Simo Olavi Pehkonen

List of Publications by Year
in descending order

91	6,836	46918 47	60497 81
papers	citations	h-index	g-index

92	92	92	7302
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The chemistry of atmospheric mercury: a review. Atmospheric Environment, 1999, 33, 2067-2079.	1.9	527
2	Photocatalytic Oxidation of Arsenic(III):â€‰ Evidence of Hydroxyl Radicals. Environmental Science & Technology, 2005, 39, 1827-1834.	4.6	299
3	Scientific uncertainties in atmospheric mercury models I: Model science evaluation. Atmospheric Environment, 2006, 40, 2911-2928.	1.9	231
4	Peracids in water treatment: A critical review. Critical Reviews in Environmental Science and Technology, 2017, 47, 1-39.	6.6	226
5	Microbiologically influenced corrosion of 304 stainless steel by aerobic Pseudomonas NCIMB 2021 bacteria: AFM and XPS study. Colloids and Surfaces B: Biointerfaces, 2007, 59, 87-99.	2.5	214
6	Superhydrophobic CuO nanoneedle-covered copper surfaces for anticorrosion. Journal of Materials Chemistry A, 2015, 3, 4374-4388.	5.2	202
7	Lysozyme-Coupled Poly(poly(ethylene glycol) methacrylate)â^'Stainless Steel Hybrids and Their Antifouling and Antibacterial Surfaces. Langmuir, 2011, 27, 2761-2774.	1.6	197
8	The influence of sulphate-reducing bacteria biofilm on the corrosion of stainless steel AISI 316. Corrosion Science, 2007, 49, 2159-2176.	3.0	194
9	The Degradation of Organophosphorus Pesticides in Natural Waters: A Critical Review. Critical Reviews in Environmental Science and Technology, 2002, 32, 17-72.	6.6	178
10	Superhydrophobic fluoropolymer-modified copper surface via surface graft polymerisation for corrosion protection. Corrosion Science, 2011, 53, 2738-2747.	3.0	171
11	Photoreduction of iron oxyhydroxides in the presence of important atmospheric organic compounds. Environmental Science & Technology, 1993, 27, 2056-2062.	4.6	169
12	Surface characterization and corrosion behavior of 70/30 Cuâ€“Ni alloy in pristine and sulfide-containing simulated seawater. Corrosion Science, 2007, 49, 1276-1304.	3.0	162
13	Surface chemistry and corrosion behaviour of 304 stainless steel in simulated seawater containing inorganic sulphide and sulphate-reducing bacteria. Corrosion Science, 2013, 74, 353-366.	3.0	152
14	Photocatalytic inactivation of Gram-positive and Gram-negative bacteria using fluorescent light. Journal of Photochemistry and Photobiology A: Chemistry, 2007, 186, 335-341.	2.0	134
15	Redox chemistry of iron in fog and stratus clouds. Journal of Geophysical Research, 1993, 98, 18423-18434.	3.3	129
16	The influence of ionic strength, nutrients and pH on bacterial adhesion to metals. Journal of Colloid and Interface Science, 2008, 321, 256-264.	5.0	127
17	Nanostructured TiO2/CuO dual-coated copper meshes with superhydrophilic, underwater superoleophobic and self-cleaning properties for highly efficient oil/water separation. Chemical Engineering Journal, 2017, 328, 497-510.	6.6	120
18	Aqueous free radical chemistry of mercury in the presence of iron oxides and ambient aerosol. Atmospheric Environment, 1997, 31, 4125-4137.	1.9	111

