

## Ring-opening olefin metathesis of twisted amides: activation of amide bonds by C=C cleavage.

### Autorzy

Qun Zhao  
Roger Lalancette  
Roman Szostak  
Michał Szostak

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Selective C=C bond cleavage in twisted amides by ring-opening olefin metathesis (ROM) was accomplished. The reaction represents the third mechanism for ring opening of nonplanar amide bonds discovered. Adding to the facile hydrolytic cleavage of nonplanar N–C(O) amide bonds and  $\sigma$  N–C bond scission reactions, this reaction manifold engages a peripheral reactivity principle that hinges upon ring strain energy enforced by the twisted amide bond. Considering the wide utility of ring-opening olefin metathesis reactions in various aspects of chemistry, we anticipate that this ring-opening methodology will be of broad interest and could lead to the development of ROM reactions of twisted amides as a powerful synthetic tool.

### Słowa kluczowe

twisted amides, olefin metathesis, amide bonds, ring opening, ring-opening methathesis, ROMP

### Adres publiczny

<http://dx.doi.org/10.1021/acscatal.9b04033>

### Strona internetowa wydawcy

<https://www.acs.org/content/acs/en.html>