

Gaku Kimura

List of Publications by Year in descending order

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| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | DÃ©collement geometry controls on shallow very low frequency earthquakes. Scientific Reports, 2022, 12, 2677. | 3.3 | 5 |
| 2 | Deformation Process and Mechanism of the Frontal Megathrust at the Nankai Subduction Zone. Geochemistry, Geophysics, Geosystems, 2022, 23, . | 2.5 | 1 |
| 3 | Structural Anomaly at the Boundary Between Strong and Weak Plate Coupling in the Centralâ€Western Nankai Trough. Geophysical Research Letters, 2022, 49, . | 4.0 | 7 |
| 4 | Rejuvenated extension of the Philippine Sea plate and its effect on subduction dynamics in the Nankai Trough. Island Arc, 2021, 30, e12402. | 1.1 | 6 |
| 5 | Deformation Structures From Splay and DÃ©collement Faults in the Nankai Accretionary Prism, SW Japan (IODP NanTroSEIZE Expedition 316): Evidence for Slow and Rapid Slip in Fault Rocks. Geochemistry, Geophysics, Geosystems, 2020, 21, e2019GC008786. | 2.5 | 5 |
| 6 | Three-dimensional topographic relief of the oceanic crust may control the occurrence of shallow very-low-frequency earthquakes in the Nankai Trough off Kumano. Earth, Planets and Space, 2020, 72, . | 2.5 | 13 |
| 7 | A new method for the empirical conversion of logging data to clay mineral fraction in the Nankai accretionary prism. Earth, Planets and Space, 2020, 72, . | 2.5 | 2 |
| 8 | Processes Governing Giant Subduction Earthquakes: IODP Drilling to Sample and Instrument Subduction Zone Megathrusts. Oceanography, 2019, 32, 80-93. | 1.0 | 12 |
| 9 | Origin of the early Cenozoic belt boundary thrust and Izanagiâ€Pacific ridge subduction in the western Pacific margin. Island Arc, 2019, 28, e12320. | 1.1 | 31 |
| 10 | Seismogenic Zone Structures Revealed by Improved 3â€ Seismic Images in the Nankai Trough off Kumano. Geochemistry, Geophysics, Geosystems, 2019, 20, 2252-2271. | 2.5 | 17 |
| 11 | Simultaneous estimation of in situ porosity and thermal structure from core sample measurements and resistivity log data at Nankai accretionary prism. Earth, Planets and Space, 2019, 71, . | 2.5 | 8 |
| 12 | Threeâ€dimensional texture of natural pseudotachylyte: Pseudotachylyte formation mechanism in hydrous accretionary complex. Island Arc, 2018, 27, e12241. | 1.1 | 0 |
| 13 | Punctuated growth of an accretionary prism and the onset of a seismogenic megathrust in the Nankai Trough. Progress in Earth and Planetary Science, 2018, 5, . | 3.0 | 26 |
| 14 | Physical property anisotropy of foliated fault rocks: Study from the Nobeoka Thrust, Shimanto Belt, southwest Japan. Island Arc, 2018, 27, e12257. | 1.1 | 1 |
| 15 | Acoustic properties of deformed rocks in the <sc>N</sc>obeoka thrust, in the <sc>S</sc>himanto <sc>B</sc>elt, <sc>K</sc>yushu, <sc>S</sc>outhwest <sc>J</sc>apan. Island Arc, 2017, 26, e12198. | 1.1 | 1 |
| 16 | Normal faulting and mass movement during ridge subduction inferred from porosity transition and zeolitization in the <sc>C</sc>osta <sc>R</sc>ica subduction zone. Geochemistry, Geophysics, Geosystems, 2017, 18, 2601-2616. | 2.5 | 1 |
| 17 | 3D geometry of a plate boundary fault related to the 2016 Off-Mie earthquake in the Nankai subduction zone, Japan. Earth and Planetary Science Letters, 2017, 478, 234-244. | 4.4 | 19 |
| 18 | Temporal stress variations along a seismogenic megasplay fault in the subduction zone: <sc>A</sc>n example from the <sc>N</sc>obeoka <sc>T</sc>hrust, southwestern <sc>J</sc>apan. Island Arc, 2017, 26, e12193. | 1.1 | 5 |

