

# Vladimir B Golovko

## List of Publications by Year in descending order

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94  
papers

3,318  
citations

218677

26  
h-index

149698

56  
g-index

97  
all docs

97  
docs citations

97  
times ranked

5013  
citing authors

#	ARTICLE	IF	CITATIONS
1	Factors Influencing Catalytic Activity of Size-Specific Triphenylphosphine-Ligated Gold Nanoclusters in the Electrocatalytic Hydrogen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2022, 126, 246-260.	3.1	12
2	Oxygen-deficient bismuth molybdate nanocatalysts: Synergistic effects in boosting photocatalytic oxidative coupling of benzylamine and mechanistic insight. <i>Journal of Colloid and Interface Science</i> , 2021, 581, 719-728.	9.4	36
3	Influence of the synthesis method on preferential clustering of Yb <sup>3+</sup> in CaF <sub>2</sub> :Yb <sup>3+</sup> /Er <sup>3+</sup> upconverting nanoparticles. <i>Optical Materials</i> , 2021, 112, 110736.	3.6	2
4	Optical Properties of the Atomically Precise Au <sub>4</sub> Core [Au <sub>9</sub> (PPh <sub>3</sub> ) <sub>8</sub> ] <sup>3+</sup> Cluster Probed by Transient Absorption Spectroscopy and Time-Dependent Density Functional Theory. <i>Journal of Physical Chemistry C</i> , 2021, 125, 2033-2044.	3.1	8
5	Au <sub>101</sub> @rGO nanocomposite: immobilization of phosphine-protected gold nanoclusters on reduced graphene oxide without aggregation. <i>Nanoscale Advances</i> , 2021, 3, 1422-1430.	4.6	10
6	Size Effect in Hydrogenation of Nitroaromatics Using Support-Immobilized Atomically Precise Gold Clusters. <i>Journal of Physical Chemistry C</i> , 2021, 125, 3327-3336.	3.1	5
7	Upconversion Thermometry Using Yb <sup>3+</sup> /Er <sup>3+</sup> Co-Doped KY <sub>3</sub> F <sub>10</sub> Nanoparticles. <i>ACS Applied Nano Materials</i> , 2021, 4, 5696-5706.	5.0	22
8	Photocatalytic Degradation of Ethiofencarb by a Visible Light-Driven SnIn <sub>4</sub> S <sub>8</sub> Photocatalyst. <i>Nanomaterials</i> , 2021, 11, 1325.	4.1	16
9	Size-activity threshold of titanium dioxide-supported Cu cluster in CO oxidation. <i>Environmental Pollution</i> , 2021, 279, 116899.	7.5	12
10	Emergent electronic properties in Co-deposited superatomic clusters. <i>Journal of Chemical Physics</i> , 2021, 155, 124309.	3.0	1
11	Potential of metal monoliths with grown carbon nanomaterials as catalyst support in intensified steam reformer: a perspective. <i>Reviews in Chemical Engineering</i> , 2020, 36, 459-491.	4.4	10
12	CO oxidation and the inhibition effects of carboxyl-modification and copper clusters on multi-walled carbon nanotubes. <i>Applied Catalysis B: Environmental</i> , 2020, 262, 118265.	20.2	12
13	Visible-Light Driven Photocatalytic Degradation of Pirimicarb by Pt-Doped AgIn <sub>2</sub> S <sub>2</sub> Nanoparticles. <i>Catalysts</i> , 2020, 10, 857.	3.5	25
14	A comparison of the Yb <sup>3+</sup> absorption and upconversion excitation spectra for both the cubic and hexagonal phases of NaYF <sub>4</sub> :Yb <sup>3+</sup> /Er <sup>3+</sup> nanoparticles. <i>Optical Materials</i> , 2020, 107, 110050.	3.6	9
15	Theoretical mechanistic study of CO catalytic oxidation by O <sub>2</sub> on an ultra-small 13-atom bimetallic Ag <sub>7</sub> Au <sub>6</sub> cluster. <i>Applied Catalysis A: General</i> , 2020, 595, 117505.	4.3	12
16	Kinetics and constraints of CO oxidation over hexameric copper nanocluster catalyst supported on carboxyl-functionalised MWCNT at high temperatures. <i>Chemical Engineering Journal</i> , 2020, 389, 124399.	12.7	8
17	Absorption spectra, defect site distribution and upconversion excitation spectra of CaF <sub>2</sub> /SrF <sub>2</sub> /BaF <sub>2</sub> :Yb <sup>3+</sup> :Er <sup>3+</sup> nanoparticles. <i>Journal of Alloys and Compounds</i> , 2020, 834, 155165.	5.5	27
18	Accelerated ZnMoO <sub>4</sub> photocatalytic degradation of pirimicarb under UV light mediated by peroxymonosulfate. <i>Applied Organometallic Chemistry</i> , 2019, 33, e5113.	3.5	27

