Xing-Cai Zhang

List of Publications by Year in descending order

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34076 62565 7,702 134 52 80 citations h-index g-index papers 137 137 137 6783 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Porous Polymers as Multifunctional Material Platforms toward Taskâ€Specific Applications. Advanced Materials, 2019, 31, e1802922.	11.1	315
2	In situ sprayed NIR-responsive, analgesic black phosphorus-based gel for diabetic ulcer treatment. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 28667-28677.	3.3	244
3	A materials-science perspective on tackling COVID-19. Nature Reviews Materials, 2020, 5, 847-860.	23.3	228
4	Capturing functional two-dimensional nanosheets from sandwich-structure vermiculite for cancer theranostics. Nature Communications, 2021, 12, 1124.	5.8	227
5	Fighting Immune Cold and Reprogramming Immunosuppressive Tumor Microenvironment with Red Blood Cell Membrane-Camouflaged Nanobullets. ACS Nano, 2020, 14, 17442-17457.	7.3	190
6	Drug-loaded polyelectrolyte microcapsules for sustained targeting of cancer cells. Advanced Drug Delivery Reviews, 2011, 63, 847-864.	6.6	182
7	Emerging Functional Porous Polymeric and Carbonaceous Materials for Environmental Treatment and Energy Storage. Advanced Functional Materials, 2020, 30, 1907006.	7.8	176
8	Multifunctional phototheranostic nanomedicine for cancer imaging and treatment. Materials Today Bio, 2020, 5, 100035.	2.6	167
9	Identification of Phase Control of Carbonâ€Confined Nb ₂ O ₅ Nanoparticles toward Highâ€Performance Lithium Storage. Advanced Energy Materials, 2019, 9, 1802695.	10.2	161
10	2D MOF Periodontitis Photodynamic Ion Therapy. Journal of the American Chemical Society, 2021, 143, 15427-15439.	6.6	161
11	Insights from nanotechnology in COVID-19 treatment. Nano Today, 2021, 36, 101019.	6.2	146
12	Arsenene-mediated multiple independently targeted reactive oxygen species burst for cancer therapy. Nature Communications, $2021,12,4777.$	5.8	144
13	Layered double hydroxide-based nanomaterials for biomedical applications. Chemical Society Reviews, 2022, 51, 6126-6176.	18.7	133
14	Sonication-Assisted Synthesis of Polyelectrolyte-Coated Curcumin Nanoparticles. Langmuir, 2010, 26, 7679-7681.	1.6	128
15	Breast cancer subtypes and the risk of distant metastasis at initial diagnosis: a population-based study. Cancer Management and Research, 2018, Volume 10, 5329-5338.	0.9	124
16	Robust and sensitive pressure/strain sensors from solution processable composite hydrogels enhanced by hollow-structured conducting polymers. Chemical Engineering Journal, 2021, 403, 126307.	6.6	110
17	Biologically modified nanoparticles as theranostic bionanomaterials. Progress in Materials Science, 2021, 118, 100768.	16.0	108
18	Top-down and bottom-up approaches in production of aqueous nanocolloids of low solubility drug paclitaxel. Physical Chemistry Chemical Physics, 2011, 13, 9014.	1.3	106

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19	Breaking the Intracellular Redox Balance with Diselenium Nanoparticles for Maximizing Chemotherapy Efficacy on Patient-Derived Xenograft Models. ACS Nano, 2020, 14, 16984-16996.	7.3	105
20	Emerging porous organic polymers for biomedical applications. Chemical Society Reviews, 2022, 51, 1377-1414.	18.7	103
21	Lapatinib/Paclitaxel polyelectrolyte nanocapsules for overcoming multidrug resistance in ovarian cancer. Nanomedicine: Nanotechnology, Biology, and Medicine, 2012, 8, 891-899.	1.7	102
22	Bioâ€Inspired Ionic Skin for Theranostics. Advanced Functional Materials, 2021, 31, 2008020.	7.8	99
