Taras Gerya

List of Publications by Year
in descending order

304	20,925	7096 78	14208 128
papers	citations	h-index	g-index

364	364	364	7468
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The rise and demise of deep accretionary wedges: A long-term field and numerical modeling perspective. , 2022, 18, 69-103.		9
2	Numerical modeling of subduction: State of the art and future directions. , 2022, 18, 503-561.		22
3	Self-organization of magma supply controls crustal thickness variation and tectonic pattern along melt-poor mid-ocean ridges. Earth and Planetary Science Letters, 2022, 584, 117482.	4.4	5
4	Subduction earthquake sequences in a non-linear visco-elasto-plastic megathrust. Geophysical Journal International, 2022, 229, 1098-1121.	2.4	10
5	Contrasting influence of sediments vs surface processes on retreating subduction zones dynamics. Tectonophysics, 2022, 836, 229410.	2.2	3
6	Low-degree mantle melting controls the deep seismicity and explosive volcanism of the Gakkel Ridge. Nature Communications, 2022, 13, .	12.8	8
7	A Wavelet-Based Adaptive Finite Element Method for the Stokes Problems. Fluids, 2022, 7, 221.	1.7	0
8	Subduction earthquake cycles controlled by episodic fluid pressure cycling. Lithos, 2022, 426-427, 106800.	1.4	12
9	Physics-Based Numerical Modeling of Geological Processes. , 2021, , 868-883.		1
10	Subduction Initiation. , 2021, , 994-1000.		1
11	Plumeâ€Induced Sinking of Intracontinental Lithospheric Mantle: An Overlooked Mechanism of Subduction Initiation?. Geochemistry, Geophysics, Geosystems, 2021, 22, e2020GC009482.	2.5	27
12	Transition from continental rifting to oceanic spreadingÂin the northern Red SeaÂarea. Scientific Reports, 2021, 11, 5594.	3.3	11
13	Trans-lithospheric diapirism explains the presence of ultra-high pressure rocks in the European Variscides. Communications Earth & Environment, 2021, 2, .	6.8	24
14	Time will tell: Secular change in metamorphic timescales and the tectonic implications. Gondwana Research, 2021, 93, 291-310.	6.0	24
15	Backarc Lithospheric Thickness and Serpentine Stability Control Slabâ€Mantle Coupling Depths in Subduction Zones. Geochemistry, Geophysics, Geosystems, 2021, 22, e2020GC009304.	2.5	10
16	Controls by rheological structure of the lithosphere on the temporal evolution of continental magmatism: Inferences from the Pannonian Basin system. Earth and Planetary Science Letters, 2021, 565, 116925.	4.4	20
17	Transient Slow Slip Characteristics of Frictionalâ€Viscous Subduction Megathrust Shear Zones. AGU Advances, 2021, 2, e2021AV000416.	5.4	11
18	Oblique subduction and mantle flow control on upper plate deformation: 3D geodynamic modeling. Earth and Planetary Science Letters, 2021, 569, 117056.	4.4	16

