

Curriculum Vitae

NANKO Kazuki

Affiliation

Professor

Plant-Environment Dynamics and Applied Sensing Laboratory (PEDAL)

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- Lab. <https://web.tuat.ac.jp/~pedal/>
- ORCID <http://orcid.org/0000-0002-1157-9287>
- Web of Science <https://www.webofscience.com/wos/author/record/F-4833-2010>
- Google Scholar <http://scholar.google.com/citations?user=xIV3-wAAAAJ>
- ResearchGate https://www.researchgate.net/profile/Kazuki_Nanko

Education

Ph.D. Agriculture. Graduate School of Agricultural and Life Sciences, the University of Tokyo. 2007.
Dissertation: *Studies on the process of throughfall drop generation in forest canopies.*

M.A. Agriculture. Graduate School of Agricultural and Life Sciences, the University of Tokyo. 2004.
Thesis: *Evaluating and modeling the influence of canopy species and meteorological factors on throughfall drop size distribution* [in Japanese]

B.S. Agriculture. Faculty of Agriculture, the University of Tokyo. 2002.
Thesis: *Assessment of raindrop impact energy under Japanese cypress plantation using laser drop-sizing gauge* [in Japanese]

Research Interests

Interests Plant-Environment Dynamics with Applied Sensing

Forests and other vegetated ecosystems dynamically interact with their environment. Rainfall is intercepted by foliage, winds are slowed by forest structure, and soil is protected by vegetation cover. These processes are essential for sustaining healthy ecosystems and reducing natural disaster risks. My research focuses on quantifying plant-environment interactions through field observation, sensing technology, and physical modeling. This work supports better understanding of eco-hydrological and biomechanical processes in forests, grasslands, and agricultural landscapes, contributing to sustainable management and climate adaptation.

Fields

Ecohydrology
Plant Biomechanics
Hydrogeomorphology
Instrumentation

Keywords Rainfall; precipitation; raindrop; throughfall; stemflow; canopy interception
Tree sway; stem breakage; uprooting; forest wind damage; coastal forest
Splash erosion; soil erosion; wind erosion; machine learning applications
Laser disdrometer; IoT-based environmental sensing

Employment and Appointments

Permanent Positions

2025-03/pres.	Professor Institute of Agriculture Tokyo University of Agriculture and Technology
2016-04/2025-02	Senior Researcher Department of Disaster Prevention, Meteorology and Hydrology Forestry and Forest Products Research Institute, Japan
2014-04/2016-03	Senior Researcher Department of Meteorological Environment Forestry and Forest Products Research Institute, Japan
2013-10/2014-03	Research Associate Department of Meteorological Environment Forestry and Forest Products Research Institute, Japan

Guest Positions during Permanent Positions

2018-06/2019-02	Visiting Scholar (as JSPS Scientist for Joint International Research) Department of Geography University of Delaware, USA
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Postdoctoral Positions

2011-08/2013-09	Postdoctoral Research Fellow Department of Forest Site Environment Forestry and Forest Products Research Institute, Japan
2011-04/2011-07	JSPS Postdoctoral Research Fellow Department of Agriculture Tokyo University of Agriculture and Technology, Japan
2010-09/2011-03	Postdoctoral Research Fellow Department of Forest Site Environment Forestry and Forest Products Research Institute, Japan
2009-11/2010-08	Postdoctoral Research Fellow Graduate School of Life and Environmental Sciences University of Tsukuba, Japan
2008-09/2009-08	Postdoctoral Research Associate Department of Geological Sciences University of South Carolina, USA
2007-04/2008-08	Postdoctoral Research Fellow Graduate School of Life and Environmental Sciences University of Tsukuba, Japan
2005-04/2007-03	JPSP Research Fellow Graduate School of Agricultural and Life Sciences

the University of Tokyo, Japan

Awards

As Principal

- 2019 **Award of President of Agriculture, Forestry and Fisheries Research Council** in the 2019 (15th) Award for Young Agricultural Researchers
Title: *Studies on rain and sediment dynamics in forests due to differences in forest types* (in Japanese)
- 2016 **Young Investigator Award** of the Japanese Forest Society
Title: *Physical interpretation of the difference in drop size distributions of leaf drips among tree species*
- 2004 **Best Poster Award** in the 2004 IUFRO Forest Hydrology Workshop, Kota Kinabalu, Malaysia.
Title: *The influence of forest species and atmospheric phenomena on the throughfall raindrop size distribution*
- 2002 **Award of President of the Japan Science and Technology Association (JAFSTA)** in the 13th Student Research Papers on Forestry Technology Competition.
Title: *Assessment of raindrop impact energy under Japanese cypress plantation using laser drop-sizing gauge* (in Japanese)

As Secondary

- 2017 **Best Poster Award** at the Annual Meetings of the Japanese Society of Soil Science and Plant Nutrition
Title: *Yamashita, N., Hashimoto, S., Nanko, K., Osone, Y., Ugawa, S., Ishizuka, S., Tanaka, N., Imai, A., Kaneko, S. and Miura, S. Mapping of forest soil carbon in all over Japan utilizing National Forest Soil Carbon Inventory: spatial estimation by regression kriging* (in Japanese)
- 2014 **Best Poster Award** in the 20th World Congress of Soil Science
Title: *Kaneko, S., Miura, S., Ugawa, S., Nanko, K., Tanaka, N., Osone, Y. and Takahashi, M. Carbon stock of dead wood, litter and mineral soil in the forest of Japan.*
- 2007 **Excellent Presentation Award for Young Researchers** in the Annual Meeting of Japan Society of Erosion Control Engineering
Title: *Mizugaki, S., Gomi, T., Onda, Y., Asai, H., Nanko, K., Asano, Y., Nagamine, M. and Hiramatsu, S. Process of surface erosion and sediment discharge into stream in Japanese cypress plantation* (in Japanese)

Publications

Metrics

Number of peer-reviewed articles	[WoS] 64; [total] 82
Total times cited	[WoS] 2,321; [Google Scholar] 3,365
h-index	[WoS] 26; [Google Scholar] 30

* Updated on 2025-06-14

Book, as an Editor

- 1 Levia, D.F., Carlyle-Moses, D.E., Iida, S., Michalzik, B., **Nanko, K.** Tischer, A. 2020. *Forest-Water Interactions*. Ecological Studies, No. 240, Springer Nature, Switzerland AG, 628 p. ISBN: 978-3-030-26085-9 (Print); 978-3-030-26086-6 (eBook), doi:10.1007/978-3-030-26086-6

Book Chapter, as an Author (without peer-review)

- 5 **Nanko, K.** 2022. Distribution of rainfall by forests. In: Saigusa, N., Shibata, H., Takahashi, S. (Eds.), *Forest and Water*, Kyoritsu Shuppan, Tokyo: 31-52. [in Japanese]
- 4 **Nanko, K.** 2022. Rainfall partitioning. In: Otsuki, K., Kume, T., Kasahara, T. (Eds.), *Introduction to Forest Hydrology*, Asakura Publishing Co., Ltd., Tokyo: 72-84. [in Japanese]
- 3 **Nanko, K.** 2008. Mechanism and actual condition of splash erosion on forest floor. In: Onda, Y. (Ed.), *Actual condition of degradation of forest plantations and discharge of water and sediment*, Iwanami Shoten, Tokyo: 125-134. [in Japanese]
- 2 **Nanko, K.** 2008. Change of raindrops in Japanese cypress forest. In: Onda, Y. (Ed.), *Actual condition of degradation of forest plantations and discharge of water and sediment*, Iwanami Shoten, Tokyo: 15-23. [in Japanese]
- 1 **Nanko, K.** 2008. New understanding: land use and water interactions. In: Calder I.R. (Author) Kuraji, K., Hayashi, Y. (Supervising translation), *Blue revolution*, Tsukiji Shokan, Tokyo: 8-33. [in Japanese]

Peer-reviewed Articles

Accepted, in press, online first, or early view

- 81 Levia, D.F., Germer, S., Latron, J., Vladich, H., **Nanko, K.**, Zumr, D., Altingoz, M., Llorens, P., Batelaan, O. (xxxx) Forest-water interactions: a multilingual perspective through six historical vignettes. *Hydrological Sciences Journal*.
- 80 Azuma, W.A., Uehara, A., Kagawa, A., Kawai, K., Saiki, S.-T., Jiao, L., **Nanko, K.** (xxxx) Towards the elucidation of eco-physiological processes in forests during and after rainfall. *Japanese Journal of Ecology*. doi:10.18960/seitai.2406 [in Japanese with English Summary]

2021/pres.

