

Kenneth S Vecchio

List of Publications by Year in descending order

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200
papers

13,589
citations

18436

62
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24179

110
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all docs

200
docs citations

200
times ranked

11267
citing authors

#	ARTICLE	IF	CITATIONS
1	Color and pseudogap tunability in multicomponent carbonitrides. <i>Materials and Design</i> , 2022, 217, 110600.	3.3	2
2	Processing-dependent stabilization of a dissimilar rare-earth boride in high-entropy (Ti _{0.2} Zr _{0.2} Hf _{0.2} Ta _{0.2} Er _{0.2})B ₂ with enhanced hardness and grain boundary segregation. <i>Journal of the European Ceramic Society</i> , 2022, 42, 5164-5171.	2.8	11
3	Efficient few-shot machine learning for classification of EBSD patterns. <i>Scientific Reports</i> , 2021, 11, 8172.	1.6	17
4	High-entropy rare earth tetraborides. <i>Journal of the European Ceramic Society</i> , 2021, 41, 2968-2973.	2.8	28
5	An Acquisition Parameter Study for Machine-Learning-Enabled Electron Backscatter Diffraction. <i>Microscopy and Microanalysis</i> , 2021, 27, 776-793.	0.2	4
6	Autonomous EBSD Pattern Classification Performance with Changing Acquisition Parameters. <i>Microscopy and Microanalysis</i> , 2021, 27, 2490-2493.	0.2	0
7	Mesoscale hetero-deformation induced (HDI) stress in FeAl-based metallic-intermetallic laminate (MIL) composites. <i>Acta Materialia</i> , 2021, 213, 116949.	3.8	13
8	A universal configurational entropy metric for high-entropy materials. <i>Scripta Materialia</i> , 2021, 201, 113974.	2.6	64
9	Bulk high-entropy hexaborides. <i>Journal of the European Ceramic Society</i> , 2021, 41, 5775-5781.	2.8	22
10	High-throughput rapid experimental alloy development (HT-READ). <i>Acta Materialia</i> , 2021, 221, 117352.	3.8	23
11	Development of ultrahigh-entropy ceramics with tailored oxidation behavior. <i>Journal of the European Ceramic Society</i> , 2021, 41, 5791-5800.	2.8	29
12	Enhancing plasticity in high-entropy refractory ceramics via tailoring valence electron concentration. <i>Materials and Design</i> , 2021, 209, 109932.	3.3	32
13	Orientation-dependent superelasticity of a metastable high-entropy alloy. <i>Applied Physics Letters</i> , 2021, 119, 161908.	1.5	3
14	Novel remapping approach for HR-EBSD based on demons registration. <i>Ultramicroscopy</i> , 2020, 208, 112851.	0.8	20
15	A computer vision approach to study surface deformation of materials. <i>Measurement Science and Technology</i> , 2020, 31, 055602.	1.4	10
16	Thermal conductivity and hardness of three single-phase high-entropy metal diborides fabricated by borocarbothermal reduction and spark plasma sintering. <i>Ceramics International</i> , 2020, 46, 6906-6913.	2.3	107
17	High-entropy monoborides: Towards superhard materials. <i>Scripta Materialia</i> , 2020, 189, 101-105.	2.6	57
18	The effect of oxides on Fe/Al interfacial reaction in Metal-Intermetallic Laminate (MIL) composites. <i>Journal of Alloys and Compounds</i> , 2020, 845, 156268.	2.8	10

