

Pu-Wei Wu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2807605/publications.pdf>

Version: 2024-02-01

112
papers

1,737
citations

257450

24
h-index

377865

34
g-index

112
all docs

112
docs citations

112
times ranked

2115
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrochemical reduction of CO ₂ by Cu ₂ O-catalyzed carbon clothes. <i>Materials Letters</i> , 2009, 63, 1001-1003.	2.6	101
2	DFT Study of Oxygen Reduction Reaction on Os/Pt Core-Shell Catalysts Validated by Electrochemical Experiment. <i>ACS Catalysis</i> , 2015, 5, 1568-1580.	11.2	70
3	Fabrication of Ni nanowires for hydrogen evolution reaction in a neutral electrolyte. <i>International Journal of Hydrogen Energy</i> , 2009, 34, 6596-6602.	7.1	57
4	A Sol-Gel Solid Electrolyte with High Lithium Ion Conductivity. <i>Chemistry of Materials</i> , 1997, 9, 1004-1011.	6.7	54
5	Effect of platinum present in multi-element nanoparticles on methanol oxidation. <i>Journal of Alloys and Compounds</i> , 2009, 478, 868-871.	5.5	48
6	Sputter Deposition of Multi-Element Nanoparticles as Electrocatalysts for Methanol Oxidation. <i>Japanese Journal of Applied Physics</i> , 2008, 47, 5755.	1.5	46
7	Controlling the Spontaneous Precipitation of Silver Nanoparticles in Sol-Gel Materials. <i>Journal of Sol-Gel Science and Technology</i> , 2000, 19, 249-252.	2.4	41
8	Ni Inverse Opals for Water Electrolysis in an Alkaline Electrolyte. <i>Journal of the Electrochemical Society</i> , 2010, 157, P18.	2.9	41
9	A cost-effective fabrication of iridium oxide films as biocompatible electrostimulation electrodes for neural interface applications. <i>Journal of Alloys and Compounds</i> , 2017, 692, 339-345.	5.5	38
10	Synthesis of large surface area carbon xerogels for electrochemical double layer capacitors. <i>Journal of Power Sources</i> , 2013, 223, 147-154.	7.8	37
11	Density Functional Theory Study of Pt ₃ M Alloy Surface Segregation with Adsorbed O/OH and Pt ₃ Os as Catalysts for Oxygen Reduction Reaction. <i>Journal of Physical Chemistry C</i> , 2014, 118, 26703-26712.	3.1	37
12	Synthesis of La _{0.6} Ca _{0.4} Co _{0.8} Ir _{0.2} O ₃ perovskite for bi-functional catalysis in an alkaline electrolyte. <i>Journal of Power Sources</i> , 2009, 189, 1003-1007.	7.8	33
13	High-yield water-based synthesis of truncated silver nanocubes. <i>Journal of Alloys and Compounds</i> , 2014, 586, 507-511.	5.5	31
14	Effect of annealing on the electrodeposited Cu ₂ O films for photoelectrochemical hydrogen generation. <i>Thin Solid Films</i> , 2010, 518, 7191-7195.	1.8	30
15	Silver-Carbon Nanocapsule Electrocatalyst for Oxygen Reduction Reaction. <i>Journal of the Electrochemical Society</i> , 2007, 154, B1059.	2.9	29
16	Fabrication of Large-Area Colloidal Crystals by Electrophoretic Deposition in Vertical Arrangement. <i>Electrochemical and Solid-State Letters</i> , 2008, 11, P20.	2.2	29
17	Rapid Galvanostatic Determination on Levelers for Superfilling in Cu Electroplating. <i>Electrochemical and Solid-State Letters</i> , 2010, 13, D7.	2.2	29
18	Displacement reaction of Pt on carbon-supported Ru nanoparticles in hexachloroplatinic acids. <i>Applied Catalysis B: Environmental</i> , 2011, 103, 116-127.	20.2	29