23	MXene Composite Nanofibers for Cell Culture and Tissue Engineering. ACS Applied Bio Materials, 2020, 3, 2125-2131.	2.3	96
24	Cytocompatible chitosan based multi-network hydrogels with antimicrobial, cell anti-adhesive and mechanical properties. Carbohydrate Polymers, 2018, 202, 246-257.	5.1	95
25	Dendronized fluorosurfactant for highly stable water-in-fluorinated oil emulsions with minimal inter-droplet transfer of small molecules. Nature Communications, 2019, 10, 4546.	5.8	95
26	Arsenene Nanodots with Selective Killing Effects and their Lowâ€Dose Combination with ßâ€Elemene for Cancer Therapy. Advanced Materials, 2021, 33, e2102054.	11.1	93
27	Biomaterials and nanomedicine for bone regeneration: Progress and future prospects. Exploration, 2021, 1, 20210011.	5.4	90
28	Converting Poorly Soluble Materials into Stable Aqueous Nanocolloids. Langmuir, 2011, 27, 1212-1217.	1.6	89
29	Orally deliverable strategy based on microalgal biomass for intestinal disease treatment. Science Advances, 2021, 7, eabi9265.	4.7	88
30	The Chromosome-Level Reference Genome of Tea Tree Unveils Recent Bursts of Non-autonomous LTR Retrotransposons in Driving Genome Size Evolution. Molecular Plant, 2020, 13, 935-938.	3.9	80
31	NIR-responsive MXene nanobelts for wound healing. NPG Asia Materials, 2021, 13, .	3.8	80
32	Ca2+-supplying black phosphorus-based scaffolds fabricated with microfluidic technology for osteogenesis. Bioactive Materials, 2021, 6, 4053-4064.	8.6	80
33	A Near-Infrared-II Polymer with Tandem Fluorophores Demonstrates Superior Biodegradability for Simultaneous Drug Tracking and Treatment Efficacy Feedback. ACS Nano, 2021, 15, 5428-5438.	7.3	79
34	Mechanochemistry: A Green, Activation-Free and Top-Down Strategy to High-Surface-Area Carbon Materials. ACS Sustainable Chemistry and Engineering, 2017, 5, 8535-8540.	3.2	78
35	Microalgae-based oral microcarriers for gut microbiota homeostasis and intestinal protection in cancer radiotherapy. Nature Communications, 2022, 13, 1413.	5.8	78
36	A non-printed integrated-circuit textile for wireless theranostics. Nature Communications, 2021, 12, 4876.	5.8	76

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37	Insight into multifunctional polyester fabrics finished by one-step eco-friendly strategy. Chemical Engineering Journal, 2019, 358, 634-642.	6.6	75
38	The Chromosome-Based Rubber Tree Genome Provides New Insights into Spurge Genome Evolution and Rubber Biosynthesis. Molecular Plant, 2020, 13, 336-350.	3.9	73
39	Electrostatic self-assembly of a Agl/Bi ₂ Ga ₄ O ₉ p–n junction photocatalyst for boosting superoxide radical generation. Journal of Materials Chemistry A, 2020, 8, 4083-4090.	5.2	73
40	Nearâ€Infraredâ€Excited Multicolor Afterglow in Carbon Dotsâ€Based Roomâ€Temperature Afterglow Materials. Angewandte Chemie - International Edition, 2021, 60, 22253-22259.	7.2	73
41	Universal Approach to Fabricating Graphene-Supported Single-Atom Catalysts from Doped ZnO Solid Solutions. ACS Central Science, 2020, 6, 1431-1440.	5.3	69
42	Nanonetwork-structured yolk-shell FeS2@C as high-performance cathode materials for Li-ion batteries. Carbon, 2018, 140, 433-440.	5.4	66
43	Targeting Hypoxic Tumors with Hybrid Nanobullets for Oxygen-Independent Synergistic Photothermal andÂThermodynamic Therapy. Nano-Micro Letters, 2021, 13, 99.	14.4	64
44	Immunogenic-cell-killing and immunosuppression-inhibiting nanomedicine. Bioactive Materials, 2021, 6, 1513-1527.	8.6	63
45	Nano-carriers for targeted delivery and biomedical imaging enhancement. Therapeutic Delivery, 2018, 9, 451-468.	1.2	61
