Jia-Wei Yan

List of Publications by Year
in descending order

86 papers	3,861 citations	147801 31 h-index	128289 60 g-index
90 all docs	90 docs citations	90 times ranked	5411 citing authors

#	Article	IF	Citations
1	Selfâ€Supporting Metalâ€“Organic Layers as Singleâ€Site Solid Catalysts. Angewandte Chemie - International Edition, 2016, 55, 4962-4966.	13.8	303
2	Designable ultra-smooth ultra-thin solid-electrolyte interphases of three alkali metal anodes. Nature Communications, 2018, 9, 1339.	12.8	265
3	Fluorescence sensing of chromium (VI) and ascorbic acid using graphitic carbon nitride nanosheets as a fluorescent â€œswitchâ€• Biosensors and Bioelectronics, 2015, 68, 210-217.	10.1	250
4	Understanding the Cubic Phase Stabilization and Crystallization Kinetics in Mixed Cations and Halides Perovskite Single Crystals. Journal of the American Chemical Society, 2017, 139, 3320-3323.	13.7	195
5	The role of ruthenium in improving the kinetics of hydrogen oxidation and evolution reactions of platinum. Nature Catalysis, 2021, 4, 711-718.	34.4	182
6	Double Layer of Au(100)/Ionic Liquid Interface and Its Stability in Imidazoliumâ€Based Ionic Liquids. Angewandte Chemie - International Edition, 2009, 48, 5148-5151.	13.8	171
7	The Electrode/Ionic Liquid Interface: Electric Double Layer and Metal Electrodeposition. ChemPhysChem, 2010, 11, 2764-2778.	2.1	141
8	Toward Long-Term Stability: Single-Crystal Alloys of Cesium-Containing Mixed Cation and Mixed Halide Perovskite. Journal of the American Chemical Society, 2019, 141, 1665-1671.	13.7	141
9	Stable Na Plating and Stripping Electrochemistry Promoted by In Situ Construction of an Alloyâ€Based Sodiophilic Interphase. Advanced Materials, 2019, 31, e1807495.	21.0	135
10	Lithiophilic Faceted Cu(100) Surfaces: High Utilization of Host Surface and Cavities for Lithium Metal Anodes. Angewandte Chemie - International Edition, 2019, 58, 3092-3096.	13.8	122
11	Probing double layer structures of Au (111)â€“BMIPF₆ionic liquid interfaces from potential-dependent AFM force curves. Chemical Communications, 2012, 48, 582-584.	4.1	114
12	Ferroceneâ€Based Metalâ€“Organic Framework Nanosheets as a Robust Oxygen Evolution Catalyst. Angewandte Chemie - International Edition, 2021, 60, 12770-12774.	13.8	111
13	Minimizing the electrosorption of water from humid ionic liquids on electrodes. Nature Communications, 2018, 9, 5222.	12.8	96
14	Resolving Fine Structures of the Electric Double Layer of Electrochemical Interfaces in Ionic Liquids with an AFM Tip Modification Strategy. Journal of the American Chemical Society, 2014, 136, 14682-14685.	13.7	71
15	Enzyme-Encapsulated Liposome-Linked Immunosorbent Assay Enabling Sensitive Personal Glucose Meter Readout for Portable Detection of Disease Biomarkers. ACS Applied Materials & Interfaces, 2016, 8, 6890-6897.	8.0	71
16	Electric Double Layer of Au(100)/Imidazolium-Based Ionic Liquids Interface: Effect of Cation Size. Journal of Physical Chemistry C, 2013, 117, 205-212.	3.1	63
17	Selfâ€Supporting Metalâ€“Organic Layers as Singleâ€Site Solid Catalysts. Angewandte Chemie, 2016, 128, 5046-5050.	2.0	61
18	Adding salt to expand voltage window of humid ionic liquids. Nature Communications, 2020, 11, 5809.	12.8	60