#	ARTICLE	IF	CITATIONS
19	Chemical bath deposition of IrO ₂ films on ITO substrate. <i>Ceramics International</i> , 2014, 40, 14983-14990.	4.8	29
20	Synthesis of Pd 9 Ru@Pt nanoparticles for oxygen reduction reaction in acidic electrolytes. <i>Journal of Power Sources</i> , 2015, 277, 116-123.	7.8	29
21	An interfacial wetting water based hydrogel electrolyte for high-voltage flexible quasi solid-state supercapacitors. <i>Energy Storage Materials</i> , 2021, 38, 489-498.	18.0	28
22	Self-healable and anti-freezing ion conducting hydrogel-based artificial bioelectronic tongue sensing toward astringent and bitter tastes. <i>Biosensors and Bioelectronics</i> , 2022, 198, 113811.	10.1	28
23	Electrowetting of Superhydrophobic ZnO Inverse Opals. <i>Journal of the Electrochemical Society</i> , 2011, 158, P93.	2.9	27
24	Highly sensitive/selective 3D nanostructured immunoparticle-based interface on a multichannel sensor array for detecting amyloid-beta in Alzheimer's disease. <i>Theranostics</i> , 2018, 8, 4210-4225.	10.0	27
25	Rapid Fabrication of Cylindrical Colloidal Crystals and Their Inverse Opals. <i>Journal of the Electrochemical Society</i> , 2010, 157, P23.	2.9	24
26	A vertically integrated ZnO-based hydrogen sensor with hierarchical bi-layered inverse opals. <i>Sensors and Actuators B: Chemical</i> , 2020, 325, 128779.	7.8	24
27	A facile route to prepare PdPt alloys for ethanol electro-oxidation in alkaline electrolyte. <i>Materials Letters</i> , 2011, 65, 215-218.	2.6	23
28	Designing the Charge Storage Properties of Li ⁺ -Exchanged Sodium Vanadium Fluorophosphate for Powering Implantable Biomedical Devices. <i>Advanced Energy Materials</i> , 2019, 9, 1900226.	19.5	23
29	High throughput fabrication of large-area colloidal crystals via a two-stage electrophoretic deposition method. <i>Electrochimica Acta</i> , 2019, 317, 52-60.	5.2	19
30	Electrophoretic fabrication of a robust chitosan/polyethylene glycol/polydopamine composite film for UV-shielding application. <i>Carbohydrate Polymers</i> , 2021, 273, 118560.	10.2	19
31	Surface modification of commercial PtRu nanoparticles for methanol electro-oxidation. <i>Journal of Power Sources</i> , 2013, 240, 122-130.	7.8	18
32	Palladium based cermet composite for hydrogen separation at elevated temperature. <i>Journal of Power Sources</i> , 2015, 274, 965-970.	7.8	18
33	Polydopamine and Its Composite Film as an Adhesion Layer for Cu Electroless Deposition on SiO ₂ . <i>Journal of the Electrochemical Society</i> , 2020, 167, 042507.	2.9	18
34	A combined electrochemical route to fabricate large-area and free-standing inverse opaline film. <i>Electrochemistry Communications</i> , 2016, 68, 32-35.	4.7	17
35	Combination of microspheres and sol-gel electrophoresis for the formation of large-area ordered macroporous SiO ₂ . <i>Electrochemistry Communications</i> , 2017, 85, 6-10.	4.7	17
36	Effect of Crystallinity on the Optical Reflectance of Cylindrical Colloidal Crystals. <i>Journal of the Electrochemical Society</i> , 2011, 158, P37.	2.9	16

