

Fiorenzo G Omenetto

List of Publications by Year in descending order

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183
papers

22,896
citations

13068

68
h-index

7931

149
g-index

190
all docs

190
docs citations

190
times ranked

22843
citing authors

#	ARTICLE	IF	CITATIONS
1	Epidermal Electronics. <i>Science</i> , 2011, 333, 838-843.	6.0	3,944
2	Dissolvable films of silk fibroin for ultrathin conformal bio-integrated electronics. <i>Nature Materials</i> , 2010, 9, 511-517.	13.3	1,501
3	New Opportunities for an Ancient Material. <i>Science</i> , 2010, 329, 528-531.	6.0	1,224
4	A Physically Transient Form of Silicon Electronics. <i>Science</i> , 2012, 337, 1640-1644.	6.0	1,085
5	Injectable, Cellular-Scale Optoelectronics with Applications for Wireless Optogenetics. <i>Science</i> , 2013, 340, 211-216.	6.0	1,010
6	Graphene-based wireless bacteria detection on tooth enamel. <i>Nature Communications</i> , 2012, 3, 763.	5.8	806
7	Silk Materials "A Road to Sustainable High Technology". <i>Advanced Materials</i> , 2012, 24, 2824-2837.	11.1	456
8	Silk film biomaterials for cornea tissue engineering. <i>Biomaterials</i> , 2009, 30, 1299-1308.	5.7	362
9	InÂvivo bioresponses to silk proteins. <i>Biomaterials</i> , 2015, 71, 145-157.	5.7	357
10	Highly Tunable Elastomeric Silk Biomaterials. <i>Advanced Functional Materials</i> , 2014, 24, 4615-4624.	7.8	338
11	Silk-Based Conformal, Adhesive, Edible Food Sensors. <i>Advanced Materials</i> , 2012, 24, 1067-1072.	11.1	335
12	Silkworm silk-based materials and devices generated using bio-nanotechnology. <i>Chemical Society Reviews</i> , 2018, 47, 6486-6504.	18.7	324
13	Biocompatible Silk Printed Optical Waveguides. <i>Advanced Materials</i> , 2009, 21, 2411-2415.	11.1	308
14	A new route for silk. <i>Nature Photonics</i> , 2008, 2, 641-643.	15.6	306
15	Bioactive Silk Protein Biomaterial Systems for Optical Devices. <i>Biomacromolecules</i> , 2008, 9, 1214-1220.	2.6	281
16	Effect of processing on silk-based biomaterials: Reproducibility and biocompatibility. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2011, 99B, 89-101.	1.6	281
17	Silk-based resorbable electronic devices for remotely controlled therapy and in vivo infection abatement. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 17385-17389.	3.3	281
18	Bioengineered functional brain-like cortical tissue. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 13811-13816.	3.3	255

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19	Fabrication of Silk Microneedles for Controlled Release Drug Delivery. <i>Advanced Functional Materials</i> , 2012, 22, 330-335.	7.8	245
20	All-water-based electron-beam lithography using silk as a resist. <i>Nature Nanotechnology</i> , 2014, 9, 306-310.	15.6	245
21	Evolution of Bioinks and Additive Manufacturing Technologies for 3D Bioprinting. <i>ACS Biomaterials Science and Engineering</i> , 2016, 2, 1662-1678.	2.6	237
22	Materials and Fabrication Processes for Transient and Bioresorbable High-Performance Electronics. <i>Advanced Functional Materials</i> , 2013, 23, 4087-4093.	7.8	222
23	Silk inverse opals. <i>Nature Photonics</i> , 2012, 6, 818-823.	15.6	217
24	Silk based bioinks for soft tissue reconstruction using 3-dimensional (3D) printing with <i>in vitro</i> and <i>in vivo</i> assessments. <i>Biomaterials</i> , 2017, 117, 105-115.	5.7	189
25	Insoluble and Flexible Silk Films Containing Glycerol. <i>Biomacromolecules</i> , 2010, 11, 143-150.	2.6	187
26	Nano- and Micropatterning of Optically Transparent, Mechanically Robust, Biocompatible Silk Fibroin Films. <i>Advanced Materials</i> , 2008, 20, 3070-3072.	11.1	181
27	Bio-microfluidics: Biomaterials and Biomimetic Designs. <i>Advanced Materials</i> , 2010, 22, 249-260.	11.1	178
28	Fabrication and application of flexible, multimodal light-emitting devices for wireless optogenetics. <i>Nature Protocols</i> , 2013, 8, 2413-2428.	5.5	177
29	Stabilization of Enzymes in Silk Films. <i>Biomacromolecules</i> , 2009, 10, 1032-1042.	2.6	174
30	Inkjet Printing of Regenerated Silk Fibroin: From Printable Forms to Printable Functions. <i>Advanced Materials</i> , 2015, 27, 4273-4279.	11.1	174
31	Processing methods to control silk fibroin film biomaterial features. <i>Journal of Materials Science</i> , 2008, 43, 6967-6985.	1.7	170
32	Silk Fibroin as Edible Coating for Perishable Food Preservation. <i>Scientific Reports</i> , 2016, 6, 25263.	1.6	168
33	Antibiotic-Releasing Silk Biomaterials for Infection Prevention and Treatment. <i>Advanced Functional Materials</i> , 2013, 23, 854-861.	7.8	164
34	25th Anniversary Article: Materials for High-Performance Biodegradable Semiconductor Devices. <i>Advanced Materials</i> , 2014, 26, 1992-2000.	11.1	161
35	Performance enhancement of terahertz metamaterials on ultrathin substrates for sensing applications. <i>Applied Physics Letters</i> , 2010, 97, .	1.5	158
36	Functional, RF-Trilayer Sensors for Tooth-Mounted, Wireless Monitoring of the Oral Cavity and Food Consumption. <i>Advanced Materials</i> , 2018, 30, e1703257.	11.1	146

