Ling Yin

List of Publications by Year
in descending order

93 papers	2,164 citations	185998 28 h-index	253896 43 g-index
94 all docs	94 docs citations	94 times ranked	1273 citing authors

#	Article	IF	Citations
1	Abrasive machining of porcelain and zirconia with a dental handpiece. Wear, 2003, 255, 975-989.	1.5	109
2	High speed grinding of silicon nitride with resin bond diamond wheels. Journal of Materials Processing Technology, 2003, 141, 329-336.	3.1	95
3	Influence of microstructure on ultraprecision grinding of cemented carbides. International Journal of Machine Tools and Manufacture, 2004, 44, 533-543.	6.2	89
4	An overview of in vitro abrasive finishing & CAD/CAM of bioceramics in restorative dentistry. International Journal of Machine Tools and Manufacture, 2006, 46, 1013-1026.	6.2	88
5	Surface characterization of 6H-SiC (0001) substrates in indentation and abrasive machining. International Journal of Machine Tools and Manufacture, 2004, 44, 607-615.	6.2	82
6	Surface quality of yttria-stabilized tetragonal zirconia polycrystal in CAD/CAM milling, sintering, polishing and sandblasting processes. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 65, 102-116.	1.5	81
7	High-quality grinding of polycrystalline silicon carbide spherical surfaces. Wear, 2004, 256, 197-207.	1.5	75
8	Ceramic Response to High Speed Grinding. Machining Science and Technology, 2004, 8, 21-37.	1.4	71
9	High speed versus conventional grinding in high removal rate machining of alumina and aluminaâ€“titania. International Journal of Machine Tools and Manufacture, 2005, 45, 897-907.	6.2	68
10	A Review of Engineered Zirconia Surfaces in Biomedical Applications. Procedia CIRP, 2017, 65, 284-290.	1.0	68
11	Machinability of lithium disilicate glass ceramic in in vitro dental diamond bur adjusting process. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 53, 78-92.	1.5	59
12	Analytical and experimental investigation of coolant velocity in high speed grinding. International Journal of Machine Tools and Manufacture, 2004, 44, 1069-1076.	6.2	56
13	Abrasive Flow Polishing of Micro Bores. Materials and Manufacturing Processes, 2004, 19, 187-207.	2.7	50
14	Loading rate effect on the mechanical behavior of zirconia in nanoindentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 619, 247-255.	2.6	47
15	ABRASIVE MACHINING OF GLASS-CERAMICS WITH A DENTAL HANDPIECE. Machining Science and Technology, 2000, 4, 209-233.	1.4	46
16	ABRASIVE MACHINING OF GLASS-INFILTRATED ALUMINA WITH DIAMOND BURS. Machining Science and Technology, 2001, 5, 43-61.	1.4	46
17	Wear behavior of pressable lithium disilicate glass ceramic. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 968-978.	1.6	46
18	Brittle materials in nano-abrasive fabrication of optical mirror-surfaces. Precision Engineering, 2008, 32, 336-341.	1.8	45

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19	Assessment of Elasticity, Plasticity and Resistance to Machining-induced Damage of Porous Pre-sintered Zirconia Using Nanoindentation Techniques. Journal of Materials Science and Technology, 2016, 32, 402-410.	5.6	39
20	Surface integrity and removal mechanism in simulated dental finishing of a feldspathic porcelain. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2006, 79B, 365-378.	1.6	38
21	Fracture, roughness and phase transformation in CAD/CAM milling and subsequent surface treatments of lithium metasilicate/disilicate glass-ceramics. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 74, 251-260.	1.5	37
22	Machinability: Zirconia-reinforced lithium silicate glass ceramic versus lithium disilicate glass ceramic. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 101, 103435.	1.5	37
23	Nano-scale mechanical properties and behavior of pre-sintered zirconia. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 36, 21-31.	1.5	36
24	Determination of the mechanical behavior of lithium disilicate glass ceramics by nanoindentation & scanning probe microscopy. Materials Chemistry and Physics, 2014, 148, 1036-1044.	2.0	35
25	Nanoindentation characterization of the elasticity, plasticity and machinability of zirconia. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 628, 181-187.	2.6	32
26	Effects of cementation surface modifications on fracture resistance of zirconia. Dental Materials, 2015, 31, 435-442.	1.6	32
27	In vitro rapid intraoral adjustment of porcelain prostheses using a high-speed dental handpiece. Acta Biomaterialia, 2008, 4, 414-424.	4.1	30
28	Propertyâ€“process relations in simulated clinical abrasive adjusting of dental ceramics. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 16, 55-65.	1.5	30
29	Subsurface damage induced in dental resurfacing of a feldspar porcelain with coarse diamond burs. Journal of Biomechanics, 2009, 42, 355-360.	0.9	28
30	Effects of Fluids on the Simulated Clinical-Dental Machining of a Glass Ceramic. Journal of the American Ceramic Society, 2004, 87, 173-175.	1.9	23
31	Micro/meso ultra precision grinding of fibre optic connectors. Precision Engineering, 2004, 28, 95-105.	1.8	23
32	Nano-mechanical behaviour of lithium metasilicate glassâ€“ceramic. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 49, 162-174.	1.5	23
33	Polishing of fiber optic connectors. International Journal of Machine Tools and Manufacture, 2004, 44, 659-668.	6.2	22
34	Loose abrasive truing and dressing of resin bond diamond cup wheels for grinding fibre optic connectors. Journal of Materials Processing Technology, 2005, 159, 229-239.	3.1	22
35	Surface morphology and fracture in handpiece adjusting of a leucite-reinforced glass ceramic with coarse diamond burs. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 534, 193-202.	2.6	22
36	Relevance of SEM to Long-Term Mechanical Properties of Cemented Paste Backfill. Geotechnical and Geological Engineering, 2018, 36, 2171-2187.	0.8	22

