

Tanja Lube

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6610581/publications.pdf>

Version: 2024-02-01

72
papers

1,929
citations

394286

19
h-index

254106

43
g-index

81
all docs

81
docs citations

81
times ranked

1336
citing authors

#	ARTICLE	IF	CITATIONS
1	Fracture of Ceramics. <i>Advanced Engineering Materials</i> , 2008, 10, 275-298.	1.6	275
2	Fracture statistics of ceramics – Weibull statistics and deviations from Weibull statistics. <i>Engineering Fracture Mechanics</i> , 2007, 74, 2919-2932.	2.0	238
3	Chairside CAD/CAM materials. Part 2: Flexural strength testing. <i>Dental Materials</i> , 2017, 33, 99-109.	1.6	227
4	The ball on three balls test – Strength and failure analysis of different materials. <i>Journal of the European Ceramic Society</i> , 2007, 27, 1481-1485.	2.8	113
5	Fractography of zirconia-specimens made using additive manufacturing (LCM) technology. <i>Journal of the European Ceramic Society</i> , 2017, 37, 4331-4338.	2.8	96
6	Optimal strength and toughness of Al ₂ O ₃ -ZrO ₂ laminates designed with external or internal compressive layers. <i>Journal of the European Ceramic Society</i> , 2008, 28, 1575-1583.	2.8	85
7	Indentation crack profiles in silicon nitride. <i>Journal of the European Ceramic Society</i> , 2001, 21, 211-218.	2.8	68
8	Surface crack in tension or in bending – A reassessment of the Newman and Raju formula in respect to fracture toughness measurements in brittle materials. <i>Journal of the European Ceramic Society</i> , 2012, 32, 1491-1501.	2.8	63
9	Effective fracture toughness in Al ₂ O ₃ -Al ₂ O ₃ /ZrO ₂ laminates. <i>Journal of the European Ceramic Society</i> , 2007, 27, 1449-1453.	2.8	60
10	Fracture toughness testing of biomedical ceramic-based materials using beams, plates and discs. <i>Journal of the European Ceramic Society</i> , 2018, 38, 5533-5544.	2.8	51
11	THE MINIATURISATION OF THE 4-POINT-BEND TEST. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 1997, 20, 1605-1616.	1.7	48
12	A silicon nitride reference material – A testing program of ESIS TC6. <i>Journal of the European Ceramic Society</i> , 2007, 27, 1203-1209.	2.8	47
13	Influence of the Infill Orientation on the Properties of Zirconia Parts Produced by Fused Filament Fabrication. <i>Materials</i> , 2020, 13, 3158.	1.3	43
14	25-year perspective – Aspects of strain and strength measurement in miniaturised testing for engineering metals and ceramics. <i>Materials Science and Technology</i> , 2010, 26, 127-148.	0.8	34
15	Strength of additive manufactured alumina. <i>Journal of the European Ceramic Society</i> , 2020, 40, 4737-4745.	2.8	34
16	Fracture statistics of ceramic laminates strengthened by compressive residual stresses. <i>Journal of the European Ceramic Society</i> , 2008, 28, 1551-1556.	2.8	29
17	Quantitative determination of the volume fraction of intergranular amorphous phase in sintered silicon nitride. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 370, 453-458.	2.6	27
18	Fracture toughness testing of small ceramic discs and plates. <i>Journal of the European Ceramic Society</i> , 2014, 34, 1637-1642.	2.8	25

