

GIULIO DI TORO: Publications**(underlined: M.S., Ph.D. or Post-Doc advised or co-advised by GDT)****PEER-REVIEWED PUBLICATIONS**

1. Aretusini S., Spagnuolo E., Plumper O., **Di Toro G.**, 2019. *Seismic slip on clay nanofoliations*. **Journal of Geophysical Research**, vol. 124, pp. 1-13, <https://doi.org/10.1029/2019JB017364>.
2. Violay M., Passelegue F., Spagnuolo E., **Di Toro G.**, Cornelio C. 2019. *Effect of water and rock composition on re-strengthening of faults during the deceleration phase of seismic slip pulses*. **Earth and Planetary Science Letters**, vol. 522, pp. 55-64.
3. Passelegue F., Aubry J., Nicolas A., Fondriest M., Deldicque D., Schubnel A., **Di Toro G.**, 2019. *From Fault Creep to Slow and Fast Earthquakes in Carbonates*. **Geology**, vol. 47, pp. 744-748.
4. Demurtas M., S.A.F. Smith, Prior D.J., Spagnuolo E., **Di Toro G.**, 2019. *Development of crystallographic preferred orientation during cataclasis in low-temperature carbonate fault gouge*. **Journal of Structural Geology**, vol. 126, 37-50.
5. Cornelio C., Spagnuolo E., **Di Toro G.**, Nielsen S., Violay M., 2019. *Mechanical behaviour of fluid-lubricated faults*. **Nature Communications**, 10.1038/s41467-019-09293-9, pp. 1-7.
6. Guerin-Marthe S., Nielsen S., Bird R., **Di Toro G.**, Giani S., 2019. *Earthquake Nucleation Size: Evidence of Loading Rate Dependence in Laboratory Faults*. **Journal of Geophysical Research**, doi: 10.1029/2018JB016803.
7. Rowe C., Lamothe K., Rempe M., Andrews M., Mitchell T., **Di Toro G.**, White J.C., Aretusini S., 2019. *Earthquake lubrication and healing explained by amorphous nanosilica*. **Nature Communications**, (2019) 10:320, <https://doi.org/10.1038/s41467-018-08238-y>.
8. Rempe M., Mitchell T., Renner J., Smith S.A.F., Bistacchi A., **Di Toro G.**, 2018. The relationship between microfracture damage and the physical properties of fault-related rocks: The Gole Larghe Fault Zone, Italian Southern Alps. **Journal of Geophysical Research**, vol. 123, pp. 7661-7687, <https://doi.org/10.1029/2018JB015900>.
9. Savage H., Rabinowitz H., Spagnuolo E., Aretusini S., Polissar P., **Di Toro G.**, 2018. *Biomarker thermal maturity experiments at earthquake slip rates*. **Earth and Planetary Science Letters**, vol. 502, pp. 253-261, <https://doi.org/10.1016/j.epsl.2018.08.038>.
10. Leah H., Fondriest M., Lucca A., Storti F., Balsamo F., **Di Toro G.**, 2018, *Coseismic extension recorded within the damage zone of the Vado di Ferruccio Thrust Fault, Central Apennines, Italy*. **Journal of Structural Geology**, vol. 114, pp. 121–138, <https://doi.org/10.1016/j.jsg.2018.06.015>
11. Giacomel P., Spagnuolo E., Manuela N., Marzoli A., Passelegue F., Youbi N., **Di Toro G.**, 2018. *Frictional instabilities and carbonation of basalts triggered by injection of pressurized H₂O- and CO₂-rich fluids*. **Geophysical Research Letters**, vol. 45, pp. 1-10, (GRL57585), doi:10.1029/2018GL078082.
12. Murphy S., G. Di Toro, F. Romano, A. Scala, S. Lorito, E. Spagnuolo, S. Aretusini, G. Festa, A. Piatanesi, S. Nielsen, 2018. *Tsunamigenic earthquake simulations using experimentally derived friction laws*. **Earth and Planetary Science Letters**, vol. 486, pp. 155-165, <https://doi.org/10.1016/j.epsl.2018.01.011>.
13. Ferré E.C., Meado A.L., Geissman J., **Di Toro G.**, Spagnuolo E., Ueda T., Ashwal L.D., Deseta N., Andersen T.B., Filiberto J., Conder J.A., 2017, *Earthquakes in the mantle? Insights from rock magnetism of pseudotachylytes*. **Journal of Geophysical Research**. vol. 122 (11), 10.1002/2017JB014618, pp.1-17.
14. Vannucchi P., Spagnuolo E., Ujiie K., Aretusini S., **Di Toro G.**, Nielsen S., Tsutsumi A., 2017. *Past seismic slip-to-the-trench recorded in Central America megathrust*. **Nature Geoscience** vol. 10, pp. 935-940, doi: 10.1038/s41561-017-0013-4.
15. Kuo L.-W., Di Felice F., Spagnuolo E., **Di Toro G.**, Song S.-R., Aretusini S., Li H., Suppe J., Si J., Wen C.-Y., 2017 *Fault gouge graphitization as evidence of past seismic slip*. **Geology** vol. 45, pp. 979-982, doi:10.1130/G39295.1.
16. Smeraglia L., Bettucci A., Billi A., Carminati E., Cavallo A., **Di Toro G.**, Natali M., Passeri D., Rossi M., Spagnuolo E., 2017. *Microstructural evidence for seismic and aseismic slip along clay bearing, carbonate faults*. **Journal of Geophysical Research**, 10.1002/2017JB014042, pp. 1-21.
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20. Aretusini S., Spagnuolo E., Mitterpergher S., Plumper O., Gualtieri A., **Di Toro G.**, 2017. *Production of nanoparticles during experimental deformation of smectites and implications for seismic slip*. **Earth and Planetary Science Letters**, vol. 463, pp. 221-231.