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19	Cold-workable refractory complex concentrated alloys with tunable microstructure and good room-temperature tensile behavior. <i>Scripta Materialia</i> , 2020, 188, 16-20.	2.6	24
20	Searching for high entropy alloys: A machine learning approach. <i>Acta Materialia</i> , 2020, 198, 178-222.	3.8	107
21	Bulk high-entropy nitrides and carbonitrides. <i>Scientific Reports</i> , 2020, 10, 21288.	1.6	85
22	Design, fabrication and optimization of FeAl ¹⁶ FeAl ₂ eutectoid metallic-intermetallic laminate (MIL) composites. <i>Materialia</i> , 2020, 13, 100859.	1.3	9
23	Phase Mapping in EBSD Using Convolutional Neural Networks. <i>Microscopy and Microanalysis</i> , 2020, 26, 458-468.	0.2	17
24	Deep Neural Network Enabled Space Group Identification in EBSD. <i>Microscopy and Microanalysis</i> , 2020, 26, 447-457.	0.2	21
25	Electromigration effect in Fe-Al diffusion couples with field-assisted sintering. <i>Acta Materialia</i> , 2020, 186, 631-643.	3.8	32
26	Crystal symmetry determination in electron diffraction using machine learning. <i>Science</i> , 2020, 367, 564-568.	6.0	99
27	Discovery of high-entropy ceramics via machine learning. <i>Npj Computational Materials</i> , 2020, 6, .	3.5	133
28	Deformation and fracture evolution of FeAl-based metallic-intermetallic laminate (MIL) composites. <i>Acta Materialia</i> , 2020, 194, 496-515.	3.8	20
29	Aged metastable high-entropy alloys with heterogeneous lamella structure for superior strength-ductility synergy. <i>Acta Materialia</i> , 2020, 199, 602-612.	3.8	72
30	Dissolving and stabilizing soft WB ₂ and MoB ₂ phases into high-entropy borides via boron-metals reactive sintering to attain higher hardness. <i>Journal of the European Ceramic Society</i> , 2020, 40, 4348-4353.	2.8	71
31	Dual-phase high-entropy ultra-high temperature ceramics. <i>Journal of the European Ceramic Society</i> , 2020, 40, 5037-5050.	2.8	91
32	Spark plasma sintering of structure-tailored ultrahigh-temperature components: First step to complex net-shaping. <i>Journal of the American Ceramic Society</i> , 2019, 102, 548-558.	1.9	9
33	Extraordinary strength-ductility synergy in a heterogeneous-structured $\hat{\text{I}}^2$ -Ti alloy through microstructural optimization. <i>Materials Research Letters</i> , 2019, 7, 467-473.	4.1	61
34	Automated Reconstruction of Spherical Kikuchi Maps. <i>Microscopy and Microanalysis</i> , 2019, 25, 912-923.	0.2	9
35	Effect of twinned-structure on deformation behavior and correlated mechanical properties in a metastable $\hat{\text{I}}^2$ -Ti alloy. <i>Journal of Alloys and Compounds</i> , 2019, 811, 152054.	2.8	6
36	High-Throughput Identification of Crystal Structures Via Machine Learning. <i>Microscopy and Microanalysis</i> , 2019, 25, 2258-2259.	0.2	0

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37	Design, fabrication and characterization of FeAl-based metallic-intermetallic laminate (MIL) composites. <i>Acta Materialia</i> , 2019, 175, 445-456.	3.8	36
38	Reactive flash spark plasma sintering of high-entropy ultrahigh temperature ceramics. <i>Scripta Materialia</i> , 2019, 170, 106-110.	2.6	101
39	A high-entropy silicide: (Mo _{0.2} Nb _{0.2} Ta _{0.2} Ti _{0.2} W _{0.2})Si ₂ . <i>Journal of Materiomics</i> , 2019, 5, 337-343.	2.8	159
40	Phase stability and mechanical properties of novel high entropy transition metal carbides. <i>Acta Materialia</i> , 2019, 166, 271-280.	3.8	422
41	Grain boundary precipitation of tantalum and NiAl in superelastic FeNiCoAlTaB alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 743, 372-381.	2.6	29
42	Non-equiatomic FeNiCoAl-based high entropy alloys with multiscale heterogeneous lamella structure for strength and ductility. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 743, 361-371.	2.6	50
43	Multifunctional Non-Equiatomic High Entropy Alloys with Superelastic, High Damping, and Excellent Cryogenic Properties. <i>Advanced Engineering Materials</i> , 2019, 21, 1800941.	1.6	31
44	High-entropy fluorite oxides. <i>Journal of the European Ceramic Society</i> , 2018, 38, 3578-3584.	2.8	399
45	Spark erosion as a high-throughput method for producing bimodal nanostructured 316L stainless steel powder. <i>Powder Technology</i> , 2018, 328, 156-166.	2.1	11
46	Application of a novel new multispectral nanoparticle tracking technique. <i>Measurement Science and Technology</i> , 2018, 29, 065002.	1.4	10
47	Observations on {332} <math>\gamma</math> twinning-induced softening in Ti-Nb Gum metal. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 724, 189-198.	2.6	21
48	A new class of high-entropy perovskite oxides. <i>Scripta Materialia</i> , 2018, 142, 116-120.	2.6	560
49	High-entropy high-hardness metal carbides discovered by entropy descriptors. <i>Nature Communications</i> , 2018, 9, 4980.	5.8	604
50	Dislocation-type evolution in quasi-statically compressed polycrystalline nickel. <i>Acta Materialia</i> , 2018, 155, 104-116.	3.8	124
51	Design of non-equiatomic high entropy alloys with heterogeneous lamella structure towards strength-ductility synergy. <i>Scripta Materialia</i> , 2018, 154, 78-82.	2.6	67
52	The search for high entropy alloys: A high-throughput ab-initio approach. <i>Acta Materialia</i> , 2018, 159, 364-383.	3.8	142
53	Enhancement of <math>\gamma</math> recrystallization texture in non-equiatomic Fe-Ni-Co-Al-based high entropy alloys by combination of annealing and Cr addition. <i>Journal of Alloys and Compounds</i> , 2018, 768, 277-286.	2.8	18
54	Lightweight Open-Cell Scaffolds from Sea Urchin Spines with Superior Material Properties for Bone Defect Repair. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 9862-9870.	4.0	15

