



Biophysical Reviews: peering into 2024

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Abstract

After introducing the winner of this year’s Michèle Auger Award for Young Scientists’ Independent Research, this Editorial for Volume 16 Issue 1 then describes the Issue contents. The Editorial concludes by providing a look into what lies ahead for 2024.

As the single publishing instrument of IUPAB (International Union for Pure and Applied Biophysics) (IUPAB 2024), *Biophysical Reviews* plays a number of roles different to a standard journal. Aside from publishing review articles on current topics in biophysics by experts in the field, the journal also seeks to promote the internationalization of biophysical science by highlighting developments from diverse regions of the world. The current Issue seeks to fulfill both of these roles by:

- (i) outlining the results of “The 2024 Michèle Auger Award for Young Scientists’ Independent Research,” an international competition aimed at supporting and identifying excellent biophysical scientists of 40 years of age or younger;
- (ii) directly describing plans for an upcoming Special Issue dedicated to the 21st IUPAB Congress to be held in Kyoto, Japan, and outlining a number of other special features occurring at different stages of the year; and
- (iii) introducing the contents of an Issue Focus collated and edited by researchers from Hong Kong on the topic of “Quantitative methods to decipher cellular heterogeneity”.

In the following sections, we describe each of these developments in greater detail.

Winner of the 2024 Michèle Auger award

The *Biophysical Reviews* Editorial Board took a decision in 2019 to initiate an award to commemorate the life and service to the journal of Prof. Michèle Auger, an editorial board member who sadly succumbed to a serious illness in late 2018 (IUPAB 2018). The award took the form of a competition for scientists working in the general field of biophysics, who were aged 40 years or younger as of October 31st of the year of entry. Participation in the award process requires nomination (either self-nomination or nomination by a peer are acceptable) and electronic submission of a descriptive one-page curriculum vitae and pdf copies of five papers meant to demonstrate their strengths in the three general areas of independence, originality, and research quality.

For the 2024 award cycle, the journal received 16 nominations who were assessed by a judging panel comprised of 42 senior scientists, all at the level of senior group leader to head of institute. To prevent the potential for collusion between judges and candidates, the judging panel was formed after the close of nominations and all members of the judging panel were kept anonymous to each other during the judging process. The group of nominees were split into four overlapping sections and each judge was assigned either one or two sections depending on the time they could devote to the assessment process. As a result, all candidates were assessed by a minimum of 19 and a maximum of 24 judges. The ordinal ranking of the average scores for this year’s nominees are shown as Fig. 1 with the associated error envelope indicated using a single standard error.

First run in 2020, the Michèle Auger Award is now in its fifth year, with details about the current and previous winners shown in Table 1. The winner of the award receives a complimentary electronic subscription to the journal, a

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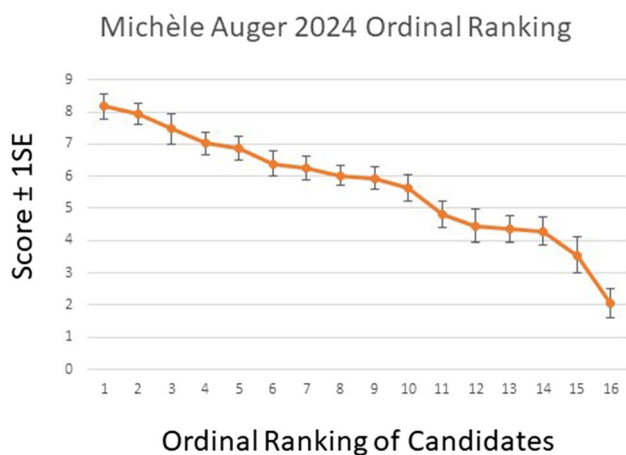


Fig. 1 The results of the 2024 Michèle Auger Award for Young Scientists' Independent Research. In all, 16 nominees were assessed by a judging panel of 42 judges. Results are presented as average scores with standard errors

physical award consisting of an engraved crystal plaque, and a complimentary open-access publishing agreement to cover the cost of their to-be published award review article. The journal would like to congratulate this year's winner, Prof. Dr. David Alsteens of the Université Catholique de Louvain (Fig. 2). David's research is focused on the nano-biophysics of the proteins and lipids involved in construction of the cell surface machinery, using multiple single-molecule methods to elucidate these processes. We will learn more about David's work from his prize-winning essay scheduled to be published within this year's Issue 6 (December 28th publication date).

