

AN IMAGE INTEGRITY DATABASE (IIDB)

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A Highly Eutrophic Lake. Credit: Nara Souza, Florida Fish and Wildlife Commission. Public domain.



Water Pollution in Lake Maracaibo, Venezuela. Image Credits: Wilfredo Rodriguez, CC BY-SA 3.0

Editorial | Published: 01 April 2004

Gel slicing and dicing: a recipe for disaster

Nature Cell Biology 6, 275 (2004) | [Download Citation](#)

Sci Eng Ethics. 2009 Jun;15(2):161-7. doi: 10.1007/s11948-008-9108-z. Epub 2009 Jan 6.

Image manipulation as research misconduct.

[Parrish D](#)¹, [Noonan B](#).

Feature

What's in a picture? The temptation of image manipulation

[Mike Rossner](#), [Kenneth M. Yamada](#)

DOI: 10.1083/jcb.200406019 | Published July 6, 2004



How to Guard Against Image Fraud

The Journal of Cell Biology's image-screening process could have caught part of Woo-Suk Hwang's fraud. The editors encourage other journals to use it.

Mar 1, 2006

MIKE ROSSNER

Editorial | JOINT THE PLANT CELL/PLANT PHYSIOLOGY EDITORIAL

Manipulation and Misconduct in the Handling of Image Data

Cathie Martin, Mike Blatt

Published September 2013. DOI: <https://doi.org/10.1105/tpc.113.250980>  15



Editorial | Published: 22 February 2006

Not picture-perfect

Nature 439, 891–892 (2006) | [Download Citation](#)

Editorial | Published: 01 September 2010

Image rights and wrongs

Nature Nanotechnology 5, 627 (2010) | [Download Citation](#)

The art of detecting data and image manipulation

“... a false statement of fact, made deliberately, is the most serious crime a scientist can commit.”

By Anthony Newman | Posted on 4 November 2013



Editorial | Published: 01 February 2006

Beautification and fraud

Nature Cell Biology 8, 101–102 (2006) | [Download Citation](#)

Bik, Fang, Casadevall (2016): 4 % of all images in biomedical literature have problems, about half of them are serious.

Bik, Fang, Casadevall (2018): 35.000 articles need to be retracted due to inappropriate image duplication.

Acuna, Brookes, Kording (2018): 9% of image reuse in biological papers must be considered problematic.

Daniel Acuna, Paul S. Brookes, Konrad P. Kording: „Bioscience-scale automated detection of figure element reuse “. Retrieved from bioRxiv. The Preprint Server for Biology, 2018. doi: <https://doi.org/10.1101/269415>



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Categories

The very best resources,
hand picked and grouped.

Cancer Research

28

Gold Set

21

Western Blots

14

Welcome to the Image Integrity Database (IIDB)

The database offers a test set of images for scholars who are working on the development of image manipulation detection algorithms or image analysis tools to facilitate an automated screening of images in publications.

For each image case there will be a full package of associated data that allows a better understanding of the complexity of such cases, such as links to RetractionWatch or PubPeer, links to the original article or to retraction notices, information about the authors and teams, the journals and the academic fields, and more.

Often evaluating image manipulation requires a broad investigation that goes beyond a computational analysis of pixels in an image and involves an investigation into individual routines and practices, workflows and standards and community guidelines, as well as an evaluation of the larger ecology in which such cases occur. The database provides all available data to facilitate a more thorough understanding of the phenomenon.

