

# Uday B Pal

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

142  
papers

1,795  
citations

23  
h-index

36  
g-index

161  
ext. papers

1,970  
ext. citations

3.3  
avg, IF

4.88  
L-index

#	Paper	IF	Citations
142	Solid Oxide Membrane (SOM)-Based Technology for Carbon-Free Efficient Production of Solar-Grade Silicon. <i>Minerals, Metals and Materials Series</i> , <b>2022</b> , 659-668	0.3	
141	Macroscopic Modeling and Phase Field Modeling of Solar Grade Silicon by Molten Salt Electrolysis. <i>Minerals, Metals and Materials Series</i> , <b>2022</b> , 41-45	0.3	
140	Finite Element Analysis and Techno-economic Modeling of Solar Silicon Molten Salt Electrolysis. <i>Jom</i> , <b>2021</b> , 73, 233-243	2.1	3
139	Alternating-Current Electrophoretic Deposition of Spinel Coatings on Porous Metallic Substrates for Solid Oxide Fuel Cell Applications. <i>Jom</i> , <b>2021</b> , 73, 2764-2770	2.1	0
138	Exploring the Role of Humidity, Temperature, and Mixed Ionic and Electronic Conductivity on SOFC Anode Electrocatalysis. <i>Jom</i> , <b>2021</b> , 73, 2771-2780	2.1	0
137	Electrochemical cleaning: An in-Situ method to reverse chromium poisoning in solid oxide fuel cell cathodes. <i>Journal of Power Sources</i> , <b>2020</b> , 471, 228474	8.9	5
136	Characterizing Performance of Electrocatalyst Nanoparticles Infiltrated into Ni-YSZ Cermet Anodes for Solid Oxide Fuel Cells. <i>Journal of the Electrochemical Society</i> , <b>2020</b> , 167, 054515	3.9	4
135	Improving SOFC Anode Electrocatalytic Activity Using Nanoparticle Infiltration into MIEC Compositions. <i>Journal of the Electrochemical Society</i> , <b>2020</b> , 167, 134506	3.9	4
134	Detailed electrochemical performance and microstructural characterization of nickel Yttria stabilized zirconia cermet anodes infiltrated with nickel, gadolinium doped ceria, and nickel Gadolinium doped ceria nanoparticles. <i>Journal of Power Sources</i> , <b>2020</b> , 447, 227357	8.9	6
133	Experimental validation of solid oxide fuel cell polarization modeling: An LSM-YSZ/YSZ/Ni-YSZ case study. <i>Electrochimica Acta</i> , <b>2020</b> , 361, 137052	6.7	0
132	Comparison of chromium poisoning between lanthanum strontium manganite and lanthanum strontium ferrite composite cathodes in solid oxide fuel cells. <i>Journal of Power Sources</i> , <b>2020</b> , 476, 228743	8.9	5
131	Multiple cycle chromium poisoning and in-situ electrochemical cleaning of LSM-based solid oxide fuel cell cathodes. <i>Journal of Power Sources Advances</i> , <b>2020</b> , 6, 100037	3.3	1
130	Electrophoretically Deposited Copper Manganese Spinel Coatings for Prevention of Chromium Poisoning in Solid Oxide Fuel Cells. <i>Minerals, Metals and Materials Series</i> , <b>2019</b> , 265-272	0.3	1
129	Measurement of Bulk Oxygen Diffusivity in (La <sub>0.8</sub> Sr <sub>0.2</sub> ) <sub>0.95</sub> MnO <sub>3</sub> . <i>Jom</i> , <b>2019</b> , 71, 96-102	2.1	2
128	Co-infiltration of Nickel and Mixed Conducting Gd <sub>0.1</sub> Ce <sub>0.9</sub> O <sub>2</sub> and La <sub>0.6</sub> Sr <sub>0.3</sub> Ni <sub>0.15</sub> Cr <sub>0.85</sub> O <sub>3</sub> Phases in Ni-YSZ Anodes for Improved Stability and Performance. <i>Jom</i> , <b>2019</b> , 71, 3835-3847	2.1	5
127	Improved Tolerance of Lanthanum Nickelate (La <sub>2</sub> NiO <sub>4</sub> ) Cathodes to Chromium Poisoning Under Current Load in Solid Oxide Fuel Cells. <i>Jom</i> , <b>2019</b> , 71, 3848-3858	2.1	4
126	Effect of anodic current density on the spreading of infiltrated nickel nanoparticles in nickel-yttria stabilized zirconia cermet anodes. <i>Journal of Power Sources</i> , <b>2019</b> , 410-411, 196-203	8.9	9

