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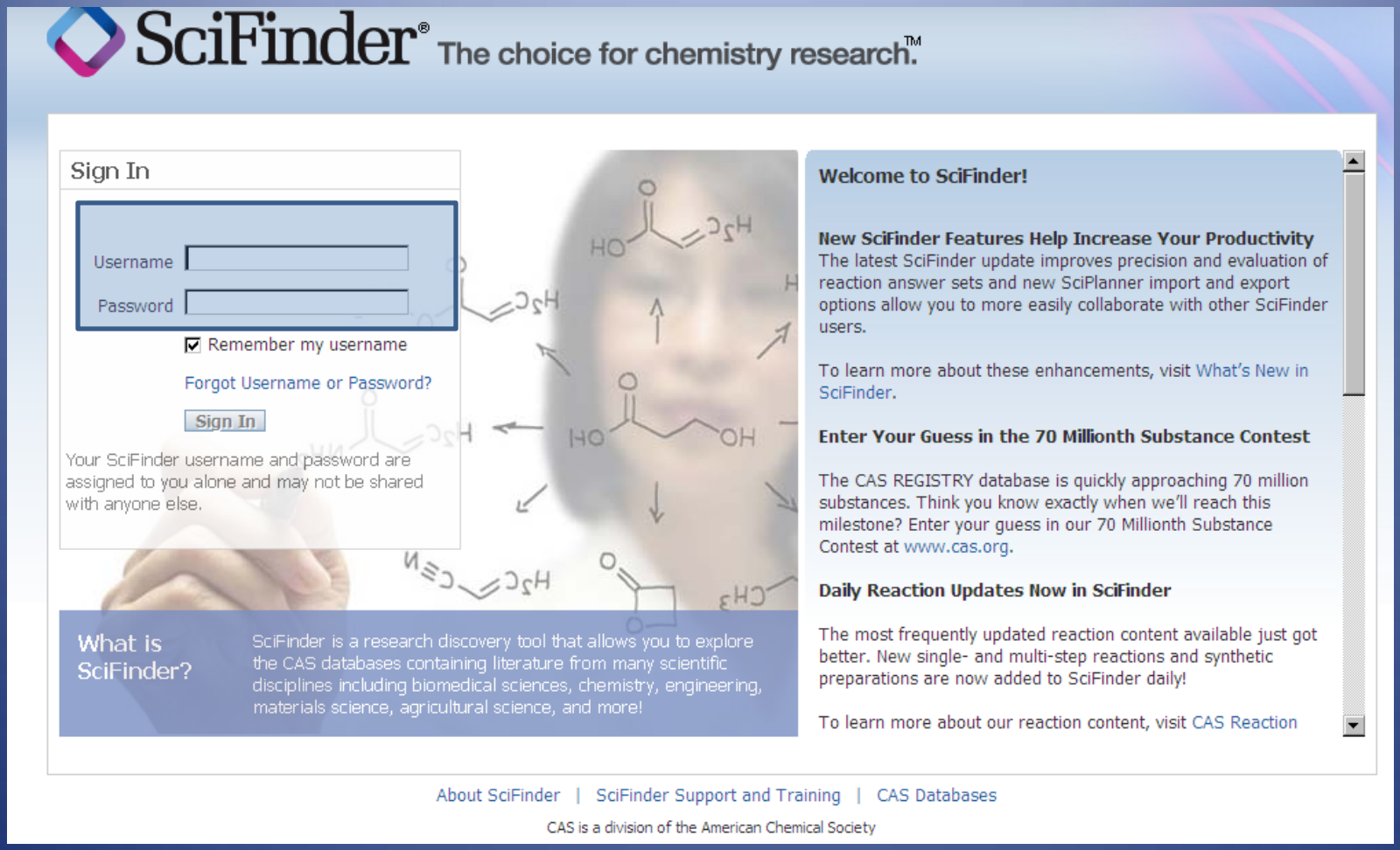

