Fiorenzo G Omenetto

List of Publications by Citations

171 papers	18,288 citations	63 h-index	134 g-index
190 ext. papers	20,872 ext. citations	13 avg, IF	6.72 L-index

#	Paper	IF	Citations
171	Epidermal electronics. *Science*, **2011**, 333, 838-43	33.3	3216
170	Dissolvable films of silk fibroin for ultrathin conformal bio-integrated electronics. *Nature Materials*, **2010**, 9, 511-7	27	1239
169	New opportunities for an ancient material. *Science*, **2010**, 329, 528-31	33.3	1016
168	A physically transient form of silicon electronics. *Science*, **2012**, 337, 1640-4	33.3	862
167	Injectable, cellular-scale optoelectronics with applications for wireless optogenetics. *Science*, **2013**, 340, 211-6	33.3	832
166	Graphene-based wireless bacteria detection on tooth enamel. *Nature Communications*, **2012**, 3, 763	17.4	657
165	Silk materials--a road to sustainable high technology. *Advanced Materials*, **2012**, 24, 2824-37	24	380
164	Silk film biomaterials for cornea tissue engineering. *Biomaterials*, **2009**, 30, 1299-308	15.6	329
163	In vivo bioresponses to silk proteins. *Biomaterials*, **2015**, 71, 145-157	15.6	269
162	Silk-based conformal, adhesive, edible food sensors. *Advanced Materials*, **2012**, 24, 1067-72	24	266
161	Highly tunable elastomeric silk biomaterials. *Advanced Functional Materials*, **2014**, 24, 4615-4624	15.6	265
160	Biocompatible Silk Printed Optical Waveguides. *Advanced Materials*, **2009**, 21, 2411-2415	24	260
159	Bioactive silk protein biomaterial systems for optical devices. *Biomacromolecules*, **2008**, 9, 1214-20	6.9	248
158	Effect of processing on silk-based biomaterials: reproducibility and biocompatibility. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2011**, 99, 89-101	3.5	227
157	Silk-based resorbable electronic devices for remotely controlled therapy and in vivo infection abatement. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 17385-9	11.5	223
156	Silkworm silk-based materials and devices generated using bio-nanotechnology. *Chemical Society Reviews*, **2018**, 47, 6486-6504	58.5	206
155	Bioengineered functional brain-like cortical tissue. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 13811-6	11.5	203

154	All-water-based electron-beam lithography using silk as a resist. *Nature Nanotechnology*, **2014**, 9, 306-10	28.7	195
153	Fabrication of Silk Microneedles for Controlled-Release Drug Delivery. *Advanced Functional Materials*, **2012**, 22, 330-335	15.6	195
152	Materials and Fabrication Processes for Transient and Bioresorbable High-Performance Electronics. *Advanced Functional Materials*, **2013**, 23, 4087-4093	15.6	191
151	Evolution of Bioinks and Additive Manufacturing Technologies for 3D Bioprinting. *ACS Biomaterials Science and Engineering*, **2016**, 2, 1662-1678	5.5	187
150	Silk inverse opals. *Nature Photonics*, **2012**, 6, 818-823	33.9	181
149	Nano- and Micropatterning of Optically Transparent, Mechanically Robust, Biocompatible Silk Fibroin Films. *Advanced Materials*, **2008**, 20, 3070-3072	24	161
148	Insoluble and flexible silk films containing glycerol. *Biomacromolecules*, **2010**, 11, 143-50	6.9	155
147	Bio-microfluidics: biomaterials and biomimetic designs. *Advanced Materials*, **2010**, 22, 249-60	24	154
146	Processing methods to control silk fibroin film biomaterial features. *Journal of Materials Science*, **2008**, 43, 6967-6985	4.3	144
145	Inkjet Printing of Regenerated Silk Fibroin: From Printable Forms to Printable Functions. *Advanced Materials*, **2015**, 27, 4273-9	24	143
144	Fabrication and application of flexible, multimodal light-emitting devices for wireless optogenetics. *Nature Protocols*, **2013**, 8, 2413-2428	18.8	142
143	Stabilization of enzymes in silk films. *Biomacromolecules*, **2009**, 10, 1032-42	6.9	140
142	Silk based bioinks for soft tissue reconstruction using 3-dimensional (3D) printing with in vitro and in vivo assessments. *Biomaterials*, **2017**, 117, 105-115	15.6	139
141	Antibiotic-Releasing Silk Biomaterials for Infection Prevention and Treatment. *Advanced Functional Materials*, **2013**, 23, 854-861	15.6	137
140	25th anniversary article: materials for high-performance biodegradable semiconductor devices. *Advanced Materials*, **2014**, 26, 1992-2000	24	130
139	Review physical and chemical aspects of stabilization of compounds in silk. *Biopolymers*, **2012**, 97, 479-98	2.2	120
138	Performance enhancement of terahertz metamaterials on ultrathin substrates for sensing applications. *Applied Physics Letters*, **2010**, 97, 261909	3.4	119
137	Rapid nanoimprinting of silk fibroin films for biophotonic applications. *Advanced Materials*, **2010**, 22, 1746-9	24	119