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37	Rapid Nanoimprinting of Silk Fibroin Films for Biophotonic Applications. <i>Advanced Materials</i> , 2010, 22, 1746-1749.	11.1	139
38	Physical and chemical aspects of stabilization of compounds in silk. <i>Biopolymers</i> , 2012, 97, 479-498.	1.2	138
39	Directed assembly of bio-inspired hierarchical materials with controlled nanofibrillar architectures. <i>Nature Nanotechnology</i> , 2017, 12, 474-480.	15.6	134
40	A Biodegradable Thin-Film Magnesium Primary Battery Using Silk Fibroin-Ionic Liquid Polymer Electrolyte. <i>ACS Energy Letters</i> , 2017, 2, 831-836.	8.8	134
41	High-strength, Durable All-Silk Fibroin Hydrogels with Versatile Processability toward Multifunctional Applications. <i>Advanced Functional Materials</i> , 2018, 28, 1704757.	7.8	133
42	Photocrosslinking of Silk Fibroin Using Riboflavin for Ocular Prostheses. <i>Advanced Materials</i> , 2016, 28, 2417-2420.	11.1	132
43	Stabilization and Release of Enzymes from Silk Films. <i>Macromolecular Bioscience</i> , 2010, 10, 359-368.	2.1	127
44	The Use of Functionalized Silk Fibroin Films as a Platform for Optical Diffraction-Based Sensing Applications. <i>Advanced Materials</i> , 2017, 29, 1605471.	11.1	127
45	Laser-based three-dimensional multiscale micropatterning of biocompatible hydrogels for customized tissue engineering scaffolds. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 12052-12057.	3.3	122
46	Dityrosine Cross-Linking in Designing Biomaterials. <i>ACS Biomaterials Science and Engineering</i> , 2016, 2, 2108-2121.	2.6	121
47	Design, Fabrication, and Function of Silk-Based Nanomaterials. <i>Advanced Functional Materials</i> , 2018, 28, 1805305.	7.8	120
48	Silk-based stabilization of biomacromolecules. <i>Journal of Controlled Release</i> , 2015, 219, 416-430.	4.8	117
49	Implantable, multifunctional, bioresorbable optics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 19584-19589.	3.3	112
50	Silk as a Multifunctional Biomaterial Substrate for Reduced Glial Scarring around Brain-Penetrating Electrodes. <i>Advanced Functional Materials</i> , 2013, 23, 3185-3193.	7.8	111
51	Metamaterial Silk Composites at Terahertz Frequencies. <i>Advanced Materials</i> , 2010, 22, 3527-3531.	11.1	102
52	Bio-functionalized silk hydrogel microfluidic systems. <i>Biomaterials</i> , 2016, 93, 60-70.	5.7	101
53	Printing of stretchable silk membranes for strain measurements. <i>Lab on A Chip</i> , 2016, 16, 2459-2466.	3.1	99
54	Programmable Hydrogel Ionic Circuits for Biologically Matched Electronic Interfaces. <i>Advanced Materials</i> , 2018, 30, e1800598.	11.1	98

