

# Joanna M Mckittrick

## List of Publications by Year in descending order

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208  
papers

10,904  
citations

38742

50  
h-index

33894

99  
g-index

218  
all docs

218  
docs citations

218  
times ranked

10269  
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural Biological Materials: Critical Mechanics-Materials Connections. <i>Science</i> , 2013, 339, 773-779.	12.6	878
2	Biological materials: Functional adaptations and bioinspired designs. <i>Progress in Materials Science</i> , 2012, 57, 1492-1704.	32.8	582
3	Keratin: Structure, mechanical properties, occurrence in biological organisms, and efforts at bioinspiration. <i>Progress in Materials Science</i> , 2016, 76, 229-318.	32.8	571
4	Structural Design Elements in Biological Materials: Application to Bioinspiration. <i>Advanced Materials</i> , 2015, 27, 5455-5476.	21.0	472
5	Structure and mechanical properties of crab exoskeletons. <i>Acta Biomaterialia</i> , 2008, 4, 587-596.	8.3	386
6	Review: Down Conversion Materials for Solid-State Lighting. <i>Journal of the American Ceramic Society</i> , 2014, 97, 1327-1352.	3.8	371
7	Multiscale Toughening Mechanisms in Biological Materials and Bioinspired Designs. <i>Advanced Materials</i> , 2019, 31, e1901561.	21.0	342
8	Structure and mechanical properties of selected biological materials. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2008, 1, 208-226.	3.1	332
9	Fluorescence properties of polycrystalline Tm <sup>3+</sup> -activated Y <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> and Tm <sup>3+</sup> -Li <sup>+</sup> co-activated Y <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> in the visible and near IR ranges. <i>Journal of Luminescence</i> , 1997, 71, 1-11.	3.1	278
10	Synthesis of Red-Emitting, Small Particle Size Luminescent Oxides Using an Optimized Combustion Process. <i>Journal of the American Ceramic Society</i> , 1996, 79, 3257-3265.	3.8	269
11	The Structure, Functions, and Mechanical Properties of Keratin. <i>Jom</i> , 2012, 64, 449-468.	1.9	266
12	The influence of processing parameters on luminescent oxides produced by combustion synthesis. <i>Displays</i> , 1999, 19, 169-172.	3.7	210
13	Phase Development and Luminescence in Chromium-Doped Yttrium Aluminum Garnet (YAG:Cr) Phosphors. <i>Journal of the American Ceramic Society</i> , 1994, 77, 2866-2872.	3.8	180
14	Energy absorbent natural materials and bioinspired design strategies: A review. <i>Materials Science and Engineering C</i> , 2010, 30, 331-342.	7.3	178
15	A Sinusoidally Architected Helicoidal Biocomposite. <i>Advanced Materials</i> , 2016, 28, 6835-6844.	21.0	158
16	Mechanistic aspects of the fracture toughness of elk antler bone. <i>Acta Biomaterialia</i> , 2010, 6, 1505-1514.	8.3	148
17	Armadillo armor: Mechanical testing and micro-structural evaluation. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2011, 4, 713-722.	3.1	138
18	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.	8.3	134

