

# Fiorenzo G Omenetto

## List of Publications by Year in Descending Order

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

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	Silk Embolic Material for Catheter-Directed Endovascular Drug Delivery (Adv. Mater. 2/2022). <i>Advanced Materials</i> , <b>2022</b> , 34, 2270017	24	
170	Silk materials at the convergence of science, sustainability, healthcare, and technology. <i>Applied Physics Reviews</i> , <b>2022</b> , 9, 011302	17.3	7
169	Generation of Complex Tunable Multispectral Signatures with Reconfigurable Protein-Based, Plasmonic-Photonic Crystal Hybrid Nanostructures.. <i>Small</i> , <b>2022</b> , e2201036	11	1
168	Stabilization of Salivary Biomarkers. <i>ACS Biomaterials Science and Engineering</i> , <b>2021</b> ,	5.5	3
167	Silk Embolic Material for Catheter-Directed Endovascular Drug Delivery. <i>Advanced Materials</i> , <b>2021</b> , e2106865	16.5	9
166	Light-activated shape morphing and light-tracking materials using biopolymer-based programmable photonic nanostructures. <i>Nature Communications</i> , <b>2021</b> , 12, 1651	17.4	11
165	Functionalized Mouth-Conformable Interfaces for pH Evaluation of the Oral Cavity. <i>Advanced Science</i> , <b>2021</b> , 8, e2003416	13.6	8
164	Silk Fibroin Regeneration in Solution of Lanthanide Ions: A Systematic Investigation. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2021</b> , 9, 653033	5.8	3
163	Unmixing octopus camouflage by multispectral mapping of Octopus bimaculoides chromatic elements. <i>Nanophotonics</i> , <b>2021</b> , 10, 2441-2450	6.3	0
162	Bioinspired Biomaterial Composite for All-Water-Based High-Performance Adhesives. <i>Advanced Science</i> , <b>2021</b> , 8, e2004786	13.6	23
161	Reconfigurable microwave metadevices based on organic electrochemical transistors. <i>Nature Electronics</i> , <b>2021</b> , 4, 424-428	28.4	10
160	Nanoporous silk films with capillary action and size-exclusion capacity for sensitive glucose determination in whole blood. <i>Lab on A Chip</i> , <b>2021</b> , 21, 608-615	7.2	2
159	Silk Reservoir Implants for Sustained Drug Delivery. <i>ACS Applied Bio Materials</i> , <b>2021</b> , 4, 869-880	4.1	2
158	Large-Scale Patterning of Reactive Surfaces for Wearable and Environmentally Deployable Sensors. <i>Advanced Materials</i> , <b>2020</b> , 32, e2001258	24	21
157	Stimuli-responsive composite biopolymer actuators with selective spatial deformation behavior. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 14602-14608	11.5	29
156	Silk Fibroin Processing from CeCl <sub>3</sub> Aqueous Solution: Fibers Regeneration and Doping with Ce(III). <i>Macromolecular Chemistry and Physics</i> , <b>2020</b> , 221, 2000066	2.6	4
155	Photonic paper: Multiscale assembly of reflective cellulose sheets in. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	8

