

Jiwan Yan

List of Publications by Year in descending order

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268
papers

6,228
citations

81434

41
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116156

66
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270
all docs

270
docs citations

270
times ranked

3367
citing authors

#	ARTICLE	IF	CITATIONS
1	Microscale Surface Patterning of Zirconia by Femtosecond Pulsed Laser Irradiation. International Journal of Precision Engineering and Manufacturing - Green Technology, 2022, 9, 619-632.	2.7	15
2	Nitrogen assisted formation of large-area ripples on Ti6Al4V surface by nanosecond pulse laser irradiation. Precision Engineering, 2022, 73, 244-256.	1.8	15
3	Fabrication of micro-structured surface with controllable randomness by using FTS-based diamond turning. Precision Engineering, 2022, 73, 363-376.	1.8	12
4	Flexible fabrication of Fresnel micro-lens array by off-spindle-axis diamond turning and precision glass molding. Precision Engineering, 2022, 74, 186-194.	1.8	9
5	Nanosecond pulsed laser-induced formation of nanopattern on Fe-based metallic glass surface. Applied Surface Science, 2022, 577, 151976.	3.1	15
6	Development of High-Sensitivity Electrically Conductive Composite Elements by Press Molding of Polymer and Carbon Nanofibers. Micromachines, 2022, 13, 170.	1.4	1
7	Microstructures and mechanical properties of Zr-based metallic glass ablated by nanosecond pulsed laser in various gas atmospheres. Journal of Alloys and Compounds, 2022, 901, 163717.	2.8	11
8	Response of Resin Coating Films Containing Fine Metal Particles to Ultrashort Laser Pulses. International Journal of Precision Engineering and Manufacturing, 2022, 23, 385-393.	1.1	3
9	Tool path generation and optimization for freeform surface diamond turning based on an independently controlled fast tool servo. International Journal of Extreme Manufacturing, 2022, 4, 025102.	6.3	12
10	The effects of simultaneous laser nitriding and texturing on surface hardness and tribological properties of Ti6Al4V. Surface and Coatings Technology, 2022, 437, 128358.	2.2	13
11	Generation of micro/nano hybrid surface structures on copper by femtosecond pulsed laser irradiation. Nanomanufacturing and Metrology, 2022, 5, 274-282.	1.5	13
12	Exploratory investigation of chip formation and surface integrity in ultra-high-speed gear hobbing. CIRP Annals - Manufacturing Technology, 2022, 71, 89-92.	1.7	4
13	Visualization of indentation induced sub-surface shear bands of Zr-based metallic glass by nanosecond pulse laser irradiation. Vacuum, 2022, 202, 111141.	1.6	3
14	Nanometric cutting: Mechanisms, practices and future perspectives. International Journal of Machine Tools and Manufacture, 2022, 178, 103905.	6.2	38
15	Amorphous Carbon Coated Silicon Wafer as Mold Insert for Precision Glass Molding. Procedia CIRP, 2022, 108, 525-530.	1.0	2
16	A novel method for fabricating micro-dimple arrays with good surface quality on metallic glass substrate by combining laser irradiation and mechanical polishing under wax sealing. Journal of Manufacturing Processes, 2022, 79, 911-923.	2.8	5
17	On the conversion of point-to-linear hierarchical micro/nano-structures on the glassy carbon surface by nanosecond pulsed laser irradiation. Applied Surface Science, 2022, 599, 153978.	3.1	0
18	Micro Electrical Discharge Machining of Ultrafine Particle Type Tungsten Carbide Using Dielectrics Mixed with Various Powders. Micromachines, 2022, 13, 998.	1.4	8

