

# Sung-Hoon Ahn

## List of Publications by Year in descending order

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206  
papers

9,329  
citations

41258

49  
h-index

45213

90  
g-index

211  
all docs

211  
docs citations

211  
times ranked

10328  
citing authors

#	ARTICLE	IF	CITATIONS
1	A flexible and highly sensitive strain-gauge sensor using reversible interlocking of nanofibres. <i>Nature Materials</i> , 2012, 11, 795-801.	13.3	1,453
2	Review of biomimetic underwater robots using smart actuators. <i>International Journal of Precision Engineering and Manufacturing</i> , 2012, 13, 1281-1292.	1.1	291
3	Optimization of hybrid renewable energy power systems: A review. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2015, 2, 99-112.	2.7	260
4	A comparison of energy consumption in bulk forming, subtractive, and additive processes: Review and case study. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2014, 1, 261-279.	2.7	255
5	Shape Memory Alloy-Based Soft Gripper with Variable Stiffness for Compliant and Effective Grasping. <i>Soft Robotics</i> , 2017, 4, 379-389.	4.6	247
6	Review of manufacturing processes for soft biomimetic robots. <i>International Journal of Precision Engineering and Manufacturing</i> , 2009, 10, 171-181.	1.1	236
7	Mathematical modeling of hybrid renewable energy system: A review on small hydro-solar-wind power generation. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2014, 1, 157-173.	2.7	221
8	A novel off-grid hybrid power system comprised of solar photovoltaic, wind, and hydro energy sources. <i>Applied Energy</i> , 2014, 133, 236-242.	5.1	200
9	A review on IPMC material as actuators and sensors: Fabrications, characteristics and applications. <i>International Journal of Precision Engineering and Manufacturing</i> , 2012, 13, 141-163.	1.1	199
10	Smart Machining Process Using Machine Learning: A Review and Perspective on Machining Industry. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2018, 5, 555-568.	2.7	194
11	An Overview of Shape Memory Alloy-Coupled Actuators and Robots. <i>Soft Robotics</i> , 2017, 4, 3-15.	4.6	189
12	Locomotion of inchworm-inspired robot made of smart soft composite (SSC). <i>Bioinspiration and Biomimetics</i> , 2014, 9, 046006.	1.5	181
13	Room-temperature synthesis of nanoporous 1D microrods of graphitic carbon nitride (g-C <sub>3</sub> N <sub>4</sub> ) with highly enhanced photocatalytic activity and stability. <i>Scientific Reports</i> , 2016, 6, 31147.	1.6	172
14	Review: Developments in micro/nanoscale fabrication by focused ion beams. <i>Vacuum</i> , 2012, 86, 1014-1035.	1.6	161
15	Hybrid manufacturing in micro/nano scale: A Review. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2014, 1, 75-92.	2.7	141
16	Gold nanoparticle modified graphitic carbon nitride/multi-walled carbon nanotube (g-C <sub>3</sub> N <sub>4</sub> /CNTs/Au) hybrid photocatalysts for effective water splitting and degradation. <i>RSC Advances</i> , 2015, 5, 24281-24292.	1.7	134
17	Soft Tendril-Inspired Grippers: Shape Morphing of Programmable Polymer-Paper Bilayer Composites. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 10419-10427.	4.0	118
18	A turtle-like swimming robot using a smart soft composite (SSC) structure. <i>Smart Materials and Structures</i> , 2013, 22, 014007.	1.8	112