The Michèle Auger Award is structured so that the research of all nominated candidates is exposed to a large group of biophysicists famous at an international level. This exposure is meant to provide a positive benefit to all entrants irrespective of whether they win or not. As for each previous year, there was a large number of very positive comments

handed in by the judges about all candidates. Candidates were marked within a group of exceptional nominees, meaning that even the low scoring candidates were regarded highly. Such widespread exposure of their work will hopefully assist in raising the profile of each nominated candidate. There is no limit on the number of times a candidate may enter (subject to meeting the 40 years or younger limit), and a number of the former winners of the award were successful only after their first entry. Each year, an open call is released for the subsequent year's award both within Issue 3 of the journal (June 30th publication date) and on the journal's Twitter/X account. Examples of the previous award cycle's announcements can be seen here (Hall 2023a, 2023b, 2023c).

On behalf of the IUPAB Biophysical Reviews journal, I would like to thank all of the candidates and judges for participating in this year's award. This participation has very much helped to perpetuate and honor the name of Prof. Michèle Auger, the former editorial board member to whom this award is dedicated (IUPAB 2018).

Precis of issue and journal plans for 2024

Following the current editorial (Hall 2024) is a commentary announcing a call for submission of articles to the Special Issue on "The 21st IUPAB Congress Kyoto Japan 2024" (Olson and Hall 2024). This year's IUPAB Congress is set to run from the 24th to the 28th of June 2024. Those interested in attending the conference can make inquiries at the following website: <https://www.c-linkage.co.jp/iupab2024-bsj-kyoto/>.

The submission deadline for the special issue is July 1st. Those interested in contributing are requested to make inquiries with the special issue editors (Olson and Hall 2024).

Next within the Issue is a collection of nine articles that constitute an Issue Focus, a relatively new feature within Biophysical Reviews that can be thought of as a type of "mini" special issue (Chen and Wu 2024). Collated and

Table 1 Current and prior recipients of the Michèle Auger Award for Young Scientists' Independent Research

Year of award	Recipient	Prize winning review
2024 (Current)	David Alsteens https://perso.uclouvain.be/david.alsteens/	To be published in Issue 6 of 2024
2023	Antonio Benedetto https://people.ucd.ie/antonio.benedetto https://www.antonibenedetto.eu/	Benedetto (2023)
2022	Miho Yanagisawa https://sites.google.com/g.ecc.u-tokyo.ac.jp/yanagisawa-lab/	Yanagisawa (2022)
2021	Jorge Alegre-Cebollada https://www.cnice.es/en/jorge-alegre-cebollada	Alegre-Cebollada (2021)
2020	Alexandria Zidovska https://www.physics.nyu.edu	Zidovska (2020)



Fig. 2 The IUPAB Biophysical Reviews journal would like to congratulate the winner of the 2024 Michèle Auger Award for Young Scientists' Independent Research, Prof. Dr. David Alsteens (Université Catholique de Louvain) <https://perso.uclouvain.be/david.alsteens/people.html>. More can be read about both the award and Prof. Michèle Auger, the scientist in who's memory the award was created and dedicated, at the following sites: <https://rdcu.be/dxH0m> and <https://iupab.org/obituary-michele-auger-former-iupab-councilor/>

edited by Drs. Xi Chen and Angela Ruhao Wu, this Issue Focus treats the topic of quantitative analysis of various types of heterogeneity in cell culture experiments. Based on eight core review articles, this Issue Focus acts to highlight the latest developments in technologies capable of assessing differences at the level of single-cell resolution. The articles appearing in the Issue Focus are listed in Table 2 and are more fully described within the separate Issue Focus editorial (Chen and Wu 2024).

Looking further ahead, this year promises to be a diverse and interesting one for the Biophysical Reviews journal. Table 3 provides an outline of the various Special Issues and Issue Focus collections outlined for 2024. Table 3 also includes an up-to-date list of the Biophysical Reviews editorial board for 2024.