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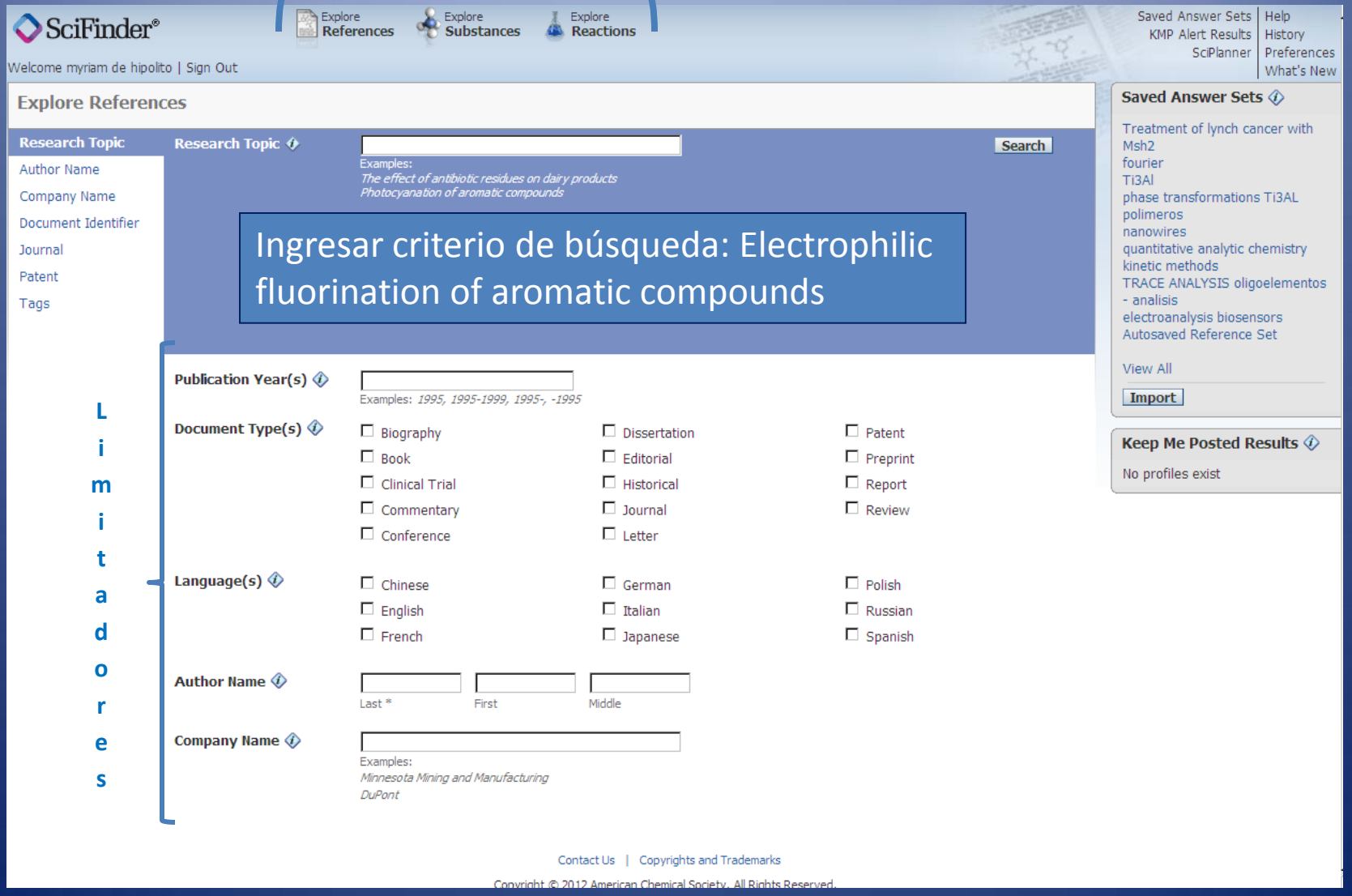

