

# Jürgen Amdahl

## List of Publications by Year in descending order

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78  
papers

1,931  
citations

257450

24  
h-index

265206

42  
g-index

79  
all docs

79  
docs citations

79  
times ranked

647  
citing authors

#	ARTICLE	IF	CITATIONS
1	On the resistance to penetration of stiffened plates, Part II: Numerical analysis. International Journal of Impact Engineering, 2009, 36, 875-887.	5.0	160
2	On the resistance to penetration of stiffened plates, Part I – Experiments. International Journal of Impact Engineering, 2009, 36, 799-807.	5.0	136
3	Analytical and numerical analysis of sheet metal instability using a stress based criterion. International Journal of Solids and Structures, 2008, 45, 2042-2055.	2.7	94
4	A simplified method for elastic large deflection analysis of plates and stiffened panels due to local buckling. Thin-Walled Structures, 2002, 40, 925-953.	5.3	84
5	Plasticity based material modelling of ice and its application to ship–iceberg impacts. Cold Regions Science and Technology, 2011, 65, 326-334.	3.5	82
6	On the resistance of tanker bottom structures during stranding. Marine Structures, 2007, 20, 218-237.	3.8	80
7	A semi-analytical model for global buckling and postbuckling analysis of stiffened panels. Thin-Walled Structures, 2004, 42, 701-717.	5.3	76
8	Analysis of ship–ship collision damage accounting for bow and side deformation interaction. Marine Structures, 2013, 32, 18-48.	3.8	69
9	Design of offshore structures against accidental ship collisions. Marine Structures, 2014, 37, 135-172.	3.8	67
10	Crushing resistance of web girders in ship collision and grounding. Marine Structures, 2008, 21, 374-401.	3.8	64
11	On the accuracy of fracture estimation in collision analysis of ship and offshore structures. Marine Structures, 2015, 44, 254-287.	3.8	57
12	A new formulation of the impact mechanics of ship collisions and its application to a ship–iceberg collision. Marine Structures, 2010, 23, 360-384.	3.8	46
13	MARSTRUCT benchmark study on nonlinear FE simulation of an experiment of an indenter impact with a ship side-shell structure. Marine Structures, 2018, 59, 142-157.	3.8	44
14	A damage-based failure model for coarsely meshed shell structures. International Journal of Impact Engineering, 2015, 83, 59-75.	5.0	42
15	Rapid assessment of ship grounding over large contact surfaces. Ships and Offshore Structures, 2012, 7, 5-19.	1.9	40
16	An analytical model to assess a ship side during a collision. Ships and Offshore Structures, 2012, 7, 431-448.	1.9	40
17	Plastic mechanism analysis of the resistance of ship longitudinal girders in grounding and collision. Ships and Offshore Structures, 2008, 3, 159-171.	1.9	38
18	A review of structural responses and design of offshore tubular structures subjected to ship impacts. Ocean Engineering, 2018, 154, 177-203.	4.3	36

