

Jiajun Gu

List of Publications by Year in descending order

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papers

4,817
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87888

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#	ARTICLE	IF	CITATIONS
1	Fluorine-free Synthesis of High-purity Ti_3C_2Tx ($T=OH, O$) via Alkali Treatment. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 6115-6119.	13.8	809
2	Fluorine-free Synthesis of High-purity Ti_3C_2Tx ($T=OH, O$) via Alkali Treatment. <i>Angewandte Chemie</i> , 2018, 130, 6223-6227.	2.0	459
3	“Egg-Box”-Assisted Fabrication of Porous Carbon with Small Mesopores for High-Rate Electric Double Layer Capacitors. <i>ACS Nano</i> , 2015, 9, 11225-11233.	14.6	291
4	Novel Photoanode Structure Templated from Butterfly Wing Scales. <i>Chemistry of Materials</i> , 2009, 21, 33-40.	6.7	211
5	Hierarchical Porous Carbonized Lotus Seedpods for Highly Efficient Solar Steam Generation. <i>Chemistry of Materials</i> , 2018, 30, 6217-6221.	6.7	204
6	Versatile Fabrication of Intact Three-Dimensional Metallic Butterfly Wing Scales with Hierarchical Sub-micrometer Structures. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 8307-8311.	13.8	113
7	Quantum Dots of 1T Phase Transitional Dichalcogenides Generated <i>via</i> Electrochemical Li Intercalation. <i>ACS Nano</i> , 2018, 12, 308-316.	14.6	110
8	High-Density Hotspots Engineered by Naturally Piled-Up Subwavelength Structures in Three-Dimensional Copper Butterfly Wing Scales for Surface-Enhanced Raman Scattering Detection. <i>Advanced Functional Materials</i> , 2012, 22, 1578-1585.	14.9	109
9	Bioinspired Fabrication of Hierarchically Structured, pH-Tunable Photonic Crystals with Unique Transition. <i>ACS Nano</i> , 2013, 7, 4911-4918.	14.6	102
10	3D Network Magnetophotonic Crystals Fabricated on <i>Morpho</i> Butterfly Wing Templates. <i>Advanced Functional Materials</i> , 2012, 22, 2072-2080.	14.9	91
11	Microwave-assisted ultrafast synthesis of adjustable bimetal phosphide/graphene heterostructures from MOFs for efficient electrochemical water splitting. <i>Journal of Materials Chemistry A</i> , 2019, 7, 14526-14535.	10.3	88
12	Highly defective 1T-MoS ₂ nanosheets on 3D reduced graphene oxide networks for supercapacitors. <i>Carbon</i> , 2019, 152, 697-703.	10.3	86
13	Self-Assembly of Large-Area 2D Polycrystalline Transition Metal Carbides for Hydrogen Electrocatalysis. <i>Advanced Materials</i> , 2018, 30, e1805188.	21.0	84
14	Achieving Rich and Active Alkaline Hydrogen Evolution Heterostructures via Interface Engineering on 2D 1T-MoS ₂ Quantum Sheets. <i>Advanced Functional Materials</i> , 2020, 30, 2000551.	14.9	83
15	Synthesis of Cu-doped WO ₃ materials with photonic structures for high performance sensors. <i>Journal of Materials Chemistry</i> , 2010, 20, 9126.	6.7	82
16	Morphology Genetic Materials Templated from Natural Species. <i>Advanced Materials</i> , 2015, 27, 464-478.	21.0	77
17	Fluorine-free Ti_3C_2Tx ($T = O, OH$) nanosheets ($\sim 450 \sim 100$ nm) for nitrogen fixation under ambient conditions. <i>Journal of Materials Chemistry A</i> , 2019, 7, 14462-14465.	10.3	76
18	Inspiration from butterfly and moth wing scales: Characterization, modeling, and fabrication. <i>Progress in Materials Science</i> , 2015, 68, 67-96.	32.8	74