154	Inkjet-printed lasing silk text on reusable distributed feedback boards. <i>Optical Materials Express</i> , <b>2020</b> , 10, 818	2.6	4
153	Active optics with silk. <i>Nanophotonics</i> , <b>2020</b> , 10, 137-148	6.3	7
152	Palladium Supported on Silk Fibroin for SuzukiMiyaura Cross-Coupling Reactions. <i>European Journal of Organic Chemistry</i> , <b>2020</b> , 2020, 6992-6996	3.2	10
151	Wearable Sensors: Large-Scale Patterning of Reactive Surfaces for Wearable and Environmentally Deployable Sensors (Adv. Mater. 28/2020). <i>Advanced Materials</i> , <b>2020</b> , 32, 2070213	24	0
150	Proton conduction in inkjet-printed reflectin films. <i>APL Materials</i> , <b>2020</b> , 8, 101113	5.7	4
149	Optomechanically Actuated Microcilia for Locally Reconfigurable Surfaces. <i>Advanced Materials</i> , <b>2020</b> , 32, e2004147	24	9
148	3D Printing of Silk Protein Structures by Aqueous Solvent-Directed Molecular Assembly. <i>Macromolecular Bioscience</i> , <b>2020</b> , 20, e1900191	5.5	22
147	N-dimensional optics with natural materials. <i>MRS Communications</i> , <b>2020</b> , 10, 201-214	2.7	1
146	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> , <b>2019</b> , 116, 21361-21368	11.5	28
145	Hydrogel Gate Graphene Field-Effect Transistors as Multiplexed Biosensors. <i>Nano Letters</i> , <b>2019</b> , 19, 2620-2623	2.5	30
144	Hierarchical Opals: Biomaterial-Based Structured Opals with Programmable Combination of Diffractive Optical Elements and Photonic Bandgap Effects (Adv. Mater. 5/2019). <i>Advanced Materials</i> , <b>2019</b> , 31, 1970030	24	
143	Inkjet Printing of Patterned, Multispectral, and Biocompatible Photonic Crystals. <i>Advanced Materials</i> , <b>2019</b> , 31, e1901036	24	45
142	3D Printing of Functional Microalgal Silk Structures for Environmental Applications. <i>ACS Biomaterials Science and Engineering</i> , <b>2019</b> , 5, 4808-4816	5.5	17
141	Cutting the Cord: Progress in Untethered Soft Robotics and Actuators. <i>MRS Advances</i> , <b>2019</b> , 4, 2787-2806	4.7	6
140	Biomaterial-Based "Structured Opals" with Programmable Combination of Diffractive Optical Elements and Photonic Bandgap Effects. <i>Advanced Materials</i> , <b>2019</b> , 31, e1805312	24	26
139	Coding cell micropatterns through peptide inkjet printing for arbitrary biomineralized architectures. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1800228	15.6	28
138	Functional, RF-Trilayer Sensors for Tooth-Mounted, Wireless Monitoring of the Oral Cavity and Food Consumption. <i>Advanced Materials</i> , <b>2018</b> , 30, e1703257	24	98
137	Protein Bricks: 2D and 3D Bio-Nanostructures with Shape and Function on Demand. <i>Advanced Materials</i> , <b>2018</b> , 30, e1705919	24	34

136	Engineering optical defects in biopolymer photonic lattices. <i>Journal of Materials Chemistry C</i> , <b>2018</b> , 6, 966-971	7.1	6
135	High-Strength, Durable All-Silk Fibroin Hydrogels with Versatile Processability toward Multifunctional Applications. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1704757	15.6	89
134	Programmable Hydrogel Ionic Circuits for Biologically Matched Electronic Interfaces. <i>Advanced Materials</i> , <b>2018</b> , 30, e1800598	24	71
133	3D freeform printing of silk fibroin. <i>Acta Biomaterialia</i> , <b>2018</b> , 71, 379-387	10.8	51
132	Stabilization of RNA Encapsulated in Silk. <i>ACS Biomaterials Science and Engineering</i> , <b>2018</b> , 4, 1708-1715	5.5	11
131	Designing the Iridescences of Biopolymers by Assembly of Photonic Crystal Superlattices. <i>Advanced Optical Materials</i> , <b>2018</b> , 6, 1800066	8.1	14
130	Flexible magnetic composites for light-controlled actuation and interfaces. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 8119-8124	11.5	43
129	Bio-Nanostructures: Protein Bricks: 2D and 3D Bio-Nanostructures with Shape and Function on Demand (Adv. Mater. 20/2018). <i>Advanced Materials</i> , <b>2018</b> , 30, 1870141	24	2
128	Design, Fabrication, and Function of Silk-Based Nanomaterials. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1805305	15.6	90
127	Solvent-Free Strategy To Encapsulate Degradable, Implantable Metals in Silk Fibroin.. <i>ACS Applied Bio Materials</i> , <b>2018</b> , 1, 1677-1686	4.1	2
126	Multispectral Imaging: Multicolor T-Ray Imaging Using Multispectral Metamaterials (Adv. Sci. 7/2018). <i>Advanced Science</i> , <b>2018</b> , 5, 1870044	13.6	1
125	Silkworm silk-based materials and devices generated using bio-nanotechnology. <i>Chemical Society Reviews</i> , <b>2018</b> , 47, 6486-6504	58.5	206
124	Directed assembly of bio-inspired hierarchical materials with controlled nanofibrillar architectures. <i>Nature Nanotechnology</i> , <b>2017</b> , 12, 474-480	28.7	111
123	Evaluation of Silk Inverse Opals for "Smart" Tissue Culture. <i>ACS Omega</i> , <b>2017</b> , 2, 470-477	3.9	12
122	The Use of Functionalized Silk Fibroin Films as a Platform for Optical Diffraction-Based Sensing Applications. <i>Advanced Materials</i> , <b>2017</b> , 29, 1605471	24	85
121	Silk based bioinks for soft tissue reconstruction using 3-dimensional (3D) printing with in vitro and in vivo assessments. <i>Biomaterials</i> , <b>2017</b> , 117, 105-115	15.6	139
120	Fabrication of elastomeric silk fibers. <i>Biopolymers</i> , <b>2017</b> , 107, e23030	2.2	10
119	Bioinspired stimuli-responsive multilayer film made of silk titanate nanocomposites. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 3924-3931	7.1	41

