Dan Jl Brett

List of Publications by Citations

458 papers	13,337 citations	57 h-index	91 g-index
493 ext. papers	17,004 ext. citations	8.8 avg, IF	6.95 L-index

#	Paper	IF	Citations
458	Intermediate temperature solid oxide fuel cells. *Chemical Society Reviews*, **2008**, 37, 1568-78	58.5	1033
457	In-operando high-speed tomography of lithium-ion batteries during thermal runaway. *Nature Communications*, **2015**, 6, 6924	17.4	346
456	Fe-N-Doped Carbon Capsules with Outstanding Electrochemical Performance and Stability for the Oxygen Reduction Reaction in Both Acid and Alkaline Conditions. *ACS Nano*, **2016**, 10, 5922-32	16.7	345
455	Review of gas diffusion cathodes for alkaline fuel cells. *Journal of Power Sources*, **2009**, 187, 39-48	8.9	267
454	Ex-situ characterisation of gas diffusion layers for proton exchange membrane fuel cells. *Journal of Power Sources*, **2012**, 218, 393-404	8.9	206
453	Tuning the interlayer spacing of graphene laminate films for efficient pore utilization towards compact capacitive energy storage. *Nature Energy*, **2020**, 5, 160-168	62.3	205
452	On the origin and application of the Bruggeman correlation for analysing transport phenomena in electrochemical systems. *Current Opinion in Chemical Engineering*, **2016**, 12, 44-51	5.4	202
451	A review of domestic heat pumps. *Energy and Environmental Science*, **2012**, 5, 9291	35.4	175
450	Fuel cells for micro-combined heat and power generation. *Energy and Environmental Science*, **2009**, 2, 729	35.4	130
449	Image based modelling of microstructural heterogeneity in LiFePO 4 electrodes for Li-ion batteries. *Journal of Power Sources*, **2014**, 247, 1033-1039	8.9	125
448	Characterising thermal runaway within lithium-ion cells by inducing and monitoring internal short circuits. *Energy and Environmental Science*, **2017**, 10, 1377-1388	35.4	119
447	Measurement of the current distribution along a single flow channel of a solid polymer fuel cell. *Electrochemistry Communications*, **2001**, 3, 628-632	5.1	116
446	Alleviation of Dendrite Formation on Zinc Anodes via Electrolyte Additives. *ACS Energy Letters*, **2021**, 6, 395-403	20.1	110
445	Three-dimensional characterization of electrodeposited lithium microstructures using synchrotron X-ray phase contrast imaging. *Chemical Communications*, **2015**, 51, 266-8	5.8	108
444	Tortuosity in electrochemical devices: a review of calculation approaches. *International Materials Reviews*, **2018**, 63, 47-67	16.1	106
443	3D microstructure design of lithium-ion battery electrodes assisted by X-ray nano-computed tomography and modelling. *Nature Communications*, **2020**, 11, 2079	17.4	96
442	Options for residential building services design using fuel cell based micro-CHP and the potential for heat integration. *Applied Energy*, **2015**, 138, 685-694	10.7	95

441	A new application for nickel foam in alkaline fuel cells. *International Journal of Hydrogen Energy*, **2009**, 34, 6799-6808	6.7	95
440	Multi-Scale Investigations of Ni0.25V2O5 nH2O Cathode Materials in Aqueous Zinc-Ion Batteries. *Advanced Energy Materials*, **2020**, 10, 2000058	21.8	92
439	Superacidity in Nafion/MOF Hybrid Membranes Retains Water at Low Humidity to Enhance Proton Conduction for Fuel Cells. *ACS Applied Materials & Interfaces*, **2016**, 8, 30687-30691	9.5	91
438	Investigating lithium-ion battery materials during overcharge-induced thermal runaway: an operando and multi-scale X-ray CT study. *Physical Chemistry Chemical Physics*, **2016**, 18, 30912-30919	3.6	91
437	Effect of clamping pressure on ohmic resistance and compression of gas diffusion layers for polymer electrolyte fuel cells. *Journal of Power Sources*, **2012**, 219, 52-59	8.9	87
436	In situ diagnostic techniques for characterisation of polymer electrolyte membrane water electrolysers Flow visualisation and electrochemical impedance spectroscopy. *International Journal of Hydrogen Energy*, **2014**, 39, 4468-4482	6.7	86
