

Søren Kiil

List of Publications by Year in descending order

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111
papers

5,883
citations

117571

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131
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131
docs citations

131
times ranked

5522
citing authors

#	ARTICLE	IF	CITATIONS
1	Antifouling technologyâpast, present and future steps towards efficient and environmentally friendly antifouling coatings. <i>Progress in Organic Coatings</i> , 2004, 50, 75-104.	1.9	1,787
2	Anticorrosive coatings: a review. <i>Journal of Coatings Technology Research</i> , 2009, 6, 135-176.	1.2	709
3	Enzyme-based antifouling coatings: a review. <i>Biofouling</i> , 2007, 23, 369-383.	0.8	172
4	Experimental Investigation and Modeling of a Wet Flue Gas Desulfurization Pilot Plant. <i>Industrial & Engineering Chemistry Research</i> , 1998, 37, 2792-2806.	1.8	133
5	Synthesis of durable microcapsules for self-healing anticorrosive coatings: A comparison of selected methods. <i>Progress in Organic Coatings</i> , 2011, 70, 342-352.	1.9	128
6	Analysis of Self-Polishing Antifouling Paints Using Rotary Experiments and Mathematical Modeling. <i>Industrial & Engineering Chemistry Research</i> , 2001, 40, 3906-3920.	1.8	120
7	Microcapsule-based self-healing anticorrosive coatings: Capsule size, coating formulation, and exposure testing. <i>Progress in Organic Coatings</i> , 2012, 75, 309-318.	1.9	119
8	Reaction rate estimation of controlled-release antifouling paint binders: Rosin-based systems. <i>Progress in Organic Coatings</i> , 2005, 53, 256-275.	1.9	98
9	Full-scale co-firing of straw and coal. <i>Fuel</i> , 1996, 75, 1584-1590.	3.4	92
10	Effects of biofouling development on drag forces of hull coatings for ocean-going ships: a review. <i>Journal of Coatings Technology Research</i> , 2015, 12, 415-444.	1.2	92
11	Dissolution rate measurements of sea water soluble pigments for antifouling paints: ZnO. <i>Progress in Organic Coatings</i> , 2006, 56, 327-337.	1.9	86
12	Controlled drug delivery from swellable hydroxypropylmethylcellulose matrices: model-based analysis of observed radial front movements. <i>Journal of Controlled Release</i> , 2003, 90, 1-21.	4.8	84
13	Optimisation of a wet FGD pilot plant using fine limestone and organic acids. <i>Chemical Engineering Science</i> , 2001, 56, 3275-3287.	1.9	78
14	Full-scale measurements of SO ₂ gas phase concentrations and slurry compositions in a wet flue gas desulphurisation spray absorber. <i>Fuel</i> , 2004, 83, 1151-1164.	3.4	75
15	Experimental investigation of a pilot-scale jet bubbling reactor for wet flue gas desulphurisation. <i>Chemical Engineering Science</i> , 2003, 58, 4695-4703.	1.9	72
16	Drying of latex films and coatings: Reconsidering the fundamental mechanisms. <i>Progress in Organic Coatings</i> , 2006, 57, 236-250.	1.9	64
17	Cathodic delamination of seawater-immersed anticorrosive coatings: Mapping of parameters affecting the rate. <i>Progress in Organic Coatings</i> , 2010, 68, 283-292.	1.9	63
18	Active pharmaceutical ingredient (API) production involving continuous processes â A process system engineering (PSE)-assisted design framework. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2012, 82, 437-456.	2.0	63

