

Jiri Henych

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5033366/publications.pdf>

Version: 2024-02-01

68
papers

1,563
citations

279487

23
h-index

344852

36
g-index

69
all docs

69
docs citations

69
times ranked

2531
citing authors

#	ARTICLE	IF	CITATIONS
1	Strongly luminescent monolayered MoS ₂ prepared by effective ultrasound exfoliation. <i>Nanoscale</i> , 2013, 5, 3387.	2.8	231
2	Chemical mechanical glass polishing with cerium oxide: Effect of selected physico-chemical characteristics on polishing efficiency. <i>Wear</i> , 2016, 362-363, 114-120.	1.5	71
3	Blue and green luminescence of reduced graphene oxide quantum dots. <i>Carbon</i> , 2013, 63, 537-546.	5.4	66
4	Ultrasound exfoliation of inorganic analogues of graphene. <i>Nanoscale Research Letters</i> , 2014, 9, 167.	3.1	58
5	Effect of preparation procedure on the formation of nanostructured ceria/zirconia mixed oxide catalysts for ethyl acetate oxidation: Homogeneous precipitation with urea vs template-assisted hydrothermal synthesis. <i>Applied Catalysis A: General</i> , 2015, 502, 418-432.	2.2	56
6	Magnetically separable reactive sorbent based on the CeO ₂ /Fe ₂ O ₃ composite and its utilization for rapid degradation of the organophosphate pesticide parathion methyl and certain nerve agents. <i>Chemical Engineering Journal</i> , 2015, 262, 747-755.	6.6	55
7	Cerium oxide for the destruction of chemical warfare agents: A comparison of synthetic routes. <i>Journal of Hazardous Materials</i> , 2016, 304, 259-268.	6.5	54
8	Shape-controlled synthesis of Sn-doped CuO nanoparticles for catalytic degradation of Rhodamine B. <i>Journal of Colloid and Interface Science</i> , 2016, 481, 28-38.	5.0	45
9	Self-Assembled BN and BCN Quantum Dots Obtained from High Intensity Ultrasound Exfoliated Nanosheets. <i>Science of Advanced Materials</i> , 2014, 6, 1106-1116.	0.1	42
10	Degradation of organophosphorus pesticide parathion methyl on nanostructured titania-iron mixed oxides. <i>Applied Surface Science</i> , 2015, 344, 9-16.	3.1	35
11	Nanocrystalline cerium oxide prepared from a carbonate precursor and its ability to breakdown biologically relevant organophosphates. <i>Environmental Science: Nano</i> , 2017, 4, 1283-1293.	2.2	34
12	Reactive adsorption and photodegradation of soman and dimethyl methylphosphonate on TiO ₂ /nanodiamond composites. <i>Applied Catalysis B: Environmental</i> , 2019, 259, 118097.	10.8	32
13	Doping of TiO ₂ and TiO ₂ with Noble Metals: Synthesis, Characterization and Photocatalytic Performance for Azo Dye Discoloration. <i>Photochemistry and Photobiology</i> , 2013, 89, 1038-1046.	1.3	31
14	Mesoporous manganese oxide for the degradation of organophosphates pesticides. <i>Journal of Materials Science</i> , 2016, 51, 2634-2642.	1.7	31
15	h-BN-TiO ₂ Nanocomposite for Photocatalytic Applications. <i>Journal of Nanomaterials</i> , 2016, 2016, 1-12.	1.5	28
16	Accelerated dephosphorylation of adenosine phosphates and related compounds in the presence of nanocrystalline cerium oxide. <i>Environmental Science: Nano</i> , 2016, 3, 847-856.	2.2	28
17	Reactive adsorption of toxic organophosphates parathion methyl and DMMP on nanostructured Ti/Ce oxides and their composites. <i>Arabian Journal of Chemistry</i> , 2019, 12, 4258-4269.	2.3	28
18	Photocatalytic degradation of ciprofloxacin in water at nano-ZnO prepared by pulse alternating current electrochemical synthesis. <i>Journal of Water Process Engineering</i> , 2021, 40, 101809.	2.6	28

