السيرة الذاتية

1- البيانات الشخصية

الاسم : عادل على اسماعيل

تاريخ الميلاد : 4-1-1969

الحالة الاجتماعية : متزوج

التخصص العام : كيمياء غير عضوية- علوم وهندسة المواد

التخصص الدقيق : مركبات وتكنولوجيا النانو

عنوان العمل : مركز بحوث وتطوير الفلزات

التليفون : 0114161157

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2- المؤهلات العلمية

- بكالوريوس : العلوم – كيمياء - كلية العلوم - جامعة الزقازيق- جيد جدا مايو 1991.

- ماجستير : العلوم – كلية العلوم- كيمياء غير عضوية - جامعة حلوان -1996.

عنوان الرسالة : المعالجة الهيدروميتالورجية المباشرة لخام المنجنيز لإنتاج كبريتات المنجنيز.

Direct hydrometallurgical treatment of manganese ore for production of manganese sulfate.

- دكتوراة الفلسفة : كلية العلوم- كيمياء غير عضوية- جامعة عين شمس 2001.

عنوان الرسالة: تحضير تيتانيا- سليكا إيروجل بطريقة السول جل لمعالجة مياه الصرف الصناعي.

Preparation of titania-silica aerogel by sol-gel technique for treatment of industrial waste waters.

3- التدرج الوظيفى

- أستاذ مشارك بمركز أبحاث النانو والمواد المتقدمة - كلية العلوم والآداب – جامعة نجران من سبتمبر 2011حتى الأن.

- رئيس معمل مركبات وتكنولوجيا النانو- مركز بحوث وتطوير الفلزات من أبريل 2010 حتى سبتمبر 2011.

- أستاذ باحث مساعد بمعمل مركبات وتكنولوجيا النانو - مركز بحوث وتطوير الفلزات من يونيه 2008 حتى الأن.

- باحث بمعمل مركبات وتكنولوجيا النانو - مركز بحوث وتطوير الفلزات من فبراير 2004 الى يونيه 2008.

- باحث بمعمل الهيدروميتالورجى- مركز بحوث وتطوير الفلزات من نوفمبر 2001 الى فبراير 2004.

- مدرس مساعد- معمل الهيدروميتالورجى - مركز بحوث وتطوير الفلزات من مارس 1996 الى نوفمبر2001.

- مساعد باحث – معمل الهيدروميتالورجى - مركز بحوث وتطوير الفلزات من يونيه 1993الى مارس1996.

4- براءة اختراع

تم تسجيل عدد 2 براءة اختراع باليابان فى الطرق الحديثة لتعيين ايونات الفلزات بالعين المجردة باستخدام السيلكا المسامية كمادة حاس بعد تحميلها ببعض المركبات العضوية.

1- H. Matsunaga, T. Hanaoka, **A.A.Ismail**, S. A. El-Safty, Fabrication method of chemical sensors , ***JP Patent 2007- 064182***

2- H. Matsunaga, T. Hanaoka, **A.A.Ismail**, S. A. El-Safty, A determination method of chromate ion in water, ***JP Patent 2006 – 160155.***

5- الجوائز و التكريم:

1. الحصول على جائزة مؤسسة مصر الخير لأفضل الأبحاث المنشورة في العلوم الطبيعية من حيث معامل التأثير الأعلى لعام 2012.
2. الحصول على الجائزة الاولى للبحوث البيئية من أكاديمية البحث العلمى والتكنولوجيا لعام 2010 - جوائز الهيئات/الأفراد.
3. الحصول على جائزة مؤسسة مصر الخير لأفضل الأبحاث المنشورة في العلوم الطبيعية من حيث معامل التأثير الأعلى لعام 2010 .
4. الحصول على جائزة الدولة التشجيعية فى العلوم التكنولوجيا المتقدمة - أكاديمية البحث العلمى والتكنولوجيا - لعام 2008.
5. إختيارات أبحاثة كمرجع علمى 1146 مره حتى 2013/9/5 وإرتفاع معدل تقييم (h index) كمؤلف للأبحاث إلى 21.
6. الاختيار فى موسوعة من هو للأبحاث المتميزة فى العلوم و الهندسة- طبعة 2006 -2007.