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19	The influence of the marine aerobic Pseudomonas strain on the corrosion of 70/30 Cuâ€“Ni alloy. Corrosion Science, 2007, 49, 4352-4385.	3.0	108
20	Purification of phenol-contaminated water by adsorption with quaternized poly(dimethylaminopropyl) Tj ETQq0 0 0 rgBT /Overlock 10 T	5.2	106
21	Aqueous Photochemistry of Mercury with Organic Acids. Journal of the Air and Waste Management Association, 1998, 48, 144-150.	0.9	100
22	Iron photochemistry of aqueous suspensions of ambient aerosol with added organic acids. Geochimica Et Cosmochimica Acta, 1994, 58, 3271-3279.	1.6	98
23	Determination of the oxidation states of iron in natural waters. A review. Analyst, The, 1995, 120, 2655.	1.7	97
24	Effects of ring substituents on the protective properties of self-assembled benzenethiols on copper. Corrosion Science, 2006, 48, 840-862.	3.0	94
25	Force measurements of bacterial adhesion on metals using a cell probe atomic force microscope. Journal of Colloid and Interface Science, 2007, 310, 661-669.	5.0	92
26	Simultaneous spectrophotometric measurement of iron(II) and iron(III) in atmospheric water. Environmental Science & Technology, 1992, 26, 1731-1736.	4.6	89
27	Copper corrosion in mildly alkaline water with the disinfectant monochloramine. Corrosion Science, 2002, 44, 2507-2528.	3.0	86
28	Degradation of monomethylmercury chloride by hydroxyl radicals in simulated natural waters. Water Research, 2003, 37, 2496-2504.	5.3	86
29	Oxidation of Diazinon by Aqueous Chlorine:Â Kinetics, Mechanisms, and Product Studies. Journal of Agricultural and Food Chemistry, 1999, 47, 1760-1766.	2.4	85
30	Kinetics and mechanisms of UV-photodegradation of chlorinated organics in the gas phase. Water Research, 2002, 36, 4203-4214.	5.3	85
31	Poly(methacrylic acid)-grafted chitosan microspheres via surface-initiated ATRP for enhanced removal of Cd(II) ions from aqueous solution. Journal of Colloid and Interface Science, 2013, 405, 171-182.	5.0	77
32	Inorganicâ'Organic Hybrid Coatings on Stainless Steel by Layer-by-Layer Deposition and Surface-Initiated Atom-Transfer-Radical Polymerization for Combating Biocorrosion. ACS Applied Materials & Interfaces, 2009, 1, 640-652.	4.0	75
33	PVDF film tethered with RGD-click-poly(glycidyl methacrylate) brushes by combination of direct surface-initiated ATRP and click chemistry for improved cytocompatibility. RSC Advances, 2014, 4, 105-117.	1.7	75
34	AFM study of microbial colonization and its deleterious effect on 304 stainless steel by Pseudomonas NCIMB 2021 and Desulfovibrio desulfuricans in simulated seawater. Corrosion Science, 2009, 51, 1372-1385.	3.0	73
35	Antibacterial Inorganicâ'Organic Hybrid Coatings on Stainless Steel via Consecutive Surface-Initiated Atom Transfer Radical Polymerization for Biocorrosion Prevention. Langmuir, 2010, 26, 6728-6736.	1.6	71
36	Scientific uncertainties in atmospheric mercury models II: Sensitivity analysis in the CONUS domain. Atmospheric Environment, 2007, 41, 6544-6560.	1.9	70

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37	Measurements of Trace Metal (Fe, Cu, Mn, Cr) Oxidation States in Fog and Stratus Clouds. Journal of the Air and Waste Management Association, 1998, 48, 128-143.	0.9	67
38	Investigation of the Heterogeneously Catalyzed Hydrolysis of Organophosphorus Pesticides. Journal of Agricultural and Food Chemistry, 1998, 46, 325-334.	2.4	64
39	Oxidation of elemental mercury by aqueous chlorine (HOCl/OClâ¯): Implications for tropospheric mercury chemistry. Journal of Geophysical Research, 1998, 103, 28093-28102.	3.3	64
40	Grafting of antibacterial polymers on stainless steel via surfaceâ€initiated atom transfer radical polymerization for inhibiting biocorrosion by Desulfovibrio desulfuricans. Biotechnology and Bioengineering, 2009, 103, 268-281.	1.7	64
41	Corrosion Behavior of Type 304 Stainless Steel in a Simulated Seawater-Based Medium in the Presence and Absence of AerobicPseudomonasNCIMB 2021 Bacteria. Industrial & Engineering Chemistry Research, 2008, 47, 3008-3020.	1.8	61
42	Effect of replacing a hydroxyl group with a methyl group on arsenic (V) species adsorption on goethite (Î±-FeOOH). Journal of Colloid and Interface Science, 2007, 306, 16-21.	5.0	59
43	Enhancing antibacterial activity of surface-grafted chitosan with immobilized lysozyme on bioinspired stainless steel substrates. Colloids and Surfaces B: Biointerfaces, 2013, 106, 11-21.	2.5	59
44	Aqueous phase reactions of mercury with free radicals and chlorine: Implications for atmospheric mercury chemistry. Chemosphere, 1999, 38, 1253-1263.	4.2	56
45	Evaluation of an Organic Corrosion Inhibitor on Abiotic Corrosion and Microbiologically Influenced Corrosion of Mild Steel. Industrial & Engineering Chemistry Research, 2007, 46, 7117-7125.	1.8	52
46	Two-phase model of mercury chemistry in the atmosphere. Atmospheric Environment, 1998, 32, 2543-2558.	1.9	51
47	Photoreduction of Iron Oxyhydroxides and the Photooxidation of Halogenated Acetic Acids. Environmental Science & Technology, 1995, 29, 1215-1222.	4.6	50
48	Enhanced adsorption of Cu(<scp>ii</scp>) ions on chitosan microspheres functionalized with polyethylenimine-conjugated poly(glycidyl methacrylate) brushes. RSC Advances, 2016, 6, 78136-78150.	1.7	50
49	Copper corrosion in distribution systems: evaluation of a homogeneous Cu2O film and a natural corrosion scale as corrosion inhibitors. Corrosion Science, 2000, 42, 1801-1822.	3.0	47
50	Oxidation of elemental mercury by aqueous bromine: atmospheric implications. Atmospheric Environment, 2004, 38, 3675-3688.	1.9	47
51	Experimental and computational studies of nitrogen doped Degussa P25 TiO2: application to visible-light driven photo-oxidation of As(iii). Catalysis Science and Technology, 2012, 2, 784.	2.1	47
52	Photocatalytic Inactivation of Airborne Bacteria in a Continuous-Flow Reactor. Industrial & Engineering Chemistry Research, 2008, 47, 7580-7585.	1.8	45
53	Biocorrosion Behavior of Titanium Oxide/Butoxide-Coated Stainless Steel. Journal of the Electrochemical Society, 2008, 155, C196.	1.3	45
54	Hydrolysis of Phorate Using Simulated Environmental Conditions:Â Rates, Mechanisms, and Product Analysis. Journal of Agricultural and Food Chemistry, 1998, 46, 1192-1199.	2.4	44