136	Silk Fibroin as Edible Coating for Perishable Food Preservation. *Scientific Reports*, **2016**, 6, 25263	4.9	117
135	Stabilization and release of enzymes from silk films. *Macromolecular Bioscience*, **2010**, 10, 359-68	5.5	112
134	Directed assembly of bio-inspired hierarchical materials with controlled nanofibrillar architectures. *Nature Nanotechnology*, **2017**, 12, 474-480	28.7	111
133	Laser-based three-dimensional multiscale micropatterning of biocompatible hydrogels for customized tissue engineering scaffolds. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 12052-7	11.5	104
132	Functional, RF-Trilayer Sensors for Tooth-Mounted, Wireless Monitoring of the Oral Cavity and Food Consumption. *Advanced Materials*, **2018**, 30, e1703257	24	98
131	Implantable, multifunctional, bioresorbable optics. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 19584-9	11.5	97
130	Silk as a Multifunctional Biomaterial Substrate for Reduced Glial Scarring around Brain-Penetrating Electrodes. *Advanced Functional Materials*, **2013**, 23, 3185-3193	15.6	91
129	Design, Fabrication, and Function of Silk-Based Nanomaterials. *Advanced Functional Materials*, **2018**, 28, 1805305	15.6	90
128	High-Strength, Durable All-Silk Fibroin Hydrogels with Versatile Processability toward Multifunctional Applications. *Advanced Functional Materials*, **2018**, 28, 1704757	15.6	89
127	Metamaterial silk composites at terahertz frequencies. *Advanced Materials*, **2010**, 22, 3527-31	24	89
126	Photocrosslinking of Silk Fibroin Using Riboflavin for Ocular Prostheses. *Advanced Materials*, **2016**, 28, 2417-20	24	88
125	A Biodegradable Thin-Film Magnesium Primary Battery Using Silk Fibroin Ionic Liquid Polymer Electrolyte. *ACS Energy Letters*, **2017**, 2, 831-836	20.1	87
124	Silk-based stabilization of biomacromolecules. *Journal of Controlled Release*, **2015**, 219, 416-430	11.7	86
123	The Use of Functionalized Silk Fibroin Films as a Platform for Optical Diffraction-Based Sensing Applications. *Advanced Materials*, **2017**, 29, 1605471	24	85
122	Printing of stretchable silk membranes for strain measurements. *Lab on A Chip*, **2016**, 16, 2459-66	7.2	80
121	Biopatterning: Precise Protein Photolithography (P3): High Performance Biopatterning Using Silk Fibroin Light Chain as the Resist (Adv. Sci. 9/2017). *Advanced Science*, **2017**, 4,	13.6	78
120	Dityrosine Cross-Linking in Designing Biomaterials. *ACS Biomaterials Science and Engineering*, **2016**, 2, 2108-2121	5.5	74
119	In vitro bioengineered model of cortical brain tissue. *Nature Protocols*, **2015**, 10, 1362-73	18.8	71