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19	Magnetic freeze casting inspired by nature. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 556, 741-750.	5.6	121
20	Microstructure, elastic properties and deformation mechanisms of horn keratin. <i>Acta Biomaterialia</i> , 2010, 6, 319-330.	8.3	120
21	Physical properties of Y2O3:Eu luminescent films grown by MOCVD and laser ablation. <i>Applied Surface Science</i> , 1997, 113-114, 509-514.	6.1	117
22	Minerals Form a Continuum Phase in Mature Cancellous Bone. <i>Calcified Tissue International</i> , 2011, 88, 351-361.	3.1	110
23	Bioinspired Scaffolds with Varying Pore Architectures and Mechanical Properties. <i>Advanced Functional Materials</i> , 2014, 24, 1978-1987.	14.9	109
24	Effect of electric current on densification behavior of conductive ceramic powders consolidated by spark plasma sintering. <i>Acta Materialia</i> , 2018, 144, 524-533.	7.9	106
25	Rapid solidification processing. <i>Materials Science and Engineering Reports</i> , 1994, 11, 355-408.	31.8	103
26	Phosphor Selection Considerations for Near-UV LED Solid State Lighting. <i>ECS Journal of Solid State Science and Technology</i> , 2013, 2, R3119-R3131.	1.8	98
27	Improving the efficiency of a blue-emitting phosphor by an energy transfer from Gd <sup>3+</sup> to Ce <sup>3+</sup> . <i>Journal of Luminescence</i> , 2003, 104, 47-54.	3.1	97
28	Mining Unexplored Chemistries for Phosphors for High-Color-Quality White-Light-Emitting Diodes. <i>Joule</i> , 2018, 2, 914-926.	24.0	97
29	An Overview on Additive Manufacturing of Polymers. <i>Jom</i> , 2018, 70, 275-283.	1.9	97
30	Anisotropy in the compressive mechanical properties of bovine cortical bone and the mineral and protein constituents. <i>Acta Biomaterialia</i> , 2011, 7, 3170-3177.	8.3	96
31	Structure and mechanical properties of selected protective systems in marine organisms. <i>Materials Science and Engineering C</i> , 2016, 59, 1143-1167.	7.3	83
32	Why the seahorse tail is square. <i>Science</i> , 2015, 349, aaa6683.	12.6	82
33	Compressive mechanical properties of demineralized and deproteinized cancellous bone. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2011, 4, 961-973.	3.1	77
34	The role of organic intertile layer in abalone nacre. <i>Materials Science and Engineering C</i> , 2009, 29, 2398-2410.	7.3	64
35	Elastic moduli of untreated, demineralized and deproteinized cortical bone: Validation of a theoretical model of bone as an interpenetrating composite material. <i>Acta Biomaterialia</i> , 2012, 8, 1080-1092.	8.3	64
36	Highly deformable bones: Unusual deformation mechanisms of seahorse armor. <i>Acta Biomaterialia</i> , 2013, 9, 6763-6770.	8.3	64

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37	The armored carapace of the boxfish. <i>Acta Biomaterialia</i> , 2015, 23, 1-10.	8.3	63
38	Luminescence study in Eu-doped aluminum oxide phosphors. <i>Optical Materials</i> , 2005, 27, 1311-1315.	3.6	62
39	Biomimetic Materials by Freeze Casting. <i>Jom</i> , 2013, 65, 720-727.	1.9	60
40	Hierarchical structure and compressive deformation mechanisms of bighorn sheep ( <i>Ovis canadensis</i> ) horn. <i>Acta Biomaterialia</i> , 2017, 64, 1-14.	8.3	60
41	Microwave sintering of nanocrystalline $\text{Al}_2\text{O}_3$ . <i>Scripta Materialia</i> , 1994, 4, 371-385.	0.5	58
42	High transmittance and low resistivity ZnO:Ga films by laser ablation. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1996, 14, 791-794.	2.1	58
43	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.	3.8	58
44	The effects of water and microstructure on the mechanical properties of bighorn sheep ( <i>Ovis</i> ) $\frac{T_j \text{ETQq0 0 0 rgBT}}{\text{Overlock 10 Tf 50 462}}$	8.3	58
45	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.	3.8	58
46	Potential Bone Replacement Materials Prepared by Two Methods. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1418, 177.	0.1	57
47	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.	0.3	57
48	Reproducibility of $\text{ZrO}_2$ -based freeze casting for biomaterials. <i>Materials Science and Engineering C</i> , 2016, 61, 105-112.	7.3	54
49	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.	3.5	52
50	A comparative study of young and mature bovine cortical bone. <i>Acta Biomaterialia</i> , 2013, 9, 5280-5288.	8.3	51
51	Densification mechanisms of spark plasma sintering: multi-step pressure dilatometry. <i>Journal of Materials Science</i> , 2012, 47, 7036-7046.	3.7	50
52	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.	3.8	49
53	Phosphor Development and Integration for Near-UV LED Solid State Lighting. <i>ECS Journal of Solid State Science and Technology</i> , 2013, 2, R3138-R3147.	1.8	49
54	Separating the influence of the cortex and foam on the mechanical properties of porcupine quills. <i>Acta Biomaterialia</i> , 2013, 9, 9065-9074.	8.3	48

