Arne Scholtissek

List of Publications by Year
in descending order

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30 papers	483 citations	758635 12 h-index	713013 21 g-index
30 all docs	30 docs citations	30 times ranked	236 citing authors

#	Article	IF	Citations
1	Wall heat fluxes and CO formation/oxidation during laminar and turbulent side-wall quenching of methane and DME flames. International Journal of Heat and Fluid Flow, 2018, 70, 181-192.	1.1	55
2	Iron as a sustainable chemical carrier of renewable energy: Analysis of opportunities and challenges for retrofitting coal-fired power plants. Renewable and Sustainable Energy Reviews, 2022, 165, 112579.	8.2	45
3	Effect of Flame-Wall Interaction on Local Heat Release of Methane and DME Combustion in a Side-Wall Quenching Geometry. Flow, Turbulence and Combustion, 2020, 104, 1029-1046.	1.4	37
4	A multi-scale asymptotic scaling and regime analysis of flamelet equations including tangential diffusion effects for laminar and turbulent flames. Combustion and Flame, 2015, 162, 1507-1529.	2.8	36
5	A flamelet/progress variable approach for modeling coal particle ignition. Fuel, 2017, 201, 29-38.	3.4	32
6	Machine Learning of ignition delay times under dual-fuel engine conditions. Fuel, 2021, 288, 119650.	3.4	22
7	In-situ tracking of mixture fraction gradient trajectories and unsteady flamelet analysis in turbulent non-premixed combustion. Combustion and Flame, 2017, 175, 243-258.	2.8	21
8	A self-contained progress variable space solution method for thermochemical variables and flame speed in freely-propagating premixed flamelets. Proceedings of the Combustion Institute, 2019, 37, 1529-1536.	2.4	20
9	A self-contained composition space solution method for strained and curved premixed flamelets. Combustion and Flame, 2019, 207, 342-355.	2.8	19
10	Thermal and chemical effects of differential diffusion in turbulent non-premixed H2 flames. Proceedings of the Combustion Institute, 2021, 38, 2627-2634.	2.4	17
11	A comprehensive study of flamelet tabulation methods for pulverized coal combustion in a turbulent mixing layer â€" Part I: A priori and budget analyses. Combustion and Flame, 2020, 216, 439-452.	2.8	16
12	The role of tangential diffusion in evaluating the performance of flamelet models. Proceedings of the Combustion Institute, 2019, 37, 1767-1774.	2.4	14
13	Experimental and numerical investigation of a stagnation pulverised coal flame. Proceedings of the Combustion Institute, 2019, 37, 2857-2866.	2.4	12
14	Influence of flow topology and scalar structure on flame-tangential diffusion in turbulent non-premixed combustion. Combustion and Flame, 2019, 206, 21-36.	2.8	12
15	Premixed flames for arbitrary combinations of strain and curvature. Proceedings of the Combustion Institute, 2021, 38, 2031-2039.	2.4	12
16	Effects of stretch-chemistry interaction on chemical pathways for strained and curved hydrogen/air premixed flames. Combustion and Flame, 2021, 232, 111532.	2.8	12
17	Flamelet budget and regime analysis for non-premixed tubular flames. Proceedings of the Combustion Institute, 2017, 36, 1349-1356.	2.4	11
18	A comprehensive study of flamelet tabulation methods for pulverized coal combustion in a turbulent mixing layerâ€"Part II: Strong heat losses and multi-mode combustion. Combustion and Flame, 2020, 216, 453-467.	2.8	11

#	Article	IF	Citations
19	Effects of Soret diffusion on turbulent non-premixed H2 jet flames. Combustion and Flame, 2020, 213, 39-51.	2.8	10
20	Flame structure analysis and composition space modeling of thermodiffusively unstable premixed hydrogen flames â€" Part I: Atmospheric pressure. Combustion and Flame, 2022, 238, 111815.	2.8	10
21	Flamelet modeling of forced ignition and flame propagation in hydrogen-air mixtures. Combustion and Flame, 2022, 243, 112125.	2.8	10
22	The impact of thermal diffusion on the structure of non-premixed flames. Combustion and Flame, 2018, 194, 352-362.	2.8	9
23	Flame structure analysis and composition space modeling of thermodiffusively unstable premixed hydrogen flames â€" Part II: Elevated pressure. Combustion and Flame, 2022, 238, 111808.	2.8	8
24	Closure of the scalar dissipation rate in the spray flamelet equations through a transport equation for the gradient of the mixture fraction. Combustion and Flame, 2019, 208, 330-350.	2.8	7
25	Derivation and analysis of two-dimensional composition space equations for multi-regime combustion using orthogonal coordinates. Combustion and Flame, 2020, 218, 205-217.	2.8	7
26	Ignition under strained conditions: Unsteady flamelet progress variable modeling for diesel engine conditions in the transient counterflow configuration. Combustion and Flame, 2022, 240, 111841.	2.8	7
27	Multi-dimensional and transient effects on flamelet modeling for turbulent pulverized coal combustion. Fuel, 2019, 255, 115772.	3.4	6
28	Evaluation of the unsteady flamelet progress variable approach in Large Eddy Simulations of the ECN Spray A. , 2022, 77, 5.		3
29	Ignition Under Strained Conditions: A Comparison Between Instationary Counterflow and Non-premixed Flamelet Solutions. Flow, Turbulence and Combustion, 2021, 106, 1277-1293.	1.4	2
30	Detailed simulations for flamelet modelling of SO x formation from coal. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900367.	0.2	0