Research outputs:

Experimental investigation on ultimate strength and failure response of composite box beams used in wind turbine blades
Research output: Research - peer-review › Journal article – Annual report year: 2018

Fracture of wind turbine blades in operation-Part I: A comprehensive forensic investigation
Research output: Research - peer-review › Journal article – Annual report year: 2018

Experimental investigation on structural collapse of a large composite wind turbine blade under combined bending and torsion
Research output: Research - peer-review › Journal article – Annual report year: 2017

Collapse of a 47-meter composite blade under combined bending and torsion in a full-scale static test
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Revisiting the structural collapse of a 52.3 m composite wind turbine blade in a full-scale bending test: Structural collapse of a 52.3 m composite wind turbine blade
Research output: Research - peer-review › Journal article – Annual report year: 2017

Structural degradation of a large composite wind turbine blade in a full-scale fatigue test
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2017

Structural integrity of wind turbines impacted by tropical cyclones: A case study from China
Research output: Research - peer-review › Conference article – Annual report year: 2016

Structural failure analysis of wind turbines impacted by super typhoon Usagi
Chen, X. & Xu, J. Z. 1 Feb 2016 In : Engineering Failure Analysis. 60, p. 391-404
Research output: Research - peer-review › Journal article – Annual report year: 2016

Failure investigation on a coastal wind farm damaged by super typhoon Usagi: A forensic engineering study
Chen, X., Li, C. & Xu, J. 2015 In : Journal of Wind Engineering and Industrial Aerodynamics. 147, p. 132-142
Research output: Research - peer-review › Journal article – Annual report year: 2015

Post-mortem study on structural failure of a wind farm impacted by super typhoon Usagi
Research output: Research - peer-review › Paper – Annual report year: 2015

Failure test and finite element simulation of a large wind turbine composite blade under static loading
Research output: Research - peer-review › Journal article – Annual report year: 2014
Numerical analysis and experimental investigation of wind turbine blades with innovative features: Structural response and characteristics
Research output: Research - peer-review › Journal article – Annual report year: 2014

Preliminary failure investigation of a 52.3 m glass/epoxy composite wind turbine blade
Research output: Research - peer-review › Journal article – Annual report year: 2014

Structural performance of a glass/polyester composite wind turbine blade with flatback and thick airfoils
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Experimental Study on CFRP-bonded Steel Plates with Thickness Reduction using Underwater Epoxy
Research output: Research - peer-review › Journal article – Annual report year: 2012

Minimum thickness of welding patches to recover structural performance of steel pipe piles under compression
Research output: Research - peer-review › Journal article – Annual report year: 2012

Tensile and Compressive Test on Thickness-Reduced Steel Plate Repaired by CFRP Strand Sheet and Underwater Epoxy with Bond Defects
Research output: Research - peer-review › Paper – Annual report year: 2012

Compression behaviors of thickness-reduced steel pipes repaired with underwater welds
Research output: Research - peer-review › Journal article – Annual report year: 2011

Evaluation of repair design on corrosion-damaged steel pipe piles using welded patch plates under compression
Chen, X., Kitane, Y. & Itoh, Y. 2011 In : Journal of Structural Engineering. 57A
Research output: Research - peer-review › Journal article – Annual report year: 2011

Mechanical Properties of Fillet Weld Joints by Underwater Wet Welding in Repairing Corrosion-Damaged Offshore Steel Structures
Chen, X. & Kitane, Y. 2010 In : Journal of Structural Engineering. 56A
Research output: Research - peer-review › Journal article – Annual report year: 2010

Experimental study on strength and ductility of underwater fillet welds in repairing offshore steel structures
Research output: Research - peer-review › Paper – Annual report year: 2009

Projects:

Verification of Structural Properties for Bend-Twist Coupled Wind Turbine Blades
Tiedemann, M. M., Branner, K., Bode, J. & Chen, X.
Industrial PhD
01/03/2018 → 28/02/2021
Project: PhD

CASMaT: Villum Center for Advanced Structural and Material Testing
Activities:

**Structural degradation of a large composite wind turbine blade in a full-scale fatigue test**
Chen, X. (Speaker)
8 Nov 2017
Activity: Talks and presentations › Conference presentations