



## *Editorial*

# 2024 Annual Report

## Networks and Heterogeneous Media Editorial Office\*

AIMS Press, Springfield, MO 65801-2604, USA

\* **Correspondence:** Email: [nhm@aimspress.org](mailto:nhm@aimspress.org).

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## 1. The Journal

Networks and Heterogeneous Media (NHM) was founded in 2006 and has been growing successfully almost for 20 years. Responding to the journal’s needs, NHM began its transformation at the end of 2022, officially changing to an OA publishing model in 2023 for the first time. From December 20, 2023 to December 20, 2024, the journal received a total of **246 submissions**, and **62 were online**, with a **rejection rate of 65.4%**, which shows that, despite the change in publication, NHM has always maintained high standards and strict requirements. This would not have been possible without the support of our editor-in-chief and editorial board team. In the meantime, thanks to the whole EB for the work done, our editorial board has been enlarged this year with the inclusion of some outstanding young scholars. Next, journal development, manuscript processing, and future perspectives will be presented to share NHM’s work and development this year.

Submission	Online	Reject/Withdraw
246	62	140/21

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Data source from December 20, 2023–December 20, 2024.

## 2. Manuscript processing

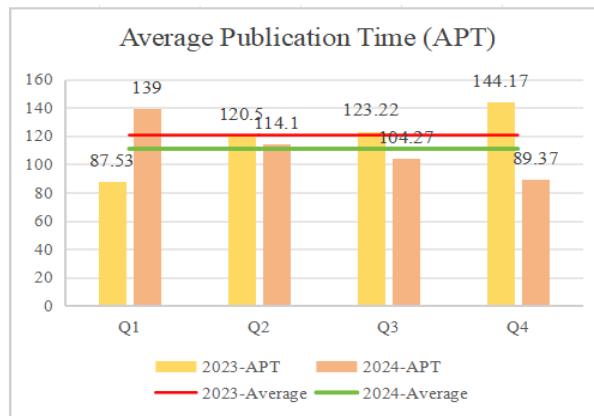
Here you will find the processing time for each stage of the paper, the turnaround time for publication, and the national & regional statistics of the authors.

## 2.1 Manuscript processing time

The processing time of the manuscript comprises three measurement indicators: Average Publication Time (APT), Submission to First Decision Time (TFD), and Acceptance to Publication Time (ATOP). Each indicator includes annual average time and quarterly time.

### 1. APT

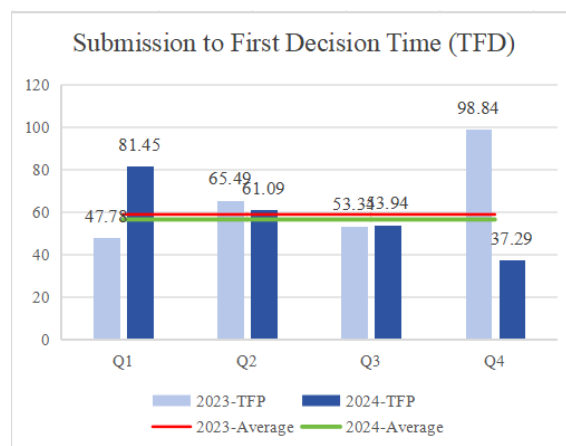
In the figure, the horizontal axis represents the quarter-year, the vertical axis represents the number of days, and the bar graph represents the average value of APT for each quarter (yellow: 2023, orange: 2024). The red line indicates the annual average APT for 2023, while the green line represents the same for 2024.



As can be seen from the figure, the overall processing time of articles has gradually shortened since the four quarters of 2024, from 4.6 months in Q1 to 2.9 months in Q4. Overall, the article processing time is 110.85 days, although it is shorter than 2023, but it is still a long time.

