Binil Starly

List of Publications by Year
in descending order

59 papers	3,321 citations	377584 21 h-index	214428 50 g-index
59 all docs	59 docs citations	59 times ranked	4837 citing authors

#	Article	IF	Citations
1	â€œFabNERâ€: information extraction from manufacturing process science domain literature using named entity recognition. Journal of Intelligent Manufacturing, 2022, 33, 2393-2407.	4.4	20
2	A genetic algorithm for order acceptance and scheduling in additive manufacturing. International Journal of Production Research, 2022, 60, 6373-6390.	4.9	11
3	Knowledge graph construction for product designs from large CAD model repositories. Advanced Engineering Informatics, 2022, 53, 101680.	4.0	16
4	Non-destructive quality monitoring of 3D printed tissue scaffolds via dielectric impedance spectroscopy and supervised machine learning. Procedia Manufacturing, 2021, 53, 636-643.	1.9	8
5	Recurrent neural networks with long term temporal dependencies in machine tool wear diagnosis and prognosis. SN Applied Sciences, 2021, 3, 1.	1.5	45
6	Dynamic matching with deep reinforcement learning for a two-sided Manufacturing-as-a-Service (MaaS) marketplace. Manufacturing Letters, 2021, 29, 11-14.	1.1	3
7	Hybrid Blockchain Architecture for Cloud Manufacturing-as-a-service (CMaaS) Platforms with Improved Data Storage and Transaction Efficiency. Procedia Manufacturing, 2021, 53, 594-605.	1.9	7
8	MVCNN++: Computer-Aided Design Model Shape Classification and Retrieval Using Multi-View Convolutional Neural Networks. Journal of Computing and Information Science in Engineering, 2021, 21, .	1.7	18
9	Network-based pricing for 3D printing services in two-sided manufacturing-as-a-service marketplace. Rapid Prototyping Journal, 2020, 26, 82-88.	1.6	6
10	Witness Box Protocol: Automatic machine identification and authentication in industry 4.0. Computers in Industry, 2020, 123, 103340.	5.7	5
11	Decentralized cloud manufacturing-as-a-service (CMaaS) platform architecture with configurable digital assets. Journal of Manufacturing Systems, 2020, 56, 157-174.	7.6	75
12	The bioprinting roadmap. Biofabrication, 2020, 12, 022002.	3.7	291
13	Automating the Search and Discovery of Manufacturing Service Providers to Enable a Digital Supply Chain Network. Smart and Sustainable Manufacturing Systems, 2020, 4, 20200061.	0.3	1
14	Provisioned Data Distribution for Intelligent Manufacturing via Fog Computing. Procedia Manufacturing, 2019, 34, 893-902.	1.9	5
15	Integrating A Dynamic Simulator and Advanced Process Control using the OPC-UA Standard. Procedia Manufacturing, 2019, 34, 813-819.	1.9	9
16	â€œFabSearchâ€: A 3D CAD Model-Based Search Engine for Sourcing Manufacturing Services. Journal of Computing and Information Science in Engineering, 2019, 19, .	1.7	18
17	A Simulator Testbed for MT-Connect Based Machines in a Scalable and Federated Multi-Enterprise Environment. , 2019, , .		0
18	Impact of Scheduling Policies on the Performance of an Additive Manufacturing Production System. Procedia Manufacturing, 2019, 39, 447-456.	1.9	13

#	Article	IF	Citations
19	Development of a Pilot Manufacturing Cyberinfrastructure With an Information Rich Mechanical CAD 3D Model Repository. , 2019, , .		4
20	A Case Study for Blockchain in Manufacturing: â€œFabRecâ€: A Prototype for Peer-to-Peer Network of Manufacturing Nodes. Procedia Manufacturing, 2018, 26, 1180-1192.	1.9	106
21	Reverse auction mechanism design for the acquisition of prototyping services in a manufacturing-as-a-service marketplace. Journal of Manufacturing Systems, 2018, 48, 134-143.	7.6	10
22	Largeâ€“scale digitization of herbarium specimens: Development and usage of an automated, highâ€“throughput conveyor system. Taxon, 2018, 67, 165-178.	0.4	42
23	Phylogeny of the Inula group (Asteraceae: Inuleae): Evidence from nuclear and plastid genomes and a recircumscription of Pentanema. Taxon, 2018, 67, 149-164.	0.4	33
24	Label free process monitoring of 3D bioprinted engineered constructs via dielectric impedance spectroscopy. Biofabrication, 2018, 10, 035012.	3.7	15
25	Streaming Machine Generated Data to Enable a Third-Party Ecosystem of Digital Manufacturing Apps. Procedia Manufacturing, 2017, 10, 1020-1030.	1.9	11
26	Sensor Data and Information Fusion to Construct Digital-twins Virtual Machine Tools for Cyber-physical Manufacturing. Procedia Manufacturing, 2017, 10, 1031-1042.	1.9	216
27	Human Mesenchymal Stem Cells Expansion on Three-Dimensional (3D) Printed Poly-Styrene (PS) Scaffolds in a Perfusion Bioreactor. Procedia CIRP, 2017, 65, 115-120.	1.0	6
28	A flexible data schema and system architecture for the virtualization of manufacturing machines (VMM). Journal of Manufacturing Systems, 2017, 45, 236-247.	7.6	68
29	Investigating Dielectric Impedance Spectroscopy As a Non-Destructive Quality Assessment Tool for 3D Cellular Constructs. , 2017, , .		3
30	Electrical Cell-Substrate Impedance Spectroscopy Can Monitor Age-Grouped Human Adipose Stem Cell Variability During Osteogenic Differentiation. Stem Cells Translational Medicine, 2017, 6, 502-511.	1.6	34
31	Particle learning in online tool wear diagnosis and prognosis. Journal of Manufacturing Processes, 2017, 28, 457-463.	2.8	37
32	3D-Bioprinting of Polylactic Acid (PLA) Nanofiberâ€“Alginate Hydrogel Bioink Containing Human Adipose-Derived Stem Cells. ACS Biomaterials Science and Engineering, 2016, 2, 1732-1742.	2.6	232
33	Modeling Human Mesenchymal Stem Cell Expansion in Vertical Wheel Bioreactors Using Lactate Production Rate in Regenerative Medicine Biomanufacturing. , 2016, , .		0
34	Fabrication of Lindenmayer System-Based Designed Engineered Scaffolds Using UV-Maskless Photolithography. MRS Advances, 2016, 1, 749-754.	0.5	1
35	Biofabrication of Multimaterial Three-Dimensional Constructs Embedded With Patterned Alginate Strands Encapsulating PC12 Neural Cell Lines. Journal of Nanotechnology in Engineering and Medicine, 2015, 6, .	0.8	6
36	Alginate Microspheroid Encapsulation and Delivery of MG-63 Cells Into Polycaprolactone Scaffolds: A New Biofabrication Approach for Tissue Engineering Constructs. Journal of Nanotechnology in Engineering and Medicine, 2015, 6, .	0.8	5

