

# Sergey Martynov

## List of Publications by Year in descending order

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29  
papers

552  
citations

687363

13  
h-index

677142

22  
g-index

29  
all docs

29  
docs citations

29  
times ranked

436  
citing authors

#	ARTICLE	IF	CITATIONS
1	The natural frequencies of microbubble oscillation in elastic vessels. Journal of the Acoustical Society of America, 2009, 126, 2963-2972.	1.1	62
2	Pressure response and phase transition in supercritical CO <sub>2</sub> releases from a large-scale pipeline. Applied Energy, 2016, 178, 189-197.	10.1	48
3	Modelling three-phase releases of carbon dioxide from high-pressure pipelines. Chemical Engineering Research and Design, 2014, 92, 36-46.	5.6	42
4	Under-expanded jets and dispersion in supercritical CO <sub>2</sub> releases from a large-scale pipeline. Applied Energy, 2016, 183, 1279-1291.	10.1	38
5	A study of the effects of friction, heat transfer, and stream impurities on the decompression behavior in CO <sub>2</sub> pipelines. , 2012, 2, 369-379.		33
6	CO <sub>2</sub> PipeHaz: Quantitative Hazard Assessment for Next Generation CO <sub>2</sub> Pipelines. Energy Procedia, 2014, 63, 2510-2529.	1.8	29
7	Pressure responses and phase transitions during the release of high pressure CO <sub>2</sub> from a large-scale pipeline. Energy, 2017, 118, 1066-1078.	8.8	28
8	An extended Peng-Robinson equation of state for carbon dioxide solid-vapor equilibrium. , 2013, 3, 136-147.		27
9	Techno-economic assessment of CO <sub>2</sub> quality effect on its storage and transport: CO <sub>2</sub> QUEST. International Journal of Greenhouse Gas Control, 2016, 54, 662-681.	4.6	25
10	Modelling choked flow for CO <sub>2</sub> from the dense phase to below the triple point. International Journal of Greenhouse Gas Control, 2013, 19, 552-558.	4.6	24
11	Under-expanded jets and dispersion in high pressure CO <sub>2</sub> releases from an industrial scale pipeline. Energy, 2017, 119, 53-66.	8.8	23
12	Flow characteristics and dispersion during the leakage of high pressure CO <sub>2</sub> from an industrial scale pipeline. International Journal of Greenhouse Gas Control, 2018, 73, 70-78.	4.6	22
13	Preparation of a Micro-Porous Alginate Gel Using a Microfluidic Bubbling Device. International Journal of Food Engineering, 2010, 6, .	1.5	19
14	CO <sub>2</sub> QUEST: Techno-economic Assessment of CO <sub>2</sub> Quality Effect on Its Storage and Transport. Energy Procedia, 2014, 63, 2622-2629.	1.8	19
15	Hybrid fluid-structure interaction modelling of dynamic brittle fracture in steel pipelines transporting CO <sub>2</sub> streams. International Journal of Greenhouse Gas Control, 2016, 54, 702-715.	4.6	15
16	A fully coupled fluid-structure interaction simulation of three-dimensional dynamic ductile fracture in a steel pipeline. Theoretical and Applied Fracture Mechanics, 2019, 101, 224-235.	4.7	14
17	A multi-source flow model for CCS pipeline transportation networks. International Journal of Greenhouse Gas Control, 2015, 43, 108-114.	4.6	13
18	Computational and Experimental Study of Solid-Phase Formation during the Decompression of High-Pressure CO <sub>2</sub> Pipelines. Industrial & Engineering Chemistry Research, 2018, 57, 7054-7063.	3.7	13

#	ARTICLE	IF	CITATIONS
19	Modeling of CO <sub>2</sub> Decompression across the Triple Point. Industrial & Engineering Chemistry Research, 2017, 56, 10491-10499.	3.7	12
20	Forced vibrations of a bubble in a liquid-filled elastic vessel. Journal of the Acoustical Society of America, 2011, 130, 2700-2708.	1.1	9
21	Assessment of Integral Thermo-Hydraulic Models for Pipeline Transportation of Dense-Phase and Supercritical CO <sub>2</sub> . Industrial & Engineering Chemistry Research, 2015, 54, 8587-8599.	3.7	9
22	Shale gas well blowout fire and explosion modelling. Applied Thermal Engineering, 2019, 149, 1061-1068.	6.0	8
23	Modelling emergency isolation of carbon dioxide pipelines. International Journal of Greenhouse Gas Control, 2016, 44, 88-93.	4.6	6
24	Assessment of brittle fractures in CO <sub>2</sub> transportation pipelines: A hybrid fluid-structure interaction model. Procedia Structural Integrity, 2016, 2, 2439-2446.	0.8	5
25	Flow characteristics and dispersion during the vertical anthropogenic venting of supercritical CO <sub>2</sub> from an industrial scale pipeline. Energy Procedia, 2018, 154, 66-72.	1.8	5
26	Optimal Valve Spacing for Next Generation CO <sub>2</sub> Pipelines. Computer Aided Chemical Engineering, 2014, 33, 265-270.	0.5	2
27	Numerical study of the effect of heat transfer on solid phase formation during decompression of CO <sub>2</sub> in pipelines. MATEC Web of Conferences, 2018, 240, 01026.	0.2	1
28	Henry's Law Constants and Vapor-Liquid Distribution Coefficients of Noncondensable Gases Dissolved in Carbon Dioxide. ACS Omega, 2022, 7, 8777-8788.	3.5	1
29	FIRE AND EXPLOSION MODELLING FOLLOWING THE ACCIDENTAL FAILURE OF HIGH PRESSURE ETHYLENE TRANSPORTATION PIPELINES. , 2019, , .		0