46	New Epigallocatechin Gallate (EGCG) Nanocomplexes Co-Assembled with 3-Mercapto-1-Hexanol and <i>\hat{l}^2</i> Lactoglobulin for Improvement of Antitumor Activity. Journal of Biomedical Nanotechnology, 2017, 13, 805-814.	0.5	60
47	An NIR photothermal-responsive hybrid hydrogel for enhanced wound healing. Bioactive Materials, 2022, 16, 162-172.	8.6	60
48	A digital microfluidic diluter-based microalgal motion biosensor for marine pollution monitoring. Biosensors and Bioelectronics, 2019, 143, 111597.	5.3	58
49	Plant-Based Nanoparticles Prepared from Proteins and Phospholipids Consisting of a Core–Multilayer-Shell Structure: Fabrication, Stability, and Foamability. Journal of Agricultural and Food Chemistry, 2019, 67, 6574-6584.	2.4	58
50	Black Phosphorus in Biological Applications: Evolutionary Journey from Monoelemental Materials to Composite Materials. Accounts of Materials Research, 2021, 2, 489-500.	5.9	57
51	Scattered seeding of CAR T cells in solid tumors augments anticancer efficacy. National Science Review, 2022, 9, nwab172.	4.6	57
52	Preparation of versatile yolk-shell nanoparticles with a precious metal yolk and a microporous polymer shell for high-performance catalysts and antibacterial agents. Polymer, 2018, 137, 195-200.	1.8	55
53	Carbon nanotube/polyurethane films with high transparency, low sheet resistance and strong adhesion for antistatic application. RSC Advances, 2017, 7, 53018-53024.	1.7	54
54	A facile and general method for synthesis of antibiotic-free protein-based hydrogel: Wound dressing for the eradication of drug-resistant bacteria and biofilms. Bioactive Materials, 2022, 18, 446-458.	8.6	54

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55	pH-Sensitive Poly(\hat{l}^2 -amino ester)s Nanocarriers Facilitate the Inhibition of Drug Resistance in Breast Cancer Cells. Nanomaterials, 2018, 8, 952.	1.9	51
56	Triple-synergistic MOF-nanozyme for efficient antibacterial treatment. Bioactive Materials, 2022, 17, 289-299.	8.6	49
57	Antibacterial Cascade Catalytic Glutathione-Depleting MOF Nanoreactors. ACS Applied Materials & Samp; Interfaces, 2022, 14, 11104-11115.	4.0	49
58	Construction of functional nanonetwork-structured carbon nitride with Au nanoparticle yolks for highly efficient photocatalytic applications. Chemical Communications, 2018, 54, 7159-7162.	2.2	48
59	Mediator-free electron-transfer on patternable hierarchical meso/macro porous bienzyme interface for highly-sensitive sweat glucose and surface electromyography monitoring. Sensors and Actuators B: Chemical, 2020, 312, 127962.	4.0	47
60	Carbon Dots in Hydroxy Fluorides: Achieving Multicolor Long-Wavelength Room-Temperature Phosphorescence and Excellent Stability via Crystal Confinement. Nano Letters, 2022, 22, 5127-5136.	4.5	46
61	Defect self-assembly of metal-organic framework triggers ferroptosis to overcome resistance. Bioactive Materials, 2023, 19, 1-11.	8.6	44
62	Fabrication, mechanical properties, and biocompatibility of reduced graphene oxide-reinforced nanofiber mats. RSC Advances, 2014, 4, 35035-35041.	1.7	43
63	Triple-synergistic 2D material-based dual-delivery antibiotic platform. NPG Asia Materials, 2020, 12, .	3.8	43
64	Smart multifunctional polyurethane microcapsules for the quick release of anticancer drugs in BGC 823 and HeLa tumor cells. Journal of Materials Chemistry B, 2017, 5, 9477-9481.	2.9	42
65	Artificial intelligence-powered microfluidics for nanomedicine and materials synthesis. Nanoscale, 2021, 13, 19352-19366.	2.8	42
