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	Interfacial Charge Transfer Complexes in TiO₂-Enediol Hybrids Synthesized by Solâ€“Gel. Langmuir, 2022, 38, 1821-1832.	3.5	8
2	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
3	Graphdiyne-based photocatalysts for solar fuel production. Green Chemistry, 2022, 24, 5739-5754.	9.0	30
4	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
5	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
6	Physicochemical Analysis of Water Extracts of Particulate Matter from Polluted Air in the Area of KrakÃ³w, Poland. Atmosphere, 2021, 12, 565.	2.3	4
7	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
8	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
9	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
10	Facet-dependent activity of tailored anatase TiO2 crystals in photoanodes for photocatalytic fuel cells. Applied Surface Science, 2021, 566, 150662.	6.1	11
11	Experimental methods in thermodynamic and kinetic studies on photocatalytic materials. , 2021, , 95-114.		0
12	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
13	Catalytic and photocatalytic oxidation of diphenyl sulphide to diphenyl sulfoxide over titanium dioxide doped with vanadium, zinc, and tin. RSC Advances, 2020, 10, 4023-4031.	3.6	13
14	Photocatalytic hydrogen evolution by co-catalyst-free TiO₂/C bulk heterostructures synthesized under mild conditions. RSC Advances, 2020, 10, 12519-12534.	3.6	25
15	Catalytic oxidation of organic sulfides by H2O2 in the presence of titanosilicate zeolites. Microporous and Mesoporous Materials, 2020, 302, 110219.	4.4	18
16	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
17	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
18	Enhanced UV Light Emission by Core-Shell Upconverting Particles Powering up TiO2 Photocatalysis in Near-Infrared Light. Catalysts, 2020, 10, 232.	3.5	4

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19	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
20	Photogeneration of reactive oxygen species over ultrafine TiO2 particles functionalized with rutinâ€“ligand induced sensitization and crystallization effects. Research on Chemical Intermediates, 2019, 45, 5781-5800.	2.7	9
21	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
22	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
23	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
24	How insignificant modifications of photocatalysts can significantly change their photocatalytic activity. Journal of Materials Chemistry A, 2019, 7, 25142-25154.	10.3	23
25	Attaching titania clusters of various size to reduced graphene oxide and its impact on the conceivable photocatalytic behavior of the junctionsâ€”a DFT/Dâ€‰â€‰+â€‰â€‰U and TD DFTB modeling. Journal of Physics: Condensed Matter, 2019, 31, 404001.	1.8	11
26	Photosensitized TiO2 films on polymers â€“ Titania-polymer interactions and visible light induced photoactivity. Applied Surface Science, 2019, 475, 710-719.	6.1	26
27	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
28	Visible light active titanates photosensitized by Ti(IV) surface complexes. Applied Surface Science, 2019, 473, 1066-1073.	6.1	7
29	Generation of hydroxyl radicals and singlet oxygen by particulate matter and its inorganic components. Environmental Pollution, 2018, 238, 638-646.	7.5	40
30	Towards global sustainability: Education on environmentally clean energy technologies. Renewable and Sustainable Energy Reviews, 2018, 81, 2541-2551.	16.4	131
31	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
32	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
33	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
34	Photocatalytic Synthesis of Chemicals. Advances in Inorganic Chemistry, 2018, 72, 93-144.	1.0	15
35	Triiodide Organic Salts: Photoelectrochemistry at the Border between Insulators and Semiconductors. ChemElectroChem, 2018, 5, 3486-3497.	3.4	8
36	Recent advances in visible light-driven water oxidation and reduction in suspension systems. Materials Today, 2018, 21, 897-924.	14.2	157

