

# Dinesh K Shetty

## List of Publications by Year in descending order

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57  
papers

1,977  
citations

279798

23  
h-index

243625

44  
g-index

57  
all docs

57  
docs citations

57  
times ranked

1009  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fabrication of high-density and translucent Al-containing garnet, $\text{Li}_7\text{xLa}_3\text{Zr}_2\text{xTa}_x\text{O}_{12}$ (LLZTO) solid-state electrolyte by pressure filtration and sintering. <i>Solid State Ionics</i> , 2021, 364, 115640.	2.7	9
2	Functional phase grading of $\text{Ta}_4\text{C}_3$ : Kinetics and properties. <i>Journal of the American Ceramic Society</i> , 2019, 102, 3771-3778.	3.8	1
3	An Assessment of the Applicability of Particle Light Scattering Theories to Birefringent Polycrystalline Ceramics. <i>Journal of the American Ceramic Society</i> , 2016, 99, 551-556.	3.8	9
4	A Functionally Graded Carbide in the Ta-C System. <i>Journal of the American Ceramic Society</i> , 2016, 99, 392-394.	3.8	13
5	First-principles study on surface stability of tantalum carbides. <i>Surface Science</i> , 2016, 644, 24-28.	1.9	16
6	$\text{Ta}_4\text{C}_3$ : A High Fracture Toughness Carbide with Rising Crack Growth Resistance (R-Curve) Behavior. <i>Journal of the American Ceramic Society</i> , 2015, 98, 2601-2608.	3.8	41
7	On the Effect of Birefringence on Light Transmission in Polycrystalline Magnesium Fluoride. <i>Journal of the American Ceramic Society</i> , 2015, 98, 829-837.	3.8	22
8	Processing of Dense $\text{Ta}_4\text{C}_3$ by Reaction Sintering of $\text{Ta}$ and $\text{TaC}$ Powder Mixture. <i>Journal of the American Ceramic Society</i> , 2014, 97, 3826-3834.	3.8	17
9	Thermal expansion behaviors of yttrium tungstates in the $\text{WO}_3\text{-Y}_2\text{O}_3$ system. <i>Ceramics International</i> , 2013, 39, 8421-8427.	4.8	19
10	Dielectric Breakdown of Polycrystalline Alumina: A Weakest-Link Failure Analysis. <i>Journal of the American Ceramic Society</i> , 2013, 96, 3430-3439.	3.8	16
11	Synthesis and characterization of $\text{Al}_{2-x}\text{Sc}_x(\text{WO}_4)_3$ ceramics for low-expansion infrared-transmitting windows. <i>Journal of Materials Science</i> , 2012, 47, 6286-6296.	3.7	18
12	Colloidal processing and optical transmittance of submicron polycrystalline alumina. , 2011, , .		2
13	Synthesis, characterization, and densification of $\text{Al}_{2-x}\text{Sc}_x(\text{WO}_4)_3$ ceramics for low-expansion infrared-transparent windows. , 2011, , .		2
14	Effects of carbon nanofibers on cell morphology, thermal conductivity and crush strength of carbon foam. <i>Carbon</i> , 2010, 48, 68-80.	10.3	51
15	Birefringence and grain-size effects on optical transmittance of polycrystalline magnesium fluoride. <i>Proceedings of SPIE</i> , 2009, , .	0.8	4
16	Short-Crack Fracture Toughness of Silicon Carbide. <i>Journal of the American Ceramic Society</i> , 2009, 92, 179-185.	3.8	23
17	Phase Constitution and Mechanical Properties of Carbides in the Ta-C System. <i>Journal of the American Ceramic Society</i> , 2009, 92, 2404-2407.	3.8	110
18	Effect of Additives on the Activation Energy for Sintering of Silicon Carbide. <i>Journal of the American Ceramic Society</i> , 2008, 91, 1135-1140.	3.8	25

