

Michael V Swain

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

434
papers

16,819
citations

66
h-index

106
g-index

441
ext. papers

18,604
ext. citations

4.5
avg, IF

6.97
L-index

#	Paper	IF	Citations
434	Bone remodeling following mandibular reconstruction using fibula free flap.. <i>Journal of Biomechanics</i> , 2022 , 133, 110968	2.9	1
433	Mechanical failure of posterior teeth due to caries and occlusal wear- A modelling study. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2022 , 125, 104942	4.1	4
432	The influence of yttria content on the microstructure, phase stability and mechanical properties of dental zirconia. <i>Ceramics International</i> , 2021 ,	5.1	1
431	A time-dependent mechanobiology-based topology optimization to enhance bone growth in tissue scaffolds. <i>Journal of Biomechanics</i> , 2021 , 117, 110233	2.9	3
430	Effect of the Location of Dental Mini-Implants on Strain Distribution under Mandibular Kennedy Class I Implant-Retained Removable Partial Dentures. <i>International Journal of Dentistry</i> , 2021 , 2021, 6688521	1.9	3
429	On fatigue failure prediction of prosthetic devices through XFEM analysis. <i>International Journal of Fatigue</i> , 2021 , 147, 106160	5	4
428	Indentation of the cornea: A Bi-layer contact problem. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021 , 118, 104463	4.1	2
427	Development of transformation bands in ceria-stabilized-zirconia based composites during bending at room temperature. <i>Journal of the European Ceramic Society</i> , 2021 , 41, 691-705	6	6
426	A machine learning-based multiscale model to predict bone formation in scaffolds. <i>Nature Computational Science</i> , 2021 , 1, 532-541		3
425	Microstructural heterogeneity of the collagenous network in the loaded and unloaded periodontal ligament and its biomechanical implications. <i>Journal of Structural Biology</i> , 2021 , 213, 107772	3.4	0
424	Efficacy of dental materials in terms of apparent mineral density restoration: composite resin, glass ionomer cement and infiltrant. <i>Composites Part C: Open Access</i> , 2021 , 100192	1.6	1
423	Monolithic crowns fracture analysis: The effect of material properties, cusp angle and crown thickness. <i>Dental Materials</i> , 2020 , 36, 1038-1051	5.7	10
422	Fatigue degradation of bilayered ceramic structures under different biaxial loading schemes. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020 , 104, 103651	4.1	1
421	The influence of flame and furnace soldering method on the stress corrosion, fatigue resistance and fracture toughness of soldered bar attachment systems for implant overdentures. <i>Journal of the Royal Society of New Zealand</i> , 2020 , 50, 115-131	2	0
420	The bulk compressive creep and recovery behavior of human dentine and resin-based dental materials. <i>Dental Materials</i> , 2020 , 36, 366-376	5.7	1
419	Mechanical and finite element models of corneal keratoprostheses. <i>Advanced Engineering Research</i> , 2020 , 20, 350-359	0.3	
418	Fracture modeling of brittle biomaterials by the phase-field method. <i>Engineering Fracture Mechanics</i> , 2020 , 224, 106752	4.2	12

4 ¹⁷	Phase transformation induces plasticity with negligible damage in ceria-stabilized zirconia-based ceramics. <i>Acta Materialia</i> , 2020 , 183, 261-273	8.4	16
4 ¹⁶	The geometrical structure of interfaces in dental enamel: A FIB-STEM investigation. <i>Acta Biomaterialia</i> , 2020 , 104, 17-27	10.8	6
4 ¹⁵	Nanoscale pathways for human tooth decay - Central planar defect, organic-rich precipitate and high-angle grain boundary. <i>Biomaterials</i> , 2020 , 235, 119748	15.6	15
4 ¹⁴	A modular design strategy to integrate mechanotransduction concepts in scaffold-based bone tissue engineering. <i>Acta Biomaterialia</i> , 2020 , 118, 100-112	10.8	7
4 ¹³	Effects of buccal thickness augmentation on bone remodeling after maxillary anterior implantation. <i>Biomechanics and Modeling in Mechanobiology</i> , 2020 , 19, 133-145	3.8	3
4 ¹²	Clinicians' Ability to Detect a Palpable Difference in Spinal Stiffness Compared With a Mechanical Device. <i>Journal of Manipulative and Physiological Therapeutics</i> , 2019 , 42, 89-95	1.3	6
4 ¹¹	Size or hierarchical dependence of the elastic modulus of three ceramic-composite CAD/CAM materials. <i>Dental Materials</i> , 2019 , 35, 953-962	5.7	8
4 ¹⁰	In vivo effects of different orthodontic loading on root resorption and correlation with mechanobiological stimulus in periodontal ligament. <i>Journal of the Royal Society Interface</i> , 2019 , 16, 20190108 ¹²	4.1	108
4 ⁰⁹	Why a zero CTE mismatch may be better for veneered Y-TZP structures. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2019 , 96, 261-268	4.1	7
4 ⁰⁸	Modelling of stress distribution and fracture in dental occlusal fissures. <i>Scientific Reports</i> , 2019 , 9, 4682	4.9	16
4 ⁰⁷	Nanoindentation-based study of the mechanical behavior of bulk supercrystalline ceramic-organic nanocomposites. <i>Journal of the European Ceramic Society</i> , 2019 , 39, 3247-3256	6	32
4 ⁰⁶	Microcomputed Tomography Calibration Using Polymers and Minerals for Enamel Mineral Content Quantitation. <i>Medical Principles and Practice</i> , 2019 , 28, 247-255	2.1	6
4 ⁰⁵	Investigation on masticatory muscular functionality following oral reconstruction - An inverse identification approach. <i>Journal of Biomechanics</i> , 2019 , 90, 1-8	2.9	10
4 ⁰⁴	Nondestructive characterization of bone tissue scaffolds for clinical scenarios. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2019 , 89, 150-161	4.1	16
4 ⁰³	The effects of core material and cooling rate on fabrication defects in the veneer of bi-layered all-ceramic systems. <i>Ceramics International</i> , 2019 , 45, 15876-15882	5.1	1
4 ⁰²	Influence of veneer pore defects on fracture behavior of bilayered lithium disilicate glass-ceramic crowns. <i>Dental Materials</i> , 2019 , 35, e83-e95	5.7	2
4 ⁰¹	Thermal induced deflection of a porcelain-zirconia bilayer: Influence of cooling rate. <i>Dental Materials</i> , 2019 , 35, 574-584	5.7	10
4 ⁰⁰	Effects of acid-alkali treatment on bioactivity and osteoinduction of porous titanium: An in vitro study. <i>Materials Science and Engineering C</i> , 2019 , 94, 200-210	8.3	19

399	Missing Surface Estimation Based on Modified Tikhonov Regularization: Application for Destroyed Dental Tissue. <i>IEEE Transactions on Image Processing</i> , 2018 ,	8.7	5
398	Instrumented indentation for determination of mechanical properties of human cornea after ultraviolet-A crosslinking. <i>Journal of Biomedical Materials Research - Part A</i> , 2018 , 106, 1413-1420	5.4	9
397	In-vitro wear of natural tooth surface opposed with zirconia reinforced lithium silicate glass ceramic after accelerated ageing. <i>Dental Materials</i> , 2018 , 34, 551-559	5.7	17
396	Validation of finite-element simulations with synchrotron radiography - A descriptive study of micromechanics in two-piece dental implants. <i>Heliyon</i> , 2018 , 4, e00524	3.6	5
395	Fractographic Analysis of a Split Tooth Presenting Radiographically as a Horizontal Root Fracture in an Unrestored Mandibular Second Molar. <i>Journal of Endodontics</i> , 2018 , 44, 304-311	4.7	5
394	Influence of ageing on glass and resin bonding of dental glass-ceramic veneer adhesion to zirconia: A fracture mechanics analysis and interpretation. <i>Acta Biomaterialia</i> , 2018 , 74, 454-463	10.8	4
393	Biomechanical analysis of bone remodeling following mandibular reconstruction using fibula free flap. <i>Medical Engineering and Physics</i> , 2018 , 56, 1-8	2.4	16
392	Relationship between growth, maturation and musculoskeletal conditions in adolescents: a systematic review. <i>British Journal of Sports Medicine</i> , 2018 , 52, 1246-1252	10.3	26
391	Frictional coefficient during flossing of teeth. <i>Dental Materials</i> , 2018 , 34, 1727-1734	5.7	3
390	FTIR characterization of the setting reaction of bio-dentine. <i>Dental Materials</i> , 2018 , 34, 1645-1651	5.7	9
389	Synthesis of stabilized hydroxyapatite nanosuspensions for enamel caries remineralization. <i>Australian Dental Journal</i> , 2018 , 63, 356	2.3	5
388	Characterization of inter-crystallite peptides in human enamel rods reveals contribution by the Y allele of amelogenin. <i>Journal of Structural Biology</i> , 2018 , 204, 26-37	3.4	3
387	Evidence that metallic proxies are unsuitable for assessing the mechanics of microwear formation and a new theory of the meaning of microwear. <i>Royal Society Open Science</i> , 2018 , 5, 171699	3.3	18
386	Micro-CT based modelling for characterising injection-moulded porous titanium implants. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2017 , 33, e02779	2.6	6
385	Bone morphological effects on post-implantation remodeling of maxillary anterior buccal bone: A clinical and biomechanical study. <i>Journal of Prosthodontic Research</i> , 2017 , 61, 393-402	4.3	17
384	Three-dimensional characterization and distribution of fabrication defects in bilayered lithium disilicate glass-ceramic molar crowns. <i>Dental Materials</i> , 2017 , 33, e178-e185	5.7	6
383	Computational and clinical investigation on the role of mechanical vibration on orthodontic tooth movement. <i>Journal of Biomechanics</i> , 2017 , 60, 57-64	2.9	17
382	A simple basis for determination of the modulus and hydraulic conductivity of human ocular surface using nano-indentation. <i>Acta Biomaterialia</i> , 2017 , 50, 312-321	10.8	7