#	ARTICLE	IF	CITATIONS
19	Crack Propagation Behavior of Fused Silica during Cyclic Indentation under Incremental Loads. Applied Sciences (Switzerland), 2022, 12, 6589.	1.3	0
20	Ultrasonic Vibration-Assisted Grinding of Carbon-Based Difficult-to-Cut Materials. Journal of the Japan Society for Precision Engineering, 2022, 88, 541-545.	0.0	0
21	Influence of Wax Lubrication on Cutting Performance of Single-Crystal Silicon in Ultraprecision Microgrooving. International Journal of Precision Engineering and Manufacturing - Green Technology, 2021, 8, 611-624.	2.7	8
22	New evidences for understanding the serrated flow and shear band behavior in nanoindentation of metallic glasses. Journal of Alloys and Compounds, 2021, 857, 157587.	2.8	8
23	Softening and hardening on a Zr-based bulk metallic glass induced by nanosecond laser surface melting. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 803, 140497.	2.6	6
24	Machinability exploration for high-entropy alloy FeCrCoMnNi by ultrasonic vibration-assisted diamond turning. CIRP Annals - Manufacturing Technology, 2021, 70, 37-40.	1.7	23
25	Fundamental Investigation of Diamond Cutting of Micro V-Shaped Grooves on a Polycrystalline Soft-Brittle Material. Journal of Manufacturing and Materials Processing, 2021, 5, 17.	1.0	5
26	One-step fabrication of regular hierarchical micro/nano-structures on glassy carbon by nanosecond pulsed laser irradiation. Journal of Manufacturing Processes, 2021, 62, 108-118.	2.8	15
27	Diffraction manipulation of visible light with submicron structures for structural coloration fabrication. Optics Express, 2021, 29, 9294.	1.7	13
28	Chip-free surface patterning of toxic brittle polycrystalline materials through micro/nanoscale burnishing. International Journal of Machine Tools and Manufacture, 2021, 162, 103688.	6.2	17
29	Deterministic error compensation for slow tool servo-driven diamond turning of freeform surface with nanometric form accuracy. Journal of Manufacturing Processes, 2021, 64, 45-57.	2.8	37
30	Annealed high-phosphorus electroless Ni-P coatings for producing molds for precision glass molding. Materials Chemistry and Physics, 2021, 262, 124297.	2.0	15
31	Evolution of high-pressure metastable phase Si-XIII during silicon nanoindentation: A molecular dynamics study. Computational Materials Science, 2021, 191, 110344.	1.4	6
32	Effects of relative tool sharpness on surface generation mechanism of precision turning of electroless nickel-phosphorus coating. Journal of Mechanical Science and Technology, 2021, 35, 3113-3121.	0.7	5
33	Machinability Investigation for Cellulose Nanofiber-Reinforced Polymer Composite by Ultraprecision Diamond Turning. International Journal of Automation Technology, 2021, 15, 475-482.	0.5	0
34	On the transformation between micro-concave and micro-convex in nanosecond laser ablation of a Zr-based metallic glass. Journal of Manufacturing Processes, 2021, 68, 1114-1122.	2.8	24
35	Laser nitriding of Zr-based metallic glass: An investigation by orthogonal experiments. Surface and Coatings Technology, 2021, 424, 127657.	2.2	18
36	Deformation behaviour of soft-brittle polycrystalline materials determined by nanoscratching with a sharp indenter. Precision Engineering, 2021, 72, 717-729.	1.8	13

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37	Surface functionalization of Zr-based metallic glass by direct nanosecond laser texturing. <i>Vacuum</i> , 2021, 194, 110635.	1.6	5
38	Single-grain cutting based modeling of abrasive belt wear in cylindrical grinding. <i>Friction</i> , 2020, 8, 208-220.	3.4	20
39	Generation of microcones on reaction-bonded silicon carbide by nanosecond pulsed laser irradiation. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 108, 1039-1048.	1.5	6
40	Effects of deep subsurface damages on surface nanostructure formation in laser recovery of grinded single-crystal silicon wafers. <i>Precision Engineering</i> , 2020, 62, 213-222.	1.8	12
41	Effect of relative tool sharpness on subsurface damage and material recovery in nanometric cutting of mono-crystalline silicon: A molecular dynamics approach. <i>Materials Science in Semiconductor Processing</i> , 2020, 108, 104868.	1.9	18
42	Laser sintering of silicon powder and carbon nanofibers. , 2020, , 169-179.		0
43	Micropillar formation from silicon powder. , 2020, , 181-195.		0
44	Effects of cyclic loading on subsurface microstructural changes of zirconia polycrystals in nanoscale mechanical processing. <i>International Journal of Machine Tools and Manufacture</i> , 2020, 159, 103626.	6.2	12
45	Algorithm of Micro-Grooving and Imaging Processing for the Generation of High-Resolution Structural Color Images. <i>Nanomanufacturing and Metrology</i> , 2020, 3, 187-198.	1.5	12
46	Surface modification of tungsten carbide cobalt by electrical discharge coating with quarry dust suspension. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 111, 2105-2116.	1.5	9
47	Laser induced micro-cracking of Zr-based metallic glass using 1011 W/m ² nano-pulses. <i>Materials Today Communications</i> , 2020, 25, 101554.	0.9	5
48	Generating Silicon Nanofiber Clusters from Grinding Sludge by Millisecond Pulsed Laser Irradiation. <i>Nanomaterials</i> , 2020, 10, 812.	1.9	3
49	Generation of high-saturation two-level iridescent structures by vibration-assisted fly cutting. <i>Materials and Design</i> , 2020, 193, 108839.	3.3	27
50	Micromachining of single-crystal diamond. , 2020, , 75-92.		0
51	Modification of surface property of alumina sprayed coating. , 2020, , 159-168.		0
52	Manufacturing of multiscale structured surfaces. <i>CIRP Annals - Manufacturing Technology</i> , 2020, 69, 717-739.	1.7	73
53	Micromachining of microstructures on sapphire. , 2020, , 93-108.		0
54	Laser recovery of silicon single crystals. , 2020, , 123-142.		0

