CÃ©sar TreviÃ±o

List of Publications by Year
in descending order

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136	1,371	393982	500791
papers	citations	19 h-index	28 g-index

136	136	136	700
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Velocity field measurements in granular gravity flow in a near 2D silo. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 250, 111-116.	0.9	72
2	The Influence of the Lewis Numbers of the Reactants on the Asymptotic Structure of Counterflow and Stagnant Diffusion Flames. Combustion Science and Technology, 1989, 64, 243-261.	1.2	56
3	A reduced reaction mechanism for the combustion of n-butane. Combustion and Flame, 2017, 175, 27-33.	2.8	46
4	The toroidal thermosyphon with known heat flux. International Journal of Heat and Mass Transfer, 1985, 28, 219-233.	2.5	45
5	The conjugate conductionâ€“natural convection heat transfer along a thin vertical plate with non-uniform internal heat generation. International Journal of Heat and Mass Transfer, 2000, 43, 2739-2748.	2.5	44
6	A steady-state analysis for variable area one- and two-phase thermosyphon loops. International Journal of Heat and Mass Transfer, 1985, 28, 1711-1719.	2.5	37
7	Gas-Phase Ignition of Premixed Fuel by Catalytic Bodies in Stagnation Flow. Combustion Science and Technology, 1983, 30, 213-229.	1.2	31
8	External heating of a flat plate in a convective flow. International Journal of Heat and Mass Transfer, 1984, 27, 1067-1073.	2.5	29
9	Catalytic Flat Plate Boundary Layer Ignition. Combustion Science and Technology, 1981, 26, 245-251.	1.2	27
10	Analysis of the structure and mechanisms of extinction of a counterflow methanol-air diffusion flame. Combustion and Flame, 1989, 76, 111-132.	2.8	27
11	Asymptotic Analysis of the Ignition of Hydrogen by a Hot Plate in a Boundary Layer Flow. Combustion Science and Technology, 1991, 78, 197-216.	1.2	27
12	Reduced kinetic mechanism for methane ignition. Proceedings of the Combustion Institute, 1992, 24, 121-127.	0.3	25
13	Gas-phase boundary layer ignition on a catalytic flat plate with heat loss. Combustion and Flame, 1985, 61, 39-49.	2.8	24
14	Numerical study of magnetohydrodynamic mixed convection and entropy generation of Al<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e4772" altimg="si210.svg"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math>O<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e4780" altimg="si211.svg"><mml:msub><mml:mrow /><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:ms	1.1	24
15	Conjugated heat transfer in circular ducts with a power-law laminar convection fluid flow. International Journal of Heat and Mass Transfer, 2002, 45, 655-666.	2.5	22
16	Transient laminar opposing mixed convection in a differentially and asymmetrically heated vertical channel of finite length. International Journal of Heat and Mass Transfer, 2008, 51, 5991-6005.	2.5	22
17	The asymptotic structure of hydrogen-air diffusion flames. Combustion and Flame, 1992, 91, 246-256.	2.8	21
18	The classical problem of convective heat transfer in laminar flow over a thin finite thickness plate with uniform temperature at the lower surface. International Journal of Heat and Mass Transfer, 1997, 40, 3577-3580.	2.5	21

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19	Stereoscopic particle image velocimetry measurements of the three-dimensional flow field of a descending autorotating Mahogany seed (Swietenia macrophylla). Journal of Experimental Biology, 2013, 216, 2017-30.	0.8	21
20	Ignition and Extinction of Catalytic Reactions on a Flat Plate. Combustion Science and Technology, 1984, 38, 113-128.	1.2	18