6- المهمات العلمية

1- مهمة علمية [Alexander von Humboldt (AvH) إلى ما بعد الدكتوراه:

المركز البحثى لتقنية الكيمياء التطبيقية – قسم العوامل الحفازة و تكنولوجيا النانو- جامعة هانوفر - المانيا - من ابريل 2008 إلى مارس 2010.

2- مهمة علمية [Japan Society for the Promotion of Science (JSPS)] إلى ما بعد الدكتوراه:

المركز البحثى لتقنية العمليات الكيميائية – المعهد القومى التخصصى الصناعى فى العلوم - سندای - اليابان - من أكتوبر 2005 إلى سبتمبر 2007.

3 – باحث زائر: المركز البحثى لتقنية العمليات الكيميائية – المعهد القومى التخصصى الصناعى فى العلوم - سندای - اليابان - – من أبريل 2005 الى أكتوبر 2005.

4- مهمة علمية لشباب الباحثين من فبراير الى سبتمبر 2003 بقسم علوم وهندسة المواد جامعة فلوريدا.

5- دورة تدريبية باليابان ممولة من هيئة التعاون الدولى اليابانية (جايكا) لمدة عشرة أشهر من أغسطس 1998 الى يونيه 1999.

7- المجال العلمى و المدرسة العلمية

1- شارك فى تأسيس مدرسة علمية فى مجال الصول جل فى مركز بحوث وتطوير الفلزات لتحضير المواد المتناهية الصغر. وتعتبر تكنولوجيا الصول جل حديثة نسبيا و يمكن عن طريقها إنتاج مواد جديدة (متقدمة) ذات خواص يصعب الحصول عليها بالطرق التقليدية و عند استخدام هذه التكنولوجيا المتقدمة لا يكون هناك حاجة إلى استخدام درجات الحرارة العالية المطلوبة لإنتاج مواد مشابهة بالطرق التقليدية لأنتاج الأكاسيد ومخاليط الأكاسيد فى حجم النانو فى صورة بودرة وأفلام رقيقة على سطح الزجاج.

2- تحضير أفلام رقيقة مسامية من ثانى أكسيد التيتانيوم محملة ببعض الصباغات وذلك لأستخدامها فى تنقية الهواء من الغازات السامة المتطايرة داخل وخارج المنزل تحت الضوء المرئى.

3- التخلص من الملوثات الصناعية السائلة بطريقة صديقة للبيئة وتكسيرها الى عناصرها الاولية النيتروجين وثانى أكسيد الكربون وذلك باستخدم العامل الحفاز الضوئى تحت الأشعة الفوق البنفسجية و أيضا الضوء المرئى.

4- تصميم مركبات مسامية بمواصفات وأشكال محددة وتطبيقها فى مجال تحضير المواد الحاسة.

3- تصميم جهاز إحساس بصرى لإزالة الأيونات السامة من المياه.

4- تخليق مواد ممتزة لإزالة العناصر الثقيلة الملوثة.

5- تحضير الزيوليت (ZSM-5) وتطبيقه فى عملية أكسدة غاز أول أكسيد الكربون الى غاز ثانى أكسيد الكربون.

6- الطلاء باستخدام طريقة الصول جل وذلك لحماية السبائك والمعادن لحمايتها من التأكل.

7 - تطوير طريقة تحضير المواد ذات الهيكل المسامى

8 - صناعة وتحضير أكاسيد من عدة عناصر على هيئة مسامية منتظمة .

8- التدريب

1. المشاركة فى الدورة التدريبية ضمن برنامج "علماء الجيل القادم من أجل مصر" والممولة من أكاديمية البحث العلمى فى الفترة 2010/6/20 وحتى 2010/6/23 تحت عنوان "علوم النانو".
2. المشاركة فى الدورة التدريبية ضمن برنامج "علماء الجيل القادم من أجل مصر" والممولة من أكاديمية البحث العلمى فى الفترة 2011/1/5 وحتى 2011/1/9 تحت عنوان "علوم النانو".
3. المشاركة فى الدورة التدريبية ضمن برنامج "علماء الجيل القادم من أجل مصر" والممولة من أكاديمية البحث العلمى فى الفترة 2011/2/2 وحتى 2011/2/4 تحت عنوان "علوم النانو".
4. المشاركة فى الدورة التدريبية المكثفة ضمن برنامج "علماء الجيل القادم من أجل مصر" والممولة من أكاديمية البحث العلمى فى الفترة 2011/2/28 وحتى 2011/3/2 تحت عنوان "علوم النانو".
5. الاشراف على التدريب العملي لطلبة كليات العلوم و الهندسة سنويا سواء بمعمل الهيدروميتالورجى أو فى معمل مركبات وتكنولوجيا النانو
6. إلقاء بعض المحاضرات في مجال المواد المتقدمة (العوامل الحفازة) للسادة أعضاء البحوث – مركز بحوث وتطوير الفلزات.
7. شارك فى تدريب مهندسيين من مشروع فوسفات أبو طرطور على انتاج حمض الفوسفوريك بالطرق الكيميائية الرطبة 1998.

