

# Cem Sarica

## List of Publications by Year in descending order

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102  
papers

2,563  
citations

172457

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233421

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102  
all docs

102  
docs citations

102  
times ranked

862  
citing authors

#	ARTICLE	IF	CITATIONS
1	Unified Model for Gas-Liquid Pipe Flow via Slug Dynamicsâ€™Part 1: Model Development. Journal of Energy Resources Technology, Transactions of the ASME, 2003, 125, 266-273.	2.3	257
2	Effect of the Flow Field on the Wax Deposition and Performance of Wax Inhibitors: Cold Finger and Flow Loop Testing. Energy & Fuels, 2017, 31, 4915-4924.	5.1	95
3	A unified mechanistic model for slug liquid holdup and transition between slug and dispersed bubble flows. International Journal of Multiphase Flow, 2003, 29, 97-107.	3.4	93
4	An Efficient Drift-Flux Closure Relationship to Estimate Liquid Holdups of Gas-Liquid Two-Phase Flow in Pipes. Energies, 2012, 5, 5294-5306.	3.1	89
5	Investigation of inhibitors efficacy in wax deposition mitigation using a laboratory scale flow loop. AIChE Journal, 2016, 62, 4131-4139.	3.6	84
6	Unified Model for Gas-Liquid Pipe Flow via Slug Dynamicsâ€™Part 2: Model Validation. Journal of Energy Resources Technology, Transactions of the ASME, 2003, 125, 274-283.	2.3	82
7	Effect of Conductivity on Horizontal-Well Pressure-Behavior. SPE Advanced Technology Series, 1995, 3, 85-94.	0.2	81
8	Review of Paraffin Deposition Research under Multiphase Flow Conditions. Energy & Fuels, 2012, 26, 3968-3978.	5.1	71
9	Influence of Pressure Drop Along the Wellbore on Horizontal-Well Productivity. SPE Journal, 1999, 4, 288-301.	3.1	64
10	A Critical Review of Controlling Paraffin Deposition in Production Lines Using Chemicals. Energy & Fuels, 2019, 33, 2797-2809.	5.1	57
11	Wax deposition mechanisms: Is the current description sufficient?. Fuel, 2020, 275, 117937.	6.4	52
12	Experimental investigation of two-phase gas-oil stratified flow wax deposition in pipeline. Fuel, 2019, 247, 113-125.	6.4	47
13	Experimental Study of Single-Phase and Two-Phase Water-in-Crude-Oil Dispersed Flow Wax Deposition in a Mini Pilot-Scale Flow Loop. Energy & Fuels, 2013, 27, 5036-5053.	5.1	42
14	Prediction of slug liquid holdup in high viscosity liquid and gas two-phase flow in horizontal pipes. Journal of Petroleum Science and Engineering, 2015, 133, 566-575.	4.2	41
15	An Experimental Study on Mechanics of Wax Removal in Pipeline. Journal of Energy Resources Technology, Transactions of the ASME, 2005, 127, 302-309.	2.3	40
16	Modeling of droplet entrainment in co-current annular two-phase flow: A new approach. International Journal of Multiphase Flow, 2012, 39, 21-28.	3.4	39
17	Flow-Pattern Transition and Hydrodynamic Modeling of Churn Flow. SPE Journal, 1999, 4, 342-348.	3.1	38
18	Unified drift velocity closure relationship for large bubbles rising in stagnant viscous fluids in pipes. Journal of Petroleum Science and Engineering, 2014, 124, 359-366.	4.2	37