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37	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
38	Structural, Optical, and Magnetic Properties of Zn-Doped CoFe2O4 Nanoparticles. Nanoscale Research Letters, 2017, 12, 141.	5.7	193
39	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
40	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
41	Periopathogens differ in terms of the susceptibility to toluidine blue O-mediated photodynamic inactivation. Photodiagnosis and Photodynamic Therapy, 2017, 20, 28-34.	2.6	11
42	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
43	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
44	Photocatalytic Carbon Dioxide Reduction at pâ€Type Copper(I) Iodide. ChemSusChem, 2016, 9, 2933-2938.	6.8	40
45	Influence of Ï€-Iodide Intermolecular Interactions on Electronic Properties of Tin(IV) Iodide Semiconducting Complexes. Inorganic Chemistry, 2016, 55, 5935-5945.	4.0	20
46	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
47	Engineering of relevant photodynamic processes through structural modifications of metallotetrapyrrolic photosensitizers. Coordination Chemistry Reviews, 2016, 325, 67-101.	18.8	222
48	Effect of Oxygen Activity on the nâ€"p Transition for Pure and Cr-Doped TiO2. Journal of Physical Chemistry C, 2016, 120, 3221-3228.	3.1	12
49	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
50	Photosensitization of titanium dioxide with 4â€²-dimethylaminoflavonol. Materials Science in Semiconductor Processing, 2016, 42, 62-65.	4.0	16
51	Hybrid (Enzymatic and Photocatalytic) Systems for CO2-Water Coprocessing to Afford Energy-Rich Molecules. , 2015, , 149-169.		2
52	Photocatalytic activity of TiO2 films on Si support prepared by atomic layer deposition. Catalysis Today, 2015, 252, 14-19.	4.4	19
53	New hybrid materials based on halogenated metalloporphyrins for enhanced visible light photocatalysis. RSC Advances, 2015, 5, 93252-93261.	3.6	30
54	Solar energy utilization in the direct photocarboxylation of 2,3-dihydrofuran using CO₂. Faraday Discussions, 2015, 183, 413-427.	3.2	33

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55	The quenching effect of chitosan crosslinking on ZnO nanoparticles photocatalytic activity. RSC Advances, 2015, 5, 80089-80097.	3.6	22
56	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
57	On Oxygen Activation at Rutile- and Anatase-TiO₂. ACS Catalysis, 2015, 5, 7424-7431.	11.2	154
58	Zinc sulfide functionalized with ruthenium nanoparticles for photocatalytic reduction of CO2. Applied Catalysis B: Environmental, 2015, 178, 170-176.	20.2	120
59	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
60	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
61	UV and visible light active aqueous titanium dioxide colloids stabilized by surfactants. Dalton Transactions, 2014, 43, 12480.	3.3	14
62	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
63	Photocatalytic Carboxylation of Organic Substrates with Carbon Dioxide at Zinc Sulfide with Deposited Ruthenium Nanoparticles. ChemPlusChem, 2014, 79, 708-715.	2.8	53
64	Photoinduced hole injection in semiconductor-coordination compound systems. Coordination Chemistry Reviews, 2013, 257, 767-775.	18.8	48
65	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
66	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
67	Visible light photoactive titanium dioxide aqueous colloids and coatings. Chemical Engineering Journal, 2013, 230, 188-194.	12.7	25
68	Copper(I) and Iron(II) Complexes of a Novel Tris(pyridyl)Âethaneâ€Derived N₄ Ligand: Aspects of Redox Behaviour and Bioinorganic Physicochemistry. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2013, 639, 1483-1490.	1.2	8
69	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
70	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
71	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
72	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