- 79 Levia, D.F., O'Halloran, R.C., Otsuka, Y., Chang, J.L., Kaiser, K., **Nanko, K.**, Iida, S., Shapiro, A.J., Gupta, Y., Sadula, S., Vlachos, D.G., Epps, T.H. (2025) Stemflow unveils trees' weatherproofing stratagem during autumnal senescence. *Plant, Cell & Environment* 48: 7001-7004. doi:10.1111/pce.15668
- 78 Saiki, S.T., Ilek, A., Ando, Y., Sahashi, N., **Nanko, K.** (2025) Impact of Pathogenic Fungi on

- Leaf Surface Wettability: A Case Study of *Erysiphe castaneigena*. *Ecohydrology* 18: e2755. doi:10.1002/eco.2755
- 77 **Nanko, K.**, Levina, D.F., Iida, S., Shinohara, Y., Sakai, N. (2025) Machine learning reveals the contrasting roles of rainfall and canopy structure metrics on the formation of canopy drip and splash throughfall. *Journal of Geophysical Research: Biogeosciences* 130: e2024JG008340. doi:10.1029/2024JG008340
- 76 Kamimura, K., **Nanko, K.**, Matsumoto, A., Ueno, S., Gardiner, B. (2024) Energy transfer during tree movement for different wind conditions and forest configurations. *Forest Ecology and Management* 571: 122223. doi:10.1016/j.foreco.2024.122223
- 75 Takeuchi, C., Shibata, S., Nukina, R., Tsuda, S., **Nanko, K.** (2024) Effects of high intensity rainfall on green surfaces at transmission tower sites. *Journal of the Japanese Society of Revegetation Technology* 50: 119-122. doi:10.7211/jjsrt.50.119 [in Japanese with an English summary]
- 74 Jeong, S., **Nanko, K.**, Katayama, A., Kume, T., Koga, S., Otsuki, K. (2024) Characteristics of throughfall kinetic energy in an unmanaged Japanese cypress plantation laden with dead branches. *Catena* 243: 108181. doi:10.1016/j.catena.2024.108181
- 73 Yamada, Y., Yamaura, Y., Shimizu, K., Murakami, W., **Nanko, K.**, Takayama, N. (2024) Conflicts among ecosystem services may depend on environmental awareness: a multi-municipality analysis. *Forestry: An International Journal of Forest Research* 97: 424–435. doi:10.1093/forestry/cpad046
- 72 Iwasaki, K., Shimoda, S., Nakata, Y., Hayamizu, M., **Nanko, K.**, Torita, H. (2024) Remote sensing of soil ridge height to visualize windbreak effectiveness in wind erosion control: A strategy for sustainable agriculture. *Computers and Electronics in Agriculture* 219: 108778. doi:10.1016/j.compag.2024.108778
- 71 Katayama, A., **Nanko, K.**, Jeong, S., Kume, T., Shinohara, Y., Seitz, S. (2023) Concentrated impacts by tree canopy drips: hotspots of soil erosion in forests. *Earth Surface Dynamics* 11: 1275–1282. doi:10.5194/esurf-11-1275-2023
- 70 Katsushima, T., Kato, A., Aiura, H., **Nanko, K.**, Suzuki, S., Takeuchi, Y., Murakami, S. (2023) Modeling of snow interception on a Japanese cedar canopy based on weighing tree experiment in a warm winter region. *Hydrological Processes* 37: e14922. doi:10.1002/hyp.14922
- 69 Katsushima, T., Adachi, S., **Nanko, K.**, Takeuchi, Y. (2023) Wind tunnel testing of the snow accretion effect on the drag coefficient of Japanese cedar branches and leaves. *Journal of the Japanese Society of Snow and Ice* 85: 101-114. doi:10.5331/seppyo.85.2_101 [in Japanese with an English summary]
- 68 **Nanko, K.**, Keim, R.F., Hudson, S.A., Levina, D.F. (2022) Throughfall drop sizes suggest canopy flowpaths vary by phenophase. *Journal of Hydrology* 612: 128144. doi:10.1016/j.jhydrol.2022.128144
- 67 Iwasaki, K., **Nanko, K.**, Nakata, Y., Masaka, K., Shinohara, Y., Nitta, K., Mizunaga, H. (2022) Port construction alters dune topography and coastal forest growth: A study on forest decline due to coastal erosion. *Ecological Engineering* 180: 106640. doi:10.1016/j.ecoleng.2022.106640
- 66 Saidin, Z.H., Levina, D.F., Kato, H., Kurihara, M., Hudson, J.E., **Nanko, K.**, Onda, Y. (2022) Vertical distribution and transport of radiocesium via branchflow and stemflow through the canopy of cedar and oak stands in the aftermath of the Fukushima Dai-ichi Nuclear Power Plant accident. *Science of the Total Environment* 818: 151698. doi:10.1016/j.scitotenv.2021.151698
- 65 Saiki, S.-T., Mori, H., **Nanko, K.**, Oguro, Y., Kurokawa, H. (2022) Interspecific comparison of leaf physiology, morphology and physical characteristics related to foliar water uptake. *Kanto Journal of Forest Research* 73: 73-76. [in Japanese with an English summary]
- 64 Llorens, P., Latron, J., Carlyle-Moses, D.E., Nätke, K., Chang, J.L., **Nanko, K.**, Iida, S., Levina,

- D.F. (20xx) Stemflow infiltration areas into forest soils around American beech (*Fagus grandifolia* Ehrh.) trees. *Ecohydrology* 15: e2369. doi:10.1002/eco.2369
- 63 Kamimura, K., **Nanko, K.**, Matsumoto, A., Ueno, S., Gardiner, J., Gardiner, B. (2022) Tree dynamic response and survival in a category-5 tropical cyclone: the case of super typhoon Trami. *Science Advances* 8: eabm7891. doi:10.1126/sciadv.abm7891
- 62 Yamashita, N., Ishizuka, S., Hashimoto, S., Ugawa, S., **Nanko, K.**, Osone, Y., Iwahashi, J., Sakai, Y., Inatomi, M., Kawanishi, A., Morisada, K., Tanaka, N., Aizawa, S., Imai, A., Takahashi, M., Kaneko, S., Miura, S., Hirai, K. (2021) National-scale 3D mapping of soil organic carbon in a Japanese forest considering microtopography and tephra deposition. *Geoderma* 406: 115534. doi:10.1016/j.geoderma.2021.115534
- 61 Hirano, Y., **Nanko, K.**, Doi, R., Nishimura, R., Iriyama, T., Tanikawa, T. (2021) Root system of the giant *Cryptomeria japonica* tree collapsed at Shinmei shrine in Okute town, Gifu, in July 2020. *Root research* 30: 65-75. doi:10.3117/rootres.30.65
- 60 Iida, S., Wheeler, K.I., **Nanko, K.**, Shinohara, Y., Sun, X., Sakai, N., Levia, D.F. (2021) Canopy structure metrics governing stemflow funneling differ between leafed and leafless states: insights from a large-scale rainfall simulator. *Hydrological Processes* 35: e14294. doi:10.1002/hyp.14294
- 59 Yamaura, Y., Yamada, Y., Matsuura, T., Tamai, K., Taki, H., Sato, T., Hashimoto, S., Murakami, W., Toda, K., Saito, H., **Nanko, K.**, Ito, E., Takayama, N., Tsuzuki, N., Takahashi, M., Yamaki, K., Sano, M. (2021) Modeling impacts of broad-scale plantation forestry on ecosystem services in the past 60 years and for the future. *Ecosystem Services* 49: 101271. doi:10.1016/j.ecoser.2021.101271

2016/2020

- 58 Tucker, A., Levia, D.F., Katul, G.G., **Nanko, K.**, Rossi, L.F. (2020) A network model for stemflow solute transport. *Applied Mathematical Modelling* 88: 266-282. doi:10.1016/j.apm.2020.06.047
- 57 Onomura, S., **Nanko, K.**, Nakayoshi, M. (2020) Applicability of a compact doppler sensor for vehicle precipitation measurements. *Journal of Japan Society of Civil Engineers, Ser. B1 (Hydraulic Engineering)* 76: I_211-I_216 doi:10.2208/jscejhe.76.2_I_211 [in Japanese with an English summary]
- 56 Mrad, A., Katul, G.G., Levia, D.F., Guswa, A.J., Boyer, E.W., Bruen, M., Carlyle-Moses, D.E., Coyte, R., Creed, I.F., van de Giesen, N., Grasso, D., Hannah, D.M., Hudson, J.E., Humphrey, V., Iida, S., Jackson, R.B., Kumagai, T., Llorens, P., Michalzik, B., **Nanko, K.**, Peters, C.A., Selker, J.S., Tetzlaff, D., Zalewski, M., Scanlon, B.R. (2020) Peak grain forecasts for the U.S. High Plains amid withering waters. *Proceedings of the National Academy of Sciences of the United States of America* 117: 26145-26150. doi:10.1073/pnas.2008383117
- 55 Levia, D.F., Creed, I.F., Hannah, D.M., **Nanko, K.**, Boyer, E.W., Carlyle-Moses, D.E., van de Giesen, N., Grasso, D., Guswa, A.J., Hudson, J.E., Hudson, S.A., Iida, S., Jackson, R.B., Katul, G.G., Kumagai, T., Llorens, P., Lopes Ribeiro, F., Pataki, D.E., Peters, C.A., Sanchez Carretero, D., Selker, J.S., Tetzlaff, D., Zalewski, M., Bruen, M. (2020) Homogenization of the terrestrial water cycle. *Nature Geoscience* 13: 656-658. doi:10.1038/s41561-020-0641-y
- 54 Carlyle-Moses, D.E., Iida, S., Germer, S., Llorens, P., Michalzik, B., **Nanko, K.**, Tanaka, T., Tischer, A., Levia, D.F. (2020) Commentary: "What We Know About Stemflow's Infiltration Area". *Frontiers in Forests and Global Change* 3: 577247. doi:10.3389/ffgc.2020.577247
- 53 Pinos, J., Latron, J., **Nanko, K.**, Levia, D.F., Llorens, P. (2020) Throughfall isotopic composition in relation to drop size at the intra-event scale in a Mediterranean Scots pine stand. *Hydrology and Earth System Sciences* 24: 4675-7690. doi:10.5194/hess-24-4675-2020
- 52 Zhu, X., Liu, W., Chen, J., Bruijnzeel, L.A., Mao, Z., Yang, X., Cardinael, R., Meng, F.-R., Sidle, R.C., Seitz, S., Nair, V.D., **Nanko, K.**, Zou, X., Chen, C., Jiang, X.J. (2020) Reductions in water, soil and nutrient losses and pesticide pollution in agroforestry practices: a review of

