Jianghong Gong

List of Publications by Citations

86 papers	1,934 citations	25 h-index	41 g-index
86 ext. papers	2,089 ext. citations	4.6 avg, IF	4.66 L-index

#	Paper	IF	Citations
86	Examination of the indentation size effect in low-load vickers hardness testing of ceramics. *Journal of the European Ceramic Society*, **1999**, 19, 2625-2631	6	258
85	On the description of indentation size effect in hardness testing for ceramics: Analysis of the nanoindentation data. *Journal of the European Ceramic Society*, **2004**, 24, 2193-2201	6	147
84	An energy-balance analysis for the size effect in low-load hardness testing. *Journal of Materials Science*, **2000**, 35, 209-213	4.3	84
83	Analysis of the nanoindentation data measured with a Berkovich indenter for brittle materials: effect of the residual contact stress. *Acta Materialia*, **2004**, 52, 785-793	8.4	77
82	Analysis of the indentation size effect on the apparent hardness for ceramics. *Materials Letters*, **1999**, 38, 197-201	3.3	74
81	Load-dependence of the measured hardness of Ti(C,N)-based cermets. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2001**, 303, 179-186	5.3	60
80	Lithium-Ion Battery Cycling for Magnetism Control. *Nano Letters*, **2016**, 16, 583-7	11.5	54
79	On the contact area for nanoindentation tests with Berkovich indenter: case study on soda-lime glass. *Materials Letters*, **2004**, 58, 1349-1353	3.3	51
78	Load-dependence of Knoop hardness of Al2O3TiC composites. *Journal of the European Ceramic Society*, **2000**, 20, 1895-1900	6	51
77	Preparation of Ni/YSZ materials for SOFC anodes by buffer-solution method. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2001**, 86, 119-122	3.1	50
76	Analysis of the nanoindentation loaddisplacement curves measured on high-purity fine-grained alumina. *Journal of the European Ceramic Society*, **2005**, 25, 649-654	6	42
75	Statistical analysis of fracture toughness of soda-lime glass determined by indentation. *Journal of Non-Crystalline Solids*, **2001**, 279, 219-223	3.9	40
74	Effect of peak load on the determination of hardness and Young's modulus of hot-pressed Si3N4 by nanoindentation. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2003**, 354, 140-145	5.3	38
73	Relationship between the Estimated Weibull Modulus and the Coefficient of Variation of the Measured Strength for Ceramics. *Journal of the American Ceramic Society*, **2004**, 82, 449-452	3.8	35
72	Buckled Tin Oxide Nanobelt Webs as Highly Stretchable and Transparent Photosensors. *Small*, **2015**, 11, 5712-8	11	34
71	SiOx Nanodandelion by Laser Ablation for Anode of Lithium-Ion Battery. *Small*, **2015**, 11, 6009-12	11	31
70	On the energy balance model for conventional Vickers microhardness testing of brittle ceramics. *Journal of Materials Science Letters*, **2000**, 19, 515-517		31

69	Filling the Gaps between Graphene Oxide: A General Strategy toward Nanolayered Oxides. *Advanced Functional Materials*, **2015**, 25, 5683-5690	15.6	27
68	A comparison between Knoop and Vickers hardness of silicon nitride ceramics. *Materials Letters*, **2002**, 56, 941-944	3.3	27
67	A new probability index for estimating Weibull modulus for ceramics with the least-square method. *Journal of Materials Science Letters*, **2000**, 19, 827-829		27
66	The influence of TiC-particle-size on the fracture toughness of Al2O3–30 wt.%TiC composites. *Journal of the European Ceramic Society*, **2001**, 21, 2377-2381	6	26
65	Load dependence of low-load Knoop hardness in ceramics: a modified PSR model. *Materials Letters*, **2001**, 47, 140-144	3.3	26
64	Determination of the mechanical behavior of lithium disilicate glass ceramics by nanoindentation & scanning probe microscopy. *Materials Chemistry and Physics*, **2014**, 148, 1036-1044	4.4	25
63	Glass fiber fabric mat as the separator for lithium-ion battery with high safety performance. *Ionics*, **2015**, 21, 3135-3139	2.7	25
62	Effect of TiC particle size on the toughness characteristics of Al2O3–TiC composites. *Materials Letters*, **2001**, 49, 235-238	3.3	25
61	Determining indentation toughness by incorporating true hardness into fracture mechanics equations. *Journal of the European Ceramic Society*, **1999**, 19, 1585-1592	6	25
60	Enhancement of the ionic conductivity of mixed calcia/yttria stabilized zirconia. *Materials Letters*, **2000**, 46, 115-119	3.3	24
59	Load dependence of the apparent hardness of silicon nitride in a wide range of loads. *Materials Letters*, **1998**, 35, 58-61	3.3	23
58	Effect of metallic binder content on the microhardness of TiCN-based cermets. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2003**, 359, 391-395	5.3	23
57	Description of the indentation size effect in hot-pressed silicon-nitride-based ceramics. *Journal of Materials Science Letters*, **1998**, 17, 473-475		22
56	ac Impedance Study of Zirconia Doped with Yttria and Calcia. *Journal of the American Ceramic Society*, **2004**, 83, 648-650	3.8	22
55	Indentation toughness of ceramics: a statistical analysis. *Ceramics International*, **2002**, 28, 767-772	5.1	22
54	Indentation toughness of ceramics: A modified approach. *Journal of Materials Science*, **2002**, 37, 865-869	4.3	22
53	Grain-boundary effect in zirconia stabilized with yttria and calcia by electrical measurements. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2003**, 103, 108-114	3.1	22
52	Temperature-dependence of the lattice conductivity of mixed calcia/yttria-stabilized zirconia. *Materials Chemistry and Physics*, **2002**, 76, 212-216	4.4	21

