Mark D Pritzker

List of Publications by Year
in descending order

83 papers	3,757 citations	159585 30 h-index	128289 60 g-index
83 all docs	83 docs citations	83 times ranked	3847 citing authors

#	Article	IF	Citations
1	In-plane and through-plane gas permeability of carbon fiber electrode backing layers. Journal of Power Sources, 2006, 162, 228-238.	7.8	446
2	Capillary pressure and hydrophilic porosity in gas diffusion layers for polymer electrolyte fuel cells. Journal of Power Sources, 2006, 156, 375-387.	7.8	354
3	Pore network modeling of fibrous gas diffusion layers for polymer electrolyte membrane fuel cells. Journal of Power Sources, 2007, 173, 277-290.	7.8	308
4	On the role of the microporous layer in PEMFC operation. Electrochemistry Communications, 2009, 11, 576-579.	4.7	241
5	Development and Simulation of Sulfurâ€doped Graphene Supported Platinum with Exemplary Stability and Activity Towards Oxygen Reduction. Advanced Functional Materials, 2014, 24, 4325-4336.	14.9	214
6	Wettability and capillary behavior of fibrous gas diffusion media for polymer electrolyte membrane fuel cells. Journal of Power Sources, 2009, 194, 433-444.	7.8	131
7	Multigrain Platinum Nanowires Consisting of Oriented Nanoparticles Anchored on Sulfurâ€Doped Graphene as a Highly Active and Durable Oxygen Reduction Electrocatalyst. Advanced Materials, 2015, 27, 1229-1234.	21.0	126
8	Direct measurement of the capillary pressure characteristics of waterâ€“airâ€“gas diffusion layer systems for PEM fuel cells. Electrochemistry Communications, 2008, 10, 1520-1523.	4.7	98
9	Use of pervaporation for the separation of phenol from dilute aqueous solutions. Journal of Membrane Science, 2009, 335, 96-102.	8.2	84
10	Modification of Hydrophilic and Hydrophobic Surfaces Using an Ionic-Complementary Peptide. PLoS ONE, 2007, 2, e1325.	2.5	75
11	Metal and Metal Oxide Electrocatalysts for Redox Flow Batteries. Advanced Functional Materials, 2020, 30, 1910564.	14.9	69
12	Surface-Assisted Assembly of an Ionic-Complementary Peptide:â€‰ Controllable Growth of Nanofibers. Journal of the American Chemical Society, 2007, 129, 12200-12210.	13.7	68
13	Effect of plating mode, thiourea and chloride on the morphology of copper deposits produced in acidic sulphate solutions. Electrochimica Acta, 2005, 50, 1849-1861.	5.2	67
14	Effect of NaCl and peptide concentration on the self-assembly of an ionic-complementary peptide EAK16-II. Colloids and Surfaces B: Biointerfaces, 2005, 46, 152-161.	5.0	65
15	Optimization of sulfur-doped graphene as an emerging platinum nanowires support for oxygen reduction reaction. Nano Energy, 2016, 19, 27-38.	16.0	58
16	Web-like 3D Architecture of Pt Nanowires and Sulfur-Doped Carbon Nanotube with Superior Electrocatalytic Performance. ACS Sustainable Chemistry and Engineering, 2018, 6, 93-98.	6.7	57
17	Proton uptake by poly(2-vinylpyridine) coatings. Journal of Applied Polymer Science, 2001, 81, 1493-1497.	2.6	55
18	Morphological stability of a planar metal electrode during potentiostatic electrodeposition and electrodissolution. Electrochimica Acta, 1992, 37, 103-112.	5.2	54