435	Characterization of the adsorption site energies and heterogeneous surfaces of porous materials. *Journal of Materials Chemistry A*, **2019**, 7, 10104-10137	13	86
434	Localized Impedance Measurements along a Single Channel of a Solid Polymer Fuel Cell. *Electrochemical and Solid-State Letters*, **2003**, 6, A63		85
433	Graphitic Carbon Nitride as a Catalyst Support in Fuel Cells and Electrolyzers. *Electrochimica Acta*, **2016**, 222, 44-57	6.7	83
432	Quartz Crystal Microbalance Electronic Interfacing Systems: A Review. *Sensors*, **2017**, 17,	3.8	82
431	Non-uniform temperature distribution in Li-ion batteries during discharge A combined thermal imaging, X-ray micro-tomography and electrochemical impedance approach. *Journal of Power Sources*, **2014**, 252, 51-57	8.9	82
430	A lung-inspired approach to scalable and robust fuel cell design. *Energy and Environmental Science*, **2018**, 11, 136-143	35.4	80
429	Towards intelligent engineering of SOFC electrodes: a review of advanced microstructural characterisation techniques. *International Materials Reviews*, **2010**, 55, 347-363	16.1	79
428	High power nano-Nb2O5 negative electrodes for lithium-ion batteries. *Electrochimica Acta*, **2016**, 192, 363-369	6.7	77
427	Exceptional supercapacitor performance from optimized oxidation of graphene-oxide. *Energy Storage Materials*, **2019**, 17, 12-21	19.4	77
426	Performance of solid oxide electrolysis cells based on composite La0.8Sr0.2MnO3 yttria stabilized zirconia and Ba0.5Sr0.5Co0.8Fe0.2O3 oxygen electrodes. *International Journal of Hydrogen Energy*, **2010**, 35, 3958-3966	6.7	76
425	Rational Design of Hierarchically Core-Shell Structured Ni S @NiMoO Nanowires for Electrochemical Energy Storage. *Small*, **2018**, 14, e1800791	11	74
424	High power TiO2 and high capacity Sn-doped TiO2 nanomaterial anodes for lithium-ion batteries. *Journal of Power Sources*, **2015**, 294, 94-102	8.9	73

423	Lithiation-Induced Dilation Mapping in a Lithium-Ion Battery Electrode by 3D X-Ray Microscopy and Digital Volume Correlation. *Advanced Energy Materials*, **2014**, 4, 1300506	21.8	72
422	Life cycle assessment of a polymer electrolyte membrane fuel cell system for passenger vehicles. *Journal of Cleaner Production*, **2017**, 142, 4339-4355	10.3	70
421	Highly pseudocapacitive Nb-doped TiO2 high power anodes for lithium-ion batteries. *Journal of Materials Chemistry A*, **2015**, 3, 22908-22914	13	69
420	Thermodynamic predictions of the impact of fuel composition on the propensity of sulphur to interact with Ni and ceria-based anodes for solid oxide fuel cells. *Journal of Power Sources*, **2008**, 175, 60-67	8.9	68
419	The effect of current density on H2S-poisoning of nickel-based solid oxide fuel cell anodes. *Journal of Power Sources*, **2011**, 196, 7182-7187	8.9	67
418	Methanol as a direct fuel in intermediate temperature (500 *Chemical Engineering Science*, **2005**, 60, 5649-5662	4.4	67
417	An efficient carbon-based ORR catalyst from low-temperature etching of ZIF-67 with ultra-small cobalt nanoparticles and high yield. *Journal of Materials Chemistry A*, **2019**, 7, 3544-3551	13	64
416	Dead-ended anode polymer electrolyte fuel cell stack operation investigated using electrochemical impedance spectroscopy, off-gas analysis and thermal imaging. *Journal of Power Sources*, **2014**, 254, 1-9	8.9	64
415	Spatial dynamics of lithiation and lithium plating during high-rate operation of graphite electrodes. *Energy and Environmental Science*, **2020**, 13, 2570-2584	35.4	63
414	The application of phase contrast X-ray techniques for imaging Li-ion battery electrodes. *Nuclear Instruments & Methods in Physics Research B*, **2014**, 324, 118-123	1.2	63