#	ARTICLE	IF	CITATIONS
19	Thermal Shock Behavior of an Al ₂ O ₃ /ZrO ₂ Multilayered Ceramic with Residual Stresses due to Phase Transformations. Key Engineering Materials, 2005, 290, 191-198.	0.4	24
20	Determination of Strength and Fracture Toughness of Small Ceramic Discs Using the Small Punch Test and the Ball-on-three-balls Test. , 2014, 3, 961-966.		23
21	Influence of WC-Co hard metal microstructure on defect density, initiation and propagation kinetics of fatigue cracks starting at intrinsic and artificial defects under a negative stress ratio. Acta Materialia, 2020, 188, 30-39.	3.8	21
22	Strength Distributions in Ceramic Laminates. Materials Science Forum, 2005, 492-493, 581-586.	0.3	20
23	A Fracture Toughness Test Using the Ball-on-Three-Balls Test. Journal of the American Ceramic Society, 2016, 99, 249-256.	1.9	18
24	Influence of the Sample Size on the Results of B3B-Tests. Key Engineering Materials, 0, 409, 176-184.	0.4	15
25	A threshold stress intensity factor at the onset of stable crack extension of Knoop indentation cracks. Engineering Fracture Mechanics, 2004, 71, 2263-2269.	2.0	14
26	Stereolithographic 3D Printing of Ceramics: Challenges and Opportunities for Structural Integrity. Advanced Engineering Materials, 2023, 25, .	1.6	14
27	Toughness measurement on ball specimens. Part II: Experimental procedure and measurement uncertainties. Journal of the European Ceramic Society, 2014, 34, 1881-1892.	2.8	12
28	R-Curves in Al ₂ O ₃ - Al ₂ O ₃ /ZrO ₂ Laminates. Key Engineering Materials, 2005, 290, 214-221.	0.4	11
29	Lifetime prediction of ceramic components – A case study on hybrid rolling contact. Engineering Fracture Mechanics, 2017, 169, 292-308.	2.0	11
30	Development of a Bending-Test Device for Small Samples. Key Engineering Materials, 1997, 132-136, 488-491.	0.4	10
31	Elastic properties and damping behaviour of alumina/zirconia laminates. Journal of the European Ceramic Society, 2007, 27, 1307-1311.	2.8	10
32	Mechanical properties of silicon nitride rolling elements in dependence of size and shape. Journal of the European Ceramic Society, 2014, 34, 4167-4176.	2.8	10
33	Fracture toughness of silicon nitride balls via thermal shock. Journal of the European Ceramic Society, 2018, 38, 1278-1287.	2.8	10
34	Monte Carlo Simulations of Strength Distributions of Brittle Materials – Type of Distribution, Specimen and Sample Size. International Journal of Materials Research, 2022, 92, 773-783.	0.1	10
35	Sub-Critical Crack Growth in Alumina – a Comparison of Different Measurement and Evaluation Methods. BHM-Zeitschrift Fuer Rohstoffe Geotechnik Metallurgie Werkstoffe Maschinen-Und Anlagentechnik, 2011, 156, 450-456.	0.4	9
36	Toughness measurement on ball specimens. Part I: Theoretical analysis. Journal of the European Ceramic Society, 2012, 32, 1163-1173.	2.8	9

#	ARTICLE	IF	CITATIONS
37	Surface strength of balls made of five structural ceramic materials evaluated with the Notched Ball Test (NBT). Journal of the European Ceramic Society, 2017, 37, 5065-5070.	2.8	8
38	Fatigue behaviour of WC-Co hard metal under stress ratio and effectively loaded volume relevant to metalworking tool failure. International Journal of Refractory Metals and Hard Materials, 2019, 80, 97-103.	1.7	8
39	Mechanical Properties of Ceramic Laminates. Key Engineering Materials, 2007, 333, 87-96.	0.4	7
40	Comparison of biaxial strength measured with the Ball-on-Three-Balls- and the Ring-on-Ring-test. Open Ceramics, 2021, 6, 100101.	1.0	7
41	Biaxial Strength Testing on Mini Specimens. , 2006, , 589-590.		5
42	Size effect assessment by Weibull's approach and the coupled criterion. Engineering Fracture Mechanics, 2021, 256, 107979.	2.0	5
43	On the transition of failure control from material-intrinsic defects to defects forming during monotonically increasing and cyclic mechanical loading in WC-Co hard metal at elevated temperature. Acta Materialia, 2022, 235, 118087.	3.8	5
44	Analysis of the effective thermoelastic properties and stress fields in silicon nitride based on EBSD data. Journal of the European Ceramic Society, 2016, 36, 1109-1125.	2.8	4
45	Fracture Toughness (KIC) of Lithography Based Manufactured Alumina Ceramic. IOP Conference Series: Materials Science and Engineering, 2018, 348, 012022.	0.3	4
46	The Esis Silicon Nitride Reference Material Testing Program. Ceramic Engineering and Science Proceedings, 0, , 337-342.	0.1	4
47	Improvement of the Strength of Silicon Nitride by Aging. , 2002, , 151-157.		4
48	The Thermo-Mechanical Response to a General Loading Path of a Martensitically Transforming Steel. Journal of Intelligent Material Systems and Structures, 2002, 13, 811-815.	1.4	3
49	Fracture Mechanisms of Structural and Functional Multilayer Ceramic Structures. Key Engineering Materials, 0, 465, 41-46.	0.4	3
50	A Residual Stress Intensity Factor Solution for Knoop Indentation Cracks. International Journal of Fracture, 2012, 175, 65-71.	1.1	3
51	Mechanical Properties of Ceramics. , 2013, , 609-632.		3
52	On the Development of Experimental Methods for the Determination of Fracture Mechanical Parameters of Ceramics. , 2016, , 197-214.		3
53	Strength behaviour of etched Zerodur \hat{A}° . Journal of the European Ceramic Society, 2017, 37, 4407-4413.	2.8	3
54	Delayed failure behaviour of the ESIS silicon nitride reference material at 1200 \hat{A}° C in air. Materials Letters, 2004, 58, 871-875.	1.3	2

