Dong Wang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/450264/publications.pdf

Version: 2024-02-01

100 papers	2,772 citations	201575 27 h-index	197736 49 g-index
100 all docs	100 docs citations	100 times ranked	3485 citing authors

#	Article	IF	Citations
1	A Near Infrared Light Triggered Hydrogenated Black TiO₂ for Cancer Photothermal Therapy. Advanced Healthcare Materials, 2015, 4, 1526-1536.	3.9	326
2	Slightly hydrogenated TiO₂ with enhanced photocatalytic performance. Journal of Materials Chemistry A, 2014, 2, 12708-12716.	5.2	188
3	Understanding the fast lithium storage performance of hydrogenated TiO2 nanoparticles. Journal of Materials Chemistry A, 2013, 1, 14507.	5.2	138
4	Nanoporous gold nanoparticles. Journal of Materials Chemistry, 2012, 22, 5344.	6.7	117
5	Formation of precise 2D Au particle arrays via thermally induced dewetting on pre-patterned substrates. Beilstein Journal of Nanotechnology, 2011, 2, 318-326.	1.5	97
6	Zwitterionic AIEgens: Rational Molecular Design for NIRâ€Ⅱ Fluorescence Imagingâ€Guided Synergistic Phototherapy. Advanced Functional Materials, 2021, 31, 2007026.	7.8	87
7	Effect of length scale on fatigue life and damage formation in thin Cu films. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 493, 267-273.	2.6	86
8	Substitutionally Dispersed Highâ€Oxidation CoO_x Clusters in the Lattice of Rutile TiO₂ Triggering Efficient Coï£¿Ti Cooperative Catalytic Centers for Oxygen Evolution Reactions. Advanced Functional Materials, 2021, 31, 2009610.	7.8	82
9	Layer-Dependent Chemically Induced Phase Transition of Two-Dimensional MoS₂. Nano Letters, 2018, 18, 3435-3440.	4.5	69
10	A Review on Photothermal Conversion of Solar Energy with Nanomaterials and Nanostructures: From Fundamentals to Applications. Advanced Sustainable Systems, 2022, 6, .	2.7	68
11	Nanoporous Gold Nanoparticles and Au/Al2O3 Hybrid Nanoparticles with Large Tunability of Plasmonic Properties. ACS Applied Materials & Interfaces, 2017, 9, 6273-6281.	4.0	58
12	Solid-state dewetting for fabrication of metallic nanoparticles and influences of nanostructured substrates and dealloying. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1544-1551.	0.8	57
13	Ordered arrays of nanoporous gold nanoparticles. Beilstein Journal of Nanotechnology, 2012, 3, 651-657.	1.5	56
14	One-for-all phototheranostics: Single component AIE dots as multi-modality theranostic agent for fluorescence-photoacoustic imaging-guided synergistic cancer therapy. Biomaterials, 2021, 274, 120892.	5.7	55
15	Niâ€“Au bi-metallic nanoparticles formed via dewetting. Materials Letters, 2012, 70, 30-33.	1.3	50
16	Optical Plasmons of Individual Gold Nanosponges. ACS Photonics, 2015, 2, 1436-1442.	3.2	50
17	Solid-state dewetting of Au/Ni bilayers: The effect of alloying on morphology evolution. Journal of Applied Physics, 2014, 116, .	1.1	49
18	Mesoscopically Bi-continuous Agâ€“Au Hybrid Nanosponges with Tunable Plasmon Resonances as Bottom-Up Substrates for Surface-Enhanced Raman Spectroscopy. Chemistry of Materials, 2016, 28, 7673-7682.	3.2	45