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19	Curved shape memory alloy-based soft actuators and application to soft gripper. Composite Structures, 2017, 176, 398-406.	3.1	109
20	A review of electrically-assisted manufacturing. International Journal of Precision Engineering and Manufacturing - Green Technology, 2015, 2, 365-376.	2.7	108
21	Soft morphing hand driven by SMA tendon wire. Composites Part B: Engineering, 2016, 105, 138-148.	5.9	106
22	Smart soft composite: An integrated 3D soft morphing structure using bend-twist coupling of anisotropic materials. International Journal of Precision Engineering and Manufacturing, 2012, 13, 631-634.	1.1	103
23	Direct printing of highly sensitive, stretchable, and durable strain sensor based on silver nanoparticles/multi-walled carbon nanotubes composites. Composites Part B: Engineering, 2019, 161, 395-401.	5.9	99
24	35% shape memory alloy actuator with bending-twisting mode. Scientific Reports, 2016, 6, 21118.	1.6	92
25	Empirical power-consumption model for material removal in three-axis milling. Journal of Cleaner Production, 2014, 78, 54-62.	4.6	90
26	Soft composite hinge actuator and application to compliant robotic gripper. Composites Part B: Engineering, 2016, 98, 397-405.	5.9	84
27	Shape Memory Alloy-Based Soft Finger with Changeable Bending Length Using Targeted Variable Stiffness. Soft Robotics, 2020, 7, 283-291.	4.6	79
28	Smart soft composite actuator with shape retention capability using embedded fusible alloy structures. Composites Part B: Engineering, 2015, 78, 507-514.	5.9	74
29	Blooming Knit Flowers: Loop-Linked Soft Morphing Structures for Soft Robotics. Advanced Materials, 2017, 29, 1606580.	11.1	72
30	Turtle mimetic soft robot with two swimming gaits. Bioinspiration and Biomimetics, 2016, 11, 036010.	1.5	71
31	Kirigami/Origami-Based Soft Deployable Reflector for Optical Beam Steering. Advanced Functional Materials, 2017, 27, 1604214.	7.8	71
32	A review on fabrication processes for electrochromic devices. International Journal of Precision Engineering and Manufacturing - Green Technology, 2016, 3, 397-421.	2.7	70
33	Stretchable Biaxial and Shear Strain Sensors Using Diffractive Structural Colors. ACS Nano, 2020, 14, 5392-5399.	7.3	68
34	Control of machining parameters for energy and cost savings in micro-scale drilling of PCBs. Journal of Cleaner Production, 2013, 54, 41-48.	4.6	65
35	Evaluation of ionic liquids as lubricants in micro milling " process capability and sustainability. Journal of Cleaner Production, 2014, 76, 167-173.	4.6	64
36	Deployable Soft Composite Structures. Scientific Reports, 2016, 6, 20869.	1.6	63

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37	From 3D to 4D printing “ design, material and fabrication for multi-functional multi-materials. International Journal of Precision Engineering and Manufacturing - Green Technology, 2017, 4, 291-299.	2.7	62
38	SMA-based smart soft composite structure capable of multiple modes of actuation. Composites Part B: Engineering, 2015, 82, 152-158.	5.9	61
39	Shape memory alloy/glass fiber woven composite for soft morphing winglets of unmanned aerial vehicles. Composite Structures, 2016, 140, 202-212.	3.1	61
40	Geometric optimization of micro drills using Taguchi methods and response surface methodology. International Journal of Precision Engineering and Manufacturing, 2011, 12, 871-875.	1.1	59
41	Fabrication of wrist-like SMA-based actuator by double smart soft composite casting. Smart Materials and Structures, 2015, 24, 125003.	1.8	59
42	From design for manufacturing (DFM) to manufacturing for design (MFD) via hybrid manufacturing and smart factory: A review and perspective of paradigm shift. International Journal of Precision Engineering and Manufacturing - Green Technology, 2016, 3, 209-222.	2.7	59
43	Real-time prediction and anomaly detection of electrical load in a residential community. Applied Energy, 2020, 259, 114145.	5.1	58
44	Effect of stand-off distance for cold gas spraying of fine ceramic particles (<math>5\frac{1}{4}\mu\text{m}</math>) under low vacuum and room temperature using nano-particle deposition system (NPDS). Surface and Coatings Technology, 2012, 206, 2125-2132.	2.2	56
45	Woven type smart soft composite for soft morphing car spoiler. Composites Part B: Engineering, 2016, 86, 285-298.	5.9	56
46	Soft grasping mechanisms composed of shape memory polymer based self-bending units. Composites Part B: Engineering, 2019, 164, 198-204.	5.9	55
47	An evaluation of green manufacturing technologies based on research databases. International Journal of Precision Engineering and Manufacturing - Green Technology, 2014, 1, 5-9.	2.7	53
48	Design and Fabrication of Soft Morphing Ray Propulsor: Undulator and Oscillator. Soft Robotics, 2017, 4, 49-60.	4.6	52
49	A smart soft actuator using a single shape memory alloy for twisting actuation. Smart Materials and Structures, 2015, 24, 125033.	1.8	51
50	Deformable wheel robot based on origami structure. , 2013, , .		49
51	Evaluation of a multi-dimensional hybrid photocatalyst for enrichment of $\text{H}_2$ evolution and elimination of dye/non-dye pollutants. Catalysis Science and Technology, 2017, 7, 2579-2590.	2.1	49
52	Modular assembly of soft deployable structures and robots. Materials Horizons, 2017, 4, 367-376.	6.4	48
53	Soundproofing effect of nano particle reinforced polymer composites. Journal of Mechanical Science and Technology, 2008, 22, 1468-1474.	0.7	46
54	Manufacturing of inchworm robot using shape memory alloy (SMA) embedded composite structure. International Journal of Precision Engineering and Manufacturing, 2011, 12, 565-568.	1.1	46