118	Photo-induced structural modification of silk gels containing azobenzene side groups. <i>Soft Matter</i> , <b>2017</b> , 13, 2903-2906	3.6	10
117	A Biodegradable Thin-Film Magnesium Primary Battery Using Silk Fibroin Ionic Liquid Polymer Electrolyte. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 831-836	20.1	87
116	Gain-Based Mechanism for pH Sensing Based on Random Lasing. <i>Physical Review Applied</i> , <b>2017</b> , 7,	4.3	19
115	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> , <b>2017</b> , 114, 451-456	11.5	58
114	Silk Fibroin Microneedles for Transdermal Vaccine Delivery. <i>ACS Biomaterials Science and Engineering</i> , <b>2017</b> , 3, 360-369	5.5	35
113	The optical properties of regenerated silk fibroin films obtained from different sources. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 103702	3.4	35
112	Conformal Silk-Azobenzene Composite for Optically Switchable Diffractive Structures. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 30951-30957	9.5	13
111	Biopatterning: Precise Protein Photolithography (P3): High Performance Biopatterning Using Silk Fibroin Light Chain as the Resist (Adv. Sci. 9/2017). <i>Advanced Science</i> , <b>2017</b> , 4,	13.6	78
110	Modulation of Multiscale 3D Lattices through Conformational Control: Painting Silk Inverse Opals with Water and Light. <i>Advanced Materials</i> , <b>2017</b> , 29, 1702769	24	71
109	Enhanced Stabilization in Dried Silk Fibroin Matrices. <i>Biomacromolecules</i> , <b>2017</b> , 18, 2900-2905	6.9	11
108	3D Printing of Regenerated Silk Fibroin and Antibody-Containing Microstructures via Multiphoton Lithography. <i>ACS Biomaterials Science and Engineering</i> , <b>2017</b> , 3, 2064-2075	5.5	32
107	3D Functional Corneal Stromal Tissue Equivalent Based on Corneal Stromal Stem Cells and Multi-Layered Silk Film Architecture. <i>PLoS ONE</i> , <b>2017</b> , 12, e0169504	3.7	45
106	Regenerated silk materials for functionalized silk orthopedic devices by mimicking natural processing. <i>Biomaterials</i> , <b>2016</b> , 110, 24-33	15.6	40
105	Silk Fibroin-Carbon Nanotube Composite Electrodes for Flexible Biocatalytic Fuel Cells. <i>Advanced Electronic Materials</i> , <b>2016</b> , 2, 1600190	6.4	11
104	Dityrosine Cross-Linking in Designing Biomaterials. <i>ACS Biomaterials Science and Engineering</i> , <b>2016</b> , 2, 2108-2121	5.5	74
103	Silk Fibroin as Edible Coating for Perishable Food Preservation. <i>Scientific Reports</i> , <b>2016</b> , 6, 25263	4.9	117
102	Nanoscale probing of electron-regulated structural transitions in silk proteins by near-field IR imaging and nano-spectroscopy. <i>Nature Communications</i> , <b>2016</b> , 7, 13079	17.4	54
101	Direct Transfer Printing of Water Hydrolyzable Metals onto Silk Fibroin Substrates through Thermal-Reflow-Based Adhesion. <i>Advanced Materials Interfaces</i> , <b>2016</b> , 3, 1600094	4.6	8

