Access to the Library database complex search:

From the Library website

Resources Other resources Library database Journal publishers New box subscriptions Search journals Search ESRF Liquid-Liquid I publications Interfaces Search ILL publications Messader G Volcov Ebooks David W. Deumer Search books and ebooks

or directly from the Library database address:

https://epn-library.esrf.fr/flora/





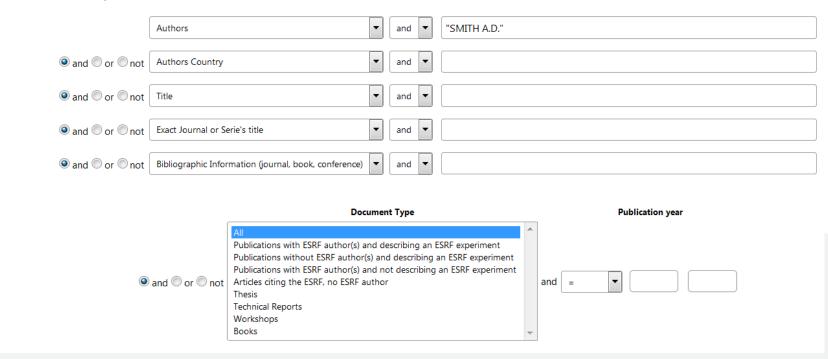
Joint ILL-ESRF Library

Institut Laue Langevin CS 20156 - 38042 Grenoble Cedex 9 - France Phone: +33 (0)4 76 20 70 20 e-mail : library@epn-campus.eu Contact us at library@epn-campus.eu

More questions?

### The auto-completion is activated for each field:

ESRF publications: Complex search







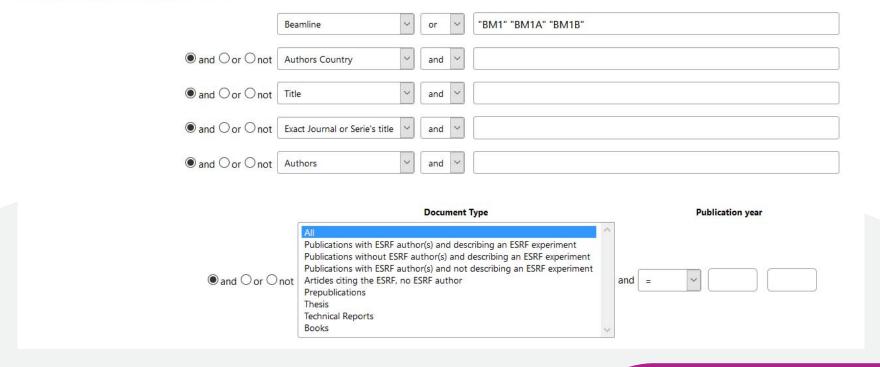
Joint ILL-ESRF Library

Institut Laue Langevin CS 20156 - 38042 Grenoble Cedex 9 - France Phone: +33 (0)4 76 20 70 20 e-mail : library@epn-campus.eu

### **Complex search**

You can search for several beamlines at once:

ESRF publications: Complex search



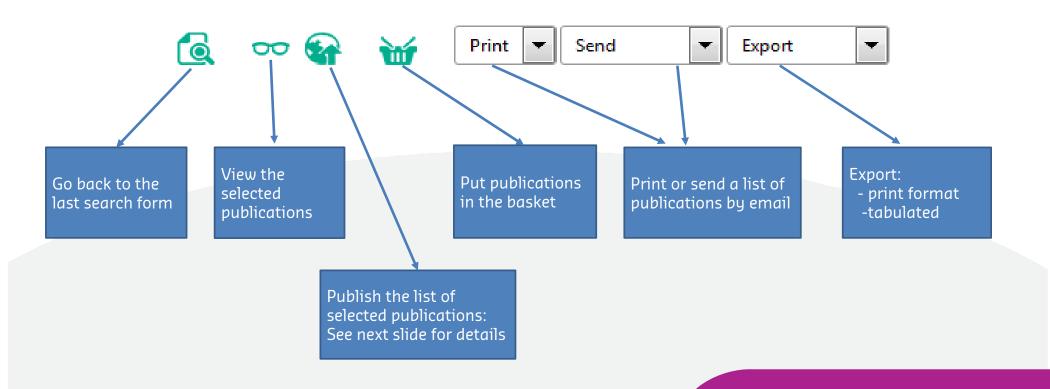




Joint ILL-ESRF Library

Institut Laue Langevin CS 20156 - 38042 Grenoble Cedex 9 - France Phone: +33 (0)4 76 20 70 20 e-mail : library@epn-campus.eu

When the list of results is displayed, you can:







Joint ILL-ESRF Library

Institut Laue Langevin CS 20156 - 38042 Grenoble Cedex 9 - France Phone: +33 (0)4 76 20 70 20 e-mail : library@epn-campus.eu

library@epn-campus.eu

More questions?