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55	Generating Nanodot Structures on Stainless-Steel Surfaces by Cross Scanning of a Picosecond Pulsed Laser. <i>Nanomanufacturing and Metrology</i> , 2020, 3, 105-111.	1.5	16
56	Surface modification and functionalization by electrical discharge coating: a comprehensive review. <i>International Journal of Extreme Manufacturing</i> , 2020, 2, 012004.	6.3	47
57	Silicon nanoparticle generation and deposition on glass from waste silicon powder by nanosecond pulsed laser irradiation. <i>Materials Science in Semiconductor Processing</i> , 2020, 111, 104998.	1.9	10
58	Direct observation of discharging phenomena in vibration-assisted micro-electrical discharge machining. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 108, 1125-1138.	1.5	9
59	Nanoparticle generation from various types of silicon materials by nanosecond-pulsed laser irradiation. <i>Applied Physics Express</i> , 2020, 13, 026505.	1.1	6
60	Surface formation mechanism in ultraprecision diamond turning of coarse-grained polycrystalline ZnSe. <i>International Journal of Machine Tools and Manufacture</i> , 2020, 153, 103554.	6.2	33
61	Multiscale Surface Patterning of Zirconia by Picosecond Pulsed Laser Irradiation. <i>Journal of Micro and Nano-Manufacturing</i> , 2020, 8, .	0.8	3
62	Measurement and Compensation of Tool Contour Error Using White Light Interferometry for Ultra-Precision Diamond Turning of Freeform Surfaces. <i>International Journal of Automation Technology</i> , 2020, 14, 654-664.	0.5	9
63	Surface Formation Behaviors in Wavy Microgroove Cutting on Various Workpiece Materials. <i>International Journal of Automation Technology</i> , 2020, 14, 245-252.	0.5	2
64	The coupling effects of laser thermal shock and surface nitridation on mechanical properties of Zr-based metallic glass. <i>Journal of Alloys and Compounds</i> , 2019, 770, 864-874.	2.8	19
65	Molecular Dynamics Investigation of Nanometric Cutting of Single-Crystal Silicon Using a Blunt Tool. <i>Jom</i> , 2019, 71, 4296-4304.	0.9	12
66	Manufacturing technologies toward extreme precision. <i>International Journal of Extreme Manufacturing</i> , 2019, 1, 022001.	6.3	72
67	Effect of the Pillar Size on the Electrochemical Performance of Laser-Induced Silicon Micropillars as Anodes for Lithium-Ion Batteries. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 3623.	1.3	6
68	Distortion measurement of optical system using phase diffractive beam splitter. <i>Optics Express</i> , 2019, 27, 29803.	1.7	9
69	Investigation on wear modes and mechanisms of abrasive belts in grinding of U71Mn steel. <i>International Journal of Advanced Manufacturing Technology</i> , 2019, 101, 1821-1835.	1.5	22
70	Chip morphology and surface integrity in ultraprecision cutting of yttria-stabilized tetragonal zirconia polycrystal. <i>CIRP Annals - Manufacturing Technology</i> , 2019, 68, 53-56.	1.7	14
71	Direct observations of multi-cyclic nanoindentation-induced phase transformations in single-crystal Ge. <i>Materials Research Express</i> , 2019, 6, 075065.	0.8	2
72	Formation behavior of laser-induced periodic surface structures on stainless tool steel in various media. <i>Precision Engineering</i> , 2019, 57, 244-252.	1.8	24

