## Sung-Hoon Ahn

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3136701/publications.pdf

Version: 2024-02-01

206 papers 9,329 citations

49 h-index

41258

90 g-index

211 all docs

211 docs citations

times ranked

211

10328 citing authors

#	Article	IF	CITATIONS
1	Machining quality monitoring (MQM) in laser-assisted micro-milling of glass using cutting force signals: an image-based deep transfer learning. Journal of Intelligent Manufacturing, 2022, 33, 1813-1828.	4.4	13
2	Multi-functionalization Strategies Using Nanomaterials: A Review and Case Study in Sensing Applications. International Journal of Precision Engineering and Manufacturing - Green Technology, 2022, 9, 323-347.	2.7	23
3	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
4	Development and assessment of a knitted shape memory alloy-based multifunctional elbow brace. Journal of Industrial Textiles, 2022, 51, 1989S-2009S.	1.1	7
5	Development of a 4D hand gripping aid using a knitted shape memory alloy and evaluation of finger-bending angles in elderly women. Fashion and Textiles, 2022, 9, .	1.3	4
6	Surface Nanopatterned Shape Memory Alloy (SMA)â€Based Photosensitive Artificial Muscle. Advanced Optical Materials, 2022, 10, .	3.6	9
7	Kerosene Supply Effect on Performance of Aluminum Nitride Micro-Electrical Discharge Machining. International Journal of Precision Engineering and Manufacturing, 2022, 23, 581-591.	1.1	5
8	Crackless glass through-structure fabrication with laser-induced backside wet etching using detachably bonded cover. CIRP Annals - Manufacturing Technology, 2022, , .	1.7	1
9	Piezoelectric strain sensor with high sensitivity and high stretchability based on kirigami design cutting. Npj Flexible Electronics, 2022, 6, .	5.1	39
10	Arduino-based low-cost electrical load tracking system with a long-range mesh network. Advances in Manufacturing, 2021, 9, 47-63.	3.2	7
11	Appropriate Smart Factory for SMEs: Concept, Application and Perspective. International Journal of Precision Engineering and Manufacturing, 2021, 22, 201-215.	1.1	34
12	Off-grid hybrid renewable energy systems and their contribution to sustainable development goals., 2021,, 75-89.		0
13	Sound-based remote real-time multi-device operational monitoring system using a Convolutional Neural Network (CNN). Journal of Manufacturing Systems, 2021, 58, 431-441.	7.6	29
14	Lithography-free and Highly Angle Sensitive Structural Coloration Using Fabry–Perot Resonance of Tin. International Journal of Precision Engineering and Manufacturing - Green Technology, 2021, 8, 997-1006.	2.7	14
15	A Multiscale Adhesion Model for Deposition Prediction in Laser Enhanced Nanoparticle Deposition Process. Acta Materialia, 2021, 208, 116740.	3.8	1
16	Interoperable Nanoparticle Sensor Capable of Strain and Vibration Measurement for Rotor Blade Monitoring. Sensors, 2021, 21, 3648.	2.1	2
17	Vaccine Cold Chain Monitoring System Using IoT Vaccine Fridge for Developing Countries. Academic Society for Appropriate Technology, 2021, 7, 26-32.	0.1	0
18	Demand-side management for off-grid solar-powered microgrids: A case study of rural electrification in Tanzania. Energy, 2021, 224, 120229.	4.5	16