381	Comparison of three and four point bending evaluation of two adhesive bonding systems for glass-ceramic zirconia bi-layered ceramics. <i>Dental Materials</i> , 2017 , 33, 1004-1011	5.7	11
380	Simulation of multi-stage nonlinear bone remodeling induced by fixed partial dentures of different configurations: a comparative clinical and numerical study. <i>Biomechanics and Modeling in Mechanobiology</i> , 2017 , 16, 411-423	3.8	7
379	Removal of dentin non-collagenous structures results in the unraveling of microfibril bundles in collagen type I. <i>Connective Tissue Research</i> , 2017 , 58, 414-423	3.3	11
378	Micro-CT analysis of naturally arrested brown spot enamel lesions. <i>Journal of Dentistry</i> , 2017 , 56, 105-111	4.8	14
377	Efficacy of Fluoride Varnishes with Added Calcium Phosphate in the Protection of the Structural and Mechanical Properties of Enamel. <i>BioMed Research International</i> , 2017 , 2017, 7834905	3	6
376	Interpenetrating network ceramic-resin composite dental restorative materials. <i>Dental Materials</i> , 2016 , 32, 34-42	5.7	79
375	Shear Strength and Interfacial Toughness Characterization of Sapphire-Epoxy Interfaces for Nacre-Inspired Composites. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 27322-27331	9.5	6
374	Atomic-scale compositional mapping reveals Mg-rich amorphous calcium phosphate in human dental enamel. <i>Science Advances</i> , 2016 , 2, e1601145	14.3	76
373	Does high level youth sports participation increase the risk of femoroacetabular impingement? A review of the current literature. <i>Pediatric Rheumatology</i> , 2016 , 14, 16	3.5	30
372	Topological design of all-ceramic dental bridges for enhancing fracture resistance. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2016 , 32, e02749	2.6	23
371	Effects of design parameters on fracture resistance of glass simulated dental crowns. <i>Dental Materials</i> , 2016 , 32, 373-84	5.7	10
370	Quantitative characterization and micro-CT mineral mapping of natural fissural enamel lesions. <i>Journal of Dentistry</i> , 2016 , 46, 23-9	4.8	12
369	Fracture behavior of inlay and onlay fixed partial dentures - An in-vitro experimental and XFEM modeling study. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016 , 59, 279-290	4.1	13
368	A comparative study of new and current methods for dental micro-CT image denoising. <i>Dentomaxillofacial Radiology</i> , 2016 , 45, 20150302	3.9	18
367	Biomechanical investigation into the role of the periodontal ligament in optimising orthodontic force: a finite element case study. <i>Archives of Oral Biology</i> , 2016 , 66, 98-107	2.8	41
366	Determination of oral mucosal Poisson's ratio and coefficient of friction from in-vivo contact pressure measurements. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2016 , 19, 357-65	2.1	11
365	Mechanical benefits of conservative restoration for dental fissure caries. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016 , 53, 11-20	4.1	23
364	The Relationship of Mandibular Morphology with Residual Ridge Resorption Associated with Implant-Retained Overdentures. <i>International Journal of Prosthodontics</i> , 2016 , 29, 573-580	1.9	2

363	Immunolocalization and distribution of proteoglycans in carious dentine. <i>Australian Dental Journal</i> , 2016 , 61, 288-97	2.3	11
362	Biomechanical investigation of impact induced rib fractures of a porcine infant surrogate model. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016 , 62, 588-598	4.1	1
361	Torsion of a circular punch attached to an elastic half-space with a coating with periodically depth-varying elastic properties. <i>Archive of Applied Mechanics</i> , 2016 , 86, 1247-1254	2.2	15
360	Dental abrasion as a cutting process. <i>Interface Focus</i> , 2016 , 6, 20160008	3.9	9
359	Effect of core ceramic grinding on fracture behaviour of bilayered zirconia veneering ceramic systems under two loading schemes. <i>Dental Materials</i> , 2016 , 32, 1453-1463	5.7	7
358	Porcelain bonding to novel Co-Cr alloys: Influence of interfacial reactions on phase stability, plasticity and adhesion. <i>Dental Materials</i> , 2016 , 32, 1504-1512	5.7	12
357	Yielding behaviors of polymeric scaffolds with implications to tissue engineering. <i>Materials Letters</i> , 2016 , 184, 108-111	3.3	12
356	A comparative study on complete and implant retained denture treatments: a biomechanics perspective. <i>Journal of Biomechanics</i> , 2015 , 48, 512-9	2.9	42
355	BoneQ responses to different designs of implant-supported fixed partial dentures. <i>Biomechanics and Modeling in Mechanobiology</i> , 2015 , 14, 403-11	3.8	26
354	A Critical Review of Dental Implant Materials with an Emphasis on Titanium Zirconia. <i>Materials</i> , 2015 , 8, 932-958	3.5	253
353	The Schwickerath adhesion test: A fracture mechanics analysis. <i>Dental Materials</i> , 2015 , 31, 986-91	5.7	11
352	Damage tolerance of indirect restorative materials (including PICN) after simulated bur adjustments. <i>Dental Materials</i> , 2015 , 31, 684-94	5.7	60
351	Raman spectroscopic characterisation of resin-infiltrated hypomineralised enamel. <i>Analytical and Bioanalytical Chemistry</i> , 2015 , 407, 5661-71	4.4	13
350	Effect of tooth bleaching agents on protein content and mechanical properties of dental enamel. <i>Acta Biomaterialia</i> , 2015 , 20, 120-128	10.8	50
349	Biomechanics of oral mucosa. <i>Journal of the Royal Society Interface</i> , 2015 , 12, 20150325	4.1	54
348	Comparison of the microstructure and phase stability of as-cast, CAD/CAM and powder metallurgy manufactured Co-Cr dental alloys. <i>Dental Materials</i> , 2015 , 31, e306-15	5.7	30
347	Influence of ultraviolet photofunctionalization on the surface characteristics of zirconia-based dental implant materials. <i>Dental Materials</i> , 2015 , 31, e14-24	5.7	40
346	The combined effect of alumina and silica co-doping on the ageing resistance of 3Y-TZP bioceramics. <i>Acta Biomaterialia</i> , 2015 , 11, 477-87	10.8	69

345	The role of proteoglycans in the nanoindentation creep behavior of human dentin. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2015 , 55, 264-270	4.1	23
344	Microstructure, phase content, and thermal stability of a cast CoCr dental alloy after porcelain sintering cycles using electron backscatter diffraction. <i>Journal of Materials Research</i> , 2015 , 30, 2188-2196	2.5	4
343	Investigation of mucosa-induced residual ridge resorption under implant-retained overdentures and complete dentures in the mandible. <i>International Journal of Oral and Maxillofacial Implants</i> , 2015 , 30, 657-66	2.8	24
342	Design for minimizing fracture risk of all-ceramic cantilever dental bridge. <i>Bio-Medical Materials and Engineering</i> , 2015 , 26 Suppl 1, S19-25	1	0
341	Shape Optimization for Additive Manufacturing of Removable Partial Dentures--A New Paradigm for Prosthetic CAD/CAM. <i>PLoS ONE</i> , 2015 , 10, e0132552	3.7	32
340	Influence of structural hierarchy on the fracture behaviour of tooth enamel. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2015 , 373,	3	47
339	Computational modeling of dynamic behaviors of human teeth. <i>Journal of Biomechanics</i> , 2015 , 48, 4214-20	2.0	15
338	A fast and accurate dental micro-CT image denoising based on total variation modeling 2015 ,		3
337	Influence of veneering porcelain thickness and cooling rate on residual stresses in zirconia molar crowns. <i>Dental Materials</i> , 2014 , 30, 271-80	5.7	43
336	Projectile penetration into ballistic gelatin. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014 , 29, 385-92	4.1	33
335	Impact of oral fluids on dental ceramics: what is the clinical relevance?. <i>Dental Materials</i> , 2014 , 30, 33-42	5.7	53
334	Differences in morphogenesis of 3D cultured primary human osteoblasts under static and microfluidic growth conditions. <i>Biomaterials</i> , 2014 , 35, 3208-19	15.6	17
333	Elemental and chemical characterization of dolphin enamel and dentine using X-ray and Raman microanalyzes (Cetacea: Delphinoidea and Inioidea). <i>Journal of Structural Biology</i> , 2014 , 185, 58-68	3.4	13
332	The effect of fiber aspect ratio and volume loading on the flexural properties of flowable dental composite. <i>Dental Materials</i> , 2014 , 30, 1234-44	5.7	41
331	Wear behavior of human enamel against lithium disilicate glass ceramic and type III gold. <i>Journal of Prosthetic Dentistry</i> , 2014 , 112, 1399-405	4	28
330	Adhesion determination of dental porcelain to zirconia using the Schwickerath test: strength vs. fracture energy approach. <i>Acta Biomaterialia</i> , 2014 , 10, 4861-4869	10.8	23
329	Micromechanical characterization of prismless enamel in the tuatara, <i>Sphenodon punctatus</i> . <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014 , 39, 210-7	4.1	9
328	Fluoride release, recharge and flexural properties of polymethylmethacrylate containing fluoridated glass fillers. <i>Australian Dental Journal</i> , 2014 , 59, 208-14	2.3	7