125	Effect of optical basicity on the stability of yttria-stabilized zirconia in contact with molten oxy-fluoride flux. <i>Journal of the American Ceramic Society</i> , <b>2018</b> , 101, 3605-3616	3.8	3
124	CuMn <sub>1.8</sub> O <sub>4</sub> protective coatings on metallic interconnects for prevention of Cr-poisoning in solid oxide fuel cells. <i>Journal of Power Sources</i> , <b>2018</b> , 378, 125-133	8.9	42
123	A New Approach to Processing Rutile from Ilmenite Ore Utilizing the Instability of Pseudobrookite. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2018</b> , 49, 2278-2284	2.5	2
122	Improving intermediate temperature performance of Ni-YSZ cermet anodes for solid oxide fuel cells by liquid infiltration of nickel nanoparticles. <i>Journal of Power Sources</i> , <b>2018</b> , 396, 257-264	8.9	31
121	Mitigation of chromium poisoning of cathodes in solid oxide fuel cells employing CuMn <sub>1.8</sub> O <sub>4</sub> spinel coating on metallic interconnect. <i>Journal of Power Sources</i> , <b>2018</b> , 376, 100-110	8.9	41
120	Effect of Humidity and Cathodic Current on Chromium Poisoning of Sr-Doped LaMnO <sub>3</sub> -Based Cathode in Anode-Supported Solid Oxide Fuel Cells. <i>ECS Transactions</i> , <b>2017</b> , 75, 61-67	1	2
119	Solid Oxide Membrane Electrolysis Process for Aluminum Production: Experiment and Modeling. <i>Journal of the Electrochemical Society</i> , <b>2017</b> , 164, F248-F255	3.9	9
118	Roles of humidity and cathodic current in chromium poisoning of Sr-doped LaMnO <sub>3</sub> -based cathodes in solid oxide fuel cells. <i>Journal of Power Sources</i> , <b>2017</b> , 360, 87-97	8.9	28
117	Preface for Thematic Section: Molten Slags, Fluxes, and Salts for Sustainable Processing. <i>Journal of Sustainable Metallurgy</i> , <b>2017</b> , 3, 669-670	2.7	
116	Chromium Poisoning of Cathodes in Solid Oxide Fuel Cells and its Mitigation Employing CuMn <sub>1.8</sub> O <sub>4</sub> Spinel Coatings on Interconnects. <i>ECS Transactions</i> , <b>2017</b> , 78, 1665-1674	1	5
115	Enhancing Anodic Catalytic Activity at High Fuel Utilization By Infiltration of Ni Nanoparticles. <i>ECS Transactions</i> , <b>2017</b> , 78, 1397-1405	1	3
114	Chromium Poisoning Effects on Performance of (La,Sr)MnO <sub>3</sub> -Based Cathode in Anode-Supported Solid Oxide Fuel Cells. <i>Journal of the Electrochemical Society</i> , <b>2017</b> , 164, F740-F747	3.9	16
113	Cu <sub>1.3</sub> Mn <sub>1.7</sub> O <sub>4</sub> spinel coatings deposited by electrophoretic deposition on Crofer 22 APU substrates for solid oxide fuel cell applications. <i>Surface and Coatings Technology</i> , <b>2017</b> , 323, 49-57	4.4	42
112	Molten Flux Design for Solid Oxide Membrane-Based Electrolysis of Aluminum from Alumina. <i>Minerals, Metals and Materials Series</i> , <b>2017</b> , 35-44	0.3	2
111	Zero-Direct-Carbon-Emission Aluminum Production by Solid Oxide Membrane-Based Electrolysis Process <b>2016</b> , 781-790		
110	Clean Metals Production by Solid Oxide Membrane Electrolysis Process. <i>Journal of Sustainable Metallurgy</i> , <b>2016</b> , 2, 152-166	2.7	24
109	Techniques for Measuring Solubility and Electrical Conductivity in Molten Salts <b>2016</b> , 465-475		2
108	Zero-Direct-Carbon-Emission Aluminum Production by Solid Oxide Membrane-Based Electrolysis Process <b>2016</b> , 781-790		1

