Nb₂O₅â€Based Photocatalysts

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Citation Report

#	Article	IF	Citations
1	Unraveling the Origin of Photocatalytic Deactivation in CeO₂/Nb₂O₅ Heterostructure Systems during Methanol Oxidation: Insight into the Role of Cerium Species. Journal of Physical Chemistry C, 2021, 125, 12650-12662.	1.5	4
2	Anchoring dye onto 1D Nb2O5 in cooperation with TEMPO for the selective photocatalytic aerobic oxidation of amines. Chemical Engineering Journal, 2021, 426, 131418.	6.6	15
3	Oxygen vacancies in actiniae-like Nb2O5/Nb2C MXene heterojunction boosting visible light photocatalytic NO removal. Applied Catalysis B: Environmental, 2021, 299, 120677.	10.8	52
4	Tuning the Pt species on Nb2O5 by support-induced modification in the photocatalytic transfer hydrogenation of phenylacetylene. Applied Catalysis B: Environmental, 2021, 298, 120554.	10.8	30
5	Mechanochemical synthesis of ternary heterojunctions TiO2(A)/TiO2(R)/ZnO and TiO2(A)/TiO2(R)/SnO2 for effective charge separation in semiconductor photocatalysis: A comparative study. Environmental Research, 2022, 203, 111841.	3.7	32
6	Enhancing Nb2O5 activity for CO2 photoreduction through Cu nanoparticles cocatalyst deposited by DC-magnetron sputtering. Journal of CO2 Utilization, 2021, 53, 101739.	3.3	12
7	Visible-light-induced oxidative alkene difunctionalization to access Î±-sulfonyloxy ketones catalyzed by oxygen-vacancy-rich Nb2O5. Applied Catalysis B: Environmental, 2022, 304, 120964.	10.8	15
9	Sorption-photocatalytic performance of NbOx nanocrystals synthesized via heat-stimulated oxidation of niobium carbide. Applied Surface Science, 2022, 582, 152422.	3.1	5
10	Wavelength-dependent generation of reactive species in the photodegradation process over pure and C-doped Nb2O5. Separation and Purification Technology, 2022, 286, 120406.	3.9	4
11	CuS/Ag2O nanoparticles on ultrathin g-C3N4 nanosheets to achieve high performance solar hydrogen evolution. Journal of Colloid and Interface Science, 2022, 615, 740-751.	5.0	17
12	Upcycling biomass waste into Fe single atom catalysts for pollutant control. Journal of Energy Chemistry, 2022, 69, 282-291.	7.1	30
13	PREPARATION OF NIOBIUM (V) OXIDE WITH CONTROLLED DISPERSITY AND MORPHOLOGY. , 2022, , 31-38.		0
14	Significance of Niobium (V) Oxide for Practical Applications: A Review. Key Engineering Materials, 0, 911, 89-95.	0.4	11
15	Thermo-driven photocatalytic CO2 hydrogenation over NiOx/Nb2O5 via regulating the electron transfer behavior of reactant gas adsorption. Applied Surface Science, 2022, 592, 153246.	3.1	13
16	Application of EPR Spectroscopy in TiO2 and Nb2O5 Photocatalysis. Catalysts, 2021, 11, 1514.	1.6	28
17	NbO_x-Based Catalysts for the Activation of Câ€“O and Câ€“C Bonds in the Valorization of Waste Carbon Resources. Accounts of Chemical Research, 2022, 55, 1301-1312.	7.6	30
18	Constructing interfacial super active sites over OH-PCN/Nb2O5 heterojunction for efficient phenol photomineralization. Journal of Catalysis, 2022, 410, 63-68.	3.1	5
19	More than a support: the unique role of Nb₂O₅ in supported metal catalysts for lignin hydrodeoxygenation. Catalysis Science and Technology, 2022, 12, 3751-3766.	2.1	18