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55	An experimental investigation on the notch toughness of Cu-Zr-based bulk metallic glasses with in-situ crystallization. <i>Journal of Non-Crystalline Solids</i> , 2017, 469, 70-78.	1.5	14
56	Microstructure evolution in Ni and Ni-superalloy based metallic-intermetallic laminate (MIL) composites. <i>Intermetallics</i> , 2017, 87, 70-80.	1.8	18
57	Investigation of the shear response and geometrically necessary dislocation densities in shear localization in high-purity titanium. <i>International Journal of Plasticity</i> , 2017, 92, 148-163.	4.1	31
58	Dynamic deformation and failure of ultrafine-grained titanium. <i>Acta Materialia</i> , 2017, 125, 210-218.	3.8	82
59	Phase stability dependence of deformation mode correlated mechanical properties and elastic properties in Ti-Nb gum metal. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 702, 173-183.	2.6	19
60	Dynamic compressive strength and mechanism of failure of Al-W fiber composite tubes with ordered mesostructure. <i>International Journal of Impact Engineering</i> , 2017, 100, 1-6.	2.4	8
61	Optimizing Bulk Metallic Glasses for Robust, Highly Wear-Resistant Gears. <i>Advanced Engineering Materials</i> , 2017, 19, 1600541.	1.6	54
62	Microstructure evolution in pure Ni and Invar-based Metallic-Intermetallic Laminate (MIL) composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 682, 454-465.	2.6	19
63	Effects of aging and cooling rate on the transformation of nanostructured Ti-50.8Ni. <i>Journal of Alloys and Compounds</i> , 2017, 693, 150-163.	2.8	11
64	High-Entropy Metal Diborides: A New Class of High-Entropy Materials and a New Type of Ultrahigh Temperature Ceramics. <i>Scientific Reports</i> , 2016, 6, 37946.	1.6	721
65	Effect of zirconium purity on the glass-forming-ability and notch toughness of Cu ₄₃ Zr ₄₃ Al ₇ Be ₇ . <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 674, 397-405.	2.6	3
66	Determination of geometrically necessary dislocations in large shear strain localization in aluminum. <i>Acta Materialia</i> , 2016, 118, 383-394.	3.8	76
67	Fragmentation and constitutive response of tailored mesostructured aluminum compacts. <i>Journal of Applied Physics</i> , 2016, 119, .	1.1	11
68	Annealing effects on the microstructure and properties of an Fe-based Metallic-Intermetallic Laminate (MIL) composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 665, 47-58.	2.6	21
69	Microstructure evolution in Fe-based-aluminide metallic-intermetallic laminate (MIL) composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 649, 325-337.	2.6	52
70	Fracture toughness of Ceramic-Fiber-Reinforced Metallic-Intermetallic-Laminate (CFR-MIL) composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 649, 407-416.	2.6	68
71	Microstructure evolution in a martensitic 430 stainless steel-Al metallic-intermetallic laminate (MIL) composite. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 643, 72-85.	2.6	39
72	Investigation into dynamic response of a three-point bend specimen in a Hopkinson bar loaded fracture test using numerical methods. <i>Advances in Mechanical Engineering</i> , 2015, 7, 168781401559131.	0.8	1