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37	Grinding characteristics of engineering ceramics in high speed regime. International Journal of Abrasive Technology, 2007, 1, 78.	0.2	19
38	Planar nanogrinding of a fine grained WC-Co composite for an optical surface finish. International Journal of Advanced Manufacturing Technology, 2005, 26, 766-773.	1.5	18
39	In-process assessment of dental cutting of a leucite-reinforced glassâ€“ceramic. Medical Engineering and Physics, 2009, 31, 214-220.	0.8	17
40	Zirconia responses to edge chipping damage induced in conventional and ultrasonic vibration-assisted diamond machining. Journal of Materials Research and Technology, 2021, 13, 573-589.	2.6	17
41	Finite element analysis of subsurface damage of ceramic prostheses in simulated intraoral dental resurfacing. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2008, 85B, 50-59.	1.6	16
42	Cutting characteristics of dental glass ceramics during in vitro dental abrasive adjusting using a high-speed electric handpiece. Ceramics International, 2013, 39, 6237-6249.	2.3	16
43	Quantitative assessment of the enamel machinability in tooth preparation with dental diamond burs. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 41, 1-12.	1.5	16
44	Responses of pre-crystallized and crystallized zirconia-containing lithium silicate glass ceramics to diamond machining. Ceramics International, 2020, 46, 1924-1933.	2.3	16
45	Microgrinding of deep micro grooves with high table reversal speed. International Journal of Machine Tools and Manufacture, 2004, 44, 39-49.	6.2	15
46	Stress and damage at the bur-prosthesis interface in dental adjustments of a leucite-reinforced glass ceramic. Journal of Oral Rehabilitation, 2010, 37, 680-691.	1.3	14
47	Nanoscale study of cartilage surfaces using atomic force microscopy. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2012, 226, 899-910.	1.0	14
48	Fracture-free surfaces of CAD/CAM lithium metasilicate glass-ceramic using micro-slurry jet erosion. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 80, 59-67.	1.5	13
49	Influences of nanoscale abrasive suspensions on the polishing of fiber-optic connectors. International Journal of Advanced Manufacturing Technology, 2005, 25, 685-690.	1.5	12
50	Effect of diamond burs on process and damage involvingin vitrodental resurfacing of a restorative porcelain. Journal Physics D: Applied Physics, 2007, 40, 5291-5300.	1.3	12
51	The feature-based posterior crown design in a dental CAD/CAM system. International Journal of Advanced Manufacturing Technology, 2007, 31, 1058-1065.	1.5	12
52	Effect of cryo-induced microcracks on microindentation of hydrated cortical bone tissue. Materials Characterization, 2009, 60, 783-791.	1.9	12
53	Induced damage zone in micro-fine dental finishing of a feldspathic porcelain. Medical Engineering and Physics, 2010, 32, 417-422.	0.8	12
54	Nano-scale mechanical behavior of pre-crystallized CAD/CAM zirconia-reinforced lithium silicate glass ceramic. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 82, 35-44.	1.5	12

