

Carbon Reports

Special Issue: Synthesis and analysis of carbon materials based on the molecular-level approach

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Deadline of submission: 31 July, 2022

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Many carbon materials contain non-crystalline, disordered, and random structures which hamper exact structure analysis and make it difficult to understand the relation between their structures and functions at the molecular level. Therefore, classic carbon study has often relied on methodologies of engineering rather than science in many cases. However, many advanced methods have been developed recently such as synthesis of atomically designed carbon materials based on the methodology of organic chemistry, modeling of molecular-level structure of non-crystalline carbon materials by theoretical calculations, and ppm-level analysis of CHO. Such advanced materials, calculations, and analytical techniques enable precise control and analysis of carbon structures at molecular level, not only in low-dimensional nanocarbons but also three-dimensional carbon materials. The aforementioned new tide is expected to provide a paradigm shift in the carbon study towards atomic design of complicated carbon materials, yielding numerous innovations. To catch up the new tide of research in carbon materials, the editorial board of Carbon Reports is planning to publish a special issue, “Synthesis and analysis of carbon materials based on the molecular-level approach”, in December 2022. We welcome many submissions of relevant papers.

Some examples which accord to the scope of the special issue are shown below:

- (1) Synthesis of carbon materials with atomic/molecular-level structure control
- (2) Modelling or visualization of complex carbon structures
- (3) Advanced analysis methods of carbon materials at atomic/molecular level

Also, any article related to “Synthesis and analysis of carbon materials based on the molecular-level approach” is acceptable.

How to submit: Please prepare a manuscript in accordance with the “Author instruction”, and submit the manuscript file to tanso-edit@bunken.co.jp Please clearly describe in your email that you are submitting the manuscript to the special issue.

Type of manuscript: Any format is acceptable: Full-length paper, short communication, mini-review, mini-account, comprehensive review, and comprehensive account.

Deadline: 31 July, 2022

Peer-review: The manuscript will be subjected to our advanced review process in which reviewers provide constructive comments to improve your manuscript, rather than rejecting your manuscript.

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