Angelo B Basile

List of Publications by Citations

226 papers	6,757 citations	50 h-index	71 g-index
258 ext. papers	7,391 ext. citations	6.1 avg, IF	6.13 L-index

#	Paper	IF	Citations
226	Methanol steam reforming for hydrogen generation via conventional and membrane reactors: A review. *Renewable and Sustainable Energy Reviews*, **2014**, 29, 355-368	16.2	289
225	Advances on methane steam reforming to produce hydrogen through membrane reactors technology: A review. *Catalysis Reviews - Science and Engineering*, **2016**, 58, 1-35	12.6	182
224	Sulfonated PEEK-based polymers in PEMFC and DMFC applications: A review. *International Journal of Hydrogen Energy*, **2012**, 37, 15241-15255	6.7	173
223	The water-gas shift reaction: from conventional catalytic systems to Pd-based membrane reactors review. *Asia-Pacific Journal of Chemical Engineering*, **2010**, 5, 111-137	1.3	151
222	A simulation study of the steam reforming of methane in a dense tubular membrane reactor. *International Journal of Hydrogen Energy*, **2004**, 29, 611-617	6.7	149
221	An experimental study of CO2 hydrogenation into methanol involving a zeolite membrane reactor. *Chemical Engineering and Processing: Process Intensification*, **2004**, 43, 1029-1036	3.7	134
220	An analysis of the performance of membrane reactors for the water gas shift reaction using gas feed mixtures. *Catalysis Today*, **2000**, 56, 53-64	5.3	118
219	Experimental Study of the Methane Steam Reforming Reaction in a Dense Pd/Ag Membrane Reactor. *Industrial & Engineering Chemistry Research*, **2004**, 43, 928-933	3.9	116
218	An economic feasibility study for water gas shift membrane reactor. *Journal of Membrane Science*, **2001**, 181, 21-27	9.6	113
217	Pd Ag membrane reactors for water gas shift reaction. *Chemical Engineering Journal*, **2003**, 93, 23-30	14.7	112
216	Experimental and simulation of both Pd and Pd/Ag for a water gas shift membrane reactor. *Separation and Purification Technology*, **2001**, 25, 549-571	8.3	105
215	Design and process study of Pd membrane reactors. *International Journal of Hydrogen Energy*, **2008**, 33, 5098-5105	6.7	93
214	Methanol and ethanol steam reforming in membrane reactors: An experimental study. *International Journal of Hydrogen Energy*, **2007**, 32, 1201-1210	6.7	89
213	Hydrogen production by methanol steam reforming carried out in membrane reactor on Cu/Zn/Mg-based catalyst. *Catalysis Today*, **2008**, 137, 17-22	5.3	87
212	Pd Ag membrane reactor for steam reforming reactions: A comparison between different fuels. *International Journal of Hydrogen Energy*, **2008**, 33, 1671-1687	6.7	85
211	CuO/ZnO catalysts for methanol steam reforming: The role of the support polarity ratio and surface area. *Applied Catalysis B: Environmental*, **2015**, 174-175, 67-76	21.8	83
210	Membrane reactor for water gas shift reaction. *Separation and Purification Technology*, **1996**, 10, 243-254		81

209	The partial oxidation of methane to syngas in a palladium membrane reactor: simulation and experimental studies. *Catalysis Today*, **2001**, 67, 65-75	5.3	79
208	H2 production by low pressure methane steam reforming in a Pd/Ag membrane reactor over a Ni-based catalyst: Experimental and modeling. *International Journal of Hydrogen Energy*, **2010**, 35, 11514-11524	6.7	78
207	The effect of mixture gas on hydrogen permeation through a palladium membrane: Experimental study and theoretical approach. *International Journal of Hydrogen Energy*, **2007**, 32, 1837-1845	6.7	78
206	Glycerol Production and Transformation: A Critical Review with Particular Emphasis on Glycerol Reforming Reaction for Producing Hydrogen in Conventional and Membrane Reactors. *Membranes*, **2017**, 7,	3.8	76
205	Synthesis, Characterization, and Applications of Palladium Membranes. *Membrane Science and Technology*, **2008**, 255-323		76
