

# Electron Localization Determines Defect Formation on

Science

309, 752-755

DOI: 10.1126/science.1111568

Citation Report

#	ARTICLE	IF	CITATIONS
4	Electronic structure of the CeO <sub>2</sub> (110) surface oxygen vacancy. Surface Science, 2005, 599, 173-186.	1.9	50
5	Electronic and Atomistic Structures of Clean and Reduced Ceria Surfaces. Journal of Physical Chemistry B, 2005, 109, 22860-22867.	2.6	358
6	CHEMISTRY: Oxygen Vacancies and Catalysis on Ceria Surfaces. Science, 2005, 309, 713-714.	12.6	1,103
7	Effects of Zr doping on stoichiometric and reduced ceria: A first-principles study. Journal of Chemical Physics, 2006, 124, 224704.	3.0	131
8	Ab initio thermodynamic properties of point defects and O-vacancy diffusion in Mg spinels. Physical Review B, 2006, 74, .	3.2	16
9	Hydrogen adsorption kinetics on Pd/Ce <sub>0.8</sub> Zr <sub>0.2</sub> O <sub>2</sub> . Physical Chemistry Chemical Physics, 2006, 8, 2385.	2.8	8
10	Concentration of Ce <sup>3+</sup> and Oxygen Vacancies in Cerium Oxide Nanoparticles. Chemistry of Materials, 2006, 18, 5144-5146.	6.7	347
11	Nanoscale Heterogeneity in Ceria Zirconia with Low-Temperature Redox Properties. Journal of Physical Chemistry B, 2006, 110, 18278-18285.	2.6	44
12	Highly Efficient Electron Stimulated Desorption of O <sup>+</sup> from Gadolinia-Doped Ceria Surfaces. Journal of Physical Chemistry B, 2006, 110, 10779-10784.	2.6	5
13	Oxygen reduction reactions in the SOFC cathode of Ag/CeO <sub>2</sub> . Solid State Ionics, 2006, 177, 939-947.	2.7	101
14	Morphology and defect structure of the CeO <sub>2</sub> (111) films grown on Ru(0001) as studied by scanning tunneling microscopy. Surface Science, 2006, 600, 5004-5010.	1.9	159
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17	Glycerol as a Source for Fuels and Chemicals by Low-Temperature Catalytic Processing. Angewandte Chemie - International Edition, 2006, 45, 3982-3985.	13.8	289
19	Density functional theory study of water adsorption at reduced and stoichiometric ceria (111) surfaces. Journal of Chemical Physics, 2006, 125, 204704.	3.0	61
20	GDC-Impregnated (La <sub>0.75</sub> Sr <sub>0.25</sub> )(Cr <sub>0.5</sub> Mn <sub>0.5</sub> )O <sub>3</sub> Anodes for Direct Utilization of Methane in Solid Oxide Fuel Cells. Journal of the Electrochemical Society, 2006, 153, A850.	2.9	89
21	Activity of CeO <sub>x</sub> and TiO <sub>x</sub> Nanoparticles Grown on Au(111) in the Water-Gas Shift Reaction. Science, 2007, 318, 1757-1760.	12.6	906
22	Development of Constraint Algorithm for the Number of Electrons in Molecular Orbitals Consisting Mainly 4f Atomic Orbitals of Rare-Earth Elements and Its Introduction to Tight-Binding Quantum Chemical Molecular Dynamics Method. Japanese Journal of Applied Physics, 2007, 46, 2505-2509.	1.5	8

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24	Oxygen vacancy formation for transient structures on the CeO <sub>2</sub> (110) surface at 300 and 750 K. Journal of Chemical Physics, 2007, 126, 234706.	3.0	16
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34	Structure-Activity Relationship in Nanostructured Copper-Ceria-Based Preferential CO Oxidation Catalysts. Journal of Physical Chemistry C, 2007, 111, 11026-11038.	3.1	296
35	Evidence of Subsurface Oxygen Vacancy Ordering on Reduced $\text{CeO}_{2-x}\text{Tl}_{1-x}\text{O}_{3-x}$	7.8	177
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44	Effect of ceria-zirconia ratio on the interaction of CO with $\text{PdO}/\text{Al}_2\text{O}_3/(\text{Ce}_x\text{Zr}_{1-x})\text{O}_2$ catalysts prepared by sol-gel method. Applied Catalysis B: Environmental, 2007, 69, 219-225.	20.2	15
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78	Atomic resolution study of the interfacial bonding at Si <sub>3</sub> N <sub>4</sub> /CeO <sub>2</sub> grain boundaries. Applied Physics Letters, 2008, 93, 053104.	3.3	9
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153	Defect Structure of Ultrathin Ceria Films on Pt(111): Atomic Views from Scanning Tunnelling Microscopy. Journal of Physical Chemistry C, 2010, 114, 17036-17041.	3.1	108
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