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55	Silk-Based Biocompatible Random Lasing. <i>Advanced Optical Materials</i> , 2016, 4, 998-1003.	3.6	90
56	In vitro bioengineered model of cortical brain tissue. <i>Nature Protocols</i> , 2015, 10, 1362-1373.	5.5	87
57	Biocompatible silk step-index optical waveguides. <i>Biomedical Optics Express</i> , 2015, 6, 4221.	1.5	84
58	Polyol-Silk Bioink Formulations as Two-Part Room-Temperature Curable Materials for 3D Printing. <i>ACS Biomaterials Science and Engineering</i> , 2015, 1, 780-788.	2.6	84
59	Modulation of Multiscale 3D Lattices through Conformational Control: Painting Silk Inverse Opals with Water and Light. <i>Advanced Materials</i> , 2017, 29, 1702769.	11.1	83
60	3D freeform printing of silk fibroin. <i>Acta Biomaterialia</i> , 2018, 71, 379-387.	4.1	83
61	Materials for Programmed, Functional Transformation in Transient Electronic Systems. <i>Advanced Materials</i> , 2015, 27, 47-52.	11.1	81
62	Protein-Protein Nanoimprinting of Silk Fibroin Films. <i>Advanced Materials</i> , 2013, 25, 2409-2414.	11.1	78
63	Nanoscale probing of electron-regulated structural transitions in silk proteins by near-field IR imaging and nano-spectroscopy. <i>Nature Communications</i> , 2016, 7, 13079.	5.8	78
64	Programming function into mechanical forms by directed assembly of silk bulk materials. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 451-456.	3.3	78
65	Inkjet Printing of Patterned, Multispectral, and Biocompatible Photonic Crystals. <i>Advanced Materials</i> , 2019, 31, e1901036.	11.1	78
66	Low-threshold blue lasing from silk fibroin thin films. <i>Applied Physics Letters</i> , 2012, 101, 091110.	1.5	77
67	Controlling silk fibroin conformation for dynamic, responsive, multifunctional, micropatterned surfaces. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 21361-21368.	3.3	75
68	An Analytical Model of Reactive Diffusion for Transient Electronics. <i>Advanced Functional Materials</i> , 2013, 23, 3106-3114.	7.8	74
69	Silk-based blood stabilization for diagnostics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 5892-5897.	3.3	74
70	Synthesis of Silk Fibroin Micro- and Submicron Spheres Using a Co-Flow Capillary Device. <i>Advanced Materials</i> , 2014, 26, 1105-1110.	11.1	68
71	Modulated Degradation of Transient Electronic Devices through Multilayer Silk Fibroin Pockets. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 19870-19875.	4.0	66
72	Functionalized Silk-Based Active Optofluidic Devices. <i>Advanced Functional Materials</i> , 2010, 20, 1083-1089.	7.8	64