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55	Cross-shaped twisting structure using SMA-based smart soft composite. International Journal of Precision Engineering and Manufacturing - Green Technology, 2014, 1, 153-156.	2.7	46
56	Shape Memory Alloy (SMA)-Based Microscale Actuators with 60% Deformation Rate and 1.6 kHz Actuation Speed. Small, 2018, 14, e1801023.	5.2	46
57	Research Trends in Sustainable Manufacturing: A Review and Future Perspective based on Research Databases. International Journal of Precision Engineering and Manufacturing - Green Technology, 2019, 6, 809-819.	2.7	43
58	Effect of twist morphing wing segment on aerodynamic performance of UAV. Journal of Mechanical Science and Technology, 2016, 30, 229-236.	0.7	41
59	Cellulose nano whiskers from grass of Korea. Macromolecular Research, 2008, 16, 396-398.	1.0	39
60	Shape memory textile composites with multi-mode actuations for soft morphing skins. Composites Part B: Engineering, 2020, 198, 108170.	5.9	39
61	Piezoelectric strain sensor with high sensitivity and high stretchability based on kirigami design cutting. Npj Flexible Electronics, 2022, 6, .	5.1	39
62	Perspective to green manufacturing and applications. International Journal of Precision Engineering and Manufacturing, 2013, 14, 873-874.	1.1	36
63	A shape memory alloy-based soft morphing actuator capable of pure twisting motion. Journal of Intelligent Material Systems and Structures, 2015, 26, 1071-1078.	1.4	36
64	Low temperature fabrication of Fe <sub>2</sub> O <sub>3</sub> nanorod film coated with ultra-thin g-C <sub>3</sub> N <sub>4</sub> for a direct z-scheme exerting photocatalytic activities. RSC Advances, 2018, 8, 33600-33613.	1.7	35
65	Direct metal printing of 3D electrical circuit using rapid prototyping. International Journal of Precision Engineering and Manufacturing, 2009, 10, 147-150.	1.1	34
66	Appropriate Smart Factory for SMEs: Concept, Application and Perspective. International Journal of Precision Engineering and Manufacturing, 2021, 22, 201-215.	1.1	34
67	Broken stitch detection method for sewing operation using CNN feature map and image-processing techniques. Expert Systems With Applications, 2022, 188, 116014.	4.4	34
68	Tool-wear monitoring during micro-end milling using wavelet packet transform and Fisher's linear discriminant. International Journal of Precision Engineering and Manufacturing, 2016, 17, 845-855.	1.1	32
69	Direct Printing of Strain Sensors via Nanoparticle Printer for the Applications to Composite Structural Health Monitoring. Procedia CIRP, 2017, 66, 238-242.	1.0	32
70	A Low-Cost Vision-Based Monitoring of Computer Numerical Control (CNC) Machine Tools for Small and Medium-Sized Enterprises (SMEs). Sensors, 2019, 19, 4506.	2.1	32
71	Image-based failure detection for material extrusion process using a convolutional neural network. International Journal of Advanced Manufacturing Technology, 2020, 111, 1291-1302.	1.5	32
72	Research advancement of green technologies. International Journal of Precision Engineering and Manufacturing, 2014, 15, 973-977.	1.1	31

