

Weidong Gao

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5377825/publications.pdf>

Version: 2024-02-01

129
papers

1,660
citations

304368

22
h-index

395343

33
g-index

130
all docs

130
docs citations

130
times ranked

1737
citing authors

#	ARTICLE	IF	CITATIONS
1	Microfibers: a preliminary discussion on their definition and sources. <i>Environmental Science and Pollution Research</i> , 2019, 26, 29497-29501.	2.7	78
2	Large-Scale Synthesis and Raman and Photoluminescence Properties of Single Crystalline $\hat{1}^2$ -SiC Nanowires Periodically Wrapped by Amorphous SiO_2 Nanospheres 2. <i>Journal of Physical Chemistry C</i> , 2009, 113, 91-96.	1.5	75
3	Preparation and characterization of electrospinning PLA/curcumin composite membranes. <i>Fibers and Polymers</i> , 2010, 11, 1128-1131.	1.1	69
4	Microfiber pollution: an ongoing major environmental issue related to the sustainable development of textile and clothing industry. <i>Environment, Development and Sustainability</i> , 2021, 23, 11240-11256.	2.7	59
5	Preparation and characterization of silver nanocomposite textile. <i>Journal of Coatings Technology Research</i> , 2007, 4, 101-106.	1.2	57
6	Automatic recognition of woven fabric pattern based on image processing and BP neural network. <i>Journal of the Textile Institute</i> , 2011, 102, 19-30.	1.0	44
7	Cellulose nanocrystals functionalized with amino-silane and epoxy-poly(ethylene glycol) for reinforcement and flexibilization of poly(lactic acid): material preparation and compatibility mechanism. <i>Cellulose</i> , 2018, 25, 6447-6463.	2.4	44
8	Surface functionalization of silk fabric by PTFE sputter coating. <i>Journal of Materials Science</i> , 2007, 42, 8025-8028.	1.7	41
9	Fabric Image Retrieval System Using Hierarchical Search Based on Deep Convolutional Neural Network. <i>IEEE Access</i> , 2019, 7, 35405-35417.	2.6	39
10	Evaluation of drug release property and blood compatibility of aspirin-loaded electrospun PLA/RSF composite nanofibers. <i>Iranian Polymer Journal (English Edition)</i> , 2013, 22, 729-737.	1.3	37
11	Poly(lactic acid)-based biocomposites reinforced with modified cellulose nanocrystals. <i>Cellulose</i> , 2017, 24, 4773-4784.	2.4	34
12	Influence of combined enzymatic treatment on one-bath scouring of cotton knitted fabrics. <i>Biocatalysis and Biotransformation</i> , 2007, 25, 9-15.	1.1	31
13	Structural characterization and dynamic water adsorption of electrospun polyamide6/montmorillonite nanofibers. <i>Journal of Applied Polymer Science</i> , 2008, 107, 3535-3540.	1.3	31
14	Hierarchically Structured and Scalable Artificial Muscles for Smart Textiles. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 54386-54395.	4.0	31
15	Antibacterial properties of PLA nonwoven medical dressings coated with nanostructured silver. <i>Fibers and Polymers</i> , 2008, 9, 556-560.	1.1	28
16	Preparation and blood compatibility of electrospun PLA/curcumin composite membranes. <i>Fibers and Polymers</i> , 2012, 13, 1254-1258.	1.1	28
17	A multi-task and multi-scale convolutional neural network for automatic recognition of woven fabric pattern. <i>Journal of Intelligent Manufacturing</i> , 2021, 32, 1147-1161.	4.4	28
18	Influences of organic-modified Fe-montmorillonite on structure, morphology and properties of polyacrylonitrile nanocomposite fibers. <i>Fibers and Polymers</i> , 2009, 10, 750-755.	1.1	24

