Wojciech Macyk

List of Publications by Year
in descending order

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123	8,721	76326	43889
papers	citations	40	91
		h-index	g-index

131	131	131	9470
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	How To Correctly Determine the Band Gap Energy of Modified Semiconductor Photocatalysts Based on UVâ€“Vis Spectra. Journal of Physical Chemistry Letters, 2018, 9, 6814-6817.	4.6	2,043
2	Bioinorganic Photochemistry:â€‰ Frontiers and Mechanisms. Chemical Reviews, 2005, 105, 2647-2694.	47.7	671
3	2D/2D/0D TiO2/C3N4/Ti3C2 MXene composite S-scheme photocatalyst with enhanced CO2 reduction activity. Applied Catalysis B: Environmental, 2020, 272, 119006.	20.2	604
4	Visible light photodegradation of 4-chlorophenol with a coke-containing titanium dioxide photocatalyst. Applied Catalysis B: Environmental, 2001, 32, 215-227.	20.2	509
5	Engineering of relevant photodynamic processes through structural modifications of metallotetrapyrrolic photosensitizers. Coordination Chemistry Reviews, 2016, 325, 67-101.	18.8	222
6	Effect of cobalt substitution on structural, elastic, magnetic and optical properties of zinc ferrite nanoparticles. Journal of Alloys and Compounds, 2018, 731, 1256-1266.	5.5	208
7	Visible light inactivation of bacteria and fungi by modified titanium dioxide. Photochemical and Photobiological Sciences, 2007, 6, 642-648.	2.9	207
8	Singlet Oxygen Photogeneration at Surface Modified Titanium Dioxide. Journal of the American Chemical Society, 2006, 128, 15574-15575.	13.7	194
9	Structural, Optical, and Magnetic Properties of Zn-Doped CoFe2O4 Nanoparticles. Nanoscale Research Letters, 2017, 12, 141.	5.7	193
10	Visible-Light Detoxification and Charge Generation by Transition Metal Chloride Modified Titania. Chemistry - A European Journal, 2000, 6, 379-384.	3.3	182
11	Titanium(IV) complexes as direct TiO2 photosensitizers. Coordination Chemistry Reviews, 2010, 254, 2687-2701.	18.8	171
12	Visible-Light Photocatalysis by Modified Titania. ChemPhysChem, 2002, 3, 399.	2.1	159
13	Recent advances in visible light-driven water oxidation and reduction in suspension systems. Materials Today, 2018, 21, 897-924.	14.2	157
14	On Oxygen Activation at Rutile- and Anatase-TiO₂. ACS Catalysis, 2015, 5, 7424-7431.	11.2	154
15	Light-Driven OR and XOR Programmable Chemical Logic Gates. Journal of the American Chemical Society, 2006, 128, 4550-4551.	13.7	149
16	Photosensitization of Crystalline and Amorphous Titanium Dioxide by Platinum(IV) Chloride Surface Complexes. Chemistry - A European Journal, 2001, 7, 1862-1867.	3.3	132
17	Towards global sustainability: Education on environmentally clean energy technologies. Renewable and Sustainable Energy Reviews, 2018, 81, 2541-2551.	16.4	131
18	Zinc sulfide functionalized with ruthenium nanoparticles for photocatalytic reduction of CO2. Applied Catalysis B: Environmental, 2015, 178, 170-176.	20.2	120

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19	Hybrid Technologies for an Enhanced Carbon Recycling Based on the Enzymatic Reduction of CO₂ to Methanol in Water: Chemical and Photochemical NADH Regeneration. ChemSusChem, 2012, 5, 373-378.	6.8	99
20	Photoelectrochemical properties of platinum(iv) chloride surface modified TiO2Dedicated to Professor Jean Kossanyi on the occasion of his 70th birthday.. Photochemical and Photobiological Sciences, 2003, 2, 322.	2.9	83
21	Nanoscale optoelectronic switches and logic devices. Nanoscale, 2009, 1, 299.	5.6	74