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73	Sound-based remote real-time multi-device operational monitoring system using a Convolutional Neural Network (CNN). <i>Journal of Manufacturing Systems</i> , 2021, 58, 431-441.	7.6	29
74	Aerodynamically Focused Nanoparticle (AFN) Printing: Novel Direct Printing Technique of Solvent-Free and Inorganic Nanoparticles. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 16466-16471.	4.0	27
75	Soundproofing properties of polypropylene/clay/carbon nanotube nanocomposites. <i>Journal of Applied Polymer Science</i> , 2013, 130, 504-509.	1.3	26
76	Design and analysis of a smart soft composite structure for various modes of actuation. <i>Composites Part B: Engineering</i> , 2016, 95, 155-165.	5.9	26
77	Comparison of mold designs for SMA-based twisting soft actuator. <i>Sensors and Actuators A: Physical</i> , 2016, 237, 96-106.	2.0	26
78	Stretchable chipless RFID multi-strain sensors using direct printing of aerosolised nanocomposite. <i>Sensors and Actuators A: Physical</i> , 2020, 313, 112224.	2.0	26
79	Synergistic effects of carbon nanotubes and exfoliated graphite nanoplatelets for electromagnetic interference shielding and soundproofing. <i>Journal of Applied Polymer Science</i> , 2013, 130, 3947-3951.	1.3	25
80	3D soft lithography: A fabrication process for thermocurable polymers. <i>Journal of Materials Processing Technology</i> , 2015, 217, 302-309.	3.1	25
81	Optimization of hybrid renewable energy power system for remote installations: Case studies for mountain and island. <i>International Journal of Precision Engineering and Manufacturing</i> , 2016, 17, 815-822.	1.1	24
82	Room temperature deposition of TiO <sub>2</sub> using nano particle deposition system (NPDS): Application to dye-sensitized solar cell (DSSC). <i>International Journal of Precision Engineering and Manufacturing</i> , 2011, 12, 749-752.	1.1	23
83	A Simplified Machine-Tool Power-Consumption Measurement Procedure and Methodology for Estimating Total Energy Consumption. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2016, 138, .	1.3	23
84	Multi-functionalization Strategies Using Nanomaterials: A Review and Case Study in Sensing Applications. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2022, 9, 323-347.	2.7	23
85	Auxetic lattice of multipods. <i>Physica Status Solidi (B): Basic Research</i> , 2009, 246, 2098-2101.	0.7	22
86	Numerical simulation and verification of a curved morphing composite structure with embedded shape memory alloy wire actuators. <i>Journal of Intelligent Material Systems and Structures</i> , 2013, 24, 89-98.	1.4	22
87	Novel fabrication of an electrochromic antimony-doped tin oxide film using a nanoparticle deposition system. <i>Applied Surface Science</i> , 2016, 377, 370-375.	3.1	22
88	Laser Controlled 65 Micrometer Long Microrobot Made of NiTi Shape Memory Alloy. <i>Advanced Materials Technologies</i> , 2019, 4, 1900583.	3.0	22
89	DEPOSITION OF Al <sub>2</sub> O <sub>3</sub> POWDERS USING NANO-PARTICLE DEPOSITION SYSTEM. <i>Surface Review and Letters</i> , 2010, 17, 189-193.	0.5	21
90	Fabrication and reliable implementation of an ionic polymer-metal composite (IPMC) biaxial bending actuator. <i>Smart Materials and Structures</i> , 2011, 20, 105026.	1.8	21

