

**Proceedings of ASME 2022
41st International Conference on
Ocean, Offshore & Arctic Engineering**

(OMAE2022)

Volume 8

**June 5-10, 2022
Hamburg, Germany**

Conference Sponsor
Ocean, Offshore and Arctic
Engineering Division

THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS

Two Park Avenue * New York, N.Y. 10016

© 2022, The American Society of Mechanical Engineers, 2 Park Avenue, New York, NY 10016, USA
(www.asme.org)

All rights reserved. Printed in the United States of America. Except as permitted under the United States Copyright Act of 1976, no part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of the publisher.

INFORMATION CONTAINED IN THIS WORK HAS BEEN OBTAINED BY THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS FROM SOURCES BELIEVED TO BE RELIABLE. HOWEVER, NEITHER ASME NOR ITS AUTHORS OR EDITORS GUARANTEE THE ACCURACY OR COMPLETENESS OF ANY INFORMATION PUBLISHED IN THIS WORK. NEITHER ASME NOR ITS AUTHORS AND EDITORS SHALL BE RESPONSIBLE FOR ANY ERRORS, OMISSIONS, OR DAMAGES ARISING OUT OF THE USE OF THIS INFORMATION. THE WORK IS PUBLISHED WITH THE UNDERSTANDING THAT ASME AND ITS AUTHORS AND EDITORS ARE SUPPLYING INFORMATION BUT ARE NOT ATTEMPTING TO RENDER ENGINEERING OR OTHER PROFESSIONAL SERVICES. IF SUCH ENGINEERING OR PROFESSIONAL SERVICES ARE REQUIRED, THE ASSISTANCE OF AN APPROPRIATE PROFESSIONAL SHOULD BE SOUGHT.

ASME shall not be responsible for statements or opinions advanced in papers or . . . printed in its publications (B7.1.3). Statement from the Bylaws.

For authorization to photocopy material for internal or personal use under those circumstances not falling within the fair use provisions of the Copyright Act, contact the Copyright Clearance Center (CCC), 222 Rosewood Drive, Danvers, MA 01923, tel: 978-750-8400, www.copyright.com.

Requests for special permission or bulk reproduction should be addressed to the ASME Publishing Department, or submitted online at: <https://www.asme.org/publications-submissions/journals/information-for-authors/journalguidelines/rights-and-permissions>

ISBN: 978-0-7918-8593-2

CONTENTS

Proceedings of ASME 2022 41st International Conference on Ocean, Offshore & Arctic Engineering OMAE2022 Volume 8

OCEAN RENEWABLE ENERGY

Current and Tidal Energy

- OMAE2022-78417** V008T09A001
The Relationship Between Reliability and Environmental Impact in Tidal Stream
Turbine Deployments
Stuart Walker, Philipp Thies, and Lars Johannig
- OMAE2022-79114** V008T09A002
Fatigue Life Evaluation of a Tidal Turbine Blade: From Simulations Using BEMT/FEM
and CFD/FEM Couplings to Full-Scale Test
*Stéphane Paboeuf, Meryem Guisser, Sébastien Loubeyre, Peter Davies, Maël
Arhant, Nicolas Dumergue, and Erwann Nicolas*
- OMAE2022-79348** V008T09A003
Joint Extremes of Waves and Currents at Tidal Energy Sites in the English Channel
Ed B. L. Mackay and Jon P. Hardwick
- OMAE2022-80245** V008T09A004
Flow-Induced Vibration Marine Current Energy Harvesting Using a Centrally-Pivoted
Cylinder
Brad Stappenbelt
- OMAE2022-80276** V008T09A005
Hydrodynamic Performance of a Vertical-Axis Tidal Current Turbine in Surge Motion
Using a 2-D Vortex Panel Model
Federica Perassi, Antonio Jarquin Laguna, and Carlos Simao Ferreira
- OMAE2022-81006** V008T09A006
Control Co-Design of a Hydrokinetic Turbine With Open-Loop Optimal Control
*Boxi Jiang, Mohammad Reza Amini, Yingqian Liao, Joaquim R. R. A. Martins, and
Jing Sun*
- OMAE2022-81210** V008T09A007
Power Production From a Hydrokinetic Device: Mass of Water Turbine
Azin Lamei, Masoud Hayatdavoodi, and Stuart Moir
- #### Hybrids and Floating Solar Energy
- OMAE2022-78762** V008T09A008
Wind Parameters Effects on Floating Solar Array Design – Case Study: Japan’s
Largest Floating Solar Array
Amir Honaryar, Madjid Karimirad, Arash Abbasnia, and Trevor Whittaker
- OMAE2022-79728** V008T09A009
The Development of a Time-Domain BEM to Investigate Dynamics of a Floating Solar
Platform in Nonlinear Wave Regimes
Arash Abbasnia, Madjid Karimirad, Gautam Baruah, and Trevor Whittaker
- OMAE2022-79732** V008T09A010
Numerical Simulation of Nonlinear Wave Interaction With Floating Solar Platforms
With Double Tubular Floaters Using Viscous Flow Model
*Gautam Baruah, Madjid Karimirad, Arash Abbasnia, Pauline MacKinnon, Nabin
Sarmah, and Abdolmajid Moghtadaei*