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55	Torsional properties of helix-reinforced composites fabricated by magnetic freeze casting. <i>Composite Structures</i> , 2015, 119, 174-184.	5.8	48
56	Luminescence enhancement of Y <sub>2</sub> O <sub>3</sub> :Eu <sup>3+</sup> and Y <sub>2</sub> SiO <sub>5</sub> :Ce <sup>3+</sup> , Tb <sup>3+</sup> core particles with SiO <sub>2</sub> shells. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2011, 176, 436-441.	3.5	47
57	A natural energy absorbent polymer composite: The equine hoof wall. <i>Acta Biomaterialia</i> , 2019, 90, 267-277.	8.3	47
58	New combustion synthesis technique for the production of (In <sub>x</sub> Ga <sub>1-x</sub> ) <sub>2</sub> O <sub>3</sub> powders: Hydrazine/metal nitrate method. <i>Journal of Materials Research</i> , 2001, 16, 1059-1065.	2.6	46
59	Axial compression of a hollow cylinder filled with foam: A study of porcupine quills. <i>Acta Biomaterialia</i> , 2013, 9, 5297-5304.	8.3	46
60	Impact testing of structural biological materials. <i>Materials Science and Engineering C</i> , 2011, 31, 730-739.	7.3	45
61	Structure dependent luminescence characterization of green-yellow emitting SrSiO <sub>4</sub> :Eu <sup>2+</sup> phosphors for near UV LEDs. <i>Journal of Luminescence</i> , 2012, 132, 106-109.	3.1	45
62	Stiff, porous scaffolds from magnetized alumina particles aligned by magnetic freeze casting. <i>Materials Science and Engineering C</i> , 2017, 77, 484-492.	7.3	45
63	White light emission from rare earth activated yttrium silicate nanocrystalline powders and thin films. <i>Optical Materials</i> , 2005, 27, 1221-1227.	3.6	43
64	Flexible Dermal Armor in Nature. <i>Jom</i> , 2012, 64, 475-485.	1.9	41
65	Structural analysis of the tongue and hyoid apparatus in a woodpecker. <i>Acta Biomaterialia</i> , 2016, 37, 1-13.	8.3	41
66	Luminescence enhancement in Eu <sup>3+</sup> -doped $\hat{1}\pm$ - and $\hat{1}^3$ -Al <sub>2</sub> O <sub>3</sub> produced by pressure-assisted low-temperature combustion synthesis. <i>Applied Physics Letters</i> , 2004, 84, 1296-1298.	3.3	40
67	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.	3.1	40
68	Synthesis of YAG:Cr phosphors by precipitation from aluminum and yttrium sulfate solutions. <i>Materials Chemistry and Physics</i> , 1994, 38, 175-180.	4.0	39
69	A New Combustion Synthesis Method for GaN:Eu <sup>3+</sup> and Ga <sub>2</sub> O <sub>3</sub> :Eu <sup>3+</sup> Luminescent Powders. <i>Physica Status Solidi A</i> , 2001, 188, 179-182.	1.7	37
70	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.	3.8	37
71	Magnetism and microstructure of YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> superconductors produced by rapid solidification. <i>Physical Review B</i> , 1988, 37, 623-626.	3.2	36
72	External Field Assisted Freeze Casting. <i>Ceramics</i> , 2019, 2, 208-234.	2.6	34