#	Article	IF	Citations
19	Shape memory alloy-driven undulatory locomotion of a soft biomimetic ray robot. Bioinspiration and Biomimetics, 2021, 16, 066006.	1.5	12
20	Drive-Tolerant Current Residual Variance (DTCRV) for Fault Detection of a Permanent Magnet Synchronous Motor Under Operational Speed and Load Torque Conditions. IEEE Access, 2021, 9, 49055-49068.	2.6	5
21	Appropriate Smart Factory: Demonstration of Applicability to Industrial Safety. Academic Society for Appropriate Technology, 2021, 7, 196-205.	0.1	3
22	Power Consumption Assessment of Machine Tool Feed Drive Units. International Journal of Precision Engineering and Manufacturing - Green Technology, 2020, 7, 455-464.	2.7	13
23	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
24	Shape Memory Alloy-Based Microscale Bending Actuator Fabricated by a Focused Ion Beam Chemical Vapor Deposition (FIB-CVD) Gap-Filling Process. International Journal of Precision Engineering and Manufacturing, 2020, 21, 491-498.	1.1	8
25	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
26	Hybrid CO2 laser-polishing process for improving material removal of silicon carbide. International Journal of Advanced Manufacturing Technology, 2020, 106, 3139-3151.	1.5	8
27	Real-time prediction and anomaly detection of electrical load in a residential community. Applied Energy, 2020, 259, 114145.	5.1	58
28	Shape Memory Alloy-Based Soft Finger with Changeable Bending Length Using Targeted Variable Stiffness. Soft Robotics, 2020, 7, 283-291.	4.6	79
29	Directly Printed Low-Cost Nanoparticle Sensor for Vibration Measurement during Milling Process. Materials, 2020, 13, 2920.	1.3	5
30	Deposition of Durable Micro Copper Patterns into Glass by Combining Laser-Induced Backside Wet Etching and Laser-Induced Chemical Liquid Phase Deposition Methods. Materials, 2020, 13, 2977.	1.3	15
31	Stretchable chipless RFID multi-strain sensors using direct printing of aerosolised nanocomposite. Sensors and Actuators A: Physical, 2020, 313, 112224.	2.0	26
32	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
33	50Ânm Scale Alignment Method for Hybrid Manufacturing Processes for Full 3D Structuring. International Journal of Precision Engineering and Manufacturing, 2020, 21, 2407-2417.	1.1	1
34	Shape memory textile composites with multi-mode actuations for soft morphing skins. Composites Part B: Engineering, 2020, 198, 108170.	5.9	39
35	Direct printing of performance tunable strain sensor via nanoparticle laser patterning process. Virtual and Physical Prototyping, 2020, 15, 265-277.	5.3	12
36	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

3

#	Article	IF	Citations
37	Off-Grid Power Plant Load Management System Applied in a Rural Area of Africa. Applied Sciences (Switzerland), 2020, 10, 4171.	1.3	6
38	Spherical Mirror and Surface Patterning on Silicon Carbide (SiC) by Material Removal Rate Enhancement Using CO2 Laser Assisted Polishing. International Journal of Precision Engineering and Manufacturing, 2020, 21, 775-785.	1.1	13
39	Hybrid composite actuator with shape retention capability for morphing flap of unmanned aerial vehicle (UAV). Composite Structures, 2020, 243, 112227.	3.1	18
40	Stretchable Biaxial and Shear Strain Sensors Using Diffractive Structural Colors. ACS Nano, 2020, 14, 5392-5399.	7.3	68
41	Tuning Intercrystalline Void-like Defects in Nanowire Clusters to TiO <sub>2</sub> Quantum Wires with Enhanced Photocatalytic Performance. ACS Applied Energy Materials, 2019, 2, 5643-5655.	2.5	1
42	Assessment of Socio-Demographic Factors, Mother and Child Health Status, Water, Sanitation, and Hygienic Conditions Existing in a Hilly Rural Village of Nepal. International Journal of Environmental Research and Public Health, 2019, 16, 3965.	1.2	4
43	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
44	Laser Controlled 65 Micrometer Long Microrobot Made of Niâ€Ti Shape Memory Alloy. Advanced Materials Technologies, 2019, 4, 1900583.	3.0	22
45	Preface for the Special Issue of Energy Harvesting. International Journal of Precision Engineering and Manufacturing - Green Technology, 2019, 6, 669-670.	2.7	4
46	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
47	Evaluation of dual layered photoanode for enhancement of visible-light-driven applications. RSC Advances, 2019, 9, 16375-16383.	1.7	5
48	Highly Sensitive Solvent-free Silver Nanoparticle Strain Sensors with Tunable Sensitivity Created Using an Aerodynamically Focused Nanoparticle Printer. ACS Applied Materials & Samp; Interfaces, 2019, 11, 26421-26432.	4.0	20
49	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
50	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
51	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
52	Preference for Case Materials in Smart Devices: A Comparative Study in Korea, USA, and Tanzania. International Journal of Precision Engineering and Manufacturing, 2019, 20, 749-767.	1.1	3
53	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
54	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