Hydrogen and Energy Storage

OMAE2022-78138 **V008T09A011**

Investigating the Increase in Energy Storage Density of Subsea Hydro-Pneumatic Accumulators Using a Compressible Fluid Undergoing Phase Change

Charise Cutajar, Tonio Sant, Luke J. Briffa, and Daniel Buhagiar

OMAE2022-80422 **V008T09A012**

Subsea Buoyancy and Gravity Energy Storage System for Deep-Water Applications: A Preliminary Assessment

Andre R. Novgorodcev, Jr., Frank Mols, and Antonio Jarquin Laguna

Offshore Wind Energy

OMAE2022-78095 **V008T09A013**

Tow Out Calculations for Floating Wind Turbines

A. P. Crowle and P. R. Thies

OMAE2022-78288 **V008T09A014**

Wake Interaction Between Two Floating Offshore Wind Turbines With Blade Deformation

Yang Huang, Qing Xiao, and Decheng Wan

OMAE2022-78352 **V008T09A015**

A Review of End-of-Life Decision Making for Offshore Wind Turbines

David Boyd, Madjid Karimirad, Vinayagamoothy Sivakumar, Soroosh Jalilvand, and Cian Desmond

OMAE2022-78552 **V008T09A016**

Effect of Protuberances at the Blade Trailing Edge of a Vertical Axis Wind Turbine

M. Somoano and F. J. Huera-Huarte

OMAE2022-78666 **V008T09A017**

Analysis of a Hybrid Mooring System Concept for a Semi-Submersible Wind Turbine in Intermediate Water Depth Under Operational, Extreme, and Yaw Error Conditions

Qun Cao, Erin E. Bachynski-Polić, Zhen Gao, Longfei Xiao, Zhengshun Cheng, and Mingyue Liu

OMAE2022-78673 **V008T09A018**

The Application of Semi-Analytical Diffraction Formulas to Predict Second-Order Dynamic Response of a TLP Floating Wind Turbine in Monochromatic Waves

Elie Ronge, Christophe Peyrard, Vengatesan Venugopal, Qing Xiao, and Lars Johanning

OMAE2022-78715 **V008T09A019**

Impact of Rotor Solidity on the Design Optimization of Floating Vertical Axis Wind Turbines

Ju Gao, D. Todd Griffith, Mohammad Jafari, Shulong Yao, and Faraz Ahsan

OMAE2022-78808 **V008T09A020**

Conceptual Design of a Prestressed Concrete Spar Floater Supporting a 10 MW Offshore Wind Turbine

Wichuda Munbua, Muhammad S. Hasan, Edgard B. Malta, Rodolfo T. Gonçalves, Chikako Fujiyama, and Koichi Maekawa

OMAE2022-78816 **V008T09A021**

Conceptual Design of a Concrete Multi-Column Floating Platform Supporting a 10 MW Offshore Wind Turbine

Muhammad S. Hasan, Wichuda Munbua, Edgard B. Malta, Rodolfo T. Gonçalves, Chikako Fujiyama, and Koichi Maekawa

OMAE2022-78877 **V008T09A022**

LQR Optimal Control of Two-Rotor Wind Turbine Mounted on Spar-Type Floating Platform