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73	Crystallization of a rapidly solidified Al <sub>2</sub> O <sub>3</sub> -ZrO <sub>2</sub> eutectic glass. Journal of Non-Crystalline Solids, 1987, 94, 163-174.	3.1	33
74	Microstructure and mechanical properties of different keratinous horns. Journal of the Royal Society Interface, 2018, 15, 20180093.	3.4	33
75	Densification of zirconium nitride by spark plasma sintering and high voltage electric discharge consolidation: A comparative analysis. Ceramics International, 2015, 41, 14973-14987.	4.8	32
76	Synergistic structures from magnetic freeze casting with surface magnetized alumina particles and platelets. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 76, 153-163.	3.1	32
77	An analysis of Y <sub>2</sub> O <sub>3</sub> :Eu <sup>3+</sup> thin films for thermographic phosphor applications. Journal of Luminescence, 2011, 131, 41-48.	3.1	30
78	Microstructural properties of Eu-doped GaN luminescent powders. Applied Physics Letters, 2002, 81, 1993-1995.	3.3	29
79	Bioinspired composites from freeze casting with clathrate hydrates. Materials & Design, 2015, 71, 62-67.	5.1	29
80	How Water Can Affect Keratin: Hydration-Driven Recovery of Bighorn Sheep ( Ovis Canadensis ) Horns. Advanced Functional Materials, 2019, 29, 1901077.	14.9	29
81	Identification and development of nanoscintillators for biotechnology applications. Journal of Luminescence, 2014, 154, 569-577.	3.1	27
82	A novel method for the synthesis of sub-microcrystalline wurtzite-type In <sub>x</sub> Ga <sub>1-x</sub> N powders. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 90, 7-12.	3.5	26
83	Color tunable single-phase Eu <sup>2+</sup> and Ce <sup>3+</sup> co-activated Sr <sub>2</sub> LiAlO <sub>4</sub> phosphors. Journal of Materials Chemistry C, 2019, 7, 7734-7744.	5.5	26
84	Synthesis of celsian ceramics from zeolite precursors. Journal of Non-Crystalline Solids, 1994, 170, 303-307.	3.1	25
85	Growth of nacre in abalone: Seasonal and feeding effects. Materials Science and Engineering C, 2011, 31, 238-245.	7.3	25
86	Comparison of luminescent properties of Y <sub>2</sub> O <sub>3</sub> :Eu <sup>3+</sup> and LaPO <sub>4</sub> :Ce <sup>3+</sup> , Tb <sup>3+</sup> phosphors prepared by various synthetic methods. Materials Characterization, 2015, 103, 162-169.	4.4	25
87	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.	1.8	24
88	Analysis of (Ba,Ca,Sr) <sub>3</sub> MgSi <sub>2</sub> O <sub>8</sub> :Eu <sup>2+</sup> , Mn <sup>2+</sup> phosphors for application in solid state lighting. Journal of Luminescence, 2014, 148, 1-5.	3.1	24
89	An integrated first principles and experimental investigation of the relationship between structural rigidity and quantum efficiency in phosphors for solid state lighting. Journal of Luminescence, 2016, 179, 297-305.	3.1	24
90	Bioinspired intrinsic control of freeze cast composites: Harnessing hydrophobic hydration and clathrate hydrates. Acta Materialia, 2016, 114, 67-79.	7.9	24