### 2. TFD

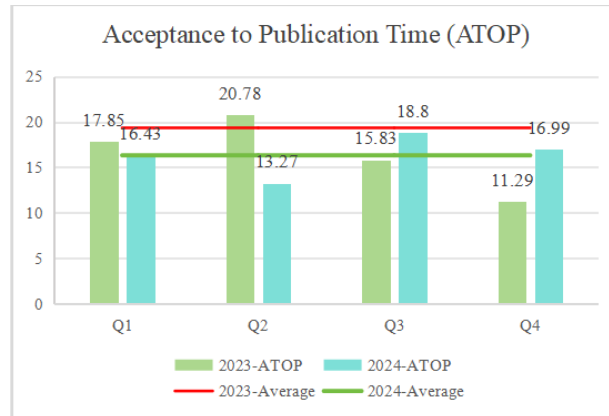
TFD is the time from receipt of the manuscript to the first decision, including the time for the editorial board to do a brief check and the reviewers to review the manuscript. The average TFD for 2024 is 56.37 days, which is slightly shorter than last year. The quarterly TFD for 2023 is shown in light blue, and 2024 in dark blue.



The four-quarter review cycle in 2024 is also gradually shortening. It is worth noting that the editors also waited for reviewers for much longer than 14 days when the required review period was 14 days. In some special cases, the review time may be set at 30 days. And in some holiday months, such as Christmas, it even went to 45–60 days, which also causes our review cycle time to be extended.

### 3. ATOP

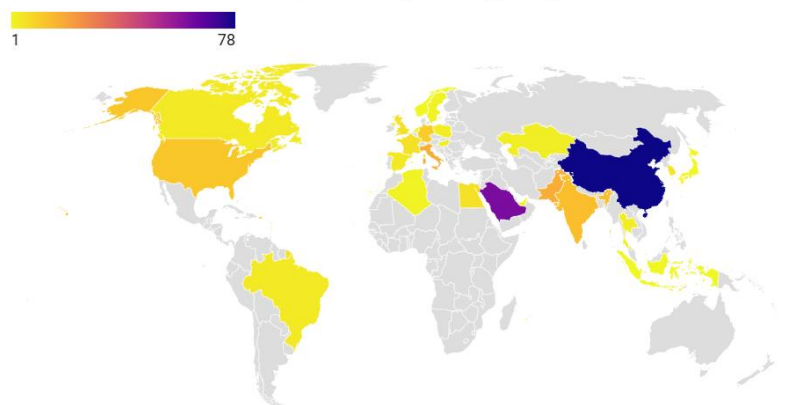
This section shows the average time from manuscript acceptance to publication, usually 10 days, which is influenced by the typesetting editor, the English editor, and the author's cooperation. The average ATOP for 2024 is 16.32 days, which is shorter than last year.



### 2.2 Distribution of countries

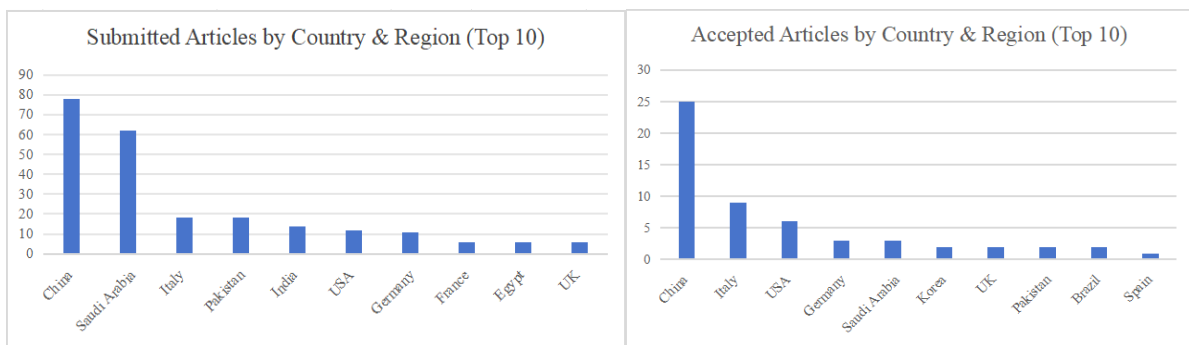
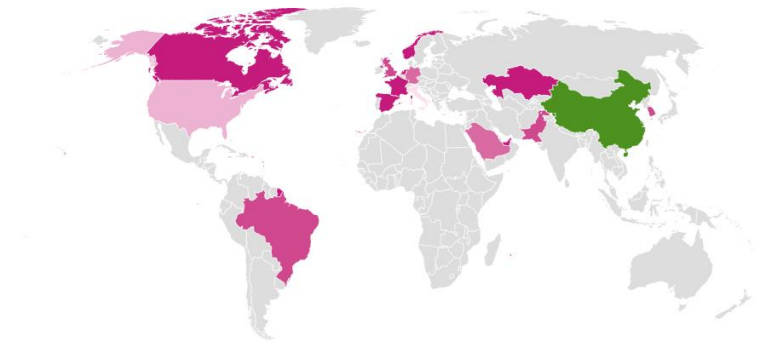
This section presents the geographic distribution of submitted manuscripts and published manuscripts. The distribution of author groups, serving as an indicator of a journal's future focus, constitutes a broad and influential category. This strong group has the potential to enhance the journal's citation impact, fostering its growth and prosperity.