الإشراف على الرسائل العلمية

1- رسالة الماجستير الخاصة بالطالب/ أحمد أمين هلال بمعهد التبين للدراسات التعدينية بعنوان " تحضير وتوصيف كبرتيد البزموت النانوية كحفاز ضوئي لمعالجة مياه الصرف الصناعية تحت الضوء المرئي" 2011 حتى الأن.

تأليف الكتب العلمية

1. A. A. Ismail, Metal oxide nanostructures: Efficient photocatalysts for degradation of highly hazardous chemicals, ***Encyclopedia of Semiconductor Nanotechnology,*** The American Scientific Publishers (ASP). **Inpress 2012.**

د) عضو بهيئة تحرير المجلات العلمية

1. Member of Editorial Board, ISRN Nanomaterials (since March 1, 2012).

2. Member of Editorial Board of Journal of Catalysts (since July 1, 2012**)**.

و) محكم بالهيئات الدولية الداعمة للمشاريع البحثية

1. Science and Technology Development Fund (STDF), Academy of Scientific
2. Research, Ministry of Scientific Research, Cairo, Egypt.
3. King Abdulaziz City for Science and Technology (KACST), Saudi Arabia
4. Romanian National Council for Scientific Research, Romania
5. Swiss National Science Foundation, International Co-operation, Berne, Switzerland

عضو اللجنة العلمية

1. عضو اللجنة العلمية في فعاليات ورشة العمل العالمية في المواد المتقدمة لأجهزة الاستشعار الإلكترونية والطاقة المتجددة التى أقيمت بجامعة نجران فى الفترة 14-16 مايو 2012.

اللجان

1. عضو بلجنة الموقع الألكترونى بمركز بحوث وتطوير الفلزات فى الفترة 2010/7/1 وحتى 2011/9/15**.**

8- النشاط العلمي

المشاركة فى المؤتمرات العالمية

1. S. M. El-Sheikh, H.M. El-Hosainy, G. Zhang, **A. A. Ismail**, D. D. Dionysiou, Facile synthesis of undoped and non-metals doped TiO_2 for visible light induced destruction of microcystin-LR, ***38th International Conference and Expo on Advanced Ceramics and Composites - ICACC 2014, Daytona Beach, FL, January 26-31, 2014.***

2. G. Zhang, X. He, M. Nadagouda, K O'Shea, S. M. El-Sheikh, **A. A. Ismail**, D. D. Dionysiou, Photocatalytic destruction of cylindrospermopsin using TiO_2 catalysts: Intermediates and reaction pathways, ***The 18th International Conference on Semiconductor Photocatalysis and Solar Energy Conversion, , San Diego, California, November 17-21, 2013.***

3. C. Han, G. Zhang, M. Nadagouda, P. Falaras, S. C. Pillai, K. O'Shea, S. M. El-Sheikh, **A. A. Ismail**, and D.D. Dionysiou. UV-visible/visible light-activated nanoTiO_2 photocatalyst for treatment of algal toxins. ***3rd European Conference on Environmental Applications of Advanced Oxidation Processes (EAAOP-3), Almería, Spain, October 28-30, 2013.***

4. D. D. Dionysiou, C. Han, J. Andersen, G. Zhang, Y. Zhang, M. Nadagouda, K. O'Shea, S. M. El-Sheikh, **A. A. Ismail**, P. Falaras, T. Byrne, S. Pillai, Development of TiO_2 photocatalysts and evaluation for the destruction of cyanotoxins and selected contaminants of emerging concern in water, ***JEP2013 3rd European Symposium on Photocatalysis, Portorož, Slovenia, September 25-27, 2013.***