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91	3D Printed Templating of Extrinsic Freeze-Casting for Macro-“Microporous Biomaterials. ACS Biomaterials Science and Engineering, 2019, 5, 2122-2133.	5.2	24
92	Kinetic studies of bone demineralization at different HCl concentrations and temperatures. Materials Science and Engineering C, 2011, 31, 523-530.	7.3	23
93	Sol-Gel Synthesis of Single Phase, High Quantum Efficiency $\text{LiCaPO}_4\text{:Eu}^{2+}$ Phosphors. ECS Journal of Solid State Science and Technology, 2012, 1, R37-R40.	1.8	23
94	Effect of starch on the mechanical and in vitro properties of collagen-hydroxyapatite sponges for applications in dentistry. Carbohydrate Polymers, 2016, 148, 78-85.	10.2	23
95	Radial-Concentric Freeze Casting Inspired by Porcupine Fish Spines. Ceramics, 2019, 2, 161-179.	2.6	23
96	Predicting and Modeling the Low-Voltage Cathodoluminescent Efficiency of Oxide Phosphors. Journal of the Electrochemical Society, 1998, 145, 3165-3170.	2.9	22
97	$\text{Ba}_{0.5}\text{Sr}_{0.5}\text{TiO}_3$ thin films deposited by PLD on $\text{SiO}_2/\text{Si}$ $\text{RuO}_2/\text{Si}$ and $\text{Pt}/\text{Si}$ electrodes. Thin Solid Films, 2000, 373, 49-52.	1.8	22
98	Structural biological materials: Overview of current research. Jom, 2008, 60, 23-32.	1.9	22
99	Europium-Activated $\text{K}_2\text{SrPO}_4$ ( $\text{Ba}$ , $\text{Sr}$ ) $\text{S}_{0.5}\text{O}_{4.5}$ Solid Solutions as Color-Tunable Phosphors for Near-UV Light-Emitting Diode Applications. Journal of the American Ceramic Society, 2013, 96, 1526-1532.	3.8	22
100	Review-“Electrophoretic Deposition of Phosphors for Solid-State Lighting. ECS Journal of Solid State Science and Technology, 2016, 5, R3107-R3120.	1.8	22
101	Modeling and Fabrication of Fine-Grain Alumina-Zirconia Composites Produced from Nanocrystalline Precursors. Journal of the American Ceramic Society, 1998, 81, 1773-1780.	3.8	21
102	Creep of trabecular bone from the human proximal tibia. Materials Science and Engineering C, 2014, 40, 219-227.	7.3	21
103	Sintering of bi-porous titanium dioxide scaffolds: Experimentation, modeling and simulation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 636, 148-156.	5.6	21
104	Preparation of Green-Emitting $\text{Sr}_{1-x}\text{Eu}_x\text{Ga}_2\text{S}_4$ Phosphors by a Solid-State Rapid Metathesis Reaction. Journal of the Electrochemical Society, 1999, 146, 4316-4319.	2.9	19
105	Particle morphology and luminescence properties of green emitting $\text{Ba}_2\text{SiO}_4\text{:Eu}^{2+}$ through a hydrothermal reaction route. Journal of Luminescence, 2015, 161, 20-24.	3.1	19
106	Reinforcements in avian wing bones: Experiments, analysis, and modeling. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 76, 85-96.	3.1	19
107	Photo- and radioluminescence characteristics of bismuth germanate nanoparticles by sol-gel and pressure-assisted combustion synthesis. Optical Materials, 2012, 34, 1116-1119.	3.6	18
108	Europium-activated barium/strontium silicates for near-UV light emitting diode applications. Journal of Luminescence, 2013, 133, 184-187.	3.1	18

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109	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.	5.2	18
110	Pulsed laser deposition of Y3Al5O12:Tb photoluminescent thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1996, 14, 1694-1696.	2.1	17
111	Spines of the porcupine fish: Structure, composition, and mechanical properties. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 73, 38-49.	3.1	17
112	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.	2.8	17
113	Modeling zirconia sintering trajectory for obtaining translucent submicronic ceramics for dental implant applications. <i>Acta Materialia</i> , 2020, 188, 101-107.	7.9	17
114	RAPID SOLIDIFICATION OF OXIDE SUPERCONDUCTORS IN THE Y-Ba-Cu-O SYSTEM. <i>Advanced Ceramic Materials</i> , 1987, 2, 353-363.	2.2	16
115	Deproteinization of Cortical Bone: Effects of Different Treatments. <i>Calcified Tissue International</i> , 2018, 103, 554-566.	3.1	16
116	Long-Ultraviolet-Excited White-Light Emission in Rare-Earth-Activated Yttrium-Oxyorthosilicate. <i>Journal of the American Ceramic Society</i> , 2007, 90, 2484-2488.	3.8	15
117	In situ Wear Study Reveals Role of Microstructure on Self-Sharpening Mechanism in Sea Urchin Teeth. <i>Matter</i> , 2019, 1, 1246-1261.	10.0	15
118	Comparison of different protocols for demineralization of cortical bone. <i>Scientific Reports</i> , 2021, 11, 7012.	3.3	15
119	Consolidation of Molybdenum nanopowders by spark plasma sintering: Densification mechanism and first mirror application. <i>Journal of Nuclear Materials</i> , 2019, 516, 354-359.	2.7	14
120	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.	3.1	14
121	Microwave and conventional sintering of rapidly solidified Al2O3-ZrO2 powders. <i>Journal of Materials Science</i> , 1994, 29, 2119-2125.	3.7	13
122	Pressure influenced combustion synthesis of $\gamma$ - and $\delta$ -Al2O3 nanocrystalline powders. <i>Journal of Physics Condensed Matter</i> , 2004, 16, 2585-2591.	1.8	13
123	Development of luminescent materials with strong UV-blue absorption. <i>Optical Materials</i> , 2005, 27, 1301-1304.	3.6	13
124	Microstructural evolution of paramagnetic materials by magnetic freeze casting. <i>Journal of Materials Research and Technology</i> , 2019, 8, 2247-2254.	5.8	13
125	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.	5.8	13
126	Advantages of self-propagating combustion reactions for synthesis of oxide phosphors. <i>Journal of the Society for Information Display</i> , 1997, 5, 117.	2.1	12