#	ARTICLE	IF	CITATIONS
19	Comparison Between Structures and Properties of ABS Nanocomposites Derived from Two Different Kinds of OMT. <i>Journal of Materials Engineering and Performance</i> , 2010, 19, 171-176.	1.2	24
20	Clothing Attribute Recognition Based on RCNN Framework Using L-Softmax Loss. <i>IEEE Access</i> , 2020, 8, 48299-48313.	2.6	24
21	Cellulose nanocrystals modified with a triazine derivative and their reinforcement of poly(lactic) Tj ETQq1 1 0.784314 rgBT /Overlock 10	2.4	23
22	Cellulose nanocrystals modified with quaternary ammonium salts and its reinforcement of polystyrene. <i>Polymer Bulletin</i> , 2018, 75, 2151-2166.	1.7	22
23	Structure, Thermal, and Antibacterial Properties of Polyacrylonitrile/Ferric Chloride Nanocomposite Fibers by Electrospinning. <i>International Journal of Polymer Analysis and Characterization</i> , 2010, 15, 110-118.	0.9	21
24	Automatic recognition of the color effect of yarn-dyed fabric by the smallest repeat unit recognition algorithm. <i>Textile Reseach Journal</i> , 2015, 85, 432-446.	1.1	21
25	Process optimization of ultrasound-assisted alcoholic-alkaline treatment for granular cold water swelling starches. <i>Ultrasonics Sonochemistry</i> , 2017, 38, 579-584.	3.8	21
26	Automatic inspection of double-system-mÃ©lange yarn-dyed fabric density with color-gradient image. <i>Fibers and Polymers</i> , 2011, 12, 127-131.	1.1	20
27	Numerical simulation of a three-dimensional flow field in compact spinning with a perforated drum: Effect of a guiding device. <i>Textile Reseach Journal</i> , 2013, 83, 2093-2108.	1.1	20
28	An eco-friendly way to whiten yellowish anti-wrinkle cotton fabrics using TBCC-activated peroxide low-temperature post-bleaching. <i>Cellulose</i> , 2019, 26, 3575-3588.	2.4	20
29	Automatic inspection of yarn-dyed fabric density by mathematical statistics of sub-images. <i>Journal of the Textile Institute</i> , 2015, 106, 823-834.	1.0	19
30	Automatic recognition of woven fabric patterns based on pattern database. <i>Fibers and Polymers</i> , 2010, 11, 303-308.	1.1	18
31	Image retrieval of wool fabric. Part I: Based on low-level texture features. <i>Textile Reseach Journal</i> , 2019, 89, 4195-4207.	1.1	18
32	Effects of ferric chloride on structure, surface morphology and combustion property of electrospun polyacrylonitrile composite nanofibers. <i>Fibers and Polymers</i> , 2011, 12, 145-150.	1.1	17
33	Dynamic measurement of fabric wrinkle recovery angle by video sequence processing. <i>Textile Reseach Journal</i> , 2014, 84, 694-703.	1.1	17
34	Automatic detection of layout of color yarns of yarnâ€dyed fabric. Part 1: Singleâ€systemâ€mÃ©lange color fabrics. <i>Color Research and Application</i> , 2015, 40, 626-636.	0.8	17
35	Image retrieval of wool fabric. Part II: based on low-level color features. <i>Textile Reseach Journal</i> , 2020, 90, 797-808.	1.1	16
36	Fabric Retrieval Based on Multi-Task Learning. <i>IEEE Transactions on Image Processing</i> , 2021, 30, 1570-1582.	6.0	16