Passing on the baton

At the beginning of 2019, I was approached by the previous IUPAB president, Prof. Marcelo Morales, and asked if I would take over as chief editor of Biophysical Reviews for a 5-year period. Since that time, aside from carrying out my main duties as a normal working scientist, my additional part time job has been to keep the Biophysical Reviews journal running and, if possible, build and develop on the excellent progress made by the two previous chief editors, Jean Garnier (who served from 2009 to 2013) and Cristobal dos Remedios (who served from 2014 to 2018). To be honest being chief editor has been quite a challenging experience and my main goal during this time was to not fail, i.e., to not let an Issue deadline be missed and not let anything be published that is factually wrong or inappropriate. Aside from trying my best to not drop the proverbial ball, I have also introduced some changes aimed at improving the journal and more greatly aligning it with the aims of IUPAB. Among these more positive goals,

Table 2 Articles appearing within the current Issue “Issue Focus—Quantitative methods to decipher cellular heterogeneity – from single-cell to spatial-omic methods”

Type and title of article within Issue Focus	Reference
Editorial: Special Mini-Issue: Quantitative methods to decipher cellular heterogeneity – from single-cell to spatial omic methods	Chen and Wu (2024)
Review: Progress in single-cell multimodal sequencing and multi-omics data integration	Wang et al. (2024)
Review: Studying temporal dynamics of single cells: expression, lineage and regulatory networks	Pan and Zhang (2024)
Review: Representing and extracting knowledge from single-cell data	Mihai et al. (2024)
Review: Heterogeneity of chemical modifications on RNA	Goh and Kuang (2024)
Review: Single cell lineage tracing with endogenous markers	Xue et al. (2024)
Review: Integrating single-cell transcriptomics with cellular phenotypes: cell morphology, Ca ²⁺ imaging and electrophysiology	Camunas-Soler (2024)
Review: Heterogeneity of chemical modifications on RNA	Hosokawa and Nishikawa (2024)
Review: Emerging tools for uncovering genetic and transcriptomic heterogeneities in bacteria	Liao (2024)

Table 3 The Biophysical Reviews Editorial Board in 2024

Role	
Chief Editor	
Damien Hall (outgoing)	Nano Life Science Institute Kanazawa University, Japan
W. Olson (incoming)	Department of Chemistry and Chemical Biology, Rutgers University, USA
Emeritus Chief Editors	
Cristobal dos Remedios	Victor Chang Cardiac Research Institute, Darlinghurst, NSW, Australia
Jean Garnier (1929–2022)	International Science Council, France
Executive Editors	
S. Harding	Department of Bioscience, University of Nottingham, England
R. Itri	Institute of Physics, University of Sao Paulo, Sao Paulo, Brazil
N. R. Jagannathan	Chettinad Academy of Research & Education, India
K. Nagayama	National Institute for Physiological Sciences, Okazaki, Japan
W. Olson	Department of Chemistry and Chemical Biology, Rutgers University, USA
G. Rivas	Centro de Investigaciones Biológicas -CIB, CSIC
Special Issue Editors for 2024	
Issue Focus Editors:	Issue 1 – Regular Issue Featuring an Issue Focus ‘Quantitative methods to decipher cellular heterogeneity – from single-cell to spatial omic methods’
Xi Chen	
Angela Ruohao Wu	
Special Issue Editors:	Issue 3 – Special Issue ‘Multiscale simulations of DNA from electrons to nucleosomes’
Wilma K. Olson	
John H. Maddocks	
Pablo D. Dans	
Thomas Cheatham III Sarah Harris	
Charlie Laughton Modesto Orozco	
Lois Pollack	
Special Issue Editors:	Issue 5 – Special Issue ‘IUPAB 2024 Kyoto Japan – Joint 21st IUPAB Congress and 62nd BSI Congress’
Wilma Olson	
Damien Hall	
Issue Focus Editors:	Issue 6 – Issue Focus ‘The 7th Symposium on Nanoengineering for Mechanobiology’
Massimo Vassalli	
Editorial Board Members	
J. Alegre-Cebollada	Centro Nacional de Investigaciones Cardiovasculares, Spain
T.W. Allen	Royal Melbourne Institute of Technology, Australia
A.A. Anashkina	Russian Academy of Sciences, Moscow, Russia
G. Amodeo	Universidad de Buenos Aires and Consejo Nacional de Investigaciones Científicas y Técnicas, Argentina
M. Baker	University of New South Wales, Australia
J. Baenziger	University of Ottawa, Canada
G. Basu	Bose Institute, India
E. Baulieu	Institut National de la Santé et de la Recherche Médicale Le Kremlin-Bicêtre, France
A. Benedetto	University College Dublin, Ireland
F. Braet	University of Sydney, Australia
A. Chattopadhyay	CSIR-Centre for Cellular & Molecular Biology, India
P. Ciancaglini	Universidade de São Paulo, Brazil
R. Clarke	University of Sydney
D. Crossman	University of Auckland, New Zealand
P.J. Cozzone	Université de la Méditerranée, Marseille, France
E.M. De La Cruz	Yale University, USA
D. Devaurs	INRIA, Grenoble, France
E.J. Dufourc	University of Bordeaux, France
E. Ehler	University of London King’s College, London, England
L. Finzi	Emory University, Atlanta, Georgia, USA