118	Programmable Hydrogel Ionic Circuits for Biologically Matched Electronic Interfaces. *Advanced Materials*, **2018**, 30, e1800598	24	71
117	Modulation of Multiscale 3D Lattices through Conformational Control: Painting Silk Inverse Opals with Water and Light. *Advanced Materials*, **2017**, 29, 1702769	24	71
116	Biocompatible silk step-index optical waveguides. *Biomedical Optics Express*, **2015**, 6, 4221-7	3.5	71
115	Bio-functionalized silk hydrogel microfluidic systems. *Biomaterials*, **2016**, 93, 60-70	15.6	70
114	Polyol-Silk Bioink Formulations as Two-Part Room-Temperature Curable Materials for 3D Printing. *ACS Biomaterials Science and Engineering*, **2015**, 1, 780-788	5.5	68
113	Protein-protein nanoimprinting of silk fibroin films. *Advanced Materials*, **2013**, 25, 2409-14	24	67
112	Materials for programmed, functional transformation in transient electronic systems. *Advanced Materials*, **2015**, 27, 47-52	24	66
111	Silk-Based Biocompatible Random Lasing. *Advanced Optical Materials*, **2016**, 4, 998-1003	8.1	66
110	Low-threshold blue lasing from silk fibroin thin films. *Applied Physics Letters*, **2012**, 101, 091110	3.4	66
109	An Analytical Model of Reactive Diffusion for Transient Electronics. *Advanced Functional Materials*, **2013**, 23, 3106-3114	15.6	63
108	Synthesis of silk fibroin micro- and submicron spheres using a co-flow capillary device. *Advanced Materials*, **2014**, 26, 1105-10	24	62
107	Silk-based blood stabilization for diagnostics. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 5892-7	11.5	60
106	Programming function into mechanical forms by directed assembly of silk bulk materials. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 451-456	11.5	58
105	Modulated Degradation of Transient Electronic Devices through Multilayer Silk Fibroin Pockets. *ACS Applied Materials & Interfaces*, **2015**, 7, 19870-5	9.5	57
104	Nanoscale probing of electron-regulated structural transitions in silk proteins by near-field IR imaging and nano-spectroscopy. *Nature Communications*, **2016**, 7, 13079	17.4	54
103	3D freeform printing of silk fibroin. *Acta Biomaterialia*, **2018**, 71, 379-387	10.8	51
102	Transdermal delivery devices: fabrication, mechanics and drug release from silk. *Small*, **2013**, 9, 3704-13	11	51
101	Functionalized-Silk-Based Active Optofluidic Devices. *Advanced Functional Materials*, **2010**, 20, 1083-1089	15.6	51

100	Tuning chemical and physical cross-links in silk electrogels for morphological analysis and mechanical reinforcement. *Biomacromolecules*, **2013**, 14, 2629-35	6.9	48
99	Spectral analysis of induced color change on periodically nanopatterned silk films. *Optics Express*, **2009**, 17, 21271-9	3.3	48
98	Inkjet Printing of Patterned, Multispectral, and Biocompatible Photonic Crystals. *Advanced Materials*, **2019**, 31, e1901036	24	45
97	Biofunctional Silk/Neuron Interfaces. *Advanced Functional Materials*, **2012**, 22, 1871-1884	15.6	45
96	Rapid nanoimprinting of doped silk films for enhanced fluorescent emission. *Advanced Materials*, **2010**, 22, 4596-9	24	45
95	3D Functional Corneal Stromal Tissue Equivalent Based on Corneal Stromal Stem Cells and Multi-Layered Silk Film Architecture. *PLoS ONE*, **2017**, 12, e0169504	3.7	45
94	Film-based Implants for Supporting Neuron-Electrode Integrated Interfaces for The Brain. *Advanced Functional Materials*, **2014**, 24, 1938-1948	15.6	44
93	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	11.5	43
92	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, 12086-90	11.5	43
91	Rapid transfer-based micropatterning and dry etching of silk microstructures. *Advanced Materials*, **2011**, 23, 2015-9	24	42
90	Bioinspired stimuli-responsive multilayer film made of silk□titanate nanocomposites. *Journal of Materials Chemistry C*, **2017**, 5, 3924-3931	7.1	41
89	Regenerated silk materials for functionalized silk orthopedic devices by mimicking natural processing. *Biomaterials*, **2016**, 110, 24-33	15.6	40
88	Bioactive "self-sensing" optical systems. *Applied Physics Letters*, **2009**, 95, 253702	3.4	40
87	Transparent, Nanostructured Silk Fibroin Hydrogels with Tunable Mechanical Properties. *ACS Biomaterials Science and Engineering*, **2015**, 1, 964-970	5.5	39
86	Direct transfer of subwavelength plasmonic nanostructures on bioactive silk films. *Advanced Materials*, **2012**, 24, 6088-93	24	39
85	Controlling silk fibroin conformation for dynamic, responsive, multifunctional, micropatterned surfaces. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 21361-21368	11.5	38
84	Recombinant reflectin-based optical materials. *Journal of Polymer Science, Part B: Polymer Physics*, **2013**, 51, 254-264	2.6	38
83	High-Q silk fibroin whispering gallery microresonator. *Optics Express*, **2016**, 24, 20825-30	3.3	38