22	Highly efficient rutile TiO₂ photocatalysts with single Cu(<scp>ii</scp>) and Fe(<scp>iii</scp>) surface catalytic sites. Journal of Materials Chemistry A, 2016, 4, 3127-3138.	10.3	73
23	Optoelectronic Switches Based on Wide Band Gap Semiconductors. Journal of Physical Chemistry B, 2006, 110, 15275-15283.	2.6	63
24	New insight into singlet oxygen generation at surface modified nanocrystalline TiO2 â€“ the effect of near-infrared irradiation. Dalton Transactions, 2013, 42, 9468.	3.3	60
25	Singlet oxygen generation in the presence of titanium dioxide materials used as sunscreens in suntan lotions. Journal of Photochemistry and Photobiology A: Chemistry, 2010, 213, 158-163.	3.9	58
26	Mechanistic studies on versatile metal-assisted hydrogen peroxide activation processes for biomedical and environmental incentives. Coordination Chemistry Reviews, 2016, 327-328, 143-165.	18.8	57
27	Photosensitization and the Photocurrent Switching Effect in Nanocrystalline Titanium Dioxide Functionalized with Iron(II) Complexes: A Comparative Study. Chemistry - A European Journal, 2007, 13, 5676-5687.	3.3	55
28	Synthesis, structure and photoelectrochemical properties of the TiO2â€“Prussian blue nanocomposite. Journal of Materials Chemistry, 2006, 16, 4603-4611.	6.7	54
29	Ligand and medium controlled photochemistry of iron and ruthenium mixed-ligand complexes: prospecting for versatile systems. Coordination Chemistry Reviews, 2000, 208, 277-297.	18.8	53
30	An integrated photocatalytic/enzymatic system for the reduction of CO₂ to methanol in bioglycerolâ€“water. Beilstein Journal of Organic Chemistry, 2014, 10, 2556-2565.	2.2	53
31	Photocatalytic Carboxylation of Organic Substrates with Carbon Dioxide at Zinc Sulfide with Deposited Ruthenium Nanoparticles. ChemPlusChem, 2014, 79, 708-715.	2.8	53
32	Self-Sensitized Photocatalytic Degradation of Colorless Organic Pollutants Attached to Rutile Nanorodsâ€”Experimental and Theoretical DFT+D Studies. Journal of Physical Chemistry C, 2016, 120, 5442-5456.	3.1	53
33	VISIBLE LIGHT PHOTOCATALYSIS BY A TITANIA TRANSITION METAL COMPLEX. Advances in Inorganic Chemistry, 2004, 56, 241-259.	1.0	52
34	Photodynamic activity of platinum(IV) chloride surface-modified TiO2 irradiated with visible light. Free Radical Biology and Medicine, 2008, 44, 1120-1130.	2.9	48
35	Photoinduced hole injection in semiconductor-coordination compound systems. Coordination Chemistry Reviews, 2013, 257, 767-775.	18.8	48
36	Chemical switches and logic gates based on surface modified semiconductors. Comptes Rendus Chimie, 2006, 9, 315-324.	0.5	46

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37	Structureâ€“redox reactivity relationships in Co_{1â^'x}Zn_xFe₂O₄: the role of stoichiometry. New Journal of Chemistry, 2019, 43, 3038-3049.	2.8	46
38	Redox-Controlled Photosensitization of Nanocrystalline Titanium Dioxide. ChemPhysChem, 2006, 7, 2384-2391.	2.1	44
39	Metal compounds and small molecules activation â€“ case studies. Coordination Chemistry Reviews, 2005, 249, 2437-2457.	18.8	42
40	Chemical composition of submicron and fine particulate matter collected in Krakow, Poland. Consequences for the APARIC project. Chemosphere, 2017, 187, 430-439.	8.2	42
41	Photocatalytic Carbon Dioxide Reduction at pâ€Type Copper(I) Iodide. ChemSusChem, 2016, 9, 2933-2938.	6.8	40
42	Generation of hydroxyl radicals and singlet oxygen by particulate matter and its inorganic components. Environmental Pollution, 2018, 238, 638-646.	7.5	40