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| 19 | Opal-CT in chert beneath the toe of the Tohoku margin and its influence on the seismic aseismic transition in subduction zones. <i>Geophysical Research Letters</i> , 2017, 44, 687-693. | 4.0 | 2 |
| 20 | Source and sink of fluid in pelagic siliceous sediments along a cold subduction plate boundary. <i>Tectonophysics</i> , 2016, 686, 146-157. | 2.2 | 2 |
| 21 | Variations in stress and driving pore fluid pressure ratio using vein orientations along megasplay faults : Example from the Nobeoka Thrust, Southwest Japan. <i>Island Arc</i> , 2016, 25, 421-432. | 1.1 | 10 |
| 22 | Hydrogeological responses to incoming materials at the erosional subduction margin, offshore Osa Peninsula, Costa Rica. <i>Geochemistry, Geophysics, Geosystems</i> , 2015, 16, 2725-2742. | 2.5 | 11 |
| 23 | Pelagic smectite as an important factor in tsunamigenic slip along the Japan Trench. <i>Geology</i> , 2015, 43, 155-158. | 4.4 | 65 |
| 24 | Multiple damage zone structure of an exhumed seismogenic megasplay fault in a subduction zone - a study from the Nobeoka Thrust Drilling Project. <i>Earth, Planets and Space</i> , 2015, 67, . | 2.5 | 15 |
| 25 | Estimation of slip rate and fault displacement during shallow earthquake rupture in the Nankai subduction zone. <i>Earth, Planets and Space</i> , 2015, 67, . | 2.5 | 15 |
| 26 | Identification of the static backstop and its influence on the evolution of the accretionary prism in the Nankai Trough. <i>Earth and Planetary Science Letters</i> , 2015, 431, 15-25. | 4.4 | 49 |
| 27 | Changes in illite crystallinity within an ancient tectonic boundary thrust caused by thermal, mechanical, and hydrothermal effects: an example from the Nobeoka Thrust, southwest Japan. <i>Earth, Planets and Space</i> , 2014, 66, 116. | 2.5 | 25 |
| 28 | Earthquake faulting in subduction zones: insights from fault rocks in accretionary prisms. <i>Progress in Earth and Planetary Science</i> , 2014, 1, 7. | 3.0 | 53 |
| 29 | Middle Miocene swift migration of the TTT triple junction and rapid crustal growth in southwest Japan: A review. <i>Tectonics</i> , 2014, 33, 1219-1238. | 2.8 | 104 |
| 30 | Long-term evolution of an accretionary prism: The case study of the Shimanto Belt, Kyushu, Japan. <i>Tectonics</i> , 2014, 33, 936-959. | 2.8 | 42 |
| 31 | The influence of organic-rich shear zones on pelagic sediment deformation and seismogenesis in a subduction zone. <i>Journal of Mineralogical and Petrological Sciences</i> , 2014, 109, 228-238. | 0.9 | 2 |
| 32 | Hanging wall deformation of a seismogenic megasplay fault in an accretionary prism: The Nobeoka Thrust in southwestern Japan. <i>Journal of Structural Geology</i> , 2013, 52, 136-147. | 2.3 | 25 |
| 33 | Contrasts in physical properties between the hanging wall and footwall of an exhumed seismogenic megasplay fault in a subduction zone—An example from the Nobeoka Thrust Drilling Project. <i>Geochemistry, Geophysics, Geosystems</i> , 2013, 14, 5354-5370. | 2.5 | 22 |
| 34 | Tectonic mélange as fault rock of subduction plate boundary. <i>Tectonophysics</i> , 2012, 568-569, 25-38. | 2.2 | 97 |
| 35 | Silica diagenesis and its effect on interplate seismicity in cold subduction zones. <i>Earth and Planetary Science Letters</i> , 2012, 317-318, 136-144. | 4.4 | 22 |
| 36 | Runaway slip to the trench due to rupture of highly pressurized megathrust beneath the middle trench slope: The tsunamigenesis of the 2011 Tohoku earthquake off the east coast of northern Japan. <i>Earth and Planetary Science Letters</i> , 2012, 339-340, 32-45. | 4.4 | 81 |