Table 3 (continued)

Role	
H.J. Galla	Institute for Biochemistry, Westfälische Wilhelms Universität Muenster, Germany
K. Gehmlich	University of Birmingham, England
J. C. Gómez-Fernández	University of Murcia, Spain
A.M. Gronenborn	University of Pittsburgh, USA
J. Higo	University of Hyogo, Japan
J.W. K. Ho	Li Ka Shing Faculty of Medicine, The University of Hong Kong, China
T. Iskratch	Queen Mary University of London, UK
N. Ito	Tokyo Medical and Dental University, Japan
P. Karthe	CAS in Crystallography and Biophysics, University of Madras, India
A.R. Kinjo	Department of Mathematics, Universiti Brunei Darussalam, Brunei
J. Kozelka	University Paris Diderot, France & Masaryk University, Czech Republic
T. Kraft	Hannover Medical School, Germany
K. K. Kim	Sungkyunkwan University, Republic of Korea
A. Li	Latrobe University, Australia
S. Leslie	McGill University, Canada
B. Maggio	Universidad Nacional de Córdoba, Argentina
B. Martinac	Victor Chang Cardiac Research Institute, Australia
J.W. McNamara	University of Cincinnati, USA
M.M. Morales	Cidade Universitária, Brazil
H. Nakamura	Institute of Protein Research, Osaka University, Japan
T. Nishizaka	Gakushuin University, Japan
H. Noji	The University of Tokyo, Japan
R.D. Peluffo	University of the Republic, Uruguay
P. Pohl	University Linz, Austria
M. Prietto	University of Lisbon, Portugal
K. Radotic	University of Belgrade, Serbia
C.M. Rao	Centre for Cellular and Molecular Biology, India
Z. Rao	Tsinghua University, China
F. Separovic	University of Melbourne, Australia
B. T. Sewell	University of Cape Town, South Africa
C. Sizun	Centre National de la Recherche Scientifique, France
K. Shearwin	Molecular and Biomedical Science, University of Adelaide, Australia
A. Shonhai	University of Venda, South Africa
C.M. Soares	Universidade Nove de Lisboa, Portugal
A.H. Squires	University of Chicago, USA
D. Szczesna-Cordary	University of Miami, USA
J. Tame	Yokohama City University, Japan
S. del Valle Alonso	Universidad Nacional de Quilmes, Argentina
J. van der Velden	VU University Medical Center, The Netherlands
M. Vassalli	University of Glasgow, Scotland
G. Viero	Institute of Biophysics, CNR, Italy
A. Watts	University of Oxford, UK
M. Williams	Massey University, New Zealand
G.J.L. Wuite	VU University Amsterdam, The Netherlands
K. Yasuda	Waseda University, Japan
B. Zapotoczny	Institute of Nuclear Physics, Polish Academy of Sciences, Poland
A. Zidovska	New York University, USA
G. Zucchelli	Università degli Studi di Milano, Italy

the changes made have included providing a descriptive editorial for each issue e.g. [Hall 2020]; the establishment of a social media presence for the journal on YouTube and Twitter/X; the establishment of a number of semi-regular special commentary and editorial features (such as the “Biophysical Reviews’ Top Five” e.g. [Dulhunty 2023], “Biophysical Reviews’ Meet the Editors Series” e.g. [Olson 2020; Hall 2023d], and “Biophysical Reviews’ Editors Roundup Series” e.g. [Basu et al. 2023]); the establishment of an annual competition dedicated to former editorial board member Professor Michèle Auger aimed at recognizing the independent work of young biophysicists of 40 years of age or younger; the establishment of a series of “mini” special issues known as an Issue Focus, based around single themes (e.g., Har Gobind Khorana’s 100th birthday [Aradhya and Jagannathan 2023], Costa Rican Biophysics [Chaves et al. 2022], and Computational Biophysics of AFM [Hall et al. 2023]); and finally the development of a Biophysical Reviews’ National Biophysical Society Partnership Program (with special issues to date on the Biophysical Society of Japan [Komatsuzaki et al. 2020], Australian Society for Biophysics [dos Remedios et al. 2022], and the Congress of Russian Biophysicists [Anashkina et al. 2023]).