#	Article	IF	Citations
55	Simulation of dynamic growth rate of focused ion beam-induced deposition using Hausdorff distance. Sensors and Actuators A: Physical, 2019, 286, 169-177.	2.0	1
56	Soft grasping mechanisms composed of shape memory polymer based self-bending units. Composites Part B: Engineering, 2019, 164, 198-204.	5.9	55
57	Soft Tendril-Inspired Grippers: Shape Morphing of Programmable Polymer–Paper Bilayer Composites. ACS Applied Materials & Interfaces, 2018, 10, 10419-10427.	4.0	118
58	Bulk density measurement of porous functionally graded materials. International Journal of Precision Engineering and Manufacturing, 2018, 19, 31-37.	1.1	14
59	Shape Memory Alloy (SMA)â€Based Microscale Actuators with 60% Deformation Rate and 1.6 kHz Actuation Speed. Small, 2018, 14, e1801023.	5.2	46
60	Controlled kinetic Monte Carlo simulation of laser improved nano particle deposition process. Powder Technology, 2018, 325, 651-658.	2.1	7
61	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
62	Resistive pressure sensor based on cylindrical micro structures in periodically ordered electrospun elastic fibers. Smart Materials and Structures, 2018, 27, 11LT01.	1.8	14
63	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
64	Investigation of Varying Particle Sizes of Dry-Deposited WO3 Particles in Relation to Performance of Electrochromic Cell. International Journal of Precision Engineering and Manufacturing - Green Technology, 2018, 5, 409-414.	2.7	10
65	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
66	Smart Machining Process Using Machine Learning: A Review and Perspective on Machining Industry. International Journal of Precision Engineering and Manufacturing - Green Technology, 2018, 5, 555-568.	2.7	194
67	Preface for the Special Issue of Sustainable Manufacturing in 4th Industrial Revolution. International Journal of Precision Engineering and Manufacturing - Green Technology, 2018, 5, 457-457.	2.7	4
68	Mechanical assembly of soft deployable structures and robots. , 2018, , .		0
69	Modular assembly of soft deployable structures and robots. Materials Horizons, 2017, 4, 367-376.	6.4	48
70	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
71	Blooming Knit Flowers: Loopâ€Linked Soft Morphing Structures for Soft Robotics. Advanced Materials, 2017, 29, 1606580.	11.1	72
72	An Overview of Shape Memory Alloy-Coupled Actuators and Robots. Soft Robotics, 2017, 4, 3-15.	4.6	189

#	Article	IF	CITATIONS
73	Hybrid 3D printing by bridging micro/nano processes. Journal of Micromechanics and Microengineering, 2017, 27, 065006.	1.5	8
74	Evaluation of a multi-dimensional hybrid photocatalyst for enrichment of H <sub>2</sub> evolution and elimination of dye/non-dye pollutants. Catalysis Science and Technology, 2017, 7, 2579-2590.	2.1	49
75	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
76	Curved shape memory alloy-based soft actuators and application to soft gripper. Composite Structures, 2017, 176, 398-406.	3.1	109
77	Advanced scanning paths for focused ion beam milling. Vacuum, 2017, 143, 40-49.	1.6	12
78	Design and Fabrication of Soft Morphing Ray Propulsor: Undulator and Oscillator. Soft Robotics, 2017, 4, 49-60.	4.6	52
79	"On the Dotâ€â€"The Timing of Selfâ€Assembled Growth to the Quantum Scale. Chemistry - A European Journal, 2017, 23, 8104-8117.	1.7	6
80	Kirigami Origamiâ€Based Soft Deployable Reflector for Optical Beam Steering. Advanced Functional Materials, 2017, 27, 1604214.	7.8	71
81	Shape Memory Alloy-Based Soft Gripper with Variable Stiffness for Compliant and Effective Grasping. Soft Robotics, 2017, 4, 379-389.	4.6	247
82	Effect of laser-excited ceramic nanoparticles on hardness and porosity of dry-sprayed coating. CIRP Annals - Manufacturing Technology, 2017, 66, 519-522.	1.7	6
83	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
84	Preface for the special issue of 4D printing. International Journal of Precision Engineering and Manufacturing - Green Technology, 2017, 4, 265-265.	2.7	3
85	Frontispiece: "On the Dotâ€â€"The Timing of Selfâ€Assembled Growth to the Quantum Scale. Chemistry - A European Journal, 2017, 23, .	1.7	O
86	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
87	Pulse width modulation as energy-saving strategy of shape memory alloy based smart soft composite actuator. International Journal of Precision Engineering and Manufacturing, 2017, 18, 895-901.	1.1	12
88	CAD/CAM for scalable nanomanufacturing: A network-based system for hybrid 3D printing. Microsystems and Nanoengineering, 2017, 3, 17072.	3.4	5
89	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
90	35 Hz shape memory alloy actuator with bending-twisting mode. Scientific Reports, 2016, 6, 21118.	1.6	92