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19	A Scalable Nickel-Cellulose Hybrid Metamaterial with Broadband Light Absorption for Efficient Solar Distillation. <i>Advanced Materials</i> , 2020, 32, e1907975.	21.0	73
20	Biomimetic zinc oxide replica with structural color using butterfly (<i>Ideopsis similis</i>) wings as templates. <i>Bioinspiration and Biomimetics</i> , 2006, 1, 89-95.	2.9	68
21	Optical Functional Materials Inspired by Biology. <i>Advanced Optical Materials</i> , 2016, 4, 195-224.	7.3	67
22	Highly sensitive, reproducible and uniform SERS substrates with a high density of three-dimensionally distributed hotspots: gyroid-structured Au periodic metallic materials. <i>NPG Asia Materials</i> , 2018, 10, e462-e462.	7.9	65
23	Spontaneous Cross-linking for Fabrication of Nanohybrids Embedded with Size-Controllable Particles. <i>ACS Nano</i> , 2016, 10, 889-898.	14.6	61
24	Bioinspired Au-CuS coupled photothermal materials: enhanced infrared absorption and photothermal conversion from butterfly wings. <i>Nano Energy</i> , 2015, 17, 52-62.	16.0	59
25	Two-dimensional quantum-sheet films with sub-1.2-nm channels for ultrahigh-rate electrochemical capacitance. <i>Nature Nanotechnology</i> , 2022, 17, 153-158.	31.5	55
26	Three-Dimensional CdS/Au Butterfly Wing Scales with Hierarchical Rib Structures for Plasmon-Enhanced Photocatalytic Hydrogen Production. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 19649-19655.	8.0	54
27	Surface-Carbonized Bamboos with Multilevel Functional Biostructures Deliver High Photothermal Water Evaporation Performance. <i>Advanced Sustainable Systems</i> , 2020, 4, 2000126.	5.3	53
28	3D Interconnected Gyroid Au-CuS Materials for Efficient Solar Steam Generation. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 34837-34847.	8.0	52
29	N-doped catalytic graphitized hard carbon for high-performance lithium/sodium-ion batteries. <i>Scientific Reports</i> , 2018, 8, 9934.	3.3	51
30	Iridescent large-area ZrO ₂ photonic crystals using butterfly as templates. <i>Applied Physics Letters</i> , 2009, 94, .	3.3	47
31	Fluorine-free Ti ₃ C ₂ T _x as anode materials for Li-ion batteries. <i>Electrochemistry Communications</i> , 2019, 104, 106472.	4.7	46
32	Metal-Organic Frameworks Reactivate Deceased Diatoms to be Efficient CO ₂ Absorbents. <i>Advanced Materials</i> , 2014, 26, 1229-1234.	21.0	44
33	Reduction of CuO Butterfly Wing Scales Generates Cu SERS Substrates for DNA Base Detection. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 9878-9882.	8.0	42
34	A simple and effective approach towards biomimetic replication of photonic structures from butterfly wings. <i>Nanotechnology</i> , 2009, 20, 315303.	2.6	41
35	Morphological Effects on Surface-Enhanced Raman Scattering from Silver Butterfly Wing Scales Synthesized via Photoreduction. <i>Langmuir</i> , 2011, 27, 11742-11746.	3.5	41
36	Butterfly effects: novel functional materials inspired from the wings scales. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 19767-19780.	2.8	41