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22. Smith, S.A.F., Griffith, J.R., Fondriest, M., **Di Toro, G.**, 2017. "Coseismic foliations" in gouge and cataclaste: experimental observations and consequences for interpreting the fault rock record. In: "Fault-zone Dynamic Processes: Evolution of Fault Properties During Seismic Rupture", Eds. M. Thomas, T. Mitchell, H. Bath, **Geophysical Monograph Series** Vol. 227, (American Geophysical Union Special Volume, Washington D.C., USA), pp. 81-102. doi/10.1002/9781119156895
23. Beeler, N., **Di Toro, G.**, Nielsen, S., 2016. *Earthquake source properties from pseudotachylite*. **Bulletin of the Seismological Society of America**. 10.1785/0120150344.
24. Mitchell M. M., Toy V., **Di Toro G.**, Renner J., Sibson R., 2016. *Fault welding by pseudotachylite formation*. **Geology**, vol. 44, no. 12, pp. 1059–1062, doi: 10.1130/G38373.1.
25. Passelegue F.X., Spagnuolo E., Violay M., Nielsen S., **Di Toro G.**, Schubnel A., 2016. *Frictional evolution, acoustic activity and off-fault damage in simulated faults sheared at seismic slip rates*. **Journal of Geophysical Research**, vol. 121, pp. 1-24, doi:10.1002/2016JB012988.
26. Demurtas M., Fondriest M., Balsamo F., Clemenzi L., Storti F., Bistacchi A., **Di Toro G.** 2016. Structure of a normal seismogenic fault zone in carbonates: the Vado di Corno Fault, Campo Imperatore, Central Apennines (Italy). **Journal of Structural Geology**, vol. 90, pp. 185-206, doi: 10.1016/j.jsg.2016.08.004.
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38. Rempe M., Smith S.,A.F., Ferri F., Mitchell T., **Di Toro, G.**, 2014. *Clast-cortex aggregates in experimental and natural calcite bearing fault zones*. **Journal of Structural Geology**, v. 68, p. 142-157.
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