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73	Numerical Investigation of the Ballistic Performance of Metal-Intermetallic Laminate Composites. <i>Applied Composite Materials</i> , 2015, 22, 437-456.	1.3	29
74	Calcium phosphate-bearing matrices induce osteogenic differentiation of stem cells through adenosine signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 990-995.	3.3	302
75	Catalytic Effect of Ni and Fe Addition to Gasifier Bed Material in the Steam Reforming of Producer Gas. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 13656-13666.	1.8	32
76	Conversion of natural marine skeletons as scaffolds for bone tissue engineering. <i>Frontiers of Materials Science</i> , 2013, 7, 103-117.	1.1	54
77	Tar and CO ₂ removal from simulated producer gas with activated carbon and charcoal. <i>Fuel Processing Technology</i> , 2013, 106, 201-208.	3.7	26
78	Three-dimensional scaffolding to investigate neuronal derivatives of human embryonic stem cells. <i>Biomedical Microdevices</i> , 2012, 14, 829-838.	1.4	60
79	Cancer cell migration within 3D layer-by-layer microfabricated photocrosslinked PEG scaffolds with tunable stiffness. <i>Biomaterials</i> , 2012, 33, 7064-7070.	5.7	107
80	Wallner lines in a nanocrystalline Ni-23% Fe alloy. <i>Scripta Materialia</i> , 2012, 67, 907-910.	2.6	1
81	Bacterial Toxin-Triggered Drug Release from Gold Nanoparticle-Stabilized Liposomes for the Treatment of Bacterial Infection. <i>Journal of the American Chemical Society</i> , 2011, 133, 4132-4139.	6.6	243
82	Evolution of Iridium-Based Molecular Catalysts during Water Oxidation with Ceric Ammonium Nitrate. <i>Journal of the American Chemical Society</i> , 2011, 133, 19024-19027.	6.6	193
83	Thermal stability and crystallization phenomena of low cost Ti-based bulk metallic glass. <i>Journal of Non-Crystalline Solids</i> , 2011, 357, 3393-3398.	1.5	15
84	Loading rate effects on the R-curve behavior of cortical bone. <i>Acta Biomaterialia</i> , 2011, 7, 724-732.	4.1	45
85	Effects of ductile phase volume fraction on the mechanical properties of Ti-Al ₃ Ti metal-intermetallic laminate (MIL) composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 3134-3146.	2.6	120
86	Effects of age and loading rate on equine cortical bone failure. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2011, 4, 57-75.	1.5	76
87	A study of the dynamic compressive behavior of Elk antler. <i>Materials Science and Engineering C</i> , 2011, 31, 1030-1041.	3.8	17
88	Aging effects on hardness and dynamic compressive behavior of Ti-55Ni (at.%) alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010, 527, 1665-1676.	2.6	63
89	Influence of cold work and texture on the high-strain-rate response of Nitinol. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010, 527, 5255-5267.	2.6	13
90	Use of Brazilian disk test to determine properties of metallic-intermetallic laminate composites. <i>Jom</i> , 2010, 62, 35-40.	0.9	26