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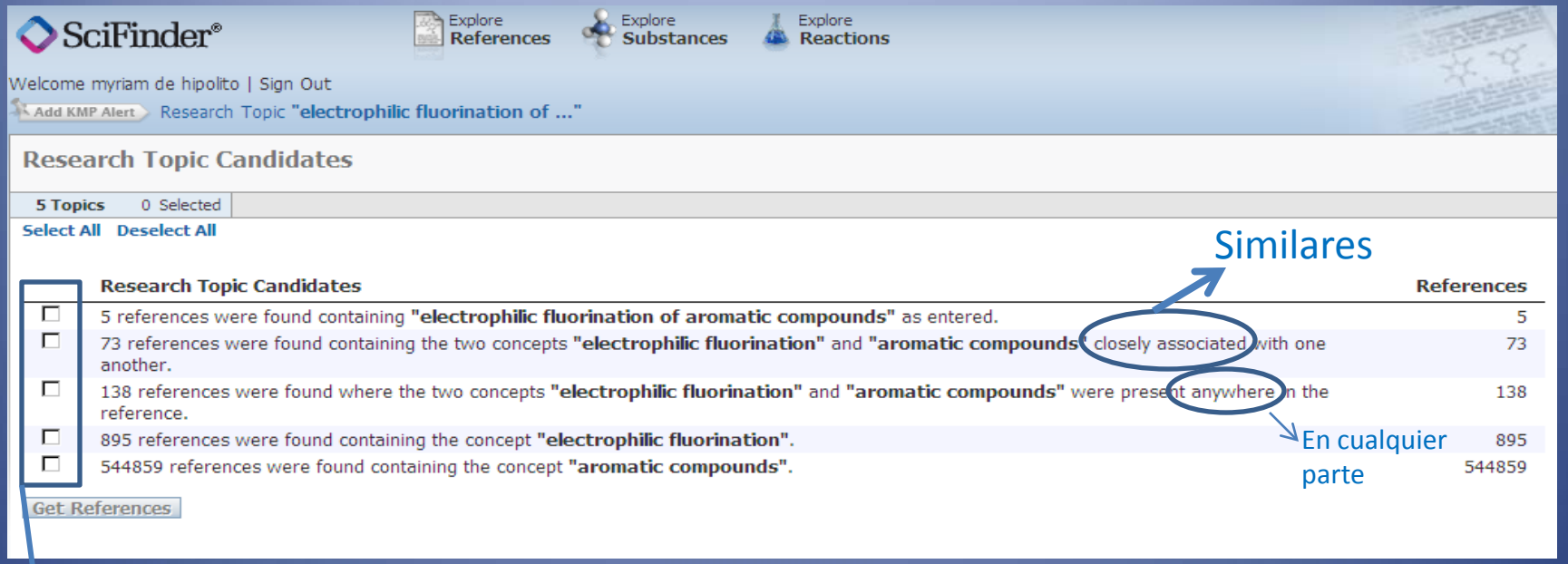

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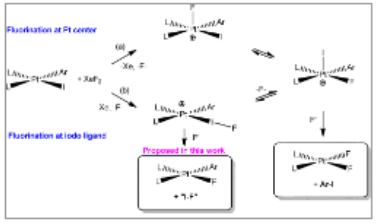
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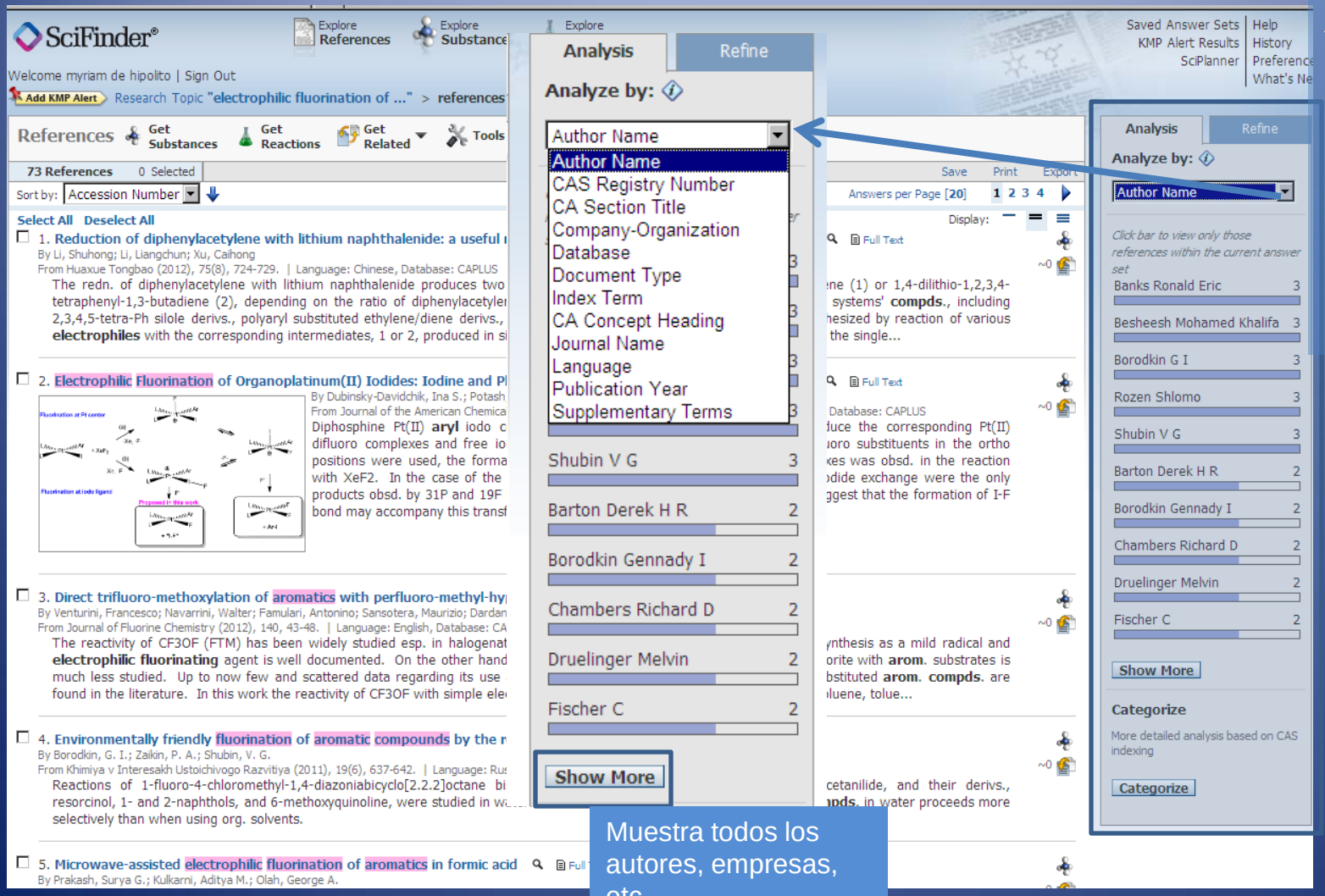

