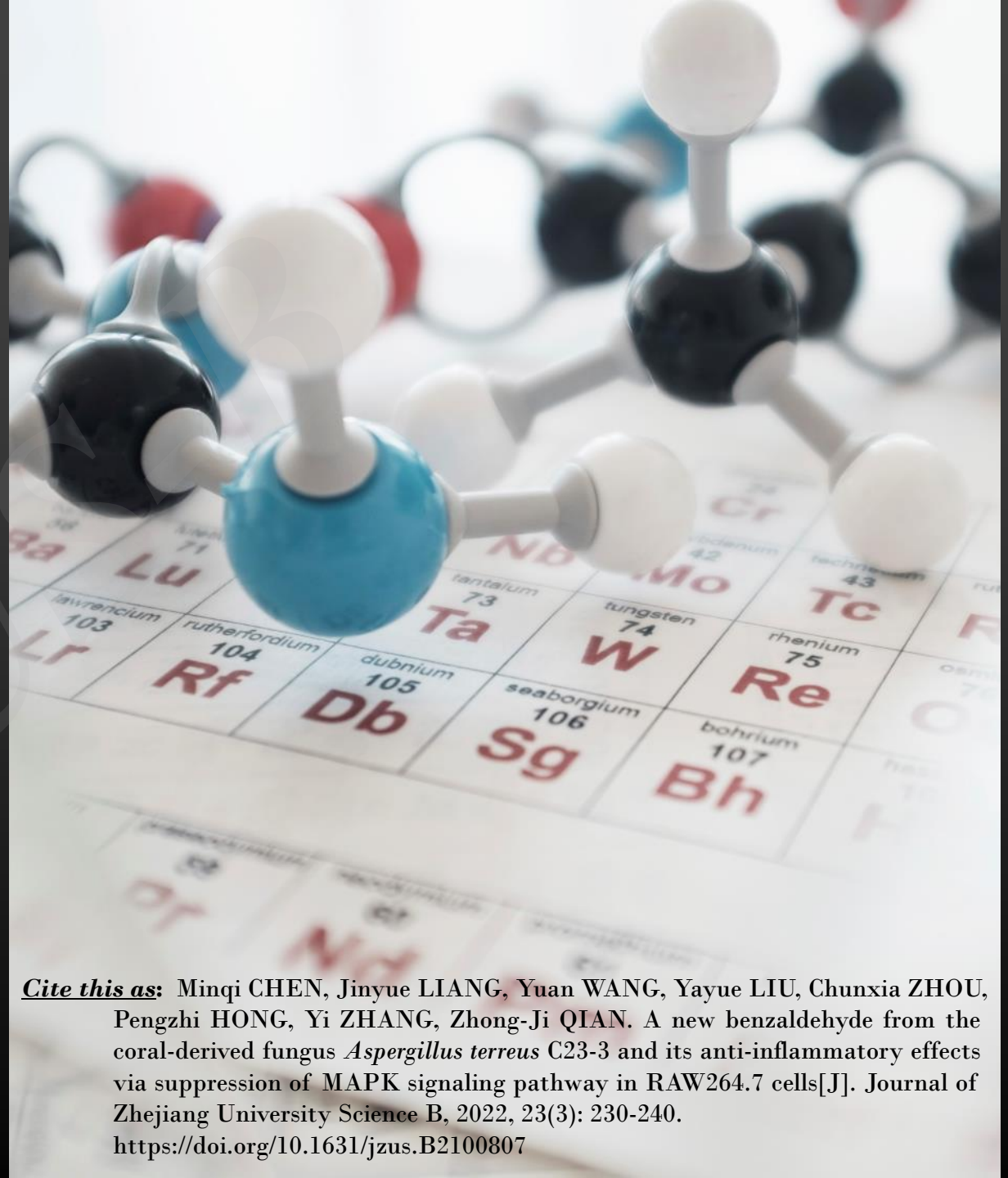
A new benzaldehyde from the coral-derived fungus *Aspergillus terreus* C23-3 and its anti-inflammatory effects via suppression of MAPK signaling pathway in RAW264.7 cell

Key words:
Benzaldehydes; Aspergillus terreus C23-3; Anti-inflammation; MAPK signaling pathway; RAW264.7



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Research Summary

- This study mainly focused on the anti-inflammation effect of two benzaldehydes in the following aspects:
  - Fermentation, extraction, and isolation
  - Structural identification
  - Production of NO, ROS, iNOS, COX-2, (IL)-6
  - the MAPKs (including JNK, ERK, and p38) and NF-κB signaling pathway

Innovation points

- A new compound ((S)-3-(2, 3-dihydroxy-3-methylfluore-4-hydroxybenzaldehyde) and a known natural product (4-hydroxy-3-(3-methyl-2-buten-1-yl)-benzaldehyde) were isolated from the fermentation broth of the coral-derived fungus Aspergillus terreus C23-3;
- The anti-inflammatory effects of these two benzaldehyde have not been reported.