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19	Investigation of Phosphine Ligand Protected Au <sub>13</sub> Clusters on Defect Rich Titania. Journal of Physical Chemistry C, 2019, 123, 6642-6649.	3.1	13
20	CO temperature-programmed desorption of a hexameric copper hydride nanocluster catalyst supported on functionalized MWCNTs for active site characterization in a low-temperature water-gas shift reaction. Chemical Engineering Journal, 2019, 377, 120278.	12.7	11
21	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
22	Benzyl Alcohol Oxidation Using Gold Catalysts Derived from Au <sub>8</sub> Clusters on TiO <sub>2</sub> . Catalysis Letters, 2019, 149, 449-455.	2.6	22
23	Photocatalytic reduction of CO <sub>2</sub> to hydrocarbons using bio-templated porous TiO <sub>2</sub> architectures under UV and visible light. Chemical Engineering Journal, 2018, 347, 64-73.	12.7	39
24	Photocatalytic degradation of methylene blue dye using catalyst based on the gold-containing clusters supported on TiO <sub>2</sub> . International Journal of Nanotechnology, 2018, 15, 669.	0.2	5
25	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
26	Aggregation Behavior of Ligand-Protected Au <sub>9</sub> Clusters on Sputtered Atomic Layer Deposition TiO <sub>2</sub> . Journal of Physical Chemistry C, 2017, 121, 10781-10789.	3.1	19
27	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
28	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
29	Bio-mimicking TiO <sub>2</sub> architectures for enhanced photocatalytic activity under UV and visible light. RSC Advances, 2017, 7, 39098-39108.	3.6	9
30	Investigation of Ligand-Stabilized Gold Clusters on Defect-Rich Titania. Journal of Physical Chemistry C, 2017, 121, 28007-28016.	3.1	20
31	Hydrothermal synthesis of mixed phase blue titanium dioxide from oxalate stabilised sols. International Journal of Nanotechnology, 2017, 14, 265.	0.2	0
32	Atomically resolved structure of ligand-protected Au <sub>9</sub> clusters on TiO <sub>2</sub> nanosheets using aberration-corrected STEM. Journal of Chemical Physics, 2016, 144, 114703.	3.0	25
33	Engineered silver nanoparticles are sensed at the plasma membrane and dramatically modify the physiology of <i>Arabidopsis thaliana</i> plants. Plant Journal, 2016, 85, 245-257.	5.7	119
34	Activity of Catalysts Derived from Au <sub>101</sub> Immobilized on Activated Carbon. Catalysis Letters, 2016, 146, 1027-1032.	2.6	9
35	A Systematic Density Functional Theory Study of the Complete De-ligation of Ru <sub>3</sub> (CO) <sub>12</sub> . ChemistrySelect, 2016, 1, 1163-1167.	1.5	8
36	Grouping and aggregation of ligand protected Au <sub>9</sub> clusters on TiO <sub>2</sub> nanosheets. RSC Advances, 2016, 6, 110765-110774.	3.6	17

