Vladimir B Golovko

List of Publications by Year
in descending order

94	3,318	218677	149698
papers	citations	26 h-index	56 g-index

97	97	97	5013
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Selective oxidation with dioxygen by gold nanoparticle catalysts derived from 55-atom clusters. Nature, 2008, 454, 981-983.	27.8	1,242
2	Single-Step Conversion of Dimethyl Terephthalate into Cyclohexanedimethanol with Ru5PtSn, a Trimetallic Nanoparticle Catalyst. Angewandte Chemie - International Edition, 2006, 45, 4782-4785.	13.8	148
3	Engineered silver nanoparticles are sensed at the plasma membrane and dramatically modify the physiology of Arabidopsis thaliana plants. Plant Journal, 2016, 85, 245-257.	5.7	119
4	Chemically-synthesised, atomically-precise gold clusters deposited and activated on titania. Physical Chemistry Chemical Physics, 2013, 15, 3917.	2.8	111
5	Chemically synthesised atomically precise gold clusters deposited and activated on titania. Part II. Physical Chemistry Chemical Physics, 2013, 15, 14806.	2.8	78
6	Establishing a Au Nanoparticle Size Effect in the Oxidation of Cyclohexene Using Gradually Changing Au Catalysts. ACS Catalysis, 2013, 3, 2986-2991.	11.2	77
7	Highly efficient catalysts for the hydrogenation of nitro-substituted aromatics. Chemical Communications, 2005, , 2026.	4.1	76
8	Factors influencing the catalytic oxidation of benzyl alcohol using supported phosphine-capped gold nanoparticles. Catalysis Science and Technology, 2015, 5, 1323-1333.	4.1	65
9	Visible-Light-Driven Aerobic Oxidation of Amines to Nitriles over Hydrous Ruthenium Oxide Supported on TiO₂. ACS Catalysis, 2015, 5, 34-38.	11.2	61
10	Low temperature synthesis of carbon nanofibres on carbon fibre matrices. Carbon, 2005, 43, 2643-2648.	10.3	60
11	Recent applications of click chemistry for the functionalization of gold nanoparticles and their conversion to glyco-gold nanoparticles. Beilstein Journal of Organic Chemistry, 2018, 14, 11-24.	2.2	50
12	Optical characterisation of nanostructured Au/WO3 thin films for sensing hydrogen at low concentrations. Sensors and Actuators B: Chemical, 2013, 179, 125-130.	7.8	45
13	Toward Control of Gold Cluster Aggregation on TiO₂ via Surface Treatments. Journal of Physical Chemistry C, 2015, 119, 24465-24474.	3.1	39
14	Photocatalytic reduction of CO2 to hydrocarbons using bio-templated porous TiO2 architectures under UV and visible light. Chemical Engineering Journal, 2018, 347, 64-73.	12.7	39
15	Influence of particle size on the electrocatalytic oxidation of glycerol over carbon-supported gold nanoparticles. Electrochimica Acta, 2014, 120, 398-407.	5.2	37
16	XPS and NEXAFS study of fluorine modified TiO2 nano-ovoids reveals dependence of Ti3+ surface population on the modifying agent. RSC Advances, 2014, 4, 20649.	3.6	37
17	Oxygen-deficient bismuth molybdate nanocatalysts: Synergistic effects in boosting photocatalytic oxidative coupling of benzylamine and mechanistic insight. Journal of Colloid and Interface Science, 2021, 581, 719-728.	9.4	36
18	Nickel Formate Route to the Growth of Carbon Nanotubes. Journal of Physical Chemistry B, 2004, 108, 18446-18450.	2.6	32

