# R Dietmar MÃ¼ller

List of Publications by Year
in descending order

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| 276 | 25,372 | 8732 | 75 | 7718 | 150 |
|---|---|---|---|---|---|
| papers | citations | | h-index | | g-index |

| 323 | 323 | 323 | 12133 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | A deforming plate tectonic model of the South China Block since the Jurassic. Gondwana Research, 2022, 102, 3-16. | 3.0 | 30 |
| 2 | A review of machine learning in processing remote sensing data for mineral exploration. Remote Sensing of Environment, 2022, 268, 112750. | 4.6 | 101 |
| 3 | A Comparative Study of Convolutional Neural Networks and Conventional Machine Learning Models for Lithological Mapping Using Remote Sensing Data. Remote Sensing, 2022, 14, 819. | 1.8 | 28 |
| 4 | Deep-sea hiatuses track the vigor of Cenozoic ocean bottom currents. Geology, 2022, 50, 710-715. | 2.0 | 7 |
| 5 | Long-term Phanerozoic sea level change from solid Earth processes. Earth and Planetary Science Letters, 2022, 584, 117451. | 1.8 | 21 |
| 6 | Dynamics of the abrupt change in Pacific Plate motion around 50 million years ago. Nature Geoscience, 2022, 15, 74-78. | 5.4 | 17 |
| 7 | Evolution of Earthâ€™s tectonic carbon conveyor belt. Nature, 2022, 605, 629-639. | 13.7 | 43 |
| 8 | A tectonic-rules-based mantle reference frame since 1 billion years ago â€“ implications for supercontinent cycles and plateâ€“mantle system evolution. Solid Earth, 2022, 13, 1127-1159. | 1.2 | 16 |
| 9 | Post-extinction recovery of the Phanerozoic oceans and biodiversity hotspots. Nature, 2022, 607, 507-511. | 13.7 | 15 |
| 10 | Bayesian geological and geophysical data fusion for the construction and uncertainty quantification of 3D geological models. Geoscience Frontiers, 2021, 12, 479-493. | 4.3 | 27 |
| 11 | Reconstructing seafloor age distributions in lost ocean basins. Geoscience Frontiers, 2021, 12, 769-780. | 4.3 | 23 |
| 12 | Coupled Evolution of Plate Tectonics and Basal Mantle Structure. Geochemistry, Geophysics, Geosystems, 2021, 22, . | 1.0 | 10 |
| 13 | Multiobjective Bayesian optimization and joint inversion for active sensor fusion. Geophysics, 2021, 86, ID1-ID17. | 1.4 | 3 |
| 14 | Extending full-plate tectonic models into deep time: Linking the Neoproterozoic and the Phanerozoic. Earth-Science Reviews, 2021, 214, 103477. | 4.0 | 183 |
| 15 | The carbonate compensation depth in the South Atlantic Ocean since the Late Cretaceous. Geology, 2021, 49, 873-878. | 2.0 | 9 |
| 16 | Kinematics and extent of the Piemontâ€“Liguria Basin â€“ implications for subduction processes in the Alps. Solid Earth, 2021, 12, 885-913. | 1.2 | 55 |
| 17 | Precipitation reconstruction from climate-sensitive lithologies using Bayesian machine learning. Environmental Modelling and Software, 2021, 139, 105002. | 1.9 | 16 |
| 18 | Mantle plumes and their role in Earth processes. Nature Reviews Earth & Environment, 2021, 2, 382-401. | 12.2 | 78 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Spatio-temporal evolution and dynamic origin of Jurassic-Cretaceous magmatism in the South China Block. Earth-Science Reviews, 2021, 217, 103605. | 4.0 | 24 |
| 20 | Global chemical weathering dominated by continental arcs since the mid-Palaeozoic. Nature Geoscience, 2021, 14, 690-696. | 5.4 | 40 |
