Soonheung Han

List of Publications by Year
in descending order

130	2,086	257450	302126
papers	citations	24 h-index	39 g-index

134	134	134	1173
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A virtual reality based fire training simulator integrated with fire dynamics data. Fire Safety Journal, 2012, 50, 12-24.	3.1	174
2	Knowledge-based parametric design of mechanical products based on configuration design method. Expert Systems With Applications, 2001, 21, 99-107.	7.6	131
3	A set of standard modeling commands for the history-based parametric approach. CAD Computer Aided Design, 2003, 35, 1171-1179.	2.7	125
4	A method and tool for humanâ€“human interaction and instant collaboration in CSCW-based CAD. Computers in Industry, 2006, 57, 740-751.	9.9	78
5	Hydrodynamic hull form optimization using parametric models. Journal of Marine Science and Technology, 2012, 17, 1-17.	2.9	73
6	A method for topological entity correspondence in a replicated collaborative CAD system. Computers in Industry, 2009, 60, 467-475.	9.9	64
7	Meta-ontology for automated information integration of parts libraries. CAD Computer Aided Design, 2006, 38, 713-725.	2.7	55
8	An efficient approach to directly compute the exact Hausdorff distance for 3D point sets. Integrated Computer-Aided Engineering, 2017, 24, 261-277.	4.6	55
9	Protection of intellectual property based on a skeleton model in product design collaboration. CAD Computer Aided Design, 2009, 41, 641-648.	2.7	45
10	Construction of a computer-simulated mixed reality environment for virtual factory layout planning. Computers in Industry, 2011, 62, 86-98.	9.9	44
11	Reconstruction of 3D interacting solids of revolution from 2D orthographic views. CAD Computer Aided Design, 2005, 37, 1388-1398.	2.7	42
12	Reliability-based design optimization of monopile transition piece for offshore wind turbine system. Renewable Energy, 2014, 71, 729-741.	8.9	40
13	Simplification of feature-based 3D CAD assembly data of ship and offshore equipment using quantitative evaluation metrics. CAD Computer Aided Design, 2015, 59, 140-154.	2.7	40
14	Repairing CAD model errors based on the design history. CAD Computer Aided Design, 2006, 38, 627-640.	2.7	35
15	Structural topology optimization of the transition piece for an offshore wind turbine with jacket foundation. Renewable Energy, 2016, 85, 1214-1225.	8.9	31
16	Interfacing heterogeneous PDM systems using the PLM Services. Advanced Engineering Informatics, 2008, 22, 307-316.	8.0	28
17	Sharing product data of nuclear power plants across their lifecycles by utilizing a neutral model. Annals of Nuclear Energy, 2008, 35, 175-186.	1.8	28
18	Method to simplify ship outfitting and offshore plant equipment three-dimensional (3-D) computer-aided design (CAD) data for construction of an equipment catalog. Journal of Marine Science and Technology, 2014, 19, 185-196.	2.9	28