21	Experimental study on laminar flow over two confined isothermal cylinders in tandem during mixed convection. International Journal of Thermal Sciences, 2017, 115, 176-196.	2.6	18
22	Numerical study of buoyancy and inclination effects on transient mixed convection in a channel with two facing cavities with discrete heating. International Journal of Mechanical Sciences, 2019, 155, 295-314.	3.6	18
23	Asymptotic analysis of the high-temperature ignition of CO/H2/O2 mixtures. Combustion and Flame, 1991, 86, 285-295.	2.8	17
24	Mixing layer ignition of hydrogen. Combustion and Flame, 1995, 103, 129-141.	2.8	16
25	Determination of Adsorption and Desorption Parameters from Ignition Temperature Measurements in Catalytic Combustion Systems. Journal of Physical Chemistry B, 2003, 107, 2262-2274.	1.2	16
26	Numerical investigation of mixed convection heat transfer from two isothermal circular cylinders in tandem arrangement: buoyancy, spacing ratio, and confinement effects. Theoretical and Computational Fluid Dynamics, 2017, 31, 159-187.	0.9	16
27	Analysis of the thermal diffusion effects on the ignition of hydrogen-air mixtures in the boundary layer of a hot flat plate. Combustion and Flame, 1994, 96, 293-303.	2.8	15
28	Laminar film condensation along a vertical fin. International Journal of Heat and Mass Transfer, 2000, 43, 2859-2868.	2.5	15
29	Gravity induced granular flow measurements in a 2D silo with a lateral bottom exit. Physics Letters, Section A: General, Atomic and Solid State Physics, 2000, 273, 109-116.	0.9	15
30	Particle image velocimetry measurements for opposing flow in a vertical channel with a differential and asymmetric heating condition. Experimental Thermal and Fluid Science, 2007, 32, 262-275.	1.5	15
31	LDA measurements in the premixed V flame stabilized in the wake of a flat plate boundary layer. Combustion and Flame, 1991, 85, 505-510.	2.8	14
32	Axisymmetrical rotation of a sand heap. Physical Review E, 1995, 51, 4621-4625.	0.8	14
33	Autoignition of hydrogen/air mixtures by a thin catalytic wire. Proceedings of the Combustion Institute, 2000, 28, 1359-1364.	2.4	14
34	Premixed Combustion in Boundary Layers for Moderate Values of the Zeldovich Numbers. Combustion Science and Technology, 1986, 48, 129-149.	1.2	13
35	Unsteady laminar mixed convection heat transfer from a horizontal isothermal cylinder in contra-flow: Buoyancy and wall proximity effects on the flow response and wake structure. Experimental Thermal and Fluid Science, 2014, 52, 30-46.	1.5	13
36	Unsteady mixed convection heat transfer from two confined isothermal circular cylinders in tandem: Buoyancy and tube spacing effects. International Journal of Heat and Fluid Flow, 2016, 60, 12-30.	1.1	13

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37	A Reduced Kinetic Mechanism for the Combustion of n-Butanol. Energy & Fuels, 2018, 32, 867-874.	2.5	13
38	Stereoscopic TR-PIV measurements of mixed convection flow in a vertical channel with an open cavity with discrete heating. International Journal of Mechanical Sciences, 2019, 150, 427-444.	3.6	13
39	Heat transfer across a vertical wall separating two fluids at different temperatures. International Journal of Heat and Mass Transfer, 1996, 39, 2231-2241.	2.5	12
40	Magnetohydrodynamic mixed convection and entropy generation analysis of Al2O3-water nanofluid past a confined circular cylinder. International Journal of Mechanical Sciences, 2022, 230, 107542.	3.6	12
41	Numerical study of the natural convective cooling of a vertical plate. Heat and Mass Transfer, 1996, 32, 89-95.	1.2	11
42	Asymptotic analysis of axisymmetric drop spreading. Physical Review E, 1998, 58, 4478-4484.	0.8	11
43	The secondary splitting of zero-gradient points in a scalar field. Journal of Engineering Mathematics, 2011, 71, 81-95.	0.6	11