204	Low temperature ethanol steam reforming in a Pd-Ag membrane reactorPart 1: Ru-based catalyst. *Journal of Membrane Science*, **2008**, 308, 250-257	9.6	76
203	Long-term tests of Pd/Ag thin wall permeator tube. *Journal of Membrane Science*, **2006**, 284, 393-397	9.6	76
202	A dense Pd/Ag membrane reactor for methanol steam reforming: Experimental study. *Catalysis Today*, **2005**, 104, 244-250	5.3	74
201	Methane steam reforming in a Pd/Ag membrane reformer: An experimental study on reaction pressure influence at middle temperature. *International Journal of Hydrogen Energy*, **2011**, 36, 1531-1539	6.7	70
200	Methanol steam reforming reaction in a Pd/Ag membrane reactor for CO-free hydrogen production. *International Journal of Hydrogen Energy*, **2008**, 33, 5583-5588	6.7	70
199	Steam Reforming of Methane in a Membrane Reactor: An Industrial Case Study. *Industrial & Engineering Chemistry Research*, **2006**, 45, 2994-3000	3.9	70
198	A study on catalytic membrane reactors for water gas shift reaction. *Separation and Purification Technology*, **1996**, 10, 53-61		68
197	An experimental study on bio-ethanol steam reforming in a catalytic membrane reactor. Part I: Temperature and sweep-gas flow configuration effects. *International Journal of Hydrogen Energy*, **2010**, 35, 3170-3177	6.7	64
196	Hydrogen production from bio-ethanol steam reforming reaction in a Pd/PSS membrane reactor. *Catalysis Today*, **2012**, 193, 42-48	5.3	63
195	A theoretical analysis of methanol synthesis from CO2 and H2 in a ceramic membrane reactor. *International Journal of Hydrogen Energy*, **2007**, 32, 5050-5058	6.7	63
194	Pd/Ag tubular membrane reactors for methane dry reforming: A reactive method for CO2 consumption and H2 production. *Journal of Membrane Science*, **2008**, 317, 96-105	9.6	63
193	Carbon molecular sieve membranes supported on non-modified ceramic tubes for hydrogen separation in membrane reactors. *International Journal of Hydrogen Energy*, **2012**, 37, 13536-13544	6.7	62
192	Integrated gasification gas combined cycle plant with membrane reactors: Technological and economical analysis. *Energy Conversion and Management*, **2007**, 48, 2680-2693	10.6	62

191	Hydrogen production from ethanol via inorganic membrane reactors technology: a review. *Catalysis Science and Technology*, **2011**, 1, 366	5.5	59
190	Ethanol steam reforming reaction in a porous stainless steel supported palladium membrane reactor. *International Journal of Hydrogen Energy*, **2011**, 36, 2029-2037	6.7	59
189	An experimental study on bio-ethanol steam reforming in a catalytic membrane reactor. Part II: Reaction pressure, sweep factor and WHSV effects. *International Journal of Hydrogen Energy*, **2010**, 35, 3159-3164	6.7	59
188	Co-current and counter-current modes for methanol steam reforming membrane reactor: Experimental study. *Catalysis Today*, **2006**, 118, 237-245	5.3	59
187	Hydrogen production for PEM fuel cell by gas phase reforming of glycerol as byproduct of bio-diesel. The use of a PdAg membrane reactor at middle reaction temperature. *International Journal of Hydrogen Energy*, **2011**, 36, 3827-3834	6.7	57
186	Hydrogen Production Using Pd-based Membrane Reactors for Fuel Cells. *Topics in Catalysis*, **2008**, 51, 107-122	2.3	57
185	Acetic acid steam reforming in a PdAg membrane reactor: The effect of the catalytic bed pattern. *Journal of Membrane Science*, **2008**, 311, 46-52	9.6	57
184	Model biogas steam reforming in a thin Pd-supported membrane reactor to generate clean hydrogen for fuel cells. *Journal of Power Sources*, **2015**, 273, 25-32	8.9	55
183	An experimental investigation on methanol steam reforming with oxygen addition in a flat PdAg membrane reactor. *International Journal of Hydrogen Energy*, **2006**, 31, 1615-1622	6.7	53