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19	Impact of Liquid Water on Reactant Mass Transfer in PEM Fuel Cell Electrodes. Journal of the Electrochemical Society, 2010, 157, B563.	2.9	54
20	Global Optimization of Reverse Osmosis Network for Wastewater Treatment and Minimization. Industrial & Engineering Chemistry Research, 2008, 47, 3060-3070.	3.7	48
21	Formation of Coâ€“Ni alloy coatings under direct current, pulse current and pulse-reverse plating conditions. Electrochimica Acta, 2012, 62, 63-72.	5.2	48
22	Peptide and peptide-carbon nanotube hydrogels as scaffolds for tissue & 3D tumor engineering. Acta Biomaterialia, 2018, 69, 107-119.	8.3	47
23	Model for Nickelâ€Iron Alloy Electrodeposition on a Rotating Disk Electrode. Journal of the Electrochemical Society, 1997, 144, 960-969.	2.9	44
24	Unipolar pulse electrodeposition of nickel hexacyanoferrate thin films with controllable structure on platinum substrates. Thin Solid Films, 2012, 520, 2438-2448.	1.8	43
25	Control of Cu 2 O Film Morphology Using Potentiostatic Pulsed Electrodeposition. Electrochimica Acta, 2016, 213, 225-235.	5.2	41
26	Mesoscopic modeling of Li insertion in phase-separating electrode materials: application to lithium iron phosphate. Physical Chemistry Chemical Physics, 2014, 16, 22555-22565.	2.8	40
27	Coâ€“Ni alloy electrodeposition under different conditions of pH, current and composition. Electrochimica Acta, 2012, 65, 234-243.	5.2	36
28	Pulsed electrodeposition of nickel hexacyanoferrate films for electrochemically switched ion exchange. Separation and Purification Technology, 2008, 63, 407-414.	7.9	33
29	Ni-samaria-doped ceria (Ni-SDC) anode-supported solid oxide fuel cell (SOFC) operating with CO. International Journal of Hydrogen Energy, 2017, 42, 9180-9187.	7.1	32
30	Steady-state model for anomalous Coâ€“Ni electrodeposition in sulfate solutions. Electrochimica Acta, 2012, 66, 139-150.	5.2	31
31	Copper electrodeposition in sulphate solutions in the presence of benzotriazole. Journal of Applied Electrochemistry, 2006, 36, 49-61.	2.9	30
32	Ionic-Complementary Peptide Matrix for Enzyme Immobilization and Biomolecular Sensing. Langmuir, 2009, 25, 7773-7777.	3.5	27
33	Modeling the Galvanostatic Pulse and Pulse Reverse Plating of Nickelâ€Iron Alloys on a Rotating Disk Electrode. Journal of the Electrochemical Society, 1998, 145, 2033-2042.	2.9	26
34	Tin oxide - mesoporous carbon composites as platinum catalyst supports for ethanol oxidation and oxygen reduction. Electrochimica Acta, 2014, 121, 421-427.	5.2	26
35	Low- and High-Frequency Pulse Current and Pulse Reverse Plating of Copper. Journal of the Electrochemical Society, 2003, 150, C665.	2.9	25
36	Low and High Frequency Pulse Current Plating of Copper onto a Rotating Disk Electrode. Journal of the Electrochemical Society, 2002, 149, C289.	2.9	24