44	Heterogeneous ignition of coal dust clouds. Combustion and Flame, 1989, 75, 325-342.	2.8	10
45	Film condensation induced by a natural convective flow: steady-state analysis. International Journal of Heat and Mass Transfer, 1997, 40, 1279-1289.	2.5	10
46	Experimental study of the tracer in the granular flow in a 2D silo. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 249, 63-68.	0.9	10
47	An asymptotic analysis of catalytic ignition in a stagnation-point flow. Combustion Theory and Modelling, 1999, 3, 469-477.	1.0	10
48	Analysis for the catalytic ignition of methane in a stagnation-point flow. AICHE Journal, 1999, 45, 567-573.	1.8	10
49	Conjugate free convection along a thin vertical plate with internal nonuniform heat generation in a porous medium. Heat and Mass Transfer, 2002, 38, 631-638.	1.2	10
50	Imbibition in a Heleâ€“Shaw cell under a temperature gradient. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 324, 14-21.	0.9	10
51	Determination of the adsorption and desorption parameters for ethene and propene from measurements of the heterogeneous ignition temperature. Combustion and Flame, 2005, 142, 107-116.	2.8	10
52	Experimental evidence of density fluctuations in two-dimensional bins. Physics Letters, Section A: General, Atomic and Solid State Physics, 1996, 223, 105-110.	0.9	9
53	Thermal nonlinear oscillator in mixed convection. Physical Review E, 2011, 84, 046310.	0.8	9
54	Numerical study on buoyancy and inclination effects on transient laminar opposing mixed convection in rectangular channels with symmetric and discrete heating. International Journal of Heat and Mass Transfer, 2015, 84, 766-785.	2.5	9

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55	Non-isothermal effects in the slippage condition and absolute viscosity for an electroosmotic flow. European Journal of Mechanics, B/Fluids, 2022, 93, 29-41.	1.2	9
56	Gas Phase Ignition of a Premixed Combustible by Catalytic and Non-Catalytic Cylindrical Surfaces. Combustion Science and Technology, 1986, 48, 45-63.	1.2	8
57	Catalytic combustion of dry carbon monoxide by external power activation. Surface Science, 2000, 449, 61-74.	0.8	8
58	Imbibition Driven by a Temperature Gradient. Journal of the Physical Society of Japan, 2003, 72, 979-982.	0.7	8
59	Catalytic ignition of very lean mixtures of hydrogen. International Journal of Hydrogen Energy, 2011, 36, 8610-8618.	3.8	8
60	Transient heating and entropy generation of a fluid inside a large aspect ratio cavity. International Journal of Thermal Sciences, 2013, 64, 220-231.	2.6	8
61	Steady and oscillatory laminar opposing mixed convection in a vertical channel of finite length subjected to symmetrical isothermal discrete heat sources. Physics of Fluids, 2015, 27, 063604.	1.6	8
62	Experimental study of buoyancy and inclination effects on transient mixed convection heat transfer in a channel with two symmetric open cubic cavities with prescribed heat flux. International Journal of Thermal Sciences, 2019, 140, 71-86.	2.6	8
63	Transient catalytic ignition on a flat plate with external energy flux. AIAA Journal, 1985, 23, 1716-1723.	1.5	7
64	Catalytic combustion in monolith reactors. Chemical Engineering Science, 1986, 41, 2253-2260.	1.9	7
65	Effects of longitudinal heat conduction of a vertical thin plate in a natural convective cooling process. Heat and Mass Transfer, 1994, 29, 195-204.	0.2	7
66	Numerical solution of the conjugate heat transfer between forced counterflowing streams. Heat and Mass Transfer, 1995, 30, 297-302.	1.2	7
67	Simplified model for the prediction of ozone generation in polluted urban areas with continuous precursor species emissions. Atmospheric Environment, 1999, 33, 1103-1110.	1.9	7