107 Surface Properties of Molten Fluoride-Based Salts **2016**, 597-605

106 Techniques for Measuring Solubility and Electrical Conductivity in Molten Salts **2016**, 463-475

105 Surface Properties of Molten Fluoride-Based Salts **2016**, 597-605

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104 Chemical characterization of surface precipitates in  $\text{La}_{0.7}\text{Sr}_{0.3}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3-\delta}$  cathode material for solid oxide fuel cells. *Journal of Power Sources*, **2016**, 333, 247-253

8.9

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103 Effect of Sr Content and Strain on Sr Surface Segregation of  $\text{LaSrCoFeO}$  as Cathode Material for Solid Oxide Fuel Cells. *ACS Applied Materials & Interfaces*, **2016**, 8, 26704-26711

9.5

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102 Simple method for determining metal power oxidation kinetics with a zirconia sensor. *Journal of Applied Electrochemistry*, **2015**, 45, 1025-1034

2.6

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101 Design of optimum solid oxide membrane electrolysis cells for metals production. *Progress in Natural Science: Materials International*, **2015**, 25, 591-594

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100 Mixed ionic electronic conducting powder bed for grid level energy storage and release: A study of tungsten oxide reduction kinetics. *International Journal of Hydrogen Energy*, **2015**, 40, 3624-3632

6.7

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99 Evaluating Electrophoretically Deposited Cu-Mn-O Spinel Coatings on Stainless Steel Substrates Used in Solid Oxide Fuel Cell Interconnects **2015**, 337-344

98 Predicting oxygen vacancy non-stoichiometric concentration in perovskites from first principles. *Applied Surface Science*, **2014**, 323, 65-70

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97 Surface Segregation and Phase Formation in Thin Films of SOFC Cathode Materials **2014**, 247-258

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96 Effect of Carbon Dioxide on the Cathodic Performance of Solid Oxide Fuel Cells. *ECS Transactions*, **2014**, 61, 131-137

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95 Mitigating Electronic Current in Molten Flux for the Magnesium SOM Process. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2014**, 45, 1325-1336

2.5

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94 Energy-Efficient and Environmentally Friendly Solid Oxide Membrane Electrolysis Process for Magnesium Oxide Reduction: Experiment and Modeling. *Metallurgical and Materials Transactions E*, **2014**, 1, 132-144

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93 Stability of yttria stabilized zirconia in molten oxy-fluorite flux for the production of silicon with the solid oxide membrane process. *Journal of the European Ceramic Society*, **2014**, 34, 3887-3896

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92 Electrochemical Characterization and Modeling of a Solid Oxide Membrane-Based Electrolyzer for Production of Magnesium and Oxygen **2014**, 417-424

91 Effect of atmospheric  $\text{CO}_2$  on surface segregation and phase formation in  $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3-\delta}$  thin films. *Applied Surface Science*, **2014**, 323, 71-77

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90 Periodic Shorting of SOM Cell to Remove Soluble Magnesium in Molten Flux and Improve Faradaic Efficiency. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2014**, 45, 2138-2144