As chief editor, I have greatly enjoyed getting to know, and work closely with, the journal editorial board members, the IUPAB executive members, and the Springer-Nature professional staff. My tenure in charge of Biophysical Reviews has been both fun and a genuine professional honor. However, all good things must come to an end and I will soon finish in this role. Over the next few months, Prof. Wilma Olson will take over as chief editor of Biophysical Reviews. Although we will hear more from Wilma over the coming months and years, it is my pleasure to briefly introduce her here. Wilma Olson is the current Mary I. Bunting Professor of Chemistry and Chemical Biology at Rutgers University, New Jersey. More can be read about Wilma at her website (shown below) and within the following “Meet the editor piece” [Olson 2020]: <https://chem.rutgers.edu/people/faculty-bio/185-olson-wilma-k>.

Wilma has been an executive editor since the journal’s founding and is very much someone who has consistently and unselfishly helped without seeking credit or the personal spotlight. Wilma received her PhD from Stanford University under the supervision of Paul Flory (the Nobel Prize winning chemist). She is the current holder of an endowed chair at one of the world’s leading universities and has previously been the president of the US Biophysical Society in 2002 and the vice president of IUPAB (2005–2018).

As a long-time executive editor and organizer of a number of special issues, Wilma is excellently placed to assume leadership of the journal. I congratulate Wilma on becoming

the new Editor-in-Chief of the journal and wish her the best in taking on this role.

Concluding remarks

More can be learnt about the journal at its official Springer-Nature website and also from its social media pages on Twitter and YouTube.

Web: <https://www.springer.com/journal/12551>

Twitter: @BiophysicalRev1.

YouTube: @biophysicalreviews9844.

Potential authors interested in submitting an article to Biophysical Reviews are encouraged to first raise the matter with either the chief editor or their local executive or editorial board member. After discussion on the suitability of their article, a timetable for their submission will be arranged in conjunction with the professional officers of the journal.

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Declarations

Conflict of interest The author declares no competing interests.

References

- Alegre-Cebollada J (2021) Protein nanomechanics in biological context. *Biophys Rev* 13:435–454. <https://doi.org/10.1007/s12551-021-00822-9>
- Anashkina AA, Rubin AB, Gudimchuk NB et al (2023) VII Congress of Russian Biophysicists—2023, Krasnodar, Russia. *Biophys Rev* 15:801–805. <https://doi.org/10.1007/s12551-023-01164-4>
- Aradhya GK, Jagannathan NR (2023) Gobind: an inspiring enigma. *Biophys Rev* 15:71–73. <https://doi.org/10.1007/s12551-023-01045-w>
- Basu G, Sudo Y, Berliner L, Shaitan K, Hall D (2023) Editors’ Roundup: June 2023. *Biophys Rev* 15:307–311. <https://doi.org/10.1007/s12551-023-01077-2>
- Benedetto A (2023) Ionic liquids meet lipid bilayers: a state-of-the-art review. *Biophys Rev* 15:1909–1939. <https://doi.org/10.1007/s12551-023-01173-3>
- Camunas-Soler J (2024) Integrating single-cell transcriptomics with cellular phenotypes: cell morphology, Ca²⁺ imaging and electrophysiology. *Biophys Rev* 16:1. <https://doi.org/10.1007/s12551-023-01174-2>. (Current Issue)
- Chaves G, Rodríguez-Corrales JÁ, Solís C (2022) Editorial for ‘Issue focus on 2nd Costa Rica biophysics symposium — March 11th–12th, 2021.’ *Biophys Rev* 14:545–548. <https://doi.org/10.1007/s12551-022-00947-5>
- Chen X, Wu AR (2024) Special Mini-Issue: Quantitative methods to decipher cellular heterogeneity – from single-cell to spatial omic methods. *Biophys Rev* 16:1. <https://doi.org/10.1007/s12551-024-01180-y>. (Current Issue)