#	Article	IF	Citations
19	Thermal dewetting of thin Au films deposited onto line-patterned substrates. Journal of Materials Science, 2012, 47, 1605-1608.	1.7	40
20	Plasma Hydrogenated TiO₂/Nickel Foam as an Efficient Bifunctional Electrocatalyst for Overall Water Splitting. ACS Sustainable Chemistry and Engineering, 2019, 7, 885-894.	3.2	40
21	Nonlinear plasmon-exciton coupling enhances sum-frequency generation from a hybrid metal/semiconductor nanostructure. Nature Communications, 2020, 11, 1464.	5.8	39
22	Whiskers growth in thin passivated Au films. Acta Materialia, 2018, 149, 154-163.	3.8	37
23	Two-dimensional nanoparticle arrays formed by dewetting of thin gold films deposited on pre-patterned substrates. Journal of Materials Science: Materials in Electronics, 2011, 22, 1067-1070.	1.1	35
24	Ordered arrays of nanoporous silicon nanopillars and silicon nanopillars with nanoporous shells. Nanoscale Research Letters, 2013, 8, 42.	3.1	34
25	Long-lived electron emission reveals localized plasmon modes in disordered nanosponge antennas. Light: Science and Applications, 2017, 6, e17075-e17075.	7.7	33
26	Solid-state dewetting of single- and bilayer Au-W thin films: Unraveling the role of individual layer thickness, stacking sequence and oxidation on morphology evolution. AIP Advances, 2016, 6, .	0.6	31
27	Fabrication of hollow gold nanoparticles by dewetting, dealloying and coarsening. Acta Materialia, 2016, 102, 108-115.	3.8	29
28	Observing charge separation in nanoantennas via ultrafast point-projection electron microscopy. Light: Science and Applications, 2018, 7, 55.	7.7	29
29	Photo-Thermoelectric Conversion Using Black Silicon with Enhanced Light Trapping Performance far beyond the Band Edge Absorption. ACS Applied Materials & Interfaces, 2021, 13, 1818-1826.	4.0	28
30	Plasmonic Horizon in Gold Nanosponges. Nano Letters, 2018, 18, 1269-1273.	4.5	26
31	Influence of the substrate on the morphological evolution of gold thin films during solid-state dewetting. Applied Surface Science, 2016, 388, 475-482.	3.1	25
32	Tuning the nanoscale morphology and optical properties of porous gold nanoparticles by surface passivation and annealing. Acta Materialia, 2017, 127, 108-116.	3.8	25
33	Ni₃N-Coated Ni Nanorod Arrays for Hydrogen and Oxygen Evolution in Electrochemical Water Splitting. ACS Applied Nano Materials, 2020, 3, 10986-10995.	2.4	23
34	Formation of supersaturated Auâ€“Ni nanoparticles via dewetting of an Au/Ni bilayer. Materials Letters, 2013, 102-103, 22-25.	1.3	22
35	Facet-controlled phase separation in supersaturated Au-Ni nanoparticles upon shape equilibration. Applied Physics Letters, 2015, 107, .	1.5	22
36	Doubly Resonant Plasmonic Hot Spotâ€“Exciton Coupling Enhances Second Harmonic Generation from Au/ZnO Hybrid Porous Nanosponges. ACS Photonics, 2019, 6, 2779-2787.	3.2	22

#	Article	IF	Citations
37	Highâ€Efficiency Photothermal Water Evaporation using Broadband Solar Energy Harvesting by Ultrablack Silicon Structures. Advanced Energy and Sustainability Research, 2021, 2, 2000083.	2.8	22
38	Plasmonic nanosponges. Advances in Physics: X, 2018, 3, 1456361.	1.5	21
39	Electrochemical performance of nanoporous Si as anode for lithium ion batteries in alkyl carbonate and ionic liquid-based electrolytes. Journal of Applied Electrochemistry, 2014, 44, 159-168.	1.5	20
40	Strong Spatial and Spectral Localization of Surface Plasmons in Individual Randomly Disordered Gold Nanosponges. Nano Letters, 2018, 18, 4957-4964.	4.5	20
41	NiCo2O4@Ni2P nanorods grown on nickel nanorod arrays as a bifunctional catalyst for efficient overall water splitting. Materials Today Energy, 2020, 17, 100490.	2.5	20
42	Influences of Ta passivation layers on the fatigue behavior of thin Cu films. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 610, 33-38.	2.6	19
43	Disordered surface formation of WS₂via hydrogen plasma with enhanced anode performances for lithium and sodium ion batteries. Sustainable Energy and Fuels, 2019, 3, 865-874.	2.5	19
44	Size effect on mechanical behavior of Al/Si3N4 multilayers by nanoindentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 644, 275-283.	2.6	18
45	A novel evaluation strategy for fatigue reliability of flexible nanoscale films. Materials Research Express, 2018, 5, 035012.	0.8	18
46	Efficient fabrication of MoS₂ nanocomposites by water-assisted exfoliation for nonvolatile memories. Green Chemistry, 2021, 23, 3642-3648.	4.6	18
47	Deformation behavior of Au/Ti multilayers under indentation. Journal of Materials Science: Materials in Electronics, 2012, 23, 1077-1082.	1.1	17
48	Solid-state dewetting of Auâ€“Ni bi-layer films mediated through individual layer thickness and stacking sequence. Applied Surface Science, 2018, 444, 505-510.	3.1	17
49	Fabrication of N-doped TiO2 coatings on nanoporous Si nanopillar arrays through biomimetic layer by layer mineralization. Dalton Transactions, 2014, 43, 8480.	1.6	16
50	Dewetting of Au/Ni bilayer films on prepatterned substrates and the formation of arrays of supersaturated Au-Ni nanoparticles. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, 021802.	0.6	15
51	Aluminum-doped ZnO thin films deposited on flat and nanostructured glass substrates: Quality and performance for applications in organic solar cells. Solar Energy, 2018, 172, 219-224.	2.9	15
52	A synergetic effect between photogenerated carriers and photothermally enhanced electrochemical urea-assisted hydrogen generation on the Ni-NiO/Nickel Foam catalyst. Materials Advances, 2021, 2, 2104-2111.	2.6	15
53	Nanoindentation of nano-Al/Si3N4 multilayers with Vickers and Brinell indenters. Journal of the European Ceramic Society, 2013, 33, 2355-2358.	2.8	12
54	Metastable Atomic Layer Deposition: 3D Self-Assembly toward Ultradark Materials. ACS Nano, 2020, 14, 15023-15031.	7.3	12

