

W1: Information Does Exist Beyond the First Page of Your Google[®] Search! American Academy of Forensic Sciences

Las Vegas, NV (February 22, 2016)



Case Examples 2

Susan Makar

NIST Information Services Office









Case Examples: Identifying Expert Witnesses

I need to identify an expert witness in fiber identification for an upcoming murder trial. Who are some possible candidates?

I was given Rob Ogden as a forensics wildlife expert. How can I verify his expertise and ensure that he can be used as an expert witness in a criminal case involving wildlife poaching?

Web of Science – Begin Search

Basic Search 🔽				
forensic*	8	Торіс	~	
AND fiber*	8	Торіс	~	
AND Example: oil spill* mediterranean 	8	Торіс	~	Search
	+ Add Another Field 🕴 Reset Form			

TIN	IESPAN	1						
۲	All y	ears	~	•				
\bigcirc	From	190	0	~	to	2015	~	

- Determine key concepts forensics AND fibers
- Truncate words to pick up variations, i.e., forensic, forensics
- Identify synonyms and combine using the "OR" connector

Web of Science – Analyze Results

Results: 582 (from Web of Science Core Collection)	Sort by: Publication Date newest to oldest	✓ Page 1 of 59 ▶
You searched for: TOPIC: (forensic*) AND TOPIC: (fiber* or fibre*)More	Select Page Save to EndNote online ✓ Add to Marked List	■ Analyze Results
🌲 Create Alert	1. Capturing and displaying microscopic images used in medical diagnostics and forensic science using 4K video resolution - an application in higher education	Times Cited: 0 (from Web of Science Core
Refine Results	By: Maier, Hans; De Heer, Gert; Ortac, Ajda; et al. JOURNAL OF MICROSCOPY Volume: 260 Issue: 2 Pages: 175-179 Published: NOV 2015 Links Full Text from Publisher View Abstract	Collection) Usage Count 🗸
Search within results for	 A microstructured capillary electrophoresis method for nitrocellulose detection in dynamite By: Calcerrada, Matias; Fernandez de la Ossa, Ma Angeles; Roy, Philippe; et al. MICROCHEMICAL JOURNAL Volume: 123 Pages: 218-223 Published: NOV 2015 	Times Cited: 0 (from Web of Science Core Collection)
Web of Science Categories 🔹 🔻	Links View Abstract	Usage Count 🗸
 MEDICINE LEGAL (308) PATHOLOGY (105) CHEMISTRY ANALYTICAL (100) SPECTROSCOPY (56) BIOCHEMICAL RESEARCH 	 Improved radiocarbon analyses of modern human hair to determine the year-of-death by cross-flow nanofiltered amino acids: common contaminants, implications for isotopic analysis, and recommendations By: Santos, Guaciara M.; De La Torre, Hector A. Martinez; Boudin, Mathieu; et al. 	Times Cited: 0 (from Web of Science Core Collection) Usage Count 🗸
METHODS (42)	RAPID COMMUNICATIONS IN MASS SPECTROMETRY Volume: 29 Issue: 19 Pages: 1765-1773 Published: OCT 15 2015	Usuge count ·
more options / values Refine	Links View Abstract	

Click on "Analyze Results" in the upper right

Web of Science – Analyze by Author

Results Analysis

<<Back to previous page

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582 records. TOPIC: (forensic*) AND TOPIC: (fiber* or fibre*)
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- Select "Authors" from the list of fields by which papers can be ranked
- Choose display options to limit the top results (top 10, top 50, etc.)
- Click "Analyze" to view the authors with the most publications on forensics and fibers

Web of Science – Select Author

Results Analysis

<<Back to previous page

582 records. TOPIC: (forensic*) AND TOPIC: (fiber* or fibre*)

Rank the records by this field:	Set display options:	Sort by:
Authors Book Series Titles Conference Titles Countries/Territories	Show the top 10 results. Minimum record count (threshold): 2	
Analyze		

Use the checkboxes below to view the records. You can choose to view those selected records, or you can exclude them (and view the others).

