Ralf Dillert

List of Publications by Year
in descending order

109 papers	5,829 citations	76031 42 h-index	90395 73 g-index
111 all docs	111 docs citations	111 times ranked	7771 citing authors

#	Article	IF	Citations
1	Photocatalytic Hydrogen Evolution Over Pt/Co-TiO2 Photocatalysts. Journal of Photocatalysis, 2021, 2, 35-48.	0.4	0
2	Photocatalytic NOx removal using tantalum oxide nanoparticles: A benign pathway. Applied Catalysis B: Environmental, 2021, 291, 119974.	10.8	58
3	TiO2 photocatalysis: Impact of the platinum loading method on reductive and oxidative half-reactions. Catalysis Today, 2021, 380, 3-15.	2.2	19
4	Photocatalytic H2 Production from Naphthalene by Various TiO2 Photocatalysts: Impact of Pt Loading and Formation of Intermediates. Catalysts, 2021, 11, 107.	1.6	19
5	Determination of the quantum yield of a heterogeneous photocatalytic reaction employing a black body photoreactor. Catalysis Today, 2020, 355, 698-703.	2.2	11
6	TiO2-reduced graphene oxide nanocomposites: Microsecond charge carrier kinetics. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 386, 112112.	2.0	9
7	Photoelectrochemistry of Ferrites: Theoretical Predictions vs. Experimental Results. Zeitschrift Fur Physikalische Chemie, 2020, 234, 719-776.	1.4	24
8	Mechanistic Insights into Hydrogen Evolution by Photocatalytic Reforming of Naphthalene. ACS Catalysis, 2020, 10, 7398-7412.	5.5	29
9	Evaluating carbon dots as electron mediators in photochemical and photocatalytic processes of NiFe2O4. APL Materials, 2020, 8, 031105.	2.2	6
10	UV/Vis Light Induced Degradation of Oxytetracycline Hydrochloride Mediated by Co-TiO2 Nanoparticles. Molecules, 2020, 25, 249.	1.7	26
11	Rh/TiO₂-Photocatalyzed Acceptorless Dehydrogenation of N-Heterocycles upon Visible-Light Illumination. ACS Catalysis, 2020, 10, 5542-5553.	5.5	78
12	Reaction Rate Study of the Photocatalytic Degradation of Dichloroacetic Acid in a Black Body Reactor. Catalysts, 2019, 9, 635.	1.6	8
13	Light-Induced Reactions of Chlorpromazine in the Presence of a Heterogeneous Photocatalyst: Formation of a Long-Lasting Sulfoxide. Catalysts, 2019, 9, 627.	1.6	13
14	Photodegradation of Herbicide Imazapyr and Phenol over Mesoporous Bicrystalline Phases TiO2: A Kinetic Study. Catalysts, 2019, 9, 640.	1.6	14
15	Visible-Light-Mediated Photocatalytic Aerobic Dehydrogenation of N-heterocycles by Surface-Grafted TiO₂ and 4-amino-TEMPO. ACS Catalysis, 2019, 9, 10694-10704.	5.5	72
16	Effect of the Degree of Inversion on the Electrical Conductivity of Spinel ZnFe₂O₄. ChemistrySelect, 2019, 4, 1232-1239.	0.7	23
17	Effect of the Degree of Inversion on the Photoelectrochemical Activity of Spinel ZnFe2O4. Catalysts, 2019, 9, 434.	1.6	18
18	In-Situ Synthesis of Nb2O5/g-C3N4 Heterostructures as Highly Efficient Photocatalysts for Molecular H2 Evolution under Solar Illumination. Catalysts, 2019, 9, 169.	1.6	40

