

Paul-Francois Paradis

List of Publications by Year in descending order

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72
papers

1,879
citations

257450

24
h-index

276875

41
g-index

72
all docs

72
docs citations

72
times ranked

908
citing authors

#	ARTICLE	IF	CITATIONS
1	Noncontact technique for measuring surface tension and viscosity of molten materials using high temperature electrostatic levitation. <i>Review of Scientific Instruments</i> , 1999, 70, 2796-2801.	1.3	194
2	New sample levitation initiation and imaging techniques for the processing of refractory metals with an electrostatic levitator furnace. <i>Review of Scientific Instruments</i> , 2001, 72, 2490-2495.	1.3	121
3	Materials properties measurements and particle beam interactions studies using electrostatic levitation. <i>Materials Science and Engineering Reports</i> , 2014, 76, 1-53.	31.8	101
4	Thermophysical properties of zirconium at high temperature. <i>Journal of Materials Research</i> , 1999, 14, 3713-3719.	2.6	90
5	Non-contact thermophysical property measurements of refractory metals using an electrostatic levitator. <i>Measurement Science and Technology</i> , 2005, 16, 443-451.	2.6	81
6	Non-contact measurements of thermophysical properties of titanium at high temperature. <i>Journal of Chemical Thermodynamics</i> , 2000, 32, 123-133.	2.0	74
7	Surface Tension and Viscosity Measurements of Liquid and Undercooled Alumina by Containerless Techniques. <i>Japanese Journal of Applied Physics</i> , 2005, 44, 5082-5085.	1.5	64
8	Hybrid electrostatic-aerodynamic levitation furnace for the high-temperature processing of oxide materials on the ground. <i>Review of Scientific Instruments</i> , 2001, 72, 2811-2815.	1.3	61
9	Thermophysical properties of liquid refractory metals: Comparison between hard sphere model calculation and electrostatic levitation measurements. <i>Journal of Chemical Physics</i> , 2003, 118, 7912-7920.	3.0	59
10	Non-Contact Thermophysical Property Measurements of Liquid and Undercooled Alumina. <i>Japanese Journal of Applied Physics</i> , 2004, 43, 1496-1500.	1.5	58
11	Giant Dielectric Constant of Hexagonal BaTiO ₃ Crystal Grown by Containerless Processing. <i>Chemistry of Materials</i> , 2004, 16, 3973-3975.	6.7	57
12	Thermophysical properties of molten refractory metals measured by an electrostatic levitator. <i>Journal of Electronic Materials</i> , 2005, 34, 1526-1532.	2.2	47
13	Maxwell-Wagner effect in hexagonal BaTiO ₃ single crystals grown by containerless processing. <i>Applied Physics Letters</i> , 2004, 85, 2899-2901.	3.3	44
14	Laser-induced rotation of a levitated sample in vacuum. <i>Review of Scientific Instruments</i> , 1999, 70, 4652-4655.	1.3	43
15	Viscosity of molten Mo, Ta, Os, Re, and W measured by electrostatic levitation. <i>Journal of Chemical Thermodynamics</i> , 2013, 65, 1-6.	2.0	42
16	Physical properties of liquid and undercooled tungsten by levitation techniques. <i>Applied Physics Letters</i> , 2005, 86, 041901.	3.3	38
17	Viscosity measurements of molten refractory metals using an electrostatic levitator. <i>Measurement Science and Technology</i> , 2012, 23, 025305.	2.6	36
18	Noncontact density measurements of tantalum and rhenium in the liquid and undercooled states. <i>Applied Physics Letters</i> , 2003, 83, 4047-4049.	3.3	35