2.5

15

89	Effect of Atmospheric Carbon Dioxide on Surface Segregation and Phase Formation in La <sub>0.6</sub> Sr <sub>0.4</sub> Co <sub>0.2</sub> Fe <sub>0.8</sub> O <sub>3-<math>\delta</math></sub> Thin Films. <i>Materials Research Society Symposia Proceedings</i> , <b>2014</b> , 1647, 1		
88	Electrochemical Characterization and Modeling of a Solid Oxide Membrane-Based Electrolyzer for Production of Magnesium and Oxygen <b>2014</b> , 417-424		
87	An Environmentally Friendly Process Involving Refining and Membrane-Based Electrolysis for Magnesium Recovery from Partially Oxidized Scrap Alloy. <i>Jom</i> , <b>2013</b> , 65, 1285-1292	2.1	16
86	Recycling of Magnesium Alloy Employing Refining and Solid Oxide Membrane (SOM) Electrolysis. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2013</b> , 44, 261-271	2.5	18
85	Study of the two-step W/WO <sub>3</sub> solar to fuel conversion cycle for syngas production. <i>Journal of Power Sources</i> , <b>2013</b> , 236, 95-102	8.9	8
84	Determining Ytria-Stabilized Zirconia (YSZ) Stability in Molten Oxy-Fluoride Flux for the Production of Magnesium with the SOM Process. <i>Journal of the American Ceramic Society</i> , <b>2013</b> , 96, 3279-3285	3.8	19
83	Production of Silicon from Silica: Solid-Oxide-Membrane Based Electrolysis Process <b>2013</b> , 173-183		
82	Production of Silicon by Solid Oxide Membrane-Based Electrolysis Process. <i>Materials Research Society Symposia Proceedings</i> , <b>2013</b> , 1493, 231-235		19
81	LSM (La <sub>0.8</sub> Sr <sub>0.2</sub> MnO <sub>3-<math>\delta</math></sub> )/Hconel Inert Anode Current Collector for Solid Oxide Membrane (SOM) Electrolysis. <i>Journal of the Electrochemical Society</i> , <b>2013</b> , 160, F1179-F1186	3.9	21
80	Estimation of Sulfide Capacities of Multicomponent Slags using Optical Basicity. <i>ISIJ International</i> , <b>2013</b> , 53, 761-767	1.7	37
79	Study of an Energy Storage and Recovery Concept Based on the W/WO <sub>3</sub> Redox Reaction: Part I. Kinetic Study and Modeling of the WO <sub>3</sub> Reduction Process for Energy Storage. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2012</b> , 43, 1001-1010	2.5	8
78	(Invited) Solid Oxide Membrane Process for the Reduction of Uranium Oxide Surrogate in Spent Nuclear Fuel. <i>ECS Transactions</i> , <b>2012</b> , 41, 171-180	1	10
77	Hard X-ray Fluorescence Measurements of Heteroepitaxial Solid Oxide Fuel Cell Cathode Materials. <i>ECS Transactions</i> , <b>2012</b> , 41, 19-24	1	6
76	(Invited) Electrolyzer for Waste to Energy Conversion. <i>ECS Transactions</i> , <b>2012</b> , 41, 93-101	1	2
75	2D Numerical Model for Identification of Oxygen Reduction Reaction Mechanisms in Patterned Cathodes of La <sub>0.6</sub> Sr <sub>0.4</sub> Co <sub>0.2</sub> Fe <sub>0.8</sub> O <sub>3-<math>\delta</math></sub> . <i>Journal of the Electrochemical Society</i> , <b>2012</b> , 159, F419-F425	3.9	6
74	Magnesium Recycling of Partially Oxidized, Mixed Magnesium-Aluminum Scrap through Combined Refining and Solid Oxide Membrane Electrolysis Processes. <i>ECS Transactions</i> , <b>2012</b> , 41, 91-101	1	3
73	Magnesium Recycling of Partially Oxidized, Mixed Magnesium-Aluminum Scrap through Combined Refining and Solid Oxide Membrane (SOM) Electrolysis Processes <b>2012</b> , 531-535		
72	Hydrogen generation and separation using Gd <sub>0.2</sub> Ce <sub>0.8</sub> O <sub>1.9</sub> /La <sub>0.08</sub> Sr <sub>0.88</sub> Ti <sub>0.95</sub> Al <sub>0.05</sub> O <sub>3-<math>\delta</math></sub> mixed ionic and electronic conducting membranes. <i>Electrochimica Acta</i> , <b>2011</b> , 56, 6989-6996	6.7	27