100	Evaluation of the Spectral Response of Functionalized Silk Inverse Opals as Colorimetric Immunosensors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 16218-26	9.5	29
99	Printing of stretchable silk membranes for strain measurements. <i>Lab on A Chip</i> , <b>2016</b> , 16, 2459-66	7.2	80
98	Silk-Based Biocompatible Random Lasing. <i>Advanced Optical Materials</i> , <b>2016</b> , 4, 998-1003	8.1	66
97	Optimizing Molecular Weight of Lyophilized Silk As a Shelf-Stable Source Material. <i>ACS Biomaterials Science and Engineering</i> , <b>2016</b> , 2, 595-605	5.5	20
96	High-Q silk fibroin whispering gallery microresonator. <i>Optics Express</i> , <b>2016</b> , 24, 20825-30	3.3	38
95	Photocrosslinking of Silk Fibroin Using Riboflavin for Ocular Prostheses. <i>Advanced Materials</i> , <b>2016</b> , 28, 2417-20	24	88
94	Silk Fibroin: Photocrosslinking of Silk Fibroin Using Riboflavin for Ocular Prostheses (Adv. Mater. 12/2016). <i>Advanced Materials</i> , <b>2016</b> , 28, 2464-2464	24	5
93	Bio-functionalized silk hydrogel microfluidic systems. <i>Biomaterials</i> , <b>2016</b> , 93, 60-70	15.6	70
92	Evolution of Biopinks and Additive Manufacturing Technologies for 3D Bioprinting. <i>ACS Biomaterials Science and Engineering</i> , <b>2016</b> , 2, 1662-1678	5.5	187
91	Eco-friendly photolithography using water-developable pure silk fibroin. <i>RSC Advances</i> , <b>2016</b> , 6, 39330-39334	3.3	33
90	Doxorubicin loaded nanodiamond-silk spheres for fluorescence tracking and controlled drug release. <i>Biomedical Optics Express</i> , <b>2016</b> , 7, 132-47	3.5	29
89	Methods and Applications of Multilayer Silk Fibroin Laminates Based on Spatially Controlled Welding in Protein Films. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 44-50	15.6	22
88	Silk-based blood stabilization for diagnostics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 5892-7	11.5	60
87	Towards the fabrication of biohybrid silk fibroin materials: entrapment and preservation of chloroplast organelles in silk fibroin films. <i>RSC Advances</i> , <b>2016</b> , 6, 72366-72370	3.7	6
86	Cashmere-derived keratin for device manufacturing on the micro- and nanoscale. <i>Journal of Materials Chemistry C</i> , <b>2015</b> , 3, 2783-2787	7.1	20
85	Fluorescent Nanodiamond Silk Fibroin Spheres: Advanced Nanoscale Bioimaging Tool. <i>ACS Biomaterials Science and Engineering</i> , <b>2015</b> , 1, 1104-1113	5.5	28
84	Transient Electronics: Materials for Programmed, Functional Transformation in Transient Electronic Systems (Adv. Mater. 1/2015). <i>Advanced Materials</i> , <b>2015</b> , 27, 187-187	24	2
83	Polyol-Silk Biopink Formulations as Two-Part Room-Temperature Curable Materials for 3D Printing. <i>ACS Biomaterials Science and Engineering</i> , <b>2015</b> , 1, 780-788	5.5	68