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91	Woven type smart soft composite beam with in-plane shape retention. Smart Materials and Structures, 2013, 22, 125007.	1.8	21
92	Socio-economic impact of renewable energy-based power system in mountainous villages of Nepal. International Journal of Precision Engineering and Manufacturing - Green Technology, 2017, 4, 37-44.	2.7	21
93	Design and Analysis of Artificial Muscle Robotic Elbow Joint Using Shape Memory Alloy Actuator. International Journal of Precision Engineering and Manufacturing, 2020, 21, 249-256.	1.1	21
94	Fabrication of 3D soft morphing structure using shape memory alloy (SMA) wire/polymer skeleton composite. Journal of Mechanical Science and Technology, 2013, 27, 3123-3129.	0.7	20
95	Multilayer deposition of ceramic and metal at room temperature using nanoparticle deposition system (NPDS) and planarization process. International Journal of Advanced Manufacturing Technology, 2014, 72, 41-46.	1.5	20
96	Highly Sensitive Solvent-free Silver Nanoparticle Strain Sensors with Tunable Sensitivity Created Using an Aerodynamically Focused Nanoparticle Printer. ACS Applied Materials & Interfaces, 2019, 11, 26421-26432.	4.0	20
97	Nanoscale 3D printing process using aerodynamically focused nanoparticle (AFN) printing, micro-machining, and focused ion beam (FIB). CIRP Annals - Manufacturing Technology, 2015, 64, 523-526.	1.7	19
98	Future perspectives of sustainable manufacturing and applications based on research databases. International Journal of Precision Engineering and Manufacturing, 2016, 17, 1249-1263.	1.1	19
99	Flexible ceramic-elastomer composite piezoelectric energy harvester fabricated by additive manufacturing. Journal of Composite Materials, 2016, 50, 1573-1579.	1.2	19
100	Smart sewing work measurement system using IoT-based power monitoring device and approximation algorithm. International Journal of Production Research, 2020, 58, 6202-6216.	4.9	19
101	Fabrication and Characterization of Microparts by Mechanical Micromachining: Precision and Cost Estimation. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2007, 221, 231-240.	1.5	18
102	Laser-assisted nano particle deposition system and its application for dye sensitized solar cell fabrication. CIRP Annals - Manufacturing Technology, 2012, 61, 575-578.	1.7	18
103	Colour-tunable 50% strain sensor using surface-nanopatterning of soft materials via nanoimprinting with focused ion beam milling process. CIRP Annals - Manufacturing Technology, 2019, 68, 595-598.	1.7	18
104	Evaluation of Industry 4.0 Data formats for Digital Twin of Optical Components. International Journal of Precision Engineering and Manufacturing - Green Technology, 2020, 7, 573-584.	2.7	18
105	Hybrid composite actuator with shape retention capability for morphing flap of unmanned aerial vehicle (UAV). Composite Structures, 2020, 243, 112227.	3.1	18
106	Computer-aided environmental design system for the energy-using product (EuP) directive. International Journal of Precision Engineering and Manufacturing, 2010, 11, 397-406.	1.1	17
107	Soundproofing ability and mechanical properties of polypropylene/exfoliated graphite nanoplatelet/carbon nanotube (PP/xGnP/CNT) composite. International Journal of Precision Engineering and Manufacturing, 2013, 14, 1087-1092.	1.1	17
108	Novel design of hollow g-C <sub>3</sub> N <sub>4</sub> nanofibers decorated with MoS <sub>2</sub> and S, N-doped graphene for ternary heterostructures. Dalton Transactions, 2019, 48, 2170-2178.	1.6	16