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73	Improving the Surface Integrity of Additive-Manufactured Metal Parts by Ultrasonic Vibration-Assisted Burnishing. <i>Journal of Micro and Nano-Manufacturing</i> , 2019, 7, .	0.8	23
74	Laser recovery of grinding-induced subsurface damage in the edge and notch of a single-crystal silicon wafer. <i>Surface Topography: Metrology and Properties</i> , 2019, 7, 015013.	0.9	6
75	Effects of tool rake angle and tool nose radius on surface quality of ultraprecision diamond-turned porous silicon. <i>Journal of Manufacturing Processes</i> , 2019, 37, 321-331.	2.8	19
76	Ultrasonic vibration-assisted microgrinding of glassy carbon. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2019, 233, 4165-4175.	1.1	10
77	Ultra-precision cutting of roll molds having two-directional wavy microstructures. <i>Transactions of the JSME (in Japanese)</i> , 2019, 85, 19-00105-19-00105.	0.1	1
78	Study on Infrared Transmittance of Si-Polymer Hybrid Structure Press Molded Using a Coupling Agent. <i>International Journal of Automation Technology</i> , 2019, 13, 817-824.	0.5	0
79	Laser Patterning of Metallic Glass. <i>Toxinology</i> , 2018, , 1-29.	0.2	0
80	Tool-Servo Driven Diamond Turning for Structured Surface. <i>Micro/Nano Technologies</i> , 2018, , 1-31.	0.1	0
81	Ultraprecision cutting of single-crystal calcium fluoride for fabricating micro flow cells. <i>Journal of Advanced Mechanical Design, Systems and Manufacturing</i> , 2018, 12, JAMDSM0021-JAMDSM0021.	0.3	9
82	Fracture toughness and sliding properties of magnetron sputtered CrBC and CrBCN coatings. <i>Applied Surface Science</i> , 2018, 443, 635-643.	3.1	15
83	Material removal mechanism and surface integrity in ultraprecision cutting of porous titanium. <i>Precision Engineering</i> , 2018, 52, 356-369.	1.8	23
84	Softening of Zr-based metallic glass induced by nanosecond pulsed laser irradiation. <i>Journal of Alloys and Compounds</i> , 2018, 754, 215-221.	2.8	22
85	Precision slicing of single-crystal SiC using extremely fine fixed-abrasive diamond wire. <i>Transactions of the JSME (in Japanese)</i> , 2018, 84, 17-00345-17-00345.	0.1	2
86	Microgrooving of a single-crystal diamond tool using a picosecond pulsed laser and some cutting tests. <i>Precision Engineering</i> , 2018, 53, 252-262.	1.8	13
87	Nanoscale surface patterning of diamond utilizing carbon diffusion reaction with a microstructured titanium mold. <i>CIRP Annals - Manufacturing Technology</i> , 2018, 67, 181-184.	1.7	5
88	Micro-electrical Discharge Machining of Hard Brittle Materials. <i>Toxinology</i> , 2018, , 1-32.	0.2	0
89	Nanosecond pulsed laser irradiation of sapphire for developing microstructures with deep V-shaped grooves. <i>Precision Engineering</i> , 2018, 52, 440-450.	1.8	21
90	Tool-Servo Driven Diamond Turning for Structured Surface. <i>Micro/Nano Technologies</i> , 2018, , 1-31.	0.1	0

