

Andrey Bukhtiyarov

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2490427/publications.pdf>

Version: 2024-02-01

77
papers

1,339
citations

331670

21
h-index

434195

31
g-index

77
all docs

77
docs citations

77
times ranked

1432
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydrogarnet-derived Rh/TiO ₂ catalysts with a low rhodium content for a photocatalytic hydrogen production. <i>Materials Letters</i> , 2022, 307, 130997.	2.6	2
2	The effect of CO treatment on the surface structure of bimetallic Pd-Au/HOPG and Pd-In/HOPG nanoparticles: A comparative study. <i>Nano Structures Nano Objects</i> , 2022, 29, 100830.	3.5	2
3	Atomic-scale changes of silica-supported catalysts with nanocrystalline or amorphous gallia phases: implications of hydrogen pretreatment on their selectivity for propane dehydrogenation. <i>Catalysis Science and Technology</i> , 2022, 12, 3957-3968.	4.1	7
4	Mechanistic <i>in situ</i> investigation of heterogeneous hydrogenation over Rh/TiO ₂ catalysts: selectivity, pairwise route and catalyst nature. <i>Faraday Discussions</i> , 2021, 229, 161-175.	3.2	18
5	Three-way catalysis with bimetallic supported Pd-Au catalysts: Gold as a poison and as a promotor. <i>Applied Catalysis B: Environmental</i> , 2021, 282, 119614.	20.2	12
6	Pd Single-Atom Sites on the Surface of PdAu Nanoparticles: A DFT-Based Topological Search for Suitable Compositions. <i>Nanomaterials</i> , 2021, 11, 122.	4.1	8
7	Comparative Study of the Photocatalytic Hydrogen Evolution over Cd _{1-x} Mn _x S and CdS-I ₂ -Mn ₃ O ₄ -MnOOH Photocatalysts under Visible Light. <i>Nanomaterials</i> , 2021, 11, 355.	4.1	6
8	Tetranitratopalladate(II) Salts with Tetraalkylammonium Cations: Structural Aspects, Reactivity, and Applicability toward Palladium Deposition for Catalytic Applications. <i>Inorganic Chemistry</i> , 2021, 60, 2983-2995.	4.0	6
9	Synthesis, Characterization and Visible-Light Photocatalytic Activity of Solid and TiO ₂ -Supported Uranium Oxycompounds. <i>Nanomaterials</i> , 2021, 11, 1036.	4.1	8
10	Sustainable Hydrogen Production from Starch Aqueous Suspensions over a Cd _{0.7} Zn _{0.3} S-Based Photocatalyst. <i>Catalysts</i> , 2021, 11, 870.	3.5	6
11	An Investigation into the Bulk and Surface Phase Transformations of Bimetallic Pd-In/Al ₂ O ₃ Catalyst during Reductive and Oxidative Treatments In Situ. <i>Catalysts</i> , 2021, 11, 859.	3.5	4
12	Investigation of concentration hysteresis in methane oxidation on bimetallic Pt/Pd/Al ₂ O ₃ catalyst by in situ XPS and mass spectrometry. <i>Mendeleev Communications</i> , 2021, 31, 635-637.	1.6	7
13	Constructing g-C ₃ N ₄ /Cd _{1-x} Zn _x S-Based Heterostructures for Efficient Hydrogen Production under Visible Light. <i>Catalysts</i> , 2021, 11, 1340.	3.5	9
14	Local Structure of Pd ₁ Single Sites on the Surface of PdIn Intermetallic Nanoparticles: A Combined DFT and CO-DRIFTS Study. <i>Catalysts</i> , 2021, 11, 1376.	3.5	5
15	SRPES and STM data for the model bimetallic Pd-In/HOPG catalysts: Effects of mild post-synthesis oxidative treatments. <i>Data in Brief</i> , 2021, 39, 107626.	1.0	1
16	Pd on Nanodiamond/Graphene in Hydrogenation of Propyne with Parahydrogen. <i>Journal of Physical Chemistry C</i> , 2021, 125, 27221-27229.	3.1	5
17	Composite photocatalysts based on Cd _{1-x} Zn _x S and TiO ₂ for hydrogen production under visible light: effect of platinum co-catalyst location. <i>RSC Advances</i> , 2021, 11, 37966-37980.	3.6	5
18	Near-Ambient Pressure XPS and MS Study of CO Oxidation over Model Pd-Au/HOPG Catalysts: The Effect of the Metal Ratio. <i>Nanomaterials</i> , 2021, 11, 3292.	4.1	4

