance Seismic Rehabilitation of Steel Moment-Resisting Frames using Light-weight Steel Elements," *Earthquake Engineering and Structural Dynamics*, 45(3), pp. 383-400.

41. He, L., Kurata, M., Nakashima, M. [2015]. "Condition Assessment of Steel Shear Walls with Tapered Links under Various Loadings," *Earthquake and Structure*, 9(4), pp. 767-788, 2015.10.

42. Kurata, M., He, L., Nakashima, M. [2015]. "Steel Slit Shear Walls with Double-Tapered Links Capable of Condition Assessment," *Earthquake Engineering and Structural Dynamics*, Wiley, 44(8), pp. 1271-1287.

43. Li, X., Kurata, M., Nakashima, M. [2015]. "Evaluating Damage Extent of Fractured Beams in Steel Moment-Resisting Frames using Dynamic Strain Responses," *Earthquake Engineering and Structural Dynamics*, Wiley, 44(4), pp. 563-581.

44. Nakashima, M., Lavan, O., Kurata, M., Luo, Y. [2014]. "Earthquake Engineering Research Needs in Light of Lessons Learned from the 2011 Tohoku Earthquake," *Earthquake Engineering and Engineering Vibration*, 13, Suppl.1, pp. 141-149. https://doi.org/10.1007/s11803-014-0244-y

45. Shi Y., Kurata, M., Nakashima, M. [2014]. "Disorder and Damage of Base-Isolated Medical Facilities when Subjected to Near-Fault and Long-Period Ground Motions," *Earthquake Engineering and Structural Dynamics*, Wiley, 43(11), pp. 1683-1701.

46. Shi, Y., Becker, T., Kurata, M., Nakashima, M. [2013]. "H∞ Control in the Frequency Domain for a Semi-Active Floor Isolation System," *Frontiers of Structural and Civil Engineering*, 7(3), pp. 264-275.

47. Kurata, M., Li, X., Fujita, K., Yamaguchi, M. [2013]. "Piezoelectric Dynamic Strain Monitoring for Detecting Local Seismic Damage in Steel Buildings," *Smart Materials and Structures.* 22, 115002.

48. Kurata, M., Kim, J., Lynch, J., van der Linden, G., Sedarat, H., Thometz, E., Hipley, P., and Sheng, L. [2013]. "Internet-Enabled Wireless Structural Monitoring Systems: Development and Permanent Deployment at the New Carquinez Suspension Bridge," *Journal of Structural Engineering*, ASCE, 139, pp. 1688–1702.

49. Kurata, M., Leon. T. R., DesRoches, R., and Nakashima, M. [2012]. "Steel Plate Shear Wall with Tension-Bracing for Seismic Rehabilitation of Steel Frames," *Journal of Constructional Steel Research*, Vol. 71, pp. 92-103.

50. Kurata, M., Leon, T. R, and DesRoches, R. [2012]. "Rapid Seismic Rehabilitation Strategy: Concept and Testing of Cable Bracing with Couples Resisting Damper (CORE Damper)," *Journal of Structural Engineering*, ASCE, Vol 138 (3), pp. 354-362.

51. Kurata, M., Nakashima, M., and Suita, K. [2005]. "Effect of Column Base Behavior on Seismic Response of Steel Moment Frames," *Journal of Earthquake Engineering*, Imperial College Press, Vol. 9, Special Issue 2, pp. 415-438.

Japanese Journal Papers (25):

1. Sakakibara, Y., Kawamata, Y., Fujita, K., Kurata, M. [2022] "Image-based Monitoring System for Concealed Suspended Piping in Buildings: Verification in shaking table testing of a full-scale steel frame with hospital functionality, *J. Struct. Constr. Eng.*, AIJ, Vol. 87, No. 798, 725-736, Aug., 2022 DOI https://doi.org/10.3130/aijs.87.725

2. Takaoka, G., Kanao, I., Kojima, K., Kurata, M. [2021] "Cyclic Bending Tests and Deformation Capacity of Aged Pipe," *Journal of Structural Engineering (Kouzou Kougaku)*, 67B, pp. 367-373 (in Japanese).