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73	Flexible magnetic composites for light-controlled actuation and interfaces. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8119-8124.	3.3	64
74	Tuning Chemical and Physical Cross-Links in Silk Electrogels for Morphological Analysis and Mechanical Reinforcement. Biomacromolecules, 2013, 14, 2629-2635.	2.6	63
75	Transdermal Delivery Devices: Fabrication, Mechanics and Drug Release from Silk. Small, 2013, 9, 3704-3713.	5.2	63
76	Stimuli-responsive composite biopolymer actuators with selective spatial deformation behavior. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 14602-14608.	3.3	63
77	Spectral analysis of induced color change on periodically nanopatterned silk films. Optics Express, 2009, 17, 21271.	1.7	60
78	Transparent, Nanostructured Silk Fibroin Hydrogels with Tunable Mechanical Properties. ACS Biomaterials Science and Engineering, 2015, 1, 964-970.	2.6	58
79	Silk Fibroin Microneedles for Transdermal Vaccine Delivery. ACS Biomaterials Science and Engineering, 2017, 3, 360-369.	2.6	55
80	3D Functional Corneal Stromal Tissue Equivalent Based on Corneal Stromal Stem Cells and Multi-Layered Silk Film Architecture. PLoS ONE, 2017, 12, e0169504.	1.1	55
81	Spatial and spectral detection of protein monolayers with deterministic aperiodic arrays of metal nanoparticles. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 12086-12090.	3.3	54
82	Bioinspired Biomaterial Composite for All-Water-Based High-Performance Adhesives. Advanced Science, 2021, 8, e2004786.	5.6	54
83	Biofunctional Silk/Neuron Interfaces. Advanced Functional Materials, 2012, 22, 1871-1884.	7.8	52
84	Film-Based Implants for Supporting Neuron-Electrode Integrated Interfaces for The Brain. Advanced Functional Materials, 2014, 24, 1938-1948.	7.8	52
85	Hydrogel Gate Graphene Field-Effect Transistors as Multiplexed Biosensors. Nano Letters, 2019, 19, 2620-2626.	4.5	52
86	Recombinant reflectin-based optical materials. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 254-264.	2.4	51
87	High-Q silk fibroin whispering gallery microresonator. Optics Express, 2016, 24, 20825.	1.7	50
88	Protein Bricks: 2D and 3D Bio-Nanostructures with Shape and Function on Demand. Advanced Materials, 2018, 30, e1705919.	11.1	50
89	Rapid Nanoimprinting of Doped Silk Films for Enhanced Fluorescent Emission. Advanced Materials, 2010, 22, 4596-4599.	11.1	49
90	Bioinspired stimuli-responsive multilayer film made of silk-titanate nanocomposites. Journal of Materials Chemistry C, 2017, 5, 3924-3931.	2.7	49

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91	Regenerated silk materials for functionalized silk orthopedic devices by mimicking natural processing. <i>Biomaterials</i> , 2016, 110, 24-33.	5.7	48
92	Rapid Transfer-Based Micropatterning and Dry Etching of Silk Microstructures. <i>Advanced Materials</i> , 2011, 23, 2015-2019.	11.1	47
93	Bioactive self-sensing optical systems. <i>Applied Physics Letters</i> , 2009, 95, 253702.	1.5	46
94	The optical properties of regenerated silk fibroin films obtained from different sources. <i>Applied Physics Letters</i> , 2017, 111, .	1.5	44
95	Direct Transfer of Subwavelength Plasmonic Nanostructures on Bioactive Silk Films. <i>Advanced Materials</i> , 2012, 24, 6088-6093.	11.1	43
96	Eco-friendly photolithography using water-developable pure silk fibroin. <i>RSC Advances</i> , 2016, 6, 39330-39334.	1.7	43
97	3D Printing of Silk Protein Structures by Aqueous Solvent-Directed Molecular Assembly. <i>Macromolecular Bioscience</i> , 2020, 20, e1900191.	2.1	42
98	Gain-Based Mechanism for $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle \text{mml:mrow} \langle \text{mml:mi} \rangle \text{p} \langle \text{mml:mi} \rangle \langle \text{mml:mtext} \rangle \text{H} \langle \text{mml:mtext} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ Sensing Based on Random Lasing. <i>Physical Review Applied</i> , 2017, 7, .	1.5	39
99	3D Printing of Regenerated Silk Fibroin and Antibody-Containing Microstructures via Multiphoton Lithography. <i>ACS Biomaterials Science and Engineering</i> , 2017, 3, 2064-2075.	2.6	39
100	Light-activated shape morphing and light-tracking materials using biopolymer-based programmable photonic nanostructures. <i>Nature Communications</i> , 2021, 12, 1651.	5.8	39
101	Fluorescent Nanodiamond Silk Fibroin Spheres: Advanced Nanoscale Bioimaging Tool. <i>ACS Biomaterials Science and Engineering</i> , 2015, 1, 1104-1113.	2.6	37
102	Large-Scale Patterning of Reactive Surfaces for Wearable and Environmentally Deployable Sensors. <i>Advanced Materials</i> , 2020, 32, e2001258.	11.1	37
103	Doxorubicin loaded nanodiamond-silk spheres for fluorescence tracking and controlled drug release. <i>Biomedical Optics Express</i> , 2016, 7, 132.	1.5	32
104	Evaluation of the Spectral Response of Functionalized Silk Inverse Opals as Colorimetric Immunosensors. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 16218-16226.	4.0	32
105	3D Printing of Functional Microalgal Silk Structures for Environmental Applications. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 4808-4816.	2.6	32
106	Biomaterial-Based Structured Opals with Programmable Combination of Diffractive Optical Elements and Photonic Bandgap Effects. <i>Advanced Materials</i> , 2019, 31, e1805312.	11.1	32
107	Silk protein based hybrid photonic-plasmonic crystal. <i>Optics Express</i> , 2013, 21, 8897.	1.7	31
108	Fabrication of Tunable, High-Refractive-Index Titanate-Silk Nanocomposites on the Micro and Nanoscale. <i>Advanced Materials</i> , 2015, 27, 6728-6732.	11.1	31

