LIST OF PAPERS BY MEMBERS OF Engineering for Resilient Society Research Group (ERS)

- S. M. N. Adnan, Y. Fukutomi, Y. Haga, K. Matsukawa, Y. Nakano: Behavior of Poorly Detailed RC Frames with Low Strength Concrete and URM Infill under High Axial Loads, Proceedings of the 17th World Conference on Earthquake Engineering, September 2020.
- K. Matsukawa, D. Kojima, Y. Haga, Y. Nakano, Safety Evaluation Procedures against Building Collapse due to Collision of Tsunami-Driven Ships, Proceedings of the 17th World Conference on Earthquake Engineering, September 2020.
- R. T. Kabir, M. K. Hasan, S. M. N. Adnan, M. Ahmed, M. Maliha, S. Barua, A. J. Ema, M. A. Islam, R. Suzuki, K. Matsukawa, Y. Nakano, M. M. Rahman, A. F. M. S. Amin, Tests on Low Strength Concrete Columns under Axial Compression and Shear, Proceedings of the 17th World Conference on Earthquake Engineering, September 2020.
- B. Ishikawa, N. Aono, K. Hoshino, Y. Suzuki, T. Suzuki, T. Hirano, Y. Nakano, J. Sakuta, S. Mochizuki, T. Yanagi, Tsunami Safety Evaluation of Public Buildings in Shizuoka Prefecture, Japan (Part2), Proceedings of the 17th World Conference on Earthquake Engineering, September 2020.

Yoshiaki Nakano, Damage Assessment Activities of School Buildings After Recent Major Earthquakes in Japan, Proceedings of the 17th World Conference on Earthquake Engineering, September 2020.

S. M. Naheed Adnan, Kazuto Matsukawa, Yuji Haga, Yoshiaki Nakano, Comparison of in-plane shear strength evaluation methods of RC frames with URM infill walls, Proceedings of the annual conference of Architectural Institute of Japan, pp.503-504, September 2020.

Radia Tahmeem Kabir, Kazuto Matsukawa, S. M. Naheed Adnan, Md Khairul Hasan, Yoshiaki Nakano, Study on shear strength of RC columns with brick aggregate and low strength concrete: Comparison of existing methods, Proceedings of the annual conference of Architectural Institute of Japan, pp.247-248, September 2020.

- Y. Nakaso, S. Arimoto, K. Kawaguchi, T. Muto, H. Ueda: Mechanical measurement of gravitropic bending force in pea sprouts, Plant Biotechnology, Vol. 37, No. 4, 2020. 12, pp. 475-480.
- L. Wang, K Kawaguchi, P. Wang: Damaged ceiling detection and localization in large-span structures using convolutional neural networks, Automation in Construction, Vol.116, 2020.8, pp. 103230.
- K. Kawaguchi, Y. Takahashi, M. Yokoyama, T. Taguchi, A. Nishino: Development of hysteresis damper for wooden houses inspired by origamic three-dimensional resistance. Part 1: consideration on basic shape model, AIJ Journal of Technology and Design, Vol. 27, No. 65, 2021.02, pp. 219-224,
- Y. Otsuka, K. Kawaguchi: Preliminary Study of MPS Incompressible Fluid analysis in the vicinty of polygon boundary, Summaries of Technical Papers of Annual Meeting, AIJ, Kanto, Japan, July 2020, No. 20105, pp. 209-210, DVD-ROM.
- K. Kawaguchi, Y. Nakaso, T. Demura: Plant-Structure-Opt.: Elucidation of the strategies of mechanical optimization in plants toward the establishment of the bases for sustainable structure system, some preliminary thoughts for design strategy of large structures learning from analogy found in mechanics in plants, Summaries of Technical Papers of Annual Meeting, AIJ, Kanto, Japan, July 2020, No. 20329, pp. 657-660, DVD-ROM.
- S. Arimoto, K. Kawaguchi Y. Nakaso, T. Demura: Preliminary study of mechanical aspect of plant gravitropism behavior (Part 2: Mechanical aspect of gravitropism of pea sprouts), Summaries of Technical Papers of Annual Meeting, AIJ, Kanto, Japan, July 2020, No. 20336, pp. 685-688, DVD-ROM.
- T. Muto, K. Kawaguchi Y. Nakaso, T. Zhang: The fundamental study of measurement of elongational growth power Eucalyptus generates and the application of the power to architecture, Summaries of Technical Papers of Annual Meeting, AIJ, Kanto, Japan, July 2020, No. 20337, pp. 689-692, DVD-ROM.
- S. Komikado, K. Kawaguchi, Y. Nakaso, R. Hosomi, H. Ishizuka, T. Zhang, T. Demura: Derivation and numerical analysis of huge building design methodology in a sustainable structure system studied from the strategies of mechanical optimization in plants

