

Industry use of virtual reality in product design and ma

Virtual Reality

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Citation Report

#	ARTICLE	IF	CITATIONS
1	How does web-based virtual reality affect learning. , 2017, , .		5
2	Virtual prototyping in design reviews of industrial systems. , 2017, , .		4
3	Perceived Space in the HTC Vive. ACM Transactions on Applied Perception, 2018, 15, 1-16.	1.2	99
4	Virtual remote inspection " A new concept for virtual reality enhanced real-time maintenance. , 2017, , .		23
5	On the Design of Virtual Reality Learning Environments in Engineering. Multimodal Technologies and Interaction, 2017, 1, 11.	1.7	104
6	Unsure How to Authenticate on Your VR Headset?. , 2018, , .		38
7	On the effectiveness of virtual reality in the education of software engineering. Computer Applications in Engineering Education, 2018, 26, 918-927.	2.2	48
8	Applications of Virtual Reality. , 2018, , 299-362.		6
9	Navigation in virtual environments using head-mounted displays: Allocentric vs. egocentric behaviors. Computers in Human Behavior, 2018, 80, 331-343.	5.1	23
10	Efficient and Secure Communications in Smart Cities using Edge, Caching, and Blockchain. , 2018, , .		12
11	Multi-user predictive rendering on remote multi-GPU clusters. , 2018, , .		1
12	A Knowledge Oriented Virtual Reality Tool for Exploring Seismic Data. , 2018, , .		2
13	Framework for the Simulation of an Aircraft Final Assembly Line. MATEC Web of Conferences, 2018, 233, 00010.	0.1	2
14	Extending Upper Limb User Interactions in AR, VR and MR Headsets Employing a Custom-Made Wearable Device. , 2018, , .		0
15	Exploring Seismic Data through Virtual Reality and Hybrid Knowledge Base. , 2018, , .		2
16	Chapter 11 Assessing the Impact of Virtual Reality on Engineering Students's™ Spatial Ability. , 2018, , 171-185.		5
17	Chances and Limitations of a Virtual Reality-supported Tool for Decision Making in Industrial Engineering. IFAC-PapersOnLine, 2018, 51, 637-642.	0.5	24
18	Integrating mocap system and immersive reality for efficient human-centred workstation design. IFAC-PapersOnLine, 2018, 51, 188-193.	0.5	25

#	ARTICLE	IF	CITATIONS
19	A rapid prototyping tool to produce 360° video-based immersive experiences enhanced with virtual/multimedia elements. <i>Procedia Computer Science</i> , 2018, 138, 441-453.	1.2	12
20	An Audio-Visual Method for Room Boundary Estimation and Material Recognition. , 2018, , .		3
21	Feasibility and user experience of virtual reality fashion stores. <i>Fashion and Textiles</i> , 2018, 5, .	1.3	36
22	WeRSort: Preliminary Results from a New Method of Remote Collaboration Facilitated by Fully Immersive Virtual Reality. <i>Proceedings of the Human Factors and Ergonomics Society</i> , 2018, 62, 2084-2088.	0.2	5
23	On the Development of Virtual Reality Scenarios for Computer-Assisted Biomedical Applications. <i>Journal of Healthcare Engineering</i> , 2018, 2018, 1-13.	1.1	7
24	A Study on Software Framework Design for Spatial Drawing Virtual Reality Application. <i>International Journal of Advanced Science and Technology</i> , 2018, 118, 57-66.	0.3	0
25	Supporting constructability analysis meetings with Immersive Virtual Reality-based collaborative BIM 4D simulation. <i>Automation in Construction</i> , 2018, 96, 1-15.	4.8	106
26	Disruptive data visualization towards zero-defects diagnostics. <i>Procedia CIRP</i> , 2018, 67, 374-379.	1.0	7
27	Game development data analysis visualized with virtual reality. , 2018, , .		2
28	A Low-Cost Immersive Virtual Reality System for Teaching Robotic Manipulators Programming. <i>Sustainability</i> , 2018, 10, 1102.	1.6	50
29	Multi-user Industrial Training and Education Environment. <i>Lecture Notes in Computer Science</i> , 2018, , 533-546.	1.0	14
30	Using virtual reality to support the product's maintainability design: Immersive maintainability verification and evaluation system. <i>Computers in Industry</i> , 2018, 101, 41-50.	5.7	56
31	The effectiveness of virtual environments in developing collaborative strategies between industrial robots and humans. <i>Robotics and Computer-Integrated Manufacturing</i> , 2019, 55, 41-54.	6.1	124
32	Operator training simulators in virtual reality environment for process operators: a review. <i>Virtual Reality</i> , 2019, 23, 293-311.	4.1	53
33	Shopping in Virtual Reality Stores: The Influence of Immersion on System Adoption. <i>Journal of Management Information Systems</i> , 2019, 36, 755-788.	2.1	97
34	Comparing Virtual Reality and Desktop Interface for Reviewing 3D CAD Models. <i>Proceedings of the Design Society International Conference on Engineering Design</i> , 2019, 1, 1923-1932.	0.6	25
35	Haptic Force Guided Sound Synthesis in Multisensory Virtual Reality (VR) Simulation for Rigid-Fluid Interaction. , 2019, , .		8
36	Augmented Reality, Virtual Reality, and Computer Graphics. <i>Lecture Notes in Computer Science</i> , 2019, , .	1.0	3

#	ARTICLE	IF	CITATIONS
37	Virtual Simulator for the Taking and Evaluation of Psychometric Tests to Obtain a Driver's License. Lecture Notes in Computer Science, 2019, , 138-149.	1.0	0
38	Modeling of Human Welders' Operations in Virtual Reality Human-Robot Interaction. IEEE Robotics and Automation Letters, 2019, 4, 2958-2964.	3.3	23
40	Measuring and Understanding Photo Sharing Experiences in Social Virtual Reality. , 2019, , .		48
41	Virtual Simulation of Automatic Quality Measurement System for Tapered Roller Bearing Based on 3D Automate Software. Journal of Physics: Conference Series, 2019, 1284, 012022.	0.3	0
42	Virtualization of Robotic Hands Using Mobile Devices . Robotics, 2019, 8, 81.	2.1	1
43	Adopting Immersive Technologies for Design Practice: The Internal and External Barriers. Proceedings of the Design Society International Conference on Engineering Design, 2019, 1, 1903-1912.	0.6	5
44	Comparison of a Gamified and Non-Gamified Virtual Reality Training Assembly Task. , 2019, , .		21
45	Data Management in Industry 4.0: State of the Art and Open Challenges. IEEE Access, 2019, 7, 97052-97093.	2.6	99
46	VPMoel: High-Fidelity Product Simulation in a Virtual-Physical Environment. IEEE Transactions on Visualization and Computer Graphics, 2019, 25, 3083-3093.	2.9	14
47	Immersive Spatial Audio Reproduction for VR/AR Using Room Acoustic Modelling from 360° Images. , 2019, , .		30
48	Digital twin and virtual reality: a co-simulation environment for design and assessment of industrial workstations. Production and Manufacturing Research, 2019, 7, 472-489.	0.9	93
49	A Virtual Reality Assembly Assessment Benchmark for Measuring VR Performance & Limitations. Procedia CIRP, 2019, 81, 785-790.	1.0	11
50	Collaborative Virtual Reality Decision Tool for Planning Industrial Shop Floor Layouts. Procedia CIRP, 2019, 81, 1295-1300.	1.0	9
51	Cooperative Design, Visualization, and Engineering. Lecture Notes in Computer Science, 2019, , .	1.0	0
52	Dynamic Immersive Visualisation Environments: Enhancing Pedagogical Techniques. Australasian Journal of Information Systems, 0, 23, .	0.3	4
53	Exploring barriers to adoption of Virtual Reality through Social Media Analytics and Machine Learning . An assessment of technology, network, price and trialability. Journal of Business Research, 2019, 100, 469-474.	5.8	81
54	VR and AR in Lean Manufacturing Classes. Lecture Notes in Mechanical Engineering, 2019, , 342-351.	0.3	8
55	Integrating virtual reality devices into the body: effects of technological embodiment on customer engagement and behavioral intentions toward the destination. Journal of Travel and Tourism Marketing, 2019, 36, 847-863.	3.1	96