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37	Electrochemical stability of carbon-supported gold nanoparticles in acidic electrolyte during cyclic voltammetry. <i>Electrochimica Acta</i> , 2016, 187, 593-604.	5.2	32
38	Gold Nanoparticles Decorated with Sialic Acid Terminated Bi-antennary N-Glycans for the Detection of Influenza Virus at Nanomolar Concentrations. <i>ChemistryOpen</i> , 2015, 4, 708-716.	1.9	23
39	Gold Nanoparticles Decorated with Sialic Acid Terminated Bi-antennary N-Glycans for the Detection of Influenza Virus at Nanomolar Concentrations. <i>ChemistryOpen</i> , 2015, 4, 662-662.	1.9	3
40	Carbon nanotube diameter control via catalytic Co nanoparticles electrodeposited in porous alumina membranes. <i>RSC Advances</i> , 2015, 5, 25747-25754.	3.6	9
41	The effect of counter ions on the far-infrared spectra of tris(triphenylphosphinegold)oxonium dimer salts. <i>RSC Advances</i> , 2015, 5, 74499-74505.	3.6	3
42	Investigation of the Photodegradation of Reactive Blue 19 on P-25 Titanium Dioxide: Effect of Experimental Parameters. <i>Australian Journal of Chemistry</i> , 2015, 68, 471.	0.9	6
43	Control of Gold Nanostructure Morphology by Variation of Temperature and Reagent Ratios in the Turkevich Reaction. <i>Australian Journal of Chemistry</i> , 2015, 68, 858.	0.9	3
44	Size-optimized galactose-capped gold nanoparticles for the colorimetric detection of heat-labile enterotoxin at nanomolar concentrations. <i>Organic and Biomolecular Chemistry</i> , 2015, 13, 5215-5223.	2.8	18
45	Effect of Gold Nanoclusters on the Production of Ti <sup>3+</sup> Defect Sites in Titanium Dioxide Nanoparticles under Ultraviolet and Soft X-ray Radiation. <i>Journal of Physical Chemistry C</i> , 2015, 119, 11171-11177.	3.1	14
46	Toward Control of Gold Cluster Aggregation on TiO <sub>2</sub> via Surface Treatments. <i>Journal of Physical Chemistry C</i> , 2015, 119, 24465-24474.	3.1	39
47	Influence of gold nanoparticle loading in Au/C on the activity towards electrocatalytic glycerol oxidation. <i>Electrochimica Acta</i> , 2015, 153, 370-378.	5.2	27
48	Visible-Light-Driven Aerobic Oxidation of Amines to Nitriles over Hydrrous Ruthenium Oxide Supported on TiO <sub>2</sub> . <i>ACS Catalysis</i> , 2015, 5, 34-38.	11.2	61
49	Factors influencing the catalytic oxidation of benzyl alcohol using supported phosphine-capped gold nanoparticles. <i>Catalysis Science and Technology</i> , 2015, 5, 1323-1333.	4.1	65
50	Hydrothermal rutile to anatase reverse phase transformation. <i>International Journal of Nanotechnology</i> , 2014, 11, 493.	0.2	4
51	Phosphine-stabilised Au <sub>9</sub> clusters interacting with titania and silica surfaces: The first evidence for the density of states signature of the support-immobilised cluster. <i>Journal of Chemical Physics</i> , 2014, 141, 014702.	3.0	28
52	Influence of particle size on the electrocatalytic oxidation of glycerol over carbon-supported gold nanoparticles. <i>Electrochimica Acta</i> , 2014, 120, 398-407.	5.2	37
53	Tuning the selectivity of a supported gold catalyst in solvent- and radical initiator-free aerobic oxidation of cyclohexene. <i>Catalysis Science and Technology</i> , 2014, 4, 752-757.	4.1	28
54	XPS and NEXAFS study of fluorine modified TiO <sub>2</sub> nano-ovoids reveals dependence of Ti <sup>3+</sup> surface population on the modifying agent. <i>RSC Advances</i> , 2014, 4, 20649.	3.6	37