- (No.2) simple analysis of growth patterns generated by dividing cell and primitive growth rules, Summaries of Technical Papers of Annual Meeting, AIJ, Kanto, Japan, July 2020, No. 20338, pp. 693-696, DVD-ROM.
- Y. Nakaso, K. Kawaguchi, T. Fujiwara, K. Yamazaki, M. Beier: Preliminary research on structural morphology of root system using nutritropism Part 1: Observation of nutritropism of rice roots and growth simulation in two dimensions, Summaries of Technical Papers of Annual Meeting, AIJ, Kanto, Japan, July 2020, No. 20340, pp. 701-704, DVD-ROM.
- S. HORIGUCHI, K. Kawaguchi, S. Arimoto, Y. Nakaso, T. Higaki, T. Demura: Direct application of jigsaw pattern observed in plant-leaf-cell-joints and its mechanical property in comparison with conventional fittings, Summaries of Technical Papers of Annual Meeting, AIJ, Kanto, Japan, July 2020, No. 20344, pp. 715-716, DVD-ROM.
- K. Uemura, K. Kawaguchi, and Kenji Oka: On the case of the initial reinforced concrete dome structure in Japan, Summaries of Technical Papers of Annual Meeting, AIJ, Kanto, Japan, July 2020, No. 20352, pp. 731-732, DVD-ROM.
- Y. Li, K. Kawaguchi, Y. Nakaso, A. Mutoh, S. Matsumoto, T. Kimura: Japanese early reinforced concrete dome structure: Threedimensional measurement of Imabari radium hot spring Part 3: 3D shape data analyzed from aerial photos taken by UAV and laser measurement, Summaries of Technical Papers of Annual Meeting, AIJ, Kanto, Japan, July 2020, No. 20353, pp. 733-734, DVD-ROM.
- A. Mutoh, A. Yomoda, K. Kawaguchi, Y. Nakaso, S. Matsumoto and T. Kimura: Preliminary report on structural investigation of "Imabari Radium host spring", an early RC dome structure in Japan Part 2: Estimation of basic structural properties of the domes, Summaries of Technical Papers of Annual Meeting, AIJ, Kanto, Japan, July 2020, No. 20354, pp. 735-736, DVD-ROM.
- S. Matsumoto, K. Kawaguchi, Y. Nakaso, A. Mutoh, T. Kimura and D. Fujii: Japanese early reinforced concrete dome structure: Vibration characteristics of Imabari radium hot spring Part 2: Results of microtremor measurement and Vibration analysis, Summaries of Technical Papers of Annual Meeting, AIJ, Kanto, Japan, July 2020, No. 20355, pp. 737-738, DVD-ROM.

- S. Nagai, K. Kawaguchi, Y. Sunada: Preliminary Research on the Measurement Method of Surface Tension of Ionic Liquids for Space Applications, Summaries of Technical Papers of Annual Meeting, AIJ, Kanto, Japan, July 2020, No. 20425, pp. 877-878, DVD-ROM.
- K. Tsuboi, K. Kawaguchi and K. Mizutani: Basic research on comparison between measured axial force and analyzed axial force of actual size tensegrity structure, Summaries of Technical Papers of Annual Meeting, AIJ, Kanto, Japan, July 2020, No. 20438, pp. 903-904, DVD-ROM.
- T. Zhang, K. Kawaguchi and M. Wu: Preliminary research on folding analysis of the origami concerning gravity and thickness, Summaries of Technical Papers of Annual Meeting, AIJ, Kanto, Japan, July 2020, No. 20442, pp. 911-912, DVD-ROM.
- R. Wada, K. Kawaguchi, T. Zhang: Preliminary research of curved crease folding using mirror reflection method, Summaries of Technical Papers of Annual Meeting, AIJ, Kanto, Japan, July 2020, No. 20447, pp. 921-922, DVD-ROM.
- N. Umeta, K. Kawaguchi: Numerical analysis example and fundamental study on shape determination of columnar structure with short member constraint by grand structure method, Summaries of Technical Papers of Annual Meeting, AIJ, Kanto, Japan, July 2020, No. 20470, pp. 967-968, DVD-ROM.
- Y. Koda, K. Kawaguchi, T. Mizumoto, Y. Masuda: Preliminary Study of Damage Detection System Using Difference of Photo Images taken for inspection of non-structural materials, Summaries of Technical Papers of Annual Meeting, AIJ, Kanto, Japan, July 2020, No. 20503, pp. 1033-1034, DVD-ROM.
- J. Hu and K. Kawaguchi: Energy performance of large-span indoor swimming stadiums with retractable membrane ceilings, Summaries of Technical Papers of Annual Meeting, AIJ, Kanto, Japan, July 2020, No. 20504, pp. 1035-1036, DVD-ROM.
- Y. Takahashi, K. Kawaguchi, T. Taguchi and A. Nishino: Preliminary research of steel thin plate hysteretic damper with origami crease pattern for timber frame house, Summaries of Technical Papers of Annual Meeting, AIJ, Kanto, Japan, July 2020, No. 22237, pp. 473-474, DVD-ROM.

Munoz, H. and Kiyota, T. (2020): Deformation and localisation behaviours of reinforced gravelly backfill using shaking table tests, Journal of Rock Mechanics and Geotechnical Engineering, Vol. 12, Issue 1, pp. 102-111.

Hidayat, R. F., Kiyota, T., Tada, N., Hayakawa, J. and Nawir, H. (2020): Reconnaissance on Liquefaction-induced flow failure caused by the 2018 Mw 7.4 Sulawesi Earthquake, Palu, Indonesia, Journal of Engineering and Technological Sciences, Vol. 52, No. 1, pp. 51-65.

Kiyota, T., Furuichi, H., Hidayat, R. F., Tada, N. and Nawir, H. (2020): Overview of long-distance flow-slide caused by the 2018 Sulawesi earthquake, Indonesia, Soils and Foundations, Vol. 60, Issue 3, pp. 722-735.

Kajihara, K., Okuda, H., Kiyota, T. and Konagai, K. (2020): Mapping of liquefaction risk on road network based on relationship between liquefaction potential and liquefaction-induced road subsidence, Soils and Foundations, Vol. 60, No. 5, pp. 1202-1214.