

Kenneth S Vecchio

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

196
papers

9,813
citations

54
h-index

93
g-index

200
ext. papers

11,712
ext. citations

5.4
avg, IF

6.57
L-index

#	Paper	IF	Citations
196	Color and pseudogap tunability in multicomponent carbonitrides. <i>Materials and Design</i> , 2022 , 217, 1106001	3.4	0
195	Orientation-dependent superelasticity of a metastable high-entropy alloy. <i>Applied Physics Letters</i> , 2021 , 119, 161908	3.4	0
194	Efficient few-shot machine learning for classification of EBSD patterns. <i>Scientific Reports</i> , 2021 , 11, 81724.9	4.9	6
193	High-entropy rare earth tetraborides. <i>Journal of the European Ceramic Society</i> , 2021 , 41, 2968-2973	6	10
192	An Acquisition Parameter Study for Machine-Learning-Enabled Electron Backscatter Diffraction. <i>Microscopy and Microanalysis</i> , 2021 , 27, 776-793	0.5	1
191	Autonomous EBSD Pattern Classification Performance with Changing Acquisition Parameters. <i>Microscopy and Microanalysis</i> , 2021 , 27, 2490-2493	0.5	
190	Mesoscale hetero-deformation induced (HDI) stress in FeAl-based metallic-intermetallic laminate (MIL) composites. <i>Acta Materialia</i> , 2021 , 213, 116949	8.4	1
189	A universal configurational entropy metric for high-entropy materials. <i>Scripta Materialia</i> , 2021 , 201, 113974	7.4	13
188	Bulk high-entropy hexaborides. <i>Journal of the European Ceramic Society</i> , 2021 , 41, 5775-5781	6	5
187	High-Throughput Rapid Experimental Alloy Development (HT-READ). <i>Acta Materialia</i> , 2021 , 221, 1173528.4	28.4	3
186	Development of ultrahigh-entropy ceramics with tailored oxidation behavior. <i>Journal of the European Ceramic Society</i> , 2021 , 41, 5791-5800	6	7
185	Enhancing plasticity in high-entropy refractory ceramics via tailoring valence electron concentration. <i>Materials and Design</i> , 2021 , 209, 109932	8.1	6
184	Design, fabrication and optimization of FeAl ₃ FeAl ₂ eutectoid metallic-intermetallic laminate (MIL) composites. <i>Materialia</i> , 2020 , 13, 100859	3.2	1
183	Phase Mapping in EBSD Using Convolutional Neural Networks. <i>Microscopy and Microanalysis</i> , 2020 , 26, 458-468	0.5	13
182	Deep Neural Network Enabled Space Group Identification in EBSD. <i>Microscopy and Microanalysis</i> , 2020 , 26, 447-457	0.5	16
181	Electromigration effect in Fe-Al diffusion couples with field-assisted sintering. <i>Acta Materialia</i> , 2020 , 186, 631-643	8.4	12
180	Crystal symmetry determination in electron diffraction using machine learning. <i>Science</i> , 2020 , 367, 564-568	393	53

