Byung Chul Kim

List of Publications by Year
in descending order

45 papers	548 citations	567281 15 h-index	677142 22 g-index
46 all docs	46 docs citations	46 times ranked	220 citing authors

#	ARTICLE	IF	CITATIONS
1	Feature-based simplification of boundary representation models using sequential iterative volume decomposition. Computers and Graphics, 2014, 38, 97-107.	2.5	47
2	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
3	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
4	Integration of history-based parametric translators using the automation APIs. International Journal of Product Lifecycle Management, 2007, 2, 18.	0.3	27
5	Integration of distributed plant lifecycle data using ISO 15926 and Web services. Annals of Nuclear Energy, 2011, 38, 2309-2318.	1.8	26
6	Stepwise volume decomposition for the modification of B-rep models. International Journal of Advanced Manufacturing Technology, 2014, 75, 1393-1403.	3.0	24
7	Toward standardized exchange of plant 3D CAD models using ISO 15926. CAD Computer Aided Design, 2017, 83, 80-95.	2.7	24
8	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
9	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
10	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
11	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
12	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
13	Machining feature recognition based on deep neural networks to support tight integration with 3D CAD systems. Scientific Reports, 2021, 11, 22147.	3.3	18
14	Enhanced volume decomposition minimizing overlapping volumes for the recognition of design features. Journal of Mechanical Science and Technology, 2015, 29, 5289-5298.	1.5	16
15	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
16	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
17	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
18	Maintenance Framework for Repairing Partially Damaged Parts Using 3D Printing. International Journal of Precision Engineering and Manufacturing, 2019, 20, 1451-1464.	2.2	15

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19	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
20	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
21	Part library-based information retrieval and inspection framework to support part maintenance using 3D printing technology. Rapid Prototyping Journal, 2019, 25, 630-644.	3.2	13
22	Three-dimensional solid reconstruction of a human bone from CT images using interpolation with triangular Bézier patches. Journal of Mechanical Science and Technology, 2017, 31, 3875-3886.	1.5	12
23	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
24	Extended progressive simplification of feature-based CAD models. International Journal of Advanced Manufacturing Technology, 2017, 93, 915-932.	3.0	8
25	End-to-end digitization of image format piping and instrumentation diagrams at an industrially applicable level. Journal of Computational Design and Engineering, 2022, 9, 1298-1326.	3.1	8
26	Inspection of Underwater Hull Surface Condition Using the Soft Voting Ensemble of the Transfer-Learned Models. Sensors, 2022, 22, 4392.	3.8	7
27	ISO 15926–based integration of process plant life-cycle information including maintenance activity. Concurrent Engineering Research and Applications, 2020, 28, 58-71.	3.2	6
28	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
29	Counter-deformed design of ship structural parts using geometric shape deformation based on welding distortion estimation. Journal of Marine Science and Technology, 2015, 20, 442-453.	2.9	5
30	Parametric optimization of FPSO hull dimensions for Brazil field using sophisticated stability and hydrodynamic calculations. International Journal of Naval Architecture and Ocean Engineering, 2021, 13, 478-492.	2.3	5
31	CAD model simplification using feature simplifications. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2016, 10, JAMDSM0099-JAMDSM0099.	0.7	4
32	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
33	Verification of product design using regulation knowledgebase and Web services. Journal of Mechanical Science and Technology, 2015, 29, 5113-5119.	1.5	3
34	Similarity comparison of original and remodeled plant 3D piping CAD models using quantitative evaluation metrics for offshore plants. Journal of Marine Science and Technology, 2018, 23, 647-661.	2.9	3
35	Practical method for the fast generation of a CAM model for jet engine parts. Advances in Mechanical Engineering, 2021, 13, 168781402110027.	1.6	3
36	Automatic Generation of CAM Model for Machining Holes for Jet Engine Compressor Case Based on Feature Recognition. Transactions of the Korean Society of Mechanical Engineers, A, 2015, 39, 337-345.	0.2	2

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37	Method for automatically generating a two-dimensional triangular mesh of a bone from a CT image considering its density heterogeneity. Journal of Mechanical Science and Technology, 2020, 34, 2941-2952.	1.5	1
38	Non-overlapping Volume Decomposition Using Maximum Volumes. Korean Journal of Computational Design and Engineering, 2014, 19, 50-60.	0.0	1
39	Stepwise Volume Decomposition Considering Design Feature Recognition. Korean Journal of Computational Design and Engineering, 2013, 18, 71-82.	0.0	1
40	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
41	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
42	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
43	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
44	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
45	A Fast Generation Method of CAM Model for Machining of Jet Engines Using Shape Search. Transactions of the Korean Society of Mechanical Engineers, A, 2016, 40, 327-336.	0.2	0