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37	Tumor marker detection using surface enhanced Raman spectroscopy on 3D Au butterfly wings. <i>Journal of Materials Chemistry B</i> , 2017, 5, 1594-1600.	5.8	40
38	Light-Driven Overall Water Splitting Enabled by a Photo-Dember Effect Realized on 3D Plasmonic Structures. <i>ACS Nano</i> , 2016, 10, 6693-6701.	14.6	39
39	Biomimetic Superstructures Assembled from Au Nanostars and Nanospheres for Efficient Solar Evaporation. <i>Advanced Sustainable Systems</i> , 2019, 3, 1900003.	5.3	37
40	ZnO single butterfly wing scales: synthesis and spatial optical anisotropy. <i>Journal of Materials Chemistry</i> , 2011, 21, 6140.	6.7	35
41	<i>In situ</i> synthesis of BiOCl nanosheets on three-dimensional hierarchical structures for efficient photocatalysis under visible light. <i>Nanoscale</i> , 2019, 11, 10203-10208.	5.6	32
42	Butterfly wing architectures inspire sensor and energy applications. <i>National Science Review</i> , 2021, 8, nwaal107.	9.5	32
43	Surface plasmon resonance of gold nanocrystals coupled with slow-photon-effect of biomorphic TiO ₂ photonic crystals for enhanced photocatalysis under visible-light. <i>Catalysis Today</i> , 2016, 274, 15-21.	4.4	31
44	Tunable three-dimensional ZrO ₂ photonic crystals replicated from single butterfly wing scales. <i>Journal of Materials Chemistry</i> , 2011, 21, 15237.	6.7	29
45	Photocatalyst of organic pollutants decomposition: TiO ₂ /glass fiber cloth composites. <i>Catalysis Today</i> , 2016, 274, 2-7.	4.4	29
46	Hierarchical few-layer fluorine-free Ti ₃ C ₂ X (T = O, F) nanosheets for photocatalysis. <i>ACS Nano</i> , 2021, 15, 10203-10208.	10.3	29
47	Superior photothermal black TiO ₂ with random size distribution as flexible film for efficient solar steam generation. <i>Applied Materials Today</i> , 2020, 20, 100669.	4.3	27
48	Self-crosslink assisted synthesis of 3D porous branch-like Fe ₃ O ₄ /C hybrids for high-performance lithium/sodium-ion batteries. <i>RSC Advances</i> , 2017, 7, 50307-50316.	3.6	24
49	Tunable optical photonic devices made from moth wing scales: a way to enlarge natural functional structures' pool. <i>Journal of Materials Chemistry</i> , 2011, 21, 13913.	6.7	22
50	Moth wing scales as optical pH sensors. <i>Sensors and Actuators B: Chemical</i> , 2012, 166-167, 824-828.	7.8	22
51	Coupling of plasmon and 3D antireflection quasi-photonic crystal structure for enhancement infrared absorption. <i>Journal of Materials Chemistry C</i> , 2015, 3, 1672-1679.	5.5	22
52	Mechanically alloyed NiTiO ₃ /transition metal heterostructures: introducing oxygen vacancies for exceptionally enhanced hydrogen evolution reaction activity. <i>Journal of Materials Chemistry A</i> , 2020, 8, 14908-14914.	10.3	22
53	Large-visual-angle microstructure inspired from quantitative design of Morpho butterflies' lamellae deviation using the FDTD/PSO method. <i>Optics Letters</i> , 2013, 38, 169.	3.3	17
54	Enhanced photocatalytic hydrogen production on three-dimensional gold butterfly wing scales/CdS nanoparticles. <i>Applied Surface Science</i> , 2018, 427, 807-812.	6.1	13

