

Editorial

Open Access



Why is the new journal *Soft Science* needed?

Chuanfei Guo¹, Cunjiang Yu², Zhifeng Ren³

¹Department of Materials Science and Engineering, Southern University of Science and Technology, Shenzhen 518055, Guangdong, China.

²Department of Mechanical Engineering, University of Houston, Houston, TX 77204, USA.

³Department of Physics and Texas Center for Superconductivity at the University of Houston (TcSUH), University of Houston, Houston, TX 77204, USA.

Correspondence to: Prof. Zhifeng Ren, Department of Physics and Texas Center for Superconductivity at the University of Houston (TcSUH), University of Houston, Houston, TX 77204, USA. E-mail: zhifengren2013@gmail.com

How to cite this article: Guo C, Yu C, Ren Z. Why is the new journal *Soft Science* needed? *Soft Sci* 2021;1:7. <https://dx.doi.org/10.20517/ss.2021.12>

Received: 16 Aug 2021 **Accepted:** 16 Aug 2021 **Available online:** 18 Aug 2021

Academic Editor: Zhifeng Ren **Copy Editor:** Xi-Jun Chen **Production Editor:** Xi-Jun Chen

Research on mechanically deformable, flexible, or stretchable (i.e., “soft” as a general term) materials and devices is a fast-growing field with numerous exciting new developments in fundamental science and emerging applications enabled by new materials, advanced fabrication processes, and novel device technologies. This soft materials and devices research has drastically impacted healthcare, medicine, robotics, space exploration, and the internet of things^[1-3]. For example, soft e-skins can enable robots to achieve tactile sensation, and flexible wearables and implantables can help monitor the health of the human body^[4-6].

The rising interest in soft materials and electronic devices research is also evidenced by the thousands of papers that have been published in this field, with an annual growth rate of ~20% over the past five years. These publications have also generated an unusually high impact. For example, a survey of recent papers on flexible electronics showed that these papers had contributed significantly to the impact factors of the journals in which they were published [Figure 1], although they make up no more than 10% of the total publication in any single journal [Figure 2].

It is envisioned that research on soft materials, devices, and systems will continue to thrive in the coming decades in both academia and industry. The already large, fast-growing community has called for



© The Author(s) 2021. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, sharing, adaptation, distribution and reproduction in any medium or format, for any purpose, even commercially, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.



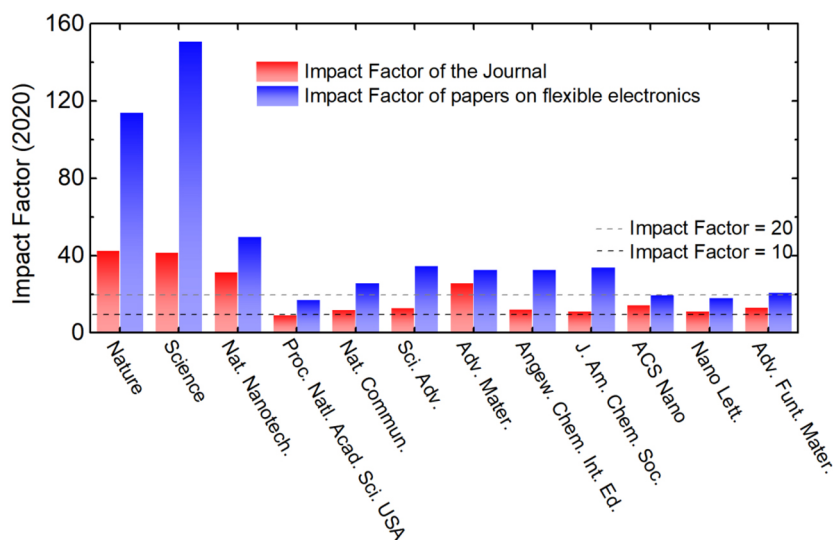


Figure 1. Impact factors of representative journals and papers on flexible electronics published in these journals.

