Soonheung Han

List of Publications by Year
in descending order

130 papers	2,086 citations	257450 24 h-index	302126 39 g-index
134 all docs	134 docs citations	134 times ranked	1173 citing authors

#	Article	IF	Citations
1	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
2	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
3	A Novel Attribute-Based Encryption Approach with Integrity Verification for CAD Assembly Models. Engineering, 2021, 7, 787-797.	6.7	6
4	Implosion tests of aluminium-alloy ring-stiffened cylinders subjected to external hydrostatic pressure. Marine Structures, 2021, 78, 102980.	3.8	9
5	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
6	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
7	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
8	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
9	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
10	Automatic Pose Generation for Robotic 3-D Scanning of Mechanical Parts. IEEE Transactions on Robotics, 2020, 36, 1219-1238.	10.3	13
11	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
12	Web-based Product Data Visualization and Feedback between PLM and MES. , 2020, , .		2
13	Visual simulation of a capsizing ship in stormy weather condition. Visual Computer, 2019, 35, 1855-1868.	3.5	0
14	A visual simulation of ocean floating wind power system. Computer Animation and Virtual Worlds, 2019, 30, e1859.	1.2	5
15	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
16	Layered discrete event system specification for a ship production scheduling model. Simulation Modelling Practice and Theory, 2019, 96, 101934.	3.8	8
17	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
18	Exchange of parametric assembly models based on neutral assembly constraints. Concurrent Engineering Research and Applications, 2019, 27, 285-294.	3.2	4

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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	Point-Oriented Persistent Identification of Entities for Exchanging Parametric CAD Data. Computer-Aided Design and Applications, 2019, 17, 274-287.	0.6	1
21	Assembly Solving for Neutral Re-Imported Product Models. Computer-Aided Design and Applications, 2019, 17, 108-123.	0.6	1
22	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
23	Series representations for the rectification of a superhelix. Applied Mathematical Modelling, 2018, 56, 381-388.	4.2	2
24	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
25	Mechanisms of Persistent Identification of Topological Entities in CAD Systems: A Review. AEJ - Alexandria Engineering Journal, 2018, 57, 2837-2849.	6.4	5
26	Implosion Tests of Aluminium Alloy Tubes Under External Hydrostatic Pressure. , 2018, , .		0
27	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
28	A web-based solution for collaborative design supporting multiple CAD systems. , 2018, , .		2
29	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
30	Interactive 3D building modeling method using panoramic image sequences and digital map. Multimedia Tools and Applications, 2018, 77, 27387-27404.	3.9	16
31	Crowd evacuation simulation using active route choice model based on human characteristics. Simulation Modelling Practice and Theory, 2018, 87, 369-378.	3.8	22
32	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
33	Cluster rendering on large high-resolution multi-displays using X3DOM and HTML. Multimedia Systems, 2017, 23, 265-279.	4.7	2
34	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
35	Geo-registration of wide-baseline panoramic image sequences using a digital map reference. Multimedia Tools and Applications, 2017, 76, 11215-11233.	3.9	1
36	User€driven treadmill using walking speed estimated from plantar pressure sensor. Electronics Letters, 2017, 53, 524-526.	1.0	5

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37	Helical extension method for solving the natural equation of a space curve. Surface Topography: Metrology and Properties, 2017, 5, 035002.	1.6	8
38	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
39	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
40	Collaborative CAD Synchronization Based on a Symmetric and Consistent Modeling Procedure. Symmetry, 2017, 9, 59.	2.2	12
41	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
42	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
43	A formula for the arc length of a superhelix. Proceedings of SPIE, 2016, , .	0.8	3
44	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
45	Structural topology optimization of the transition piece for an offshore wind turbine with jacket foundation. Renewable Energy, 2016, 85, 1214-1225.	8.9	31
46	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
47	Automatic spline smoothing of non-stationary kinematic signals using bilayered partitioning and blending with correlation analysis. , 2015, 39, 22-34.		2
48	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
49	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
50	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
51	Interoperability of product and manufacturing information using ontology. Concurrent Engineering Research and Applications, 2015, 23, 265-278.	3.2	21
52	Editing 3D models on smart devices. CAD Computer Aided Design, 2015, 59, 229-238.	2.7	8
53	A multi-user selective undo/redo approach for collaborative CAD systems. Journal of Computational Design and Engineering, 2014, 1, 103-115.	3.1	7
54	An alternative method for smartphone input using AR markers. Journal of Computational Design and Engineering, 2014, 1, 153-160.	3.1	5

