Edouard Kaminski

List of Publications by Year
in descending order

65 papers	3,038 citations	172457 29 h-index	161849 54 g-index
65 all docs	65 docs citations	65 times ranked	2661 citing authors

#	Article	IF	Citations
1	The chemical composition of the Earth: Enstatite chondrite models. Earth and Planetary Science Letters, 2010, 293, 259-268.	4.4	363
2	Turbulent entrainment in jets with arbitrary buoyancy. Journal of Fluid Mechanics, 2005, 526, 361-376.	3.4	239
3	The Geochemical Regimes of Piton de la Fournaise Volcano (Reunion) During the Last 530 000 Years. Journal of Petrology, 1997, 38, 171-201.	2.8	199
4	The route to self-similarity in turbulent jets and plumes. Journal of Fluid Mechanics, 2006, 547, 137.	3.4	157
5	A kinematic model for recrystallization and texture development in olivine polycrystals. Earth and Planetary Science Letters, 2001, 189, 253-267.	4.4	153
6	The size distribution of pyroclasts and the fragmentation sequence in explosive volcanic eruptions. Journal of Geophysical Research, 1998, 103, 29759-29779.	3.3	143
7	Timescales for the evolution of seismic anisotropy in mantle flow. Geochemistry, Geophysics, Geosystems, 2002, 3, 1-17.	2.5	134
8	Results of the eruptive column model inter-comparison study. Journal of Volcanology and Geothermal Research, 2016, 326, 2-25.	2.1	114
9	D-Rex, a program for calculation of seismic anisotropy due to crystal lattice preferred orientation in the convective upper mantle. Geophysical Journal International, 2004, 158, 744-752.	2.4	112
10	On the rise of turbulent plumes: Quantitative effects of variable entrainment for submarine hydrothermal vents, terrestrial and extra terrestrial explosive volcanism. Journal of Geophysical Research, 2008, 113, .	3.3	82
11	Laminar starting plumes in high-Prandtl-number fluids. Journal of Fluid Mechanics, 2003, 478, 287-298.	3.4	76
12	A deep mantle origin for the primitive signature of ocean island basalt. Nature Geoscience, 2011, 4, 879-882.	12.9	75
13	On the dynamics of volcanic columns: A comparison of field data with a new model of negatively buoyant jets. Journal of Volcanology and Geothermal Research, 2008, 178, 94-103.	2.1	69
14	Lithosphere structure beneath the Phanerozoic intracratonic basins of North America. Earth and Planetary Science Letters, 2000, 178, 139-149.	4.4	63
15	Expansion and quenching of vesicular magma fragments in Plinian eruptions. Journal of Geophysical Research, 1997, 102, 12187-12203.	3.3	56
16	Seismic characterization of mantle flow in subduction systems: Can we resolve a hydrated mantle wedge?. Earth and Planetary Science Letters, 2006, 243, 632-649.	4.4	54
17	PSInSAR as a new tool to monitor preâ€eruptive volcano ground deformation: Validation using GPS measurements on Piton de la Fournaise. Geophysical Research Letters, 2010, 37, .	4.0	54
18	Modeling olivine <scp>CPO</scp> evolution with complex deformation histories: Implications for the interpretation of seismic anisotropy in the mantle. Geochemistry, Geophysics, Geosystems, 2015, 16, 3436-3455.	2.5	52

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19	The rise and fall of turbulent fountains: a new model for improved quantitative predictions. Journal of Fluid Mechanics, 2010, 657, 265-284.	3.4	43
20	The effect of total grain-size distribution on the dynamics of turbulent volcanic plumes. Earth and Planetary Science Letters, 2014, 394, 124-134.	4.4	41
21	An experimental study of the surface thermal signature of hot subaerial isoviscous gravity currents: Implications for thermal monitoring of lava flows and domes. Journal of Geophysical Research, 2012, 117, .	3.3	40
22	The influence of water on the development of lattice preferred orientation in olivine aggregates. Geophysical Research Letters, 2002, 29, 17-1.	4.0	38
23	Porous compaction in transient creep regime and implications for melt, petroleum, and CO₂ circulation. Journal of Geophysical Research, 2008, 113, .	3.3	37
24	Estimation of ash injection in the atmosphere by basaltic volcanic plumes: The case of the EyjafjallajÃ¶kull 2010 eruption. Journal of Geophysical Research, 2011, 116, .	3.3	37
25	Rise of volcanic plumes to the stratosphere aided by penetrative convection above large lava flows. Earth and Planetary Science Letters, 2011, 301, 171-178.	4.4	36
26	Marginal stability of atmospheric eruption columns and pyroclastic flow generation. Journal of Geophysical Research, 2001, 106, 21785-21798.	3.3	34
27	A two-stage scenario for the formation of the Earth's mantle and core. Earth and Planetary Science Letters, 2013, 365, 97-107.	4.4	34
28	The Geochemical Regimes of Piton de la Fournaise Volcano (Reunion) During the Last 530 000 Years. Journal of Petrology, 1997, 38, 171-201.	2.8	34
29	Laboratory experiments of forced plumes in a densityâ€stratified crossflow and implications for volcanic plumes. Geophysical Research Letters, 2014, 41, 8759-8766.	4.0	33
30	Lowâ€Frequency Earthquakes and Pore Pressure Transients in Subduction Zones. Geophysical Research Letters, 2018, 45, 11,083.	4.0	29
31	Entrainment in plane turbulent pure plumes. Journal of Fluid Mechanics, 2014, 755, .	3.4	27
32	The recent Plinian explosive activity of Mt. PelÃ©e volcano (Lesser Antilles): The P1 AD 1300 eruption. Bulletin of Volcanology, 2012, 74, 2187-2203.	3.0	26
33	Marginally stable recent Plinian eruptions of Mt. PelÃ©e volcano (Lesser Antilles): the P2 AD 280 eruption. Bulletin of Volcanology, 2019, 81, 1.	3.0	23
34	Age-independent seismic anisotropy under oceanic plates explained by strain history in the asthenosphere. Earth and Planetary Science Letters, 2017, 460, 135-142.	4.4	20
35	Microwave-heating laboratory experiments for planetary mantle convection. Journal of Fluid Mechanics, 2015, 777, 50-67.	3.4	19
36	Earth's Uranium and Thorium content and geoneutrinos fluxes based on enstatite chondrites. Earth and Planetary Science Letters, 2014, 407, 1-8.	4.4	18

