Reinhold H Dauskardt

List of Publications by Year
in descending order

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209	7,822	36303	64796
papers	citations	51 h-index	79 g-index

209	209	209	7704
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Machine learning with knowledge constraints for process optimization of open-air perovskite solar cell manufacturing. Joule, 2022, 6, 834-849.	24.0	69
2	Insights into the Mechanical Properties of Ultrathin Perfluoropolyetherâ€“Silane Coatings. Langmuir, 2022, 38, 6435-6442.	3.5	1
3	Polyimide Hybrid Nanocomposites with Controlled Polymer Filling and Polymerâ€“Matrix Interaction. ACS Applied Materials & Interfaces, 2022, 14, 28239-28246.	8.0	3
4	Gas cluster etching for the universal preparation of polymer composites for nano chemical and mechanical analysis with AFM. Applied Surface Science, 2022, 599, 153954.	6.1	1
5	Low-temperature sprayed SnO_x nanocomposite films with enhanced hole blocking for efficient large area perovskite solar cells. Journal of Materials Chemistry A, 2021, 9, 21332-21339.	10.3	5
6	Comprehensive characterization of the structure and properties of human stratum corneum relating to barrier function and skin hydration: modulation by a moisturizer formulation. Experimental Dermatology, 2021, 30, 1352-1357.	2.9	8
7	Perspectives of Open-Air Processing to Enable Perovskite Solar Cell Manufacturing. Frontiers in Energy Research, 2021, 9, .	2.3	10
8	Computational prediction of the molecular configuration of three-dimensional network polymers. Nature Materials, 2021, 20, 1422-1430.	27.5	84
9	Predicting hydration and moisturizer ingredient effects on mechanical behavior of human stratum corneum. Extreme Mechanics Letters, 2021, 46, 101327.	4.1	11
10	Low temperature open-air plasma deposition of amorphous tin oxide for perovskite solar cells. Thin Solid Films, 2021, 730, 138708.	1.8	6
11	Robust, High-Performing Maizeâ€“Perovskite-Based Solar Cells with Improved Stability. ACS Applied Energy Materials, 2021, 4, 11194-11203.	5.1	11
12	Ectoine disperses keratin and alters hydration kinetics in stratum corneum. Biochemistry and Biophysics Reports, 2021, 28, 101134.	1.3	3
13	Crystallization kinetics of rapid spray plasma processed multiple cation perovskites in open air. Journal of Materials Chemistry A, 2020, 8, 169-176.	10.3	14
14	Lipid Loss Increases Stratum Corneum Stress and Drying Rates. Skin Pharmacology and Physiology, 2020, 33, 180-188.	2.5	10
15	Rapid Open-Air Fabrication of Perovskite Solar Modules. Joule, 2020, 4, 2675-2692.	24.0	78
16	Scalable open-air deposition of compact ETL TiO_xon perovskite for fullerene-free solar cells. Journal of Materials Chemistry A, 2020, 8, 22858-22866.	10.3	6
17	Mechanically reliable hybrid organosilicate glasses for advanced interconnects. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, 060601.	1.2	3
18	Open-Air Plasma-Deposited Multilayer Thin-Film Moisture Barriers. ACS Applied Materials & Interfaces, 2020, 12, 26405-26412.	8.0	22