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55	A scaling law for form drag coefficients in incompressible turbulent flows. Ocean Engineering, 2014, 92, 75-82.	4.3	0
56	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
57	A framework for automatic creation of motion effects from theatrical motion pictures. Multimedia Systems, 2014, 20, 327-346.	4.7	15
58	A ship-to-ship automatic docking system for ocean cargo transfer. Journal of Marine Science and Technology, 2014, 19, 360-375.	2.9	8
59	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
60	A framework for the automatic 3D city modeling using the panoramic image from mobile mapping system and digital maps. , 2014, , .		2
61	Reliability-based design optimization of monopile transition piece for offshore wind turbine system. Renewable Energy, 2014, 71, 729-741.	8.9	40
62	CAD client on smart device with drag-type buttons. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2014, 8, JAMDSM0078-JAMDSM0078.	0.7	0
63	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
64	Implementation of the direct integration from CAM to CAE for the PCB simulation. Computers in Industry, 2013, 64, 1014-1021.	9.9	5
65	Stepwise Volume Decomposition Considering Design Feature Recognition. Korean Journal of Computational Design and Engineering, 2013, 18, 71-82.	0.0	1
66	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
67	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
68	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
69	Securing design checking service for the regulation-based product design. Computers in Industry, 2012, 63, 586-596.	9.9	5
70	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
71	Integrated management of facility, process, and output: data model perspective. Science China Information Sciences, 2012, 55, 994-1007.	4.3	11
72	Hydrodynamic hull form optimization using parametric models. Journal of Marine Science and Technology, 2012, 17, 1-17.	2.9	73

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73	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
74	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
75	A virtual reality based fire training simulator integrated with fire dynamics data. Fire Safety Journal, 2012, 50, 12-24.	3.1	174
76	An Interface between 3D Modeling Tool and Scientific Data Format. International Journal of Machine Learning and Computing, 2012, , 168-172.	0.6	2
77	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
78	Integration of distributed plant lifecycle data using ISO 15926 and Web services. Annals of Nuclear Energy, 2011, 38, 2309-2318.	1.8	26
79	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
80	Construction of a computer-simulated mixed reality environment for virtual factory layout planning. Computers in Industry, 2011, 62, 86-98.	9.9	44
81	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
82	Macro-parametric: an approach for the history-based parametrics. International Journal of Product Lifecycle Management, 2010, 4, 321.	0.3	13
83	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
84	Solving the Shallow Water equations using 2D SPH particles forÂinteractive applications. Visual Computer, 2010, 26, 865-872.	3.5	25
85	A distributed visualization module and its applications using tiled display wall. , 2010, , .		4
86	Design of a framework for interoperable motion effects for 4D theaters using human-centered motion data. , 2010, , .		3
87	Knowledge-based configuration design of a train bogie. Journal of Mechanical Science and Technology, 2010, 24, 2503-2510.	1.5	11
88	Visualization of Neutral Model of Ship Pipe System Using X3D. Lecture Notes in Computer Science, 2010, , 218-228.	1.3	4
89	Development of v-DMU Based on e-Science Using COVISE and SAGE. , 2010, , 21-30.		0
90	An Underwater Vehicle Simulator with Immersive Interface using X3D and HLA. Simulation, 2009, 85, 33-44.	1.8	3