82	Silk Fibroin Microneedles for Transdermal Vaccine Delivery. *ACS Biomaterials Science and Engineering*, **2017**, 3, 360-369	5.5	35
81	The optical properties of regenerated silk fibroin films obtained from different sources. *Applied Physics Letters*, **2017**, 111, 103702	3.4	35
80	Protein Bricks: 2D and 3D Bio-Nanostructures with Shape and Function on Demand. *Advanced Materials*, **2018**, 30, e1705919	24	34
79	Eco-friendly photolithography using water-developable pure silk fibroin. *RSC Advances*, **2016**, 6, 39330-39334	3.7	33
78	3D Printing of Regenerated Silk Fibroin and Antibody-Containing Microstructures via Multiphoton Lithography. *ACS Biomaterials Science and Engineering*, **2017**, 3, 2064-2075	5.5	32
77	Hydrogel Gate Graphene Field-Effect Transistors as Multiplexed Biosensors. *Nano Letters*, **2019**, 19, 2620-2626	11.5	30
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	11.5	29
75	Evaluation of the Spectral Response of Functionalized Silk Inverse Opals as Colorimetric Immunosensors. *ACS Applied Materials & Interfaces*, **2016**, 8, 16218-26	9.5	29
74	Doxorubicin loaded nanodiamond-silk spheres for fluorescence tracking and controlled drug release. *Biomedical Optics Express*, **2016**, 7, 132-47	3.5	29
73	Fluorescent Nanodiamond Silk Fibroin Spheres: Advanced Nanoscale Bioimaging Tool. *ACS Biomaterials Science and Engineering*, **2015**, 1, 1104-1113	5.5	28
72	Coding cell micropatterns through peptide inkjet printing for arbitrary biomineralized architectures. *Advanced Functional Materials*, **2018**, 28, 1800228	15.6	28
71	Silk protein based hybrid photonic-plasmonic crystal. *Optics Express*, **2013**, 21, 8897-903	3.3	28
70	Biomaterial-Based "Structured Opals" with Programmable Combination of Diffractive Optical Elements and Photonic Bandgap Effects. *Advanced Materials*, **2019**, 31, e1805312	24	26
69	Fabrication of Tunable, High-Refractive-Index Titanate-Silk Nanocomposites on the Micro- and Nanoscale. *Advanced Materials*, **2015**, 27, 6728-32	24	24
68	Materials and fabrication sequences for water soluble silicon integrated circuits at the 90 nm node. *Applied Physics Letters*, **2015**, 106, 014105	3.4	24
67	Bioinspired Biomaterial Composite for All-Water-Based High-Performance Adhesives. *Advanced Science*, **2021**, 8, e2004786	13.6	23
66	Methods and Applications of Multilayer Silk Fibroin Laminates Based on Spatially Controlled Welding in Protein Films. *Advanced Functional Materials*, **2016**, 26, 44-50	15.6	22
65	3D Printing of Silk Protein Structures by Aqueous Solvent-Directed Molecular Assembly. *Macromolecular Bioscience*, **2020**, 20, e1900191	5.5	22

