

Renaud Toussaint, publication list

(cf <http://ites.unistra.fr/renaud>)

179 publications, peer reviewed journals (149) and proceedings and chapters (30), 2 monographs, and 7 submitted articles (h-index=45, 5678 citations, Scholar Google, or h-index=36, 4139 citations, Scopus, or h-index=34, 3809 citations, Web of Science),

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open source versions :

HAL :

https://hal.archives-ouvertes.fr/search/index/?q=renaud+toussaint&docType_s=ART+OR+COMM+OR+COUV+OR+OTHER+OR+OUV+OR+DOUV+OR+UNDEFINED+OR+REPORT+OR+THESE+OR+HDR+OR+LECTURE&submitType_s=notice+OR+file&sort=producedDate_tdate+desc

ArXiv :

<https://arxiv.org/search/?searchtype=author&query=Toussaint%2C+R>

UnivOak :

https://univ oak.eu/islandora/search/renaud.toussaint?type=dismax&islandora_solr_search_navigat ion=1&f%5B0%5D=dc.contributor%3A%22Toussaint%5C%20Renaud%5C%20%22

Researchgate :

https://www.researchgate.net/profile/Renaud_Toussaint

Preprint:

A Dodangeh, R Toussaint, EG Flekkøy, M Fahs [Simple model for injection related anthropic mechanism triggering distant clusters during the 2019-2020 seismicity crisis in Strasbourg](#)

Authorea Preprints

Published articles in peer-reviewed scientific journals

149. D Hafermaas, S Köhler, D Koehn, R Toussaint [Dynamic System Roughening from Mineral to Tectonic Plate Scale: Similarities Between Stylolites and Mid-Ocean Ridges](#) Minerals, 2025, 15 (7), 743

148. P Sarma, E Aharonov, R Toussaint, S Perez. [Fault gouge failure induced by fluid injection: Hysteresis, delay and shear-strengthening](#). Journal of Geophysical Research: Solid Earth, 2025, 130 (6), e2024JB030768

147. M Meghraoui, Z Cakir, J Kariche, R Toussaint, F Provost, V Karabacak, R Sbeinati, E Altunel, T Nemer. [The 2023Mw 7.8 Kahramanmaraş earthquake rupture increases potential failure along the northern Dead Sea Fault](#). Tectonophysics, 2025, 230799

146. K Khobaib, P Reis, M Moura, R Toussaint, EG Flekkøy, KJ Måløy, [Gravity stabilized drainage in porous media with controlled disorder](#). Physical Review Research, 2025, 7 (2), 023040

145. P Reis, G Linga, M Moura, PA Rikvold, R Toussaint, EG Flekkøy, KJ Måløy [Interaction between corner and bulk flows during drainage in granular porous media](#) Advances in Water Resources, 2025, 198, 104914

144. MI Arran, A Mangueney, J De Rosny, R Toussaint. [Simulated slidequakes: Insights from DEM simulations into the high-frequency seismic signal generated by geophysical granular flows](#). Journal of Geophysical Research: Earth Surface, 2024, 129 (8), e2023JF007455

143. Clément Hibert, François Noël, David Toe, Miloud Talib, Mathilde Desrues, Emmanuel Wyser, Ombeline Brenguier, Franck Bourrier, Renaud Toussaint, Jean-Philippe Malet, Michel Jaboyedoff. [Machine learning prediction of the mass and the velocity of controlled single-](#)

[block rockfalls from the seismic waves they generate](#). Earth Surface Dynamics, 2024, 12 (3), 641-656

142. R Abbasov, M Fahs, A Younes, H Nowamooz, KJ Måløy, R Toussaint. [Modeling rainfall-induced landslide using the concept of local factor of safety: Uncertainty propagation and sensitivity analysis](#) Computers and Geotechnics, 2024, 167, 106102

141. Eirik Grude Flekkøy, Renaud Toussaint. Statistical implications of the $n = 1$ observation of 1I/ Oumuamua. Monthly Notices of the Royal Astronomical Society: Letters, 2023, 523 (1), pp.L9–L14. ;10.1093/mnrasl/slad049t;. ;hal-04311831t;

140. François Noël, Synnøve Flugekvam Nordang, Michel Jaboyedoff, Julien Travelletti, Battista Matasci, Michaël Digout, Marc-Henri Derron, Andrin Caviezel, Clément Hibert, David Toe, Miloud Talib, Emmanuel Wyser, Franck Bourrier, Renaud Toussaint, Jean-Philippe Malet, Jacques Locat. Highly energetic rockfalls: back analysis of the 2015 event from the Mel de la Niva, Switzerland. Landslides, 2023, 20 (8), pp.1–22. ;10.1007/s10346-023-02054-2t;. ;hal-04291588t;

139. Paula Reis, Marcel Moura, Gaute Linga, Per Arne Rikvold, Renaud Toussaint, et al.. A simplified pore-scale model for slow drainage including film-flow effects. Advances in Water Resources, 2023, 182, pp.104580. ;10.1016/j.advwatres.2023.104580t;. ;hal-04311793t;

138. Shahar Ben-Zeev, Liran Goren, Renaud Toussaint, Einat Aharonov. Drainage explains soil liquefaction beyond the earthquake near-field. Nature Communications, 2023, 14 (1), pp.5791. ;10.1038/s41467-023-41405-4t;. ;hal-04311812t;

137. Vincent Bachelet, Anne Mangeney, Renaud Toussaint, Julien de Rosny, Matthew I. Arran, et al.. Acoustic emissions of nearly steady and uniform granular flows: A proxy for flow dynamics and velocity fluctuations. Journal of Geophysical Research: Earth Surface, 2023, ;10.1029/2022JF006990t;. ;hal-04024382t;

136. D. Koehn, S. Köehler, Renaud Toussaint, I. Ghani, H. Stollhofen. Scaling analysis, correlation length and compaction estimates of natural and simulated stylolites. Journal of Structural Geology, 2022, 161, pp.104670. ;10.1016/j.jsg.2022.104670t;. ;hal-03873884t;

135. Daniel Koehn, Ulrich Kelka, Renaud Toussaint, Coralie Siegel, Gary Mullen, et al.. Fault controlled mixing and mineralization on outcrop scale the role of stationary and traveling waves of high saturation indices. Geological Magazine, 2022, pp.1–14. ;10.1017/S001675682200070Xt;. ;hal-03874156t;

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128. Vincent-Dospital, T., Cochard, A., Santucci, S., Måløy, K. J., & Toussaint, R. (2021). Thermally activated intermittent dynamics of creeping crack fronts along disordered interfaces. *Scientific reports*, 11(1), 1-16.
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