66	Atomic Sn–enabled high-utilization, large-capacity, and long-life Na anode. Science Advances, 2022, 8, eabm7489.	4.7	42
67	Supermolecule Cucurbituril Subnanoporous Carbon Supercapacitor (SCSCS). Nano Letters, 2021, 21, 2156-2164.	4.5	40
68	Polyphenol and self-assembly: metal polyphenol nanonetwork for drug delivery and pharmaceutical applications. Future Drug Discovery, 2019, 1, .	0.8	37
69	Microenvironment-Controlled Micropatterned Microfluidic Model (MMMM) for Biomimetic <i>In Situ</i> Situ	7.3	37
70	Amine-Wetting-Enabled Dendrite-Free Potassium Metal Anode. ACS Nano, 2022, 16, 7291-7300.	7.3	36
71	Functional nanonetwork-structured polymers with inbuilt poly(acrylic acid) linings for enhanced adsorption. Polymer Chemistry, 2017, 8, 4771-4775.	1.9	35
72	NIR/MRIâ€Guided Oxygenâ€Independent Carrierâ€Free Antiâ€Tumor Nanoâ€Theranostics. Small, 2022, 18, e210)609020.	35

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73	Highly conductive sandwich-structured CNT/PEDOT:PSS/CNT transparent conductive films for OLED electrodes. Applied Nanoscience (Switzerland), 2019, 9, 1971-1979.	1.6	34
74	Synergistic Cobalt Sulfide/Eggshell Membrane Carbon Electrode. ACS Applied Materials & Samp; Interfaces, 2019, 11, 32244-32250.	4.0	32
75	Fabrication and Biocompatibility of Core–Shell Structured Magnetic Fibrous Scaffold. Journal of Biomedical Nanotechnology, 2019, 15, 500-506.	0.5	32
76	In-situ preparation of porous carbon nanosheets loaded with metal chalcogenides for a superior oxygen evolution reaction. Carbon, 2019, 149, 144-151.	5.4	32
77	Wettability-patterned microchip for emerging biomedical materials and technologies. Materials Today, 2021, 51, 273-293.	8.3	32
78	Biomimicry, biomineralization, and bioregeneration of bone using advanced three-dimensional fibrous hydroxyapatite scaffold. Materials Today Advances, 2019, 3, 100014.	2.5	30
79	DNAâ€Damageâ€Responseâ€Targeting Mitochondriaâ€Activated Multifunctional Prodrug Strategy for Selfâ€Defensive Tumor Therapy. Angewandte Chemie - International Edition, 2022, 61, .	7.2	30
80	Three-dimensional transistor arrays for intra- and inter-cellular recording. Nature Nanotechnology, 2022, 17, 292-300.	15.6	30
81	Enhancing the physicochemical performance of myofibrillar gels using Pickering emulsion fillers: Rheology, microstructure and stability. Food Hydrocolloids, 2022, 128, 107606.	5.6	29
82	A feedback-controlling digital microfluidic fluorimetric sensor device for simple and rapid detection of mercury (II) in costal seawater. Marine Pollution Bulletin, 2019, 144, 20-27.	2.3	28
83	Nanoengineered Shear-Thinning Hydrogel Barrier for Preventing Postoperative Abdominal Adhesions. Nano-Micro Letters, 2021, 13, 212.	14.4	28
84	Surface-Degradable Drug-Eluting Stent with Anticoagulation, Antiproliferation, and Endothelialization Functions. Biomolecules, 2019, 9, 69.	1.8	27
85	Rational Design of Silver Gradient for Studying Size Effect of Silver Nanoparticles on Contact Killing. ACS Biomaterials Science and Engineering, 2019, 5, 425-431.	2.6	26
86	Step emulsification: high-throughput production of monodisperse droplets. BioTechniques, 2020, 68, 114-116.	0.8	26
87	Machine-learning micropattern manufacturing. Nano Today, 2021, 38, 101152.	6.2	26
88	From Bench to the Clinic: The Path to Translation of Nanotechnology-Enabled mRNA SARS-CoV-2 Vaccines. Nano-Micro Letters, 2022, 14, 41.	14.4	26
89	Mitochondrial H2Sn-Mediated Anti-Inflammatory Theranostics. Nano-Micro Letters, 2021, 13, 168.	14.4	25
90	Highly photoluminescent carbon dots-based immunosensors for ultrasensitive detection of aflatoxin M1 residues in milk. Food Chemistry, 2021, 355, 129443.	4.2	25

