

Is the publishing landscape of bioprinting research going to change?

Editor-in-Chief: Chee Kai CHUA

Executive Director and Professor, Singapore Centre for 3D Printing, School of Mechanical & Aerospace Engineering, College of Engineering, Nanyang Technological University, Singapore

<http://dx.doi.org/10.18063/IJB.2016.02.011>.

Bioprinting as a new and emerging research field is now gaining momentum. [Figure 1](#) was generated from Scopus by using bioprinting as the search keyword. It shows the trend of the number of published documents (article or review) per year. There are 361 documents in total and 103 are published in the most recent year. It is obvious that the bioprinting research field is rapidly growing. In fact, the number of documents per year is tripled from 2012 to 2015. Most of the published documents went to the journals listed in [Table 1](#), and the top one has published 53 documents. Although our search keyword is limited to bioprinting only, [Figure 1](#) and [Table 1](#) already give us a glimpse of the publishing landscape of bioprinting research before 2015.

It is worthy to note that bioprinting research now shows prominent presence in most of the biotechnology, biomaterials and tissue engineering journals. These trends further validate the vision of this journal

to present bioprinting as an independent research field for the future of biotechnologies.

The *International Journal of Bioprinting* (IJB) was launched in July 2015. It is the first academic journal whose primary focus is on bioprinting. By July 2016, it will publish about 30 articles in total, which is equivalent to the 2nd rank in [Table 1](#). Moreover, since the beginning of this year, at least three new journals have joined the bioprinting family: *3D Printing in Medicine* (by Springer), *Bioprinting* (by Elsevier) and *Journal of 3D Printing in Medicine* (by Future Medicine). With so many journals dedicated to bioprinting research, it is expected that the publishing landscape of bioprinting research is going to experience accelerated growth over the next few years.

We also checked the landscape by subject area, and the growth pattern has been stable over the past five years. Current perception and definition of bioprinting is mainly from five areas: engineering, biology, material

Table 1. Top 20 journals in terms of number of documents from 2004 to 2015 (data source: Scopus)

Journal	Documents	Journal	Documents
<i>Biofabrication</i>	53	<i>Journal of Biomedical Materials Research Part A</i>	6
<i>Biomaterials</i>	16	<i>Nanomedicine</i>	5
<i>Advanced Healthcare Materials</i>	15	<i>Artificial Organs</i>	5
<i>Lab on A Chip</i>	10	<i>Advanced Materials</i>	5
<i>Acta Biomaterialia</i>	9	<i>Trends in Biotechnology</i>	5
<i>Biotechnology Journal</i>	8	<i>Plos One</i>	5
<i>Tissue Engineering Part C Methods</i>	8	<i>Virtual and Physical Prototyping</i>	4
<i>Biotechnology and Bioengineering</i>	7	<i>Macromolecular Bioscience</i>	4
<i>Tissue Engineering Part A</i>	7	<i>Biomedical Microdevices</i>	4
<i>Journal of Tissue Engineering and Regenerative Medicine</i>	6	<i>IEEE Pulse</i>	4

science, medicine and surprisingly, chemical engineering (Figure 2). Pharmacology seems to be on the rise in recent years. It is expected that this landscape will continue to grow organically as new definitions arise and new applications of bioprinting are being developed in these research fields.

In conclusion, we expect the publishing landscape of

bioprinting research to experience an explosive change in next few years due to the participation of the new journals with strong presence of existing journals. Along with this dynamic growth, the editorial team of IJB will continue to drive bioprinting as a multi-disciplinary research field and a critical enabler in life sciences.

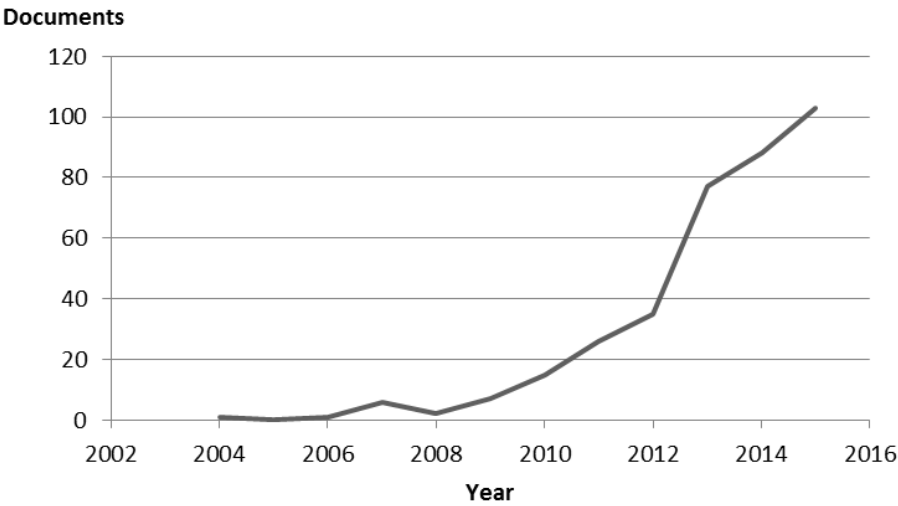


Figure 1. Number of documents (article or review) per year (data source: Scopus).

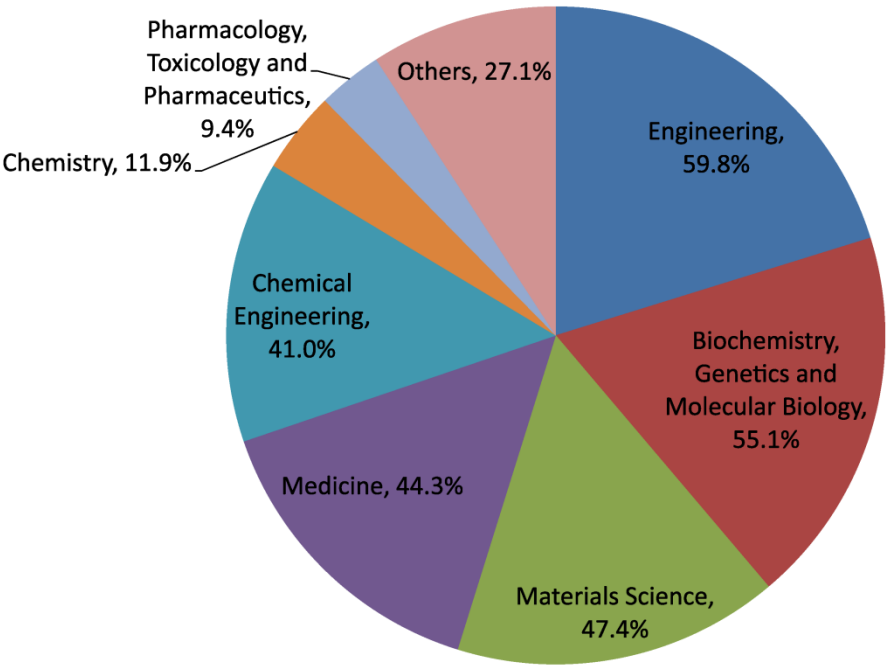


Figure 2. Bioprinting documents by subject area from 2004 to 2015 (data source: Scopus).