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| 37 | Sources and physicochemical characteristics of fluids along a subduction zone megathrust: A geochemical approach using syn-tectonic mineral veins in the Mugi Trough, Shimanto accretionary complex. <i>Geochemistry, Geophysics, Geosystems</i> , 2012, 13, . | 2.5 | 39 |
| 38 | Spatial and temporal evolution of the megasplay fault in the Nankai Trough. <i>Geochemistry, Geophysics, Geosystems</i> , 2011, 12, . | 2.5 | 88 |
| 39 | A new source of water in seismogenic subduction zones. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a. | 4.0 | 34 |
| 40 | Dynamic changes in fluid redox state associated with episodic fault rupture along a megasplay fault in a subduction zone. <i>Earth and Planetary Science Letters</i> , 2011, 302, 369-377. | 4.4 | 54 |
| 41 | Slumping and mass transport deposition in the Nankai fore arc: Evidence from IODP drilling and 3D reflection seismic data. <i>Geochemistry, Geophysics, Geosystems</i> , 2011, 12, . | 2.5 | 103 |
| 42 | Progressive illitization in fault gouge caused by seismic slip propagation along a megasplay fault in the Nankai Trough. <i>Geology</i> , 2011, 39, 995-998. | 4.4 | 59 |
| 43 | Seismic slip propagation to the updip end of plate boundary subduction interface faults: Vitrinite reflectance geothermometry on Integrated Ocean Drilling Program NanTro SEIZE cores. <i>Geology</i> , 2011, 39, 395-398. | 4.4 | 147 |
| 44 | Split Philippine Sea plate beneath Japan. <i>Geophysical Research Letters</i> , 2010, 37, . | 4.0 | 52 |
| 45 | Origin and evolution of a splay fault in the Nankai accretionary wedge. <i>Nature Geoscience</i> , 2009, 2, 648-652. | 12.9 | 177 |
| 46 | Horizontal shortening versus vertical loading in accretionary prisms. <i>Geochemistry, Geophysics, Geosystems</i> , 2009, 10, . | 2.5 | 18 |
| 47 | Interactions between deformation and fluids in the frontal thrust region of the NanTroSEIZE transect offshore the Kii Peninsula, Japan: Results from IODP Expedition 316 Sites C0006 and C0007. <i>Geochemistry, Geophysics, Geosystems</i> , 2009, 10, . | 2.5 | 65 |
| 48 | Anelastic strain recovery reveals extension across SW Japan subduction zone. <i>Geophysical Research Letters</i> , 2009, 36, . | 4.0 | 75 |
| 49 | Deformation and fluid flow in seismogenic subduction zone: The Mugi Trough in the Shimanto Belt. <i>Journal of the Geological Society of Japan</i> , 2009, 115, S21-S36. | 0.6 | 2 |
| 50 | Underplating of Trough evidenced by the depositional ages: U-Pb dating of zircons from the Shimanto accretionary complex, southwest Japan. <i>Island Arc</i> , 2008, 17, 376-393. | 1.1 | 43 |
| 51 | Development of three-dimensional basement structure in Taiwan deduced from past plate motion: Consistency with the present seismicity. <i>Tectonics</i> , 2007, 26, n/a-n/a. | 2.8 | 3 |
| 52 | Transition of accretionary wedge structures around the up-dip limit of the seismogenic subduction zone. <i>Earth and Planetary Science Letters</i> , 2007, 255, 471-484. | 4.4 | 116 |
| 53 | Fluidization of granular material in a subduction thrust at seismogenic depths. <i>Earth and Planetary Science Letters</i> , 2007, 259, 307-318. | 4.4 | 83 |
| 54 | Tectonolithification of sandstone prior to the onset of seismogenic subduction zone: Evidence from tectonic Trough of the Shimanto Belt, Japan. <i>Geochemistry, Geophysics, Geosystems</i> , 2006, 7, n/a-n/a. | 2.5 | 18 |