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19	Multiaxial Lenticular Stress-Strain Relationship of Native Myocardium is Preserved by Infarct-Induced Natural Heart Regeneration in Neonatal Mice. Scientific Reports, 2020, 10, 7319.	3.3	6
20	Self-aligned concentrating immersion-lens arrays for patterning and efficiency recovery in scaffold-reinforced perovskite solar cells. Applied Materials Today, 2020, 20, 100704.	4.3	1
21	Perspectives on intrinsic toughening strategies and passivation of perovskite films with organic additives. Solar Energy Materials and Solar Cells, 2020, 209, 110433.	6.2	25
22	Thermalâ€Disrupting Interface Mitigates Intercellular Cohesion Loss for Accurate Topical Antibacterial Therapy. Advanced Materials, 2020, 32, e1907030.	21.0	75
23	Comment on â€œLight-induced lattice expansion leads to high-efficiency perovskite solar cellsâ€. Science, 2020, 368, .	12.6	38
24	Open-Air Plasma-Deposited Multilayer Thin Film Moisture Barriers for Perovskite Solar Cells. , 2020, , .		0
25	Design of Mechanically Reliable ULK Glasses. , 2020, , .		0
26	Design of Ultrastiff Organosilicate Hybrid Glasses. Advanced Functional Materials, 2019, 29, 1904890.	14.9	11
27	Surface Chemical Functionalization to Achieve Extreme Levels of Molecular Confinement in Hybrid Nanocomposites. Advanced Functional Materials, 2019, 29, 1903132.	14.9	9
28	Hole-Transport Layer Molecular Weight and Doping Effects on Perovskite Solar Cell Efficiency and Mechanical Behavior. ACS Applied Materials & Interfaces, 2019, 11, 23757-23764.	8.0	42
29	Tearing and reliability of photovoltaic module backsheets. Progress in Photovoltaics: Research and Applications, 2019, 27, 693-705.	8.1	21
30	Open Air Plasma Deposition of Superhydrophilic Titania Coatings. Advanced Functional Materials, 2019, 29, 1806421.	14.9	25
31	Rapid Aqueous Spray Fabrication of Robust NiO_x: A Simple and Scalable Platform for Efficient Perovskite Solar Cells. Advanced Energy Materials, 2019, 9, 1803600.	19.5	62
32	High Performance Rollâ€toâ€Roll Produced Fullereneâ€Free Organic Photovoltaic Devices via Temperatureâ€Controlled Slot Die Coating. Advanced Functional Materials, 2019, 29, 1805825.	14.9	64
33	Optically Transparent Protective Coating for Plastics Using Dual Spray and Atmospheric Plasma Deposition. Advanced Materials Interfaces, 2018, 5, 1701433.	3.7	10
34	Degradation of multijunction photovoltaic gridlines induced via thermal cycling. Solar Energy Materials and Solar Cells, 2018, 179, 178-184.	6.2	10
35	Controlling Thin-Film Stress and Wrinkling during Perovskite Film Formation. ACS Energy Letters, 2018, 3, 1225-1232.	17.4	148
36	Design and understanding of encapsulated perovskite solar cells to withstand temperature cycling. Energy and Environmental Science, 2018, 11, 144-150.	30.8	314

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37	Molecular design of confined organic network hybrids with controlled deformation rate sensitivity and moisture resistance. Acta Materialia, 2018, 142, 162-171.	7.9	6
38	Poly(triarylamine) composites with carbon nanomaterials for highly transparent and conductive coatings. Thin Solid Films, 2018, 646, 61-66.	1.8	9
39	Effect of Cation Composition on the Mechanical Stability of Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1702116.	19.5	130
40	Spray Plasma Processing of Barrier Films Deposited in Air for Improved stability of Flexible Electronic Devices. , 2018, , .		0
41	The Role of Catalyst Adhesion in ALD-TiO₂ Protection of Water Splitting Silicon Anodes. ACS Applied Materials & Interfaces, 2018, 10, 37103-37109.	8.0	15
42	Engineering Stress in Perovskite Solar Cells to Improve Stability. Advanced Energy Materials, 2018, 8, 1802139.	19.5	271
43	Rapid route to efficient, scalable, and robust perovskite photovoltaics in air. Energy and Environmental Science, 2018, 11, 2102-2113.	30.8	43
44	Measurement of the biomechanical function and structure of ex vivo drying skin using raman spectral analysis and its modulation with emollient mixtures. Experimental Dermatology, 2018, 27, 901-908.	2.9	11
45	Using Unentangled Oligomers To Toughen Materials. ACS Applied Materials & Interfaces, 2018, 10, 27549-27554.	8.0	7
46	Open-air spray plasma deposited UV-absorbing nanocomposite coatings. Nanoscale, 2018, 10, 14525-14533.	5.6	10
47	Electrically Conductive Copper Coreâ€“Shell Nanowires through Benzenethiol-Directed Assembly. Nano Letters, 2018, 18, 4900-4907.	9.1	8
48	Beyond Fullerenes: Indacenodithiophene-Based Organic Charge-Transport Layer toward Upscaling of Low-Cost Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 22143-22155.	8.0	27
49	Influence of Bulky Organoâ€Ammonium Halide Additive Choice on the Flexibility and Efficiency of Perovskite Lightâ€Emitting Devices. Advanced Functional Materials, 2018, 28, 1802060.	14.9	76
50	Toward Sustainable Multifunctional Coatings Containing Nanocellulose in a Hybrid Glass Matrix. ACS Nano, 2018, 12, 5495-5503.	14.6	25
51	Understanding mechanical behavior and reliability of organic electronic materials. MRS Bulletin, 2017, 42, 115-123.	3.5	39
52	Effect of heat, UV radiation, and moisture on the decohesion kinetics of inverted organic solar cells. Solar Energy Materials and Solar Cells, 2017, 170, 239-245.	6.2	14
53	Improved stability and efficiency of perovskite solar cells with submicron flexible barrier films deposited in air. Journal of Materials Chemistry A, 2017, 5, 22975-22983.	10.3	38
54	Synthesis of Polyimides in Molecular-Scale Confinement for Low-Density Hybrid Nanocomposites. Nano Letters, 2017, 17, 7040-7044.	9.1	11