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109	Coding Cell Micropatterns Through Peptide Inkjet Printing for Arbitrary Biomineralized Architectures. <i>Advanced Functional Materials</i> , 2018, 28, 1800228.	7.8	31
110	Silk materials at the convergence of science, sustainability, healthcare, and technology. <i>Applied Physics Reviews</i> , 2022, 9, .	5.5	31
111	Rapid fabrication of silk films with controlled architectures via electrogelation. <i>Journal of Materials Chemistry B</i> , 2014, 2, 4983.	2.9	28
112	Materials and fabrication sequences for water soluble silicon integrated circuits at the 90nm node. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	28
113	Methods and Applications of Multilayer Silk Fibroin Laminates Based on Spatially Controlled Welding in Protein Films. <i>Advanced Functional Materials</i> , 2016, 26, 44-50.	7.8	26
114	Optimizing Molecular Weight of Lyophilized Silk As a Shelf-Stable Source Material. <i>ACS Biomaterials Science and Engineering</i> , 2016, 2, 595-605.	2.6	25
115	Gold nanoparticle-doped biocompatible silk films as a path to implantable thermo-electrically wireless powering devices. <i>Applied Physics Letters</i> , 2010, 97, 123702.	1.5	24
116	Dielectric Breakdown Strength of Regenerated Silk Fibroin Films as a Function of Protein Conformation. <i>Biomacromolecules</i> , 2013, 14, 3509-3514.	2.6	24
117	Encapsulation of volatile compounds in silk microparticles. <i>Journal of Coatings Technology Research</i> , 2015, 12, 793-799.	1.2	24
118	Optomechanically Actuated Microcilia for Locally Reconfigurable Surfaces. <i>Advanced Materials</i> , 2020, 32, e2004147.	11.1	24
119	Reconfigurable microwave metadevices based on organic electrochemical transistors. <i>Nature Electronics</i> , 2021, 4, 424-428.	13.1	23
120	Cashmere-derived keratin for device manufacturing on the micro- and nanoscale. <i>Journal of Materials Chemistry C</i> , 2015, 3, 2783-2787.	2.7	22
121	Palladium Supported on Silk Fibroin for Suzuki-Miyaura Cross-Coupling Reactions. <i>European Journal of Organic Chemistry</i> , 2020, 2020, 6992-6996.	1.2	21
122	Optically induced birefringence and holography in silk. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2012, 50, 257-262.	2.4	20
123	Synthesis and characterization of biocompatible nanodiamond-silk hybrid material. <i>Biomedical Optics Express</i> , 2014, 5, 596.	1.5	19
124	Silk Fibroin/Carbon Nanotube Composite Electrodes for Flexible Biocatalytic Fuel Cells. <i>Advanced Electronic Materials</i> , 2016, 2, 1600190.	2.6	19
125	Designing the Iridescences of Biopolymers by Assembly of Photonic Crystal Superlattices. <i>Advanced Optical Materials</i> , 2018, 6, 1800066.	3.6	19
126	Silk Embolic Material for Catheter-Directed Endovascular Drug Delivery. <i>Advanced Materials</i> , 2022, 34, e2106865.	11.1	19

