Nicolas Keller

List of Publications by Year
in descending order

124 papers	5,443 citations	71102 41 h-index	91884 69 g-index
132 all docs	132 docs citations	132 times ranked	6976 citing authors

#	Article	IF	Citations
1	COST Action PRIORITY: An EU Perspective on Micro- and Nanoplastics as Global Issues. Microplastics, 2022, 1, 282-290.	4.2	12
2	Emerging high-prospect applications in photothermal catalysis. Current Opinion in Green and Sustainable Chemistry, 2022, 37, 100652.	5.9	7
3	Photocatalytic degradation of polystyrene nanoplastics in water. A methodological study. Journal of Environmental Chemical Engineering, 2022, 10, 108195.	6.7	8
4	Modified-TiO2 Photocatalyst Supported on Î²-SiC Foams for the Elimination of Gaseous Diethyl Sulfide as an Analog for Chemical Warfare Agent: Towards the Development of a Photoreactor Prototype. Catalysts, 2021, 11, 403.	3.5	5
5	TiO2 and TiO2-Carbon Hybrid Photocatalysts for Diuron Removal from Water. Catalysts, 2021, 11, 457.	3.5	5
6	Irradiance-Controlled Photoassisted Synthesis of Sub-Nanometre Sized Ruthenium Nanoparticles as Co-Catalyst for TiO2 in Photocatalytic Reactions. Materials, 2021, 14, 4799.	2.9	1
7	UV-A light-assisted gas-phase formic acid decomposition on photo-thermo Ru/TiO2 catalyst. Catalysis Today, 2021, 380, 138-146.	4.4	8
8	Photo-/thermal synergies in heterogeneous catalysis: Towards low-temperature (solar-driven) processing for sustainable energy and chemicals. Applied Catalysis B: Environmental, 2021, 296, 120320.	20.2	66
9	Highâ€flow arteriovenous fistula and hemodynamic consequences at 1â€‰year after kidney transplantation. Seminars in Dialysis, 2021, , .	1.3	0
10	Highly robust La1-xTixFeO3 dual catalyst with combined photocatalytic and photo-CWPO activity under visible light for 4-chlorophenol removal in water. Applied Catalysis B: Environmental, 2020, 262, 118310.	20.2	30
11	Reaction pathways, kinetics and toxicity assessment during the photocatalytic degradation of glyphosate and myclobutanil pesticides: Influence of the aqueous matrix. Chemical Engineering Journal, 2020, 384, 123315.	12.7	46
12	Self-tuned properties of CuZnO catalysts for hydroxymethylfurfural hydrodeoxygenation towards dimethylfuran production. Catalysis Science and Technology, 2020, 10, 658-670.	4.1	25
13	Ferrite Materials for Photoassisted Environmental and Solar Fuels Applications. Topics in Current Chemistry, 2020, 378, 6.	5.8	39
14	Antibacterial and Biofilm-Preventive Photocatalytic Activity and Mechanisms on P/F-Modified TiO2 Coatings. ACS Applied Bio Materials, 2020, 3, 5687-5698.	4.6	12
15	TiO₂ supported Ru catalysts for the hydrogenation of succinic acid: influence of the support. Catalysis Science and Technology, 2020, 10, 6860-6869.	4.1	11
16	Ni-Pd/Î³-Al2O3 Catalysts in the Hydrogenation of Levulinic Acid and Hydroxymethylfurfural towards Value Added Chemicals. Catalysts, 2020, 10, 1026.	3.5	14
17	Ti-Modified LaFeO₃/Î²-SiC Alveolar Foams as Immobilized Dual Catalysts with Combined Photo-Fenton and Photocatalytic Activity. ACS Applied Materials & Interfaces, 2020, 12, 57025-57037.	8.0	16
18	Virtually Transparent TiO₂/Polyelectrolyte Thin Multilayer Films as High-Efficiency Nanoporous Photocatalytic Coatings for Breaking Down Formic Acid and for <i>Escherichia coli</i> Removal. ACS Applied Materials & Interfaces, 2020, 12, 55766-55781.	8.0	7

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19	Activity enhancement pathways in LaFeO3@TiO2 heterojunction photocatalysts for visible and solar light driven degradation of myclobutanil pesticide in water. Journal of Hazardous Materials, 2020, 400, 123099.	12.4	53
