Albert Bruix

List of Publications by Year
in descending order

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45	3,668	218677	223800
papers	citations	26 h-index	46 g-index

51	51	51	5850
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Support nanostructure boosts oxygen transfer to catalytically active platinum nanoparticles. Nature Materials, 2011, 10, 310-315.	27.5	748
2	A New Type of Strong Metalâ€“Support Interaction and the Production of H₂ through the Transformation of Water on Pt/CeO₂(111) and Pt/CeO_x/TiO₂(110) Catalysts. Journal of the American Chemical Society, 2012, 134, 8968-8974.	13.7	682
3	Maximum Nobleâ€Metal Efficiency in Catalytic Materials: Atomically Dispersed Surface Platinum. Angewandte Chemie - International Edition, 2014, 53, 10525-10530.	13.8	384
4	First-principles-based multiscale modelling of heterogeneous catalysis. Nature Catalysis, 2019, 2, 659-670.	34.4	197
5	In Situ Detection of Active Edge Sites in Single-Layer MoS₂ Catalysts. ACS Nano, 2015, 9, 9322-9330.	14.6	144
6	Single-layer<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mtext>MoS</mml:mtext><mml:mn>2</mml:mn></mml:msub> Au(111): Band gap renormalization and substrate interaction. Physical Review B, 2016, 93, .	3.2	128
7	Towards stable single-atom catalysts: strong binding of atomically dispersed transition metals on the surface of nanostructured ceria. Catalysis Science and Technology, 2016, 6, 6806-6813.	4.1	92
8	Effects of deposited Pt particles on the reducibility of CeO2(111). Physical Chemistry Chemical Physics, 2011, 13, 11384.	2.8	89
9	Oxide-based nanomaterials for fuel cell catalysis: the interplay between supported single Pt atoms and particles. Catalysis Science and Technology, 2017, 7, 4315-4345.	4.1	84
10	CO oxidation activity of Pt/CeO2 catalysts below 0 Â°C: platinum loading effects. Applied Catalysis B: Environmental, 2021, 286, 119931.	20.2	83
11	Crystalline and electronic structure of single-layer<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>TaS</mml:mi><mml:mn>2</mml:mn></mml:msub></m Physical Review B, 2016, 94, .	3.2	75
12	Adsorption, Oxidation State, and Diffusion of Pt Atoms on the CeO₂(111) Surface. Journal of Physical Chemistry C, 2010, 114, 14202-14207.	3.1	71
13	Visualizing hydrogen-induced reshaping and edge activation in MoS2 and Co-promoted MoS2 catalyst clusters. Nature Communications, 2018, 9, 2211.	12.8	71
14	Growth and electronic structure of epitaxial single-layer<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mtext>WS</mml:mtext><mml:mn>2</mml:mn></mml:msub> Au(111). Physical Review B, 2015, 92, .	3.2	70
15	Modeling Ceria-Based Nanomaterials for Catalysis and Related Applications. Catalysis Letters, 2016, 146, 2053-2080.	2.6	63
16	Ab initio study of CO2 hydrogenation mechanisms on inverse ZnO/Cu catalysts. Journal of Catalysis, 2018, 360, 168-174.	6.2	58
17	Density functional theory model study of size and structure effects on water dissociation by platinum nanoparticles. Journal of Chemical Physics, 2012, 137, 034701.	3.0	56
18	Symmetry-Driven Band Gap Engineering in Hydrogen Functionalized Graphene. ACS Nano, 2016, 10, 10798-10807.	14.6	55

#	Article	IF	Citations
19	High efficiency of Pt2+- CeO2 novel thin film catalyst as anode for proton exchange membrane fuel cells. Applied Catalysis B: Environmental, 2016, 197, 262-270.	20.2	52
20	DFT Study on Ce-Doped Anatase TiO₂: Nature of Ce³⁺ and Ti³⁺ Centers Triggered by Oxygen Vacancy Formation. Journal of Physical Chemistry C, 2014, 118, 9677-9689.	3.1	51
21	Water Dissociation and Hydroxyl Ordering on Anatase <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>TiO</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> stretchy="false">(</mml:mo><mml:mn>001</mml:mn><mml:mo) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 652 Td (stretchy="false		

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37	Chemically-resolved determination of hydrogenated grapheneâ€“substrate interaction. Physical Chemistry Chemical Physics, 2019, 21, 13462-13466.	2.8	7
38	How to design models for ceria nanoparticles: Challenges and strategies for describing nanostructured reducible oxides. Frontiers of Nanoscience, 2018, 12, 55-99.	0.6	6
39	Charting the Atomic C Interaction with Transition Metal Surfaces. ACS Catalysis, 2022, 12, 9256-9269.	11.2	6
40	Designing new catalysts: synthesis of new active structures: general discussion. Faraday Discussions, 2016, 188, 131-159.	3.2	4
41	Size-dependent phase stability in transition metal dichalcogenide nanoparticles controlled by metal substrates. Nanoscale, 2021, 13, 10167-10180.	5.6	4
42	Bridging model and real catalysts: general discussion. Faraday Discussions, 2016, 188, 565-589.	3.2	3
43	Catalyst design from theory to practice: general discussion. Faraday Discussions, 2016, 188, 279-307.	3.2	2
44	Ptâ€“CeO2 Catalysts for Fuel Cell Applications: From Surface Science to Electrochemistry. , 2018, , 189-201.		2
45	Activating catalysts by adsorbate-induced reconstructions. Nature Catalysis, 2022, 5, 84-85.	34.4	1