John T S Irvine

List of Publications by Citations

492 papers	25,056 citations	74 h-index	141 g-index
519 ext. papers	27,980 ext. citations	7.5 avg, IF	7.4 L-index

#	Paper	IF	Citations
492	Electroceramics: Characterization by Impedance Spectroscopy. *Advanced Materials*, **1990**, 2, 132-138	24	1700
491	Advanced anodes for high-temperature fuel cells. *Nature Materials*, **2004**, 3, 17-27	27	1203
490	A redox-stable efficient anode for solid-oxide fuel cells. *Nature Materials*, **2003**, 2, 320-3	27	986
489	Ammonia and related chemicals as potential indirect hydrogen storage materials. *International Journal of Hydrogen Energy*, **2012**, 37, 1482-1494	6.7	613
488	In situ growth of nanoparticles through control of non-stoichiometry. *Nature Chemistry*, **2013**, 5, 916-23	17.6	569
487	Layered oxygen-deficient double perovskite as an efficient and stable anode for direct hydrocarbon solid oxide fuel cells. *Nature Materials*, **2015**, 14, 205-9	27	475
486	Nano-socketed nickel particles with enhanced coking resistance grown in situ by redox exsolution. *Nature Communications*, **2015**, 6, 8120	17.4	438
485	Evolution of the electrochemical interface in high-temperature fuel cells and electrolysers. *Nature Energy*, **2016**, 1,	62.3	418
484	A red metallic oxide photocatalyst. *Nature Materials*, **2012**, 11, 595-8	27	370
483	Structural Investigation of Graphitic Carbon Nitride via XRD and Neutron Diffraction. *Chemistry of Materials*, **2015**, 27, 2612-2618	9.6	346
482	Synthesis and Characterization of (La[sub 0.75]Sr[sub 0.25])Cr[sub 0.5]Mn[sub 0.5]O[sub 3₫ a Redox-Stable, Efficient Perovskite Anode for SOFCs. *Journal of the Electrochemical Society*, **2004**, 151, A252	3.9	336
481	Disruption of extended defects in solid oxide fuel cell anodes for methane oxidation. *Nature*, **2006**, 439, 568-71	50.4	329
480	A symmetrical solid oxide fuel cell demonstrating redox stable perovskite electrodes. *Journal of Materials Chemistry*, **2006**, 16, 1603		319
479	Inorganic perovskite photocatalysts for solar energy utilization. *Chemical Society Reviews*, **2016**, 45, 5951-5984	58.3	318
478	Synthesis of ammonia directly from air and water at ambient temperature and pressure. *Scientific Reports*, **2013**, 3, 1145	4.9	277
477	Switching on electrocatalytic activity in solid oxide cells. *Nature*, **2016**, 537, 528-531	50.4	276
476	Recent Progress in the Development of Anode Materials for Solid Oxide Fuel Cells. *Advanced Energy Materials*, **2011**, 1, 314-332	21.8	276

475	A direct urea fuel cell □power from fertiliser and waste. *Energy and Environmental Science*, **2010**, 3, 438	35.4	248
474	Conductivity studies of dense yttrium-doped BaZrO3 sintered at 1325□C. *Journal of Solid State Chemistry*, **2007**, 180, 3493-3503	3.3	236
473	g-C3N4 coated SrTiO3 as an efficient photocatalyst for H2 production in aqueous solution under visible light irradiation. *International Journal of Hydrogen Energy*, **2011**, 36, 13501-13507	6.7	202
472	Step-change in high temperature steam electrolysis performance of perovskite oxide cathodes with exsolution of B-site dopants. *Energy and Environmental Science*, **2013**, 6, 256-266	35.4	197
471	Formation, structure, and stability of titanate nanotubes and their proton conductivity. *Journal of Physical Chemistry B*, **2005**, 109, 5439-44	3.4	188
