Ian E M Smith

List of Publications by Year in descending order

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41344 82547 6,630 126 49 72 citations h-index g-index papers 126 126 126 3248 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	238Uî—,230Th disequilibria, magma petrogenesis, and flux rates beneath the depleted Tonga-Kermadec island arc. Geochimica Et Cosmochimica Acta, 1997, 61, 4855-4884.	3.9	355
2	Geology of Eastern Papua. Bulletin of the Geological Society of America, 1971, 82, 3299.	3.3	209
3	Shallow-seated controls on styles of explosive basaltic volcanism: a case study from New Zealand. Journal of Volcanology and Geothermal Research, 1999, 91, 97-120.	2.1	164
4	An integrated model for the temporal evolution of andesites and rhyolites and crustal development in New Zealand's North Island. Journal of Volcanology and Geothermal Research, 2005, 140, 1-24.	2.1	157
5	Petrology and petrogenesis of volcanic rocks from the Taupo Volcanic Zone: a review. Journal of Volcanology and Geothermal Research, 1995, 68, 59-87.	2.1	156
6	The geochemistry and petrogenesis of basalts from the Taupo Volcanic Zone and Kermadec Island Arc, S.W. Pacific. Journal of Volcanology and Geothermal Research, 1993, 54, 265-290.	2.1	143
7	Basalt and Sediment Geochemistry and Magma Petrogenesis in a Transect from Oceanic Island Arc to Rifted Continental Margin Arc: the Kermadec—Hikurangi Margin, SW Pacific. Journal of Petrology, 1996, 37, 1523-1546.	2.8	139
8	Delayed partial melting of subduction-modified mantle in papua new guinea. Tectonophysics, 1978, 46, 197-216.	2.2	119
9	A fifty year perspective of magmatic evolution on Ruapehu Volcano, New Zealand: verification of open system behaviour in an arc volcano. Earth and Planetary Science Letters, 1999, 170, 301-314.	4.4	113
10	Mechanisms driving polymagmatic activity at a monogenetic volcano, Udo, Jeju Island, South Korea. Contributions To Mineralogy and Petrology, 2010, 160, 931-950.	3.1	113
11	A model for calculating eruptive volumes for monogenetic volcanoes — Implication for the Quaternary Auckland Volcanic Field, New Zealand. Journal of Volcanology and Geothermal Research, 2013, 266, 16-33.	2.1	109
12	The Anatomy of an Andesite Volcano: a Time–Stratigraphic Study of Andesite Petrogenesis and Crustal Evolution at Ruapehu Volcano, New Zealand. Journal of Petrology, 2012, 53, 2139-2189.	2.8	103
13	40Ar/39Ar geochronology of magmatic activity, magma flux and hazards at Ruapehu volcano, Taupo Volcanic Zone, New Zealand. Journal of Volcanology and Geothermal Research, 2003, 120, 271-287.	2.1	102
14	Asthenospheric Control of Melting Processes in a Monogenetic Basaltic System: a Case Study of the Auckland Volcanic Field, New Zealand. Journal of Petrology, 2013, 54, 2125-2153.	2.8	97
15	A detailed tephrostratigraphic framework at Merapi Volcano, Central Java, Indonesia: implications for eruption predictions and hazard assessment. Journal of Volcanology and Geothermal Research, 2000, 100, 51-67.	2.1	96
16	Sequential eruption of alkaline and sub-alkaline magmas from a small monogenetic volcano in the Auckland Volcanic Field, New Zealand. Journal of Volcanology and Geothermal Research, 2011, 201, 126-142.	2.1	92
17	Deep-seated fractionation during the rise of a small-volume basalt magma batch: Crater Hill, Auckland, New Zealand. Contributions To Mineralogy and Petrology, 2008, 155, 511-527.	3.1	87
18	Randomized Interventional Study on Prediction of Preeclampsia/Eclampsia in Women With Suspected Preeclampsia. Hypertension, 2019, 74, 983-990.	2.7	84

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19	The petrology of a large intra-oceanic silicic eruption: the Sandy Bay Tephra, Kermadec Arc, Southwest Pacific. Journal of Volcanology and Geothermal Research, 2003, 124, 173-194.	2.1	80