20	Coating-free TiO2@Î²-SiC alveolar foams as a ready-to-use composite photocatalyst with tunable adsorption properties for water treatment. RSC Advances, 2020, 10, 3817-3825.	3.6	13
21	Synergy effect between photocatalysis and heterogeneous photo-Fenton catalysis on Ti-doped LaFeO₃ perovskite for high efficiency light-assisted water treatment. Catalysis Science and Technology, 2020, 10, 1299-1310.	4.1	42
22	Solvothermal hydrodeoxygenation of hydroxymethylfurfural derived from biomass towards added value chemicals on Ni/TiO2 catalysts. Journal of Supercritical Fluids, 2020, 163, 104827.	3.2	15
23	Understanding the influence of the composition of the Ag Pd catalysts on the selective formic acid decomposition and subsequent levulinic acid hydrogenation. International Journal of Hydrogen Energy, 2020, 45, 17339-17353.	7.1	29
24	Ferrite Materials for Photoassisted Environmental and Solar Fuels Applications. Topics in Current Chemistry Collections, 2020, , 107-162.	0.5	7
25	Photocatalytic Degradation of Myclobutanil and Its Commercial Formulation with TiO2 P25 in Slurry and TiO2/Î²-SiC Foams. Journal of Nanoscience and Nanotechnology, 2020, 20, 5938-5943.	0.9	1
26	Light-driven synthesis of sub-nanometric metallic Ru catalysts on TiO2. Catalysis Today, 2019, 326, 8-14.	4.4	13
27	Enhanced Production of Î³â€Valerolactone with an Internal Source of Hydrogen on Caâ€Modified TiO 2 Supported Ru Catalysts. ChemSusChem, 2019, 12, 553.	6.8	0
28	Ti-substituted LaFeO3 perovskite as photoassisted CWPO catalyst for water treatment. Applied Catalysis B: Environmental, 2019, 248, 120-128.	20.2	66
29	Clinical utility of leflunomide for BK polyomavirus associated nephropathy in kidney transplant recipients: A multicenter retrospective study. Transplant Infectious Disease, 2019, 21, e13058.	1.7	13
30	Heterogeneous photodegradation of Pyrimethanil and its commercial formulation with TiO2 immobilized on SiC foams. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 368, 1-6.	3.9	35
31	Sn-doped and porogen-modified TiO2 photocatalyst for solar light elimination of sulfure diethyle as a model for chemical warfare agent. Applied Catalysis B: Environmental, 2019, 245, 279-289.	20.2	41
32	Enhanced Production of Î³â€Valerolactone with an Internal Source of Hydrogen on Caâ€Modified TiO₂ Supported Ru Catalysts. ChemSusChem, 2019, 12, 639-650.	6.8	35
33	Alveolar TiO2-Î²-SiC photocatalytic composite foams with tunable properties for water treatment. Catalysis Today, 2019, 328, 235-242.	4.4	20
34	On the role of BmimPF6 and P/F- containing additives in the sol-gel synthesis of TiO2 photocatalysts with enhanced activity in the gas phase degradation of methyl ethyl ketone. Applied Catalysis B: Environmental, 2018, 234, 56-69.	20.2	16
35	Photocatalytic Decontamination of Airborne T2 Bacteriophage Viruses in a Small-Size TiO2/Î²-SiC Alveolar Foam LED Reactor. Water, Air, and Soil Pollution, 2018, 229, 1.	2.4	26
36	Photoactive ZnO Materials for Solar Light-Induced CuxO-ZnO Catalyst Preparation. Materials, 2018, 11, 2260.	2.9	15

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37	Solar Light Induced Photon-Assisted Synthesis of TiO2 Supported Highly Dispersed Ru Nanoparticle Catalysts. Materials, 2018, 11, 2329.	2.9	12
38	Highâ€Frequency Stimulation of Normal and Blind Mouse Retinas Using TiO₂ Nanotubes. Advanced Functional Materials, 2018, 28, 1804639.	14.9	13
39	Temperature dependent photoluminescence of anatase and rutile TiO2 single crystals: Polaron and self-trapped exciton formation. Journal of Applied Physics, 2018, 124, .	2.5	39