#### [ Submitted Articles by Country & Region ]



This view provides the counts of Submitted manuscripts per region and country. The region and country are derived by the affiliation of the author. The top 10 countries list is computed using Submitted articles descending for 2024.

[ Accepted Articles by Country & Region ]



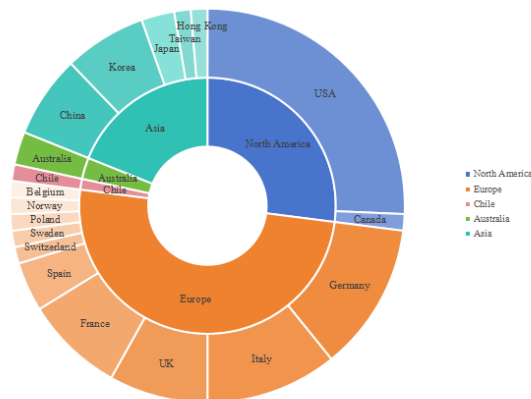
Submissions to NHM are mostly from countries in Asia, such as China, Saudi Arabia, Italy, Pakistan, etc.; final publications are mostly from countries in Asia and Europe, such as China, Italy, USA, Germany, etc.

### 3. Journal development

#### 3.1 Editorial board countries and regions

Currently, NHM has 74 editorial board members from 19 countries on five continents, with the highest number of editorial board members from Europe, followed by North America and Asia.

Distribution of Editorial board countries



This year we have joined seventeen new members of the Editorial Board, whose information is shown in the table below. We welcome them and hope to attract more outstanding scholars to join our team.

Name	Position	Affiliation
<b>Paola F. Antonietti</b>	Professor	MOX-Laboratory for Modeling and Scientific Computing, Department of Mathematics, Politecnico di Milano, Italy
<b>Giacomo Dimarco</b>	Professor	Department of Mathematics and Computer Science, University of Ferrara, Via Machiavelli 35, 44121 Ferrara, Italy
<b>Mustafa Kulenovic</b>	Professor	University of Rhode Island, Department of Mathematics and Applied Mathematical Sciences, 5 Lippitt Road, USA
<b>Chang-Hong Wu</b>	Professor	Department of Applied Mathematics, National Yang Ming Chiao Tung University, Taiwan, China
<b>Yihong Du</b>	Professor	School of Science and Technology, University of New England, Armidale, NSW 2351, Australia
<b>Haomin Zhou</b>	Professor	School of Mathematics, Georgia Institute of Technology, Atlanta, GA 30332, USA
<b>Lanre Akinyemi</b>	Associate professor	Department of Mathematics, Prairie View A&M University, Prairie View, TX, USA
<b>Denis Bonheure</b>	Professor	Department of Mathematics, Université Libre de Bruxelles, Brussels, Belgium
<b>André Schlichting</b>	Professor	Institute of Applied Analysis, University Ulm, Helmholtzstraße 18, 89081 Ulm, Room E.10, Germany
<b>Jihoon Ok</b>	Associate professor	Department of Mathematics, Sogang University, 35 Baekbeom-ro, Mapo-gu, Seoul 04107, Republic of Korea
<b>Adrian Muntean</b>	Professor	Department of Mathematics and Computer Science, Karlstad University, Sweden
<b>Peter Bella</b>	Professor	TU Dortmund, Fakultät für Mathematik, Germany
<b>Agnieszka Świerczewska-Gwiazda</b>	Professor	Faculty of Mathematics, Informatics and Mechanics, University of Warsaw, Poland
<b>Xiaochuan Tian</b>	Associate professor	Department of Mathematics, University of California, San Diego, USA
<b>Lorenzo Pareschi</b>	Professor	Department of Mathematics, Heriot-Watt University, Edinburgh EH14 4AS, United Kingdom
<b>Weimin Han</b>	Professor	Department of Mathematics, University of Iowa, USA
<b>Yanping Lin</b>	Professor	Mathematics Department, Hong Kong Polytechnic University and University of Alberta

### 3.2 Article metrics

Statistics of the most cited manuscripts of Web of Science in the last five years and the last two years, where the “\*” after the title indicates that the manuscript is from a special issue manuscript.