#	ARTICLE	IF	CITATIONS
37	Free-standing Au inverse opals for enhanced glucose sensing. Journal of Alloys and Compounds, 2016, 684, 453-460.	5.5	16
38	Effect of Polyethylene Glycol Additives on Pulse Electroplating of SnAg Solder. Journal of Electronic Materials, 2008, 37, 224-230.	2.2	15
39	Evaluation on carbon nanocapsules for supercapacitors using a titanium cavity electrode. Journal of Power Sources, 2010, 195, 5122-5129.	7.8	15
40	Electroless Deposition of Ru Films Via an Oxidative-Reductive Mechanism. Journal of the Electrochemical Society, 2011, 158, D463.	2.9	15
41	Green Synthesis of Ni@PEDOT and Ni@PEDOT/Au (Core@Shell) Inverse Opals for Simultaneous Detection of Ascorbic Acid, Dopamine, and Uric Acid. Nanomaterials, 2020, 10, 1722.	4.1	15
42	Synthesis and characterization of iridium oxide thin film via a pre-coordination step for bio-stimulating electrode application. Ceramics International, 2020, 46, 18648-18655.	4.8	15
43	Structural characterization of colloidal crystals and inverse opals using transmission X-ray microscopy. Journal of Colloid and Interface Science, 2014, 426, 199-205.	9.4	14
44	Solution processing approaches for solid electrolytes and electrode materials. Journal of Materials Research, 1998, 13, 866-874.	2.6	13
45	Mechanical Alloying Preparation of La _{0.6} Ca _{0.4} Co _{0.25} O _{3.5} as a Bifunctional Electrocatalyst in Alkaline Electrolyte. Electrochemical and Solid-State Letters, 2008, 11, B47.	2.2	13
46	A facile approach to fabricate Ni inverse opals at controlled thickness. Materials Letters, 2009, 63, 2393-2395.	2.6	13
47	Dealloyed Pt ₂ O ₃ nanoparticles for enhanced oxygen reduction reaction in acidic electrolytes. Applied Catalysis B: Environmental, 2014, 150-151, 636-646.	20.2	13
48	Editors' Choice "Interface Engineering Strategy Utilizing Electrochemical ALD of Cu-Zn for Enabling Metallization of Sub-10 nm Semiconductor Device Nodes. ECS Journal of Solid State Science and Technology, 2019, 8, P516-P521.	1.8	13
49	Facile Synthesis of Co ₃ O ₄ @CoO@Co Gradient Core@Shell Nanoparticles and Their Applications for Oxygen Evolution and Reduction in Alkaline Electrolytes. Materials, 2020, 13, 2703.	2.9	13
50	Displacement Reaction in Pulse Current Deposition of PtRu for Methanol Electro-Oxidation. Journal of the Electrochemical Society, 2009, 156, B735.	2.9	12
51	Templated fabrication of nanostructured Ni brush for hydrogen evolution reaction. Journal of Materials Research, 2010, 25, 2001-2007.	2.6	12
52	Pulse Electrodepositions of PtRu on Large-Area Carbon Nanotubes for Enhancement of Methanol Electro-Oxidation. Journal of the Electrochemical Society, 2010, 157, B39.	2.9	12
53	Using decomposed Nafion ionomers to anchor Pt nanoparticles and improve their durability during methanol electro-oxidation. Journal of Power Sources, 2014, 245, 315-323.	7.8	12
54	Synthesis of Petal-Like Carbon Nanocapsule@MnO ₂ Core-Shell Particles and Their Application in Supercapacitors. Journal of the Electrochemical Society, 2014, 161, H598-H605.	2.9	12

#	ARTICLE	IF	CITATIONS
55	A flexible bioelectrode based on IrO ₂ ‐coated metallized polypropylene micromembrane. <i>Ceramics International</i> , 2021, 47, 32554-32561.	4.8	12
56	Enhancement of bifunctional catalysis by Ir doping of La _{0.6} Ca _{0.4} CoO ₃ perovskites. <i>Materials Letters</i> , 2008, 62, 4220-4222.	2.6	11
57	Preparation and characterization of ruthenium films via an electroless deposition route. <i>Thin Solid Films</i> , 2010, 518, 7245-7248.	1.8	11
58	Facile Electrochemical Fabrication of Large-Area ZnO Inverse Opals with Reduced Defects. <i>Journal of the Electrochemical Society</i> , 2011, 158, P45.	2.9	11
59	Pulse electrodeposition of copper-manganese alloy in deep eutectic solvent. <i>Journal of Alloys and Compounds</i> , 2018, 742, 38-44.	5.5	11
60	Carbon nanocapsules as an electrocatalyst support for the oxygen reduction reaction in alkaline electrolyte. <i>Journal of Applied Electrochemistry</i> , 2008, 38, 507-514.	2.9	10
61	Improved electrochemical performances by carbon nanocapsules as an electrocatalyst support for direct methanol fuel cells. <i>Diamond and Related Materials</i> , 2009, 18, 501-504.	3.9	10
62	Electrochemical degradation of Nafion ionomer to functionalize carbon support for methanol electro-oxidation. <i>Journal of Power Sources</i> , 2011, 196, 8225-8233.	7.8	10
63	A Combined Process of Liftoff and Printing for the Fabrication of Scalable Inkjet Printed Microstructures on a Flexible Substrate. <i>IEEE Transactions on Electron Devices</i> , 2015, 62, 1248-1254.	3.0	10
64	Fabrication of Anodic Aluminum Oxide Film on Large-Area Glass Substrate. <i>Electrochemical and Solid-State Letters</i> , 2007, 10, C69.	2.2	9
65	Synthesis and Characterization of La _{0.6} Ca _{0.4} Co _{0.8} Ru _{0.2} O ₃ for Oxygen Reduction Reaction in an Alkaline Electrolyte. <i>Journal of the Electrochemical Society</i> , 2010, 157, B900.	2.9	9
66	Mechanical properties of three-dimensional ordered macroporous Ni foam. <i>Materials Letters</i> , 2018, 215, 152-156.	2.6	9
67	Growth and characterization of high quality CIGS films using novel precursors stacked and surface sulfurization process. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 11429-11438.	2.2	9
68	Formation of RuO ₂ thin film using dopamine as a reducing, chelating, and adhesive agent simultaneously. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2021, 119, 196-203.	5.3	9
69	Flexible Optogenetic Transducer Device for Remote Neuron Modulation Using Highly Upconversion‐Efficient Dendrite‐Like Gold Inverse Opaline Structure. <i>Advanced Healthcare Materials</i> , 2022, 11, e2101310.	7.6	9
70	Structural characterizations of PtRu nanoparticles by galvanostatic pulse electrodeposition. <i>Journal of Alloys and Compounds</i> , 2014, 583, 170-175.	5.5	8
71	Conformal deposition of Pt on titania nanotubes to produce a bio-electrode for neuro-stimulating applications. <i>Electrochemistry Communications</i> , 2018, 88, 61-66.	4.7	8
72	Combination of electrophoresis and electro-flocculation for the formation of adhering IrO ₂ pH sensing films. <i>Electrochimica Acta</i> , 2019, 312, 291-298.	5.2	8

