Supporting research integrity: indicating article status from any point of discovery

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Company focus: LibKey intelligent access



Article level intelligence

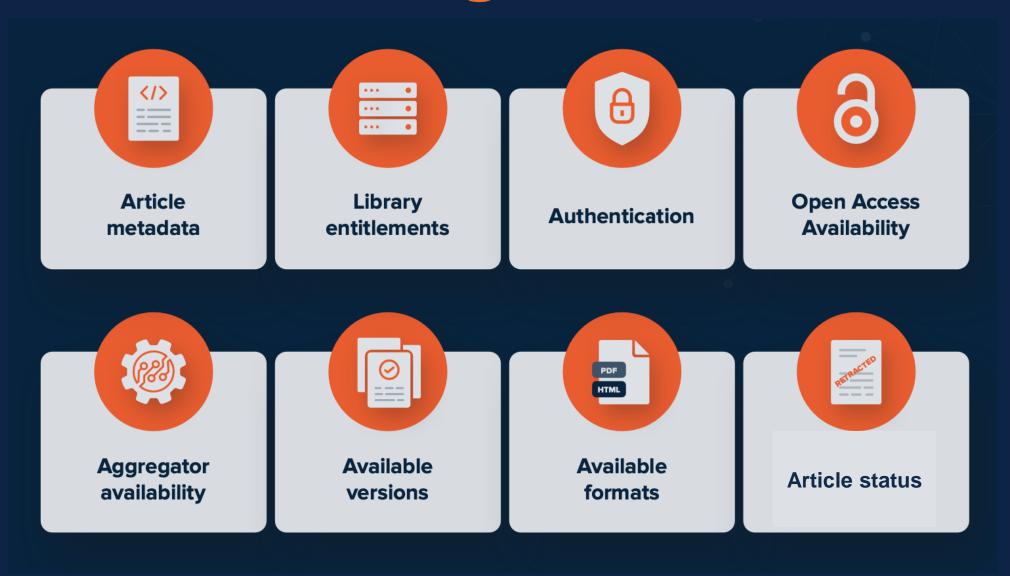


Expert Al system for intelligent source selection



Fastest, most reliable, informed linking

Article level intelligence



The "best source"



OA VoR



Subscribed
Journal Publisher



Real time analysis of all available sources



Subscribed
Journal Aggregator



Use Al expert system to determine the "best source"



Accepted Manuscripts



Best source versus all sources approach improves overall linking reliability



ILL/Document Delivery

Universal application



Article level intelligence: article status



Significant concerns over proliferation of poor scholarship through the citation of articles that have been retracted, labeled with an expression of concern, or published in problematic journals

Article status: first order retraction



- Steady growth of article retractions over the last year, a record 14,000 last year (compared to 1,000 in 2009)
- Retraction identification has become better but is still uneven
- User awareness depends on article retrieval date, point of discovery and other factors
- Citation leads to "pollution" in the scholarly record

"Feet of clay": second order retraction



Cited references









"Although the act of retracting flawed articles helps purge the scientific literature of erroneous or unethical research, citations to such research after it's been retracted, presents a real challenge to the integrity of the scientific endeavor."

Bar-Ilan J, Halevi G. Post retraction citations in context: a case study. Scientometrics. 2017;113(1) 547-656

10 most highly cited retracted articles

	Year of	Citations Before
Article	Retraction	Retraction
Pluripotency of mesenchymal stem cells derived from adult. Nature. June 20, 2002.	2024	4482
6-month consequences of COVID-19 in patients discharged from hospital: a cohort study. Lancet. January		
8, 2021.	2023	2250
Primary Prevention of Cardiovascular Disease with a Mediterranean Diet. New England Journal of		
Medicine. April 4, 2013	2018	1695
A specific amyloid-β protein assembly in the brain impairs memory. Nature. March 16, 2008	2024	2348
Predictive Validity of a Medication Adherence Measure in an Outpatient Setting. The Journal of Clinical		
Hypertension. May 2, 2008.	2023	1929
MicroRNA signatures of tumor-derived exosomes as diagnostic biomarkers of ovarian cancer. Gynecologic	:	
Oncology. June 25, 2008	2023	1865
Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in		
children. Lancet. February 28, 1998	2010	542
Recent progress in processing and properties of ZnO. Progress in Materials Science. May 28, 2004	2020	1550
Visfatin: A protein secreted by visceral fat that mimics the effects of insulin. Science. January 21, 2005	2007	232
An enhanced transient expression system in plants based on suppression of gene silencing by the p19		
protein of tomato bushy stunt virus. Plant Journal. February 28, 2003	2015	895