68	Heat Transfer Analysis on a Moving Flat Sheet Emerging into Quiescent Fluid. Journal of Thermophysics and Heat Transfer, 2002, 16, 373-378.	0.9	7
69	Transient mixed convection heat transfer for opposing flow from two discrete flush-mounted heaters in a rectangular channel of finite length: Effect of buoyancy and inclination angle. International Journal of Thermal Sciences, 2016, 104, 357-372.	2.6	7
70	Effect of plate thermal resistance on boundary layer ignition. Combustion and Flame, 1981, 43, 121-129.	2.8	6
71	Boundary layer separation by a step in surface temperature. International Journal of Heat and Mass Transfer, 1992, 35, 2725-2738.	2.5	6
72	Steady-state analysis of the conjugate heat transfer between forced counterflowing streams. Journal of Thermophysics and Heat Transfer, 1996, 10, 476-483.	0.9	6

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73	Laminar Film Condensation on a Thin Finite Thickness Plate. Journal of Thermophysics and Heat Transfer, 1997, 11, 119-120.	0.9	6
74	Catalytic ignition of dry carbon monoxide in a stagnation-point flow. Combustion and Flame, 1999, 119, 505-512.	2.8	6
75	Theoretical analysis of the direct decomposition of methane gas in a laminar stagnation-point flow: CO2-free production of hydrogen. International Journal of Hydrogen Energy, 2008, 33, 7419-7426.	3.8	6
76	Experimental investigation of opposed rectangular impinging jets confined in an open cavity with vertical crossflow in a rectangular duct. International Journal of Heat and Mass Transfer, 2019, 145, 118745.	2.5	6
77	Vortex induced vibrations of a pivoted finite height cylinder at low Reynolds number. Physics of Fluids, 2021, 33, .	1.6	6
78	On the influence of the plate thickness on the boundary layer ignition for large activation energies. Combustion and Flame, 1983, 49, 91-100.	2.8	5
79	Conjugate natural convection heat transfer between two fluids separated by a horizontal wall: steady-state analysis. Heat and Mass Transfer, 1996, 31, 353-358.	1.2	5
80	Ignition of catalytic reactions in a vertical wall immersed in a combustible gas. Proceedings of the Combustion Institute, 1996, 26, 1797-1804.	0.3	5
81	Graetz Problem for the Conjugated Conduction-Film Condensation Process. Journal of Thermophysics and Heat Transfer, 2000, 14, 96-102.	0.9	5
82	Transient ignition and combustion of diluted hydrogen/air mixtures by a thin catalytic wire. Proceedings of the Combustion Institute, 2002, 29, 981-988.	2.4	5
83	The role of duct thickness on the quenching process of premixed flame propagation. Combustion Theory and Modelling, 2008, 12, 115-133.	1.0	5
84	Transient mixed convection in a channel with two facing discretely heated semicircular cavities: Buoyancy, inclination angle, and channel aspect ratio effects. Experimental Heat Transfer, 2019, 32, 337-363.	2.3	5
85	Transient conjugate condensation process on a vertical plate with finite thermal inertia. International Journal of Heat and Mass Transfer, 1996, 39, 2221-2230.	2.5	4
86	Influence of the aspect ratio of a drop in the spreading process over a horizontal surface. Physical Review E, 1998, 58, 4473-4477.	0.8	4
87	Analysis of a forced laminar film condensation including finite longitudinal heat conduction effects. Heat and Mass Transfer, 2003, 39, 489-498.	1.2	4
88	Natural convection in a vertical strip immersed in a porous medium. European Journal of Mechanics, B/Fluids, 2003, 22, 545-553.	1.2	4
89	Theoretical analysis for the heterogeneous decomposition of hydrogen sulfide to hydrogen on an iron-metallic plate in a laminar stagnation-point flow. Applied Surface Science, 2006, 253, 2327-2335.	3.1	4
