

Joanna M Mckittrick

List of Publications by Year in descending order

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208
papers

10,904
citations

44444

50
h-index

39744

98
g-index

218
all docs

218
docs citations

218
times ranked

11603
citing authors

#	ARTICLE	IF	CITATIONS
1	Comparison of different protocols for demineralization of cortical bone. <i>Scientific Reports</i> , 2021, 11, 7012.	1.6	15
2	Digital healthcare technologies: Modern tools to transform prosthetic care. <i>Expert Review of Medical Devices</i> , 2021, 18, 129-144.	1.4	7
3	Beyond density: Mesostructural features of impact resistant wood. <i>Materials Today Communications</i> , 2020, 22, 100697.	0.9	5
4	The role of collagen in the dermal armor of the boxfish. <i>Journal of Materials Research and Technology</i> , 2020, 9, 13825-13841.	2.6	7
5	Radular stylus of <i>Cryptochiton stelleri</i> : A multifunctional lightweight and flexible fiber-reinforced composite. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020, 111, 103991.	1.5	14
6	Scale and size effects on the mechanical properties of bioinspired 3D printed two-phase composites. <i>Journal of Materials Research and Technology</i> , 2020, 9, 14944-14960.	2.6	13
7	Deproteinized young bone reveals a continuous mineral phase and its contribution to mechanical properties with age. <i>Journal of Materials Research and Technology</i> , 2020, 9, 15421-15432.	2.6	2
8	Applying Bio-Inspired hierarchical design to jamming technology: Improving density-efficient mechanical properties and opening application spaces. <i>Journal of Materials Research and Technology</i> , 2020, 9, 15555-15565.	2.6	3
9	Cholla cactus frames as lightweight and torsionally tough biological materials. <i>Acta Biomaterialia</i> , 2020, 112, 213-224.	4.1	8
10	Mechanical Optimization of Diatomite Monoliths from Freeze Casting for High-Throughput Applications. <i>ACS Applied Bio Materials</i> , 2020, 3, 4444-4453.	2.3	1
11	Modeling zirconia sintering trajectory for obtaining translucent submicronic ceramics for dental implant applications. <i>Acta Materialia</i> , 2020, 188, 101-107.	3.8	17
12	Multiscale Toughening Mechanisms in Biological Materials and Bioinspired Designs. <i>Advanced Materials</i> , 2019, 31, e1901561.	11.1	342
13	In situ Wear Study Reveals Role of Microstructure on Self-Sharpening Mechanism in Sea Urchin Teeth. <i>Matter</i> , 2019, 1, 1246-1261.	5.0	15
14	Consolidation of Molybdenum nanopowders by spark plasma sintering: Densification mechanism and first mirror application. <i>Journal of Nuclear Materials</i> , 2019, 516, 354-359.	1.3	14
15	Electric current effects in spark plasma sintering: From the evidence of physical phenomenon to constitutive equation formulation. <i>Scripta Materialia</i> , 2019, 170, 90-94.	2.6	18
16	Color tunable single-phase Eu^{2+} and Ce^{3+} co-activated $\text{Sr}_2\text{LiAlO}_4$ phosphors. <i>Journal of Materials Chemistry C</i> , 2019, 7, 7734-7744.	2.7	26
17	Microstructural evolution of paramagnetic materials by magnetic freeze casting. <i>Journal of Materials Research and Technology</i> , 2019, 8, 2247-2254.	2.6	13
18	A Natural Stress Deflector on the Head? Mechanical and Functional Evaluation of the Woodpecker Skull Bones. <i>Advanced Theory and Simulations</i> , 2019, 2, 1800152.	1.3	17

