



Kaifu Bian, Intel Corporation, has received a Materials Research Society (MRS) Postdoctoral Award "for advancing the understanding of nanoparticle assemblies under stress," and Nicholas E. Jackson, Argonne National Laboratory, has received the award "for foundational theoretical and computational contributions to the study of structure and transport in charged polymers and organic semiconductors."

Bian was a postdoctoral researcher in the Advanced Material Laboratories at Sandia National Laboratories, Albuquerque, under the guidance of Hongyou Fan. Previously, Bian completed his PhD degree in chemical



engineering and materials science at Cornell University in Ithaca. He currently works for Intel Corporation as a technology development engineer.

Bian's research focuses on the exploration of the relationships between processing, structure, and properties of self-assembled nanoparticles, especially under stress. During his postdoc research, he further advanced the stress-induced synthesis method for high-dimensional nanostructures, originally invented by Fan's group. His work has led to the fabrication of CdSe nanowires with high luminescence not achievable by traditional synthesis.

Jackson is a postdoctoral fellow in the Materials Science Division at Argonne

National Laboratory, advised by Juan de Pablo. In 2016, he received his PhD degree in chemistry from Northwestern University studying the formation of optoelectronic networks in organic semiconductors. He earned a BA degree in physics from Wesleyan University in 2011.

Jackson is interested in the multiscale modeling of soft matter, with a focus on optically, electronically, and ionically functional soft materials. His multiscale theoretical and computational research spans quantum mechanical, coarsegrained, and mesoscopic modeling techniques. Currently, his research concerns the development and application of hybrid machine learning and statistical mechanical methodologies to describe structural and conductivity phenomena in charged and semiconducting polymers.

The MRS Postdoctoral Award recognizes scholars who show exceptional promise, which may include excellence in scientific research, leadership, advocacy, outreach, or teaching during their postdoc assignment. MRS acknowledges the Jiang Family Foundation and MTI Corporation for their generous support of this award.