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19	Evaluation of Binary Solvent Mixtures for Efficient Monoacylglycerol Production by Continuous Enzymatic Glycerolysis. <i>Journal of Agricultural and Food Chemistry</i> , 2006, 54, 7113-7119.	2.4	61
20	Presence and effects of marine microbial biofilms on biocide-based antifouling paints. <i>Biofouling</i> , 2006, 22, 33-41.	0.8	59
21	Mathematical Modelling of a Self-Polishing Antifouling Paint Exposed to Seawater: A Parameter Study. <i>Chemical Engineering Research and Design</i> , 2002, 80, 45-52.	2.7	58
22	Continuous Hydrolysis and Liquid-Liquid Phase Separation of an Active Pharmaceutical Ingredient Intermediate Using a Miniscale Hydrophobic Membrane Separator. <i>Organic Process Research and Development</i> , 2012, 16, 888-900.	1.3	58
23	Seawater-soluble pigments and their potential use in self-polishing antifouling paints: simulation-based screening tool. <i>Progress in Organic Coatings</i> , 2002, 45, 423-434.	1.9	56
24	Model based analysis of the drying of a single solution droplet in an ultrasonic levitator. <i>Chemical Engineering Science</i> , 2006, 61, 2701-2709.	1.9	56
25	Monitoring and Control of a Continuous Grignard Reaction for the Synthesis of an Active Pharmaceutical Ingredient Intermediate Using Inline NIR spectroscopy. <i>Organic Process Research and Development</i> , 2012, 16, 901-914.	1.3	56
26	Dynamic simulations of a self-polishing antifouling paint exposed to seawater. <i>Journal of Coatings Technology</i> , 2002, 74, 45-54.	0.7	52
27	Simulation studies of the influence of HCl absorption on the performance of a wet flue gas desulphurisation pilot plant. <i>Chemical Engineering Science</i> , 2002, 57, 347-354.	1.9	49
28	Effects of marine microbial biofilms on the biocide release rate from antifouling paints—A model-based analysis. <i>Progress in Organic Coatings</i> , 2006, 57, 56-66.	1.9	49
29	Influence of substrate topography on cathodic delamination of anticorrosive coatings. <i>Progress in Organic Coatings</i> , 2009, 64, 142-149.	1.9	43
30	Foaming in Wet Flue Gas Desulfurization Plants: The Influence of Particles, Electrolytes, and Buffers. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 3239-3246.	1.8	42
31	Estimation of Polishing and Leaching Behaviour of Antifouling Paints Using Mathematical Modelling: A Literature Review. <i>Biofouling</i> , 2003, 19, 37-43.	0.8	41
32	Erosion of wind turbine blade coatings – Design and analysis of jet-based laboratory equipment for performance evaluation. <i>Progress in Organic Coatings</i> , 2015, 78, 103-115.	1.9	38
33	Acid-resistant organic coatings for the chemical industry: a review. <i>Journal of Coatings Technology Research</i> , 2017, 14, 279-306.	1.2	38
34	Effect of Solvents on the Product Distribution and Reaction Rate of a Buchwald-Hartwig Amination Reaction. <i>Organic Process Research and Development</i> , 2006, 10, 762-769.	1.3	37
35	Mass transfer in wetted-wall columns: Correlations at high Reynolds numbers. <i>Chemical Engineering Science</i> , 1998, 53, 495-503.	1.9	35
36	Cathodic delamination: Quantification of ionic transport rates along coating-steel interfaces. <i>Progress in Organic Coatings</i> , 2010, 68, 70-78.	1.9	35