413	Fuel cell micro-CHP techno-economics: Part 1 model concept and formulation. *International Journal of Hydrogen Energy*, **2009**, 34, 9545-9557	6.7	63
412	A sizing-design methodology for hybrid fuel cell power systems and its application to an unmanned underwater vehicle. *Journal of Power Sources*, **2010**, 195, 6559-6569	8.9	63
411	Mechanisms and effects of mechanical compression and dimensional change in polymer electrolyte fuel cells A review. *Journal of Power Sources*, **2015**, 284, 305-320	8.9	61
410	Free-standing supercapacitors from Kraft lignin nanofibers with remarkable volumetric energy density. *Chemical Science*, **2019**, 10, 2980-2988	9.4	60
409	High power Nb-doped LiFePO4 Li-ion battery cathodes; pilot-scale synthesis and electrochemical properties. *Journal of Power Sources*, **2016**, 326, 476-481	8.9	60
408	Identifying the Cause of Rupture of Li-Ion Batteries during Thermal Runaway. *Advanced Science*, **2018**, 5, 1700369	13.6	59
407	Effect of temperature uncertainty on polymer electrolyte fuel cell performance. *International Journal of Hydrogen Energy*, **2014**, 39, 1439-1448	6.7	59
406	Solid oxide fuel cell/gas turbine hybrid system analysis for high-altitude long-endurance unmanned aerial vehicles. *International Journal of Hydrogen Energy*, **2008**, 33, 7214-7223	6.7	59

405	Double-shelled tremella-like NiO@Co3O4@MnO2 as a high-performance cathode material for alkaline supercapacitors. *Journal of Power Sources*, **2017**, 343, 76-82	8.9	58
404	Effect of gas diffusion layer properties on water distribution across air-cooled, open-cathode polymer electrolyte fuel cells: A combined ex-situ X-ray tomography and in-operando neutron imaging study. *Electrochimica Acta*, **2016**, 211, 478-487	6.7	58
403	Investigation of Hot Pressed Polymer Electrolyte Fuel Cell Assemblies via X-ray Computed Tomography. *Electrochimica Acta*, **2017**, 242, 125-136	6.7	57
402	Graphitic Carbon Nitride Supported Catalysts for Polymer Electrolyte Fuel Cells. *Journal of Physical Chemistry C*, **2014**, 118, 6831-6838	3.8	57
401	Raman spectroscopy as a probe of temperature and oxidation state for gadolinium-doped ceria used in solid oxide fuel cells. *Journal of Physical Chemistry A*, **2008**, 112, 1497-501	2.8	57
400	Fuel cell systems optimisation Methods and strategies. *International Journal of Hydrogen Energy*, **2011**, 36, 14678-14703	6.7	56
399	Quantifying Bulk Electrode Strain and Material Displacement within Lithium Batteries via High-Speed Operando Tomography and Digital Volume Correlation. *Advanced Science*, **2016**, 3, 1500332	13.6	55
398	Combined current and temperature mapping in an air-cooled, open-cathode polymer electrolyte fuel cell under steady-state and dynamic conditions. *Journal of Power Sources*, **2015**, 297, 315-322	8.9	54
397	X-ray micro-tomography as a diagnostic tool for the electrode degradation in vanadium redox flow batteries. *Electrochemistry Communications*, **2014**, 48, 155-159	5.1	54
396	Tracking Internal Temperature and Structural Dynamics during Nail Penetration of Lithium-Ion Cells. *Journal of the Electrochemical Society*, **2017**, 164, A3285-A3291	3.9	54
395	Modelling and experiments to identify high-risk failure scenarios for testing the safety of lithium-ion cells. *Journal of Power Sources*, **2019**, 417, 29-41	8.9	53
394	The effect of fuel composition and temperature on the interaction of H2S with nickel eria anodes for Solid Oxide Fuel Cells. *Journal of Power Sources*, **2008**, 183, 232-239	8.9	53
393	4D imaging of lithium-batteries using correlative neutron and X-ray tomography with a virtual unrolling technique. *Nature Communications*, **2020**, 11, 777	17.4	52
392	Fuel cell micro-CHP techno-economics: Part 2 Model application to consider the economic and environmental impact of stack degradation. *International Journal of Hydrogen Energy*, **2009**, 34, 9558-9569	6.7	52