40	Supported goldâ€“nickel nano-alloy as a highly efficient catalyst in levulinic acid hydrogenation with formic acid as an internal hydrogen source. Catalysis Science and Technology, 2018, 8, 4318-4331.	4.1	51
41	Introduction by guest editors. Photochemical and Photobiological Sciences, 2017, 16, 8-9.	2.9	0
42	Environmental photocatalysis and photochemistry for a sustainable world: a big challenge. Environmental Science and Pollution Research, 2017, 24, 12503-12505.	5.3	12
43	One-pot synthesis of lightly doped Zn1â^'x Cu x O and Auâ€“Zn1â^'x Cu x O with solar light photocatalytic activity in liquid phase. Environmental Science and Pollution Research, 2017, 24, 15622-15633.	5.3	16
44	Wide band gap Ga2O3 as efficient UV-C photocatalyst for gas-phase degradation applications. Environmental Science and Pollution Research, 2017, 24, 26792-26805.	5.3	20
45	Layer-by-Layer Photocatalytic Assembly for Solar Light-Activated Self-Decontaminating Textiles. ACS Applied Materials & Interfaces, 2016, 8, 34438-34445.	8.0	15
46	Ta-doped TiO 2 as photocatalyst for UV-A activated elimination of chemical warfare agent simulant. Journal of Catalysis, 2016, 334, 129-141.	6.2	26
47	Ru catalysts for levulinic acid hydrogenation with formic acid as a hydrogen source. Green Chemistry, 2016, 18, 2014-2028.	9.0	126
48	Antibacterial textiles functionalized by layer-by-layer assembly of polyelectrolytes and TiO2photocatalyst. RSC Advances, 2015, 5, 38859-38867.	3.6	22
49	Î²-SiC alveolar foams as a structured photocatalytic support for the gas phase photocatalytic degradation of methylethylketone. Applied Catalysis B: Environmental, 2015, 170-171, 301-311.	20.2	36
50	Single-Step Synthesis of SnS₂ Nanosheet-Decorated TiO₂ Anatase Nanofibers as Efficient Photocatalysts for the Degradation of Gas-Phase Diethylsulfide. ACS Applied Materials & Interfaces, 2015, 7, 19324-19334.	8.0	105
51	Structural and electronic effects in bimetallic PdPt nanoparticles on TiO2 for improved photocatalytic oxidation of CO in the presence of humidity. Applied Catalysis B: Environmental, 2015, 166-167, 381-392.	20.2	50
52	H2S photocatalytic oxidation over WO3/TiO2 Hombikat UV100. Environmental Science and Pollution Research, 2014, 21, 3503-3514.	5.3	29
53	TiO2 nanorods for gas phase photocatalytic applications. Catalysis Today, 2014, 235, 193-200.	4.4	17
54	TiO ₂ Photocatalysis Damages Lipids and Proteins in Escherichia coli. Applied and Environmental Microbiology, 2014, 80, 2573-2581.	3.1	195

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55	Effect of ball-milling and Fe-/Al-doping on the structural aspect and visible light photocatalytic activity of TiO2 towards Escherichia coli bacteria abatement. Materials Science and Engineering C, 2014, 38, 11-19.	7.3	27
56	Photocatalytic degradation of butanone (methylethylketone) in a small-size TiO2/Î²-SiC alveolar foam LED reactor. Applied Catalysis B: Environmental, 2014, 154-155, 301-308.	20.2	24
57	Î²-SiC foams as a promising structured photocatalytic support for water and air detoxification. Catalysis Today, 2013, 209, 13-20.	4.4	59
58	One step synthesis of niobium doped titania nanotube arrays to form (N,Nb) co-doped TiO₂with high visible light photoelectrochemical activity. Journal of Materials Chemistry A, 2013, 1, 2151-2160.	10.3	75
59	Chemistry of NO_{<i>x</i>} on TiO₂ Surfaces Studied by Ambient Pressure XPS: Products, Effect of UV Irradiation, Water, and Coadsorbed K⁺. Journal of Physical Chemistry Letters, 2013, 4, 536-541.	4.6	79