470	Symmetric and reversible solid oxide fuel cells. *RSC Advances*, **2011**, 1, 1403	3.7	187
469	Preparation and characterisation of apatite-type lanthanum silicates by a sol-gel process. *Materials Research Bulletin*, **2001**, 36, 1245-1258	5.1	185
468	Efficient Reduction of CO[sub 2] in a Solid Oxide Electrolyzer. *Electrochemical and Solid-State Letters*, **2008**, 11, B167		174
467	Elaboration of CO2 tolerance limits of BaCe0.9Y0.1O3□electrolytes for fuel cells and other applications. *Solid State Ionics*, **2005**, 176, 3019-3026	3.3	171
466	Catalytic Properties of the Perovskite Oxide La0.75Sr0.25Cr0.5Fe0.5O3-□n Relation to Its Potential as a Solid Oxide Fuel Cell Anode Material. *Chemistry of Materials*, **2004**, 16, 4116-4121	9.6	163
465	An Efficient Solid Oxide Fuel Cell Based upon Single-Phase Perovskites. *Advanced Materials*, **2005**, 17, 1734-1737	24	163
464	Discovery and characterization of novel oxide anodes for solid oxide fuel cells. *Chemical Record*, **2004**, 4, 83-95	6.6	156
463	Structure and Properties of La0.4Sr0.4TiO3 Ceramics for Use as Anode Materials in Solid Oxide Fuel Cells. *Chemistry of Materials*, **2010**, 22, 5042-5053	9.6	155
462	(La0.75Sr0.25)0.95Mn0.5Cr0.5O3 as the cathode of solid oxide electrolysis cells for high temperature hydrogen production from steam. *Journal of Materials Chemistry*, **2008**, 18, 2349		153
461	Enhanced Photocatalytic H2 Production in Core-Shell Engineered Rutile TiO2. *Advanced Materials*, **2016**, 28, 5850-6	24	152
460	Enhancing CO electrolysis through synergistic control of non-stoichiometry and doping to tune cathode surface structures. *Nature Communications*, **2017**, 8, 14785	17.4	147
459	Effect of alumina additions upon electrical properties of 8 mol.% yttria-stabilised zirconia. *Solid State Ionics*, **1999**, 121, 209-216	3.3	147
458	Synthesis and electrical characterisation of doped perovskite titanates as potential anode materials for solid oxide fuel cells. *Journal of Materials Chemistry*, **1997**, 7, 2495-2498		143

457	Direct synthesis of methane from CO2/H2O in an oxygen-ion conducting solid oxide electrolyser. *Energy and Environmental Science*, **2011**, 4, 2218	35.4	135
456	Advanced Electrochemical Properties of LnBa[sub 0.5]Sr[sub 0.5]Co[sub 2]O[sub 5+δ] (Ln=Pr, Sm, and Gd) as Cathode Materials for IT-SOFC. *Journal of the Electrochemical Society*, **2009**, 156, B682	3.9	135
455	Electrochemical performance of ball-milled ZnO–SnO2 systems as anodes in lithium-ion battery. *Journal of Power Sources*, **2001**, 97-98, 219-222	8.9	134
454	Investigation of the Structural and Catalytic Requirements for High-Performance SOFC Anodes Formed by Infiltration of LSCM. *Electrochemical and Solid-State Letters*, **2009**, 12, B48		132
453	Electrochemical oxidation of solid carbon in hybrid DCFC with solid oxide and molten carbonate binary electrolyte. *Energy and Environmental Science*, **2008**, 1, 148	35.4	130
452	Syntheses, Li Insertion, and Photoactivity of Mesoporous Crystalline TiO2. *Advanced Functional Materials*, **2009**, 19, 2826-2833	15.6	129
451	Synthesis, chemical stability and proton conductivity of the perovksites Ba(Ce,Zr)1−x Scx O3 −δ *Solid State Ionics*, **2007**, 178, 635-640	3.3	124
