# Alexandre V Vorontsov

List of Publications by Year
in descending order



| 60 | 2,855 | 159585 30 | 168389 53 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 61 | 61 | 61 | 3349 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | 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 |
| 2 | Role of Platinum Deposited on TiO2in Phenol Photocatalytic Oxidation. Langmuir, 2003, 19, 3151-3156. | 3.5 | 290 |
| 3 | Advancing Fenton and photo-Fenton water treatment through the catalyst design. Journal of Hazardous Materials, 2019, 372, 103-112. | 12.4 | 221 |
| 4 | 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 |
| 5 | Photocatalytic destruction of gaseous diethyl sulfide over TiO2. Applied Catalysis B: Environmental, 2001, 32, 11-24. | 20.2 | 110 |
| 6 | Pathways of photocatalytic gas phase destruction of HD simulant 2-chloroethyl ethyl sulfide. Journal of Catalysis, 2003, 220, 414-423. | 6.2 | 96 |
| 7 | Experimental Study of Dimethyl Methylphosphonate Decomposition over Anatase TiO2. Journal of Physical Chemistry B, 2005, 109, 21884-21892. | 2.6 | 92 |
| 8 | Influence of Nanoparticles Size on XRD Patterns for Small Monodisperse Nanoparticles of Cu<sup>0</sup> and TiO<sub>2</sub> Anatase. Industrial & Engineering Chemistry Research, 2018, 57, 2526-2536. | 3.7 | 78 |
| 9 | Routes of photocatalytic destruction of chemical warfare agent simulants. New Journal of Chemistry, 2002, 26, 732-744. | 2.8 | 69 |
| 10 | Insights into Reinforced Photocatalytic Activity of the CNTâ€“TiO<sub>2</sub> Nanocomposite for CO<sub>2</sub> Reduction and Water Splitting. Journal of Physical Chemistry C, 2019, 123, 367-378. | 3.1 | 67 |
| 11 | 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 |
| 12 | 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 |
| 13 | Vibrofluidized- and fixed-bed photocatalytic reactors: case of gaseous acetone photooxidation. Chemical Engineering Science, 2000, 55, 5089-5098. | 3.8 | 57 |
| 14 | 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 |
| 15 | Enhanced photocatalytic degradation of dimethyl methylphosphonate in the presence of low-frequency ultrasound. Photochemical and Photobiological Sciences, 2003, 2, 694. | 2.9 | 52 |
| 16 | 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 |
| 17 | Photocatalytic hydrogen evolution from aqueous solutions of organophosphorous compounds. International Journal of Hydrogen Energy, 2010, 35, 7337-7343. | 7.1 | 51 |
| 18 | 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 |

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|---|---|---|---|
| 19 | 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 |
| 20 | TiO2 reactivation in photocatalytic destruction of gaseous diethyl sulfide in a coil reactor. Applied Catalysis B: Environmental, 2003, 44, 25-40. | 20.2 | 47 |
| 21 | Photocatalytic Degradation of 2-Phenethyl-2-chloroethyl Sulfide in Liquid and Gas Phases. Environmental Science & Technology, 2002, 36, 5261-5269. | 10.0 | 46 |
| 22 | 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 |
| 23 | 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 |
| 24 | 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 |
| 25 | Photocatalytic oxidation of ethanol and isopropanol vapors on cadmium sulfide. Journal of Catalysis, 2012, 287, 138-148. | 6.2 | 40 |
| 26 | 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 |
| 27 | Noble metal and sulfuric acid modified TiO2 photocatalysts: Mineralization of organophosphorous compounds. Applied Catalysis B: Environmental, 2006, 63, 114-123. | 20.2 | 38 |
| 28 | Engineering and modeling the effect of Mg doping in TiO<sub>2</sub> for enhanced photocatalytic reduction of CO<sub>2</sub> to fuels. Catalysis Science and Technology, 2018, 8, 3686-3694. | 4.1 | 38 |
| 29 | 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 |
| 30 | Photocatalytic oxidation of VX simulant 2-(butylamino)ethanethiol. Journal of Hazardous Materials, 2004, 113, 89-95. | 12.4 | 32 |
| 31 | Hydrous TiO2 materials and their application for sorption of inorganic ions. Chemical Engineering Journal, 2014, 251, 131-137. | 12.7 | 26 |
| 32 | Oxygen vacancies in nano-sized TiO2 anatase nanoparticles. Solid State Ionics, 2019, 339, 115009. | 2.7 | 22 |
| 33 | Cluster models of photocatalytic anatase TiO2 nanoparticles and their computational characterization. Catalysis Today, 2015, 252, 168-176. | 4.4 | 21 |
| 34 | 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 |
| 35 | Fast elimination of organic airborne compounds by adsorption and catalytic oxidation over aerosol TiO2. Catalysis Communications, 2008, 9, 2598-2600. | 3.3 | 18 |
| 36 | Recent Advancements in the Understanding of the Surface Chemistry in TiO2 Photocatalysis. Surfaces, 2020, 3, 72-92. | 2.3 | 18 |