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19	Iron-based photocatalytic and photoelectrocatalytic nano-structures: Facts, perspectives, and expectations. Applied Catalysis B: Environmental, 2019, 244, 1065-1095.	10.8	100
20	Nature and photoreactivity of TiO2-rGO nanocomposites in aqueous suspensions under UV-A irradiation. Applied Catalysis B: Environmental, 2019, 241, 375-384.	10.8	41
21	Changes in the solid-state properties of bismuth iron oxide during the photocatalytic reformation of formic acid. Catalysis Today, 2019, 326, 22-29.	2.2	13
22	Photocatalytic reduction of Cr(VI) on hematite nanoparticles in the presence of oxalate and citrate. Applied Catalysis B: Environmental, 2019, 242, 218-226.	10.8	110
23	Photocatalytic conversion of biomass into valuable products: a meaningful approach?. Green Chemistry, 2018, 20, 1169-1192.	4.6	181
24	Photocatalytic degradation of the herbicide imazapyr: do the initial degradation rates correlate with the adsorption kinetics and isotherms?. Catalysis Science and Technology, 2018, 8, 985-995.	2.1	31
25	Visible-light photocatalytic activity of zinc ferrites. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 366, 118-126.	2.0	54
26	Effect of the degree of inversion on optical properties of spinel ZnFe₂O₄. Physical Chemistry Chemical Physics, 2018, 20, 28267-28278.	1.3	88
27	Spectroscopic analysis of proton exchange during the photocatalytic decomposition of aqueous acetic acid: an isotopic study on the product distribution and reaction rate. Catalysis Science and Technology, 2018, 8, 5886-5899.	2.1	2
28	Highly Selective Photocatalytic Reduction of o-Dinitrobenzene to o-Phenylenediamine over Non-Metal-Doped TiO2 under Simulated Solar Light Irradiation. Catalysts, 2018, 8, 641.	1.6	10
29	Ag/Ag2O as a Co-Catalyst in TiO2 Photocatalysis: Effect of the Co-Catalyst/Photocatalyst Mass Ratio. Catalysts, 2018, 8, 647.	1.6	59
30	Photocatalytic Reforming of Aqueous Acetic Acid into Molecular Hydrogen and Hydrocarbons over Co-catalyst-Loaded TiO₂: Shifting the Product Distribution. Journal of Physical Chemistry C, 2018, 122, 12792-12809.	1.5	18
31	Photoactivity of Titanium Dioxide Foams. International Journal of Photoenergy, 2018, 2018, 1-9.	1.4	1
32	A Method to Compare the Activities of Semiconductor Photocatalysts in Liquidâ"Solid Systems. ChemPhotoChem, 2018, 2, 948-951.	1.5	6
33	TiO2/Fe3O4/Ag nanophotocatalysts in solar fuel production: New approach to using a flexible lightweight sustainable textile fabric. Journal of Cleaner Production, 2018, 196, 688-697.	4.6	16
34	Surface Interactions between Imazapyr and the TiO₂ Surface: An in Situ ATR-FTIR Study. Journal of Physical Chemistry C, 2017, 121, 4293-4303.	1.5	11
35	Multifunctional Gadoliniumâ€Doped Mesoporous TiO₂ Nanobeads: Photoluminescence, Enhanced Spin Relaxation, and Reactive Oxygen Species Photogeneration, Beneficial for Cancer Diagnosis and Treatment. Small, 2017, 13, 1700349.	5.2	59
36	Photocatalytic conversion of acetate into molecular hydrogen and hydrocarbons over Pt/TiO 2 : pH dependent formation of Kolbe and Hofer-Moest products. Journal of Catalysis, 2017, 349, 128-135.	3.1	31