43	Photocatalysis Involving a Visible Light-Induced Hole Injection in a Chromate(VI)â€“TiO₂ System. Journal of Physical Chemistry C, 2012, 116, 21762-21770.	3.1	39
44	Nanoscale Digital Devices Based on the Photoelectrochemical Photocurrent Switching Effect: Preparation, Properties and Applications. Israel Journal of Chemistry, 2011, 51, 36-55.	2.3	36
45	TiO2 Processed by pressurized hot solvents as a novel photocatalyst for photocatalytic reduction of carbon dioxide. Applied Surface Science, 2017, 391, 282-287.	6.1	36
46	Spectroelectrochemical analysis of TiO 2 electronic states â€“ Implications for the photocatalytic activity of anatase and rutile. Catalysis Today, 2018, 309, 35-42.	4.4	36
47	Photoelectrochemical Photocurrent Switching Effect: A New Platform for Molecular Logic Devices. Chimia, 2007, 61, 831-834.	0.6	34
48	Working prototype of an optoelectronic XOR/OR/YES reconfigurable logic device based on nanocrystalline semiconductors. Solid-State Electronics, 2006, 50, 1649-1655.	1.4	33
49	Solar energy utilization in the direct photocarboxylation of 2,3-dihydrofuran using CO₂. Faraday Discussions, 2015, 183, 413-427.	3.2	33
50	Redox characterization of semiconductors based on electrochemical measurements combined with UV-Vis diffuse reflectance spectroscopy. Physical Chemistry Chemical Physics, 2013, 15, 14256.	2.8	32
51	Visible light induced photocatalytic inactivation of bacteria by modified titanium dioxide films on organic polymers. Photochemical and Photobiological Sciences, 2015, 14, 514-519.	2.9	32
52	Iron and other metal species as phase-composition controllers influencing the photocatalytic activity of TiO2 materials. Applied Catalysis B: Environmental, 2019, 247, 173-181.	20.2	31
53	New hybrid materials based on halogenated metalloporphyrins for enhanced visible light photocatalysis. RSC Advances, 2015, 5, 93252-93261.	3.6	30
54	Efficient synthesis of BiFeO3 by the microwave-assisted sol-gel method: â€œAâ€•site influence on the photoelectrochemical activity of perovskites. Applied Surface Science, 2019, 471, 1017-1027.	6.1	30

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55	Graphdiyne-based photocatalysts for solar fuel production. Green Chemistry, 2022, 24, 5739-5754.	9.0	30
56	Spectroelectrochemical characterization of euhedral anatase TiO2 crystals â€“ Implications for photoelectrochemical and photocatalytic properties of {001} {100} and {101} facets. Electrochimica Acta, 2019, 310, 256-265.	5.2	28
57	TiO₂ with Tunable Anatase-to-Rutile Nanoparticles Ratios: How Does the Photoactivity Depend on the Phase Composition and the Nature of Photocatalytic Reaction?. ACS Applied Nano Materials, 2021, 4, 633-643.	5.0	28
58	Antimicrobial photodynamic therapyâ€"A discovery originating from the pre-antibiotic era in a novel periodontal therapy. Photodiagnosis and Photodynamic Therapy, 2015, 12, 612-618.	2.6	26
59	Photosensitized TiO2 films on polymers â€“ Titania-polymer interactions and visible light induced photoactivity. Applied Surface Science, 2019, 475, 710-719.	6.1	26
60	Photoelectrochemical Properties of a Dinitrogen-Fixing Iron Titanate Thin Film. Journal of Physical Chemistry B, 2005, 109, 10858-10862.	2.6	25
61	Visible light photoactive titanium dioxide aqueous colloids and coatings. Chemical Engineering Journal, 2013, 230, 188-194.	12.7	25
62	Photocatalytic hydrogen evolution by co-catalyst-free TiO₂/C bulk heterostructures synthesized under mild conditions. RSC Advances, 2020, 10, 12519-12534.	3.6	25