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19	Unified Modeling of Gas/Oil/Water Pipe Flow - Basic Approaches and Preliminary Validation. SPE Projects, Facilities and Construction, 2006, 1, 1-7.	0.2	36
20	Onset of Liquid-Film Reversal In Upward-Inclined Pipes. SPE Journal, 2018, 23, 1630-1647.	3.1	36
21	An Investigation of Two-Phase Oil/Water Paraffin Deposition. SPE Production and Operations, 2008, 23, 49-55.	0.6	34
22	Review of High-Viscosity Oil Multiphase Pipe Flow. Energy & Fuels, 2012, 26, 3979-3985.	5.1	34
23	Microscopic Study of Wax Deposition: Mass Transfer Boundary Layer and Deposit Morphology. Energy & Fuels, 2016, 30, 2674-2686.	5.1	34
24	A New Comprehensive Model for Predicting Liquid Loading in Gas Wells. SPE Production and Operations, 2014, 29, 337-349.	0.6	33
25	Low liquid loading gas/liquid pipe flow. Journal of Natural Gas Science and Engineering, 2011, 3, 413-422.	4.4	32
26	Analogous behavior of pseudo-slug and churn flows in high viscosity liquid system and upward inclined pipes. International Journal of Multiphase Flow, 2018, 103, 61-77.	3.4	32
27	Development of a fast transient simulator for gas-liquid two-phase flow in pipes. Journal of Petroleum Science and Engineering, 2013, 102, 27-35.	4.2	31
28	Solids transport models comparison and fine-tuning for horizontal, low concentration flow in single-phase carrier fluid. AIChE Journal, 2014, 60, 76-122.	3.6	31
29	Validation of wax deposition models with recent laboratory scale flow loop experimental data. Journal of Petroleum Science and Engineering, 2017, 149, 351-366.	4.2	29
30	Influence of operating temperatures on long-duration wax deposition in flow lines. Journal of Petroleum Science and Engineering, 2019, 183, 106373.	4.2	29
31	Thermal methods in flow assurance: A review. Journal of Natural Gas Science and Engineering, 2021, 88, 103798.	4.4	29
32	A Model for Wetted-Wall Fraction and Gravity Center of Liquid Film in Gas/Liquid Pipe Flow. SPE Journal, 2011, 16, 692-697.	3.1	28
33	Effect of surfactants on liquid loading in vertical wells. International Journal of Multiphase Flow, 2016, 83, 183-201.	3.4	28
34	Paraffin Deposition During the Flow of Water-in-Oil and Oil-in-Water Dispersions in Pipes. , 2008, , .		27
35	Experimental Study on High Viscosity Oil/Water Flow in Horizontal and Vertical Pipes. , 2009, , .		26
36	Flow Assurance: Validation of Wax Deposition Models Using Field Data from a Subsea Pipeline. , 2011, , .		25

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37	Foam flow in vertical gas wells under liquid loading: Critical velocity and pressure drop prediction. International Journal of Multiphase Flow, 2016, 87, 124-135.	3.4	25
38	Analysis of flow pattern transition from segregated to slug flow in upward inclined pipes. International Journal of Multiphase Flow, 2019, 115, 19-39.	3.4	25
39	Wave characteristics in gas-oil two phase flow and large pipe diameter. International Journal of Multiphase Flow, 2014, 63, 93-104.	3.4	23
40	A unit cell model for gas-liquid pseudo-slug flow in pipes. Journal of Natural Gas Science and Engineering, 2018, 60, 125-143.	4.4	23
41	Threshold velocity to initiate particle motion in horizontal and near-horizontal conduits. Powder Technology, 2016, 292, 272-289.	4.2	22
42	Experimental study of pseudo-slug flow in upward inclined pipes. Journal of Natural Gas Science and Engineering, 2020, 75, 103147.	4.4	22
43	Experimental Investigation of active heating in removal of wax deposits. Journal of Petroleum Science and Engineering, 2021, 200, 108346.	4.2	22
44	Modeling of oil-water flow using energy minimization concept. International Journal of Multiphase Flow, 2011, 37, 326-335.	3.4	21
45	Refined reconstruction of liquid-gas interface structures for stratified two-phase flow using wire-mesh sensor. Flow Measurement and Instrumentation, 2015, 46, 230-239.	2.0	21
46	Droplet entrainment analysis of three-phase low liquid loading flow. International Journal of Multiphase Flow, 2017, 89, 45-56.	3.4	19
47	Dynamic Microscopic Study of Wax Deposition: Particulate Deposition. Energy & Fuels, 2021, 35, 12065-12074.	5.1	19
48	Effects of High Oil Viscosity on Oil/Gas Flow Behavior in Horizontal Pipes. , 2006, , .		17
49	An Experimental Study of Paraffin Deposition under Two-Phase Gas-Oil Slug Flow in Horizontal Pipes. , 2015, , .		17
50	On the characteristics of the roll waves in gas-liquid stratified-wavy flow: A two-dimensional perspective. Experimental Thermal and Fluid Science, 2015, 65, 90-102.	2.7	17
51	A new objective and distribution-based method to characterize pseudo-slug flow from wire-mesh-sensors (WMS) data. Experimental Thermal and Fluid Science, 2019, 109, 109855.	2.7	17
52	Characterization of Oil Water Flows in Inclined Pipes. , 2008, , .		16
53	Experimental Study on Wax-Deposition Characteristics of a Waxy Crude Oil Under Single-Phase Turbulent-Flow Conditions. Oil and Gas Facilities, 2013, 2, 61-73.	0.4	16
54	A methodology to quantify the uncertainty in liquid holdup measurements with wire mesh sensor. Flow Measurement and Instrumentation, 2015, 46, 18-24.	2.0	16