Omar El Beshbichi, Yihan Xing, and Muk Chen Ong

OMAE2022-78929	V008T09A023
Influence of Aerodynamic Loads on a Dual-Spar Floating Offshore Wind Farm With a Shared Line in Parked Conditions <i>Guodong Liang, Zhiyu Jiang, and Karl Merz</i>	
OMAE2022-78985	V008T09A024
On the Real Time Hybrid Modelling of Floating Offshore Wind Turbine Using Ducted Fan(s) <i>Alexandre Cinello, François Pétrié, Benjamin Rousse, and Cédric Le Cunff</i>	
OMAE2022-79006	V008T09A025
Simulation of VIM of an Offshore Floating Wind Turbine <i>Elizabeth Passano, Guttorm Grytøyr, Herbjørn Haslum, Halvor Lie, and Decao Yin</i>	
OMAE2022-79081	V008T09A026
A Three Degrees of Freedom Vibration Model for a Partially Installed Wind Turbine <i>Andreas F. Haselsteiner, Aljoscha Sander, and Klaus-Dieter Thoben</i>	
OMAE2022-79109	V008T09A027
Interaction of Offshore Support Vessel With Adjacent Offshore Wind Turbine During Maintenance Operation <i>Xiudi Ren, Longbin Tao, Martin Nuernberg, and Iman Ramzanpoor</i>	
OMAE2022-79124	V008T09A028
Influence of the Semi-Submersible Platform Flexibility on the Dynamic Response of the Wind Turbine <i>Sofya Sizova, Elise Maillot, Suzanne Moreau, and Marie Féron</i>	
OMAE2022-79155	V008T09A029
FRyFAST : A Coupling Between FRyDoM and OpenFAST for the Simulation of Floating Offshore Wind Turbines With High Complexity Platforms <i>Camille Chauvigné, Lucas Letournel, François Rongère, Pierre-Yves Guillaume, Natalia Castro Casas, Benjamin Maréchal, and Sofien Kerkeni</i>	
OMAE2022-79203	V008T09A030
A Statistical Model of Motion Maxima of Offshore Wind Turbine Components During Installation <i>Lena Ströer, Andreas F. Haselsteiner, Aljoscha Sander, and Klaus-Dieter Thoben</i>	
OMAE2022-79230	V008T09A031
Modelling Aerodynamics of a Floating Offshore Wind Turbine Using the Overset Mesh Solver In OpenFOAM <i>Zaibin Lin, Ling Qian, Michele Sergio Campobasso, Wei Bai, Yang Zhou, and Zhihua Ma</i>	
OMAE2022-79248	V008T09A032
Hydrodynamic Performance of an Innovative Semisubmersible Platform With Twin Wind Turbines <i>Mujahid Elobeid, Longbin Tao, David Ingram, Ajit C. Pillai, Pedro Mayorga, and Jan Erik Hanssen</i>	
OMAE2022-79265	V008T09A033
Probabilistic Assessment of the Effect of Bolt Pre-Load Loss Over Time in Offshore Wind Turbine Bolted Ring-Flanges Using a Gaussian Process Surrogate Model <i>Jack Jorgensen, Melinda Hodkiewicz, Edward Cripps, and Ghulam Mubashar Hassan</i>	
OMAE2022-79283	V008T09A034
Offshore Wind Power Construction Efficiency Assessment in Fujian Sea Area Based on the Mixed Integer Linear Programming <i>Zihao Yang, Yifan Lin, and Sheng Dong</i>	

