
Symposium (Oral) | Symposium (technical) | Plasma controlled precursors pioneering life-science and material-science

[19p-B32-1~8]Plasma controlled precursors pioneering life-science and material-science

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Thu. Sep 19, 2019 1:30 PM - 5:15 PM B32 (B32)

△ : Presentation by Applicant for JSAP Young Scientists Presentation Award

▲ : English Presentation

▼ : Both of Above

No Mark : None of Above

3:25 PM - 3:55 PM

[19p-B32-5]Emerging heterogenic catalysis via plasma-generated reactive species

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Keywords:Plasma catalysis, vibrational excitation, Bigas

Heterogeneous catalysis under nonthermal plasma environment induces unique reaction pathways due to plasma-generated reactive species. Many ground-breaking phenomena such as surface reaction promotion at low temperature and reduction of activation energy have been reported so far: plasma catalysis research is rapidly expanding its scope over the interdisciplinary research field such as catalytic CVD of nanocarbon materials and low-temperature activation of alkane. This talk focuses on the fundamental aspect of the interaction between plasma-generated active species and heterogeneous catalysts. A potential application of plasma catalysis is also introduced.