63	Visible light driven photocatalysis in chromate(VI)/TiO2 systemsâ€"Improving stability of the photocatalyst. Catalysis Today, 2011, 161, 78-83.	4.4	24
64	Photochemistry of [(Î·5-C5H5)Ru(CO)2]2 in polar and non-polar solvents. Journal of Photochemistry and Photobiology A: Chemistry, 1997, 103, 221-226.	3.9	23
65	Photocatalytic oxidation of volatile pollutants of air driven by visible light. Journal of Photochemistry and Photobiology A: Chemistry, 2012, 241, 8-12.	3.9	23
66	Perspectives of molecular and nanostructured systems with d- and f-block metals in photogeneration of reactive oxygen species for medical strategies. Coordination Chemistry Reviews, 2019, 398, 113012.	18.8	23
67	How insignificant modifications of photocatalysts can significantly change their photocatalytic activity. Journal of Materials Chemistry A, 2019, 7, 25142-25154.	10.3	23
68	The quenching effect of chitosan crosslinking on ZnO nanoparticles photocatalytic activity. RSC Advances, 2015, 5, 80089-80097.	3.6	22
69	Photosensitization of Culâ€“the role of visible light induced CuI â†' CuII transition in photocatalytic degradation of organic pollutants and inactivation of microorganisms. Photochemical and Photobiological Sciences, 2017, 16, 1079-1087.	2.9	22
70	Photocatalytic carboxylation of C H bonds promoted by popped graphene oxide (PGO) either bare or loaded with CuO. Journal of CO2 Utilization, 2017, 20, 97-104.	6.8	22
71	Photocatalytic degradation of dyes using rutile TiO2 synthesized by reverse micelle and low temperature methods: real-time monitoring of the degradation kinetics. Journal of Molecular Liquids, 2021, 342, 117407.	4.9	22
72	Near-Infrared-Triggered Nitrogen Fixation over Upconversion Nanoparticles Assembled Carbon Nitride Nanotubes with Nitrogen Vacancies. ACS Applied Materials & Interfaces, 2021, 13, 32937-32947.	8.0	21

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73	Influence of Ï€-Iodide Intermolecular Interactions on Electronic Properties of Tin(IV) Iodide Semiconducting Complexes. Inorganic Chemistry, 2016, 55, 5935-5945.	4.0	20
74	Photocatalytic activity of TiO2 films on Si support prepared by atomic layer deposition. Catalysis Today, 2015, 252, 14-19.	4.4	19
75	Design, engineering, and performance of nanorod-Fe2O3@rGO@LaSrFe2-Co O6 (nâ€¯=â€¯0, 1) composite architectures: The role of double oxide perovskites in reaching high solar to hydrogen efficiency. Applied Catalysis B: Environmental, 2020, 272, 118952.	20.2	19
76	Catalytic oxidation of organic sulfides by H2O2 in the presence of titanosilicate zeolites. Microporous and Mesoporous Materials, 2020, 302, 110219.	4.4	18
77	Photosensitization of titanium dioxide with 4â€²-dimethylaminoflavonol. Materials Science in Semiconductor Processing, 2016, 42, 62-65.	4.0	16
78	Combined Spectroscopic Methods of Determination of Density of Electronic States: Comparative Analysis of Diffuse Reflectance Spectroelectrochemistry and Reversed Double-Beam Photoacoustic Spectroscopy. Journal of Physical Chemistry Letters, 2021, 12, 3019-3025.	4.6	16
79	Photocatalytic Synthesis of Chemicals. Advances in Inorganic Chemistry, 2018, 72, 93-144.	1.0	15
80	Photocytotoxicity of platinum(IV)-chloride surface modified TiO2 irradiated with visible light against murine macrophages. Journal of Photochemistry and Photobiology B: Biology, 2008, 92, 54-58.	3.8	14
81	UV and visible light active aqueous titanium dioxide colloids stabilized by surfactants. Dalton Transactions, 2014, 43, 12480.	3.3	14
