

## Peptidomimetics – An infinite reservoir of metal binding motifs in metabolically stable and biologically active molecules.

---

### Autorzy

Joanna Wątył

Adriana Miller

Henryk Kozłowski

Magdalena Rowińska-Żyrek

### Rok wydania

2021

### Czasopismo

Journal of Inorganic  
Biochemistry

### Numer woluminu

217

### Strony

111386/1-111386/17

### DOI

10.1016/j.jinorgbio.2021.111386

### Kolekcja

Naukowa

### Język

Angielski

### Typ publikacji

Artykuł

### Streszczenie

The involvement of metal ions in interactions with therapeutic peptides is inevitable. They are one of the factors able to fine-tune the biological properties of antimicrobial peptides, a promising group of drugs with one large drawback – a problematic metabolic stability. Appropriately chosen, proteolytically stable peptidomimetics seem to be a reasonable solution of the problem, and the use of D-,  $\beta$ -,  $\gamma$ -amino acids, unnatural amino acids, azapeptides, peptoids, cyclopeptides and dehydropeptides is an infinite reservoir of metal binding motifs in metabolically stable, well-designed, biologically active molecules. Below, their specific structural features, metal-chelating abilities and antimicrobial potential are discussed.

### Słowa kluczowe

Peptidomimetics, Antimicrobial peptides, Metal binding sites

### Adres publiczny

<http://dx.doi.org/10.1016/j.jinorgbio.2021.111386>

### Strona internetowa wydawcy

<http://www.elsevier.com>