182	Hydrogen Recovery from Methanol Steam Reforming in a Dense Membrane Reactor: Simulation Study. *Industrial & Engineering Chemistry Research*, **2004**, 43, 2420-2432	3.9	52
181	Advances in Methanol Production and Utilization, with Particular Emphasis toward Hydrogen Generation via Membrane Reactor Technology. *Membranes*, **2018**, 8,	3.8	52
180	Fabrication variables affecting the structure and properties of supported carbon molecular sieve membranes for hydrogen separation. *Journal of Membrane Science*, **2012**, 415-416, 288-297	9.6	51
179	On the coupling effect in pervaporation. *Journal of Membrane Science*, **1993**, 81, 43-55	9.6	51
178	CO-free hydrogen production by steam reforming of acetic acid carried out in a PdAg membrane reactor: The effect of co-current and counter-current mode. *International Journal of Hydrogen Energy*, **2008**, 33, 4091-4096	6.7	50
177	Hydrogen production from methanol by oxidative steam reforming carried out in a membrane reactor. *Catalysis Today*, **2005**, 104, 251-259	5.3	50
176	H2 production by low pressure methanol steam reforming in a dense PdAg membrane reactor in co-current flow configuration: Experimental and modeling analysis. *International Journal of Hydrogen Energy*, **2013**, 38, 16685-16697	6.7	49
175	Methanol steam reforming in a dense PdAg membrane reactor: The pressure and WHSV effects on CO-free H2 production. *Journal of Membrane Science*, **2008**, 323, 235-240	9.6	49
174	Methanol Production and Applications: An Overview **2018**, 3-28		48

173	Oxidative steam reforming of ethanol over RuAl2O3 catalyst in a dense PdAg membrane reactor to produce hydrogen for PEM fuel cells. *International Journal of Hydrogen Energy*, **2009**, 34, 8558-8565	6.7	47
172	An Ru-based catalytic membrane reactor for dry reforming of methaneIts catalytic performance compared with tubular packed bed reactors. *Catalysis Today*, **2003**, 82, 57-65	5.3	47
171	The oncoming energy vector: Hydrogen produced in Pd-composite membrane reactor via bioethanol reforming over Ni/CeO 2 catalyst. *Catalysis Today*, **2016**, 259, 368-375	5.3	45
170	Co-current and counter-current modes for water gas shift membrane reactor. *Catalysis Today*, **2003**, 82, 275-281	5.3	45
169	Co-current and counter-current configurations for ethanol steam reforming in a dense PdAg membrane reactor. *International Journal of Hydrogen Energy*, **2008**, 33, 6165-6171	6.7	43
168	From bioethanol exploitation to high grade hydrogen generation: Steam reforming promoted by a Co-Pt catalyst in a Pd-based membrane reactor. *Renewable Energy*, **2018**, 119, 834-843	8.1	42
167	Evaluation of dense PdAg membrane reactor performance during methanol steam reforming in comparison with autothermal reforming using CFD analysis. *International Journal of Hydrogen Energy*, **2016**, 41, 8745-8754	6.7	42
166	Methanol steam reforming in an Al 2 O 3 supported thin Pd-layer membrane reactor over Cu/ZnO/Al 2 O 3 catalyst. *International Journal of Hydrogen Energy*, **2014**, 39, 18702-18710	6.7	42
165	Performance and Long-Term Stability of Pd/PSS and Pd/Al2O3 Membranes for Hydrogen Separation. *Membranes*, **2014**, 4, 143-62	3.8	42
164	Sulfonated PEEK-WC membranes for proton-exchange membrane fuel cell: Effect of the increasing level of sulfonation on electrochemical performances. *Journal of Membrane Science*, **2006**, 281, 377-385	9.6	41
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160	Counter-current membrane reactor for WGS process: Membrane design. *International Journal of Hydrogen Energy*, **2010**, 35, 12609-12617	6.7	39
159	CO-Free Hydrogen Production by Ethanol Steam Reforming in a PdAg Membrane Reactor. *Fuel Cells*, **2008**, 8, 62-68	2.9	38
158	HIGH TEMPERATURE MEMBRANE REACTORS AND INTEGRATED MEMBRANE OPERATIONS. *Reviews in Chemical Engineering*, **2002**, 18,	5	38