| 21 | Modelling the role of dynamic topography and eustasy in the evolution of the Great Artesian Basin. Basin Research, 2021, 33, 3378-3405. | 1.3 | 4 |
| 22 | Potential encoding of coupling between Milankovitch forcing and Earth's interior processes in the Phanerozoic eustatic sea-level record. Earth-Science Reviews, 2021, 220, 103727. | 4.0 | 16 |
| 23 | Papanin Ridge and Ojin Rise Seamounts (Northwest Pacific): Dual Hotspot Tracks Formed by the Shatsky Plume. Geochemistry, Geophysics, Geosystems, 2021, 22, e2021GC009847. | 1.0 | 6 |
| 24 | Predicting the emplacement of Cordilleran porphyry copper systems using a spatio-temporal machine learning model. Ore Geology Reviews, 2021, 137, 104300. | 1.1 | 8 |
| 25 | The evolution of basal mantle structure in response to supercontinent aggregation and dispersal. Scientific Reports, 2021, 11, 22967. | 1.6 | 7 |
| 26 | Decoding earth's plate tectonic history using sparse geochemical data. Geoscience Frontiers, 2020, 11, 265-276. | 4.3 | 10 |
| 27 | Computer vision-based framework for extracting tectonic lineaments from optical remote sensing data. International Journal of Remote Sensing, 2020, 41, 1760-1787. | 1.3 | 32 |
| 28 | Subduction history reveals Cretaceous slab superflux as a possible cause for the mid-Cretaceous plume pulse and superswell events. Gondwana Research, 2020, 79, 125-139. | 3.0 | 26 |
| 29 | Environmental predictors of deep-sea polymetallic nodule occurrence in the global ocean. Geology, 2020, 48, 293-297. | 2.0 | 30 |
| 30 | Modeling the Dynamic Landscape Evolution of a Volcanic Coastal Environment Under Future Climate Trajectories. Frontiers in Earth Science, 2020, 8, . | 0.8 | 5 |
| 31 | A Global Data Set of Presentâ€Day Oceanic Crustal Age and Seafloor Spreading Parameters. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC009214. | 1.0 | 133 |
| 32 | Intraplate volcanism triggered by bursts in slab flux. Science Advances, 2020, 6, . | 4.7 | 32 |
| 33 | A Quantitative Tomotectonic Plate Reconstruction of Western North America and the Eastern Pacific Basin. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC009117. | 1.0 | 41 |
| 34 | East African topography and volcanism explained by a single, migrating plume. Geoscience Frontiers, 2020, 11, 1669-1680. | 4.3 | 14 |
| 35 | Integration of Selective Dimensionality Reduction Techniques for Mineral Exploration Using ASTER Satellite Data. Remote Sensing, 2020, 12, 1261. | 1.8 | 45 |
| 36 | Sea-level fluctuations driven by changes in global ocean basin volume following supercontinent break-up. Earth-Science Reviews, 2020, 208, 103293. | 4.0 | 36 |

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| 37 | Surrogate-assisted Bayesian inversion for landscape and basin evolution models. Geoscientific Model Development, 2020, 13, 2959-2979. | 1.3 | 8 |
| 38 | Probabilistic modelling of sedimentary basin evolution using Bayeslands. ASEG Extended Abstracts, 2019, 2019, 1-5. | 0.1 | 0 |
| 39 | Multicore Parallel Tempering Bayeslands for Basin and Landscape Evolution. Geochemistry, Geophysics, Geosystems, 2019, 20, 5082-5104. | 1.0 | 11 |
| 40 | Lost tectonic history recovered from Earthâ€™s deep mantle. Nature, 2019, 565, 432-433. | 13.7 | 1 |
| 41 | Bayeslands: A Bayesian inference approach for parameter uncertainty quantification in Badlands. Computers and Geosciences, 2019, 131, 89-101. | 2.0 | 17 |