#	Article	IF	Citations
91	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
92	Turtle mimetic soft robot with two swimming gaits. Bioinspiration and Biomimetics, 2016, 11, 036010.	1.5	71
93	Novel fabrication of an electrochromic antimony-doped tin oxide film using a nanoparticle deposition system. Applied Surface Science, 2016, 377, 370-375.	3.1	22
94	Design and analysis of a smart soft composite structure for various modes of actuation. Composites Part B: Engineering, 2016, 95, 155-165.	5.9	26
95	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
96	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
97	Soft morphing hand driven by SMA tendon wire. Composites Part B: Engineering, 2016, 105, 138-148.	5.9	106
98	Design and evaluation of micro-cutting tools for local planarization. International Journal of Precision Engineering and Manufacturing, 2016, 17, 1267-1273.	1.1	8
99	A review on fabrication processes for electrochromic devices. International Journal of Precision Engineering and Manufacturing - Green Technology, 2016, 3, 397-421.	2.7	70
100	Room-temperature synthesis of nanoporous 1D microrods of graphitic carbon nitride (g-C3N4) with highly enhanced photocatalytic activity and stability. Scientific Reports, 2016, 6, 31147.	1.6	172
101	Deployable Soft Composite Structures. Scientific Reports, 2016, 6, 20869.	1.6	63
102	Optimization of hybrid renewable energy power system for remote installations: Case studies for mountain and island. International Journal of Precision Engineering and Manufacturing, 2016, 17, 815-822.	1.1	24
103	Soft composite hinge actuator and application to compliant robotic gripper. Composites Part B: Engineering, 2016, 98, 397-405.	5.9	84
104	A Simplified Machine-Tool Power-Consumption Measurement Procedure and Methodology for Estimating Total Energy Consumption. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2016, 138, .	1.3	23
105	Room-Temperature Fabrication of a Flexible Thermoelectric Generator Using a Dry-Spray Deposition System. Journal of Electronic Materials, 2016, 45, 2286-2290.	1.0	6
106	Effect of twist morphing wing segment on aerodynamic performance of UAV. Journal of Mechanical Science and Technology, 2016, 30, 229-236.	0.7	41
107	Shape memory alloy/glass fiber woven composite for soft morphing winglets of unmanned aerial vehicles. Composite Structures, 2016, 140, 202-212.	3.1	61
108	Woven type smart soft composite for soft morphing car spoiler. Composites Part B: Engineering, 2016, 86, 285-298.	5.9	56