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91	Press Molding of Hybrid Fresnel Lenses for Infrared Applications. <i>Micro/Nano Technologies</i> , 2018, , 1-30.	0.1	1
92	Nanometer-scale chip formation and surface integrity of pure titanium in diamond turning. <i>International Journal of Advanced Manufacturing Technology</i> , 2018, 95, 479-492.	1.5	11
93	Investigation of Subsurface Damage Behaviors in Single-crystal Ge by Multi-cyclic Nanoindentation. <i>Procedia CIRP</i> , 2018, 71, 244-248.	1.0	1
94	Machining-Induced Subsurface Damage in Single-Crystal Silicon â€”Formation, Characterization, and Recoveryâ€”. <i>Journal of the Japan Society for Precision Engineering</i> , 2018, 84, 971-974.	0.0	0
95	Micro-electrical Discharge Machining of Hard Brittle Materials. <i>Toxinology</i> , 2018, , 1-32.	0.2	1
96	Surface Flattening and Nanostructuring of Steel by Picosecond Pulsed Laser Irradiation. <i>Nanomanufacturing and Metrology</i> , 2018, 1, 217-224.	1.5	11
97	Laser Patterning of Metallic Glass. <i>Toxinology</i> , 2018, , 1-29.	0.2	0
98	Characterization of recrystallized depth and dopant distribution in laser recovery of grinding damage in single-crystal silicon. <i>Materials Science in Semiconductor Processing</i> , 2018, 82, 54-61.	1.9	5
99	Experimental investigation of RB-SiC using Cuâ€“CNF composite electrodes in electrical discharge machining. <i>International Journal of Advanced Manufacturing Technology</i> , 2018, 98, 3019-3028.	1.5	5
100	Press Molding of Hybrid Fresnel Lenses for Infrared Applications. <i>Micro/Nano Technologies</i> , 2018, , 1-30.	0.1	0
101	Multi-scale dimple creation on metallic glass by a two-step method involving nanoindentation and polishing. <i>Applied Surface Science</i> , 2018, 462, 565-574.	3.1	14
102	Noncontact on-machine measurement system based on capacitive displacement sensors for single-point diamond turning. <i>Optical Engineering</i> , 2018, 57, 1.	0.5	5
103	Tool-Servo Driven Diamond Turning for Structured Surface. <i>Micro/Nano Technologies</i> , 2018, , 215-244.	0.1	0
104	Press Molding of Hybrid Fresnel Lenses for Infrared Applications. <i>Micro/Nano Technologies</i> , 2018, , 661-690.	0.1	0
105	Micro-electrical Discharge Machining of Hard Brittle Materials. <i>Micro/Nano Technologies</i> , 2018, , 775-806.	0.1	0
106	Laser Patterning of Metallic Glass. <i>Micro/Nano Technologies</i> , 2018, , 499-527.	0.1	0
107	Mechanisms of micro-groove formation on single-crystal diamond by a nanosecond pulsed laser. <i>Journal of Materials Processing Technology</i> , 2017, 243, 299-311.	3.1	29
108	Ultraprecision surface flattening of porous silicon by diamond turning. <i>Precision Engineering</i> , 2017, 49, 262-277.	1.8	18

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109	Improvement of glass formability in ultrasonic vibration assisted molding process. International Journal of Precision Engineering and Manufacturing, 2017, 18, 57-62.	1.1	16
110	Fabrication of single-crystal silicon micro pillars on copper foils by nanosecond pulsed laser irradiation. CIRP Annals - Manufacturing Technology, 2017, 66, 253-256.	1.7	12
111	Mechanisms of material removal and subsurface damage in fixed-abrasive diamond wire slicing of single-crystalline silicon. Precision Engineering, 2017, 50, 32-43.	1.8	66
112	On the phase transformation of single-crystal 4H α -SiC during nanoindentation. Journal Physics D: Applied Physics, 2017, 50, 265303.	1.3	40
113	Thermochemical micro imprinting of single-crystal diamond surface using a nickel mold under high-pressure conditions. Applied Surface Science, 2017, 404, 318-325.	3.1	18
114	Study on the crack resistance of CrBN composite coatings via nano-indentation and scratch tests. Journal of Alloys and Compounds, 2017, 708, 1103-1109.	2.8	35
115	Fundamental characteristics of material removal and surface formation in diamond turning of porous carbon. International Journal of Additive and Subtractive Materials Manufacturing, 2017, 1, 23.	0.2	2
116	A nanosecond time-resolved XFEL analysis of structural changes associated with CO release from cytochrome c oxidase. Science Advances, 2017, 3, e1603042.	4.7	68
117	An investigation on the crack resistance of CrN, CrBN and CrTiBN coatings via nanoindentation. Vacuum, 2017, 145, 186-193.	1.6	31
118	Investigating shear band interaction in metallic glasses by adjacent nanoindentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 704, 375-385.	2.6	21
119	An overview of current status of cutting fluids and cooling techniques of turning hard steel. International Journal of Heat and Mass Transfer, 2017, 114, 380-394.	2.5	116
120	Surface patterning of Zr-based metallic glass by laser irradiation induced selective thermoplastic extrusion in nitrogen gas. Journal of Micromechanics and Microengineering, 2017, 27, 075007.	1.5	41
121	Micropatterning of diamond crystallites via cobalt-catalyzed thermochemical etching. Journal of Materials Science, 2017, 52, 709-720.	1.7	19
122	Atomic-scale characterization of subsurface damage and structural changes of single-crystal silicon carbide subjected to electrical discharge machining. Acta Materialia, 2017, 123, 362-372.	3.8	45
123	Improvement of form accuracy and surface integrity of Si-HDPE hybrid micro-lens arrays in press molding. Precision Engineering, 2017, 47, 469-479.	1.8	16
124	Ductile machining of single-crystal silicon for microlens arrays by ultraprecision diamond turning using a slow tool servo. International Journal of Machine Tools and Manufacture, 2017, 115, 2-14.	6.2	134
125	Fabrication of Microstructures on Single-crystal Diamond by Press Imprinting Utilizing Pure Iron Molds. Journal of the Japan Society for Precision Engineering, 2017, 83, 770-774.	0.0	0
126	Design and fabrication of Si-HDPE hybrid Fresnel lenses for infrared imaging systems. Optics Express, 2017, 25, 1202.	1.7	24