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19	Plate motion and plume-induced subduction initiation. Gondwana Research, 2021, 98, 277-288.	6.0	5
20	Depletion of the upper mantle by convergent tectonics in the Early Earth. Scientific Reports, 2021, 11, 21489.	3.3	5
21	Plume-Induced Subduction Initiation: Revisiting Models and Observations. Frontiers in Earth Science, 2021, 9, .	1.8	13
22	Dynamic slab segmentation due to brittleâ€“ductile damage in the outer rise. Nature, 2021, 599, 245-250.	27.8	41
23	Inversion in the permeability evolution of deforming Westerly granite near the brittleâ€“ductile transition. Scientific Reports, 2021, 11, 24027.	3.3	0
24	Building cratonic keels in Precambrian plate tectonics. Nature, 2020, 586, 395-401.	27.8	43
25	Corona structures driven by plumeâ€“lithosphere interactions and evidence for ongoing plume activity on Venus. Nature Geoscience, 2020, 13, 547-554.	12.9	90
26	Seismo-hydro-mechanical modelling of the seismic cycle: Methodology and implications for subduction zone seismicity. Tectonophysics, 2020, 791, 228504.	2.2	25
27	Slab Rollback Orogeny Model: A Test of Concept. Geophysical Research Letters, 2020, 47, e2020GL089917.	4.0	12
28	Ongoing formation of felsic lower crustal channel by relamination in Zagros collision zone revealed from regional tomography. Scientific Reports, 2020, 10, 8224.	3.3	9
29	Analog and Numerical Experiments of Double Subduction Systems With Opposite Polarity in Adjacent Segments. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC009035.	2.5	7
30	The role of pre-existing weak zones in the formation of the Himalaya and Tibetan plateau: 3-D thermomechanical modelling. Geophysical Journal International, 2020, 221, 1971-1983.	2.4	18
31	Lateral propagationâ€“induced subduction initiation at passive continental margins controlled by preexisting lithospheric weakness. Science Advances, 2020, 6, eaaz1048.	10.3	54
32	Can Grain Size Reduction Initiate Transform Faults?â€”Insights From a 3â€D Numerical Study. Tectonics, 2020, 39, e2019TC005793.	2.8	15
33	Subduction Initiation by Plumeâ€Plateau Interaction: Insights From Numerical Models. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC009119.	2.5	9
34	Plumeâ€Induced Subduction Initiation: Singleâ€Slab or Multiâ€Slab Subduction?. Geochemistry, Geophysics, Geosystems, 2020, 21, e2019GC008663.	2.5	28
35	Peel-back controlled lithospheric convergence explains the secular transitions in Archean metamorphism and magmatism. Earth and Planetary Science Letters, 2020, 538, 116224.	4.4	49
36	Oceanic crust recycling controlled by weakening at slab edges. Nature Communications, 2020, 11, 2009.	12.8	17

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37	Transient stripping of subducting slabs controls periodic forearc uplift. Nature Communications, 2020, 11, 1823.	12.8	49
38	Characteristics of earthquake ruptures and dynamic off-fault deformation on propagating faults. Solid Earth, 2020, 11, 1333-1360.	2.8	12
39	Seismic and Aseismic Fault Growth Lead to Different Fault Orientations. Journal of Geophysical Research: Solid Earth, 2019, 124, 8867-8889.	3.4	26
40	Stress-driven fluid flow controls long-term megathrust strength and deep accretionary dynamics. Scientific Reports, 2019, 9, 9714.	3.3	26
41	A Secondary Zone of Uplift Due to Megathrust Earthquakes. Pure and Applied Geophysics, 2019, 176, 4043-4068.	1.9	13
42	Geodynamics of the early Earth: Quest for the missing paradigm. Geology, 2019, 47, 1006-1007.	4.4	27
43	Isotopic and Petrologic Investigation, and a Thermomechanical Model of Genesis of Large-Volume Rhyolites in Arc Environments: Karymshina Volcanic Complex, Kamchatka, Russia. Frontiers in Earth Science, 2019, 6, .	1.8	10
44	The continuity equation. , 2019, , 12-25.		0
45	Density and gravity. , 2019, , 26-37.		0
46	Numerical solutions of partial differential equations. , 2019, , 38-49.		0
47	Stress and strain. , 2019, , 50-59.		0
48	The momentum equation. , 2019, , 60-72.		0
49	Viscous rheology of rocks. , 2019, , 73-81.		1
50	Numerical solutions of the momentum and continuity equations. , 2019, , 82-104.		2
51	The advection equation and marker-in-cell method. , 2019, , 105-127.		0
52	The heat conservation equation. , 2019, , 128-138.		0
53	Numerical solution of the heat conservation equation. , 2019, , 139-155.		1
54	2D thermomechanical code structure. , 2019, , 156-170.		1