#	ARTICLE	IF	CITATIONS
73	Electroless deposition of Ru films on Si substrates with surface pretreatments. <i>Thin Solid Films</i> , 2013, 529, 426-429.	1.8	7
74	Templated fabrication of three-dimensional ordered macroporous Cu ₂ O/Ni structure for glucose sensing. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2021, 119, 277-285.	5.3	7
75	Fabrication of composite Cu ₂ O/Au inverse opals for enhanced detection of hydrogen peroxide: Synergy effect from structure and sensing mechanism. <i>Journal of Alloys and Compounds</i> , 2021, 886, 161243.	5.5	7
76	Temperature-Dependent Reaction Pathways in FeS ₂ : Reversibility and the Electrochemical Formation of Fe ₃ S ₄ . <i>Chemistry of Materials</i> , 2022, 34, 5422-5432.	6.7	7
77	Conformal Deposition of Ni ²⁺ /P on Anodic Aluminum Oxide Template. <i>Electrochemical and Solid-State Letters</i> , 2008, 11, D1.	2.2	6
78	Composite NiCo ₂ /NiCo ₂ O ₄ inverse opals for the oxygen evolution reaction in an alkaline electrolyte. <i>Catalysis Science and Technology</i> , 2020, 10, 7566-7580.	4.1	6
79	Fabrication of biocompatible and conductive polypropylene micromembrane as a soft and porous electrode. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2021, 129, 381-388.	5.3	6
80	A flexible IrO ₂ membrane for pH sensing. <i>Scientific Reports</i> , 2022, 12, .	3.3	6
81	Core-Shell Pd ₉ /Ru@Pt on Functionalized Graphene for Methanol Electrooxidation. <i>Journal of the Electrochemical Society</i> , 2018, 165, H365-H373.	2.9	5
82	Formation of Free-Standing Inverse Opals with Gradient Pores. <i>Nanomaterials</i> , 2020, 10, 1923.	4.1	5
83	An Inkjet Printing Technique for Scalable Microfabrication of Graphene-Based Sensor Components. <i>IEEE Access</i> , 2020, 8, 79338-79346.	4.2	5
84	A conductive silver membrane for electrochemical detection of free chlorine in aqueous solution. <i>Sensors and Actuators B: Chemical</i> , 2021, 348, 130724.	7.8	5
85	Fabrication of ordered Ta ₂ O ₅ nanodots using an anodic aluminum oxide template on Si substrate. <i>Journal of Materials Research</i> , 2007, 22, 1064-1071.	2.6	4
86	Structural characterizations of Cu ₃ Pt electrocatalyst featuring Pt-rich surface layers synthesized via mechanical alloying and selective dissolution routes. <i>Journal of Alloys and Compounds</i> , 2013, 552, 329-335.	5.5	4
87	Controlled synthesis of uniform hollow polypyrrole microcapsules by a cosolvent approach. <i>SN Applied Sciences</i> , 2019, 1, 1.	2.9	4
88	Leveraging the water electrolysis reaction in bipolar electrophoresis to form robust and defectless chitosan films. <i>Carbohydrate Polymers</i> , 2020, 250, 116912.	10.2	4
89	Honeycomb-type retinal device using chemically derived iridium oxide biointerfaces. <i>AIP Advances</i> , 2021, 11, .	1.3	4
90	Highly Ordered Polymer Nanostructures via Solvent On-Film Annealing for Surface-Enhanced Raman Scattering. <i>Langmuir</i> , 2022, 38, 801-809.	3.5	4