#	Article	IF	Citations
55	Solid-State Dewetting of Gold on Stochastically Periodic SiO₂ Nanocolumns Prepared by Oblique Angle Deposition. ACS Applied Materials & Interfaces, 2021, 13, 11385-11395.	4.0	12
56	Probing Transient Localized Electromagnetic Fields Using Low-Energy Point-Projection Electron Microscopy. ACS Photonics, 2021, 8, 2573-2580.	3.2	12
57	Black Silver: Three-Dimensional Ag Hybrid Plasmonic Nanostructures with Strong Photon Coupling for Scalable Photothermoelectric Power Generation. ACS Applied Materials & Interfaces, 2022, 14, 16894-16900.	4.0	12
58	Growth of Hierarchically 3D Silverâ€“Silica Hybrid Nanostructures by Metastable State Assisted Atomic Layer Deposition (MSâ€ALD). Advanced Materials Technologies, 2017, 2, 1700015.	3.0	11
59	Rapid fabrication and interface structure of highly faceted epitaxial Ni-Au solid solution nanoparticles on sapphire. Acta Materialia, 2021, 220, 117318.	3.8	10
60	Efficient preparation of Ni-M (MÂ=ÂFe, Co, Mo) bimetallic oxides layer on Ni nanorod arrays for electrocatalytic oxygen evolution. Applied Materials Today, 2021, 25, 101185.	2.3	10
61	Photo-thermoelectric conversion and photo-induced thermal imaging using 2D/3D ReS2@carbon framework with enhanced photon harvesting. Chemical Engineering Journal, 2022, 446, 137084.	6.6	10
62	Complex patterned gold structures fabricated via laser annealing and dealloying. Applied Surface Science, 2014, 302, 74-78.	3.1	9
63	Bio-inspired self-assembly of large area 3D Ag@SiO2 plasmonic nanostructures with tunable broadband light harvesting. Applied Materials Today, 2021, 25, 101238.	2.3	9
64	Luminescent ordered arrays of nanoporous silicon nanopillars and silicon nanopillars with nanoporous shells. Materials Letters, 2013, 98, 186-189.	1.3	8
65	Ultrasensitive Strain Sensors Based on Cuâ€Al Alloy Films with Voided Cluster Boundaries. Advanced Materials Technologies, 2021, 6, 2100524.	3.0	8
66	Surface-Nanostructured Alâ€“AlN Composite Thin Films with Excellent Broad-Band Antireflection Properties Fabricated by Limited Reactive Sputtering. ACS Applied Nano Materials, 2018, 1, 1124-1130.	2.4	7
67	Layer thickness effect on fracture behavior of Al/Si 3 N 4 multilayer on Si substrate under three-point bending. Applied Surface Science, 2018, 445, 563-567.	3.1	7
68	N-doped TiO₂ with a disordered surface layer fabricated via plasma treatment as an anode with clearly enhanced performance for rechargeable sodium ion batteries. Sustainable Energy and Fuels, 2019, 3, 2688-2696.	2.5	7
69	Achieving very high cycle fatigue performance of Au thin films for flexible electronic applications. Journal of Materials Science and Technology, 2021, 89, 107-113.	5.6	7
70	Ordered arrays of patterned nanoporous silicon. Journal of Micromechanics and Microengineering, 2013, 23, 074004.	1.5	6
71	Silicon/silicide grown out of nanoporous gold nanoparticles. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1512-1515.	0.8	6
72	Tunable plasmon resonance of semi-spherical nanoporous gold nanoparticles. Materials Research Express, 2014, 1, 035018.	0.8	6