| 42 | Constraining Absolute Plate Motions Since the Triassic. Journal of Geophysical Research: Solid Earth, 2019, 124, 7231-7258. | 1.4 | 43 |
| 43 | Sequestration and subduction of deep-sea carbonate in the global ocean since the Early Cretaceous. Geology, 2019, 47, 91-94. | 2.0 | 32 |
| 44 | A Global Plate Model Including Lithospheric Deformation Along Major Rifts and Orogens Since the Triassic. Tectonics, 2019, 38, 1884-1907. | 1.3 | 316 |
| 45 | The interplay of dynamic topography and eustasy on continental flooding in the late Paleozoic. Tectonophysics, 2019, 761, 108-121. | 0.9 | 22 |
| 46 | Global kinematics of tectonic plates and subduction zones since the late Paleozoic Era. Geoscience Frontiers, 2019, 10, 989-1013. | 4.3 | 126 |
| 47 | Australian-Antarctic breakup and seafloor spreading: Balancing geological and geophysical constraints. Earth-Science Reviews, 2019, 188, 41-58. | 4.0 | 49 |
| 48 | Rift and plate boundary evolution across two supercontinent cycles. Global and Planetary Change, 2019, 173, 1-14. | 1.6 | 70 |
| 49 | Palaeolatitudinal distribution of lithologic indicators of climate in a palaeogeographic framework. Geological Magazine, 2019, 156, 331-354. | 0.9 | 33 |
| 50 | Global tectonic reconstructions with continuously deforming and evolving rigid plates. Computers and Geosciences, 2018, 116, 32-41. | 2.0 | 48 |
| 51 | The Dynamic Topography of Eastern China Since the Latest Jurassic Period. Tectonics, 2018, 37, 1274-1291. | 1.3 | 35 |
| 52 | Oceanic crustal carbon cycle drives 26-million-year atmospheric carbon dioxide periodicities. Science Advances, 2018, 4, eaaq0500. | 4.7 | 52 |
| 53 | Controls on the global distribution of contourite drifts: Insights from an eddy-resolving ocean model. Earth and Planetary Science Letters, 2018, 489, 228-240. | 1.8 | 50 |
| 54 | A reconstruction of the North Atlantic since the earliest Jurassic. Basin Research, 2018, 30, 160-185. | 1.3 | 57 |

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| 55 | Dynamic topography of passive continental margins and their hinterlands since the Cretaceous. Gondwana Research, 2018, 53, 225-251. | 3.0 | 55 |
| 56 | Tectonics and geodynamics of the eastern Tethys and northern Gondwana since the Jurassic. ASEG Extended Abstracts, 2018, 2018, 1-6. | 0.1 | 1 |
| 57 | Modelling and visualising distributed crustal deformation of Australia and Zealandia using GPlates 2.0. ASEG Extended Abstracts, 2018, 2018, 1-7. | 0.1 | 5 |
| 58 | Surface Process Models of The Lake Eyre Basin Using Badlands Software. ASEG Extended Abstracts, 2018, 2018, 1-1. | 0.1 | 0 |
| 59 | Oblique rifting: the rule, not the exception. Solid Earth, 2018, 9, 1187-1206. | 1.2 | 85 |
| 60 | On the Scales of Dynamic Topography in Wholeâ€Mantle Convection Models. Geochemistry, Geophysics, Geosystems, 2018, 19, 3140-3163. | 1.0 | 20 |
| 61 | No Evidence for Milankovitch Cycle Influence on Abyssal Hills at Intermediate, Fast, and Superfast Spreading Rates. Geophysical Research Letters, 2018, 45, 10,305. | 1.5 | 10 |
| 62 | GPlates: Building a Virtual Earth Through Deep Time. Geochemistry, Geophysics, Geosystems, 2018, 19, 2243-2261. | 1.0 | 392 |
| 63 | Geodynamic reconstruction of an accreted Cretaceous back-arc basin in the Northern Andes. Journal of Geodynamics, 2018, 121, 115-132. | 0.7 | 21 |