#	ARTICLE	IF	CITATIONS
19	Hydrogen peroxide route to Sn-doped titania photocatalysts. <i>Chemistry Central Journal</i> , 2012, 6, 113.	2.6	27
20	Enhanced visible-light photodegradation of fluoroquinolone-based antibiotics and <i>E. coli</i> growth inhibition using Ag@TiO ₂ nanoparticles. <i>RSC Advances</i> , 2021, 11, 13980-13991.	1.7	26
21	Graphene oxide/MnO ₂ nanocomposite as destructive adsorbent of nerve-agent simulants in aqueous media. <i>Applied Surface Science</i> , 2017, 412, 19-28.	3.1	25
22	Can cerium oxide serve as a phosphodiesterase-mimetic nanozyme?. <i>Environmental Science: Nano</i> , 2019, 6, 3684-3698.	2.2	25
23	Size Effects on Surface Chemistry and Raman Spectra of Sub-5 nm Oxidized High-Pressure High-Temperature and Detonation Nanodiamonds. <i>Journal of Physical Chemistry C</i> , 2021, 125, 5647-5669.	1.5	25
24	Recovery of Cerium Dioxide from Spent Glass-Polishing Slurry and Its Utilization as a Reactive Sorbent for Fast Degradation of Toxic Organophosphates. <i>Advances in Materials Science and Engineering</i> , 2015, 2015, 1-8.	1.0	24
25	A green method of graphene preparation in an alkaline environment. <i>Ultrasonics Sonochemistry</i> , 2015, 24, 65-71.	3.8	24
26	Chemical warfare agent simulant DMMP reactive adsorption on TiO ₂ /graphene oxide composites prepared via titanium peroxo-complex or urea precipitation. <i>Journal of Hazardous Materials</i> , 2018, 359, 482-490.	6.5	23
27	Bifunctional TiO ₂ /CeO ₂ reactive adsorbent/photocatalyst for degradation of bis-p-nitrophenyl phosphate and CWAs. <i>Chemical Engineering Journal</i> , 2021, 414, 128822.	6.6	22
28	Template-assisted hydrothermally obtained titania-ceria composites and their application as catalysts in ethyl acetate oxidation and methanol decomposition with a potential for sustainable environment protection. <i>Applied Surface Science</i> , 2017, 396, 1289-1302.	3.1	19
29	ZnO/Bi ₂ O ₃ nanowire composites as a new family of photocatalysts. <i>Powder Technology</i> , 2015, 270, 83-91.	2.1	18
30	Graphene oxide and graphitic carbon nitride nanocomposites assembled by electrostatic attraction forces: Synthesis and characterization. <i>Materials Chemistry and Physics</i> , 2019, 228, 228-236.	2.0	18
31	Mesoporous cerium oxide for fast degradation of aryl organophosphate flame retardant triphenyl phosphate. <i>RSC Advances</i> , 2019, 9, 32058-32065.	1.7	17
32	Size and nitrogen inhomogeneity in detonation and laser synthesized primary nanodiamond particles revealed via salt-assisted deaggregation. <i>Carbon</i> , 2021, 171, 230-239.	5.4	17
33	Room-temperature synthesis of nanoceria for degradation of organophosphate pesticides and its regeneration and reuse. <i>RSC Advances</i> , 2020, 10, 14441-14450.	1.7	16
34	Nanocrystalline cerium oxide for catalytic degradation of paraoxon methyl: Influence of CeO ₂ surface properties. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106229.	3.3	15
35	Water-based synthesis of TiO ₂ /CeO ₂ composites supported on plasma-treated montmorillonite for parathion methyl degradation. <i>Applied Clay Science</i> , 2017, 144, 26-35.	2.6	14
36	Design and Performance of Novel Self-Cleaning g-C ₃ N ₄ /PMMA/PUR Membranes. <i>Polymers</i> , 2020, 12, 850.	2.0	14

#	ARTICLE	IF	CITATIONS
37	Feasible Synthesis of TiO ₂ Deposited on Kaolin for Photocatalytic Applications. <i>Clays and Clay Minerals</i> , 2013, 61, 165-176.	0.6	13
38	Photocatalytic and electrochemical properties of single- and multi-layer sub-stoichiometric titanium oxide coatings prepared by atmospheric plasma spraying. <i>Journal of Advanced Ceramics</i> , 2016, 5, 126-136.	8.9	13
39	Template-assisted hydrothermally synthesized iron-titanium binary oxides and their application as catalysts for ethyl acetate oxidation. <i>Applied Catalysis A: General</i> , 2016, 528, 24-35.	2.2	13
40	Solar light decomposition of warfare agent simulant DMMP on TiO ₂ /graphene oxide nanocomposites. <i>Catalysis Science and Technology</i> , 2019, 9, 1816-1824.	2.1	13
41	Mesoporous TiO ₂ powders as host matrices for iron nanoparticles. Effect of the preparation procedure and doping with Hf. <i>Nano Structures Nano Objects</i> , 2016, 7, 56-63.	1.9	12
42	Iron modified titanium-hafnium binary oxides as catalysts in total oxidation of ethyl acetate. <i>Catalysis Communications</i> , 2016, 81, 14-19.	1.6	12
43	Role of bismuth in nano-structured doped TiO ₂ photocatalyst prepared by environmentally benign soft synthesis. <i>Journal of Materials Science</i> , 2014, 49, 3560-3571.	1.7	11
44	Chemical degradation of trimethyl phosphate as surrogate for organo-phosphorus pesticides on nanostructured metal oxides. <i>Materials Research Bulletin</i> , 2015, 61, 259-269.	2.7	11
45	Formation of Catalytic Active Sites in Hydrothermally Obtained Binary Ceria-Iron Oxides: Composition and Preparation Effects. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 1838-1852.	4.0	11
46	Nanostructured manganese oxides as highly active catalysts for enhanced hydrolysis of bis(4-nitrophenyl)phosphate and catalytic decomposition of methanol. <i>Catalysis Science and Technology</i> , 2021, 11, 1766-1779.	2.1	11
47	Nanostructured Metal Oxides for Stoichiometric Degradation of Chemical Warfare Agents. <i>Reviews of Environmental Contamination and Toxicology</i> , 2016, 236, 239-258.	0.7	10
48	Synthesis and characterization of TiO ₂ /Mg(OH) ₂ composites for catalytic degradation of CWA surrogates. <i>RSC Advances</i> , 2020, 10, 19542-19552.	1.7	10
49	Graphene oxide nanoparticle attachment and its toxicity on living lung epithelial cells. <i>RSC Advances</i> , 2015, 5, 59447-59457.	1.7	9
50	Novel synthesis of Ag@AgCl/ZnO by different radiation sources including radioactive isotope ⁶⁰ Co: Physicochemical and antimicrobial study. <i>Applied Surface Science</i> , 2020, 529, 147098.	3.1	9
51	Impact of Ge ⁴⁺ Ion as Structural Dopant of Ti ⁴⁺ in Anatase: Crystallographic Translation, Photocatalytic Behavior, and Efficiency under UV and VIS Irradiation. <i>Journal of Nanomaterials</i> , 2012, 2012, 1-11.	1.5	8
52	Mesoporous copper-ceria-titania ternary oxides as catalysts for environmental protection: Impact of Ce/Ti ratio and preparation procedure. <i>Applied Catalysis A: General</i> , 2020, 595, 117487.	2.2	8
53	Photocatalytic oxidation of butane by titania after reductive annealing. <i>Journal of Materials Science</i> , 2014, 49, 4161-4170.	1.7	6
54	<i>In Situ</i> FTIR Spectroscopy Study of the Photodegradation of Acetaldehyde and azo Dye Photobleaching on Bismuth-Modified TiO ₂ . <i>Photochemistry and Photobiology</i> , 2015, 91, 48-58.	1.3	6