82	In vivo bioresponses to silk proteins. <i>Biomaterials</i> , <b>2015</b> , 71, 145-157	15.6	269
81	In vitro bioengineered model of cortical brain tissue. <i>Nature Protocols</i> , <b>2015</b> , 10, 1362-73	18.8	71
80	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> , <b>2015</b> , 112, 12052-7	11.5	104
79	Transparent, Nanostructured Silk Fibroin Hydrogels with Tunable Mechanical Properties. <i>ACS Biomaterials Science and Engineering</i> , <b>2015</b> , 1, 964-970	5.5	39
78	Modulated Degradation of Transient Electronic Devices through Multilayer Silk Fibroin Pockets. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 19870-5	9.5	57
77	Silk fibroin hydroxyapatite composite thermal stabilisation of carbonic anhydrase. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 19282-19287	13	12
76	Materials for programmed, functional transformation in transient electronic systems. <i>Advanced Materials</i> , <b>2015</b> , 27, 47-52	24	66
75	Silk-based stabilization of biomacromolecules. <i>Journal of Controlled Release</i> , <b>2015</b> , 219, 416-430	11.7	86
74	Enhanced photoluminescence of Si nanocrystals-doped cellulose nanofibers by plasmonic light scattering. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 041111	3.4	17
73	Fabrication of Tunable, High-Refractive-Index Titanate-Silk Nanocomposites on the Micro- and Nanoscale. <i>Advanced Materials</i> , <b>2015</b> , 27, 6728-32	24	24
72	Inkjet Printing of Regenerated Silk Fibroin: From Printable Forms to Printable Functions. <i>Advanced Materials</i> , <b>2015</b> , 27, 4273-9	24	143
71	Encapsulation of Volatile Compounds in Silk Microparticles <b>2015</b> , 12, 793-799		14
70	Biocompatible silk step-index optical waveguides. <i>Biomedical Optics Express</i> , <b>2015</b> , 6, 4221-7	3.5	71
69	Materials and fabrication sequences for water soluble silicon integrated circuits at the 90 nm node. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 014105	3.4	24
68	All-water-based electron-beam lithography using silk as a resist. <i>Nature Nanotechnology</i> , <b>2014</b> , 9, 306-1028.7	28.7	195
67	Rapid fabrication of silk films with controlled architectures via electrogelation. <i>Journal of Materials Chemistry B</i> , <b>2014</b> , 2, 4983-4987	7.3	18
66	Synthesis of silk fibroin micro- and submicron spheres using a co-flow capillary device. <i>Advanced Materials</i> , <b>2014</b> , 26, 1105-10	24	62
65	Highly tunable elastomeric silk biomaterials. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 4615-4624	15.6	265

64	Bioengineered functional brain-like cortical tissue. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 13811-6	11.5	203
63	25th anniversary article: materials for high-performance biodegradable semiconductor devices. <i>Advanced Materials</i> , <b>2014</b> , 26, 1992-2000	24	130
62	Encapsulation of oil in silk fibroin biomaterials. <i>Journal of Applied Polymer Science</i> , <b>2014</b> , 131, n/a-n/a	2.9	12
61	Silk: A Different Kind of Fiber Optics <i>Optics and Photonics News</i> , <b>2014</b> , 25, 28	1.9	7
60	Synthesis and characterization of biocompatible nanodiamond-silk hybrid material. <i>Biomedical Optics Express</i> , <b>2014</b> , 5, 596-608	3.5	18
59	Film-based Implants for Supporting Neuron-Electrode Integrated Interfaces for The Brain. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 1938-1948	15.6	44
58	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> , <b>2014</b> , 111, 17385-9	11.5	223
57	Protein-protein nanoimprinting of silk fibroin films. <i>Advanced Materials</i> , <b>2013</b> , 25, 2409-14	24	67
56	Fabrication and application of flexible, multimodal light-emitting devices for wireless optogenetics. <i>Nature Protocols</i> , <b>2013</b> , 8, 2413-2428	18.8	142
55	Injectable, cellular-scale optoelectronics with applications for wireless optogenetics. <i>Science</i> , <b>2013</b> , 340, 211-6	33.3	832
54	Biomimetics: A Biomimetic Composite from Solution Self-Assembly of Chitin Nanofibers in a Silk Fibroin Matrix (Adv. Mater. 32/2013). <i>Advanced Materials</i> , <b>2013</b> , 25, 4528-4528	24	1
53	Tuning chemical and physical cross-links in silk electrogels for morphological analysis and mechanical reinforcement. <i>Biomacromolecules</i> , <b>2013</b> , 14, 2629-35	6.9	48
52	Recombinant reflectin-based optical materials. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2013</b> , 51, 254-264	2.6	38
51	An Analytical Model of Reactive Diffusion for Transient Electronics. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 3106-3114	15.6	63
50	Silk as a Multifunctional Biomaterial Substrate for Reduced Glial Scarring around Brain-Penetrating Electrodes. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 3185-3193	15.6	91
49	Materials and Fabrication Processes for Transient and Bioresorbable High-Performance Electronics. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 4087-4093	15.6	191
48	Transdermal delivery devices: fabrication, mechanics and drug release from silk. <i>Small</i> , <b>2013</b> , 9, 3704-13	11	51
47	Dielectric breakdown strength of regenerated silk fibroin films as a function of protein conformation. <i>Biomacromolecules</i> , <b>2013</b> , 14, 3509-14	6.9	20