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19	Surface tension and viscosity of liquid and undercooled tantalum measured by a containerless method. <i>Journal of Applied Physics</i> , 2005, 97, 053506.	2.5	34
20	Viscosity of liquid undercooled tungsten. <i>Journal of Applied Physics</i> , 2005, 97, 106101.	2.5	31
21	Thermophysical properties of vanadium at high temperature measured with an electrostatic levitation furnace. <i>Journal of Chemical Thermodynamics</i> , 2002, 34, 1929-1942.	2.0	30
22	Noncontact surface tension and viscosity measurements of rhenium in the liquid and undercooled states. <i>Applied Physics Letters</i> , 2004, 85, 5866-5868.	3.3	28
23	Nanosized Nucleus-Supercooled Liquid Interfacial Free Energy and Thermophysical Properties of Early and Late Transition Liquid Metals. <i>Crystal Growth and Design</i> , 2014, 14, 1103-1109.	3.0	27
24	Surface tension and viscosity of molten vanadium measured with an electrostatic levitation furnace. <i>Journal of Chemical Thermodynamics</i> , 2010, 42, 856-859.	2.0	25
25	Thermophysical properties of molten tungsten measured with an electrostatic levitator. <i>Heat Transfer - Asian Research</i> , 2006, 35, 152-164.	2.8	24
26	Non-contact Thermophysical Property Measurements of Liquid and Supercooled Platinum. <i>Japanese Journal of Applied Physics</i> , 2006, 45, 1719-1724.	1.5	24
27	Spectral emissivity measurements of liquid refractory metals by spectrometers combined with an electrostatic levitator. <i>Measurement Science and Technology</i> , 2012, 23, 125602.	2.6	21
28	Development of an electrostatic levitator for neutron diffraction structure analysis. <i>Review of Scientific Instruments</i> , 2003, 74, 1147-1149.	1.3	20
29	Effects of the positioning force of electrostatic levitators on viscosity measurements. <i>Review of Scientific Instruments</i> , 2009, 80, 013906.	1.3	20
30	Novel Synthesis of Calcium Oxide-Aluminum Oxide Glasses. <i>Japanese Journal of Applied Physics</i> , 2002, 41, 3029-3030.	1.5	18
31	Thermophysical Property Measurements of Molten Nickel Using an Electrostatic Levitation Furnace. <i>Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals</i> , 2004, 68, 781-786.	0.4	18
32	Experiments in materials science on the ground and in reduced gravity using electrostatic levitators. <i>Advances in Space Research</i> , 2008, 41, 2118-2125.	2.6	17
33	Contactless Density Measurement of Liquid Nd-Doped 50%CaO-50%Al ₂ O ₃ . <i>Journal of the American Ceramic Society</i> , 2003, 86, 2234-2236.	3.8	16
34	Non-contact property measurements of liquid and supercooled ceramics with a hybrid electrostatic-aerodynamic levitation furnace. <i>Measurement Science and Technology</i> , 2005, 16, 452-456.	2.6	16
35	Noncontact surface tension and viscosity measurements of molten oxides with a pressurized hybrid electrostatic-aerodynamic levitator. <i>Review of Scientific Instruments</i> , 2006, 77, 053901.	1.3	16
36	Noncontact density measurements of liquid, undercooled, and high temperature solid boron. <i>Applied Physics Letters</i> , 2005, 86, 151901.	3.3	15

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37	Spectral emissivity and constant pressure heat capacity of liquid titanium measured by an electrostatic levitator. <i>Journal of Chemical Thermodynamics</i> , 2019, 131, 557-562.	2.0	15
38	Compact electrostatic levitator for diffraction measurements with a two axis diffractometer and a laboratory x-ray source. <i>Review of Scientific Instruments</i> , 2007, 78, 026102.	1.3	14
39	Electrostatic levitation furnace for structural studies of high temperature liquid metals by neutron scattering experiments. <i>Journal of Non-Crystalline Solids</i> , 2002, 312-314, 309-313.	3.1	12
40	An aerodynamic levitation system for drop tube and quenching experiments. <i>Review of Scientific Instruments</i> , 2003, 74, 1057-1063.	1.3	11
41	Microstructure and Dielectric Constant of BaTiO ₃ Synthesized by Roller Quenching. <i>Japanese Journal of Applied Physics</i> , 2004, 43, 8135-8138.	1.5	11
42	Thermophysical Property Measurements of High Temperature Melts Using an Electrostatic Levitation Method. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 11RD03.	1.5	11
43	Observation of rapid solidification of deeply undercooled Si melts using electrostatic levitation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 375-377, 460-463.	5.6	10
44	Physical Properties of Liquid Terbium Measured by Levitation Techniques. <i>Journal of Rare Earths</i> , 2007, 25, 665-669.	4.8	10
45	Spectral emissivity and constant pressure heat capacity of molten nickel and rhodium measured by spectrometers combined with an electrostatic levitator. <i>Journal of Chemical Thermodynamics</i> , 2016, 103, 107-114.	2.0	10
46	Challenges of Handling, Processing, and Studying Liquid and Supercooled Materials at Temperatures above 3000 K with Electrostatic Levitation. <i>Crystals</i> , 2017, 7, 309.	2.2	10
47	Densities of liquid Re, Os, and Ir, and their temperature dependence measured by an electrostatic levitator. <i>International Journal of Refractory Metals and Hard Materials</i> , 2020, 92, 105305.	3.8	9
48	Density Measurements of Mould Flux Slags by Electrostatic Levitation Method. <i>ISIJ International</i> , 2006, 46, 606-610.	1.4	9
49	Synthesis of barium titanate by electrostatic levitation. <i>Journal of Crystal Growth</i> , 2005, 273, 515-519.	1.5	8
50	Viscosity of liquid boron. <i>Physical Review B</i> , 2010, 81, .	3.2	8
51	Measurement of spectral emissivity and constant pressure heat capacity of liquid platinum with an electrostatic levitator. <i>Journal of Chemical Thermodynamics</i> , 2017, 112, 7-12.	2.0	8
52	Thermophysical Properties of Molten Yttrium Measured by Non-contact Techniques. <i>Microgravity Science and Technology</i> , 2009, 21, 113-118.	1.4	7
53	Hybrid Processing Combining Electrostatic Levitation and Laser Heating: Application to Terrestrial Analogues of Asteroid Materials. <i>Advances in Optical Technologies</i> , 2011, 2011, 1-8.	0.8	7
54	Containerless Solidification of Undercooled Nd ₂ Fe ₁₄ B by Electrostatic Levitation Furnace. <i>Japanese Journal of Applied Physics</i> , 2002, 41, 2908-2911.	1.5	6