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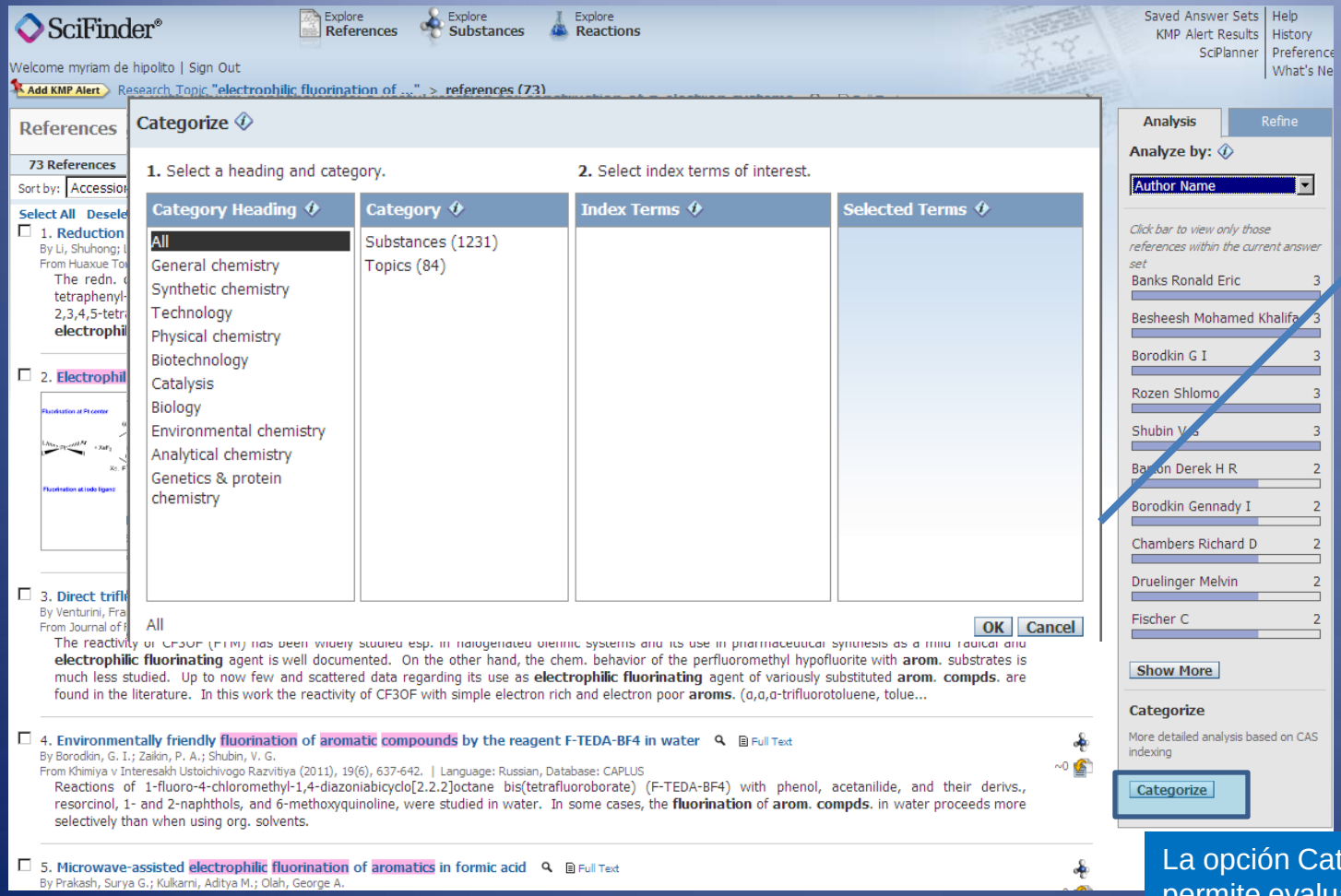