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19	Passenger evacuation simulation considering the heeling angle change during sinking. International Journal of Naval Architecture and Ocean Engineering, 2019, 11, 329-343.	2.3	28
20	Integration of history-based parametric translators using the automation APIs. International Journal of Product Lifecycle Management, 2007, 2, 18.	0.3	27
21	Representation and Propagation of Engineering Change Information in Collaborative Product Development using a Neutral Reference Model. Concurrent Engineering Research and Applications, 2009, 17, 147-157.	3.2	26
22	Integration of distributed plant lifecycle data using ISO 15926 and Web services. Annals of Nuclear Energy, 2011, 38, 2309-2318.	1.8	26
23	An XML-Based Macro Data Representation for a Parametric CAD Model Exchange. Computer-Aided Design and Applications, 2004, 1, 153-162.	0.6	25
24	Solving the Shallow Water equations using 2D SPH particles forÂinteractive applications. Visual Computer, 2010, 26, 865-872.	3.5	25
25	Parametric exchange of round shapes between a mechanical CAD system and a ship CAD system. CAD Computer Aided Design, 2012, 44, 154-161.	2.7	22
26	A procedural method to exchange editable 3D data from a free-hand 2D sketch modeling system into 3D mechanical CAD systems. CAD Computer Aided Design, 2012, 44, 123-131.	2.7	22
27	Crowd evacuation simulation using active route choice model based on human characteristics. Simulation Modelling Practice and Theory, 2018, 87, 369-378.	3.8	22
28	A multichannel visualization module for virtual manufacturing. Computers in Industry, 2006, 57, 653-662.	9.9	21
29	Retrieval of CAD model data based on Web Services for collaborative product development in a distributed environment. International Journal of Advanced Manufacturing Technology, 2010, 50, 1085-1099.	3.0	21
30	Interoperability of product and manufacturing information using ontology. Concurrent Engineering Research and Applications, 2015, 23, 265-278.	3.2	21
31	Feature shape complexity: a new criterion for the simplification of feature-based 3D CAD models. International Journal of Advanced Manufacturing Technology, 2017, 88, 1831-1843.	3.0	21
32	A template-based reconstruction of plane-symmetric 3D models from freehand sketches. CAD Computer Aided Design, 2008, 40, 975-986.	2.7	20
33	A review of smart manufacturing reference models based on the skeleton meta-model. Journal of Computational Design and Engineering, 2020, 7, 323-336.	3.1	20
34	Product data quality assurance for e-manufacturing in the automotive industry. International Journal of Computer Integrated Manufacturing, 2006, 19, 136-147.	4.6	19
35	B-rep model simplification using selective and iterative volume decomposition to obtain finer multi-resolution models. CAD Computer Aided Design, 2019, 112, 23-34.	2.7	19
36	Parameter-based Engineering Changes for a Distributed Engineering Environment. Concurrent Engineering Research and Applications, 2004, 12, 275-286.	3.2	18

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37	Analysis of evacuation simulation considering crowd density and the effect of a fallen person. Journal of Ambient Intelligence and Humanized Computing, 2019, 10, 4869-4879.	4.9	18
38	Encapsulation of geometric functions for ship structural CAD using a STEP database as native storage. CAD Computer Aided Design, 2003, 35, 1161-1170.	2.7	17
39	Graph-Based Simplification of Feature-Based Three-Dimensional Computer-Aided Design Models for Preserving Connectivity. Journal of Computing and Information Science in Engineering, 2015, 15, .	2.7	16
40	Interactive 3D building modeling method using panoramic image sequences and digital map. Multimedia Tools and Applications, 2018, 77, 27387-27404.	3.9	16
41	Object-oriented approach to a knowledge-based structural design system. Expert Systems With Applications, 1996, 10, 223-231.	7.6	15
42	An interactive data-driven driving simulator using motion blending. Computers in Industry, 2008, 59, 520-531.	9.9	15
43	A method to exchange procedurally represented 2D CAD model data using ISO 10303 STEP. CAD Computer Aided Design, 2011, 43, 1717-1728.	2.7	15
44	Name matching method using topology merging and splitting history for exchange of feature-based CAD models. Journal of Mechanical Science and Technology, 2012, 26, 3201-3212.	1.5	15
45	A framework for automatic creation of motion effects from theatrical motion pictures. Multimedia Systems, 2014, 20, 327-346.	4.7	15
46	Enhancement of equipment information sharing using three-dimensional computer-aided design simplification and digital catalog techniques in the plant industry. Concurrent Engineering Research and Applications, 2016, 24, 275-289.	3.2	14
47	Macro-parametric: an approach for the history-based parametrics. International Journal of Product Lifecycle Management, 2010, 4, 321.	0.3	13
48	Flexible Concurrency Control for Legacy CAD to Construct Collaborative CAD Environment. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2012, 6, 324-339.	0.7	13
49	User-assisted integrated method for controlling level of detail of large-scale B-rep assembly models. International Journal of Computer Integrated Manufacturing, 2018, 31, 881-892.	4.6	13
50	Automatic Pose Generation for Robotic 3-D Scanning of Mechanical Parts. IEEE Transactions on Robotics, 2020, 36, 1219-1238.	10.3	13
51	OpenPDM-based product data exchange among heterogeneous PDM systems in a distributed environment. International Journal of Advanced Manufacturing Technology, 2009, 40, 1033-1043.	3.0	12
52	Collaborative CAD Synchronization Based on a Symmetric and Consistent Modeling Procedure. Symmetry, 2017, 9, 59.	2.2	12
53	A method for verification of computer-aided design model errors. Journal of Engineering Design, 2005, 16, 337-352.	2.3	11
54	Knowledge-based configuration design of a train bogie. Journal of Mechanical Science and Technology, 2010, 24, 2503-2510.	1.5	11

