

Editorial

To the Future: The Infinite Possibilities of Technology

Xiangang Luo^{1,2*} and Minghui Hong³DOI: [10.67704/technol.2026.26e001](https://doi.org/10.67704/technol.2026.26e001)Citation: Luo XG, Hong MH. To the Future: The Infinite Possibilities of Technology. *Technology* 1, 26e001 (2026).

While science takes as its mandate the revelation of the physical world's operating laws, technology, driven by the developmental needs of humanity, serves as the core force that transforms the world. From the roar of the steam engine to the iterative leaps of artificial intelligence, and from the ubiquity of electrical grids to the dawn of quantum information, technology has always been the critical engine of civilizational advancement. It not only responds to practical needs but also continuously reshapes the boundaries of our ability to understand and transform the world. Technology is not merely the physical extension of scientific knowledge; it is the concentrated expression of human wisdom and creativity. With every leap, it profoundly rewrites the underlying logic of how society operates.

The wave of industrial civilization propelled humanity into an era of explosive technological innovation. Today, we are better equipped than at any time in history to map the trajectory of technological evolution and analyze its internal logic and developmental laws: from the breakthrough of fundamental principles to the expansion of application scenarios, from the emergence of individual innovations to the synergy of entire technological systems, and from deep advancement within individual disciplines to integrative innovation across multiple fields. The development of technology is both the materialization of scientific laws and the distillation and sublimation of human needs. Exploring this essence of technology is not only the key to understanding the past but also the beacon guiding the future. The history of technology demonstrates that truly disruptive innovations often emerge at the blurred boundaries between disciplines, within the tension between basic research and practical needs. It is this tension that drives technology from the laboratory to industry, transforming theoretical constructs

into tangible power.

However, the current field of technological research still faces many challenges: disciplinary barriers impede systemic innovation, there is a lack of efficient channels for translating fundamental research into engineering applications, and in the face of global issues such as climate change, energy crises, and public health, technological breakthroughs urgently require stronger systemic responses.

It is against this backdrop that *Technology* is launched. As a peer-reviewed, international journal, *Technology*'s mission is to build a platform for the multidisciplinary study of technological development. We take a global view and a rigorous, evidence-based approach. We will examine the historical drivers, institutional mechanisms, and emerging frontiers of technology.

The journal warmly welcomes high-quality original research papers and forward-looking reviews, encompassing the following core technological directions:

- Basic sciences and frontier interdisciplinary research: focusing on the deep integration of mathematics, physics, chemistry and other basic disciplines with engineering technology, advocating innovation across the full chain from fundamental discoveries to technological translation;

- Life sciences and healthcare: covering biomedical engineering, precision medicine, synthetic biology, intelligent diagnostics and therapeutics, committed to safeguarding human health through technological breakthroughs;

- Information technology and intelligent sciences: focusing on artificial intelligence, big data, photonic computing, quantum information, communication networks and other frontier fields, driving the underlying architectural innovation of the information age;

- Advanced manufacturing and mechanical engineering;

Received: 31 July 2026

Accepted: 14 August 2026

Published online:

¹State Key Laboratory of Optical Field Manipulation Science and Technology, Institute of Optics and Electronics, Chinese Academy of Sciences, Chengdu 610209, China; ²Institute of Optics and Electronics, Chinese Academy of Sciences, Chengdu 610209, China; ³Pen-Tung Sah Institute of Micro-Nano Science and Technology, Xiamen University, Xiamen, 361005, China.

*Correspondence: XG Luo, E-mail: lxg@ioe.ac.cn

exploring smart manufacturing, robotics, precision machining, additive manufacturing and other directions, reshaping the future form of manufacturing;

-Energy and environmental engineering: addressing clean energy, energy storage technologies, carbon neutrality technologies, environmental monitoring and remediation, responding to the challenges of sustainable development with engineering solutions;

-Materials science and engineering: covering the full spectrum from structural materials to functional materials, from nanoscale to macroscopic properties, consolidating the foundation of technological progress;

-Astronomy and earth sciences: focusing on deep space exploration, remote sensing technologies, and earth system science, expanding the frontiers of human knowledge.

This journal not only highlights contemporary breakthroughs in technology but also strives to uncover the intrinsic laws of technological evolution. We advocate using scientific methodologies to analyze the underlying logic of technological innovation, propelling technological research from empirical summaries toward theoretical frameworks. We encourage deep interdisciplinary and cross-sectoral integration, exploring the interactive relationships between technology, society, ethics, and ecology, thereby ensuring that technological innovation advances steadily on a path that serves human well-being. We firmly believe that technology never develops in isolation; it shares a profound, symbiotic relationship with science, culture, institutions, and the environment. Only by examining technology within a broader system can we truly grasp its trajectory.

As a newly launched journal, we uphold the following editorial philosophies:

First, international vision. We aim to bring together the wisdom of top scholars worldwide, build an open and inclusive academic community, and promote cross-border, cross-cultural intellectual exchange and collaborative innovation.

Second, pursuit of frontier. We are keenly attuned to the harbingers of technological change, prioritize publication of forward-looking, disruptive, and systemically impactful research, and aspire to be a bellwether of technological innovation.

Third, cross-disciplinary orientation. We break down traditional disciplinary silos, encourage the discovery of new breakthroughs at the intersection of disciplines, and promote the integration and restructuring of technological systems.

Fourth, social responsibility. We adhere to the principle of technology for good, pay attention to the ethical dimensions and social impacts of technological development, and ensure that technology always serves the overall interests of human civilization.

Fifth, commitment to open science. We adhere to the open-access publishing model, promote the free dissemination and sharing of knowledge, and accelerate the translation of research outcomes into practical applications.

We hereby sincerely invite scholars, engineers, and scientists across the globe to submit their finest work to *Technology*. Whether you are an expert deeply rooted in a specific field or an explorer active at interdisciplinary frontiers, *Technology* will provide you with rigorous, fair, and efficient peer-review services, alongside an international platform to widely disseminate your research. We look forward to defining the future of technology together with you.

May *Technology* become a window into the soul of innovation — a bridge that connects ideas and sparks collaboration. Let us push technological civilization to a higher plane. With reason as our compass and innovation as our sail, we will explore the boundless possibilities of technology, contributing our knowledge and strength to the lasting progress of humankind. On this journey filled with unknowns and hope, *Technology* stands ready to walk alongside global scholars, witnessing and recording every breakthrough from 0 to 1 and every leap from 1 to N.

Competing interests

The authors declare no competing interests.



Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, 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. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/>

©The Author(s) 2026. Published by Technology Publishing.