1. Record Nr. UNINA9910787578803321

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| Titolo | Collision and grounding of ships and offshore structures / / editors, Jrgen Amdahl, Soren Ehlers and Bernt J. Leira |
| Pubbl/distr/stampa | London : , : CRC Press, , 2013 |
| ISBN | 1-62870-760-7<br>1-138-00059-0 |
| Edizione | [First edition.] |
| Descrizione fisica | 1 online resource (355 p.) |
| Altri autori (Persone) | AmdahlJorgen <1951-><br>EhlersSoren<br>LeiraBernt J |
| Disciplina | 623.8884 |
| Soggetti | Collisions at sea<br>Marine accidents |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | A balkema book.<br>Proceedings of the 6th International Conference on Collision and Grounding of Ships and Offshore Structures, ICCGS, Trondheim, Norway, 17-19 June 2013. |
| Nota di bibliografia | Includes bibliographical references. |
| Nota di contenuto | Front Cover; Table of contents; Foreword; Feasibility of collision and grounding data for probabilistic accident modeling; Bridge crossings at Sognefjorden - Ship collision risk studies; VTS a risk reducer: A quantitative study of the effect of VTS Great Belt; An improvement on a method for estimating number of collision candidates between ships; Modeling and simulation system for marine accident cause investigation; Development of vessel collision model based on Naturalistic Decision Making model<br>Material characterization and implementation of the RTCL, BWH and SHEAR failure criteria to finite element codes for the simulation of impacts on ship structuresPrediction of failure strain according to stress triaxiality of a high strength marine structural steel; Fracture mechanics approach to assess the progressive structural failure of a damaged ship; Evaluation of the fendering capabilities of the SPS for an offshore application; Collision tests with rigid and deformable bulbous bows driven against double hull side structures |

Side structure filled with multicellular glass hollow spheres in a quasi-static collision testResponse of a tanker side panel punched by a knife edge indenter; A study on positive separating bulbous bow; Calculation of a stranding scenario; Grounding resistance capacity of a bulk carrier considering damage confined to the bow; Loading on stranded ships; Plastic mechanism analysis of structural performances for stiffeners on outer bottom plate during shoal grounding accident; A simplified approach to predict the bottom damage in tanker grounding
Residual ultimate longitudinal strength - grounding damage index diagram of a corroded oil tanker hull structureTowards an integrated approach to collision and grounding damage assessment; Towards more rational design of ship structures against collisions; Structural safety assessment of ship collision and grounding using FSI analysis technique; Ship-ice collision analysis to define ice model according to the IACS Polar Rule; On the plastic and fracture damage of polar class vessel structures subjected to impact loadings
Review of existing methods for the analysis of the accidental limit state due to ice actionsA particle swarm optimization-based procedure to obtain a crashworthy ice-classed LNG tanker; Drop tests of ice blocks on stiffened panels with different structural flexibility; Risk analysis for offloading operations in the Barents, Pechora and Caspian seas; Safe jacket configurations to resist boat impact; Collision between a spar platform and a tanker; Ship collisions against wind turbines, quays and bridge piers
Experimental and numerical investigations on the collision between offshore wind turbine support structures and service vessels

Sommario/riassunto

Collision and Grounding of Ships and Offshore Structures contains the latest research results and innovations presented at the 6th International Conference on Collision and Grounding of Ships and Offshore Structures (Trondheim, Norway, 17-19 June 2013). The book comprises contributions made in the field of numerical and analytical analysis of collision and grounding consequences for ships and offshore structures in various scenarios, such as narrow passageways and arctic conditions including accidental ice impact. A wide range of topics is covered:- Recent large-scale collision experiments- In