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127	Fabrication of Hexagonal Microlens Arrays on Single-Crystal Silicon Using the Tool-Servo Driven Segment Turning Method. <i>Micromachines</i> , 2017, 8, 323.	1.4	38
128	Comparative Study of Phase Transformation in Single-Crystal Germanium during Single and Cyclic Nanoindentation. <i>Crystals</i> , 2017, 7, 333.	1.0	5
129	Glass molding process for microstructures. , 2017, , 213-262.		3
130	Laser Irradiation Responses of a Single-Crystal Diamond Produced by Different Crystal Growth Methods. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 815.	1.3	13
131	Ductile mode cutting of optical glass without silicon oxide composition. <i>Proceedings of International Conference on Leading Edge Manufacturing in 21st Century LEM21</i> , 2017, 2017.9, 063.	0.0	0
132	Fundamental characteristics of material removal and surface formation in diamond turning of porous carbon. <i>International Journal of Additive and Subtractive Materials Manufacturing</i> , 2017, 1, 23.	0.2	2
133	Volumetric and timescale analysis of phase transformation in single-crystal silicon during nanoindentation. <i>Applied Physics A: Materials Science and Processing</i> , 2016, 122, 1.	1.1	6
134	Shield gas induced cracks during nanosecond-pulsed laser irradiation of Zr-based metallic glass. <i>Applied Physics A: Materials Science and Processing</i> , 2016, 122, 1.	1.1	15
135	Surface Property Modification of Alumina Sprayed Coatings Using Nd:YAG Laser. <i>Procedia CIRP</i> , 2016, 42, 464-469.	1.0	9
136	In situ characterization of formation and growth of high-pressure phases in single-crystal silicon during nanoindentation. <i>Applied Physics A: Materials Science and Processing</i> , 2016, 122, 1.	1.1	1
137	Effects of pre-compression deformation on nanoindentation response of Zr ₆₅ Cu ₁₅ Al ₁₀ Ni ₁₀ bulk metallic glass. <i>Journal of Alloys and Compounds</i> , 2016, 674, 223-228.	2.8	24
138	Surface patterning of synthetic diamond crystallites using nickel powder. <i>Diamond and Related Materials</i> , 2016, 66, 206-212.	1.8	23
139	Laser Recovery of Subsurface Damages in Chemomechanically Polished Silicon Wafers. <i>Key Engineering Materials</i> , 2016, 701, 97-100.	0.4	0
140	Diamond turning of high-precision roll-to-roll imprinting molds for fabricating subwavelength gratings. <i>Optical Engineering</i> , 2016, 55, 064105.	0.5	13
141	Fabrication of silicon-based porous nanocomposite films by focused infrared light sintering. <i>CIRP Annals - Manufacturing Technology</i> , 2016, 65, 217-220.	1.7	5
142	Nanosecond pulsed laser irradiation induced hierarchical micro/nanostructures on Zr-based metallic glass substrate. <i>Materials and Design</i> , 2016, 109, 153-161.	3.3	43
143	Crack-free ductile mode grinding of fused silica under controllable dry grinding conditions. <i>International Journal of Machine Tools and Manufacture</i> , 2016, 109, 126-136.	6.2	66
144	Microstructural changes of Zr-based metallic glass during micro-electrical discharge machining and grinding by a sintered diamond tool. <i>Journal of Alloys and Compounds</i> , 2016, 688, 14-21.	2.8	35