Simple search

Search using descriptions, keywords and resource numbers

☒ Photo
☒ Document

By date

Any year

Any month

Clear

Search

Advanced search

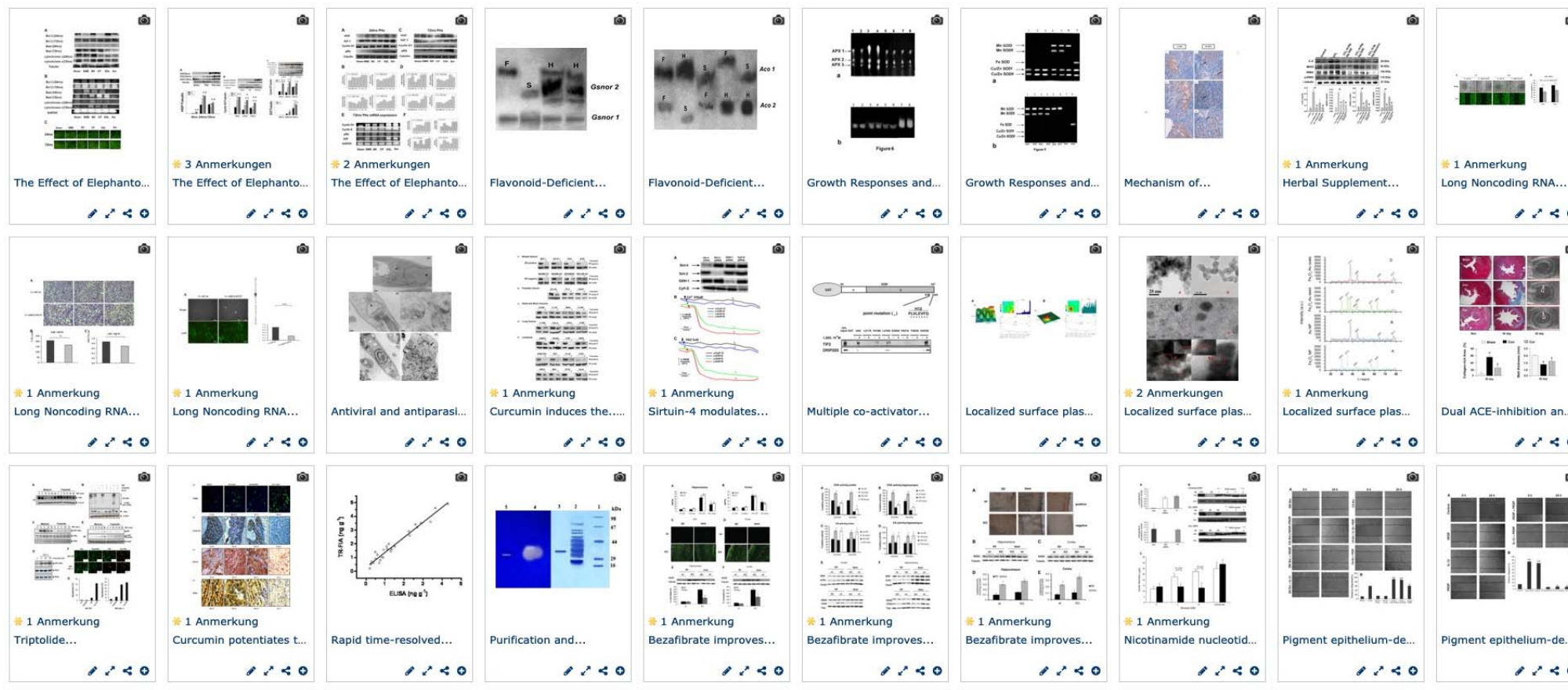
My collections Current collection: Micrographs 2 items Actions... Show thumbs

Screenshot Image Integrity Database, May 27, 2019.

- A) Collect/structure data to make complex cases better understandable.
- B) Develop test set for algorithm testing.
- C) Establish platform for learning, analysis and systematic screening.

