DOI	Title	Author	Contribution
http://doi.org/10.1088/1367-2630/15/8/083028	Minkowski Tensors of Anisotropic Spatial Structure	Schröder-Turk, G. E., Mickel, W., Kapfer, S. C., Schaller, F. M., Breidenbach, B., Hug, D., & Mecke, K. (2010)	Detailed theoretical extension of scalar Minkowski measures to tensors. Algorithmic implementation of measurement and treatment of boundary effects.
http://doi.org/10.1209/0295-5075/90/34001	Disordered spherical bead packs are anisotropic.	Schröder-Turk, G. E., Mickel, W., Schröter, M., Delaney, G. W., Saadatfar, M., Senden, T. J., Aste, T. (2010)	Investigation of anisotropy in spherical and ellipsoidal bead packs. These ellipsoidal exhibit a greater packing density in a disordered state than spherical bead packs.
http://doi.org/10.1111/j.1365-2818.2009.03331.x	Tensorial Minkowski functionals and anisotropy measures for planar patterns.	Schröder-Turk, G. E., Kapfer, S., Breidenbach, B., Beisbart, C., & Mecke, K. (2010).	Theory and algorithms to compute two-dimensional Minkowski tensors in application to surface problems.
http://doi.org/10.1002/pamm.201510224	Study on statistically similar RVEs for real microstructures based on different statistical descriptors	Scheunemann, L., Balzani, D., Brands, D., & Schröder, J. (2015)..	Incorporation of Minkowski Tensors to capture anisotropy in construction of SSREVs and evaluation of resulting material properties.
http://doi.org/10.1016/j.actamat.2012.02.029	Structure and deformation correlation of closed-cell aluminium foam subject to uniaxial compression.	Saadatfar, M., Mukherjee, M., Madadi, M., Schröder-Turk, G. E., Garcia-Moreno, F., Schaller, F. M., … Ramamurty, U. (2012).	Experimental and numerical analysis of the statistical properties of an aluminium foam sample and their change under uniaxial compression. Showed changing tensorial properties under increased loading.
http://doi.org/10.1007/s11440-015-0397-5	Stress-induced anisotropy in granular materials: fabric, stiffness, and permeability	Kuhn, M. R., Sun, W. C., & Wang, Q. (2015).	Evaluation of permeability and stiffness anisotropy of a granular sample under deformation using Minkowski tensors.
http://doi.org/10.1088/1742-5468/2010/11/P11010	Local anisotropy of fluids using Minkowski tensors	Kapfer, S. C., Mickel, W., Schaller, F. M., Spanner, M., Goll, C., Nogawa, T., Schröder-Turk, G. E. (2010)	Investigation of robustness of Minkowski tensors in application to simple analytical and experimental data.
http://doi.org/10.1007/3-540-45782-8_10	Vector- and tensor-valued descriptors for spatial patterns.	Beisbart, C., Dahlke, R., Mecke, K. R., & Wagner, H. (2002)	Detailed mathematical analysis of tensorial and vector shape descriptors such as Minkowski functional. Derivation of shape anisotropy measures in various applications.
Akad. Wiss.Wien, *136*, 271–306.	Über kapillare Leitung des Wassers im Boden.	Kozeny, J. (1927).	First attempt to analytically describe the ability of a porous medium to flow a fluid from first principles.
http://doi.org/10.1017/S0021859600051789	Permeability of saturated sands, soils and clays.	Carman, P. C. (1939)	Extends Kozenys work on deriving permeability based on material properties and gives comparison to experimental data.
http://doi.org/Doi 10.1016/S0263-8762(97)80003-2	Fluid flow through granular beds.	Carman, P. C. (1937).	Detailed experimental verification of Kozeny equation and introduces correction factors.
	Investigating the role of tortuosity in the Kozeny-Carman equation	Allen, R., & Sun, S. (2014).	Differentiate between different types of tortuosity as defined in the Kozeny-Carman equation and experimentally determine their value based on numerical measurements.
http://doi.org/10.1103/PhysRevB.34.8179	Quantitative prediction of permeability in porous rock.	Katz, A. J., & Thompson, A. H. (1986).	Introduced an empirical relation between permeability and the conductivity of a porous medium.
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http://doi.org/10.1007/s11242-015-0563-0	A Sensitivity Study of the Effect of Image Resolution on Predicted Petrophysical Properties.	Alyafei, N., Raeini, A. Q., Paluszny, A., & Blunt, M. J. (2015).	Investigated effects of upscaling on derived effective properties from Micro-CT images. Showed deviations between capillary pressure measurements and pore throat radius measurements on binary images.
http://doi.org/10.1007/	Computations of Absolute Permeability on Micro-CT Images.	Mostaghimi, P., Blunt, M. J., & Bijeljic, B. (2013).	Introduced a method to compute Stokes flow directly on a voxel image of a porous medium. Showed errors in comparison to experimental data and by estimation using the Kozeny Carman relation. Showed that anisotropy is more profound in carbonate samples than in sandstone samples.
http://doi.org/10.1007/s11242-015-0458-0	Computational Permeability Determination from Pore-Scale Imaging: Sample Size, Mesh and Method Sensitivities.	Guibert, R., Nazarova, M., Horgue, P., Hamon, G., Creux, P., & Debenest, G. (2015).	Showed range of errors in computation of permeability on 3D images based using finite difference and lattice Boltzmann methods. Investigated sensitivity of derived properties based on image, sample and mesh sizes.
ISBN: 978-0-471-97486-4	Statistical Analysis of Microstructures in Materials Science	Joachim Ohser, Frank Mücklich (2000)	Provide algorithmic implementations for various 2D and 3D image morphological measurements as well as the treatment of boundary effects in image measure
ISBN 978-1-4757-6355-3	Random Heterogeneous Materials	Salvatore Torquato (2002)	Classification of material properties of random porous materials. Summary of analytical and semi-analytical methods to model properties of random materials.
ISBN: 978-3-527-31203-0	3D Images of Materials Structures: Processing and Analysis	Joachim Ohser, Katja Schladitz (2009)	Compendium of imaging analysis methods for 3 dimensional images of materials.