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109	Demand-side management for off-grid solar-powered microgrids: A case study of rural electrification in Tanzania. <i>Energy</i> , 2021, 224, 120229.	4.5	16
110	Smart Phone Robot Made of Smart Soft Composite (SSC). <i>Composites Research</i> , 2015, 28, 52-57.	0.1	16
111	Deposition of Durable Micro Copper Patterns into Glass by Combining Laser-Induced Backside Wet Etching and Laser-Induced Chemical Liquid Phase Deposition Methods. <i>Materials</i> , 2020, 13, 2977.	1.3	15
112	Bulk density measurement of porous functionally graded materials. <i>International Journal of Precision Engineering and Manufacturing</i> , 2018, 19, 31-37.	1.1	14
113	Resistive pressure sensor based on cylindrical micro structures in periodically ordered electrospun elastic fibers. <i>Smart Materials and Structures</i> , 2018, 27, 11LT01.	1.8	14
114	Lithography-free and Highly Angle Sensitive Structural Coloration Using Fabry-Pérot Resonance of Tin. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2021, 8, 997-1006.	2.7	14
115	Formation Strategy of Renewable Energy Sources for High Mountain Off-grid System Considering Sustainability. <i>Journal of the Korean Society for Precision Engineering</i> , 2012, 29, 958-963.	0.1	14
116	Design and 3D printing of controllable-pitch archimedean screw for pico-hydropower generation. <i>Journal of Mechanical Science and Technology</i> , 2015, 29, 4851-4857.	0.7	13
117	Power Consumption Assessment of Machine Tool Feed Drive Units. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2020, 7, 455-464.	2.7	13
118	Spherical Mirror and Surface Patterning on Silicon Carbide (SiC) by Material Removal Rate Enhancement Using CO2 Laser Assisted Polishing. <i>International Journal of Precision Engineering and Manufacturing</i> , 2020, 21, 775-785.	1.1	13
119	Machining quality monitoring (MQM) in laser-assisted micro-milling of glass using cutting force signals: an image-based deep transfer learning. <i>Journal of Intelligent Manufacturing</i> , 2022, 33, 1813-1828.	4.4	13
120	Rapid prototyping and testing of 3d micro rockets using mechanical micro machining. <i>Journal of Mechanical Science and Technology</i> , 2006, 20, 85-93.	0.7	12
121	Evaluation of morphological architecture of cellulose chains in grass during conversion from macro to nano dimensions. <i>E-Polymers</i> , 2009, 9, .	1.3	12
122	Numerical simulation of hybrid composite shape-memory alloy wire-embedded structures. <i>Journal of Intelligent Material Systems and Structures</i> , 2011, 22, 1941-1948.	1.4	12
123	Advanced scanning paths for focused ion beam milling. <i>Vacuum</i> , 2017, 143, 40-49.	1.6	12
124	Pulse width modulation as energy-saving strategy of shape memory alloy based smart soft composite actuator. <i>International Journal of Precision Engineering and Manufacturing</i> , 2017, 18, 895-901.	1.1	12
125	Direct printing of performance tunable strain sensor via nanoparticle laser patterning process. <i>Virtual and Physical Prototyping</i> , 2020, 15, 265-277.	5.3	12
126	Shape memory alloy-driven undulatory locomotion of a soft biomimetic ray robot. <i>Bioinspiration and Biomimetics</i> , 2021, 16, 066006.	1.5	12



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127	Laser-marking process for liquid-crystal display light guide panel. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2005, 219, 565-569.	1.5	11
128	Coating of Ni powders through micronozzle in a nano particle deposition system. Metals and Materials International, 2010, 16, 465-467.	1.8	11
129	Photovoltaic Characteristics of a Dye-Sensitized Solar Cell (DSSC) Fabricated by a Nano-Particle Deposition System (NPDS). Materials Transactions, 2013, 54, 2064-2068.	0.4	11
130	Stable and magnetically reusable nanoporous magnetite micro/nanospheres for rapid extraction of carcinogenic contaminants from water. RSC Advances, 2016, 6, 34297-34311.	1.7	11
131	Direct coating of a g-C <sub>3</sub> N <sub>4</sub> layer onto one-dimensional TiO <sub>2</sub> nanocluster/nanorod films for photoactive applications. Dalton Transactions, 2018, 47, 7237-7244.	1.6	11
132	Reduction of Functionally Graded Material Layers for Si <sub>3</sub> N <sub>4</sub> -Al <sub>2</sub> O <sub>3</sub> System Using Three-Dimensional Finite Element Modeling. Materials Transactions, 2008, 49, 829-834.	0.4	10
133	Effect of repeated insertions into a mesoscale pinhole assembly: Case of interference fit. International Journal of Precision Engineering and Manufacturing, 2013, 14, 1651-1654.	1.1	10
134	Design and development of bio-mimetic soft robotic hand with shape memory alloy. , 2015, , .		10
135	Investigation of Varying Particle Sizes of Dry-Deposited WO <sub>3</sub> Particles in Relation to Performance of Electrochromic Cell. International Journal of Precision Engineering and Manufacturing - Green Technology, 2018, 5, 409-414.	2.7	10
136	Web-based design and manufacturing systems for micromachining: Comparison of architecture and usability. Computer Applications in Engineering Education, 2006, 14, 169-177.	2.2	9
137	Development of micro torque measurement device using strain gauge. , 2009, , .		9
138	Shape memory alloy (SMA)-based head and neck immobilizer for radiotherapy. Journal of Computational Design and Engineering, 2015, 2, 176-182.	1.5	9
139	Ionic liquid-induced synthesis of a graphene intercalated ferrocene nanocatalyst and its environmental application. Applied Catalysis B: Environmental, 2016, 182, 326-335.	10.8	9
140	Site-specific characterization of beetle horn shell with micromechanical bending test in focused ion beam system. Acta Biomaterialia, 2017, 57, 395-403.	4.1	9
141	Microstructural Control of the Electrochromic and Ion Storage Layers on the Performance of an Electrochromic Device Fabricated by the Kinetic Spray Technique. International Journal of Precision Engineering and Manufacturing - Green Technology, 2018, 5, 231-238.	2.7	9
142	Simulation of electrical conductivity for nanoparticles and nanotubes composite sensor according to geometrical properties of nanomaterials. Composites Part B: Engineering, 2019, 174, 107003.	5.9	9
143	Significant thermal conductivity reduction of CVD graphene with relatively low hole densities fabricated by focused ion beam processing. Applied Physics Letters, 2019, 114, .	1.5	9
144	Minimization of Recombination Losses in 3D Nanostructured TiO <sub>2</sub> Coated with Few Layered g-C <sub>3</sub> N <sub>4</sub> for Extended Photo-response. Journal of the Korean Ceramic Society, 2016, 53, 393-399.	1.1	9