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55	Hyperconnected molecular glass network architectures with exceptional elastic properties. Nature Communications, 2017, 8, 1019.	12.8	21
56	Scaffold-reinforced perovskite compound solar cells. Energy and Environmental Science, 2017, 10, 2500-2508.	30.8	77
57	Synthesis and use of a hyper-connecting cross-linking agent in the hole-transporting layer of perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 19267-19279.	10.3	38
58	The Effects of Terminal Groups on Elastic Asymmetries in Hybrid Molecular Materials. Journal of Physical Chemistry B, 2017, 121, 9753-9759.	2.6	3
59	Effect of Mechanical Constraint on Tearing Energy of Polymer Membranes. Macromolecular Materials and Engineering, 2016, 301, 1096-1103.	3.6	4
60	Organothiolâ€Based Hybridâ€Layer Strategy for Highâ€Performance Copper Adhesion and Stressâ€Migration via Simultaneous Oxide Reduction. Advanced Materials Interfaces, 2016, 3, 1600118.	3.7	5
61	Optical properties of metal oxynitride thin films grown with atmospheric plasma deposition. Journal Physics D: Applied Physics, 2016, 49, 395302.	2.8	3
62	Degradation of silicone encapsulants in CPV optics. , 2016, , .		1
63	Adhesion of antireflective coatings in multijunction photovoltaics. , 2016, , .		0
64	Role of Carbon Bridge Length of Organosilicate Precursors on the Atmospheric Plasma Deposition of Transparent Bilayer Protective Coatings on Plastics. Plasma Processes and Polymers, 2016, 13, 1053-1060.	3.0	5
65	Fracture Mechanics and Testing of Interface Adhesion Strength in Multilayered Structures â€“ Application in Advanced Solar PV Materials and Technology. Procedia Engineering, 2016, 139, 47-55.	1.2	18
66	A stability study of roll-to-roll processed organic photovoltaic modules containing a polymeric electron-selective layer. Solar Energy Materials and Solar Cells, 2016, 152, 133-140.	6.2	16
67	Quantitative adhesion characterization of antireflective coatings in multijunction photovoltaics. Solar Energy Materials and Solar Cells, 2016, 153, 78-83.	6.2	3
68	Cross-Linkable, Solvent-Resistant Fullerene Contacts for Robust and Efficient Perovskite Solar Cells with Increased J_{SC} and V_{OC}. ACS Applied Materials & Interfaces, 2016, 8, 25896-25904.	8.0	45
69	Thermomechanical asymmetries in ULK dielectric glasses. , 2016, , .		1
70	Spray deposition of compositionally graded hybrid layers for high-performance adhesion. , 2016, , .		0
71	Elastic and thermal expansion asymmetry in dense molecular materials. Nature Materials, 2016, 15, 974-980.	27.5	20
72	Degradation of thermally-cured silicone encapsulant under terrestrial UV. Solar Energy Materials and Solar Cells, 2016, 157, 346-353.	6.2	15