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37	Long-term stability of PEG-based antifouling surfaces in seawater. <i>Journal of Coatings Technology Research</i> , 2016, 13, 567-575.	1.2	33
38	Antifouling effect of hydrogen peroxide release from enzymatic marine coatings: Exposure testing under equatorial and Mediterranean conditions. <i>Progress in Organic Coatings</i> , 2010, 68, 248-257.	1.9	31
39	Model-based analysis of photoinitiated coating degradation under artificial exposure conditions. <i>Journal of Coatings Technology Research</i> , 2012, 9, 375-398.	1.2	31
40	Investigation of char strength and expansion properties of an intumescent coating exposed to rapid heating rates. <i>Progress in Organic Coatings</i> , 2013, 76, 1851-1857.	1.9	31
41	Experimental Study of Drag Resistance Using a Laboratory Scale Rotary Set-up. <i>Biofouling</i> , 2003, 19, 45-51.	0.8	30
42	Exposure of hydrocarbon intumescent coatings to the UL1709 heating curve and furnace rheology: Effects of zinc borate on char properties. <i>Progress in Organic Coatings</i> , 2019, 135, 321-330.	1.9	29
43	Mathematical modeling of tin-free chemically-active antifouling paint behavior. <i>AIChE Journal</i> , 2006, 52, 1926-1940.	1.8	27
44	Spray Drying of Suspensions for Pharma and Bio Products: Drying Kinetics and Morphology. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 3657-3664.	1.8	27
45	Adhesion between coating layers based on epoxy and silicone. <i>Journal of Colloid and Interface Science</i> , 2007, 316, 678-686.	5.0	26
46	Rain erosion of wind turbine blade coatings using discrete water jets: Effects of water cushioning, substrate geometry, impact distance, and coating properties. <i>Wear</i> , 2015, 328-329, 140-148.	1.5	25
47	Performance of a Wet Flue Gas Desulfurization Pilot Plant under Oxy-Fuel Conditions. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 4238-4244.	1.8	24
48	Process Development of Continuous Glycerolysis in an Immobilized Enzyme-Packed Reactor for Industrial Monoacylglycerol Production. <i>Journal of Agricultural and Food Chemistry</i> , 2007, 55, 7786-7792.	2.4	23
49	Design and operation of a filter reactor for continuous production of a selected pharmaceutical intermediate. <i>Chemical Engineering Science</i> , 2012, 71, 111-117.	1.9	23
50	Reduction of cathodic delamination rates of anticorrosive coatings using free radical scavengers. <i>Journal of Coatings Technology Research</i> , 2010, 7, 773-786.	1.2	22
51	Separation of Enantiomers by Continuous Preferential Crystallization: Experimental Realization Using a Coupled Crystallizer Configuration. <i>Organic Process Research and Development</i> , 2013, 17, 1010-1020.	1.3	22
52	Use of spray dry absorption product in wet flue gas desulphurisation plants: pilot-scale experiments. <i>Fuel</i> , 2002, 81, 1899-1905.	3.4	20
53	Effects of coating ingredients on the thermal properties and morphological structures of hydrocarbon intumescent coating chars. <i>Progress in Organic Coatings</i> , 2020, 143, 105626.	1.9	20
54	Parametric Study of Tin-Free Antifouling Model Paint Behavior Using Rotary Experiments. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 1636-1649.	1.8	19

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55	Applicability of a Fiber-Supported Catalyst on a Buchwald-Hartwig Amination Reaction. <i>Organic Process Research and Development</i> , 2007, 11, 956-965.	1.3	19
56	Quantitative analysis of silica aerogel-based thermal insulation coatings. <i>Progress in Organic Coatings</i> , 2015, 89, 26-34.	1.9	19
57	Full-Scale Continuous Mini-Reactor Setup for Heterogeneous Grignard Alkylation of a Pharmaceutical Intermediate. <i>Organic Process Research and Development</i> , 2013, 17, 1142-1148.	1.3	18
58	Redesign of a Grignard-Based Active Pharmaceutical Ingredient (API) Batch Synthesis to a Flow Process for the Preparation of Melitracen HCl. <i>Organic Process Research and Development</i> , 2018, 22, 228-235.	1.3	18
59	Characterization of a Multistage Continuous MSMPR Crystallization Process Assisted by Image Analysis of Elongated Crystals. <i>Crystal Growth and Design</i> , 2018, 18, 6455-6469.	1.4	18
60	Effect of Air Injection on Nucleation Rates: An Approach from Induction Time Statistics. <i>Crystal Growth and Design</i> , 2017, 17, 3287-3294.	1.4	17
61	Quantification of simultaneous solvent evaporation and chemical curing in thermoset coatings. <i>Journal of Coatings Technology Research</i> , 2010, 7, 569-586.	1.2	16
62	Evaluation method for the drying performance of enzyme containing formulations. <i>Biochemical Engineering Journal</i> , 2008, 40, 121-129.	1.8	15
63	Laboratory and gas-fired furnace performance tests of epoxy primers for intumescent coatings. <i>Progress in Organic Coatings</i> , 2014, 77, 1577-1584.	1.9	15
64	Thermodynamic Modeling of Multi-phase Solid-Liquid Equilibria in Industrial-Grade Oils and Fats. <i>JAOCs, Journal of the American Oil Chemists' Society</i> , 2015, 92, 17-28.	0.8	15
65	Investigation of Parameters Affecting Gypsum Dewatering Properties in a Wet Flue Gas Desulphurization Pilot Plant. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 10100-10107.	1.8	14
66	Experimental investigation of the degradation rate of adipic acid in wet flue gas desulphurisation plants. <i>Fuel</i> , 2006, 85, 725-735.	3.4	12
67	Marine biofouling protection: design of controlled release antifouling paints. <i>Computer Aided Chemical Engineering</i> , 2007, , 181-238.	0.3	12
68	Investigation of the gypsum quality at three full-scale wet flue gas desulphurisation plants. <i>Fuel</i> , 2011, 90, 2965-2973.	3.4	12
69	Effects of foaming and antifoaming agents on the performance of a wet flue gas desulfurization pilot plant. <i>AIChE Journal</i> , 2014, 60, 2382-2388.	1.8	12
70	Optimization of Grignard Addition to Esters: Kinetic and Mechanistic Study of Model Phthalide Using Flow Chemistry. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 4859-4866.	1.8	12
71	Comparison of an industrial- and a laboratory-scale furnace for analysis of hydrocarbon intumescent coating performance. <i>Journal of Fire Sciences</i> , 2020, 38, 309-329.	0.9	12
72	Characterization of pigment-leached antifouling coatings using BET surface area measurements and mercury porosimetry. <i>Progress in Organic Coatings</i> , 2007, 60, 238-247.	1.9	11