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145	Surface Nanopatterned Shape Memory Alloy (SMA)-Based Photosensitive Artificial Muscle. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	9
146	MIMS: Web-based micro machining service. <i>International Journal of Computer Integrated Manufacturing</i> , 2005, 18, 251-259.	2.9	8
147	Nano particle deposition system (NPDS) for ceramic and metal coating at room temperature and low vacuum condition. , 2008, , .		8
148	Nanoparticle Deposition of Al <sub>2</sub> O <sub>3</sub> Powders on Various Substrates. <i>Materials Transactions</i> , 2009, 50, 2680-2684.	0.4	8
149	Nanoscale effects in carbon structures fabricated using focused ion beam-chemical vapor deposition. <i>Thin Solid Films</i> , 2010, 518, 5177-5182.	0.8	8
150	Defects of wave patterns from tungsten carbide/stainless steel brazed micro-end-milling for printed circuit board machining. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2013, 227, 1743-1747.	1.5	8
151	Dielectric characteristics of a barium titanate film deposited by Nano Particle Deposition System (NPDS). <i>International Journal of Precision Engineering and Manufacturing</i> , 2015, 16, 1029-1034.	1.1	8
152	Design and evaluation of micro-cutting tools for local planarization. <i>International Journal of Precision Engineering and Manufacturing</i> , 2016, 17, 1267-1273.	1.1	8
153	Hybrid 3D printing by bridging micro/nano processes. <i>Journal of Micromechanics and Microengineering</i> , 2017, 27, 065006.	1.5	8
154	Shape Memory Alloy-Based Microscale Bending Actuator Fabricated by a Focused Ion Beam Chemical Vapor Deposition (FIB-CVD) Gap-Filling Process. <i>International Journal of Precision Engineering and Manufacturing</i> , 2020, 21, 491-498.	1.1	8
155	Hybrid CO <sub>2</sub> laser-polishing process for improving material removal of silicon carbide. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 106, 3139-3151.	1.5	8
156	Controlled kinetic Monte Carlo simulation of laser improved nano particle deposition process. <i>Powder Technology</i> , 2018, 325, 651-658.	2.1	7
157	Arduino-based low-cost electrical load tracking system with a long-range mesh network. <i>Advances in Manufacturing</i> , 2021, 9, 47-63.	3.2	7
158	Development and assessment of a knitted shape memory alloy-based multifunctional elbow brace. <i>Journal of Industrial Textiles</i> , 2022, 51, 1989S-2009S.	1.1	7
159	Crack-Free Joint in a Ni-Al <sub>2</sub> O <sub>3</sub> FGM System Using Three-Dimensional Modeling. <i>Materials Transactions</i> , 2009, 50, 1875-1880.	0.4	6
160	Slicing algorithm for polyhedral models based on vertex shifting. <i>International Journal of Precision Engineering and Manufacturing</i> , 2010, 11, 803-807.	1.1	6
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