#	ARTICLE	IF	CITATIONS
56	Crisis management training using discrete-event simulation and virtual reality techniques. Computers and Industrial Engineering, 2019, 135, 711-722.	3.4	33
57	Human centred design and evaluation of cabin interiors for business jet aircraft in virtual reality. International Journal on Interactive Design and Manufacturing, 2019, 13, 761-772.	1.3	24
58	Analysing recent augmented and virtual reality developments in tourism. Journal of Hospitality and Tourism Technology, 2019, 10, 571-586.	2.5	38
59	Assessment of virtual reality-based manufacturing assembly training system. International Journal of Advanced Manufacturing Technology, 2019, 105, 3743-3759.	1.5	73
60	Empirische Zugänge zur Virtual Reality. , 2019, , 1-21.		3
61	A Case Study of a Virtual Training Environment. Lecture Notes in Mechanical Engineering, 2019, , 352-367.	0.3	2
62	A visual automatic analysis and evaluation method based on virtual reality in microgravity environment. Microsystem Technologies, 2019, 25, 2117-2133.	1.2	1
63	High-performance computer graphics technologies in engineering applications. World Journal of Engineering, 2019, 16, 304-308.	1.0	1
64	Analyzing the potential of Virtual Reality for engineering design review. Automation in Construction, 2019, 104, 27-37.	4.8	184
65	A Tool, not a Toy: Using Virtual Reality to Evaluate the Communication Between Autonomous Vehicles and Pedestrians. Progress in IS, 2019, , 203-216.	0.5	29
66	Augmented Reality and Virtual Reality. Progress in IS, 2019, , .	0.5	19
67	A Review on Collaborative Learning Environment across Virtual and Augmented Reality Technology. IOP Conference Series: Materials Science and Engineering, 2019, 551, 012050.	0.3	14
68	Value formation with immersive technologies: an activity perspective. Journal of Business and Industrial Marketing, 2019, 35, 483-494.	1.8	12
69	Combining Pairwise Feature Matches from Device Trajectories for Biometric Authentication in Virtual Reality Environments. , 2019, , .		24
70	Real-Time manufacturing optimization with a simulation model and virtual reality. Procedia Manufacturing, 2019, 38, 1103-1110.	1.9	14
71	Designing Collaborative and Coordinated Virtual Reality Training Integrated with Virtual and Physical Factories. , 2019, , .		16
72	An Event-Based User Experience Evaluation Method for Virtual Reality Applications. , 2019, , .		0
73	Design of an IMU-independent Posture Recognition Processing Unit for Head Mounted Devices. , 2019, , .		3

#	ARTICLE	IF	CITATIONS
74	Survey of integrability of procedural modeling techniques for generating a complete city. , 2019, , .		3
75	Applications and research trends of digital human models in the manufacturing industry. Virtual Reality & Intelligent Hardware, 2019, 1, 558-579.	1.8	56
76	Virtual reality human-robot collaborative welding: A case study of weaving gas tungsten arc welding. Journal of Manufacturing Processes, 2019, 48, 210-217.	2.8	53
77	User-centred design of autonomous mobility for public transportation in Singapore. Transportation Research Procedia, 2019, 41, 191-203.	0.8	10
78	Exploring Virtual Reality as an Integrated Development Environment for Cyber-Physical Systems. , 2019, , .		2
79	Flexible Framework to Model Industry 4.0 Processes for Virtual Simulators. Applied Sciences (Switzerland), 2019, 9, 4983.	1.3	23
80	AARDVARK: Aerospace Analysis and Design in Virtual and Augmented Reality toolKit. , 2019, , .		1
81	Structuring and Inspecting 3D Anchors for Seismic Volume into Hyperknowledge Base in Virtual Reality. , 2019, , .		3
82	“Too true to be good?” when virtual reality decreases interest in actual reality. Journal of Business Research, 2019, 100, 561-570.	5.8	67
83	The influence of virtual reality in e-commerce. Journal of Business Research, 2019, 100, 475-482.	5.8	122
84	A Digital-Twin-Assisted Fault Diagnosis Using Deep Transfer Learning. IEEE Access, 2019, 7, 19990-19999.	2.6	276
85	The impact of virtual, augmented and mixed reality technologies on the customer experience. Journal of Business Research, 2019, 100, 547-560.	5.8	661
86	A dual model of product involvement for effective virtual reality: The roles of imagination, co-creation, telepresence, and interactivity. Journal of Business Research, 2019, 100, 483-492.	5.8	138
87	The virtual reality hardware acceptance model (VR-HAM): Extending and individuating the technology acceptance model (TAM) for virtual reality hardware. Journal of Business Research, 2019, 100, 503-513.	5.8	245
88	Estimating VR Sickness and user experience using different HMD technologies: An evaluation study. Future Generation Computer Systems, 2019, 94, 302-316.	4.9	78
89	Tactile Robots as a Central Embodiment of the Tactile Internet. Proceedings of the IEEE, 2019, 107, 471-487.	16.4	54
90	A comparative study on computer-integrated set-ups to design human-centred manufacturing systems. Robotics and Computer-Integrated Manufacturing, 2019, 55, 265-278.	6.1	48
91	Toward a user-centric classification scheme for extended reality paradigms. Journal of Ambient Intelligence and Humanized Computing, 2020, 11, 2237-2249.	3.3	13

#	ARTICLE	IF	CITATIONS
92	Research on Computer Aided Design Software Innovation Based on VR Technology. <i>Advances in Intelligent Systems and Computing</i> , 2020, , 1185-1189.	0.5	2
93	Virtual prototyping in the design of see-through features in mobile machinery. <i>Virtual Reality</i> , 2020, 24, 23-37.	4.1	8
94	A hybrid method for evaluation of maintainability towards a design process using virtual reality. <i>Computers and Industrial Engineering</i> , 2020, 140, 106227.	3.4	23
95	A spatial multi-scale integer coding method and its application to three-dimensional model organization. <i>International Journal of Digital Earth</i> , 2020, 13, 1151-1171.	1.6	7
96	A Four-Pillared Holistic Model for Improving Performance in Engineering Virtual Project Teams. <i>EMJ - Engineering Management Journal</i> , 2020, 32, 107-119.	1.4	6
97	Virtual Factory: Digital Twin Based Integrated Factory Simulations. <i>Procedia CIRP</i> , 2020, 93, 216-221.	1.0	36
98	Getting Rid of Cybersickness. , 2020, , .		27
99	Simulation in industry 4.0: A state-of-the-art review. <i>Computers and Industrial Engineering</i> , 2020, 149, 106868.	3.4	146
100	New Approach for Industrial Training Using Virtual Reality Technology. <i>Procedia CIRP</i> , 2020, 93, 262-267.	1.0	4
101	Spatial Perception of 3D CAD Model Dimensions and Affordances in Virtual Environments. <i>IEEE Access</i> , 2020, 8, 174587-174604.	2.6	9
102	Realidad Virtual en procesos de aprendizaje en estudiantes universitarios: motivaci3n e inter3s para despertar vocaciones cient4ficas. <i>Cuadernos De Documentaci3n Multimedia</i> , 2020, 31, .	0.1	5
103	The relevance of virtual reality to communication design. <i>Design Studies</i> , 2020, 71, 100965.	1.9	6
104	Immersive Virtual Reality-Based Cardiopulmonary Resuscitation Interactive Learning Support System. <i>IEEE Access</i> , 2020, 8, 120870-120880.	2.6	10
105	Construction 4.0: A Literature Review. <i>Sustainability</i> , 2020, 12, 9755.	1.6	150
106	Work-in-Progress“ A Generalizable Virtual Reality Training and Intelligent Tutor for Additive Manufacturing. , 2020, , .		2
107	Applications of Virtual Reality in Engineering and Product Design: Why, What, How, When and Where. <i>Electronics (Switzerland)</i> , 2020, 9, 1064.	1.8	49
108	Life Cycle Engineering 4.0: A Proposal to Conceive Manufacturing Systems for Industry 4.0 Centred on the Human Factor (DfHFin4.0). <i>Applied Sciences (Switzerland)</i> , 2020, 10, 4442.	1.3	12
109	The Design of Applying Gamification in an Immersive Virtual Reality Virtual Laboratory for Powder-Bed Binder Jetting 3DP Training. <i>Education Sciences</i> , 2020, 10, 172.	1.4	7