327	Survival-rate analysis of surface treated dental zirconia (Y-TZP) ceramics. <i>Journal of Materials Science: Materials in Medicine</i> , 2014 , 25, 2255-64	4.5	24
326	Coordinate geometry method for capturing and evaluating crown preparation geometry. <i>Journal of Prosthetic Dentistry</i> , 2014 , 112, 481-7	4	11
325	A comparison between rib fracture patterns in peri- and post-mortem compressive injury in a piglet model. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014 , 33, 67-75	4.1	11
324	Influence of veneer and cyclic loading on failure behavior of lithium disilicate glass-ceramic molar crowns. <i>Dental Materials</i> , 2014 , 30, 164-71	5.7	51
323	Effect of core ceramic grinding on fracture behaviour of bilayered lithium disilicate glass-ceramic under two loading schemes. <i>Journal of Dentistry</i> , 2014 , 42, 1436-45	4.8	10
322	A periodontal ligament driven remodeling algorithm for orthodontic tooth movement. <i>Journal of Biomechanics</i> , 2014 , 47, 1689-95	2.9	65
321	Hertzian contact response and damage tolerance of dental ceramics. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014 , 34, 124-33	4.1	29
320	Comparing Contact Pressure Induced by a Conventional Complete Denture and an Implant-Retained Overdenture. <i>Applied Mechanics and Materials</i> , 2014 , 553, 384-389	0.3	2
319	Validate Mandible Finite Element Model under Removable Partial Denture (RPD) with In Vivo Pressure Measurement. <i>Applied Mechanics and Materials</i> , 2014 , 553, 322-326	0.3	4
318	Nanoindentation Derived Mechanical Properties of the Corneoscleral Rim of the Human Eye. <i>Key Engineering Materials</i> , 2014 , 606, 117-120	0.4	9
317	The contribution of proteoglycans to the mechanical behavior of mineralized tissues. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014 , 38, 91-104	4.1	35
316	Ceramic implants (Y-TZP): are they a viable alternative to titanium implants for the support of overdentures? A randomized clinical trial. <i>Clinical Oral Implants Research</i> , 2014 , 25, 1366-77	4.8	48
315	Surface characteristics and microbial adherence ability of modified polymethylmethacrylate by fluoridated glass fillers. <i>Australian Dental Journal</i> , 2014 , 59, 482-9	2.3	12
314	Micromechanical Properties of Polyacrylamide Hydrogels Measured by Spherical Nanoindentation. <i>Key Engineering Materials</i> , 2014 , 606, 121-124	0.4	3
313	Strain-rate stiffening of cortical bone: observations and implications from nanoindentation experiments. <i>Nanoscale</i> , 2014 , 6, 14863-71	7.7	12
312	Numerical Simulation of Biomechanical Behaviours in Novel Dental Restorations. <i>Applied Mechanics and Materials</i> , 2014 , 553, 327-331	0.3	1
311	Influence of a tungsten metal conditioner on the adhesion and residual stress of porcelain bonded to cobalt-chromium alloy. <i>Journal of Prosthetic Dentistry</i> , 2014 , 112, 584-90	4	4
310	Patients' perspectives on zirconia and titanium implants with a novel distribution supporting maxillary and mandibular overdentures: a qualitative study. <i>Clinical Oral Implants Research</i> , 2014 , 25, 587-97	4.8	8

309	Fractographic analysis of anterior bilayered ceramic crowns that failed by veneer chipping. <i>Quintessence International</i> , 2014 , 45, 369-76	2	3
308	Fractured zirconia implants and related implant designs: scanning electron microscopy analysis. <i>Clinical Oral Implants Research</i> , 2013 , 24, 592-7	4.8	26
307	Thermally induced fracture for core-veneered dental ceramic structures. <i>Acta Biomaterialia</i> , 2013 , 9, 8394-402	10.8	53
306	X-ray microdiffraction, TEM characterization and texture analysis of human dentin and enamel. <i>Journal of Microscopy</i> , 2013 , 251, 144-53	1.9	31
305	Residual stresses in Y-TZP crowns due to changes in the thermal contraction coefficient of veneers. <i>Dental Materials</i> , 2013 , 29, 594-601	5.7	37
304	Mechanical properties of polymer-infiltrated-ceramic-network materials. <i>Dental Materials</i> , 2013 , 29, 419-26	28.1	
303	Fracture resistance of titanium and zirconia abutments: an in vitro study. <i>Journal of Prosthetic Dentistry</i> , 2013 , 109, 304-12	4	72
302	In-vitro strength degradation of dental ceramics and novel PICN material by sharp indentation. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2013 , 26, 34-42	4.1	87
301	Clothing increases the risk of indirect ballistic fractures. <i>Journal of Orthopaedic Surgery and Research</i> , 2013 , 8, 42	2.8	19
300	Multiscale design of surface morphological gradient for osseointegration. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2013 , 20, 387-97	4.1	56
299	Effect of autoclave induced low-temperature degradation on the adhesion energy between yttria-stabilized zirconia veneered with porcelain. <i>Dental Materials</i> , 2013 , 29, e263-70	5.7	16
298	Structural analysis of reactionary dentin formed in response to polymicrobial invasion. <i>Journal of Structural Biology</i> , 2013 , 181, 207-22	3.4	21
297	The all-ceramic, inlay supported fixed partial denture. Part 5. Extended finite element analysis validation. <i>Australian Dental Journal</i> , 2013 , 58, 434-41	2.3	12
296	Composite polymerization stress as a function of specimen configuration assessed by crack analysis and finite element analysis. <i>Dental Materials</i> , 2013 , 29, 1026-33	5.7	15
295	Compressive rib fracture: peri-mortem and post-mortem trauma patterns in a pig model. <i>Legal Medicine</i> , 2013 , 15, 193-201	1.9	11
294	Evaluating the efficiency of caries removal using an Er:YAG laser driven by fluorescence feedback control. <i>Archives of Oral Biology</i> , 2013 , 58, 603-10	2.8	18
293	Three dimensional quantification of mandibular bone remodeling using standard tessellation language registration based superimposition. <i>Clinical Oral Implants Research</i> , 2013 , 24, 1273-9	4.8	16
292	Mechanical properties of dental tissues in dolphins (Cetacea: Delphinoidea and Inioidea). <i>Archives of Oral Biology</i> , 2013 , 58, 773-9	2.8	19

291	Finite element analysis of an implant-assisted removable partial denture. <i>Journal of Prosthodontics</i> , 2013 , 22, 550-555	3.9	11
290	The all-ceramic, inlay supported fixed partial denture. Part 4. Fracture surface analyses of an experimental model, all-ceramic, inlay supported fixed partial denture. <i>Australian Dental Journal</i> , 2013 , 58, 141-7	2.3	4
289	Finite element analysis of a novel implant distribution to support maxillary overdentures. <i>International Journal of Oral and Maxillofacial Implants</i> , 2013 , 28, e1-10	2.8	12
288	Porous Titanium Implant and Micro-CT Based Characterization of Sub-Surface Morphology 2013 , 1579-1586		
287	FEA evaluation of the resistance form of a premolar crown. <i>Journal of Prosthodontics</i> , 2013 , 22, 304-12	3.9	8
286	Tooth eruption results from bone remodelling driven by bite forces sensed by soft tissue dental follicles: a finite element analysis. <i>PLoS ONE</i> , 2013 , 8, e58803	3.7	37
285	Titanium versus zirconia implants supporting maxillary overdentures: three-dimensional finite element analysis. <i>International Journal of Oral and Maxillofacial Implants</i> , 2013 , 28, e198-208	2.8	18
284	Strain Distribution in a Kennedy Class I Implant Assisted Removable Partial Denture under Various Loading Conditions. <i>International Journal of Dentistry</i> , 2013 , 2013, 351279	1.9	12
283	Effect of surface treatments on the adhesion of self-adhesive resin cements to titanium. <i>Journal of Adhesive Dentistry</i> , 2013 , 15, 65-71	3	4
282	Sensitivity analysis of bi-layered ceramic dental restorations. <i>Dental Materials</i> , 2012 , 28, e6-14	5.7	26
281	A comparative study between crack analysis and a mechanical test for assessing the polymerization stress of restorative composites. <i>Dental Materials</i> , 2012 , 28, 632-41	5.7	28
280	Influence of veneer application on fracture behavior of lithium-disilicate-based ceramic crowns. <i>Dental Materials</i> , 2012 , 28, 653-60	5.7	37
279	A comparison of fit of CNC-milled titanium and zirconia frameworks to implants. <i>Clinical Implant Dentistry and Related Research</i> , 2012 , 14 Suppl 1, e20-9	3.9	33
278	The all-ceramic, inlay supported fixed partial denture. Part 3. Experimental approach for validating the finite element analysis. <i>Australian Dental Journal</i> , 2012 , 57, 23-30	2.3	7
277	A method to determine site-specific, anisotropic fracture toughness in biological materials. <i>Scripta Materialia</i> , 2012 , 66, 515-518	5.6	17
276	Strain energy density approach for failure evaluation of occlusal loaded ceramic tooth crowns. <i>Theoretical and Applied Fracture Mechanics</i> , 2012 , 58, 44-50	3.7	9
275	The effect of margin thickness, degree of convergence and bonding interlayer on the marginal failure of glass-simulated all-ceramic crowns. <i>Acta Biomaterialia</i> , 2012 , 8, 4426-37	10.8	14
274	Development of a model mouth containing an artificial tongue to measure the release of volatile compounds. <i>Innovative Food Science and Emerging Technologies</i> , 2012 , 15, 96-103	6.8	17