71	A solid oxide membrane electrolyzer for production of hydrogen and syn-gas from steam and hydrocarbon waste in a single step. <i>International Journal of Hydrogen Energy</i> , <b>2011</b> , 36, 152-159	6.7	12
70	Application of a State-Space Model to Patterned Cathodes of (La <sub>0.87</sub> Ca <sub>0.13</sub> ) <sub>0.95</sub> MnO <sub>3</sub> . <i>Journal of the Electrochemical Society</i> , <b>2011</b> , 158, B1523	3.9	2
69	Mechanistic Interpretation of the Oxygen Reduction Kinetics of La <sub>0.85</sub> Ca <sub>0.15</sub> MnO <sub>3</sub> Cathode. <i>ECS Transactions</i> , <b>2011</b> , 35, 2119-2127	1	
68	Polarization Resistance of La <sub>0.85</sub> Ca <sub>0.15</sub> MnO <sub>3</sub> Cathodes for Solid Oxide Fuel Cells (SOFCs) Measured Using Patterned Electrodes. <i>ECS Transactions</i> , <b>2010</b> , 28, 137-146	1	1
67	Cost-Effective Single Step Cofiring Process for Manufacturing Solid Oxide Fuel Cells Using HSC $\square$ Anode. <i>Journal of Fuel Cell Science and Technology</i> , <b>2010</b> , 7,		9
66	Out-of-cell measurements of H <sub>2</sub> H <sub>2</sub> O effective binary diffusivity in the porous anode of solid oxide fuel cells (SOFCs). <i>Journal of Power Sources</i> , <b>2010</b> , 195, 532-535	8.9	43
65	Defect Chemistry and Electrical Properties of (La <sub>0.8</sub> Ca <sub>0.2</sub> ) <sub>0.95</sub> FeO <sub>3</sub> . <i>Journal of the Electrochemical Society</i> , <b>2009</b> , 156, B795	3.9	21
64	Analysis of Electrochemical Performance of SOFCs Using Polarization Modeling and Impedance Measurements. <i>Journal of the Electrochemical Society</i> , <b>2009</b> , 156, B311	3.9	33
63	Analysis of the Electronic and Ionic Conductivity of Calcium-Doped Lanthanum Ferrite. <i>Electrochemical and Solid-State Letters</i> , <b>2009</b> , 12, B141		9
62	Electrochemical Characterization of a Solid Oxide Membrane Electrolyzer for Production of High-Purity Hydrogen. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2009</b> , 40, 1041-1053	2.5	7
61	Hydrogen Production Using Solid Oxide Membrane Electrolyzer with Solid Carbon Reductant in Liquid Metal Anode. <i>Journal of the Electrochemical Society</i> , <b>2009</b> , 156, B1067	3.9	9
60	Transport Through Electrophoretically Deposited CuMn <sub>1.8</sub> O <sub>4</sub> Spinel Coatings on Crofer Interconnects. <i>Materials Research Society Symposia Proceedings</i> , <b>2008</b> , 1126, 1		
59	Evaluation of Electrophoretically Deposited CuMn <sub>1.8</sub> O <sub>4</sub> Spinel Coatings on Crofer 22 APU for Solid Oxide Fuel Cell Interconnects. <i>Journal of the Electrochemical Society</i> , <b>2008</b> , 155, B1161	3.9	35
58	Evaluation of Electrophoretically Deposited CuMn <sub>1.8</sub> O <sub>4</sub> Spinel Coatings On Metallic Interconnects for SOFC Applications. <i>ECS Transactions</i> , <b>2008</b> , 13, 405-411	1	4
57	Analysis of Electrochemical Performance of Single Step Co-fired Solid Oxide Fuel Cell (SOFC) Analyzed Using Polarization Model and Impedance Spectroscopy. <i>Materials Research Society Symposia Proceedings</i> , <b>2008</b> , 1126, 1		
56	Effect of Anode Active Layer on Performance of Single-Step Cofired Solid Oxide Fuel Cells. <i>Journal of the Electrochemical Society</i> , <b>2008</b> , 155, B610	3.9	14
55	Fabrication of Porous Supported MIEC Dense Thin Coating for Hydrogen Separation. <i>ECS Transactions</i> , <b>2008</b> , 13, 201-213	1	
54	Electrical Performance of Calcium doped Lanthanum Ferrite for use in Single-Step Co-fired Solid Oxide Fuel Cells (SOFCs). <i>Materials Research Society Symposia Proceedings</i> , <b>2008</b> , 1126, 1		