| 64 | Burial and exhumation history of the Galilee Basin, Australia: Implications for unconventional hydrocarbon prospectivity. AAPG Bulletin, 2018, 102, 483-507. | 0.7 | 5 |
| 65 | Geodynamic and Surface Process Evolution of New Guinea Since the Jurassic. ASEG Extended Abstracts, 2018, 2018, 1-1. | 0.1 | 0 |
| 66 | The Interplay Between the Eruption and Weathering of Large Igneous Provinces and the Deepâ€Time Carbon Cycle. Geophysical Research Letters, 2018, 45, 5380-5389. | 1.5 | 69 |
| 67 | The influence of carbonate platform interactions with subduction zone volcanism on palaeo-atmospheric CO<sub>2</sub> since the Devonian. Climate of the Past, 2018, 14, 857-870. | 1.3 | 19 |
| 68 | PyBacktrack 1.0: A Tool for Reconstructing Paleobathymetry on Oceanic and Continental Crust. Geochemistry, Geophysics, Geosystems, 2018, 19, 1898-1909. | 1.0 | 16 |
| 69 | SPGM: A Scalable PaleoGeomorphology Model. SoftwareX, 2018, 7, 263-272. | 1.2 | 2 |
| 70 | Formation and evolution of the Chain-Kairali Escarpment and the Vishnu Fracture Zone in the Western Indian Ocean. Journal of Asian Earth Sciences, 2018, 164, 307-321. | 1.0 | 11 |
| 71 | Influence of mantle flow on the drainage of eastern <scp>A</scp>ustralia since the <scp>J</scp>urassic <scp>P</scp>eriod. Geochemistry, Geophysics, Geosystems, 2017, 18, 280-305. | 1.0 | 37 |
| 72 | Origin and evolution of the deep thermochemical structure beneath Eurasia. Nature Communications, 2017, 8, 14164. | 5.8 | 55 |

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| 73 | A global review and digital database of large-scale extinct spreading centers. , 2017, 13, 911-949. | | 24 |
| 74 | Dynamic topography and eustasy controlled the paleogeographic evolution of northern Africa since the midâ€Cretaceous. Tectonics, 2017, 36, 929-944. | 1.3 | 28 |
| 75 | A full-plate global reconstruction of the Neoproterozoic. Gondwana Research, 2017, 50, 84-134. | 3.0 | 474 |
| 76 | Future intraplate stress and the longevity of carbon storage. Fuel, 2017, 200, 31-36. | 3.4 | 5 |
| 77 | A reconstruction of the Eurekan Orogeny incorporating deformation constraints. Tectonics, 2017, 36, 304-320. | 1.3 | 35 |
| 78 | Correspondence: Reply to â€˜Numerical modelling of the PERM anomaly and the Emeishan large igneous provinceâ€™. Nature Communications, 2017, 8, 822. | 5.8 | 6 |
| 79 | The role of deep Earth dynamics in driving the flooding and emergence of New Guinea since the Jurassic. Earth and Planetary Science Letters, 2017, 479, 273-283. | 1.8 | 5 |
| 80 | Kinematic constraints on the Rodinia to Gondwana transition. Precambrian Research, 2017, 299, 132-150. | 1.2 | 59 |
| 81 | Potential links between continental rifting, CO2 degassing and climate change through time. Nature Geoscience, 2017, 10, 941-946. | 5.4 | 136 |
| 82 | Predicting Sediment Thickness on Vanished Ocean Crust Since 200 Ma. Geochemistry, Geophysics, Geosystems, 2017, 18, 4586-4603. | 1.0 | 23 |
| 83 | Oceanic Residual Topography Agrees With Mantle Flow Predictions at Long Wavelengths. Geophysical Research Letters, 2017, 44, 10,896. | 1.5 | 18 |
| 84 | Global patterns in Earth's dynamic topography since the Jurassic: the role of subducted slabs. Solid Earth, 2017, 8, 899-919. | 1.2 | 30 |
| 85 | Improving global paleogeography since the late Paleozoic using paleobiology. Biogeosciences, 2017, 14, 5425-5439. | 1.3 | 111 |