90	Reduced kinetic mechanism for high-temperature propane ignition. International Journal of Chemical Kinetics, 2008, 40, 721-729.	1.0	4

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91	Effects of buoyancy and inclination for opposing mixed convection in a symmetrical heated duct with a plane symmetric sudden contractionâ€“expansion. Experimental Thermal and Fluid Science, 2016, 74, 324-338.	1.5	4
92	Experimental study of mixed convection heat transfer in a vertical channel with a one-sided semicylindrical constriction with prescribed heat flux. International Journal of Heat and Fluid Flow, 2017, 67, 155-167.	1.1	4
93	Unsteady Mixed Convection from Two Isothermal Semicircular Cylinders in Tandem Arrangement. , 0, , .		4
94	Transient analysis of carbon combustion in stagnation flow. Combustion and Flame, 1989, 75, 281-295.	2.8	3
95	Higher-order effects in boundary-layer premixed combustion. Journal of Propulsion and Power, 1990, 6, 237-242.	1.3	3
96	The effects of displacement induced by thermal perturbations on the structure and stability of boundary-layer flows. Theoretical and Computational Fluid Dynamics, 1996, 8, 57-72.	0.9	3
97	Asymptotic Analysis of the Transient Conjugate Heat Transfer Process Between Two Forced Counterflowing Streams. SIAM Journal on Applied Mathematics, 1997, 57, 577-596.	0.8	3
98	Asymptotic and numerical transient analysis of the free convection cooling of a vertical plate embedded in a porous medium. Heat and Mass Transfer, 2004, 40, 593.	1.2	3
99	Ignition and combustion of diluted hydrogen mixtures in a flow past an array of catalytic wires. Combustion Theory and Modelling, 2007, 11, 483-499.	1.0	3
100	Model of the low-temperature heat release and ignition of n-butanol. Combustion Theory and Modelling, 2018, 22, 1176-1193.	1.0	3
101	Low temperature first ignition of n-butane. Combustion Theory and Modelling, 2019, 23, 1150-1168.	1.0	3
102	Numerical investigation on buoyancy and inclination effects on transient mixed convection in a channel with discretely heated plane symmetric contraction-expansions. International Journal of Thermal Sciences, 2019, 146, 106056.	2.6	3
103	Transient phenomena in boundary layer ignition with finite plate thermal resistance. Proceedings of the Combustion Institute, 1981, 18, 1781-1789.	0.3	2
104	Effect of prandtl number on boundary layer ignition. Combustion and Flame, 1982, 46, 211-212.	2.8	2
105	Catalytic combustion in stagnation-point flow. Heat and Mass Transfer, 1985, 19, 159-166.	0.2	2
106	Role of ionizing radiation in chemical evolution studies. International Journal of Radiation Applications and Instrumentation Nuclear Tracks and Radiation Measurements, 1988, 31, 821-823.	0.0	2
107	Longitudinal heat conduction effects on a vertical thin plate in a steady laminar condensation process. International Journal of Heat and Fluid Flow, 1996, 17, 517-525.	1.1	2
108	Natural convective cooling of a horizontal heat conducting plate facing up in an otherwise adiabatic cavity. International Journal of Heat and Mass Transfer, 1998, 41, 1983-1991.	2.5	2

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109	On a universal description for the fracture patterns in rotating cohesive granular media. Europhysics Letters, 1999, 45, 269-273.	0.7	2
110	The conjugate heat transfer from an internal heated small strip in a forced laminar flow. Heat and Mass Transfer, 2001, 37, 485-491.	1.2	2
111	Natural Convective Conjugate Cooling Mechanism in Vertical Fins. Journal of Thermophysics and Heat Transfer, 2003, 17, 396-401.	0.9	2
112	The influence of the variable thermal conductivity of a vertical fin on a laminar-film condensation process. Heat and Mass Transfer, 2004, 40, 383-391.	1.2	2