450	Engineering Composite Oxide SOFC Anodes for Efficient Oxidation of Methane. *Electrochemical and Solid-State Letters*, **2008**, 11, B16		123
449	Challenges in developing direct carbon fuel cells. *Chemical Society Reviews*, **2017**, 46, 2889-2912	58.5	120
448	Alternative Cathode Material for CO2Reduction by High Temperature Solid Oxide Electrolysis Cells. *Journal of the Electrochemical Society*, **2012**, 159, F442-F448	3.9	120
447	Demonstration of high power, direct conversion of waste-derived carbon in a hybrid direct carbon fuel cell. *Energy and Environmental Science*, **2012**, 5, 6973	35.4	116
446	Heteroatom-Modulated Switching of Photocatalytic Hydrogen and Oxygen Evolution Preferences of Anatase TiO2 Microspheres. *Advanced Functional Materials*, **2012**, 22, 3233-3238	15.6	114
445	High-Temperature Powder Neutron Diffraction Study of the Oxide Ion Conductor La0.9Sr0.1Ga0.8Mg0.2O2.85. *Journal of Solid State Chemistry*, **1998**, 139, 135-143	3.3	110
444	Sinterability of commercial 8 mol% yttria-stabilized zirconia powders and the effect of sintered density on the ionic conductivity. *Journal of Materials Science*, **1998**, 33, 4297-4305	4.3	109
443	In Situ Growth of Nanoparticles in Layered Perovskite La0.8Sr1.2Fe0.9Co0.1O4±δ as an Active and Stable Electrode for Symmetrical Solid Oxide Fuel Cells. *Chemistry of Materials*, **2016**, 28, 2981-2993	9.6	109
442	Mesoporous Monocrystalline TiO2 and Its Solid-State Electrochemical Properties. *Chemistry of Materials*, **2009**, 21, 2540-2546	9.6	107
441	Electrochemical Investigation of Composite Cathodes with SmBa0.5Sr0.5Co2O5+δ Cathodes for Intermediate Temperature-Operating Solid Oxide Fuel Cell *Chemistry of Materials*, **2010**, 22, 883-892	9.6	106
440	Evidence and Model for Strain-Driven Release of Metal Nanocatalysts from Perovskites during Exsolution. *Journal of Physical Chemistry Letters*, **2015**, 6, 5106-10	6.4	103

439	Mixed conductivity and electrochemical behavior of (La0.75Sr0.25)0.95Cr0.5Mn0.5O3 *Solid State Ionics*, **2007**, 178, 101-113	3.3	103
438	Novel tin oxide spinel-based anodes for Li-ion batteries. *Journal of Power Sources*, **2001**, 97-98, 223-225	8.9	98
437	Structural, thermal and electrochemical properties of layered perovskite SmBaCo2O5+d, a potential cathode material for intermediate-temperature solid oxide fuel cells. *Journal of Power Sources*, **2009**, 194, 704-711	8.9	96
436	Electrochemical reduction of CO2 in a proton conducting solid oxide electrolyser. *Journal of Materials Chemistry*, **2011**, 21, 195-198		94
435	Tailoring SOFC Electrode Microstructures for Improved Performance. *Advanced Energy Materials*, **2018**, 8, 1800120	21.8	92
434	Demonstration of chemistry at a point through restructuring and catalytic activation at anchored nanoparticles. *Nature Communications*, **2017**, 8, 1855	17.4	87
433	Methane oxidation at redox stable fuel cell electrode La0.75Sr0.25Cr0.5Mn0.5O(3-delta). *Journal of Physical Chemistry B*, **2006**, 110, 21771-6	3.4	86
432	Electrical conductivity and redox stability of La2Mo2 WxO9 materials. *Electrochimica Acta*, **2005**, 50, 4385-4395	6.7	86
431	Influence of structure and composition upon performance of tin phosphate based negative electrodes for lithium batteries. *Electrochimica Acta*, **2002**, 47, 1727-1738	6.7	83
