

# Pei-Chen Su

## List of Publications by Year in descending order

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78  
papers

3,004  
citations

236925

25  
h-index

161849

54  
g-index

79  
all docs

79  
docs citations

79  
times ranked

2891  
citing authors

#	ARTICLE	IF	CITATIONS
1	High-Performance Ultrathin Solid Oxide Fuel Cells for Low-Temperature Operation. <i>Journal of the Electrochemical Society</i> , 2007, 154, B20.	2.9	456
2	Nanomaterials and technologies for low temperature solid oxide fuel cells: Recent advances, challenges and opportunities. <i>Nano Energy</i> , 2018, 45, 148-176.	16.0	363
3	Solid Oxide Fuel Cell with Corrugated Thin Film Electrolyte. <i>Nano Letters</i> , 2008, 8, 2289-2292.	9.1	310
4	4D printing of high performance shape memory polymer using stereolithography. <i>Materials and Design</i> , 2017, 126, 219-225.	7.0	243
5	Layer-structured LiNi <sub>0.8</sub> Co <sub>0.2</sub> O <sub>2</sub> : A new triple (H <sup>+</sup> /O <sub>2</sub> <sup>••</sup> /e <sup>••</sup> ) conducting cathode for low temperature proton conducting solid oxide fuel cells. <i>Journal of Power Sources</i> , 2016, 306, 369-377.	7.8	176
6	Plasma-Enhanced Atomic Layer Deposition of Nanoscale Yttria-Stabilized Zirconia Electrolyte for Solid Oxide Fuel Cells with Porous Substrate. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 2998-3002.	8.0	103
7	High speed 4D printing of shape memory polymers with nanosilica. <i>Applied Materials Today</i> , 2020, 18, 100515.	4.3	77
8	Stress-driven grain growth in nanocrystalline Pt thin films. <i>Scripta Materialia</i> , 2011, 64, 25-28.	5.2	64
9	Curing characteristics of shape memory polymers in 3D projection and laser stereolithography. <i>Virtual and Physical Prototyping</i> , 2017, 12, 77-84.	10.4	64
10	Thin-Film Solid Oxide Fuel Cells on Porous Nickel Substrates with Multistage Nanohole Array. <i>Journal of the Electrochemical Society</i> , 2006, 153, A554.	2.9	61
11	Combinatorial deposition of a dense nano-thin film YSZ electrolyte for low temperature solid oxide fuel cells. <i>Journal of Materials Chemistry A</i> , 2013, 1, 9645.	10.3	60
12	Thermal stability and performance enhancement of nano-porous platinum cathode in solid oxide fuel cells by nanoscale ZrO <sub>2</sub> capping. <i>Electrochemistry Communications</i> , 2015, 56, 65-69.	4.7	51
13	Nanoscale membrane electrolyte array for solid oxide fuel cells. <i>Electrochemistry Communications</i> , 2012, 16, 77-79.	4.7	50
14	A circular membrane for nano thin film micro solid oxide fuel cells with enhanced mechanical stability. <i>Energy and Environmental Science</i> , 2015, 8, 3374-3380.	30.8	46
15	4D printing materials for vat photopolymerization. <i>Additive Manufacturing</i> , 2021, 44, 102024.	3.0	45
16	Redox performance of Na-modified Fe <sub>2</sub> O <sub>3</sub> /Al <sub>2</sub> O <sub>3</sub> with syngas as reducing agent in chemical looping combustion process. <i>Chemical Engineering Journal</i> , 2018, 334, 2079-2087.	12.7	40
17	The four-step multiple stage transformation in deformed and annealed Ti <sub>49</sub> Ni <sub>51</sub> shape memory alloy. <i>Acta Materialia</i> , 2004, 52, 1117-1122.	7.9	38
18	Effect of Electrolyte Thickness on Electrochemical Reactions and Thermo-Fluidic Characteristics inside a SOFC Unit Cell. <i>Energies</i> , 2018, 11, 473.	3.1	38