➡ View Records					Save Analysis Data to File
× Exclude Records	Field: Authors	Record Count	% of 582	Bar Chart	 Data rows displayed in table All data rows (up to 200,000)
	GRIEVE MC	20	3.436 %	1.00	
	ROUX C	16	2.749 %	1.00	
	CAUSIN V	12	2.062 %	1.	
	DE WAEL K	12	2.062 %	1	Select the author(s) with
	ROBERTSON J	10	1.718 %	1	the meet peper
	MARIGO A	9	1.546 %	1	the most papers
	WAS-GUBALA J	9	1.546 %	1	
	MAREGA C	8	1.375 %	1	
	PALMER R	8	1.375 %	1	
	WIGGINS KG	8	1.375 %	1	

Web of Science – Scan Search Results

Results: 20 (from Web of Science Core Collection)	Sort by: Publication Date newest to oldest	✓ Page 1 of 2 ▶
You searched for: TOPIC: (forensic*) AND TOPIC: (fiber* or fibre*)More	Select Page Save to EndNote online	■ Analyze Results
🌲 Create Alert	1. The individuality of fibres used to provide forensic evidence - not all blue polyesters are the same	Times Cited: 11 (from Web of Science Core
Refine Results	By: Grieve, MC; Biermann, TW; Schaub, K SCIENCE & JUSTICE Volume: 45 Issue: 1 Pages: 13-28 Published: JAN-MAR 2005 → Links View Abstract	Collection) Usage Count ∽
Search within results for	 The individuality of blue polyester fibers used to provide forensic evidence By: Grieve, MC; Biermann, TW Conference: 2rd European Academy of Eccencie Science Meeting Leasting: ISTANELII, TURKEY Date: SED 	Times Cited: 0 (from Web of Science Core Collection)
Web of Science Categories MEDICINE LEGAL (20) PATHOLOGY (14) 	22-27, 2003 Sponsor(s): European Acad Forens Sci; Istanbul Univ, Inst Forens Sci FORENSIC SCIENCE INTERNATIONAL Volume: 136 Supplement: 1 Pages: 121-122 Published: SEP 2003 → Links	Usage Count 🗸
more options / values Refine	 The occurrence and individuality of orange and green cotton fibres By: Grieve, MC; Biermann, T; Davignon, M SCIENCE & IUSTICE Volume: 43 Jasue: 1 Pages: 5-22 Published: JAN-MAR 2003 	Times Cited: 11 (from Web of Science Core Collection)
Document Types 🔹	→ Links	Usage Count 🗸
 ARTICLE (16) EDITORIAL MATERIAL (2) PROCEEDINGS PAPER (1) MEETING ABSTRACT (1) 	 Black cellulosic fibres - a "bete noire"? By: Grieve, MC; Deck, S SCIENCE & JUSTICE Volume: 42 Issue: 2 Pages: 81-88 Published: APR-JUN 2002 	Times Cited: 5 (from Web of Science Core Collection)

- Scan search results to ensure papers are on target
- Note the times cited for each paper
- · Select a paper to learn more about the authors' affiliations

Web of Science – Check Address Field

The individuality of <mark>fibres</mark> used to provide <mark>forensic</mark> evidence - not all blue polyesters are the same

By: Grieve, MC (Grieve, MC); Biermann, TW (Biermann, TW); Schaub, K (Schaub, K)

SCIENCE & JUSTICE Volume: 45 Issue: 1 Pages: 13-28 DOI: 10.1016/S1355-0306(05)71616-6 Published: JAN-MAR 2005 View Journal Information

Abstract

Fibres used in forensic casework suffer from a disadvantage common to other forms of trace evidence - it is not possible to state with absolute certainty that they originate from a specific source. Target fibre studies, population studies and research on 'blocks of colour' have effectively demonstrated the polymorphism of textile fibres (particularly man-made ones) and have shown that when a fibre is believed to have a specific putative source, the chance that it has originated from a different source purely by coincidence is extremely remote. A study by Houck MM (Houck MM, Inter-comparison of unrelated fibre evidence. Forensic Science International 2003; 135: 146-149) has shown that no coincidental matching fibres were recovered from items of clothing examined in 20 unrelated crimes. The study involved over two million comparisons. This work goes a step further, and using the example of blue polyester fibres shows that even within a very narrow segment of the whole general fibre population, many examples of a specific colour/type of man-made fibre taken from random sources can be compared and the chance of any two being the same is very low. These studies should help to show the specificity and value of transferred fibres in providing forensic evidence.

Keywords

Addresses:

Author Keywords: forensic science; fibres; polyester; blocks of colour; individualization; frequency KeyWords Plus: BLACK COTTON FIBERS; TARGET FIBER; TEXTILE FIBERS; CAR SEATS; POPULATION; RED

Author Information

Reprint Address: Biermann, TW (reprint author)

Forens Sci Inst, D-65193 Wiesbaden, Germany.