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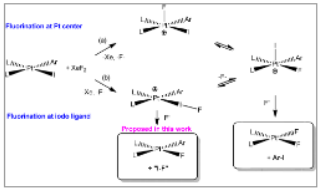

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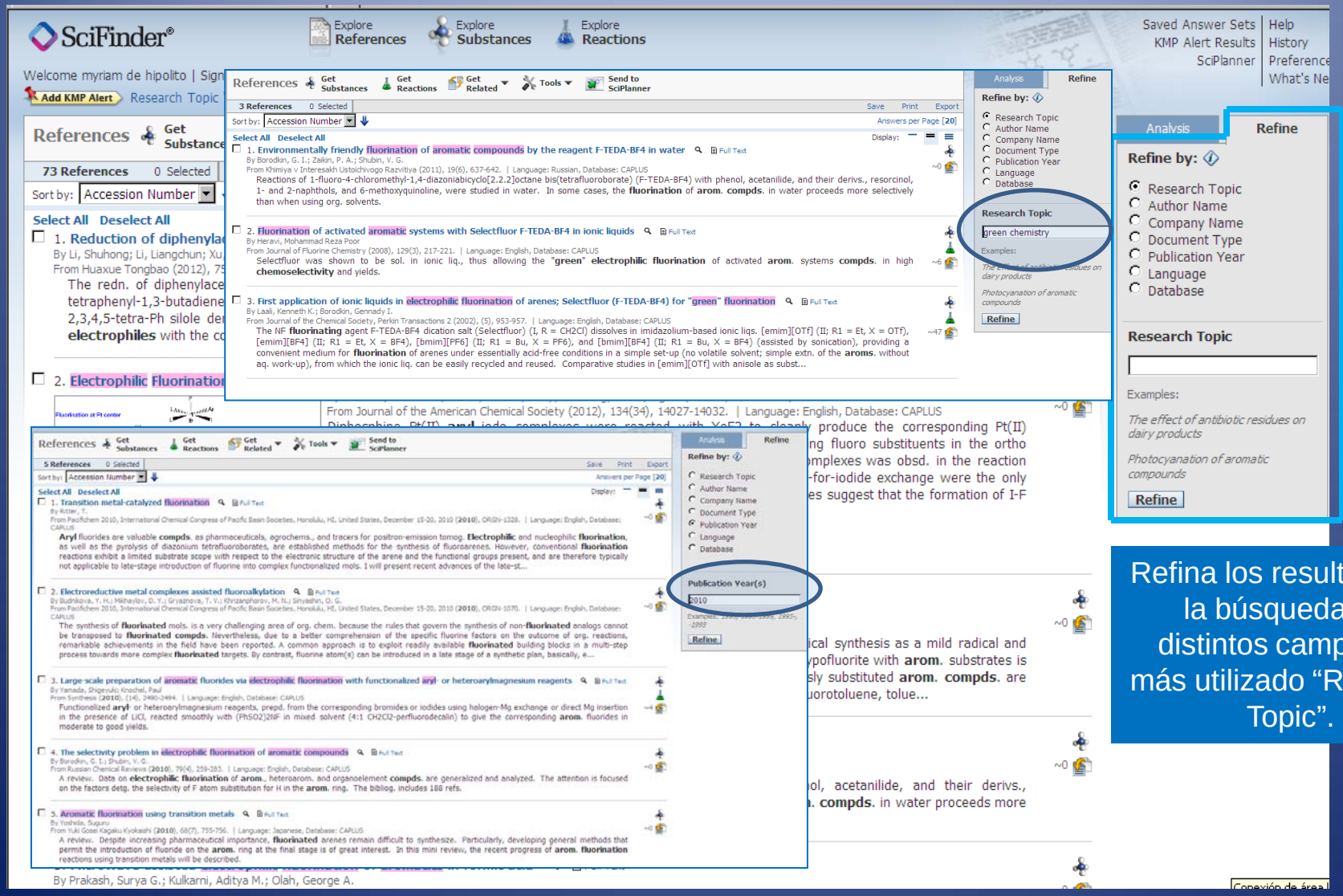