391	Pilot-scale continuous synthesis of a vanadium-doped LiFePO4/C nanocomposite high-rate cathodes for lithium-ion batteries. *Journal of Power Sources*, **2016**, 302, 410-418	8.9	51
390	Review of Materials and Characterization Methods for Polymer Electrolyte Fuel Cell Flow-Field Plates. *Journal of Fuel Cell Science and Technology*, **2007**, 4, 29-44		51
389	Developments in X-ray tomography characterization for electrochemical devices. *Materials Today*, **2019**, 31, 69-85	21.8	50
388	Visualizing the Carbon Binder Phase of Battery Electrodes in Three Dimensions. *ACS Applied Energy Materials*, **2018**, 1, 3702-3710	6.1	50

387	Insights on Flexible Zinc-Ion Batteries from Lab Research to Commercialization. *Advanced Materials*, **2021**, 33, e2007548	24	50
386	Spatially Resolving Lithiation in Silicon-Graphite Composite Electrodes via in Situ High-Energy X-ray Diffraction Computed Tomography. *Nano Letters*, **2019**, 19, 3811-3820	11.5	49
385	Identifying the Origins of Microstructural Defects Such as Cracking within Ni-Rich NMC811 Cathode Particles for Lithium-Ion Batteries. *Advanced Energy Materials*, **2020**, 10, 2002655	21.8	49
384	A general method for boosting the supercapacitor performance of graphitic carbon nitride/graphene hybrids. *Journal of Materials Chemistry A*, **2017**, 5, 25545-25554	13	49
383	Spatial quantification of dynamic inter and intra particle crystallographic heterogeneities within lithium ion electrodes. *Nature Communications*, **2020**, 11, 631	17.4	48
382	Ranunculus flower-like Ni(OH)2@Mn2O3 as a high specific capacitance cathode material for alkaline supercapacitors. *Journal of Materials Chemistry A*, **2016**, 4, 7591-7595	13	48
381	Mass transfer in fibrous media with varying anisotropy for flow battery electrodes: Direct numerical simulations with 3D X-ray computed tomography. *Chemical Engineering Science*, **2019**, 196, 104-115	4.4	48
380	Cage-like MnO2-Mn2O3 hollow spheres with high specific capacitance and high rate capability as supercapacitor material. *Electrochimica Acta*, **2016**, 219, 540-546	6.7	47
379	Enabling stable MnO2 matrix for aqueous zinc-ion battery cathodes. *Journal of Materials Chemistry A*, **2020**, 8, 22075-22082	13	47
378	4D analysis of the microstructural evolution of Si-based electrodes during lithiation: Time-lapse X-ray imaging and digital volume correlation. *Journal of Power Sources*, **2016**, 320, 196-203	8.9	47
377	Palladium alloys used as electrocatalysts for the oxygen reduction reaction. *Energy and Environmental Science*, **2021**, 14, 2639-2669	35.4	47
376	Mesoporous nickel selenide N-doped carbon as a robust electrocatalyst for overall water splitting. *Electrochimica Acta*, **2019**, 300, 93-101	6.7	46
375	Exploring 3D microstructural evolution in Li-Sulfur battery electrodes using in-situ X-ray tomography. *Scientific Reports*, **2016**, 6, 35291	4.9	45
374	A cost effective, highly porous, manganese oxide/carbon supercapacitor material with high rate capability. *Journal of Materials Chemistry A*, **2016**, 4, 5390-5394	13	45
373	A techno-economic appraisal of hydrogen generation and the case for solid oxide electrolyser cells. *International Journal of Hydrogen Energy*, **2011**, 36, 5782-5796	6.7	45
372	Characterising the structural properties of polymer separators for lithium-ion batteries in 3D using phase contrast X-ray microscopy. *Journal of Power Sources*, **2016**, 333, 184-192	8.9	45
371	Visualization of liquid water in a lung-inspired flow-field based polymer electrolyte membrane fuel cell via neutron radiography. *Energy*, **2019**, 170, 14-21	7.9	45
370	Microstructural degradation of silicon electrodes during lithiation observed via operando X-ray tomographic imaging. *Journal of Power Sources*, **2017**, 342, 904-912	8.9	44