82	Photocatalytic Activity of TiO₂ Modified with Hexafluorometallatesâ€”Fine Tuning of Redox Properties by Redox-Innocent Anions. Journal of Physical Chemistry C, 2014, 118, 24915-24924.	3.1	14
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91	Triiodide Organic Salts: Photoelectrochemistry at the Border between Insulators and Semiconductors. ChemElectroChem, 2018, 5, 3486-3497.	3.4	8
92	Generation and photogeneration of hydroxyl radicals and singlet oxygen by particulate matter and its inorganic components. Journal of Environmental Chemical Engineering, 2021, 9, 106478.	6.7	8
93	Interfacial Charge Transfer Complexes in TiO₂-Enediol Hybrids Synthesized by Solâ€“Gel. Langmuir, 2022, 38, 1821-1832.	3.5	8
94	Visible light active titanates photosensitized by Ti(IV) surface complexes. Applied Surface Science, 2019, 473, 1066-1073.	6.1	7
95	Photocatalytic activity of TiO2 polymorph B revisited: physical, redox, spectroscopic, and photochemical properties of TiO2(B)/anatase series of titanium dioxide materials. Materials Today Sustainability, 2020, 10, 100052.	4.1	7
96	Selective and efficient catalytic and photocatalytic oxidation of diphenyl sulphide to sulfoxide and sulfone: the role of hydrogen peroxide and TiO₂ polymorph. RSC Advances, 2022, 12, 1862-1870.	3.6	7
97	Photoassisted Catalytic Oxidation of Carbon Monoxide at Room Temperature. Monatshefte FÃ¼r Chemie, 2007, 138, 935-940.	1.8	6
98	Physicochemical Analysis of Water Extracts of Particulate Matter from Polluted Air in the Area of KrakÃ³w, Poland. Atmosphere, 2021, 12, 565.	2.3	4
99	Enhanced UV Light Emission by Core-Shell Upconverting Particles Powering up TiO2 Photocatalysis in Near-Infrared Light. Catalysts, 2020, 10, 232.	3.5	4
100	Bioinorganic Photochemistry: Frontiers and Mechanisms. ChemInform, 2005, 36, no.	0.0	2
101	Hybrid (Enzymatic and Photocatalytic) Systems for CO2-Water Coprocessing to Afford Energy-Rich Molecules. , 2015, , 149-169.		2
102	Photoinduced Electron Transfer in Proteins. , 0, , 209-226.		1
103	Photodynamic Inactivation of Microorganisms. , 0, , 335-343.		1
104	Solar Radiation and Terrestrial Environment. , 0, , 127-155.		0
105	Photoenzymes. , 0, , 189-207.		0
106	Foundation and Evolution of Photosynthesis. , 0, , 169-187.		0
107	Therapeutic Strategies. , 0, , 293-334.		0
108	Light and Biomatter. , 0, , 247-255.		0

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109	From Interstellar Space to Planetary Atmospheres. , 0, , 107-125.		0
110	Philosophy of Bioinorganic Photochemistry. , 0, , 1-12.		0
111	Nucleic Acid Photocleavage and Charge Transport. , 0, , 227-246.		0
112	Formation and Properties of Electronic Excited States. , 0, , 19-23.		0
113	Light and Matter. , 0, , 13-18.		0
114	Photodelivery and Phototargeting. , 0, , 345-351.		0
115	Photochemical Reactions. , 0, , 41-76.		0
116	Photophysical Deactivation of Electronic Excited States. , 0, , 25-33.		0
117	Photocatalysis in Environmental Protection. , 0, , 359-376.		0
118	Photochemistry and Photophysics of Supramolecular Systems and Nanoassemblies. , 0, , 77-105.		0
119	Fluorescent and Chromogenic Sensing and Labelling. , 0, , 257-292.		0
120	Phototoxicity and Photoprotection. , 0, , 353-358.		0
121	Heterogeneous (Photo)Catalysis and Biogenesis on Earth. , 0, , 157-167.		0
122	Kinetics of the Excited-State Decay. , 0, , 35-40.		0
123	Experimental methods in thermodynamic and kinetic studies on photocatalytic materials. , 2021, , 95-114.		0