64	Large-Scale Patterning of Reactive Surfaces for Wearable and Environmentally Deployable Sensors. *Advanced Materials*, **2020**, 32, e2001258	24	21
63	Gold nanoparticle-doped biocompatible silk films as a path to implantable thermo-electrically wireless powering devices. *Applied Physics Letters*, **2010**, 97, 123702	3.4	21
62	Cashmere-derived keratin for device manufacturing on the micro- and nanoscale. *Journal of Materials Chemistry C*, **2015**, 3, 2783-2787	7.1	20
61	Optimizing Molecular Weight of Lyophilized Silk As a Shelf-Stable Source Material. *ACS Biomaterials Science and Engineering*, **2016**, 2, 595-605	5.5	20
60	Dielectric breakdown strength of regenerated silk fibroin films as a function of protein conformation. *Biomacromolecules*, **2013**, 14, 3509-14	6.9	20
59	Gain-Based Mechanism for pH Sensing Based on Random Lasing. *Physical Review Applied*, **2017**, 7,	4.3	19
58	Rapid fabrication of silk films with controlled architectures via electrogelation. *Journal of Materials Chemistry B*, **2014**, 2, 4983-4987	7.3	18
57	Synthesis and characterization of biocompatible nanodiamond-silk hybrid material. *Biomedical Optics Express*, **2014**, 5, 596-608	3.5	18
56	Optically induced birefringence and holography in silk. *Journal of Polymer Science, Part B: Polymer Physics*, **2012**, 50, 257-262	2.6	18
55	3D Printing of Functional Microalgal Silk Structures for Environmental Applications. *ACS Biomaterials Science and Engineering*, **2019**, 5, 4808-4816	5.5	17
54	Enhanced photoluminescence of Si nanocrystals-doped cellulose nanofibers by plasmonic light scattering. *Applied Physics Letters*, **2015**, 107, 041111	3.4	17
53	Designing the Iridescences of Biopolymers by Assembly of Photonic Crystal Superlattices. *Advanced Optical Materials*, **2018**, 6, 1800066	8.1	14
52	Encapsulation of Volatile Compounds in Silk Microparticles **2015**, 12, 793-799		14
51	Conformal Silk-Azobenzene Composite for Optically Switchable Diffractive Structures. *ACS Applied Materials & Interfaces*, **2017**, 9, 30951-30957	9.5	13
50	Evaluation of Silk Inverse Opals for "Smart" Tissue Culture. *ACS Omega*, **2017**, 2, 470-477	3.9	12
49	Silk fibroin hydroxyapatite composite thermal stabilisation of carbonic anhydrase. *Journal of Materials Chemistry A*, **2015**, 3, 19282-19287	13	12
48	Encapsulation of oil in silk fibroin biomaterials. *Journal of Applied Polymer Science*, **2014**, 131, n/a-n/a	2.9	12
47	Stabilization of RNA Encapsulated in Silk. *ACS Biomaterials Science and Engineering*, **2018**, 4, 1708-1715	5.5	11

46	Silk Fibroin-Carbon Nanotube Composite Electrodes for Flexible Biocatalytic Fuel Cells. *Advanced Electronic Materials*, **2016**, 2, 1600190	6.4	11
45	Enhanced Stabilization in Dried Silk Fibroin Matrices. *Biomacromolecules*, **2017**, 18, 2900-2905	6.9	11
44	Light-activated shape morphing and light-tracking materials using biopolymer-based programmable photonic nanostructures. *Nature Communications*, **2021**, 12, 1651	17.4	11
43	Fabrication of elastomeric silk fibers. *Biopolymers*, **2017**, 107, e23030	2.2	10
42	Photo-induced structural modification of silk gels containing azobenzene side groups. *Soft Matter*, **2017**, 13, 2903-2906	3.6	10
41	Palladium Supported on Silk Fibroin for Suzuki–Miyaura Cross-Coupling Reactions. *European Journal of Organic Chemistry*, **2020**, 2020, 6992-6996	3.2	10
40	Reconfigurable microwave metadevices based on organic electrochemical transistors. *Nature Electronics*, **2021**, 4, 424-428	28.4	10
39	Silk Embolic Material for Catheter-Directed Endovascular Drug Delivery. *Advanced Materials*, **2021**, e2106865	24	9
38	Optomechanically Actuated Microcilia for Locally Reconfigurable Surfaces. *Advanced Materials*, **2020**, 32, e2004147	24	9
37	Photonic paper: Multiscale assembly of reflective cellulose sheets in. *Science Advances*, **2020**, 6,	14.3	8
36	Direct Transfer Printing of Water Hydrolyzable Metals onto Silk Fibroin Substrates through Thermal-Reflow-Based Adhesion. *Advanced Materials Interfaces*, **2016**, 3, 1600094	4.6	8
35	Functionalized Mouth-Conformable Interfaces for pH Evaluation of the Oral Cavity. *Advanced Science*, **2021**, 8, e2003416	13.6	8
34	Silk: A Different Kind of Fiber Optics. *Optics and Photonics News*, **2014**, 25, 28	1.9	7
33	Active optics with silk. *Nanophotonics*, **2020**, 10, 137-148	6.3	7
32	Silk materials at the convergence of science, sustainability, healthcare, and technology. *Applied Physics Reviews*, **2022**, 9, 011302	17.3	7
31	Engineering optical defects in biopolymer photonic lattices. *Journal of Materials Chemistry C*, **2018**, 6, 966-971	7.1	6
30	SnapShot: Silk biomaterials. *Biomaterials*, **2010**, 31, 6119-20	15.6	6
29	Towards the fabrication of biohybrid silk fibroin materials: entrapment and preservation of chloroplast organelles in silk fibroin films. *RSC Advances*, **2016**, 6, 72366-72370	3.7	6