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91	Carbon nanodots enhance and optimize the photoluminescence of micro-spherical YBO3:Eu3+ phosphors. Journal of Alloys and Compounds, 2019, 783, 813-819.	2.8	24
92	Differentiation of bMSCs on Biocompatible, Biodegradable, and Biomimetic Scaffolds for Largely Defected Tissue Repair. ACS Applied Bio Materials, 2020, 3, 735-746.	2.3	23
93	Scalable fabrication and active site identification of MOF shell-derived nitrogen-doped carbon hollow frameworks for oxygen reduction. Journal of Materials Science and Technology, 2021, 66, 186-192.	5.6	23
94	Instrumentation-Compact Digital Microfluidic Reaction Interface-Extended Loop-Mediated Isothermal Amplification for Sample-to-Answer Testing of <i>Vibrio parahaemolyticus</i> . Analytical Chemistry, 2021, 93, 9728-9736.	3.2	23
95	Biocompatible and Biodegradable 3D Double-Network Fibrous Scaffold for Excellent Cell Growth. Journal of Biomedical Nanotechnology, 2019, 15, 2209-2215.	0.5	23
96	Highly sensitive Curcumin-conjugated nanotheranostic platform for detecting amyloid-beta plaques by magnetic resonance imaging and reversing cognitive deficits of Alzheimer's disease via NLRP3-inhibition. Journal of Nanobiotechnology, 2022, 20, .	4.2	23
97	Facile synthesis of carbon dots with superior sensing ability. Applied Nanoscience (Switzerland), 2018, 8, 1189-1196.	1.6	22
98	Dual Specificity Phosphatase 6 Protects Neural Stem Cells from \hat{l}^2 -Amyloid-Induced Cytotoxicity through ERK1/2 Inactivation. Biomolecules, 2018, 8, 181.	1.8	21
99	Sustainable Silkâ€Derived Multimode Carbon Dots. Small, 2021, 17, e2103623.	5.2	21
100	Effect of Fermentation Conditions and Plucking Standards of Tea Leaves on the Chemical Components and Sensory Quality of Fermented Juice. Journal of Chemistry, 2018, 2018, 1-7.	0.9	20
101	Strain Control for Halide Perovskites. Matter, 2020, 2, 294-296.	5.0	20
102	Facile RbBr interface modification improves perovskite solar cell efficiency. Materials Today Chemistry, 2019, 14, 100179.	1.7	18
103	Osteogenic differentiation of BMSCs on MoS2 composite nanofibers with different cell seeding densities. Applied Nanoscience (Switzerland), 2020, 10, 3703-3716.	1.6	18
104	Functional Surfactants for Molecular Fishing, Capsule Creation, and Single-Cell Gene Expression. Nano-Micro Letters, 2021, 13, 147.	14.4	18
105	Wetting-Enhanced Structural Color for Convenient and Reversible Encryption of Optical Information. ACS Applied Materials & Samp; Interfaces, 2021, 13, 42276-42286.	4.0	18
106	Tea and Cancer Prevention. Journal of Cancer Research Updates, 2015, 4, .	0.3	18
107	An upgraded 2D nanosheet-based FRET biosensor: insights into avoiding background and eliminating effects of background fluctuations. Chemical Communications, 2022, 58, 467-470.	2.2	18
108	A new supramolecular binder strongly enhancing the electrochemistry performance for lithium–sulfur batteries. Chemical Communications, 2019, 55, 13924-13927.	2.2	17

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109	High-Performance Transparent PEDOT: PSS/CNT Films for OLEDs. Nanomaterials, 2021, 11, 2067.	1.9	17
110	Click chemistry extracellular vesicle/peptide/chemokine nanocarriers for treating central nervous system injuries. Acta Pharmaceutica Sinica B, 2023, 13, 2202-2218.	5.7	17
111	Lightweight, Highly Permeable, Biocompatible, and Antiadhesive Composite Meshes for Intraperitoneal Repairs. Macromolecular Bioscience, 2018, 18, e1800067.	2.1	16