#	ARTICLE	IF	CITATIONS
110	Applications of virtual reality in maintenance during the industrial product lifecycle: A systematic review. <i>Journal of Manufacturing Systems</i> , 2020, 56, 525-538.	7.6	83
111	A FRAMING OF DESIGN AS PATHWAYS BETWEEN PHYSICAL, VIRTUAL AND COGNITIVE MODELS. <i>Proceedings of the Design Society DESIGN Conference</i> , 2020, 1, 41-50.	0.8	4
112	Two-Tier analyzed content filtering based Data Management Architecture in Industry 4.0. , 2020, , .		3
113	AN EXPLORATIVE STUDY TOWARDS USING VR SKETCHING AS A TOOL FOR IDEATION AND PROTOTYPING IN PRODUCT DESIGN. <i>Proceedings of the Design Society DESIGN Conference</i> , 2020, 1, 225-234.	0.8	9
114	Application of Industry 4.0 to the Product Development Process in Project-Type Production. <i>Energies</i> , 2020, 13, 5553.	1.6	13
115	Space Elements of Computer Music Production Based on VR Technology. <i>IEEE Access</i> , 2020, , 1-1.	2.6	2
116	Digital Media Application Technology in Tourism Management Major VRAR Direction Talent Training Model Reform and Practice Research. <i>IEEE Access</i> , 2024, , 1-1.	2.6	7
117	VR Technology Online Classroom Mode in Cross Border E-Commerce Teaching in Colleges and Universities. <i>IEEE Access</i> , 2020, , 1-1.	2.6	1
118	Design and Implementation of Virtual Pottery Space Based on Ceramic Cloud Service Platform. , 2020, , .		1
119	Influence of the Development of VR Technology on Enterprise Human Resource Management in the Era of Artificial Intelligence. <i>IEEE Access</i> , 2020, , 1-1.	2.6	4
120	Implementation of virtual reality in technical education: an innovative view. <i>International Journal of Management in Education</i> , 2020, 14, 545.	0.1	1
121	Human-Robot Assembly: Methodical Design and Assessment of an Immersive Virtual Environment for Real-World Significance. , 2020, , .		1
122	Electrically Elicited Force Response Characteristics of Forearm Extensor Muscles for Electrical Muscle Stimulation-Based Haptic Rendering. <i>Sensors</i> , 2020, 20, 5669.	2.1	4
123	Challenges, Opportunities and Future Directions of Smart Manufacturing: A State of Art Review. <i>Sustainable Futures</i> , 2020, 2, 100023.	1.5	146
124	On accident causation models, safety training and virtual reality. <i>International Journal of Occupational Safety and Ergonomics</i> , 2022, 28, 28-44.	1.1	10
125	Eye-Tracking-Based Classification of Information Search Behavior Using Machine Learning: Evidence from Experiments in Physical Shops and Virtual Reality Shopping Environments. <i>Information Systems Research</i> , 2020, 31, 675-691.	2.2	58
126	Understanding Usersâ€™ Engagement and Responses in 3D Virtual Reality: The Influence of Presence on User Value. <i>Interacting With Computers</i> , 2020, 32, 103-117.	1.0	6
127	Virtual and augmented reality: Advancing research in consumer marketing. <i>International Journal of Research in Marketing</i> , 2020, 37, 443-465.	2.4	217

#	ARTICLE	IF	CITATIONS
128	FROM CAD TO PHYSICS-BASED DIGITAL TWIN: FRAMEWORK FOR REAL-TIME SIMULATION OF VIRTUAL PROTOTYPES. Proceedings of the Design Society DESIGN Conference, 2020, 1, 335-344.	0.8	4
129	Meet the Virtual Jeju Dol Harubangâ€™The Mixed VR/AR Application for Cultural Immersion in Koreaâ€™s Main Heritage. ISPRS International Journal of Geo-Information, 2020, 9, 367.	1.4	38
130	Applications of Virtual Data in Subsea Inspections. Journal of Marine Science and Engineering, 2020, 8, 328.	1.2	13
131	BioMove: Biometric User Identification from Human Kinesiological Movements for Virtual Reality Systems. Sensors, 2020, 20, 2944.	2.1	41
132	Virtual reality through the customer journey: Framework and propositions. Journal of Retailing and Consumer Services, 2020, 55, 102056.	5.3	64
133	Trend Analysis on Adoption of Virtual and Augmented Reality in the Architecture, Engineering, and Construction Industry. Data, 2020, 5, 26.	1.2	106
134	Augmented Reality and Virtual Reality. Progress in IS, 2020, , .	0.5	16
135	Examining User Perception of the Size of Multiple Objects in Virtual Reality. Applied Sciences (Switzerland), 2020, 10, 4049.	1.3	10
136	Effects of Egocentric Versus Exocentric Virtual Object Storage Technique on Cognition in Virtual Environments. , 2020, , .		2
138	Being present in a real or virtual world: A EEG study. International Journal of Medical Informatics, 2020, 136, 103977.	1.6	20
139	Finger Gesture Spotting from Long Sequences Based on Multi-Stream Recurrent Neural Networks. Sensors, 2020, 20, 528.	2.1	10
140	Effects of Using Immersive Media on the Effectiveness of Training to Prevent Ergonomics Risks. International Journal of Environmental Research and Public Health, 2020, 17, 2592.	1.2	12
141	Effects of physical, non-immersive virtual, and immersive virtual store environments on consumers' perceptions and purchase behavior. Computers in Human Behavior, 2020, 110, 106374.	5.1	56
142	Advances in Simulation and Digital Human Modeling. Advances in Intelligent Systems and Computing, 2021, , .	0.5	3
143	The use of a virtual reality training system to improve technical skill in the maintenance of live-line power distribution networks. Interactive Learning Environments, 2021, 29, 527-544.	4.4	29
144	VRmol: an integrative web-based virtual reality system to explore macromolecular structure. Bioinformatics, 2021, 37, 1029-1031.	1.8	16
145	Perception is realityâ€¦ How digital retail environments influence brand perceptions through presence. Journal of Business Research, 2021, 123, 86-96.	5.8	28
146	An immersive performative architectural design tool with daylighting simulations: a building information modeling-based approach. Engineering, Construction and Architectural Management, 2021, 28, 1319-1344.	1.8	7

#	ARTICLE	IF	CITATIONS
147	Usability of virtual reality for basic design education: a comparative study with paper-based design. International Journal of Technology and Design Education, 2021, 31, 357-377.	1.7	40
148	Action Research on Virtual-Reality-Assisted Product and Process Design. IEEE Transactions on Engineering Management, 2022, 69, 3292-3309.	2.4	3
149	Model Reconstruction of Real-World 3D Objects: An Application with Microsoft HoloLens. Human-computer Interaction Series, 2021, , 89-104.	0.4	0
150	Consistency in Multi-device Service Including VR: A Case Study. Lecture Notes in Computer Science, 2021, , 147-159.	1.0	0
151	A Comparative Evaluation of a Single and Stereo Lighthouse Systems for 3-D Estimation. IEEE Sensors Journal, 2021, 21, 24791-24800.	2.4	1
152	Leveraging synthetic data from CAD models for training object detection models – a VR industry application case. Procedia CIRP, 2021, 100, 714-719.	1.0	5
154	Seven Levels of Detail to structure use cases and interaction mechanism for the development of industrial Virtual Reality applications within the context of planning and configuration of robot-based automation solutions. Procedia CIRP, 2021, 96, 284-289.	1.0	8
155	The Role of Mental Imagery as Driver to Purchase Intentions in a Virtual Supermarket. Progress in IS, 2021, , 17-28.	0.5	0
156	A Survey on Multi-Access Edge Computing Applied to Video Streaming: Some Research Issues and Challenges. IEEE Communications Surveys and Tutorials, 2021, 23, 871-903.	24.8	83
157	The Mobile Office: A Mobile AR Systems for Productivity Applications in Industrial Environments. Lecture Notes in Computer Science, 2021, , 511-532.	1.0	2
158	Review on existing VR/AR solutions in human–robot collaboration. Procedia CIRP, 2021, 97, 407-411.	1.0	68
159	Improving Real-Time Hand Gesture Recognition with Semantic Segmentation. Sensors, 2021, 21, 356.	2.1	29
160	Extended Reality in Business-to-Business Sales: An Exploration of Adoption Factors. Advances in Intelligent Systems and Computing, 2021, , 123-130.	0.5	1
161	A Transferable Psychological Evaluation of Virtual Reality Applied to Safety Training in Chemical Manufacturing. Journal of Chemical Health and Safety, 2021, 28, 55-65.	1.1	15
162	The effectiveness of interactive virtual reality for furniture, fixture and equipment design communication: an empirical study. Engineering, Construction and Architectural Management, 2021, 28, 1440-1467.	1.8	7
163	Developing a Web Platform for the Management of the Predictive Maintenance in Smart Factories. Wireless Personal Communications, 2021, 119, 1469.	1.8	12
164	Recent Advances and Opportunities of Active Materials for Haptic Technologies in Virtual and Augmented Reality. Advanced Functional Materials, 2021, 31, 2008831.	7.8	63
165	Requirements Gathering for VR Simulators for Training: Lessons Learned for Globally Dispersed Teams. , 2021, , .		2