28	Cutting the Cord: Progress in Untethered Soft Robotics and Actuators. *MRS Advances*, **2019**, 4, 2787-2804	4.7	6
27	Towards an Integrated Optofluidic Diffractive Spectrometer. *IEEE Photonics Technology Letters*, **2007**, 19, 1976-1978	2.2	5
26	Silk Fibroin: Photocrosslinking of Silk Fibroin Using Riboflavin for Ocular Prostheses (Adv. Mater. 12/2016). *Advanced Materials*, **2016**, 28, 2464-2464	24	5
25	Silk Fibroin Processing from CeCl3 Aqueous Solution: Fibers Regeneration and Doping with Ce(III). *Macromolecular Chemistry and Physics*, **2020**, 221, 2000066	2.6	4
24	Three-dimensional thermal analysis of wirelessly powered light-emitting systems. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2012**, 468, 4088-4097	2.4	4
23	Inkjet-printed lasing silk text on reusable distributed feedback boards. *Optical Materials Express*, **2020**, 10, 818	2.6	4
22	Proton conduction in inkjet-printed reflectin films. *APL Materials*, **2020**, 8, 101113	5.7	4
21	Stabilization of Salivary Biomarkers. *ACS Biomaterials Science and Engineering*, **2021**,	5.5	3
20	Silk Fibroin Regeneration in Solution of Lanthanide Ions: A Systematic Investigation. *Frontiers in Bioengineering and Biotechnology*, **2021**, 9, 653033	5.8	3
19	Transient Electronics: Materials for Programmed, Functional Transformation in Transient Electronic Systems (Adv. Mater. 1/2015). *Advanced Materials*, **2015**, 27, 187-187	24	2
18	Bio-Nanostructures: Protein Bricks: 2D and 3D Bio-Nanostructures with Shape and Function on Demand (Adv. Mater. 20/2018). *Advanced Materials*, **2018**, 30, 1870141	24	2
17	Flexible Electronics: Materials and Designs for Wirelessly Powered Implantable Light-Emitting Systems (Small 18/2012). *Small*, **2012**, 8, 2770-2770	11	2
16	IR Supercontinuum in Compact Tellurite PCFs **2007**,		2
15	Nanoporous silk films with capillary action and size-exclusion capacity for sensitive glucose determination in whole blood. *Lab on A Chip*, **2021**, 21, 608-615	7.2	2
14	Silk Reservoir Implants for Sustained Drug Delivery. *ACS Applied Bio Materials*, **2021**, 4, 869-880	4.1	2
13	Solvent-Free Strategy To Encapsulate Degradable, Implantable Metals in Silk Fibroin.. *ACS Applied Bio Materials*, **2018**, 1, 1677-1686	4.1	2
12	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	24	1
11	Nanoimprinting: Protein-Protein Nanoimprinting of Silk Fibroin Films (Adv. Mater. 17/2013). *Advanced Materials*, **2013**, 25, 2378-2378	24	1

10	N-dimensional optics with natural materials. *MRS Communications*, **2020**, 10, 201-214	2.7	1
9	Multispectral Imaging: Multicolor T-Ray Imaging Using Multispectral Metamaterials (Adv. Sci. 7/2018). *Advanced Science*, **2018**, 5, 1870044	13.6	1
8	Dry Spun, Bulk-Functionalized rGO Fibers for Textile Integrated Potentiometric Sensors. *Advanced Materials Technologies*,2101508	6.8	1
7	Generation of Complex Tunable Multispectral Signatures with Reconfigurable Protein-Based, Plasmonic-Photonic Crystal Hybrid Nanostructures.. *Small*, **2022**, e2201036	11	1
6	Wearable Sensors: Large-Scale Patterning of Reactive Surfaces for Wearable and Environmentally Deployable Sensors (Adv. Mater. 28/2020). *Advanced Materials*, **2020**, 32, 2070213	24	0
5	Unmixing octopus camouflage by multispectral mapping of Octopus bimaculoides chromatic elements. *Nanophotonics*, **2021**, 10, 2441-2450	6.3	0
4	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	24	
3	Biomaterials: Biofunctional Silk/Neuron Interfaces (Adv. Funct. Mater. 9/2012). *Advanced Functional Materials*, **2012**, 22, 1870-1870	15.6	
2	Surface Enhanced Vibrational Spectroscopy of Proteins with Plasmonic Nanoantenna Arrays. *Materials Research Society Symposia Proceedings*, **2010**, 1248, 1002		
1	Silk Embolic Material for Catheter-Directed Endovascular Drug Delivery (Adv. Mater. 2/2022). *Advanced Materials*, **2022**, 34, 2270017	24	