## Accepted Manuscript

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Josep Roqué Rosell, Joaquim Portillo Serra, Thomas Aiglsperger, Sergi Plana-Ruiz, Trifon Trifonov, Joaquín Antonio Proenza

PII: S0022-0248(17)30700-5

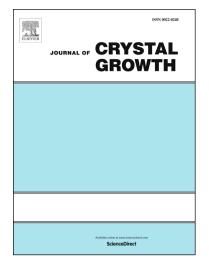
DOI: https://doi.org/10.1016/j.jcrysgro.2017.11.031

Reference: CRYS 24389

To appear in: Journal of Crystal Growth

Received Date: 8 July 2017

Revised Date: 1 November 2017 Accepted Date: 27 November 2017



Please cite this article as: J. Roqué Rosell, J. Portillo Serra, T. Aiglsperger, S. Plana-Ruiz, T. Trifonov, J. Antonio Proenza, Au crystal growth on natural occurring Au—Ag aggregate elucidated by means of precession electron diffraction (PED)., *Journal of Crystal Growth* (2017), doi: https://doi.org/10.1016/j.jcrysgro.2017.11.031

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Au crystal growth on natural occurring Au—Ag aggregate elucidated by means of precession

electron diffraction (PED).

Josep Roqué Rosell<sup>a\*</sup>, Joaquim Portillo Serra<sup>b,c</sup>, Thomas Aiglsperger<sup>a</sup>, Sergi Plana-Ruiz<sup>b</sup>, Trifon

Trifonov<sup>d</sup> and Joaquín Antonio Proenza<sup>a</sup>.

<sup>a</sup>Departament de Mineralogia, Petrologia i Geologia Aplicada, Universitat de Barcelona, Marti i

Franquès s/n, Barcelona, Catalunya, 08028, Spain

<sup>b</sup>Centres Científics i Tecnològics, Universitat de Barcelona, Lluís Solé i Sabaris, 1-3, Barcelona,

Catalunya, 08028, Spain

<sup>c</sup>NanoMEGAS, Boulevard Edmond Machtens 79, Brussels, B-1080, Belgium

<sup>d</sup>Centre de Recerca de Nanoenginyeria, Universitat Politècnica de Catalunya, Pascual i Vila, 15 Edifici

C Planta -1, Barcelona, Catalunya, 08028, Spain

Correspondence email: josep.roque@ub.edu

In the present work, a lamella from an Au—Ag aggregate found in Ni-laterites has been examined

using Transmission Electron Microscope to produce a series of Precision Electron Diffraction (PED)

patterns. The analysis of the structural data obtained, coupled with Energy Dispersive X-ray

microanalysis, made it possible to determine the orientation of twinned native gold growing on the

Au—Ag aggregate. The native Au crystal domains are found to have grown at the outermost part of the

aggregate whereas the inner core of the aggregate is an Au—Ag alloy (~4 wt% Ag). The submicron

structural study of the natural occurring Au aggregate points to the mobilization and precipitation of

gold in laterites and provides insights on Au aggregates development at supergene conditions. This

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