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55	Effects of high oil viscosity on oil-gas upward flow behavior in deviated pipes. <i>Experimental Thermal and Fluid Science</i> , 2019, 109, 109896.	2.7	16
56	Unified Model of Heat Transfer in Gas-Liquid Pipe Flow. <i>SPE Production and Operations</i> , 2006, 21, 114-122.	0.6	15
57	Identification and Classification of New Three-Phase Gas/Oil/Water Flow Patterns. , 2007, , .		15
58	Pressure Effects on Low-Liquid-Loading Oil/Gas Flow in Slightly Upward Inclined Pipes: Flow Pattern, Pressure Gradient, and Liquid Holdup. <i>SPE Journal</i> , 2019, 24, 2221-2238.	3.1	15
59	A Numerical Model Coupling Reservoir and Horizontal Well Flow Dynamicsâ€™ Applications in Well Completions, and Production Logging. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2004, 126, 169-176.	2.3	14
60	High-Viscosity Oil-Gas Flow in Vertical Pipe. , 2010, , .		14
61	Experimental Investigation of Three-Phase Low-Liquid-Loading Flow. <i>Oil and Gas Facilities</i> , 2016, 5, 45-56.	0.4	14
62	A Model for Temperature Prediction for Two-Phase Oil/Water Stratified Flow. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2013, 135, .	2.3	13
63	A model for the thin film friction factor in near-horizontal stratified-annular transition two-phase low liquid loading flow. <i>International Journal of Multiphase Flow</i> , 2018, 102, 29-37.	3.4	13
64	Microscopic Study of Wax Precipitationâ€™Static Conditions. <i>Energy &amp; Fuels</i> , 0, , .	5.1	12
65	A Mini Pilot-Scale Flow Loop Experimental Study of Turbulent Flow Wax Deposition by Using a Natural Gas Condensate. <i>Energy &amp; Fuels</i> , 2017, 31, 2457-2478.	5.1	12
66	Power-Law Correlation for Two-Phase Pressure Drop of Gas/Liquid Flows in Horizontal Pipelines. <i>SPE Projects, Facilities and Construction</i> , 2010, 5, 176-182.	0.2	11
67	Sensitivity of Slug Flow Mechanistic Models on Slug Length. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2011, 133, .	2.3	11
68	Experimental study using advanced diagnostics to investigate slug aeration and bubble behavior in high liquid viscosity horizontal slug flow. <i>Journal of Petroleum Science and Engineering</i> , 2020, 191, 107202.	4.2	11
69	A Model To Predict Liquid Holdup and Pressure Gradient of Near-Horizontal Wet-Gas Pipelines. <i>SPE Projects, Facilities and Construction</i> , 2007, 2, 1-8.	0.2	10
70	Inclination Effects on Flow Characteristics of High Viscosity Oil/Gas Two-Phase Flow. , 2012, , .		10
71	Liquid droplet entrainment in two-phase oil-gas low-liquid-loading flow in horizontal pipes at high pressure. <i>International Journal of Multiphase Flow</i> , 2018, 99, 383-396.	3.4	10
72	Model parameter fine-tuning and ranking methodology to improve the accuracy of threshold velocity predictions for solid particle transport. <i>Journal of Petroleum Science and Engineering</i> , 2013, 110, 210-224.	4.2	9