[1] Forens Sci Inst, D-65193 Wiesbaden, Germany

Citation Network

11 Times Cited 30 Cited References View Related Records See View Citation Map Create Citation Alert (data from Web of Science TM Core Collection

All Times Cited Counts 11 in All Databases 11 in Web of Science Core Collection 2 in BIOSIS Citation Index 0 in Chinese Science Citation Database 0 in Data Citation Index 0 in Russian Science Citation Index 0 in SciELO Citation Index

Usage Count Last 180 Days: 7 Since 2013: 22

Learn more

Most Recent Citation

Vooijs, Cees. Towards source level evaluation of the evidential value of fibre

Is this the address of a reputable organization?

Case Examples: Identifying Expert Witnesses

I was given Rob Ogden as a forensics wildlife expert. How can I verify his expertise and ensure that he can be used as an expert witness in a criminal case involving poaching?

Google Scholar

Rob Ogden TRACE Wildlife Forensics Network, Royal Zoological Society of Scotland Wildlife Forensics and Conservation genetics		llow 🔻	Google So	cholar	Q	
	Verified email at tracenetwork.org - Homepage		\langle	Citation indices Citations h-index	All 1611 22	Since 2010 1385 21
Title 1–20		Cited by	Year	To-maex	33	32
Molecular evidence R Ogden, RS Thorpe Proceedings of the Nati	e for ecological speciation in tropical habitats onal Academy of Sciences 99 (21), 13612-13615	178	2002	2007 2008 2009 201	0 2011 2012 2	013 2014 2015
Validation of the ba identification N Dawnay, R Ogden, R Forensic Science Intern	rcoding gene COI for use in forensic genetic species McEwing, GR Carvalho, RS Thorpe lational 173 (1), 1-6	172	2007			
Application of SNPs opportunities and c SJ Helyar, J Hemmer-H Molecular Ecology Res	s for population genetics of nonmodel organisms: new hallenges ansen, D Bekkevold, MI Taylor, R Ogden, ources 11 (s1), 123-136	163	2011			
Genomic signatures organism; the Atlan EE Nielsen, J Hemmer- BMC Evolutionary Biolo	s of local directional selection in a high gene flow marine tic cod (Gadus morhua) Hansen, NA Poulsen, V Loeschcke, T Moen, gy 9 (1), 276	128	2009			

- Papers ranked by times cited (screen shot lists only 4 of 70 papers); scroll down the list to find current papers with fewer cites
- Citation data includes citation counts and h-index

Web of Science – Begin Search

Basic Search 🔽				
ogden r*	0	Author	~	
		└→ Select f	rom Index	
AND ~ wildlife forensic*	8	Торіс	~	Search
+ Add Another I	Field Reset Form			
TIMESPAN				
All years				
From 1900 v to 2015 v				

- Truncate author's name to pick up full name or first/middle initials
- Adding key concepts will limit search to the right R. Ogden

Web of Science – Search Results

Results: 8 (from Web of Science Core Collection)	Sort by:	Publication Date newest to oldest	◀ Page 1
View Distinct Author Record Sets for: ogden r*	Select	Page Save to EndNote online 🗸 Add to Marked List	<u>≡ Analyz</u>
You searched for: AUTHOR: (ogden r*) AND TOPIC: (wildlife forensic*)More	1.	Wildlife forensic science: A review of genetic geographic origin assignment	III Create Citatio
Create Alert		By: Ogden, Rob; Linacre, Adrian FORENSIC SCIENCE INTERNATIONAL-GENETICS Volume: 18 Pages: 152-159 Published: SEP 2015 → Links View Abstract	(from web of Scien Collection) Usage Count ~
Refine Results Search within results for	2.	Sturgeon conservation genomics: SNP discovery and validation using RAD sequencing By: Ogden, R.; Gharbi, K.; Mugue, N.; et al. MOLECULAR ECOLOGY Volume: 22 Issue: 11 Special Issue: SI Pages: 3112-3123 Published: JUN 2013	Times Cited: 17 (from web of Scient Collection) Usage Count ~
Web of Science Categories MEDICINE LEGAL (5) GENETICS HEREDITY (3) FVOLUTIONARY BIOLOGY (2)	3.	Unlocking the potential of genomic technologies for wildlife forensics By: Ogden, Rob MOLECULAR ECOLOGY RESOURCES Volume: 11 Supplement: 1 Pages: 109-116 Published: MAR 2011 → Links View Abstract	Times Cited: 20 (From Web of Scient Collection) Usage Count ~
 EVOLUTIONARY BIOLOGY (2) ECOLOGY (2) BIOCHEMISTRY MOLECULAR BIOLOGY (2) 	4 .	Forensic science, genetics and wildlife biology: getting the right mix for a wildlife DNA forensics lab By: Ogden, Rob FORENSIC SCIENCE MEDICINE AND PATHOLOGY Volume: 6 Issue: 3 Pages: 172-179 Published: SEP	Times Cited: 11 (from Web of Scien Collection)

