

- Sak, P. B., D. M. Fisher, T. W. Gardner, K. Murphy, and S. L. Brantley (2004), Rates of weathering rind formation on Costa Rican basalt, *Geochim. Cosmochim. Acta*, 68(7), 1453–1472, doi:10.1016/j.gca.2003.09.007.
- Shepard, M. K., R. A. Brackett, and R. E. Arvidson (1995), Self-affine (fractal) topography: Surface parameterization and radar scattering, *J. Geophys. Res.*, 100(E6), 11,709–11,718, doi:10.1029/95JE00664.
- Shepard, M. K., B. A. Campbell, M. H. Bulmer, T. G. Farr, L. R. Gaddis, and J. J. Plaut (2001), The roughness of natural terrain: A planetary and remote sensing perspective, *J. Geophys. Res.*, 106(E12), 32,777–32,796, doi:10.1029/2000JE001429.
- Smith, J. A., R. C. Finkel, D. L. Farber, D. T. Rodbell, and G. O. Seltzer (2005), Preservation and boulder erosion in the tropical Andes: Interpreting old surface exposure ages in glaciated valleys, *J. Quat. Sci.*, 20(7–8), 735–758, doi:10.1002/jqs.981.
- Sneed, E. D., and R. L. Folk (1958), Pebbles in the lower Colorado River, Texas: A study in particle morphogenesis, *J. Geol.*, 66(2), 114–150.
- Stretch, R., and H. A. Viles (2002), Lichen weathering on Lanzarote lava flows, *Geomorphology*, 47, 87–94, doi:10.1016/S0169-555X(02)00143-5.
- Sumner, P., and W. Nel (2002), The effect of rock moisture on Schmidt hammer rebound: Tests on rock samples from Marion Island and South Africa, *Earth Surf. Processes Landforms*, 27, 1137–1142, doi:10.1002/esp.402.
- Swanson, D. A., and T. L. Wright (1978), Bedrock geology of the Northern Columbia Plateau and adjacent areas, in *The Channeled Scabland: A Guide to the Geomorphology of the Columbia Basin*, Washington, edited by V. Baker and D. Nummedal, pp. 37–57, NASA, Washington, D. C.
- Swanson, D. A., T. L. Wright, P. R. Hooper, and R. D. Bentley (1979), Revisions in stratigraphic nomenclature of the Columbia River Basalt Group, *U.S. Geol. Surv. Bull.* 1457-G, 59 pp., U.S. Geol. Surv., Washington, D. C.
- Tinkler, K. J., and E. E. Wohl (Eds.) (1998), *Rivers Over Rock: Fluvial Processes in Bedrock Channels*, 323 pp., AGU, Washington, D. C.
- Turcotte, D. L. (1997), *Fractals and Chaos in Geology and Geophysics*, 414 pp., Cambridge Univ. Press, New York.
- Turkington, A. V., and J. D. Phillips (2004), Cavernous weathering, dynamical instability, and self-organization, *Earth Surf. Processes Landforms*, 29(6), 665–675, doi:10.1002/esp.1060.
- Viles, H. A. (2001), Scale issues in weathering studies, *Geomorphology*, 41, 63–72, doi:10.1016/S0169-555X(01)00104-0.
- Williams, G. P. (1983), Paleohydrological methods and some examples from Swedish fluvial environments. part I: Cobble and boulder deposits, *Geogr. Ann. Ser. A*, 65(3/4), 227–243.
- Williams, R. B. G., and D. A. Robinson (1983), The effect of surface texture on the determination of surface hardness of rock using the Schmidt hammer, *Earth Surf. Processes Landforms*, 8, 289–292, doi:10.1002/esp.3290080311.
- Wood, J. (1996), The geomorphological characterisation of digital elevation models, Ph.D. thesis, Univ. of Leicester, Leicester, U. K. (Available at <http://www.soi.city.ac.uk/~jwo/phd>)
- Wyatt, M. B., and H. Y. McSween Jr. (2002), Spectral evidence for weathered basalt as an alternative to andesite in the northern lowlands of Mars, *Nature*, 417, 263–266, doi:10.1038/417263a.
- Yang, Z. Y., and T. J. Wu (2006), An index for describing the core-stone shape in weathered columnar joints, *Geotech. Geol. Eng.*, 24, 1349–1363, doi:10.1007/s10706-005-2213-8.
- Yingst, R. A., A. F. C. Haldemann, K. L. Biedermann, and A. M. Monhead (2007), Quantitative morphology of rocks at the Mars Pathfinder landing site, *J. Geophys. Res.*, 112, E06002, doi:10.1029/2005JE002582.

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