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91	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
92	A method for topological entity correspondence in a replicated collaborative CAD system. Computers in Industry, 2009, 60, 467-475.	9.9	64
93	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
94	Protection of intellectual property based on a skeleton model in product design collaboration. CAD Computer Aided Design, 2009, 41, 641-648.	2.7	45
95	Interfacing heterogeneous PDM systems using the PLM Services. Advanced Engineering Informatics, 2008, 22, 307-316.	8.0	28
96	An interactive data-driven driving simulator using motion blending. Computers in Industry, 2008, 59, 520-531.	9.9	15
97	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
98	A template-based reconstruction of plane-symmetric 3D models from freehand sketches. CAD Computer Aided Design, 2008, 40, 975-986.	2.7	20
99	Sharing of CAD assembly model data using parallel Web Services. , 2008, , .		2
100	A Hybrid Driving Simulator with Dynamics-Driven Motion and Data-Driven Motion. Simulation, 2008, 84, 359-371.	1.8	6
101	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
102	Integration of history-based parametric translators using the automation APIs. International Journal of Product Lifecycle Management, 2007, 2, 18.	0.3	27
103	Interfacing heterogeneous PDM systems by PLM services for design collaboration. , 2006, , .		1
104	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
105	Image-Based Modeling of Urban Buildings Using Aerial Photographs and Digital Maps. Transactions in GIS, 2006, 10, 377-394.	2.3	5
106	Repairing CAD model errors based on the design history. CAD Computer Aided Design, 2006, 38, 627-640.	2.7	35
107	Meta-ontology for automated information integration of parts libraries. CAD Computer Aided Design, 2006, 38, 713-725.	2.7	55
108	A multichannel visualization module for virtual manufacturing. Computers in Industry, 2006, 57, 653-662.	9.9	21

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109	A method and tool for human–human interaction and instant collaboration in CSCW-based CAD. Computers in Industry, 2006, 57, 740-751.	9.9	78
110	Representation of Urban Buildings Using Modified Relief Mapping. Journal of Computer Science and Technology, 2006, 21, 204-208.	1.5	3
111	Silhouette management for protruded displacement mapping. , 2006, , .		0
112	Product data quality assurance for e-manufacturing in the automotive industry. International Journal of Computer Integrated Manufacturing, 2006, 19, 136-147.	4.6	19
113	Recognition of design symbols from midship drawings. Ocean Engineering, 2005, 32, 1968-1981.	4.3	5
114	Reconstruction of 3D interacting solids of revolution from 2D orthographic views. CAD Computer Aided Design, 2005, 37, 1388-1398.	2.7	42
115	Ontology modeling framework for automated information integration of components libraries. , 2005, , .		1
116	A framework for a multi-sensory VR effect system with motional display. , 2005, , .		3
117	A method for verification of computer-aided design model errors. Journal of Engineering Design, 2005, 16, 337-352.	2.3	11
118	An XML-Based Macro Data Representation for a Parametric CAD Model Exchange. Computer-Aided Design and Applications, 2004, 1, 153-162.	0.6	25
119	Parameter-based Engineering Changes for a Distributed Engineering Environment. Concurrent Engineering Research and Applications, 2004, 12, 275-286.	3.2	18
120	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
121	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
122	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
123	A set of standard modeling commands for the history-based parametric approach. CAD Computer Aided Design, 2003, 35, 1171-1179.	2.7	125
124	Collaborative Engineering Design Based on an Intelligent STEP Database. Concurrent Engineering Research and Applications, 2002, 10, 239-249.	3.2	10
125	Knowledge-based parametric design of mechanical products based on configuration design method. Expert Systems With Applications, 2001, 21, 99-107.	7.6	131
126	Integration of heterogeneous CAD databases using STEP and the Internet. Decision Support Systems, 2000, 28, 365-379.	5.9	9

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127	An object-oriented configuration design method for paper feeding mechanisms. Expert Systems With Applications, 1998, 14, 283-289.	7.6	8
128	Object-oriented approach to a knowledge-based structural design system. Expert Systems With Applications, 1996, 10, 223-231.	7.6	15
129	Mapping 2D midship drawings into 3D structural models based on STEP AP218. , 0, , .		0
130	A road map on human-human interaction and fine-function collaboration in collaborative integrated design environments. , 0, , .		5