



## Single-Ion Magnets: Design and Syntheses

Guest Editor:

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### Message from the Guest Editor

Dear Colleagues,

In the recent past, great efforts have been made to develop various strategies for the construction of new single-molecule magnets (SMMs) with high energy barriers and blocking temperatures. These great endeavors result in great and fast development of molecular nanomagnets. In particular, one of the most successful strategies is to design and synthesize SMMs with one metal center (known as single-ion magnets, SIMs). To date, a myriad of SIMs based on transition metal ions, lanthanide ions, and actinide ions have been reported. Some of them exhibit outstanding SMM behaviors, especially the Ln-SMMs. However, this field is still full of challenges, such as the lack of clarity with respect to the relationship between blocking temperatures and relaxation mechanisms, how to rationally design stable high-performance SIMs, etc. The Special Issue “**Single-Ion Magnets: Design and Syntheses**” proposed here aims to publish new results and perspectives from both synthetic and theoretical chemists to promote the development of SIMs.

Dr. Dong Shao  
*Guest Editor*