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37	Laser-flash-photolysis-spectroscopy: a nondestructive method?. Faraday Discussions, 2017, 197, 505-516.	1.6	13
38	Photoelectrochemical and theoretical investigations of spinel type ferrites (M_xFe_{3â^'x}O₄) for water splitting: a mini-review. Journal of Photonics for Energy, 2016, 7, 012009.	0.8	111
39	Mechanistic Features of the TiO₂ Heterogeneous Photocatalysis of Arsenic and Uranyl Nitrate in Aqueous Suspensions Studied by the Stoppedâ€Flow Technique. ChemPhysChem, 2016, 17, 885-892.	1.0	24
40	Photocatalytic hydrogen production from biomass-derived compounds: a case study of citric acid. Environmental Technology (United Kingdom), 2016, 37, 2687-2693.	1.2	26
41	Chapter 6. Self-cleaning Coatings on Polymeric Substrates. RSC Smart Materials, 2016, , 142-165.	0.1	3
42	Research Update: Photoelectrochemical water splitting and photocatalytic hydrogen production using ferrites (MFe2O4) under visible light irradiation. APL Materials, 2015, 3, .	2.2	92
43	The Influence of Irradiance and Humidity on the Photocatalytic Conversion of Nitrogen(II) Oxide. Journal of Advanced Oxidation Technologies, 2015, 18, .	0.5	4
44	Effect of polar and movable (OH or NH2groups) on the photocatalytic H2production of alkyl-alkanolamine: a comparative study. Environmental Technology (United Kingdom), 2015, 36, 2190-2197.	1.2	13
45	Nitrogen(II) Oxide Charge Transfer Complexes on TiO₂: A New Source for Visible-Light Activity. Journal of Physical Chemistry C, 2015, 119, 4488-4501.	1.5	33
46	Utilization of the microwave electric or magnetic field in the synthesis of monometallic and bimetallic nanoparticles. RSC Advances, 2015, 5, 14637-14645.	1.7	7
47	Application of the Stopped Flow Technique to the TiO₂-Heterogeneous Photocatalysis of Hexavalent Chromium in Aqueous Suspensions: Comparison with O₂ and H₂O₂ as Electron Acceptors. Langmuir, 2015, 31, 6229-6236.	1.6	16
48	Novel Microwave Thermodynamic Model for Alcohol with Clustering Structure in Nonpolar Solution. Journal of Physical Chemistry B, 2015, 119, 14479-14485.	1.2	20
49	Photocatalytic evolution of molecular hydrogen and oxygen over La-doped NaTaO3particles: Effect of different cocatalysts (Presentation Recording). , 2015, , .		0
50	Determination of the photocatalytic deposition velocity. Chemical Engineering Journal, 2015, 261, 88-94.	6.6	15
51	Photocatalytic Degradation of Anthracene in Closed System Reactor. International Journal of Photoenergy, 2014, 2014, 1-6.	1.4	38
52	Self-Cleaning Properties, Mechanical Stability, and Adhesion Strength of Transparent Photocatalytic TiO₂â€"ZnO Coatings on Polycarbonate. ACS Applied Materials & Interfaces, 2014, 6, 2270-2278.	4.0	106
53	The nature of chlorine-inhibition of photocatalytic degradation of dichloroacetic acid in a TiO2-based microreactor. Physical Chemistry Chemical Physics, 2014, 16, 14867.	1.3	75
54	Ruthenium-modified zinc oxide, a highly active vis-photocatalyst: the nature and reactivity of photoactive centres. Physical Chemistry Chemical Physics, 2014, 16, 5833.	1.3	49

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55	Microwave-Driven Asbestos Treatment and Its Scale-up for Use after Natural Disasters. Environmental Science & Technology, 2014, 48, 6882-6890.	4.6	13
56	Solvent-free hydrothermal synthesis of anatase TiO2 nanoparticles with enhanced photocatalytic hydrogen production activity. Applied Catalysis A: General, 2013, 466, 32-37.	2.2	62
57	Enhancing the photocatalytic activity of TiO2 by pH control: a case study for the degradation of EDTA. Catalysis Science and Technology, 2013, 3, 3216.	2.1	37
58	Light intensity dependence of the kinetics of the photocatalytic oxidation of nitrogen(ii) oxide at the surface of TiO2. Physical Chemistry Chemical Physics, 2013, 15, 20876.	1.3	66
59	Arenesulfonic Acid-Functionalized Mesoporous Silica Decorated with Titania: A Heterogeneous Catalyst for the One-Pot Photocatalytic Synthesis of Quinolines from Nitroaromatic Compounds and Alcohols. ACS Catalysis, 2013, 3, 565-572.	5.5	42
60	Zinc Oxide Photocatalysis: Influence of Iron and Titanium Doping and Origin of the Optimal Doping Ratio. ChemCatChem, 2013, 5, 774-778.	1.8	21
61	Factors affecting the selectivity of the photocatalytic conversion of nitroaromatic compounds over TiO2 to valuable nitrogen-containing organic compounds. Physical Chemistry Chemical Physics, 2013, 15, 2992.	1.3	37
62	Preparation and Characterization of Transparent Hydrophilic Photocatalytic TiO₂/SiO₂ Thin Films on Polycarbonate. Langmuir, 2013, 29, 3730-3739.	1.6	120
63	Tuning the photocatalytic selectivity of TiO2 anatase nanoplates by altering the exposed crystal facets content. Applied Catalysis B: Environmental, 2013, 142-143, 761-768.	10.8	66
64	Catalytic Role of Surface Oxygens in TiO₂ Photooxidation Reactions: Aqueous Benzene Photooxidation with Ti¹⁸O₂ under Anaerobic Conditions. Journal of Physical Chemistry Letters, 2013, 4, 1415-1422.	2.1	56
65	Photocatalysis as an Auspicious Synthetic Route Towards Nitrogen Containing Organic Compounds. Current Organic Chemistry, 2013, 17, 2482-2502.	0.9	4
66	Transition metal-modified zinc oxides for UV and visible light photocatalysis. Environmental Science and Pollution Research, 2012, 19, 3688-3695.	2.7	34
67	Kinetics and mechanisms of charge transfer processes in photocatalytic systems: A review. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2012, 13, 263-276.	5.6	264
68	Designing Optimal Metal-Doped Photocatalysts: Correlation between Photocatalytic Activity, Doping Ratio, and Particle Size. Journal of Physical Chemistry C, 2012, 116, 25558-25562.	1.5	82
69	Composite hydroxyapatite/TiO2 materials for photocatalytic oxidation of NOx. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 1046-1052.	1.7	77
70	Fe-doped titanium dioxide synthesized: Photocatalytic activity and mineralization study for azo dye. Journal of Photochemistry and Photobiology A: Chemistry, 2012, 243, 17-22.	2.0	26
71	TiO2 nanoparticles as electron pools: Single- and multi-step electron transfer processes. Journal of Photochemistry and Photobiology A: Chemistry, 2012, 245, 9-17.	2.0	22
72	Photocatalytic degradation of azo dyes by BiOX (X=Cl, Br). Journal of Molecular Catalysis A, 2012, 365, 1-7.	4.8	36