OMAE2022-79302	V008T09A035
Fatigue Analysis of Wind Turbine Blade Coating Considering Uncertainty Due to Voids Subjected to Impact Fatigue <i>Nikesh Kuthe, Suhail Ahmad, and Puneet Mahajan</i>	
OMAE2022-79407	V008T09A036
Investigating the Impact of Disruptive Events on the Fabrication and Installation Processes for a Floating Offshore Wind Farm <i>Zohreh Sarichloo, Adrian Murphy, Joseph Butterfield, John Doran, Paddy Hannigan, and Cian Desmond</i>	
OMAE2022-79432	V008T09A037
Development of 12MW Cross-Shaped Semi-Submersible Floating Offshore Wind Turbine <i>Ryo Matsuoka, Takashi Takeda, Hiroki Kusumoto, Shu Kuwada, Haruki Yoshimoto, and Ken Kamizawa</i>	
OMAE2022-79483	V008T09A038
Power Performance and Response Analysis of a Semi-Submersible Wind Turbine With Combined Flap Type and Torus Wave Energy Converters <i>Chern Fong Lee, Christodoulos Tryfonidis, and Muk Chen Ong</i>	
OMAE2022-79515	V008T09A039
A Study of Offshore Wind Turbine Wake Effects in Yaw Conditions Using an Improved Actuator Line Method <i>Ning Fan, Kangping Liao, and Qian Wang</i>	
OMAE2022-79598	V008T09A040
Sustainable Reuse of Decommissioned Jacket Platforms for Offshore Wind Energy Accounting for Accumulated Fatigue Damage <i>Taemin Heo, Ding Peng Liu, Lance Manuel, Jose A. F. O. Correia, and Paulo Mendes</i>	
OMAE2022-79698	V008T09A041
Transferability of Meta-Model Configurations for Different Wind Turbine Types <i>Franziska Müller, Clemens Hübler, and Raimund Rolfes</i>	
OMAE2022-79735	V008T09A042
Platform Motion Forecast of Hywind Floating Offshore Wind Turbine Based on SADA Method and Full-Scale Measurement Data <i>Peng Chen and Zhiqiang Hu</i>	
OMAE2022-79827	V008T09A043
Assessment of the Power Obtained by a Multi Wind Turbine Floating Platform <i>Raquel Martín-San-Román, José Azcona-Armendáriz, Mikel Iribas-Latour, and Alvaro Cuerva-Tejero</i>	
OMAE2022-79834	V008T09A044
Experimental Analysis of Mooring and Power Cable Dynamics When Using Elastic String Models <i>M. Somoano, D. Blanco, A. Rodríguez-Luis, and R. Guancho</i>	
OMAE2022-79844	V008T09A045
FMI-Based Co-Simulation of Low-Height Lifting System for Offshore Wind Turbine Installation <i>Shuai Yuan, Behfar Ataei, Karl Henning Halse, Houxiang Zhang, and Hans Petter Hildre</i>	
OMAE2022-79855	V008T09A046
Double Braid Mooring Damper for Floating Offshore Wind Application <i>Faryal Khalid, Philipp R. Thies, Peter Halswell, David Newsam, and Lars Johanning</i>	

OMAE2022-79879	V008T09A047
The Effects of Hydrodynamic and Aerodynamic Loads on the Low Frequency Responses of Floating Offshore Wind Turbines <i>Edward Land, Will Brindley, and Zhiqiang Hu</i>	
OMAE2022-79916	V008T09A048
Development of a Modular, Adaptable and Scalable Gravity Anchor System for Various Floating Foundations <i>Imanol Flores Ganuza, Johannes Wahrendorf, Eva Hlawatsch, Frank Adam, and Jochen Großmann</i>	
OMAE2022-80071	V008T09A049
Suspended Power Cable Configurations for Floating Offshore Wind Turbines in Deep Water Powering an FPSO <i>Anja Schnepf, Carlos Lopez-Pavon, Aymeric Devulder, Øyvind Johnsen, and Muk Chen Ong</i>	
OMAE2022-80344	V008T09A050
Experimental Study of the Effect of Heave Plate Dimensions on the Flow-Induced Motions (FIM) of a Multi-Column Floating Offshore Wind Turbine (FOWT) <i>Rodolfo T. Gonçalves, Edgard B. Malta, Alexandre N. Simos, Shinichiro Hirabayashi, and Hideyuki Suzuki</i>	
OMAE2022-80493	V008T09A051
Dynamic Analysis of an Integrated Structure Consists of Jacket Offshore Wind Turbine and Aquaculture Cage <i>Na Li, Haisheng Zhao, Wei Shi, Wenhua Wang, and Xin Li</i>	
OMAE2022-80585	V008T09A052
Dynamic Response Analysis of a Novel Semi-Submersible Floating Offshore Wind Turbine Based on Different Mooring System Designs <i>Zhixin Zhao, Wenhua Wang, Wei Shi, Xin Li, and Bin Wang</i>	
OMAE2022-80593	V008T09A053
Mooring System Design for Floating Offshore Wind Turbine Working in Intermediate Water <i>Zhen He, Zhenju Chuang, Chunzheng Li, and Aobo Zhang</i>	
OMAE2022-80701	V008T09A054
Dynamic Analysis of Blade Mating Process Using Jack-Up Crane Vessel: A Code-to-Code Comparison <i>Saravanan Bhaskaran, Amrit Shankar Verma, Shuai Yuan, and Karl Henning Halse</i>	
OMAE2022-80883	V008T09A055
Structural Load Estimation of Downstream Wind Turbines in an Offshore Wind Farm <i>Yiqing Xia, Yosuke Matsumoto, Iman Yousefi, Kazuyoshi Oouchi, Shunsuke Kaneko, Michio Nittouji, Kenji Fujii, and Kaho Machida</i>	
OMAE2022-80926	V008T09A056
A Comparison of Approaches for Modelling Walk-to-Work Gangway Access <i>Ben Moverley Smith, Ben Middleditch, and Philipp Thies</i>	
OMAE2022-80930	V008T09A057
Offshore Wind Turbine Support Structures Along Indian Coast - Multi Criteria Analysis <i>Mounika Mallela, Nilanjan Saha, Satya Kiran Raju Alluri, and M. V. Ramana Murthy</i>	
OMAE2022-80933	V008T09A058
A Perspective of Decommissioning Methods for Bottom-Fixed Offshore Wind Turbines <i>Soheil Salahshour, Muk Chen Ong, Bjørn Skaare, and Zhiyu Jiang</i>	