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19	Revealing phase evolution mechanism for stabilizing formamidinium-based lead halide perovskites by a key intermediate phase. CheM, 2021, 7, 2513-2526.	11.7	49
20	The Electric Double Layer in an Ionic Liquid Incorporated with Water Molecules: Atomic Force Microscopy Force Curve Study. ChemElectroChem, 2016, 3, 2221-2226.	3.4	48
21	Adsorption of Solvent Cations on Au(111) and Au(100) in Alkylimidazolium-Based Ionic Liquids â€“ Worm-Like <i>versus</i> Micelle-Like Structures. Zeitschrift Fur Physikalische Chemie, 2012, 226, 979-994.	2.8	44
22	Evaluating Solid-Electrolyte Interphases for Lithium and Lithium-free Anodes from Nanoindentation Features. CheM, 2020, 6, 2728-2745.	11.7	44
23	Electrochemically Roughened Rhodium Electrode as a Substrate for Surface-enhanced Raman Spectroscopy. Journal of Physical Chemistry B, 2003, 107, 899-902.	2.6	43
24	A template-directed bifunctional NiS_x/nitrogen-doped mesoporous carbon electrocatalyst for rechargeable Znâ€“air batteries. Journal of Materials Chemistry A, 2019, 7, 19889-19897.	10.3	43
25	Extending the shell-isolated nanoparticle-enhanced Raman spectroscopy approach to interfacial ionic liquids at single crystal electrode surfaces. Chemical Communications, 2014, 50, 14740-14743.	4.1	40
26	Regulation of vascular smooth muscle cell autophagy by DNA nanotube-conjugated mTOR siRNA. Biomaterials, 2015, 67, 137-150.	11.4	38
27	Single molecular catalysis of a redox enzyme on nanoelectrodes. Faraday Discussions, 2016, 193, 133-139.	3.2	38
28	The electrochemical interface of Ag(111) in 1-ethyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide ionic liquidâ€"A combined in-situ scanning probe microscopy and impedance study. Electrochimica Acta, 2016, 197, 282-289.	5.2	37
29	In-situ STM and AFM Studies on Electrochemical Interfaces in imidazolium-based ionic liquids. Electrochimica Acta, 2019, 309, 11-17.	5.2	34
30	A strategy for selective detection based on interferent depleting and redox cycling using the plane-recessed microdisk array electrodes. Electrochimica Acta, 2011, 56, 8101-8107.	5.2	33
31	Electrochemical and in-situ scanning tunneling microscopy studies of bis(fluorosulfonyl)imide and bis(trifluoromethanesulfonyl)imide based ionic liquids on graphite and gold electrodes and lithium salt influence. Journal of Power Sources, 2015, 293, 187-195.	7.8	31
32	An electrochemical surfaceâ€enhanced Raman spectroscopic study on nanorodâ€structured lithium prepared by electrodeposition. Journal of Raman Spectroscopy, 2016, 47, 1017-1023.	2.5	30
33	Molecular-level understanding of electric double layer in ionic liquids. Current Opinion in Electrochemistry, 2017, 4, 105-111.	4.8	30
34	Electrochemical Polishing of Lithium Metal Surface for Highly Demanding Solidâ€Electrolyte Interphase. ChemElectroChem, 2019, 6, 181-188.	3.4	30
35	Theoretical Investigation of Generatorâ€“Collector Microwell Arrays for Improving Electroanalytical Selectivity: Application to Selective Dopamine Detection in the Presence of Ascorbic Acid. ChemPhysChem, 2013, 14, 1887-1898.	2.1	29
36	Functionalization of graphene by tetraphenylethylene using nitrene chemistry. RSC Advances, 2012, 2, 7042.	3.6	28

