

Duhwan Mun

List of Publications by Year in descending order

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84
papers

1,041
citations

430874

18
h-index

501196

28
g-index

86
all docs

86
docs citations

86
times ranked

408
citing authors

#	ARTICLE	IF	CITATIONS
1	A set of standard modeling commands for the history-based parametric approach. CAD Computer Aided Design, 2003, 35, 1171-1179.	2.7	125
2	Feature-based simplification of boundary representation models using sequential iterative volume decomposition. Computers and Graphics, 2014, 38, 97-107.	2.5	47
3	Protection of intellectual property based on a skeleton model in product design collaboration. CAD Computer Aided Design, 2009, 41, 641-648.	2.7	45
4	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
5	Knowledge-based part similarity measurement utilizing ontology and multi-criteria decision making technique. Advanced Engineering Informatics, 2011, 25, 119-130.	8.0	31
6	Deep-learning-based retrieval of piping component catalogs for plant 3D CAD model reconstruction. Computers in Industry, 2020, 123, 103320.	9.9	30
7	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
8	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
9	Features Recognition from Piping and Instrumentation Diagrams in Image Format Using a Deep Learning Network. Energies, 2019, 12, 4425.	3.1	28
10	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
11	Integration of distributed plant lifecycle data using ISO 15926 and Web services. Annals of Nuclear Energy, 2011, 38, 2309-2318.	1.8	26
12	Stepwise volume decomposition for the modification of B-rep models. International Journal of Advanced Manufacturing Technology, 2014, 75, 1393-1403.	3.0	24
13	Toward standardized exchange of plant 3D CAD models using ISO 15926. CAD Computer Aided Design, 2017, 83, 80-95.	2.7	24
14	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
15	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
16	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
17	Deep-learning-based recognition of symbols and texts at an industrially applicable level from images of high-density piping and instrumentation diagrams. Expert Systems With Applications, 2021, 183, 115337.	7.6	21
18	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

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19	Machining feature recognition based on deep neural networks to support tight integration with 3D CAD systems. <i>Scientific Reports</i> , 2021, 11, 22147.	3.3	18
20	An integrated translation of design data of a nuclear power plant from a specification-driven plant design system to neutral model data. <i>Annals of Nuclear Energy</i> , 2010, 37, 389-397.	1.8	16
21	Enhanced volume decomposition minimizing overlapping volumes for the recognition of design features. <i>Journal of Mechanical Science and Technology</i> , 2015, 29, 5289-5298.	1.5	16
22	Graph-Based Simplification of Feature-Based Three-Dimensional Computer-Aided Design Models for Preserving Connectivity. <i>Journal of Computing and Information Science in Engineering</i> , 2015, 15, .	2.7	16
23	Shape distribution-based retrieval of 3D CAD models at different levels of detail. <i>Multimedia Tools and Applications</i> , 2017, 76, 15867-15884.	3.9	16
24	A method to exchange procedurally represented 2D CAD model data using ISO 10303 STEP. <i>CAD Computer Aided Design</i> , 2011, 43, 1717-1728.	2.7	15
25	Name matching method using topology merging and splitting history for exchange of feature-based CAD models. <i>Journal of Mechanical Science and Technology</i> , 2012, 26, 3201-3212.	1.5	15
26	Maintenance Framework for Repairing Partially Damaged Parts Using 3D Printing. <i>International Journal of Precision Engineering and Manufacturing</i> , 2019, 20, 1451-1464.	2.2	15
27	Enhancement of equipment information sharing using three-dimensional computer-aided design simplification and digital catalog techniques in the plant industry. <i>Concurrent Engineering Research and Applications</i> , 2016, 24, 275-289.	3.2	14
28	User-assisted integrated method for controlling level of detail of large-scale B-rep assembly models. <i>International Journal of Computer Integrated Manufacturing</i> , 2018, 31, 881-892.	4.6	13
29	Part library-based information retrieval and inspection framework to support part maintenance using 3D printing technology. <i>Rapid Prototyping Journal</i> , 2019, 25, 630-644.	3.2	13
30	Dataset and method for deep learning-based reconstruction of 3D CAD models containing machining features for mechanical parts. <i>Journal of Computational Design and Engineering</i> , 2021, 9, 114-127.	3.1	13
31	OpenPDM-based product data exchange among heterogeneous PDM systems in a distributed environment. <i>International Journal of Advanced Manufacturing Technology</i> , 2009, 40, 1033-1043.	3.0	12
32	Three-dimensional solid reconstruction of a human bone from CT images using interpolation with triangular Bézier patches. <i>Journal of Mechanical Science and Technology</i> , 2017, 31, 3875-3886.	1.5	12
33	A method of generating depth images for view-based shape retrieval of 3D CAD models from partial point clouds. <i>Multimedia Tools and Applications</i> , 2021, 80, 10859-10880.	3.9	12
34	Integrated management of facility, process, and output: data model perspective. <i>Science China Information Sciences</i> , 2012, 55, 994-1007.	4.3	11
35	Shape distribution-based approach to comparing 3D CAD assembly models. <i>Journal of Mechanical Science and Technology</i> , 2017, 31, 5627-5638.	1.5	11
36	Web Service with Parallel Processing Capabilities for the Retrieval of CAD Assembly Data. <i>Concurrent Engineering Research and Applications</i> , 2011, 19, 5-18.	3.2	10