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19	Electrochemical stability of carbon-supported gold nanoparticles in acidic electrolyte during cyclic voltammetry. Electrochimica Acta, 2016, 187, 593-604.	5.2	32
20	Catalytic growth of carbon nanotubes on stainless steel: Characterization and frictional properties. Diamond and Related Materials, 2008, 17, 1853-1857.	3.9	31
21	Far-infrared absorption spectra of synthetically-prepared, ligated metal clusters with Au6, Au8, Au9 and Au6Pd metal cores. RSC Advances, 2013, 3, 22140.	3.6	30
22	The effect of MnO2 loading on the glycerol electrooxidation activity of Au/MnO2/C catalysts. Electrochimica Acta, 2013, 98, 208-217.	5.2	29
23	Growth of aligned carbon nanofibres over large areas using colloidal catalysts at low temperatures. Chemical Communications, 2004, , 1416.	4.1	28
24	Phosphine-stabilised Au9 clusters interacting with titania and silica surfaces: The first evidence for the density of states signature of the support-immobilised cluster. Journal of Chemical Physics, 2014, 141, 014702.	3.0	28
25	Tuning the selectivity of a supported gold catalyst in solvent- and radical initiator-free aerobic oxidation of cyclohexene. Catalysis Science and Technology, 2014, 4, 752-757.	4.1	28
26	Submicron patterning of Co colloid catalyst for growth of vertically aligned carbon nanotubes. Nanotechnology, 2005, 16, 1636-1640.	2.6	27
27	Influence of gold nanoparticle loading in Au/C on the activity towards electrocatalytic glycerol oxidation. Electrochimica Acta, 2015, 153, 370-378.	5.2	27
28	Accelerated ZnMoO₄ photocatalytic degradation of pirimicarb under UV light mediated by peroxymonosulfate. Applied Organometallic Chemistry, 2019, 33, e5113.	3.5	27
29	Absorption spectra, defect site distribution and upconversion excitation spectra of CaF2/SrF2/BaF2:Yb3+:Er3+ nanoparticles. Journal of Alloys and Compounds, 2020, 834, 155165.	5.5	27
30	Atomically resolved structure of ligand-protected Au9 clusters on TiO2 nanosheets using aberration-corrected STEM. Journal of Chemical Physics, 2016, 144, 114703.	3.0	25
31	Visible-Light Driven Photocatalytic Degradation of Pirimicarb by Pt-Doped AgInS2 Nanoparticles. Catalysts, 2020, 10, 857.	3.5	25
32	Production of Carbon Nanofibers in High Yields Using a Sodium Chloride Support. Journal of Physical Chemistry B, 2005, 109, 16665-16670.	2.6	24
33	Catalyst patterning methods for surface-bound chemical vapor deposition of carbon nanotubes. Applied Physics A: Materials Science and Processing, 2005, 81, 1559-1567.	2.3	23
34	Gold Nanoparticles Decorated with Sialic Acid Terminated Bi-antennary N-Glycans for the Detection of Influenza Virus at Nanomolar Concentrations. ChemistryOpen, 2015, 4, 708-716.	1.9	23
35	Wet catalyst assisted growth of carbon nanofibers on complex three-dimensional substrates. Diamond and Related Materials, 2005, 14, 733-738.	3.9	22
36	Benzyl Alcohol Oxidation Using Gold Catalysts Derived from Au8 Clusters on TiO2. Catalysis Letters, 2019, 149, 449-455.	2.6	22

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37	Upconversion Thermometry Using Yb³⁺/Er³⁺ Co-Doped KY₃F₁₀ Nanoparticles. ACS Applied Nano Materials, 2021, 4, 5696-5706.	5.0	22
38	Investigation of Ligand-Stabilized Gold Clusters on Defect-Rich Titania. Journal of Physical Chemistry C, 2017, 121, 28007-28016.	3.1	20
39	Aggregation Behavior of Ligand-Protected Au₉ Clusters on Sputtered Atomic Layer Deposition TiO₂. Journal of Physical Chemistry C, 2017, 121, 10781-10789.	3.1	19
40	Synthesis of cobalt-containing cyclophanes, and the formation of an unprecedented seven-membered cyclic diyneElectronic supplementary information (ESI) available: crystallographic data for complexes 8 and 11. See http://www.rsc.org/suppdata/nj/b3/b310515f/. New Journal of Chemistry, 2004, 28, 527.	2.8	18
41	Hydrogen sensing using gold nanoclusters supported on tungsten trioxide thin films. International Journal of Hydrogen Energy, 2013, 38, 12865-12877.	7.1	18
42	Size-optimized galactose-capped gold nanoparticles for the colorimetric detection of heat-labile enterotoxin at nanomolar concentrations. Organic and Biomolecular Chemistry, 2015, 13, 5215-5223.	2.8	18
43	Grouping and aggregation of ligand protected Au₉ clusters on TiO₂ nanosheets. RSC Advances, 2016, 6, 110765-110774.	3.6	17
44	Photocatalytic Degradation of Ethiofencarb by a Visible Light-Driven SnIn4S8 Photocatalyst. Nanomaterials, 2021, 11, 1325.	4.1	16
45	Uniform and selective CVD growth of carbon nanotubes and nanofibres on arbitrarily microstructured silicon surfaces. Nanotechnology, 2006, 17, 1397-1403.	2.6	14
46	Catalytic consequences of charge-balancing cations in zeolite during photo-Fenton oxidation of formaldehyde in alkaline conditions. Separation and Purification Technology, 2014, 125, 269-274.	7.9	14
47	Effect of Gold Nanoclusters on the Production of Ti3+ Defect Sites in Titanium Dioxide Nanoparticles under Ultraviolet and Soft X-ray Radiation. Journal of Physical Chemistry C, 2015, 119, 11171-11177.	3.1	14
48	Synthesis and Properties of a New Range of Mixed-Donor Alkynyl Ferrocenophanes. Organometallics, 2005, 24, 628-637.	2.3	13
49	Transparent, photocatalytic, titania thin films formed at low temperature. Current Applied Physics, 2013, 13, 142-147.	2.4	13
50	Investigation of Phosphine Ligand Protected Au₁₃ Clusters on Defect Rich Titania. Journal of Physical Chemistry C, 2019, 123, 6642-6649.	3.1	13
51	Identification of the Vibrational Modes in the Far-Infrared Spectra of Ruthenium Carbonyl Clusters and the Effect of Gold Substitution. Inorganic Chemistry, 2014, 53, 4340-4349.	4.0	12
52	CO oxidation and the inhibition effects of carboxyl-modification and copper clusters on multi-walled carbon nanotubes. Applied Catalysis B: Environmental, 2020, 262, 118265.	20.2	12
53	Theoretical mechanistic study of CO catalytic oxidation by O2 on an ultra-small 13-atom bimetallic Ag7Au6 cluster. Applied Catalysis A: General, 2020, 595, 117505.	4.3	12
54	Size-activity threshold of titanium dioxide-supported Cu cluster in CO oxidation. Environmental Pollution, 2021, 279, 116899.	7.5	12