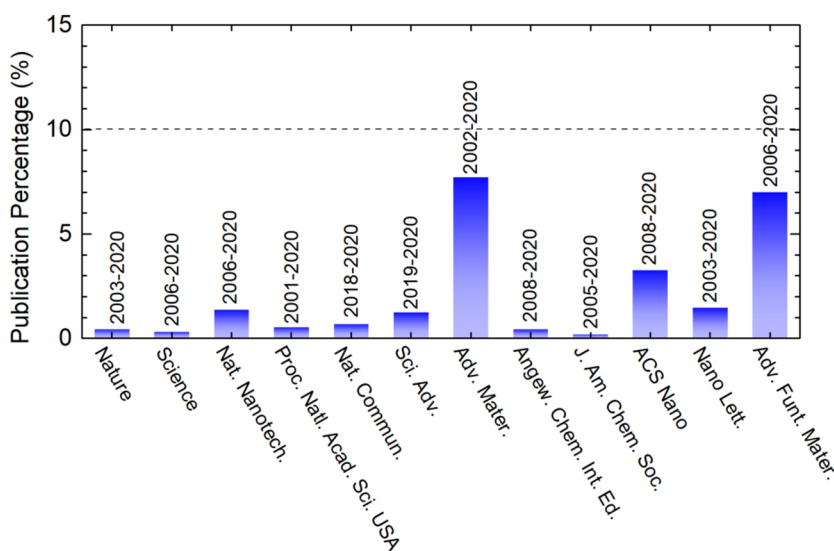


Figure 2. Publication of papers on flexible electronics as percentages of all published papers in representative journals.

specialized journals focusing on soft devices and systems research. In 2016, Nature Publishing Group launched *npj Flexible Electronics*, the first journal specializing in “flexible electronic systems, including plastic electronics and emerging materials, new device design and fabrication technologies”^[7]. It received its first impact factor of 12.7 in 2021 and is expected to be a flagship journal for this emerging field. However, there exists no other journal specializing in soft devices and systems.

To better accommodate the needs of this fairly large and fast-growing community, we feel that it is very timely to launch such a specialized journal. We have therefore launched this new journal, *Soft Science*, which is aimed to become a high-profile and specialized platform that publishes high-quality papers on mechanically soft systems on a variety of scales, ranging from materials (e.g., hydrogels) to devices (e.g., flexible electronics) to functional systems (e.g., soft robotics). This journal has received its first batch of submissions, and six high-quality papers have been published in its first issue. These three reviews and three

research articles cover flexible tactile sensors, wearable supercapacitors, elastomers, and organic/inorganic thermoelectric materials.

As the editorial team of a new journal, we promise to handle all the submitted papers very quickly so that a decision can be reached in a time much shorter than most of the other journals and published online within 24 h after acceptance.

DECLARATIONS

Author's contributions

Preparation of the manuscript: Guo C, Yu C, Ren Z

Availability of data and materials

Not applicable.

Financial support and sponsorship

None.

Conflicts of interest

All authors declared that there are no conflicts of interest.

Ethical approval and consent to participate

Not applicable.

Consent for publication

Not applicable.

Copyright

© The Author(s) 2021.

REFERENCES

1. Wang X, Liu Z, Zhang T. Flexible Sensing Electronics for wearable/attachable health monitoring. *Small* 2017;13:1602790. DOI [PubMed](#)
2. Rich SI, Wood RJ, Majidi C. Untethered soft robotics. *Nat Electron* 2018;1:102-12. DOI
3. Kang J, Tok JB, Bao Z. Self-healing soft electronics. *Nat Electron* 2019;2:144-50. DOI [PubMed](#)
4. Wang S, Xu J, Wang W, et al. Skin electronics from scalable fabrication of an intrinsically stretchable transistor array. *Nature* 2018;555:83-8. DOI [PubMed](#)
5. Someya T, Bao Z, Malliaras GG. The rise of plastic bioelectronics. *Nature* 2016;540:379-85. DOI [PubMed](#)
6. Gao W, Ota H, Kiriya D, Takei K, Javey A. Flexible Electronics toward Wearable Sensing. *Acc Chem Res* 2019;52:523-33. DOI [PubMed](#)
7. *npj Flexible Electronics*. Available from: <https://www.nature.com/npjflexelectron/about>. [Last accessed on 16 Aug 2021].