Alexandre V Vorontsov

List of Publications by Year
in descending order

60 papers	2,855 citations	159585 30 h-index	168389 53 g-index
61 all docs	61 docs citations	61 times ranked	3349 citing authors

#	Article	IF	Citations
1	Reduced graphene oxide/NH2-MIL-125(Ti) composite: Selective CO2 photoreduction to methanol under visible light and computational insights into charge separation. Journal of CO2 Utilization, 2020, 42, 101300.	6.8	37
2	Computational Models of (001) Faceted Anatase TiO 2 Nanoparticles. Journal of Chemical Technology and Biotechnology, 2020, 95, 2750.	3.2	2
3	Recent Advancements in the Understanding of the Surface Chemistry in TiO2 Photocatalysis. Surfaces, 2020, 3, 72-92.	2.3	18
4	Oxygen vacancies in nano-sized TiO2 anatase nanoparticles. Solid State Ionics, 2019, 339, 115009.	2.7	22
5	Design of active sites in zeolite catalysts using modern semiempirical methods: The case of mordenite. Computational and Theoretical Chemistry, 2019, 1166, 112572.	2.5	7
6	Insights into the visible light photocatalytic activity of S-doped hydrated TiO2. International Journal of Hydrogen Energy, 2019, 44, 17963-17973.	7.1	15
7	Quantum size effect and visible light activity of anatase nanosheet quantum dots. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 379, 39-46.	3.9	16
8	Self-assembled reduced graphene oxide-TiO2 nanocomposites: Synthesis, DFTB+ calculations, and enhanced photocatalytic reduction of CO2 to methanol. Carbon, 2019, 147, 385-397.	10.3	57
9	Insights into Reinforced Photocatalytic Activity of the CNTâ€“TiO₂ Nanocomposite for CO₂ Reduction and Water Splitting. Journal of Physical Chemistry C, 2019, 123, 367-378.	3.1	67
10	Semiempirical computational study of oxygen vacancies in a decahedral anatase nanoparticle. International Journal of Quantum Chemistry, 2019, 119, e25806.	2.0	8
11	Advancing Fenton and photo-Fenton water treatment through the catalyst design. Journal of Hazardous Materials, 2019, 372, 103-112.	12.4	221
12	Influence of Nanoparticles Size on XRD Patterns for Small Monodisperse Nanoparticles of Cu⁰ and TiO₂ Anatase. Industrial & Engineering Chemistry Research, 2018, 57, 2526-2536.	3.7	78
13	Determination of graphene's edge energy using hexagonal graphene quantum dots and PM7 method. Physical Chemistry Chemical Physics, 2018, 20, 14740-14752.	2.8	17
14	Structure, electronic and optical properties of bilayer anatase nanoribbons. Computational Materials Science, 2018, 155, 266-281.	3.0	3
15	Size and surface groups effects in decahedral anatase nanoparticles for photocatalytic applications. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 363, 51-60.	3.9	14
16	Engineering and modeling the effect of Mg doping in TiO₂ for enhanced photocatalytic reduction of CO₂ to fuels. Catalysis Science and Technology, 2018, 8, 3686-3694.	4.1	38
17	Reinforced photocatalytic reduction of CO2 to fuel by efficient S-TiO2: Significance of sulfur doping. International Journal of Hydrogen Energy, 2018, 43, 17682-17695.	7.1	43
18	Structural and electronic effects in acetone adsorption over TiO2 anatase clusters as the first stage of photocatalytic oxidation. Journal of Nanoparticle Research, 2017, 19, 1.	1.9	8

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19	Benchmarking semiempirical and DFT methods for the interaction of thiophene and diethyl sulfide molecules with a Ti(OH)4(H2O) cluster. Journal of Molecular Modeling, 2017, 23, 223.	1.8	6
20	Efficient approach for simultaneous CO and H2 production via photoreduction of CO2 with water over copper nanoparticles loaded TiO2. Applied Catalysis A: General, 2016, 523, 107-117.	4.3	52
21	Acetone and ethanol vapor oxidation via negative atmospheric corona discharge over titania-based catalysts. Applied Catalysis B: Environmental, 2016, 183, 18-27.	20.2	21
22	Adsorption and photocatalytic oxidation of acetone and diethyl sulfide on FeOOH aerosol. Colloid Journal, 2015, 77, 11-15.	1.3	1
23	Physicochemical properties and photocatalytic activity of H3PW12O40/TiO2. Kinetics and Catalysis, 2015, 56, 308-315.	1.0	10
24	Influence of elevated surface texture hydrated titania on Ce-doped Mn/TiO2 catalysts for the low-temperature SCR of NO under oxygen-rich conditions. Journal of Catalysis, 2015, 325, 145-155.	6.2	415
25	Cluster models of photocatalytic anatase TiO2 nanoparticles and their computational characterization. Catalysis Today, 2015, 252, 168-176.	4.4	21
26	Influence of Nafion loading on hydrogen production in a membrane photocatalytic system. Journal of Photochemistry and Photobiology A: Chemistry, 2015, 297, 8-13.	3.9	8
27	Arrangement of acid sites on the surfaces of anatase titanium dioxide nanoparticles according to cluster models. Kinetics and Catalysis, 2014, 55, 409-415.	1.0	9
28	Hydrous TiO2 materials and their application for sorption of inorganic ions. Chemical Engineering Journal, 2014, 251, 131-137.	12.7	26
29	Molecular and reactive adsorption of dimethyl methylphosphonate over (001) and (100) anatase clusters. Computational and Theoretical Chemistry, 2013, 1020, 63-71.	2.5	15
30	Oxidation of Ethanol Vapors in Negative Atmospheric Corona Discharge. Industrial & Engineering Chemistry Research, 2013, 52, 5842-5848.	3.7	11
31	Fast purification of air from diethyl sulfide with nanosized TiO2 aerosol. Applied Catalysis B: Environmental, 2013, 129, 318-324.	20.2	8
32	Preparation of Organic Compounds Using Photocatalytic Reactions. Current Organic Chemistry, 2013, 17, 2459-2481.	1.6	9
33	Photocatalytic oxidation of ethanol vapors under visible light on CdSâ€“TiO2 nanocatalyst. Journal of Photochemistry and Photobiology A: Chemistry, 2012, 250, 103-109.	3.9	48
34	Photocatalytic oxidation of ethanol and isopropanol vapors on cadmium sulfide. Journal of Catalysis, 2012, 287, 138-148.	6.2	40
35	Influence of the method of platinum deposition on activity and stability of Pt/TiO2 photocatalysts in the photocatalytic oxidation of dimethyl methylphosphonate. Catalysis Communications, 2011, 12, 597-601.	3.3	62
36	The Influence of Corona Electrodes Thickness on the Efficiency of Plasmachemical Oxidation of Acetone. Plasma Chemistry and Plasma Processing, 2011, 31, 23-39.	2.4	16