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| 55 | Modern and ancient seismogenic out-of-sequence thrusts in the Nankai accretionary prism: Comparison of laboratory-derived physical properties and seismic reflection data. <i>Geophysical Research Letters</i> , 2006, 33, n/a-n/a. | 4.0 | 27 |
| 56 | Tectonic incorporation of the upper part of oceanic crust to overriding plate of a convergent margin: An example from the Cretaceous-early Tertiary Mugi Melange, the Shimanto Belt, Japan. <i>Tectonophysics</i> , 2005, 401, 217-230. | 2.2 | 76 |
| 57 | Deformation and fluid flow of a major out-of-sequence thrust located at seismogenic depth in an accretionary complex: Nobeoka Thrust in the Shimanto Belt, Kyushu, Japan. <i>Tectonics</i> , 2005, 24, n/a-n/a. | 2.8 | 79 |
| 58 | Melange and its seismogenic roof décollement: A plate boundary fault rock in the subduction zone-An example from the Shimanto Belt, Japan. <i>Tectonics</i> , 2005, 24, n/a-n/a. | 2.8 | 93 |
| 59 | In situ pressure-temperature conditions of a tectonic melange: Constraints from fluid inclusion analysis of syn-melange veins. <i>Island Arc</i> , 2003, 12, 357-365. | 1.1 | 26 |
| 60 | Pseudotachylite from an ancient accretionary complex: Evidence for melt generation during seismic slip along a master décollement?. <i>Geology</i> , 2003, 31, 637. | 4.4 | 81 |
| 61 | Workshop explores seismogenic zone drilling in the Nankai trough. <i>Eos</i> , 2001, 82, 532-532. | 0.1 | 0 |
| 62 | Deformation history of tectonic melange and its relationship to the underplating process and relative plate motion: An example from the deeply buried Shimanto Belt, SW Japan. <i>Tectonics</i> , 2001, 20, 376-393. | 2.8 | 49 |
| 63 | Cretaceous episodic growth of the Japanese Islands. <i>Island Arc</i> , 1997, 6, 52-68. | 1.1 | 45 |
| 64 | Paleogeographic maps of the Japanese Islands: Plate tectonic synthesis from 750 Ma to the present. <i>Island Arc</i> , 1997, 6, 121-142. | 1.1 | 961 |
| 65 | Collision orogeny at arc-arc junctions in the Japanese Islands. <i>Island Arc</i> , 1996, 5, 262-275. | 1.1 | 117 |
| 66 | Change in fabric of melange in the Shimanto Belt, Japan: Change in relative convergence?. <i>Tectonics</i> , 1995, 14, 1273-1289. | 2.8 | 93 |
| 67 | The latest Cretaceous-Early Paleogene rapid growth of accretionary complex and exhumation of high pressure series metamorphic rocks in northwestern Pacific margin. <i>Journal of Geophysical Research</i> , 1994, 99, 22147-22164. | 3.3 | 124 |
| 68 | Underplated units in an accretionary complex: Melange of the Shimanto Belt of eastern Shikoku, southwest Japan. <i>Tectonics</i> , 1991, 10, 31-50. | 2.8 | 159 |
| 69 | Collision Tectonics in Hokkaido and Sakhalin. , 1983, , 123-134. | | 64 |
| 70 | Cretaceous-Neogene accretionary units. , 0, , 125-137. | | 3 |
| 71 | Expedition 358 summary. <i>Proceedings of the International Ocean Discovery Program</i> , 0, , . | 0.0 | 10 |
| 72 | NanTroSEIZE Stage 1 expeditions: introduction and synthesis of key results. <i>Proceedings of the Integrated Ocean Drilling Program Integrated Ocean Drilling Program</i> , 0, , . | 1.0 | 60 |

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|----|---|-----|-----------|
| 73 | Expedition 316 summary. Proceedings of the Integrated Ocean Drilling Program Integrated Ocean Drilling Program, 0, , . | 1.0 | 54 |
| 74 | Generation Depth of the Pseudotachylyte from an Out-of-Sequence Thrust in Accretionary Prism – Geothermobarometric Evidence. Scientific Drilling, 0, SpecialIssue, 47-50. | 0.6 | 9 |
| 75 | Site C0002. Proceedings of the International Ocean Discovery Program, 0, , . | 0.0 | 6 |
| 76 | Site C0025. Proceedings of the International Ocean Discovery Program, 0, , . | 0.0 | 2 |
| 77 | Site C0024. Proceedings of the International Ocean Discovery Program, 0, , . | 0.0 | 1 |
| 78 | Expedition 358 methods. Proceedings of the International Ocean Discovery Program, 0, , . | 0.0 | 3 |