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55	Elasticity and plasticity. , 2019, , 171-187.		0
56	2D implementation of visco-elasto-plasticity. , 2019, , 188-208.		0
57	2D thermomechanical modelling of inertial processes. , 2019, , 209-223.		0
58	Seismo-thermomechanical modelling. , 2019, , 224-239.		0
59	Hydro-thermomechanical modelling. , 2019, , 240-276.		0
60	Adaptive mesh refinement. , 2019, , 277-291.		0
61	The multigrid method. , 2019, , 292-318.		0
62	Programming of 3D problems. , 2019, , 319-339.		0
63	Numerical benchmarks. , 2019, , 340-368.		0
64	Design of 2D numerical geodynamic models. , 2019, , 369-405.		1
65	Variability of subducting slab morphologies in the mantle transition zone: Insight from petrological-thermomechanical modeling. Earth-Science Reviews, 2019, 196, 102874.	9.1	49
66	Growing primordial continental crust self-consistently in global mantle convection models. Gondwana Research, 2019, 73, 96-122.	6.0	31
67	Crustal melting beneath orogenic plateaus: Insights from 3-D thermo-mechanical modeling. Tectonophysics, 2019, 761, 1-15.	2.2	27
68	Near-ridge initiation of intraoceanic subduction: Effects of inheritance in 3D numerical models of the Wilson Cycle. Tectonophysics, 2019, 763, 1-13.	2.2	28
69	Plumeâ€Induced Breakup of a Subducting Plate: Microcontinent Formation Without Cessation of the Subduction Process. Geophysical Research Letters, 2019, 46, 3663-3675.	4.0	19
70	The Neoarchaean Limpopo Orogeny: Exhumation and Regional-Scale Gravitational Crustal Overturn Driven by a Granulite Diapir. Regional Geology Reviews, 2019, , 185-224.	1.2	11
71	A water budget dichotomy of rocky protoplanets from 26Al-heating. Nature Astronomy, 2019, 3, 307-313.	10.1	91
72	Late Orogenic Heating of (Ultra)High Pressure Rocks: Slab Rollback vs. Slab Breakoff. Geosciences (Switzerland), 2019, 9, 499.	2.2	33

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73	Understanding the isotopic and chemical evolution of Yellowstone hot spot magmatism using magmatic-thermomechanical modeling. Journal of Volcanology and Geothermal Research, 2019, 370, 13-30.	2.1	12
74	Magma ascent in planetesimals: Control by grain size. Earth and Planetary Science Letters, 2019, 507, 154-165.	4.4	31
75	On the formation of oceanic detachment faults and their influence on intra-oceanic subduction initiation: 3D thermomechanical modeling. Earth and Planetary Science Letters, 2019, 506, 195-208.	4.4	31
76	Bimodal seismicity in the Himalaya controlled by fault friction and geometry. Nature Communications, 2019, 10, 48.	12.8	78
77	3D numerical modelling of the Wilson cycle: structural inheritance of alternating subduction polarity. Geological Society Special Publication, 2019, 470, 439-461.	1.3	7
78	Thermomechanical Modeling of the Formation of a Multilevel, Crustalâ€Scale Magmatic System by the Yellowstone Plume. Geophysical Research Letters, 2018, 45, 3873-3879.	4.0	54
79	Divergent plate motion drives rapid exhumation of (ultra)high pressure rocks. Earth and Planetary Science Letters, 2018, 491, 67-80.	4.4	35
80	Efficient cooling of rocky planets by intrusive magmatism. Nature Geoscience, 2018, 11, 322-327.	12.9	78
81	3D modeling of crustal shortening influenced by along-strike lithological changes: Implications for continental collision in the Western and Central Alps. Tectonophysics, 2018, 746, 425-438.	2.2	14
82	The Mechanism and Dynamics of Nâ€S Rifting in Southern Tibet: Insight From 3â€D Thermomechanical Modeling. Journal of Geophysical Research: Solid Earth, 2018, 123, 859-877.	3.4	20
83	Impact splash chondrule formation during planetesimal recycling. Icarus, 2018, 302, 27-43.	2.5	79
84	Variability of orogenic magmatism during Mediterranean-style continental collisions: A numerical modelling approach. Gondwana Research, 2018, 56, 119-134.	6.0	27
85	Dynamics of exhumation and deformation of HP-UHP orogens in double subduction-collision systems: Numerical modeling and implications for the Western Dabie Orogen. Earth-Science Reviews, 2018, 182, 68-84.	9.1	34
86	Precambrian ultra-hot orogenic factory: Making and reworking of continental crust. Tectonophysics, 2018, 746, 572-586.	2.2	49
87	Plume-induced continental rifting and break-up in ultra-slow extension context: Insights from 3D numerical modeling. Tectonophysics, 2018, 746, 121-137.	2.2	42
88	Stagnant lid tectonics: Perspectives from silicate planets, dwarf planets, large moons, and large asteroids. Geoscience Frontiers, 2018, 9, 103-119.	8.4	72
89	Dynamics of terrane accretion during seaward continental drifting and oceanic subduction: Numerical modeling and implications for the Jurassic crustal growth of the Lhasa Terrane, Tibet. Tectonophysics, 2018, 746, 212-228.	2.2	20
90	What drives metamorphism in early Archean greenstone belts? Insights from numerical modeling. Tectonophysics, 2018, 746, 587-601.	2.2	25