OMAE2022-81065	V008T09A059
Model Test and Validation of the Crown Floating Offshore Wind Turbine <i>Wei Yu, Frank Lemmer, Katja Lehmann, Po Wen Cheng, Santiago de Guzmán, Jaime Moreu, and Tommaso Battistella</i>	
OMAE2022-81116	V008T09A060
Validation Study of a CFD Numerical Solver for the Oscillatory Flow Features Around Heave Plates <i>Seung-yoon Han, Benjamin Bouscasse, Jean-Christophe Gilloteaux, and David Le Touzé</i>	
OMAE2022-81245	V008T09A061
Preliminary Investigation of a Shared Mooring Arrangement for a Floating Offshore Wind Turbine Farm in Deep Water <i>Yutao Wang, Hugh Wolgamot, Phillip Watson, Christophe Gaudin, Wenhua Zhao, and Ian Milne</i>	
OMAE2022-81290	V008T09A062
Experimental and Numerical Investigation on the Dynamic Response of Platform for a Spar-Type Floating Wind Turbine Under Aerodynamic and Hydrodynamic Forces <i>Baoxuan Wang, Xu Liang, and Xue Jiang</i>	
OMAE2022-81467	V008T09A063
Identification of Wave Drift Forces on a Floating Wind Turbine Sub-Structure With Heave Plates and Comparison With Predictions <i>Nuno Fonseca, Synne Nybø, José Miguel Rodrigues, Aitor Gallego, and Carlos Garrido</i>	
OMAE2022-81555	V008T09A064
Design Methodology Evolution: Transition From O&G FPU to FOWT <i>Shaosong Zhang, Daewoong Son, and Antoine Peiffer</i>	
OMAE2022-86751	V008T09A065
Optimization of Semi-Submersible Hull Design for Floating Offshore Wind Turbines <i>I-Jen Hsu, Glib Ivanov, Kai-Tung Ma, Zheng-Zhang Huang, Hua-Tung Wu, Yun-Tzu Huang, and Mike Chou</i>	
Wave Energy	
OMAE2022-78191	V008T09A066
A Novel Zero-Discharge Supercritical Water-Based Wave Energy Desalination System <i>Faete Filho, Gabriel Glosson, Jason McMorris, Tarek Abdel-Salam, Kurabachew Duba, Thanh Toan Tran, and Salman Husain</i>	
OMAE2022-79119	V008T09A067
The Application of the Spectral Domain Modeling to the Techno-Economic Analysis of the Adjustable Draft Point Absorbers <i>Jian Tan, Antonio Jarquin Laguna, Henk Polinder, and Sape Miedema</i>	
OMAE2022-79674	V008T09A068
Environmental Extreme Conditions for a Wave Energy Converter: An Integrated Wave-Structure Approach <i>Saghy Saeidtehrani, George Lavidas, and Andrei Metrikine</i>	
OMAE2022-79869	V008T09A069
Performance Modelling of Flap-Type Wave Energy Converter Array: Flaps With Various Dynamic Characteristics <i>Saghy Saeidtehrani and George Lavidas</i>	
OMAE2022-79897	V008T09A070
Wave Record Gap-Filling Using a Low-Rank Tensor Completion Model <i>Jiaxin Chen, Ian G. C. Ashton, and Ajit C. Pillai</i>	