430	Investigation of Ramsdellite Titanates as Possible New Negative Electrode Materials for Li Batteries. *Journal of the Electrochemical Society*, **1999**, 146, 4348-4353	3.9	83
429	Synthesis and applications of nanoporous perovskite metal oxides. *Chemical Science*, **2018**, 9, 3623-3637	9.4	82
428	The development of a carbon ir semi fuel cell. *Journal of Power Sources*, **2006**, 162, 750-756	8.9	82
427	Structural origins of the differing grain conductivity values in BaZr0.9Y0.1O2.95 and indication of novel approach to counter defect association. *Journal of Materials Chemistry*, **2008**, 18, 3414		79
426	(La,Sr)(Cr,Mn)O3/GDC cathode for high temperature steam electrolysis and steam-carbon dioxide co-electrolysis. *Solid State Ionics*, **2012**, 225, 131-135	3.3	78
425	Li1 + x Fe1 3x Ti1 + 2x O 4 (0.0 x 0.33) Based Spinels: Possible Negative Electrode Materials for Future Li-Ion Batteries. *Journal of the Electrochemical Society*, **1999**, 146, 3958-3962	3.9	78
424	Facile structure design based on C3N4 for mediator-free Z-scheme water splitting under visible light. *Catalysis Science and Technology*, **2015**, 5, 3416-3422	5.5	77
423	Photocatalytic H2 generation from spinels ZnFe2O4, ZnFeGaO4 and ZnGa2O4. *Catalysis Today*, **2013**, 199, 22-26	5.3	77
422	Reduction studies and evaluation of surface modified A-site deficient La-doped SrTiO3 as anode material for IT-SOFCs. *Journal of Materials Chemistry*, **2009**, 19, 8119		77

421	Solid state electrochemistry of direct carbon/air fuel cells. *Solid State Ionics*, **2008**, 179, 1417-1421	3.3	77
420	Layered Intergrowth Phases Bi4MO8X (X=Cl, M=Ta and X=Br, M=Ta or Nb): Structural and Electrophysical Characterization. *Journal of Solid State Chemistry*, **2002**, 166, 148-157	3.3	76
419	La-doped SrTiO3 as anode material for IT-SOFC. *Solid State Ionics*, **2011**, 192, 491-493	3.3	75
418	The role of defect chemistry in strontium titanates utilised for high temperature steam electrolysis. *Journal of Materials Chemistry*, **2011**, 21, 9367		74
417	LSCM(YSZ(GO) composites as improved symmetrical electrodes for solid oxide fuel cells. *Journal of the European Ceramic Society*, **2007**, 27, 4223-4227	6	73
416	Ni/C Slurries Based on Molten Carbonates as a Fuel for Hybrid Direct Carbon Fuel Cells. *Journal of the Electrochemical Society*, **2009**, 156, B716	3.9	70
415	Electronic transport in the novel SOFC anode material La1SrxCr0.5Mn0.5O3 *Solid State Ionics*, **2006**, 177, 2005-2008	3.3	70
414	Enhancing Electronic Conductivity in Strontium Titanates through Correlated A and B-Site Doping. *Chemistry of Materials*, **2011**, 23, 1607-1617	9.6	69
413	The effect of Pt NPs crystallinity and distribution on the photocatalytic activity of Pt-g-C3N4. *Physical Chemistry Chemical Physics*, **2015**, 17, 13929-36	3.6	68
412	An efficient ceramic-based anode for solid oxide fuel cells. *Journal of Power Sources*, **2007**, 171, 663-669	8.9	68
411	Probing the energy levels of perovskite solar cells via Kelvin probe and UV ambient pressure photoemission spectroscopy. *Physical Chemistry Chemical Physics*, **2016**, 18, 19738-45	3.6	67
410	Lattice strain-enhanced exsolution of nanoparticles in thin films. *Nature Communications*, **2019**, 10, 1471	17.4	66