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37	Discrete event simulation of Maglev transport considering traffic waves. <i>Journal of Computational Design and Engineering</i> , 2014, 1, 233-242.	3.1	10
38	Standardized exchange of plant equipment and materials data based on ISO 15926 methodology in nuclear power plants. <i>Annals of Nuclear Energy</i> , 2018, 118, 185-198.	1.8	10
39	Deep Learning-Based Method to Recognize Line Objects and Flow Arrows from Image-Format Piping and Instrumentation Diagrams for Digitization. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 10054.	2.5	10
40	Extended progressive simplification of feature-based CAD models. <i>International Journal of Advanced Manufacturing Technology</i> , 2017, 93, 915-932.	3.0	8
41	Part recognition-based simplification of triangular mesh models for ships and plants. <i>International Journal of Advanced Manufacturing Technology</i> , 2019, 105, 1329-1342.	3.0	8
42	A Method to Minimize the Data Size of a Lightweight Model for Ship and Offshore Plant Structure Using Part Characteristics. <i>Journal of Marine Science and Engineering</i> , 2020, 8, 763.	2.6	8
43	Semantics-aware adaptive simplification for lightweighting diverse 3D CAD models in industrial plants. <i>Journal of Mechanical Science and Technology</i> , 2020, 34, 1289-1300.	1.5	8
44	Mesh-offset-based method to generate a delta volume to support the maintenance of partially damaged parts through 3D printing. <i>Journal of Mechanical Science and Technology</i> , 2021, 35, 3131-3143.	1.5	8
45	End-to-end digitization of image format piping and instrumentation diagrams at an industrially applicable level. <i>Journal of Computational Design and Engineering</i> , 2022, 9, 1298-1326.	3.1	8
46	Simulating ship and buoy motions arising from ocean waves in a ship handling simulator. <i>Simulation</i> , 2012, 88, 1407-1418.	1.8	6
47	ISO 15926-based integration of process plant life-cycle information including maintenance activity. <i>Concurrent Engineering Research and Applications</i> , 2020, 28, 58-71.	3.2	6
48	Multiobjective evolutionary optimization for feature-based simplification of 3D boundary representation models. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 110, 2603-2618.	3.0	6
49	Deep learning applications in an industrial process plant: repository of segmented point clouds for pipework components. <i>JMST Advances</i> , 2020, 2, 15-24.	1.9	6
50	Lifecycle management of component catalogs based on a neutral model to support seamless integration with plant 3D design. <i>Journal of Computational Design and Engineering</i> , 2021, 8, 409-427.	3.1	6
51	Iterative offset-based method for reconstructing a mesh model from the point cloud of a pig. <i>Computers and Electronics in Agriculture</i> , 2022, 198, 106996.	7.7	6
52	Securing design checking service for the regulation-based product design. <i>Computers in Industry</i> , 2012, 63, 586-596.	9.9	5
53	Counter-deformed design of ship structural parts using geometric shape deformation based on welding distortion estimation. <i>Journal of Marine Science and Technology</i> , 2015, 20, 442-453.	2.9	5
54	Implementation of persistent identification of topological entities based on macro-parametrics approach. <i>Journal of Computational Design and Engineering</i> , 2016, 3, 161-177.	3.1	5