#	ARTICLE	IF	CITATIONS
91	A biocompatible open system Na-doped IrO _x (OH) _y energy storage device with enhanced charge storage properties and long lifetime. Journal of Materials Chemistry A, 2022, 10, 14479-14487.	10.3	4
92	Effect of anodic dissolution in multi-element nanoparticles on methanol electro-oxidation. Journal of Alloys and Compounds, 2009, 486, 738-742.	5.5	3
93	Facile Surface Functionalization of Carbon/Nafion for Enhancement of Methanol Electro-Oxidation. ECS Transactions, 2010, 33, 2017-2026.	0.5	3
94	Chemical stability and electrical conductivity of BaCe _{0.4} Zr _{0.4} Gd _{0.1} Dy _{0.1} O ₃ perovskite. Ceramics International, 2015, 41, 10856-10860.	4.8	3
95	Development of IrO ₂ bio-ink for ink-jet printing application. Ceramics International, 2019, 45, 16645-16650.	4.8	3
96	A Strategy to Synthesize Ultrahigh-N-Doped Hierarchical Carbons via Induced β -Sheet from Silk Fibroin by <i>In Situ</i> Electrogelation/Electropolymerization. ACS Applied Energy Materials, 2020, 3, 3596-3608.	5.1	3
97	Synthesis of IrO ₂ decorated core-shell PS@PPyNH ₂ microspheres for bio-interface application. Nanotechnology, 2020, 31, 375605.	2.6	3
98	Conformal Electrodeposition of Co-Ni to Improve the Mechanical Properties of Three-Dimensional Ordered Macroporous Ni Films. Journal of the Electrochemical Society, 2020, 167, 022505.	2.9	3
99	Fabrication of TiO ₂ -coated nanostructured Ni foams for improved mechanical properties. Ceramics International, 2020, 46, 3968-3975.	4.8	2
100	Synthesis of polystyrene@polypyrrole-COOH@Ag (core@shell@shell) microspheres for potential application in anisotropic conductive paste. Materials Letters, 2020, 263, 127239.	2.6	2
101	Pt deposition on Ni-based superalloy via a combination of galvanic displacement reaction and chemical reduction. Materials Chemistry and Physics, 2020, 254, 123475.	4.0	2
102	Characterization of pH Sensors Based on Iridium Oxide and Gold Encapsulated Polypropylene Membranes. , 2021, , .		2
103	Thermally Activated Conductivity of Hydrogenated Amorphous Carbon Films Induced by Argon Plasma Bombardment. Japanese Journal of Applied Physics, 1993, 32, L539-L542.	1.5	1
104	Fabrication of Tri-layered Structure for Solid Oxide Fuel Cells by Electrophoretic Depositions. ECS Transactions, 2009, 25, 643-648.	0.5	1
105	Gravity-Assisted Seeding Control for 1-D Material Growth. IEEE Nanotechnology Magazine, 2009, 8, 427-430.	2.0	1
106	Characteristic improvement of inkjet printed Ag interconnects using tape on-off and mirror-reaction processes. , 2015, , .		1
107	Formation of Cu/MnO _x composite film by concurrent electroplating and electrophoresis in an organic solvent. Thin Solid Films, 2018, 660, 585-589.	1.8	1
108	Conformal Deposition of RuO ₂ on Cu via a Galvanic Cementation Reaction. Journal of the Electrochemical Society, 2019, 166, D476-D482.	2.9	1

#	ARTICLE	IF	CITATIONS
109	A Combined Process Of Silicon Shadow Masking And Inkjet Printing (SSMP) For Making Graphene Oxide And Reduced Graphene Oxide Microstructures For Selective Cell Culturing Applications. , 2019, , .		1
110	Synthesis and Characterization of Pt-Carbon Nano Capsule Electrocatalyst for Hydrogen Oxidation Reaction. ECS Transactions, 2007, 11, 317-324.	0.5	0
111	Electroplating of Sn-2.5Ag solders as 20 μm pitch micro-bumps. , 2010, , .		0
112	Galvanostatic electrodeposition of SnCuNi as a lead-free solder. , 2010, , .		0