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19	Radial-Concentric Freeze Casting Inspired by Porcupine Fish Spines. <i>Ceramics</i> , 2019, 2, 161-179.	1.0	23
20	How Water Can Affect Keratin: Hydration-Driven Recovery of Bighorn Sheep (<i>Ovis Canadensis</i>) Horns. <i>Advanced Functional Materials</i> , 2019, 29, 1901077.	7.8	29
21	3D Printed Templating of Extrinsic Freeze-Casting for Macro-Microporous Biomaterials. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 2122-2133.	2.6	24
22	A natural energy absorbent polymer composite: The equine hoof wall. <i>Acta Biomaterialia</i> , 2019, 90, 267-277.	4.1	47
23	External Field Assisted Freeze Casting. <i>Ceramics</i> , 2019, 2, 208-234.	1.0	34
24	Energy efficient spark plasma sintering: Breaking the threshold of large dimension tooling energy consumption. <i>Journal of the American Ceramic Society</i> , 2019, 102, 706-716.	1.9	8
25	Oxidation effects on spark plasma sintering of molybdenum nanopowders. <i>Journal of the American Ceramic Society</i> , 2019, 102, 801-812.	1.9	9
26	Mining Unexplored Chemistries for Phosphors for High-Color-Quality White-Light-Emitting Diodes. <i>Joule</i> , 2018, 2, 914-926.	11.7	97
27	An Overview on Additive Manufacturing of Polymers. <i>Jom</i> , 2018, 70, 275-283.	0.9	97
28	Effect of electric current on densification behavior of conductive ceramic powders consolidated by spark plasma sintering. <i>Acta Materialia</i> , 2018, 144, 524-533.	3.8	106
29	A Facile Method Using a Flux to Improve Quantum Efficiency of Submicron Particle Sized Phosphors for Solid-State Lighting Applications. <i>Ceramics</i> , 2018, 1, 38-53.	1.0	3
30	Mechanical Properties of Model Two-Phase Composites with Continuous Compared to Discontinuous Phases. <i>Advanced Engineering Materials</i> , 2018, 20, 1800505.	1.6	12
31	A comparative analysis of the avian skull: Woodpeckers and chickens. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018, 84, 273-280.	1.5	12
32	Response of Sea Urchin Fitness Traits to Environmental Gradients Across the Southern California Oxygen Minimum Zone. <i>Frontiers in Marine Science</i> , 2018, 5, .	1.2	12
33	Deproteinization of Cortical Bone: Effects of Different Treatments. <i>Calcified Tissue International</i> , 2018, 103, 554-566.	1.5	16
34	Microstructure and mechanical properties of different keratinous horns. <i>Journal of the Royal Society Interface</i> , 2018, 15, 20180093.	1.5	33
35	Structure and mechanical implications of the pectoral fin skeleton in the Longnose Skate (<i>Chondrichthyes, Batoidea</i>). <i>Acta Biomaterialia</i> , 2017, 51, 393-407.	4.1	11
36	Spines of the porcupine fish: Structure, composition, and mechanical properties. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 73, 38-49.	1.5	17

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37	Stiff, porous scaffolds from magnetized alumina particles aligned by magnetic freeze casting. <i>Materials Science and Engineering C</i> , 2017, 77, 484-492.	3.8	45
38	Hierarchical structure and compressive deformation mechanisms of bighorn sheep (<i>Ovis canadensis</i>) horn. <i>Acta Biomaterialia</i> , 2017, 64, 1-14.	4.1	60
39	Reinforcements in avian wing bones: Experiments, analysis, and modeling. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 76, 85-96.	1.5	19
40	Synergistic structures from magnetic freeze casting with surface magnetized alumina particles and platelets. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 76, 153-163.	1.5	32
41	A Sinusoidally Architected Helicoidal Biocomposite. <i>Advanced Materials</i> , 2016, 28, 6835-6844.	11.1	158
42	An integrated first principles and experimental investigation of the relationship between structural rigidity and quantum efficiency in phosphors for solid state lighting. <i>Journal of Luminescence</i> , 2016, 179, 297-305.	1.5	24
43	Microstructural Control of Colloidal-Based Ceramics by Directional Solidification Under Weak Magnetic Fields. <i>Journal of the American Ceramic Society</i> , 2016, 99, 1917-1926.	1.9	37
44	Bioinspired intrinsic control of freeze cast composites: Harnessing hydrophobic hydration and clathrate hydrates. <i>Acta Materialia</i> , 2016, 114, 67-79.	3.8	24
45	Structural analysis of the tongue and hyoid apparatus in a woodpecker. <i>Acta Biomaterialia</i> , 2016, 37, 1-13.	4.1	41
46	Effect of starch on the mechanical and in vitro properties of collagen-hydroxyapatite sponges for applications in dentistry. <i>Carbohydrate Polymers</i> , 2016, 148, 78-85.	5.1	23
47	Densification mechanism and mechanical properties of tungsten powder consolidated by spark plasma sintering. <i>International Journal of Refractory Metals and Hard Materials</i> , 2016, 61, 22-29.	1.7	58
48	Thermally stimulated luminescence and persistent luminescence of U^{2+} -irradiated YAG:Pr ³⁺ nanophosphors produced by combustion synthesis. <i>Radiation Measurements</i> , 2016, 94, 35-40.	0.7	8
49	A Protocol for Bioinspired Design: A Ground Sampler Based on Sea Urchin Jaws. <i>Journal of Visualized Experiments</i> , 2016, , .	0.2	8
50	Reproducibility of ZrO ₂ -based freeze casting for biomaterials. <i>Materials Science and Engineering C</i> , 2016, 61, 105-112.	3.8	54
51	Review—Electrophoretic Deposition of Phosphors for Solid-State Lighting. <i>ECS Journal of Solid State Science and Technology</i> , 2016, 5, R3107-R3120.	0.9	22
52	Structure and mechanical properties of selected protective systems in marine organisms. <i>Materials Science and Engineering C</i> , 2016, 59, 1143-1167.	3.8	83
53	Keratin: Structure, mechanical properties, occurrence in biological organisms, and efforts at bioinspiration. <i>Progress in Materials Science</i> , 2016, 76, 229-318.	16.0	571
54	Structural Design Elements in Biological Materials: Application to Bioinspiration. <i>Advanced Materials</i> , 2015, 27, 5455-5476.	11.1	472

