

附件2

高平教授团队与Advanced Materials期刊编辑部的往来信件

December 11th, 2021

Dear Chief Editor of the Advanced Materials

Re: Plagiarism of Manuscript with Reference: [doi:10.1002/adma.202107941](https://doi.org/10.1002/adma.202107941).

I wish to draw your attention to the above manuscript entitled: “Ultra-high Molecular Weight Polyethylene Lamellar-thin Framework on Square Meter Scale” for its infringements of published results from my research group at the Hong Kong University of Science and Technology (HKUST).

Before providing you with the data plagiarism details, I hereby declare my relationship with Runlai Li who is one of the co-corresponding authors of the manuscript ([doi:10.1002/adma.202107941](https://doi.org/10.1002/adma.202107941)). I am his supervisor for his degrees in Master of Science (2012-2013), PhD in Chemical Engineering (2013-2017), and postdoctoral researcher (2017-2019). He was under my supervision from 2012 to 2019. He went on to take a new postdoctoral research position in National University of Singapore in 2019 before joining Sichuan University in 2020.

I also wish to alert you that he is also being sued for an ongoing potential infringement of patents from my laboratory. The technology transfer center of HKUST is conducting the infringement investigation at the moment.

The attached lists the figures in the manuscript ([doi:10.1002/adma.202107941](https://doi.org/10.1002/adma.202107941)) and the counter part comparison with my group’s published figures in refereed journals, PhD theses of my other students, media announcements from HKUST as well as from our published papers in the online archives. It is noted that some of the figures in the manuscripts have some altered appearances with respect to color tones or scale bars; but being in my research group for nearly seven years, and a co-author, a co-inventor of patents of the nanofilm, he has access to many of the original data. It is also to be noted that he did not cite any of these publications. Further, we also are still pursuing a law suit involving him with respect to the theft of our polymer nanofilms samples.

I am coping this email to the administrators of HKUST for their record keeping and future follow up actions. I reserve the right to contact media to help protect academic professionalism and integrity.

I urge you to launch an independent investigation. I know the Advanced Materials only publishes original contributions. I refer to your publication policy as stipulated in: <https://onlinelibrary.wiley.com/page/journal/15214095/homepage/publication-ethics-guidelines>.

Yours sincerely,



Ping Gao (Dr)
Professor in Chemical and Biological Engineering
Director of the Advanced Membrane Centre
Acting Head of the Advanced Materials Thrust
HKUST

Plagiarism Details

Dr. Runlai Li's paper

Our previous disclosed work

Fig 1.

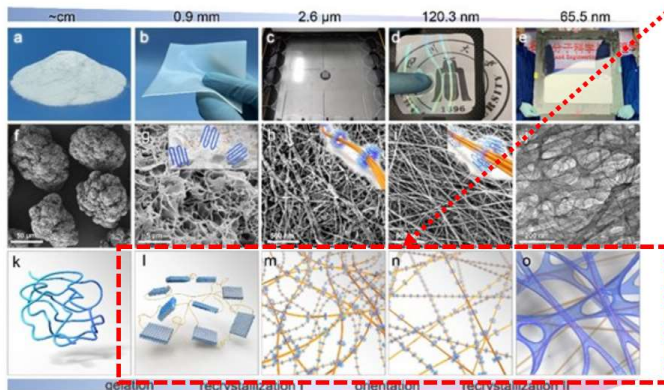
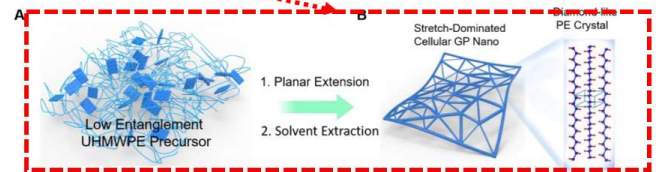


Figure 1. Preparation of LTF, divided into five stages: UHMWPE resin, gel, pre-stretched film (PSF), ultra-stretched film (USF) and LTF. They are demonstrated by (a-e) photographs, (f-i) SEM & (j) TEM, and (k-o) schematic illustrations, respectively.