#	ARTICLE	IF	CITATIONS
166	Dances with Robots. TDR - the Drama Review - A Journal of Performance Studies, 2021, 65, 124-143.	0.0	2
167	Three-dimensional modeled environments versus 360 degree panoramas for mobile virtual reality training. Virtual Reality, 2022, 26, 571-581.	4.1	19
168	Architecture of visual design creation system based on 5G virtual reality. International Journal of Communication Systems, 2022, 35, e4750.	1.6	9
169	Mitigating Psychological Trauma on Adult Burn Patients Based on Virtual Reality Technology of Smart Medical Treatment. Journal of Healthcare Engineering, 2021, 2021, 1-11.	1.1	10
170	Simulation-based assessments of fire emergency preparedness and response in virtual reality. International Journal of Occupational Safety and Ergonomics, 2022, 28, 1316-1330.	1.1	5
171	The Use of Augmented Reality and Virtual Reality in Ergonomic Applications for Education, Aviation, and Maintenance. Ergonomics in Design, 0, , 106480462110034.	0.4	6
172	Panoramic Stereo Imaging of a Bionic Compound-Eye Based on Binocular Vision. Sensors, 2021, 21, 1944.	2.1	9
173	Demonstration and evaluation of a digital twin-based virtual factory. International Journal of Advanced Manufacturing Technology, 2021, 114, 185-203.	1.5	35
174	EEG Cortical Activities and Networks Altered by Watching 2D/3D Virtual Reality Videos. Journal of Psychophysiology, 2022, 36, 4-12.	0.3	5
175	Delivering Critical Stimuli for Decision Making in VR Training: Evaluation Study of a Firefighter Training Scenario. IEEE Transactions on Human-Machine Systems, 2021, 51, 65-74.	2.5	13
176	Physical Education Teaching in Colleges and Universities Assisted by Virtual Reality Technology Based on Artificial Intelligence. Mathematical Problems in Engineering, 2021, 2021, 1-11.	0.6	27
177	Auxiliary use and detail optimization of computer VR technology in landscape design. Arabian Journal of Geosciences, 2021, 14, 1.	0.6	19
178	Application of virtual reality technologies in the comradesâ€™ marathon as a response to COVID-19 pandemic. Development Southern Africa, 2022, 39, 20-34.	1.1	10
179	Design of Lingnan Cultural Gene Implantation Cultural and Creative Products Based on Virtual Reality Technology. Mathematical Problems in Engineering, 2021, 2021, 1-9.	0.6	9
180	Object manipulation in immersive virtual environments: Hand Motion tracking technology and snap-to-fit function. Automation in Construction, 2021, 124, 103594.	4.8	10
181	The Development and Testing of a Digital ITER-Type Mock-Up Based on Virtual Reality Technology. Fusion Science and Technology, 2021, 77, 350-358.	0.6	2
182	Hands-free interaction in immersive virtual reality: A systematic review. IEEE Transactions on Visualization and Computer Graphics, 2021, 27, 2702-2713.	2.9	33
183	VR Implementation in User-Interactive Simulation Environments. , 2021, , .		3

#	ARTICLE	IF	CITATIONS
184	How Developers Optimize Virtual Reality Applications: A Study of Optimization Commits in Open Source Unity Projects. , 2021, , .		11
185	Building a virtual factory: an integrated design approach to building smart factories. Journal of Global Operations and Strategic Sourcing, 2021, 14, 608-635.	3.4	8
187	Inspection of Histological 3D Reconstructions in Virtual Reality. Frontiers in Virtual Reality, 2021, 2, .	2.5	2
188	Innovation System of Film Art Creation Based on Virtual Reality Technology. , 2021, , .		1
189	Effects of Level of Immersion on Virtual Training Transfer of Bimanual Assembly Tasks. Frontiers in Virtual Reality, 2021, 2, .	2.5	2
190	Human factors/ergonomics evaluation for virtual reality headsets: a review. CCF Transactions on Pervasive Computing and Interaction, 2021, 3, 99-111.	1.7	22
191	Evaluating distance perception for architecture design alternatives in immersive virtual environment: a comparative study. Construction Innovation, 2022, 22, 205-221.	1.5	1
192	A Methodological Framework for Assessing Social Presence in Music Interactions in Virtual Reality. Frontiers in Psychology, 2021, 12, 663725.	1.1	9
193	L'agentivité des systèmes immersifs de réalité virtuelle en situation de codesign: étude comparative entre le Hype-3D et un environnement traditionnel. Sciences Du Design, 2021, n° 13, 27-41.	0.1	0
194	Virtual Reality Design and Realization of Interactive Garden Landscape. Complexity, 2021, 2021, 1-10.	0.9	8
195	94. Using virtual reality field demonstrations to increase farmer engagement. , 2021, , .		1
196	Towards design guidelines for virtual reality training for the chemical industry. Education for Chemical Engineers, 2021, 36, 12-23.	2.8	45
197	Virtual reality simulation of human-robot coexistence for an aircraft final assembly line: process evaluation and ergonomics assessment. International Journal of Computer Integrated Manufacturing, 2021, 34, 975-995.	2.9	19
198	EMBRACING NEW VISUALISATION TOOLS IN EDUCATION: HOW THE LEARNING EXPERIENCE OF DIGITAL SKETCHING INFLUENCES ITS USE IN DESIGN PRACTICE. Proceedings of the Design Society, 2021, 1, 1353-1362.	0.5	1
199	Construction 4.0: what we know and where we are headed?. Journal of Information Technology in Construction, 2021, 26, 526-545.	1.4	20
200	Virus tinged? Exploring the facets of virtual reality use in tourism as a result of the COVID-19 pandemic. Telematics and Informatics, 2021, 60, 101575.	3.5	68
201	Evaluation of Incision Margin and Radiotherapy Adjustment in Breast Cancer-Conserving Surgery Based on VR Pathology 3D Reconstruction. Journal of Healthcare Engineering, 2021, 2021, 1-11.	1.1	2
202	Integrating lean production strategies, virtual reality technique and building information modeling method for mass customization in cabinet manufacturing. Engineering, Construction and Architectural Management, 2022, 29, 3970-3996.	1.8	5

#	ARTICLE	IF	CITATIONS
203	VR as a 3D Modelling Tool in Engineering Design Applications. Applied Sciences (Switzerland), 2021, 11, 7570.	1.3	9
204	A survey of immersive technologies and applications for industrial product development. Computers and Graphics, 2021, 100, 137-151.	1.4	13
205	The human source memory system struggles to distinguish virtual reality and reality. Computers in Human Behavior Reports, 2021, 4, 100111.	2.3	7
206	Augmented Reality as a research tool: investigating cognitive-motor dual-task during outdoor navigation. International Journal of Human Computer Studies, 2021, 152, 102644.	3.7	9
207	Intelligent Splicing Method of Virtual Reality Lingnan Cultural Heritage Panorama Based on Automatic Machine Learning. Mobile Information Systems, 2021, 2021, 1-10.	0.4	4
208	Development of a design platform for the high-range sprayer used for street trees based on a VR visualization. International Journal on Interactive Design and Manufacturing, 2021, 15, 661-670.	1.3	0
209	Design and preliminary realization of component installation scheme generation system in virtual EAST. Fusion Engineering and Design, 2021, 170, 112718.	1.0	0
210	Digital simulation tools in aviation maintainability training. Computer Applications in Engineering Education, 2022, 30, 384-395.	2.2	2
211	An evidence of cognitive benefits from immersive design review: Comparing three-dimensional perception and presence between immersive and non-immersive virtual environments. Automation in Construction, 2021, 130, 103849.	4.8	40
212	Mixed reality in design prototyping: A systematic review. Design Studies, 2021, 77, 101046.	1.9	31
213	New approach of designing robotics production systems using immersive virtual reality environment. MATEC Web of Conferences, 2021, 343, 08001.	0.1	0
214	IPN Hand: A Video Dataset and Benchmark for Real-Time Continuous Hand Gesture Recognition. , 2021, , .		32
215	Industry 4.0 in Welding. Materials Forming, Machining and Tribology, 2021, , 253-298.	0.7	7
216	Task-Driven Biometric Authentication of Users in Virtual Reality (VR) Environments. Lecture Notes in Computer Science, 2019, , 55-67.	1.0	32
217	Automating the Integration of 4D Models in Game Engines for a Virtual Reality-Based Construction Simulation. Lecture Notes in Computer Science, 2019, , 123-132.	1.0	3
218	Designing Tomorrow's Human-Machine Interfaces in Autonomous Vehicles: An Exploratory Study in Virtual Reality. Progress in IS, 2020, , 151-160.	0.5	1
219	Enhancing Product Configuration and Sales Processes with Extended Reality. Progress in IS, 2020, , 37-50.	0.5	3
220	Simulation-Based Safety Training for Plant Maintenance in Virtual Reality. Advances in Intelligent Systems and Computing, 2021, , 167-173.	0.5	4