5. G. Zhang, M. Nadagouda, M. Pelaez, K. O'Shea, **A. A. Ismail** and D. D. Dionysiou, Degradation of cylindrospermopsin using brookite titanium dioxide under simulated solar light, ***The 244th American Chemical Society (ACS) National Meeting, Division of Environmental Chemistry, Philadelphia, Pennsylvania , US, August 19-23, 2012***

6. M. Wark, I. Bannat, **A.A. Ismail**, D.W. Bahnemann, Photocatalytically active hybrid thin films from ordered mesoporous TiO_2 by electrochemical deposition of co-catalysts in the pores, ***15th International Congress on Catalysis in Munich, Germany , July 1 – 6, 2012.***

7. **A. A. Ismail**, D.W. Bahnemann, Synthesis and photocatalytic properties of nanocrystalline Au, Pd and Pt photodeposited onto mesoporous RuO_2-TiO_2 nanocomposites, ***7th European Meeting on Solar Chemistry and Photocatalysis: Environmental Applications- SPEA7 - Oporto, Portugal, June 17-20, 2012.***

8. A.M.Ali, **A.A. Ismail** , R. Najmy, A. Al-Hajry, Zinc oxide-silica films prepared by sol-gel technique for gas sensing applications, ***2nd International Advances in Applied Physics and Materials Science Congress, Antalya, Turkey, 26 - 29 April 2012.***

9. M.H.H. Mahmoud, **A.A. Ismail** and M.M.S. Sanad, Developing a cost-effective synthesis of active iron oxide doped titania photocatalysts loaded with palladium, platinum or silver nanoparticles, ***International Conference on Materials Science and Its Applications, Development and Innovations Taif University, KSA, Feb., 13-15, 2012.***

10. **A. A. Ismail**, D.W. Bahnemann, J. Rathouský, V. Yarovyi, M. Wark, Multilayered ordered mesoporous platinum/titania composite films: Does the photocatalytic activity benefit from the film thickness?, ***The 15th International Conference on TiO_2 Photocatalysis: Fundamentals and Applications, (TiO_2-16), San Diego, California, US, Nov., 7-10, 2011.***

11. **A. A. Ismail**, D. W. Bahnemann, Study of the efficiency of UV and visible-light photocatalytic oxidation of methanol on mesoporous RuO_2-TiO_2 Nanocomposites, ***19th Annual International Conference on Composites or Nano Engineering, ICCE-19, Shanghai, China, July 24-30, 2011.***

12. M. M. Rashad, **A. A. Ismail**, I. Osama, I. A. Ibrahim, A. T. Kandil, Stannic oxide nanopowders via co-precipitation method, ***19th Annual International Conference on Composites or Nano Engineering, ICCE-19, Shanghai, China, July 24-30, 2011.***

13. M. Wark, V. Yarovyi, I. Bannat, **A.A. Ismail**, D.W. Bahnemann, Noble metal doped porous titania photocatalysts: Impact of mesoporous order***, The 15th International Conference on TiO_2 Photocatalysis: Fundamentals and Applications, (TiO_2-15), San Diego, California, US, Nov., 15-18, 2010.***

14. **A. A. Ismail**, D. W. Bahnemann, Study of the efficiency of UV and visible-light photocatalytic oxidation of methanol on mesoporous RuO_2-TiO_2 nanocomposites, ***European Meeting on Solar Chemistry and Photocatalysis for Environmental Applications, SPEA6 Prague, Czech Republic, June 13 –16, 2010.***

15. R. Fateh, **A. A. Ismail**, R. Dillert, D. Bahnemann, Highly active crystalline mesoporous TiO_2 films for self-cleaning applications, ***European Meeting on Solar Chemistry and Photocatalysis for Environmental Applications, SPEA6 Prague, Czech Republic, June 13 – 16, 2010.***

16. M. Wark, **A. A. Ismail**, D. W. Bahnemann, Noble metals doped porous titania photocatalysts:Impact of mesoporous order and crystallinity, ***European Meeting on Solar Chemistry and Photocatalysis for Environmental Applications, SPEA6, Prague, Czech Republic, June 13 – 16, 2010.***