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55	Design against Fatigue of Super Duplex Stainless Steel Structures Fabricated by Wire Arc Additive Manufacturing Process. Metals, 2021, 11, 1965.	1.0	12
56	Micro-fine finishing of a feldspar porcelain for dental prostheses. Medical Engineering and Physics, 2008, 30, 856-864.	0.8	11
57	Microwave Modification of Sugar Cane to Enhance Juice Extraction During Milling. Journal of Microwave Power and Electromagnetic Energy, 2011, 45, 178-187.	0.4	10
58	A Machining Science Approach to Dental Cutting of Glass Ceramics Using an Electric Handpiece and Diamond Burs. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2013, 135, .	1.3	10
59	Microstructural influence on damage-induced zirconia surface asperities produced by conventional and ultrasonic vibration-assisted diamond machining. Ceramics International, 2021, 47, 25744-25754.	2.3	10
60	Microstructural responses of Zirconia materials to in-situ SEM nanoindentation. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 118, 104450.	1.5	9
61	Effect of microstructure on micromechanical performance of dry cortical bone tissues. Materials Characterization, 2009, 60, 1424-1431.	1.9	8
62	Ultrasonic assisted high rotational speed diamond machining of dental glass ceramics. International Journal of Advanced Manufacturing Technology, 2018, 96, 387.	1.5	7
63	Microâ€slurry jet for surface processing of dental ceramics. Biosurface and Biotribology, 2019, 5, 8-12.	0.6	7
64	Response of pre-crystallized CAD/CAM zirconia-reinforced lithium silicate glass ceramic to cyclic nanoindentation. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 92, 58-70.	1.5	7
65	Influence of CAD/CAM milling, sintering and surface treatments on the fatigue behavior of lithium disilicate glass ceramic. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 113, 104133.	1.5	7
66	High Speed Grinding Performance and Material Removal Mechanism of Silicon Nitride. , 2002, , 416-420.		6
67	Linear Grinding of Microbores Using Diamond-Adhered Wire. Materials and Manufacturing Processes, 2007, 22, 271-276.	2.7	6
68	2D and 3D mapping of microindentations in hydrated and dehydrated cortical bones using confocal laser scanning microscopy. Journal of Materials Science, 2012, 47, 4432-4438.	1.7	4
69	Effect of bur selection on machining damage mechanisms of polymer-infiltrated ceramic network material for CAD/CAM dental restorations. Ceramics International, 2020, 46, 23116-23126.	2.3	4
70	In-situ SEM cyclic nanoindentation of pre-sintered and sintered zirconia materials. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 126, 105068.	1.5	4
71	Surface Waviness Controlled Grinding of Thin Mold Inserts Using Chilled Air as Coolant. Materials and Manufacturing Processes, 2004, 19, 341-354.	2.7	3
72	Influence of enzymatic maceration on the microstructure and microhardness of compact bone. Biomedical Materials (Bristol), 2010, 5, 015006.	1.7	3

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73	Damage morphology produced in low-cycle high-load indentations of feldspar porcelain and leucite glass ceramic. Journal of Materials Science, 2013, 48, 7902-7912.	1.7	3
74	Polishing Using Flexible Abrasive Tools and Loose Abrasives. , 2011, , 345-384.		3
75	Soft machining-induced surface and edge chipping damage in pre-crystalized lithium silicate glass ceramics. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 131, 105224.	1.5	3
76	An experimental investigation of fabrication mechanisms of optic fibre end faces using nano/microindentation and nanogrinding. International Journal of Nanomanufacturing, 2006, 1, 47.	0.3	2
77	Effect of Penetration Rate on Insertion Force in Trabecular Bone Biopsy. Materials Science Forum, 2010, 654-656, 2225-2228.	0.3	2
78	Grindability of dental ceramics in the in vitro oral regime. International Journal of Abrasive Technology, 2011, 4, 204.	0.2	2
79	Influence of Grinding Fluids on the Abrasive Machining of a Micaceous Glass Ceramic. , 0, , 191-196.		2
80	Microgrinding of lithium metasilicate/disilicate glass-ceramics. Ceramics International, 2022, 48, 8548-8562.	2.3	2
81	In-situ SEM micropillar compression of porous and dense zirconia materials. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 132, 105268.	1.5	2
82	Surface topography in mechanical polishing of 6H-SiC (0001) substrate. Proceedings of SPIE, 2007, , .	0.8	0
83	Abrasive Technology in Ceramic Restorative Dentistry. Advanced Materials Research, 2009, 76-78, 363-366.	0.3	0
84	Surface Roughness and Stress Responses of a Feldspar Porcelain to Fatigue Impact. Key Engineering Materials, 0, 443, 557-561.	0.4	0
85	Forecasting of Cutting Forces in Dental Adjustment of Ceramic Prostheses Using an Artificial Neural Network. Advanced Materials Research, 0, 152-153, 1687-1690.	0.3	0
86	FEA-Predicted Subsurface Damage in Micro Finishing of a Feldspar Porcelain Using Fine-Grit Dental Burs. Key Engineering Materials, 0, 443, 562-566.	0.4	0
87	Nano-Hardness Testing of Wear Particles in Sheep Knee Joints. Materials Science Forum, 2010, 654-656, 2253-2256.	0.3	0
88	In Vitro Dental Cutting of Feldspar and Leucite Glass Ceramics Using an Electric Handpiece. , 2012, , .		0
89	Ceramics in restorative dentistry. , 2014, , 711-740.		0
90	Clinical Resurfacing of Feldspar and Leucite Glass Ceramics Using Dental Handpieces and Burs. Springer Series in Biomaterials Science and Engineering, 2017, , 163-194.	0.7	0

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91	Lubricated Wear of Machinable Lithium Disilicate Glass Ceramic. Key Engineering Materials, 0, 739, 18-22.	0.4	0
92	Aesthetic Ceramics for Dental Restorations. Journal of the Society of Biomechanisms, 2017, 41, 137-142.	0.0	0
93	Fracture Damage: A Bottleneck in Glass Ceramic Machining. , 2017, , .		0