46	Antibiotic-Releasing Silk Biomaterials for Infection Prevention and Treatment. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 854-861	15.6	137
45	Nanoimprinting: Protein-Protein Nanoimprinting of Silk Fibroin Films (Adv. Mater. 17/2013). <i>Advanced Materials</i> , <b>2013</b> , 25, 2378-2378	24	1
44	Silk protein based hybrid photonic-plasmonic crystal. <i>Optics Express</i> , <b>2013</b> , 21, 8897-903	3.3	28
43	Fabrication of Silk Microneedles for Controlled-Release Drug Delivery. <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 330-335	15.6	195
42	Silk-based conformal, adhesive, edible food sensors. <i>Advanced Materials</i> , <b>2012</b> , 24, 1067-72	24	266
41	Review physical and chemical aspects of stabilization of compounds in silk. <i>Biopolymers</i> , <b>2012</b> , 97, 479-98.2	120	
40	Graphene-based wireless bacteria detection on tooth enamel. <i>Nature Communications</i> , <b>2012</b> , 3, 763	17.4	657
39	Silk inverse opals. <i>Nature Photonics</i> , <b>2012</b> , 6, 818-823	33.9	181
38	A physically transient form of silicon electronics. <i>Science</i> , <b>2012</b> , 337, 1640-4	33.3	862
37	Direct transfer of subwavelength plasmonic nanostructures on bioactive silk films. <i>Advanced Materials</i> , <b>2012</b> , 24, 6088-93	24	39
36	Flexible Electronics: Materials and Designs for Wirelessly Powered Implantable Light-Emitting Systems (Small 18/2012). <i>Small</i> , <b>2012</b> , 8, 2770-2770	11	2
35	Low-threshold blue lasing from silk fibroin thin films. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 091110	3.4	66
34	Optically induced birefringence and holography in silk. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2012</b> , 50, 257-262	2.6	18
33	Biofunctional Silk/Neuron Interfaces. <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 1871-1884	15.6	45
32	Biomaterials: Biofunctional Silk/Neuron Interfaces (Adv. Funct. Mater. 9/2012). <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 1870-1870	15.6	
31	Silk materials--a road to sustainable high technology. <i>Advanced Materials</i> , <b>2012</b> , 24, 2824-37	24	380
30	Three-dimensional thermal analysis of wirelessly powered light-emitting systems. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2012</b> , 468, 4088-4097	2.4	4
29	Implantable, multifunctional, bioresorbable optics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 19584-9	11.5	97

28	Epidermal electronics. <i>Science</i> , <b>2011</b> , 333, 838-43	33.3	3216
27	Rapid transfer-based micropatterning and dry etching of silk microstructures. <i>Advanced Materials</i> , <b>2011</b> , 23, 2015-9	24	42
26	Effect of processing on silk-based biomaterials: reproducibility and biocompatibility. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , <b>2011</b> , 99, 89-101	3.5	227
25	Dissolvable films of silk fibroin for ultrathin conformal bio-integrated electronics. <i>Nature Materials</i> , <b>2010</b> , 9, 511-7	27	1239
24	Surface Enhanced Vibrational Spectroscopy of Proteins with Plasmonic Nanoantenna Arrays. <i>Materials Research Society Symposia Proceedings</i> , <b>2010</b> , 1248, 1002		
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15	Metamaterial silk composites at terahertz frequencies. <i>Advanced Materials</i> , <b>2010</b> , 22, 3527-31	24	89
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