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73	Photo-induced hydrophilicity and self-cleaning: models and reality. Energy and Environmental Science, 2012, 5, 7491.	15.6	222
74	Kinetic and Mechanistic Investigations of the Light Induced Formation of Gold Nanoparticles on the Surface of TiO₂. Chemistry - A European Journal, 2012, 18, 4314-4321.	1.7	19
75	Influence of inlet concentration and light intensity on the photocatalytic oxidation of nitrogen(II) oxide at the surface of AeroxideÂ® TiO2 P25. Journal of Hazardous Materials, 2012, 211-212, 240-246.	6.5	59
76	Hematite Photocatalysis: Dechlorination of 2,6-Dichloroindophenol and Oxidation of Water. Journal of Physical Chemistry C, 2011, 115, 25442-25450.	1.5	37
77	Growth and Reactivity of Silver Nanoparticles on the Surface of TiO₂: A Stopped-Flow Study. Journal of Physical Chemistry C, 2011, 115, 12163-12172.	1.5	27
78	Kinetic and Mechanistic Investigations of Multielectron Transfer Reactions Induced by Stored Electrons in TiO₂ Nanoparticles: A Stopped Flow Study. Journal of Physical Chemistry A, 2011, 115, 2139-2147.	1.1	90
79	Highly Active Crystalline Mesoporous TiO₂ Films Coated onto Polycarbonate Substrates for Self-Cleaning Applications. Journal of Physical Chemistry C, 2011, 115, 10405-10411.	1.5	107
80	Photonic efficiency and mechanism of photocatalytic molecular hydrogen production over platinized titanium dioxide from aqueous methanol solutions. Catalysis Today, 2011, 161, 196-201.	2.2	115
81	Hydroxyapatite/titanium dioxide nanocomposites for controlled photocatalytic NO oxidation. Applied Catalysis B: Environmental, 2011, 106, 398-404.	10.8	87
82	Reaction dynamics of the transfer of stored electrons on TiO2 nanoparticles: A stopped flow study. Journal of Photochemistry and Photobiology A: Chemistry, 2011, 217, 271-274.	2.0	34
83	(Green) Photocatalytic Synthesis Employing Nitroaromatic Compounds. Materials Research Society Symposia Proceedings, 2011, 1352, 119.	0.1	0
84	Synthesis and photocatalytic activity of boron-doped TiO2 in aqueous suspensions under UV-A irradiation. Water Science and Technology, 2010, 61, 2501-2506.	1.2	2
85	Direct Synthesis of Photocatalytically Active Rutile TiO₂ Nanorods Partly Decorated with Anatase Nanoparticles. Journal of Physical Chemistry C, 2010, 114, 4909-4915.	1.5	93
86	Tailored Titanium Dioxide Nanomaterials: Anatase Nanoparticles and Brookite Nanorods as Highly Active Photocatalysts. Chemistry of Materials, 2010, 22, 2050-2060.	3.2	394
87	Physical properties, stability, and photocatalytic activity of transparent TiO2/SiO2 films. Separation and Purification Technology, 2009, 67, 173-179.	3.9	25
88	Evaluation of two types of TiO2-based catalysts by photodegradation of DMSO in aqueous suspension. Journal of Photochemistry and Photobiology A: Chemistry, 2009, 202, 164-171.	2.0	56
89	Photocatalytic conversion of nitroaromatic compounds in the presence of TiO2. Catalysis Today, 2009, 144, 154-159.	2.2	66
90	Enhanced photocatalytic production of molecular hydrogen on TiO2 modified with Ptâ€“polypyrrole nanocomposites. Photochemical and Photobiological Sciences, 2009, 8, 683-690.	1.6	88