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55	Factors Influencing Catalytic Activity of Size-Specific Triphenylphosphine-Ligated Gold Nanoclusters in the Electrocatalytic Hydrogen Evolution Reaction. Journal of Physical Chemistry C, 2022, 126, 246-260.	3.1	12
56	CO temperature-programmed desorption of a hexameric copper hydride nanocluster catalyst supported on functionalized MWCNTs for active site characterization in a low-temperature waterâ€“gas shift reaction. Chemical Engineering Journal, 2019, 377, 120278.	12.7	11
57	Study of ferrocenyl-substituted Co2(CO)6-bispropargylic alcohol complexes as substrates for the formation of chains and macrocycles. Journal of Organometallic Chemistry, 2008, 693, 2683-2692.	1.8	10
58	Potential of metal monoliths with grown carbon nanomaterials as catalyst support in intensified steam reformer: a perspective. Reviews in Chemical Engineering, 2020, 36, 459-491.	4.4	10
59	Au₁₀₁â€“rGO nanocomposite: immobilization of phosphine-protected gold nanoclusters on reduced graphene oxide without aggregation. Nanoscale Advances, 2021, 3, 1422-1430.	4.6	10
60	Carbon nanotube diameter control via catalytic Co nanoparticles electrodeposited in porous alumina membranes. RSC Advances, 2015, 5, 25747-25754.	3.6	9
61	Activity of Catalysts Derived from Au101 Immobilized on Activated Carbon. Catalysis Letters, 2016, 146, 1027-1032.	2.6	9
62	Bio-mimicking TiO₂ architectures for enhanced photocatalytic activity under UV and visible light. RSC Advances, 2017, 7, 39098-39108.	3.6	9
63	A comparison of the Yb3+ absorption and upconversion excitation spectra for both the cubic and hexagonal phases of NaYF4:Yb3+/Er3+ nanoparticles. Optical Materials, 2020, 107, 110050.	3.6	9
64	Double dehydration of a diynediol promoted by a single Co2(CO)6unit; activation of an uncoordinated propargylic centre. New Journal of Chemistry, 2002, 26, 1706-1708.	2.8	8
65	Platinum-Ruthenium Nanoparticles: Active and Selective Catalysts for Hydrogenation of Phenylacetylene. Australian Journal of Chemistry, 2012, 65, 1420.	0.9	8
66	A Systematic Density Functional Theory Study of the Complete De-ligation of Ru₃(CO)₁₂. ChemistrySelect, 2016, 1, 1163-1167.	1.5	8
67	Kinetics and constraints of CO oxidation over hexameric copper nanocluster catalyst supported on carboxyl-functionalised MWCNT at high temperatures. Chemical Engineering Journal, 2020, 389, 124399.	12.7	8
68	Optical Properties of the Atomically Precise C₄ Core [Au₉(PPh₃)₈]³⁺ Cluster Probed by Transient Absorption Spectroscopy and Time-Dependent Density Functional Theory. Journal of Physical Chemistry C, 2021, 125, 2033-2044.	3.1	8
69	Selective growth of vertically aligned carbon nanofibres in sub-micron patterns and Raman mapping of produced arrays. Diamond and Related Materials, 2006, 15, 1023-1028.	3.9	7
70	A route to a wide range of cyclopentanecarboxylic acids via 4-substituted camphors. Tetrahedron, 2012, 68, 1972-1978.	1.9	7
71	Stable colloidal Coâ€“Pd nanocatalysts for carbon nanotube growth. Physica Status Solidi (B): Basic Research, 2009, 246, 2436-2439.	1.5	6
72	Investigation of the Photodegradation of Reactive Blue 19 on P-25 Titanium Dioxide: Effect of Experimental Parameters. Australian Journal of Chemistry, 2015, 68, 471.	0.9	6