121 Ergebnisse   Datum  48 pro Seite  Aktionen...

← Seite 1 von 3 →



Einfache Suche

Suche nach Beschreibung, Schlagworten und Ressourcen IDs

subjects:BLS - Basic Lif

☒ Foto
☒ Dokument

Nach Datum

Jahr 
Monat 

zurücksetzen

Suchen

zur erweiterten Suche

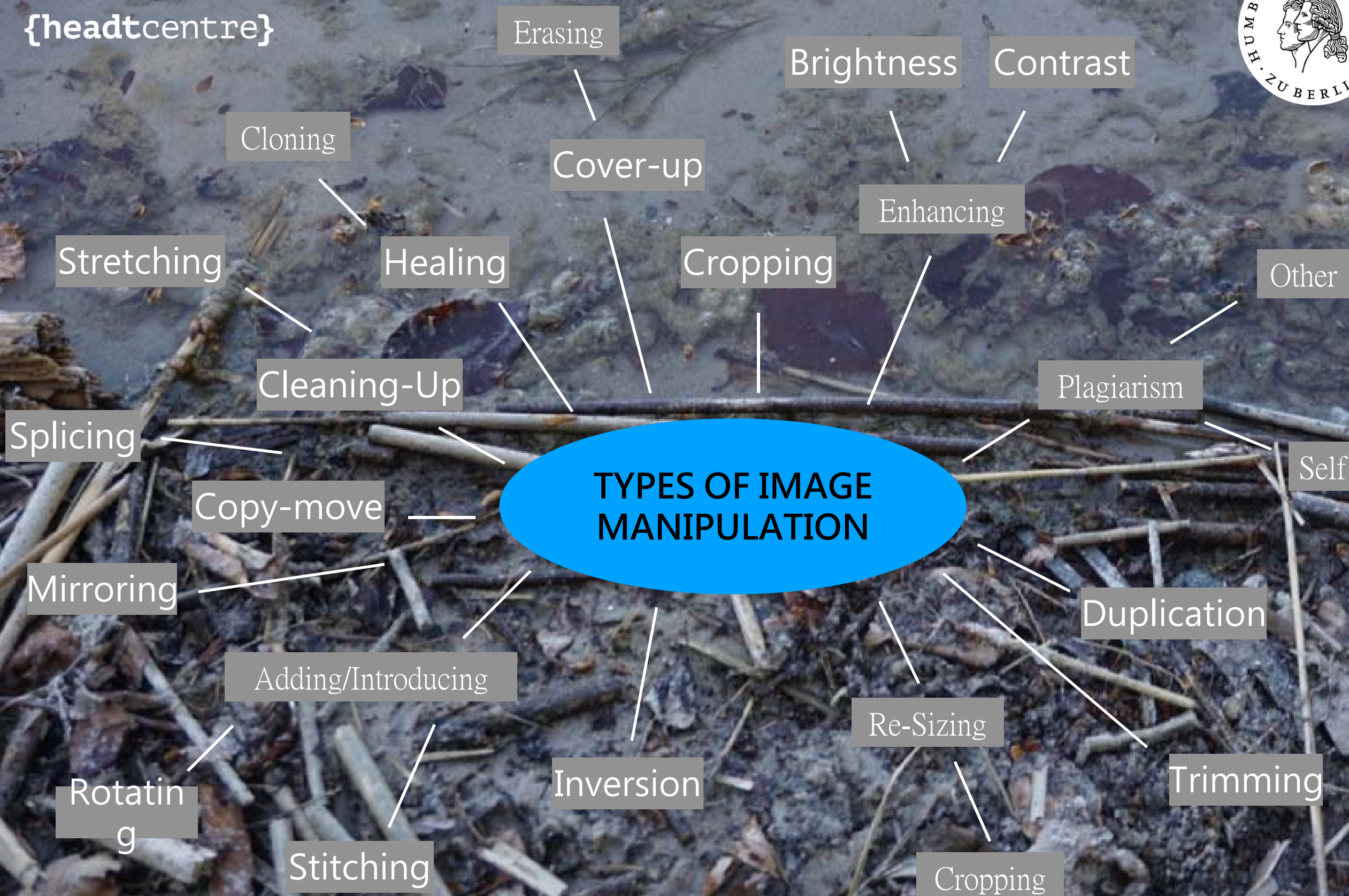
Aktuelle Kollektion:
Meine Kollektion
0 Objekte

Aktionen...