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|---|---|---|---|
| 37 | 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 |
| 38 | 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 |
| 39 | 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 |
| 40 | 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 |
| 41 | Molecular and reactive adsorption of dimethyl methylphosphonate over (001) and (100) anatase clusters. Computational and Theoretical Chemistry, 2013, 1020, 63-71. | 2.5 | 15 |
| 42 | Insights into the visible light photocatalytic activity of S-doped hydrated TiO2. International Journal of Hydrogen Energy, 2019, 44, 17963-17973. | 7.1 | 15 |
| 43 | 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 |
| 44 | Parametric studies of diethyl phosphoramidate photocatalytic decomposition over TiO2. Journal of Hazardous Materials, 2011, 186, 1147-1153. | 12.4 | 11 |
| 45 | Oxidation of Ethanol Vapors in Negative Atmospheric Corona Discharge. Industrial & Engineering Chemistry Research, 2013, 52, 5842-5848. | 3.7 | 11 |
| 46 | Physicochemical properties and photocatalytic activity of H3PW12O40/TiO2. Kinetics and Catalysis, 2015, 56, 308-315. | 1.0 | 10 |
| 47 | Catalytic vapour-phase hydrolysis and photocatalytic oxidation of dimethyl methylphosphonate on a TiO2 surface. Mendeleev Communications, 2004, 14, 197-199. | 1.6 | 9 |
| 48 | 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 |
| 49 | Preparation of Organic Compounds Using Photocatalytic Reactions. Current Organic Chemistry, 2013, 17, 2459-2481. | 1.6 | 9 |
| 50 | Fast purification of air from diethyl sulfide with nanosized TiO2 aerosol. Applied Catalysis B: Environmental, 2013, 129, 318-324. | 20.2 | 8 |
| 51 | 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 |
| 52 | 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 |
| 53 | Semiempirical computational study of oxygen vacancies in a decahedral anatase nanoparticle. International Journal of Quantum Chemistry, 2019, 119, e25806. | 2.0 | 8 |
| 54 | 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 |

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|---|---|---|---|
| 55 | 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 |
| 56 | Photocatalytic Destruction of a Thiosulfonate. Topics in Catalysis, 2005, 35, 245-253. | 2.8 | 3 |
| 57 | Structure, electronic and optical properties of bilayer anatase nanoribbons. Computational Materials Science, 2018, 155, 266-281. | 3.0 | 3 |
| 58 | Photocatalytic Transformations of Sulfur-Based Organic Compounds. Nanostructure Science and Technology, 2010, , 579-621. | 0.1 | 2 |
| 59 | Computational Models of (001) Faceted Anatase TiO 2 Nanoparticles. Journal of Chemical Technology and Biotechnology, 2020, 95, 2750. | 3.2 | 2 |
| 60 | Adsorption and photocatalytic oxidation of acetone and diethyl sulfide on FeOOH aerosol. Colloid Journal, 2015, 77, 11-15. | 1.3 | 1 |