369	A study of the effect of compression on the performance of polymer electrolyte fuel cells using electrochemical impedance spectroscopy and dimensional change analysis. *International Journal of Hydrogen Energy*, **2013**, 38, 7414-7422	6.7	44
368	Measurement and modelling of carbon monoxide poisoning distribution within a polymer electrolyte fuel cell. *International Journal of Hydrogen Energy*, **2007**, 32, 863-871	6.7	44
367	Concept and system design for a ZEBRA battery intermediate temperature solid oxide fuel cell hybrid vehicle. *Journal of Power Sources*, **2006**, 157, 782-798	8.9	44
366	Optimisation of air cooled, open-cathode fuel cells: Current of lowest resistance and electro-thermal performance mapping. *Journal of Power Sources*, **2015**, 291, 261-269	8.9	43
365	The effect of felt compression on the performance and pressure drop of all-vanadium redox flow batteries. *Journal of Energy Storage*, **2016**, 8, 91-98	7.8	43
364	The application of hierarchical structures in energy devices: new insights into the design of solid oxide fuel cells with enhanced mass transport. *Energy and Environmental Science*, **2018**, 11, 2390-2403	35.4	43
363	A multi-objective optimisation model for a general polymer electrolyte membrane fuel cell system. *Journal of Power Sources*, **2010**, 195, 2754-2763	8.9	43
362	Application of infrared thermal imaging to the study of pellet solid oxide fuel cells. *Journal of Power Sources*, **2007**, 166, 112-119	8.9	43
361	The Role of Phosphate Group in Doped Cobalt Molybdate: Improved Electrocatalytic Hydrogen Evolution Performance. *Advanced Science*, **2020**, 7, 1903674	13.6	42
360	Self-standing electrodes with core-shell structures for high-performance supercapacitors. *Energy Storage Materials*, **2017**, 9, 119-125	19.4	42
359	Correlation between triple phase boundary and the microstructure of Solid Oxide Fuel Cell anodes: The role of composition, porosity and Ni densification. *Journal of Power Sources*, **2017**, 365, 210-219	8.9	41
358	Fair electricity transfer price and unit capacity selection for microgrids. *Energy Economics*, **2013**, 36, 581-593	5.3	40
357	A study of the effect of water management and electrode flooding on the dimensional change of polymer electrolyte fuel cells. *Journal of Power Sources*, **2013**, 242, 70-77	8.9	40
356	Cathode Design for Aqueous Rechargeable Multivalent Ion Batteries: Challenges and Opportunities. *Advanced Functional Materials*, **2021**, 31, 2010445	15.6	40
355	Synergistic relationship between the three-dimensional nanostructure and electrochemical performance in biocarbon supercapacitor electrode materials. *Sustainable Energy and Fuels*, **2018**, 2, 772-785	5.8	39
354	What happens inside a fuel cell? Developing an experimental functional map of fuel cell performance. *ChemPhysChem*, **2010**, 11, 2714-31	3.2	39
353	Nano-engineered intrapores in nanoparticles of PtNi networks for increased oxygen reduction reaction activity. *Journal of Power Sources*, **2018**, 374, 48-54	8.9	39
352	Carbon monoxide poisoning and mitigation strategies for polymer electrolyte membrane fuel cells A review. *Progress in Energy and Combustion Science*, **2020**, 79, 100842	33.6	38

351	Current density mapping and optical flow visualisation of a polymer electrolyte membrane water electrolyser. *Journal of Power Sources*, **2014**, 265, 97-103	8.9	38
350	Laser-preparation of geometrically optimised samples for X-ray nano-CT. *Journal of Microscopy*, **2017**, 267, 384-396	1.9	37
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348	Membrane resistance and current distribution measurements under various operating conditions in a polymer electrolyte fuel cell. *Journal of Power Sources*, **2007**, 172, 2-13	8.9	37
347	Rechargeable aqueous Zn-based energy storage devices. *Joule*, **2021**,	27.8	37