#	ARTICLE	IF	CITATIONS
19	Liquid-Phase Hydrogenation of 1-Phenyl-1-propyne on the Pd ₁ Ag ₃ /Al ₂ O ₃ Single-Atom Alloy Catalyst: Kinetic Modeling and the Reaction Mechanism. <i>Nanomaterials</i> , 2021, 11, 3286.	4.1	9
20	In Situ XPS and MS Study of Methane Oxidation on the Pd@Pt/Al ₂ O ₃ Catalysts. <i>Topics in Catalysis</i> , 2020, 63, 66-74.	2.8	21
21	Spatially resolved NMR spectroscopy of heterogeneous gas phase hydrogenation of 1,3-butadiene with <i>para</i> -hydrogen. <i>Catalysis Science and Technology</i> , 2020, 10, 99-104.	4.1	16
22	Zinc Addition Influence on the Properties of Pd/Sibunit Catalyst in Selective Acetylene Hydrogenation. <i>Topics in Catalysis</i> , 2020, 63, 139-151.	2.8	14
23	Oxygen transport in Pr nickelates: Elucidation of atomic-scale features. <i>Solid State Ionics</i> , 2020, 344, 115155.	2.7	6
24	Photoinduced Deposition of Platinum from (Bu ₄ N) ₂ [Pt(NO ₃) ₆] for a Low Pt-Loading Pt/TiO ₂ Hydrogen Photogeneration Catalyst. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 48631-48641.	8.0	24
25	Formation of Isolated Single-Atom Pd ₁ Sites on the Surface of Pd@Ag/Al ₂ O ₃ Bimetallic Catalysts. <i>Kinetics and Catalysis</i> , 2020, 61, 758-767.	1.0	15
26	Deciphering the Nature of Ru Sites in Reductively Exsolved Oxides with Electronic and Geometric Metal@Support Interactions. <i>Journal of Physical Chemistry C</i> , 2020, 124, 25299-25307.	3.1	18
27	Intermetallic Pd In /Al ₂ O ₃ catalysts with isolated single-atom Pd sites for one-pot hydrogenation of diphenylacetylene into trans-stilbene. <i>Mendeleev Communications</i> , 2020, 30, 468-471.	1.6	12
28	An ultrahigh vacuum-compatible reaction cell for model catalysis under atmospheric pressure flow conditions. <i>Review of Scientific Instruments</i> , 2020, 91, 125101.	1.3	3
29	“Electronic structure”-beamline 1-6 at SKIF synchrotron facility. <i>AIP Conference Proceedings</i> , 2020, , .	0.4	2
30	Synthesis of Hydroxylamine Sulfate via NO Hydrogenation over Pt/Graphite Catalysts, Part 2: Effect of the Reaction Conditions and the Physicochemical State of a Catalyst on the Yield of Products. <i>Catalysis in Industry</i> , 2020, 12, 16-28.	0.7	1
31	Photocatalytic CO ₂ Reduction Over Ni-Modified Cd _{1-x} Zn _x S-Based Photocatalysts: Effect of Phase Composition of Photocatalyst and Reaction Media on Reduction Rate and Product Distribution. <i>Topics in Catalysis</i> , 2020, 63, 121-129.	2.8	10
32	Intermetallic Pd-In/HOPG model catalysts: Reversible tuning the surface structure by O ₂ -induced segregation. <i>Applied Surface Science</i> , 2020, 525, 146493.	6.1	10
33	Effect of sulfosalicylic acid treatment on the properties of Beta zeolite and performance of NiW/Beta-based catalysts in hexadecane hydrocracking. <i>Applied Catalysis A: General</i> , 2020, 598, 117573.	4.3	14
34	Liquid-phase acetylene hydrogenation over Ag-modified Pd/Sibunit catalysts: Effect of Pd to Ag molar ratio. <i>Applied Catalysis A: General</i> , 2020, 600, 117627.	4.3	34
35	Carbon dioxide reduction under visible light: a comparison of cadmium sulfide and titania photocatalysts. <i>Mendeleev Communications</i> , 2020, 30, 192-194.	1.6	16
36	CO-induced segregation as an efficient tool to control the surface composition and catalytic performance of PdAg ₃ /Al ₂ O ₃ catalyst. <i>Mendeleev Communications</i> , 2019, 29, 547-549.	1.6	21