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19	Chemical stability study of nanoscale thin film yttria-doped barium cerate electrolyte for micro solid oxide fuel cells. <i>Journal of Power Sources</i> , 2014, 268, 804-809.	7.8	36
20	Proton-conducting Micro-solid Oxide Fuel Cells with Improved Cathode Reactions by a Nanoscale Thin Film Gadolinium-doped Ceria Interlayer. <i>Scientific Reports</i> , 2016, 6, 22369.	3.3	35
21	Thin-Film SOFCs Using Gastight YSZ Thin Films on Nanoporous Substrates. <i>Journal of the Electrochemical Society</i> , 2006, 153, A431.	2.9	34
22	Inkjet-Printed Porous Silver Thin Film as a Cathode for a Low-Temperature Solid Oxide Fuel Cell. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 10343-10349.	8.0	33
23	Fuel cell and hydrogen technologies research, development and demonstration activities in Singapore – An update. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 13869-13878.	7.1	29
24	3D Stereolithography of Polymer Composites Reinforced with Orientated Nanoclay. <i>Procedia Engineering</i> , 2017, 216, 1-7.	1.2	28
25	Superior energy absorption of continuously graded microlattices by electron beam additive manufacturing. <i>Virtual and Physical Prototyping</i> , 2021, 16, 14-28.	10.4	28
26	Direct Observation of Nanoscale Pt Electrode Agglomeration at the Triple Phase Boundary. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 6036-6040.	8.0	26
27	Development of CNTs-filled photopolymer for projection stereolithography. <i>Rapid Prototyping Journal</i> , 2017, 23, 129-136.	3.2	26
28	Molecular Dynamics Simulation of Oxygen Ion Diffusion in Yttria Stabilized Zirconia Single Crystals and Bicrystals. <i>Fuel Cells</i> , 2014, 14, 574-580.	2.4	24
29	Nanoporous palladium anode for direct ethanol solid oxide fuel cells with nanoscale proton-conducting ceramic electrolyte. <i>Journal of Power Sources</i> , 2017, 340, 98-103.	7.8	24
30	Spray coating of dense proton-conducting BaCe <sub>0.7</sub> Zr <sub>0.1</sub> Y <sub>0.2</sub> O <sub>3</sub> electrolyte for low temperature solid oxide fuel cells. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 6516-6525.	7.1	21
31	A Silicon-Based Nanoscale Thin Film Solid Oxide Fuel Cell Array with Edge Reinforced Support for Enhanced Thermal Mechanical Stability. <i>Nano Letters</i> , 2016, 16, 2413-2417.	9.1	21
32	Nickel-tin solid-liquid inter-diffusion bonding. <i>International Journal of Precision Engineering and Manufacturing</i> , 2014, 15, 143-147.	2.2	19
33	Hydrogen Generation Using Solid Oxide Electrolysis Cells. <i>Fuel Cells</i> , 2020, 20, 644-649.	2.4	19
34	Cup-shaped yttria-doped barium zirconate membrane fuel cell array. <i>Microelectronic Engineering</i> , 2011, 88, 2405-2407.	2.4	18
35	A high-performance SDC-infiltrated nanoporous silver cathode with superior thermal stability for low temperature solid oxide fuel cells. <i>Journal of Materials Chemistry A</i> , 2018, 6, 7357-7363.	10.3	18
36	Impact of Fine Particulate Matter on Visibility at Incheon International Airport, South Korea. <i>Aerosol and Air Quality Research</i> , 2020, , 1048-1061.	2.1	18

