

## Preprints/Publications

### Preprints

1. Painlevé transcendents in the defocusing mKdV equation with non-zero boundary conditions (with Zhaoyu Wang and Engui Fan)  
([arXiv:2306.07073](#)).
2. Soliton resolution and asymptotic stability of  $N$ -soliton solutions for the defocusing mKdV equation with finite density type initial data (with Engui Fan and Zechuan Zhang)  
([arXiv:2108.03650](#)).

### Publications in refereed journals

1. Transient asymptotics of the modified Camassa-Holm equation (with Yiling Yang and Lun Zhang)  
**Journal of the London Mathematical Society**, 110 (2024), e12967.  
(DOI: [10.1112/jlms.12967](#)) ([arXiv:2308.06950](#))
2. On the Cauchy problem of defocusing mKdV equation with finite density initial data: long-time asymptotics in soliton-less regions (with Engui Fan and Zechuan Zhang)  
**Journal of Differential Equations**, 372 (2023), 55-122.  
(DOI: [10.1016/j.jde.2023.06.038](#)) ([arXiv:2108.06284](#))
3. Large-time asymptotics to the focusing nonlocal modified Kortweg-de Vries equation with step-like boundary conditions (with Engui Fan)  
**Studies in Applied Mathematics**, 150 (2023), 1217-1273.  
(DOI: [10.1111/sapm.12568](#)) ([arXiv:2208.01268](#))
4. Riemann-Hilbert approach for multisoliton solutions of generalized coupled fourth-order nonlinear Schrödinger equations (with Weiqi Peng and Shoufu Tian)  
**Mathematical Methods in the Applied Sciences**, 43 (2020), 865-880.  
(DOI: [10.1002/mma.5964](#))