

Richard P Vinci

List of Publications by Year in descending order

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55
papers

1,162
citations

430874

18
h-index

395702

33
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56
all docs

56
docs citations

56
times ranked

1088
citing authors

#	ARTICLE	IF	CITATIONS
1	The influence of grain boundary area on the complex time-temperature-transformation diagram of Eu-doped magnesium aluminate spinel. <i>Scripta Materialia</i> , 2020, 178, 251-255.	5.2	8
2	Single crystal growth of CoTi ₂ O ₅ by solid state reaction synthesis. <i>Journal of the American Ceramic Society</i> , 2019, 102, 5050-5062.	3.8	7
3	Novel metal-ceramic composite microstructures produced through the partial reduction of CoTiO ₃ . <i>Journal of Materials Science</i> , 2018, 53, 8193-8210.	3.7	5
4	Surface energies, segregation, and fracture behavior of magnesium aluminate spinel low-index grain boundary planes. <i>Acta Materialia</i> , 2018, 148, 320-329.	7.9	17
5	The effect of grain size on viscoelastic relaxation behavior of Au thin films. <i>Scripta Materialia</i> , 2018, 155, 1-4.	5.2	8
6	Microstructure and fracture toughness of electrodeposited Ni-21at.% W alloy thick films. <i>Acta Materialia</i> , 2018, 143, 272-280.	7.9	34
7	A chevron-notched bowtie micro-beam bend test for fracture toughness measurement of brittle materials. <i>Scripta Materialia</i> , 2017, 132, 53-57.	5.2	17
8	The Effect of Aging on the Microstructure of Selective Laser Melted Cu-Ni-Si. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2017, 48, 6070-6082.	2.2	25
9	Statistically-substantiated density characterizations of additively manufactured steel alloys through verification, validation, and uncertainty quantification. , 2017, , .		1
10	Aberration-Corrected Scanning Transmission Electron Microscope (STEM) Through-Focus Imaging for Three-Dimensional Atomic Analysis of Bismuth Segregation on Copper [001]/33° Twist Bicrystal Grain Boundaries. <i>Microscopy and Microanalysis</i> , 2016, 22, 679-689.	0.4	3
11	Complex time-temperature-transformation (TTT) diagrams: Opportunities and challenges. <i>Current Opinion in Solid State and Materials Science</i> , 2016, 20, 316-323.	11.5	31
12	Viscoelastic mechanical properties measurement of thin Al and Al-Mg films using bulge testing. <i>Thin Solid Films</i> , 2016, 618, 2-7.	1.8	18
13	Driving forces for texture transformation in thin Ag films. <i>Acta Materialia</i> , 2016, 105, 495-504.	7.9	20
14	Correlations between microstructure, fracture morphology, and fracture toughness of nanocrystalline Ni-W alloys. <i>Scripta Materialia</i> , 2016, 113, 84-88.	5.2	23
15	Effect of Intermetallics on Pt-Al Surface Coatings Colour. <i>Defect and Diffusion Forum</i> , 2014, 353, 259-262.	0.4	2
16	Solid State Annealing Behavior of Aluminum Thin Films on Sapphire. <i>Journal of the American Ceramic Society</i> , 2012, 95, 823-830.	3.8	10
17	Sol-Gel-Derived Single-Crystal Alumina Coatings with Vermicular Structure. <i>Journal of the American Ceramic Society</i> , 2011, 94, 340-343.	3.8	8
18	Dislocation structure of GaN films grown on planar and nano-patterned sapphire. <i>Journal of Applied Physics</i> , 2011, 110, .	2.5	23