- dos Remedios C, Cranfield C, Whelan D et al (2022) A special issue of the Australian society for Biophysics. *Biophys Rev* 14:1–2. <https://doi.org/10.1007/s12551-022-00936-8>
- Dulhunty AF (2023) Biophysical reviews top five: voltage-dependent charge movement in nerve and muscle. *Biophys Rev* 15:1903–1907. <https://doi.org/10.1007/s12551-023-01165-3>
- Goh WSS, Kuang Y (2024) Heterogeneity of chemical modifications on RNA. *Biophys Rev* 16:1. <https://doi.org/10.1007/s12551-023-01128-8>. **(Current Issue)**
- Hall D (2020) Biophysical Reviews: 2020—looking back, going forward. *Biophys Rev* 12:1269–1276. <https://doi.org/10.1007/s12551-020-00777-3>
- Hall D (2023a) Biophysical Reviews: and the winner is *Biophys Rev* 15:145–149. <https://doi.org/10.1007/s12551-023-01062-9>
- Hall D (2023b) Biophysical Reviews: a call for nominations to the 2024 Michèle Auger Award. *Biophys Rev* 15:295–299. <https://doi.org/10.1007/s12551-023-01078-1>
- Hall D (2023c) Biophysical Reviews: a goodbye to 2023. *Biophys Rev* 15:1879–1882. <https://doi.org/10.1007/s12551-023-01177-z>
- Hall D (2023d) (2023d) Biophysical Reviews’ “Meet the Editors Series”: a profile of Damien Hall. *Biophys Rev* 15:1883–1896. <https://doi.org/10.1007/s12551-023-01176-0>
- Hall D (2024) Biophysical Reviews: peering into 2024. *Biophys Rev* 16(1). <https://doi.org/10.1007/s12551-024-01182-w>. **(Current Issue)**
- Hall D, Flechsig H, Sumikama T (2023) Computational biophysics of atomic force microscopy—an IUPAB-sponsored workshop. *Biophys Rev* 15:2041–2044. <https://doi.org/10.1007/s12551-023-01170-6>
- Hosokawa M, Nishikawa Y (2024) Tools for microbial single-cell genomics for obtaining uncultured microbial genomes. *Biophys Rev* 16:1. <https://doi.org/10.1007/s12551-023-01124-y>. **(Current Issue)**
- IUPAB (2018) <https://iupab.org/obituary-michele-auger-former-iupab-councilor/>. (Last accessed 24/1/2024)
- IUPAB (2024) <https://iupab.org/>. (Last accessed 24/1/2024)
- Komatsuzaki T, Nakamura H, Tame J et al (2020) Editorial for the Special Issue of Biophysical Reviews focused on the Biophysical Society of Japan with select scientific content from the 57th BSI annual meeting, Miyazaki, Japan. *Biophys Rev* 12:183–185. <https://doi.org/10.1007/s12551-020-00691-8>
- Liao Y (2024) Emerging tools for uncovering genetic and transcriptional heterogeneities in bacteria. *Biophys Rev* 16:1. <https://doi.org/10.1007/s12551-023-01178-y>. **(Current Issue)**
- Mihai IS, Chafle S, Henriksson J (2024) Representing and extracting knowledge from single-cell data. *Biophys Rev* 16:1. <https://doi.org/10.1007/s12551-023-01091-4>. **(Current Issue)**
- Olson WK (2020) Biophysical Reviews’ “Meet the Editors Series”—a profile of Wilma K. Olson *Biophys Rev* 12:9–12. <https://doi.org/10.1007/s12551-020-00611-w>
- Olson WK, Hall D (2024) Biophysical Reviews Special Issue call: The 21st IUPAB Congress 2024 Kyoto Japan. *Biophys Rev* 16:1. <https://doi.org/10.1007/s12551-024-01181-x>. **(Current Issue)**
- Pan X, Zhang X (2024) Studying temporal dynamics of single cells: expression, lineage and regulatory networks. *Biophys Rev* 16:1. <https://doi.org/10.1007/s12551-023-01090-5>. **(Current Issue)**
- Wang X, Wu X, Hong N et al (2024) Progress in single-cell multimodal sequencing and multi-omics data integration. *Biophys Rev* 16:1. <https://doi.org/10.1007/s12551-023-01092-3>. **(Current Issue)**
- Xue Y, Su Z, Lin X, Ho MK, Yu KHO (2024) Single cell lineage tracing with endogenous markers. *Biophys Rev* 16:1. <https://doi.org/10.1007/s12551-024-01179-5>. **(Current Issue)**
- Yanagisawa M (2022) Cell-size space effects on phase separation of binary polymer blends. *Biophys Rev* 14:1093–1103. <https://doi.org/10.1007/s12551-022-01001-0>
- Zidovska A (2020) The rich inner life of the cell nucleus: dynamic organization, active flows, and emergent rheology. *Biophys Rev* 12:1093–1106. <https://doi.org/10.1007/s12551-020-00761-x>

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