#	ARTICLE	IF	CITATIONS
19	Full six degrees of freedom coupled dynamic simulation of ship collision and grounding accidents. <i>Marine Structures</i> , 2016, 47, 1-22.	3.8	35
20	Integrated numerical analysis of an iceberg collision with a foreship structure. <i>Marine Structures</i> , 2011, 24, 377-395.	3.8	34
21	On the sensitivity to work hardening and strain-rate effects in nonlinear FEM analysis of ship collisions. <i>Ships and Offshore Structures</i> , 2017, 12, 100-115.	1.9	34
22	Experimental investigation of oil leakage from damaged ships due to collision and grounding. <i>Ocean Engineering</i> , 2011, 38, 1894-1907.	4.3	29
23	Crushing resistance of a cruciform and its application to ship collision and grounding. <i>Ships and Offshore Structures</i> , 2012, 7, 185-195.	1.9	27
24	Plastic design of laterally patch loaded plates for ships. <i>Marine Structures</i> , 2007, 20, 124-142.	3.8	26
25	Understanding ship-grounding events. <i>Marine Structures</i> , 2011, 24, 551-569.	3.8	26
26	Analytical and numerical modelling of oil spill from a side tank with collision damage. <i>Ships and Offshore Structures</i> , 2012, 7, 73-86.	1.9	26
27	Investigation on structural performance predictions of double-bottom tankers during shoal grounding accidents. <i>Marine Structures</i> , 2013, 33, 188-213.	3.8	25
28	Numerical investigations of the dynamic response of a floating bridge under environmental loadings. <i>Ships and Offshore Structures</i> , 2018, 13, 113-126.	1.9	25
29	Analysis and design of offshore tubular members against ship impacts. <i>Marine Structures</i> , 2018, 58, 109-135.	3.8	25
30	A new approach for coupling external dynamics and internal mechanics in ship collisions. <i>Marine Structures</i> , 2016, 45, 110-132.	3.8	24
31	A comparative analysis of the fluid-structure interaction method and the constant added mass method for ice-structure collisions. <i>Marine Structures</i> , 2016, 49, 58-75.	3.8	23
32	Numerical analysis of local and global responses of an offshore fish farm subjected to ship impacts. <i>Ocean Engineering</i> , 2019, 194, 106653.	4.3	22
33	Numerical investigations of a prestressed pontoon wall subjected to ship collision loads. <i>Ocean Engineering</i> , 2019, 172, 234-244.	4.3	18
34	Large inelastic deformation resistance of stiffened panels subjected to lateral loading. <i>Marine Structures</i> , 2018, 59, 342-367.	3.8	17
35	Design of steel bridge girders against ship forecastle collisions. <i>Engineering Structures</i> , 2019, 196, 109277.	5.3	16
36	Laboratory experiments on shared-energy collisions between freshwater ice blocks and a floating steel structure. <i>Ships and Offshore Structures</i> , 2017, 12, 530-544.	1.9	13

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37	Local and Global Responses of a Floating Bridge Under Ship-Girder Collisions. Journal of Offshore Mechanics and Arctic Engineering, 2019, 141, .	1.2	13
38	Dynamic responses of a floating bridge subjected to ship collision load on bridge girders. Procedia Engineering, 2017, 199, 2506-2513.	1.2	12
39	Modelling of the ductile-brittle fracture transition in steel structures with large shell elements: A numerical study. Marine Structures, 2018, 62, 40-59.	3.8	12
40	Assessment of ship impact risk to offshore structures - New NORSOK N-003 guidelines. Marine Structures, 2019, 63, 480-494.	3.8	12
41	Monitoring of ship damage condition during stranding. Marine Structures, 2011, 24, 261-274.	3.8	11
42	Benchmark study on the assessment of ship damage conditions during stranding. Ships and Offshore Structures, 2012, 7, 197-213.	1.9	11
43	Glacial ice impacts: Part II: Damage assessment and ice-structure interactions in accidental limit states (ALS). Marine Structures, 2021, 75, 102889.	3.8	11
44	Numerical and analytical studies of ship deckhouse impact with steel and RC bridge girders. Engineering Structures, 2021, 234, 111868.	5.3	11
45	Simplified stress resultants plasticity on a geometrically nonlinear constant stress shell element. Computers and Structures, 2001, 79, 1723-1734.	4.4	10
46	On multi-planar impact mechanics in ship collisions. Marine Structures, 2019, 63, 364-383.	3.8	10
47	A numerical solver for coupled dynamic simulation of glacial ice impacts considering hydrodynamic-ice-structure interaction. Ocean Engineering, 2021, 226, 108827.	4.3	10
48	Computer simulation study of offshore collisions and analysis of ship-platform impacts. Applied Ocean Research, 1980, 2, 119-127.	4.1	9
49	Hydro-Elastic Contributions to Fatigue Damage on a Large Monopile. Energy Procedia, 2016, 94, 102-114.	1.8	8
50	Numerical and simplified analytical methods for analysis of the residual strength of ship double bottom. Ocean Engineering, 2012, 52, 22-34.	4.3	7
51	Implementation of Linear Potential-Flow Theory in the 6DOF Coupled Simulation of Ship Collision and Grounding Accidents. Journal of Ship Research, 2016, 60, 119-144.	1.1	7
52	Discussion of assumptions behind the external dynamic models in ship collisions and groundings. Ships and Offshore Structures, 2019, 14, 45-62.	1.9	7
53	A Direct Design Procedure for FPSO Side Structures Against Large Impact Loads. Journal of Offshore Mechanics and Arctic Engineering, 2009, 131, .	1.2	6
54	Discussion of assumptions behind rule-based ice loads due to crushing. Ocean Engineering, 2016, 119, 249-261.	4.3	6