- evidence and processes. *Plant and Soil* 453: 45-86. doi:10.1007/s11104-019-04377-3
- 51 Guswa, A.J., Tetzlaff, D., Selker, J.S., Carlyle-Moses, D.E., Boyer, E.W., Bruen, M., Cayuela, C., Creed, I.F., van de Giesen, N., Grasso, D., Hannah, D.M., Hudson, J.E., Hudson, S.A., Iida, S., Jackson, R.B., Katul, G.G., Kumagai, T., Llorens, P., Lopes Ribeiro, F., Michalzik, B., **Nanko, K.**, Oster, C., Pataki, D.E., Peters, C.A., Rinaldo, A., Sanchez-Carretero, D., Trifunovic, B., Zalewski, M., Haagsma, M., Levía, D.F. (2020) Advancing ecohydrology in the 21st century: a convergence of opportunities. *Ecohydrology* 13: e2208. doi:10.1002/eco.2208
 - 50 Dezhban, A., Attarod, P., Zahedi Amiri, G., Pypker, T.G., **Nanko, K.** (2020) The variability of stemflow generation in a natural beech stand (*Fagus orientalis* Lipsky) in relation to rainfall and tree traits. *Ecohydrology* 13: e2198. doi:10.1002/eco.2198
 - 49 **Nanko, K.** (2020) Rainwater dynamics on leaves and branches based on raindrop measurements. *Journal of the Japanese Society of Soil Physics* 144: 17-23. doi:10.34467/jssoilphysics.144.0_17 [in Japanese with an English summary] (Accepted on 2020.02.18)
 - 48 Imamura, N., Levía, D.F., **Nanko, K.**, Tanaka, N., Ohte, N. (2020) Geographic factors explain the variability of atmospheric deposition of sulfur and nitrogen onto coniferous forests within and beyond the Tokyo Metropolis. *Water, Air, & Soil Pollution* 231: 105. doi:10.1007/s11270-020-4467-4
 - 47 **Nanko, K.**, Tanaka, N., Leuchner, M., Levía, D.F. (2020) Throughfall erosivity in relation to drop size and crown position: a case study from a teak plantation in Thailand. In: Levía, D.F., Carlyle-Moses, D.E., Iida, S., Michalzik, B., Nanko, K., & Tischer, A. (Eds.) *Forest-Water Interactions*. Ecological Studies, No. 240, Springer Nature, Switzerland AG: 279-298. doi:10.1007/978-3-030-26086-6_12
 - 46 Lüpke, M., Leuchner, M., Levía, D.F., **Nanko, K.**, Iida, S., Menzel, A. (2019) Characterization of differential throughfall drop size distributions beneath European beech and Norway spruce. *Hydrological Processes* 33: 3391-3406. doi:10.1002/hyp.13565
 - 45 Dezhban, A., Attarod, P., Zahedi Amiri, G., Pypker, T.G., **Nanko, K.** (2019) Spatial and temporal variability of throughfall under a natural *Fagus orientalis* stand in the Hyrcanian Forests, North of Iran. *Journal of Agricultural Science and Technology* 21: 1843-1858.
 - 44 Dezhban, A., Attarod, P., Zahedi Amiri, G., Pypker, T.G., **Nanko, K.** (2019) Fog precipitation and rainfall interception in a pure natural oriental beech (*Fagus orientalis* L.) stand in the Hyrcanian Forests, North of Iran. *Journal of Forest and Wood Products* 72: 89-100. doi:10.22059/jfwp.2019.267717.970 [in Persian with English Summary]
 - 43 Levía, D.F.*, **Nanko, K.*** (*Co-first authors), Amasaki, H., Giambelluca, T.W., Hotta, N., Iida, S., Mudd, R.G., Nullet, M.A., Sakai, N., Shinohara, Y., Sun, X., Suzuki, M., Tanaka, N., Tantasirin, C., Yamada, K. (2019) Throughfall partitioning by trees. *Hydrological Processes* 33: 1698-1708. doi:10.1002/hyp.13432
 - 42 Dezhban, A., Attarod, P., Zahedi Amiri, G., Pypker, T.G., **Nanko, K.** (2019) Seasonal variability of throughfall spatial pattern under a natural *Fagus orientalis* stand using geostatistical method. *Iranian Journal of Forest* 11: 13-28. [in Persian with English Summary]
 - 41 **Nanko, K.**, Suzuki, S., Noguchi, H., Ishida, Y., Levía, D.F., Ogura, A., Hagino, H., Matsumoto, H., Takimoto, H., Sakamoto, T. (2019) Mechanical properties of Japanese black pine (*Pinus thunbergii* Parl.) planted on coastal sand dunes: resistance to uprooting and stem breakage by tsunamis. *Wood Science and Technology* 53: 469-489. doi:10.1007/s00226-019-01075-z
 - 40 Shinohara, Y., Misumi, Y., Kubota, T., **Nanko, K.** (2019) Characteristics of soil erosion in a moso-bamboo forest of western Japan: Comparison with a broadleaved forest and a coniferous forest. *Catena* 172: 451-460. doi:10.1016/j.catena.2018.09.011
 - 39 Boulange, J., Malhat, F., Jaikaew, P., **Nanko, K.**, Watanabe, H. (2019) Portable rainfall simulator for plot-scale investigation of rainfall-runoff, and transport of sediment and pollutants. *International Journal of Sediment Research* 34: 38-47.

- doi:10.1016/j.ijsrc.2018.08.003
- 38 Shinohara, Y., Ichinose, K., Morimoto, M., Kubota, T., **Nanko, K.** (2018) Factors influencing the erosivity indices of raindrops in Japanese cypress plantations. *Catena* 171: 54-61. doi:10.1016/j.catena.2018.06.030
 - 37 Carlyle-Moses, D.E., Iida, S., Germer, S., Llorens, P., Michalzik, B., **Nanko, K.**, Tischer, A., Levía, D.F. (2018) Expressing stemflow commensurate with its ecohydrological importance. *Advances in Water Resources* 121: 472-479. doi:10.1016/j.advwatres.2018.08.015
 - 36 Nagano, R., **Nanko, K.**, Sogo, K., Sugimoto, H. (2018) Evaluation of canopy rainfall interception by three broad-leaved species in urban area. *Journal of the Japanese Society of Revegetation Technology* 44: 81–86. doi:10.7211/jjsrt.44.81 [in Japanese with an English summary]
 - 35 Iida, S., Levía, D.F., **Nanko, K.**, Sun, X., Shimizu, T., Tamai, K., Shinohara, Y. (2018) Correction of canopy interception loss measurements in temperate forests: a comparison of necessary adjustments among three different rain gauges based on a dynamic calibration procedure. *Journal of Hydrometeorology* 19: 547-553. doi:10.1175/JHM-D-17-0124.1
 - 34 Imamura, N., Levía, D.F., Toriyama, J., Kobayashi, M., **Nanko, K.** (2017) Stemflow-induced spatial heterogeneity of radiocesium concentrations and stocks in the soil of a broadleaved deciduous forest. *Science of the Total Environment* 599–600: 1013–1021. doi:10.1016/j.scitotenv.2017.05.017
 - 33 **Nanko, K.**, Hashimoto, S., Miura, S., Ishizuka, S., Sakai, Y., Levía, D.F., Ugawa, S., Nishizono, T., Kitahara, F., Osone, Y., Kaneko, S. (2017) Assessment of soil group, site and climatic effects on soil organic carbon stocks of topsoil in Japanese forests. *European Journal of Soil Science* 68: 547–558. doi:10.1111/ejss.12444
 - 32 Levía, D.F., Hudson, S.A., Llorens, P., **Nanko, K.** (2017) Throughfall drop size distributions: a review and prospectus for future research. *Wiley Interdisciplinary Reviews: Water* 4: e1225. doi:10.1002/wat2.1225
 - 31 Hashimoto, S., **Nanko, K.**, Ľupek, B., Lehtonen, A. (2017) Data-mining analysis of the global distribution of soil carbon in observational databases and Earth system models. *Geoscientific Model Development* 10: 1321–1337. doi:10.5194/gmd-10-1321-2017
 - 30 Tanaka, N., Levía, D.F., Igarashi, Y., Yoshifuji, N., Tanaka, K., Tantasirin, C., **Nanko, K.**, Suzuki, M., Kumagai, T. (2017) What factors are most influential in governing stemflow production from plantation-grown teak trees? *Journal of Hydrology* 544: 10–20. doi:10.1016/j.jhydrol.2016.11.010
 - 29 Shinohara, Y., Otani, S., Kubota, T., Otsuki, K., **Nanko, K.** (2016) Effects of plant roots on the soil erosion rate under simulated rainfall with high kinetic energy. *Hydrological Sciences Journal* 61: 2435–2442. doi:10.1080/02626667.2015.1112904
 - 28 Weber, Y., Jolivet, V., Gilet, G., **Nanko, K.**, Ghazanfarpour, D. (2016) A phenomenological model for throughfall rendering in real-time. *Computer Graphics Forum* 35: 13–23. doi:10.1111/cgf.12945
 - 27 **Nanko, K.**, Onda, Y., Kato, H., Gomi, T. (2016) Immediate change in throughfall spatial distribution and canopy water balance after heavy thinning in a dense mature Japanese cypress plantation. *Ecohydrology* 9: 300–314. doi:10.1002/eco.1636
 - 26 **Nanko, K.**, Moskalski, S.M., Torres, R. (2016) Rainfall erosivity–intensity relationships for normal rainfall events and a tropical cyclone on the US southeast coast. *Journal of Hydrology* 534: 440–450. doi:10.1016/j.jhydrol.2016.01.022
 - 25 **Nanko, K.**, Hudson, S.A., Levía, D.F. (2016) Differences in throughfall drop size distributions in the presence and absence of foliage. *Hydrological Sciences Journal* 61: 620–627. doi:10.1080/02626667.2015.1052454

2011/2015

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- 2 **Nanko, K.**, Hotta, N., Suzuki, M. (2006) Evaluating the influence of canopy species and meteorological factors on throughfall drop size distribution. *Journal of Hydrology* 329: 422–431. doi:10.1016/j.jhydrol.2006.02.036
- 1 **Nanko, K.**, Hotta, N., Suzuki, M. (2004) Assessing raindrop impact energy at the forest floor in a mature Japanese cypress plantation using continuous raindrop-sizing instruments. *Journal of Forest Research* 9: 157–164. doi:10.1007/s10310-003-0067-6

Other reports in English

- 4 **Nanko, K.**, Suzuki, S., Noguchi, H., Hagino, H., Ogura, A., Ishida, Y., Matsumoto, H., Takimoto, H., Sakamoto, T. (2015) Simulation of tree deformation of Japanese black pine caused by temporally varied wind. *The 8th Plant Biomechanics International Conference*: 240.
- 3 Kaneko, S., Ugawa, S., Miura, S., **Nanko, K.**, Takahashi, M. (2012) Monitoring of organic carbon stocks in Japanese forest soil. *MARCO Symposium 2012, Strengthening Collaboration to meet Agro-Environmental Challenges in Monsoon Asia, Tsukuba, Japan*: 154–158.
- 2 Giambelluca, T.W., Sutherland, R.A., **Nanko, K.**, Mudd, R., Ziegler, A.D. (2010) Effects of *Miconia* on hydrology: A first approximation. In Loope, L.L., J.-Y. Meyer, B.D. Hardesty and

C.W. Smith (eds.), Proceedings of the International Miconia Conference, Keanae, Maui, Hawai'i, May 4-7, 2009, Maui Invasive Species Committee and Pacific Cooperative Studies Unit, University of Hawai'i at Manoa.