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91	Coupling SPH and thermochemical models of planets: Methodology and example of a Mars-sized body. Icarus, 2018, 301, 235-246.	2.5	65
92	Nucleation and evolution of ridge-ridge-ridge triple junctions: Thermomechanical model and geometrical theory. Tectonophysics, 2018, 746, 83-105.	2.2	37
93	Subduction initiation in nature and models: A review. Tectonophysics, 2018, 746, 173-198.	2.2	335
94	Relamination Styles in Collisional Orogens. Tectonics, 2018, 37, 224-250.	2.8	32
95	Plume-lithosphere interactions in rifted margin tectonic settings: Inferences from thermo-mechanical modelling. Tectonophysics, 2018, 746, 138-154.	2.2	20
96	Nonâ€uniform splitting of a single mantle plume by double cratonic roots: Insight into the origin of the central and southern East African Rift System. Terra Nova, 2018, 30, 125-134.	2.1	22
97	Seismic behaviour of mountain belts controlled by plate convergence rate. Earth and Planetary Science Letters, 2018, 482, 81-92.	4.4	78
98	Oblique continental rifting and long transform fault formation based on 3D thermomechanical numerical modeling. Tectonophysics, 2018, 746, 106-120.	2.2	18
99	The role of lateral strength contrasts in orogenesis: A 2D numerical study. Tectonophysics, 2018, 746, 549-561.	2.2	19
100	Subduction initiation dynamics along a transform fault control trench curvature and ophiolite ages. Geology, 2018, 46, 607-610.	4.4	69
101	Initiation of a Protoâ€transform Fault Prior to Seafloor Spreading. Geochemistry, Geophysics, Geosystems, 2018, 19, 4744-4756.	2.5	18
102	Afar triple junction triggered by plume-assisted bi-directional continental break-up. Scientific Reports, 2018, 8, 14742.	3.3	30
103	Multi-terrane structure controls the contrasting lithospheric evolution beneath the western and centralâ€"eastern Tibetan plateau. Nature Communications, 2018, 9, 3780.	12.8	49
104	Alongâ€Axis Variations of Rift Width in a Coupled Lithosphereâ€Mantle System, Application to East Africa. Geophysical Research Letters, 2018, 45, 5362-5370.	4.0	20
105	An Invariant Rateâ€• and Stateâ€Dependent Friction Formulation for Viscoeastoplastic Earthquake Cycle Simulations. Journal of Geophysical Research: Solid Earth, 2018, 123, 5018-5051.	3.4	64
106	Emplacement of metamorphic core complexes and associated geothermal systems controlled by slab dynamics. Earth and Planetary Science Letters, 2018, 498, 322-333.	4.4	36
107	Extensional Polarity Change in Continental Rifts: Inferences From 3â€D Numerical Modeling and Observations. Journal of Geophysical Research: Solid Earth, 2018, 123, 8073-8094.	3.4	23
108	Toward 4D modeling of orogenic belts: Example from the transpressive Zagros Fold Belt. Tectonophysics, 2017, 702, 82-89.	2.2	15