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91	Dynamic fracture resilience of elk antler: Biomimetic inspiration for improved crashworthiness. <i>Jom</i> , 2010, 62, 41-46.	0.9	9
92	Influence of anisotropy (crystallographic and microstructural) on spallation in Zr, Ta, HY-100 steel, and 1080 eutectoid steel. <i>International Journal of Fracture</i> , 2010, 163, 243-258.	1.1	29
93	Templated Mineralization of Synthetic Hydrogels for Bone-Like Composite Materials: Role of Matrix Hydrophobicity. <i>Biomacromolecules</i> , 2010, 11, 2060-2068.	2.6	69
94	Stimuli-Responsive Liposome Fusion Mediated by Gold Nanoparticles. <i>ACS Nano</i> , 2010, 4, 1935-1942.	7.3	145
95	Aspectos microestruturais da falha de um aço IF deformado via compressão dinâmica a -196°C. <i>Revista Escola De Minas</i> , 2009, 62, 167-173.	0.1	1
96	The response of carbon nanotube ensembles to fluid flow: Applications to mechanical property measurement and diagnostics. <i>Journal of Applied Physics</i> , 2009, 106, .	1.1	15
97	High Strength (Ti ₅₈ Ni ₂₈ Cu ₈ Si ₄ Sn ₂) ₁₀₀ Mo ₅ Nanoeutectic Matrix Dendrite, BMG-Derived Composites with Enhanced Plasticity and Corrosion Resistance. <i>Advanced Engineering Materials</i> , 2009, 11, 885-891.	1.6	5
98	Semi-solid induction forging of metallic glass matrix composites. <i>Jom</i> , 2009, 61, 11-17.	0.9	40
99	Mechanical Behavior and Microstructural Development of Low-Carbon Steel and Microcomposite Steel Reinforcement Bars Deformed under Quasi-Static and Dynamic Shear Loading. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2009, 40, 1835-1850.	1.1	21
100	Modeling the amorphous forming ability of Ti-based alloys with wide supercooled liquid regions and high hardness. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 506, 94-100.	2.6	20
101	Development of bioresorbable Mg-substituted tricalcium phosphate scaffolds for bone tissue engineering. <i>Materials Science and Engineering C</i> , 2009, 29, 2003-2010.	3.8	11
102	Dimensional control of multi-walled carbon nanotubes in floating-catalyst CVD synthesis. <i>Carbon</i> , 2009, 47, 2085-2094.	5.4	54
103	Evaluation of glass-forming ability in metals using multi-model techniques. <i>Journal of Alloys and Compounds</i> , 2009, 471, 222-240.	2.8	19
104	Hopkinson Bar Loaded Fracture Experimental Technique: A Critical Review of Dynamic Fracture Toughness Tests. <i>Applied Mechanics Reviews</i> , 2009, 62, .	4.5	141
105	Effect of Mo-Fe substitution on glass forming ability, thermal stability, and hardness of Fe-Ca-B-Mo-Cr-W bulk amorphous alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 490, 221-228.	2.6	11
106	Preparation, characterization and mechanical performance of dense β -TCP ceramics with/without magnesium substitution. <i>Journal of Materials Science: Materials in Medicine</i> , 2008, 19, 3063-3070.	1.7	26
107	Aging and loading rate effects on the mechanical behavior of equine bone. <i>Jom</i> , 2008, 60, 39-44.	0.9	15
108	Devitrification and Cooling Rate Effects on Microstructure and Mechanical Properties in Fe ₅₇ C ₉ B ₁₁ Mo ₁₂ Cr ₈ W ₃ Bulk Metallic Glass. <i>Advanced Engineering Materials</i> , 2008, 10, 1056-1063.	1.6	3

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109	Development of quaternary Fe-based bulk metallic glasses. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 492, 230-235.	2.6	28
110	MECHANICAL AND MICROSTRUCTURAL PROPERTIES OF PTFE-Al-W SYSTEM. <i>AIP Conference Proceedings</i> , 2008, , .	0.3	6
111	Length and the Oxidation Kinetics of Chemical-Vapor-Deposition-Generated Multiwalled Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2008, 112, 10108-10113.	1.5	14
112	Effect of Mo-Fe substitution on glass forming ability and thermal stability of Fe-Ca-B-Mo-Cr-W bulk amorphous alloys. <i>Journal of Non-Crystalline Solids</i> , 2008, 354, 4550-4555.	1.5	5
113	Particle size effect on strength, failure, and shock behavior in polytetrafluoroethylene-Al-W granular composite materials. <i>Journal of Applied Physics</i> , 2008, 104, .	1.1	113
114	The influence of metallic particle size on the mechanical properties of polytetrafluoroethylene-Al-W powder composites. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	42
115	Optical determination of the flexural rigidity of carbon nanotube ensembles. <i>Applied Physics Letters</i> , 2008, 92, 173106.	1.5	8
116	The Mechanical Response of Aligned Carbon Nanotube Mats via Transmitted Laser Intensity Measurements. , 2008, , .		1
117	Experimental investigation of dynamic effects in a two-bar/three-point bend fracture test. <i>Review of Scientific Instruments</i> , 2007, 78, 063903.	0.6	32
118	Electroplating of Copper-Alumina Nanocomposite Films with an Impinging Jet Electrode. <i>Journal of the Electrochemical Society</i> , 2007, 154, D394.	1.3	16
119	Mechanical behavior of ultralong multiwalled carbon nanotube mats. <i>Journal of Applied Physics</i> , 2007, 101, 023512.	1.1	74
120	Modeling and validation of the large deformation inelastic response of amorphous polymers over a wide range of temperatures and strain rates. <i>International Journal of Solids and Structures</i> , 2007, 44, 7938-7954.	1.3	201
121	Conversion of sea urchin spines to Mg-substituted tricalcium phosphate for bone implants. <i>Acta Biomaterialia</i> , 2007, 3, 785-793.	4.1	63
122	Damage evolution in Ti6Al4V-Al3Ti metal-intermetallic laminate composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007, 443, 1-15.	2.6	57
123	Thermal history analysis of friction stir processed and submerged friction stir processed aluminum. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007, 465, 165-175.	2.6	53
124	Prediction of glass-forming compositions using liquidus temperature calculations. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007, 471, 135-143.	2.6	26
125	A microstructural investigation of adiabatic shear bands in an interstitial free steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007, 457, 205-218.	2.6	132
126	Hydrothermal synthesis of hydroxyapatite rods. <i>Journal of Crystal Growth</i> , 2007, 308, 133-140.	0.7	97

