

## 1. 査読付き学術論文（学術雑誌等に掲載されたもの）

- [1.1] Sadamori Kojaku, Giacomo Livan, and Naoki Masuda.  
Detecting anomalous citation groups in journal networks.  
*Scientific Reports*, 11, 14524, 2021 (IF<sup>1</sup>: **3.998**, TC<sup>2</sup>:0).
- [1.2] Sadamori Kojaku, Laurent Hébert-Dufresne, Enys Mones, Sune Lehmann, and Yong-Yeol Ahn.  
The effectiveness of backward contact tracing in networks.  
*Nature Physics*, 1745-2481, 2021 (IF: **19.256**, TC: **35**).
- [1.3] Sadamori Kojaku and Naoki Masuda.  
Constructing networks by filtering correlation matrices: a null model approach.  
*Proceedings of the Royal Society A*, 475, 2231, 2019 (2-year IF: 2.741, TC: 3).
- [1.4] Sadamori Kojaku, Mengqiao Xu, Haoxiang Xia, and Naoki Masuda.  
Multiscale core-periphery structure in a global liner shipping network.  
*Scientific Reports*, 9, 404, 2019 (IF: **3.998**, TC: **15**).
- [1.5] Sadamori Kojaku, Giulio Cimini, Guido Caldarelli, and Naoki Masuda.  
Structural changes in the interbank market across the financial crisis from multiple core-periphery analysis.  
*Journal of Network Theory in Finance*, 4, 33-51, 2018 (TC: **11**).
- [1.6] Naoki Masuda, Sadamori Kojaku, and Yukie Sano.  
Configuration model for correlation matrices preserving the node strength.  
*Physical Review E*, 98, 012312, 2018 (2-year IF: 2.296, TC: **17**).
- [1.7] Sadamori Kojaku and Naoki Masuda.  
A generalised significance test for individual communities in networks.  
*Scientific Reports*, 8, 7351, 2018 (IF: **3.998**, TC: **15**).
- [1.8] Sadamori Kojaku and Naoki Masuda.  
Core-periphery structure requires something else in the network.  
*New Journal of Physics*, 20, 043012, 2018 (IF: **3.539**, TC: **37**).
- [1.9] Sadamori Kojaku and Naoki Masuda.  
Finding multiple core-periphery pairs in networks.  
*Physical Review E*, 96, 052313, 2017 (2-year IF: 2.296, TC: **38**).
- [1.10] Sadamori Kojaku, Ichigaku Takigawa, Mineichi Kudo, and Hideyuki Imai.  
Dense core model for cohesive subgraph discovery.  
*Social Networks*, 44, 143-152, 2016 (2-year IF: 2.376, TC: **11**).
- [1.11] 幸若完壮, 渡辺浩太, 五十嵐一

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<sup>1</sup>2-year window Journal Impact Factor. Web of Science Journal Citation Index 2019 調べ。

<sup>2</sup>引用数。2021/05/10 Google Scholar調べ。

合理的な忘却型Profit Sharing強化学習法.

電気学会論文誌C (電子・情報・システム部門誌), 3, 448-454, 2012 (TC: 0).