157	Production of hydrogen via glycerol steam reforming in a Pd-Ag membrane reactor over Co-Al2O3 catalyst. *Asia-Pacific Journal of Chemical Engineering*, **2010**, 5, 138-145	1.3	36
156	A simulation study on methanol steam reforming in the silica membrane reactor for hydrogen production. *International Journal of Hydrogen Energy*, **2015**, 40, 3909-3918	6.7	35

155	The effect of the hydrogen flux pressure and temperature dependence factors on the membrane reactor performances. *International Journal of Hydrogen Energy*, **2007**, 32, 4052-4058	6.7	35
154	Sulfonation of PEEK-WC polymer via chloro-sulfonic acid for potential PEM fuel cell applications. *International Journal of Hydrogen Energy*, **2010**, 35, 12688-12695	6.7	34
153	Co-current and counter-current modes for methanol steam reforming membrane reactor. *International Journal of Hydrogen Energy*, **2006**, 31, 2243-2249	6.7	34
152	An experimental study of multilayered composite palladium membrane reactors for partial oxidation of methane to syngas. *Catalysis Today*, **2001**, 67, 55-64	5.3	34
151	Membrane integrated system in the fusion reactor fuel cycle. *Catalysis Today*, **1995**, 25, 321-326	5.3	34
150	Pd-based membrane reactors for producing ultra pure hydrogen: Oxidative reforming of bio-ethanol. *International Journal of Hydrogen Energy*, **2013**, 38, 701-707	6.7	33
149	Hydrogen production as a green fuel in silica membrane reactor: Experimental analysis and artificial neural network modeling. *Fuel*, **2018**, 222, 114-124	7.1	32
148	Hydrogen production by a Pd Ag membrane reactor during glycerol steam reforming: ANN modeling study. *International Journal of Hydrogen Energy*, **2018**, 43, 7722-7730	6.7	32
147	H2 production in silica membrane reactor via methanol steam reforming: Modeling and HAZOP analysis. *International Journal of Hydrogen Energy*, **2013**, 38, 10315-10326	6.7	32
146	Evaluation of silica membrane reactor performance for hydrogen production via methanol steam reforming: Modeling study. *International Journal of Hydrogen Energy*, **2013**, 38, 16698-16709	6.7	31
145	CFD analysis of a hybrid sorption-enhanced membrane reactor for hydrogen production during WGS reaction. *International Journal of Hydrogen Energy*, **2017**, 42, 26914-26923	6.7	31
144	Recovery of pyridine from aqueous solution by membrane pervaporation. *Journal of Membrane Science*, **1993**, 80, 309-318	9.6	31
143	Hydrogen production via silica membrane reactor during the methanol steam reforming process: experimental study. *RSC Advances*, **2015**, 5, 95823-95832	3.7	30
142	Performance evaluation of graphene oxide (GO) nanocomposite membrane for hydrogen separation: Effect of dip coating sol concentration. *Separation and Purification Technology*, **2018**, 200, 169-176	8.3	30
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140	Gas permeability of polyphosphazene membranes. *Separation and Purification Technology*, **1991**, 5, 252-258		30
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137	Membrane reactor for the production of hydrogen and higher hydrocarbons from methane over Ru/Al2O3 catalyst. *Chemical Engineering Journal*, **2003**, 93, 31-39	14.7	29
136	Performance evaluation of Pd Ag membrane reactor in glycerol steam reforming process: Development of the CFD model. *International Journal of Hydrogen Energy*, **2019**, 44, 1000-1009	6.7	29
135	CFD analysis of Pd-Ag membrane reactor performance during ethylbenzene dehydrogenation process. *International Journal of Hydrogen Energy*, **2018**, 43, 7675-7683	6.7	28
134	High temperature proton exchange membrane fuel cell using a sulfonated membrane obtained via H2SO4 treatment of PEEK-WC. *Catalysis Today*, **2005**, 104, 213-218	5.3	28
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132	Theoretical study of hydrogen production using inorganic membrane reactors during WGS reaction. *International Journal of Hydrogen Energy*, **2016**, 41, 8696-8705	6.7	27