The same ultrathin PE film preparation procedure



References: [1] – [3]

arXiv:2011.11414 <https://arxiv.org/abs/2011.11414> (Figure 1)

WO2019123019A2 <https://patents.google.com/patent/WO2019123019A2/en> (PCT patent)

US 2019/0267594 A1 <https://patents.google.com/patent/US20190267594A1/en> (US patent)



Reference: [4]

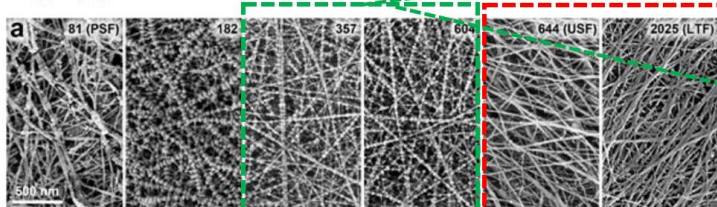
Li, R., Gao, P., *Global Challenges* 2017, 1, 1700020

DOI:org/10.1002/gch2.201700020

Dr. Runlai Li's paper

Our previous disclosed work

Fig 2(a)



WILEY-VCH

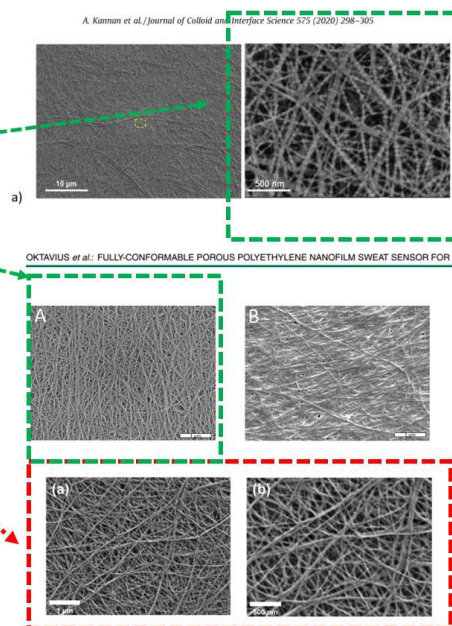


Figure 3.1 The surface morphologies of the UHMWPE membrane for membrane distillation. (a) Surface SEM morphology of UHMWPE membrane with magnification ×10000; (b) Surface SEM morphology of UHMWPE membrane with magnification ×40000.

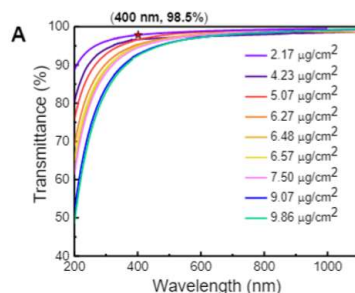
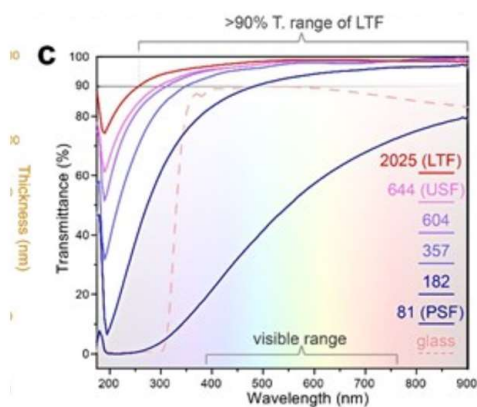
References: [5]
A. Kannan et al./ *Journal of Colloid and Interface Science* 575 (2020) 298–305
DOI:10.1016/j.jcis.2020.04.086

References: [6]
OKTAVIUS et al *IEEE Sensors Journal*, 2021 v. 21, 8861–8867
DOI:10.1109/JSEN.2021.3054989

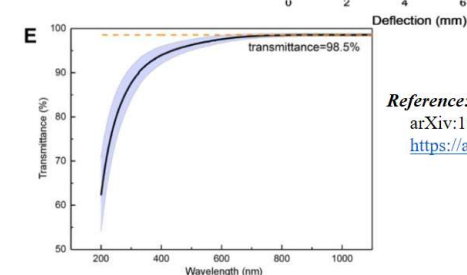
References: [7]
Qiao GU. PhD thesis of HKUST
See Document “Qiao GU Thesis” Page 39

