Dinesh K Shetty

List of Publications by Year in Descending Order

57 papers	1,717 citations	22 h-index	40 g-index
57 ext. papers	1,800 ext. citations	4 avg, IF	4.41 L-index

#	Paper	IF	Citations
57	Fabrication of high-density and translucent Al-containing garnet, Li7□La3Zr2□TaxO12 (LLZTO) solid-state electrolyte by pressure filtration and sintering. *Solid State Ionics*, **2021**, 364, 115640	3.3	2
56	Functional phase grading of □Ta4C3-x: Kinetics and properties. *Journal of the American Ceramic Society*, **2019**, 102, 3771-3778	3.8	
55	First-principles study on surface stability of tantalum carbides. *Surface Science*, **2016**, 644, 24-28	1.8	10
54	An Assessment of the Applicability of Particle Light Scattering Theories to Birefringent Polycrystalline Ceramics. *Journal of the American Ceramic Society*, **2016**, 99, 551-556	3.8	7
53	A Functionally Graded Carbide in the Ta□ System. *Journal of the American Ceramic Society*, **2016**, 99, 392-394	3.8	13
52	On the Effect of Birefringence on Light Transmission in Polycrystalline Magnesium Fluoride. *Journal of the American Ceramic Society*, **2015**, 98, 829-837	3.8	16
51	□Ta4C3□: A High Fracture Toughness Carbide with Rising-Crack-Growth-Resistance (R-Curve) Behavior. *Journal of the American Ceramic Society*, **2015**, 98, 2601-2608	3.8	32
50	Processing of Dense □Ta4C3□ by Reaction Sintering of Ta and TaC Powder Mixture. *Journal of the American Ceramic Society*, **2014**, 97, 3826-3834	3.8	14
49	Thermal expansion behaviors of yttrium tungstates in the WO3▽2O3 system. *Ceramics International*, **2013**, 39, 8421-8427	5.1	16
48	Dielectric Breakdown of Polycrystalline Alumina: A Weakest-Link Failure Analysis. *Journal of the American Ceramic Society*, **2013**, 96, 3430-3439	3.8	11
47	Synthesis and characterization of Al2□ Sc x (WO4)3 ceramics for low-expansion infrared-transmitting windows. *Journal of Materials Science*, **2012**, 47, 6286-6296	4.3	14
46	Colloidal processing and optical transmittance of submicron polycrystalline alumina **2011**,		1
45	Synthesis, characterization, and densification of Al 2-x Sc x (WO 4) 3 ceramics for low-expansion infrared-transparent windows **2011**,		2
44	Effects of carbon nanofibers on cell morphology, thermal conductivity and crush strength of carbon foam. *Carbon*, **2010**, 48, 68-80	10.4	44
43	Birefringence and grain-size effects on optical transmittance of polycrystalline magnesium fluoride **2009**,		2
42	Short-Crack Fracture Toughness of Silicon Carbide. *Journal of the American Ceramic Society*, **2009**, 92, 179-185	3.8	16
41	Phase Constitution and Mechanical Properties of Carbides in the Ta□ System. *Journal of the American Ceramic Society*, **2009**, 92, 2404-2407	3.8	97

40	Effect of Additives on the Activation Energy for Sintering of Silicon Carbide. *Journal of the American Ceramic Society*, **2008**, 91, 1135-1140	3.8	24
39	Effects of Additives on the Pressure-Assisted Densification and Properties of Silicon Carbide. *Journal of the American Ceramic Society*, **2008**, 91, 2163-2169	3.8	20
38	C-Crack Initiation in Quasi-Static and Impact Loading of a Bearing-Grade Silicon Nitride. *Journal of ASTM International*, **2008**, 5, 101363		
37	R Curves and Crack-Stability Map: Application to Ce-TZP/Al2O3. *Journal of the American Ceramic Society*, **2007**, 90, 3554-3558	3.8	5
36	Contact damage initiation in silicon nitride in Hertzian indentation: role of microstructure. *Journal of Materials Science*, **2007**, 42, 3508-3519	4.3	3
35	Load-Bearing Capacity in Quasi-Static Compression and Bearing Toughness of Silicon Nitride Balls. *Tribology Transactions*, **2004**, 47, 522-526	1.8	4
34	Transformation zones, crack shielding, and crack-growth resistance of Ce-TZP/alumina composite in mode II and combined mode II and mode I loading. *Engineering Fracture Mechanics*, **2003**, 70, 2569-2585	4.2	4
33	Toughening of layered ceramic composites with residual surface compression: effects of layer thickness. *Engineering Fracture Mechanics*, **2001**, 68, 1-7	4.2	45
32	Transient wear of silicon nitride in lubricated rolling contact. *Wear*, **1998**, 223, 58-65	3.5	14
31	Micromechanics of crack bridging in sapphire/epoxy composites. *Composites Science and Technology*, **1998**, 58, 1763-1773	8.6	13
30	Cyclic Fatigue of Ce-TZP/Al2O3 Composites: Role of the Degradation of Transformation Zone Shielding. *Journal of the American Ceramic Society*, **1995**, 78, 599-608	3.8	16
29	Critical Stresses for Extension of Filament-Bridged Matrix Cracks in Ceramic-Matrix Composites: An Assessment with a Model Composite with Tailored Interfaces. *Journal of the American Ceramic Society*, **1995**, 78, 1139-1146	3.8	6
28	Rolling-Contact Fatigue and Wear of CVD-SiC with Residual Surface Compression. *Journal of the American Ceramic Society*, **1995**, 78, 2307-2313	3.8	13
27	Direct measurement of crack shielding in ceramics by the application of Raman microprobe spectroscopy. *Journal of Materials Research*, **1994**, 9, 3183-3193	2.5	12
26	Crack Shielding in Ce-TZP/Al2O3 Composites: Comparison of Fatigue and Sustained Load Crack Growth Specimens. *Journal of the American Ceramic Society*, **1994**, 77, 105-117	3.8	18
25	Matrix Cracking in Ceramic-Matrix Composites. *Journal of the American Ceramic Society*, **1993**, 76, 2497-2504	3.8	39
24	R-Curve Behavior and Flaw Insensitivity of Ce-TZP/Al2O3 Composite. *Journal of the American Ceramic Society*, **1993**, 76, 961-969	3.8	31
23	Transformation Zone Shape Effects on Crack Shielding in Ceria-Partially-Stabilized Zirconia (Ce-TZP)/Alumina Composites. *Journal of the American Ceramic Society*, **1992**, 75, 2991-2994	3.8	26