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55	Density measurement of glass and liquid CaAl_2O_4 using a pressurized electrostatic levitator. Measurement Science and Technology, 2014, 25, 085301.	2.6	6
56	Thermophysical Properties of Molten Tungsten Measured with an Electrostatic Levitator. Netsu Bussei, 2005, 19, 61-66.	0.1	6
57	Thermophysical Property Measurements of High Temperature Melts Using an Electrostatic Levitation Method. Japanese Journal of Applied Physics, 2011, 50, 11RD03.	1.5	6
58	Aerodynamic Trapping and Laser Heating for Containerless Glass Processing in Microgravity. Journal of Thermophysics and Heat Transfer, 1997, 11, 112-118.	1.6	5
59	Solidification and thermophysical property studies of barium titanate using electrostatic levitation furnace. Journal of Crystal Growth, 2006, 292, 480-484.	1.5	5
60	Spectral emissivity, hemispherical total emissivity, and constant pressure heat capacity of liquid vanadium measured by an electrostatic levitator. Journal of Chemical Thermodynamics, 2021, 163, 106598.	2.0	5
61	Specifications of a ground-based electrostatic levitation furnace and applications to the study of liquid properties. Journal of Non-Crystalline Solids, 2002, 312-314, 314-318.	3.1	4
62	Noncontact Thermophysical Property Measurements of Refractory Metals Using an Electrostatic Levitator. Advances in Materials Research, 2009, , 173-195.	0.2	4
63	Densities of Liquid Tm_2O_3 , Yb_2O_3 , and Lu_2O_3 Measured by an Electrostatic Levitation Furnace Onboard the International Space Station. Metals, 2022, 12, 1126.	2.3	4
64	Huge Dielectric Constant of Transparent Hexagonal BaTiO_3 Obtained by Containerless Processing. Ferroelectrics, 2004, 301, 199-201.	0.6	3
65	Electrostatic Levitation on the ISS. Minerals, Metals and Materials Series, 2022, , 65-92.	0.4	3
66	Property Measurements and Solidification Studies by Electrostatic Levitation. Annals of the New York Academy of Sciences, 2004, 1027, 464-473.	3.8	2
67	Towards Microgravity Experiments Using the Electrostatic Levitation Furnace (ELF) in the International Space Station (ISS). Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2014, 12, Th_15-Th_18.	0.2	2
68	Phase relation between supercooled liquid and amorphous silicon. Applied Physics Letters, 2020, 116, 093705.	3.3	2
69	Surface tension measurement using sample rotation combined with electrostatic levitation. Japanese Journal of Applied Physics, 2014, 53, 126601.	1.5	1
70	Dielectric Constant of Barium Titanate Synthesized by Containerless Processing. Materials Research Society Symposia Proceedings, 2004, 848, 1.	0.1	0
71	Giant Dielectric Constant of Hexagonal BaTiO_3 Crystal Grown by Containerless Processing.. ChemInform, 2004, 35, no.	0.0	0
72	Study of Non-linear Behavior of Liquid Drop Oscillation. , 2005, , .		0