409	Simultaneous cellulose conversion and hydrogen production assisted by cellulose decomposition under UV-light photocatalysis. *Chemical Communications*, **2016**, 52, 1673-6	5.8	66
408	B-site doping of lanthanum strontium titanate for solid oxide fuel cell anodes. *Journal of Power Sources*, **2011**, 196, 7323-7327	8.9	66
407	Composite Oxygen Electrode Based on LSCM for Steam Electrolysis in a Proton Conducting Solid Oxide Electrolyzer. *Journal of the Electrochemical Society*, **2012**, 159, F763-F767	3.9	66
406	Phase Transition in Perovskite Oxide La0.75Sr0.25Cr0.5Mn0.5O3- Observed by in Situ High-Temperature Neutron Powder Diffraction. *Chemistry of Materials*, **2006**, 18, 5453-5460	9.6	66
405	Electrical Properties of Polycrystalline Nickel Zinc Ferrites. *Journal of the American Ceramic Society*, **1990**, 73, 729-732	3.8	66
404	Modified strontium titanates: from defect chemistry to SOFC anodes. *RSC Advances*, **2015**, 5, 1168-1180	3.7	65

403	On the existence of A-site deficiency in perovskites and its relation to the electrochemical performance. *Advanced Materials*, **2012**, 24, 528-32	24	65
402	High H? ionic conductivity in barium hydride. *Nature Materials*, **2015**, 14, 95-100	27	64
401	Electrodeposited NiCu bimetal on carbon paper as stable non-noble anode for efficient electrooxidation of ammonia. *Applied Catalysis B: Environmental*, **2018**, 237, 1101-1109	21.8	63
400	Improved Oxidation of Hydrocarbons with New Electrodes in High Temperature Fuel Cells. *Fuel Cells*, **2001**, 1, 205-210	2.9	62
399	Synthesis and lithium-storage properties of MnO/reduced graphene oxide composites derived from graphene oxide plus the transformation of Mn(VI) to Mn(II) by the reducing power of graphene oxide. *Journal of Materials Chemistry A*, **2015**, 3, 297-303	13	61
398	Characterization of layered perovskite oxides NdBa1−xSrxCo2O5+δ (x = 0 and 0.5) as cathode materials for IT-SOFC. *International Journal of Hydrogen Energy*, **2012**, 37, 5920-5929	6.7	61
397	Investigation of proton conducting BaZr0.9Y0.1O2.95 : BaCe0.9Y0.1O2.95 core–shell structures. *Journal of Materials Chemistry*, **2005**, 15, 598-604		61
396	Structural studies on W6+ and Nd3+ substituted La2Mo2O9 materials. *Journal of Solid State Chemistry*, **2006**, 179, 278-288	3.3	61
395	Formation of two-carbon acids from carbon dioxide by photoreduction on cadmium sulphide. *Journal of the Chemical Society Chemical Communications*, **1988**, 1123		61
394	Comparative assessment of visible light and UV active photocatalysts by hydroxyl radical quantification. *Journal of Photochemistry and Photobiology A: Chemistry*, **2017**, 334, 13-19	4.7	60
393	Structural Disorder in Doped Zirconias, Part I: The Zr0.8Sc0.2−xYxO1.9 (0.0 ≤ x ≤ 0.2) System. *Chemistry of Materials*, **2011**, 23, 1356-1364	9.6	60
392	Impedance Studies on LSCM–GDC Cathode for High Temperature CO2 Electrolysis. *Electrochemical and Solid-State Letters*, **2012**, 15, B31		59
391	Catalysis and oxidation of carbon in a hybrid direct carbon fuel cell. *Journal of Power Sources*, **2011**, 196, 7318-7322	8.9	58
390	Room temperature demonstration of a sodium superionic conductor with grain conductivity in excess of 0.01 S cm−1 and its primary applications in symmetric battery cells. *Journal of Materials Chemistry A*, **2019**, 7, 7766-7776	13	57