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55	Ordering of Hollow Ag-Au Nanospheres with Butterfly Wings as a Bio-template. <i>Scientific Reports</i> , 2018, 8, 9261.	3.3	13
56	One-pot Hydrothermal Synthesis of Ternary $1T\text{-MoS}_2/\text{Hexa-}\text{WO}_3/\text{Graphene}$ Composites for High-performance Supercapacitors. <i>Chemistry - A European Journal</i> , 2019, 25, 16054-16062.	3.3	13
57	Rational Construction of a 0D/1D S-Scheme $\text{CeO}_2/\text{CdWO}_4$ Heterojunction for Photocatalytic CO_2 Reduction and H_2 Production. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 10931-10944.	3.7	13
58	Large-area 3D Hierarchical Superstructures Assembled from Colloidal Nanoparticles. <i>Small</i> , 2019, 15, 1805308.	10.0	12
59	Optical Performance Study of Gyroid-structured TiO_2 Photonic Crystals Replicated from Natural Templates Using a Sol-gel Method. <i>Advanced Optical Materials</i> , 2018, 6, 1800064.	7.3	11
60	A bioinspired solar evaporator for continuous and efficient desalination by salt dilution and secretion. <i>Journal of Materials Chemistry A</i> , 2021, 9, 17985-17993.	10.3	11
61	Angle-independent pH-sensitive composites with natural gyroid structure. <i>Scientific Reports</i> , 2017, 7, 42207.	3.3	10
62	Synthesis of naturally cross-linked polycrystalline ZrO_2 hollow nanowires using butterfly as templates. <i>Materials Chemistry and Physics</i> , 2012, 134, 16-20.	4.0	9
63	Biocompatible, small-sized and well-dispersed gold nanoparticles regulated by silk fibroin fiber from <i>Bombyx mori</i> cocoons. <i>Frontiers of Materials Science</i> , 2019, 13, 126-132.	2.2	9
64	Giant Seebeck coefficient decrease in polycrystalline materials with highly anisotropic band structures: Implications in seeking high-quality thermoelectric materials. <i>Solid State Communications</i> , 2008, 148, 10-13.	1.9	7
65	Constructing High-Performance Lithium-Ion Hybrid Capacitors Based on the Electrode Framework Matching Strategy. <i>ACS Applied Energy Materials</i> , 2022, 5, 1963-1971.	5.1	7
66	Bioinspired Porous Anodic Alumina/Aluminum Flake Powder for Multiband Compatible Low Detectability. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 8464-8472.	8.0	7
67	Influence of disorders on the optical properties of butterfly wing: Analysis with a finite-difference time-domain method. <i>European Physical Journal B</i> , 2013, 86, 1.	1.5	6
68	Photonic structure arrays generated using butterfly wing scales as biological units. <i>Journal of Materials Chemistry B</i> , 2015, 3, 1743-1747.	5.8	6
69	$\text{AgBr}/\text{diatomite}$ for the efficient visible-light-driven photocatalytic degradation of Rhodamine B. <i>Journal of Nanoparticle Research</i> , 2018, 20, 1.	1.9	6
70	Copper sulfide as the cation exchange template for synthesis of bimetallic catalysts for CO_2 electroreduction. <i>RSC Advances</i> , 2021, 11, 23948-23959.	3.6	6
71	Quasi-periodical 3D Hierarchical Silver Nanosheets with ≤ 10 nm Nanogap Applied as an Effective and Applicable SERS Substrate. <i>Advanced Materials Interfaces</i> , 2015, 2, 1500359.	3.7	5
72	Bio-templated germanium photonic crystals by a facile liquid phase deposition process. <i>RSC Advances</i> , 2016, 6, 73156-73159.	3.6	3

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73	Cyroid-structured Au@Ag periodic bimetal materials for ultrasensitive SERS detection. Journal of Materials Chemistry C, 2021, 9, 9137-9141.	5.5	3
74	Morph-Genetic Materials Inspired from Butterfly Wing Scales. Advanced Topics in Science and Technology in China, 2012, , 75-122.	0.1	3
75	Ce ⁴⁺ as a facile and versatile surface modification reagent for templated synthesis in electrical applications. Nanoscale, 2019, 11, 2138-2142.	5.6	2
76	Pt-decorated fluorine-free Ti ₃ C ₂ TX for hydrogen evolution reaction. Journal of Materials Science: Materials in Electronics, 2020, 31, 11345-11351.	2.2	2
77	In Situ Ion-Exchange Synthesis of Fe ₃ O ₄ Nanosheets with 3D Hierarchically Porous Carbon Frameworks for High-Performance Energy Storage. Energy Technology, 2022, 10, .	3.8	2
78	Biological Templates: High-Density Hotspots Engineered by Naturally Piled-Up Subwavelength Structures in Three-Dimensional Copper Butterfly Wing Scales for Surface-Enhanced Raman Scattering Detection (Adv. Funct. Mater. 8/2012). Advanced Functional Materials, 2012, 22, 1542-1542.	14.9	1
79	An ancient method-inspired route for fast fabrication of ~PbS bird feathers™. MRS Communications, 2013, 3, 61-65.	1.8	1
80	Bioinspired multilevel interconnected networks with porous multiwalled nanotubes built by heterogeneous nanocrystallites. Journal of the American Ceramic Society, 2020, 103, 604-613.	3.8	1
81	Surface-Enhanced Raman Scattering (SERS) Mechanisms of Metal Scale Replicas. SpringerBriefs in Materials, 2015, , 69-88.	0.3	0
82	3D Assembly: Large-Area 3D Hierarchical Superstructures Assembled from Colloidal Nanoparticles (Small 18/2019). Small, 2019, 15, 1970096.	10.0	0
83	Surface-Enhanced Raman Scattering (SERS) Performance of Metal Scale Replicas. SpringerBriefs in Materials, 2015, , 55-68.	0.3	0