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55	Bioinspired composites from freeze casting with clathrate hydrates. <i>Materials & Design</i> , 2015, 71, 62-67.	5.1	29
56	Particle morphology and luminescence properties of green emitting Ba ₂ SiO ₄ :Eu ²⁺ through a hydrothermal reaction route. <i>Journal of Luminescence</i> , 2015, 161, 20-24.	1.5	19
57	Experimentally-based multiscale model of the elastic moduli of bovine trabecular bone and its constituents. <i>Materials Science and Engineering C</i> , 2015, 54, 207-216.	3.8	12
58	The armored carapace of the boxfish. <i>Acta Biomaterialia</i> , 2015, 23, 1-10.	4.1	63
59	Why the seahorse tail is square. <i>Science</i> , 2015, 349, aaa6683.	6.0	82
60	Sintering of bi-porous titanium dioxide scaffolds: Experimentation, modeling and simulation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 636, 148-156.	2.6	21
61	Comparison of luminescent properties of Y ₂ O ₃ :Eu ³⁺ and LaPO ₄ :Ce ³⁺ , Tb ³⁺ phosphors prepared by various synthetic methods. <i>Materials Characterization</i> , 2015, 103, 162-169.	1.9	25
62	Densification of zirconium nitride by spark plasma sintering and high voltage electric discharge consolidation: A comparative analysis. <i>Ceramics International</i> , 2015, 41, 14973-14987.	2.3	32
63	Torsional properties of helix-reinforced composites fabricated by magnetic freeze casting. <i>Composite Structures</i> , 2015, 119, 174-184.	3.1	48
64	Computer modelling and biomimetics for understanding the evolution of tail grasping in seahorses. <i>FASEB Journal</i> , 2015, 29, 342.3.	0.2	0
65	Porous Scaffolds: Bioinspired Scaffolds with Varying Pore Architectures and Mechanical Properties (Adv. Funct. Mater. 14/2014). <i>Advanced Functional Materials</i> , 2014, 24, 2108-2108.	7.8	0
66	Creep of trabecular bone from the human proximal tibia. <i>Materials Science and Engineering C</i> , 2014, 40, 219-227.	3.8	21
67	Electrophoretic Deposition of Nano- and Micron-Sized Ba ₂ SiO ₄ :Eu ²⁺ Phosphor Particles. <i>Journal of the Electrochemical Society</i> , 2014, 161, D111-D117.	1.3	6
68	Review: Down Conversion Materials for Solid State Lighting. <i>Journal of the American Ceramic Society</i> , 2014, 97, 1327-1352.	1.9	371
69	Bioinspired Scaffolds with Varying Pore Architectures and Mechanical Properties. <i>Advanced Functional Materials</i> , 2014, 24, 1978-1987.	7.8	109
70	Analysis of (Ba,Ca,Sr) ₃ MgSi ₂ O ₈ :Eu ²⁺ , Mn ²⁺ phosphors for application in solid state lighting. <i>Journal of Luminescence</i> , 2014, 148, 1-5.	1.5	24
71	Identification and development of nanoscintillators for biotechnology applications. <i>Journal of Luminescence</i> , 2014, 154, 569-577.	1.5	27
72	Toward a better understanding of mineral microstructure in bony tissues. <i>Bioinspired, Biomimetic and Nanobiomaterials</i> , 2014, 3, 71-84.	0.7	7