113	Transient Natural Convective Conjugate Cooling Mechanism in Vertical Fins. Journal of Thermophysics and Heat Transfer, 2006, 20, 422-428.	0.9	2
114	Variable Thermal Conductivity and Perforation Effects on a Heat-Conducting Plate. Journal of Thermophysics and Heat Transfer, 2010, 24, 665-669.	0.9	2
115	Experimental investigation of unsteady laminar mixed convection from a horizontal heated cylinder in contra-flow: Buoyancy and confinement effects on the three-dimensional heat transfer response. European Journal of Mechanics, B/Fluids, 2019, 75, 165-179.	1.2	2
116	Three-dimensional deflecting oscillation of turbulent planar opposed jets confined in an open cavity under crossflow. Physics of Fluids, 2020, 32, 105101.	1.6	2
117	Experimental study of external lateral flow effects on turbulent isothermal upward/downward slot jets impinging inside an open cavity. International Journal of Mechanical Sciences, 2021, 198, 106343.	3.6	2
118	Aerodynamics of Premixed Flames in Flat Plate Boundary Layerst. Combustion Science and Technology, 1984, 38, 293-312.	1.2	1
119	Critical conditions for carbon combustion. Proceedings of the Combustion Institute, 1988, 21, 211-219.	0.3	1
120	Applications of radio and radiation chemistry to chemical evolution studies. Journal of Radioanalytical and Nuclear Chemistry, 1988, 124, 281-288.	0.7	1
121	Pressure gradients due to gas expansion in the boundary layer combustion of a condensed fuel. Heat and Mass Transfer, 1990, 25, 309-319.	0.2	1
122	Effect of longitudinal heat conduction on the catalytic ignition of carbon monoxide in a boundary layer. Combustion Theory and Modelling, 2000, 4, 173-187.	1.0	1
123	Oscillatory heat transfer process in a vertical strip immersed in a porous medium. Heat and Mass Transfer, 2004, 40, 937-942.	1.2	1
124	Modeling of the catalytic removal of CO and NO in dry combustion gases. AICHE Journal, 2010, 56, 801-809.	1.8	1
125	Super free fall of an inviscid liquid through interconnected vertical pipes. Europhysics Letters, 2015, 112, 14002.	0.7	1
126	Natural Convection and Entropy Generation in a Large Aspect Ratio Cavity with Walls of Finite Thickness. Environmental Science and Engineering, 2013, , 309-320.	0.1	1

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127	Symmetry Breaking Instability in a Mixed Convection Problem. Environmental Science and Engineering, 2014, , 3-15.	0.1	1
128	Catalytic ignition by external energy flux: Steady state analysis. Proceedings of the Combustion Institute, 1985, 20, 1853-1859.	0.3	0
129	Stability analysis of a simplified model of a fluidized bed combustor. Combustion and Flame, 1990, 80, 399-411.	2.8	0
130	Transient nitrogen injection in a cylindrical porous cap initially filled with natural gas. Journal of Petroleum Science and Engineering, 2004, 43, 1-12.	2.1	0
131	Heat Transfer with a Step in Surface Temperature. Journal of Thermophysics and Heat Transfer, 2008, 22, 118-121.	0.9	0
132	Auto-ignition of methaneâ€“air mixtures flowing along an array of thin catalytic plates. Combustion Theory and Modelling, 2010, 15, 47-59.	1.0	0
133	Conjugate Heating Inside a Large Aspect Ratio Cavity with Finite Conductive Walls. Journal of Thermophysics and Heat Transfer, 2013, 27, 679-691.	0.9	0
134	Buoyancy Effect on the Wake of a Confined Circular Cylinder during Opposing Laminar Mixed Convection Heat Transfer. Applied Mechanics and Materials, 2013, 390, 675-679.	0.2	0
135	Mathematical model of tidal water transport by a partial blockage of a coastal lagoon. Applied Mathematical Modelling, 2018, 60, 592-605.	2.2	0
136	Laminar film condensation on a thin finite thickness plate. Journal of Thermophysics and Heat Transfer, 1997, 11, 119-121.	0.9	0