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- 1 **Nanko, K.**, Hotta, N., Suzuki, M. (2004) The influence of forest species and atmospheric phenomena on the throughfall rainfall size distribution. *In Sidle, R.C., Tani, M., Abdul Rahim, N., Tewodros Ayele, T. (Eds.) Forests and Water in Warm, Humid Asia, Proceedings of IUFRO Forest Hydrology Workshop, Kota Kinabalu, Malaysia: 81–83.*

Presentations

Invited or Keynote Lectures and Talks in English

- 2022-06-17 **Nanko, K.** Canopy water flowpath suggested from raindrop measurements. *Special Seminar of Soil Erosion in Forested Area* (Shiiba Research Forest, Miyazaki, Japan)
- 2021-11-17 **Nanko, K.** Interactions between “trees” and “rain and wind”. *Geographical Colloquium at RWTH* (Online, Germany)
- 2019-09-03 **Nanko, K.** Lecture on raindrop and disdrometer. *Raindrop and disdrometer workshop* (University of Hawai'i at Mānoa, Honolulu, HI, USA)
- 2019-05-16 Levia, D.F., **Nanko, K.** Ecohydrology of forest ecosystems: A retrospective reflection and prospectus of future work (or, what we know and where we should go). *Applied Ecology Seminar* (Uniwersytet Łódzki, Łódź, Poland)
- 2019-04-12 Carlyle-Moses, D.E., Iida, S., Germer, S., Llorens, P., Michalzik, B., **Nanko, K.**, Tischere, A., Levia, D.F. Stand-scale metrics for expressing stemflow commensurate with its ecohydrological importance. *EGU General Assembly 2019* (Austria Center Vienna, Vienna, Austria)
- 2018-04-24 Kamimura, K., **Nanko, K.** Measurement and recording of tree movement. *Tree Motion and Wind Measurement Workshop* (Danish Technical University, Roskilde, Denmark)
- 2016-05-10 **Nanko, K.**, Levia, D.F. Relationship between foliage wettability and throughfall drop size. *Plant Trait Workshop, Interdisciplinary German-Japanese Symposium, iJaDe2016* (Technische Universität Dresden, Dresden, Germany)
- 2016-05-10 **Nanko, K.** Simulation of dynamic tree sway based on physical vibration theory. *Plant Trait Workshop, Interdisciplinary German-Japanese Symposium, iJaDe2016* (Technische Universität Dresden, Dresden, Germany)
- 2014-06-08 **Nanko, K.**, Hashimoto, S., Miura, S., Kaneko, S., Levia, D.F., Hudson, S.A. Which factors determine, 1) soil organic carbon stock, and 2) throughfall drop size? Introduction of a recent multifactorial analysis, boosted regression trees (BRT). *173th HyARC seminar* (Nagoya University, Nagoya, Japan)
- 2013-09-20 **Nanko, K.** Process of Throughfall Raindrop Generation and Its Impact to Forest Ecosystem Services. *Department of Geology Seminar Series* (University of Delaware, Newark, DE, USA)
- 2013-05-01 **Nanko, K.** Process of throughfall drop generation in forest canopies. Watershed Hydrology and Ecosystem Management Laboratory Seminar (Tokyo University of Agriculture and Technology, Fuchu, Japan)

Symposium Presentations as a Speaker (in English)

2021/pres.

- 2025-07-02 **Nanko, K.**, Levia, D.F., Iida, S., Shinohara, Y., Sakai, N. Raindrop Dynamics in Forest Canopies: Machine Learning and Rain Simulation Insights into Canopy Drip and Splash Throughfall. *Droplets 2025*, 337 (University of Liège campus Sart Tilman, Liège, Belgium), Oral
- 2025-03-05 **Nanko, K.**, Levia, D.F., Iida, S., Shinohara, Y., Sakai, N., Throughfall partitioning under varying canopy conditions: insights from machine learning and rainfall simulations. *US-Japan Joint Meeting* (University of Tsukuba, Ibaraki, Japan)

- 2024-12-11 **Nanko, K.**, Tsuda, S., Yamada, M. Quantification of Rainfall Amount and Kinetic Energy under Transmission Towers. *AGU Fall Meeting 2024*, H31V-0884 (Walter E. Washington Convention Center, Washington, D.C., USA)
- 2024-07-09 **Nanko, K.**, Levía, D.F. Various types of drop size distributions of rainfall measured with a self-designed laser disdrometer. *9th GEWEX Open Science Conference*, 19-33 (Keio Plaza Hotel Sapporo, Sapporo, Japan)
- 2024-06-25 Nanko, K. Raindrop-ology. *11th Japanese-French Frontiers of Science (JFFoS) Symposium*, 44 (Strasbourg University, Strasbourg, France)
- 2023-10-04 **Nanko, K.** Rainfall partitioning and large drop generation by forest canopy. *Japan-Germany Research Cooperative Program between JSPS and DFG "Understanding and large-scale mapping of soil erosion, soil carbon accumulation, and soil bacterial communities in forest ecosystems using machine learning"* (University of Tübingen, Tübingen, Germany)
- 2023-04-27 **Nanko, K.**, Keim, R., Hudson, S., Ebato, M., Levía, D. Rainwater canopy flowpath estimated by raindrop measurements. *EGU General Assembly 2023*, EGU23-2558 (Hybrid, Vienna, Austria)
- 2022-06-26 **Nanko, K.** Forest, as a modulator of rain and wind. *10th Japanese-French Frontiers of Science (JFFoS) Symposium* (Kyoto Brighton Hotel, Kyoto, Japan)
- 2021-04-27 **Nanko, K.**, Tanaka, N., Leuchner, M., Levía, D.F. Variability of throughfall erosivity among crown positions in a teak plantation based on raindrop measurements and throughfall partitioning. *EGU General Assembly 2021* (Online, Austria)
- 2021-02-15 **Nanko, K.**, Levía, D.F., Seitz, S. Sustaining the soil: management strategies of forest-water interactions to protect forest soils. *6th IAHR Europe Congress* (Online, Warsaw, Poland)

2016/2020

- 2019-12-13 **Nanko, K.**, Levía, D.F., Iida, S., Sun, X., Shinohara, Y., Sakai, N. Effect of tree species, leaf states, and rainfall intensity on throughfall generation and throughfall partitioning by use of a large-scale rainfall simulator. *2019 AGU Fall Meeting* (Moscone Center, San Francisco, CA, USA)
- 2019-10-02 **Nanko, K.** Interactions among forest canopy, raindrop, wind, and soil. *Tsukuba Conference 2019* (Tsukuba International Congress Center, Tsukuba, Japan)
- 2018-12-11 **Nanko, K.**, Carlyle-Moses, D.E., Iida, S., Germer, S., Llorens, P., Michalzik, B., Tischere, A., Levía, D.F. Righting a wrong: Expressing stemflow commensurate with its ecohydrological importance. *2018 AGU Fall Meeting* (Walter E. Washington Convention Center, Washington, D.C., USA)
- 2018-12-10 **Nanko, K.**, Tanaka, N., Leuchner, M., Levía, D.F. Effect of throughfall type on drop size distribution and soil erosion potential in a teak plantation in northern Thailand. *2018 AGU Fall Meeting* (Walter E. Washington Convention Center, Washington, D.C., USA)
- 2018-04-13 **Nanko, K.**, Levía, D.F., Iida, S., Sun, X., Shinohara, Y., Sakai, N. Importance of the canopy wet-up phase for throughfall drop generation revealed by use of a large-scale rainfall simulator. *EGU General Assembly 2018* (Austria Center Vienna, Vienna, Austria)
- 2018-04-09 **Nanko, K.**, Shinohara, Y., Ichinose, K., Morimoto, M., Kubota, T. Influential factors on erosivity of throughfall drops in Japanese cypress plantations. *EGU General Assembly 2018* (Austria Center Vienna, Vienna, Austria)
- 2018-04-09 **Nanko, K.**, Katsushima, T., Suzuki, S., Sakamoto, T. Prediction of wind-blown sand transport on different beach throughout Japan. *EGU General Assembly 2018* (Austria Center Vienna, Vienna, Austria)
- 2017-12-15 **Nanko, K.**, Levía, D.F., Iida, S., Sun, X., Shinohara, Y., Sakai, N. Temporal

sequencing of throughfall drop generation as revealed by use of a large-scale rainfall simulator. *2017 AGU Fall Meeting* (Ernest N. Morial Convention Center, New Orleans, LA, USA)