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37	Low temperature solid oxide fuel cells with proton-conducting Y:BaZrO <sub>3</sub> electrolyte on porous anodic aluminum oxide substrate. <i>Thin Solid Films</i> , 2013, 544, 125-128.	1.8	17
38	A functional micro-solid oxide fuel cell with a 10 nm-thick freestanding electrolyte. <i>Journal of Materials Chemistry A</i> , 2017, 5, 18414-18419.	10.3	17
39	High power Co <sub>3</sub> O <sub>4</sub> /ZnO p-n type piezoelectric transducer. <i>Thin Solid Films</i> , 2015, 584, 112-115.	1.8	16
40	Nano-patterned dual-layer ITO electrode of high brightness blue light emitting diodes using maskless wet etching. <i>Optics Express</i> , 2013, 21, A970.	3.4	14
41	Ion Conductivity Enhancement Effect by Introduction of Dislocations in Yttria-Stabilized Zirconia. <i>ECS Transactions</i> , 2008, 11, 3-8.	0.5	13
42	Hygroscopic properties of particulate matter and effects of their interactions with weather on visibility. <i>Scientific Reports</i> , 2021, 11, 16401.	3.3	13
43	Graphene-based Oxygen Reduction Electrodes for Low Temperature Solid Oxide Fuel Cells. <i>Fuel Cells</i> , 2017, 17, 344-352.	2.4	10
44	Pulsed laser deposition of Ba <sub>0.5</sub> Sr <sub>0.5</sub> Co <sub>0.8</sub> Fe <sub>0.2</sub> O <sub>3-δ</sub> thin film cathodes for low temperature solid oxide fuel cells. <i>Surface and Coatings Technology</i> , 2017, 320, 344-348.	4.8	10
45	Fabrication of yttrium-doped barium zirconate thin films with sub-micrometer thickness by a sol-gel spin coating method. <i>Thin Solid Films</i> , 2015, 584, 116-119.	1.8	9
46	Nickel oxide coated carbon nanoparticles as temperature sensing materials. <i>Materials Chemistry and Physics</i> , 2014, 148, 305-310.	4.0	8
47	Enhanced light extraction efficiency of GaN-based LED fabricated by multi-chip array. <i>Optical Materials Express</i> , 2015, 5, 1098.	3.0	8
48	Sputtered Nanoporous PtNi Thin Film Cathodes with Improved Thermal Stability for Low Temperature Solid Oxide Fuel Cells. <i>Electrochimica Acta</i> , 2017, 247, 558-563.	5.2	8
49	Chemical Solution Deposition Technique of Thin-Film Ceramic Electrolytes for Solid Oxide Fuel Cells. <i>Journal of Electroceramics</i> , 2010, 22, 105-110.		8
50	A rotationally focused flow (RFF) microfluidic biosensor by density difference for early-stage detectable diagnosis. <i>Scientific Reports</i> , 2021, 11, 9277.	3.3	8
51	Conductive lithium nickel oxide thin film patterns via inkjet printing technology. <i>Thin Solid Films</i> , 2013, 544, 348-351.	1.8	7
52	Biotin-Streptavidin Binding Interactions of Dielectric Filled Silicon Bulk Acoustic Resonators for Smart Label-Free Biochemical Sensor Applications. <i>Sensors</i> , 2014, 14, 4585-4598.	3.8	7
53	Pulsed laser deposition of epitaxial MgO buffer layer for proton-conducting ceramic electrolytes. <i>Surface and Coatings Technology</i> , 2017, 320, 339-343.	4.8	7
54	Numerical Study on Electrochemical Performance of Low-Temperature Micro-Solid Oxide Fuel Cells with Submicron Platinum Electrodes. <i>Energies</i> , 2018, 11, 1204.	3.1	7