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73	Correlation of Multi-scale Modeling and Experimental Results for the Elastic Modulus of Trabecular Bone. Conference Proceedings of the Society for Experimental Mechanics, 2014, , 59-65.	0.3	0
74	Biomimetic Materials by Freeze Casting. Jom, 2013, 65, 720-727.	0.9	60
75	Kinetic characterization of the deproteinization of trabecular and cortical bovine femur bones. Materials Science and Engineering C, 2013, 33, 4958-4964.	3.8	11
76	A comparative study of young and mature bovine cortical bone. Acta Biomaterialia, 2013, 9, 5280-5288.	4.1	51
77	Synthesis and characterization of (Lu ¹⁻³ Y Ce) ₂ SiO ₅ luminescent powders with fast decay time. Journal of Luminescence, 2013, 136, 86-89.	1.5	8
78	Axial compression of a hollow cylinder filled with foam: A study of porcupine quills. Acta Biomaterialia, 2013, 9, 5297-5304.	4.1	46
79	Separating the influence of the cortex and foam on the mechanical properties of porcupine quills. Acta Biomaterialia, 2013, 9, 9065-9074.	4.1	48
80	Structural Biological Materials: Critical Mechanics-Materials Connections. Science, 2013, 339, 773-779.	6.0	878
81	Europium-Activated K ₂ SrPO ₄ ·4H ₂ O (K ₂ SrPO ₄ ·4H ₂ O, Sr ₂ SiO ₅) Solid Solutions as Color-Tunable Phosphors for Near-UV Light-Emitting Diode Applications. Journal of the American Ceramic Society, 2013, 96, 1526-1532.	1.9	22
82	Highly deformable bones: Unusual deformation mechanisms of seahorse armor. Acta Biomaterialia, 2013, 9, 6763-6770.	4.1	64
83	Rapid processing & characterization of micro-scale functionally graded porous materials. Journal of Materials Processing Technology, 2013, 213, 1251-1257.	3.1	7
84	Initial anisotropy in demineralized bovine cortical bone in compressive cyclic loading-unloading. Materials Science and Engineering C, 2013, 33, 817-823.	3.8	8
85	Europium-activated barium/strontium silicates for near-UV light emitting diode applications. Journal of Luminescence, 2013, 133, 184-187.	1.5	18
86	Electrophoretic Deposition of Phosphors for White Solid State Lighting Using Near UV-Emitting LEDs. ECS Journal of Solid State Science and Technology, 2013, 2, R153-R159.	0.9	7
87	Phosphor Development and Integration for Near-UV LED Solid State Lighting. ECS Journal of Solid State Science and Technology, 2013, 2, R3138-R3147.	0.9	49
88	Phosphor Selection Considerations for Near-UV LED Solid State Lighting. ECS Journal of Solid State Science and Technology, 2013, 2, R3119-R3131.	0.9	98
89	Comparison of Electrophoretic Deposition of Nano- and Micron-Sized Ba ₂ SiO ₄ :Eu ²⁺ Phosphor Particles. ECS Meeting Abstracts, 2013, , .	0.0	0
90	Development of Phosphors for White Emitting Near UV LEDs. ECS Meeting Abstracts, 2013, , .	0.0	0

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91	Porous Hydroxyapatite-Polyhydroxybutyrate Composites Fabricated by a Novel Method Via Centrifugation. Conference Proceedings of the Society for Experimental Mechanics, 2013, , 63-71.	0.3	7
92	Isolation of Collagen from Cortical Bovine Bone for Preparation of Porous Collagen Sponges. Conference Proceedings of the Society for Experimental Mechanics, 2013, , 73-78.	0.3	4
93	EPD of Phosphors for Display and Solid State Lighting Technologies. Key Engineering Materials, 2012, 507, 149-153.	0.4	5
94	Hierarchical Structure of Porosity in Cortical and Trabecular Bones. Materials Research Society Symposia Proceedings, 2012, 1420, 24.	0.1	1
95	Effect of SiO ₂ coatings on halophosphate phosphors for near UV-emitting LEDs. , 2012, , .		1
96	White-emitting solid state lighting by electrophoretic deposition of phosphors. , 2012, , .		2
97	Sol-Gel Synthesis of Single Phase, High Quantum Efficiency LiCaPO ₄ :Eu ²⁺ Phosphors. ECS Journal of Solid State Science and Technology, 2012, 1, R37-R40.	0.9	23
98	Nano- and Submicron Sized Europium Activated Silicate Phosphors Prepared by a Modified Co-Precipitation Method. ECS Journal of Solid State Science and Technology, 2012, 1, R98-R102.	0.9	24
99	Potential Bone Replacement Materials Prepared by Two Methods. Materials Research Society Symposia Proceedings, 2012, 1418, 177.	0.1	57
100	Biological materials: Functional adaptations and bioinspired designs. Progress in Materials Science, 2012, 57, 1492-1704.	16.0	582
101	Magnetic freeze casting inspired by nature. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 556, 741-750.	2.6	121
102	Densification mechanisms of spark plasma sintering: multi-step pressure dilatometry. Journal of Materials Science, 2012, 47, 7036-7046.	1.7	50
103	The Structure, Functions, and Mechanical Properties of Keratin. Jom, 2012, 64, 449-468.	0.9	266
104	Flexible Dermal Armor in Nature. Jom, 2012, 64, 475-485.	0.9	41
105	Elastic moduli of untreated, demineralized and deproteinized cortical bone: Validation of a theoretical model of bone as an interpenetrating composite material. Acta Biomaterialia, 2012, 8, 1080-1092.	4.1	64
106	Elastic properties of cancellous bone in terms of elastic properties of its mineral and protein phases with application to their osteoporotic degradation. Mechanics of Materials, 2012, 44, 139-150.	1.7	8
107	Photo- and radioluminescence characteristics of bismuth germanate nanoparticles by sol-gel and pressure-assisted combustion synthesis. Optical Materials, 2012, 34, 1116-1119.	1.7	18
108	Structure dependent luminescence characterization of green-yellow emitting Sr ₂ SiO ₄ :Eu ²⁺ phosphors for near UV LEDs. Journal of Luminescence, 2012, 132, 106-109.	1.5	45

