## 耐災害 ICT 研究活動 (2019年)

## <論文> *< 論文 (査読あり)*

- L. Shan, O. Zhao, K. Temma, K. Hattori, F. Kojima, and F. Adachi, "Evaluation of Machine Learnable Bandwidth Allocation Strategy for User Cooperative Traffic Forwarding," IEEE Access (Early Access), 27 June 2019. DOI: https://doi.org/10.1109/ACCESS.2019.2925431.
- 2. 服部, 天間, 趙, 単, 安達, 大和田, "端末間協調省電力通信フレームワーク 一実機実験を用いた有効性の評価一,"電子情報通信学会論文誌, Vol.J102-B, No.6, pp.435-444, 2019 年 6 月 . DOI: https://doi.org/10.14923/transcomj.2018MOP0006.
- Xiaonan Liu, Zan Li, Nan Zhao, Weixiao Meng, Guan Gui, Yunfei Chen, and Fumiyuki Adachi, "Transceiver Design and Multi-hop D2D for UAV IoT Coverage in Disasters," IEEE Internet of Things Journal, Vol. 6, Issue 2, pp. 1803-1815, April 2019. DOI: https://doi.org/10.1109/JIOT.2018.2877504.
- 4. Bomin Mao, Fengxiao Tang, Zubair Md. Fadlullah, and Nei Kato, "An Absorbing Markov Chain Based Model to Solve Computation and Communication Tradeoff in GPU-Accelerated MDRUs for Safety Confirmation in Disaster Scenarios," IEEE Transactions on Computers, Volume: 68, Issue: 9, Sept. 1 2019
- 5. Yoshitaka Shimizu, Yasuo Suzuki, Ryota Sasazawa, Yuichi Kawamoto, Hiroki Nishiyama, Nei Kato, Atsushi Yamamoto, and Satoshi Kotabe, "Development of Movable and Deployable ICT Resource Unit (MDRU) and its overseas activities," Journal of Disaster Research (JDR), Vol.14, No.2, pp. 363-374, 2019.
- 6. Hiroshi Kumagai, Hiroshi Sakurauchi, Shinsuke Koitabashi, Takeaki Uchiyama, Shinichi Sasaki, Kazuhide Noda, Makoto Ishizaki, Satoshi Kotabe, Atsushi Yamamoto, Yoshitaka Shimizu, Yasunori Owada, Katsuhiro Temma, Toshiaki Miyazaki, Peng Li, Yuichi Kawamoto, Nei Kato, and Hiroki Nishiyama, "Development of Resilient Communications

- Technology for Disaster Information Exchange," Journal of Disaster Research (JDR), Vol.14 No.2, 2019
- 7. Tohn Furutani, Yuichi Kawamoto, Hiroki Nishiyama, and Nei Kato, "Proposal and Performance Evaluation of Information Diffusion Technique With Novel Virtual-Cell-Based Wi-Fi Direct," IEEE Transactions on Emerging Topics in Computing, 09 January 2019
- 8. Bomin Mao, Fengxiao Tang, Zubair Md. Fadlullah, and Nei Kato, "An Intelligent Packet Forwarding Approach for Disaster Recovery Networks," IEEE International Conference on Communications (ICC 2019), Shanghai, China, May 2019.
- 9. M. Yoshida, K. Kasai, T. Hirooka, and M. Nakazawa, "Dual-polarization on-line 256 and 512 QAM digital coherent transmission," OFC 2019, M2H.4, March 2019.
- M. Yoshida, T. Kan, K. Kasai, T. Hirooka, and M. Nakazawa, "Real-time 256 QAM bi-directional coherent transmission in next generation mobile fronthaul," OECC/PSC 2019, TuA2-3, July 2019.
- 11. N. Takefushi, M. Yoshida, K. Kasai, T. Hirooka, and M. Nakazawa, "GAWBS noise characteristics in digital coherent transmission in various optical fibers," OECC/PSC 2019, ThC2-5, July 2019.
- 12. Takashi Kan, Masato Yoshida, Keisuke Kasai, Toshihiko Hirooka, Katsumi Iwatsuki, and Masataka Nakazawa, "Demonstration of on-line bi-directional 10-RRHs with an 80 Gbit/s/RRH capacity using 256 QAM WDM coherent transmission for next generation mobile fronthaul," ECOC 2019, September (2019).
- 13. Naoya Takefushi, Masato Yoshida, Keisuke Kasai, Toshihiko Hirooka, and Masataka Nakazawa, "Experimental and theoretical analyses of GAWBS depolarization noise in digital coherent transmission," ECOC 2019, September (2019).
- 14. Y. Omori, T. Hosotani, T. Otsuji, K. Iwatsuki, and A. Satou, "UTC-PD-integrated HEMT for optical-to-millimeter-wave carrier frequency down-conversion," OFC: Optical Fiber Conference Dig., Th3B.5, pp. Th3B.5-1-3, San Diego, CA, USA, March 6, 2019.
- 15. M. Suzuki, T. Hosotani, T. Suemitsu, Y. Takida, H. Ito, H. Minamide, T.

- Otsuji, and A. Satou, "Introduction of 2D nanoantennas to grating-gate plasmonic THz detector for controlling Its polarization characteristics," OTST: Optical Terahertz Science and Technology Dig., Tu-P-13 (1 page), Eldrado Hotel&Spa, Santa Fe, NM, USA, March 12, 2019.
- 16. Y. Omori, T. Hosotani, T. Otsuji, K. Iwatsuki, and A. Satou, "Optical-to-millimeter-wave carrier frequency down-conversion by UTC-PD-integrated HEMT," CSW: Compound Semiconductor Week Dig., WeE2-4 (2 pages), Nara, Japan, May 19-23, 2019.
- 17. K. Nishimura, Y. Omori, T. Hosotani, T. Suemitsu, K. Iwatsuki, T. Otsuji, and A. Satou, "Integration of UTC-PD structure with InGaAs HEMT for optical-to-wireless carrier frequency down-conversion," RJUSE2019: 8th Russia-Japan-USA-Europe Symposium on Fundamental & Applied Problems of Terahertz Devices & Technologies, & GDR-I FIR-LAB Workshop, Nizhny Novgorod, Russia, July 8-11, 2019.
- 18. Yusuke Tanimura, Kazuto Sasai, Tetsuo Kinoshita, "Proactive Service Management in Disaster Recovery Phase with Non-destructive Benchmarking Technique," Proc. of the First International Workshop on Practical Issues, Systems & Applications for Disaster Risk Reduction in Smart Computing (DRRSC2019) in conjunction with the 6th IEEE International Conference on Big Data and Smart Computing (BigComp 2019), Feb. 2019.
  - 19. Kazuto Sasai, Takuya Hoshino, Ryota Fukutani, Tetsuo Kinoshita, "Collaboration mechanism between human administrators and agent-oriented network management systems," Proc. of the First International Workshop on Practical Issues, Systems & Applications for Disaster Risk Reduction in Smart Computing (DRRSC2019) in conjunction with the 6th IEEE International Conference on Big Data and Smart Computing (BigComp 2019), Feb. 2019.
  - 20. Tiago Koketsu Rodrigues, Katsuya Suto, and Nei Kato, "Hyperparameter Study of Machine Learning Solutions for the Edge Server Deployment Problem," 2019 IEEE 90th Vehicular Technology Conference (VTC2019 fall), Honolulu, Hawaii, USA, Sep. 2019