131	Water gas shift reaction in membrane reactors: Theoretical investigation by artificial neural networks model and experimental validation. *International Journal of Hydrogen Energy*, **2015**, 40, 5897-5906	6.7	26
130	Partial oxidation of ethanol in a membrane reactor for high purity hydrogen production. *International Journal of Hydrogen Energy*, **2010**, 35, 12626-12634	6.7	25
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117	Fabrication & performance study of a palladium on alumina supported membrane reactor: Natural gas steam reforming, a case study. *International Journal of Hydrogen Energy*, **2018**, 43, 7713-7721	6.7	17
116	New PEEK-WC and PLA membranes for H2 separation. *International Journal of Hydrogen Energy*, **2017**, 42, 22138-22148	6.7	16
115	Introduction A Review of Membrane Reactors **2011**, 1-61		16
114	Methane Conversion to Syngas in a Composite Palladium Membrane Reactor with Increasing Number of Pd Layers. *Industrial & Engineering Chemistry Research*, **2002**, 41, 1703-1710	3.9	16
113	Methanol steam reforming for hydrogen generation: A comparative modeling study between silica and Pd-based membrane reactors by CFD method. *Fuel Processing Technology*, **2020**, 199, 106273	7.2	15
112	Theoretical evaluation of PdAg membrane reactor performance during biomass steam gasification for hydrogen production using CFD method. *International Journal of Hydrogen Energy*, **2018**, 43, 11719-11730	6.7	15
111	Preparation of Polymeric Membranes Entrapping Cyclodextrins and Their Molecular Recognition of Naringin. *Journal of Inclusion Phenomena and Macrocyclic Chemistry*, **2003**, 47, 33-37		14
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106	Composite catalytic membrane reactor analysis for the water gas shift reaction in the tritium fusion fuel cycle. *Fusion Engineering and Design*, **1995**, 30, 217-223	1.7	13
105	Experimental evaluation of graphene oxide/TiO2-alumina nanocomposite membranes performance for hydrogen separation. *International Journal of Hydrogen Energy*, **2020**, 45, 7479-7487	6.7	13
104	PLA Easy Fil White-based membranes for CO2 separation **2019**, 9, 360-369		12
103	Investigation of Palladium Membrane Reactor Performance during Ethanol Steam Reforming using CFD Method. *Chemical Product and Process Modeling*, **2016**, 11, 51-55	1.1	12
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101	The evaluation of methane mixed reforming reaction in an industrial membrane reformer for hydrogen production. *International Journal of Hydrogen Energy*, **2018**, 43, 15321-15329	6.7	11
100	Hydrogen Production by Ethanol Steam Reforming: Experimental Study of a Pd-Ag Membrane Reactor and Traditional Reactor Behaviour. *International Journal of Chemical Reactor Engineering*, **2008**, 6,	1.2	11
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97	Electrochemical characterization of sulfonated PEEK-WC membranes for PEM fuel cells. *International Journal of Hydrogen Energy*, **2013**, 38, 551-557	6.7	10
96	Partial Oxidation of Methane in a Catalytic Ruthenium Membrane Reactor. *Industrial & Engineering Chemistry Research*, **2003**, 42, 2968-2974	3.9	10
95	Progress in Methanol Steam Reforming Modelling via Membrane Reactors Technology. *Membranes*, **2018**, 8,	3.8	10
94	Membrane reactors for methane steam reforming (MSR) **2015**, 31-59		9
93	Porous ceramic membranes for membrane reactors **2013**, 298-336		9
92	Proton conducting membranes based on sulfonated PEEK-WC polymer for PEMFCs. *International Journal of Hydrogen Energy*, **2013**, 38, 16642-16648	6.7	8
91	Inorganic membrane reactors for hydrogen production: an overview with particular emphasis on dense metallic membrane materials **2013**, 42-148		8
90	Progress in Modeling of Silica-Based Membranes and Membrane Reactors for Hydrogen Production and Purification. *ChemEngineering*, **2019**, 3, 2	2.6	8