2017-07-20 **Nanko, K.**, Suzuki, S., Katsushima, T., Minamino, R., Kamimura, K., Mizunaga, H. Estimation of tree resistance to wind damage using segmented stem and voxelized canopy from terrestrial laser scanner data. *8th International Conference on Wind and Trees* (National Center for Atmospheric Research, Boulder, CO, USA)

2016-12-16 **Nanko, K.**, Oguro, M., Miura, S., Masaki, T. Prediction of soil erosion rates in Japan where heavily forested landscape with unstable terrain. *2016 AGU Fall Meeting* (Moscone Center, San Francisco, CA, USA)

2011/2015

2015-12-15 **Nanko, K.**, Suzuki, S., Noguchi, H., Hagino, H. Simulation of Tsunami Resistance of a *Pinus thunbergii* tree in Coastal Forest in Japan. *2015 AGU Fall Meeting* (Moscone Center, San Francisco, CA, USA)

2015-12-03 **Nanko, K.**, Suzuki, S., Noguchi, H., Hagino, H., Ogura, A., Ishida, Y., Matsumoto, H., Takimoto, H., Sakamoto, T. Simulation of tree deformation of Japanese black pine caused by temporally varied wind. *8th Plant Biomechanics International Conference* (Nagoya University, Nagoya, Japan)

2014-10-06 **Nanko, K.**, Miura, S., Ugawa, S., Hashimoto, S., Osone, Y., Ishizuka, S., Sakai, Y., Tanaka, N., Takahashi, M., Kaneko, S. Detectable differences in carbon stocks of forest soils in Japan: Boosted regression tree analysis can identify stratifying factors. *IUFRO World Congress 2014* (Salt Palace Convention Center, Salt Lake City, UT, USA)

2013-04-10 **Nanko, K.**, Ugawa, A., Takahashi, M., Morisada, K., Takeuchi, M., Matsuura, Y., Yoshinaga, S., Araki, M., Tanaka, N., Ikeda, S., Miura, S., Ishizuka, S., Kobayashi, M., Inagaki, M., Imai, A., Hashimoto, A., Kaneko, S., the Inventory Working Group Team Carbon stocks of dead wood, litter, and soil in the forest sector in Japan estimated by the National Forest Soil Carbon Inventory. *EGU General Assembly 2013* (Austria Center Vienna, Vienna, Austria)

2013-04-10 **Nanko, K.**, Onda, Y., Ito, A., Moriwaki, H. Spatial variability of throughfall and raindrops under a single canopy with different canopy structure. *EGU General Assembly 2013* (Austria Center Vienna, Vienna, Austria)

2013-04-10 **Nanko, K.**, Watanabe, A., Hotta, N., Suzuki, M. Linkage between canopy water storage and drop size distributions of leaf drips. *EGU General Assembly 2013* (Austria Center Vienna, Vienna, Austria)

2004/2010

2010-06-22 **Nanko, K.**, Onda, Y., Ito, A., Suwa, S., Moriwaki, H., Fukuzono, T. Inference of water behavior in a tree canopy based on the dense measurements of throughfall rate and throughfall raindrops. *2010 Western Pacific Geophysics Meeting* (Taipei International Convention Center, Taipei, Taiwan)

2008-04-16 **Nanko, K.**, Onda, Y., Ito, A., Ito, S., Mizugaki, S., Moriwaki, H. Variability of surface runoff and infiltration rate under a tree canopy: Indoor rainfall experiment using a stand of Japanese cypress. *EGU General Assembly 2008* (Austria Center Vienna, Vienna, Austria)

2007-12-14 **Nanko, K.**, Onda, Y., Ito, A., Moriwaki, H. Influence of canopy thickness on throughfall amount and kinetic energy under different canopy saturation conditions: An indoor experiment with a Japanese cypress (*Chamaecyparis obtusa*) stand. *2007 AGU Fall Meeting* (Moscone Center, San Francisco, CA, USA)

2007-07-28 **Nanko, K.**, Onda, Y., Ito, A., Moriwaki, H. Influence of canopy structures on generating throughfall erosivity: An experimental approach. *Sustainable forestry*

for water resources management and flood mitigation in mountainous regions
(Nagoya University, Nagoya, Japan)

- 2007-04-18 **Nanko, K.**, Onda, Y., Ito, A., Moriwaki, H. Influence of canopy structures on generating throughfall erosivity: An experimental approach. *EGU General Assembly 2007* (Austria Center Vienna, Vienna, Austria)
- 2006-10-16 **Nanko, K.**, Onda, Y., Ito, A., Ito, S., Moriwaki, H. Effect of canopy structures for spatial distribution of throughfall depth and raindrops with experimental approach. *3rd APHW Conference* (The Grand Hotel, Bangkok, Thailand)
- 2005-12-09 **Nanko, K.**, Mizugaki, S., Onda, Y., Hiramatsu, S. Evaluation of splash erosion at forest floor in mature Japanese cypress plantations. *2005 AGU Fall Meeting* (Moscone Center, San Francisco, CA, USA)
- 2004-07-11 **Nanko, K.**, Hotta, N., Suzuki, M. The influence of forest species and atmospheric phenomena on the throughfall rainfall size distribution. *IUFRO Forest Hydrology Workshop* (Kota Kinabalu, Malaysia)

Symposium Presentations as a Co-speaker (in English)

2021/pres.

- 2024-12-12 Levia, D.F., O'Halloran, R.C., Otsuka, Y., Chang, J.L. Kaiser, K., **Nanko, K.**, Iida, S., Shapiro, A.J. Gupta, Y., Sadula, S., Vlachos, D.G., Epps III, T.H. Stemflow neutral sugar concentrations and the physiological ecology of trees: new data and a new perspective. *AGU Fall Meeting 2024*, H41C-01 (Walter E. Washington Convention Center, Washington, D.C., USA)
- 2024-12-11 Iida, S., **Nanko, K.**, Levia, D.F., Shimizu, T., Iwagami, S., Oda, T., Miyazawa, Y., Kagawa, A., Kubota, T., Momiyama, H., Yokoo, Y. Canopy interception dynamics during rainfall events revealed by multi-sensor data. *AGU Fall Meeting 2024*, H33I-1039 (Walter E. Washington Convention Center, Washington, D.C., USA)
- 2023-11-30 Takeuchi, C., Nukina, R., Shibata, S., Tsuda, S., **Nanko, K.** Relationship between raindrop impact and inhibition of vegetation establishment using rainfall devices. *The 13th International Conference on Landscape and Ecological Engineering*, P24 (ARA Convention Hall, Jeju National University, Jeju, Korea)
- 2023-08-29 Jeong, S., **Nanko, K.**, Katayama, A., Kume, T., Koga, S., Otsuki, K. Characteristics of throughfall kinetic energy and sampling strategy in an unmanaged Japanese cypress plantation laden with dead branches. *2023 Summer Meeting of Korean Society of Forest Science*, P-0001 (International Convention Center, Jeonbuk National University, Jeonju, Korea)
- 2023-06-22 Kamimura, K., **Nanko, K.**, Matsumoto, A., Ueno, S. Dynamic behavior of trees during 1.5-year observation. *10th International Wind and Trees Conference*, 53 (Villa Bolasco, Treviso, Italy)
- 2023-04-27 Katayama, A., **Nanko, K.**, Jeong, S., Kume, T., Shinohara, Y., Seitz, S. Concentrative drop impacts by a bunch of canopy drips: hotspots of soil erosion in forest. *EGU General Assembly 2023*, EGU23-1767 (Hybrid, Vienna, Austria)
- 2022-05-23 Kamimura, K., **Nanko, K.**, Matsumoto, A., Ueno, S., Gardiner, J., Gardiner, B Tree dynamic behavior with forestry activities and a category-5 tropical cyclone. *EGU General Assembly 2022* (Hybrid, Vienna, Austria)
- 2021-12-15 Yamada, Y., Yamaura, Y., Shimizu, K., **Nanko, K.**, Murakami, W., Takayama, N. Proposing policies to improve ecosystem services based on local forest harvesting trends. *3rd ESP Asia Conference* (Online, Nagasaki, Japan)
- 2021-02-15 Levia, D.F., **Nanko, K.** The role of forests and trees as modulators of water and biogeochemical cycles. *6th IAHR Europe Congress* (Online, Warsaw, Poland)