#	ARTICLE	IF	CITATIONS
221	The Use of Immersive Technologies for Design Reviews. <i>Advances in Intelligent Systems and Computing</i> , 2020, , 656-662.	0.5	2
222	The Use of Immersive Technologies for Concept Design. <i>Advances in Intelligent Systems and Computing</i> , 2020, , 698-704.	0.5	5
223	Integration of New Technologies and Alternative Methods in Laboratory-Based Scenarios. <i>Advances in Intelligent Systems and Computing</i> , 2021, , 488-507.	0.5	5
224	Application of Virtual Reality Technologies for Achieving Energy Efficient Manufacturing: Literature Analysis and Findings. <i>IFIP Advances in Information and Communication Technology</i> , 2020, , 479-486.	0.5	3
225	Comparison of Manual Assembly Training Possibilities in Various Virtual Reality Systems. <i>Lecture Notes in Electrical Engineering</i> , 2019, , 398-404.	0.3	2
226	Examination of Effectiveness of a Performed Procedural Task Using Low-Cost Peripheral Devices in VR. <i>Lecture Notes in Computer Science</i> , 2018, , 403-415.	1.0	3
227	Design of Experiment Comparing Users of Virtual Reality Head-Mounted Displays and Desktop Computers. <i>Advances in Intelligent Systems and Computing</i> , 2019, , 240-249.	0.5	4
228	Strategy of Improving Skills of Innovation Managers in the Area of Advanced Manufacturing Technologies. <i>Advances in Intelligent Systems and Computing</i> , 2019, , 296-305.	0.5	2
229	3D-Visualisierung von Landschaft "Ein Ausblick auf zukünftige Entwicklungen. <i>RaumFragen: Stadt - Region - Landschaft</i> , 2019, , 559-573.	1.0	9
231	Levitation Simulator: Prototyping Ultrasonic Levitation Interfaces in Virtual Reality. , 2020, , .		8
232	Exploring the Vulnerabilities and Advantages of SWIPE or Pattern authentication in Virtual Reality (VR). , 2020, , .		19
233	Expert Performance in the Examination of Interior Surfaces in an Automobile: Virtual Reality vs. Reality. , 2020, , .		2
234	Streamlining XR Technology Into Industrial Training and Maintenance Processes. , 2020, , .		6
235	Communicating Hurricane Risk with Virtual Reality: A Pilot Project. <i>Bulletin of the American Meteorological Society</i> , 2019, 100, 1897-1902.	1.7	11
236	The proliferation of virtual laboratories in educational fields. <i>Advances in Distributed Computing and Artificial Intelligence Journal</i> , 2020, 9, 85-97.	1.1	21
237	Virtual Reality-Enhanced Configuration Design of Customized Workplaces: a Case Study of Ship Bridge System. <i>Computer-Aided Design and Applications</i> , 2018, 16, 345-357.	0.4	5
238	Proportional Error Back-Propagation (PEB): Real-Time Automatic Loop Closure Correction for Maintaining Global Consistency in 3D Reconstruction with Minimal Computational Cost. <i>Measurement Science Review</i> , 2018, 18, 86-93.	0.6	3
239	Design of Hybrid Refractive/Diffractive Lenses for Wearable Reality Displays. <i>Balkan Journal of Electrical and Computer Engineering</i> , 0, , 94-98.	0.4	2

#	ARTICLE	IF	CITATIONS
240	Associating 2D Sketch Information with 3D CAD Models for VR/AR Viewing During Bridge Maintenance Process. International Journal of Automation Technology, 2019, 13, 482-489.	0.5	5
241	Using Virtual Reality to Enforce Principles of Cybersecurity. Journal of Computational Science Education, 2019, 10, 81-87.	0.3	11
242	A Point-Based and Image-Based Multi-Pass Rendering Technique for Visualizing Massive 3D Point Clouds in VR Environments. Journal of WSCG, 2018, 26, .	0.6	7
243	Incorporating Virtual Reality Technology in Safety Training Solution for Construction Site of Urban Cities. Sustainability, 2021, 13, 243.	1.6	43
244	INTERACTION AND LOCOMOTION TECHNIQUES FOR THE EXPLORATION OF MASSIVE 3D POINT CLOUDS IN VR ENVIRONMENTS. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XLII-4, 623-630.	0.2	3
245	Complexity-Reduced Super Resolution for Foveation-Based Driving Head Mounted Displays. IEEE Access, 2021, 9, 140042-140049.	2.6	1
246	Increasing Sociability in a Virtual World: A Serious Game for Social Anxiety Disorder. , 2021, , .		1
247	STRIVE: String-Based Force Feedback for Automotive Engineering. , 2021, , .		6
248	INTERVALES: INTERactive Virtual and Augmented framework for industrial Environment and Scenarios. Advanced Engineering Informatics, 2021, 50, 101425.	4.0	10
249	A Systematic Literature Review on Extended Reality: Virtual, Augmented and Mixed Reality in Working Life. The International Journal of Virtual Reality, 2021, 21, 1-28.	2.2	36
250	Monitoring console using Virtual Reality for automotive industry. IOP Conference Series: Materials Science and Engineering, 2021, 1182, 012006.	0.3	0
251	Computer-aided process planning in immersive environments: A critical review. Computers in Industry, 2021, 133, 103547.	5.7	9
252	VR "rozpoznawalnoÅ sprzÄtu w Åwietle wynikÅw badaÅ, empirycznych. , 2017, 15, 71-82.	0.0	0
253	Everyday Virtual Reality. , 2018, , 1-9.		2
254	Spatial Drawing Framework Design in Virtual Environment. , 2018, , .		0
255	Development of Air Flow Simulator in Agricultural Facility based on Virtual Reality. Protected Horticulture and Plant Factory, 2019, 28, 16-27.	0.4	0
256	Virtual Reality as a Tool for Ophthalmic Examination. Advances in Intelligent Systems and Computing, 2020, , 94-106.	0.5	0
257	A Conceptual Framework for Developing a Customized I 4.0 Education Scale: An Exploratory Research. Lecture Notes in Mechanical Engineering, 2020, , 203-216.	0.3	3

#	ARTICLE	IF	CITATIONS
258	Integrating Virtual Reality and Augmented Reality in a Collaborative User Interface. Journal of the Malaysian Branch of the Royal Asiatic Society, 2019, 9, .	0.2	8
260	Virtualization of an Aluminum Cans Production Line Using Virtual Reality. , 2020, , .		2
261	Understanding research methodologies when combining virtual reality technology with machine learning techniques. , 2020, , .		0
262	Advancing the Adoption of Virtual Reality and Neurotechnology to Improve Flight Training. , 2021, , .		6
263	Tourists and Augmented and Virtual Reality Experiences. , 2020, , 1-20.		3
264	Insight About the Use of AR and VR for Trainees. Advances in Computational Intelligence and Robotics Book Series, 2020, , 178-192.	0.4	0
265	Customer Integration Through Virtual Reality Implementation: A SWOT Analysis in the Area of Production Systems. Progress in IS, 2020, , 253-266.	0.5	2
267	WAAT: A Workstation AR Authoring Tool for Industry 4.0. Lecture Notes in Computer Science, 2020, , 304-320.	1.0	4
268	Integrating Virtual Reality in a Lab Based Learning Environment. Lecture Notes in Computer Science, 2020, , 99-114.	1.0	2
270	VRAnat: A Complete Virtual Reality Platform for Academic Training in Anatomy. Advances in Intelligent Systems and Computing, 2020, , 395-403.	0.5	0
271	Learning History Using Virtual and Augmented Reality. Computers, 2021, 10, 146.	2.1	11
272	Investigating Effects and User Preferences of Extra- and Intradiegetic Virtual Reality Questionnaires. , 2020, , .		2
273	Arc-Type and Tilt-Type: Pen-based Immersive Text Input for Room-Scale VR. , 2020, , .		4
275	Virtual bowling. , 2020, , .		2
276	Mesleki EÄYitime YÄ¶nelik ArttÄ±rÄ±lmÄ±ÅY ve Sanal GerÅ¶eklik Teknolojilerinin Tek Bir Uygulamada BirleÅYtirilerek Karma GerÅ¶eklik UygulamasÄ± GeliÅYtirilmesi ve DonanÄ±m TasarlanmasÄ±. Academic Perspective Procedia, 2020, 3, 322-330.	0.0	0
277	Exploring Tangible VR as a Tool for Workplace Design. , 2020, , .		1
278	Virtual Reality (VR) in Engineering Education and Training. , 2020, , .		9
279	Efficient Orchestration of Service Chains in Fog Computing for Immersive Media. , 2021, , .		4