Vorschaubilder ausblenden

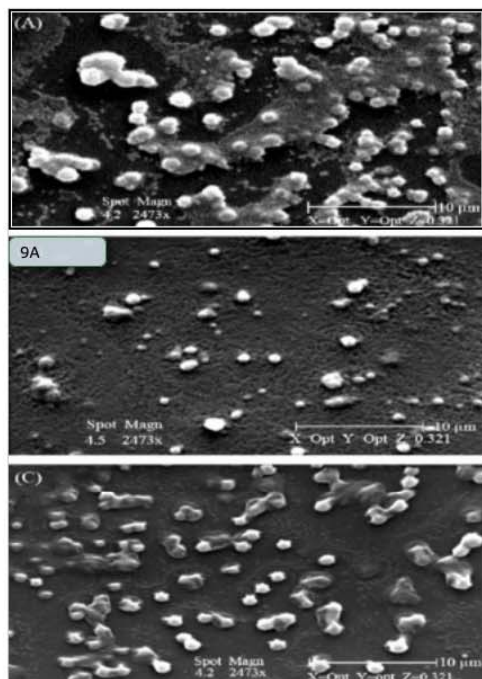
Screenshot Image Integrity Database, May 27, 2019.

World Conference On Research Integrity. June 5, 2019: An Image Integrity Database



Synthesis and characterization of an acrylate-containing siliconized epoxy hybrid oligomer and its emulsion copolymerization with vinyl acetate/2-ethylhexylacrylate monomers

View all results



> Full screen preview

Resource tools

File information	File size	Options
Original JPG File 1045 × 1480 pixels (1.55 MP) 3.5 in × 4.9 in @ 300 PPI	959 KB	Download
Screen 565 × 800 pixels (0.45 MP) 4.8 cm × 6.8 cm @ 300 PPI	142 KB	Download
Preview Full screen preview	142 KB	View
<div><div>Add to collectionEditManage alternative filesTransform</div><div>ShareDeleteLog</div></div>		
How do you rate this resource?		★★★★★ 0 ratings

Resource details

Publication Retraction Retraction Case 1

Resource ID	Access	Authors	Publisher	Journal	Subjects	Publication Date	DOI
63	Confidential	Hamid Javaherian	Elsevier	Progress in Organic Chemistry	PHY - Physical Sciences, Materials Science	17 November 2011	10.1016/j.proorg.2011.10.007

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Clear

Search

Advanced search

Screenshot Image Integrity Database, May 27, 2019.

Challenges:

- Getting access to data
- Copyrights & permissions
- Retraction statements not always detailed enough
- Resources



Thank you for your
attention!

References:

Acuna, Daniel E; Brookes, Paul S; Kording, Konrad P. (2018): Bioscience-scale automated detection of figure element reuse

<https://www.biorxiv.org/content/early/2018/02/23/269415>

Bik, Elisabeth M.; Fang, Ferric; Casadevall, Arturo (2016): The Prevalence of Inappropriate Image Duplication in Biomedical Research Publications, <http://mbio.asm.org/content/7/3/e00809-16>

Bik, Elisabeth M.; Fang, Ferric; Kullas, Amy L.; Davis, Roger J.; Casadevall, Arturo (2018): Analysis and Correction of Inappropriate Image Duplication: The Molecular and Cellular Biology Experience. doi: <https://doi.org/10.1101/354621>

Butler, Declan (2018): Researchers have finally created a tool to spot duplicated images across thousands of papers <https://www.nature.com/articles/d41586-018-02421-3>

Silverman, Craig (2012): Three ways to spot if an image has been manipulated. In: Poynter. A Global Leader in Journalism. <https://www.poynter.org/news/three-ways-spot-if-image-has-been-manipulated>

Van Hilten, Lucy Goodchild (2018): At Harvard, developing software to spot misused images in science. <https://www.elsevier.com/connect/at-harvard-developing-software-to-spot-misused-images-in-science>