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55	Identification of the Vibrational Modes in the Far-Infrared Spectra of Ruthenium Carbonyl Clusters and the Effect of Gold Substitution. <i>Inorganic Chemistry</i> , 2014, 53, 4340-4349.	4.0	12
56	Catalytic consequences of charge-balancing cations in zeolite during photo-Fenton oxidation of formaldehyde in alkaline conditions. <i>Separation and Purification Technology</i> , 2014, 125, 269-274.	7.9	14
57	Rearrangement of chiral 1-bromo-N-nitrobicyclo[2.2.1]heptan-2-imines. <i>Tetrahedron: Asymmetry</i> , 2013, 24, 817-821.	1.8	2
58	Hydrogen sensing using gold nanoclusters supported on tungsten trioxide thin films. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 12865-12877.	7.1	18
59	Establishing a Au Nanoparticle Size Effect in the Oxidation of Cyclohexene Using Gradually Changing Au Catalysts. <i>ACS Catalysis</i> , 2013, 3, 2986-2991.	11.2	77
60	The effect of MnO <sub>2</sub> loading on the glycerol electrooxidation activity of Au/MnO <sub>2</sub> /C catalysts. <i>Electrochimica Acta</i> , 2013, 98, 208-217.	5.2	29
61	Chemically-synthesised, atomically-precise gold clusters deposited and activated on titania. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 3917.	2.8	111
62	Far-infrared absorption spectra of synthetically-prepared, ligated metal clusters with Au <sub>6</sub> , Au <sub>8</sub> , Au <sub>9</sub> and Au <sub>6</sub> Pd metal cores. <i>RSC Advances</i> , 2013, 3, 22140.	3.6	30
63	Transparent, photocatalytic, titania thin films formed at low temperature. <i>Current Applied Physics</i> , 2013, 13, 142-147.	2.4	13
64	Optical characterisation of nanostructured Au/WO <sub>3</sub> thin films for sensing hydrogen at low concentrations. <i>Sensors and Actuators B: Chemical</i> , 2013, 179, 125-130.	7.8	45
65	Growth of Carbon Nanotubes on Mesoporous Silica Coated Planar and Three-Dimensional Surfaces. <i>Materials Research Society Symposia Proceedings</i> , 2013, 1505, 1.	0.1	0
66	Current density enhancement in inverted nanopyramid textured crystalline silicon solar cell using gold nanoparticles. <i>Proceedings of SPIE</i> , 2013, , .	0.8	0
67	Chemically synthesised atomically precise gold clusters deposited and activated on titania. Part II. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 14806.	2.8	78
68	Platinum-Ruthenium Nanoparticles: Active and Selective Catalysts for Hydrogenation of Phenylacetylene. <i>Australian Journal of Chemistry</i> , 2012, 65, 1420.	0.9	8
69	Diastereospecific ring cleavage of bornane-2,3-dione in the Bucherer-Bergs reaction. <i>Tetrahedron: Asymmetry</i> , 2012, 23, 1080-1083.	1.8	5
70	A route to a wide range of cyclopentanecarboxylic acids via 4-substituted camphors. <i>Tetrahedron</i> , 2012, 68, 1972-1978.	1.9	7
71	Stable colloidal Co <sup>II</sup> /Pd nanocatalysts for carbon nanotube growth. <i>Physica Status Solidi (B): Basic Research</i> , 2009, 246, 2436-2439.	1.5	6
72	A computational study of a novel seven-membered cyclic diyne and its cobalt <sup>II</sup> -carbonyl complex. <i>Computational and Theoretical Chemistry</i> , 2009, 909, 111-115.	1.5	0