- Note yellow highlighted search terms in search results
- Note citation counts of individual papers
- Only eight papers, are there more?

Web of Science – Begin Author Search

Basic Search Example: oil	 Basic Search Author Search Cited Reference Search Advanced Search 	+ Add Another Field Reset Form	Торіс	~	Search
TIMESPAN All years From 1900	 ✓ to 2015 ✓ 				

What if Ogden's papers do not include the words "wildlife" and "forensics"? An author search can demonstrate the breadth of his work and find additional papers.

Select Author Search from the drop-down box next to "Basic Search." This will begin the process of identifying the correct author.

Web of Science – Enter Author Name



- Enter the full last name
- Abbreviate first name to pick up first and middle name variations, i.e., Robert, Rob, R, etc.
- Click on "Select Research Domain"

Web of Science – Select Research Domain



- Check the appropriate box(es) to indicate the author's research domain
- Click on "Select Organization" if the author's organization is known
- Click on "Finish Search" if the author's organization is unknown

Web of Science – Refine Results



You searched for: AU=(ogden r**) AND (SH=(LIFE SCIENCES BIOMEDICINE) OR WC=(Multidisciplinary Sciences)) ...More

🜲 Create Alert

Refine Results	Sort by: Publication Date newest to oldest 🗸
Search within results for	Select Page Save to EndNote online
 Web of Science Categories NEUROSCIENCES (58) PSYCHIATRY (36) AGRICULTURE DAIRY ANIMAL SCIENCE (32) MULTIDISCIPLINARY SCIENCES 	 Population structure and dispersal patterns in Scottish Golden Eagles Aquila chrysaetos revealed by molecular genetic analysis of territorial birds By: Ogden, Rob; Heap, Elizabeth; McEwing, Ross; et al. IBIS Volume: 157 Issue: 4 Pages: 837-848 Published: OCT 2015 Links View Abstract
(30) RADIOLOGY NUCLEAR MEDICINE MEDICAL IMAGING (27) more options / values	 Wildlife forensic science: A review of genetic geographic origin assignment By: Ogden, Rob; Linacre, Adrian FORENSIC SCIENCE INTERNATIONAL-GENETICS Volume: 18 Pages: 152-159 Published: SEP 2015 Links View Abstract

Several choices if organization is unknown:

- Use filters to exclude (or include) subject disciplines
- Scan 114 author record sets

Web of Science – Scan Record Sets

Author Search Results: 297 Records 114 Record Sets

You searched for: AU=(ogden r**) AND (SH=(LIFE SCIENCES BIOMEDICINE) OR WC=(Multidisciplinary Sciences)) ...More

Record Sets Last Updated: December 15, 2015

▲ Pa

Records grouped together are likely written by the same person. (Tell me more.)

If your papers appear in multiple record sets use the I wrote these publications button to add them to your publication list in ResearcherID and have them grouped together.

	Author Names	Last Known Organization 🗓	Research Areas	Publication Years
1.	OGDEN RW Also published as: OGDEN R W OGDEN RAY W OGDEN RAYMOND W OGDEN RA Researcher ID: B-3906-2008 View profile at ResearcherID.com	University of Glasgow	MECHANICS (107) MATHEMATICS (64) MATERIALS SCIENCE (48) ENGINEERING (44) PHYSICS (21)	1970 - 2015

- Even with over 100 record sets it is easy to scan for the correct author
- Look for many clues correct initials, research areas, publication years
- View sampling of author's publications if still unsure

Questions?



Contact:

Susan Makar <u>susan.makar@nist.gov</u>