Agnes Schulze

List of Publications by Year
in descending order

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52	2,185	257101 24	223531 46
papers	citations	h-index	g-index

54	54	54	2906
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recent advances in nanomaterials for water protection and monitoring. Chemical Society Reviews, 2017, 46, 6946-7020.	18.7	441
2	Biocatalytic Degradation Efficiency of Postconsumer Polyethylene Terephthalate Packaging Determined by Their Polymer Microstructures. Advanced Science, 2019, 6, 1900491.	5.6	181
3	Photoactive microfiltration membranes via directed synthesis of TiO2 nanoparticles on the polymer surface for removal of drugs from water. Journal of Membrane Science, 2015, 478, 49-57.	4.1	134
4	Photocatalytic degradation of steroid hormone micropollutants by TiO2-coated polyethersulfone membranes in a continuous flow-through process. Nature Nanotechnology, 2022, 17, 417-423.	15.6	125
5	Degradation of Polyester Polyurethane by Bacterial Polyester Hydrolases. Polymers, 2017, 9, 65.	2.0	116
6	Low-Temperature Synthesis of Anatase/Rutile/Brookite TiO2 Nanoparticles on a Polymer Membrane for Photocatalysis. Catalysts, 2017, 7, 209.	1.6	103
7	Nanoneedle and nanotubular titanium dioxide â€“ PES mixed matrix membrane for photocatalysis. Applied Catalysis B: Environmental, 2014, 160-161, 456-464.	10.8	58
8	Tailoring Membrane Surface Charges: A Novel Study on Electrostatic Interactions during Membrane Fouling. Polymers, 2015, 7, 2017-2030.	2.0	58
9	Permanent surface modification by electron-beam-induced grafting of hydrophilic polymers to PVDF membranes. RSC Advances, 2013, 3, 22518.	1.7	55
10	Photocatalytic degradation and toxicity evaluation of diclofenac by nanotubular titanium dioxideâ€“PES membrane in a static and continuous setup. RSC Advances, 2015, 5, 16340-16348.	1.7	50
11	The critical zeta potential of polymer membranes: how electrolytes impact membrane fouling. RSC Advances, 2016, 6, 98180-98189.	1.7	50
12	Electron Beamâ€Based Functionalization of Poly(ethersulfone) Membranes. Macromolecular Rapid Communications, 2010, 31, 467-472.	2.0	49
13	Synthesis of High Crystalline TiO2 Nanoparticles on a Polymer Membrane to Degrade Pollutants from Water. Catalysts, 2018, 8, 376.	1.6	45
14	IBX-Mediated Conversion of Primary Alcohols and Aldehydes toN-Hydroxysuccinimide Esters. Advanced Synthesis and Catalysis, 2004, 346, 252-256.	2.1	43
15	Electron Beam-Induced Immobilization of Laccase on Porous Supports for Waste Water Treatment Applications. Molecules, 2014, 19, 11860-11882.	1.7	43
16	Characterisation of electron beam irradiation-immobilised laccase for application in wastewater treatment. Science of the Total Environment, 2018, 624, 309-322.	3.9	41
17	Enzymatic degradation of polyethylene terephthalate nanoplastics analyzed in real time by isothermal titration calorimetry. Science of the Total Environment, 2021, 773, 145111.	3.9	37
18	Electron beam-based functionalization of polymer membranes. Water Science and Technology, 2012, 65, 574-580.	1.2	35