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73	Microscopic Study of Wax Inhibition Mechanism. , 2016, , .		9
74	Experimental Study of Paraffin Deposition Under Two-Phase Gas/Oil Slug Flow in Horizontal Pipes. SPE Production and Operations, 2017, 32, 99-117.	0.6	9
75	Settling and re-entrainment of wax particles in near-freezing systems. AIChE Journal, 2018, 64, 765-772.	3.6	9
76	Modeling pseudo-slugs liquid holdup in slightly upward inclined pipes. Journal of Petroleum Science and Engineering, 2020, 194, 107564.	4.2	9
77	Effects of High Oil Viscosity on Drift Velocity for Upward Inclined Pipes. , 2008, , .		8
78	Experimental Study on Wax Deposition Characteristics of a Waxy Crude Oil Under Single Phase Turbulent Flow Conditions. , 2012, , .		8
79	Signal processing for slug flow analysis via a voltage or instantaneous liquid holdup time-series. Flow Measurement and Instrumentation, 2021, 79, 101968.	2.0	8
80	Pressure Effects on Pressure Gradient and Liquid Holdup in Two-Phase Oil-Gas Low-Liquid-Loading Flow in Horizontal Pipes. , 2017, , .		7
81	Effects of monoethylene glycol (MEG) on three-phase flow characteristics in near-horizontal pipes. Journal of Petroleum Science and Engineering, 2017, 149, 834-843.	4.2	6
82	A Mechanistic Model for Gas/Liquid Flow in Upward Vertical Annuli. , 2009, , .		5
83	A Mechanistic Slug Liquid Holdup Model for Wide Ranges of Liquid Viscosity and Pipe Inclination Angle. , 2013, , .		5
84	A Simplified Model for Steady-State Pseudo-Slug Flow. , 2018, , .		5
85	An Experimental Investigation of a Highly Deviated Shroud Type Downhole Separators. , 2020, , .		5
86	Experimental Investigation of Three-Phase Low Liquid Loading Flow. , 2015, , .		4
87	Comprehensive Fall Velocity Study on Continuous Flow Plungers. SPE Production and Operations, 2021, 36, 604-623.	0.6	4
88	Unified Model for Gas-Liquid Pipe Flow Via Slug Dynamics: Part 2 – Model Validation. , 2002, , 787.		2
89	Analysis of roll wave characteristics under low liquid loading two-phase flow conditions. AIChE Journal, 2017, 63, 3177-3186.	3.6	2
90	Effect of Surfactant (Foamer) Delivery Location on Horizontal Wells Deliquification. , 2017, , .		2

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91	Identification of Optimum Closure Relationships for a Mechanistic Model Using a Data Set From a Low-Liquid Loading Subsea Pipeline. , 2017, , .		2
92	Effects of High Pressure on the Performance of Existing Two-Phase Flow Models in Wellbores. , 2018, , .		2
93	Sensitivity of Slug Flow Mechanistic Models on Slug Length. , 2009, , .		1
94	A model ranking and uncertainty propagation approach for improving confidence in solids transport model predictions. Journal of Petroleum Science and Engineering, 2017, 151, 128-142.	4.2	1
95	Comprehensive Fall Velocity Study on Continuous Flow Plungers. , 2020, , .		1
96	Effects of high oil viscosity on oil-gas downward flow in deviated pipes. Part 2: Holdup and pressure gradient. Canadian Journal of Chemical Engineering, 2021, , .	1.7	1
97	Effects of high oil viscosity on oil-gas downward flow in deviated pipes. Part 1: Experimental setup and flow pattern transitions. Canadian Journal of Chemical Engineering, 2021, , .	1.7	1
98	Signal processing for slug flow analysis: MATLAB algorithm. MethodsX, 2021, 8, 101546.	1.6	1
99	Flow Assurance and Control in Petroleum Production and Transport. Journal of Energy Resources Technology, Transactions of the ASME, 2008, 130, .	2.3	0
100	Experimental Study of Drop Size Distribution for Air-Oil Two-Phase Flow in Large Diameter Pipe. , 2015, , .		0
101	Selection of Optimal Closure Relationships for Multiphase Flow using a Genetic Algorithm. , 2019, , .		0
102	Modeling Liquid Holdup in Pseudo-Slugs. , 2020, , .		0