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55	Manufacturability evaluation of parts using descriptor-based machining feature recognition. <i>International Journal of Computer Integrated Manufacturing</i> , 2021, 34, 1196-1222.	4.6	5
56	Exchange of Plant P&ID Data Based on ISO 15926 Using iRINGTools. <i>Korean Journal of Computational Design and Engineering</i> , 2013, 18, 200-210.	0.0	5
57	A Method for Automatic Generation of Parametric Computer Aided Design Models in a Mold Base e-Catalog System. <i>Journal of Computing and Information Science in Engineering</i> , 2006, 6, 308-314.	2.7	4
58	Engineered-to-order Approach for Providing Flexibility in e-Commerce of Mold Parts. <i>Concurrent Engineering Research and Applications</i> , 2007, 15, 345-355.	3.2	4
59	Profile-based feature representation method and its application in data exchange from mechanical CAD systems to ship CAD systems. <i>Journal of Mechanical Science and Technology</i> , 2016, 30, 5641-5649.	1.5	4
60	Determination of appropriate level of detail of a three-dimensional computer-aided design model from a permissible dissimilarity for fully automated simplification. <i>Advances in Mechanical Engineering</i> , 2017, 9, 168781401770712.	1.6	4
61	Neutral model-based interfacing of 3D design to support collaborative project management in the process plant industry. <i>Journal of Computational Design and Engineering</i> , 2021, 8, 824-835.	3.1	4
62	Deep learning-based digitalization of a part catalog book to generate part specification by a neutral reference data dictionary. <i>Computers in Industry</i> , 2022, 139, 103665.	9.9	4
63	Verification of product design using regulation knowledgebase and Web services. <i>Journal of Mechanical Science and Technology</i> , 2015, 29, 5113-5119.	1.5	3
64	Similarity comparison of original and remodeled plant 3D piping CAD models using quantitative evaluation metrics for offshore plants. <i>Journal of Marine Science and Technology</i> , 2018, 23, 647-661.	2.9	3
65	Practical method for the fast generation of a CAM model for jet engine parts. <i>Advances in Mechanical Engineering</i> , 2021, 13, 168781402110027.	1.6	3
66	A Method for Measuring Part Similarity Using Ontology and a Multi-Criteria Decision Making Method. , 2009, , .		2
67	Robust generation of the delta volume for the damaged area of a part using the marching cubes algorithm to support additive manufacturing-based part maintenance. <i>International Journal of Advanced Manufacturing Technology</i> , 2021, 117, 1473.	3.0	1
68	Design Verification System Framework of Pressure Vessels Using Korea Industrial Standards. <i>Transactions of the Korean Society of Mechanical Engineers, A</i> , 2015, 39, 291-301.	0.2	1
69	Development of Preprocessor for the Exchange of Equipment and Materials™ Specifications Sheet Data Based on ISO 15926. <i>Transactions of the Korean Society of Mechanical Engineers, A</i> , 2018, 42, 1141-1158.	0.2	1
70	Development of A Postprocessor for Exchanging of Equipment and Materials Specification-sheet Data Based on ISO 15926. <i>Transactions of the Korean Society of Mechanical Engineers, A</i> , 2019, 43, 373-383.	0.2	1
71	Non-overlapping Volume Decomposition Using Maximum Volumes. <i>Korean Journal of Computational Design and Engineering</i> , 2014, 19, 50-60.	0.0	1
72	Stepwise Volume Decomposition Considering Design Feature Recognition. <i>Korean Journal of Computational Design and Engineering</i> , 2013, 18, 71-82.	0.0	1

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73	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
74	Simplification of Boundary Representation Models Based on Stepwise Volume Decomposition. Transactions of the Korean Society of Mechanical Engineers, A, 2013, 37, 1305-1313.	0.2	1
75	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
76	Development of an Editor for Reference Data Library Based on ISO 15926. Korean Journal of Computational Design and Engineering, 2014, 19, 390-401.	0.0	1
77	Development of an UG NX-based Plug-in Type System for the Simplification of 3D CAD Assembly Models. Transactions of the Korean Society of Mechanical Engineers, A, 2017, 41, 1239-1246.	0.2	1
78	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
79	Development of a System to Retrieve Manufacturing Conditions to Support 3D Printing-Based Part Maintenance. Journal of the Korean Society for Precision Engineering, 2020, 37, 633-640.	0.2	1
80	Counter-Deformed Design of Ship Structural Parts Using Geometric Shape Deformation Based on Welding Distortion Estimation. , 2013, , .		0
81	Development of Procedural 2D CAD Data Translator Supporting ISO 10303 STEP. Transactions of the Korean Society of Mechanical Engineers, A, 2013, 37, 693-705.	0.2	0
82	Development of an ISO 15926-based Integration Platform of 3D Design Data for Process Plants. Korean Journal of Computational Design and Engineering, 2015, 20, 385-400.	0.0	0
83	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
84	Reconstruction of primitive-shaped pipe elbows from a triangular mesh in ship outfitting model. Journal of Mechanical Science and Technology, 2021, 35, 5551-5560.	1.5	0