Special Issue

Catalytic Conversion of Low Carbon Energy

Message from the Guest Editor

The utilization and enhancement of low carbon energetic species (c.a. C1 to C2 carbonaceous species) is the main task in the contemporary energetic cycle in human society, in which most processes are achieved via more than one catalytic step. To increase the efficiency of carbon species utilization, we must devote great effort to clarifying the optimized reaction process applied and to improving the specific process to some extent. Our aims in this Special Issue, entitled “Catalytic Conversion of Low Carbon Energy”, are to: first, discuss the optimal means of upgrading the low carbonaceous species, such as methane, methanol, CO2, ethanol, etc.; second, we want to elucidate the possible reaction mechanism of each process based on in situ, operando characterizations and kinetic studies etc. This Special Issue would contain both thermal reaction process and photo-/electronic reaction strategies. Hopefully, this will bring broad attention from related fields and assist researchers in optimizing their own reaction system in low carbonaceous species improvement efforts and push this specific topic forward.

Guest Editor

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