20	The petrology, phase relations and tectonic setting of basalts from the taupo volcanic zone, New Zealand and the Kermadec Island arc - havre trough, SW Pacific. Journal of Volcanology and Geothermal Research, 1990, 43, 253-270.	2.1	79
21	Peralkaline rhyolites associated with andesitic arcs of the southwest Pacific. Earth and Planetary Science Letters, 1977, 37, 230-236.	4.4	78
22	How Small-volume Basaltic Magmatic Systems Develop: a Case Study from the Jeju Island Volcanic Field, Korea. Journal of Petrology, 2012, 53, 985-1018.	2.8	78
23	Transition from effusive to explosive phases in andesite eruptions — A case-study from the AD1655 eruption of Mt. Taranaki, New Zealand. Journal of Volcanology and Geothermal Research, 2007, 161, 15-34.	2.1	77
24	Kâ€Ar ages of early Miocene arcâ€type volcanoes in northern New Zealand. New Zealand Journal of Geology, and Geophysics, 2001, 44, 285-311.	1.8	76
25	The Tonga–Kermadec arc and Havre–Lau back-arc system: Their role in the development of tectonic and magmatic models for the western Pacific. Journal of Volcanology and Geothermal Research, 2006, 156, 315-331.	2.1	72
26	New SW Pacific tectonic model: Cyclical intraoceanic magmatic arc construction and nearâ€coeval emplacement along the Australiaâ€Pacific margin in the Cenozoic. Geochemistry, Geophysics, Geosystems, 2008, 9, .	2.5	70
27	Spatio-temporal evolution of a dispersed magmatic system and its implications for volcano growth, Jeju Island Volcanic Field, Korea. Lithos, 2012, 148, 337-352.	1.4	70
28	Southeastern Papua: Generation of thick crust in a tensional environment?. Geology, 1975, 3, 117.	4.4	67
29	Northland ophiolite, New Zealand, and implications for plate-tectonic evolution of the southwest Pacific. Geology, 1992, 20, 149.	4.4	67
30	The inception and progression of melting in a monogenetic eruption: Motukorea Volcano, the Auckland Volcanic Field, New Zealand. Lithos, 2012, 155, 360-374.	1.4	67
31	Volcanic rock associations at convergent plate boundaries: Reappraisal of the concept using case histories from Papua New Guinea. Bulletin of the Geological Society of America, 1978, 89, 96.	3.3	66
32	Petrology and dynamics of the Waimihia mixed magma eruption, Taupo Volcano, New Zealand. Journal of the Geological Society, 1992, 149, 193-207.	2.1	66
33	Evolution of high-K arc magma, Egmont volcano, Taranaki, New Zealand: evidence from mineral chemistry. Journal of Volcanology and Geothermal Research, 1996, 74, 275-295.	2.1	66
34	Amplified hazard of small-volume monogenetic eruptions due to environmental controls, Orakei Basin, Auckland Volcanic Field, New Zealand. Bulletin of Volcanology, 2012, 74, 2121-2137.	3.0	66
35	Petrology and Geochemistry of Intraplate Basalts in the South Auckland Volcanic Field, New Zealand: Evidence for Two Coeval Magma Suites from Distinct Sources. Journal of Petrology, 2004, 46, 473-503.	2.8	64
36	Unravelling a complex volcanic history from fine-grained, intricate Holocene ashÂsequences at the Tongariro Volcanic Centre, New Zealand. Quaternary International, 2011, 246, 352-363.	1.5	63

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37	Origin of oceanic phonolites by crystal fractionation and the problem of the Daly gap: an example from Rarotonga. Contributions To Mineralogy and Petrology, 2001, 142, 336-346.	3.1	62
38	Using titanomagnetite textures to elucidate volcanic eruption histories. Geology, 2008, 36, 31.	4.4	61
39	Age relationships and tectonic implications of late Cenozoic basaltic volcanism in Northland, New Zealand. New Zealand Journal of Geology, and Geophysics, 1993, 36, 385-393.	1.8	59