3. Fukuzawa, A., Ikeda, Y., Kurata, M. [2021] "Evaluation of Dynamic Soil-RC Building Interaction Through Modal Properties Identified from Earthquake Records at Base, Upper Floor and Peripheral Ground Surface," *Journal of Structural Engineering (Kouzou Kougaku)*, 67B, pp. 483-494 (in Japanese).

4. Xie, J., Ikeda, Y., Kurata, M. [2021] "Dynamic Properties of Large-Scale Low-Rise Commercial Buildings Based on Microtremor Measurements," *Journal of Structural Engineering (Kouzou Kougaku)*, 67B, pp. 495-507 (in Japanese).

5. Xie, J., Ikeda, Y., Kurata, M. [2021] "Multi-Degree-of-Freedom Linear Building Model Based on Microtremor Measurement for Seismic Response Analysis," *Journal of Structural Engineering (Kouzou Kougaku)*, 67B, pp. 506-518 (in Japanese).

6. Marzano, G., Skalomenos, K.A., Kurata, M., Sasaki, Y. [2020] "Fragility Functions for Evaluation on Moment-Resisting Frames Retrofitted with the Minimal Disturbance Arm Damper," *Journal of Structural Engineering (Kouzou Kougaku)*, 66B

7. Wada, T., Ikeda, Y., Kurata, M., Kashima, T. [2019] "Verification of Method to Evaluate Amplitude-Dependent Natural Frequencies of Steel Buildings using Main Shock Response", *Journal of Structural Engineering (Kouzou Kougaku)*, 65B (in Japanese).

8. Hamashima, I., Kurata, M., Nakashima, M. [2017]. "Slipping Behavior of Base Shear Capping Buildings for Collapse Prevention and Required Maximum Strength," *Journal of Structural and Constructional Engineering*, AIJ, No.741, p. 1695-1705 (in Japanese).

9. Shiraishi, M., Morii, T., Okada, K., Sugimoto, K., Sato, T., Kurata, M., Tobita, J. [2017]. "Local Damage Detection using Densely Deployed Vibration Sensors and Output Error of Sub-structures," *Journal of Structural and Constructional Engineering*, AIJ, No.736, p. 1187-1197 (in Japanese).

10. Togo, T., He, L., Hayashi, K., Kurata, M., Nakashima, M. [2016]. "Seismic behavior and design of assembled slit shear walls using low yield point steel," *Journal of Structural and Constructional Engineering*, AIJ, No.720, pp. 335-343 (in Japanese).

11. Shimmoto, S., Kurata, M., Suzuki, A., Li, X. [2015]. "Immediate Decision Support on Re-occupancy of Earthquake-Affected Buildings Based on Assessment of Aftershock Risk," *Journal of Social Safety Science*, Institute of Social Safety Science, No.27, pp. 275-281, 2015.11 (in Japanese).

12. Hayashi, K., Nishi, R., Luo, Y., Kurata, M., Nakashima, M. [2015]. "Restoring Force Characteristics and Ultimate Behavior of Concrete Filled Steel Tube Columns using Ultra-High Strength Steel H-SA700," *Journal of Structural and Constructional Engineering*, AIJ, 80 (718), pp. 2001-2009. 2015.12 (in Japanese).

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5. Skalomenos, K.A., Kurata, M., Fukutomi, Y., Nishiyama, M., "Evaluation of Cyclic Behavior of Steel Braces with Stronger Middle Length Treated by Induction Hardening," 11th US National Conference on Earthquake Engineering, June 25-29, 2018

6. Y. Otsuki, K. Buyco, M. Kurata and M. Speicher, "Feasibility Study on Multi-Code Seismic Evaluation of a Landmark Building," 11th US National Conference on Earthquake Engineering, June 25-29, 2018

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グローバル時代を生きぬくことができる建築人の育成特別委員会：第2次答申書，分担執筆，日本建築学会，2017年5月15日(in Japanese)

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