## 1. Most Cited Articles, 2024 (Last Five Years)

Title	Authors	Publication Year	Total Citations
Multiscale models of covid-19 with mutations and variants*	Bellomo, Nicola; Burini, Diletta; Outada, Nisrine	2022	44
Deep neural network approach to forward-inverse problems	Jo, Hyeontae; Son, Hwijae; Hwang, Hyung Ju; Kim, Eun Heui	2020	16
Relative entropy method for the relaxation limit of hydrodynamic models*	Carrillo, Jose Antonio; Peng, Yingping; Wróblewska- Kaminska, Aneta	2020	15
Existence results and stability analysis for a nonlinear fractional boundary value problem on a circular ring with an attached edge : A study of fractional calculus on metric graph	Mehandiratta, Vaibhav; Mehra, Mani;	2021	13
Incompressible limit of a continuum model of tissue growth for two cell populations	Leugering, Guenter Degond, Pierre; Hecht, Sophie; Vauchelet, Nicolas	2020	12
Homogenization of Bingham flow in thin porous media	Anguiano, Maria; Bunoiau, Renata	2020	12
Kinetic modelling of multiple interactions in socio-economic systems	Toscani, Giuseppe; Tosin, Andrea; Zanella, Mattia	2020	11
Perturbation analysis of the effective conductivity of a periodic composite	Luzzini, Paolo; Musolino, Paolo	2020	11
The selection problem for some first-order stationary mean-field games	Gomes, Diogo A.; Mitake, Hiroyoshi;	2020	11
A new mixed finite element method for the n-dimensional boussinesq problem with temperature-dependent viscosity	Terai, Kengo Almonacid, JA; Gatica, GN; Oyarzúa, R; Ruiz-Baier, R	2020	10

Note: “\*” Stands for Contributions to the Special Issue.

Last Updated: December 2024

Source: Web of Science

## 2. Most Cited Articles, 2024 (Last Two Years)

Title	Authors	Publication Year	Total Citations
Bicriteria multi-machine scheduling with equal processing	Liu, Zhimeng;	2023	6

times subject to release dates	Li, Shuguang; Khan, Muhammad Ijaz; Abdelmohsen, Shaimaa A. M.; Eldin, Sayed M.		
Homogenization of nonlinear nonlocal diffusion equation with periodic and stationary structure*	Chen, Junlong; Tang, Yanbin	2023	6
Learning the nonlinear flux function of a hidden scalar conservation law from data	Li, Qing; Evje, Steinar	2023	5
Nonlocal scalar conservation laws with discontinuous flux*	Chiarello, Felisia Angela; Coclite, Giuseppe Maria Herty, Michael;	2023	5
Central schemes for networked scalar conservation laws	Kolbe, Niklas; Mueller, Siegfried	2023	5
Global solution to the Cauchy problem of fractional drift diffusion system with power-law nonlinearity*	Gu, Caihong; Tang, Yanbin	2023	5
Explicit Richardson extrapolation methods and their analyses for solving two-dimensional nonlinear wave equation with delays*	Deng, Dingwen; Chen, Jingliang	2023	5
SLeNN-ELM: A shifted Legendre neural network method for fractional delay differential equations based on extreme learning machine*	Ye, Yinlin; Li, Yajing; Fan, Hongtao; Liu, Xinyi; Zhang, Hongbing	2023	5
Application of a hybrid pseudospectral method to a new two-dimensional multi-term mixed sub-diffusion and wave-diffusion equation of fractional order*	Shah, Farman Ali; Kamran; Santina, Dania; Mlaiki, Nabil; Aljawi, Salma	2024	4
Detection of DDoS attack in IoT traffic using ensemble machine learning techniques	Pandey, Nimisha; Mishra, Pramod Kumar	2023	4
Simple is best: A single-CNN method for classifying remote sensing images	Song, Huaxiang; Zhou, Yong Burger, Raimund;	2023	4
A difference scheme for a triangular system of conservation laws with discontinuous flux modeling three-phase flows	Diehl, Stefan; Marti, M. Carmen; Vasquez, Yolanda	2023	4
On rotavirus infectious disease model using piecewise modified ABC fractional order derivative*	Eiman; Shah, Kamal; Sarwar, Muhammad; Abdeljawad, Thabet Gu, Jie;	2024	3
Two high-order compact difference schemes with temporal graded meshes for time-fractional Black-Scholes equation	Nong, Lijuan; Yi, Qian; Chen, An	2023	3
Isoperimetric planar clusters with infinitely many regions	Novaga, Matteo; Paolini, Emanuele;	2023	3

