

論文リスト

(1) 学術論文 (査読有)

1. Ayuki Sekisaka and Hiroko Sekisaka-Yamamoto, “Existence, uniqueness, and uniform boundedness of solutions to a reaction-diffusion equation involving a convolution term and multicomponent reaction-diffusion system approximation”, MATRIX-RIMS Tandem Workshop: Evolutionary Partial Differential Equations and Applications, 5 pages, 2025
2. Ayuki Sekisaka and Hiroko Yamamoto, “Instability in the nebula model of compressive viscous gases”, *Physica D*, 403, 13 pages, 2020
3. Tomoyuki Miyaji, Toshiyuki Ogawa and Ayuki Sekisaka, “Rippling rectangular waves for a modified Benney equation”, *Japan Journal of Industrial and Applied Mathematics*, 35, 2018, pp. 939–968
4. Ayuki Sekisaka and Shunsaku Nii, “Computer assisted verification of the eigenvalue problem for one-dimensional Schrödinger operator”, *Springer Proceedings in Mathematics (Proceedings of Mathematical Challenge to a New Phase of Materials Science 2014)*, 2016, pp. 145–157

(2) プレプリント

1. Ayuki Sekisaka and Hiroko Sekisaka-Yamamoto, “Extension of the infinite-dimensional stability index for multidimensional reaction-diffusion systems”, under review
2. Ayuki Sekisaka and Hiroko Sekisaka-Yamamoto, “A generalized reaction-diffusion approximation of nonlocal evolution equations”, under review
3. Kei Sugihara, Ayuki Sekisaka, Toshiyuki Ogawa and Takashi Miura, ” Segmented wavetrains and sites of reversal in the mouse seminiferous tubules ”, under review
4. Ayuki Sekisaka, ” The absolute spectrum revisited from topological view point ”, arXiv:1706.08305, <https://arxiv.org/abs/1706.08305>, 2017

(3) 総説・解説

1. 関坂歩幹, “反応拡散系の進行波解の安定性問題と Evans 関数”, 応用数学勉強会レクチャーノート, 39 pages, 2022 年

2. 関坂歩幹, “反応拡散方程式の進行波の安定性に対する力学系的アプローチ”, 北海道大学数学講究録 Vol.160 (第10回数学総合若手研究集会) pp. 171–174, 2014年
3. 関坂歩幹, “1次元シュレディンガー作用素の固有値問題に対する力学系的アプローチと計算機援用証明”, 城崎新人セミナー報告集 (京都大学数理解析研究所) Vol.6 pp. 173–177, 2010年