179	Discovery of high-entropy ceramics via machine learning. <i>Npj Computational Materials</i> , 2020 , 6, 10.9 52
178	Deformation and fracture evolution of FeAl-based metallic-intermetallic laminate (MIL) composites. <i>Acta Materialia</i> , 2020 , 194, 496-515 8.4 8
177	Aged metastable high-entropy alloys with heterogeneous lamella structure for superior strength-ductility synergy. <i>Acta Materialia</i> , 2020 , 199, 602-612 8.4 26
176	Dissolving and stabilizing soft WB2 and MoB2 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 6 23
175	Dual-phase high-entropy ultra-high temperature ceramics. <i>Journal of the European Ceramic Society</i> , 2020 , 40, 5037-5050 6 33
174	A computer vision approach to study surface deformation of materials. <i>Measurement Science and Technology</i> , 2020 , 31, 055602 2 6
173	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 5.1 41
172	High-entropy monoborides: Towards superhard materials. <i>Scripta Materialia</i> , 2020 , 189, 101-105 5.6 23
171	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 5.7 3
170	Cold-workable refractory complex concentrated alloys with tunable microstructure and good room-temperature tensile behavior. <i>Scripta Materialia</i> , 2020 , 188, 16-20 5.6 7
169	Searching for high entropy alloys: A machine learning approach. <i>Acta Materialia</i> , 2020 , 198, 178-222 8.4 35
168	Bulk high-entropy nitrides and carbonitrides. <i>Scientific Reports</i> , 2020 , 10, 21288 4.9 24
167	Novel remapping approach for HR-EBSD based on demons registration. <i>Ultramicroscopy</i> , 2020 , 208, 112851 5.1 15
166	High-Throughput Identification of Crystal Structures Via Machine Learning. <i>Microscopy and Microanalysis</i> , 2019 , 25, 2258-2259 0.5
165	Design, fabrication and characterization of FeAl-based metallic-intermetallic laminate (MIL) composites. <i>Acta Materialia</i> , 2019 , 175, 445-456 8.4 20
164	Reactive flash spark plasma sintering of high-entropy ultrahigh temperature ceramics. <i>Scripta Materialia</i> , 2019 , 170, 106-110 5.6 61
163	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 6.7 90
162	Spark plasma sintering of structure-tailored ultrahigh-temperature components: First step to complex netshaping. <i>Journal of the American Ceramic Society</i> , 2019 , 102, 548-558 3.8 6

161	Extraordinary strength-ductility synergy in a heterogeneous-structured β Ti alloy through microstructural optimization. <i>Materials Research Letters</i> , 2019 , 7, 467-473	7.4	24
160	Automated Reconstruction of Spherical Kikuchi Maps. <i>Microscopy and Microanalysis</i> , 2019 , 25, 912-923	0.5	9
159	Effect of twinned-structure on deformation behavior and correlated mechanical properties in a metastable β Ti alloy. <i>Journal of Alloys and Compounds</i> , 2019 , 811, 152054	5.7	4
158	Phase stability and mechanical properties of novel high entropy transition metal carbides. <i>Acta Materialia</i> , 2019 , 166, 271-280	8.4	213
157	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	5.3	14
156	Non-equiatom 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	5.3	24
155	Multifunctional Non-Equiatom High Entropy Alloys with Superelastic, High Damping, and Excellent Cryogenic Properties. <i>Advanced Engineering Materials</i> , 2019 , 21, 1800941	3.5	20
154	High-entropy fluorite oxides. <i>Journal of the European Ceramic Society</i> , 2018 , 38, 3578-3584	6	223
153	Spark erosion as a high-throughput method for producing bimodal nanostructured 316L stainless steel powder. <i>Powder Technology</i> , 2018 , 328, 156-166	5.2	6
152	Application of a novel new multispectral nanoparticle tracking technique. <i>Measurement Science and Technology</i> , 2018 , 29, 065002	2	9
151	Observations on {332} twinning-induced softening in Ti-Nb Gum metal. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 724, 189-198	5.3	11
150	A new class of high-entropy perovskite oxides. <i>Scripta Materialia</i> , 2018 , 142, 116-120	5.6	318
149	The search for high entropy alloys: A high-throughput ab-initio approach. <i>Acta Materialia</i> , 2018 , 159, 364-383	8.4	76
148	Enhancement of recrystallization texture in non-equiatom 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	5.7	15
147	High-entropy high-hardness metal carbides discovered by entropy descriptors. <i>Nature Communications</i> , 2018 , 9, 4980	17.4	298
146	Dislocation-type evolution in quasi-statically compressed polycrystalline nickel. <i>Acta Materialia</i> , 2018 , 155, 104-116	8.4	62
145	Design of non-equiatom high entropy alloys with heterogeneous lamella structure towards strength-ductility synergy. <i>Scripta Materialia</i> , 2018 , 154, 78-82	5.6	40
144	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	9.5	12