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73	From straight chain to macrocyclic complexes containing mixed sulfur/nitrogen donors and coordinated 1,3-diynes. Journal of Organometallic Chemistry, 2007, 692, 4985-4994.	1.8	5
74	Self-cyclisation versus diynediol-promoted ring closure during the construction of coordinated crown-type macrocycles. Polyhedron, 2008, 27, 167-174.	2.2	5
75	Diastereospecific ring cleavage of bornane-2,3-dione in the Bucherer-Bergs reaction. Tetrahedron: Asymmetry, 2012, 23, 1080-1083.	1.8	5
76	Photocatalytic degradation of methylene blue dye using catalyst based on the gold-containing clusters supported on TiO<SUB align="right">2. International Journal of Nanotechnology, 2018, 15, 669.	0.2	5
77	Size-controlled, high optical quality ZnO nanowires grown using colloidal Au nanoparticles and ultra-small cluster catalysts. APL Materials, 2019, 7, 022518.	5.1	5
78	Size Effect in Hydrogenation of Nitroaromatics Using Support-Immobilized Atomically Precise Gold Clusters. Journal of Physical Chemistry C, 2021, 125, 3327-3336.	3.1	5
79	Hydrothermal rutile to anatase reverse phase transformation. International Journal of Nanotechnology, 2014, 11, 493.	0.2	4
80	Apparatus for the investigation of high-temperature, high-pressure gas-phase heterogeneous catalytic and photo-catalytic materials. Review of Scientific Instruments, 2017, 88, 054101.	1.3	4
81	Gold Nanoparticles Decorated with Sialic Acid Terminated Bi-antennary N-Glycans for the Detection of Influenza Virus at Nanomolar Concentrations. ChemistryOpen, 2015, 4, 662-662.	1.9	3
82	The effect of counter ions on the far-infrared spectra of tris(triphenylphosphinegold)oxonium dimer salts. RSC Advances, 2015, 5, 74499-74505.	3.6	3
83	Control of Gold Nanostructure Morphology by Variation of Temperature and Reagent Ratios in the Turkevich Reaction. Australian Journal of Chemistry, 2015, 68, 858.	0.9	3
84	Rearrangement of chiral 1-bromo-N-nitrobicyclo[2.2.1]heptan-2-imines. Tetrahedron: Asymmetry, 2013, 24, 817-821.	1.8	2
85	Template-less and surfactant-free solvent-driven direct synthesis of urchin-like gold nanoparticles in anisole. International Journal of Nanotechnology, 2017, 14, 337.	0.2	2
86	Influence of the synthesis method on preferential clustering of Yb3+ in CaF2:Yb3+/Er3+ upconverting nanoparticles. Optical Materials, 2021, 112, 110736.	3.6	2
87	Methanol tolerant Oxygen Reduction Reaction electrocatalysis using Sizeâ€Specific Triphenylphosphineâ€Ligated Gold Nanoclusters. ChemNanoMat, 0, , .	2.8	2
88	Emergent electronic properties in Co-deposited superatomic clusters. Journal of Chemical Physics, 2021, 155, 124309.	3.0	1
89	Nickel Formate Route to the Growth of Carbon Nanotubes.. ChemInform, 2005, 36, no.	0.0	0
90	Production of Carbon Nanofibers in High Yields Using a Sodium Chloride Support.. ChemInform, 2005, 36, no.	0.0	0

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91	A computational study of a novel seven-membered cyclic diyne and its cobaltâ€“carbonyl complex. Computational and Theoretical Chemistry, 2009, 909, 111-115.	1.5	0
92	Growth of Carbon Nanotubes on Mesoporous Silica Coated Planar and Three-Dimensional Surfaces. Materials Research Society Symposia Proceedings, 2013, 1505, 1.	0.1	0
93	Current density enhancement in inverted nanopyramid textured crystalline silicon solar cell using gold nanoparticles. Proceedings of SPIE, 2013, , .	0.8	0
94	Hydrothermal synthesis of mixed phase blue titanium dioxide from oxalate stabilised sols. International Journal of Nanotechnology, 2017, 14, 265.	0.2	0