



# Retraction Note: On the Algorithmic Stability of Optimal Control with Derivative Operators

Tim Chen<sup>1</sup> · J. C.-Y. Cheng<sup>2,3</sup>

Published online: 16 December 2023

© Springer Science+Business Media, LLC, part of Springer Nature 2023

**Retraction to: *Circuits, Systems, and Signal Processing* (2020) 39:5863–5881**  
<https://doi.org/10.1007/s00034-020-01447-1>

The Editor in Chief has retracted this article after concerns over mathematical content, authorship and relevance of references. Additionally, there are concerns about overlaps with previously-published articles by the same authors [1, 2]. The authors did not respond to requests for an explanation or any correspondence about this retraction.

## References

1. T. Chen, B. Daleanu, J.Y. Chen, On the fractional optimal control problems with singular and non-singular derivative operators: a mathematical derive. *Sci. Rev.* **4**(12), 95–98 (2018). <https://doi.org/10.32861/sr.412.95.98>
2. T. Chen, S. Khurram, C.Y.J. Cheng, A relaxed structural mechanics and fuzzy control for fluid–structure dynamic analysis. *Eng. Comput.* **36**(7), 2200–2219 (2019). <https://doi.org/10.1108/EC-11-2018-0522>

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

---

The original article can be found online at <https://doi.org/10.1007/s00034-020-01447-1>.

---

✉ J. C.-Y. Cheng  
jc343965@gmail.com

Tim Chen  
timchen@tdtu.edu.vn

<sup>1</sup> AI LAB, Faculty of Information Technology, Ton Duc Thang University, Ho Chi Minh City, Vietnam

<sup>2</sup> Covenant University, 10 Idiroko Road, Canaan Land, Ota, Ogun State, Nigeria

<sup>3</sup> NAAM Research Group, King Abdulaziz University, 21589 Jeddah, Saudi Arabia