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88	Modelling Study of Palladium Membrane Reactor Performance during Methan Steam Reforming using CFD Method. *Chemical Product and Process Modeling*, **2016**, 11, 17-21	1.1	7
87	Water Gas Shift Reaction in Pd-Based Membrane Reactors. *Advances in Science and Technology*, **2010**, 72, 99-104	0.1	7
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74	From sugars to ethanol□from agricultural wastes to algal sources: An overview **2019**, 3-34		4
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72	Single-stage hydrogen production and separation from fossil fuels using micro- and macromembrane reactors **2015**, 445-468		4
71	Membrane Reactor: An Integrated □Membrane + Reaction□System **2016**, 231-253		4
70	Membrane processes for biofuel separation: an introduction **2014**, 65-103		4
69	Alternatives to palladium in membranes for hydrogen separation: nickel, niobium and vanadium alloys, ceramic supports for metal alloys and porous glass membranes **2013**, 183-217		4
68	Process Intensification in the Chemical and Petrochemical Industry **2013**, 119-151		4
67	Progresses on the partial oxidation of methane to syngas using a membrane reactor. *Studies in Surface Science and Catalysis*, **1998**, 459-464	1.8	4
66	Vapor phase esterification of acetic acid with ethanol in a CHA zeolite membrane reactor: A CFD analysis. *Chemical Engineering Science*, **2021**, 236, 116536	4.4	4

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63	Steam Reforming, Preferential Oxidation, and Autothermal Reforming of Ethanol for Hydrogen Production in Membrane Reactors **2019**, 193-213		4
62	Membrane reactors for steam reforming of glycerol and acetic acid to produce hydrogen **2015**, 249-266		3
61	H2 production from bioalcohols and biomethane steam reforming in membrane reactors **2017**, 321-344		3
60	Process Intensification in the Chemical Industry: A Review **2013**, 95-118		3
59	Simulation of Water Gas Shift Membrane Reactors by a Two-dimensional Model. *Computer Aided Chemical Engineering*, **2011**, 29, 1643-1647	0.6	3
58	Zeolite Membrane Reactors **2011**, 243-273		3
57	Nanostructured Perovskites for the Fabrication of Thin Ceramic Membranes and Related Phenomena **2011**, 201-225		3
56	Performance Assessment of Water Gas Shift Membrane Reactors by a Two-dimensional Model. *Computer Aided Chemical Engineering*, **2012**, 610-614	0.6	3
55	A simplified method for limit conversion calculation in membrane reactors. *Asia-Pacific Journal of Chemical Engineering*, **2010**, 5, 226-234	1.3	3
54	The pressure effect on ethanol steam reforming in membrane reactor: experimental study. *Desalination*, **2006**, 200, 671-672	10.3	3
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51	Hydrogen production by silica membrane reactor during dehydrogenation of methylcyclohexane: CFD analysis. *International Journal of Hydrogen Energy*, **2021**, 46, 19768-19777	6.7	3
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47	Membrane contactors: fundamentals, membrane materials and key operations **2013**, 54-106		2
46	Modeling of Silica Membranes **2017**, 135-153		2
45	Palladium-based composite membranes for hydrogen separation in membrane reactors **2013**, 149-182		2
44	Integrating different membrane operations and combining membranes with conventional separation techniques in industrial processes **2013**, 296-343		2
43	Innovative Solar Technology: CSP Plants for Combined Production of Hydrogen and Electricity **2013** , 25-49		2
42	Membranes for hydrocarbon fuel processing and separation **2011**, 295-338		2
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39	Hydrogen Production for PEM Fuel Cells. *Biofuels and Biorefineries*, **2015**, 339-356	0.3	2
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