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109	Photoluminescence of Europium-Activated Hydroxyapatite Nanoparticles in Body Fluids. <i>Science of Advanced Materials</i> , 2012, 4, 558-562.	0.1	8
110	Luminescence Properties and Stability Improvement by SiO ₂ Coating on Various Phosphors for Near UV-Emitting LEDs. <i>ECS Meeting Abstracts</i> , 2012, , .	0.0	2
111	Compressive mechanical properties of demineralized and deproteinized cancellous bone. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2011, 4, 961-973.	1.5	77
112	Minerals Form a Continuum Phase in Mature Cancellous Bone. <i>Calcified Tissue International</i> , 2011, 88, 351-361.	1.5	110
113	Armadillo armor: Mechanical testing and micro-structural evaluation. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2011, 4, 713-722.	1.5	138
114	Correlation of the mechanical and structural properties of cortical rachis keratin of rectrices of the Toco Toucan (<i>Ramphastos toco</i>). <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2011, 4, 723-732.	1.5	40
115	The effects of water and microstructure on the mechanical properties of bighorn sheep (<i>Ovis</i>) Tj ETQq1 1 0.784314 r _g BT /Overlock 10 T 4.P 58	4.1	96
116	Anisotropy in the compressive mechanical properties of bovine cortical bone and the mineral and protein constituents. <i>Acta Biomaterialia</i> , 2011, 7, 3170-3177.	4.1	96
117	Luminescence enhancement of Y ₂ O ₃ :Eu ³⁺ and Y ₂ SiO ₅ :Ce ³⁺ ,Tb ³⁺ core particles with SiO ₂ shells. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2011, 176, 436-441.	1.7	47
118	Growth of nacre in abalone: Seasonal and feeding effects. <i>Materials Science and Engineering C</i> , 2011, 31, 238-245.	3.8	25
119	Impact testing of structural biological materials. <i>Materials Science and Engineering C</i> , 2011, 31, 730-739.	3.8	45
120	Kinetic studies of bone demineralization at different HCl concentrations and temperatures. <i>Materials Science and Engineering C</i> , 2011, 31, 523-530.	3.8	23
121	Reprint of: Growth of nacre in abalone: Seasonal and feeding effects. <i>Materials Science and Engineering C</i> , 2011, 31, 716-723.	3.8	8
122	An analysis of Y ₂ O ₃ :Eu ³⁺ thin films for thermographic phosphor applications. <i>Journal of Luminescence</i> , 2011, 131, 41-48.	1.5	30
123	COMPARISON OF DEMINERALIZED AND DEPROTEINIZED BONE. <i>Materials Research Society Symposia Proceedings</i> , 2011, 1301, 27.	0.1	2
124	Investigations into Demineralized Cortical Bone. <i>Materials Research Society Symposia Proceedings</i> , 2011, 1301, 33.	0.1	0
125	Recent advances on the measurement and calculation of the elastic moduli of cortical and trabecular bone: A review. <i>Theoretical and Applied Mechanics</i> , 2011, 38, 209-297.	0.1	57
126	Dynamic fracture resilience of elk antler: Biomimetic inspiration for improved crashworthiness. <i>Jom</i> , 2010, 62, 41-46.	0.9	9