#	ARTICLE	IF	CITATIONS
280	Evaluation of the Virtual Economic Effect of Tourism Product Emotional Marketing Based on Virtual Reality. <i>Frontiers in Psychology</i> , 2021, 12, 759268.	1.1	10
281	Virtual Reality as Pedagogical Tool to Enhance Experiential Learning: A Systematic Literature Review. <i>Education Research International</i> , 2021, 2021, 1-17.	0.6	26
283	Assessment of Virtual Reality as a Didactic Resource in Higher Education. <i>Sustainability</i> , 2021, 13, 12730.	1.6	25
284	Adaptive disassembly sequence planning for VR maintenance training via deep reinforcement learning. <i>International Journal of Advanced Manufacturing Technology</i> , 2023, 124, 3039-3048.	1.5	8
285	Usability in the Product Design Process Based on the Intelligent Microprocessor. <i>Wireless Communications and Mobile Computing</i> , 2021, 2021, 1-15.	0.8	0
286	Embedded VR Video Image Control System in the Ideological and Political Teaching System Based on Artificial Intelligence. <i>Mobile Information Systems</i> , 2021, 2021, 1-12.	0.4	1
287	Defining the Potential of Extended Reality Tools for Implementing Co-creation of User Oriented Products and Systems. <i>Lecture Notes in Mechanical Engineering</i> , 2022, , 165-174.	0.3	3
288	Evaluating the influence of interaction technology on procedural learning using Virtual Reality. , 2021, , .		0
289	Identifying institutional barriers when implementing new technologies in the healthcare industry. <i>European Journal of Innovation Management</i> , 2023, 26, 909-932.	2.4	10
291	Implications of Virtual Reality on Environmental Sustainability in Manufacturing Industry: A Case Study. <i>Procedia CIRP</i> , 2021, 104, 464-469.	1.0	6
292	Multiple perspectives integration for virtual reality-aided assemblability assessment in narrow assembly spaces. <i>International Journal of Advanced Manufacturing Technology</i> , 2022, 119, 2495-2508.	1.5	4
293	The Effects on Driving Behavior When Using a Head-mounted Display in a Dynamic Driving Simulator. <i>ACM Transactions on Applied Perception</i> , 2022, 19, 1-18.	1.2	6
294	Exploring Visuo-haptic Feedback Congruency in Virtual Reality. , 2020, , .		8
295	Towards a methodology for online VR application testing. , 2020, , .		3
296	Designing in virtual environments: The integration of virtual reality tools into industrial design research and education. , 0, , .		2
297	VR Design and Display System of Ceramic Products Based on Cloud Service Platform. , 2020, , .		1
298	Research on Landscape Planning and Design of Urban Point Public Space Based on Computer Virtual Technology. , 2020, , .		0
299	5G+VR industrial technology application. , 2020, , .		3

#	ARTICLE	IF	CITATIONS
300	â€œCan I Touch This?â€ Survey of Virtual Reality Interactions via Haptic Solutions. , 2021, , .		18
301	Local to Global Plane Regularity Aggregation for Dense Surfel Mapping. , 2021, , .		0
302	Lessons learned from requirements gathering for virtual reality simulators. Virtual Reality & Intelligent Hardware, 2021, 3, 407-422.	1.8	2
303	I Am the Robot: Teen Collaboration in an Asymmetric, Virtual Reality Game. Frontiers in Virtual Reality, 2022, 2, .	2.5	1
304	VR/AR Case Studies. , 2022, , 331-369.		2
305	A Human-Centric Model for Sustainable Asset Management in Railway: A Case Study. Sustainability, 2022, 14, 936.	1.6	3
307	The potential of immersive virtual reality forÂrepresentations in design education. Virtual Reality, 2022, 26, 1227-1244.	4.1	13
308	Do we see rendered surface materials differently in virtual reality? A psychophysics-based investigation. Virtual Reality, 0, , 1.	4.1	2
309	Free-Roam Virtual Reality: A New Avenue for Gaming. Studies in Computational Intelligence, 2022, , 29-34.	0.7	4
310	Innovative Technologies: Applications in the Present and Considerations for the Future. , 2022, , 193-215.		1
312	An Approach Based on VR to Design Industrial Human-Robot Collaborative Workstations. Applied Sciences (Switzerland), 2021, 11, 11773.	1.3	8
313	Implementation of Virtual Reality for Training in Education and Industry: A Forklift Case. Lecture Notes in Mechanical Engineering, 2022, , 292-305.	0.3	2
315	Sketching in-vehicle ambient lighting in virtual reality with the Wizard-of-Oz method. Digital Creativity, 0, , 1-15.	0.8	2
316	Developing simulation approaches: a simple case of emulation for logic validation using tecnomatix plant simulation. Journal of Physics: Conference Series, 2022, 2212, 012011.	0.3	2
317	5G Virtual Reality in the Design and Dissemination of Contemporary Urban Image System under the Background of Big Data. Wireless Communications and Mobile Computing, 2022, 2022, 1-14.	0.8	5
318	Systematic Review of Multimodal Humanâ€Computer Interaction. Informatics, 2022, 9, 13.	2.4	10
319	Recognizing Personality Traits Using Consumer Behavior Patterns in a Virtual Retail Store. Frontiers in Psychology, 2022, 13, 752073.	1.1	9
320	Virtual Reality Metaverse System Supplementing Remote Education Methods: Based on Aircraft Maintenance Simulation. Applied Sciences (Switzerland), 2022, 12, 2667.	1.3	83

#	ARTICLE	IF	CITATIONS
321	Immersive Industrialized Construction Environments for Energy Efficiency Construction Workforce. <i>Frontiers in Virtual Reality</i> , 2022, 3, .	2.5	1
322	emteqPROâ€”Fully Integrated Biometric Sensing Array for Non-Invasive Biomedical Research in Virtual Reality. <i>Frontiers in Virtual Reality</i> , 2022, 3, .	2.5	11
323	A New Maintainability Evaluation Method Based on Virtual-real Fusion Scene Construction. <i>Scientific Programming</i> , 2022, 2022, 1-12.	0.5	2
324	Application of Humanâ€”Computer Interaction Virtual Reality Technology to the Design of Ice and Snow Landscapes. <i>International Journal of Humanoid Robotics</i> , 2022, 19, .	0.6	7
325	The Use of Virtual Reality in Tourism Destinations as a Tool to Develop Tourist Behavior Perspective. <i>Sustainability</i> , 2022, 14, 4191.	1.6	22
326	Product Tests in Virtual Reality: Lessons Learned during Collision Avoidance Development for Drones. <i>Designs</i> , 2022, 6, 33.	1.3	4
327	Understanding the challenges of immersive technology use in the architecture and construction industry: A systematic review. <i>Automation in Construction</i> , 2022, 137, 104228.	4.8	35
328	Effectiveness of virtual reality in discrete event simulation models for manufacturing systems. <i>Computers and Industrial Engineering</i> , 2022, 168, 108079.	3.4	10
329	What is XR? Towards a Framework for Augmented and Virtual Reality. <i>Computers in Human Behavior</i> , 2022, 133, 107289.	5.1	234
330	Teaching Mode of Art Design Wisdom Course Based on VR Technology. , 2021, , .		2
331	VR Education Support Systemâ€”A Case Study of Digital Circuits Design. <i>Energies</i> , 2022, 15, 277.	1.6	10
333	Development of Multi-User Synchronous VR System and its Performance Analysis. , 2021, , .		0
334	Strategic use of immersive media and narrative message in virtual marketing: Understanding the roles of telepresence and transportation. <i>Psychology and Marketing</i> , 2022, 39, 524-542.	4.6	40
335	Spatial Updating in Virtual Reality â€” Auditory and Visual Cues in a Cave Automatic Virtual Environment. , 2022, , .		2
336	Design and Analysis of Clothing Catwalks Taking into Account Unity's Immersive Virtual Reality in an Artificial Intelligence Environment. <i>Computational Intelligence and Neuroscience</i> , 2022, 2022, 1-12.	1.1	8
337	A Systematic Review on the Influence of Virtual Reality on Language Learning Outcomes. <i>International Journal of Online Pedagogy and Course Design</i> , 2022, 12, 1-18.	0.3	1
338	Virtual Reality in Small and Medium-Sized Enterprises: A Systematic Literature Review. , 2022, , .		2
339	The Development and Realization of Digital Panorama Media Technology Based on VR Technology. <i>Computational Intelligence and Neuroscience</i> , 2022, 2022, 1-7.	1.1	1

#	ARTICLE	IF	CITATIONS
340	Business customer virtual interaction: enhancing value creation in B2B markets in the post-COVID-19 era – an SME perspective. <i>Journal of Business and Industrial Marketing</i> , 2022, 37, 2075-2094.	1.8	13
341	Virtual reality utility and usefulness in the furniture, fixture and equipment sector: a validation of interactive and distributed immersion. <i>Smart and Sustainable Built Environment</i> , 2023, 12, 787-819.	2.2	1
342	Immersive Speculative Enactments: Bringing Future Scenarios and Technology to Life Using Virtual Reality. , 2022, , .		14
343	The Simulation of Aerobics Performance Based on Virtual Reality. <i>Wireless Communications and Mobile Computing</i> , 2022, 2022, 1-12.	0.8	1
344	Digital technologies as enablers of supply chain sustainability in an emerging economy. <i>Operations Management Research</i> , 2022, 15, 689-710.	5.0	52
345	Digital Twin for Human-Robot Collaboration in Manufacturing: Review and Outlook. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 4811.	1.3	20
346	A user-centric computer-aided verification process in a virtuality-reality continuum. <i>Computers in Industry</i> , 2022, 140, 103678.	5.7	4
347	Toward human-centric smart manufacturing: A human-cyber-physical systems (HCPS) perspective. <i>Journal of Manufacturing Systems</i> , 2022, 63, 471-490.	7.6	100
348	Reality-Virtuality Technologies in the Field of Materials Science and Engineering. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 4968.	1.3	3
349	The Study of Immersive Physiology Courses Based on Intelligent Network through Virtual Reality Technology in the Context of 5G. <i>Computational Intelligence and Neuroscience</i> , 2022, 2022, 1-8.	1.1	4
350	Design of Interactive Landscape Virtual Tour System Based on 3D Virtual Reality Technology. , 2022, , .		1
351	Effects of Virtual Reality-Based Multimodal Audio-Tactile Cueing in Patients With Spatial Attention Deficits: Pilot Usability Study. <i>JMIR Serious Games</i> , 2022, 10, e34884.	1.7	3
352	Multi-Kinects fusion for full-body tracking in virtual reality-aided assembly simulation. <i>International Journal of Distributed Sensor Networks</i> , 2022, 18, 155013292210975.	1.3	5
354	Optimization of 3D Virtual Reality Technology in High School Physics Direct-Type Teaching. <i>Wireless Communications and Mobile Computing</i> , 2022, 2022, 1-9.	0.8	1
355	Effects of Augmented Reality-, Virtual Reality-, and Mixed Reality-Based Training on Objective Performance Measures and Subjective Evaluations in Manual Assembly Tasks: A Scoping Review. <i>Human Factors</i> , 2024, 66, 589-626.	2.1	10
357	VRTest: An Extensible Framework for Automatic Testing of Virtual Reality Scenes. , 2022, , .		0
358	Will the Interest Triggered by Virtual Reality (VR) Turn into Intention to Travel (VR vs. Corporeal)? The Moderating Effects of Customer Segmentation. <i>Sustainability</i> , 2022, 14, 7010.	1.6	5
359	Features of the organization and classification of virtual reality interfaces. , 2022, , 25-41.	0.0	0