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73	Quantification of gypsum crystal nucleation, growth, and breakage rates in a wet flue gas desulfurization pilot plant. <i>AIChE Journal</i> , 2009, 55, 2746-2753.	1.8	11
74	Mathematical modelling of simultaneous solvent evaporation and chemical curing in thermoset coatings: A parameter study. <i>Progress in Organic Coatings</i> , 2011, 70, 192-198.	1.9	10
75	Leveling measurements of antifouling coatings using an optical profilometer: Effects of additives and solvent concentration and type. <i>Progress in Organic Coatings</i> , 2019, 132, 159-168.	1.9	10
76	Engineering model for intumescent coating behavior in a pilot-scale gas-fired furnace. <i>AIChE Journal</i> , 2016, 62, 3947-3962.	1.8	9
77	Drag resistance of ship hulls: effects of surface roughness of newly applied fouling control coatings, coating water absorption, and welding seams. <i>Journal of Coatings Technology Research</i> , 2018, 15, 657-669.	1.2	9
78	Continuous Crystallization with Gas Entrainment: Evaluating the Effect of a Moving Gas Phase in an MSMR Crystallizer. <i>Organic Process Research and Development</i> , 2019, 23, 252-262.	1.3	9
79	Leveling kinetics of coatings with solvent evaporation and non-Newtonian rheology. <i>Progress in Organic Coatings</i> , 2019, 132, 169-177.	1.9	9
80	Review of heat exposure equipment and in-situ characterisation techniques for intumescent coatings. <i>Fire Safety Journal</i> , 2021, 121, 103264.	1.4	9
81	Thermal insulation performance and char formation and degradation mechanisms of boron-containing hydrocarbon intumescent coatings. <i>Fire Safety Journal</i> , 2021, 123, 103369.	1.4	9
82	Non-Destructive Subsurface Inspection of Marine and Protective Coatings Using Near- and Mid-Infrared Optical Coherence Tomography. <i>Coatings</i> , 2021, 11, 877.	1.2	9
83	Mathematical modeling of photoinitiated coating degradation: Effects of coating glass transition temperature and light stabilizers. <i>Progress in Organic Coatings</i> , 2013, 76, 1730-1737.	1.9	8
84	Estimation of long-term drag performance of fouling control coatings using an ocean-placed raft with multiple dynamic rotors. <i>Journal of Coatings Technology Research</i> , 2015, 12, 975-995.	1.2	8
85	Foaming in wet flue gas desulfurization plants: Laboratory-scale investigation of long-term performance of antifoaming agents. <i>AIChE Journal</i> , 2013, 59, 3741-3747.	1.8	7
86	Experimental investigation and mathematical modeling of the reaction between SO ₂ (g) and CaCO ₃ (s)-containing micelles in lube oil for large two-stroke marine diesel engines. <i>Chemical Engineering Journal</i> , 2020, 388, 124188.	6.6	7
87	Inactivation of a solid-state detergent protease by hydrogen peroxide vapor and humidity. <i>Journal of Biotechnology</i> , 2009, 141, 73-79.	1.9	6
88	Interactions between calcium carbonate and ammonium polyphosphate in low-borate concentration hydrocarbon intumescent coatings. <i>Fire and Materials</i> , 2022, 46, 499-512.	0.9	6
89	Methanol degradation mechanisms and permeability phenomena in novolac epoxy and polyurethane coatings. <i>Journal of Coatings Technology Research</i> , 2021, 18, 831-842.	1.2	6
90	Kinetic modeling of multi-component crystallization of industrial-grade oils and fats. <i>European Journal of Lipid Science and Technology</i> , 2015, 117, 1066-1078.	1.0	5

