

## Accepted Manuscript

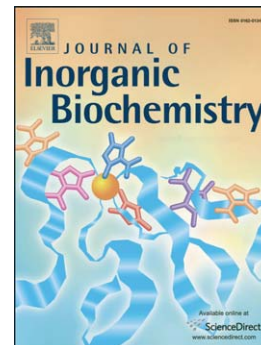
Tyrosine nitration in peptides by peroxynitrite generated *in situ* in a light-controlled platform: Effects of pH and thiols

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**Tyrosine nitration in peptides by peroxynitrite generated  
*in situ* in a light-controlled platform: Effects of pH and thiols**

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nitration

Highlights:

- Peroxynitrite was generated *in situ* within wells of a light-controlled platform
- A photoactive metal nitrosyl complex provides the optimal NO flux
- Effective tyrosine nitration in model peptides were demonstrated
- The platform allowed studies under different pH, CO<sub>2</sub> and thiol concentrations
- A cysteine neighbor strongly attenuates the extent of tyrosine nitration

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