#	ARTICLE	IF	CITATIONS
37	Exploring the relationship between bending property and crease recovery of woven fabrics. <i>Journal of the Textile Institute</i> , 2015, 106, 1173-1179.	1.0	14
38	Characterization of PVAc/TiO ₂ hybrid nanofibers: From fibrous morphologies to molecular structures. <i>Journal of Applied Polymer Science</i> , 2009, 112, 1481-1485.	1.3	13
39	Preparation, characterization of antibacterial PLA/TP nanofibers. <i>Fibers and Polymers</i> , 2011, 12, 340-344.	1.1	13
40	Wicking Behaviors of Ring and Compact-Siro Ring Spun Yarns with Different Twists. <i>Autex Research Journal</i> , 2019, 19, 68-73.	0.6	13
41	Automatic detection of layout of color yarns of yarn-dyed fabric. Part 2: Region segmentation of double-color large color fabric. <i>Color Research and Application</i> , 2016, 41, 626-635.	0.8	12
42	Effects of Snailase Treatment on Wettability of Raw Cotton Yarns in Pre-wetting Process of Foam Sizing. <i>Applied Biochemistry and Biotechnology</i> , 2017, 182, 1065-1075.	1.4	12
43	Preparation of silica micro spheres via a semibatch sol-gel method. <i>Journal of Sol-Gel Science and Technology</i> , 2017, 81, 669-677.	1.1	12
44	Woven Fabric Density Measurement by Using Multi-Scale Convolutional Neural Networks. <i>IEEE Access</i> , 2019, 7, 75810-75821.	2.6	12
45	Whitening citric acid treated cotton fabrics by a TBCC-activated peroxide post-bleaching. <i>Cellulose</i> , 2020, 27, 5367-5376.	2.4	12
46	An automatic scheduling method for weaving enterprises based on genetic algorithm. <i>Journal of the Textile Institute</i> , 2015, 106, 1377-1387.	1.0	11
47	Multi-perspective measurement of yarn hairiness using mirrored images. <i>Textile Research Journal</i> , 2018, 88, 621-629.	1.1	11
48	Effect of pullulan on molecular chain conformations in the process of starch retrogradation condensed matter. <i>International Journal of Biological Macromolecules</i> , 2019, 138, 736-743.	3.6	11
49	Reducing yarn hairiness in ring spinning by an agent-aided system. <i>Textile Research Journal</i> , 2019, 89, 4438-4451.	1.1	11
50	Improved dyeing of poly-m-phenyleneisophthalamide using cationic dye based on macro-cation dyeing mechanism. <i>Dyes and Pigments</i> , 2019, 163, 111-117.	2.0	11
51	Exploring the mechanism of pullulan delay potato starch long-term retrogradation from the viewpoint of amylopectin chain motion. <i>International Journal of Biological Macromolecules</i> , 2020, 145, 84-91.	3.6	11
52	5-Aminolevulinic Acid-Mediated Sonodynamic Therapy Promotes Phenotypic Switching from Dedifferentiated to Differentiated Phenotype via Reactive Oxygen Species and p38 Mitogen-Activated Protein Kinase in Vascular Smooth Muscle Cells. <i>Ultrasound in Medicine and Biology</i> , 2015, 41, 1681-1689.	0.7	10
53	A computer vision-based system for automatic detection of misarranged warp yarns in yarn-dyed fabric. Part I: continuous segmentation of warp yarns. <i>Journal of the Textile Institute</i> , 2018, 109, 577-584.	1.0	10
54	Analysis of curve parameters to characterize multidirectional fabric wrinkling by a double extraction method. <i>Textile Research Journal</i> , 2019, 89, 2973-2982.	1.1	10