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109	Continental crust formation on early Earth controlled by intrusive magmatism. Nature, 2017, 545, 332-335.	27.8	174
110	Partitioning of crustal shortening during continental collision: 2â€D thermomechanical modeling. Journal of Geophysical Research: Solid Earth, 2017, 122, 592-606.	3.4	24
111	3D geodynamic models for the development of opposing continental subduction zones: The Hindu Kushâ€"Pamir example. Earth and Planetary Science Letters, 2017, 480, 133-146.	4.4	31
112	Emergence of silicic continents as the lower crust peels off on a hot plate-tectonic Earth. Nature Geoscience, 2017, 10, 698-703.	12.9	90
113	Horizontal mantle flow controls subduction dynamics. Scientific Reports, 2017, 7, 7550.	3.3	41
114	Long-distance impact of Iceland plume on Norwayâ€™s rifted margin. Scientific Reports, 2017, 7, 10408.	3.3	29
115	Crustal rheology controls on the Tibetan plateau formation during India-Asia convergence. Nature Communications, 2017, 8, 15992.	12.8	57
116	Stratigraphic signatures of forearc basin formation mechanisms. Geochemistry, Geophysics, Geosystems, 2017, 18, 2388-2410.	2.5	13
117	Modeling Craton Destruction by Hydrationâ€Induced Weakening of the Upper Mantle. Journal of Geophysical Research: Solid Earth, 2017, 122, 7449-7466.	3.4	30
118	Lithosphere delamination in continental collisional orogens: A systematic numerical study. Journal of Geophysical Research: Solid Earth, 2016, 121, 5186-5211.	3.4	116
119	The effects of short-lived radionuclides and porosity on the early thermo-mechanical evolution of planetesimals. Icarus, 2016, 274, 350-365.	2.5	89
120	Benchmarking numerical models of brittle thrust wedges. Journal of Structural Geology, 2016, 92, 140-177.	2.3	81
121	3D numerical modeling of mantle flow, crustal dynamics and magma genesis associated with slab roll-back and tearing: The eastern Mediterranean case. Earth and Planetary Science Letters, 2016, 442, 93-107.	4.4	101
122	Thermo-mechanical controls of flat subduction: Insights from numerical modeling. Gondwana Research, 2016, 40, 170-183.	6.0	48
123	3-D thermo-mechanical modeling of plume-induced subduction initiation. Earth and Planetary Science Letters, 2016, 453, 193-203.	4.4	39
124	Fluidâ€assisted deformation of the subduction interface: Coupled and decoupled regimes from 2â€D hydromechanical modeling. Journal of Geophysical Research: Solid Earth, 2016, 121, 6132-6149.	3.4	12
125	Crustal deformation dynamics and stress evolution during seamount subduction: Highâ€resolution 3â€D numerical modeling. Journal of Geophysical Research: Solid Earth, 2016, 121, 6880-6902.	3.4	68
126	Impact of sedimentation on evolution of accretionary wedges: Insights from high-resolution thermomechanical modeling. Tectonics, 2016, 35, 2828-2846.	2.8	15

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127	The role of lateral lithospheric strength heterogeneities in orogenic plateau growth: Insights from 3â€Ð thermoâ€mechanical modeling. Journal of Geophysical Research: Solid Earth, 2016, 121, 3118-3138.	3.4	32
128	Regimes of subduction and lithospheric dynamics in the Precambrian: 3D thermomechanical modelling. Gondwana Research, 2016, 37, 53-70.	6.0	88
129	Contrasted continental rifting via plume-craton interaction: Applications to Central East African Rift. Geoscience Frontiers, 2016, 7, 221-236.	8.4	68
130	Interplate deformation at earlyâ€stage oblique subduction: 3â€Ð thermomechanical numerical modeling. Tectonics, 2016, 35, 1610-1625.	2.8	9
131	Thermo-mechanical modeling of the obduction process based on the Oman Ophiolite case. Gondwana Research, 2016, 32, 1-10.	6.0	61
132	On the influence of the asthenospheric flow on the tectonics and topography at a collision-subduction transition zones: Comparison with the eastern Tibetan margin. Journal of Geodynamics, 2016, 100, 184-197.	1.6	36
133	Early Earth plume-lid tectonics: A high-resolution 3D numerical modelling approach. Journal of Geodynamics, 2016, 100, 198-214.	1.6	128
134	Numerical modeling of deep oceanic slab dehydration: Implications for the possible origin of far field intra-continental volcanoes in northeastern China. Journal of Asian Earth Sciences, 2016, 117, 328-336.	2.3	19
135	Decarbonation of subducting slabs: Insight from petrologicalâ€"thermomechanical modeling. Gondwana Research, 2016, 36, 314-332.	6.0	30
136	2D thermomechanical modelling of continentâ€"arcâ€"continent collision. Gondwana Research, 2016, 32, 138-150.	6.0	28
137	Tectonic slicing of subducting oceanic crust along plate interfaces: Numerical modeling. Geochemistry, Geophysics, Geosystems, 2015, 16, 3505-3531.	2.5	46
138	How partial melting affects smallâ€scale convection in a plumeâ€fed sublithospheric layer beneath fastâ€moving plates. Geochemistry, Geophysics, Geosystems, 2015, 16, 3924-3945.	2.5	6
139	Tectonic overpressure and underpressure in lithospheric tectonics and metamorphism. Journal of Metamorphic Geology, 2015, 33, 785-800.	3.4	71
140	Material transportation and fluid-melt activity in the subduction channel: Numerical modeling. Science China Earth Sciences, 2015, 58, 1251-1268.	5.2	29
141	Supercomputer simulation of continental collisions in Precambrian: The effect of lithosphere thickness. Moscow University Geology Bulletin, 2015, 70, 77-83.	0.3	2
142	H 2 O-fluid-saturated melting of subducted continental crust facilitates exhumation of ultrahigh-pressure rocks in continental subduction zones. Earth and Planetary Science Letters, 2015, 428, 151-161.	4.4	40
143	Earthquake supercycle in subduction zones controlled by the width of the seismogenic zone. Nature Geoscience, 2015, 8, 471-474.	12.9	101
144	Dual continental rift systems generated by plumeâ€"lithosphere interaction. Nature Geoscience, 2015, 8, 388-392.	12.9	176