Same UV-Vis performance but different description

Fig 2(c)



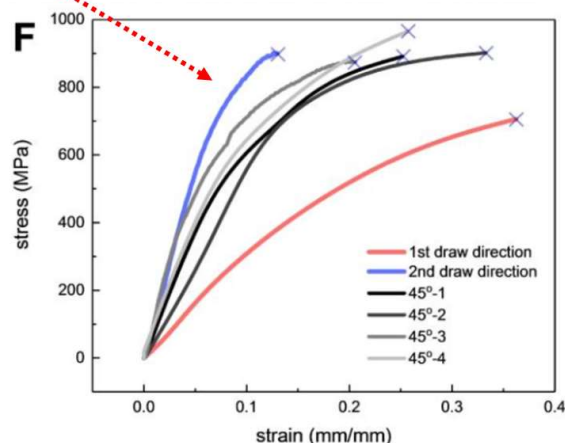
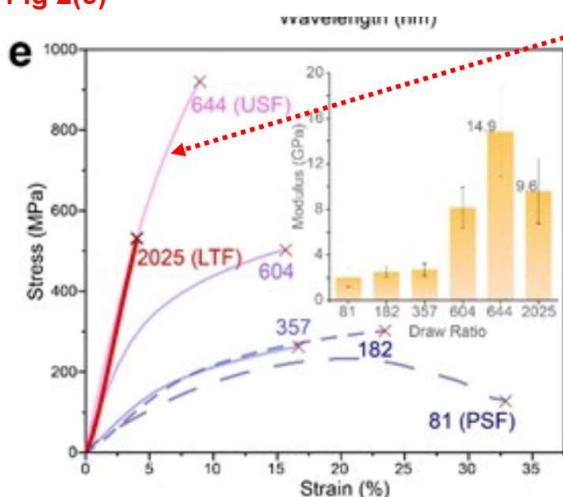
References: [1]
arXiv:2011.11414 (Figure 2A)
<https://arxiv.org/abs/1901.07952>



Reference: [8]
arXiv:1901.07952 (Figure 1E)
<https://arxiv.org/abs/1901.07952>

Similar tensile performance

Fig 2(e)



References: [8]
arXiv:1901.07952
<https://arxiv.org/abs/1901.07952> (Figure 2F)

Our Media Release

HKUST Researchers Develop the World's Strongest Polymer Nanomembrane

Showing Potential for Multiple Biomedical and Environmental Applications

2020-12-21

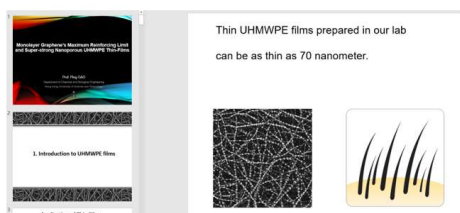


Researchers from the Hong Kong University of Science and Technology (HKUST) have developed an ultrathin polymer nanomembrane, which is not only 25 times stronger than stainless steel with the same mass, but is also extremely transparent, gas-permeable and water-proof with adjustable porous properties, making it suitable for use as wearable devices, medical protection, disinfection, electronics, solar cells and many other cutting-edge technologies.

Since the onset of the Covid-19 pandemic, the team led by Prof. GAO Ping, Professor of Chemical and Biological Engineering and Acting Head of the Advanced Materials Thrust at HKUST(GZ), has been studying how to build a transparent and breathable face mask with their novel advanced material. After months of efforts the team has finally produced a prototype with a 99 per cent filtration efficiency for virus, bacteria and particulate matters under tests in line with NIOSH N95 (NI95 respirator testing standard)2.

<https://hkust.edu.hk/news/research-and-innovation/hkust-researchers-develop-worlds-strongest-polymer-nanomembrane>

Our Public Presentation



See Document "Presentation"
In this presentation we claimed our research output on producing UHMWPE nanofilm with thickness of 70 nm.