389	Oxide Ion Conductivity in the Hexagonal Perovskite Derivative BaMoNbO. *Journal of the American Chemical Society*, **2016**, 138, 16764-16769	16.4	57
388	Oxygen deficient layered double perovskite as an active cathode for CO2 electrolysis using a solid oxide conductor. *Faraday Discussions*, **2015**, 182, 227-39	3.6	56
387	Electrochemical performance of a hybrid direct carbon fuel cell powered by pyrolysed MDF. *Energy and Environmental Science*, **2009**, 2, 687	35.4	56
386	High density and low temperature sintered proton conductor BaCe0.5Zr0.35Sc0.1Zn0.05O3−δ *Solid State Ionics*, **2008**, 179, 678-682	3.3	56

385	Anodic Performance and Intermediate Temperature Fuel Cell Testing of La0.75Sr0.25Cr0.5Mn0.5O3-δ at Lanthanum Gallate Electrolytes. *Chemistry of Materials*, **2006**, 18, 1001-1006	9.6	54
384	Studies on the Reorganization of Extended Defects with Increasing n in the Perovskite-Based La4Srn−4TinO3n+2 Series. *Advanced Functional Materials*, **2005**, 15, 1000-1008	15.6	54
383	Structural and Electrical Properties of the Perovskite Oxide Sr2FeNbO6. *Chemistry of Materials*, **2004**, 16, 2309-2316	9.6	53
382	Water incorporation studies on doped barium cerate perovskites. *Solid State Ionics*, **2003**, 162-163, 83-91	3.3	53
381	High oxide ion and proton conductivity in a disordered hexagonal perovskite. *Nature Materials*, **2020**, 19, 752-757	27	52
380	Investigation of electrical and mechanical properties of 3YSZ/8YSZ composite electrolytes. *Solid State Ionics*, **2009**, 180, 57-62	3.3	52
379	Microstructural optimisation of materials for SOFC applications using PMMA microspheres. *Journal of Materials Chemistry*, **2006**, 16, 540		52
378	Electrochemical Characterization of Ceramic SOFC Anodes. *Journal of the Electrochemical Society*, **2001**, 148, A923	3.9	52
377	Development of anode material based on La-substituted SrTiO3 perovskites doped with manganese and/or gallium for SOFC. *Journal of Power Sources*, **2009**, 192, 43-50	8.9	51
376	Activation and Ripening of Impregnated Manganese Containing Perovskite SOFC Electrodes under Redox Cycling. *Chemistry of Materials*, **2009**, 21, 1077-1084	9.6	51
375	Mn-substituted titanates as efficient anodes for direct methane SOFCs. *Solid State Ionics*, **2006**, 177, 1997-2003	3.3	51
374	Ionic conductivity of amorphous lithium lanthanum titanate thin film. *Solid State Ionics*, **2005**, 176, 553-558	3.3	51
373	Synthesis and electrical characterisation of the tetragonal tungsten bronze type phases, (Ba/Sr/Ca/La)0 6MxNb1−xO3−δ (M=Mg, Ni, Mn, Cr, Fe, In, Sn): evaluation as potential anode materials for solid oxide fuel cells. *Solid State Ionics*, **1999**, 124, 61-72	3.3	51
372	Impact of the annealing temperature on Pt/g-C3N4 structure, activity and selectivity between photodegradation and water splitting. *Catalysis Today*, **2017**, 287, 182-188	5.3	50
371	Phase Relations at 1500°C in the Ternary System ZrO2–Y2O3–TiO2. *Journal of Solid State Chemistry*, **1999**, 143, 273-276	3.3	50
370	Effects of nanocrystallization upon the soft magnetic properties of Co-based amorphous alloys. *Journal of Applied Physics*, **1994**, 75, 6940-6942	2.5	49
369	Charge carrier localised in zero-dimensional (CHNH)BiI clusters. *Nature Communications*, **2017**, 8, 170	17.4	48