#	ARTICLE	IF	CITATIONS
55	Automatic Assessment of Fabric Smoothness Appearance Based on a Compact Convolutional Neural Network With Label Smoothing. <i>IEEE Access</i> , 2020, 8, 26966-26974.	2.6	10
56	Genetic algorithm-based detection of the layout of color yarns. <i>Journal of the Textile Institute</i> , 2011, 102, 172-179.	1.0	9
57	Antimicrobial activity and mechanism of PLA/TP composite nanofibrous films. <i>Journal of the Textile Institute</i> , 2014, 105, 196-202.	1.0	9
58	Exploring the role of pullulan in the process of potato starch film formation. <i>Carbohydrate Polymers</i> , 2020, 234, 115910.	5.1	9
59	Improving the hydrophobicity of nylon fabric by consecutive treatment with poly(acrylic acid), tetraethylorthosilicate, and octadecylamine. <i>Journal of Applied Polymer Science</i> , 2015, 132, .	1.3	8
60	Weave pattern recognition by measuring fiber orientation with Fourier transform. <i>Journal of the Textile Institute</i> , 2017, 108, 622-630.	1.0	8
61	Determination of optimal system parameters to characterize the wrinkle recovery of fabrics by an integrated shape retention evaluation system. <i>Textile Research Journal</i> , 2020, 90, 91-100.	1.1	8
62	Color Prediction for Pre-Colored Cotton Fiber Blends Based on Improved Kubelka-Munk Double-Constant Theory. <i>Fibers and Polymers</i> , 2021, 22, 412-420.	1.1	8
63	Beyond the Definition of Microfiber Pollution is More Research. <i>AATCC Review</i> , 2019, 19, 49-52.	0.2	8
64	Physical properties of Al-doped ZnO films deposited on nonwoven substrates by radio frequency magnetron sputtering. <i>Journal of Coatings Technology Research</i> , 2008, 5, 393-397.	1.2	7
65	Fabric seam detection based on wavelet transform and CIELAB color space: A comparison. <i>Optik</i> , 2015, 126, 5650-5655.	1.4	7
66	Numerical simulation of flow field in complete condensing spinning: effects of suction unit and guiding device. <i>Journal of the Textile Institute</i> , 2016, 107, 811-824.	1.0	7
67	Decoloration of Multi-Color Fabric Images for Fabric Appearance Smoothness Evaluation by Supervised Image-to-Image Translation. <i>IEEE Access</i> , 2019, 7, 181284-181294.	2.6	7
68	Numerical simulation of the fiber trajectories in vortex spinning under different process parameters based on the finite element model. <i>Textile Research Journal</i> , 2019, 89, 2626-2636.	1.1	7
69	Pattern design and optimization of yarn-dyed plaid fabric using modified interactive genetic algorithm. <i>Journal of the Textile Institute</i> , 2020, 111, 1652-1661.	1.0	7
70	Automatic recognition of woven fabric structural parameters: a review. <i>Artificial Intelligence Review</i> , 2022, 55, 6345-6387.	9.7	7
71	Image analysis measurement of cottonseed coat fragments in 100% cotton woven fabric. <i>Fibers and Polymers</i> , 2013, 14, 1208-1214.	1.1	6
72	An intelligent computer method for automatic mosaic of sequential slub yarn images based on image processing. <i>Textile Research Journal</i> , 2018, 88, 2854-2866.	1.1	6

#	ARTICLE	IF	CITATIONS
73	Optimization of Operational Parameters of Foam Sizing Process for Cotton Yarns Based on Plackett-Burman Experiment Design. <i>Autex Research Journal</i> , 2018, 18, 61-66.	0.6	6
74	Instrumental evaluation of fabric shape retention by image analysis. <i>Textile Research Journal</i> , 2020, 90, 2376-2384.	1.1	6
75	Color matching for colored fiber blends based on the fuzzy c-mean cluster in HSV color space. , 2010, , .		5
76	Optimization of an alcoholic-alkaline freeze-drying treatment for granular cold-water swelling starches. <i>Starch/Staerke</i> , 2017, 69, 1600198.	1.1	5
77	Numerical simulation and analysis of the dynamic finite element model of the fiber motion in the air spinning process. <i>Textile Research Journal</i> , 2019, 89, 1198-1206.	1.1	5
78	In-situ characterization of handle characteristics of suiting woven fabrics by a simultaneous measurement method. <i>Textile Research Journal</i> , 2019, 89, 2522-2531.	1.1	5
79	Pattern retrieval of yarn-dyed plaid fabric based on modified interactive genetic algorithm. <i>Color Research and Application</i> , 2020, 45, 1143-1152.	0.8	5
80	Established an eco-friendly cotton fabric treating process with enhancing anti-wrinkle performance. <i>Journal of Engineered Fibers and Fabrics</i> , 2021, 16, 155892502110034.	0.5	5
81	Sequential image for measurement of fabric crease recovery angle. <i>Journal of the Textile Institute</i> , 2016, 107, 825-832.	1.0	4
82	Image analysis for seam-puckering evaluation. <i>Textile Research Journal</i> , 2017, 87, 2513-2523.	1.1	4
83	Process optimization of ultrasound-assisted treatment for soya bean protein isolate/polyacrylamide composite film. <i>Royal Society Open Science</i> , 2018, 5, 180213.	1.1	4
84	Proactive Mobility Management Based on Virtual Cells in SDN-Enabled Ultra-Dense Networks. , 2019, , .		4
85	Intelligent recognition of the patterns of yarn-dyed fabric based on LSRT images. <i>Journal of Engineered Fibers and Fabrics</i> , 2019, 14, 155892501984065.	0.5	4
86	Comment on "A planet too rich in fiber". <i>EMBO Reports</i> , 2019, 20, .	2.0	4
87	Analysis of the influence of the guided needle structure on the vortex spinning process and yarn properties. <i>Textile Research Journal</i> , 2019, 89, 1246-1257.	1.1	4
88	Recognition of the layout of colored yarns in yarn-dyed fabrics. <i>Textile Research Journal</i> , 2021, 91, 100-114.	1.1	4
89	Depth recovery of hairy fibers for precise yarn hairiness measurement. <i>Applied Optics</i> , 2018, 57, 7021.	0.9	4
90	Airflow Characteristics During the Rotor Spun Composite Yarn Spinning Process. <i>Fibres and Textiles in Eastern Europe</i> , 2017, 25, 13-17.	0.2	4