22	Extreme-Value Statistics Analysis of Fracture Strengths of a Sintered Silicon Nitride Failing from Pores. *Journal of the American Ceramic Society*, **1992**, 75, 2116-2124	3.8	19
21	Transformation Plasticity and Toughening in CeO2-Partially-Stabilized Zirconia-Alumina (Ce-TZP/Al2O3) Composites Doped with MnO. *Journal of the American Ceramic Society*, **1992**, 75, 1229-1238	3.8	45
20	Role of Autocatalytic Transformation in Zone Shape and Toughening of Ceria-Tetragonal-Zirconia-Alumina (Ce-TZP/Al2O3) Composites. *Journal of the American Ceramic Society*, **1991**, 74, 678-681	3.8	8
19	Rising Crack-Growth-Resistance (R-Curve) Behavior of Toughened Alumina and Silicon Nitride. *Journal of the American Ceramic Society*, **1991**, 74, 2634-2641	3.8	123
18	Reliability Analysis of Structural Ceramics Subjected to Biaxial Flexure. *Journal of the American Ceramic Society*, **1991**, 74, 333-344	3.8	48
17	Interfacial Sliding Friction in Silicon Carbide-Borosilicate Glass Composites: A Comparison of Pullout and Pushout Tests. *Journal of the American Ceramic Society*, **1991**, 74, 115-122	3.8	51
16	Equivalence of Physically Based Statistical Fracture Theories for Reliability Analysis of Ceramics in Multiaxial Loading. *Journal of the American Ceramic Society*, **1990**, 73, 1917-1921	3.8	18
15	Prediction of Crack Paths in Particulate Composites Using Electrical Analog. *Journal of the American Ceramic Society*, **1990**, 73, 340-345	3.8	3
14	Fatigue Crack Propagation in Ceria-Partially-Stabilized Zirconia (Ce-TZP)-Alumina Composites. *Journal of the American Ceramic Society*, **1990**, 73, 2992-3001	3.8	47
13	Fracture Toughness of Polycrystalline Ceramics in Combined Mode I and Mode II Loading. *Journal of the American Ceramic Society*, **1989**, 72, 78-84	3.8	79
12	Interfacial Bonding and Friction in Silicon Carbide [Filament]-Reinforced Ceramic- and Glass-Matrix Composites. *Journal of the American Ceramic Society*, **1989**, 72, 1891-1898	3.8	108
11	Transformation Zone Shape, Size, and Crack-Growth-Resistance [R-Curve] Behavior of Ceria-Partially-Stabilized Zirconia Polycrystals. *Journal of the American Ceramic Society*, **1989**, 72, 921-928	3.8	62
10	Crack Stability and Strength Distribution of Ceramics That Exhibit Rising Crack-Growth-Resistance (R-Curve) Behavior. *Journal of the American Ceramic Society*, **1989**, 72, 1158-1162	3.8	65
9	Indentation Fracture Response and Damage Resistance of Al2O3-ZrO2 Composites Strengthened by Transformation-Induced Residual Stresses. *Journal of the American Ceramic Society*, **1988**, 71, C-501-C-505	3.8	48
8	Shear-Lag Analysis of Fiber Push-Out (Indentation) Tests for Estimating Interfacial Friction Stress in Ceramic-Matrix Composites. *Journal of the American Ceramic Society*, **1988**, 71, C-107-C-109	3.8	145
7	Mixed-mode fracture in biaxial stress state: Application of the diametral-compression (Brazilian disk) test. *Engineering Fracture Mechanics*, **1987**, 26, 825-840	4.2	137
6	Effects of composition and microstructure on the slurry erosion of WC-Co cermets. *Wear*, **1987**, 114, 1-18	3.5	11
5	Strength Improvement in Transformation-Toughened Alumina by Selective Phase Transformation. *Journal of the American Ceramic Society*, **1987**, 70, 714-718	3.8	49

4	Cleavage fracture of steel in the upper ductile-brittle transition region. *Engineering Fracture Mechanics*, **1983**, 17, 461-470	4.2	26
3	Comparison between high temperature dead-load creep and stress-relaxation deformation in iron-doped polycrystalline aluminum and magnesium oxides.. *Journal of the Ceramic Association Japan*, **1983**, 91, 251-257		
2	Lower-bound fracture toughness of a reactor-pressure-vessel steel. *Engineering Fracture Mechanics*, **1981**, 14, 833-842	4.2	18
1	Analysis of creep deformation under cyclic loading conditions. *Materials Science and Engineering*, **1975**, 20, 261-266		17