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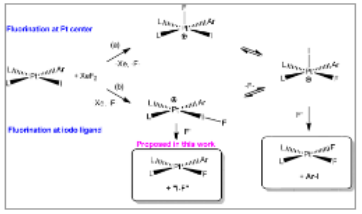

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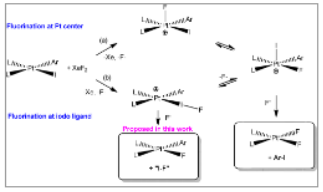

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Resumen

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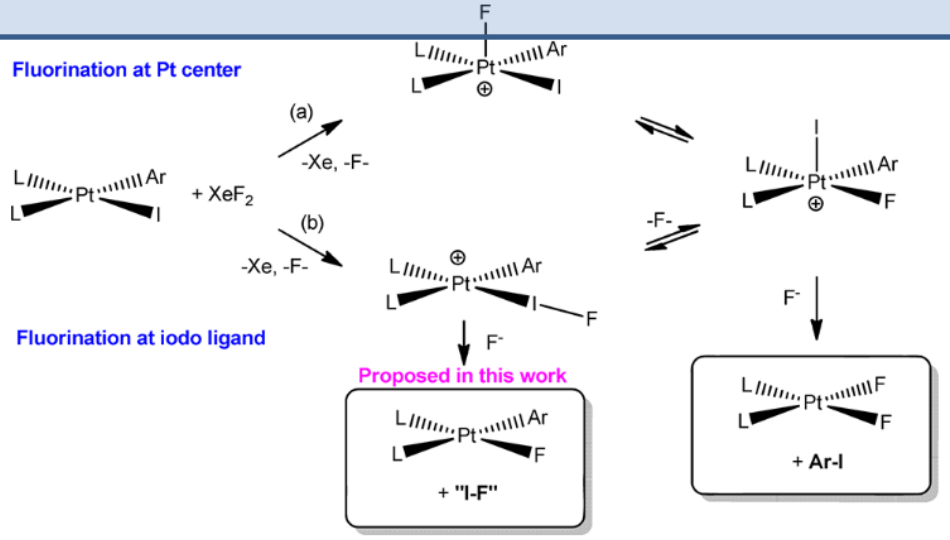
2. Electrophilic Fluorination of Organoplatinum(II) Iodides: Iodine and Platinum Atoms as Competing Fluorination Sites

By: Dubinsky-Davidchik, Ina S.; Potash, Shay; Goldberg, Israel; Vigalok, Arkadi; Vedernikov, Andrei N.

Diphosphine Pt(II) aryl iodo complexes were reacted with XeF2 to cleanly produce the corresponding Pt(II) difluoro complexes and free iodoarenes. However, when aryl ligands bearing fluoro substituents in the ortho positions were used, the formation of the corresponding Pt(II) aryl fluoro complexes was obsd. in the reaction with XeF2. In the case of the Pt-C6F5 complex, the products of the fluoride-for-iodide exchange were the only products obsd. by 31P and 19F NMR spectroscopy. The exptl. and theor. studies suggest that the formation of I-F bond may accompany this transformation. The plausible I-F species could be trapped by electron-richer organoplatinum complexes to give a Pt(IV) transient which subsequently eliminates the corresponding aryl iodide. Hence, in some cases a pathway involving an attack of XeF2 at the iodo ligand of Pt(II) aryl iodo complexes to generate I-F species can be operative in addn. to or instead of the XeF2 attack at the metal center. The DFT studies demonstrate that the electrophilic attacks of XeF2 at both sites, Pt and iodide, can be competitive.