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55	Inkjet-printed Ag@SDC core-shell nanoparticles as a high-performance cathode for low-temperature solid oxide fuel cells. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 30853-30860.	7.1	7
56	Morphology Effect of the ZnO Surface via Organic Etchants for Photon Extraction in III-Nitride Emitters. <i>ECS Journal of Solid State Science and Technology</i> , 2017, 6, Q13-Q17.	1.8	6
57	Improving thermal stability of nanoporous platinum cathode at platinum/yttria-stabilized zirconia interface by oxygen plasma treatment. <i>Journal of Power Sources</i> , 2018, 396, 73-79.	7.8	6
58	Moisture-dependent electrochemical characterization of Ba <sub>0.2</sub> Sr <sub>1.8</sub> Fe <sub>1.5</sub> Mo <sub>0.5</sub> O <sub>6-<math>\delta</math></sub> as the fuel electrode for solid oxide electrolysis cells (SOECs). <i>Electrochimica Acta</i> , 2020, 355, 136670.	5.2	6
59	Morphological Effects of Various Silica Nanostructures on the Mechanical Properties of Printed Parts in Digital Light Projection 3D Printing. <i>ACS Applied Nano Materials</i> , 2021, 4, 4522-4531.	5.0	6
60	Gas-tight yttria-doped barium zirconate thin film electrolyte via chemical solution deposition technique. <i>Journal of the European Ceramic Society</i> , 2017, 37, 2997-3001.	5.7	5
61	Rapid thermal processing of chemical-solution-deposited yttrium-doped barium zirconate thin films. <i>Surface and Coatings Technology</i> , 2017, 320, 213-216.	4.8	5
62	Sub-second sintering process for La <sub>6</sub> Sr <sub>4</sub> Co <sub>2</sub> Fe <sub>8</sub> O <sub>3-<math>\delta</math></sub> -gadolinium doped ceria composite cathode via a flash light irradiation method for intermediate temperature-solid oxide fuel cells. <i>Journal of Alloys and Compounds</i> , 2022, 895, 162683.	5.5	5
63	Low Temperature Synthesis of Sub-micrometer Yttria-doped Barium Zirconate Thin Films by Modified Chemical Solution Deposition Technique. <i>ECS Transactions</i> , 2015, 68, 481-488.	0.5	4
64	Fabrication of yttria-doped barium zirconate electrolyte with sub-micrometer thickness via low temperature viscous flow sintering. <i>Surface and Coatings Technology</i> , 2017, 320, 432-436.	4.8	4
65	SDC-Infiltrated Microporous Silver Membrane with Superior Resistance to Thermal Agglomeration for Cathode-Supported Solid Oxide Fuel Cells. <i>Energies</i> , 2018, 11, 2181.	3.1	4
66	Injection-seeded high-repetition-rate short-pulse micro-laser based on upconversion nanoparticles. <i>Nanoscale</i> , 2021, 13, 878-885.	5.6	4
67	Surface third-harmonic generation at a two-photon-polymerized micro-interferometer for real-time on-chip refractive index monitoring. <i>Optics Express</i> , 2019, 27, 29196.	3.4	4
68	Self-reconstructing Bessel beam created by two-photon-polymerized micro-axicon for light-sheet fluorescence microscopy. <i>Results in Physics</i> , 2021, 24, 104111.	4.1	3
69	Effect of Laser-derived Surface Re-melting of YSZ Electrolyte on Performance of Solid Oxide Fuel Cells. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2019, 6, 235-239.	4.9	2
70	Detection of thiocholine ions with cobalt phthalocyanine mediated screen printed electrode. <i>International Journal of Precision Engineering and Manufacturing</i> , 2014, 15, 2573-2579.	2.2	1
71	Inkjet-printed silver and samarium-doped ceria nanocomposite cathode for low temperature solid oxide fuel cells. , 2017, , .		1
72	Numerical analysis of injected current effects on thermal characteristics of vertical-cavity surface-emitting laser. <i>Journal of Mechanical Science and Technology</i> , 2018, 32, 1463-1469.	1.5	1

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73	Label-free quantitative measurement of cardiovascular dynamics in a zebrafish embryo using frequency-comb-referenced-quantitative phase imaging. Journal of Biomedical Optics, 2021, 26, .	2.6	1
74	Silicon-based thin film solid oxide fuel cell array. , 2010, , .		0
75	Generalized equilibrium concentration of polyvacancy: case study for trivacancy in hard-sphere crystals. Molecular Physics, 2011, 109, 2461-2470.	1.7	0
76	Fabrication and strength analysis of humanoid focusing mechanism. Microelectronic Engineering, 2012, 98, 610-613.	2.4	0
77	Silver as a cathode for silicon-based micro solid oxide fuel cells. , 2016, , .		0
78	Opportunities for Fabrication of SOFC Anode Using Selective Laser Melting. , 2014, , .		0