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55	Integrated management of facility, process, and output: data model perspective. Science China Information Sciences, 2012, 55, 994-1007.	4.3	11
56	Collaborative Engineering Design Based on an Intelligent STEP Database. Concurrent Engineering Research and Applications, 2002, 10, 239-249.	3.2	10
57	Web Service with Parallel Processing Capabilities for the Retrieval of CAD Assembly Data. Concurrent Engineering Research and Applications, 2011, 19, 5-18.	3.2	10
58	Standardized exchange of plant equipment and materials data based on ISO 15926 methodology in nuclear power plants. Annals of Nuclear Energy, 2018, 118, 185-198.	1.8	10
59	Integration of heterogeneous CAD databases using STEP and the Internet. Decision Support Systems, 2000, 28, 365-379.	5.9	9
60	Digital exchange of design models between marine equipment libraries using hybrid neutral formats. Journal of Marine Science and Technology, 2004, 9, 182-189.	2.9	9
61	Experimental investigations on the implosion characteristics of thin cylindrical aluminium-alloy tubes. International Journal of Solids and Structures, 2020, 200-201, 64-82.	2.7	9
62	Implosion tests of aluminium-alloy ring-stiffened cylinders subjected to external hydrostatic pressure. Marine Structures, 2021, 78, 102980.	3.8	9
63	An object-oriented configuration design method for paper feeding mechanisms. Expert Systems With Applications, 1998, 14, 283-289.	7.6	8
64	Mapping 2D midship drawings into a 3D ship hull model based on STEP AP218. CAD Computer Aided Design, 2004, 36, 537-547.	2.7	8
65	A ship-to-ship automatic docking system for ocean cargo transfer. Journal of Marine Science and Technology, 2014, 19, 360-375.	2.9	8
66	Editing 3D models on smart devices. CAD Computer Aided Design, 2015, 59, 229-238.	2.7	8
67	Helical extension method for solving the natural equation of a space curve. Surface Topography: Metrology and Properties, 2017, 5, 035002.	1.6	8
68	Layered discrete event system specification for a ship production scheduling model. Simulation Modelling Practice and Theory, 2019, 96, 101934.	3.8	8
69	A multi-user selective undo/redo approach for collaborative CAD systems. Journal of Computational Design and Engineering, 2014, 1, 103-115.	3.1	7
70	Feature-based translation of CAD models with macro-parametric approach: issues of feature mapping, persistent naming, and constraint translation. Journal of Computational Design and Engineering, 2020, 7, 603-614.	3.1	7
71	3D reconstruction of as-built model of plant piping system from point clouds and port information. Journal of Computational Design and Engineering, 2021, 8, 195-209.	3.1	7
72	A Hybrid Driving Simulator with Dynamics-Driven Motion and Data-Driven Motion. Simulation, 2008, 84, 359-371.	1.8	6