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19	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	21
20	C-Crack Initiation in Quasi-Static and Impact Loading of a Bearing-Grade Silicon Nitride. Journal of ASTM International, 2008, 5, 1-14.	0.2	0
21	R Curves and Crack-Stability Map: Application to Ce-TZP/Al <sub>2</sub> O <sub>3</sub> . Journal of the American Ceramic Society, 2007, 90, 3554-3558.	3.8	6
22	Contact damage initiation in silicon nitride in Hertzian indentation: role of microstructure. Journal of Materials Science, 2007, 42, 3508-3519.	3.7	3
23	Load-Bearing Capacity in Quasi-Static Compression and Bearing Toughness of Silicon Nitride Balls. Tribology Transactions, 2004, 47, 522-526.	2.0	4
24	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.	4.3	5
25	Toughening of layered ceramic composites with residual surface compression: effects of layer thickness. Engineering Fracture Mechanics, 2001, 68, 1-7.	4.3	47
26	Transient wear of silicon nitride in lubricated rolling contact. Wear, 1998, 223, 58-65.	3.1	15
27	Micromechanics of crack bridging in sapphire/epoxy composites. Composites Science and Technology, 1998, 58, 1763-1773.	7.8	15
28	Cyclic Fatigue of Ce-TZP/Al <sub>2</sub> O <sub>3</sub> Composites: Role of the Degradation of Transformation Zone Shielding. Journal of the American Ceramic Society, 1995, 78, 599-608.	3.8	17
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	7
30	Rolling-Contact Fatigue and Wear of CVD-SiC with Residual Surface Compression. Journal of the American Ceramic Society, 1995, 78, 2307-2313.	3.8	14
31	Direct measurement of crack shielding in ceramics by the application of Raman microprobe spectroscopy. Journal of Materials Research, 1994, 9, 3183-3193.	2.6	15
32	Crack Shielding in Ce-TZP/Al <sub>2</sub> O <sub>3</sub> Composites: Comparison of Fatigue and Sustained Load Crack Growth Specimens. Journal of the American Ceramic Society, 1994, 77, 105-117.	3.8	19
33	Matrix Cracking in Ceramic-Matrix Composites. Journal of the American Ceramic Society, 1993, 76, 2497-2504.	3.8	41
34	R-Curve Behavior and Flaw Insensitivity of Ce-TZP/Al <sub>2</sub> O <sub>3</sub> Composite. Journal of the American Ceramic Society, 1993, 76, 961-969.	3.8	34
35	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	32
36	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	26

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37	Transformation Plasticity and Toughening in CeO <sub>2</sub> -Partially-Stabilized Zirconia-Alumina (Ce-TZP/Al <sub>2</sub> O <sub>3</sub> ) Composites Doped with MnO. Journal of the American Ceramic Society, 1992, 75, 1229-1238.	3.8	53
38	Role of Autocatalytic Transformation in Zone Shape and Toughening of Ceria-Tetragonal-Zirconia-Alumina (Ce-TZP/Al <sub>2</sub> O <sub>3</sub> ) Composites. Journal of the American Ceramic Society, 1991, 74, 678-681.	3.8	8
39	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	145
40	Reliability Analysis of Structural Ceramics Subjected to Biaxial Flexure. Journal of the American Ceramic Society, 1991, 74, 333-344.	3.8	57
41	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	57
42	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	24
43	Prediction of Crack Paths in Particulate Composites Using Electrical Analog. Journal of the American Ceramic Society, 1990, 73, 340-345.	3.8	3
44	Fatigue Crack Propagation in Ceria-Partially-Stabilized Zirconia (Ce-TZP)-Alumina Composites. Journal of the American Ceramic Society, 1990, 73, 2992-3001.	3.8	52
45	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	96
46	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	115
47	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	74
48	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	77
49	Indentation Fracture Response and Damage Resistance of Al <sub>2</sub> O <sub>3</sub> -ZrO <sub>2</sub> Composites Strengthened by Transformation-Induced Residual Stresses. Journal of the American Ceramic Society, 1988, 71, C-501-C-505.	3.8	53
50	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	159
51	Mixed-mode fracture in biaxial stress state: Application of the diametral-compression (Brazilian disk) test. Engineering Fracture Mechanics, 1987, 26, 825-840.	4.3	148
52	Effects of composition and microstructure on the slurry erosion of WC-Co cermets. Wear, 1987, 114, 1-18.	3.1	12
53	Strength Improvement in Transformation-Toughened Alumina by Selective Phase Transformation. Journal of the American Ceramic Society, 1987, 70, 714-718.	3.8	56
54	Cleavage fracture of steel in the upper ductile-brittle transition region. Engineering Fracture Mechanics, 1983, 17, 461-470.	4.3	32

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55	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.	0.2	0
56	Lower-bound fracture toughness of a reactor-pressure-vessel steel. Engineering Fracture Mechanics, 1981, 14, 833-842.	4.3	19
57	Analysis of creep deformation under cyclic loading conditions. Materials Science and Engineering, 1975, 20, 261-266.	0.1	18