273	The dentin organic matrix - limitations of restorative dentistry hidden on the nanometer scale. <i>Acta Biomaterialia</i> , 2012 , 8, 2419-33	10.8	122
272	Finite element analysis suggests functional bone strain accounts for continuous post-eruptive emergence of teeth. <i>Archives of Oral Biology</i> , 2012 , 57, 1070-8	2.8	14
271	A comparative mechanical and bone remodelling study of all-ceramic posterior inlay and onlay fixed partial dentures. <i>Journal of Dentistry</i> , 2012 , 40, 48-56	4.8	38
270	Regulation of reactionary dentin formation by odontoblasts in response to polymicrobial invasion of dentin matrix. <i>Bone</i> , 2012 , 50, 265-75	4.7	52
269	Mechanical heterogeneity of dentin at different length scales as determined by AFM phase contrast. <i>Micron</i> , 2012 , 43, 1364-71	2.3	13
268	A comparison of space closure rates between preactivated nickel-titanium and titanium-molybdenum alloy T-loops: a randomized controlled clinical trial. <i>European Journal of Orthodontics</i> , 2012 , 34, 33-8	3.3	16
267	Mandibular flexure and its significance on implant fixed prostheses: a review. <i>Journal of Prosthodontics</i> , 2012 , 21, 219-24	3.9	17
266	Hierarchical flexural strength of enamel: transition from brittle to damage-tolerant behaviour. <i>Journal of the Royal Society Interface</i> , 2012 , 9, 1265-74	4.1	44
265	Comparison of mechanical behaviors of enamel rod and interrod regions in enamel. <i>Journal of Materials Research</i> , 2012 , 27, 448-456	2.5	19
264	Laser ultrasonic evaluation of human dental enamel during remineralization treatment. <i>Biomedical Optics Express</i> , 2011 , 2, 345-55	3.5	7
263	Titanium dioxide nanoparticles addition to a conventional glass-ionomer restorative: influence on physical and antibacterial properties. <i>Journal of Dentistry</i> , 2011 , 39, 589-98	4.8	134
262	The all-ceramic, inlay supported fixed partial denture. Part 2. Fixed partial denture design: a finite element analysis. <i>Australian Dental Journal</i> , 2011 , 56, 302-11	2.3	17
261	Cracks formed by Vickers indentation adjacent to the interface in bonded dental ceramics with various marginal angles. <i>Dental Materials Journal</i> , 2011 , 30, 308-14	2.5	5
260	Cracking of porcelain surfaces arising from abrasive grinding with a dental air turbine. <i>Journal of Prosthodontics</i> , 2011 , 20, 613-20	3.9	32
259	TONGUE-BALATE INTERACTIONS DURING SWALLOWING. <i>Journal of Texture Studies</i> , 2011 , 42, 95-102	3.6	25
258	A novel in vitro approach to assess the fit of implant frameworks. <i>Clinical Oral Implants Research</i> , 2011 , 22, 658-63	4.8	16
257	Self-reparability of glass-ionomer cements: an in vitro investigation. <i>European Journal of Oral Sciences</i> , 2011 , 119, 187-91	2.3	2
256	Descriptive study of the longevity of dental implant surgery drills. <i>Clinical Implant Dentistry and Related Research</i> , 2011 , 13, 244-54	3.9	23

255	Influence of occlusal geometry on ceramic crown fracture; role of cusp angle and fissure radius. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2011 , 4, 1057-66	4.1	26
254	The effect of friction on indenter force and pile-up in numerical simulations of bone nanoindentation. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2011 , 4, 1554-8	4.1	24
253	A novel polymer infiltrated ceramic dental material. <i>Dental Materials</i> , 2011 , 27, 527-34	5.7	120
252	Analysis of interfacial fracture in dental restorations. <i>Dental Materials</i> , 2011 , 27, 1094-101	5.7	14
251	Thermal gradients and residual stresses in veneered Y-TZP frameworks. <i>Dental Materials</i> , 2011 , 27, 1102-10	5.7	108
250	Effect of surface treatments on adhesion of low-fusing porcelain to titanium as determined by strain energy release rate. <i>Dental Materials</i> , 2011 , 27, 1213-20	5.7	12
249	Pressed ceramics onto zirconia. Part 2: indentation fracture and influence of cooling rate on residual stresses. <i>Dental Materials</i> , 2011 , 27, 1111-8	5.7	58
248	Occlusal geometrical considerations in all-ceramic pre-molar crown failure testing. <i>Dental Materials</i> , 2011 , 27, 1127-34	5.7	25
247	A novel polymer infiltrated ceramic for dental simulation. <i>Journal of Materials Science: Materials in Medicine</i> , 2011 , 22, 1639-43	4.5	30
246	Finite element based bone remodeling and resonance frequency analysis for osseointegration assessment of dental implants. <i>Finite Elements in Analysis and Design</i> , 2011 , 47, 898-905	2.2	21
245	Morphoscopic analysis of experimentally produced bony wounds from low-velocity ballistic impact. <i>Forensic Science, Medicine, and Pathology</i> , 2011 , 7, 322-32	1.5	16
244	The effect of annealing temperatures on surface properties, hydroxyapatite growth and cell behaviors of TiO ₂ nanotubes. <i>Surface and Interface Analysis</i> , 2011 , 43, 998-1005	1.5	73
243	Contraction stresses in dental composites adjacent to and at the bonded interface as measured by crack analysis. <i>Acta Biomaterialia</i> , 2011 , 7, 417-23	10.8	26
242	One-step approach for hydroxyapatite-incorporated TiO ₂ coating on titanium via a combined technique of micro-arc oxidation and electrophoretic deposition. <i>Applied Surface Science</i> , 2011 , 257, 7010-7018	6.7	39
241	Computational Fracture Modelling in Bioceramic Structures. <i>Advanced Materials Research</i> , 2011 , 268-270, 853-856	0.5	5
240	Application of polychromatic μ CT for mineral density determination. <i>Journal of Dental Research</i> , 2011 , 90, 18-30	8.1	78
239	Moments generated by simple V-bends in nickel titanium wires. <i>European Journal of Orthodontics</i> , 2011 , 33, 457-60	3.3	2
238	Scanning electron microscopy observations of failures of implant overdenture bars: a case series report. <i>Clinical Implant Dentistry and Related Research</i> , 2010 , 12, 26-38	3.9	13

237	Linking the clinical presentation of molar-incisor hypomineralisation to its mineral density. <i>International Journal of Paediatric Dentistry</i> , 2010 , 20, 353-60	3.1	34
236	A micro-mechanical evaluation of the effects of die hardener on die stone. <i>Dental Materials Journal</i> , 2010 , 29, 433-7	2.5	7
235	Residual Stresses in Fabrication of Core-Veneered Ceramic Prostheses. <i>Advanced Materials Research</i> , 2010 , 97-101, 2241-2244	0.5	17
234	Nano-indentation characterisation of natural carious white spot lesions. <i>Caries Research</i> , 2010 , 44, 101-7	4.2	17
233	Biomechanical Response in Mandibular Bone due to Mastication Loading on 3-Unit Fixed Partial Dentures. <i>Journal of Dental Biomechanics</i> , 2010 , 2010, 902537		12
232	Mineral density of hypomineralised enamel. <i>Journal of Dentistry</i> , 2010 , 38, 50-8	4.8	80
231	Protein content of molar-incisor hypomineralisation enamel. <i>Journal of Dentistry</i> , 2010 , 38, 591-6	4.8	68
230	Influence of chromium interlayer on the adhesion of porcelain to machined titanium as determined by the strain energy release rate. <i>Journal of Dentistry</i> , 2010 , 38, 648-54	4.8	16
229	The influence of opaque application methods on the bond strength and final shade of PFM restorations. <i>Journal of Dentistry</i> , 2010 , 38 Suppl 2, e143-9	4.8	15
228	A suitable base material for composite resin restorations: zinc oxide eugenol. <i>Journal of Dentistry</i> , 2010 , 38, 290-5	4.8	22
227	Surface morphology optimization for osseointegration of coated implants. <i>Biomaterials</i> , 2010 , 31, 7196-206	4.6	83
226	Bone remodeling induced by dental implants of functionally graded materials. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2010 , 92, 430-8	3.5	18
225	Computational biomechanics of bone responses to dental prostheses Osseointegration, remodeling and resorption. <i>IOP Conference Series: Materials Science and Engineering</i> , 2010 , 10, 012122	0.4	3
224	Micro-computerised Tomography Optimisation for the Measurement of Bone Mineral Density around Titanium Dental Implants. <i>Journal of Biomechanical Science and Engineering</i> , 2010 , 5, 2-10	0.8	1
223	Tongue pressure patterns during water swallowing. <i>Dysphagia</i> , 2010 , 25, 11-9	3.7	57
222	Nano-scale sliding contact deformation behaviour of enamel under wet and dry conditions. <i>Journal of Materials Science: Materials in Medicine</i> , 2010 , 21, 1195-203	4.5	11
221	XRD2 micro-diffraction analysis of the interface between Y-TZP and veneering porcelain: role of application methods. <i>Dental Materials</i> , 2010 , 26, 545-52	5.7	45
220	Effect of chromium interlayer on the shear bond strength between porcelain and pure titanium. <i>Dental Materials</i> , 2010 , 26, 793-8	5.7	20