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73	Shape estimation of a bent and twisted cylinder using strain from a sensor array in triple helices. Measurement Science and Technology, 2018, 29, 095003.	2.6	6
74	A Novel Attribute-Based Encryption Approach with Integrity Verification for CAD Assembly Models. Engineering, 2021, 7, 787-797.	6.7	6
75	Lifecycle management of component catalogs based on a neutral model to support seamless integration with plant 3D design. Journal of Computational Design and Engineering, 2021, 8, 409-427.	3.1	6
76	A road map on human-human interaction and fine-function collaboration in collaborative integrated design environments. , 0, , .		5
77	Recognition of design symbols from midship drawings. Ocean Engineering, 2005, 32, 1968-1981.	4.3	5
78	Image-Based Modeling of Urban Buildings Using Aerial Photographs and Digital Maps. Transactions in GIS, 2006, 10, 377-394.	2.3	5
79	Securing design checking service for the regulation-based product design. Computers in Industry, 2012, 63, 586-596.	9.9	5
80	Implementation of the direct integration from CAM to CAE for the PCB simulation. Computers in Industry, 2013, 64, 1014-1021.	9.9	5
81	An alternative method for smartphone input using AR markers. Journal of Computational Design and Engineering, 2014, 1, 153-160.	3.1	5
82	Implementation of persistent identification of topological entities based on macro-parametrics approach. Journal of Computational Design and Engineering, 2016, 3, 161-177.	3.1	5
83	Userâ€driven treadmill using walking speed estimated from plantar pressure sensor. Electronics Letters, 2017, 53, 524-526.	1.0	5
84	Mechanisms of Persistent Identification of Topological Entities in CAD Systems: A Review. AEJ - Alexandria Engineering Journal, 2018, 57, 2837-2849.	6.4	5
85	A visual simulation of ocean floating wind power system. Computer Animation and Virtual Worlds, 2019, 30, e1859.	1.2	5
86	An Evacuation Simulation for Hazard Analysis of Isolation at Sea during Passenger Ship Heeling. International Journal of Environmental Research and Public Health, 2020, 17, 9393.	2.6	5
87	A Method for Automatic Generation of Parametric Computer Aided Design Models in a Mold Base e-Catalog System. Journal of Computing and Information Science in Engineering, 2006, 6, 308-314.	2.7	4
88	Engineered-to-order Approach for Providing Flexibility in e-Commerce of Mold Parts. Concurrent Engineering Research and Applications, 2007, 15, 345-355.	3.2	4
89	A distributed visualization module and its applications using tiled display wall. , 2010, , .		4
90	Profile-based feature representation method and its application in data exchange from mechanical CAD systems to ship CAD systems. Journal of Mechanical Science and Technology, 2016, 30, 5641-5649.	1.5	4

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91	Determination of appropriate level of detail of a three-dimensional computer-aided design model from a permissible dissimilarity for fully automated simplification. Advances in Mechanical Engineering, 2017, 9, 168781401770712.	1.6	4
92	Exchange of parametric assembly models based on neutral assembly constraints. Concurrent Engineering Research and Applications, 2019, 27, 285-294.	3.2	4
93	Neutral model-based interfacing of 3D design to support collaborative project management in the process plant industry. Journal of Computational Design and Engineering, 2021, 8, 824-835.	3.1	4
94	Visualization of Neutral Model of Ship Pipe System Using X3D. Lecture Notes in Computer Science, 2010, , 218-228.	1.3	4
95	A framework for a multi-sensory VR effect system with motional display. , 2005, , .		3
96	Representation of Urban Buildings Using Modified Relief Mapping. Journal of Computer Science and Technology, 2006, 21, 204-208.	1.5	3
97	An Underwater Vehicle Simulator with Immersive Interface using X3D and HLA. Simulation, 2009, 85, 33-44.	1.8	3
98	Design of a framework for interoperable motion effects for 4D theaters using human-centered motion data. , 2010, , .		3
99	A formula for the arc length of a superhelix. Proceedings of SPIE, 2016, , .	0.8	3
100	Sharing of CAD assembly model data using parallel Web Services. , 2008, , .		2
101	Automatic 3D City Modeling Using a Digital Map and Panoramic Images from a Mobile Mapping System. Mathematical Problems in Engineering, 2014, 2014, 1-10.	1.1	2
102	A framework for the automatic 3D city modeling using the panoramic image from mobile mapping system and digital maps. , 2014, , .		2
103	Automatic spline smoothing of non-stationary kinematic signals using bilayered partitioning and blending with correlation analysis. , 2015, 39, 22-34.		2
104	Cluster rendering on large high-resolution multi-displays using X3DOM and HTML. Multimedia Systems, 2017, 23, 265-279.	4.7	2
105	Series representations for the rectification of a superhelix. Applied Mathematical Modelling, 2018, 56, 381-388.	4.2	2
106	A web-based solution for collaborative design supporting multiple CAD systems. , 2018, , .		2
107	An Interface between 3D Modeling Tool and Scientific Data Format. International Journal of Machine Learning and Computing, 2012, , 168-172.	0.6	2
108	Downstream Computer-Aided Design, Engineering, and Manufacturing Integration Using Exchangeable Persistent Identifiers in Neutral Re-imported Computer-Aided Design Models. Journal of Computing and Information Science in Engineering, 2021, 21, .	2.7	2