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37	Parametric studies of diethyl phosphoramidate photocatalytic decomposition over TiO2. Journal of Hazardous Materials, 2011, 186, 1147-1153.	12.4	11
38	Photocatalytic hydrogen evolution from aqueous solutions of organophosphorous compounds. International Journal of Hydrogen Energy, 2010, 35, 7337-7343.	7.1	51
39	Photocatalytic Transformations of Sulfur-Based Organic Compounds. Nanostructure Science and Technology, 2010, , 579-621.	0.1	2
40	Overall water splitting over Pt/TiO2 catalyst with Ce3+/Ce4+ shuttle charge transfer system. International Journal of Hydrogen Energy, 2009, 34, 138-146.	7.1	45
41	Enhancement of the O2 or H2 photoproduction rate in a Ce3+/Ce4+â€“TiO2 system by the TiO2 surface and structure modification. Applied Catalysis A: General, 2009, 367, 130-137.	4.3	42
42	Fast elimination of organic airborne compounds by adsorption and catalytic oxidation over aerosol TiO2. Catalysis Communications, 2008, 9, 2598-2600.	3.3	18
43	Influence of mesoporous and platinum-modified titanium dioxide preparation methods on photocatalytic activity in liquid and gas phase. Applied Catalysis B: Environmental, 2007, 77, 35-45.	20.2	50
44	Effect of TiOSO4 hydrothermal hydrolysis conditions on TiO2 morphology and gas-phase oxidative activity. Research on Chemical Intermediates, 2007, 33, 449-464.	2.7	39
45	Acceleration of Acetone Destruction Process under Synergistic Action of Photocatalytic Oxidation and Barrier Discharge. Plasma Chemistry and Plasma Processing, 2007, 27, 624-634.	2.4	17
46	Noble metal and sulfuric acid modified TiO2 photocatalysts: Mineralization of organophosphorous compounds. Applied Catalysis B: Environmental, 2006, 63, 114-123.	20.2	38
47	Photocatalytic Destruction of a Thiosulfonate. Topics in Catalysis, 2005, 35, 245-253.	2.8	3
48	Experimental Study of Dimethyl Methylphosphonate Decomposition over Anatase TiO2. Journal of Physical Chemistry B, 2005, 109, 21884-21892.	2.6	92
49	Catalytic vapour-phase hydrolysis and photocatalytic oxidation of dimethyl methylphosphonate on a TiO2 surface. Mendeleev Communications, 2004, 14, 197-199.	1.6	9
50	Comparative study on photocatalytic oxidation of four organophosphorus simulants of chemical warfare agents in aqueous suspension of titanium dioxide. Journal of Photochemistry and Photobiology A: Chemistry, 2004, 162, 503-511.	3.9	60
51	Photocatalytic oxidation of VX simulant 2-(butylamino)ethanethiol. Journal of Hazardous Materials, 2004, 113, 89-95.	12.4	32
52	TiO2 reactivation in photocatalytic destruction of gaseous diethyl sulfide in a coil reactor. Applied Catalysis B: Environmental, 2003, 44, 25-40.	20.2	47
53	Pathways of photocatalytic gas phase destruction of HD simulant 2-chloroethyl ethyl sulfide. Journal of Catalysis, 2003, 220, 414-423.	6.2	96
54	Role of Platinum Deposited on TiO2in Phenol Photocatalytic Oxidation. Langmuir, 2003, 19, 3151-3156.	3.5	290

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55	Enhanced photocatalytic degradation of dimethyl methylphosphonate in the presence of low-frequency ultrasound. Photochemical and Photobiological Sciences, 2003, 2, 694.	2.9	52
56	Photocatalytic Degradation of 2-Phenethyl-2-chloroethyl Sulfide in Liquid and Gas Phases. Environmental Science & Technology, 2002, 36, 5261-5269.	10.0	46
57	Routes of photocatalytic destruction of chemical warfare agent simulants. New Journal of Chemistry, 2002, 26, 732-744.	2.8	69
58	Photocatalytic destruction of gaseous diethyl sulfide over TiO2. Applied Catalysis B: Environmental, 2001, 32, 11-24.	20.2	110
59	Vibrofluidized- and fixed-bed photocatalytic reactors: case of gaseous acetone photooxidation. Chemical Engineering Science, 2000, 55, 5089-5098.	3.8	57
60	Influence of the form of photodeposited platinum on titania upon its photocatalytic activity in CO and acetone oxidation. Journal of Photochemistry and Photobiology A: Chemistry, 1999, 125, 113-117.	3.9	130