#	ARTICLE	IF	CITATIONS
91	Yarn-Dyed Fabric Image Retrieval Using Colour Moments and the Perceptual Hash Algorithm. <i>Fibres and Textiles in Eastern Europe</i> , 2019, 27, 60-69.	0.2	4
92	Structure and Morphological Evolvement of Electrospun Polyacrylonitrile/Organicâ€“Modified Fe-Montmorillonite Composite Carbon Nanofibers. <i>International Journal of Polymer Analysis and Characterization</i> , 2011, 16, 24-35.	0.9	3
93	Color separation for colored fiber blends based on the fuzzy Câ€means cluster. <i>Color Research and Application</i> , 2012, 37, 212-218.	0.8	3
94	Xylanaseâ€and celluloseâ€aided bioprocessing of bamboo. <i>Engineering in Life Sciences</i> , 2015, 15, 605-611.	2.0	3
95	Measurement of long yarn hair based on hairiness segmentation and hairiness tracking. <i>Journal of the Textile Institute</i> , 2016, , 1-9.	1.0	3
96	Dynamic Measurement of Foam-Sized Yarn Properties from Yarn Sequence Images. <i>Autex Research Journal</i> , 2018, 18, 314-322.	0.6	3
97	Objective Evaluation of Fabric Wrinkles Based on 2-D Gabor Transform. <i>Fibers and Polymers</i> , 2020, 21, 2138-2146.	1.1	3
98	An adhesive-aided ring spinning for improving cotton yarn quality with the aid of sodium carboxymethyl cellulose solution. <i>Journal of Engineered Fibers and Fabrics</i> , 2020, 15, 155892502092783.	0.5	3
99	In situ characterization of the morphological wrinkling of woven fibrous materials by a mechanical test. <i>Textile Reseach Journal</i> , 2020, 90, 2085-2096.	1.1	3
100	Evaluation of an Intelligent Computer Method for the Automatic Mosaic of Sequential Slub Yarn Images. <i>Fibres and Textiles in Eastern Europe</i> , 2018, 26, 38-48.	0.2	3
101	Research on Gait Cycle Recognition with Plantar Pressure Sensors. , 2020, , .		3
102	Clothing recognition based on deep sparse convolutional neural network. <i>International Journal of Clothing Science and Technology</i> , 2022, 34, 119-133.	0.5	3
103	Synergy of Silane and Polyacrylate Treatments to Prepare Thermally Stable and Hydrophobic Cellulose Nanocrystals. <i>Chemistry Letters</i> , 2018, 47, 1272-1275.	0.7	2
104	Detection of residual yarn on spinning bobbins based on salient region detection. <i>Journal of the Textile Institute</i> , 2019, 110, 838-846.	1.0	2
105	User Selection and Power Allocation in Massive multiuser MIMO Systems. , 2019, , .		2
106	Color matching of vortex spun yarn and ring spun yarn by the composition of dope-dyed fiber. <i>Journal of the Textile Institute</i> , 2020, 111, 172-177.	1.0	2
107	Coalition Game-Based Beamwidth Selection for D2D Users Underlying Ultra Dense mmWave Networks. , 2020, , .		2
108	Study on Gathering-and-twisting Mechanism of Fibers and CMC-Na/PAM/PVA Solution Optimization for Enhancing Cotton Yarn Performance by Adhesive-aided Ring Spinning. <i>Fibers and Polymers</i> , 2021, 22, 3490-3500.	1.1	2