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127	Enhanced photoluminescence of Si nanocrystals-doped cellulose nanofibers by plasmonic light scattering. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	18
128	Functionalized Mouth-Conformable Interfaces for pH Evaluation of the Oral Cavity. <i>Advanced Science</i> , 2021, 8, e2003416.	5.6	18
129	Conformal Silk-Azobenzene Composite for Optically Switchable Diffractive Structures. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 30951-30957.	4.0	17
130	Silk fibroin hydroxyapatite composite thermal stabilisation of carbonic anhydrase. <i>Journal of Materials Chemistry A</i> , 2015, 3, 19282-19287.	5.2	16
131	Encapsulation of oil in silk fibroin biomaterials. <i>Journal of Applied Polymer Science</i> , 2014, 131, .	1.3	15
132	Bombyx mori Silk Fibroin Regeneration in Solution of Lanthanide Ions: A Systematic Investigation. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 653033.	2.0	15
133	Active optics with silk. <i>Nanophotonics</i> , 2020, 10, 137-148.	2.9	15
134	Photo-induced structural modification of silk gels containing azobenzene side groups. <i>Soft Matter</i> , 2017, 13, 2903-2906.	1.2	14
135	Stabilization of RNA Encapsulated in Silk. <i>ACS Biomaterials Science and Engineering</i> , 2018, 4, 1708-1715.	2.6	14
136	Evaluation of Silk Inverse Opals for Smart-Tissue Culture. <i>ACS Omega</i> , 2017, 2, 470-477.	1.6	13
137	Fabrication of elastomeric silk fibers. <i>Biopolymers</i> , 2017, 107, e23030.	1.2	13
138	Photonic paper: Multiscale assembly of reflective cellulose sheets in <i>Lunaria annua</i> . <i>Science Advances</i> , 2020, 6, .	4.7	13
139	Stabilization of Salivary Biomarkers. <i>ACS Biomaterials Science and Engineering</i> , 2021, 7, 5451-5473.	2.6	12
140	Enhanced Stabilization in Dried Silk Fibroin Matrices. <i>Biomacromolecules</i> , 2017, 18, 2900-2905.	2.6	11
141	Silk-Fibroin-Supported Palladium Catalyst for Suzuki-Miyaura and Ullmann Coupling Reactions of Aryl Chlorides. <i>European Journal of Organic Chemistry</i> , 2022, 2022, .	1.2	10
142	Silk: A Different Kind of Fiber Optics. <i>Optics and Photonics News</i> , 2014, 25, 28.	0.4	9
143	Direct Transfer Printing of Water Hydrolyzable Metals onto Silk Fibroin Substrates through Thermal-Flow-Based Adhesion. <i>Advanced Materials Interfaces</i> , 2016, 3, 1600094.	1.9	9
144	Silk Fibroin Processing from CeCl ₃ Aqueous Solution: Fibers Regeneration and Doping with Ce(III). <i>Macromolecular Chemistry and Physics</i> , 2020, 221, 2000066.	1.1	9

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145	Nanoporous silk films with capillary action and size-exclusion capacity for sensitive glucose determination in whole blood. <i>Lab on A Chip</i> , 2021, 21, 608-615.	3.1	9
146	Silk Reservoir Implants for Sustained Drug Delivery. <i>ACS Applied Bio Materials</i> , 2021, 4, 869-880.	2.3	8
147	Towards an Integrated Optofluidic Diffractive Spectrometer. <i>IEEE Photonics Technology Letters</i> , 2007, 19, 1976-1978.	1.3	7
148	Towards the fabrication of biohybrid silk fibroin materials: entrapment and preservation of chloroplast organelles in silk fibroin films. <i>RSC Advances</i> , 2016, 6, 72366-72370.	1.7	7
149	Cutting the Cord: Progress in Untethered Soft Robotics and Actuators. <i>MRS Advances</i> , 2019, 4, 2787-2804.	0.5	7
150	SnapShot: Silk Biomaterials. <i>Biomaterials</i> , 2010, 31, 6119-6120.	5.7	6
151	Silk Fibroin: Photocrosslinking of Silk Fibroin Using Riboflavin for Ocular Prostheses (<i>Adv. Mater.</i>) Tj ETQq1 1 0.784314 rgBT /Overlock 11.1	11.1	6
152	Engineering optical defects in biopolymer photonic lattices. <i>Journal of Materials Chemistry C</i> , 2018, 6, 966-971.	2.7	6
153	Inkjet-printed lasing silk text on reusable distributed feedback boards. <i>Optical Materials Express</i> , 2020, 10, 818.	1.6	6
154	Dry Spun, Bulkâ€Functionalized rGO Fibers for Textile Integrated Potentiometric Sensors. <i>Advanced Materials Technologies</i> , 2022, 7, .	3.0	6
155	Generation of Complex Tunable Multispectral Signatures with Reconfigurable Proteinâ€Based, Plasmonicâ€Photonic Crystal Hybrid Nanostructures. <i>Small</i> , 2022, 18, e2201036.	5.2	6
156	Proton conduction in inkjet-printed reflectin films. <i>APL Materials</i> , 2020, 8, 101113.	2.2	5
157	Three-dimensional thermal analysis of wirelessly powered light-emitting systems. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2012, 468, 4088-4097.	1.0	4
158	Unmixing octopus camouflage by multispectral mapping of <i>Octopus bimaculoides</i> â€™ chromatic elements. <i>Nanophotonics</i> , 2021, 10, 2441-2450.	2.9	4
159	Transient Electronics: Materials for Programmed, Functional Transformation in Transient Electronic Systems (<i>Adv. Mater.</i> 1/2015). <i>Advanced Materials</i> , 2015, 27, 187-187.	11.1	3
160	Solvent-Free Strategy To Encapsulate Degradable, Implantable Metals in Silk Fibroin. <i>ACS Applied Bio Materials</i> , 2018, 1, 1677-1686.	2.3	3
161	Bio-Nanostructures: Protein Bricks: 2D and 3D Bio-Nanostructures with Shape and Function on Demand (<i>Adv. Mater.</i> 20/2018). <i>Advanced Materials</i> , 2018, 30, 1870141.	11.1	3
162	N-dimensional optics with natural materials. <i>MRS Communications</i> , 2020, 10, 201-214.	0.8	3