60	Ethylene Removal and Fresh Product Storage: A Challenge at the Frontiers of Chemistry. Toward an Approach by Photocatalytic Oxidation. Chemical Reviews, 2013, 113, 5029-5070.	47.7	208
61	Solar light-activated photocatalytic degradation of gas phase diethylsulfide on WO3-modified TiO2 nanotubes. Applied Catalysis B: Environmental, 2013, 138-139, 128-140.	20.2	54
62	On the use of capillary cytometry for assessing the bactericidal effect of TiO2. Identification and involvement of reactive oxygen species. Photochemical and Photobiological Sciences, 2013, 12, 610-620.	2.9	12
63	TiO2/Î²-SiC foam-structured photoreactor for continuous wastewater treatment. Environmental Science and Pollution Research, 2012, 19, 3727-3734.	5.3	37
64	Photocatalysis: fundamentals and applications in JEP 2011. Environmental Science and Pollution Research, 2012, 19, 3651-3654.	5.3	19
65	WO3-modified TiO2 nanotubes for photocatalytic elimination of methylethylketone under UVA and solar light irradiation. Journal of Photochemistry and Photobiology A: Chemistry, 2012, 245, 43-57.	3.9	28
66	Comparison of Hombikat UV100 and P25 TiO2 performance in gas-phase photocatalytic oxidation reactions. Journal of Photochemistry and Photobiology A: Chemistry, 2012, 250, 58-65.	3.9	69
67	Synthesis of transparent vertically aligned TiO₂nanotubes on a few-layer graphene (FLG) film. Chemical Communications, 2012, 48, 1224-1226.	4.1	18
68	A parametric study of the UV-A photocatalytic oxidation of H2S over TiO2. Applied Catalysis B: Environmental, 2012, 115-116, 209-218.	20.2	59
69	Enhanced CO photocatalytic oxidation in the presence of humidity by tuning composition of Pdâ€“Pt bimetallic nanoparticles supported on TiO2. Chemical Communications, 2011, 47, 5331.	4.1	28
70	Impact of three different TiO2 morphologies on hydrogen evolution by methanol assisted water splitting: Nanoparticles, nanotubes and aerogels. International Journal of Hydrogen Energy, 2011, 36, 14360-14373.	7.1	84
71	Photocatalytically Active Polyelectrolyte/Nanoparticle Films for the Elimination of a Model Odorous Gas. Macromolecular Rapid Communications, 2011, 32, 1145-1149.	3.9	13
72	Self-decontaminating layer-by-layer functionalized textiles based on WO3-modified titanate nanotubes. Application to the solar photocatalytic removal of chemical warfare agents. Applied Catalysis A: General, 2011, 391, 455-467.	4.3	42

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73	Beta zeolite supported solâ€"gel TiO2 materials for gas phase photocatalytic applications. Journal of Hazardous Materials, 2011, 186, 1218-1225.	12.4	32
74	Solar light photocatalytic hydrogen production from water over Pt and Au/TiO2(anatase/rutile) photocatalysts: Influence of noble metal and porogen promotion. Journal of Catalysis, 2010, 269, 179-190.	6.2	289
75	UV-A photocatalytic treatment of Legionella pneumophila bacteria contaminated airflows through three-dimensional solid foam structured photocatalytic reactors. Journal of Hazardous Materials, 2010, 175, 372-381.	12.4	41
76	Catalysts, mechanisms and industrial processes for the dimethylcarbonate synthesis. Journal of Molecular Catalysis A, 2010, 317, 1-18.	4.8	204
77	3D solid carbon foam-based photocatalytic materials for vapor phase flow-through structured photoreactors. Applied Catalysis A: General, 2010, 382, 122-130.	4.3	42
78	High surface-to-volume hybrid platelet reactor filled with catalytically grown vertically aligned carbon nanotubes. Catalysis Today, 2010, 150, 133-139.	4.4	12