Problematic journals



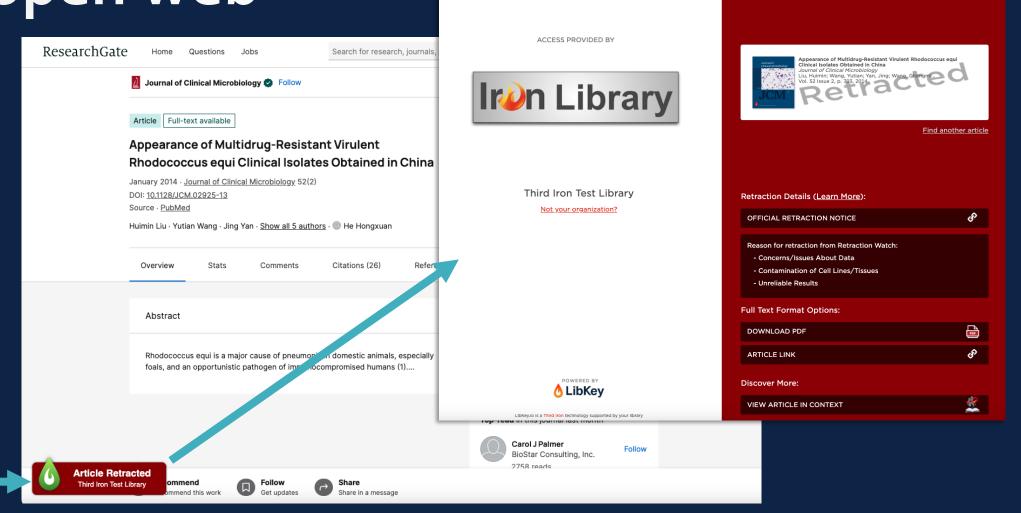
- Lack of peer review
- Profit driven
- Harm to academic careers
- Misinformation

Third Iron: detailed article status data

- Consulting multiple data sources
- Editorially managing article metadata for consistent identification
- Connecting first order retractions to citations to create second order retraction map
- Updated daily
- Partnering with Cabells to inform users of problematic journal status



First order retraction notification – open web



First order retraction notification – library services



LibKey "signposts" the link in order to inform user of first order retracted status

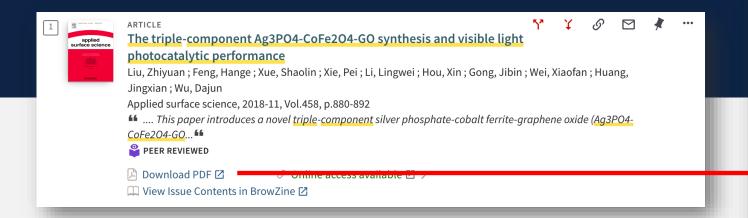


Expression of Concern Notification





Second order retraction: current experience



Researchers are unaware that articles they are interested in have cited retracted articles, further compounding the problem of retraction





Applied Surface Science

journal homepage: www.elsevier.com/locate/apsuse



Full Length Article

The triple-component Ag₃PO₄-CoFe₂O₄-GO synthesis and visible light photocatalytic performance



Zhiyuan Liu^a, Hange Feng^a, Shaolin Xue^{a,*}, Pei Xie^{a,b}, Lingwei Li^a, Xin Hou^a, Jibin Gong^a, Xiaofan Wei^a, Jingxian Huang^a, Dajun Wu^{c,d}

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d School of Physics and Electronic Engineering, Changshu Institute of Technology, Suzhou 215500, China