51	R-curve behavior of TiC particle reinforced Al2O3 composites. *Scripta Materialia*, **2000**, 43, 27-31	5.6	20
50	A new function for the description of the nanoindentation unloading data. *Scripta Materialia*, **2003**, 49, 93-97	5.6	17
49	Effect of load-dependence of hardness on indentation toughness determination for soda-lime glass. *Journal of Non-Crystalline Solids*, **2001**, 282, 325-328	3.9	16
48	Nanoindentation Characterization of the Hardness of Zirconia Dental Ceramics. *Advanced Engineering Materials*, **2013**, 15, 704-707	3.5	15
47	Effect of porosity on the microhardness testing of brittle ceramics: A case study on the system of NiO–ZrO2. *Ceramics International*, **2013**, 39, 8751-8759	5.1	14
46	On the local crack resistance of Al2O3–TiC composites evaluated by direct indentation method. *Journal of the European Ceramic Society*, **2001**, 21, 941-946	6	14
45	Sol–gel synthesis of mesoporous spherical zirconia. *RSC Advances*, **2015**, 5, 104629-104634	3.7	13
44	Is a three-parameter Weibull function really necessary for the characterization of the statistical variation of the strength of brittle ceramics?. *Journal of the European Ceramic Society*, **2018**, 38, 2234-2242	6	13
43	Influence of TiC particle size on the load-independent hardness of Al2O3–TiC composites. *Materials Letters*, **2003**, 57, 3439-3443	3.3	13
42	Electrical Conductivity of Zirconia Stabilized with Yttria and Calcia. *Journal of Materials Science Letters*, **1999**, 18, 443-444		13
41	Compositional dependence of hardness of (Ce,Y)-TZP/Al2O3 composites. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2004**, 372, 207-212	5.3	11
40	Ionic conductivity in the ternary system (ZrO2)1−0.08x−0.12y(Y2O3)0.08x(CaO)0.12y. *Journal of Materials Science*, **2000**, 35, 3547-3551	4.3	11
39	Analysis of non-linear Arrhenius behavior of ionic conduction in cubic zirconia stabilized with yttria and calcia. *Journal of Materials Science Letters*, **2002**, 21, 157-159		10
38	Effect of microcracking on the energy-balance relationship for hardness testing of ceramics. *Materials Letters*, **2001**, 49, 180-184	3.3	10
37	A facile fabrication method for ultrathin NiO/Ni nanosheets as a high-performance electrocatalyst for the oxygen evolution reaction. *RSC Advances*, **2017**, 7, 18539-18544	3.7	9
36	Weibull modulus of fracture strength of toughened ceramics subjected to small-scale contacts. *Journal of Materials Science*, **2001**, 36, 2391-2396	4.3	8
35	Effect of TiC-particle size on sliding wear of TiC particulate reinforced alumina composites. *Materials Letters*, **2002**, 53, 258-261	3.3	8
34	Environmental effects on the room-temperature static fatigue behavior of polycrystalline mullite. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2000**, 283, 76-81	5.3	8