219	Keratin-hydroxyapatite composites: biocompatibility, osseointegration, and physical properties in an ovine model. <i>Journal of Biomedical Materials Research - Part A</i> , 2010 , 95, 1084-95	5.4	40
218	Mandibular bone remodeling induced by dental implant. <i>Journal of Biomechanics</i> , 2010 , 43, 287-93	2.9	102
217	Prediction of mandibular bone remodelling induced by fixed partial dentures. <i>Journal of Biomechanics</i> , 2010 , 43, 1771-9	2.9	58
216	Correlation of mineral density and elastic modulus of natural enamel white spot lesions using X-ray microtomography and nanoindentation. <i>Acta Biomaterialia</i> , 2010 , 6, 4553-9	10.8	28
215	Size-dependent elastic/inelastic behavior of enamel over millimeter and nanometer length scales. <i>Biomaterials</i> , 2010 , 31, 1955-63	15.6	81
214	Monitoring natural frequency for osseointegration and bone remodeling induced by dental implants 2009 ,		2
213	Structural integrity of enamel: experimental and modeling. <i>Journal of Dental Research</i> , 2009 , 88, 529-33	8.1	33
212	A system of calibrating microtomography for use in caries research. <i>Caries Research</i> , 2009 , 43, 314-21	4.2	45
211	Noncontact, nondestructive elasticity evaluation of sound and demineralized human dental enamel using a laser ultrasonic surface wave dispersion technique. <i>Journal of Biomedical Optics</i> , 2009 , 14, 054046	2.5	7
210	Multiscale Bone Remodeling Prediction for Fully Porous-Coated (FPC) Dental Implant Supported Prosthesis. <i>Advanced Materials Research</i> , 2009 , 79-82, 2167-2170	0.5	1
209	Influence of the indenter tip geometry and environment on the indentation modulus of enamel. <i>Journal of Materials Research</i> , 2009 , 24, 616-625	2.5	19
208	Calculation of contraction stresses in dental composites by analysis of crack propagation in the matrix surrounding a cavity. <i>Dental Materials</i> , 2009 , 25, 543-50	5.7	31
207	SEM observations of porcelain Y-TZP interface. <i>Dental Materials</i> , 2009 , 25, 857-62	5.7	80
206	Nanoindentation creep behavior of human enamel. <i>Journal of Biomedical Materials Research - Part A</i> , 2009 , 91, 352-9	5.4	51
205	Mandibular single-implant overdentures: a review with surgical and prosthodontic perspectives of a novel approach. <i>Clinical Oral Implants Research</i> , 2009 , 20, 356-65	4.8	31
204	Wear behaviour of dental enamel at the nanoscale with a sharp and blunt indenter tip. <i>Wear</i> , 2009 , 266, 60-68	3.5	32
203	Effect of microstructure upon elastic behaviour of human tooth enamel. <i>Journal of Biomechanics</i> , 2009 , 42, 1075-80	2.9	49
202	Determination of viscoelastic-plastic material parameters of biomaterials by instrumented indentation. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2009 , 2, 318-25	4.1	47

201	Dental implant induced bone remodeling and associated algorithms. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2009 , 2, 410-32	4.1	107
200	Modelling of ER squeeze films at low amplitude oscillations. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2009 , 161, 101-108	2.7	5
199	Design optimization of functionally graded dental implant for bone remodeling. <i>Composites Part B: Engineering</i> , 2009 , 40, 668-675	10	86
198	Unstable cracking (chipping) of veneering porcelain on all-ceramic dental crowns and fixed partial dentures. <i>Acta Biomaterialia</i> , 2009 , 5, 1668-77	10.8	363
197	Mechanical responses to orthodontic loading: a 3-dimensional finite element multi-tooth model. <i>American Journal of Orthodontics and Dentofacial Orthopedics</i> , 2009 , 135, 174-81	2.1	106
196	Moment-to-force characteristics of preactivated nickel-titanium and titanium-molybdenum alloy symmetrical T-loops. <i>American Journal of Orthodontics and Dentofacial Orthopedics</i> , 2009 , 135, 757-63	2.1	22
195	In vitro demineralization of human enamel natural and abraded surfaces: a micromechanical and SEM investigation. <i>Journal of Dentistry</i> , 2009 , 37, 264-72	4.8	18
194	Enamel--a functionally graded natural coating. <i>Journal of Dentistry</i> , 2009 , 37, 596-603	4.8	80
193	Laser ultrasonic surface wave dispersion technique for non-destructive evaluation of human dental enamel. <i>Optics Express</i> , 2009 , 17, 15592-607	3.3	30
192	Characterization of a novel calibration method for mineral density determination of dentine by X-ray micro-tomography. <i>Analyst, The</i> , 2009 , 134, 72-9	5	32
191	State of the art of Micro-CT applications in dental research. <i>International Journal of Oral Science</i> , 2009 , 1, 177-88	27.9	209
190	Ultrastructure of dentine carious lesions. <i>Archives of Oral Biology</i> , 2008 , 53, 124-32	2.8	53
189	Influence of tooth removal on mandibular bone response to mastication. <i>Archives of Oral Biology</i> , 2008 , 53, 1129-37	2.8	24
188	Determining the complex modulus of alginate irreversible hydrocolloid dental material. <i>Dental Materials</i> , 2008 , 24, 1545-8	5.7	6
187	Relationship between laser fluorescence and enamel hypomineralisation. <i>Journal of Dentistry</i> , 2008 , 36, 915-21	4.8	24
186	Relationship between nanohardness and mineral content of artificial carious enamel lesions. <i>Caries Research</i> , 2008 , 42, 157-63	4.2	44
185	Nanoindentation-derived elastic modulus of an amorphous polymer and its sensitivity to load-hold period and unloading strain rate. <i>Journal of Materials Research</i> , 2008 , 23, 637-641	2.5	14
184	Micromechanical property recovery of human carious dentin achieved with colloidal nano-beta-tricalcium phosphate. <i>Journal of Dental Research</i> , 2008 , 87, 233-7	8.1	31

183	Mechanical properties characterization of a viscoelastic solid using low-frequency large-amplitude oscillatory indentations with a sharp tip. <i>Journal of Materials Research</i> , 2008 , 23, 1557-1563	2.5	
182	Temperature effects on the forces, moments and moment to force ratio of nickel-titanium and TMA symmetrical T-loops. <i>Angle Orthodontist</i> , 2008 , 78, 1035-42	2.6	12
181	On the critical parameters that regulate the deformation behaviour of tooth enamel. <i>Biomaterials</i> , 2008 , 29, 2697-703	15.6	51
180	Micromechanical evaluation of mineralized multilayers. <i>Journal of Biomechanics</i> , 2008 , 41, 3414-8	2.9	9
179	Gelatin sponges (Gelfoam) as a scaffold for osteoblasts. <i>Journal of Materials Science: Materials in Medicine</i> , 2008 , 19, 1173-82	4.5	97
178	Transmission electron microscope characterisation of molar-incisor-hypomineralisation. <i>Journal of Materials Science: Materials in Medicine</i> , 2008 , 19, 3187-92	4.5	40
177	The biomechanical modelling of non-ballistic skin wounding: blunt-force injury. <i>Forensic Science, Medicine, and Pathology</i> , 2008 , 4, 33-9	1.5	30
176	Experimental simulation of non-ballistic wounding by sharp and blunt punches. <i>Forensic Science, Medicine, and Pathology</i> , 2008 , 4, 212-20	1.5	13
175	A novel pressure film approach for determining the force imparted by clear removable thermoplastic appliances. <i>Annals of Biomedical Engineering</i> , 2008 , 36, 335-41	4.7	42
174	Measuring intraoral pressure: adaptation of a dental appliance allows measurement during function. <i>Dysphagia</i> , 2008 , 23, 237-43	3.7	45
173	The effect of zoledronic acid on the intrinsic material properties of healing bone: an indentation study. <i>Medical Engineering and Physics</i> , 2008 , 30, 843-7	2.4	19
172	Understanding the mechanical behaviour of human enamel from its structural and compositional characteristics. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2008 , 1, 18-29	4.1	241
171	On the design of dental resin-based composites: a micromechanical approach. <i>Acta Biomaterialia</i> , 2008 , 4, 165-72	10.8	23
170	Mechanical behaviour of porous hydroxyapatite. <i>Acta Biomaterialia</i> , 2008 , 4, 577-86	10.8	119
169	Ultrastructural observations and growth of occluding crystals in carious dentine. <i>Acta Biomaterialia</i> , 2008 , 4, 1427-39	10.8	20
168	Energy absorption characterization of human enamel using nanoindentation. <i>Journal of Biomedical Materials Research - Part A</i> , 2007 , 81, 484-92	5.4	32
167	Nanoindentation response of PEEK modified by mesh-assisted plasma immersion ion implantation. <i>Surface and Coatings Technology</i> , 2007 , 201, 7961-7969	4.4	30
166	On the structure-property relationship of sound and hypomineralized enamel. <i>Acta Biomaterialia</i> , 2007 , 3, 865-72	10.8	66