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19	Abbreviated GaN metalorganic vapor phase epitaxy growth mode on nano-patterned sapphire for enhanced efficiency of InGaN-based light-emitting diodes. , 2010, , .		0
20	Abbreviated MOVPE nucleation of III-nitride light-emitting diodes on nano-patterned sapphire. Journal of Crystal Growth, 2010, 312, 1311-1315.	1.5	106
21	Temperature-Dependent Viscoelasticity in Thin Au Films and Consequences for MEMS Devices. Journal of Microelectromechanical Systems, 2010, 19, 1299-1308.	2.5	33
22	Metalorganic Vapor Phase Epitaxy of III-Nitride Light-Emitting Diodes on Nanopatterned AGOG Sapphire Substrate by Abbreviated Growth Mode. IEEE Journal of Selected Topics in Quantum Electronics, 2009, 15, 1066-1072.	2.9	157
23	Templated epitaxial coatings on magnesium aluminate spinel using the sol-gel method. Journal of Materials Science, 2009, 44, 1180-1186.	3.7	12
24	Growths of InGaN Quantum Wells Light-Emitting Diodes on Nano-Patterned AGOG Sapphire Substrate Using Abbreviated Growth Mode. , 2009, , .		0
25	Precision in-package positioning with a thermal inchworm. Sensors and Actuators A: Physical, 2008, 142, 316-321.	4.1	7
26	Design of a bidirectional MEMS actuator with high displacement resolution, large driving force and power-free latching. Microelectronic Engineering, 2008, 85, 587-598.	2.4	8
27	Thermal stability of Cu nanowires on a sapphire substrate. Journal of Applied Physics, 2008, 103, .	2.5	36
28	The electrical and mechanical properties of Auâ€“V and Auâ€“V2O5 thin films for wear-resistant RF MEMS switches. Journal of Applied Physics, 2008, 103, 083522.	2.5	16
29	Improved Photoluminescence of InGaN Quantum Wells Grown on Nano-Patterned AGOG Sapphire Substrate by Metalorganic Vapor Phase Epitaxy. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	1
30	Fabrication of Pt-IrO_x and Au-V₂O₅ Thin Films. Key Engineering Materials, 2007, 345-346, 735-740.	0.4	2
31	The influence of vanadium alloying on the elevated-temperature mechanical properties of thin gold films. Thin Solid Films, 2007, 515, 7919-7925.	1.8	10
32	Sub-Surface Oxidation at the Aluminum/Sapphire Interface During Low-Temperature Annealing. Journal of the American Ceramic Society, 2007, 90, 2571-2575.	3.8	8
33	Temperature-dependent microtensile testing of thin film materials for application to microelectromechanical system. Microsystem Technologies, 2006, 12, 1045-1051.	2.0	25
34	Fabrication and Morphological Stability of Aluminium Nanostructures En Route to Nanopatterned Sapphire. Advances in Science and Technology, 2006, 45, 945.	0.2	0
35	Novel room-temperature first-level packaging process for microscale devices. Sensors and Actuators A: Physical, 2005, 123-124, 646-654.	4.1	21
36	Linear viscoelasticity in aluminum thin films. Applied Physics Letters, 2005, 87, 061902.	3.3	16

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37	Patterning of sapphire substrates via a solid state conversion process. Journal of Materials Research, 2005, 20, 417-423.	2.6	25
38	Microstructural evolution in lead-free solder alloys: Part II. Directionally solidified Sn-Ag-Cu, Sn-Cu and Sn-Ag. Journal of Materials Research, 2004, 19, 1425-1431.	2.6	57
39	Microstructural evolution in lead-free solder alloys: Part I. Cast Sn-Ag-Cu eutectic. Journal of Materials Research, 2004, 19, 1417-1424.	2.6	85
40	Mechanical behavior of Pt and Pt-Ru solid solution alloy thin films. Acta Materialia, 2004, 52, 4199-4211.	7.9	34
41	Imaging and mechanical property measurements of kerogen via nanoindentation. Geochimica Et Cosmochimica Acta, 2004, 68, 4113-4119.	3.9	114
42	Stress relaxation in nanoscale aluminum films. , 2004, 5343, 154.		4
43	Internal Oxidation and Mechanical Properties of Pt-IrO ₂ Thin Films. Materials Research Society Symposia Proceedings, 2003, 795, 445.	0.1	0
44	Monotonic Testing and Tension-Tension Fatigue Testing of Free-standing Al Microtensile Beams. Materials Research Society Symposia Proceedings, 2003, 795, 170.	0.1	3
45	Mechanical Properties in Small Dimensions: Comments from Industry. MRS Bulletin, 2002, 27, 52-53.	3.5	2
46	Effect of Interface Conditions on Yield Behavior of Passivated Copper Thin Films. Journal of Materials Research, 2002, 17, 1863-1870.	2.6	15
47	Mechanical Properties in Small Dimensions. MRS Bulletin, 2002, 27, 12-17.	3.5	18
48	Solid Solution Alloy Effects on Microstructure and Indentation Hardness in Pt-Ru Thin Films. Materials Research Society Symposia Proceedings, 2001, 673, 1.	0.1	2
49	Metal Adhesion to 100 Si Substrates with Varying Surface Conditions. Materials Research Society Symposia Proceedings, 2001, 695, 1.	0.1	3
50	Study of the effect of grain boundary migration on hillock formation in Al thin films. Journal of Applied Physics, 2001, 90, 781-788.	2.5	49
51	In-Situ Observations of Shear Band Development during Deformation of a Bulk Metallic Glass. Materials Research Society Symposia Proceedings, 2000, 644, 1021.	0.1	3
52	Non-Destructive Evaluation of Strains and Voiding in Passivated Copper Metallizations. Materials Research Society Symposia Proceedings, 1993, 308, 297.	0.1	13
53	Stress in Copper Thin Films with Barrier Layers. Materials Research Society Symposia Proceedings, 1993, 308, 337.	0.1	10
54	Non-Destructive Evaluation of Strains and Voiding in Passivated copper Metallizations. Materials Research Society Symposia Proceedings, 1993, 309, 229.	0.1	1

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55	Stress in Copper thin Films With Barrier Layers. Materials Research Society Symposia Proceedings, 1993, 309, 269.	0.1	6