40	Late Holocene lava flow morphotypes of northern Harrat Rahat, Kingdom of Saudi Arabia: Implications for the description of continental lava fields. Journal of Asian Earth Sciences, 2014, 84, 131-145.	2.3	58
41	Pb-Nd-Sr isotopic compositions and trace element characteristics of young volcanic rocks from Egmont Volcano and comparisons with basalts and andesites from the Taupo Volcanic Zone, New Zealand. Geochimica Et Cosmochimica Acta, 1992, 56, 941-953.	3.9	57
42	Petrogenesis of dacite in an oceanic subduction environment: Raoul Island, Kermadec arc. Journal of Volcanology and Geothermal Research, 2006, 156, 252-265.	2.1	56
43	Mixed deposits of complex magmatic and phreatomagmatic volcanism: an example from Crater Hill, Auckland, New Zealand. Bulletin of Volcanology, 1996, 58, 59-66.	3.0	55
44	The Petrology of the Rotoiti Eruption Sequence, Taupo Volcanic Zone: an Example of Fractionation and Mixing in a Rhyolitic System. Journal of Petrology, 2004, 45, 2045-2066.	2.8	55
45	Chemical discontinuities in Archean metavolcanic terrains and the development of Archean crust. Precambrian Research, 1980, 10, 301-311.	2.7	54
46	Kâ€Ar ages, paleomagnetism, and geochemistry of the South Auckland volcanic field, North Island, New Zealand. New Zealand Journal of Geology, and Geophysics, 1994, 37, 143-153.	1.8	54
47	Melt generation models for the Auckland volcanic field, New Zealand: constraints from UTh isotopes. Earth and Planetary Science Letters, 1997, 149, 67-84.	4.4	53
48	High potassium calc-alkaline rocks from Cape Nelson, eastern Papua. Contributions To Mineralogy and Petrology, 1970, 28, 259-271.	3.1	52
49	Geochemistry of late Cenozoic basaltic volcanism in Northland and Coromandel, New Zealand: implications for mantle enrichment processes. Chemical Geology, 2000, 164, 219-238.	3.3	52
50	Intraplate volcanism influenced by distal subduction tectonics at Jeju Island, Republic of Korea. Bulletin of Volcanology, 2015, 77, 1.	3.0	52
51	Dynamics of melting beneath a small-scale basaltic system: a U-Th–Ra study from Rangitoto volcano, Auckland volcanic field, New Zealand. Contributions To Mineralogy and Petrology, 2011, 162, 547-563.	3.1	51
52	Magma Evolution in the Primitive, Intra-oceanic Tonga Arc: Rapid Petrogenesis of Dacites at Fonualei Volcano. Journal of Petrology, 2012, 53, 1231-1253.	2.8	51
53	The Origin and Significance of Garnet Phenocrysts and Garnet-Bearing Xenoliths in Miocene Calc-alkaline Volcanics from Northland, New Zealand. Journal of Petrology, 1992, 33, 125-161.	2.8	48
54	Characterization and quantification of suspended sediment sources to the Manawatu River, New Zealand. Science of the Total Environment, 2016, 543, 171-186.	8.0	48

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55	Volcanic evolution in eastern Papua. Tectonophysics, 1982, 87, 315-333.	2.2	47
56	Structure and petrology of newly discovered volcanic centers in the northern Kermadec–southern Tofua arc, South Pacific Ocean. Journal of Geophysical Research, 2008, 113, .	3.3	47
57	Phreatomagmatic eruptions through unconsolidated coastal plain sequences, Maungataketake, Auckland Volcanic Field (New Zealand). Journal of Volcanology and Geothermal Research, 2014, 276, 46-63.	2.1	47
58	Whole-rock geochemical reference data for Torlesse and Waipapa terranes, North Island, New Zealand. New Zealand Journal of Geology, and Geophysics, 2015, 58, 213-228.	1.8	47
59	A geomagnetic excursion in the Brunhes epoch recorded in New Zealand basalts. Earth and Planetary Science Letters, 1992, 111, 41-48.	4.4	46
60	Geochemistry and heat transfer processes in Quaternary rhyolitic systems of The Taupo Volcanic Zone, New Zealand. Tectonophysics, 1993, 223, 213-235.	2.2	45