#	Article	IF	Citations
109	Comparison of mold designs for SMA-based twisting soft actuator. Sensors and Actuators A: Physical, 2016, 237, 96-106.	2.0	26
110	Flexible ceramic-elastomer composite piezoelectric energy harvester fabricated by additive manufacturing. Journal of Composite Materials, 2016, 50, 1573-1579.	1.2	19
111	lonic liquid-induced synthesis of a graphene intercalated ferrocene nanocatalyst and its environmental application. Applied Catalysis B: Environmental, 2016, 182, 326-335.	10.8	9
112	Minimization of Recombination Losses in 3D Nanostructured TiO2 Coated with Few Layered g-C3N4 for Extended Photo-response. Journal of the Korean Ceramic Society, 2016, 53, 393-399.	1.1	9
113	A review of electrically-assisted manufacturing. International Journal of Precision Engineering and Manufacturing - Green Technology, 2015, 2, 365-376.	2.7	108
114	Design and development of bio-mimetic soft robotic hand with shape memory alloy., 2015,,.		10
115	Preface for the special issue of ISGMA 2014. International Journal of Precision Engineering and Manufacturing, 2015, 16, 1227-1227.	1.1	0
116	Smart soft composite actuator with shape retention capability using embedded fusible alloy structures. Composites Part B: Engineering, 2015, 78, 507-514.	5.9	74
117	Shape memory alloy (SMA)-based head and neck immobilizer for radiotherapy. Journal of Computational Design and Engineering, 2015, 2, 176-182.	1.5	9
118	Fabrication of wrist-like SMA-based actuator by double smart soft composite casting. Smart Materials and Structures, 2015, 24, 125003.	1.8	59
119	Design and 3D printing of controllable-pitch archimedean screw for pico-hydropower generation. Journal of Mechanical Science and Technology, 2015, 29, 4851-4857.	0.7	13
120	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
121	Optimization of hybrid renewable energy power systems: A review. International Journal of Precision Engineering and Manufacturing - Green Technology, 2015, 2, 99-112.	2.7	260
122	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
123	Dielectric characteristics of a barium titanate film deposited by Nano Particle Deposition System (NPDS). International Journal of Precision Engineering and Manufacturing, 2015, 16, 1029-1034.	1.1	8
124	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. RSC Advances, 2015, 5, 24281-24292.	1.7	134
125	SMA-based smart soft composite structure capable of multiple modes of actuation. Composites Part B: Engineering, 2015, 82, 152-158.	5.9	61
126	A smart soft actuator using a single shape memory alloy for twisting actuation. Smart Materials and Structures, 2015, 24, 125033.	1.8	51

#	Article	IF	Citations
127	3D soft lithography: A fabrication process for thermocurable polymers. Journal of Materials Processing Technology, 2015, 217, 302-309.	3.1	25
128	Smart Phone Robot Made of Smart Soft Composite (SSC). Composites Research, 2015, 28, 52-57.	0.1	16
129	0214 Acceleration and Deceleration Characteristics of Power Consumption on Machine Tool Feed Drive. Proceedings of International Conference on Leading Edge Manufacturing in 21st Century LEM21, 2015, 2015.8, _0214-10214-5	0.0	0
130	Energy consumption of the brushing process for PCB manufacturing based on a friction model. International Journal of Precision Engineering and Manufacturing, 2014, 15, 2265-2272.	1.1	6
131	Evaluation of ionic liquids as lubricants in micro milling – process capability and sustainability. Journal of Cleaner Production, 2014, 76, 167-173.	4.6	64
132	Hybrid manufacturing in micro/nano scale: A Review. International Journal of Precision Engineering and Manufacturing - Green Technology, 2014, 1, 75-92.	2.7	141
133	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
134	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
135	Cellulose nanofiber assisted deposition of titanium dioxide on fluorine-doped tin oxide glass. RSC Advances, 2014, 4, 987-991.	1.7	4
136	Mathematical modeling of hybrid renewable energy system: A review on small hydro-solar-wind power generation. International Journal of Precision Engineering and Manufacturing - Green Technology, 2014, 1, 157-173.	2.7	221
137	Bio-inspired deposition of silver nano-particles (AgNPs) on silicon substrate. Materials Letters, 2014, 116, 175-177.	1.3	1
138	Locomotion of inchworm-inspired robot made of smart soft composite (SSC). Bioinspiration and Biomimetics, 2014, 9, 046006.	1.5	181
139	A novel off-grid hybrid power system comprised of solar photovoltaic, wind, and hydro energy sources. Applied Energy, 2014, 133, 236-242.	5.1	200
140	Mechanical behavior of microscale carbon pillar fabricated by focused ion beam induced deposition. International Journal of Precision Engineering and Manufacturing, 2014, 15, 1485-1488.	1.1	5
141	A comparison of energy consumption in bulk forming, subtractive, and additive processes: Review and case study. International Journal of Precision Engineering and Manufacturing - Green Technology, 2014, 1, 261-279.	2.7	255
142	Aerodynamically Focused Nanoparticle (AFN) Printing: Novel Direct Printing Technique of Solvent-Free and Inorganic Nanoparticles. ACS Applied Materials & Solvent-Free and Inorganic Nanoparticles.	4.0	27
143	Research advancement of green technologies. International Journal of Precision Engineering and Manufacturing, 2014, 15, 973-977.	1.1	31
144	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