368	Evaluation of Ca Doped La0.2Sr0.7TiO3as an Alternative Material for Use in SOFC Anodes. *Journal of the Electrochemical Society*, **2012**, 159, F757-F762	3.9	48

367	Improvement of the electrochemical properties of novel solid oxide fuel cell anodes, La0.75Sr0.25Cr0.5Mn0.5O3 and La4Sr8Ti11Mn0.5Ga0.5O37.5 using Cu YSZ-based cermets. *Electrochimica Acta*, **2007**, 52, 7217-7225	6.7	48
366	Ce-substituted LSCM as new anode material for SOFC operating in dry methane. *Solid State Ionics*, **2008**, 179, 1562-1566	3.3	48
365	Optimization of Mixed Conducting Properties of Y2O3 ZrO2 TiO2 and Sc2O3 Y2O3 ZrO2 TiO2 Solid Solutions as Potential SOFC Anode Materials. *Journal of Solid State Chemistry*, **2002**, 165, 12-18	3.3	48
364	Niobium based tetragonal tungsten bronzes as potential anodes for solid oxide fuel cells: synthesis and electrical characterisation. *Solid State Ionics*, **1999**, 120, 125-134	3.3	48
363	The AC Impedance Response of the Physical Interface Between Yttria-Stabilized Zirconia and YBa2Cu3 O 7 x. *Journal of the Electrochemical Society*, **1995**, 142, 2650-2654	3.9	48
362	Synthesis, sinterability and ionic conductivity of nanocrystalline La2Mo2O9 powders. *Solid State Ionics*, **2005**, 176, 1807-1816	3.3	47
361	Combined X-ray study of lithium (tin) cobalt oxide matrix negative electrodes for Li-ion batteries. *Electrochimica Acta*, **2002**, 47, 2885-2892	6.7	46
360	Qualitative X-ray Diffraction Analysis of Metastable Tetragonal (t?) Zirconia. *Journal of the American Ceramic Society*, **2001**, 84, 615-618	3.8	46
359	Modification of LSCM GDC cathodes to enhance performance for high temperature CO2 electrolysis using solid oxide electrolysis cells (SOECs). *Journal of Materials Chemistry A*, **2017**, 5, 7081-7090	13	45
358	Ca-substituted, A-site deficient perovskite La0.2Sr0.7TiO3 as a potential anode material for SOFCs. *Journal of Materials Chemistry A*, **2013**, 1, 5868	13	45
357	Homogeneous Doping of Substitutional Nitrogen/Carbon in TiO2 Plates for Visible Light Photocatalytic Water Oxidation. *Advanced Functional Materials*, **2019**, 29, 1901943	15.6	44
356	Nature and extent of oxygen nonstoichiometry in Bi2Sr2CaCu2O8+ *Journal of Solid State Chemistry*, **1990**, 87, 29-34	3.3	44
355	Structural and electrical properties of calcium and strontium hydrides. *Journal of Materials Chemistry*, **2009**, 19, 2766		43
354	Co-doping of scandia-zirconia electrolytes for SOFCs. *Faraday Discussions*, **2007**, 134, 41-9; discussion 103-18, 415-9	3.6	43
353	Structural Chemistry and Conductivity of a Solid Solution of YBa1-xSrxCo2O5+ *Journal of Physical Chemistry C*, **2007**, 111, 19120-19125	3.8	43
352	Hydrogen titanates as potential proton conducting fuel cell electrolytes. *Solid State Ionics*, **2000**, 136-137, 297-303	3.3	43
351	Equation of motion of domain walls and equivalent circuits in soft ferromagnetic materials. *Journal of Applied Physics*, **1994**, 75, 7000-7002	2.5	43
350	Effects of thermal annealing on the magnetization dynamics of vitrovac amorphous ribbons. *Journal of Applied Physics*, **1992**, 72, 1486-1489	2.5	42

349	Modeling of CH4-assisted SOEC for H2O/CO2 co-electrolysis. *International Journal of Hydrogen Energy*, **2016**, 41, 21839-21849	6.7	42
348	Smart utilization of cobaltite-based double perovskite cathodes on barrier-layer-free zirconia electrolyte of solid oxide fuel cells. *Journal of Materials Chemistry A*, **2016**, 4, 19019-19025	13	41