2016/2020

- 2020-12-17 Saidin, Z.H., Onda, Y., Kato, H., Hudson, J.E., **Nanko, K.**, Levia, D.F. Vertical variation in branchflow and stemflow cycling of radiocesium between coniferous and deciduous forests in Japan. *AGU Fall Meeting 2020* (Online, USA)
- 2020-12-10 Levia, D.F., Creed, I.F., Hannah, D.M., **Nanko, K.**, Boyer, E.W., Carlyle-Moses, D.E., van de Giesen, N., Grasso, D., Guswa, A.J., Hudson, J.E., Hudson, S.A., Iida, S., Jackson, R.B., Katul, G.G., Kumagai, T., Llorens, P., Lopes Ribeiro, F., Pataki, D.E., Peters, C.A., Sanchez Carretero, D., Selker, J.S., Tetzlaff, D., Zalewski, M., Bruen, M. Planetary resilience jeopardized by homogenization of the terrestrial water cycle. *AGU Fall Meeting 2020* (Online, USA)
- 2020-12-10 Mrad, A., Katul, G.G., Levia, D.F., Guswa, A.J., Boyer, E.W., Bruen, M., Carlyle-Moses, D.E., Coyte, R., Creed, I.F., van de Giesen, N., Grasso, D., Hannah, D.M., Hudson, J.E., Humphrey, V., Iida, S., Jackson, R.B., Kumagai, T., Llorens, P., Michalzik, B., **Nanko, K.**, Peters, C.A., Selker, J.S., Tetzlaff, D., Zalewski, M., Scanlon, B.R. Peak grain forecasts in the U.S. High Plains amid withering waters. *AGU Fall Meeting 2020* (Online, USA)
- 2020-12-09 Tucker, A.M., Levia, D.F., Katul, G.G., **Nanko, K.**, Rossi, L.F. A network model for stemflow solute transport. *AGU Fall Meeting 2020* (Online, USA)
- 2020-12-09 Carlyle-Moses, D.E., Llorens, P., Latron, J., Nathe, K., **Nanko, K.**, Chang, J., Iida, S., Levia, D.F. Investigating infiltration areas and infiltration funneling ratios for American beech trees. *AGU Fall Meeting 2020* (Online, USA)
- 2020-07-15 Ishizuka, M., Kurosaki, Y., Hagino, H., **Nanko, K.**, Batdelger, G., Yasuda, Y., Suzuki, S. Wind tunnel experiment on sand saltation splash by using a high-speed camera. *JpGU - AGU Joint Meeting 2020* (Online, Japan)
- 2020-05-06 Llorens, P., Latron, J., Carlyle-Moses, D.E., Nathé, K., Chang, J.L., **Nanko, K.**, Iida, S., Levia, D.F. Stemflow infiltration areas into forest soils around American beech trees. *EGU General Assembly 2020* (Online, Austria)
- 2019-10-05 Yamada, Y., Yamaura, Y., Takahashi, M., **Nanko, K.**, Matsuura, T., Hashimoto, S., Takayama, N., Toda, K., Sato, T. Simulating Impacts of Local Forest Policies on Forest Ecosystem Functions. *XXV IUFRO World Congress 2019* (Expo Unimed Ciritiba, Critiba, Brazil)
- 2019-05-30 Ishizuka, M., Nakahara, Y., Masaoka, H., Nakao, G., Ishii, T., Kurosaki, Y., Hagino, H., Nakamura, K., Bantsetseg, B., **Nanko, K.**, Nishihara, E., Suzuki, S. Wind tunnel experiments for saltation and dust emission under weak crusted Mongolian soil. *JpGU Meeting 2019* (Makuhari Messe, Chiba, Japan)
- 2019-05-29 Iida, S., Carlyle-Moses, D.E., Germer, S., Llorens, P., Michalzik, B., **Nanko, K.**, Tischere, A., Levia, D.F. Quantifying stemflow to better express its ecohydrological significance. *JpGU Meeting 2019* (Makuhari Messe, Chiba, Japan)
- 2019-05-26 Saidin, Z.H., Onda, Y., Kato, H., Kurihara, M., **Nanko, K.**, Levia, D.F. Spatial variability of radiocesium deposition through the tree canopy via branchflow and stemflow. *JpGU Meeting 2019* (Makuhari Messe, Chiba, Japan)
- 2019-04-12 Pinos, J., Latron, J., Cayuela, C., **Nanko, K.**, Levia, D.F., Llorens, P. Can drop characteristics explain differences in isotopic composition between open rainfall and throughfall? *EGU General Assembly 2019* (Austria Center Vienna, Vienna, Austria)
- 2019-04-08 Saidin, Z.H., Onda, Y., Kato, H., Kurihara, M., **Nanko, K.**, Levia, D.F. Vertical variation in the transport and fate of radiocesium through the canopy via branchflow and stemflow. *EGU General Assembly 2019* (Austria Center Vienna, Vienna, Austria)

- 2018-12-14 Levía, D.F., Iida, S., **Nanko, K.**, Sun, X., Shimizu, T., Tamai, K., Shinohara, Y. The importance of gauge calibration in quantifying canopy interception loss. *2018 AGU Fall Meeting* (Walter E. Washington Convention Center, Washington, D.C., USA)
- 2018-09-28 Nakahara Y., Ishizuka, M., Kurosaki, Y., Hagino, H., Batdelger, G., **Nanko, K.**, Suzuki, S., Nakamura, K. Experimental study on motion characteristics of saltating grains under crusted soils related to the dust emission in drylands. *2018 joint 14th iCACGP Quadrennial Symposium/15th IGAC Science Conference* (Sunport Takamatsu Convention Center, Takamatsu, Japan)
- 2018-09-12 Singla, B., Latron, J., **Nanko, K.**, Levía, D.F., Molina, A.J., Cayuela, C., Oromí, M., Gallart, F., Llorens, P. Relationship between throughfall drop size and isotopic composition: Preliminary insights from an ongoing experiment in Mediterranean conditions (Vallcebre, North-Eastern Spain). *17th Biennial Conference ERB 2018* (Technische Universität Darmstadt, Darmstadt, Germany)
- 2018-05-24 Iida, S., Levía, D.F., **Nanko, K.**, Sun, X., Shinohara, Y., Sakai, N. Stemflow and canopy structure: Revelations from the NIED large-scale rainfall simulator. *JpGU Meeting 2018* (Makuhari Messe, Chiba, Japan)
- 2018-04-13 Levía, D.F., Iida, S., **Nanko, K.**, Sun, X., Shinohara, Y., Sakai, N. Disentangling the relative influence of canopy structure on stemflow: Insights from a large-scale rainfall simulator and Bayesian statistics. *EGU General Assembly 2018* (Austria Center Vienna, Vienna, Austria)
- 2018-04-13 Singla, B., Latron, J., **Nanko, K.**, Levía, D.F., Molina, A.J., Cayuela, C., Oromí, M., Llorens, P. Preliminary insights into the relationship between throughfall drop size and isotopic composition. *EGU General Assembly 2018* (Austria Center Vienna, Vienna, Austria)
- 2018-04-11 Hashimoto, S., **Nanko, K.**, Ťupek, B., Lehtonen, A. Data-mining analysis of the global distribution of soil carbon in observational databases and Earth System Models. *EGU General Assembly 2018* (Austria Center Vienna, Vienna, Austria)
- 2018-04-09 Seitz, S., Fernández-Raga, M., **Nanko, K.** Splash and interrill erosion research: Current needs and future prospects. *EGU General Assembly 2018* (Austria Center Vienna, Vienna, Austria)
- 2017-12-15 Levía, D.F., Iida, S., **Nanko, K.**, Sun, X., Shinohara, Y., Sakai, N. Use of a large-scale rainfall simulator reveals novel insights into stemflow generation. *2017 AGU Fall Meeting* (Ernest N. Morial Convention Center, New Orleans, LA, USA)
- 2017-06-27 Yamashita, N., Hashimoto, S., **Nanko, K.**, Ishizuka, S., Osone, Y., Ugawa, S., Tanaka, N., Imaya, A., Kaneko, S., Miura, S. Fine-resolution mapping of soil carbon stock in Japanese forest based on machine-learning regression kriging. *Pedometrics 2017* (Hof van Wageningen, Wageningen, Netherlands)
- 2017-04-27 Levía, D.F., Imamura, N., Toriyama, J., Kobayashi, M., **Nanko, K.** Spatial heterogeneity of radiocesium in the soil of a broadleaved deciduous forest: The marked role of stemflow. *EGU General Assembly 2017* (Austria Center Vienna, Vienna, Austria)
- 2017-04-24 Hiraoka, M., Onda, Y., Gomi, T., Mizugaki, S., **Nanko, K.**, Kato, H. Controlling factors for infiltration on undisturbed hillslopes in unmanaged plantation forests. *EGU General Assembly 2017* (Austria Center Vienna, Vienna, Austria)
- 2016-11-15 Levía, D.F., Hudson, S.A., Llorens, P., **Nanko, K.** Disdrometers: A useful tool to measure throughfall drop size distributions. *Irish National Hydrology Conference 2016* (Hodson Bay Hotel, Athlone, Co. Roscommon, Ireland)

2011/2015

- 2015-12-14 Tanaka, N., Levia, D.F., Igarashi, Y., Yoshifuji, N., Tanaka, K., Chatchai, T., **Nanko, K.**, Suzuki, M., Kumagai, T. Factors Governing Stemflow Production from Plantation Grown Teak Trees in Thailand. *2015 AGU Fall Meeting* (Moscone Center, San Francisco, CA, USA)
- 2015-12-14 Hudson, S.A., Levia, D.F., **Nanko, K.** Examining the role of meteorological conditions and throughfall drop sizes. *2015 AGU Fall Meeting* (Moscone Center, San Francisco, CA, USA)
- 2015-12-14 Oda, T., Hiraoka, M., **Nanko, K.**, Sato, T., Hotta, N., Ohte, N., Suzuki, M., Uchiyama, Y. Spatial pattern of the throughfall volume on a steep slope dominated by deciduous broad-leaved trees. *2015 AGU Fall Meeting* (Moscone Center, San Francisco, CA, USA)
- 2014-12-16 Tanaka, N., Levia, D.F., Igarashi, Y., **Nanko, K.**, Yoshifuji, N., Tanaka, K., Chatchai, T., Suzuki, M., Kumagai, T. Throughfall under a teak plantation in Thailand: A multifactorial analysis on the effects of canopy phenology and meteorological conditions. *2014 AGU Fall Meeting* (Moscone Center, San Francisco, CA, USA)
- 2014-12-16 Hudson, S.A., **Nanko, K.**, Levia, D.F. Throughfall drop size distribution in relation to leaf canopy state. *2014 AGU Fall Meeting* (Moscone Center, San Francisco, CA, USA)
- 2014-11-11 Saito, A., Kotani, A., Ohta, T., Maximov, T.C., Kononov, A.V., **Nanko, K.** Differences in characteristic of water and carbon exchanges in overstory and understory in eastern Siberian larch forest. *8th annual international symposium on "C/H₂O/Energy balance and climate over boreal and arctic regions with special emphasis on eastern Eurasia"* (Kasteel Hoekelum, Wageningen, Netherlands)
- 2014-10-07 Miura, S., Kanamori, M., Ogaya, N., **Nanko, K.**, Nagame, I., Suzuki, M. A new soil erosion survey method in the national forest inventory of Japan. *IUFRO World Congress 2014* (Salt Palace Convention Center, Salt Lake City, UT, USA)
- 2014-08-01 Ueno, K., **Nanko, K.**, Mochizuki, H. Rain on snow (ROS) in Japanese Alps. *AOGS 11th Annual Meeting* (Royton Sapporo Hotel, Sapporo, Japan)
- 2014-06-08 Kaneko, S., Miura, S., Ugawa, S., **Nanko, K.**, Tanaka, N., Osone, Y., Takahashi, M. Carbon stock of dead wood, litter and mineral soil in the forest of Japan. *20th World Congress of Soil Science* (ICC JEJU, Jeju, Korea)
- 2013-08-19 Sakai, Y., Ishizuka, S., **Nanko, K.**, Ugawa, S., Kaneko, S. Lignin stock in deadwood debris accumulated in Japanese plantation forests. *INTECOL 2013* (ExCeL London, London, UK)
- 2013-07-12 Ueno, K., **Nanko, K.**, Sato, K. Winter rain on snow in Japanese Alps. *Davos Atmosphere and Cryosphere Assembly DACA-13* (Congress Centre Davos, Davos, Switzerland)
- 2013-04-09 Hashimoto, S., Matsuura, T., **Nanko, K.**, Linkov, I., Shaw, G., Kaneko, S. Predicted spatio-temporal dynamics of radiocesium deposited on forests following the Fukushima Dai-ichi nuclear power plant accident. *EGU General Assembly 2013* (Austria Center Vienna, Vienna, Austria)
- 2012-09-26 Kaneko, S., Ugawa, S., Miura, S., **Nanko, K.**, Takahashi, M. Monitoring of organic carbon stocks in Japanese forest soil. *MARCO Symposium 2012, Strengthening Collaboration to meet Agro-Environmental Challenges in Monsoon Asia*, Tsukuba, Japan (International Congress Center, Tsukuba, Japan)
- 2012-09-19 Hirata, A., Onda, Y., Kato, H., **Nanko, K.**, Kuraji, K., Tanaka, N., Gomi, T. Effects of forest thinning on canopy interception in Japanese cypress plantations: Changes in the proportion of throughfall components. *3rd International Conference on Forests and Water in a Changing Environment* (Kyushu University, Fukuoka, Japan)