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37	Stability of Perovskite Thin Films under Working Condition: Biasâ€Dependent Degradation and Grain Boundary Effects. Advanced Functional Materials, 2021, 31, 2103894.	14.9	28
38	Electrochemical Impedance Spectroscopy and Atomic Force Microscopic Studies of Electrical and Mechanical Properties of Nano-Black Lipid Membranes and Size Dependence. Langmuir, 2012, 28, 14739-14746.	3.5	26
39	Atomically thin photoanode of InSe/graphene heterostructure. Nature Communications, 2021, 12, 91.	12.8	26
40	Anin situSTM study of cobalt electrodeposition on Au(111) in BMIBF4ionic liquid. Journal of Experimental Nanoscience, 2006, 1, 269-278.	2.4	24
41	On the Hopping Efficiency of Nanoparticles in the Electron Transfer across Selfâ€Assembled Monolayers. ChemPhysChem, 2013, 14, 952-957.	2.1	24
42	Electrochemical Impedance Spectroscopy for Real-Time Detection of Lipid Membrane Damage Based on a Porous Self-Assembly Monolayer Support. Analytical Chemistry, 2018, 90, 7422-7427.	6.5	24
43	In Situ STM Studies on the Underpotential Deposition of Antimony on Au(111) and Au(100) in a BMIBF4Ionic Liquid. Journal of Physical Chemistry C, 2007, 111, 10467-10477.	3.1	22
44	An STM Study on Nonionic Fluorosurfactant Zonyl FSN Self-Assembly on Au(111): Large Domains, Few Defects, and Good Stability. Langmuir, 2008, 24, 13245-13249.	3.5	22
45	Strategy for Increasing the Electrode Density of Microelectrode Arrays by Utilizing Bipolar Behavior of a Metallic Film. Analytical Chemistry, 2014, 86, 3138-3145.	6.5	20
46	Ionic Liquid Based Approach for Single-Molecule Electronics with Cobalt Contacts. Langmuir, 2014, 30, 14329-14336.	3.5	19
47	Intermixed Adatom and Surfaceâ€Bound Adsorbates in Regular Selfâ€Assembled Monolayers of Racemic 2â€Butanethiol on Au(111). ChemPhysChem, 2015, 16, 928-932.	2.1	18
48	An In Situ Scanning Tunneling Microscopy Study on the Electrochemical Interface between Au(111) and Ethaline Deep Eutectic Solvent. ChemElectroChem, 2020, 7, 4601-4605.	3.4	18
49	Plasmoelectric Potential Mapping of a Single Nanoparticle. ACS Photonics, 2018, 5, 3519-3525.	6.6	16
50	Electronic Spillover from a Metallic Nanoparticle: Can Simple Electrochemical Electron Transfer Processes Be Catalyzed by Electronic Coupling of a Molecular Scale Gold Nanoparticle Simultaneously to the Redox Molecule and the Electrode?. Journal of the American Chemical Society, 2020, 142, 10646-10658.	13.7	16
51	A robust interphase via in-situ pre-reconfiguring lithium anode surface for long-term lithium-oxygen batteries. Journal of Energy Chemistry, 2022, 72, 186-194.	12.9	16
52	Adsorption of Dye Molecules on Single Crystalline Semiconductor Surfaces: An Electrochemical Shell-Isolated Nanoparticle Enhanced Raman Spectroscopy Study. Journal of Physical Chemistry C, 2016, 120, 22500-22507.	3.1	15
53	Electrochemical impedance spectroscopy and Raman spectroscopy studies on electrochemical interface between Au(111) electrode and ethaline deep eutectic solvent. Electrochimica Acta, 2021, 390, 138859.	5.2	14
54	Formation sequence of solid electrolyte interphases and impacts on lithium deposition and dissolution on copper: an <i>in situ</i> atomic force microscopic study. Faraday Discussions, 2021, 233, 190-205.	3.2	14

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55	STM Study on Nonionic Fluorosurfactant Zonyl FSN Self-Assembly on Au(100): (3âˆ’111) Molecular Lattice, Corrugations, and Adsorbate-Enhanced Mobility. Langmuir, 2010, 26, 3829-3834.	3.5	13
56	Comparative Electrochemical Scanning Tunneling Microscopy Study of Nonionic Fluorosurfactant Zonyl FSN Self-Assembled Monolayers on Au(111) and Au(100): A Potential-Induced Structural Transition. Langmuir, 2011, 27, 943-947.	3.5	13
57	An electrochemical method for selective detection of dopamine by depleting ascorbic acid in diffusion layer. Journal of Electroanalytical Chemistry, 2010, 640, 51-55.	3.8	12
58	Theory of Microwell Arrays Performing as Generatorsâ€"Collectors Based on a Single Bipolar Plane Electrode. ChemElectroChem, 2016, 3, 487-494.	3.4	12
59	Double electrode systems with microelectrode arrays for electrochemical measurements. Reviews in Analytical Chemistry, 2015, 34, .	3.2	11
60	Mitigating concentration polarization for highly reversible plating/stripping electrochemistry: Li versus Na. Journal of Materials Chemistry A, 2019, 7, 23216-23224.	10.3	11
61	A new strategy for eliminating interference from ECâ€² mechanism during analytical measurements based on plane-band-recessed microdisk array electrodes. Electrochemistry Communications, 2014, 38, 61-64.	4.7	10
62	Single-molecule anisotropic magnetoresistance at room temperature: Influence of molecular structure. Electrochimica Acta, 2021, 389, 138760.	5.2	10
63	Effect of hydrogen bond donor molecules ethylene glycerol and lactic acid on electrochemical interfaces in choline chloride based-deep eutectic solvents. Journal of Chemical Physics, 2021, 155, 244702.	3.0	10
64	Copper Deposition on Au(111) in a Deep Eutectic Solvent: An In Situ STM Study**. ChemElectroChem, 2022, 9, .	3.4	10
65	Chemistry of cysteine assembly on Au(100): electrochemistry, <i>in situ</i> STM and molecular modeling. Nanoscale, 2019, 11, 17235-17251.	5.6	9
66	Voltammetry and Singleâ€Molecule In Situ Scanning Tunnelling Microscopy of the Redox Metalloenzyme Human Sulfite Oxidase. ChemElectroChem, 2021, 8, 164-171.	3.4	9
67	Structural Exploration of Multilayered Ionic Liquid/Ag Electrode Interfaces by Atomic Force Microscopy and Surfaceâ€Enhanced Raman Spectroscopy. ChemElectroChem, 2020, 7, 4936-4942.	3.4	8
68	Surface electrochemistry approaches for understanding and creating smooth solid-electrolyte interphase and lithiophilic interfaces for lithium metal anodes. Current Opinion in Electrochemistry, 2021, 26, 100671.	4.8	8
69	An in situ STM investigation of EMITFSI ionic liquid on Au(111) in the presence of lithium salt. Science Bulletin, 2015, 60, 877-883.	9.0	7
70	An in-situ Raman spectroscopic study on the cathodic process of EMITFSI ionic liquid on Ag electrodes. Journal of Electroanalytical Chemistry, 2018, 819, 435-441.	3.8	7
71	Electrochemical Growth of Three-Dimensional Nanostripe Architecture of Antimony on Cu(100). Journal of Physical Chemistry B, 2004, 108, 2773-2776.	2.6	6
72	Enhancing the Bipolar Redox Cycling Efficiency of Plane-Recessed Microelectrode Arrays by Adding a Chemically Irreversible Interferent. Analytical Chemistry, 2016, 88, 8535-8541.	6.5	6

