



Special Issue Reprint

## **Plasma for Energy and Catalytic Nanomaterials**

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The Special Issue "Plasma for Energy and Catalytic Nanomaterials" highlights the recent progress and advancements in the synthesis and applications of energy and catalytic nanomaterials by plasma. Compared with conventional preparation methods, plasma provides a fast, facile, and environmentally friendly method for synthesizing highly efficient nanomaterials. The synthesized nanomaterials generally show enhanced metal-support interactions, small-sized metal nanoparticles, specific metal structures, and abundant oxygen vacancies. The plasma method allows thermodynamically and dynamically difficult reactions to proceed at low temperatures due to the activation of energetic electrons. Despite the growing interest in plasma for energy and catalytic nanomaterials, the synthesis mechanisms of nanomaterials using plasma still remain obscure due to the complicated physical and chemical reactions that occur during plasma preparation. The Guest Editors and the MDPI staff are therefore pleased to offer this Special Issue to interested reader, including graduate and Ph.D. students, postdoctoral researchers, and the entire community interested in the field of nanomaterials. We share the conviction that the Issue can serve as a useful tool for updating the literature and to aid with the conception of new production and/or research programs. Further dedicated R&D advances are possible based on new instruments and materials under development.



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