- 2012-07-03 Ugawa, S., **Nanko, K.**, Tanaka, N., Ikeda, S., Miura, S., Morisada, K., Takahashi, M., Kaneko, S. Soil carbon stocks in the forest sector of Japan and their determining factor. *4th International Congress EUROSOIL 2012* (Fiera del Levante, Bari, Italy)
- 2011-10-18 Miura, S., Ugawa, S., **Nanko, K.**, Tanaka, N., Ikeda, S., Morisada, K., Kaneko, S., Takahashi, M. National inventory of soil carbon stock in Japanese forest confirmed historical human impact on soil degradation for hundred of years. *ASA, CSSA and SSSA International Annual Meetings* (Henry Gonzalez Convention Center, San Antonio, TX, USA)

2006/2010

- 2010-12-13 Kato, H., Onda, Y., **Nanko, K.**, Gomi, T. Field study of rainfall redistribution in Japanese cypress plantations. *2010 AGU Fall Meeting* (Moscone Center, San Francisco, CA, USA)
- 2010-06-22 Onda, Y., Gomi, T., Mizugaki, S., **Nanko, K.**, Fukushima, T. Field and modeling studies on the effects of forest devastation on flooding and environmental issues. *2010 Western Pacific Geophysics Meeting* (Taipei International Convention Center, Taipei, Taiwan)
- 2009-05-05 Giambelluca, T.W., Sutherland, R.A., **Nanko, K.**, Mudd, R.G., Ziegler, A.D. Effects of *Miconia* on hydrology: A first approximation. *International Miconia Conference, Keanae, Maui, Hawaii, May 4-7, 2009* (University of Hawaii at Manoa, Maui, HI, USA)
- 2008-04-18 Wakiyama, Y., Onda, Y., **Nanko, K.**, Mizugaki, S., Kim, Y., Kitahara, H., Ono, H. Temporal variations of rain splash at the forest floor of Japanese cypress plantations. *EGU General Assembly 2008* (Austria Center Vienna, Vienna, Austria)
- 2008-04-15 Mizugaki, S., Onda, Y., Gomi, T., Nanko K., Asai, H., Nagamine, M., Hiramatsu, S. Sediment transport by surface erosion in a mountain catchment draining Japanese cypress forest — understanding connectivity of sediment from hillslope to channel. *EGU General Assembly 2008* (Austria Center Vienna, Vienna, Austria)
- 2007-12-14 Mizugaki, S., **Nanko, K.**, Onda, Y. The effect of slope angle on splash detachment in steep forest plantation. *2007 AGU Fall Meeting* (Moscone Center, San Francisco, CA, USA)
- 2007-07-28 Mizugaki, S., Gomi, T., Onda, Y., Asai, H., **Nanko, K.**, Asano, Y., Nagamine, M. Runoff and sediment routing in a Japanese cypress plantation watershed estimated from field observation and fingerprinting techniques. *Sustainable forestry for water resources management and flood mitigation in mountainous regions* (Nagoya University, Nagoya, Japan)
- 2007-07-28 Wakiyama, Y., Onda, Y., **Nanko, K.**, Mizugaki, S., Kim, Y., Kitahara, A., Ono, H. Temporal variation of rain splash at forest floor of young Japanese cypress plantations. *Sustainable forestry for water resources management and flood mitigation in mountainous regions* (Nagoya University, Nagoya, Japan)
- 2007-04-20 Onda, Y., Mizugaki, S., **Nanko, K.**, Asai, H., Nagamine, M., Gomi, T., Hiramatsu, S. Sediment yield and transportation in a humid forest plantation catchment through various scale field monitoring and FRN analysis. *EGU General Assembly 2007* (Austria Center Vienna, Vienna, Austria)
- 2007-04-18 Mizugaki, S., Onda, Y., Koga, S., Fukuyama, T., **Nanko, K.**, Asai, H., Nagamine, M., Hiramatsu, S. Contribution of forest floor to suspended sediment in conifer (Japanese cypress) plantation and broadleaf forest watersheds. *EGU General Assembly 2007* (Austria Center Vienna, Vienna, Austria)
- 2006-12-13 Onda, Y., Mizugaki, S., **Nanko, K.**, Asai, H. Estimating sediment sources by multiple scale field measurements and fingerprinting using radionuclides. *2006 AGU Fall Meeting* (Moscone Center, San Francisco, CA, USA)

Research Grants

As PI

- 2025/2028 Japan Society for the Promotion of Science, Grant-in-Aid for Scientific Research (A), 25H00783. *How much precipitation really falls in Japan's mountainous regions.*
¥46,930,000 (total), ¥9,800,000 (direct allocation)
- 2023 Japan-Germany Research Cooperative Program between JSPS and DFG, PJSBP2 20233605. *Understanding and large-scale mapping of soil erosion, soil carbon accumulation and soil bacterial communities in forest ecosystems using machine learning.*
¥2,500,000 (total and direct allocation)
- 2018/2022 Japan Society for the Promotion of Science, Fund for the Promotion of Joint International Research (Fostering Joint International Research), 17KK0159. *How does rain journey through the vertical structures of tree canopy? Development of physical model using chemical analysis.*
¥13,260,000 (total), ¥10,200,000 (direct allocation)
- 2018/2020 Japan Society for the Promotion of Science, Grant-in-Aid for Scientific Research (B), 18H02249. *Development of dynamic model of coastal geomorphology and coastal forest canopy based on the clarification of wind-driven environmental stress.*
¥17,550,000 (total), ¥4,700,000 (direct allocation)
- 2015/2017 Japan Society for the Promotion of Science, Grant-in-Aid for Young Scientists (A), 15H05626. *3D physical simulation on tree wetting and drying processes through multipoint raindrop measurements.*
¥20,670,000 (total), ¥15,900,000 (direct allocation)
- 2014/2015 Forestry and Forest Products Research Institute, Research Grant, 201412. *Simulation of buffering function and breakage dynamics of a tree against wind/tsunami by the particle method.*
¥4,000,000 (total and direct allocation)
- 2011 Japan Society for the Promotion of Science, Grant-in-Aid for JSPS Fellows, 11J07538. *Estimation of rainfall re-distribution by forest canopy on hillslope.*
¥800,000 (total and direct allocation)
- 2007 Japan Society of Erosion Control Engineering, Grant for Young Scientists. *Understanding spatial distribution of soil erosion in forest watershed with bared soil surface.*
¥200,000 (total and direct allocation)
- 2005/2006 Japan Society for the Promotion of Science, Grant-in-Aid for JSPS Fellows, 05J11212. *Clarification of throughfall drop generation process and assessment of surface erosion in forest.*
¥1,900,000 (total and direct allocation)

As Host of Invitation Fellowship

- 2025 Japan Society for the Promotion of Science, Invitation Fellowship for Research in Japan (Short-term), S25129. *Water movement in forest: From canopy to subsurface.*
Fellow: Maria Pilar LLORENCE GARCIA, Institute of Environmental Assessment and Water Research (IDAEA-CSIC), Spain
- 2021 Japan Society for the Promotion of Science, JSPS Postdoctoral Fellowships for Research in Japan (Short-term Program), PE21018. *Development of integrative measurement setups for throughfall and splash erosion under forest.*
Fellow: Steffen Seitz, University of Tübingen, Germany

- 2020 Japan Society for the Promotion of Science, Invitation Fellowship for Research in Japan (Long-term), L20538. *The role of wind on rainfall partitioning by forest canopy: wind-driven rain and canopy swaying*
Fellow: Maria Pilar LLORENCE GARCIA, Institute of Environmental Assessment and Water Research (IDAEA-CSIC), Spain
- 2016 Japan Society for the Promotion of Science, Invitation Fellowship for Research in Japan (Short-term), S16088. *Study on rainfall redistribution by forest canopy using natural and simulated rainfall.*
Fellow: Delphis Francis Levia Jr., University of Delaware, USA