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127	Energy absorbent natural materials and bioinspired design strategies: A review. <i>Materials Science and Engineering C</i> , 2010, 30, 331-342.	3.8	178
128	Microstructure, elastic properties and deformation mechanisms of horn keratin. <i>Acta Biomaterialia</i> , 2010, 6, 319-330.	4.1	120
129	Mechanistic aspects of the fracture toughness of elk antler bone. <i>Acta Biomaterialia</i> , 2010, 6, 1505-1514.	4.1	148
130	Synthesis and Photoluminescence Properties of Y ₂ O ₃ :Eu ³⁺ /SiO ₂ Core/Shell Phosphor Nanoparticles. <i>ECS Transactions</i> , 2010, 28, 183-190.	0.3	3
131	Study of Luminescence from GaN:Tb ³⁺ Powders and Thin Films Deposited by MOVPE and PLD Methods. <i>Journal of the Electrochemical Society</i> , 2009, 156, J158.	1.3	9
132	Bioinspired Inorganic/polymer Thin Films. <i>Materials Research Society Symposia Proceedings</i> , 2009, 1239, 1.	0.1	0
133	Comparison of the structure and mechanical properties of bovine femur bone and antler of the North American elk (<i>Cervus elaphus canadensis</i>). <i>Acta Biomaterialia</i> , 2009, 5, 693-706.	4.1	134
134	The role of organic intertile layer in abalone nacre. <i>Materials Science and Engineering C</i> , 2009, 29, 2398-2410.	3.8	64
135	Structure and mechanical properties of selected biological materials. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2008, 1, 208-226.	1.5	332
136	Structural biological materials: Overview of current research. <i>Jom</i> , 2008, 60, 23-32.	0.9	22
137	Eu ³⁺ activated GaN thin films grown on sapphire by pulsed laser deposition. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008, 5, 1756-1758.	0.8	3
138	Synthesis of rare-earth activated AlN and GaN powders via a three-step conversion process. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008, 5, 1889-1891.	0.8	6
139	Structure and mechanical properties of crab exoskeletons. <i>Acta Biomaterialia</i> , 2008, 4, 587-596.	4.1	386
140	Fracture Mechanisms of Bone: A Comparative Study between Antler and Bovine Femur. <i>Materials Research Society Symposia Proceedings</i> , 2008, 1132, 1.	0.1	2
141	Study of GaN:Eu ³⁺ Thin Films Deposited by Metallorganic Vapor-Phase Epitaxy. <i>Journal of the Electrochemical Society</i> , 2008, 155, J315.	1.3	11
142	A Study of Oxygen Content in GaN, AlN, and GaAlN Powders. <i>Journal of the Electrochemical Society</i> , 2008, 155, J137.	1.3	1
143	A novel hybrid pulsed laser deposition/metalorganic vapour deposition method to form rare-earth activated GaN. <i>Journal Physics D: Applied Physics</i> , 2008, 41, 122001.	1.3	2
144	Long-Ultraviolet-Excited White-Light Emission in Rare-Earth-Activated Yttrium-Oxyorthosilicate. <i>Journal of the American Ceramic Society</i> , 2007, 90, 2484-2488.	1.9	15

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145	In situ characterization of Ti-peroxy gel during formation on titanium surfaces in hydrogen peroxide containing solutions. <i>Materials Science and Engineering C</i> , 2006, 26, 1408-1411.	3.8	8
146	White light emission from rare earth activated yttrium silicate nanocrystalline powders and thin films. <i>Optical Materials</i> , 2005, 27, 1221-1227.	1.7	43
147	Development of luminescent materials with strong UV-blue absorption. <i>Optical Materials</i> , 2005, 27, 1301-1304.	1.7	13
148	Luminescence study in Eu-doped aluminum oxide phosphors. <i>Optical Materials</i> , 2005, 27, 1311-1315.	1.7	62
149	Nanocrystalline Rare Earth-doped Gallium Nitride Phosphor Powders. <i>Materials Research Society Symposia Proceedings</i> , 2005, 866, 184.	0.1	1
150	Pressure influenced combustion synthesis of $\hat{\text{A}}$ - and $\hat{\text{A}}$ - Al_2O_3 nanocrystalline powders. <i>Journal of Physics Condensed Matter</i> , 2004, 16, 2585-2591.	0.7	13
151	Luminescence enhancement in Eu^{3+} -doped $\hat{\text{A}}$ - and $\hat{\text{A}}$ - Al_2O_3 produced by pressure-assisted low-temperature combustion synthesis. <i>Applied Physics Letters</i> , 2004, 84, 1296-1298.	1.5	40
152	Interaction Between Titanium Implant Surfaces and Hydrogen Peroxide in Biologically Relevant Environments. <i>Materials Research Society Symposia Proceedings</i> , 2004, 823, W11.17.1.	0.1	0
153	Investigation of the physical properties of a blue-emitting phosphor produced using a rapid exothermic reaction. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2003, 97, 265-274.	1.7	52
154	Improving the efficiency of a blue-emitting phosphor by an energy transfer from Gd^{3+} to Ce^{3+} . <i>Journal of Luminescence</i> , 2003, 104, 47-54.	1.5	97
155	Microstructural properties of Eu-doped GaN luminescent powders. <i>Applied Physics Letters</i> , 2002, 81, 1993-1995.	1.5	29
156	A novel method for the synthesis of sub-microcrystalline wurtzite-type $\text{In}_x\text{Ga}_{1-x}\text{N}$ powders. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2002, 90, 7-12.	1.7	26
157	A New Combustion Synthesis Method for GaN:Eu^{3+} and $\text{Ga}_2\text{O}_3:\text{Eu}^{3+}$ Luminescent Powders. <i>Physica Status Solidi A</i> , 2001, 188, 179-182.	1.7	37
158	A NEW COMBUSTION SYNTHESIS TECHNIQUE FOR RARE EARTH-DOPED III-NITRIDE LUMINESCENT POWDERS. <i>Modern Physics Letters B</i> , 2001, 15, 655-658.	1.0	1
159	New combustion synthesis technique for the production of $(\text{In}_x\text{Ga}_{1-x})_2\text{O}_3$ powders: Hydrazine/metal nitrate method. <i>Journal of Materials Research</i> , 2001, 16, 1059-1065.	1.2	46
160	Laser melting of photoluminescent $(\text{Y}_{0.92}\text{Eu}_{0.08})_2\text{O}_3$ films. <i>Journal of Applied Physics</i> , 2001, 90, 3919-3924.	1.1	1
161	$\text{Ba}_{0.5}\text{Sr}_{0.5}\text{TiO}_3$ thin films deposited by PLD on SiO_2/Si , RuO_2/Si and Pt/Si electrodes. <i>Thin Solid Films</i> , 2000, 373, 49-52.	0.8	22
162	Characterization of Photoluminescent $(\text{Y}_{1-x}\text{Eu}_x)_2\text{O}_3$ Thin Films Prepared by Metallorganic Chemical Vapor Deposition. <i>Journal of the American Ceramic Society</i> , 2000, 83, 1241-1246.	1.9	58