17. **A. A. Ismail**, T. A. Kandiel, D. W. Bahnemann, Novel (and Better?) titania-based photocatalysts: brookite nanorods and mesoporous structures***, SP3 - Third International Conference on Semiconductor Photochemistry, Glasgow, Scotland, April 12- 16th, 2010.***

18. L. Robben and **A. A. Ismail**, Detailed analysis of the small angle X-Ray Scattering of ordered mesoporous titania compounds calcined at different temperatures***, Deutsche Physikalische Gesellschaft (DPG) Spring Meeting, Regensburg, Germany, March 21-26, 2010.***

19. **A. A. Ismail**, D. W. Bahnemann, M. Wark, Palladium or gold doped porous titania photocatalysts:Impact of mesoporous order and crystallinity, ***22nd German Zeolite Conference, Munich, Germany, March 3-5, 2010.***

20. **A. A. Ismail** and D. W. Bahnemann, Platinum/titania mesoporous as a photocatalyst with enhanced its photocatalytic Activity for methanol oxidation, ***The 14th International Conference on TiO_2 Photocatalysis: Fundamentals and Applications, (TiO_2-14), New York, US, October 5-8, 2009.***

21. **A. A. Ismail** and D. W. Bahnemann, Synthesis and photocatalytic properties of mesostructured Au, Pt and Pd/RuO_2-TiO_2 nanoarchtectures, ***XXIV International conference on photochemistry (ICP 2009), Toledo, Spain, July19- 24 ,2009.***

22. **A. A. Ismail**, L. Robben, D. W. Bahnemann, Characterization of highly ordered 2D-hexagonal mesostructured TiO_2 and Pd/TiO_2 by small angle X-Ray scattering (SAXS) and X-Ray powder diffraction (XRD)***, 17th Annual Meeting of the German Crystallographic Society, Hannover, Germany, March 9-12, 2009.***

23. **A. A. Ismail**, I. A. Ibrahim, Synthesis of TiO_2-SiO_2 aerogel monoliths for phenol and cyanide photo -degradation from industrial wastewaters, ***European Meeting on Solar Chemistry and Photocatalysis for Environmental Applications, Palermo, Italy, October 4 – 8, 2008.***

24. **A. A. Ismail**, D. W. Bahnemann, Enhancement Photonic Efficiency of Pd/TiO_2 Mesostructured for methanol oxidation, ***Sixth International Conference on Inorganic Materials, Dresden, Germany, September 28-30, 2008.***

25. **A. A. Ismail**, D. W. Bahnemann, Mesostructured gold/titania nanocomposites as highly efficient photocatalysts for the oxidation of methanol, ***The 13th International Conference on TiO_2 Photocatalysis: Fundamentals and Applications (TiO_2-13), California, US, September 22-25, 2008.***

26. S. A. El-Safty, **A. A. Ismail**, Hideyuki Matsunaga, General and simple approach for visual detection of multiple pollutant cations using three-dimensional nanoscale structures, ***MS&T'07 Materials Science& Technology Conference, Detroit, Michigan, USA, Sep. 16-20, 2007.***

27. **A.A.Ismail**, Z.M.El-Bahy, R.M. Mohamed, Enhancement of photocatalytic properties of titania nanoparticles by doping of rare earth, ***XIVth International Sol-Gel Conference, Montpellier, France, Sep. 2-7, 2007.***

28. **A. A. Ismail,** S. A. El-Safty, H. Matsunaga, Fabrication of cubic Fd3m nanostructured chemosensors for a colorimetric detection of Bi (III) ion, ***XIVth International Sol-Gel Conference, Montpellier, France, Sep. 2-7, 2007.***

29. **A. A. Ismail,** H.Matsunaga, Synthesis ZnO/TiO_2-SiO_2 nanoparticles using sol gel processing for photocatalytic oxidation of trichloroethylene, ***14th IUPAC International Symposium on Organometallic Chemistry Directed Towards Organic Synthesis (OMCOS 14) Nara, Japan , August 2 - 6, 2007.***

30. **A.A. Ismail**, H. Matsunaga, Sol-gel synthesis of V_2O_5/TiO_2 - SiO_2 nanoparticles for catalytic oxidation, ***Fifth Tokyo Conference on Advanced Catalytic Science and Technology, July 23 - 28, Tokyo, Japan, 2006.***