ARTICLE INFO

Photocatalysis Sliver phosphate

Graphene oxide Degradation

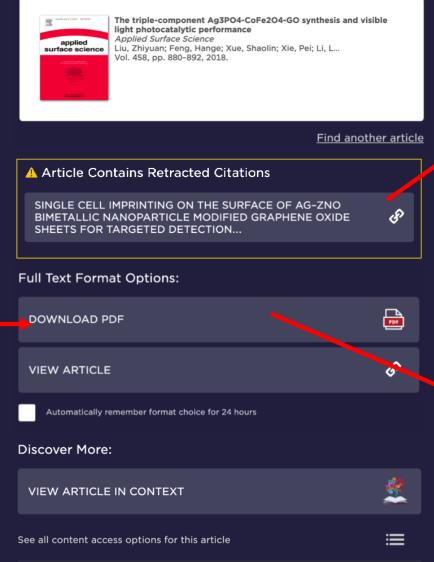
This paper introduces a novel triple-component silver phosphate-cobalt ferrite-graphene oxide (Ag₃PO₄: CoFe₂O₄-GO) photocatalyst, illustrates its synthetic principle of adjusting the pH value, elaborates on its dualchannel reaction mechanism and reveals its advantages. Morphology and elementary analyses revealed that the magnetic CoFe₂O₄ nanoparticles (NPs) and the GO were uniformly adorned on the Ag₃PO₄ particles' surface, forming a spherical structure. Because of this particular structure, not only could the Ag₃PO₄-CoFe₂O₄-GO composite be thoroughly removed with magnet field from treated water, but the photocatalytic activity and stability had been greatly improved to pure Ag₃PO₄. The effects of different samples were also evaluated, in terms of the efficiencies in inactivation and degradation. The reactive oxygen species (ROSs) yield measurements and photoluminescence spectra analysis indicated that O_2 adsorption could be promoted by the $CoFe_2O_4$ and the GO. Upon visible light irradiation, a part of motivated electrons of the Ag₃PO₄ were consumed by the CoFe₂O₄, and others were transferred to the GO. The effective electron-hole separation is due to the dual transfer channel existing in the Ag₂PO₄-CoFe₂O₄-GO composite, Hence, the dual transfer channel is the major reason for enhancing photocatalytic activity and stability

With the development of novel photocatalyst for solar-energy conversion, more and more articles pay much attention to the highly efficient and lower-cost photocatalyst in purifying water and protecting the environment under light irradiation [1-4]. In the past, TiO2 based semiconductors had been considered as a clearly superior option, on account of the high stability, non-toxicity and high electron mobility [5-7]. Though these semiconductors are effectual, we can't ignore a problem of TiO2 possessing a relatively large value of band gap [8]. It

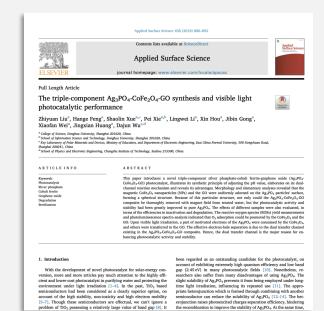
been regarded as an outstanding candidate for the photocatalyst, on account of exhibiting extremely high quantum efficiency and low band gap (2.45 eV) in many photocatalytic fields [10]. Nonetheless, researchers also suffer from many disadvantages of using Ag₃PO₄. The slight solubility of Ag₃PO₄ prevents it from being employed under longtime light irradiation, influencing its repeated use [11]. The appropriate heterojunction which is formed through combining with another semiconductor can reduce the solubility of Ag₃PO₄ [12-14]. The heterojunction raises photoexcited charges separation efficiency, hindering the recombination to improve the stability of Ag₃PO₄. At the same time,

Second order retraction









Cabells integration: library systems



An Uncommon Case of Atrial Fibrillation due to a Lung Mass Invasion of the Left...





Open Access 3

by Rahman, Ali; Alqaisi, Sura; Krishnaswamy, Shiv; More...