#	ARTICLE	IF	CITATIONS
163	IR Supercontinuum in Compact Tellurite PCFs. , 2007, , .		2
164	Flexible Electronics: Materials and Designs for Wirelessly Powered Implantable Light-Emitting Systems (Small 18/2012). Small, 2012, 8, 2770-2770.	5.2	2
165	Silk fibroin-based active optofluidics. , 2008, , .		1
166	Biomimetics: A Biomimetic Composite from Solution Self-Assembly of Chitin Nanofibers in a Silk Fibroin Matrix (Adv. Mater. 32/2013). Advanced Materials, 2013, 25, 4528-4528.	11.1	1
167	Nanoimprinting: Protein-Protein Nanoimprinting of Silk Fibroin Films (Adv. Mater. 17/2013). Advanced Materials, 2013, 25, 2378-2378.	11.1	1
168	Multispectral Imaging: Multicolor T-Ray Imaging Using Multispectral Metamaterials (Adv. Sci. 7/2018). Advanced Science, 2018, 5, 1870044.	5.6	1
169	Wearable Sensors: Large-Scale Patterning of Reactive Surfaces for Wearable and Environmentally Deployable Sensors (Adv. Mater. 28/2020). Advanced Materials, 2020, 32, 2070213.	11.1	1
170	Spectrally controlled supercontinuum generation. , 2006, , .		0
171	Supercontinuum generation using imaging taper. , 2007, , .		0
172	Supercontinuum generation using imaging taper. , 2007, , .		0
173	High nonlinearity glass photonic crystal nanowires. , 2007, , .		0
174	A path for non-invasive glucose detection using mid-IR supercontinuum. , 2008, , .		0
175	Silk Metamaterials: Metamaterial Silk Composites at Terahertz Frequencies (Adv. Mater. 32/2010). Advanced Materials, 2010, 22, n/a-n/a.	11.1	0
176	Surface Enhanced Vibrational Spectroscopy of Proteins with Plasmonic Nanoantenna Arrays. Materials Research Society Symposia Proceedings, 2010, 1248, 1002.	0.1	0
177	Silk - new opportunities in optics and photonics for an ancient material. , 2011, , .		0
178	Biomaterials: Biofunctional Silk/Neuron Interfaces (Adv. Funct. Mater. 9/2012). Advanced Functional Materials, 2012, 22, 1870-1870.	7.8	0
179	Fluorescent nanoparticles for biosensing applications. , 2013, , .		0
180	Biopatterning: Precise Protein Photolithography ($P ³$): High Performance Biopatterning Using Silk Fibroin Light Chain as the Resist (Adv. Sci. 9/2017). Advanced Science, 2017, 4, .	5.6	0

#	ARTICLE	IF	CITATIONS
181	Hierarchical Opals: Biomaterial-Based “Structured Opals” with Programmable Combination of Diffractive Optical Elements and Photonic Bandgap Effects (Adv. Mater. 5/2019). Advanced Materials, 2019, 31, 1970030.	11.1	0
182	Demonstration of magnetic and light-controlled actuation of a photomagnetically actuated deformable mirror for wavefront control. Optical Engineering, 2021, 60, .	0.5	0
183	Silk Embolic Material for Catheter-Directed Endovascular Drug Delivery (Adv. Mater. 2/2022). Advanced Materials, 2022, 34, .	11.1	0