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55	Poly(1-vinylimidazole) formation on copper surfaces via surface-initiated graft polymerization for corrosion protection. Corrosion Science, 2010, 52, 1958-1968.	3.0	43
56	Light distribution field in catalyst suspensions within an annular photoreactor. Chemical Engineering Science, 2005, 60, 5255-5268.	1.9	40
57	Modification of Surface-Oxidized Copper Alloy by Coupling of Viologens for Inhibiting Microbiologically Influenced Corrosion. Journal of the Electrochemical Society, 2007, 154, C645.	1.3	40
58	Evaluation of Three Different Lamp Emission Models Using Novel Application of Potassium Ferrioxalate Actinometry. Industrial & Engineering Chemistry Research, 2004, 43, 948-955.	1.8	39
59	Click functionalization of poly(glycidyl methacrylate) microspheres with triazole-4-carboxylic acid for the effective adsorption of Pb(<scp>ii</scp>) ions. New Journal of Chemistry, 2017, 41, 6475-6488.	1.4	38
60	Polymers for Combating Biocorrosion. Frontiers in Materials, 2018, 5, .	1.2	38
61	Irreversible adsorption of methyl arsenic, arsenate, and phosphate onto goethite in arsenic and phosphate binary systems. Journal of Colloid and Interface Science, 2008, 317, 35-43.	5.0	37
62	Surface Modification of Mild Steel with Thermally Cured Antibacterial Poly(vinylbenzyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 467 Td (ch Corrosion. Industrial & Engineering Chemistry Research, 2014, 53, 12363-12378.	1.8	36
63	Biocorrosion of AISI 304 Stainless Steel by Desulfovibrio desulfuricans in Seawater. Industrial & Engineering Chemistry Research, 2008, 47, 4703-4711.	1.8	31
64	Poly(4-vinylaniline)-Polyaniline Bilayer-Modified Stainless Steels for the Mitigation of Biocorrosion by Sulfate-Reducing Bacteria (SRB) in Seawater. Industrial & Engineering Chemistry Research, 2012, 51, 14738-14751.	1.8	31
65	Chitosan Microsphere Scaffold Tethered with RGD-Conjugated Poly(methacrylic acid) Brushes as Effective Carriers for the Endothelial Cells. Macromolecular Bioscience, 2014, 14, 1299-1311.	2.1	29
66	Minimal Invasiveness and Spectroscopy-Like Footprints for the Characterization of Heterogeneous Nanoscale Wetting in Ambient Conditions. Journal of Physical Chemistry C, 2013, 117, 20819-20825.	1.5	27
67	Pathways for the Hydrolysis of Phorate:Â Product Studies by31P NMR and GC-MS. Journal of Agricultural and Food Chemistry, 2000, 48, 3013-3017.	2.4	25
68	PVBC microspheres tethered with poly(3-sulfopropyl methacrylate) brushes for effective removal of Pb(II) ions from aqueous solution. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 498, 218-230.	2.3	24
69	Studies on the magnetic water treatment in new pilot scale drinking water system and in old existing real-life water system. Journal of Water Process Engineering, 2016, 9, 215-224.	2.6	24
70	Nitrogen-sensitized dual phase titanate/titania for visible-light driven phenol degradation. Journal of Solid State Chemistry, 2012, 196, 518-527.	1.4	23
71	Antimicrobial surfaces of viologen-quaternized poly((2-dimethyl amino)ethyl methacrylate)-Si(100) hybrids from surface-initiated atom transfer radical polymerization. Nanobiotechnology, 2006, 2, 123-134.	1.2	22
72	Phorate and Terbufos adsorption onto four tropical soils. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2004, 240, 55-61.	2.3	21