347	The cyclic voltammetry of some sulphonated transition metal phthalocyanines in dimethylsulphoxide and in water. *Journal of Electroanalytical Chemistry and Interfacial Electrochemistry*, **1989**, 271, 161-172		39
346	Cellulose II as bioethanol feedstock and its advantages over native cellulose. *Renewable and Sustainable Energy Reviews*, **2017**, 77, 182-192	16.2	38
345	Substitutional Carbon-Modified Anatase TiO Decahedral Plates Directly Derived from Titanium Oxalate Crystals via Topotactic Transition. *Advanced Materials*, **2018**, 30, e1705999	24	38
344	Nickel nanocatalyst exsolution from (La,Sr) (Cr,M,Ni)O3 (MMn,Fe) perovskites for the fuel oxidation layer of Oxygen Transport Membranes. *Solid State Ionics*, **2016**, 288, 120-123	3.3	38
343	Doped tin oxides as potential lithium ion battery negative electrodes. *Ionics*, **1999**, 5, 450-454	2.7	38
342	Development of tubular hybrid direct carbon fuel cell. *International Journal of Hydrogen Energy*, **2012**, 37, 19337-19344	6.7	37
341	Electrolysis of CO2 in a proton conducting membrane. *Solid State Ionics*, **2013**, 252, 157-164	3.3	37
340	Oxygen stoichiometry-Tccorrelations in Bi2Sr2CaCu2O8+x. *Superconductor Science and Technology*, **1989**, 2, 181-184	3.1	37
339	Enhanced carbon dioxide electrolysis at redox manipulated interfaces. *Nature Communications*, **2019**, 10, 1550	17.4	36
338	Nano-composite structural Ni–Sn alloy anodes for high performance and durability of direct methane-fueled SOFCs. *Journal of Materials Chemistry A*, **2015**, 3, 13801-13806	13	36
337	Structure–property relationship in layered perovskite cathode LnBa0.5Sr0.5Co2O5+δ (Ln = Pr, Nd) for solid oxide fuel cells. *Journal of Power Sources*, **2011**, 196, 7333-7337	8.9	36
336	An NMR Investigation of Lithium Occupancy of Different Sites in the Oxide Superconductor LiTi2O4 and Related Compounds. *Journal of Solid State Chemistry*, **2000**, 152, 397-402	3.3	36
335	Absence of critical temperature plateaux in quenched samples of YBa2Cu3Ox. *Physica C: Superconductivity and Its Applications*, **1990**, 168, 346-350	1.3	36
334	Role of coal characteristics in the electrochemical behaviour of hybrid direct carbon fuel cells. *Energy and Environmental Science*, **2016**, 9, 2868-2880	35.4	36
333	Demonstration of high performance in a perovskite oxide supported solid oxide fuel cell based on La and Ca co-doped SrTiO3. *Journal of Materials Chemistry A*, **2016**, 4, 11708-11718	13	35
332	A Novel Direct Carbon Fuel Cell Concept. *Journal of Fuel Cell Science and Technology*, **2007**, 4, 280-282		35

331	Modulated Fluorite-Type Structure of Materials from the (1−x)Y0.5Zr0.5O1.75−xY0.75Nb0.25O1.75 (0≤x≤1) System. *Chemistry of Materials*, **2000**, 12, 1729-1737	9.6	35
330	Investigation of Microstructural and Electrochemical Properties of Impregnated (La,Sr)(Ti,Mn)O3−δ as a Potential Anode Material in High-Temperature Solid Oxide Fuel Cells. *Chemistry of Materials*, **2011**, 23, 3841-3847	9.6	34
329	Investigation of the Relationship between the Structure and Conductivity of the Novel Oxide Ionic Conductor Ba3MoNbO8.5. *Chemistry of Materials*, **2017**, 29, 4146-4152	9.6	33
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