53	A lower carbon footprint process for production of metals from their oxide sources. <i>Jom</i> , <b>2008</b> , 60, 43-47.1	2.1	23
52	Effects of particle size of 8 mol% Y2O3 stabilized ZrO2 (YSZ) and additive Ta2O5 on the phase composition and the microstructure of sintered YSZ electrolyte. <i>Journal of Materials Processing Technology</i> , <b>2008</b> , 200, 199-204	5.3	10
51	Measurement of partial oxygen ion conductivity of Sr-doped lanthanum manganite. <i>Journal of Power Sources</i> , <b>2007</b> , 173, 887-890	8.9	8
50	The use of solid-oxide-membrane technology for electrometallurgy. <i>Jom</i> , <b>2007</b> , 59, 44-49	2.1	78
49	Oxidation Studies on Crofer 22 APU Alloy Under Simulated SOFC Operating Conditions. <i>ECS Transactions</i> , <b>2007</b> , 7, 2379-2384	1	5
48	Effect of Fuel Composition on Performance of Single-Step Cofired SOFCs. <i>Journal of the Electrochemical Society</i> , <b>2007</b> , 154, B1080	3.9	20
47	High Performance Low Cost Co-Fired Solid Oxide Fuel Cells. <i>ECS Transactions</i> , <b>2007</b> , 7, 579-588	1	5
46	Effect of Surface-Exchange Catalyst on the Transport Properties of MIEC Membrane for Hydrogen Separation. <i>ECS Transactions</i> , <b>2007</b> , 6, 1-6	1	4
45	Refractory Cathode Investigation for Single-Step Co-fired Solid Oxide Fuel Cells. <i>ECS Transactions</i> , <b>2007</b> , 7, 399-404	1	1
44	Electrochemical Performance of Solid Oxide Fuel Cells Manufactured by Single Step Co-firing Process. <i>Journal of the Electrochemical Society</i> , <b>2007</b> , 154, B389	3.9	42
43	Polarization measurements on single-step co-fired solid oxide fuel cells (SOFCs). <i>Journal of Power Sources</i> , <b>2007</b> , 172, 39-49	8.9	90
42	Performance of intermediate temperature (600-800°C) solid oxide fuel cell based on Sr and Mg doped lanthanum-gallate electrolyte. <i>Journal of Power Sources</i> , <b>2006</b> , 160, 305-315	8.9	26
41	Use of Conductivity Relaxation Experiments to Evaluate Surface-Exchange Catalysts. <i>Electrochemical and Solid-State Letters</i> , <b>2006</b> , 9, A179		5
40	High Performance Single Step Co-Fired Solid Oxide Fuel Cells. <i>Materials Research Society Symposia Proceedings</i> , <b>2006</b> , 972, 1		2
39	Regenerative, coal-based solid oxide fuel cell-electrolyzers. <i>Journal of Power Sources</i> , <b>2006</b> , 162, 74-80	8.9	33
38	Modeling and Scaleup of Galvanic Deoxidation of Molten Metals Using Solid Electrolyte Cells. <i>Journal of the American Ceramic Society</i> , <b>2005</b> , 79, 641-650	3.8	6
37	Solid Oxide Membrane (SOM) technology for environmentally sound production of tantalum metal and alloys from their oxide sources. <i>Scandinavian Journal of Metallurgy</i> , <b>2005</b> , 34, 293-301		42
36	Results demonstrating techniques for enhancing electrochemical reactions involving iron oxide in slags and C in liquid iron. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2005</b> , 36, 209-218	2.5	11

35	Solid oxide membrane process for magnesium production directly from magnesium oxide. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>2005</b> , 36, 463-473	2.5	117
34	Materials System for Intermediate-Temperature (600-800°C) SOFCs Based on Doped Lanthanum-Gallate Electrolyte. <i>Journal of the Electrochemical Society</i> , <b>2005</b> , 152, A1890	3.9	13
33	Gd <sub>0.2</sub> Ce <sub>0.8</sub> O <sub>1.9</sub> -Y <sub>0.08</sub> Sr <sub>0.88</sub> Ti <sub>0.95</sub> Al <sub>0.05</sub> O <sub>3+δ</sub> Composite Mixed Conductors for Hydrogen Separation. <i>Journal of the Electrochemical Society</i> , <b>2005</b> , 152, A1726	3.9	12
32	Oxygen flux and process analysis of hydrogen separation from water through mixed conducting membrane. <i>Materials Research Society Symposia Proceedings</i> , <b>2005</b> , 885, 1		
31	Polarization study on doped lanthanum gallate electrolyte using impedance spectroscopy. <i>Journal of Materials Engineering and Performance</i> , <b>2004</b> , 13, 274-281	1.6	5
30	Cathodic Polarization Study on Doped Lanthanum Gallate Electrolyte Using Impedance Spectroscopy. <i>Journal of Electroceramics</i> , <b>2004</b> , 13, 653-661	1.5	4
29	Identifying the path to successful green manufacturing. <i>Jom</i> , <b>2002</b> , 54, 25-25	2.1	10
28	Determining physio-chemical properties of slags by electrical measurements. <i>Jom</i> , <b>2002</b> , 54, 57-61	2.1	6
27	Emerging technologies for metals production. <i>Jom</i> , <b>2001</b> , 53, 27-27	2.1	2
26	Emerging SOM technology for the green synthesis of metals from oxides. <i>Jom</i> , <b>2001</b> , 53, 32-35	2.1	79
25	Electrowinning Magnesium Metal from MgCl <sub>2</sub> -NdOCl Melt Using Solid-Oxide Oxygen-Ion-Conducting Membrane Technology. <i>High Temperature Materials and Processes</i> , <b>2001</b> , 20, 209-218	0.9	1
24	Rate of Reduction of Ferric and Ferrous Oxide from Calcia-Silica-Alumina Slag by Carbon in Liquid Iron. <i>ISIJ International</i> , <b>1999</b> , 39, 103-112	1.7	10
23	Thermodynamic Stability and Interfacial Impedance of Solid-Electrolyte Cells with Noble-Metal Electrodes <b>1999</b> , 3, 279-299		19
22	Experimental evidence for electrochemical nature of the reaction between iron oxide in calcia-silica-alumina slag and carbon in liquid iron. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , <b>1999</b> , 30, 877-889	2.5	14
21	Relationship between activity and three phase boundary in the ternary phase diagram. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , <b>1999</b> , 23, 165-172	1.9	1
20	Comparison of Power Densities and Chemical Potential Variation in Solid Oxide Fuel Cells with Multilayer and Single-Layer Oxide Electrolytes. <i>Journal of the Electrochemical Society</i> , <b>1998</b> , 145, 99-106	3.9	10
19	Transient and Permanent Effects of Direct Current on Oxygen Transfer across YSZ-Electrode Interfaces. <i>Journal of the Electrochemical Society</i> , <b>1997</b> , 144, 2479-2485	3.9	16
18	Activities and ternary phase diagrams. <i>Calphad: Computer Coupling of Phase Diagrams and Thermochemistry</i> , <b>1997</b> , 21, 483-495	1.9	1