	Stepanov, Eugene; Tortorelli, Vincenzo Maria		
Galerkin spectral method for a multi-term time-fractional diffusion equation and an application to inverse source problem*	Sun, L. L.; Chang, M. L.	2023	3
On the well-posedness of the "Bando-follow the leader" car following model and a time-delayed version*	Gong, Xiaoqian; Keimer, Alexander	2023	3
Approximation of solutions to integro-differential time fractional wave equations in $L^p$ -space	Zhao, Yongqiang; Tang, Yanbin	2023	3
Asymptotic flocking of the relativistic Cucker-Smale model with time delay	Ahn, Hyunjin	2023	3
A transformed $L1$ Legendre-Galerkin spectral method for time fractional Fokker-Planck equations*	Huang, Diandian; Huang, Xin; Qin, Tingting; Zhou, Yongtao	2023	3
Error estimate of L1-ADI scheme for two-dimensional multi-term time fractional diffusion equation	Li, Kexin; Chen, Hu; Xie, Shusen	2023	3
A Hilliges-Weidlich-type scheme for a one-dimensional scalar conservation law with nonlocal flux*	Burger, Raimund; Contreras, Harold Deivi; Villada, Luis Miguel	2023	3

Note: "\*" Stands for Contributions to the Special Issue.

Last Updated: December 2024

Source: Web of Science

### 3.3 Special issues

Only the number of submissions and rejections, publications for the special issue were counted from December 20, 2023, to December 20, 2024.

Special Issue Submissions	Rejection and withdrawal	Published
128	64/8	42

The data counts the submissions, rejections, and published manuscripts for special issues established in 2024.

Title	Established	Contribute	Accept
Recent advances in numerical methods for integer-and fractional-order PDEs	2022-08-23	0	1
Nonlocal conservation laws	2022-08-24	1	3
Iterative Processes and their Applications	2022-01-21	0	0
Advanced Mathematical Methodologies to Manage Pandemics	2023-05-04	7	7
Interdisciplinary Approaches for Understanding Networks and Heterogeneous Media	2023-05-09	7	2
Numerical Simulation and Mathematical Modelling	2023-11-03	60	12
Nonlinear PDEs in material science	2023-11-16	5	2



Analysis of Analytical, Computational and ML-based Approaches for Differential and Integral Equations	2023-11-29	17	4
Analysis and computation of discrete and continuum models for microstructured materials	2024-01-31	12	8
Local and Nonlocal PDEs Arising in Real Life Problems	2024-03-20	13	3
Soliton Dynamics and Nonlinear Waves: Integrable Systems, Experimental Insights, and Beyond	2024-11-27	0	0

## 4. Summary and perspective

### 4.1. Summary

The successful publication of 62 excellent papers in 2024, the second year of the official conversion to an OA journal, would not have been possible without the support of the editorial board members, the editor-in-chief, and the contributions of authors and reviewers. The impact factor of the journal has improved this year, and it is believed that the journal will get better and better in the coming days.

### 4.2. Perspective

At present, there are some problems that we need to improve in the next step:

- 1) the manuscript processing cycle is a little longer, we should try to shorten the processing time;
- 2) the editorial board needs to be further expanded;
- 3) the scope of the journal is too limited to partial differential equations, and then it has to be expanded within a reasonable range;
- 4) and the promotion of the journal needs to be further improved.

Next year, everything will be better.



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