

## Special Issue

# In-Depth Study of Carbon Nitrides: Synthesis, Composites and Catalysis

### Message from the Guest Editors

Since the pioneering work contributed by Domen and X.C. Wang, graphite-like carbon nitride (g-C<sub>3</sub>N<sub>4</sub>) has attracted intensive attention from global researchers of energy as well environmental fields due to its suitable visible light absorption, chemical stability, non-toxicity, straightforward synthesis, and versatility. Therefore, single or combined technologies such as photocatalysis, electrocatalysis, photo-electro-catalysis and thermal catalysis based on g-C<sub>3</sub>N<sub>4</sub> have obtained unprecedented innovation and application in many sub-fields: For example, in the field of energy, hydrogen evolution from pure water/seawater, CO<sub>2</sub> reduction to multi-carbon products, nitrogen fixation, hydrogen peroxide production and organic synthesis of fine chemicals. In the field of environment, the degradation and utilization of various harmful gases, water bodies, garbage solid wastes and micro-plastics, the inactivation of viruses and bacteria, and the recovery of toxic metal cations in water. In the biological field, tumor cell therapy based on g-C<sub>3</sub>N<sub>4</sub>, bacterial killing and biological fluorescence probe molecular application, etc.

### Guest Editors

Dr. Xiaolong Yang

Prof. Dr. Xibao Li

Dr. Shijie Li

### Deadline for manuscript submissions

closed (1 November 2023)



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*Catalysts*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[catalysts@mdpi.com](mailto:catalysts@mdpi.com)

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