#	Article	IF	Citations
145	Empirical power-consumption model for material removal in three-axis milling. Journal of Cleaner Production, 2014, 78, 54-62.	4.6	90
146	Alignment Algorithm for Nano-scale Three-dimensional Printing System. Journal of the Korean Society for Precision Engineering, 2014, 31, 1101-1106.	0.1	2
147	Soundproofing properties of polypropylene/clay/carbon nanotube nanocomposites. Journal of Applied Polymer Science, 2013, 130, 504-509.	1.3	26
148	Perspective to green manufacturing and applications. International Journal of Precision Engineering and Manufacturing, 2013, 14, 873-874.	1.1	36
149	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
150	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
151	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
152	Synergistic effects of carbon nanotubes and exfoliated graphite nanoplatelets for electromagnetic interference shielding and soundproofing. Journal of Applied Polymer Science, 2013, 130, 3947-3951.	1.3	25
153	Numerical simulation and verification of a curved morphing composite structure with embedded shape memory alloy wire actuators. Journal of Intelligent Material Systems and Structures, 2013, 24, 89-98.	1.4	22
154	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
155	Deformable wheel robot based on origami structure. , 2013, , .		49
156	Woven type smart soft composite beam with in-plane shape retention. Smart Materials and Structures, 2013, 22, 125007.	1.8	21
157	Defects of wave patterns from tungsten carbide/stainless steel brazed micro-end-milling for printed circuit board machining. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2013, 227, 1743-1747.	1.5	8
158	Locomotion of crawling robots made of smart soft composite (SSC) (ICCAS 2013)., 2013,,.		0
159	A turtle-like swimming robot using a smart soft composite (SSC) structure. Smart Materials and Structures, 2013, 22, 014007.	1.8	112
160	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
161	A flexible and highly sensitive strain-gauge sensor using reversible interlocking of nanofibres. Nature Materials, 2012, 11, 795-801.	13.3	1,453
162	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

#	Article	IF	Citations
163	Preface for a special issue on green manufacturing and applications. International Journal of Precision Engineering and Manufacturing, 2012, 13, 1027-1027.	1.1	3
164	Review of biomimetic underwater robots using smart actuators. International Journal of Precision Engineering and Manufacturing, 2012, 13, 1281-1292.	1.1	291
165	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
166	Effect of stand-off distance for cold gas spraying of fine ceramic particles (< $51\frac{1}{4}$ m) under low vacuum and room temperature using nano-particle deposition system (NPDS). Surface and Coatings Technology, 2012, 206, 2125-2132.	2.2	56
167	Review: Developments in micro/nanoscale fabrication by focused ion beams. Vacuum, 2012, 86, 1014-1035.	1.6	161
168	A review on IPMC material as actuators and sensors: Fabrications, characteristics and applications. International Journal of Precision Engineering and Manufacturing, 2012, 13, 141-163.	1.1	199
169	Formation Strategy of Renewable Energy Sources for High Mountain Off-grid System Considering Sustainability. Journal of the Korean Society for Precision Engineering, 2012, 29, 958-963.	0.1	14
170	Numerical simulation of hybrid composite shape-memory alloy wire-embedded structures. Journal of Intelligent Material Systems and Structures, 2011, 22, 1941-1948.	1.4	12
171	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
172	Room temperature deposition of TiO2 using nano particle deposition system (NPDS): Application to dye-sensitized solar cell (DSSC). International Journal of Precision Engineering and Manufacturing, 2011, 12, 749-752.	1.1	23
173	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
174	Fabrication and reliable implementation of an ionic polymer–metal composite (IPMC) biaxial bending actuator. Smart Materials and Structures, 2011, 20, 105026.	1.8	21
175	Effect of Moisture and Temperature on Mechanical Properties of Graphite Composite Bipolar Plate for Proton Exchange Membrane Fuel Cell (PEMFC). Advanced Composite Materials, 2011, 20, 53-64.	1.0	2
176	Fine-Sized Etching of Flexible Substrates Using Nano Particle Deposition System (NPDS). Materials Transactions, 2010, 51, 2099-2103.	0.4	3
177	Coating of Ni powders through micronozzle in a nano particle deposition system. Metals and Materials International, 2010, 16, 465-467.	1.8	11
178	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
179	Slicing algorithm for polyhedral models based on vertex shifting. International Journal of Precision Engineering and Manufacturing, 2010, 11, 803-807.	1.1	6
180	Morphological influence of the beam overlap in focused ion beam induced deposition using raster scan. Microelectronic Engineering, 2010, 87, 972-976.	1.1	6