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127	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.	7.3	12
128	Mechanical Properties of Model Two-Phase Composites with Continuous Compared to Discontinuous Phases. <i>Advanced Engineering Materials</i> , 2018, 20, 1800505.	3.5	12
129	A comparative analysis of the avian skull: Woodpeckers and chickens. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018, 84, 273-280.	3.1	12
130	Response of Sea Urchin Fitness Traits to Environmental Gradients Across the Southern California Oxygen Minimum Zone. <i>Frontiers in Marine Science</i> , 2018, 5, .	2.5	12
131	Study of GaN:Eu <sup>3+</sup> Thin Films Deposited by Metallorganic Vapor-Phase Epitaxy. <i>Journal of the Electrochemical Society</i> , 2008, 155, J315.	2.9	11
132	Kinetic characterization of the deproteinization of trabecular and cortical bovine femur bones. <i>Materials Science and Engineering C</i> , 2013, 33, 4958-4964.	7.3	11
133	Structure and mechanical implications of the pectoral fin skeleton in the Longnose Skate ( <i>Chondrichthyes</i> , <i>Batoidea</i> ). <i>Acta Biomaterialia</i> , 2017, 51, 393-407.	8.3	11
134	Time dependent magnetic response in a GdBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> superconductor: Flux creep or superconducting glass state?. <i>Physica C: Superconductivity and Its Applications</i> , 1988, 153-155, 310-311.	1.2	10
135	Dynamic Compaction of Al <sub>2</sub> O <sub>3</sub> -ZrO <sub>2</sub> Compositions. <i>Journal of the American Ceramic Society</i> , 1994, 77, 1605-1612.	3.8	9
136	Development of novel microstructures in zirconia-toughened alumina using rapid solidification and shock compaction. <i>Journal of Materials Research</i> , 1996, 11, 110-119.	2.6	9
137	Study of Luminescence from GaN:Tb <sup>3+</sup> Powders and Thin Films Deposited by MOVPE and PLD Methods. <i>Journal of the Electrochemical Society</i> , 2009, 156, J158.	2.9	9
138	Dynamic fracture resilience of elk antler: Biomimetic inspiration for improved crashworthiness. <i>Jom</i> , 2010, 62, 41-46.	1.9	9
139	Oxidation effects on spark plasma sintering of molybdenum nanopowders. <i>Journal of the American Ceramic Society</i> , 2019, 102, 801-812.	3.8	9
140	Magnetic susceptibility of rapidly solidified YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> superconductors. <i>Journal of Applied Physics</i> , 1988, 63, 4229-4231.	2.5	8
141	Chemical synthesis of spun-on thick films of oxide superconductors. <i>Thin Solid Films</i> , 1991, 206, 146-150.	1.8	8
142	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.	7.3	8
143	Reprint of: Growth of nacre in abalone: Seasonal and feeding effects. <i>Materials Science and Engineering C</i> , 2011, 31, 716-723.	7.3	8
144	Elastic properties of cancellous bone in terms of elastic properties of its mineral and protein phases with application to their osteoporotic degradation. <i>Mechanics of Materials</i> , 2012, 44, 139-150.	3.2	8

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145	Synthesis and characterization of (Lu <sup>1+</sup> Y <sup>3+</sup> Ce <sup>3+</sup> ) <sub>2</sub> SiO <sub>5</sub> luminescent powders with fast decay time. Journal of Luminescence, 2013, 136, 86-89.	3.1	8
146	Initial anisotropy in demineralized bovine cortical bone in compressive cyclic loading/unloading. Materials Science and Engineering C, 2013, 33, 817-823.	7.3	8
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