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55	Analysis of tether anchored floating suspension bridge subjected to large ship collisions. Procedia Engineering, 2017, 199, 2488-2493.	1.2	6
56	Evaluation of Nonlinear Material Behavior for Offshore Structures Subjected to Accidental Actions. Journal of Offshore Mechanics and Arctic Engineering, 2018, 140, .	1.2	6
57	Broad Side Ship Collision With Jacket Legs: Examination of NORSOK N-004 Analysis Procedure. , 2012, , .		5
58	Numerical Simulation of an Ice Beam in Four-Point Bending Using SPH. , 2014, , .		4
59	A simplified analytical method for predictions of ship deckhouse collision loads on steel bridge girders. Ships and Offshore Structures, 2019, 14, 121-134.	1.9	4
60	Thermal analysis of marine structural steel EH36 subject to non-spreading cryogenic spills. Part I: experimental study. Ships and Offshore Structures, 2022, 17, 1863-1871.	1.9	4
61	Development of ductile fracture modelling approach in ship impact simulations. Ocean Engineering, 2022, 252, 111173.	4.3	4
62	Design and Modelling of Accidental Ship Collisions With Ice Masses at Laboratory-Scale. , 2012, , .		3
63	<i>Reduced Order Model for Control Applications in Offshore Wind Turbines*</i> This work has been carried out at the Centre for Autonomous Marine Operations and Systems at the Norwegian University of Science and Technology (NTNU AMOS). The Norwegian Research Council is acknowledged as the main sponsor of NTNU AMOS. This work was supported by the Research Council of Norway through the Centres of Excellence funding scheme. Project number 223254 - NTNU AMOS., IFAC-PapersOnLine, 2016, 49, 386-393.	0.9	3
64	Analysis of tether anchored floating suspension bridge subjected to extreme environmental loads. Procedia Engineering, 2017, 199, 3033-3038.	1.2	3
65	Long-term fatigue damage sensitivity to wave directionality in extra-large monopile foundations. Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, 2018, 232, 37-49.	0.5	3
66	Numerical Investigation of the Collision Damage and Residual Strength of a Floating Bridge Girder. , 2018, , .		3
67	Pressure-dependent plasticity models with convex yield loci for explicit ice crushing simulations. Marine Structures, 2022, 84, 103233.	3.8	3
68	Dynamic amplification of drag dominated structures in irregular seas. , 2015, , .		2
69	Iceberg Shape Sensitivity in Ship Impact Assessment in View of Existing Material Models. , 2012, , .		1
70	Rapid assessment of ship grounding over large contact surfaces. Ships and Offshore Structures, 2013, 8, 1-2.	1.9	1
71	Numerical Investigation of Fluid-Ice-Structure Interaction During Collision by an Arbitrary Lagrangian Eulerian Method. , 2016, , .		1
72	Evaluation of Nonlinear Material Behavior for Offshore Structures Subjected to Accidental Actions. , 2017, , .		1

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73	Thermal analysis of marine structural steel EH36 subject to non-spreading cryogenic spills. Part II: finite element analysis. Ships and Offshore Structures, 2022, 17, 2176-2185.	1.9	1
74	Investigation on Smeared Thickness Method for Plating Stiffeners on Prediction of Grounding Character of Double Bottom Tanker Over Obstacles With Large Contact Surface. , 2012, , .		0
75	Non-Conservative Consequences of "Conservative" Assumptions in Ship-Platform Collision Analysis. , 2014, , .		0
76	An Extension of the BWH Instability Criterion: Numerical Study. , 2015, , .		0
77	Assessment to Iceberg Impact Loads to Fixed Structures in Multi-Planar Space. , 2017, , .		0
78	Making sense of speed effects on ice crushing pressure-area relationships in IACS ice-strengthening rules for ships. Ocean Engineering, 2021, 230, 109059.	4.3	0