143	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	3.9	10
142	Microstructure evolution in Ni and Ni-superalloy based metallic-intermetallic laminate (MIL) composites. <i>Intermetallics</i> , 2017 , 87, 70-80	3.5	14
141	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	7.6	26
140	Dynamic deformation and failure of ultrafine-grained titanium. <i>Acta Materialia</i> , 2017 , 125, 210-218	8.4	59
139	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	5.3	14
138	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	4	5
137	Optimizing Bulk Metallic Glasses for Robust, Highly Wear-Resistant Gears . <i>Advanced Engineering Materials</i> , 2017 , 19, 1600541	3.5	36
136	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	5.3	11
135	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	5.7	8
134	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	5.3	53
133	Determination of geometrically necessary dislocations in large shear strain localization in aluminum. <i>Acta Materialia</i> , 2016 , 118, 383-394	8.4	49
132	Fragmentation and constitutive response of tailored mesostructured aluminum compacts. <i>Journal of Applied Physics</i> , 2016 , 119, 145903	2.5	11
131	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	5.3	15
130	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	5.3	37
129	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	4.9	409
128	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	5.3	2
127	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	5.3	23
126	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	1.2	

125	Numerical Investigation of the Ballistic Performance of Metal-Intermetallic Laminate Composites. <i>Applied Composite Materials</i> , 2015 , 22, 437-456	2	27
124	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, 990-5	11.5	250
123	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	3.9	27
122	Conversion of natural marine skeletons as scaffolds for bone tissue engineering. <i>Frontiers of Materials Science</i> , 2013 , 7, 103-117	2.5	44
121	Tar and CO ₂ removal from simulated producer gas with activated carbon and charcoal. <i>Fuel Processing Technology</i> , 2013 , 106, 201-208	7.2	23
120	Three-dimensional scaffolding to investigate neuronal derivatives of human embryonic stem cells. <i>Biomedical Microdevices</i> , 2012 , 14, 829-838	3.7	56
119	Cancer cell migration within 3D layer-by-layer microfabricated photocrosslinked PEG scaffolds with tunable stiffness. <i>Biomaterials</i> , 2012 , 33, 7064-70	15.6	94
118	Wallner lines in a nanocrystalline Ni ₃ Al-3% Fe alloy. <i>Scripta Materialia</i> , 2012 , 67, 907-910	5.6	
117	Evolution of iridium-based molecular catalysts during water oxidation with ceric ammonium nitrate. <i>Journal of the American Chemical Society</i> , 2011 , 133, 19024-7	16.4	179
116	Thermal stability and crystallization phenomena of low cost Ti-based bulk metallic glass. <i>Journal of Non-Crystalline Solids</i> , 2011 , 357, 3393-3398	3.9	14
115	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, 4132-9	16.4	188
114	Loading rate effects on the R-curve behavior of cortical bone. <i>Acta Biomaterialia</i> , 2011 , 7, 724-32	10.8	40
113	Effects of ductile phase volume fraction on the mechanical properties of Ti ₆ Al ₄ V ₃ metal-intermetallic laminate (MIL) composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528, 3134-3146	5.3	100
112	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	4.1	69
111	A study of the dynamic compressive behavior of Elk antler. <i>Materials Science and Engineering C</i> , 2011 , 31, 1030-1041	8.3	13
110	Templated mineralization of synthetic hydrogels for bone-like composite materials: role of matrix hydrophobicity. <i>Biomacromolecules</i> , 2010 , 11, 2060-8	6.9	67
109	Stimuli-responsive liposome fusion mediated by gold nanoparticles. <i>ACS Nano</i> , 2010 , 4, 1935-42	16.7	131
108	Aging effects on hardness and dynamic compressive behavior of Ti ₆ Al ₄ V ₃ Ni (at.%) alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 527, 1665-1676	5.3	48