OMAE2022-80110	V008T09A071
The Influence of Different Configurations and Spacings on the Performance of Oscillating Wave Surge Converters When Operating in Wave Farms <i>Daniela Benites-Munoz, Giles Thomas, and Luofeng Huang</i>	
OMAE2022-80578	V008T09A072
Comprehensive Verification and Validation of a CFD Analysis <i>Tiago Amaral, Manuel Rentschler, Guilherme Vaz, and João Baltazar</i>	
OMAE2022-80731	V008T09A073
Minimizing Cost in a 100% Renewable Electricity Grid: A Case Study of Wave Energy in California <i>Ryan G. Coe, George Lavidas, Giorgio Bacelli, Peter H. Kobos, and Vincent S. Neary</i>	
OMAE2022-80867	V008T09A074
Modeling Comparison of Flexible-Inflatable and Rigid Small-Scale Heaving Wave Energy Converters <i>Michael Kelly, Thomas Boerner, and Mohammad-Reza Alam</i>	
OMAE2022-80885	V008T09A075
Wave-by-Wave Prediction in Narrowly Spread Seas Using Fixed- and Drifting-Point Wave Records: Validation Using Physical Measurements <i>Thobani Hlophe, Hugh Wolgamot, Paul H. Taylor, Adi Kurniawan, Jana Orszaghova, and Scott Draper</i>	
OMAE2022-80972	V008T09A076
Nonlinear Model Predictive Control Based on Real-Time Iteration Scheme for Wave Energy Converters Using WEC-Sim <i>Juan Luis Guerrero-Fernández, Nathan Michael Tom, and John Anthony Rossiter</i>	
OMAE2022-80986	V008T09A077
Experimental Investigation on a Speed Controlled Wells Turbine for Wave Energy Conversion <i>F. Licheri, P. Puddu, F. Cambuli, and T. Ghisu</i>	
OMAE2022-80990	V008T09A078
Energy-Maximising Control Philosophy for a Cyclorotor Wave Energy Device <i>John V. Ringwood and Andrei Ermakov</i>	
OMAE2022-81070	V008T09A079
Three-Dimensional Simulations for Geometric Optimization of a Shoreline Hybrid Wave Energy Converter <i>Theofano Koutrouveli and Luciana Das Neves</i>	
OMAE2022-81138	V008T09A080
Stochastic Response Determination of U-Oscillating Water Columns in Severe Seas by a Statistical Linearization Scheme <i>Andrea Scialò, Giovanni Malara, Ioannis A. Kougioumtzoglou, and Felice Arena</i>	
OMAE2022-81155	V008T09A081
Accurate WEC Power Estimation for Multi-Modal Wave Spectra <i>Kouros Parsa, Mark Kim, and Neil Williams</i>	
OMAE2022-81267	V008T09A082
Nonlinear Moment-Based Optimal Control of Wave Energy Converters With Non-Ideal Power Take-Off Systems <i>Nicolás Faedo, Giuseppe Giorgi, John V. Ringwood, and Giuliana Mattiazzo</i>	
OMAE2022-81361	V008T09A083
Input-Unknown Estimation for Arrays of Wave Energy Conversion Systems via LTI Synthesis <i>Guglielmo Papini, Edoardo Pasta, Bruno Paduano, Nicolás Faedo, and Giuliana Mattiazzo</i>	

OMAE2022-81447	V008T09A084
Solutions to Wave Damping Over Time in CFD RANS Simulations Due to Exponential Generation of Numerical Turbulence	
<i>Pietro Casalone, Oronzo dell'Edera, Marco Fontana, Giuliana Mattiazzo, and Beatrice Battisti</i>	
OMAE2022-81464	V008T09A085
Wave Energy Converter Optimal Design Under Parameter Uncertainty	
<i>Filippo Giorcelli, Sergej Antonello Sirigu, Edoardo Pasta, Daniele Giovanni Gioia, Mauro Bonfanti, and Giuliana Mattiazzo</i>	
OMAE2022-81470	V008T09A086
A Combined Nonlinear Mooring-Line and Umbilical Cable Dynamics Model and Application	
<i>Solomon C. Yim, Ming Chen, and Shangmao Ai</i>	
OMAE2022-81518	V008T09A087
Influence on Structural Loading of a Wave Energy Converter by Controlling Variable- Geometry Components and the Power Take-Off	
<i>Salman Husain, Jacob Davis, Nathan Tom, Krish Thiagarajan, Cole Burge, and Nhu Nguyen</i>	
OMAE2022-81530	V008T09A088
Design and Optimization of a Point Absorber for the Mediterranean Sea	
<i>Alberto Ghigo, Sergej Antonello Sirigu, Fabio Carapellese, and Giovanni Bracco</i>	
OMAE2022-82707	V008T09A089
Mitigating Force Oscillations in a Wave Energy Converter Using Control Barrier Functions	
<i>Mathias Marley and Roger Skjetne</i>	