31. R.M. Mohamed, **A.A. Ismail**, I.A.Ibrahim,B. Koopman, Characterization of synthetic zeolites optimized for heavy metal removal, ***Fifth Tokyo Conference on Advanced Catalytic Science and Technology, July 23 - 28, Tokyo, Japan, 2006.***

32. **A.A. Ismail**, S.A. El-Safty, T. Hanaoka, H. Matsunaga, Novel monolithic sensor designs for high efficient colorimetric detection of Cr(VI) ion, ***International congress on analytical sciences, ICAS-2006 ,June 25-30, Moscow, Russia, 2006.***

33. **A. A. Ismail**, S. A. El-Safty, T. Hanaoka, H. Matsunaga, Optical sensor for detection of bismuth using mesoporous silica monoliths containing a chelating chromophore, ***The 67th symposim on analytical chemistry, May 13-14, Akita, Japan, 2006. Science links Japan, Bunseki Kagaku Toronkai Koen Yoshishu, http://sciencelinks.jp/j-east/article/200707/000020070707A0239110.php***

34. G.C. Kini, R.M. Mohamed, **A.A. Ismail**, I.A. Ibrahim, Characterization of synthetic zeolites optimized for heavy metal removal, ***Materials Research Society (MRS) conference, April 18-19 San Francisco, US, 2006.***

35. A.S. Hamdy, **A.A. Ismail**, D.P. Butt, Novel silica-Based ceramic coatings prepared by sol-gel method for aluminum alloys, ***European Corrosion Congress – EUROCORR, Portugal , Sept. 1-6, 2005.***

36. O. A. Fouad, **A. A. Ismail**, Z. I. Zaki, R. M. Mohamed, Photocatalytic activity of ZnO thin films prepared by thermal physical vapor deposition approach, ***NanoSMat 2005, International Conference on Surfaces Coatings and Nanomaterials, Aveiro, Portugal, Sept. 6-9, 2005.***

37. G. Kini, R.M.Mohamed, **A.A. Ismail**, I.A. Ibrahim, B. Koopman, Characterization of zeolite optimized for heavy metal removal, ***international Symposium on the role of adsorbed films and particulate systems in nano and biotechnologies, University of Florida, Gainesville, USA, August 24-26, 2005.***

38. A. S. Hamdy, , **A.A. Ismail**, D.P. Butt, Comparative studies on anticorrosion nano-particle silica-, ceria- and molybdate based thin films adsorbed on aluminum alloys, ***international Symposium on the role of adsorbed films and particulate systems in nano and biotechnologies, University of Florida, Gainesville, USA, August 24-26, 2005.***

39. A. S. Hamdy, **A.A. Ismail**, D.P. Butt, Sol-gel prepared anti-corrosion vanadia-based ceramic coatings for 6061-T6 aluminum alloy, ***international Symposium on the role of adsorbed films and particulate systems in nano and biotechnologies, University of Florida, Gainesville, USA, August 24-26, 2005.***

40. **A. A. Ismail**, R.M. Mohamed, I.A. Ibrahim, Studying influence of source of alumina on crystallinity of nanosized ZSM-5, ***The 3rd International Zeolite Symposium(3rd FEZA) Prague,Czech Republic, August 23-26, 2005.***

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الاشتراك فى المشاريع البحثية

حيث تم المشاركة كعضو فعال فى معظم المشاريع البحثية المقدمة للمعمل من وزارتى الصناعة والبحث العلمى بالإضافة لمشاريع التعاون الدولى مثل الشراكة المصرية - الامريكية والاسبانية.

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مراجع أدبى لعدد من المجلات العالمية وهى

مراجع أدبى لعدد أكثر من 40 مجلة علمية دولية، في معظم مجالات هندسة المواد والنانوتكنولوجي والعلوم البيئية، ، والكيمياء البيئية وكيمياء المواد ، والكيمياء الفيزيائية

1. ***Journal of Physical Chemistry*** *(American Chemical Society)*
2. ***Journal of Materials Chemistry*** *(Royal Society of Chemistry)*
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قائمة بالبحوث المنشورة

- إختيارات أبحاثة كمرجع علمى 1138 مره حتى 2013/8/27 وإرتفاع معدل تقييم (h index) كمؤلف للأبحاث إلى 21.

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