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73	Defect Passivation by a Multifunctional Phosphate Additive toward Improvements of Efficiency and Stability of Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2022, 14, 31911-31919.	8.0	6
74	Colloidal lithography-based fabrication of suspended nanoporous silicon nitride membranes. Mikrochimica Acta, 2009, 167, 135-140.	5.0	4
75	Water-induced mica/ionic liquid interfacial nanostructure switches revealed by AFM. Chemical Communications, 2020, 56, 15064-15067.	4.1	4
76	Charge Transfer Kinetics at Ag(111) Single Crystal Electrode/Ionic Liquid Interfaces: Dependence on the Cation Alkyl Side Chain Length. ChemElectroChem, 2021, 8, 983-990.	3.4	4
77	Ferroceneâ€Based Metalâ€“Organic Framework Nanosheets as a Robust Oxygen Evolution Catalyst. Angewandte Chemie, 2021, 133, 12880-12884.	2.0	4
78	Electrochemical interfaces in ionic liquids/deep eutectic solvents incorporated with water: A review. Electrochemical Science Advances, 2023, 3, .	2.8	4
79	Electrochemical preparation and abnormal infrared effects of nanostructured Ni thin film. Science Bulletin, 2004, 49, 442-446.	1.7	3
80	Measurement of the Quantum Conductance of Germanium by an Electrochemical Scanning Tunneling Microscope Break Junction Based on a Jumpâ€Toâ€Contact Mechanism. Chemistry - an Asian Journal, 2013, 8, 2401-2406.	3.3	3
81	IN SITU PHOTOLUMINESCENCE STUDIES OF SILICON SURFACES DURING PHOTOELECTROCHEMICAL ETCHING PROCESSES. Surface Review and Letters, 2001, 08, 327-335.	1.1	2
82	Selective detection by depleting interferent in diffusion layer based on a combination of pre-depletion pulse and differential pulse voltammetry. Journal of Electroanalytical Chemistry, 2013, 688, 40-44.	3.8	2
83	Inhibition of DNA nanotube-conjugated mTOR siRNA on the growth of pulmonary arterial smooth muscle cells. Data in Brief, 2015, 5, 28-34.	1.0	2
84	Efficient plasmon-enhanced perovskite solar cells by molecularly isolated gold nanorods. Journal of Energy Chemistry, 2022, , .	12.9	1
85	InnenrÃ¼cktitelbild: Self-Supporting Metal-Organic Layers as Single-Site Solid Catalysts (Angew. Chem.) Tj ETQq1 1 0.784314 rgBT /Ov	2.0	0
86	Electrochemistry of complex molecular and biomolecular scale entities. Current Opinion in Electrochemistry, 2021, 26, 100670.	4.8	0