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73	Visible light driven photocatalysis in chromate(VI)/TiO2 systemsâ€"Improving stability of the photocatalyst. Catalysis Today, 2011, 161, 78-83.	4.4	24
74	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
75	Titanium(IV) complexes as direct TiO2 photosensitizers. Coordination Chemistry Reviews, 2010, 254, 2687-2701.	18.8	171
76	Nanoscale optoelectronic switches and logic devices. Nanoscale, 2009, 1, 299.	5.6	74
77	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
78	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
79	Photoelectrochemical Photocurrent Switching Effect: A New Platform for Molecular Logic Devices. Chimia, 2007, 61, 831-834.	0.6	34
80	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
81	Visible light inactivation of bacteria and fungi by modified titanium dioxide. Photochemical and Photobiological Sciences, 2007, 6, 642-648.	2.9	207
82	Photoassisted Catalytic Oxidation of Carbon Monoxide at Room Temperature. Monatshefte FÃ¼r Chemie, 2007, 138, 935-940.	1.8	6
83	Synthesis, structure and photoelectrochemical properties of the TiO2â€"Prussian blue nanocomposite. Journal of Materials Chemistry, 2006, 16, 4603-4611.	6.7	54
84	Optoelectronic Switches Based on Wide Band Gap Semiconductors. Journal of Physical Chemistry B, 2006, 110, 15275-15283.	2.6	63
85	Light-Driven OR and XOR Programmable Chemical Logic Gates. Journal of the American Chemical Society, 2006, 128, 4550-4551.	13.7	149
86	Singlet Oxygen Photogeneration at Surface Modified Titanium Dioxide. Journal of the American Chemical Society, 2006, 128, 15574-15575.	13.7	194
87	Chemical switches and logic gates based on surface modified semiconductors. Comptes Rendus Chimie, 2006, 9, 315-324.	0.5	46
88	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
89	Redox-Controlled Photosensitization of Nanocrystalline Titanium Dioxide. ChemPhysChem, 2006, 7, 2384-2391.	2.1	44
90	Metal compounds and small molecules activation â€" case studies. Coordination Chemistry Reviews, 2005, 249, 2437-2457.	18.8	42

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91	Bioinorganic Photochemistry:â€‰ Frontiers and Mechanisms. Chemical Reviews, 2005, 105, 2647-2694.	47.7	671
92	Bioinorganic Photochemistry: Frontiers and Mechanisms. ChemInform, 2005, 36, no.	0.0	2
93	Photoelectrochemical Properties of a Dinitrogen-Fixing Iron Titanate Thin Film. Journal of Physical Chemistry B, 2005, 109, 10858-10862.	2.6	25
94	VISIBLE LIGHT PHOTOCATALYSIS BY A TITANIA TRANSITION METAL COMPLEX. Advances in Inorganic Chemistry, 2004, 56, 241-259.	1.0	52
95	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
96	Visible-Light Photocatalysis by Modified Titania. ChemPhysChem, 2002, 3, 399.	2.1	159
97	Photosensitization of Crystalline and Amorphous Titanium Dioxide by Platinum(IV) Chloride Surface Complexes. Chemistry - A European Journal, 2001, 7, 1862-1867.	3.3	132
98	Visible light photodegradation of 4-chlorophenol with a coke-containing titanium dioxide photocatalyst. Applied Catalysis B: Environmental, 2001, 32, 215-227.	20.2	509
99	Visible-Light Detoxification and Charge Generation by Transition Metal Chloride Modified Titania. Chemistry - A European Journal, 2000, 6, 379-384.	3.3	182
100	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
101	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
102			

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109	Philosophy of Bioinorganic Photochemistry. , 0, , 1-12.		0
110	Nucleic Acid Photocleavage and Charge Transport. , 0, , 227-246.		0
111	Formation and Properties of Electronic Excited States. , 0, , 19-23.		0
112	Photoinduced Electron Transfer in Proteins. , 0, , 209-226.		1
113	Light and Matter. , 0, , 13-18.		0
114	Photodelivery and Phototargeting. , 0, , 345-351.		0
115	Photochemical Reactions. , 0, , 41-76.		0
116	Photodynamic Inactivation of Microorganisms. , 0, , 335-343.		1
117	Photophysical Deactivation of Electronic Excited States. , 0, , 25-33.		0
118	Photocatalysis in Environmental Protection. , 0, , 359-376.		0
119	Photochemistry and Photophysics of Supramolecular Systems and Nanoassemblies. , 0, , 77-105.		0
120	Fluorescent and Chromogenic Sensing and Labelling. , 0, , 257-292.		0
121	Phototoxicity and Photoprotection. , 0, , 353-358.		0
122	Heterogeneous (Photo)Catalysis and Biogenesis on Earth. , 0, , 157-167.		0
123	Kinetics of the Excited-State Decay. , 0, , 35-40.		0