#	ARTICLE	IF	CITATIONS
55	Single Edge Precrack V-Notched Beam (SEPVNB) Fracture Toughness Testing on Silicon Nitride. Materials Science Forum, 0, 962, 205-209.	0.3	2
56	A Knoop-Indentation Method for R-Curve Determination. , 2002, , 447-456.		2
57	Einfluss von Kontaktspannungen auf die Festigkeit im 4-Kugelversuch. Praktische Metallographie/Practical Metallography, 2008, 45, 18-32.	0.1	2
58	Indentation Cracks in Silicon Nitride. Key Engineering Materials, 2002, 223, 27-38.	0.4	1
59	Fracture of Monoliths Fabricated by Stacking Water Processed Green Ceramic Tapes. Key Engineering Materials, 2005, 290, 203-207.	0.4	1
60	Strain Mismatch in Ceramic Multilayers: Determination by Strength Measurements. Key Engineering Materials, 2007, 333, 239-242.	0.4	1
61	Geometry Effect on the Thermal Shock Response of Al ₂ O ₃ /ZrO ₂ Multilayered Ceramics. Key Engineering Materials, 2007, 333, 251-254.	0.4	1
62	Influence of an apparent r-curve on strength and fracture statistics of ceramic laminates. International Journal of Materials Research, 2009, 100, 1137-1144.	0.1	1
63	Mechanical Properties and Reliability of Advanced Ceramics. , 2014, , 173-199.		1
64	Fracture Toughness Measurement. , 2021, , 762-774.		1
65	Failure Statistics Beyond the Weibull Behavior. Ceramic Engineering and Science Proceedings, 0, , 497-502.	0.1	1
66	Strength Distributions in Ceramic Laminates. Materials Science Forum, 0, , 581-586.	0.3	1
67	Defects and Fracture Statistics in Low-Pressure Injection Moulded Alumina Components. Praktische Metallographie/Practical Metallography, 2011, 48, 442-453.	0.1	1
68	Macroscopic damage modeling for silicon nitride. Proceedings in Applied Mathematics and Mechanics, 2015, 15, 147-148.	0.2	0
69	Fracture Toughness of Silicon Nitride Measured by the Surface Crack in Flexure (SCF) Test Method. IOP Conference Series: Materials Science and Engineering, 2019, 622, 012001.	0.3	0
70	Distribution distortion in the statistical analysis of strength data when using multiple specimen batches. Journal of the European Ceramic Society, 2021, , .	2.8	0
71	Keramische Verbundwerkstoffe*. Materialpruefung/Materials Testing, 2010, 52, 20-26.	0.8	0
72	Testing Methods on Ceramic Rolling Elements for Hybrid Bearings. Materials Performance and Characterization, 2015, 4, 209-225.	0.2	0