| 86 | The deep Earth origin of the Iceland plume and its effects on regional surface uplift and subsidence. Solid Earth, 2017, 8, 235-254. | 1.2 | 17 |
| 87 | The GPlates Portal: Cloud-Based Interactive 3D Visualization of Global Geophysical and Geological Data in a Web Browser. PLoS ONE, 2016, 11, e0150883. | 1.1 | 41 |
| 88 | Vigorous deep-sea currents cause global anomaly in sediment accumulation in the Southern Ocean. Geology, 2016, 44, 663-666. | 2.0 | 16 |
| 89 | Alignment between seafloor spreading directions and absolute plate motions through time. Geophysical Research Letters, 2016, 43, 1472-1480. | 1.5 | 12 |
| 90 | Tectonic environments of South American porphyry copper magmatism through time revealed by spatiotemporal data mining. Tectonics, 2016, 35, 2847-2862. | 1.3 | 15 |

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| 91 | Ocean Basin Evolution and Global-Scale Plate Reorganization Events Since Pangea Breakup. Annual Review of Earth and Planetary Sciences, 2016, 44, 107-138. | 4.6 | 724 |
| 92 | A rapid burst in hotspot motion through the interaction of tectonics and deep mantle flow. Nature, 2016, 533, 239-242. | 13.7 | 73 |
| 93 | Large fluctuations of shallow seas in low-lying Southeast Asia driven by mantle flow. Geochemistry, Geophysics, Geosystems, 2016, 17, 3589-3607. | 1.0 | 28 |
| 94 | Global plate boundary evolution and kinematics since the late Paleozoic. Global and Planetary Change, 2016, 146, 226-250. | 1.6 | 553 |
| 95 | Tectonic evolution and deep mantle structure of the eastern Tethys since the latest Jurassic. Earth-Science Reviews, 2016, 162, 293-337. | 4.0 | 151 |
| 96 | Ridgeâ€spotting: A new test for Pacific absolute plate motion models. Geochemistry, Geophysics, Geosystems, 2016, 17, 2408-2420. | 1.0 | 10 |
| 97 | Controls on the distribution of deepâ€sea sediments. Geochemistry, Geophysics, Geosystems, 2016, 17, 3075-3098. | 1.0 | 19 |
| 98 | Abrupt plate accelerations shape rifted continental margins. Nature, 2016, 536, 201-204. | 13.7 | 147 |
| 99 | Revision of Paleogene plate motions in the Pacific and implications for the Hawaiian-Emperor bend: REPLY. Geology, 2016, 44, e385-e385. | 2.0 | 3 |
| 100 | Tectonic evolution of Western Tethys from Jurassic to present day: coupling geological and geophysical data with seismic tomography models. International Geology Review, 2016, 58, 1616-1645. | 1.1 | 38 |
| 101 | Subduction controls the distribution and fragmentation of Earthâ€™s tectonic plates. Nature, 2016, 535, 140-143. | 13.7 | 112 |
| 102 | Formation of Australian continental margin highlands driven by plateâ€“mantle interaction. Earth and Planetary Science Letters, 2016, 441, 60-70. | 1.8 | 54 |
| 103 | The Late Cretaceous to recent tectonic history of the Pacific Ocean basin. Earth-Science Reviews, 2016, 154, 138-173. | 4.0 | 83 |
| 104 | Oceanic microplate formation records the onset of Indiaâ€“Eurasia collision. Earth and Planetary Science Letters, 2016, 433, 204-214. | 1.8 | 27 |
| 105 | Identifying tectonic niche environments of South American porphyry magmatism through geological time: a spatio-temporal data mining approach. ASEG Extended Abstracts, 2015, 2015, 1-4. | 0.1 | 0 |
| 106 | Semiautomatic fracture zone tracking. Geochemistry, Geophysics, Geosystems, 2015, 16, 2462-2472. | 1.0 | 60 |
| 107 | Building a machine learning classifier for iron ore prospectivity in the Yilgarn Craton. ASEG Extended Abstracts, 2015, 2015, 1-4. | 0.1 | 0 |