#	ARTICLE	IF	CITATIONS
163	Ferroelectric and microstructure properties of Ba _{1-x} Sr _x TiO ₃ films grown on different electrodes. <i>Integrated Ferroelectrics</i> , 1999, 24, 85-94.	0.3	0
164	The influence of processing parameters on luminescent oxides produced by combustion synthesis. <i>Displays</i> , 1999, 19, 169-172.	2.0	210
165	Preparation of Green-Emitting Sr ²⁺ -doped Eu ³⁺ x Ga ₂ S ₄ Phosphors by a Solid-State Rapid Metathesis Reaction. <i>Journal of the Electrochemical Society</i> , 1999, 146, 4316-4319.	1.3	19
166	An Investigation of the Chromaticity of Blue Emitting Yttrium Silicate. <i>Materials Research Society Symposia Proceedings</i> , 1999, 558, 15.	0.1	6
167	An Investigation of the Chromaticity of Blue Emitting Yttrium Silicate. <i>Materials Research Society Symposia Proceedings</i> , 1999, 560, 15.	0.1	3
168	Phase Transformation Kinetics in Pb _{0.91} La _{0.09} Zr _{0.65} Ti _{0.35} O ₃ Films. <i>Journal of Materials Science Letters</i> , 1998, 17, 1445-1447.	0.5	2
169	Predicting and Modeling the Low-Voltage Cathodoluminescent Efficiency of Oxide Phosphors. <i>Journal of the Electrochemical Society</i> , 1998, 145, 3165-3170.	1.3	22
170	Enhanced photoluminescent emission of thin phosphor films via pulsed excimer laser melting. <i>Journal of Materials Research</i> , 1998, 13, 3019-3021.	1.2	7
171	Growth and Analysis of Red, Green and Blue Luminescent Oxide Thin Films. <i>Surface Review and Letters</i> , 1998, 05, 413-417.	0.5	3
172	Improvement of luminescent properties of thin-film phosphors by excimer laser processing. , 1998, , .		0
173	Low-Voltage Cathodoluminescent Properties of Blue-Emitting Yttrium Silicates Doped With Cerium. <i>Materials Research Society Symposia Proceedings</i> , 1998, 508, 269.	0.1	1
174	Microstructural Development, Densification, and Hot Pressing of Celsian Ceramics from Ion-Exchanged Zeolite Precursors. <i>Journal of the American Ceramic Society</i> , 1998, 81, 845-852.	1.9	49
175	Modeling and Fabrication of Fine-Grain Alumina-Zirconia Composites Produced from Nanocrystalline Precursors. <i>Journal of the American Ceramic Society</i> , 1998, 81, 1773-1780.	1.9	21
176	Microstructural and Photoluminescence Studies on Europium Doped Yttrium Oxide Films Synthesized by Metallorganic Vapor Deposition. <i>Materials Research Society Symposia Proceedings</i> , 1997, 495, 39.	0.1	2
177	Advantages of self-propagating combustion reactions for synthesis of oxide phosphors. <i>Journal of the Society for Information Display</i> , 1997, 5, 117.	0.8	12
178	Physical properties of Y ₂ O ₃ :Eu luminescent films grown by MOCVD and laser ablation. <i>Applied Surface Science</i> , 1997, 113-114, 509-514.	3.1	117
179	Fluorescence properties of polycrystalline Tm ³⁺ -activated Y ₃ Al ₅ O ₁₂ and Tm ³⁺ -Li ⁺ co-activated Y ₃ Al ₅ O ₁₂ in the visible and near IR ranges. <i>Journal of Luminescence</i> , 1997, 71, 1-11.	1.5	278
180	Luminescent oxide thin films grown by pulsed laser deposition. <i>Journal of the Society for Information Display</i> , 1996, 4, 347.	0.8	1