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145	Generation of felsic crust in the Archean: A geodynamic modeling perspective. Precambrian Research, 2015, 271, 198-224.	2.7	246
146	Geomorphologicalâ€“thermo-mechanical modeling: Application to orogenic wedge dynamics. Tectonophysics, 2015, 659, 12-30.	2.2	52
147	Plate tectonics on the Earth triggered by plume-induced subduction initiation. Nature, 2015, 527, 221-225.	27.8	310
148	From continental rifting to seafloor spreading: Insight from 3D thermo-mechanical modeling. Gondwana Research, 2015, 28, 1329-1343.	6.0	44
149	Practical analytical solutions for benchmarking of 2-D and 3-D geodynamic Stokes problems with variable viscosity. Solid Earth, 2014, 5, 461-476.	2.8	37
150	Threeâ€dimensional simulations of the southern polar giant impact hypothesis for the origin of the Martian dichotomy. Geophysical Research Letters, 2014, 41, 8736-8743.	4.0	71
151	Implementation of a multigrid solver on a GPU for Stokes equations with strongly variable viscosity based on Matlab and CUDA. International Journal of High Performance Computing Applications, 2014, 28, 50-60.	3.7	30
152	Lead transport in intra-oceanic subduction zones: 2D geochemicalâ€“thermo-mechanical modeling of isotopic signatures. Lithos, 2014, 208-209, 265-280.	1.4	32
153	Numerical models of the thermomechanical evolution of planetesimals: Application to the acapulcoiteâ€lodranite parent body. Meteoritics and Planetary Science, 2014, 49, 1083-1099.	1.6	59
154	Contrasting styles of Phanerozoic and Precambrian continental collision. Gondwana Research, 2014, 25, 522-545.	6.0	244
155	Precambrian geodynamics: Concepts and models. Gondwana Research, 2014, 25, 442-463.	6.0	262
156	Plume-induced crustal convection: 3D thermomechanical model and implications for the origin of novae and coronae on Venus. Earth and Planetary Science Letters, 2014, 391, 183-192.	4.4	78
157	From oceanic plateaus to allochthonous terranes: Numerical modelling. Gondwana Research, 2014, 25, 494-508.	6.0	82
158	Modeling the seismic cycle in subduction zones: The role and spatiotemporal occurrence of offâ€megathrust earthquakes. Geophysical Research Letters, 2014, 41, 1194-1201.	4.0	51
159	Slab detachment in laterally varying subduction zones: 3-D numerical modeling. Geophysical Research Letters, 2014, 41, 1951-1956.	4.0	82
160	Subduction of fracture zones controls mantle melting and geochemical signature above slabs. Nature Communications, 2014, 5, 5095.	12.8	51
161	Subduction initiates at straight passive margins. Geology, 2014, 42, 331-334.	4.4	32
162	Asymmetric three-dimensional topography over mantle plumes. Nature, 2014, 513, 85-89.	27.8	190