| 108 | Cenozoic surface uplift from south Western Australian rivers. ASEG Extended Abstracts, 2015, 2015, 1-4. | 0.1 | 0 |

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| 109 | Long-term interaction between mid-ocean ridges and mantle plumes. Nature Geoscience, 2015, 8, 479-483. | 5.4 | 92 |
| 110 | Plate Tectonics. , 2015, , 45-93. | | 12 |
| 111 | A tectonic model reconciling evidence for the collisions between India, Eurasia and intra-oceanic arcs of the central-eastern Tethys. Gondwana Research, 2015, 28, 451-492. | 3.0 | 165 |
| 112 | Absolute plate motions since 130 Ma constrained by subduction zone kinematics. Earth and Planetary Science Letters, 2015, 418, 66-77. | 1.8 | 53 |
| 113 | Absolute plate motion of Africa around Hawaii-Emperor bend time. Geophysical Journal International, 2015, 201, 1743-1764. | 1.0 | 20 |
| 114 | Uncovering the relationship between subducting bathymetric ridges and volcanic chains with significant earthquakes using geophysical data mining. Australian Journal of Earth Sciences, 2015, 62, 171-180. | 0.4 | 7 |
| 115 | Deformation-related volcanism in the Pacific Ocean linked to the Hawaiianâ€“Emperor bend. Nature Geoscience, 2015, 8, 393-397. | 5.4 | 38 |
| 116 | Ridge subduction sparked reorganization of the Pacific plateâ€mantle system 60â€“50 million years ago. Geophysical Research Letters, 2015, 42, 1732-1740. | 1.5 | 170 |
| 117 | Revision of Paleogene plate motions in the Pacific and implications for the Hawaiian-Emperor bend. Geology, 2015, 43, 455-458. | 2.0 | 31 |
| 118 | Tectonic speed limits from plate kinematic reconstructions. Earth and Planetary Science Letters, 2015, 418, 40-52. | 1.8 | 102 |
| 119 | Provenance of plumes in global convection models. Geochemistry, Geophysics, Geosystems, 2015, 16, 1465-1489. | 1.0 | 58 |
| 120 | Prospectivity of Western Australian iron ore from geophysical data using a reject option classifier. Ore Geology Reviews, 2015, 71, 761-776. | 1.1 | 7 |
| 121 | Census of seafloor sediments in the worldâ€™s ocean. Geology, 2015, 43, 795-798. | 2.0 | 110 |
| 122 | Influence of subduction history on South American topography. Earth and Planetary Science Letters, 2015, 430, 9-18. | 1.8 | 67 |
| 123 | Assessing the role of slab rheology in coupled plate-mantle convection models. Earth and Planetary Science Letters, 2015, 430, 191-201. | 1.8 | 22 |
| 124 | Full-fit reconstruction of the South China Sea conjugate margins. Tectonophysics, 2015, 661, 121-135. | 0.9 | 39 |
| 125 | The tectonic stress field evolution of India since the Oligocene. Gondwana Research, 2015, 28, 612-624. | 3.0 | 30 |
| 126 | Geologic and kinematic constraints on Late Cretaceous to mid Eocene plate boundaries in the southwest Pacific. Earth-Science Reviews, 2015, 140, 72-107. | 4.0 | 75 |

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| 127 | Paleophysiography of Ocean Basins. , 2015, , 1-15. | | 2 |
| 128 | Data Driven Science. , 2015, , . | | 1 |
| 129 | A suite of early Eocene (~ 55 Ma) climate model boundary conditions. Geoscientific Model Development, 2014, 7, 2077-2090. | 1.3 | 71 |
| 130 | The Cretaceous and Cenozoic tectonic evolution of Southeast Asia. Solid Earth, 2014, 5, 227-273. | 1.2 | 234 |
| 131 | Plate tectonic raster reconstruction in GPlates. Solid Earth, 2014, 5, 741-755. | 1.2 | 14 |