#	ARTICLE	IF	CITATIONS
109	Effect of yarn structure on the liquid moisture transport in yarns. Journal of the Textile Institute, 0, , 1-6.	1.0	2
110	Patterned fabric image retrieval using relevant feedback via geometric similarity. Textile Reseach Journal, 0, , 004051752110362.	1.1	2
111	Appearance generation for colored spun yarn fabric based on conditional image-to-image translation. Color Research and Application, 2022, 47, 1023-1034.	0.8	2
112	Evaluation of bamboo water-retting for fiber bundle extraction. Textile Reseach Journal, 2022, 92, 3289-3298.	1.1	2
113	Inspecting anisotropy in wrinkle recovery angle of woven fabric. Journal of the Textile Institute, 2016, 107, 711-718.	1.0	1
114	K&M theory of fabric knitted by three-channel rotor spun wool yarn. Color Research and Application, 2019, 44, 243-248.	0.8	1
115	Optimizing parameters of warp fatigue life tester by response surface methodology. Journal of Engineered Fibers and Fabrics, 2019, 14, 155892501989380.	0.5	1
116	Fusing Convolutional Neural Network Features With Hand-Crafted Features for Objective Fabric Smoothness Appearance Assessment. IEEE Access, 2020, 8, 110678-110692.	2.6	1
117	A Fingerprint Database Construction Method Based on Universal Kriging Interpolation for Outdoor Localization. , 2020, , .		1
118	Improve Quality of Experience of Users by Optimizing Handover Parameters in Mobile Networks. , 2020, , .		1
119	M&lange fabric image retrieval based on soft similarity learning. Journal of Engineered Fibers and Fabrics, 2022, 17, 155892502210888.	0.5	1
120	Wool fabric image retrieval based on soft similarity and listwise learning. Textile Reseach Journal, 0, , 004051752211026.	1.1	1
121	Fabric defect detection based on projected transform for feature extraction. , 2011, , .		0
122	Automated woven fabric texture periodicity extraction by spectral analysis and patch-DMF. Journal of the Textile Institute, 2022, 113, 422-429.	1.0	0
123	Analysis of Adhesion Effect of Solution on Cotton Fibers in Adhesive-aided Ring Spinning. Fibers and Polymers, 2021, 22, 2323-2332.	1.1	0
124	Pattern design and optimization of yarn-dyed plaid fabric using isolation niche genetic algorithm and rough set theory. Color Research and Application, 2022, 47, 213-224.	0.8	0
125	Effect of yarn structure, arrangement and surface on liquid moisture transfer in fabrics. Journal of the Textile Institute, 0, , 1-8.	1.0	0
126	Joint Resource Allocation and Power optimization for Energy-Efficiency in Multiuser mmWave Massive MIMO System. , 2021, , .		0

#	ARTICLE	IF	CITATIONS
127	A Real-time Detection Method of Available Backhaul Capacity in UDN With Backhaul Constraint. , 2021, , .		0
128	Dynamic Adaptive Marking Strategy Based on DCTCP in Data Center Networks. , 2022, , .		0
129	Image recoloring of printed fabric based on the salient map and local color transfer. Textile Reseach Journal, 0, , 004051752211036.	1.1	0