79	CHARACTERIZATION OF POLYBUTYLACRYLATE-B-POLYVINYLPYRIDINE BLOCK COPOLYMERS BY SIZE-EXCLUSION CHROMATOGRAPHY AND DUAL REFRACTIVE INDEX/UV-DETECTION. Journal of Liquid Chromatography and Related Technologies, 2010, 33, 1587-1600.	1.0	0
80	Photocatalytic Treatment of Bioaerosols: Impact of the Reactor Design. Environmental Science & Technology, 2010, 44, 2605-2611.	10.0	25
81	Layerâ€byâ€Layer Deposited Titanateâ€Based Nanotubes for Solar Photocatalytic Removal of Chemical Warfare Agents from Textiles. Angewandte Chemie - International Edition, 2009, 48, 161-164.	13.8	80
82	Macronized aligned carbon nanotubes for use as catalyst support and ceramic nanoporous membrane template. Catalysis Today, 2009, 145, 76-84.	4.4	21
83	Monitoring the bactericidal effect of UV-A photocatalysis: A first approach through 1D and 2D protein electrophoresis. Catalysis Today, 2009, 147, 169-172.	4.4	21
84	Photocatalytic removal of monoterpenes in the gas phase. Activity and regeneration. Green Chemistry, 2009, 11, 966.	9.0	8
85	Porogen Template Assisted TiO2 Rutile Coupled Nanomaterials for Improved Visible and Solar Light Photocatalytic Applications. Catalysis Letters, 2008, 123, 65-71.	2.6	23
86	Numeration methods for targeting photoactive materials in the UV-A photocatalytic removal of microorganisms. Chemical Society Reviews, 2008, 37, 744.	38.1	72
87	Activation and isomerization of hydrocarbons over WO3/ZrO2 catalystsII. Influence of tungsten loading on catalytic activity: Mechanistic studies and correlation with surface reducibility and tungsten surface species. Journal of Catalysis, 2008, 256, 159-171.	6.2	23
88	Towards the oxygenated phase coverage rate of Î²-SiC surface. Diamond and Related Materials, 2008, 17, 1867-1870.	3.9	11
89	Cuâ€"Y zeolite supported on silicon carbide for the vapour phase oxidative carbonylation of methanol to dimethyl carbonate. Green Chemistry, 2008, 10, 207-213.	9.0	28
90	Mesostructured Anatase TiO2 for Visible Light and UV Photocatalysis With Confinement Effect and Semiconductor Coupling. Journal of Solar Energy Engineering, Transactions of the ASME, 2008, 130, .	1.8	7

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91	Oxidative dehydrogenation of ethylbenzene to styrene over ultra-dispersed diamond and onion-like carbon. Carbon, 2007, 45, 2145-2151.	10.3	168
92	UV-A photocatalytic treatment of high flow rate air contaminated with Legionella pneumophila. Catalysis Today, 2007, 129, 215-222.	4.4	35
93	On the modification of photocatalysts for improving visible light and UV degradation of gas-phase toluene over TiO2. Applied Catalysis B: Environmental, 2007, 70, 423-430.	20.2	31
94	Room temperature visible light oxidation of CO by high surface area rutile TiO2-supported metal photocatalyst. Applied Catalysis B: Environmental, 2007, 69, 133-137.	20.2	47
95	Temperature dependent photoluminescence of photocatalytically active titania nanopowders. Catalysis Today, 2007, 122, 101-108.	4.4	28
96	Supported carbon nanofibers for the fixed-bed synthesis of styrene. Carbon, 2006, 44, 809-812.	10.3	46
97	Mesoporous TiO2-based photocatalysts for UV and visible light gas-phase toluene degradation. Thin Solid Films, 2006, 495, 272-279.	1.8	79
98	A new one-dimensional tungsten carbide nanostructured material. Materials Letters, 2006, 60, 1774-1777.	2.6	29
99	Sulfate-promoted Titania Photocatalyst for High Efficiency Gas Phase Toluene Degradation. Chemistry Letters, 2005, 34, 336-337.	1.3	8
100	High-efficiency WO3/carbon nanotubes for olefin skeletal isomerization. Catalysis Today, 2005, 102-103, 94-100.	4.4	14