#	ARTICLE	IF	CITATIONS
181	Synthesis of Red-Emitting, Small Particle Size Luminescent Oxides Using an Optimized Combustion Process. Journal of the American Ceramic Society, 1996, 79, 3257-3265.	1.9	269
182	Phosphor Synthesis Routes and their Effect on the Performance of Garnet Phosphors At Low-Voltages. Materials Research Society Symposia Proceedings, 1996, 424, 409.	0.1	1
183	Development of novel microstructures in zirconia-toughened alumina using rapid solidification and shock compaction. Journal of Materials Research, 1996, 11, 110-119.	1.2	9
184	Pulsed laser deposition of Y3Al5O12:Tb photoluminescent thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1996, 14, 1694-1696.	0.9	17
185	High transmittance<sup>low</sup> resistivity ZnO:Ga films by laser ablation. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1996, 14, 791-794.	0.9	58
186	Low Resistivity-Highly Transparent ZnO:Ga Tco's Grown by Laser Ablation. Materials Research Society Symposia Proceedings, 1995, 397, 247.	0.1	3
187	Densification behavior of dynamically shock compacted Al2O3/ZrO2 powders synthesized through rapid solidification. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1995, 26, 2503-2509.	1.1	5
188	Microwave and conventional sintering of rapidly solidified Al2O3-ZrO2 powders. Journal of Materials Science, 1994, 29, 2119-2125.	1.7	13
189	Rapid solidification processing. Materials Science and Engineering Reports, 1994, 11, 355-408.	14.8	103
190	Synthesis of YAG:Cr phosphors by precipitation from aluminum and yttrium sulfate solutions. Materials Chemistry and Physics, 1994, 38, 175-180.	2.0	39
191	Phase Development and Luminescence in Chromium-Doped Yttrium Aluminum Garnet (YAG:Cr) Phosphors. Journal of the American Ceramic Society, 1994, 77, 2866-2872.	1.9	180
192	Dynamic Compaction of Al2O3-ZrO2 Compositions. Journal of the American Ceramic Society, 1994, 77, 1605-1612.	1.9	9
193	Microwave sintering of nanocrystalline ¹³ -Al2O3. Scripta Materialia, 1994, 4, 371-385.	0.5	58
194	Synthesis of celsian ceramics from zeolite precursors. Journal of Non-Crystalline Solids, 1994, 170, 303-307.	1.5	25
195	Aligned gadolinium barium copper oxide thick films formed by in situ crystallization in a magnetic field. Journal of Materials Research, 1993, 8, 2440-2444.	1.2	1
196	Compaction of Submicron and Nanocrystalline Al2O3-ZrO2 Ceramics. , 1993, , 559-564.		0
197	Al2O3-ZrO2 Ceramics with Submicron Microstructures Obtained through Microwave Sintering, Plasma Sintering and Shock Compaction. Materials Research Society Symposia Proceedings, 1992, 274, 149.	0.1	5
198	Magnetic Alignment of Amorphous Coatings of GD:123. Materials Research Society Symposia Proceedings, 1992, 275, 425.	0.1	0

#	ARTICLE	IF	CITATIONS
199	Chemical synthesis of spun-on thick films of oxide superconductors. <i>Thin Solid Films</i> , 1991, 206, 146-150.	0.8	8
200	Melting and solidification behavior of $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$. <i>Journal of Applied Physics</i> , 1989, 65, 3662-3666.	1.1	6
201	Rapid solidification processing of high T_c superconductors: Microstructural features and phase relationships. <i>Physica C: Superconductivity and Its Applications</i> , 1988, 153-155, 369-370.	0.6	4
202	Time dependent magnetic response in a $\text{GdBa}_2\text{Cu}_3\text{O}_{7-x}$ superconductor: Flux creep or superconducting glass state?. <i>Physica C: Superconductivity and Its Applications</i> , 1988, 153-155, 310-311.	0.6	10
203	Magnetism and microstructure of $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ superconductors produced by rapid solidification. <i>Physical Review B</i> , 1988, 37, 623-626.	1.1	36
204	Magnetic susceptibility of rapidly solidified $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ superconductors. <i>Journal of Applied Physics</i> , 1988, 63, 4229-4231.	1.1	8
205	Rapid Solidification of $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$, $\text{EuBa}_2\text{Cu}_3\text{O}_{7-x}$, and $\text{GdBa}_2\text{Cu}_3\text{O}_{7-x}$. <i>Materials Research Society Symposia Proceedings</i> , 1987, 99, 567.	0.1	0
206	RAPID SOLIDIFICATION OF OXIDE SUPERCONDUCTORS IN THE Y-Ba-Cu-O SYSTEM. <i>Advanced Ceramic Materials</i> , 1987, 2, 353-363.	2.3	16
207	Crystallization of a rapidly solidified $\text{Al}_2\text{O}_3\text{-ZrO}_2$ eutectic glass. <i>Journal of Non-Crystalline Solids</i> , 1987, 94, 163-174.	1.5	33
208	Gas desorption from FEA-phosphor screen pairs. , 0, , .		6