#	ARTICLE	IF	CITATIONS
360	Augmented Reality Authoring of Digital Twins: Design, Implementation and Evaluation in an Industry 4.0 Context. <i>Frontiers in Virtual Reality</i> , 0, 3, .	2.5	5
361	Relationship between electroencephalographic data and comfort perception captured in a Virtual Reality design environment of an aircraft cabin. <i>Scientific Reports</i> , 2022, 12, .	1.6	6
362	VR in customer-centered marketing: Purpose-driven design. <i>Business Horizons</i> , 2023, 66, 225-236.	3.4	6
363	Extended reality technologies in small and medium-sized European industrial companies: level of awareness, diffusion and enablers of adoption. <i>Virtual Reality</i> , 2022, 26, 1745-1761.	4.1	11
364	Virtualization of Laboratories. <i>Advances in Educational Technologies and Instructional Design Book Series</i> , 2022, , 215-241.	0.2	2
365	Virtual Reality Technology. <i>Advances in E-Business Research Series</i> , 2022, , 187-208.	0.2	0
366	Design and Implementation of OPC UA-Based VR/AR Collaboration Model Using CPS Server for VR Engineering Process. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 7534.	1.3	2
367	The virtualization of human-robot interactions: a user-centric workload assessment. <i>Virtual Reality</i> , 2023, 27, 553-571.	4.1	8
368	Three-Dimensional Construction Method for Two-Dimensional Film Pattern Design in Sustainable Rhinoceros Skin Coating Technology. <i>Coatings</i> , 2022, 12, 1132.	1.2	0
369	Innovative Application of Artificial Intelligence in the Field of Innovation and Entrepreneurship of College Students in Internet Colleges and Universities. <i>Computational Intelligence and Neuroscience</i> , 2022, 2022, 1-12.	1.1	2
370	Water Conservancy Automation Monitoring System Based on VR Image Video and Internet of Things. <i>Mobile Information Systems</i> , 2022, 2022, 1-10.	0.4	1
371	Application of Virtual Reality Technology in Adolescent Mental Health Science Education. <i>Wireless Communications and Mobile Computing</i> , 2022, 2022, 1-11.	0.8	7
372	Extended reality applications in industry 4.0. - A systematic literature review. <i>Telematics and Informatics</i> , 2022, 73, 101863.	3.5	33
373	Constrained and virtually traveling? Exploring the effect of travel constraints on intention to use virtual reality in tourism. <i>Technology in Society</i> , 2022, 71, 102091.	4.8	21
374	Designing complex manufacturing systems by virtual reality: A novel approach and its application to the virtual commissioning of a production line. <i>Computers in Industry</i> , 2022, 143, 103761.	5.7	9
375	Immersive virtual reality applications for design reviews: Systematic literature review and classification scheme for functionalities. <i>Advanced Engineering Informatics</i> , 2022, 54, 101760.	4.0	6
376	Towards a Digitized Workplace. <i>SpringerBriefs in Business</i> , 2022, , 21-34.	0.3	0
377	Tourists and Augmented and Virtual Reality Experiences. , 2022, , 997-1016.		0

#	ARTICLE	IF	CITATIONS
378	Virtual Reality as a Powerful Persuasive Technology to Change Attitude During the Spread of COVID-19. Lecture Notes in Networks and Systems, 2022, , 143-158.	0.5	0
379	Toward Touristsâ€™Mediaâ€™Cities Tourism: Xiâ€™™an as a Wanghong City. Sustainability, 2022, 14, 11806.	1.6	3
380	Effects of Artificial Intelligence and Virtual Reality in Martial Arts Sports on Studentsâ€™™ Physical and Mental Health. International Transactions on Electrical Energy Systems, 2022, 2022, 1-12.	1.2	2
381	A state-of-the-art on production planning in Industry 4.0. International Journal of Production Research, 2023, 61, 6602-6632.	4.9	16
382	The right tools for the job: towards preference and performance considerations in the design of virtual reality interactions. Behaviour and Information Technology, 2023, 42, 278-288.	2.5	1
383	Circular Economy Guidelines for the Textile Industry. Sustainability, 2022, 14, 11111.	1.6	8
384	Visualization and visual analysis of multimedia data in manufacturing: A survey. Visual Informatics, 2022, 6, 12-21.	2.5	6
385	Augmented reality-based guidance in product assembly and maintenance/repair perspective: A state of the art review on challenges and opportunities. Expert Systems With Applications, 2023, 213, 118983.	4.4	30
386	Challenges and opportunities on AR/VR technologies for manufacturing systems in the context of industry 4.0: A state of the art review. Journal of Manufacturing Systems, 2022, 65, 260-278.	7.6	69
387	Ultracompact virtual reality system with a Pancharatnamâ€™Berry phase deflector. Optics Express, 2022, 30, 39652.	1.7	6
388	VRTest. , 2022, , .		2
389	Feasibility Analysis of Safety Training in Human-Robot Collaboration Scenario: Virtual Reality Use Case. Lecture Notes in Mechanical Engineering, 2023, , 246-256.	0.3	2
390	STRATEGY OF DIGITAL TRANSFORMATION OF INDUSTRIAL ENTERPRISES: THE EFFECTS OF THE INTRODUCTION OF SMART MANUFACTURING TECHNOLOGIES. StrategiÄeskie ReÄ;jeniÄc I Risk-MenedÄ¼ment, 2022, 13, 210-225. ^{0.2}		1
391	Cross-Domain 3D Model Retrieval Based On Contrastive Learning And Label Propagation. , 2022, , .		1
392	Geometry-Aware Reference Synthesis for Multi-View Image Super-Resolution. , 2022, , .		1
393	Orientation Prediction for VR and AR Devices Using Inertial Sensors Based on Kalman-Like Error Compensation. IEEE Access, 2022, 10, 114306-114317.	2.6	0
394	Mixed Reality in Multiuser Participatory Design: Case Study of the Design of the 2022 Nordic Pavilion Exhibition at the Venice Biennale. Buildings, 2022, 12, 1920.	1.4	2
395	The Trend of Industrial Design from the Perspective of Metaverse. Lecture Notes in Computer Science, 2022, , 397-406.	1.0	2

#	ARTICLE	IF	CITATIONS
396	Prototyping to elicit user requirements for product development: Using head-mounted augmented reality when designing interactive devices. <i>Design Studies</i> , 2023, 84, 101147.	1.9	10
397	Sustainability at Universities and Colleges. , 2022, , 1-16.		0
398	Study on the Influence of Upper Limb Representations and Haptic Feedback in Virtual Reality. , 2022, , .		0
399	Exploiting Virtual Reality for Enhancing the Shopping Experience in the Fashion Industry: Between Interaction and Perception. , 2022, , .		3
400	Materials Science and Engineering Education Based on Reality-Virtuality Technologies. <i>Lecture Notes in Networks and Systems</i> , 2023, , 48-58.	0.5	0
401	A Virtual Planning Method for Spatial Pose and Performance Fusion Advancement of Mining and Transportation Equipment in Complex Geological Environment. <i>Mining, Metallurgy and Exploration</i> , 0, , .	0.4	0
402	A review on ergonomics evaluations of virtual reality. <i>Work</i> , 2023, 74, 831-841.	0.6	2
403	When Virtual Reality meets destination marketing: The mediating role of presences between vividness and user responses. <i>Journal of Vacation Marketing</i> , 0, , 135676672211414.	2.5	4
404	Entrepreneurship in The World of Metaverse: Virtual or Real?. , 2022, 2, 71-82.		27
405	Escaping the Holodeck: Designing Virtual Environments for Real Organizations. , 2023, , 223-249.		0
406	Virtual Manufacturing, Technologies, and Applications. , 2023, , 135-149.		0
407	Human-Technology Interaction in the Context of Industry 4.0: Current Trends and Challenges. , 2023, , 1-14.		0
408	Riverland on the Verge: Promoting International Wine Tourism Through Virtual Reality in Riverland, South Australia. , 2023, , 115-134.		0
409	Investigating the relationship between three-dimensional perception and presence in virtual reality-reconstructed architecture. <i>Applied Ergonomics</i> , 2023, 109, 103953.	1.7	8
410	Does imagination compensate for the need for touch in 360-virtual shopping?. <i>International Journal of Information Management</i> , 2023, 70, 102622.	10.5	6
411	How does Personality Matter? Investigating The Effect of Big-Five Personality Traits on Virtual Reality Acceptance Behavior. , 2022, , .		2
412	Biophilic Enriched Virtual Environments for Industrial Training: a User Study. , 2022, , .		2
413	Shaping OTT Movie Consumption through Immersive Cinema: A Qualitative Investigation of Consumer Perspectives. <i>Vision</i> , 0, , 097226292211383.	1.5	1