YouTube Seminar



A online lecture give by **Prof. Malcolm Mackley** in 2018 from Cambridge University

<http://www.malcolmmackley.com/unexpected-outcomes-in-science-and-technology/>

References:

- [1] P. Gao, Q. Gu, J. Li, R. Li, Q. Zhang, L-T. Weng, T. Zhao, T. X. Yu, M. Shao, K. Amine, *arXiv* **2021**. <https://arxiv.org/abs/2011.11414>
- [2] P. Gao, J. Li, R. Li, Q. Zhang, Q. Gu, *A Method for the Synthesis of Flexible Multifunctional High-Voidage Ultrathin PE Membranes.*, **2018**, WO 2019/123019 A2.
<https://patents.google.com/patent/WO2019123019A2/en>
- [3] P. Gao; T. Zhao, R. Li, J. Li; Q. Gu, *Nanoporous Ultrahigh Molecular Weight Polyethylene Membrane*, **2019**, US 2019/0267594 A1.
<https://patents.google.com/patent/US20190267594A1/en>
- [4] R. Li, P. Gao, *Glob. Challenges* **2017**, 1, 1700020. [DOI:org/10.1002/gch2.201700020](https://doi.org/10.1002/gch2.201700020)
- [5] A. Kannan, P. Hristov, J. Li, J. Zawala, P. Gao, G. G. Fuller, *J. Colloid Interface Sci.* **2020**, 575, 298. [DOI:10.1016/j.jcis.2020.04.086](https://doi.org/10.1016/j.jcis.2020.04.086)
- [6] A. K. Oktavius, Q. Gu, N. Wihardjo, O. Winata, S. W. Sunanto, J. Li, P. Gao, *IEEE Sens. J.* **2021**, 21, 8861. [DOI:10.1109/JSEN.2021.3054989](https://doi.org/10.1109/JSEN.2021.3054989)
- [7] Q. Gu, *Superstrong Ultrahigh Molecular Weight Polyethylene Membrane with Tunable Pore Structure for Separation Processes — Seawater Desalination and Air Purification*, [Doctoral dissertation, Hong Kong University of Science and Technology], **2021**.
https://drive.google.com/file/d/16fB45gSkaPfT_ce1YBePEt0TOyyj2sOX/view?usp=sharing
- [8] J. Li, R. Li, Q. Gu, Q. Zhang, T. X. Yu, P. GAO, *arXiv* **2019**. <https://arxiv.org/abs/1901.07952>
- [9] J. Li, *Preparation and Characterization of Multifunctional Porous UHMWPE Nanomembranes*, [Doctoral dissertation, Hong Kong University of Science and Technology], **2020**.
<https://drive.google.com/file/d/1Z5WHM8lpqUDSGdjxh5XIcM5gSjYLeNeN/view?usp=sharing>

Ping GAO

From: Ping GAO
Sent: Monday, December 20, 2021 3:22 PM
To: ADVMAT
Cc: advmat@wiley-vch.de; imigeditorial@wiley.com; jlenders@wiley.com; qguab@ust.hk; Che Ting CHAN; Nancy IP
Subject: RE: Plagiarism of Manuscript with Reference: doi:10.1002/adma.202107941

Dear Professor Hammer,

Thank you for your email and your emphasis on your seriousness regarding your journal's policy towards plagiarism concerns.

First, I wish to stress that the accepted manuscript (adma.202107941) contains data from my other research students' PhD theses as well as literatures published in my research group. We demand the paper be removed from the journal.

Second, I wish to draw your attention to the fact that Runlai Li is also being investigated for patent conflict regarding the polymer nanomembrane with our patent, which was featured under the USPTO website on 4 July 2019: <http://ct.moreover.com/?a=39612275146&p=1gw&v=1&x=dT2IFaO4tkFpXXCWPcg2-A>. For your information, the conflicting Chinese patent, published in August 2021, (the accepted manuscript was based on) was filed by Runlai LI through Sichuan University.

I reserve the rights to contact media to protect academic professionalism and integrity.

Best regards,

Ping Gao (Dr)

Professor in Chemical and Biological Engineering

Director of the Advanced Membrane Centre

Acting Head of the Advanced Materials Thrust

HKUST

From: ADVMAT <advmat@wiley-vch.de>
Sent: Thursday, December 16, 2021 10:49 PM
To: Ping GAO <kepgao@ust.hk>
Subject: Re: Plagiarism of Manuscript with Reference: doi:10.1002/adma.202107941

Dear Professor Gao,

We thank you for reaching out regarding your concerns associated with an article at Advanced Materials (adma.202107941) and we take those concerns very seriously.