107	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	5.3	11
106	Use of Brazilian disk test to determine properties of metallic-intermetallic laminate composites. <i>Jom</i> , 2010 , 62, 35-40	2.1	23
105	Dynamic fracture resilience of elk antler: Biomimetic inspiration for improved crashworthiness. <i>Jom</i> , 2010 , 62, 41-46	2.1	8
104	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	2.3	23
103	The response of carbon nanotube ensembles to fluid flow: Applications to mechanical property measurement and diagnostics. <i>Journal of Applied Physics</i> , 2009 , 106, 074304	2.5	15
102	High Strength (Ti58Ni28Cu8Si4Sn2)100%Mo Nanoeutectic Matrix Ti Dendrite, BMG-Derived Composites with Enhanced Plasticity and Corrosion Resistance. <i>Advanced Engineering Materials</i> , 2009 , 11, 885-891	3.5	5
101	Semi-solid induction forging of metallic glass matrix composites. <i>Jom</i> , 2009 , 61, 11-17	2.1	38
100	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	2.3	19
99	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	5.3	20
98	Development of bioresorbable Mg-substituted tricalcium phosphate scaffolds for bone tissue engineering. <i>Materials Science and Engineering C</i> , 2009 , 29, 2003-2010	8.3	10
97	Dimensional control of multi-walled carbon nanotubes in floating-catalyst CVD synthesis. <i>Carbon</i> , 2009 , 47, 2085-2094	10.4	48
96	Evaluation of glass-forming ability in metals using multi-model techniques. <i>Journal of Alloys and Compounds</i> , 2009 , 471, 222-240	5.7	18
95	Hopkinson Bar Loaded Fracture Experimental Technique: A Critical Review of Dynamic Fracture Toughness Tests. <i>Applied Mechanics Reviews</i> , 2009 , 62,	8.6	114
94	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
93	MECHANICAL AND MICROSTRUCTURAL PROPERTIES OF PTFE/Al/W SYSTEM 2008 ,		4
92	Length and the Oxidation Kinetics of Chemical-Vapor-Deposition-Generated Multiwalled Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 10108-10113	3.8	14
91	Effect of Mo substitution on glass forming ability and thermal stability of Fe-C-B-Mo-W bulk amorphous alloys. <i>Journal of Non-Crystalline Solids</i> , 2008 , 354, 4550-4555	3.9	5
90	Particle size effect on strength, failure, and shock behavior in polytetrafluoroethylene-Al-W granular composite materials. <i>Journal of Applied Physics</i> , 2008 , 104, 103903	2.5	93

89	The influence of metallic particle size on the mechanical properties of polytetrafluoroethylene-Al ₂ O ₃ powder composites. <i>Applied Physics Letters</i> , 2008 , 92, 031903	3-4	32
88	Optical determination of the flexural rigidity of carbon nanotube ensembles. <i>Applied Physics Letters</i> , 2008 , 92, 173106	3-4	6
87	Effect of Mo-Fe substitution on glass forming ability, thermal stability, and hardness of Fe-C-B-Mo-Cr bulk amorphous alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 490, 221-228	5-3	11
86	Preparation, characterization and mechanical performance of dense beta-TCP ceramics with/without magnesium substitution. <i>Journal of Materials Science: Materials in Medicine</i> , 2008 , 19, 3063-3070	4-5	20
85	Aging and loading rate effects on the mechanical behavior of equine bone. <i>Jom</i> , 2008 , 60, 39-44	2-1	14
84	Devitrification and Cooling Rate Effects on Microstructure and Mechanical Properties in Fe ₅₇ Cr ₉ B ₁₁ Mo ₁₂ Cr ₈ W ₃ Bulk Metallic Glass. <i>Advanced Engineering Materials</i> , 2008 , 10, 1056-1063	3-5	3
83	Development of quaternary Fe-based bulk metallic glasses. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 492, 230-235	5-3	26
82	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 ¹⁷²	2-1	172
81	Conversion of sea urchin spines to Mg-substituted tricalcium phosphate for bone implants. <i>Acta Biomaterialia</i> , 2007 , 3, 785-93	10-8	55
80	Damage evolution in Ti ₆ Al ₄ V-Al ₃ Ti metal-intermetallic laminate composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007 , 443, 1-15	5-3	56
79	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	5-3	44
78	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	5-3	23
77	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	5-3	105
76	Hydrothermal synthesis of hydroxyapatite rods. <i>Journal of Crystal Growth</i> , 2007 , 308, 133-140	1-6	82
75	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	2-3	68
74	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	2-3	15
73	Fracture of Nitinol under Quasistatic and Dynamic Loading. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2007 , 38, 2907-2915	2-3	17
72	Superelasticity in a New Biolimplant Material: Ni-rich 55NiTi Alloy. <i>Experimental Mechanics</i> , 2007 , 47, 365-371	2-3	56