#	ARTICLE	IF	CITATIONS
37	N-Methylation of p-Anisidine on the Catalysts Based on Cu-Containing Layered Double Hydroxides. <i>Kinetics and Catalysis</i> , 2019, 60, 343-354.	1.0	7
38	Chemical and Phase Transformation in W-Mn-Containing Catalysts for Oxidative Coupling of Methane. <i>Russian Journal of Physical Chemistry A</i> , 2019, 93, 421-430.	0.6	4
39	Using Sr-XPS to Study the Preparation Features of M-Au/HOPG Model Catalysts (M = Pd, Ag, Cu). <i>Journal of Structural Chemistry</i> , 2019, 60, 45-52.	1.0	4
40	Study on the active phase formation of Pd-Zn/Sibunit catalysts during the thermal treatment in hydrogen. <i>Applied Surface Science</i> , 2019, 483, 730-741.	6.1	20
41	PdIn/Al ₂ O ₃ Intermetallic Catalyst: Structure and Catalytic Characteristics in Selective Hydrogenation of Acetylene. <i>Kinetics and Catalysis</i> , 2019, 60, 842-850.	1.0	15
42	Pd-Cu/HOPG and Pd-Ag/HOPG Model Catalysts in CO and Methanol Oxidations at Submillibar Pressures. <i>Kinetics and Catalysis</i> , 2019, 60, 832-841.	1.0	8
43	CO ₂ activation on ultrathin ZrO ₂ film by H ₂ O co-adsorption: In situ NAP-XPS and IRAS studies. <i>Surface Science</i> , 2019, 679, 139-146.	1.9	38
44	Pd Segregation on the Surface of Bimetallic PdAu Nanoparticles Induced by Low Coverage of Adsorbed CO. <i>Journal of Physical Chemistry C</i> , 2019, 123, 8037-8046.	3.1	40
45	Surface science approach to Pt/carbon model catalysts: XPS, STM and microreactor studies. <i>Applied Surface Science</i> , 2018, 440, 680-687.	6.1	47
46	In situ formation of the active sites in Pd-Au bimetallic nanocatalysts for CO oxidation: NAP (near ambient pressure) XPS and MS study. <i>Faraday Discussions</i> , 2018, 208, 255-268.	3.2	45
47	Selective Single-Site Pd-In Hydrogenation Catalyst for Production of Enhanced Magnetic Resonance Signals using Parahydrogen. <i>Chemistry - A European Journal</i> , 2018, 24, 2547-2553.	3.3	50
48	PdZn/Al ₂ O ₃ catalyst for liquid-phase alkyne hydrogenation: effect of the solid-state alloy transformation into intermetallics. <i>Mendeleev Communications</i> , 2018, 28, 152-154.	1.6	25
49	Model Bimetallic Pd-Ag/HOPG Catalysts: An XPS and STM Study. <i>Kinetics and Catalysis</i> , 2018, 59, 776-785.	1.0	19
50	Tuning the surface structure and catalytic performance of PdIn/Al ₂ O ₃ in selective liquid-phase hydrogenation by mild oxidative-reductive treatments. <i>Mendeleev Communications</i> , 2018, 28, 603-605.	1.6	23
51	Synthesis of Hydroxylamine Sulfate via NO Hydrogenation over Pt/Graphite Catalysts. I: Physicochemical State of Platinum Particles and the Surface of the Support in the Catalysts. <i>Catalysis in Industry</i> , 2018, 10, 279-287.	0.7	1
52	Hydrothermal Solubilization-Hydrolysis-Dehydration of Cellulose to Glucose and 5-Hydroxymethylfurfural Over Solid Acid Carbon Catalysts. <i>Topics in Catalysis</i> , 2018, 61, 1912-1927.	2.8	37
53	Atomic scale structural defects in the graphite layer for model catalysis. <i>Surface Science</i> , 2018, 677, 90-92.	1.9	8
54	Bimetallic Pd-Au/Highly Oriented Pyrolytic Graphite Catalysts: from Composition to Pairwise Parahydrogen Addition Selectivity. <i>Journal of Physical Chemistry C</i> , 2018, 122, 18588-18595.	3.1	17