Whenever there is a dispute over an article we must follow the publishing guidelines outlined through COPE, you can find them described here: [How to handle authorship disputes: a guide for new researchers | COPE: Committee on Publication Ethics](#)

In this case we will need to contact the authors of the Advanced Materials article to notify them of the situation. To do this, I ask for your consent to forward them the letter you sent outlining your concerns and your permission to notify them that you are the one who has made the allegations. Additionally, do you wish to be added as an author to the forementioned article or to have its publication removed? Once we have received your consent to contact the authors with your concerns, we will have to assess their response(s) and will keep an open line of communication with you as our investigation proceeds. Please note that our ideal resolution to a case like this is to have all parties involved agree on a solution. However, in the unfortunate situation that we cannot resolve the concerns then the

institution(s) of the publishing authors must be contacted and asked to conduct their own investigation. The decision from the formal investigation of the institution(s) would then determine this outcome.

Please provide the necessary consents at your earliest convenience and let me know if you have any questions about the process.

Bests,

Brenton Hammer, Ph.D.

Advanced Materials

Impact Factor (2021 Journal Citation Reports): 30.849

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From: Ping GAO <kepgao@ust.hk>

Sent: Wednesday, December 15, 2021 03:34

To: ADVMAT <advmat@wiley-vch.de>

Cc: ADVMAT <advmat@wiley-vch.de>; imigeditorial <imigeditorial@wiley.com>; Lenders, Jos <jlenders@wiley.com>

Subject: RE: Plagiarism of Manuscript with Reference: doi:10.1002/adma.202107941

 This is an external email.

Dear Professor Hammer,

Thank you for your email acknowledging the receipt of my email regarding the plagiarism incidence of the recently accepted article at Advanced Materials (adma.202107941).

It should be your journal's responsibility to ensure the authenticity of the data; I do not see why I should contact Sichuan University for their investigation.

Best regards,
Ping Gao (Dr)
Professor in Chemical and Biological Engineering
Director of the Advanced Membrane Centre
Acting Head of the Advanced Materials Thrust
HKUST

To: Ping GAO <kepgao@ust.hk>

Subject: Re: Plagiarism of Manuscript with Reference: doi:10.1002/adma.202107941

Dear Professor Gao,

We have received your email concerning the article that was recently accepted at Advanced Materials (adma.202107941) and are evaluating the evidence. Based on our policies, I strongly recommend that you contact Sichuan University with a formal complaint, as they are predominately responsible for a full investigation and decisions on ethical violations in this case. Additionally, for our investigation, can you please provide your consent to contact the authors of this article with the accusations and send them your "Letter to the Editor" so they can respond?

Bests,
Brenton Hammer, Ph.D.

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From: Ping GAO <kepgao@ust.hk>

Sent: Saturday, December 11, 2021 10:16

To: ADVMAT <advmat@wiley-vch.de>; jlenders@wiley-vch.de <jlenders@wiley-vch.de>; imigeditorial <imigeditorial@wiley.com>

Cc: Che Ting CHAN <phchan@ust.hk>; boip@ust.hk <boip@ust.hk>

Subject: Re: Plagiarism of Manuscript with Reference: doi:10.1002/adma.202107941

 This is an external email.

Dear Editor-in-Chief of the Advanced Materials,

I am writing this email to draw your attention to the above manuscript entitled: “Ultra-high Molecular Weight Polyethylene Lamellar-thin Framework on Square Meter Scale” for its infringements of published results from my research group at HKUST.

I am the research supervisor of one of the co-corresponding authors of this manuscript, Runlai Li. Runlai Li was under my supervision from 2012 to 2019 and during which period he did his MSc, PhD and postdoctoral research.

Please refer to the attached document for the details enlisting the data plagiarisms.

Yours sincerely,

Ping Gao (Dr)

Professor in Chemical and Biological Engineering

Director of the Advanced Membrane Centre

Acting Head of the Advanced Materials Thrust

HKUST