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109	Web-based Product Data Visualization and Feedback between PLM and MES. , 2020, , .		2
110	Ontology modeling framework for automated information integration of components libraries. , 2005, , .		1
111	Interfacing heterogeneous PDM systems by PLM services for design collaboration. , 2006, , .		1
112	Visualization of the Synthetic Environment Data Representation & Interchange Specification data for verifying large-scale synthetic environment data. Journal of Defense Modeling and Simulation, 2015, 12, 507-518.	1.7	1
113	Geo-registration of wide-baseline panoramic image sequences using a digital map reference. Multimedia Tools and Applications, 2017, 76, 11215-11233.	3.9	1
114	Point-Oriented Persistent Identification of Entities for Exchanging Parametric CAD Data. Computer-Aided Design and Applications, 2019, 17, 274-287.	0.6	1
115	Profile-Based Feature Representation Based on Guide Curve Approximation Using Line and Arc Segments. Lecture Notes in Computer Science, 2012, , 533-543.	1.3	1
116	Stepwise Volume Decomposition Considering Design Feature Recognition. Korean Journal of Computational Design and Engineering, 2013, 18, 71-82.	0.0	1
117	Development of 3D CAD Part Data Simplification System for Ship and Offshore Plant Equipment. Korean Journal of Computational Design and Engineering, 2013, 18, 167-176.	0.0	1
118	Development of Feature-Based 3D CAD Assembly Data Simplification System for Equipment and Materials. Transactions of the Korean Society of Mechanical Engineers, A, 2014, 38, 1075-1084.	0.2	1
119	Development of a Neutral Model-based Catalog Generation System to Support 3D Design of a Plant. Transactions of the Korean Society of Mechanical Engineers, A, 2018, 42, 753-763.	0.2	1
120	Assembly Solving for Neutral Re-Imported Product Models. Computer-Aided Design and Applications, 2019, 17, 108-123.	0.6	1
121	Development of a System to Translate Fitting Parts" Spec-Catalog Data between Plant 3D CAD Systems and Neutral Model. Transactions of the Korean Society of Mechanical Engineers, A, 2019, 43, 657-665.	0.2	1
122	Mapping 2D midship drawings into 3D structural models based on STEP AP218. , 0, , .		0
123	Silhouette management for protruded displacement mapping. , 2006, , .		0
124	A scaling law for form drag coefficients in incompressible turbulent flows. Ocean Engineering, 2014, 92, 75-82.	4.3	0
125	CAD client on smart device with drag-type buttons. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2014, 8, JAMDSM0078-JAMDSM0078.	0.7	0
126	Implosion Tests of Aluminium Alloy Tubes Under External Hydrostatic Pressure. , 2018, , .		0

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127	Visual simulation of a capsizing ship in stormy weather condition. Visual Computer, 2019, 35, 1855-1868.	3.5	0
128	Development of v-DMU Based on e-Science Using COVISE and SAGE. , 2010, , 21-30.		0
129	Ship Outfitting Design Data Exchange between CAD Systems Using Different Primitive Set. Korean Journal of Computational Design and Engineering, 2013, 18, 234-242.	0.0	0
130	Development of a Similarity Evaluation System for Offshore Plants' 3D Piping CAD Models Created Using Aveva Marine and SmartMarine 3D. Transactions of the Korean Society of Mechanical Engineers, A, 2016, 40, 397-406.	0.2	0