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163	Driving the upper plate surface deformation by slab rollback and mantle flow. Earth and Planetary Science Letters, 2014, 405, 110-118.	4.4	120
164	Boris Kaus receives 2012 Paul Niggli Medal. Swiss Journal of Geosciences, 2014, 107, 129-131.	1.2	0
165	Deep plate serpentinization triggers skinning of subducting slabs. Geology, 2014, 42, 723-726.	4.4	20
166	Dependence of mid-ocean ridge morphology on spreading rate in numerical 3-D models. Gondwana Research, 2014, 25, 270-283.	6.0	31
167	Numerical approach to the Stokes problem with high contrasts in viscosity. Applied Mathematics and Computation, 2014, 235, 17-25.	2.2	5
168	Influence of lithospheric mantle stratification on craton extension: Insight from two-dimensional thermo-mechanical modeling. Tectonophysics, 2014, 631, 50-64.	2.2	57
169	3D effects of strain vs. velocity weakening on deformation patterns in accretionary wedges. Tectonophysics, 2014, 615-616, 122-141.	2.2	29
170	Geodynamic regimes of intra-oceanic subduction: Implications for arc extension vs. shortening processes. Gondwana Research, 2014, 25, 546-560.	6.0	43
171	Formation and Exhumation of Ultrahigh-Pressure Terranes. Elements, 2013, 9, 289-293.	0.5	55
172	Intracratonic geodynamics. Gondwana Research, 2013, 24, 838-848.	6.0	44
173	Collision of continental corner from 3-D numerical modeling. Earth and Planetary Science Letters, 2013, 380, 98-111.	4.4	134
174	Fourâ€dimensional numerical modeling of crustal growth at active continental margins. Journal of Geophysical Research: Solid Earth, 2013, 118, 4682-4698.	3.4	18
175	The seismic cycle at subduction thrusts: Insights from seismoâ€thermoâ€mechanical models. Journal of Geophysical Research: Solid Earth, 2013, 118, 6183-6202.	3.4	100
176	Oblique subduction modelling indicates along-trench tectonic transport of sediments. Nature Communications, 2013, 4, 2456.	12.8	35
177	Testing the influence of far-field topographic forcing on subduction initiation at a passive margin. Tectonophysics, 2013, 608, 517-524.	2.2	41
178	Initiation of transform faults at rifted continental margins: 3D petrological-thermomechanical modeling and comparison to the Woodlark Basin. Petrology, 2013, 21, 550-560.	0.9	37
179	Numerical modeling of eastern Tibetan-type margin: Influences of surface processes, lithospheric structure and crustal rheology. Gondwana Research, 2013, 24, 1091-1107.	6.0	17
180	Generation of new continental crust by sublithospheric silicic-magma relamination in arcs: A test of Taylor's andesite model. Gondwana Research, 2013, 23, 1554-1566.	6.0	130

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181	Mafic injection as a trigger for felsic magmatism: A numerical study. Geochemistry, Geophysics, Geosystems, 2013, 14, 1910-1928.	2.5	49
182	Numerical modeling of geochemical variations caused by crustal relamination. Geochemistry, Geophysics, Geosystems, 2013, 14, 470-487.	2.5	58
183	Highâ€resolution 3D numerical modeling of thrust wedges: Influence of dÃ©collement strength on transfer zones. Geochemistry, Geophysics, Geosystems, 2013, 14, 1131-1155.	2.5	50
184	Paradigms, new and old, for ultrahigh-pressure tectonism. Tectonophysics, 2013, 603, 79-88.	2.2	122
185	Three-dimensional thermomechanical modeling of oceanic spreading initiation and evolution. Physics of the Earth and Planetary Interiors, 2013, 214, 35-52.	1.9	119
186	Slab detachment during continental collision: Influence of crustal rheology and interaction with lithospheric delamination. Tectonophysics, 2013, 602, 124-140.	2.2	96
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