#	ARTICLE	IF	CITATIONS
414	Psychological predictors of consumer-level virtual reality technology adoption and usage. <i>Virtual Reality</i> , 0, , .	4.1	3
415	Fashion Design Collaboration using Virtual Reality Environments - A Case Study of Design Review Process for a Fashion Show -. <i>The Korean Society of Costume</i> , 2022, 72, 124-138.	0.1	0
416	The role of virtual reality technology in conceptual design: positioning, applications, and value. <i>Digital Creativity</i> , 2023, 34, 53-77.	0.8	2
417	Extended reality. , 2023, , 1-13.		0
418	Evolution and contribution of extended reality in smart healthcare systems. , 2023, , 159-208.		1
419	Effects of Immersion on Knowledge Gain and Cognitive Load in Additive Manufacturing Process Education. <i>3D Printing and Additive Manufacturing</i> , 0, , .	1.4	1
420	Regarding the Immersion of VR, What do We Need to do to Make it Better?. , 0, 39, 121-130.		0
422	Supporting Engineering Areas. <i>Simulation Foundations, Methods and Applications</i> , 2023, , 353-371.	0.8	0
423	Incorporating Extended Reality Technology for Delivering Computer Aided Design and Visualisation Modules. , 2022, , .		4
424	How Can One Share a User's Activity during VR Synchronous Augmentative Cooperation?. <i>Multimodal Technologies and Interaction</i> , 2023, 7, 20.	1.7	2
425	Examining the utility of a photorealistic virtual ear in otologic education. <i>Journal of Otolaryngology - Head and Neck Surgery</i> , 2023, 52, .	0.9	0
426	Visiting Heritage Sites in AR and VR. <i>Heritage</i> , 2023, 6, 2489-2502.	0.9	10
427	Metaverse virtual social center for elderly communication in time of social distancing. <i>Virtual Reality & Intelligent Hardware</i> , 2023, 5, 68-80.	1.8	6
428	Developing Low-Cost Mobile Immersive System MA-VRIOT with Physical Activity Interactions by Integrating IOT Technology. , 2022, , .		0
429	Learning about Victims of Holocaust in Virtual Reality: The Main, Mediating and Moderating Effects of Technology, Instructional Method, Flow, Presence, and Prior Knowledge. <i>Multimodal Technologies and Interaction</i> , 2023, 7, 28.	1.7	4
430	Emerging digital technologies in the workplace. 3d printing, work organisation and job quality at the airbus spain case study. <i>International Journal of Innovation and Technology Management</i> , 0, , .	0.8	0
432	Application of sustainable smart manufacturing technologies and toolkits in the automotive industry. <i>International Journal of Low-Carbon Technologies</i> , 2023, 18, 412-422.	1.2	1
433	Sustainability at Universities and Colleges. , 2023, , 1237-1252.		0

#	ARTICLE	IF	CITATIONS
434	Comparing Customer Behaviours: Immersive Virtual Reality Store Experiences versus Web and Physical Store Experiences. , 2022, , .		0
435	Research on Simulation Method of Ship Equipment maintenance Support process. , 2022, , .		0
436	Interactive Architecture Design Model Based on Multi-objective Genetic Algorithm. Lecture Notes on Data Engineering and Communications Technologies, 2023, , 465-473.	0.5	0
437	Machinery Changes and Challenges of Architecture and Landscape Design in the Virtual Reality Perspective. Journal of Robotics, 2023, 2023, 1-9.	0.6	1
438	XR Technology Deployment in Value Creation. Applied Sciences (Switzerland), 2023, 13, 5048.	1.3	2
439	Using Virtual Reality to Shape Humanity's Return to the Moon: Key Takeaways from a Design Study. , 2023, , .		1
440	Using Virtual Reality and Co-Design to Study the Design of Large-scale Shape-Changing Interfaces. , 2023, , .		1
454	EEG-Based VR Scene Adaptive Generation System for Regulating Emotion. , 2023, , .		0
455	Design and Realization of Production Monitoring System for Seamless Steel Pipe Based on Virtual Reality. , 2023, , .		0
456	Comparing VR Modeling Tool and Hand-Sketching in the Inspiration of Classic Chair Design and Modeling. Lecture Notes in Computer Science, 2023, , 182-192.	1.0	0
457	User Experience Evaluation in Virtual Reality for Autism: A Systematic Literature Review. Lecture Notes in Computer Science, 2023, , 546-568.	1.0	0
458	Enhanced Scene Interpretation and Perception Through 3D Virtual Thermal Imaging. Lecture Notes in Computer Science, 2023, , 157-167.	1.0	0
460	Neurophysiological UX Evaluation of Industry 4.0 Technologies: E-commerce, e-learning Websites, and VR Simulation. Smart Innovation, Systems and Technologies, 2023, , 689-700.	0.5	0
461	Immersive Entwicklung. , 2023, , 353-359.		0
464	Evaluation and Validation Process of Extended Reality Applications Developed in an Industrial Context: A Systematic Review. SN Computer Science, 2023, 4, .	2.3	0
466	Application of smart manufacturing in business. AIP Conference Proceedings, 2023, , .	0.3	0
468	Equipment-process-strategy integration for sustainable machining: a review. Frontiers of Mechanical Engineering, 2023, 18, .	2.5	1
471	A Design Approach and Prototype Implementation for Factory Monitoring Based on Virtual and Augmented Reality at the Edge of Industry 4.0. , 2023, , .		0

#	ARTICLE	IF	CITATIONS
474	Leveraging Advanced Digital Technology Practices to Enhance Information Quality in Low-Volume Product Introduction and Manufacturing. IFIP Advances in Information and Communication Technology, 2023, , 401-416.	0.5	0
475	Leveraging Information Visualization Through Extended Reality (XR) for Incorporating Changeability in Product-Service Systems. IFIP Advances in Information and Communication Technology, 2023, , 255-268.	0.5	0
476	Introduction of Virtual Environment with Personalized Content Recommendation for Realistic Avatar Creation in Online Platform using Machine Learning. , 2023, , .		0
479	Virtual and Augmented Reality. , 2024, , 33-49.		0
484	VRGuide: Efficient Testing of Virtual Reality Scenes via Dynamic Cut Coverage. , 2023, , .		0
485	Effect of Handshake in VR Environment via Robotic Arm on Psychological Distance. , 2023, , .		0
488	Virtual Reality for Industrial Assembly Training: The Impact of Tool Interaction Realism on Learning Outcomes. , 2023, , .		0
490	Sustainable innovative disaster readiness technologies: 3D or 4D printing, IoT and big data in industry 4.0. AIP Conference Proceedings, 2023, , .	0.3	0
498	Digital Twin in Extended Reality Applications for Industry 4.0. Lecture Notes in Electrical Engineering, 2024, , 867-880.	0.3	0
499	Exploring Extended Reality (XR) in the Workplace - Applications, Challenges: Survey. , 2023, , .		0
500	Background and Technologies. , 2024, , 33-74.		0
501	How Visual Data Is Revolutionizing the Industry World. , 2024, , 75-88.		0
502	Everyday Virtual Reality. , 2024, , 663-671.		0
507	Skeleton-Based Human Action Recognition via Multi-Knowledge Flow Embedding Hierarchically Decomposed Graph Convolutional Network. Lecture Notes in Computer Science, 2024, , 186-199.	1.0	0
510	Immersive Virtual Reality to Verify the As-built State of Electric Line Networks in Buildings. Lecture Notes in Geoinformation and Cartography, 2024, , 129-143.	0.5	0
512	A Comprehensive Framework, Review for Virtual Reality to Unlock Their Marketing Potential. Lecture Notes in Networks and Systems, 2024, , 30-44.	0.5	0