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145	Press molding of a Siâ€‘HDPE hybrid lens substrate and evaluation of its infrared optical properties. <i>Precision Engineering</i> , 2016, 43, 429-438.	1.8	15
146	Microstructure, mechanical and tribological properties of CrSiC coatings sliding against SiC and Al ₂ O ₃ balls in water. <i>Applied Surface Science</i> , 2016, 368, 129-139.	3.1	18
147	Evaluating mechanical properties and crack resistance of CrN, CrTiN, CrAlN and CrTiAlN coatings by nanoindentation and scratch tests. <i>Surface and Coatings Technology</i> , 2016, 285, 203-213.	2.2	143
148	Friction and wear properties of CrSiCN coatings with low carbon content as sliding against SiC and steel balls in water. <i>Tribology International</i> , 2016, 94, 176-186.	3.0	40
149	Possibility for rapid generation of high-pressure phases in single-crystal silicon by fast nanoindentation. <i>Semiconductor Science and Technology</i> , 2015, 30, 115001.	1.0	4
150	Laser sintering of silicon powder and carbon nanofibers for porous composite thick films. <i>Applied Physics Express</i> , 2015, 8, 026501.	1.1	11
151	Experimental study of crystal anisotropy based on ultra-precision cylindrical turning of single-crystal calcium fluoride. <i>Precision Engineering</i> , 2015, 40, 172-181.	1.8	39
152	New insights into phase transformations in single crystal silicon by controlled cyclic nanoindentation. <i>Scripta Materialia</i> , 2015, 102, 35-38.	2.6	30
153	Influence of trimethylsilane flow on the microstructure, mechanical and tribological properties of CrSiCN coatings in water lubrication. <i>Applied Surface Science</i> , 2015, 355, 516-530.	3.1	40
154	Sintered diamond as a hybrid EDM and grinding tool for the micromachining of single-crystal SiC. <i>CIRP Annals - Manufacturing Technology</i> , 2015, 64, 221-224.	1.7	43
155	Comparison of crack resistance between ternary CrSiC and quaternary CrSiCN coatings via nanoindentation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 642, 391-397.	2.6	18
156	Evaluation of crack resistance of CrSiCN coatings as a function of Si concentration via nanoindentation. <i>Surface and Coatings Technology</i> , 2015, 272, 239-245.	2.2	26
157	On the mechanism of secondary pop-out in cyclic nanoindentation of single-crystal silicon. <i>Journal of Materials Research</i> , 2015, 30, 1861-1868.	1.2	16
158	Effect of counterparts on the tribological properties of TiCN coatings with low carbon concentration in water lubrication. <i>Wear</i> , 2015, 328-329, 356-362.	1.5	28
159	Influence of carbon concentration on the electrochemical behavior of CrCN coatings in simulated body fluid. <i>Surface and Coatings Technology</i> , 2015, 265, 16-23.	2.2	24
160	Anisotropy of synthetic diamond in catalytic etching using iron powder. <i>Applied Surface Science</i> , 2015, 346, 388-393.	3.1	46
161	Comparison of tribological and electrochemical properties of TiN, CrN, TiAlN and a-C:H coatings in simulated body fluid. <i>Materials Chemistry and Physics</i> , 2015, 158, 74-81.	2.0	56
162	On the surface characteristics of a Zr-based bulk metallic glass processed by microelectrical discharge machining. <i>Applied Surface Science</i> , 2015, 355, 1306-1315.	3.1	57

#	ARTICLE	IF	CITATIONS
163	Development of polycrystalline Niâ€P mold by heat treatment for glass microgroove forming. Precision Engineering, 2015, 39, 25-30.	1.8	24
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