Classical operators of harmonic analysis in Orlicz spaces

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We deal with classical operators of harmonic analysis in Orlicz spaces such as the Hardy-Littlewood maximal operator, the Hardy-type integral operators, the maximal operator of fractional order, the Riesz potential, the Laplace transform, and also with Sobolev-type embeddings on open subsets of $\mathbb{R}^n$ or with respect to Frostman measures and, in particular, trace embeddings on the boundary. For each operator (in case of embeddings we consider the identity operator) we investigate the question of its boundedness from an Orlicz space into another. Particular attention is paid to the sharpness of the results. We further study the question of the existence of optimal Orlicz domain and target spaces and their description. The work consists of author's published and unpublished results compiled together with material appearing in the literature.