

# Faculty Profile

Xiaoming Wang, Professor



2024 - , Professor, Purdue University

2019 - 2024, Associate Professor, Purdue University, USA

2014 - 2019, Assistant Professor, Purdue University, USA

2013 - 2014, Visiting Assistant Professor, Purdue University, USA

2008 - 2012, Consultant, Hong Kong Productivity Council, Hong Kong

2006 - 2008, Engineer, K B Alloys Inc. Kentucky USA

2005 - 2006, Consultant, Hong Kong Productivity Council, Hong Kong

2002 - 2005, Postdoctoral Researcher, McGill University, Canada

2001 - 2002, Research Scientist, Alcan International Ltd. Quebec Canada

2001, Research Associate, École Polytechnique Montréal, Montreal Canada

1989 - 1992, Engineer, First Automobile Group Co. China

# Research Introduction

Combat strength-ductility trade off for light Metals

## Challenge

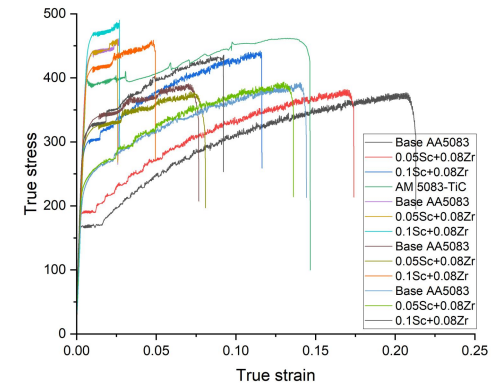
- High strength and high ductility aluminum alloys for Giga casting
- High strength and high ductility aluminum alloys for additive manufacturing

## Innovation

- US Patent 11242582
- International (PCT) Patent 11,390,824 B2.
- US Patent App. 18/600,506

## Solution

- Increase the fluidity both intrinsically and extrinsically
- Nanoparticle reinforced aluminum alloy composites



## Impact Areas

- Integration of lightweight structural components for **transportation** and **aerospace** industries