#	Article	IF	CITATIONS
181	Nanoscale effects in carbon structures fabricated using focused ion beam-chemical vapor deposition. Thin Solid Films, 2010, 518, 5177-5182.	0.8	8
182	COMPUTATIONAL FLUID DYNAMICS ANALYSIS OF FABRICATED MICRONOZZLE FOR SUPERSONIC PARTICLE DEPOSITION. Surface Review and Letters, 2010, 17, 45-49.	0.5	0
183	DEPOSITION OF <font>Al<sub>2</sub>O<sub>3</sub></font> POWDERS USING NANO-PARTICLE DEPOSITION SYSTEM. Surface Review and Letters, 2010, 17, 189-193.	0.5	21
184	Design of Repeat-Antenna Package for Mobile Communication Made of Ferrite-Loaded Glass-Fabric/Epoxy Composites. Advanced Composite Materials, 2010, 19, 215-228.	1.0	1
185	Design and fabrication of a smart flexible structure using Shape Memory Alloy wire (SMA). , 2010, , .		4
186	A study of tool pattern design for calcified-atherosclerotic-plaque removal robot. , 2010, , .		5
187	Evaluation of morphological architecture of cellulose chains in grass during conversion from macro to nano dimensions. E-Polymers, 2009, 9, .	1.3	12
188	Review of manufacturing processes for soft biomimetic robots. International Journal of Precision Engineering and Manufacturing, 2009, 10, 171-181.	1.1	236
189	Direct metal printing of 3D electrical circuit using rapid prototyping. International Journal of Precision Engineering and Manufacturing, 2009, 10, 147-150.	1.1	34
190	Auxetic lattice of multipods. Physica Status Solidi (B): Basic Research, 2009, 246, 2098-2101.	0.7	22
191	Effect of repetition in micro scale pin-hole interference fit. , 2009, , .		1
192	Development of micro torque measurement device using strain gauge. , 2009, , .		9
193	Crack-Free Joint in a Ni-Al <sub>2</sub> O <sub>3</sub> FGM System Using Three-Dimensional Modeling. Materials Transactions, 2009, 50, 1875-1880.	0.4	6
194	Nanoparticle Deposition of Al <sub>2</sub> O <sub>3</sub> Powders on Various Substrates. Materials Transactions, 2009, 50, 2680-2684.	0.4	8
195	Cellulose nano whiskers from grass of Korea. Macromolecular Research, 2008, 16, 396-398.	1.0	39
196	Soundproofing effect of nano particle reinforced polymer composites. Journal of Mechanical Science and Technology, 2008, 22, 1468-1474.	0.7	46
197	Nano particle deposition system (NPDS) for ceramic and metal coating at room temperature and low vacuum condition. , 2008, , .		8
198	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

#	Article	IF	CITATIONS
199	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
200	Rapid prototyping and testing of 3d micro rockets using mechanical micro machining. Journal of Mechanical Science and Technology, 2006, 20, 85-93.	0.7	12
201	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
202	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
203	MIMS: Web-based micro machining service. International Journal of Computer Integrated Manufacturing, 2005, 18, 251-259.	2.9	8
204	A Multiscale Adhesion Model for Deposition Prediction in Laser Enhanced Nanoparticle Deposition Process. SSRN Electronic Journal, 0, , .	0.4	0
205	Nanoscale Ag/WO3 Multilayered Fabry–Perot Cavities for Colorimetric NO2 Sensing. ACS Applied Nano Materials, 0, , .	2.4	1
206	A Cameraâ€Based Structural Color Sensor Using Image Processing Algorithm with RGB to Hue Transformation. Advanced Materials Technologies, 0, , 2101671.	3.0	0