| 132 | Pacific plate slab pull and intraplate deformation in the early Cenozoic. Solid Earth, 2014, 5, 757-777. | 1.2 | 19 |
| 133 | Topographic asymmetry of the South Atlantic from global models of mantle flow and lithospheric stretching. Earth and Planetary Science Letters, 2014, 387, 107-119. | 1.8 | 92 |
| 134 | Cenozoic uplift of south Western Australia as constrained by river profiles. Tectonophysics, 2014, 622, 186-197. | 0.9 | 20 |
| 135 | Community infrastructure and repository for marine magnetic identifications. Geochemistry, Geophysics, Geosystems, 2014, 15, 1629-1641. | 1.0 | 97 |
| 136 | Circumâ€Arctic mantle structure and longâ€wavelength topography since the Jurassic. Journal of Geophysical Research: Solid Earth, 2014, 119, 7889-7908. | 1.4 | 31 |
| 137 | New global marine gravity model from CryoSat-2 and Jason-1 reveals buried tectonic structure. Science, 2014, 346, 65-67. | 6.0 | 1,074 |
| 138 | Mapping crustal thickness using marine gravity data: Methods and uncertainties. Geophysics, 2014, 79, G27-G36. | 1.4 | 52 |
| 139 | Geological, tomographic, kinematic and geodynamic constraints on the dynamics of sinking slabs. Journal of Geodynamics, 2014, 73, 1-13. | 0.7 | 93 |
| 140 | Seawater chemistry driven by supercontinent assembly, breakup and dispersal: REPLY. Geology, 2014, 42, e335-e335. | 2.0 | 1 |
| 141 | Plate Motion. , 2014, , 1-10. | | 2 |
| 142 | The tectonic evolution of the Arctic since Pangea breakup: Integrating constraints from surface geology and geophysics with mantle structure. Earth-Science Reviews, 2013, 124, 148-183. | 4.0 | 153 |
| 143 | Seawater chemistry driven by supercontinent assembly, breakup, and dispersal. Geology, 2013, 41, 907-910. | 2.0 | 50 |
| 144 | Oblique mid ocean ridge subduction modelling with the parallel fast multipole boundary element method. Computational Mechanics, 2013, 51, 455-463. | 2.2 | 10 |

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| 145 | Organization of the tectonic plates in the last 200 Myr. Earth and Planetary Science Letters, 2013, 373, 93-101. | 1.8 | 36 |
| 146 | The Moho: Boundary above upper mantle peridotites or lower crustal eclogites? A global review and new interpretations for passive margins. Tectonophysics, 2013, 609, 636-650. | 0.9 | 46 |
| 147 | Towards a predictive model for opal exploration using a spatio-temporal data mining approach. Australian Journal of Earth Sciences, 2013, 60, 217-229. | 0.4 | 11 |
| 148 | Convergence of tectonic reconstructions and mantle convection models for significant fluctuations in seafloor spreading. Earth and Planetary Science Letters, 2013, 383, 92-100. | 1.8 | 48 |
| 149 | Relationships between palaeogeography and opal occurrence in Australia: A data-mining approach. Computers and Geosciences, 2013, 56, 76-82. | 2.0 | 11 |
| 150 | Revised tectonic evolution of the Eastern Indian Ocean. Geochemistry, Geophysics, Geosystems, 2013, 14, 1891-1909. | 1.0 | 96 |
| 151 | The breakup of East Gondwana: Assimilating constraints from Cretaceous ocean basins around India into a bestâ€fit tectonic model. Journal of Geophysical Research: Solid Earth, 2013, 118, 808-822. | 1.4 | 207 |
| 152 | Global sediment thickness data set updated for the Australianâ€Antarctic Southern Ocean. Geochemistry, Geophysics, Geosystems, 2013, 14, 3297-3305. | 1.0 | 166 |