346	Four-Dimensional Studies of Morphology Evolution in Lithium–Sulfur Batteries. *ACS Applied Energy Materials*, **2018**, 1, 5090-5100	6.1	36
345	The Hydro-electro-thermal Performance of Air-cooled, Open-cathode Polymer Electrolyte Fuel Cells: Combined Localised Current Density, Temperature and Water Mapping. *Electrochimica Acta*, **2015**, 180, 307-315	6.7	36
344	Hydrogen Oxidation on PdIr/C Catalysts in Alkaline Media. *Journal of the Electrochemical Society*, **2014**, 161, F458-F463	3.9	36
343	Highly conductive low nickel content nano-composite dense cermets from nano-powders made via a continuous hydrothermal synthesis route. *Solid State Ionics*, **2010**, 181, 827-834	3.3	36
342	Electrochemical Impedance Spectroscopy for All-Solid-State Batteries: Theory, Methods and Future Outlook. *ChemElectroChem*, **2021**, 8, 1930-1947	4.3	36
341	Comparison of three-dimensional analysis and stereological techniques for quantifying lithium-ion battery electrode microstructures. *Journal of Microscopy*, **2016**, 263, 280-92	1.9	36
340	Multi-scale 3D investigations of a commercial 18650 Li-ion battery with correlative electron- and X-ray microscopy. *Journal of Power Sources*, **2017**, 357, 77-86	8.9	35
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338	Spatially resolved ultrasound diagnostics of Li-ion battery electrodes. *Physical Chemistry Chemical Physics*, **2019**, 21, 6354-6361	3.6	34
337	Effect of serpentine flow-field design on the water management of polymer electrolyte fuel cells: An in-operando neutron radiography study. *Journal of Power Sources*, **2018**, 399, 254-263	8.9	34
336	Development of open-cathode polymer electrolyte fuel cells using printed circuit board flow-field plates: Flow geometry characterisation. *International Journal of Hydrogen Energy*, **2014**, 39, 18326-18336	6.7	34
335	Investigating the evolving microstructure of lithium metal electrodes in 3D using X-ray computed tomography. *Physical Chemistry Chemical Physics*, **2017**, 19, 22111-22120	3.6	34
334	Toward high practical capacitance of Ni(OH)2 using highly conductive CoB nanochain supports. *Journal of Materials Chemistry A*, **2017**, 5, 92-96	13	34

333	High capacity nanocomposite Fe3O4/Fe anodes for Li-ion batteries. *Journal of Power Sources*, **2015**, 291, 102-107	8.9	34
332	An improved cathode for alkaline fuel cells. *International Journal of Hydrogen Energy*, **2010**, 35, 1783-1788	8.7	34
331	Microstructural Evolution of Battery Electrodes During Calendering. *Joule*, **2020**, 4, 2746-2768	27.8	34
330	System-level electro-thermal optimisation of air-cooled open-cathode polymer electrolyte fuel cells: Air blower parasitic load and schemes for dynamic operation. *International Journal of Hydrogen Energy*, **2015**, 40, 16760-16766	6.7	33
329	Biobutanol as Fuel for Direct Alcohol Fuel Cells-Investigation of Sn-Modified Pt Catalyst for Butanol Electro-oxidation. *ACS Applied Materials & Interfaces*, **2016**, 8, 12859-70	9.5	33
328	Two-dimensional model of low-pressure PEM electrolyser: Two-phase flow regime, electrochemical modelling and experimental validation. *International Journal of Hydrogen Energy*, **2017**, 42, 26203-26216	6.7	32
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326	2021 roadmap on lithium sulfur batteries. *JPhys Energy*, **2021**, 3, 031501	4.9	32
325	The effect of non-uniform compression and flow-field arrangements on membrane electrode assemblies - X-ray computed tomography characterisation and effective parameter determination. *Journal of Power Sources*, **2019**, 426, 97-110	8.9	31
324	Transition-Metal-Doped □MnO2 Nanorods as Bifunctional Catalysts for Efficient Oxygen Reduction and Evolution Reactions. *ChemistrySelect*, **2018**, 3, 2613-2622	1.8	31