61	Correspondence between glass-FT and 14C ages of silicic pyroclastic flow deposits sourced from Maninjau caldera, west-central Sumatra. Earth and Planetary Science Letters, 2004, 227, 121-133.	4.4	45
62	Link between SSZ ophiolite formation, emplacement and arc inception, Northland, New Zealand: U–Pb SHRIMP constraints; Cenozoic SW Pacific tectonic implications. Earth and Planetary Science Letters, 2006, 250, 606-632.	4.4	45
63	Geophysical evidence for temporal and structural relationships within the monogenetic basalt volcanoes of the Auckland volcanic field, northern New Zealand. Journal of Volcanology and Geothermal Research, 1993, 57, 71-83.	2.1	42
64	Integrating records of explosive and effusive activity from proximal and distal sequences: Mt. Taranaki, New Zealand. Quaternary International, 2011, 246, 364-373.	1.5	41
65	Final Magma Storage Depth Modulation of Explosivity and Trachyte–Phonolite Genesis at an Intraplate Volcano: a Case Study from Ulleung Island, South Korea. Journal of Petrology, 2014, 55, 709-747.	2.8	41
66	Felsic volcanism in the Kermadec arc, SW Pacific: crustal recycling in an oceanic setting. Geological Society Special Publication, 2003, 219, 99-118.	1.3	40
67	The influence of magma plumbing complexity on monogenetic eruptions, Jeju Island, Korea. Terra Nova, 2011, 23, 70-75.	2.1	40
68	Probabilistic Assessment of Vent Locations for the Next Auckland Volcanic Field Event. Mathematical Geosciences, 2005, 37, 227-242.	0.9	38
69	Improving the reliability of microprobe-based analyses of andesitic glasses for tephra correlation. Holocene, 2007, 17, 573-583.	1.7	37
70	Tephrostratigraphy and geochemical fingerprinting of the Mangaone Subgroup tephra beds, Okataina Volcanic Centre, New Zealand. New Zealand Journal of Geology, and Geophysics, 2002, 45, 207-219.	1.8	36
71	Palaeointensities of the Auckland geomagnetic excursions by the LTD-DHT Shaw method. Physics of the Earth and Planetary Interiors, 2006, 154, 168-179.	1.9	36
72	Magmatic peridotites and pyroxenites, Andong Ultramafic Complex, Korea: Geochemical evidence for supra-subduction zone formation and extensive melt–rock interaction. Lithos, 2011, 127, 599-618.	1.4	36

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73	Auckland Volcanic Field magmatism, volcanism, and hazard: a review. New Zealand Journal of Geology, and Geophysics, 0, , 1-22.	1.8	36
74	Formation and emplacement of the Northland ophiolite, northern New Zealand: SW Pacific tectonic implications. Journal of the Geological Society, 2005, 162, 225-241.	2.1	35
75	The origin of reversed geochemical zoning in the northern New Hebrides volcanic arc. Contributions To Mineralogy and Petrology, 1982, 81, 148-155.	3.1	33
76	Isotopic compositions of late Cenozoic volcanics from southeast Papua New Guinea: Evidence for multi-component sources in arc and rift environments. Chemical Geology, 1992, 97, 233-249.	3.3	33
77	Volcanic history of Macauley Island, Kermadec Ridge, New Zealand. New Zealand Journal of Geology, and Geophysics, 1996, 39, 295-308.	1.8	33
78	Facies analysis of pyroclastic deposits within basaltic tuffâ€rings of the Auckland volcanic field, New Zealand. New Zealand Journal of Geology, and Geophysics, 1996, 39, 309-327.	1.8	32
79	Silicic volcanism and back-arc extension related to migration of the Late Cainozoic Australian–Pacific plate boundary. Journal of Volcanology and Geothermal Research, 2004, 131, 295-306.	2.1	32
80	Geochemistry of the Early Miocene volcanic succession of Northland, New Zealand, and implications for the evolution of subduction in the Southwest Pacific. Journal of Volcanology and Geothermal Research, 2011, 199, 25-37.	2.1	32
81	Geochemical fingerprinting of basaltic tephra deposits in the Auckland Volcanic Field. New Zealand Journal of Geology, and Geophysics, 2000, 43, 569-577.	1.8	31