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37	3D Bioprinting Techniques. , 2015, , 57-77.		19
38	Manufacturing Road Map for Tissue Engineering and Regenerative Medicine Technologies. Stem Cells Translational Medicine, 2015, 4, 130-135.	1.6	76
39	Large scale industrialized cell expansion: producing the critical raw material for biofabrication processes. Biofabrication, 2015, 7, 044103.	3.7	45
40	Controlled release of metronidazole from composite poly-Îµ-caprolactone/alginate (PCL/alginate) rings for dental implants. Dental Materials, 2013, 29, 656-665.	1.6	45
41	Alginate based 3D hydrogels as an in vitro co-culture model platform for the toxicity screening of new chemical entities. Toxicology and Applied Pharmacology, 2011, 256, 62-72.	1.3	74
42	Experimental investigation on the operating variables of a near-field electrospinning process via response surface methodology. Journal of Manufacturing Processes, 2011, 13, 104-112.	2.8	28
43	A design for the additive manufacture of functionally graded porous structures with tailored mechanical properties for biomedical applications. Journal of Manufacturing Processes, 2011, 13, 160-170.	2.8	290
44	Fabrication of Low Cost 1D CdSe Nanowires using Near-field Electrospinning. Materials Research Society Symposia Proceedings, 2011, 1302, 37801.	0.1	0
45	Mechanical evaluation of porous titanium (Ti6Al4V) structures with electron beam melting (EBM). Journal of the Mechanical Behavior of Biomedical Materials, 2010, 3, 249-259.	1.5	666
46	Long-term cultivation of HepG2 liver cells encapsulated in alginate hydrogels: A study of cell viability, morphology and drug metabolism. Toxicology in Vitro, 2010, 24, 1314-1323.	1.1	93
47	Computer-Aided Process Planning for the Layered Fabrication of Porous Scaffold Matrices. Biological and Medical Physics Series, 2010, , 39-55.	0.3	0
48	Real time in vitro measurement of oxygen uptake rates for HEPG2 liver cells encapsulated in alginate matrices. Microfluidics and Nanofluidics, 2009, 6, 373-381.	1.0	18
49	Computer Aided Biomodeling and Analysis of Patient Specific Porous Titanium Mandibular Implants. Journal of Medical Devices, Transactions of the ASME, 2009, 3, .	0.4	7
50	A Lindenmayer system-based approach for the design of nutrient delivery networks in tissue constructs. Biofabrication, 2009, 1, 045004.	3.7	16
51	Dependance of Lindenmayer System (L-System) Parameters on Flow Characteristics in Engineered Biomaterials. , 2009, , .		2
52	Enabling Sensor Technologies for the Quantitative Evaluation of Engineered Tissue. Annals of Biomedical Engineering, 2008, 36, 30-40.	1.3	27
53	Fabrication of Micropatterned Hydrogels Using Maskless Photopolymerization for Tissue Engineering Applications. , 2008, , .		4
54	Internal Scaffold Architecture Designs using Lindenmayer Systems. Computer-Aided Design and Applications, 2007, 4, 395-403.	0.4	15

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55	Application of computer-assisted design in craniofacial reconstructive surgery using a commercial image guidance system. Journal of Neurosurgery: Pediatrics, 2006, 104, 64-67.	0.8	8
56	Computer Aided Tissue Engineering for the Design and Evaluation of Lumbar-Spine Arthroplasty. Computer-Aided Design and Applications, 2006, 3, 771-778.	0.4	8
57	A Computer-aided Multi-scale Modeling and Direct Fabrication of Bone Structure. Computer-Aided Design and Applications, 2005, 2, 627-635.	0.4	6
58	Computerâ€aided tissue engineering: overview, scope and challenges. Biotechnology and Applied Biochemistry, 2004, 39, 29-47.	1.4	288
59	Computerâ€aided tissue engineering: application to biomimetic modelling and design of tissue scaffolds. Biotechnology and Applied Biochemistry, 2004, 39, 49-58.	1.4	206