#	Article	IF	Citations
73	ZnO/porous-Si and TiO2/porous-Si nanocomposite nanopillars. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, 01A102.	0.9	6
74	Morphological and compositional mapping of supersaturated AuNi alloy nanoparticles fabricated by solid state dewetting. Applied Surface Science Advances, 2021, 4, 100082.	2.9	6
75	Tailoring Patterned Visible-Light Scattering by Silicon Photonic Crystals. ACS Applied Materials & Interfaces, 2021, 13, 60319-60326.	4.0	6
76	Size effect on the mechanical behavior of Al/Si multilayers deposited on Kapton substrate. Journal of Materials Science: Materials in Electronics, 2015, 26, 8224-8228.	1.1	5
77	Hydrogenâ€“nitrogen plasma assisted synthesis of titanium dioxide with enhanced performance as anode for sodium ion batteries. Scientific Reports, 2020, 10, 11817.	1.6	5
78	Formation and evolution of Au-SiOx Heterostructures: From nanoflowers to nanosprouts. Materials and Design, 2021, 209, 109956.	3.3	5
79	Thin film nanostructuring at oblique angles by substrate patterning. Surface and Coatings Technology, 2022, 436, 128293.	2.2	5
80	Hydrogenated TiO₂ Nanoparticles Loaded with Au Nanoclusters Demonstrating Largely Enhanced Performance for Electrochemical Reduction of Nitrogen to Ammonia. Energy Technology, 2022, 10, .	1.8	5
81	Improving Silicon Photocathode Performance for Water Reduction through Dual Interface Engineering and Integrating ReS₂ Photocatalyst. ACS Applied Energy Materials, 2022, 5, 8222-8231.	2.5	5
82	Evaluating the Optical Response of Heavily Decorated Black Silicon Based on a Realistic 3D Modeling Methodology. ACS Applied Materials & Interfaces, 2022, 14, 36189-36199.	4.0	5
83	Controlled synthesis of self-assembled 3D nanostructures using metastable atomic layer deposition. Materials Today Chemistry, 2018, 10, 112-119.	1.7	4
84	Effect of SiO 2 Interlayer Thickness in Au/SiO 2 /Si Multilayer Systems on Si Sources and the Formation of Auâ€Based Nanostructures. Advanced Materials Interfaces, 2022, 9, 2101493.	1.9	4
85	Investigation of NiAlN as gate-material for submicron CMOS technology. Microelectronic Engineering, 2004, 76, 354-359.	1.1	3
86	Cancer Treatment: A Near Infrared Light Triggered Hydrogenated Black TiO₂ for Cancer Photothermal Therapy (Adv. Healthcare Mater. 10/2015). Advanced Healthcare Materials, 2015, 4, 1576-1576.	3.9	3
87	Synthesis and characterization of size controlled bimetallic nanosponges. Physical Sciences Reviews, 2019, 4, .	0.8	3
88	3D structure evolution using metastable atomic layer deposition based on planar silver templates. Applied Surface Science, 2020, 514, 145770.	3.1	3
89	Controllable Si oxidation mediated by annealing temperature and atmosphere. Journal of Materials Science, 2022, 57, 10943-10952.	1.7	3
90	Fatigue behavior of nanoscale Mo/W multilayers on flexible substrates. MRS Advances, 2019, 4, 2309-2317.	0.5	2

#	Article	IF	Citations
91	Effect of a thin Au and ZnO layer on optical properties of 1D PhC structures patterned in LED surface. Optik, 2019, 199, 163333.	1.4	2
92	Optical Properties of Nanoporous Gold Sponges Using Model Structures Obtained from Three-dimensional Phase-field Simulation. , 2021, , .		2
93	Simulation of the Plasmonic Properties of Gold Nanosponges with Nanotomographically Reconstructioned Models. , 2019, , .		1
94	Unpolarized photoluminescence from d-band holes versus polarized scattering of single gold nanosponges. , 2017, , .		0
95	Femtosecond Streaking and Control of Electrons from a Plasmonic Nanofocusing Taper by Photoemitted Charges in a Nanoantenna. , 2019, , .		0
96	A model revealing grain boundary arrangement-dominated fatigue cracking behavior in nanoscale metallic multilayers. MRS Communications, 2019, 9, 936-940.	0.8	0
97	Length-scale dominated thermal fatigue behavior in nanocrystalline Au interconnect lines. Materialia, 2019, 7, 100337.	1.3	0
98	Plasmon-driven ultrafast point-projection electron microscopy. EPJ Web of Conferences, 2019, 205, 08010.	0.1	0
99	Surface photonic crystal structures for LED emission modification. , 2017, , .		0
100	Ultrafast Optical Dynamics of a Nonlinearly Coupled Au Plasmon-ZnO Exciton Nanostructure. , 2020, , .		0