82	High-potassium intrusives from southeastern Papua. Contributions To Mineralogy and Petrology, 1972, 34, 167-176.	3.1	30
83	The petrology, geochronology and geochemistry of Hauhungatahi volcano, S.W. Taupo Volcanic Zone. Journal of Volcanology and Geothermal Research, 2010, 190, 179-191.	2.1	30
84	Pyroclast textural variation as an indicator of eruption column steadiness in andesitic Plinian eruptions at Mt. Ruapehu. Bulletin of Volcanology, 2014, 76, 1.	3.0	30
85	REE-fractionated trachytes and dacites from Papua New Guinea and their relationship to andesite petrogenesis. Contributions To Mineralogy and Petrology, 1979, 69, 227-233.	3.1	29
86	Late Cenozoic volcanism and extension in Eastern Papua. Geological Society Special Publication, 1984, 16, 163-171.	1.3	29
87	Multiple Sources for Sea-Rafted Loisels Pumice, New Zealand. Quaternary Research, 1998, 49, 271-279.	1.7	29
88	U–Th–Ra fractionation during crustal-level andesite formation at Ruapehu volcano, New Zealand. Chemical Geology, 2007, 244, 437-451.	3.3	29
89	Towed-camera investigations of shallow–intermediate water-depth submarine stratovolcanoes of the southern Kermadec arc, New Zealand. Marine Geology, 2002, 185, 207-218.	2.1	28
90	Rapid timescales of differentiation and evidence for crustal contamination at intra-oceanic arcs: Geochemical and U–Th–Ra–Sr–Nd isotopic constraints from Lopevi Volcano, Vanuatu, SW Pacific. Earth and Planetary Science Letters, 2008, 273, 184-194.	4.4	28

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91	New palaeomagnetic evidence for the recent eruptive activity of Mt. Taranaki, New Zealand. Journal of Volcanology and Geothermal Research, 1994, 60, 15-27.	2.1	26
92	In situ chemical fractionation in thin basaltic lava flows: examples from the Auckland volcanic field, New Zealand, and a general physical model. Journal of Volcanology and Geothermal Research, 1996, 74, 89-99.	2.1	25
93	K-Ar ages of the Auckland geomagnetic excursions. Earth, Planets and Space, 2004, 56, 283-288.	2.5	25
94	Using geochemistry as a tool for correlating proximal andesitic tephra: case studies from Mt Rainier (USA) and Mt Ruapehu (New Zealand). Journal of Quaternary Science, 2007, 22, 395-410.	2.1	25
95	Geochemical evidence for paired arcs in the Permian volcanics of southern New Zealand. Contributions To Mineralogy and Petrology, 1979, 68, 285-291.	3.1	24
96	Petrology of the Rumble seamounts, southern Kermadec Ridge, southwest Pacific. Bulletin of Volcanology, 1988, 50, 139-147.	3.0	24
97	Seismicity and late cenozoic volcanism in parts of Papua-New Guinea. Tectonophysics, 1971, 12, 15-22.	2.2	23
98	Origin of the Northland Ophiolite, northern New Zealand: Discussion of new data and reassessment of the model. New Zealand Journal of Geology, and Geophysics, 2004, 47, 383-389.	1.8	23
99	Andesitic Plinian eruptions at Mt. Ruapehu: quantifying the uppermost limits of eruptive parameters. Bulletin of Volcanology, 2012, 74, 1161-1185.	3.0	23
100	Co-located monogenetic eruptions ~200Âkyr apart driven by tapping vertically separated mantle source regions, Chagwido, Jeju Island, Republic of Korea. Bulletin of Volcanology, 2015, 77, 1.	3.0	23
101	Multi-criteria correlation of tephra deposits to source centres applied in the Auckland Volcanic Field, New Zealand. Bulletin of Volcanology, 2017, 79, 1.	3.0	23
102	The geochemistry of rock and water samples from Curtis Island volcano, Kermadec group, southwest Pacific. Journal of Volcanology and Geothermal Research, 1988, 34, 233-240.	2.1	22
103	Rare earth mobility in young arc-type volcanic rocks from northern New Zealand. Geochimica Et Cosmochimica Acta, 1992, 56, 3951-3955.	3.9	22