#	ARTICLE	IF	CITATIONS
55	Titania and zirconia binary oxides as catalysts for total oxidation of ethyl acetate and methanol decomposition. <i>Journal of Environmental Chemical Engineering</i> , 2018, 6, 2540-2550.	3.3	6
56	Structure and catalytic activity of hydrothermally obtained titanium-tin binary oxides for sustainable environment: Evaluation and control. <i>Microporous and Mesoporous Materials</i> , 2019, 276, 223-231.	2.2	6
57	Crucial cytotoxic and antimicrobial activity changes driven by amount of doped silver in biocompatible carbon nitride nanosheets. <i>Colloids and Surfaces B: Biointerfaces</i> , 2021, 202, 111680.	2.5	6
58	Effect of crystal structure on nanofiber morphology and chemical modification; design of CeO ₂ /PVDF membrane. <i>Polymer Testing</i> , 2022, 110, 107568.	2.3	6
59	Graphene Oxide Normal (GO + Mn ²⁺) and Ultrapure: Short-Term Impact on Selected Antioxidant Stress Markers and Cytokines in NHDF and A549 Cell Lines. <i>Antioxidants</i> , 2021, 10, 765.	2.2	5
60	Anthropogenic records in a fluvial depositional system: The Odra River along The Czech-Polish border. <i>Anthropocene</i> , 2021, 34, 100286.	1.6	5
61	Nickel-Decorated Mesoporous Iron-Cerium Mixed Oxides: Microstructure and Catalytic Activity in Methanol Decomposition. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 873-890.	4.0	5
62	Fast and Straightforward Synthesis of Luminescent Titanium(IV) Dioxide Quantum Dots. <i>Journal of Nanomaterials</i> , 2017, 2017, 1-9.	1.5	3
63	Laser-Induced Modification of Hydrogenated Detonation Nanodiamonds in Ethanol. <i>Nanomaterials</i> , 2021, 11, 2251.	1.9	3
64	Design Control of Copper-Doped Titania-Zirconia Catalysts for Methanol Decomposition and Total Oxidation of Ethyl Acetate. <i>Symmetry</i> , 2022, 14, 751.	1.1	3
65	Degradation of parathion methyl by reactive sorption on the cerium oxide surface: The effect of solvent on the degradation efficiency. <i>Arabian Journal of Chemistry</i> , 2022, 15, 103852.	2.3	3
66	Improvement of Orange II Photobleaching by Moderate Ga ³⁺ -Doping of Titania and Detrimental Effect of Structural Disorder on Ga Overloading. <i>Journal of Nanomaterials</i> , 2014, 2014, 1-11.	1.5	2
67	Multi-component titanium-copper-cobalt- and niobium nanostructured oxides as catalysts for ethyl acetate oxidation. <i>Reaction Kinetics, Mechanisms and Catalysis</i> , 2015, 116, 397-408.	0.8	1
68	Amidoxime-functionalized bead cellulose for the decomposition of highly toxic organophosphates. <i>RSC Advances</i> , 2021, 11, 17976-17984.	1.7	1