17	Analytic Solution for Charge Transport and Chemical-Potential Variation in Single-Layer and Multilayer Devices of Different Mixed-Conducting Oxides. <i>Journal of the Electrochemical Society</i> , <b>1996</b> , 143, 3214-3222	3.9	47
16	Incorporation of Chlorine in a Secondary Steelmaking Slag Based on the CaO-Al <sub>2</sub> O <sub>3</sub> -SiO <sub>2</sub> System.. <i>ISIJ International</i> , <b>1996</b> , 36, 1119-1126	1.7	3
15	Incorporation of Sulfur in an Optimized Ladle Steelmaking Slag.. <i>ISIJ International</i> , <b>1996</b> , 36, 402-409	1.7	2
14	Deoxidation of Molten Steel Using a Short-Circuited Solid Oxide Electrochemical Cell. <i>Journal of the Electrochemical Society</i> , <b>1995</b> , 142, 469-475	3.9	13
13	Laboratory Scale Refining Studies on Low Carbon Aluminum Killed Steels Using Synthetic Fluxes.. <i>ISIJ International</i> , <b>1994</b> , 34, 140-149	1.7	5
12	Kinetic Studies on the Desulfurization of Aluminum Killed Low Carbon Steel Using Synthetic Fluxes. <i>Canadian Metallurgical Quarterly</i> , <b>1994</b> , 33, 305-312	0.9	4
11	Deoxidation of Molten Metals by Short Circuiting Yttria-Stabilized Zirconia Electrolyte Cell. <i>Journal of the Electrochemical Society</i> , <b>1994</b> , 141, 467-474	3.9	15
10	Removal of FeO during Foaming of CaO-Al <sub>2</sub> O <sub>3</sub> -SiO <sub>2</sub> -FeO Slags by Low Carbon-Iron Melts.. <i>ISIJ International</i> , <b>1994</b> , 34, 408-413	1.7	12
9	A General Model for BOP Decarburization.. <i>ISIJ International</i> , <b>1993</b> , 33, 862-868	1.7	17
8	Oxygen Pressure Dependence of Lead Ion Transport in PbO-SiO <sub>2</sub> Melts. <i>Journal of the American Ceramic Society</i> , <b>1985</b> , 68, C-104-C-105	3.8	1
7	Electronic and ionic transport in liquid PbO-SiO <sub>2</sub> systems. <i>Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science</i> , <b>1985</b> , 16, 77-82		12
6	Electrical Conductivity of PbO-SiO <sub>2</sub> Liquids Containing Pb Precipitates. <i>Canadian Metallurgical Quarterly</i> , <b>1984</b> , 23, 295-302	0.9	1
5	Interfacial effects in gaseous reduction of PbO-SiO <sub>2</sub> melts. <i>Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science</i> , <b>1983</b> , 14, 693-700		7
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