Cardiology research, 02/2023, Volume 14, Issue 1



.... In this **case**, we present a previously asymptomatic individual who presented to the hospital with respiratory complaints and was found to have a large **lung mass**, consistent with neuroendocrine **lung**...



Problematic Journal

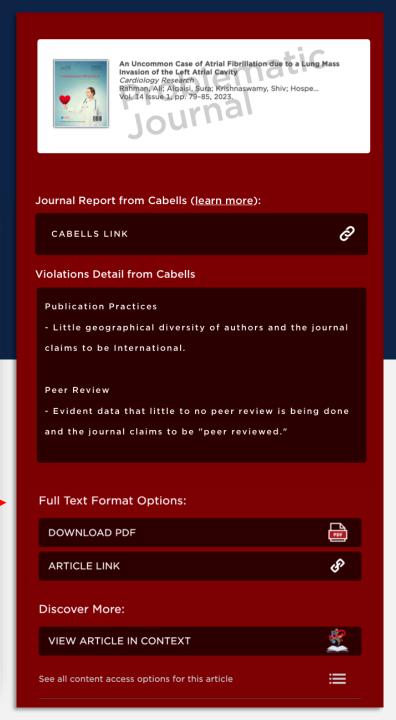


Journal Article



View in Context





Cabells integration: LibKey Nomad

Case Reports

> Cardiol Res. 2023 Feb;14(1):79-85. doi: 10.14740/cr1473. Epub 2023 Feb 25.

An Uncommon Case of Atrial Fibrillation due to a Lung Mass Invasion of the Left Atrial Cavity



Ali Rahman ¹, Sura Alqaisi ¹, Shiv Krishnaswamy ¹, Emilio Hospedales ², Walif Aji ³

Affiliations + expand

PMID: 36896222 PMCID: PMC9990543 DOI: 10.14740/cr1473





An Uncommon Case of Atrial Fibrillation due to a Lung Mass Invasion of the Left Atrial Cavity Cardiology Research

Rahman, Ali; Alqaisi, Sura; Krishnaswamy, Shiv; Hospe Vol. 14 Issue 1, pp. 79–85, 2023.

Journal Report from Cabells (learn more):

CABELLS LINK



Violations Detail from Cabells

Publication Practices

- Little geographical diversity of authors and the journal claims to be International.

Peer Review

FULL

Ful

- Evident data that little to no peer review is being done and the journal claims to be "peer reviewed."

Full Text Format Options:

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ARTICLE LINK



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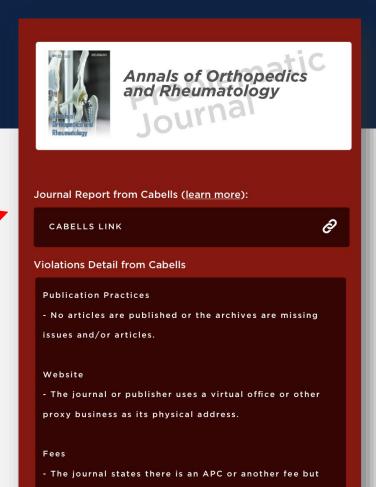


Cabells integration: LibKey Nomad



Rheumatol 8(1): 1096

Will scan for known URL's of problematic journals as well as DOI's for Articles from those titles.



First order retraction notifications displayed

Library ID	Retractions Displyed in LibKey Nomad
1562	7,350
130	7,115
591	6,974
47	3,406
186	3,333
1390	3,294
871	2,974
239	2,572
1104	2,507
451	2,499

Library ID	Retractions Displayed in Discovery	
1562	20,173	
47	14,443	
130	10,428	
757	9,610	
186	8,429	
591	6,799	
871	4,754	
451	3,693	
1704	3,466	
1498	3,342	

LibKey: preserving scholarly integrity



Embedding article status into the access infrastructure helps:

- Maintain Scientific Integrity
- Prevents the Spread of Misinformation
- Ensures Accurate Research
- Ethical Responsibility
- Improves Citation Metrics

Identifying papers that have cited retracted articles is critical for maintaining the quality, accuracy, and reliability of the scientific literature.

Thank you!

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