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37	An analogue study of the influence of solidification on the advance and surface thermal signature of lava flows. Earth and Planetary Science Letters, 2014, 396, 46-55.	4.4	16
38	Fully determined scaling laws for volumetrically heated convective systems, a tool for assessing habitability of exoplanets. Physics of the Earth and Planetary Interiors, 2017, 266, 18-28.	1.9	16
39	Early accretion of planetesimals unraveled by the thermal evolution of the parent bodies of magmatic iron meteorites. Earth and Planetary Science Letters, 2020, 548, 116469.	4.4	16
40	Combined effects of total grain-size distribution and crosswind on the rise of eruptive volcanic columns. Journal of Volcanology and Geothermal Research, 2016, 326, 103-113.	2.1	15
41	Interpretation of seismic anisotropy in terms of mantle flow when melt is present. Geophysical Research Letters, 2006, 33, .	4.0	14
42	Second-order model of entrainment in planar turbulent jets at low Reynolds number. Physics of Fluids, 2014, 26, 045110.	4.0	14
43	The timing and intensity of column collapse during explosive volcanic eruptions. Earth and Planetary Science Letters, 2015, 411, 208-217.	4.4	14
44	Fundamentals of laminar free convection in internally heated fluids at values of the Rayleighâ€“Roberts number up to. Journal of Fluid Mechanics, 2018, 846, 966-998.	3.4	14
45	A revisit of the role of gas entrapment on the stability conditions of explosive volcanic columns. Journal of Volcanology and Geothermal Research, 2018, 357, 349-361.	2.1	13
46	Impact of wind direction variability on hazard assessment in Martinique (Lesser Antilles): The example of the 13.5â€¯kaâ€¯calâ€¯BP Bellefontaine Plinian eruption of Mount PelÃ©e volcano. Journal of Volcanology and Geothermal Research, 2019, 381, 193-208.	2.1	13
47	Convection in an internally heated stratified heterogeneous reservoir. Journal of Fluid Mechanics, 2019, 870, 67-105.	3.4	13
48	Anisotropic rheology of a cubic medium and implications for geological materials. Geophysical Journal International, 2007, 170, 876-885.	2.4	11
49	Evidence of reactivation of a hydrothermal system from seismic anisotropy changes. Nature Communications, 2019, 10, 5278.	12.8	11
50	Transition from stable column to partial collapse during the 79ÂcalÂCE P3 Plinian eruption of Mt. PelÃ©e volcano (Lesser Antilles). Journal of Volcanology and Geothermal Research, 2020, 392, 106764.	2.1	11
51	Wind Entrainment in Jets with Reversing Buoyancy: Implications for Volcanic Plumes. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB020136.	3.4	11
52	Microwave-based laboratory experiments for internally-heated mantle convection. AIP Conference Proceedings, 2013, , .	0.4	10
53	A fluid dynamics perspective on the interpretation of the surface thermal signal of lava flows. Geological Society Special Publication, 2016, 426, 243-256.	1.3	8
54	Structure of differentiated planetesimals: A chondritic fridge on top of a magma ocean. Icarus, 2022, 385, 115100.	2.5	8

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55	The influence of wind on the estimation of lava effusion rate from thermal remote-sensing. Journal of Volcanology and Geothermal Research, 2013, 264, 223-230.	2.1	7
56	Defining a proxy for the interpretation of seismic anisotropy in nonâ€Newtonian mantle flows. Geophysical Research Letters, 2014, 41, 7065-7072.	4.0	7
57	The Earthâ€™s mantle in a microwave oven: thermal convection driven by a heterogeneous distribution of heat sources. Experiments in Fluids, 2017, 58, 1.	2.4	7
58	Transient convection experiments in internally-heated systems. MethodsX, 2021, 8, 101224.	1.6	7
59	The fate of particles in a volumetrically heated convective fluid at high Prandtl number. Journal of Fluid Mechanics, 2021, 929, .	3.4	6
60	Volcanic hazard assessment for tephra fallout in Martinique. Journal of Applied Volcanology, 2021, 10, .	2.0	5
61	The Composition of the Deep Earth. , 2015, , 303-328.		3
62	How to Detect Water in the Mantle Wedge of a Subduction Zone Using Seismic Anisotropy. Geophysical Research Letters, 2018, 45, 13,298.	4.0	3
63	Microwave-based, internally-heated convection: New perspectives for the heterogeneous case. AIP Conference Proceedings, 2015, , .	0.4	1
64	Eruptive cycles inferred from ground deformation at Piton de La Fournaise - a case study for the Globvolcano project. , 2008, , .		0
65	Les Ã©ruptions volcaniques Â« explosives Â» : des grandes aux petites Ã©chelles. Bulletin De La SociÃ©tÃ© FranÃ§aise De Physique, 2005, , 5-10.	0.0	0