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19	Particle adsorption on a polyether sulfone membrane: how electrostatic interactions dominate membrane fouling. RSC Advances, 2016, 6, 65383-65391.	1.7	33
20	Transparent Low Molecular Weight Poly(Ethylene Glycol) Diacrylate-Based Hydrogels as Film Media for Photoswitchable Drugs. Polymers, 2017, 9, 639.	2.0	29
21	TiO2 as Photosensitizer and Photoinitiator for Synthesis of Photoactive TiO2-PEGDA Hydrogel Without Organic Photoinitiator. Frontiers in Chemistry, 2018, 6, 340.	1.8	27
22	Membrane fouling control for sustainable microalgal biodiesel production: A review. Renewable and Sustainable Energy Reviews, 2022, 161, 112335.	8.2	27
23	Surface modification of polyamide and poly(vinylidene fluoride) membranes. Journal of Applied Polymer Science, 2013, 128, 322-331.	1.3	26
24	Bio-Inspired Polymer Membrane Surface Cleaning. Polymers, 2017, 9, 97.	2.0	26
25	Comparison of Photocatalytic Membrane Reactor Types for the Degradation of an Organic Molecule by TiO2-Coated PES Membrane. Catalysts, 2020, 10, 725.	1.6	26
26	A novel electron beam-based method for the immobilization of trypsin on poly(ethersulfone) and poly(vinylidene fluoride) membranes. Reactive and Functional Polymers, 2013, 73, 698-702.	2.0	23
27	Charge Separating Microfiltration Membrane with pH-Dependent Selectivity. Polymers, 2019, 11, 3.	2.0	21
28	High flux and adsorption based non-functionalized hexagonal boron nitride lamellar membrane for ultrafast water purification. Chemical Engineering Journal, 2021, 420, 127721.	6.6	20
29	Membrane Functionalization with Hyperbranched Polymers. Materials, 2016, 9, 706.	1.3	19
30	Controlled Electron-Beam Synthesis of Transparent Hydrogels for Drug Delivery Applications. Polymers, 2019, 11, 501.	2.0	19
31	Water Softening Using a Light-Responsive, Spiropyran-Modified Nanofiltration Membrane. Polymers, 2019, 11, 344.	2.0	18
32	Oxone/Sodium Chloride: A Simple and Efficient Catalytic System for the Oxidation of Alcohols to Symmetric Esters and Ketones. Synthetic Communications, 2006, 36, 1147-1156.	1.1	17
33	Biocatalytic Self-Cleaning Polymer Membranes. Polymers, 2015, 7, 1837-1849.	2.0	16
34	Enhanced Removal and Toxicity Decline
of Diclofenac by Combining UVA Treatment
and Adsorption of Photoproducts
to Polyvinylidene Difluoride. Polymers, 2020, 12, 2340.	2.0	16
35	Oxidation of Alcohols with Catalytic Amounts of IBX. Synthesis, 2006, 2006, 257-260.	1.2	15
36	Polymer membranes for active degradation of complex fouling mixtures. Journal of Membrane Science, 2018, 563, 481-491.	4.1	15

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37	Photosensitizer-loaded hydrogels for photodynamic inactivation of multirestistant bacteria in wounds. RSC Advances, 2021, 11, 7600-7609.	1.7	15
38	Latex particle rejections from virgin and mixed charged surface polycarbonate track etched membranes. Journal of Membrane Science, 2019, 584, 110-119.	4.1	13
39	Electron Beam Immobilization of Novel Antimicrobial, Short Peptide Motifs Leads to Membrane Surfaces with Promising Antibacterial Properties. Journal of Functional Biomaterials, 2018, 9, 21.	1.8	12
40	Effect of Morphology on the Photoelectrochemical Activity of TiO2 Self-Organized Nanotube Arrays. Catalysts, 2020, 10, 279.	1.6	12
41	Uptake and release of photosensitizers in a hydrogel for applications in photodynamic therapy: the impact of structural parameters on intrapolymer transport dynamics. RSC Advances, 2018, 8, 41624-41632.	1.7	11
42	Electron beam functionalized photodynamic polyethersulfone membranesâ€“photophysical characterization and antimicrobial activity. Photochemical and Photobiological Sciences, 2018, 17, 1346-1354.	1.6	11
43	Radiation-Induced Graft Immobilization (RIGI): Covalent Binding of Non-Vinyl Compounds on Polymer Membranes. Polymers, 2021, 13, 1849.	2.0	10
44	Estradiol Removal by Adsorptive Coating of a Microfiltration Membrane. Membranes, 2021, 11, 99.	1.4	10
45	Photodynamic Inactivation of SARS-CoV-2 Infectivity and Antiviral Treatment Effects In Vitro. Viruses, 2022, 14, 1301.	1.5	10
46	Photoactive polymer membranes for degradation of pharmaceuticals from water. Catalysis Today, 2021, 364, 256-262.	2.2	9
47	Highly Efficient One-Step Protein Immobilization on Polymer Membranes Supported by Response Surface Methodology. Frontiers in Chemistry, 2021, 9, 804698.	1.8	6
48	Reduction of Biofouling of a Microfiltration Membrane Using Amide Functionalitiesâ€”Hydrophilization without Changes in Morphology. Polymers, 2020, 12, 1379.	2.0	5
49	Reagent-Free Immobilization of Industrial Lipases to Develop Lipolytic Membranes with Self-Cleaning Surfaces. Membranes, 2022, 12, 599.	1.4	3
50	Ion incidence angle dependent pattern formation at AZ 4562Â® photo resist by Ar+ ion beam erosion. Applied Surface Science, 2022, 574, 151682.	3.1	1
51	IBX-Mediated Conversion of Primary Alcohols and Aldehydes to N-Hydroxysuccinimide Esters.. ChemInform, 2004, 35, no.	0.1	0
52	Membrane Functionalization in Pilot Scale: Rollâ€toâ€Roll Electron Beam System with Inline Contact Angle Determination. Chemie-Ingenieur-Technik, 2021, 93, 1383-1388.	0.4	0