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322	New insights into the electrochemical behaviour of porous carbon electrodes for supercapacitors. *Journal of Energy Storage*, **2018**, 19, 337-347	7.8	30
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320	Investigating the effect of thermal gradients on stress in solid oxide fuel cell anodes using combined synchrotron radiation and thermal imaging. *Journal of Power Sources*, **2015**, 288, 473-481	8.9	30
319	Feasibility study and techno-economic analysis of an SOFC/battery hybrid system for vehicle applications. *Journal of Power Sources*, **2007**, 171, 186-197	8.9	30
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315	Design of next-generation ceramic fuel cells and real-time characterization with synchrotron X-ray diffraction computed tomography. *Nature Communications*, **2019**, 10, 1497	17.4	29
314	4D nano-tomography of electrochemical energy devices using lab-based X-ray imaging. *Nano Energy*, **2018**, 47, 556-565	17.1	29
313	Detection of Internal Defects in Lithium-Ion Batteries Using Lock-in Thermography. *ECS Electrochemistry Letters*, **2015**, 4, A106-A109		28
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310	Defected vanadium bronzes as superb cathodes in aqueous zinc-ion batteries. *Nanoscale*, **2020**, 12, 20638-20648	7.7	27
309	In situ compression and X-ray computed tomography of flow battery electrodes. *Journal of Energy Chemistry*, **2018**, 27, 1353-1361	12	27
308	Study of water accumulation dynamics in the channels of an open-cathode fuel cell through electro-thermal characterisation and droplet visualisation. *International Journal of Hydrogen Energy*, **2015**, 40, 16786-16796	6.7	27
307	ZIF-8-Derived Hollow Carbon for Efficient Adsorption of Antibiotics. *Nanomaterials*, **2019**, 9,	5.4	26
306	Co-gasification of beech-wood and polyethylene in a fluidized-bed reactor. *Fuel Processing Technology*, **2019**, 190, 29-37	7.2	26
305	Superior Multifunctional Activity of Nanoporous Carbons with Widely Tunable Porosity: Enhanced Storage Capacities for Carbon-Dioxide, Hydrogen, Water, and Electric Charge. *Advanced Energy Materials*, **2020**, 10, 1903649	21.8	26
304	A study of carbon deposition on solid oxide fuel cell anodes using electrochemical impedance spectroscopy in combination with a high temperature crystal microbalance. *Journal of Power Sources*, **2013**, 235, 14-19	8.9	26
303	Investigation of cycling-induced microstructural degradation in silicon-based electrodes in lithium-ion batteries using X-ray nanotomography. *Electrochimica Acta*, **2017**, 253, 85-92	6.7	26
302	Design and synthesis of tremella-like Ni□Co□ flakes on co-coated cotton textile as high-performance electrode for flexible supercapacitor. *Journal of Alloys and Compounds*, **2020**, 814, 151789	5.7	26
301	Evolution of Electrochemical Cell Designs for In-Situ and Operando 3D Characterization. *Materials*, **2018**, 11,	3.5	26
300	Cobalt nickel nitride coated by a thin carbon layer anchoring on nitrogen-doped carbon nanotube anodes for high-performance lithium-ion batteries. *Journal of Materials Chemistry A*, **2018**, 6, 19853-19862	13	26
299	Evaluating the Potential Benefits of Metal Ion Doping in SnO 2 Negative Electrodes for Lithium Ion Batteries. *Electrochimica Acta*, **2017**, 242, 400-407	6.7	25
298	Electrochemical pressure impedance spectroscopy applied to the study of polymer electrolyte fuel cells. *Electrochemistry Communications*, **2017**, 75, 60-63	5.1	25

297	A Structure and Durability Comparison of Membrane Electrode Assembly Fabrication Methods: Self-Assembled Versus Hot-Pressed. *Journal of the Electrochemical Society*, **2018**, 165, F3045-F3052	3.9	25
296	Electro-thermal impedance spectroscopy applied to an open-cathode polymer electrolyte fuel cell. *Journal of Power Sources*, **2016**, 302, 210-214	8.9	25
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