165	Modelling of fracture behaviour in biomaterials. <i>Biomaterials</i> , 2007 , 28, 1317-26	15.6	55
164	Influence of environment on the mechanical behaviour of mature human enamel. <i>Biomaterials</i> , 2007 , 28, 4512-20	15.6	78
163	Fatigue failures of bar-attachment brazed joints for implant-supported overdentures. <i>Engineering Fracture Mechanics</i> , 2007 , 74, 1148-1159	4.2	7
162	Nanoindentation derived stress-strain properties of dental materials. <i>Dental Materials</i> , 2007 , 23, 814-21	5.7	81
161	Influence of the bonder on the adhesion of porcelain to machined titanium as determined by the strain energy release rate. <i>Dental Materials</i> , 2007 , 23, 822-8	5.7	38
160	Functional significance of strain distribution in the human mandible under masticatory load: numerical predictions. <i>Archives of Oral Biology</i> , 2007 , 52, 465-73	2.8	88
159	Characterization of nanoindentation-induced residual stresses in human enamel by Raman microspectroscopy. <i>Analytical and Bioanalytical Chemistry</i> , 2007 , 389, 1185-92	4.4	12
158	Giant pop-ins and amorphization in germanium during indentation. <i>Journal of Applied Physics</i> , 2007 , 101, 043524	2.5	32
157	Contact induced deformation of enamel. <i>Applied Physics Letters</i> , 2007 , 90, 171916	3.4	66
156	On the cyclic indentation behavior of crystalline silicon with a sharp tip. <i>Journal of Materials Research</i> , 2007 , 22, 2992-2997	2.5	10
155	Ultrastructure of dentine carious lesions. <i>Australian Dental Journal</i> , 2007 , 52, S37-S37	2.3	
154	Mechanical evaluation of cervical glass-ionomer restorations: 3D finite element study. <i>Journal of Dentistry</i> , 2007 , 35, 28-35	4.8	42
153	Enamel - a "metallic-like" deformable biocomposite. <i>Journal of Dentistry</i> , 2007 , 35, 431-7	4.8	121
152	Characterisation of enamel white spot lesions using X-ray micro-tomography. <i>Journal of Dentistry</i> , 2007 , 35, 737-43	4.8	73
151	Tongue contractions during speech may have led to the development of the bony geometry of the chin following the evolution of human language: a mechanobiological hypothesis for the development of the human chin. <i>Medical Hypotheses</i> , 2007 , 69, 20-4	3.8	15
150	Restoration of non-carious cervical lesions Part II. Restorative material selection to minimise fracture. <i>Dental Materials</i> , 2007 , 23, 1562-9	5.7	54
149	Comparative assessment of hardening of demineralized dentin under lining materials using an ultramicroindentation system. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2007 , 83, 199-205	3.5	4
148	On the indentation contact area of a creeping solid during constant-strain-rate loading by a sharp indenter. <i>Journal of Materials Research</i> , 2007 , 22, 893-899	2.5	8

147	Physical and metallurgical considerations of failures of soldered bars in bar attachment systems for implant overdentures: a review of the literature. <i>Journal of Prosthetic Dentistry</i> , 2006 , 96, 283-8	4	22
146	Effect of unloading strain rate on the elastic modulus of a viscoelastic solid determined by nanoindentation. <i>Journal of Materials Research</i> , 2006 , 21, 708-714	2.5	22
145	Nanoindentation: Application to dental hard tissue investigations. <i>Journal of Materials Research</i> , 2006 , 21, 1893-1905	2.5	82
144	Influence of water, loading rate and bonder on the adhesion of porcelain to titanium. <i>Journal of Dentistry</i> , 2006 , 34, 485-90	4.8	27
143	Adhesive strength and its improvement referring to the laminated-type mouthguard. <i>Dental Traumatology</i> , 2006 , 22, 205-14	4.5	14
142	Elastic modulus and stress-strain response of human enamel by nano-indentation. <i>Biomaterials</i> , 2006 , 27, 4388-98	15.6	166
141	Mandibular stiffness in humans: numerical predictions. <i>Journal of Biomechanics</i> , 2006 , 39, 1903-13	2.9	38
140	The effect of plasma immersion ion implantation on the contact pressure and composition of titanium nitride thin films. <i>Surface and Coatings Technology</i> , 2006 , 201, 396-400	4.4	7
139	Combined influences of mechanical properties and surface roughness on the tribological properties of amorphous carbon coatings. <i>Wear</i> , 2006 , 260, 62-74	3.5	23
138	Influence of surface and heat treatments on the flexural strength of Y-TZP dental ceramic. <i>Journal of Dentistry</i> , 2005 , 33, 9-18	4.8	337
137	Characterising the micro-mechanical behaviour of the carious dentine of primary teeth using nano-indentation. <i>Journal of Biomechanics</i> , 2005 , 38, 1535-42	2.9	50
136	Mechanical properties and adhesion characteristics of hybrid sol-gel thin films. <i>Surface and Coatings Technology</i> , 2005 , 192, 354-364	4.4	75
135	Physical properties of root cementum: Part 3. Hardness and elastic modulus after application of light and heavy forces. <i>American Journal of Orthodontics and Dentofacial Orthopedics</i> , 2005 , 127, 168-76; quiz 260	2.1	37
134	Influence of surface and heat treatments on the flexural strength of a glass-infiltrated alumina/zirconia-reinforced dental ceramic. <i>Dental Materials</i> , 2005 , 21, 454-63	5.7	115
133	Towards automated 3D finite element modeling of direct fiber reinforced composite dental bridge. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2005 , 74, 520-8	3.5	50
132	Accuracy and reliability of a dynamic biomechanical skin measurement probe for the analysis of stiffness and viscoelasticity. <i>Physiological Measurement</i> , 2004 , 25, 97-105	2.9	7
131	Micromechanical Characterization of Electrophoretic-Deposited Green Films. <i>Journal of the American Ceramic Society</i> , 2004 , 82, 3521-3528	3.8	5
130	Influence of hydration and mechanical characterization of carious primary dentine using an ultra-micro indentation system (UMIS). <i>European Journal of Oral Sciences</i> , 2004 , 112, 231-6	2.3	36

129	Mechanical properties across hypomineralized/hypoplastic enamel of first permanent molar teeth. <i>European Journal of Oral Sciences</i> , 2004 , 112, 497-502	2.3	67
128	Root resorption and its association with alterations in physical properties, mineral contents and resorption craters in human premolars following application of light and heavy controlled orthodontic forces. <i>Orthodontics and Craniofacial Research</i> , 2004 , 7, 79-97	3	61
127	Strength, fracture toughness and microstructure of a selection of all-ceramic materials. Part I. Pressable and alumina glass-infiltrated ceramics. <i>Dental Materials</i> , 2004 , 20, 441-8	5.7	283
126	Quantitative analysis of the mineral content of sound and carious primary dentine using BSE imaging. <i>Archives of Oral Biology</i> , 2004 , 49, 99-107	2.8	49
125	Correlating the mechanical properties to the mineral content of carious dentine--a comparative study using an ultra-micro indentation system (UMIS) and SEM-BSE signals. <i>Archives of Oral Biology</i> , 2004 , 49, 369-78	2.8	76
124	Strength, fracture toughness and microstructure of a selection of all-ceramic materials. Part II. Zirconia-based dental ceramics. <i>Dental Materials</i> , 2004 , 20, 449-56	5.7	573
123	A micro-mechanics model of dentin mechanical properties. <i>Biomaterials</i> , 2004 , 25, 5081-90	15.6	54
122	Surface roughness: Its implications and inference with regards to ultra microindentation measurements of polymer mechanical properties. <i>Polymer Testing</i> , 2004 , 23, 501-507	4.5	23
121	Fibre reinforced composite dental bridge. Part I: Experimental investigation. <i>Biomaterials</i> , 2004 , 25, 4987-98	15.6	18
120	Fibre reinforced composite dental bridge. Part II: Numerical investigation. <i>Biomaterials</i> , 2004 , 25, 4995-5006	15.6	40
119	Mechanical properties and microstructure of hypomineralised enamel of permanent teeth. <i>Biomaterials</i> , 2004 , 25, 5091-100	15.6	115
118	Observation and numerical simulation of an elastic-plastic solid loaded by a spherical indenter. <i>Journal of Materials Research</i> , 2004 , 19, 3474-3483	2.5	10
117	Simple method and critical comparison of frame compliance and indenter area function for nanoindentation. <i>Journal of Materials Research</i> , 2004 , 19, 3490-3502	2.5	27
116	Aging under mechanical stress: first experiments and related simulations for a silver-based multilayer mirror 2004 ,		1
115	Using oscillatory squeezing flow to measure the viscoelastic properties of dental composite resin cements during curing. <i>Rheologica Acta</i> , 2003 , 42, 118-122	2.3	13
114	Physical properties of root cementum: part 2. Effect of different storage methods. <i>American Journal of Orthodontics and Dentofacial Orthopedics</i> , 2003 , 124, 561-70	2.1	30
113	Topographical analysis of the structural, biochemical and dynamic biomechanical properties of cartilage in an ovine model of osteoarthritis. <i>Osteoarthritis and Cartilage</i> , 2003 , 11, 65-77	6.2	152
112	Topical administration of the nitric oxide donor glyceryl trinitrate modifies the structural and biomechanical properties of ovine articular cartilage. <i>Osteoarthritis and Cartilage</i> , 2003 , 11, 872-8	6.2	12