101	H/D exchange using D2O on carbon materials: A flexible tool for surface BrÃ¸nsted acidity direct measurement. Catalysis Today, 2005, 102-103, 266-272.	4.4	4
102	Macroscopic carbon nanofibers for use as photocatalyst support. Catalysis Today, 2005, 101, 323-329.	4.4	47
103	A tool for direct quantitative measurement of surface BrÃ¸nsted acid sites of solids by H/D exchange using D2O. Applied Catalysis A: General, 2005, 289, 37-43.	4.3	10
104	Gas phase photocatalytic removal of toluene effluents on sulfated titania. Journal of Catalysis, 2005, 235, 318-326.	6.2	57
105	New catalysts based on silicon carbide support for improvements in the sulfur recovery: new silicon carbide nanotubes as catalyst support for the trickle-bed H2S oxidation. Journal of the Brazilian Chemical Society, 2005, 16, 514-519.	0.6	14
106	New catalysts based on silicon carbide support for improvements in the sulfur recovery. Silicon carbide as support for the selective H2S oxidation. Journal of the Brazilian Chemical Society, 2005, 16, .	0.6	3
107	High surface area submicrometer-sized Î²-SiC particles grown by shape memory synthesis method. Diamond and Related Materials, 2005, 14, 1353-1360.	3.9	25
108	Direct quantitative determination of surface BrÃ¸nsted acidity of solids by H/D exchange using D2O. Chemical Communications, 2005, , 201-203.	4.1	6

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109	Biological agent inactivation in a flowing air stream by photocatalysis. Chemical Communications, 2005, , 2918.	4.1	58
110	Carbon nanotubes as a template for mild synthesis of magnetic CoFe2O4 nanowires. Carbon, 2004, 42, 1395-1399.	10.3	27
111	Carbon nanotubes as nanosized reactor for the selective oxidation of H2S into elemental sulfur. Catalysis Today, 2004, 91-92, 91-97.	4.4	58
112	Synthesis and characterization of a new medium surface area TiO2â€"Î²-SiC material for use as photocatalyst. Journal of Materials Chemistry, 2004, 14, 1887-1895.	6.7	21
113	A new TiO2â€"Î²-SiC material for use as photocatalyst. Materials Letters, 2004, 58, 970-974.	2.6	22
114	New catalytic phenomena on nanostructured (fibers and tubes) catalysts. Journal of Catalysis, 2003, 216, 333-342.	6.2	115
115	Synthesis and characterisation of medium surface area silicon carbide nanotubes. Carbon, 2003, 41, 2131-2139.	10.3	123
116	Synthesis and catalytic uses of carbon and silicon carbide nanostructures. Catalysis Today, 2002, 76, 11-32.	4.4	138
117	Low temperature use of SiC-supported NiS2-based catalysts for selective H2S oxidation. Applied Catalysis A: General, 2002, 234, 191-205.	4.3	40
118	Large scale synthesis of carbon nanofibers by catalytic decomposition of ethane on nickel nanoclusters decorating carbon nanotubes. Physical Chemistry Chemical Physics, 2002, 4, 514-521.	2.8	106
119	Carbon nanofiber supported palladium catalyst for liquid-phase reactions. Journal of Molecular Catalysis A, 2001, 170, 155-163.	4.8	168
120	Continuous process for selective oxidation of H2S over SiC-supported iron catalysts into elemental sulfur above its dewpoint. Applied Catalysis A: General, 2001, 217, 205-217.	4.3	87
121	The First Preparation of Silicon Carbide Nanotubes by Shape Memory Synthesis and Their Catalytic Potential. Journal of Catalysis, 2001, 200, 400-410.	6.2	225
122	Selective oxidation of H2S in Claus tail-gas over SiC supported NiS2 catalyst. Catalysis Today, 2000, 61, 157-163.	4.4	49
123	Direct oxidation of H2S into S. New catalysts and processes based on SiC support. Catalysis Today, 1999, 53, 535-542.	4.4	68
124	Preparation and characterization of SiC microtubes. Applied Catalysis A: General, 1999, 187, 255-268.	4.3	58