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73	Self-cyclisation versus diynediol-promoted ring closure during the construction of coordinated crown-type macrocycles. <i>Polyhedron</i> , 2008, 27, 167-174.	2.2	5
74	Study of ferrocenyl-substituted Co <sub>2</sub> (CO) <sub>6</sub> -bispropargylic alcohol complexes as substrates for the formation of chains and macrocycles. <i>Journal of Organometallic Chemistry</i> , 2008, 693, 2683-2692.	1.8	10
75	Selective oxidation with dioxygen by gold nanoparticle catalysts derived from 55-atom clusters. <i>Nature</i> , 2008, 454, 981-983.	27.8	1,242
76	Catalytic growth of carbon nanotubes on stainless steel: Characterization and frictional properties. <i>Diamond and Related Materials</i> , 2008, 17, 1853-1857.	3.9	31
77	From straight chain to macrocyclic complexes containing mixed sulfur/nitrogen donors and coordinated 1,3-diynes. <i>Journal of Organometallic Chemistry</i> , 2007, 692, 4985-4994.	1.8	5
78	Selective growth of vertically aligned carbon nanofibres in sub-micron patterns and Raman mapping of produced arrays. <i>Diamond and Related Materials</i> , 2006, 15, 1023-1028.	3.9	7
79	Single-Step Conversion of Dimethyl Terephthalate into Cyclohexanedimethanol with Ru <sub>5</sub> PtSn, a Trimetallic Nanoparticle Catalyst. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 4782-4785.	13.8	148
80	Uniform and selective CVD growth of carbon nanotubes and nanofibres on arbitrarily microstructured silicon surfaces. <i>Nanotechnology</i> , 2006, 17, 1397-1403.	2.6	14
81	Low temperature synthesis of carbon nanofibres on carbon fibre matrices. <i>Carbon</i> , 2005, 43, 2643-2648.	10.3	60
82	Highly efficient catalysts for the hydrogenation of nitro-substituted aromatics. <i>Chemical Communications</i> , 2005, , 2026.	4.1	76
83	Nickel Formate Route to the Growth of Carbon Nanotubes.. <i>ChemInform</i> , 2005, 36, no.	0.0	0
84	Production of Carbon Nanofibers in High Yields Using a Sodium Chloride Support.. <i>ChemInform</i> , 2005, 36, no.	0.0	0
85	Catalyst patterning methods for surface-bound chemical vapor deposition of carbon nanotubes. <i>Applied Physics A: Materials Science and Processing</i> , 2005, 81, 1559-1567.	2.3	23
86	Submicron patterning of Co colloid catalyst for growth of vertically aligned carbon nanotubes. <i>Nanotechnology</i> , 2005, 16, 1636-1640.	2.6	27
87	Wet catalyst assisted growth of carbon nanofibers on complex three-dimensional substrates. <i>Diamond and Related Materials</i> , 2005, 14, 733-738.	3.9	22
88	Production of Carbon Nanofibers in High Yields Using a Sodium Chloride Support. <i>Journal of Physical Chemistry B</i> , 2005, 109, 16665-16670.	2.6	24
89	Synthesis and Properties of a New Range of Mixed-Donor Alkynyl Ferrocenophanes. <i>Organometallics</i> , 2005, 24, 628-637.	2.3	13
90	Growth of aligned carbon nanofibres over large areas using colloidal catalysts at low temperatures. <i>Chemical Communications</i> , 2004, , 1416.	4.1	28

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91	Synthesis of cobalt-containing cyclophanes, and the formation of an unprecedented seven-membered cyclic diyne Electronic supplementary information (ESI) available: crystallographic data for complexes 8 and 11. See <a href="http://www.rsc.org/suppdata/nj/b3/b310515f/">http://www.rsc.org/suppdata/nj/b3/b310515f/</a> . <i>New Journal of Chemistry</i> , 2004, 28, 527.	2.8	18
92	Nickel Formate Route to the Growth of Carbon Nanotubes. <i>Journal of Physical Chemistry B</i> , 2004, 108, 18446-18450.	2.6	32
93	Double dehydration of a diynediol promoted by a single $\text{Co}_2(\text{CO})_6$ unit; activation of an uncoordinated propargylic centre. <i>New Journal of Chemistry</i> , 2002, 26, 1706-1708.	2.8	8
94	Methanol tolerant Oxygen Reduction Reaction electrocatalysis using Size-Specific Triphenylphosphine-Ligated Gold Nanoclusters. <i>ChemNanoMat</i> , 0, , .	2.8	2