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73	Mechanical integrity of solution-processed perovskite solar cells. Extreme Mechanics Letters, 2016, 9, 353-358.	4.1	150
74	Role of Stress Factors on the Adhesion of Interfaces in R2R Fabricated Organic Photovoltaics. Advanced Energy Materials, 2016, 6, 1501927.	19.5	18
75	Fundamental limits of material toughening in molecularly confined polymers. Nature Materials, 2016, 15, 294-298.	27.5	49
76	Adhesion and debonding kinetics of photovoltaic encapsulation in moist environments. Progress in Photovoltaics: Research and Applications, 2016, 24, 183-194.	8.1	37
77	Controlling kinetics of heterogeneous solâ€“gel solution for high-performance adhesive hybrid films. Journal of Sol-Gel Science and Technology, 2016, 77, 620-626.	2.4	2
78	Carbon-Bridge Incorporation in Organosilicate Coatings Using Oxidative Atmospheric Plasma Deposition. ACS Applied Materials & Interfaces, 2016, 8, 1309-1318.	8.0	11
79	Low-cost, single-step hybrid bond/barrier films for Cu bondlines in advanced packaging. , 2015, , .		0
80	Entanglements in <scp>P3HT</scp> and their influence on thinâ€film mechanical properties: Insights from molecular dynamics simulations. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 934-942.	2.1	59
81	Selective Deposition of Compositionally Graded Hybrid Adhesive Films. Advanced Materials Interfaces, 2015, 2, 1500262.	3.7	5
82	Molecular-Scale Understanding of Cohesion and Fracture in P3HT:Fullerene Blends. ACS Applied Materials & Interfaces, 2015, 7, 9957-9964.	8.0	60
83	Molecular Design for Moisture Insensitivity of Compositionally Graded Hybrid Films. ACS Applied Materials & Interfaces, 2015, 7, 6812-6818.	8.0	7
84	A catalytic alloy approach for graphene on epitaxial SiC on silicon wafers. Journal of Materials Research, 2015, 30, 609-616.	2.6	60
85	Understanding age-induced alterations to the biomechanical barrier function of human stratum corneum. Journal of Dermatological Science, 2015, 80, 94-101.	1.9	44
86	Thermal cycling effect on mechanical integrity of inverted polymer solar cells. Solar Energy Materials and Solar Cells, 2015, 143, 418-423.	6.2	23
87	Dual Precursor Atmospheric Plasma Deposition of Transparent Bilayer Protective Coatings on Plastics. ACS Applied Materials & Interfaces, 2015, 7, 17929-17934.	8.0	18
88	Nanoscale Interfacial Engineering for Flexible Barrier Films. Nano Letters, 2015, 15, 6751-6755.	9.1	10
89	Morphology and interdiffusion control to improve adhesion and cohesion properties in inverted polymer solar cells. Solar Energy Materials and Solar Cells, 2015, 132, 443-449.	6.2	24
90	Decohesion Kinetics of PEDOT:PSS Conducting Polymer Films. Advanced Functional Materials, 2014, 24, 1325-1332.	14.9	110

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91	Conductive Transparent TiN_x/TiO₂ Hybrid Films Deposited on Plastics in Air Using Atmospheric Plasma Processing. Advanced Functional Materials, 2014, 24, 3075-3081.	14.9	19
92	Toughening Thinâ€Film Structures with Ceramicâ€Like Amorphous Silicon Carbide Films. Small, 2014, 10, 253-257.	10.0	17
93	Atmospheric plasma deposition of transparent semiconducting ZnO films on plastics in ambient air. Organic Electronics, 2014, 15, 775-784.	2.6	10
94	Moisture-assisted failure mechanisms in underfill epoxy/silicon systems for microelectronic packaging. , 2014, , .		3
95	Controlling Interdiffusion, Interfacial Composition, and Adhesion in Polymer Solar Cells. Advanced Materials Interfaces, 2014, 1, 1400135.	3.7	28
96	Highly Transparent Multifunctional Bilayer Coatings on Polymers Using Low-Temperature Atmospheric Plasma Deposition. ACS Nano, 2014, 8, 7186-7191.	14.6	27
97	Environmental mechanisms of debonding in photovoltaic backsheets. Solar Energy Materials and Solar Cells, 2014, 120, 87-93.	6.2	66
98	Interface Structure of Cu Wire Bonding on Cu Substrate with Sn Plating. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2014, 78, 177-182.	0.4	0
99	Influence of network bond percolation on the thermal, mechanical, electrical and optical properties of high and low-k a-SiC:H thin films. Journal of Non-Crystalline Solids, 2013, 379, 67-79.	3.1	76
100	Improved Adhesion of Dense Silica Coatings on Polymers by Atmospheric Plasma Pretreatment. ACS Applied Materials & Interfaces, 2013, 5, 8495-8504.	8.0	31
101	Evidence of a highly compressed nanolayer at the epitaxial silicon carbide interface with silicon. Acta Materialia, 2013, 61, 6533-6540.	7.9	36
102	Adhesion properties of inverted polymer solarcells: Processing and film structure parameters. Organic Electronics, 2013, 14, 1262-1270.	2.6	66
103	Molecular Intercalation and Cohesion of Organic Bulk Heterojunction Photovoltaic Devices. Advanced Functional Materials, 2013, 23, 2863-2871.	14.9	59
104	Heterogeneous Solution Deposition of High-Performance Adhesive Hybrid Films. ACS Applied Materials & Interfaces, 2013, 5, 9891-9895.	8.0	9
105	Tunable Plasticity in Amorphous Silicon Carbide Films. ACS Applied Materials & Interfaces, 2013, 5, 7950-7955.	8.0	18
106	Tailored amorphous silicon carbide barrier dielectrics by nitrogen and oxygen doping. Thin Solid Films, 2013, 531, 552-558.	1.8	18
107	Can understanding the effect of solar UV radiation on skinâ€™s biomechanical function help prevent skin damage?. Expert Review of Dermatology, 2013, 8, 5-6.	0.3	0
108	Hybrid coupling layers for bulk metallic glass adhesion. Journal of Materials Research, 2013, 28, 3164-3169.	2.6	4