111	Interfacial fracture toughness between bovine cortical bone and cements. <i>Biomaterials</i> , 2003 , 24, 1159-66	6.6	29
110	A novel pin-on-apparatus. <i>Wear</i> , 2003 , 254, 111-119	3.5	11
109	Fracture-toughening mechanisms responsible for differences in work to fracture of hydrated and dehydrated dentine. <i>Journal of Biomechanics</i> , 2003 , 36, 229-37	2.9	119
108	Multilayered carbon films for tribological applications. <i>Diamond and Related Materials</i> , 2003 , 12, 178-184	3.5	21
107	Carbon coating of Ti-6Al-4V for reduced wear in combined impact and sliding applications. <i>Tribology International</i> , 2003 , 36, 873-882	4.9	15
106	Micro-mechanical characterisation of the properties of primary tooth dentine. <i>Journal of Dentistry</i> , 2003 , 31, 261-7	4.8	89
105	Adhesion of porcelain to titanium and a titanium alloy. <i>Journal of Dentistry</i> , 2003 , 31, 509-18	4.8	58
104	Preliminary in vitro assessment of erosive potential using the ultra-micro-indentation system. <i>Caries Research</i> , 2003 , 37, 218-24	4.2	39
103	Instrumented indentation characterisation of mouth-guard materials. <i>Dental Materials</i> , 2002 , 18, 211-5	5.7	11
102	PBI deposition of thick carbon coatings from a cathodic arc plasma. <i>Surface and Coatings Technology</i> , 2002 , 156, 143-148	4.4	15
101	Elasto-plastic deformation of silica glass and glassy carbons with different indenters. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 2002 , 82, 2199-2205		10
100	Determination of elastic modulus of dentin by small spherical diamond indenters. <i>Dental Materials Journal</i> , 2001 , 20, 227-36	2.5	19
99	Evaluating acrylic and glass-ionomer cement strength using the biaxial flexure test. <i>Biomaterials</i> , 2001 , 22, 1583-90	15.6	50
98	Fracture toughness of bovine bone: influence of orientation and storage media. <i>Biomaterials</i> , 2001 , 22, 3127-32	15.6	76
97	Elasto-plastic deformation of glass-like carbons heat-treated at different temperatures. <i>Carbon</i> , 2001 , 39, 1525-1532	10.4	57
96	Physical properties of root cementum: Part I. A new method for 3-dimensional evaluation. <i>American Journal of Orthodontics and Dentofacial Orthopedics</i> , 2001 , 120, 198-208	2.1	58
95	The accuracy and reliability of a novel handheld dynamic indentation probe for analysing articular cartilage. <i>Physics in Medicine and Biology</i> , 2001 , 46, 541-50	3.8	80
94	Self-Limiting Hardness Changes in Laser Peened 6061-T6 Aluminium. <i>Surface Engineering</i> , 2001 , 17, 477-482	4.8	15

93	A simple contact and fracture mechanics approach to tumble drum breakage. <i>International Journal of Mineral Processing</i> , 2000 , 59, 175-183		3
92	Subsurface properties of laser peened 6061-T6 Al weldments. <i>Surface Engineering</i> , 2000 , 16, 116-121	2.6	16
91	Semiclosed-Cell Mullite Foams: Preparation and Macro- and Micromechanical Characterization. <i>Journal of the American Ceramic Society</i> , 1999 , 82, 961-968	3.8	37
90	Measurement of the viscoelastic properties of bituminous materials using an oscillating needle technique. <i>Rheologica Acta</i> , 1999 , 38, 443-450	2.3	6
89	Biomechanical, histological and immunohistological studies of patellar cartilage in an ovine model of osteoarthritis induced by lateral meniscectomy. <i>Osteoarthritis and Cartilage</i> , 1999 , 7, 281-94	6.2	61
88	Characterization of mechanical properties of VO ₂ thin films on sapphire and silicon by ultra-microindentation. <i>Thin Solid Films</i> , 1999 , 343-344, 134-137	2.2	25
87	Indentation response and cracking of sub-micron silica films on a polymeric substrate. <i>Engineering Fracture Mechanics</i> , 1998 , 61, 93-105	4.2	18
86	Modified four-point bending specimen for determining the interface fracture energy for thin, brittle layers. <i>International Journal of Fracture</i> , 1998 , 92, 213-220	2.3	99
85	Crack formation mechanisms during micro and macro indentation of diamond-like carbon coatings on elastic-plastic substrates. <i>Thin Solid Films</i> , 1998 , 332, 180-184	2.2	31
84	Measurement of the micro mechanical properties of sol-gel TiO ₂ films. <i>Thin Solid Films</i> , 1998 , 332, 189-194	2.2	39
83	Ultra-micro indentation technique used for examination of mechanical properties close to an HIPed surface of silicon nitride. <i>Journal of the European Ceramic Society</i> , 1998 , 18, 879-890	6	3
82	Microindentation measurements of glassy carbon implanted with high-energy titanium ions. <i>Surface and Coatings Technology</i> , 1998 , 103-104, 384-388	4.4	8
81	Influence of implantation of heavy metallic ions on the mechanical properties of two polymers, polystyrene and polyethylene terephthalate. <i>Journal of Materials Research</i> , 1997 , 12, 1917-1926	2.5	23
80	Investigation of the elastic modulus of thin films using simple biaxial bending techniques. <i>Thin Solid Films</i> , 1997 , 308-309, 304-309	2.2	25
79	A comparative assessment of three approaches for ranking the adhesion of TiN coatings onto two steels. <i>Thin Solid Films</i> , 1997 , 308-309, 329-333	2.2	13
78	Ultramicrohardness measurement of ion implanted alumina. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1997 , 121, 335-339	1.2	4
77	Mechanical and structural modification of CR-39 polymer surface by 50-keV hydrogen and argon ion implantation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1997 , 127-128, 698-701	1.2	30
76	Mechanical property characterization of a number of polymers using uniaxial compression and spherical tipped indentation tests. <i>Journal of Materials Science</i> , 1997 , 32, 4493-4500	4.3	15

75	Scratch deformation behaviour of alumina under a sharp indenter. <i>Journal of the European Ceramic Society</i> , 1997 , 17, 91-100	6	24
74	Evaluation of the strain energy release rate for the fracture of titanium-porcelain interfacial bonding. <i>Biomaterials</i> , 1997 , 18, 1553-7	15.6	17
73	Mechanical property characterization of 9 Mol% Ce-TZP ceramic material III. Fracture toughness. <i>Journal of the European Ceramic Society</i> , 1996 , 16, 545-551	6	12
72	An experimental investigation of the use of random squeezing to determine the complex modulus of viscoelastic fluids. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1996 , 65, 177-194	2.7	39
71	The indentation characterisation of the mechanical properties of various carbon materials: Glassy carbon, coke and pyrolytic graphite. <i>Carbon</i> , 1996 , 34, 1357-1366	10.4	69
70	Investigation of the stresses and stress intensity factors responsible for fracture of thin protective films during ultra-micro indentation tests with spherical indenters. <i>Thin Solid Films</i> , 1996 , 286, 111-121	2.2	96
69	Micro-Fourier rheometer: Inertial effects. <i>Rheologica Acta</i> , 1996 , 35, 410-416	2.3	13
68	Influence of Calcination Temperature on the Microstructure and Mechanical Properties of a Gel-Derived and Sintered 3 mol% Y-TZP Material. <i>Journal of the American Ceramic Society</i> , 1996 , 79, 1034-1040 ⁹	2.8	109
67	Mechanical property characterization of a 9 mol% Ce-TZP ceramic material II. Flexural response. <i>Journal of the European Ceramic Society</i> , 1995 , 15, 1185-1192	6	14
66	Influence of thickness and substrate on the hardness and deformation of TiN films. <i>Thin Solid Films</i> , 1995 , 270, 283-288	2.2	50
65	Errors associated with depth-sensing microindentation tests. <i>Journal of Materials Research</i> , 1995 , 10, 1491-1501	2.5	109
64	Determining the mechanical properties of small volumes of material from submicrometer spherical indentations. <i>Journal of Materials Research</i> , 1995 , 10, 101-112	2.5	302
63	Comparison of acoustic emission from pointed and spherical indentation of TiN films on silicon and sapphire. <i>Surface and Coatings Technology</i> , 1995 , 76-77, 528-533	4.4	10
62	Observations and simple fracture mechanics analysis of indentation fracture delamination of TiN films on silicon. <i>Journal of Adhesion Science and Technology</i> , 1994 , 8, 611-624	2	26
61	Acoustic emission and precision force-displacement observations of spherical indentations into TiN films on silicon. <i>Surface and Coatings Technology</i> , 1994 , 68-69, 598-602	4.4	22
60	Deformation of ceria-stabilised tetragonal zirconia ceramics in scratch experiments with a sharp indenter. <i>Journal of the European Ceramic Society</i> , 1994 , 13, 11-23	6	3
59	Significance of specimen size for the KR-curve behavior of quasi-brittle materials. <i>Journal of the European Ceramic Society</i> , 1994 , 13, 501-507	6	2
58	Mechanical property characterization of thin films using spherical tipped indenters. <i>Thin Solid Films</i> , 1994 , 253, 204-211	2.2	149