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37	Kinetic Monte Carlo simulation of electrodeposition using the embedded-atom method. Electrochimica Acta, 2014, 121, 407-414.	5.2	24
38	Ionicâ€complementary peptideâ€modified highly ordered pyrolytic graphite electrode for biosensor application. Biotechnology Progress, 2008, 24, 964-971.	2.6	23
39	Shrinking-core model for systems with facile heterogeneous and homogeneous reactions. Chemical Engineering Science, 1996, 51, 3631-3645.	3.8	22
40	Prediction of oriented strand board properties from mat formation and compression operating conditions. Part 1. Horizontal density distribution and vertical density profile. Wood Science and Technology, 2006, 40, 139-158.	3.2	21
41	Investigation of Local Mass Transfer in a Packed Bed of Pall Rings Using a Limiting Current Technique. Industrial & Engineering Chemistry Research, 2003, 42, 3626-3634.	3.7	20
42	EIS Study of Nickel Deposition in Borateâ€“Sulfate Solutions. Journal of the Electrochemical Society, 2010, 157, D283.	2.9	20
43	Electrodeposition and electrodissolution of zinc in mixed methanesulfonate-based electrolytes. Electrochimica Acta, 2018, 268, 448-461.	5.2	20
44	Life-cycle analysis of zinc-cerium redox flow batteries. Electrochimica Acta, 2020, 356, 136785.	5.2	20
45	Effect of pulse plating on composition of Snâ€“Pb coatings deposited in fluoroborate solutions. Journal of Applied Electrochemistry, 2003, 33, 1143-1153.	2.9	18
46	Effects of saccharin and anions (SO4 2â˜, Clâ˜) on the electrodeposition of Coâ€“Ni alloys. Journal of Solid State Electrochemistry, 2015, 19, 423-433.	2.5	18
47	Model for parallel surface and pore diffusion of an adsorbate in a spherical adsorbent particle. Chemical Engineering Science, 2003, 58, 473-478.	3.8	17
48	Performance of Electrode Materials During Food Processing by Pulsed Electric Fields. IEEE Transactions on Plasma Science, 2014, 42, 3161-3166.	1.3	17
49	Prediction of oriented strand board properties from mat formation and compression operating conditions. Part 2: MOE prediction and process optimization. Wood Science and Technology, 2006, 40, 291-307.	3.2	16
50	Effect of electrolyte and agitation on the anomalous behavior and morphology of electrodeposited Coâ€“Ni alloys. Journal of Solid State Electrochemistry, 2013, 17, 419-433.	2.5	16
51	In situ polarization study of zincâ€“cerium redox flow batteries. Journal of Power Sources, 2020, 471, 228463.	7.8	16
52	Investigation of catalyst layer defects in catalyst-coated membrane for PEMFC application: Non-destructive method. International Journal of Energy Research, 2018, 42, 3615-3632.	4.5	15
53	Design and assessment of a hybrid chemical engineering laboratory course with the incorporation of student-centred experiential learning. Education for Chemical Engineers, 2020, 30, 1-8.	4.8	15
54	Batch adsorption study of ammonia removal from synthetic/real wastewater using ion exchange resins and zeolites. Separation Science and Technology, 2021, 56, 462-473.	2.5	15

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55	Characterizing Corrosion Effects of Weak Organic Acids Using a Modified Bono Test. Journal of Electronic Materials, 2013, 42, 3609-3619.	2.2	14
56	Improvement of zinc-cerium redox flow batteries using mixed methanesulfonate-chloride negative electrolyte. Applied Energy, 2019, 255, 113894.	10.1	14
57	Shrinking core model for multispecies uptake onto an ion exchange resin involving distinct reaction fronts. Separation and Purification Technology, 2005, 42, 15-24.	7.9	13
58	A two-dimensional transient model for a zinc-cerium redox flow battery validated by extensive experimental data. Journal of Power Sources, 2021, 506, 230237.	7.8	13
59	Modeling the Degradation of Scanning Electrochemical Microscope Images Due to Surface Roughness. Analytical Chemistry, 1995, 67, 4500-4507.	6.5	11
60	Electrodeposited p-type Cu2O thin films at high pH for all-oxide solar cells with improved performance. Thin Solid Films, 2019, 676, 42-53.	1.8	11
61	Model for the ferric chloride leaching of galena. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 1998, 29, 953-960.	2.1	10
62	Pseudoequilibrium Model Based Estimator of Matte Grade in a Copper Smelter. Industrial & Engineering Chemistry Research, 1997, 36, 112-121.	3.7	9
63	Comprehensive impedance model of cobalt deposition in sulfate solutions accounting for homogeneous reactions and adsorptive effects. Electrochimica Acta, 2011, 56, 8023-8033.	5.2	9
64	Atomistic kinetic Monte Carlo simulations of polycrystalline copper electrodeposition. Electrochemistry Communications, 2014, 46, 140-143.	4.7	9
65	Transport property measurement of binary electrolytes using a four-electrode electrochemical cell. Electrochemistry Communications, 2016, 67, 11-15.	4.7	9
66	Applications of flow cytometry sorting in the pharmaceutical industry: A review. Biotechnology Progress, 2021, 37, e3146.	2.6	9
67	On line estimation of matte grade in a copper smelter. Canadian Journal of Chemical Engineering, 1996, 74, 993-1003.	1.7	8
68	Effect of low concentrations of Pb2+ on Sn electrodeposition in methyl sulphonic acid solutions. Electrochimica Acta, 2008, 53, 2430-2440.	5.2	8
69	Morphological evolution of anodic TiO₂ nanotubes. RSC Advances, 2014, 4, 35833-35843.	3.6	8
70	Enhancement of Electricity Generation by a Microbial Fuel Cell Using a Highly Active Non-Precious-Metal Nitrogen-Doped Carbon Composite Catalyst Cathode. Energy & Fuels, 2017, 31, 959-967.	5.1	6
71	Ammonia removal from real wastewater using a LEWATIT S 108 H resin: A batch process and fixed-bed column. Separation Science and Technology, 2020, 55, 2869-2878.	2.5	6
72	Pore transport-controlled shrinking-core systems involving diffusion, migration, and homogeneous reactions: Part I. Formulation of model and rate equation for PbSO4-carbonate system. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2000, 31, 683-691.	2.1	5