## 2. 査読付き国際会議発表論文

- [2.1] Sadamori Kojaku, Jisung Yoon, Isabel Constantino, and Yong-Yeol Ahn. Residual2Vec: De-biasing graph embedding with random graphs. NeurIPS, 2021 (acceptance rate 26%).
- [2.2] <sup>3</sup>Xia Cui, Sadamori Kojaku, Naoki Masuda, and Danushka Bollegala. Solving feature sparseness in text classification using core-periphery decomposition. In Proceedings of the 7th Joint Conference on Lexical and Computational Semantics, 225-264. New Orleans, USA, 2018 (TC: 3).
- [2.3] \*Keigo Kimura, Mineichi Kudo, Lu Sun, and Sadamori Kojaku. Fast random k-labelsets for large-scale multi-label classification. 23rd International Conference on Pattern Recognition. Cancun, Mexico, December 4-8, 2016 (TC: 0).
- [2.4] \*Sadamori Koujaku, Mineichi Kudo, Ichigaku Takigawa, and Hideyuki Imai. Community change detection in dynamic networks in noisy environment. 24th International Conference on World Wide Web. Florence, Italy, May 18-22, 2015 (TC: 6).
- [2.5] \*Sadamori Koujaku, Mineichi Kudo, Ichigaku Takigawa, and Hideyuki Imai. Structural change point detection for social networks. The World Congress on Engineering. London, the United Kingdom, July 3-5, 2013 (TC: 7) [**Best student Award**].
- [2.6] \*Sadamori Koujaku, Kota Watanabe, and Hajime Igarashi. Adaptive profit sharing reinforcement learning for dynamic environment. 10th International Conference on Machine Learning and Applications and Workshops. Hawaii, the United States, 2011 (TC: 0).

## 3. 解説・総説

- [3.1] 幸若完壮  
埋め込み法が拓くネットワーク科学の新展開.  
特集号「複雑ネットワーク研究の最前線」システム制御情報学会論文誌, 65, 5, 185-191 (2021).

## 4. 著書

なし。

## 5. 招待講演

- [5.1] \*Sadamori Kojaku, Livan Giacomo, and Naoki Masuda. Detecting anomalous citation groups in journal networks. Science of Innovation and Success Workshop. 2-3 Aug., Waseda University, Japan, 2021.

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<sup>3</sup>\* 発表者

- [5.2] \*幸若完壮 ネットワークコアの検出アルゴリズムとその応用. ネットワーク科学セミナー. 統計数理研究所. 8.28-30 (2019).

## 6. その他の論文

### 査読中

- [6.1] Dakota Murray, Jisung Yoon, Sadamori Kojaku, Rodrigo Costas, Woo-Sung Jung, Staša Milojević, and Yong-Yeol Ahn. Unsupervised embedding of trajectories captures the latent structure of mobility. *Preprint arXiv*, 2012.02785, 2020.  
(Science Advancesで審査中)

### 口頭発表およびポスター発表

(以下、[6.3]を除くすべての項目に関して、Proceedingsへの掲載はないが、1,2ページの要旨の審査あり。)

- [6.2] (口頭発表) \*Sadamori Kojaku, Xiaoran Yan, Jisung Yoon, Filipi N. Silva, and Yong-Yeol Ahn. Disambiguating author names using BERT. Workshop on Natural Language Processing for Scientific Text. 8 Oct., Virtual, 2021 (CT: 0).
- [6.3] (口頭発表) \*Sadamori Kojaku, Jisung Yoon, and Yong-Yeol Ahn. residual2vec: a bias-corrected embedding for graphs. International Conference on Computational Social Science. 27-31 July, ETH Zurich, 2021 (CT: 0).
- [6.4] (口頭発表) Sadamori Kojaku, Laurent Hébert-Dufresne, Enys Mones, Sune Lehmann, and \*Yong-Yeol Ahn. The effectiveness of backward contact tracing in networks. NetSci. Virtual, 05-10 July (2021).
- [6.5] (口頭発表) \*Sadamori Kojaku, Jisung Yoon, and Yong-Yeol Ahn. Residual2Vec: A null model approach for graph embedding. NetSci. Virtual, 05-10 July (2021).
- [6.6] (ポスター) \*Isabel Constantino, Sadamori Kojaku, Santo Fortunato, and Yong-Yeol Ahn. Embedding the disciplinary structure of physics. NetSci. Virtual, 05-10 July (2021).
- [6.7] (口頭発表) Dakota Murray, \*Jisung Yoon, Sadamori Kojaku, Rodrigo Costas, Woo-Sung Jung, Staša Milojević, and Yong-Yeol Ahn. Unsupervised embedding of trajectories captures the latent structure of mobility. NetSci. Virtual, 05-10 July (2021).
- [6.8] (口頭発表) \*Sadamori Kojaku, Attila Varga, Xiaoran Yan, Filipi N. Silva, Staša Milojević, Alessandro Flammini, and Yong-Yeol Ahn. The landscape of the COVID-19 research: A neural embedding approach. Netsci. Rome, Italy, 17-25 September (2020).
- [6.9] (口頭発表) \*Sadamori Kojaku, Giacomo Livan, and Naoki Masuda. Detecting citation cartels in journal networks. Netsci. Rome, Italy, 17-25 September (2020).
- [6.10] (口頭発表) \*Shaunette Ferguson, Sadamori Kojaku, and Teruyoshi Kobayashi. Diurnal dynamics of financial systemic risk. Netsci-X. Tokyo, Japan, 20-23 January (2020).