104	Eruption episodes and magma recharge events in andesitic systems: Mt Taranaki, New Zealand. Journal of Volcanology and Geothermal Research, 2008, 177, 1063-1076.	2.1	22
105	Strontium isotopes in Cenozoic volcanic rocks from southeastern Papua New Guinea. Lithos, 1982, 15, 199-206.	1.4	21
106	Petrology of the gabbro and sheeted basaltic intrusives at North Cape, New Zealand. New Zealand Journal of Geology, and Geophysics, 1996, 39, 389-402.	1.8	21
107	Volcanic geology of Rarotonga, southern Pacific Ocean. New Zealand Journal of Geology, and Geophysics, 1998, 41, 95-104.	1.8	21
108	Further K-Ar dating and paleomagnetic study of the Auckland geomagnetic excursions. Earth, Planets and Space, 2007, 59, 755-761.	2.5	20

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109	Paleomagnetism of Young New Zealand Basalts and Longitudinal Distribution of Paleosecular Variation Journal of Geomagnetism and Geoelectricity, 1995, 47, 1011-1022.	0.9	20
110	Some challenges of monitoring a potentially active volcanic field in a large urban area: Auckland volcanic field, New Zealand. Natural Hazards, 2011, 59, 507-528.	3.4	19
111	The chemical characterization and tectonic significance of ophiolite terrains in southeastern Papua New Guinea. Tectonics, 2013, 32, 159-170.	2.8	19
112	Geophysical evidence for widespread reversely magnetised pyroclastics in the western Taupo Volcanic Zone (New Zealand). New Zealand Journal of Geology, and Geophysics, 1992, 35, 47-55.	1.8	18
113	A melt-focusing zone in the lithospheric mantle preserved in the Santa Elena Ophiolite, Costa Rica. Lithos, 2015, 230, 189-205.	1.4	17
114	Long-lived shield volcanism within a monogenetic basaltic field: The conundrum of Rangitoto volcano, New Zealand. Bulletin of the Geological Society of America, 2016, 128, 1160-1172.	3.3	16
115	Petrology of recrystallized ultramafic xenoliths from Merelava volcano, Vanuatu. Contributions To Mineralogy and Petrology, 1989, 102, 230-241.	3.1	15
116	The Hollyford Gabbronorite â€" A calcalkaline cumulate. New Zealand Journal of Geology, and Geophysics, 1983, 26, 345-357.	1.8	13
117	Oblique rifting along the central and southern Kermadec Arc front (30°-36°S), SW Pacific. Geochemistry, Geophysics, Geosystems, 2007, 8, n/a-n/a.	2.5	13
118	An assessment of the mantle and slab components in the magmas of an oceanic arc volcano: Raoul Volcano, Kermadec arc. Journal of Volcanology and Geothermal Research, 2009, 184, 437-450.	2.1	13
119	Redefining the Waitemata Basin, New Zealand: A new tectonic, magmatic, and basin evolution model at a subduction terminus in the SW Pacific. Geochemistry, Geophysics, Geosystems, 2010, 11, .	2.5	13
120	Dynamics and pre-eruptive conditions of catastrophic, ignimbrite-producing eruptions from the Yenkahe Caldera, Vanuatu. Journal of Volcanology and Geothermal Research, 2015, 308, 39-60.	2.1	12
121	Geology, petrology, and petrogenesis of Little Barrier Island, Hauraki Gulf, New Zealand. New Zealand Journal of Geology, and Geophysics, 1999, 42, 155-168.	1.8	10
122	Geochemical patterns of late Cenozoic intraplate basaltic volcanism in northern New Zealand and their relationship to the behaviour of the mantle. New Zealand Journal of Geology, and Geophysics, 0, , 1-12.	1.8	7
123	High-magnesium andesites: the example of the Papuan Volcanic Arc. Geological Society Special Publication, 2014, 385, 117-135.	1.3	4
124	Conceptual Development of a National Volcanic Hazard Model for New Zealand. Frontiers in Earth Science, 2017, 5, .	1.8	3
125	Mantle heterogeneity controls on small-volume basaltic volcanism: REPLY. Geology, 2015, 43, e371-e371.	4.4	1
126	Specimen Requirements for Preeclampsia Markers. journal of applied laboratory medicine, The, 2020, 5, 605-607.	1.3	1