112	Nature-derived bionanomaterials for sustained release of 5-fluorouracil to inhibit subconjunctival fibrosis. Materials Today Advances, 2021, 11, 100150.	2.5	16
113	Imparting reusable and SARS-CoV-2 inhibition properties to standard masks through metal-organic nanocoatings. Journal of Hazardous Materials, 2022, 431, 128441.	6.5	16
114	A versatile bottom-up interface self-assembly strategy to hairy nanoparticle-based 2D monolayered composite and functional nanosheets. Chemical Communications, 2019, 55, 10241-10244.	2.2	15
115	Arsenene Nanodots with Selective Killing Effects and their Lowâ€Dose Combination with ßâ€Elemene for Cancer Therapy (Adv. Mater. 37/2021). Advanced Materials, 2021, 33, 2170292.	11.1	15
116	Harnessing GLUT1â€√argeted Proâ€oxidant Ascorbate for Synergistic Phototherapeutics. Angewandte Chemie - International Edition, 2022, 61, .	7.2	15
117	Ganoderma Lucidum-derived erythrocyte-like sustainable materials. Carbon, 2022, 196, 70-77.	5.4	14
118	Three-dimensional nanofibrous microenvironment designed for the regulation of mesenchymal stem cells. Applied Nanoscience (Switzerland), 2018, 8, 1915-1924.	1.6	13
119	Single-Walled Carbon Nanotubes (SWCNTs) and Poly(3,4-ethylenedioxythiophene) Nanocomposite Microwire-Based Electronic Biosensor Fabricated by Microlithography and Layer-by-Layer Nanoassembly. Journal of Nanoscience and Nanotechnology, 2019, 19, 7591-7595.	0.9	12
120	One-Step Preparation of Green Fabric for Continuous Antibacterial Applications. Engineering, 2021, 7, 326-333.	3.2	11
121	Composite nanomaterial thin film-based biosensors. , 2010, , .		10
122	Nanowires Pin Neurons: a Nano "Moon Landing― Matter, 2019, 1, 560-562.	5. 0	10
123	Hydrogen bonding-based self-assembly technology for high-performance melt blending TPU/PA6 polymers. Applied Nanoscience (Switzerland), 2020, 10, 51-59.	1.6	9
124	Evaluation of Anti-Obesity Activity, Acute Toxicity, and Subacute Toxicity of Probiotic Dark Tea. Biomolecules, 2018, 8, 99.	1.8	8
125	Nearâ€Infraredâ€Excited Multicolor Afterglow in Carbon Dotsâ€Based Roomâ€Temperature Afterglow Materials. Angewandte Chemie, 2021, 133, 22427-22433.	1.6	8
126	DNAâ€Damageâ€Responseâ€Targeting Mitochondriaâ€Activated Multifunctional Prodrug Strategy for Selfâ€Defensive Tumor Therapy. Angewandte Chemie, 2022, 134, .	1.6	8

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127	Microfluidic chemostatic bioreactor for high-throughput screening and sustainable co-harvesting of biomass and biodiesel in microalgae. Bioactive Materials, 2023, 25, 629-639.	8.6	7
128	Calix[<i>n</i>]triazolium based turn-on fluorescent sensing ensemble for selective adenosine monophosphate (AMP) detection. Chemical Communications, 2021, 57, 12139-12142.	2.2	6
129	A rapid construction strategy of NaYF ₄ :Yb,Er@CDs nanocomposites for dual-mode anti-counterfeiting. Materials Advances, 2022, 3, 4542-4547.	2.6	6
130	Incidence and Survival Outcomes of Breast Cancer with Synchronous Hepatic Metastases: A Population-Based Study. Journal of Cancer, 2018, 9, 4306-4313.	1.2	5
131	Sorting Gold and Sand (Silica) Using Atomic Force Microscope-Based Dielectrophoresis. Nano-Micro Letters, 2022, 14, 13.	14.4	3
132	A novel fiber-grafting-sensing testing method for temperature deformation of piezoelectric composites. Polymer Testing, 2020, 81, 106162.	2.3	2
133	Harnessing GLUT1 Targeted Proâ€oxidant Ascorbate for Synergistic Phototherapeutics. Angewandte Chemie, 0, , .	1.6	1
134	Titelbild: DNAâ€Damageâ€Responseâ€Targeting Mitochondriaâ€Activated Multifunctional Prodrug Strategy for Selfâ€Defensive Tumor Therapy (Angew. Chem. 16/2022). Angewandte Chemie, 2022, 134, .	1.6	0