57	Relationship between Fracture Toughness and Phase Assemblage in Mg-PSZ. <i>Journal of the American Ceramic Society</i> , 1994 , 77, 571-579	3.8	55
56	An ultra-micro indentation investigation of aspects of the fracture process in particulate reinforced metal matrix composites. <i>Scripta Metallurgica Et Materialia</i> , 1994 , 31, 577-582		12
55	A comparison of the mechanical properties of three glass-ionomer cements. <i>Dental Materials Journal</i> , 1994 , 13, 220-7	2.5	9
54	A simple predictive model for spherical indentation. <i>Journal of Materials Research</i> , 1993 , 8, 297-306	2.5	571
53	Observation, analysis, and simulation of the hysteresis of silicon using ultra-micro-indentation with spherical indenters. <i>Journal of Materials Research</i> , 1993 , 8, 830-840	2.5	142
52	A Simple Method for Determination of the Elastic Modulus of Thin Films on a Substrate. <i>Materials Research Society Symposia Proceedings</i> , 1993 , 308, 177		15
51	Cyclic fatigue lifetime predictions of partially stabilized zirconia with crack resistance curve characteristics. <i>Journal of the European Ceramic Society</i> , 1993 , 11, 445-453	6	10
50	Cyclic fatigue behaviour of eutectoid aged Mg-PSZ ceramics with processing flaws. <i>Journal of the European Ceramic Society</i> , 1993 , 12, 221-226	6	3
49	Stress-Strain Behavior of Alumina, Magnesia-Partially-Stabilized Zirconia, and Duplex Ceramics and Its Relevance for Flaw Resistance, KR-Curve Behavior, and Thermal Shock Behavior. <i>Journal of the American Ceramic Society</i> , 1992 , 75, 3058-3064	3.8	9
48	Comparative Measurement of Indentation Fracture Toughness with Berkovich and Vickers Indenters. <i>Journal of the American Ceramic Society</i> , 1992 , 75, 3299-3304	3.8	120
47	Fracture Toughness and Thermal Shock Behavior of Silicon Nitride-Boron Nitride Ceramics. <i>Journal of the American Ceramic Society</i> , 1992 , 75, 67-70	3.8	57
46	Stress-Strain Behavior of Duplex Ceramics: I, Observations. <i>Journal of the American Ceramic Society</i> , 1992 , 75, 1729-1736	3.8	8
45	Grain-Size-Dependent Transformation Behavior in Polycrystalline Tetragonal Zirconia. <i>Journal of the American Ceramic Society</i> , 1992 , 75, 493-502	3.8	200
44	Elastic-plastic characterization of thin films with spherical indentation. <i>Thin Solid Films</i> , 1992 , 220, 289-294		37
43	Compressive creep of SiC whisker-reinforced alumina. <i>Journal of the European Ceramic Society</i> , 1992 , 10, 317-326	6	9
42	Crack tip bridging stresses in alumina and duplex ceramics. <i>Journal of the European Ceramic Society</i> , 1992 , 9, 133-142	6	9
41	Interrelation among flaw resistance, KR-curve behavior and thermal shock strength degradation in ceramics. II. Experiment. <i>Journal of the European Ceramic Society</i> , 1991 , 8, 365-374	6	18
40	Thermal relief of stresses in sputtered refractory metals and compounds. <i>Surface and Coatings Technology</i> , 1991 , 49, 199-202	4.4	9

39	Interrelation between Flaw Resistance, R-Curve Behavior, and Thermal Shock Strength Degradation in Ceramics. <i>Journal of the American Ceramic Society</i> , 1991 , 74, 2859-2868	3.8	16
38	K R -Curve Behavior of Duplex Ceramics. <i>Journal of the American Ceramic Society</i> , 1991 , 74, 11-18	3.8	61
37	Thermal Shock Behavior of Duplex Ceramics. <i>Journal of the American Ceramic Society</i> , 1991 , 74, 19-24	3.8	56
36	Crack-Tip-Bridging Stresses in Ceramic Materials. <i>Journal of the American Ceramic Society</i> , 1991 , 74, 1828-1832	3.8	52
35	Acoustic Emission During Micro- and Macrocrack Growth in Mg-PSZ. <i>Journal of the American Ceramic Society</i> , 1991 , 74, 1922-1927	3.8	12
34	Interrelation among flaw resistance, KR-curve behavior and thermal shock strength degradation in ceramics. I. Theoretical considerations. <i>Journal of the European Ceramic Society</i> , 1991 , 8, 355-363	6	6
33	Quasi-brittle behaviour of ceramics and its relevance for thermal shock. <i>Engineering Fracture Mechanics</i> , 1991 , 40, 871-877	4.2	7
32	R-curve behaviour in a macro-defect-free cement paste. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1990 , 62, 347-361		6
31	R-Curve Behavior and Thermal Shock Resistance of Ceramics. <i>Journal of the American Ceramic Society</i> , 1990 , 73, 621-628	3.8	96
30	Creep Deformation and the Grain-Boundary Resistivity of Tetragonal Zirconia Polycrystalline Materials. <i>Journal of the American Ceramic Society</i> , 1990 , 73, 2505-2507	3.8	22
29	Thermal shock of a titanium di-boride based composite. <i>Ceramics International</i> , 1990 , 16, 77-83	5.1	13
28	A preliminary investigation of the corrosion of a TiB ₂ /BN/AlN composite during aluminium evaporation. <i>Ceramics International</i> , 1989 , 15, 375-382	5.1	12
27	Metastability of the Martensitic Transformation in a 12 mol% Ceria-Zirconia Alloy: I, Deformation and Fracture Observations. <i>Journal of the American Ceramic Society</i> , 1989 , 72, 90-98	3.8	74
26	Metastability of the Martensitic Transformation in a 12 mol% Ceria-Zirconia Alloy: II, Grinding Studies. <i>Journal of the American Ceramic Society</i> , 1989 , 72, 1358-1364	3.8	108
25	Reversible Transformation and Elastic Anisotropy in Mg-ZrO ₂ . <i>Journal of the American Ceramic Society</i> , 1989 , 72, 1530-1532	3.8	8
24	Anisotropic Ionic Conductivity Observed in Superplastically Deformed Yttria-Stabilized Zirconia/Alumina Composite. <i>Journal of the American Ceramic Society</i> , 1989 , 72, 1279-1281	3.8	5
23	Transformation zone shape in ceriapartially-stabilized zirconia. <i>Acta Metallurgica</i> , 1988 , 36, 955-962		54
22	Crack Resistance Curves in Magnesia-Partially-Stabilized Zirconia. <i>Journal of the American Ceramic Society</i> , 1988 , 71, 399-407	3.8	132

21	Microstructural Evolution in Ca-PSZ and the Room-Temperature Instability of Tetragonal ZrO ₂ . <i>Journal of the American Ceramic Society</i> , 1987 , 70, 214-220	3.8	50
20	Ion implantation of low melting point metals into sapphire. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1987 , 19-20, 805-808	1.2	28
19	Stability of Mg-PSZ in high temperature steam environment. <i>Journal of Materials Science Letters</i> , 1985 , 4, 848-850		12
18	Limitation of Maximum Strength of Zirconia-Toughened Ceramics by Transformation Toughening Increment. <i>Journal of the American Ceramic Society</i> , 1985 , 68, C-97-C-99	3.8	46
17	Inelastic deformation of Mg-PSZ and its significance for strength-toughness relationship of zirconia toughened ceramics. <i>Acta Metallurgica</i> , 1985 , 33, 2083-2091		113
16	Toughened PSZ Ceramics-Their Role as Advanced Engine Components 1983 ,		4
15	Comparison of K _{1c} Values for Al ₂ O ₃ -ZrO ₂ Composites Obtained from Notched-Beam and Indentation Strength Techniques. <i>Journal of the American Ceramic Society</i> , 1983 , 66, C-27-C-29	3.8	13
14	Influence of Thermal Decomposition on the Mechanical Properties of Magnesia-Stabilized Cubic Zirconia. <i>Journal of the American Ceramic Society</i> , 1983 , 66, 358-362	3.8	52
13	Grain-Size Dependence of Fracture Energy in Ceramics. <i>Journal of the American Ceramic Society</i> , 1982 , 65, C-14-C-16	3.8	18
12	Dependence of Fracture Toughness of Alumina on Grain Size and Test Technique. <i>Journal of the American Ceramic Society</i> , 1982 , 65, 566-572	3.8	109
11	A deformation and fracture mechanics approach to the scoring and breaking of glass. <i>Journal of Non-Crystalline Solids</i> , 1980 , 38-39, 445-450	3.9	9
10	A fracture mechanics description of the microcracking about NiS inclusions in glass. <i>Journal of Non-Crystalline Solids</i> , 1980 , 38-39, 451-456	3.9	19
9	Indentation deformation/fracture of normal and anomalous glasses. <i>Journal of Non-Crystalline Solids</i> , 1979 , 31, 415-428	3.9	281
8	Dislocation generation beneath static and rolling contact with a sphere. <i>Wear</i> , 1978 , 48, 173-180	3.5	10
7	Some observations of overlapping interacting cracks. <i>Engineering Fracture Mechanics</i> , 1978 , 10, 299-304	4.2	48
6	Wear-like features on natural fault surfaces. <i>Wear</i> , 1976 , 37, 63-68	3.5	13
5	Indentation fracture in brittle rocks and glasses. <i>International Journal of Rock Mechanics and Mining Sciences</i> , 1976 , 13, 311-319		69
4	Origin of macroscopic wear grooves generated during sliding friction experiments. <i>International Journal of Rock Mechanics and Mining Sciences</i> , 1975 , 12, 367-371		5

3	Microscopic observations of abrasive wear of polycrystalline alumina. <i>Wear</i> , 1975 , 35, 185-189	3.5	52
2	Further Studies on Environment-Sensitive Hardness and Machinability of Al ₂ O ₃ . <i>Journal of the American Ceramic Society</i> , 1975 , 58, 372-376	3.8	24
1	Fatigue tests of Ni-P amorphous alloy microcantilever beams		2