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127	Improved Pulse Shaping to Achieve Constant Strain Rate and Stress Equilibrium in Split-Hopkinson Pressure Bar Testing. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2007, 38, 2655-2665.	1.1	88
128	Dynamic Effects in Hopkinson Bar Four-Point Bend Fracture. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2007, 38, 2896-2906.	1.1	17
129	Fracture of Nitinol under Quasistatic and Dynamic Loading. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2007, 38, 2907-2915.	1.1	20
130	Superelasticity in a New Biolimplant Material: Ni-rich 55NiTi Alloy. <i>Experimental Mechanics</i> , 2007, 47, 365-371.	1.1	68
131	Influence of Molecular Conformation on the Constitutive Response of Polyethylene: A Comparison of HDPE, UHMWPE, and PEX. <i>Experimental Mechanics</i> , 2007, 47, 381-393.	1.1	84
132	Conversion of bulk seashells to biocompatible hydroxyapatite for bone implants. <i>Acta Biomaterialia</i> , 2007, 3, 910-918.	4.1	197
133	Local Heating of Discrete Droplets Using Magnetic Porous Silicon-Based Photonic Crystals. <i>Journal of the American Chemical Society</i> , 2006, 128, 7938-7946.	6.6	61
134	Constitutive modeling of polymer materials at impact loading rates. <i>European Physical Journal Special Topics</i> , 2006, 134, 103-107.	0.2	2
135	Influence of temperature and strain rate on the mechanical behavior of three amorphous polymers: Characterization and modeling of the compressive yield stress. <i>International Journal of Solids and Structures</i> , 2006, 43, 2318-2335.	1.3	451
136	Prediction of carbon nanotube growth success by the analysis of carbon-catalyst binary phase diagrams. <i>Carbon</i> , 2006, 44, 267-275.	5.4	249
137	Response of NiTi shape memory alloy at high strain rate: A systematic investigation of temperature effects on tension-compression asymmetry. <i>Acta Materialia</i> , 2006, 54, 4609-4620.	3.8	106
138	Dynamic fracture of bovine bone. <i>Materials Science and Engineering C</i> , 2006, 26, 1325-1332.	3.8	100
139	Mechanical properties and structure of <i>Strombus gigas</i> , <i>Tridacna gigas</i> , and <i>Haliotis rufescens</i> sea shells: A comparative study. <i>Materials Science and Engineering C</i> , 2006, 26, 1380-1389.	3.8	129
140	Thermogravimetric Analysis of Synthesis Variation Effects on CVD Generated Multiwalled Carbon Nanotubes. <i>Journal of Physical Chemistry B</i> , 2006, 110, 1179-1186.	1.2	109
141	Creation of dense hydroxyapatite (synthetic bone) by hydrothermal conversion of seashells. <i>Materials Science and Engineering C</i> , 2006, 26, 1445-1450.	3.8	35
142	Synthesis optimization and characterization of multiwalled carbon nanotubes. <i>Journal of Electronic Materials</i> , 2006, 35, 211-223.	1.0	20
143	Carbon Nanotube-Based Fluid Flow/Shear Sensors. <i>Materials Research Society Symposia Proceedings</i> , 2006, 963, 1.	0.1	2
144	A unified model for stiffness modulus of amorphous polymers across transition temperatures and strain rates. <i>Polymer</i> , 2005, 46, 8194-8201.	1.8	149

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145	Submerged friction stir processing (SFSP): An improved method for creating ultra-fine-grained bulk materials. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005, 402, 234-241.	2.6	153
146	Synthetic multifunctional metallic-intermetallic laminate composites. <i>Jom</i> , 2005, 57, 25-31.	0.9	146
147	Fracture of Ti-Al3Ti metal-intermetallic laminate composites: Effects of lamination on resistance-curve behavior. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2005, 36, 3217-3236.	1.1	65
148	Effects of ductile laminate thickness, volume fraction, and orientation on fatigue-crack propagation in Ti-Al3Ti metal-intermetallic laminate composites. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2005, 36, 1595-1608.	1.1	80
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