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73	Magnetic nickel chrysotile nanotubes tethered with pH-sensitive poly(methacrylic acid) brushes for Cu(II) adsorption. Journal of Molecular Liquids, 2019, 276, 611-623.	2.3	20
74	Hydrolysis of Terbufos Using Simulated Environmental Conditions:Â Rates, Mechanisms, and Product Analysis. Journal of Agricultural and Food Chemistry, 2001, 49, 5866-5873.	2.4	19
75	Surface functionalization of Cuâ€“Ni alloys via grafting of a bactericidal polymer for inhibiting biocorrosion byDesulfovibrio desulfuricansin anaerobic seawater. Biofouling, 2009, 25, 109-125.	0.8	18
76	Poly(methacrylic acid)-graft-Ni3Si2O5(OH)4 multiwalled nanotubes as a novel nanosorbent for effective removal of copper(II) ions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 502, 89-101.	2.3	17
77	Peracetic acid for conditioning of municipal wastewater sludge: Hygienization, odor control, and fertilizing properties. Waste Management, 2020, 102, 371-379.	3.7	16
78	Light Distribution Model for an Annular Reactor with a Cylindrical Reflector. Industrial & Engineering Chemistry Research, 2005, 44, 3471-3479.	1.8	14
79	Mechanism of Interactions between Hg(II) and Demeton S:Â an NMR Study. Environmental Science & Technology, 2005, 39, 2586-2591.	4.6	14
80	Nanoscale Investigation of Photoinduced Hydrophilicity Variations in Anatase and Rutile Nanopowders. Langmuir, 2013, 29, 14512-14518.	1.6	14
81	Protonâ€“arsenic adsorption ratios and zeta potential measurements: Implications for protonation of hydroxyls on the goethite surface. Journal of Colloid and Interface Science, 2007, 315, 13-20.	5.0	11
82	PCL microspheres tailored with carboxylated poly(glycidyl methacrylate)â€“REDV conjugates as conducive microcarriers for endothelial cell expansion. Journal of Materials Chemistry B, 2015, 3, 8670-8683.	2.9	11
83	Performance Evaluation of Light Emission Models in Light Attenuating Media. Ozone: Science and Engineering, 2005, 27, 459-467.	1.4	7
84	Oxidation of elemental mercury by aqueous bromine: atmospheric implications. Atmospheric Environment, 2004, 38, 3675-3675.	1.9	6
85	Inhibition of Microbiologically Influenced Corrosion of Mild Steel and Stainless Steel 316 by an Organic Inhibitor. Advanced Materials Research, 2007, 20-21, 379-382.	0.3	4
86	Study of the stability of aluminium trimeric clusters in aqueous solutions. Molecular Simulation, 2012, 38, 934-943.	0.9	4
87	Quasi-quantitative determination of elemental relationships and surface properties in aqueous aluminium-silicon systems. Journal of Water Process Engineering, 2014, 1, 54-63.	2.6	3
88	Superhydrophobic Film Coatings for Corrosion Inhibition. Interface Science and Technology, 2018, , 133-184.	1.6	3
89	Novel Antibacterial Coatings for Biofouling and Biocorrosion Inhibition. Interface Science and Technology, 2018, , 257-372.	1.6	3
90	The Influence of the Marine Aerobic Pseudomonas Strain on the Corrosion of 70/30 Cu-Ni Alloy. ECS Transactions, 2006, 2, 159-192.	0.3	1

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91	Conducting Polymer Coatings as Effective Barrier to Corrosion. Interface Science and Technology, 2018, , 23-61.	1.6	0