33	Nanoindentation characterization of tetragonal zirconia polycrystalline implanted by titanium ions with MEVVA sources. *Materials Chemistry and Physics*, **2014**, 147, 268-272	4.4	7
32	Analysis of continuous stiffness data measured during nanoindentation of titanium films on glass substrate. *Materials Chemistry and Physics*, **2011**, 125, 500-504	4.4	7
31	Influence of thickness on the electrical conductivity of YSZ electrolytes. *Journal of the Ceramic Society of Japan*, **2010**, 118, 550-554	1	7
30	A simple method for determining the Weibull estimator. *Journal of Materials Science Letters*, **1997**, 16, 875-876		7
29	Characterization of R-curve behavior in Si3N4-based ceramics. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2001**, 318, 42-49	5.3	7
28	Variation in the indentation toughness of silicon nitride. *Materials Letters*, **2002**, 57, 643-646	3.3	7
27	Crack-location-dependent R-curve behavior in Si3N4. *Journal of the European Ceramic Society*, **2000**, 20, 1339-1344	6	7
26	Statistical variability in the indentation toughness of TiCN particle reinforced Al2O3 composite. *Materials Letters*, **2001**, 49, 357-360	3.3	7
25	Determining the confidence intervals for Weibull estimators. *Journal of Materials Science Letters*, **1999**, 18, 1405-1407		7
24	Low-temperature ionic conductivity of the solid solution in the system ZrO2–Y2O3–Yb2O3. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2002**, 90, 287-290	3.1	6
23	Strength characteristics of toughened ceramics containing contact-induced small surface cracks. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2003**, 344, 132-139	5.3	5
22	Comment on "Measurement of hardness on traditional ceramics" H. Kim and T. Kim, J. Eur. Ceram. Soc., 22, 1437–1445 (2002). *Journal of the European Ceramic Society*, **2003**, 23, 1769-1772	6	5
21	Description of the nanoindentation unloading curves with a universal function: Theoretical consideration and applications to brittle materials. *Materials Chemistry and Physics*, **2020**, 251, 123165	4.4	4
20	Synergetic enhancement of mechanical and electrical properties in Ce0.8Sm0.1Nd0.1O2–La10Si6O27 composite electrolytes. *Journal of the American Ceramic Society*, **2018**, 101, 3130-3137	3.8	4
19	Strength/crack-size relationship for Knoop-indented bending specimens and its application to silicon nitride ceramics. *Journal of the European Ceramic Society*, **1998**, 18, 891-899	6	4
18	Correlation between Weibull moduli for tensile and bending strength of brittle ceramics: a numerical simulation analysis based on a three-parameter Weibull distribution. *Journal of Materials Science*, **2003**, 38, 2541-2545	4.3	4
17	A universal function for the description of nanoindentation unloading data: Case study on soda-lime glass. *Journal of Non-Crystalline Solids*, **2020**, 544, 120067	3.9	3
16	Room temperature time-dependent failure behavior of polycrystalline mullite in water. *Materials Letters*, **1998**, 34, 40-42	3.3	3

15	Simple method for determining the initial unloading slope for ceramics nanoindentation tests. *Journal of Materials Science Letters*, **2003**, 22, 267-268		3
14	Fracture toughness of Al2O3-TiCN composites. *Journal of Materials Science Letters*, **2001**, 20, 2085-2087		3
13	Microstructural dependence of electrical conductivity of (ZrO2)0.90(Y2O3)0.04(CaO)0.06 solid electrolyte. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2000**, 78, 140-144	3.1	3
12	VARIATION OF THE POWER LAW EXPONENTS IN THE ANALYSIS OF UNIVERSAL DYNAMIC RESPONSE. *Modern Physics Letters B*, **2009**, 23, 3463-3469	1.6	2
11	Determination of the thickness of titanium films on glass substrate by nanoindentation tests. *Journal of Materials Research*, **2011**, 26, 353-356	2.5	2
10	Low amplitude cyclic deformation behavior of single crystalline silicon. *Scripta Materialia*, **1999**, 41, 109-115	3.6	2
9	Self-calibration of area function for mechanical property determination with nanoindentation tests. *Journal of Materials Science*, **2020**, 55, 16002-16017	4.3	2
8	On the efficiency of the "effective truncation length" of indenter tip in mechanical property determination with nanoindentation tests. *Materials Today Communications*, **2020**, 25, 101412	2.5	1
7	Effect of CaF2 on the electrical properties of yttria-stabilized zirconia. *Materials Letters*, **2004**, 58, 394-396	3.3	1
6	The Efficiency of Normal Distribution in Statistical Characterization of the Experimentally Measured Strength for Ceramics. *Journal of Materials Engineering and Performance*, **2021**, 30, 42-55	1.6	0
5	Synthesis of vertically-aligned CNT arrays from diameter-controlled Fe3O4 nanoparticles. *Journal of the Ceramic Society of Japan*, **2014**, 122, 187-191	1	
4	Effect of Multi-point Indentation on the Bending Strength of Silicon Nitride Ceramic. *Journal of Materials Science Letters*, **1998**, 17, 1107-1109		
3	Reply to "Comment on 'Relationship between the Estimated Weibull Modulus and the Coefficient of Variation of the Measured Strength for Ceramics'". *Journal of the American Ceramic Society*, **2004**, 83, 1015-1016	3.8	
2	Empirical method for the determination of hardness from low-load ball indentation tests for brittle materials. *Journal of Materials Science*, **2004**, 39, 3175-3177	4.3	
1	Effect of flowing slurry on the delayed failure behavior of polycrystalline mullite. *Materials Letters*, **2000**, 46, 219-221	3.3	