



## Open data management. Description of available data and metadata related to a publication

<b>Authors (ORCID codes)</b>	Alessandro Chiesa, <sup>1,2</sup> Emilio Macaluso, <sup>2</sup> Paolo Santini, <sup>2</sup> Stefano Carretta, <sup>2,3</sup> and Eva Pavarini <sup>1,4</sup>
<b>Date</b>	2019/06/24
<b>Institutions</b>	<sup>1</sup> Institute for Advanced Simulation, Forschungszentrum Jülich, 52425 Jülich, Germany. <sup>2</sup> Dipartimento di Scienze Matematiche, Fisiche e Informatiche, University of Parma, 43124 Parma, Italy . <sup>3</sup> UdR Parma, INSTM, I-43124 Parma, Italy. <sup>4</sup> JARA High-Performance Computing, RWTH Aachen University, 52062 Aachen, Germany.
<b>Paper citation</b>	Physical Review B <b>99</b> , 235145 (2019); <a href="https://arxiv.org/abs/1909.01770">arXiv:1909.01770</a>
<b>Language</b>	English
<b>Dataset ID</b>	SUMO_INSTMPR_Chiesa_PRB2019-1
<b>List of data files available</b>	Ni2_transport.mat
<b>Methodology</b>	This is a theoretical study based on ab-initio DFT calculations performed on the Jülich supercomputers JURECA and JUWELS.
<b>Data processing and software needed</b>	Calculations were done by employing NWChem quantum chemistry package (see website <a href="http://www.nwchem-sw.org/index.php/Main_Page">http://www.nwchem-sw.org/index.php/Main_Page</a> ). Data were processed and plotted using Matlab (version 2019a)
<b>Access to the data</b>	Contact Stefano Carretta at <a href="mailto:stefano.carretta@unipr.it">stefano.carretta@unipr.it</a>