Contact us at

By clicking on 👣 , you can:



• Get a TXT file:

#### Publish records

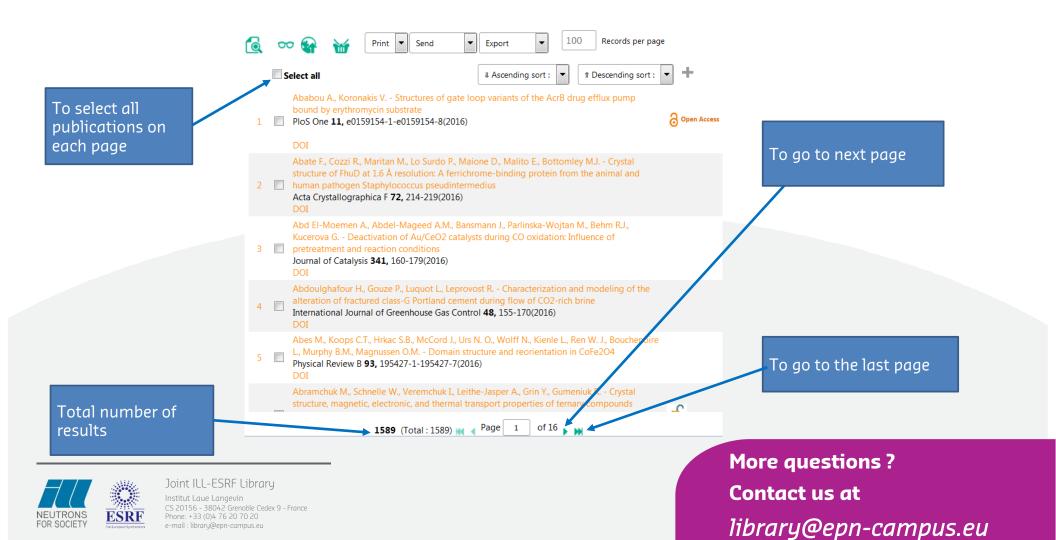
| Select category | Export - Tabbed                      |    |        |  | • |
|-----------------|--------------------------------------|----|--------|--|---|
| Select template | exp_PUB_ESRF_opac - Publication ESRF |    |        |  | • |
|                 |                                      |    |        |  |   |
|                 |                                      | ОК | Cancel |  |   |





More questions?

Only 100 results per page are displayed.



When you have viewed a publication, it appears in green in the list:





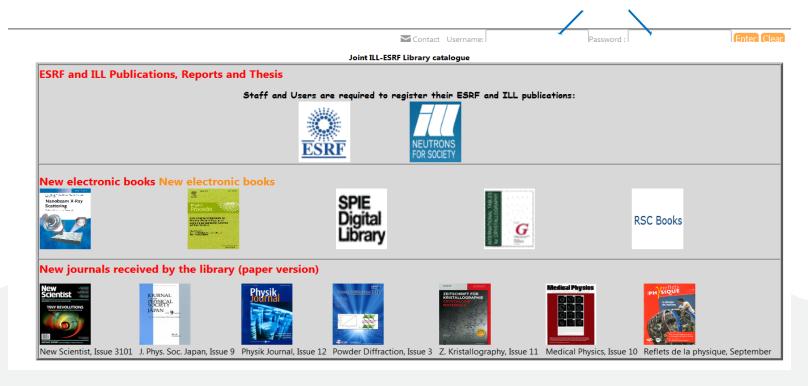




Institut Laue Langevin CS 20156 - 38042 Grenoble Cedex 9 - France Phone: +33 (0)4 76 20 70 20 e-mail : library@epn-campus.eu Contact us at library@epn-campus.eu

More questions?

### Log-in to the Library catalogue



#### To be able:

- to create your personal baskets
- to access PDF files





Joint ILL-ESRF Library
Institut Laue Langevin

Institut Laue Langevin CS 20156 - 38042 Grenoble Cedex 9 - France Phone: +33 (0)4 76 20 70 20 e-mail: libraru@ill.eu

By selecting publications and clicking on the glasses icon (see previous slide), you get:

Beamline:

Open Access Agrawal N., Lehtonen S.I., Uusi-Mäkelä M., Jain P., Viitala S., Määttä J.A.E., Kähkönen N., Azizi L., Riihimäki T.A., Kulomaa M.S., Johnson M.S., Hytönen V.P., Airenne T.T. - Molecular features of steroidbinding antidins and their use for assaying serum progesterone

PloS One 44. e0212339-1-e0212339-27 (2019)

Number ESRF19AG1419

ID30A-3

Web of Science

Articles citing this publication Link on Google Scholar

Facility used: ESRF (Grenoble)

Abstract: Chicken avidin (Avd) and streptavidin from Streptomyces avidinii

are extensively used in bionanotechnology due to their extremely tight binding to biotin (K-d similar to 10(-15) M for chicken Avd). We previously reported engineered Avds known as antidins, which have micro- to nanomolar affinities for steroids, non-natural ligands of Avd. Here, we report the 2.8 angstrom X-ray structure of the sbAvd-2 (1117Y) antidin co-crystallized with progesterone. We describe the creation of new synthetic phage display libraries and report the experimental as well as computational binding analysis of progesterone-binding antidins. We introduce a next-generation antidin with 5 nM binding affinity for progesterone, and demonstrate the use of anti dins for measuring progesterone in serum samples. Our data give insights on how to engineer and alter the binding preferences of Avds and to develop better molecular tools for modern bionanotechnological applications.

Permanent link: https://epn-library.esrf.fr/flora

/jsp/index\_view\_direct\_anonymous.jsp?record=doc:PUB\_ESRF:52213

PloS\_ONE\_14\_e0212339.pdf

Full text of publications since 2013



Joint ILL-ESRF Library

Institut Laue Langevin CS 20156 - 38042 Grenoble Cedex 9 - France Phone: +33 (0)4 76 20 70 20

e-mail: library@epn-campus.eu