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91	Mathematical modeling of pigment dispersion taking into account the full agglomerate particle size distribution. <i>Journal of Coatings Technology Research</i> , 2017, 14, 69-84.	1.2	5
92	Mixed Flow Reactor Experiments and Modeling of Sulfuric Acid Neutralization in Lube Oil for Large Two-Stroke Diesel Engines. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 138-155.	1.8	5
93	Replacement of traditional seawater-soluble pigments by starch and hydrolytic enzymes in polishing antifouling coatings. <i>Journal of Coatings Technology Research</i> , 2010, 7, 355-363.	1.2	4
94	Separation of Enantiomers by Preferential Crystallization: Mathematical Modeling of a Coupled Crystallizer Configuration. <i>Organic Process Research and Development</i> , 2014, 18, 601-612.	1.3	4
95	Simultaneous tracking of hardness, reactant conversion, solids concentration, and glass transition temperature in thermoset polyurethane coatings. <i>Journal of Coatings Technology Research</i> , 2021, 18, 349-359.	1.2	4
96	Degradation mechanisms of amine-cured epoxy novolac and bisphenol F resins under conditions of high pressures and high temperatures. <i>Progress in Organic Coatings</i> , 2021, 156, 106268.	1.9	4
97	Influence of CO ₂ at HPHT Conditions on the Properties and Failures of an Amine-Cured Epoxy Novolac Coating. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 14768-14778.	1.8	4
98	A passive apparatus for controlled-flux delivery of biocides: hydrogen peroxide as an example. <i>Biofouling</i> , 2009, 26, 213-222.	0.8	3
99	Model-based analysis of thermal insulation coatings. <i>Journal of Coatings Technology Research</i> , 2014, 11, 495-507.	1.2	3
100	Reaction of Sulfuric Acid in Lube Oil: Implications for Large Two-Stroke Diesel Engines. , 2017, , .		3
101	Diffusion cell investigations into the acidic degradation of organic coatings. <i>Journal of Coatings Technology Research</i> , 2018, 15, 1201-1215.	1.2	3
102	On-line, non-Newtonian capillary rheometry for continuous and in-line coatings production. <i>Journal of Coatings Technology Research</i> , 2021, 18, 611-626.	1.2	3
103	Simultaneous acid exposure and erosive particle wear of thermoset coatings. <i>Journal of Coatings Technology Research</i> , 2018, 15, 457-469.	1.2	2
104	A systematic methodology for the design of continuous active pharmaceutical ingredient production processes. <i>Computer Aided Chemical Engineering</i> , 2011, , 271-275.	0.3	1
105	A Solvent-Free Base Liberation of a Tertiary Aminoalkyl Halide by Flow Chemistry. <i>Organic Process Research and Development</i> , 2016, 20, 2043-2049.	1.3	1
106	Interlayer molecular migration and reaction in an epoxy-polyurethane coating system: Implications for the system hardness. <i>Progress in Organic Coatings</i> , 2021, 151, 106083.	1.9	1
107	Quantitative Characterization of Highly Porous Structures with Fluorescence Microscopy and Microcomputed Tomography. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 5463-5470.	1.8	1
108	Proof of concept investigation of alternative and less harmful boron compounds for epoxy-based hydrocarbon intumescent coatings. <i>Fire Safety Journal</i> , 2021, 125, 103437.	1.4	1

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109	Quantitative Mapping of Mechanisms for Photoinitiated Coating Degradation. , 2015, , 185-198.		1
110	Wet clay adhesion to antistick coatings: effects of binder type and surface roughness. Journal of Coatings Technology Research, 2020, 17, 69-79.	1.2	0
111	A char stratification approach to characterization and quantitative thermal insulation performance of hydrocarbon intumescent coatings. Journal of Coatings Technology Research, 0, , 1.	1.2	0