#	ARTICLE	IF	CITATIONS
55	New photocatalysts based on Cd _{0.3} Zn _{0.7} S and Ni(OH) ₂ for hydrogen production from ethanol aqueous solutions under visible light. Applied Catalysis A: General, 2018, 563, 170-176.	4.3	19
56	The effect of oxidative and reductive treatments of titania-supported metal catalysts on the pairwise hydrogen addition to unsaturated hydrocarbons. Catalysis Today, 2017, 283, 82-88.	4.4	20
57	New Pt/Alumina model catalysts for STM and in situ XPS studies. Applied Surface Science, 2017, 401, 341-347.	6.1	20
58	Propane Oxidation Over Pd/Al ₂ O ₃ : Kinetic and In Situ XPS Study. Topics in Catalysis, 2017, 60, 190-197.	2.8	27
59	Heterogeneous Microtesla SABRE Enhancement of ¹⁵ N NMR Signals. Angewandte Chemie - International Edition, 2017, 56, 10433-10437.	13.8	58
60	Formation of supported intermetallic nanoparticles in the Pd ^δ Zn ^{1±} -Al ₂ O ₃ catalyst. Kinetics and Catalysis, 2017, 58, 471-479.	1.0	20
61	Heterogeneous Microtesla SABRE Enhancement of ¹⁵ N NMR Signals. Angewandte Chemie, 2017, 129, 10569-10573.	2.0	27
62	Aqueous, Heterogeneous <i>para</i> -Hydrogen-Induced ¹⁵ N Polarization. Journal of Physical Chemistry C, 2017, 121, 15304-15309.	3.1	40
63	XPS/STM study of model bimetallic Pd ^δ Au/HOPG catalysts. Applied Surface Science, 2016, 367, 214-221.	6.1	50
64	Using X-ray Photoelectron Spectroscopy To Evaluate Size of Metal Nanoparticles in the Model Au/C Samples. Journal of Physical Chemistry C, 2016, 120, 10419-10426.	3.1	25
65	Production of Pure Aqueous ¹³ C- ¹³ C-Hyperpolarized Acetate by Heterogeneous Parahydrogen-Induced Polarization. Chemistry - A European Journal, 2016, 22, 16446-16449.	3.3	36
66	Thermal stability of Ag ^δ Au, Cu ^δ Au, and Ag ^δ Cu bimetallic nanoparticles supported on highly oriented pyrolytic graphite. Kinetics and Catalysis, 2016, 57, 704-711.	1.0	4
67	Hydrogenation of Unsaturated Six-Membered Cyclic Hydrocarbons Studied by the Parahydrogen-Induced Polarization Technique. Journal of Physical Chemistry C, 2016, 120, 13541-13548.	3.1	20
68	Are Au Nanoparticles on Oxygen-Free Supports Catalytically Active?. Topics in Catalysis, 2016, 59, 469-477.	2.8	19
69	Application of near ambient pressure gas-phase X-ray photoelectron spectroscopy to the investigation of catalytic properties of copper in methanol oxidation. Applied Surface Science, 2016, 363, 303-309.	6.1	27
70	XPS study of gold oxidation with nitrogen dioxide in model Au/C samples. Kinetics and Catalysis, 2015, 56, 796-800.	1.0	22
71	In situ XPS study of the size effect in the interaction of NO with the surface of the model Ag/Al ₂ O ₃ /FeCrAl catalysts. Russian Chemical Bulletin, 2015, 64, 2780-2785.	1.5	14
72	Bimetallic Pd ^δ Pt ³ -Al ₂ O ₃ catalysts for complete methane oxidation: the effect of the Pt: Pd ratio. Russian Chemical Bulletin, 2015, 64, 2802-2805.	1.5	4

#	ARTICLE	IF	CITATIONS
73	Strong Metal-Support Interactions for Palladium Supported on TiO ₂ Catalysts in the Heterogeneous Hydrogenation with Parahydrogen. ChemCatChem, 2015, 7, 2581-2584.	3.7	54
74	The model thin film alumina catalyst support suitable for catalysis-oriented surface science studies. Applied Surface Science, 2015, 349, 310-318.	6.1	18
75	Contribution of (NO ₃) ^{surf} Reduction to the Overall Mechanism of H ₂ -Promoted n-C ₆ H ₁₄ -DeNO _x Over Ag/Al ₂ O ₃ . Topics in Catalysis, 2013, 56, 187-192.	2.8	4
76	Identification of nitrogen-containing species obtained by nitric oxide adsorption on the surface of model gold catalysts. Kinetics and Catalysis, 2011, 52, 756-760.	1.0	21
77	An XPS and STM study of the size effect in NO adsorption on gold nanoparticles. Russian Chemical Bulletin, 2011, 60, 1977-1984.	1.5	21