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91	Use of microwave discharge electrodeless lamps (MDEL). Journal of Photochemistry and Photobiology A: Chemistry, 2008, 193, 284-287.	2.0	22
92	Preparation of porous CdIn2S4 photocatalyst films by hydrothermal crystal growth at solid/liquid/gas interfaces. Thin Solid Films, 2008, 516, 4988-4992.	0.8	32
93	Photodegradation of methylene blue in water, a standard method to determine the activity of photocatalytic coatings?. Research on Chemical Intermediates, 2008, 34, 381-392.	1.3	83
94	Photocatalytic Degradation of Methylene Blue on Fixed Powder Layers: Which Limitations are to be Considered?. Journal of Advanced Oxidation Technologies, 2008, 11, .	0.5	3
95	Light-induced degradation of perfluorocarboxylic acids in the presence of titanium dioxide. Chemosphere, 2007, 67, 785-792.	4.2	112
96	Photodestruction of dichloroacetic acid catalyzed by nano-sized TiO2 particles. Applied Catalysis B: Environmental, 2002, 36, 161-169.	10.8	140
97	Photocatalysis in water environments using artificial and solar light. Catalysis Today, 2000, 58, 199-230.	2.2	467
98	Solar-catalytic Treatment of an Industrial Wastewater. Zeitschrift Fur Physikalische Chemie, 1999, 213, 141-147.	1.4	22
99	Large scale studies in solar catalytic wastewater treatment. Catalysis Today, 1999, 54, 267-282.	2.2	99
100	Photocatalytic Treatment of an Industrial Wastewater in the Double-Skin Sheet Reactor. Chemical Engineering and Technology, 1999, 22, 931.	0.9	21
101	Photocatalytic Disinfection of Municipal Wastewater. Chemical Engineering and Technology, 1998, 21, 356.	0.9	34
102	14C-trinitrotoluene: synthesis and photocatalytic degradation. Journal of Labelled Compounds and Radiopharmaceuticals, 1998, 41, 337-343.	0.5	7
103	A Novel Nonconcentrating Reactor for Solar Water Detoxification. Journal of Solar Energy Engineering, Transactions of the ASME, 1997, 119, 114-119.	1.1	41
104	Solar water treatment: Principles and reactors. Water Science and Technology, 1997, 35, 137.	1.2	68
105	Photocatalytic degradation of trinitrotoluene: reductive and oxidative pathways. Journal of Photochemistry and Photobiology A: Chemistry, 1997, 110, 191-199.	2.0	22
106	Photocatalytic degradation of trinitrotoluene and trinitrobenzene: influence of hydrogen peroxide. Journal of Photochemistry and Photobiology A: Chemistry, 1996, 94, 231-236.	2.0	51
107	Photocatalytic degradation of trinitrotoluene and other nitroaromatic compounds. Chemosphere, 1995, 30, 2333-2341.	4.2	68
108	Effect of the Degree of Inversion on the Photocatalytic Activity of Spinel ZnFe2O4. , 0, , .		0

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109	Effect of the Degree of Inversion on the Photocatalytic Activity of Spinel ZnFe2O4. , 0, , .		0