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109	A Mechanomodulatory Device to Minimize Incisional Scar Formation. Advances in Wound Care, 2013, 2, 185-194.	5.1	41
110	Moisture-assisted cracking and atomistic crack path meandering in oxidized hydrogenated amorphous silicon carbide films. Journal of Applied Physics, 2013, 113, .	2.5	8
111	Low-temperature Alâ€“Ge bonding for 3D integration. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, .	1.2	7
112	The effect of anneal, solar irradiation and humidity on the adhesion/cohesion properties of P3HT:PCBM based inverted polymer solar cells. , 2012, , .		15
113	Solar UV radiation reduces the barrier function of human skin. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 17111-17116.	7.1	222
114	Scar Zones. Plastic and Reconstructive Surgery, 2012, 129, 1272-1276.	1.4	47
115	Interface Structure of Cu Wire Bonding on Cu Substrate with Sn Plating. Materials Transactions, 2012, 53, 2091-2096.	1.2	2
116	Atmospheric Plasma Deposited Dense Silica Coatings on Plastics. ACS Applied Materials & Interfaces, 2012, 4, 6587-6598.	8.0	62
117	Biomechanics of the Barrier Function of Human Stratum Corneum. , 2012, , 233-254.		3
118	Environmentally assisted debonding of copper/barrier interfaces. Acta Materialia, 2012, 60, 2219-2228.	7.9	31
119	Contamination and moisture absorption effects on the mechanical properties of catalyst coated membranes in PEM fuel cells. International Journal of Hydrogen Energy, 2012, 37, 6790-6797.	7.1	36
120	Interlayer adhesion in roll-to-roll processed flexible inverted polymer solar cells. Solar Energy Materials and Solar Cells, 2012, 97, 171-175.	6.2	184
121	Cohesion and device reliability in organic bulk heterojunction photovoltaic cells. Solar Energy Materials and Solar Cells, 2012, 99, 182-189.	6.2	91
122	Film stresses and electrode buckling in organic solar cells. Solar Energy Materials and Solar Cells, 2012, 103, 80-85.	6.2	25
123	Effect of glycerin on drying stresses in human stratum corneum. Journal of Dermatological Science, 2011, 61, 129-131.	1.9	15
124	Improving Cutaneous Scar Formation by Controlling the Mechanical Environment. Annals of Surgery, 2011, 254, 217-225.	4.2	218
125	Mechanical durability of proton exchange membranes with catalyst platinum dispersion. Journal of Power Sources, 2011, 196, 8234-8240.	7.8	19
126	High yield four-point bend thin film adhesion testing techniques. Engineering Fracture Mechanics, 2011, 78, 2390-2398.	4.3	27