71	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	2.6	74
70	Conversion of bulk seashells to biocompatible hydroxyapatite for bone implants. <i>Acta Biomaterialia</i> , 2007 , 3, 910-8	10.8	164
69	Experimental investigation of dynamic effects in a two-bar/three-point bend fracture test. <i>Review of Scientific Instruments</i> , 2007 , 78, 063903	1.7	27
68	Electroplating of Copper-Alumina Nanocomposite Films with an Impinging Jet Electrode. <i>Journal of the Electrochemical Society</i> , 2007 , 154, D394	3.9	13
67	Mechanical behavior of ultralong multiwalled carbon nanotube mats. <i>Journal of Applied Physics</i> , 2007 , 101, 023512	2.5	66
66	Creation of dense hydroxyapatite (synthetic bone) by hydrothermal conversion of seashells. <i>Materials Science and Engineering C</i> , 2006 , 26, 1445-1450	8.3	25
65	Synthesis optimization and characterization of multiwalled carbon nanotubes. <i>Journal of Electronic Materials</i> , 2006 , 35, 211-223	1.9	19
64	Carbon Nanotube-Based Fluid Flow/Shear Sensors. <i>Materials Research Society Symposia Proceedings</i> , 2006 , 963, 1		1
63	Local heating of discrete droplets using magnetic porous silicon-based photonic crystals. <i>Journal of the American Chemical Society</i> , 2006 , 128, 7938-46	16.4	53
62	Constitutive modeling of polymer materials at impact loading rates. <i>European Physical Journal Special Topics</i> , 2006 , 134, 103-107		2
61	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	3.1	367
60	Prediction of carbon nanotube growth success by the analysis of carbon-catalyst binary phase diagrams. <i>Carbon</i> , 2006 , 44, 267-275	10.4	220
59	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	8.4	95
58	Dynamic fracture of bovine bone. <i>Materials Science and Engineering C</i> , 2006 , 26, 1325-1332	8.3	88
57	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	8.3	108
56	Thermogravimetric analysis of synthesis variation effects on CVD generated multiwalled carbon nanotubes. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 1179-86	3.4	102
55	Growth mechanism of vapor phase CVD-grown multi-walled carbon nanotubes. <i>Carbon</i> , 2005 , 43, 2608-2617	4.7	87
54	Growth of well-aligned carbon nanotube structures in successive layers. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 12353-7	3.4	20

53	A unified model for stiffness modulus of amorphous polymers across transition temperatures and strain rates. <i>Polymer</i> , 2005 , 46, 8194-8201	3.9	120
52	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	5.3	128
51	Effect of Grain-Boundary Phase on Dynamic Compression Fatigue in Hot-Pressed Silicon Nitride. <i>Journal of the American Ceramic Society</i> , 2005 , 81, 129-139	3.8	12
50	Synthetic multifunctional metallic-intermetallic laminate composites. <i>Jom</i> , 2005 , 57, 25-31	2.1	117
49	Fracture of Ti-Al ₃ Ti 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	2.3	54
48	Effects of ductile laminate thickness, volume fraction, and orientation on fatigue-crack propagation in Ti-Al ₃ Ti metal-intermetallic laminate composites. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2005 , 36, 1595-1608	2.3	70
47	Response to the discussion by I.V. Rokach of the paper entitled: "Analysis of the dynamic responses for a pre-cracked three-point bend specimen" <i>International Journal of Fracture</i> , 2005 , 131, 301-307	2.3	2
46	Microstructure and exchange coupling in nanocrystalline Nd ₂ (FeCo) ₁₄ B-FeCo particles produced by spark erosion. <i>Applied Physics Letters</i> , 2005 , 86, 122507	3.4	10
45	Analysis of modified split Hopkinson pressure bar dynamic fracture test using an inertia model. <i>International Journal of Fracture</i> , 2004 , 126, 143-164	2.3	10
44	Analysis of the dynamic responses for a pre-cracked three-point bend specimen. <i>International Journal of Fracture</i> , 2004 , 127, 147-165	2.3	33
43	Crack length calculation for bend specimens under static and dynamic loading. <i>Engineering Fracture Mechanics</i> , 2004 , 71, 1971-1985	4.2	25
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41	Evaluation of dynamic fracture toughness K _{Id} by Hopkinson pressure bar loaded instrumented Charpy impact test. <i>Engineering Fracture Mechanics</i> , 2004 , 71, 279-287	4.2	45
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