

Department of Technology & Environmental Design

Graduate Student Research Titles

2012

AUTHOR	TITLE
Christopher Pike	<i>A Performance Analysis of Three Types of Solar Thermal Collectors Under Direct and Diffuse Solar Radiation</i>
Doug Willson	<i>A Comparison of the Performance of ETFE-glazed Solar Thermal Collectors to Standard Glass-glazed Counterparts: A Case Study</i>
Jacob Florence	<i>The Use of E85 as a Replacement for Methanol in Base-Transesterification Biodiesel Production</i>
Jay Schulte	<i>Human-Powered Electrical Generation Using a Bicycle Trainer</i>
Chelsea Royall	<i>An Analysis of Entries in the U.S. Department of Energy's Solar Decathlon 2011 With a Focus on Cost-Benefit Assessment of Wall Assemblies (THESIS)</i>
Justin Hackler	<i>Energy Consumption in Vacation Homes in the North Carolina High Country</i>
Kacey Hoover	<i>Power Purchase and Rate Structure Options for Commercial Customer Photovoltaic Systems</i>
Matt Allenbaugh	<i>Wind Energy in Western North Carolina: A Visual Impact Assessment</i>
Nathan Culver	<i>Examining Energy Flows and Practices of Small Vineyards and Wineries in North Carolina: A Case Study</i>
Robert Kardos	<i>Use of a Mobile Solar PV Unit to Provide Temporary On-site Power at Residential New Home Construction Sites</i>
Robin Delarm-Neri	<i>Energy Modeling of Low-Cost Houses in Colder Climates in South Africa (THESIS)</i>
Stacy Moore	<i>The Effect of PV-Powered Attic Vent Fans on Attic Temperatures: A Case Study</i>
Tak Fu Chan	<i>A Fuel-Economy Study Comparing Pork Fat Biodiesel, Used Cooking Oil Biodiesel, and Petroleum Diesel</i>

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Tyler Davidson	<i>Measuring the Effectiveness of MPG Driver Support Tool Presence in Improving Automobile Fuel Efficiency</i>
Brandon Cox	<i>Flush Roof-Mounted Photovoltaics: The Roof Assembly and Photovoltaic System Performance</i>
Renee Blacken	<i>Composting of Food Waste from Locally-Owned Food Service Businesses in Boone, North Carolina: A Feasibility Study</i>
Muhammad Sabry	<i>Determining the Accuracy of Solar Trackers (THESIS)</i>
Rebecca Hobden	<i>Effectiveness of Ultrafiltration on the Recovery and Reuse of <i>Thermomyces langiunosa</i> in the Production of Biodiesel (THESIS)</i>
Adeyemi Serrano	<i>A Comparison of the Thermal Emittance Characteristics of Selected Solar Thermal Collector Coating Materials</i>
William Pflieger, Jr.	<i>Quantification of ENERGY STAR Qualification for New Homes: An Investigation of Market Impacts (THESIS)</i>
Jamie Trowbridge	<i>Bench-Scale Analysis of Anaerobic Digestion to Treat Brewery Waste</i>
Steve Sciara	<i>Characterizing Electrical Output of Sanyo HIT 195 Bifacial Photovoltaic Modules by Altering Reflective Material Below the Lower Face Absorptive Cells (THESIS)</i>