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20	Preparation of Niobium(V) Oxide with Controlled Dispersity and Morphology. Glass and Ceramics (English Translation of Steklo I Keramika), 0, , .	0.2	0
21	Synergistic effect of hierarchical structure and S-scheme heterojunction over O-doped g-C3N4/N-doped Nb2O5 for highly efficient photocatalytic CO2 reduction. Applied Catalysis B: Environmental, 2022, 315, 121585.	10.8	66
22	Nbâ€“Oâ€“C Charge Transfer Bridge in 2D/2D Nb₂O₅/gâ€C₃N₄ Sâ€Scheme Heterojunction for Boosting Solarâ€Driven CO₂ Reduction: Inâ€‰Situ Illuminated Xâ€Ray Photoelectron Spectroscopy Investigation and Mechanism Insight. Solar Rrl, 2022, 6, .	3.1	21
23	Oxygen-vacancy-boosted visible light driven photocatalytic oxidative dehydrogenation of saturated N-heterocycles over Nb2O5 nanorods. Applied Catalysis B: Environmental, 2022, 316, 121622.	10.8	16
24	Photocatalytic reduction of levulinic acid using thermally modified niobic acid. Chemical Engineering Journal, 2022, 450, 137935.	6.6	5
25	On the Sintering Behavior of Nb2O5 and Ta2O5 Mixed Oxide Powders. Materials, 2022, 15, 5036.	1.3	1
26	Phosphate doping as a promising approach to improve reactivity of Nb2O5 in catalytic activation of hydrogen peroxide and removal of methylene blue via adsorption and oxidative degradation. Journal of Hazardous Materials, 2022, 440, 129783.	6.5	9
27	In-situ irradiated XPS investigation on 2D/1D Cd0.5Zn0.5S/Nb2O5 S-scheme heterojunction photocatalysts for simultaneous promotion of antibiotics removal and hydrogen evolution. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 652, 129846.	2.3	21
28	Hydroxynaphthaleneâ€“Nb₂O₅ complex photocatalysis for selective aerobic oxidation of amines induced by blue light. Sustainable Energy and Fuels, 2022, 6, 4437-4445.	2.5	2
29	An insight towards the photo-generation of H2 and multifarious carbon fuel additive from biomass-derived ethanol: Boosting the bio-chemical economy. Journal of Materials Chemistry A, 0, , .	5.2	3
30	Photo-Charging a Zinc-Air Battery Using a Nb2O5-CdS Photoelectrode. Catalysts, 2022, 12, 1240.	1.6	2
31	Unveiling Sâ€Scheme Charge Transfer Pathways in In₂S₃/Nb₂O₅ Hybrid Nanofiber Photocatalysts for Lowâ€Concentration CO₂ Hydrogenation. Solar Rrl, 2023, 7, .	3.1	12
32	Hydrodeoxygenation of lignin-derived phenolics to cycloalkanes over Niâ€“Co alloy coupled with oxophilic NbO. Applied Energy, 2022, 328, 120199.	5.1	17
33	Ultrafast-laser powder bed fusion of oxygen-deficient Nb2O5 ceramics with highly improved electrical properties. Materials and Design, 2022, 224, 111346.	3.3	2
34	Strategy I: Doping. , 2022, , 43-85.		0
35	Visible light-driven selective oxidation of amines by cooperative photocatalysis of niobium oxide nanorods with an electronâ€“proton transfer mediator. Journal of Colloid and Interface Science, 2023, 633, 959-966.	5.0	5
36	Structural Distortion of g-C3N4 Induced by N-Defects for Enhanced Photocatalytic Hydrogen Evolution. Catalysts, 2022, 12, 1496.	1.6	6
37	A DFT Study on the Mechanism of Active Species in Selective Photocatalytic Oxidation of Toluene into Benzaldehyde on (WO₃)₃ Clusters. ChemistrySelect, 2022, 7, .	0.7	1

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38	Ethanol Solution Plasma Loads Carbon Dots onto 2D HNb₃O₈ for Enhanced Photocatalysis. ACS Applied Materials & Interfaces, 2023, 15, 1157-1166.	4.0	6
39	Ni loaded SnS₂ hexagonal nanosheets for photocatalytic hydrogen generation via water splitting. RSC Advances, 2023, 13, 2418-2426.	1.7	5
40	Influence of Zinc Acetate Concentration on ZnO Growth on Anodized Nb2O5 Nanoporous Films and Photocatalytic Dye Degradation. Arabian Journal for Science and Engineering, 2023, 48, 9009-9022.	1.7	1
41	Recent advancement in the development of metal oxide heterostructures for environmental remediation. , 2023, , 193-246.		0
42	Alumina Coatings Containing Niobium Pentoxide Polymorphs Prepared by Plasma Electrolytic Oxidation of Aluminum. Advanced Engineering Materials, 2023, 25, .	1.6	0
43	Black Titania and Niobia within Ten Minutes â€“ Mechanochemical Reduction of Metal Oxides with Alkali Metal Hydrides. Chemistry - A European Journal, 2023, 29, .	1.7	2
44	Application of a flexible memristor in self-color electronics and its depth mechanism analysis. Ceramics International, 2023, 49, 22460-22470.	2.3	2
45	Confinement assembly of a novel Nb2O5&ZnIn2S4 photoanode and its highly efficient and sensitive photoelectrochemical cathodic protection performance. Chemical Engineering Journal, 2023, 463, 142233.	6.6	3
46	Nb2O5/red phosphorus S-scheme heterojunction photocatalyst for removal of organic contaminant and Cr(VI): Electrochemical performance and mechanism. Materials Science in Semiconductor Processing, 2023, 160, 107421.	1.9	2
47	The superior photocatalytic performance of loofah sponges impregnated with Nb2O5. Journal of Photochemistry and Photobiology A: Chemistry, 2023, 441, 114694.	2.0	3
48	Enhanced sunlight photo-catalytic performances of ZnO/ZnNb2O6/Nb2O5 composites for organic pollutant degradation. Optical Materials, 2023, 138, 113637.	1.7	1
49	Atomically Local Electric Field Induced Interface Water Reorientation for Alkaline Hydrogen Evolution Reaction. Angewandte Chemie - International Edition, 2023, 62, .	7.2	33
50	Atomically Local Electric Field Induced Interface Water Reorientation for Alkaline Hydrogen Evolution Reaction. Angewandte Chemie, 2023, 135, .	1.6	1
51	Weakened Crystalline SnNb ₂ O ₆ for Enhanced Performance in Photocatalytic H ₂ Production and CO ₂ Reduction. Chemistry - an Asian Journal, 0, , .	1.7	0
56	Visible-light-driven organic oxidation over CdS-doped metalâ€“organic frameworks. Dalton Transactions, 2023, 52, 8857-8863.	1.6	2
58	TiFeNb₁₀O_{29â”’Î´} anode for high-power and durable lithium-ion batteries. Chemical Communications, 2023, 59, 6710-6713.	2.2	1
63	Recent advances of semiconductor photocatalysis for water pollutant treatment: mechanisms, materials and applications. Physical Chemistry Chemical Physics, 2023, 25, 25899-25924.	1.3	1