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127	Effect of cation contamination and hydrated pressure loading on the mechanical properties of proton exchange membranes. Journal of Power Sources, 2011, 196, 3803-3809.	7.8	36
128	Adhesion and degradation of hard coatings on poly (methyl methacrylate) substrates. Thin Solid Films, 2011, 519, 1907-1913.	1.8	25
129	Effects of barrier composition and electroplating chemistry on adhesion and voiding in copper/dielectric diffusion barrier films. Journal of Applied Physics, 2011, 110, 044312.	2.5	9
130	Molecular structure and fracture properties of ZrOX/Epoxysilane hybrid films. Journal of Sol-Gel Science and Technology, 2010, 55, 360-368.	2.4	31
131	Molecular Origins of the Mechanical Behavior of Hybrid Glasses. Advanced Functional Materials, 2010, 20, 2884-2892.	14.9	68
132	Mechanical Fatigue of Hybrid Glasses. Small, 2010, 6, 1892-1896.	10.0	6
133	Bondability of Cu wire on Cu substrate with Sn plating by ultrasonic. Yosetsu Gakkai Ronbunshu/Quarterly Journal of the Japan Welding Society, 2010, 28, 362-368.	0.5	3
134	Solution chemistry effects on cracking and damage evolution during chemical-mechanical planarization. Journal of Materials Research, 2010, 25, 1904-1909.	2.6	2
135	Effects of e-beam curing on glass structureand mechanical properties of nanoporous organosilicate thin films. International Journal of Materials Research, 2010, 101, 228-235.	0.3	3
136	Bilayer metal gate electrodes with tunable work function: Adhesion and interface characterization. Journal of Applied Physics, 2010, 108, .	2.5	9
137	Molecular Mobility under Nanometer Scale Confinement. Nano Letters, 2010, 10, 1955-1959.	9.1	32
138	Mechanical properties of hydrogenated amorphous silicon carbide thin films. , 2010, , .		1
139	Tailoring UV cure depth profiles for optimal mechanical properties of organosilicate thin films. Applied Physics Letters, 2009, 95, 071902.	3.3	8
140	Surfactant-controlled damage evolution during chemical mechanical planarization of nanoporous films. Acta Materialia, 2009, 57, 4687-4696.	7.9	24
141	Surfactant Mobility in Nanoporous Glass Films. Nano Letters, 2009, 9, 2427-2432.	9.1	15
142	Integration Challenges of Nanoporous Low Dielectric Constant Materials. IEEE Transactions on Device and Materials Reliability, 2009, 9, 509-515.	2.0	14
143	Effects of thermal annealing and Si incorporation on bonding structure and fracture properties of diamond-like carbon films. Diamond and Related Materials, 2009, 18, 615-619.	3.9	19
144	Superior mechanical properties of dense and porous organic/inorganic hybrid thin films. Journal of Sol-Gel Science and Technology, 2008, 48, 187-193.	2.4	68

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145	Molecularâ€Controlled Fracture and Release of Templated Nanoporous Organosilicate Thin Films. Advanced Materials, 2008, 20, 3159-3164.	21.0	10
146	Pore size scaling for enhanced fracture resistance of nanoporous polymer thin films. Acta Materialia, 2008, 56, 5946-5953.	7.9	7
147	Effect of Corneodesmosome Degradation on the Intercellular Delamination of Human Stratum Corneum. Journal of Investigative Dermatology, 2008, 128, 2345-2347.	0.7	25
148	Role of friction and loading parameters in four-point bend adhesion measurements. Journal of Materials Research, 2008, 23, 87-96.	2.6	5
149	Tuning depth profiles of organosilicate films with ultraviolet curing. Journal of Applied Physics, 2008, 104, .	2.5	22
150	Effects of UV cure on glass structure and fracture properties of nanoporous carbon-doped oxide thin films. Journal of Applied Physics, 2008, 104, 043513.	2.5	32
151	Depth dependence of ultraviolet curing of organosilicate low-k thin films. Journal of Applied Physics, 2008, 103, .	2.5	25
152	Aqueous solution diffusion in hydrophobic nanoporous thin-film glasses. Journal of Materials Research, 2007, 22, 710-718.	2.6	18
153	Stress and Slurry Chemistry Effects on CMP Damage of Ultra-Low-k Dielectrics. , 2007, , .		3
154	Assessing the Effect of Die Sealing in Cu/Low-k Structures. , 2007, , .		3
155	Time-dependant intercellular delamination of human stratum corneum. Journal of Materials Science, 2007, 42, 8986-8994.	3.7	14
156	Mechanical properties of human stratum corneum: Effects of temperature, hydration, and chemical treatment. Biomaterials, 2006, 27, 785-795.	11.4	188
157	Graded delamination behavior of human stratum corneum. Biomaterials, 2006, 27, 5861-5870.	11.4	52
158	Mode II fracture behavior of a Zr-based bulk metallic glass. Journal of the Mechanics and Physics of Solids, 2006, 54, 2418-2435.	4.8	61
159	Fatigue damage in bulk metallic glass I: Simulation. Scripta Materialia, 2006, 54, 349-353.	5.2	51
160	Fracture Properties of Porous MSSQ Films: Impact of Porogen Loading and Burnout. Materials Research Society Symposia Proceedings, 2006, 914, 1.	0.1	2
161	The Role of Nanoscale Confinement of Adhesion Promoting Molecules on the Adhesion and Resistance to Moisture Attack at the Polymer/Silicon Nitride Interface. Materials Research Society Symposia Proceedings, 2006, 924, 1.	0.1	0
162	Fracture of nanoporous methyl silsesquioxane thin-film glasses. Journal of Materials Research, 2006, 21, 882-894.	2.6	58