As Co-PI

- 2025/2029 Japan Society for the Promotion of Science, Grant-in-Aid for Scientific Research (B), 21H02243. *Study on the mechanism of rainfall interception and enhancement of forest flood mitigation function.*
PI: Shigeki Murakami, Forestry and Forest Products Research Institute, Japan
¥18,720,000 (total), ¥830,000 (direct allocation in 2025)
- 2025 The Kajima Foundation, General Research Grants, 21H02243. *Creation of autonomous remote weather observation technology utilizing the inverse magnetostrictive effect [English translation by myself.]*
PI: Hiroki Kurita, Tohoku University, Japan
¥1,450,000 (total), ¥730,000 (direct allocation)
- 2022/2025 Japan Society for the Promotion of Science, Grant-in-Aid for Scientific Research (B), 21H02243. *What happens in forests during extreme rainfall? — Elucidation of the evaporation shutdown mechanism during heavy rainfall [English translation by myself].*
PI: Shin'ichi Iida, Forestry and Forest Products Research Institute, Japan
¥17,160,000 (total), ¥1,000,000 (direct allocation)
- 2021/2025 Japan Society for the Promotion of Science, Grant-in-Aid for Scientific Research (B), 21H02243. *How do trees absorb water from leaf surface? — Development of tree response model include foliar water uptake —.*
PI: Shin-Taro Saiki, Forestry and Forest Products Research Institute, Japan
¥17,160,000 (total), ¥2,600,000 (direct allocation)
- 2021/2023 Japan Society for the Promotion of Science, Grant-in-Aid for Scientific Research (C), 21K05837. *[English title is in preparation].*
PI: Munehiro Ebato, National Agricultural and Food Research Organization, Japan
¥17,810,000 (total), ¥1,090,000 (direct allocation)
- 2020/2024 Forestry and Forest Products Research Institute, Research Grant, [id]. *[English title is in preparation]*
PI: Satoru Suzuki, Forestry and Forest Products Research Institute, Japan
¥34,200,000 (total in 2020–22), ¥2,499,000 (direct allocation in 2020/2023)
- 2020/2023 Japan Society for the Promotion of Science, Grant-in-Aid for Scientific Research (B), 20H03024. *Analyzing and modeling for dynamic mechanism of tree failure caused by strong wind and rain.*
PI: Kana Kamimura, Shinshu University, Japan
¥17,810,000 (total), ¥3,000,000 (direct allocation)
- 2020/2022 Japan Society for the Promotion of Science, Grant-in-Aid for Scientific Research (B), 20H03316. *How does the interspecific variation of leaf traits affect the acclimation capacity of plants?*
PI: Riichi Oguchi, Tohoku University, Japan
¥18,070,000 (total), ¥770,000 (direct allocation)

- 2020/2022 Japan Society for the Promotion of Science, Grant-in-Aid for Scientific Research (C), 20K06151. *Windbreak effects on potato production: relationship with wind erosion of ridges.*
PI: Kenta Iwasaki, Hokkaido Research Organization, Japan
¥4,160,000 (total), ¥900,000 (direct allocation)
- 2019/2020 Consejo Superior de Investigaciones Científicas (CSIC), LINKA20045. *The impacts of forest management and climate change on rainfall partitioning: their effects on soil moisture and groundwater.*
PI: Pilar Llorens, IDAEA-CSIC, Spain
€18,512 (total)
- 2017/2019 Japan Society for the Promotion of Science, Grant-in-Aid for Scientific Research (C), 17K07836. *Clarifying the dynamic interaction among trees to improve prediction accuracy of forest damage by typhoon.*
PI: Kana Kamimura, Shinshu University, Japan
¥4,940,000 (total), ¥500,000 (direct allocation)
- 2016/2019 Forestry and Forest Products Research Institute, Research Grant, 201502. *Integrated analysis of forest ecosystem services for regional forest management.*
PI: Yuichi Yamaura, Forestry and Forest Products Research Institute, Japan
¥30,213,000 (total), ¥921,000 (direct allocation)
- 2016/2017 Japan Society for the Promotion of Science, Grant-in-Aid for Challenging Exploratory Research, 16K14937. *Why uneven-aged stands are resistant to wind damage? Integration of canopy dynamics, vibration engineering and wind dynamics.*
PI: Hiromi Mizunaga, Shizuoka University, Japan
¥3,640,000 (total), ¥550,000 (direct allocation)

International activities

Conferences, conference sessions, and workshops organized

- 2024-05 11th Japanese-French Frontiers of Science Symposium (As a Planning Group Member in the section of Earth Science/Geosciences/Environment)
- 2023-10 Japan-Germany Research Cooperative Program between JSPS and DFG. Understanding and large-scale mapping of soil erosion, soil carbon accumulation, and soil bacterial communities in forest ecosystems using machine learning. (together with Seitz, S.)
- 2023-04 EGU General Assembly 2023. Session HS10.3: Vegetation and canopies: Effects on erosion and hydrological, pedological, biogeochemical processes and patterns. (together with Metzger, J.C., Marzen, M., Seitz, S., Coenders-Gerrits, M., Friesen, J., Llorens, P.)
- 2021-04 EGU General Assembly 2021. Session SSS11.4: Field and laboratory experiments, measurements and modelling of soil detachment and transport in Soil Science, Geomorphology and Hydrology research. (together with Iserloh, T., Seitz, S., Marzen, M., Isidoro, J., Kavka, P.)
- 2018-04 EGU General Assembly 2018. Session SSS2.4/HS11.50: Initial soil erosion – Rain splash and interrill erosion processes (together with Seitz, S., Fernández-Raga, M.)

Host of International Fellows

- 2023-09-16/09-23 Dr. Delphis F. Levia (University of Delaware, USA)
- 2023-07-31/08-25 Dr. Anna Ilek (Poznań University of Live Sciences, Poland)
- 2022-04-25/06-24 Dr. Steffen Seitz (University of Tübingen, Germany)
- 2019-10-15/10-23 Dr. Jérôme Latron (Institute of Environmental Assessment and Water Research (IDAEA-CSIC), Spain)
Dr. Pilar Llorens (Institute of Environmental Assessment and Water Research (IDAEA-CSIC), Spain)
- 2019-09-28/10-08 Dr. Delphis F. Levia (University of Delaware, USA)
Dr. Darryl E. Carlyle-Moses (Thompson Rivers University, Canada)
- 2017-10-14/10-24 Dr. Delphis F. Levia (University of Delaware, USA)
- 2014-06-25/06-28 Dr. Delphis F. Levia (University of Delaware, USA)

Review

Editor

- Editor, Hydrological Research Letters (2024/pres.)
- Associate Editor, Hydrological Research Letters (2011/2024)

Journal Reviewer

46 journals

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| ● Agricultural and Forest Meteorology | ● Journal of Hydrology |
| ● Atmosphere | ● Journal of Hydrometeorology |
| ● Canadian Journal of Forest Research | ● Journal of Mountain Science |
| ● Catena | ● Journal of Plant Nutrition and Soil Science |
| ● Earth Surface Processes and Landforms | ● Land Degradation & Development |
| ● Earth System Science Data | ● Pedosphere |
| ● Ecohydrology | ● Plant Diseases |
| ● Ecological Research | ● Plos One |
| ● Forest Ecology and Management | ● Progress in Physical Geography |
| ● Forest Science | ● Quaternary International |
| ● Forestry | ● Science of the Total Environment |
| ● Forests | ● Scientia Agricola |
| ● Geoderma | ● Scientific Reports |
| ● Hydrological Processes | ● Soil Science and Plant Nutrition |
| ● Hydrological Research Letters | ● Soil Science Society of America Journal |
| ● Hydrological Sciences Journal | ● Trees |
| ● IEEJ Transactions on Electrical and Electronic Engineering | ● Urban Forestry & Urban Greening |
| ● International Agrophysics | ● Water Resources Research |
| ● Japan Agricultural Research Quarterly: JARQ | ○ FFPRI Bulletin |
| ● Journal of Agricultural Meteorology | ○ Japanese Journal of Forest Environment |
| ● Journal of Experimental Botany | ○ Journal of the Japanese Forest Society |
| ● Journal of Forest Research | ○ Proceedings of Journal of Japan Society of Civil Engineers |
| ● Journal of Geophysical Research - Biogeosciences | ○ Journal of Japan Society of Hydrology and Water Resources |

* *The filled circle* indicates an international journal, and *the open circle* indicates a Japanese domestic journal.

Proposal Reviewer

- Scientific Research-FNRS
- UKRI-JSPS Research Partnership

Academic Societies

- American Geophysical Union (AGU)
- European Geosciences Union (EGU)
- International Association of Hydrological Sciences (IAHS)
- The Japanese Forest Society
- Japan Society of Hydrology and Water Resources
- Japanese Society of Coastal Forest
- The Ecological Society of Japan

* *The filled circle* indicates international society, and *the open circle* indicates Japanese domestic society.

Committee Activities

- American Geophysical Union (AGU)
 - Judge of Outstanding Student Poster Awards (OSPA): 2017/2019
- European Geosciences Union (EGU)
 - Judge of Outstanding Student Poster and PICO (OSPP) Awards: 2018
 - Session Convener in EGU General Assembly: 2018, 2021, 2023
- The Japanese Forest Society
 - Diversity Promotion Committee: 2021/2022
 - Assistant of Secretary General: 2014/2016 & 2019/2021
 - Judge of the Student Poster Award: 2025, 2023, & 2013
- Japanese Society of Coastal Forest
 - Manager of Publicity Committee: 2018/pres.
- Japan Society of Hydrology and Water Resources
 - Member of International Journal Editorial Committee: 2011/pres.
 - Steering Committee of Annual Meeting: 2021