- [6.11] (口頭発表) \*Sadamori Kojaku, Giulio Cimini, Guido Caldarelli, and Naoki Masuda. Structural changes in the interbank market across the financial crisis from multiple core-periphery analysis. Netsci. Vermont, U.S., May 26-31 (2019).
- [6.12] (ポスター発表) \*Sadamori Kojaku and Naoki Masuda. Constructing networks from correlation matrices: An application to economical data. Threshold Networks. Nottingham 22-24 July (2019).
- [6.13] (口頭発表) \*Sadamori Kojaku and Naoki Masuda. Core-periphery structure in degree-heterogeneous networks. Netsci-X. Hangzhou, China (2018).
- [6.14] (ポスター発表) \*Sadamori Kojaku and Naoki Masuda. A generalised significance test for individual communities in networks. Netsci. Paris, France, June 11-15 (2018).
- [6.15] (ポスター発表) \*Sadamori Kojaku and Naoki Masuda. Multi-scale organisation of core-periphery structure in networks. 1st Latin American Conference on Complex Networks. Puebla, Mexico September 25-29 (2017).
- [6.16] (ポスター発表) \*Sadamori Kojaku and Naoki Masuda. Core-periphery structure of networks: Consideration for random heterogeneous networks. Netsci. Indianapolis, Indiana, USA (2017).
- [6.17] (ポスター発表) \*Sadamori Kojaku and Naoki Masuda. An extension of modularity for finding multiple core/periphery structure in networks. Netsci-X. Tel Aviv, Israel January 15-18 (2017) [**Best Contribution on Financial Networks Award**].
- [6.18] (口頭発表) \*Sadamori Kojaku and Naoki Masuda. Finding multiple core-periphery structure with random walks. 5th International Workshop on Complex Networks and their Applications. Milan, Italy November 30-December 2 (2016).

## 7. 特許等

- [7.1] 幸若完壮, 上東貴志. 学術論文の査読者検索装置、査読者検索方法、及び査読者検索プログラム. 特願2020-14904, 2020
- [7.2] Prediction method, prediction system and program. Patent No: 9087294, 2011

## 8. 受賞等

- [8.1] Best Contribution on Financial Networks Award. *NetSci-X* [発表者58人中1人]. 2017
- [8.2] 研究科科長賞. 北海道大学大学院情報科学研究科 2015
- [8.3] Best Student Award. *The World Congress on Engineering* 2013

## 9. 競争的獲得資金の獲得状況

- [9.1] Sadamori Kojaku, Giulio Cimini, Guido Caldarelli, Daigo Uemoto, and Takashi Kamihi-gashi. Correlation-based reconstruction of financial networks for systemic risk control.  
代表者: 幸若完壮, Giulio Cimini. JSPS二国間(日本-イタリア)交流事業。(海外転出のため辞退) 2020.

## 10. その他研究業績

- [10.1] (査読) Nature communications; Scientific Reports; Journal of Complex Networks; Journal of Computational Social Science; PLOS ONE.
- [10.2] (国際会議プログラム委員) International Conference on Network Science, 2020  
<https://netsci2020.netscisociety.net/organizers/>
- [10.3] (国際会議運営) International Conference on Network Science X, 2020 (Web担当)  
<https://netscix2020tokyo.github.io/index.php/organizers/>