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Name	Yan Yin	
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<h2>Invited Keynote Lecture</h2>		
Presentation Title	<b>Design of transition metal-nitrogen-carbon catalyst layer for anion exchange membrane fuel cell</b>	
Abstract (Approximately 200 words)	<p>Pt/C is the mainstream catalyst for fuel cells and is commercially used due to its highly electrocatalytic activity for the oxygen reduction reaction (ORR). However, the high cost and scarcity of Pt remain great challenges for large-scale commercial applications of fuel cell. Developing highly efficient non-noble catalysts for oxygen reduction reaction (ORR) is an urgent requirement for reducing fuel cell cost. As a hot spot material, zeolitic imidazolate frameworks (ZIFs) are being extensively studied as the precursors for synthesizing highly reactive catalysts, due to the diversity of metal-nitrogen-carbon as well as controllability of porous structure. Great progress has been achieved on the oxygen reduction activity in alkaline environment, with much effort having been devoted to the design of active chemical structures and the increase in active site density. When these catalysts are applied to the anion exchange membrane fuel cell (AEMFC), beside their high reactivity, the mass transfer property within the catalyst layer (CL) is also of high significance for AEMFC performance, especially at high current density operation. Here, we report the recent work in State Key Laboratory of Engines (SKLE) of China focusing on the non-noble catalysts layer to improve the AEMFC performance, including the design of nano-structured transition metal-nitrogen-carbon catalyst as well as controllable construction of high-performance CLs.</p>	
Biographical Sketch (Approximately 200 words)	<p>Dr. Yan Yin is working at State Key Laboratory of Engines (SKLE) at Tianjin University, China. She received her Ph.D. in 2003 from Yamaguchi University, Japan, in the field of Symbiotic Environmental Systems Engineering. Dr. Yin's research interests include fuel cells; advanced membrane materials; renewable energy; gas separation; hydrogen economy, etc. She holds 10+ international patents and has published about 100 papers including articles in Nature Materials, Nature Communications, Energy &amp; Environmental Science, etc., with nearly 3000 citations and an H-index of 33. She has been one of the Chinese Most Cited Researchers 2019 by Elsevier (2020).</p>	