

## Kenan Song

Arizona State University  
Ira A. Fulton Schools of Engineering  
6075 S. Innovation Way West, Technology Center,  
Room 151, Mail Code 2180, Mesa, AZ 85212

Email: [kenan.song@asu.edu](mailto:kenan.song@asu.edu)  
Office Phone: [1-480-727-2720](tel:1-480-727-2720)  
LinkedIn: [www.linkedin.com/in/songkenan](http://www.linkedin.com/in/songkenan)  
Web: <https://sites.google.com/site/kenansonglab/>

### Education and Work Experience

<b>Arizona State University (ASU)</b> , Tempe, AZ <i>Assistant Professor</i> in Engineering, The Polytechnic School	<b>September 2017</b>
<b>Massachusetts Institute of Technology (MIT)</b> , Cambridge, MA <i>Postdoc.</i> in Chemical Engineering & Materials Science and Engineering	<b>April 2017</b>
<b>Northeastern University</b> , Boston, MA <i>Ph.D.</i> in Mechanical Engineering	<b>December 2014</b>
<b>Northeastern University</b> , Shenyang, Liaoning, P. R. China <i>B.E.</i> in Engineering Mechanics	<b>July 2010</b>

### Research Interests

Develop fundamental knowledge concerning creation of new 3D printers, innovating design principles, building-up and characterizing filler-matrix interactions toward fabricating nanocomposite materials and systems, where their structural features are established through bottom-up or top-down means and material properties are capable of matching theoretical predictions. The research interests include Additive Manufacturing, Advanced Composites, Surface Science, Interface Engineering, Textile Engineering, and, Coating Technologies. Both experimental methods and simulation theories are used as study tools.

### Selected Publications

- Song, K.**; Chen, D.; Polak, R.; Rubner, M. F.; Cohen, R. E.; Askar, K. A., *Enhanced Wear Resistance of Transparent Epoxy Composite Coatings with Vertically Aligned Halloysite Nanotubes*. ACS Appl. Mater. Interfaces 2016, **8 (51)**, 35552-35564. DOI: [10.1021/acsami.6b11872](https://doi.org/10.1021/acsami.6b11872)
- Song, K.**; Polak, R.; Chen, D.; Rubner, M. F.; Cohen, R. E.; Askar, K. A., *Spray-Coated Halloysite-Epoxy Composites: A Means to Create Mechanically Robust, Vertically Aligned Nanotube Composites*. ACS Applied Materials and Interfaces 2016, **8(31)**, 20396–20406. DOI: [10.1021/acsami.6b06174](https://doi.org/10.1021/acsami.6b06174)
- Song, K.**; Zhang, Y.; Meng, J.; Minus, M.L. *Spectral Analysis of Lamellae Evolution and Constraining Effects Aided by Nano-carbons: A Coupled Experimental and Simulation Study*. Polymer 2015, **75**, 187-198. <http://dx.doi.org/10.1016/j.polymer.2015.08.032>
- Song, K.**; Zhang, Y.; Minus, M.L. *Polymer Interphase Self-Reinforcement and Strengthening Mechanisms in Low-loaded Nano-composite Fibers*, Macromolecular Chemistry and Physics 2015, **216(12)**, 1313-1320. DOI: [10.1002/macp.201500011](https://doi.org/10.1002/macp.201500011)
- Song, K.**; Zhang, Y.; Meng, J.; Green, E.C.; Tajaddod, N.; Li, H.; Minus, M.L. *Structural Polymer-based Carbon Nanotube Composite Fibers: Understanding the Processing-Structure-Performance Relationship*, Materials 2013, **6(6)**, 2543-2577. doi: [10.3390/ma6062543](https://doi.org/10.3390/ma6062543)
- Song, K.**; Zhang, Y.; Meng, J.; Minus, M.L. *Lubrication of Poly(vinyl alcohol) Chain Orientation by Carbon Nano-Chips in Composite Tapes*, Journal of Applied Polymer Science 2012, **127(4)**, 2977-2982. DOI: [10.1002/app.37963](https://doi.org/10.1002/app.37963)