Andrzej I Stankiewicz

List of Publications by Year
in descending order

41 papers	2,904 citations	201385 27 h-index	288905 40 g-index
59 all docs	59 docs citations	59 times ranked	2942 citing authors

#	Article	IF	Citations
1	Structure, Energy, Synergy, Timeâ€”The Fundamentals of Process Intensification. Industrial & Engineering Chemistry Research, 2009, 48, 2465-2474.	1.8	500
2	A review of intensification of photocatalytic processes. Chemical Engineering and Processing: Process Intensification, 2007, 46, 781-789.	1.8	387
3	Membrane engineering in process intensificationâ€”An overview. Journal of Membrane Science, 2011, 380, 1-8.	4.1	343
4	Process intensification and process systems engineering: A friendly symbiosis. Computers and Chemical Engineering, 2008, 32, 3-11.	2.0	168
5	Hydrodynamic evaluations in high rate algae pond (HRAP) design. Chemical Engineering Journal, 2013, 217, 231-239.	6.6	124
6	A helicopter view of microwave application to chemical processes: reactions, separations, and equipment concepts. Reviews in Chemical Engineering, 2014, 30, .	2.3	91
7	On the effect of resonant microwave fields on temperature distribution in time and space. International Journal of Heat and Mass Transfer, 2012, 55, 3800-3811.	2.5	87
8	Intensified Reaction and Separation Systems. Annual Review of Chemical and Biomolecular Engineering, 2011, 2, 431-451.	3.3	78
9	Microwaves and microreactors: Design challenges and remedies. Chemical Engineering Journal, 2014, 243, 147-158.	6.6	73
10	Microwave-activated methanol steam reforming for hydrogen production. International Journal of Hydrogen Energy, 2011, 36, 12843-12852.	3.8	67
11	Synthesis, characterization, and application of ruthenium-doped SrTiO 3 perovskite catalysts for microwave-assisted methane dry reforming. Chemical Engineering and Processing: Process Intensification, 2018, 127, 178-190.	1.8	66
12	On the accuracy and reproducibility of fiber optic (FO) and infrared (IR) temperature measurements of solid materials in microwave applications. Measurement Science and Technology, 2010, 21, 045108.	1.4	63
13	Crystal Nucleation by Laser-Induced Cavitation. Crystal Growth and Design, 2011, 11, 2311-2316.	1.4	62
14	Complexity and Challenges in Noncontact High Temperature Measurements in Microwave-Assisted Catalytic Reactors. Industrial & Engineering Chemistry Research, 2017, 56, 13379-13391.	1.8	62
15	Numerical analysis of microwave heating cavity: Combining electromagnetic energy, heat transfer and fluid dynamics for a NaY zeolite fixed-bed. Applied Thermal Engineering, 2019, 155, 226-238.	3.0	58
16	Process Intensification of Reactive Distillation for the Synthesis of <i>n</i>-Propyl Propionate: The Effects of Microwave Radiation on Molecular Separation and Esterification Reaction. Industrial & Engineering Chemistry Research, 2010, 49, 10287-10296.	1.8	51
17	Beyond electrolysis: old challenges and new concepts of electricity-driven chemical reactors. Reaction Chemistry and Engineering, 2020, 5, 1005-1016.	1.9	51
18	A concise review on microwave-assisted polycondensation reactions and curing of polycondensation polymers with focus on the effect of process conditions. Chemical Engineering Journal, 2015, 264, 633-644.	6.6	49

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19	On the parametric sensitivity of heat generation by resonant microwave fields in process fluids. International Journal of Heat and Mass Transfer, 2013, 57, 375-388.	2.5	48
20	Syngas production via microwave-assisted dry reforming of methane. Catalysis Today, 2021, 362, 72-80.	2.2	42
21	Microwave Swing Regeneration vs Temperature Swing Regenerationâ€"Comparison of Desorption Kinetics. Industrial & Engineering Chemistry Research, 2011, 50, 8632-8644.	1.8	40
22	Subtle Microwave-Induced Overheating Effects in an Industrial Demethylation Reaction and Their Direct Use in the Development of an Innovative Microwave Reactor. Journal of the American Chemical Society, 2017, 139, 5431-5436.	6.6	36
23	Perspectives of Microwavesâ€Enhanced Heterogeneous Catalytic Gasâ€Phase Processes in Flow Systems. Chemical Record, 2019, 19, 40-50.	2.9	35
24	Rigid Body Dynamics Algorithm for Modeling Random Packing Structures of Nonspherical and Nonconvex Pellets. Industrial & Engineering Chemistry Research, 2018, 57, 14988-15007.	1.8	34
25	On the Reliability of Sensitivity Test Methods for Submicrometer-Sized RDX and HMX Particles. Propellants, Explosives, Pyrotechnics, 2013, 38, 761-769.	1.0	31
26	<i>110th Anniversary:</i> The Missing Link Unearthed: Materials and Process Intensification. Industrial & Engineering Chemistry Research, 2019, 58, 9212-9222.	1.8	29
27	Process intensification education contributes to sustainable development goals. Part 2. Education for Chemical Engineers, 2020, 32, 15-24.	2.8	28
28	A systematic investigation of microwave-assisted reactive distillation: Influence of microwaves on separation and reaction. Chemical Engineering and Processing: Process Intensification, 2015, 93, 87-97.	1.8	27
29	Multiparameter Investigation of Laser-Induced Nucleation of Supersaturated Aqueous KCl Solutions. Crystal Growth and Design, 2018, 18, 312-317.	1.4	22
30	Exploration of rectangular waveguides as a basis for microwave enhanced continuous flow chemistries. Chemical Engineering Science, 2013, 89, 196-205.	1.9	20
31	Coaxial traveling-wave microwave reactors: Design challenges and solutions. Chemical Engineering Research and Design, 2020, 153, 677-683.	2.7	20
32	Microwave heating in heterogeneous catalysis: Modelling and design of rectangular traveling-wave microwave reactor. Chemical Engineering Science, 2021, 232, 116383.	1.9	17
33	Novel microwave reactor equipment using internal transmission line (INTLI) for efficient liquid phase chemistries: A study-case of polyester preparation. Chemical Engineering and Processing: Process Intensification, 2013, 69, 83-89.	1.8	15
34	Modelâ€Based Optimization of a Photocatalytic Reactor with Lightâ€Emitting Diodes. Chemical Engineering and Technology, 2016, 39, 1946-1954.	0.9	12
35	A two-step modelling approach for plasma reactors â€“ experimental validation for CO2 dissociation in surface wave microwave plasma. Reaction Chemistry and Engineering, 2019, 4, 1253-1269.	1.9	11
36	Catalyst Heating Characteristics in the Traveling-Wave Microwave Reactor. Catalysts, 2021, 11, 369.	1.6	8

#	Article	IF	Citations
37	Practical challenges in the energyâ€based control of molecular transformations in chemical reactors. AICHE Journal, 2014, 60, 3392-3405.	1.8	6
38	Reverse traveling microwave reactor â€“ Modelling and design considerations. Chemical Engineering Science, 2021, 246, 116862.	1.9	5
39	The behavior and modelling of the vibrational-to-translational temperature ratio at long time scales in CO2 vibrational kinetics. Reaction Chemistry and Engineering, 2019, 4, 2108-2116.	1.9	1
40	Penrose triangles of the fossil-to-bio-based transition. Faraday Discussions, 2017, 202, 521-529.	1.6	0
41	4.1 Membrane Crystallization Technology and Process Intensification. , 2017, , 1-7.		0