| 153 | Early Indiaâ€Australia spreading history revealed by newly detected Mesozoic magnetic anomalies in the Perth Abyssal Plain. Journal of Geophysical Research: Solid Earth, 2013, 118, 3275-3284. | 1.4 | 51 |
| 154 | Forward modelling of oceanic lithospheric magnetization. Geophysical Journal International, 2013, 192, 951-962. | 1.0 | 22 |
| 155 | Full-fit reconstruction of the Labrador Sea and Baffin Bay. Solid Earth, 2013, 4, 461-479. | 1.2 | 62 |
| 156 | A review of observations and models of dynamic topography. Lithosphere, 2013, 5, 189-210. | 0.6 | 277 |
| 157 | Kinematics of the South Atlantic rift. Solid Earth, 2013, 4, 215-253. | 1.2 | 286 |
| 158 | Towards community-driven paleogeographic reconstructions: integrating open-access paleogeographic and paleobiology data with plate tectonics. Biogeosciences, 2013, 10, 1529-1541. | 1.3 | 54 |
| 159 | Macquarie Arc and the Lachlan Orocline hypothesis: Magnetic analysis and development of geologically constrained forward model of lithospheric magnetisation. ASEG Extended Abstracts, 2013, 2013, 1-3. | 0.1 | 0 |
| 160 | Australian paleo-stress fields and tectonic reactivation over the past 100 Ma. Australian Journal of Earth Sciences, 2012, 59, 13-28. | 0.4 | 66 |
| 161 | The link between great earthquakes and the subduction of oceanic fracture zones. Solid Earth, 2012, 3, 447-465. | 1.2 | 27 |
| 162 | Early to middle Miocene monsoon climate in Australia: REPLY. Geology, 2012, 40, e274-e274. | 2.0 | 4 |

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| 163 | Global paleo-lithospheric models for geodynamical analysis of plate reconstructions. Physics of the Earth and Planetary Interiors, 2012, 212-213, 106-113. | 0.7 | 3 |
| 164 | A global-scale plate reorganization event at 105â˜'100Ma. Earth and Planetary Science Letters, 2012, 355-356, 283-298. | 1.8 | 165 |
| 165 | Testing absolute plate reference frames and the implications for the generation of geodynamic mantle heterogeneity structure. Earth and Planetary Science Letters, 2012, 317-318, 204-217. | 1.8 | 53 |
| 166 | Modeling the Miocene climatic optimum: Ocean circulation. Paleoceanography, 2012, 27, n/a-n/a. | 3.0 | 88 |
| 167 | Spherical dynamic models of topâ€down tectonics. Geochemistry, Geophysics, Geosystems, 2012, 13, . | 1.0 | 17 |
| 168 | Insights on the kinematics of the Indiaâ€Eurasia collision from global geodynamic models. Geochemistry, Geophysics, Geosystems, 2012, 13, . | 1.0 | 74 |
| 169 | Constraining the Jurassic extent of Greater India: Tectonic evolution of the West Australian margin. Geochemistry, Geophysics, Geosystems, 2012, 13, . | 1.0 | 78 |
| 170 | Influence of overriding plate geometry and rheology on subduction. Geochemistry, Geophysics, Geosystems, 2012, 13, . | 1.0 | 24 |
| 171 | The GPlates Geological Information Model and Markup Language. Geoscientific Instrumentation, Methods and Data Systems, 2012, 1, 111-134. | 0.6 | 17 |
| 172 | Plate tectonic reconstructions with continuously closing plates. Computers and Geosciences, 2012, 38, 35-42. | 2.0 | 214 |
| 173 | Dynamic topography and anomalously negative residual depth of the Argentine Basin. Gondwana Research, 2012, 22, 658-663. | 3.0 | 22 |
| 174 | Global continental and ocean basin reconstructions since 200Ma. Earth-Science Reviews, 2012, 113, 212-270. | 4.0 | 1,459 |
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