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73	How to relate experiments and theory for electrochemistry? Linear sweep voltammetry for the reduction of Fe(CN)63â". Education for Chemical Engineers, 2010, 5, e78-e86.	4.8	5
74	Kinetic and hydrodynamic implications of 1-D and 2-D models for copper electrodeposition under mixed kinetic-mass transfer control. Electrochimica Acta, 2013, 89, 717-725.	5.2	5
75	Current Response for Multilayer Adsorption Processes Driven by a Potential Step or Sweep. Journal of the Electrochemical Society, 1988, 135, 619-626.	2.9	4
76	Electrochemistry: Development and Simulation of Sulfur-doped Graphene Supported Platinum with Exemplary Stability and Activity Towards Oxygen Reduction (Adv. Funct. Mater. 27/2014). Advanced Functional Materials, 2014, 24, 4324-4324.	14.9	4
77	Graphite felt modified with<scp>WO₃</scp>,<scp>SnO₂,</scp>and binary<scp>WO₃</scp>/<scp>SnO₂</scp>â€mixtures as novel positive electrodes for ceriumâ€based redox flow batteries. International Journal of Energy Research, 2022, 46, 4680-4698.	4.5	3
78	Simulation and Optimization of the Continuous Oriented Strand Board Pressing Process. Industrial & Engineering Chemistry Research, 2006, 45, 1974-1988.	3.7	2
79	Electrocatalysts: Multigrain Platinum Nanowires Consisting of Oriented Nanoparticles Anchored on Sulfur-Doped Graphene as a Highly Active and Durable Oxygen Reduction Electrocatalyst (Adv. Mater.) Tj ETQq1 1 0.784314 rgBT /Over	21.8	2
80	Pore transport-controlled shrinking-core systems involving diffusion, migration, and homogeneous reactions: Part II. Application of model for PbSO4-carbonate system to experimental data. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2000, 31, 693-703.	2.1	1
81	Voltage Loss Analysis of Zinc-Cerium Redox Flow Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 3732-3732.	0.0	1
82	Porous Electrodes in Redox Flow Batteries. , 2022, , 466-479.		0
83	Analytical Solution to Transient Convectionâ€"Diffusion Equation for Reaction at Rotating Disk Electrode Using Novel Hybrid Integral Balance-Collocation Method. International Journal of Applied and Computational Mathematics, 2022, 8, 1.	1.6	0