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163	Residual stress effects on plastic deformation and interfacial fracture in thin-film structures. Acta Materialia, 2005, 53, 1955-1961.	7.9	27
164	Benchmarking Four Point Bend Adhesion Testing: The Effect of Test Parameters On Adhesion Energy. AIP Conference Proceedings, 2005, , .	0.4	7
165	Effect of solution pH on the accelerated cracking of nanoporous thin-film glasses. Journal of Materials Research, 2005, 20, 680-687.	2.6	30
166	Indentation fracture toughness of amorphous steel. Journal of Materials Research, 2005, 20, 783-786.	2.6	51
167	Electrical technique for monitoring crack growth in thin-film fracture mechanics specimens. Journal of Materials Research, 2004, 19, 3139-3144.	2.6	8
168	Fatigue crack growth in micro-machined single-crystal silicon. Journal of Materials Research, 2004, 19, 2635-2640.	2.6	21
169	Fracture of nanoporous thin-film glasses. Nature Materials, 2004, 3, 53-57.	27.5	77
170	Toughening of nanoporous glasses using porogen residuals. Nature Materials, 2004, 3, 464-469.	27.5	66
171	Mechanisms of elevated temperature fatigue crack growth in Zrâ€“Tiâ€“Cuâ€“Niâ€“Be bulk metallic glass. Acta Materialia, 2004, 52, 3525-3533.	7.9	24
172	Fracture and deformation of bulk metallic glasses and their composites. Intermetallics, 2004, 12, 1025-1029.	3.9	55
173	Adhesion of polymer thin-films and patterned lines. International Journal of Fracture, 2003, 119/120, 475-485.	2.2	48
174	Interface Separation in Residually-Stressed Thin-Film Structures. Journal of Materials Science, 2003, 11, 309-317.	1.2	17
175	Fracture and fatigue behavior of a Zrâ€“Tiâ€“Nb ductile phase reinforced bulk metallic glass matrix composite. Scripta Materialia, 2003, 49, 1181-1187.	5.2	108
176	Effects of open-volume regions on relaxation time scales and fracture behavior of a Zrâ€“Tiâ€“Niâ€“Cuâ€“Be bulk metallic glass. Journal of Non-Crystalline Solids, 2003, 317, 181-186.	3.1	47
177	Temperature dependence of positron annihilation in a Zrâ€“Tiâ€“Niâ€“Cuâ€“Be bulk metallic glass. Journal of Materials Research, 2003, 18, 2021-2024.	2.6	25
178	Effect of Moisture and Graded-Layer Mechanical Properties on Deformation and Interfacial Adhesion. Materials Research Society Symposia Proceedings, 2003, 778, 751.	0.1	4
179	Multi-Scale Simulations of Interfacial Fracture of Nanoscale Thin-Film Structures: Effect of Length Scales and Residual Stresses. Materials Research Society Symposia Proceedings, 2003, 778, 931.	0.1	3
180	Moisture-assisted subcritical debonding of a polymer/metal interface. Journal of Applied Physics, 2002, 91, 1293-1303.	2.5	85

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181	Mechanical Relaxation Time Scales in a Zrâ€“Tiâ€“Niâ€“Cuâ€“Be Bulk Metallic Glass. Journal of Materials Research, 2002, 17, 1254-1257.	2.6	41
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