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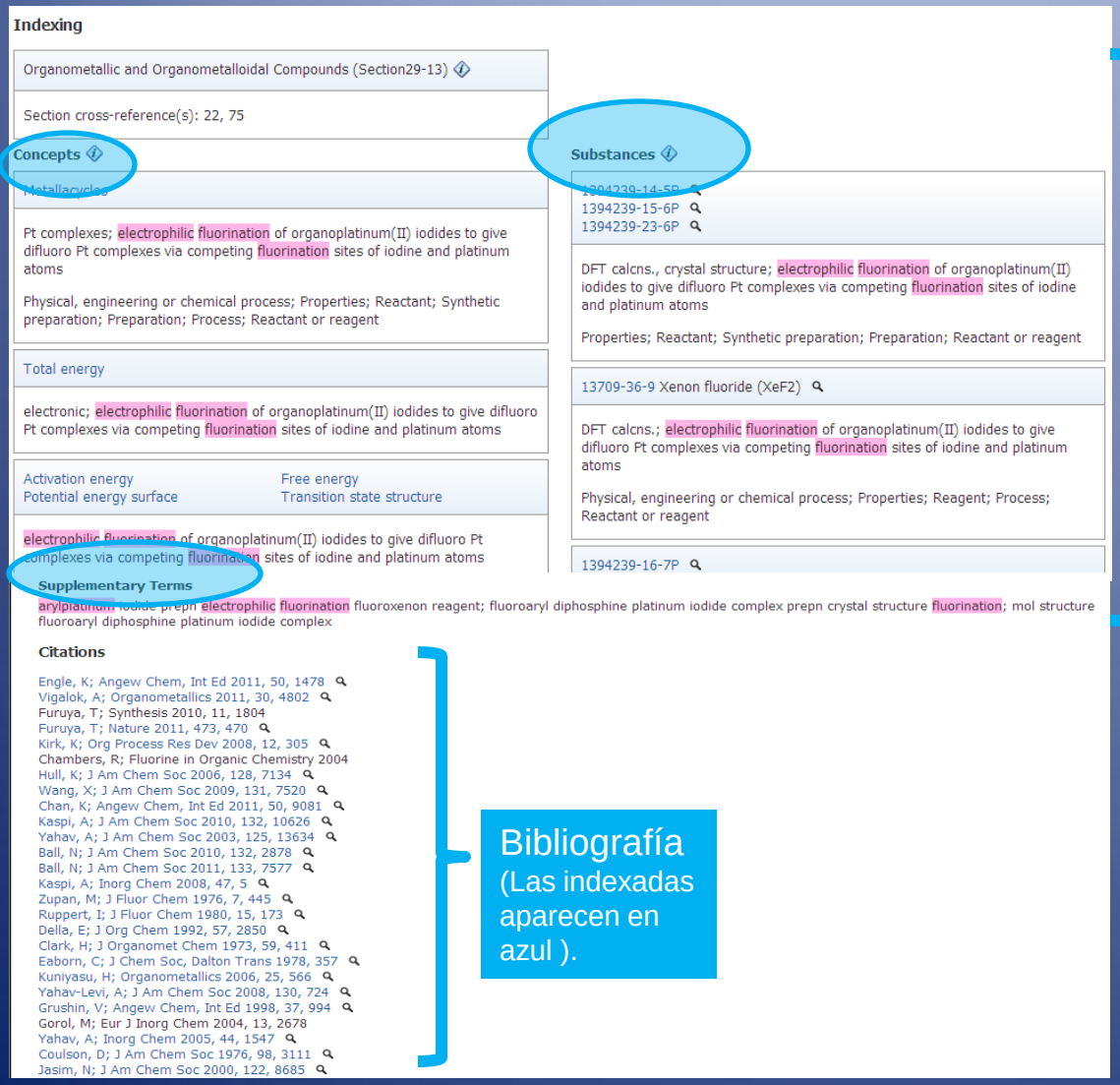

Indexing

Organometallic and Organometalloidal Compounds (Section29-13)

Section cross-reference(s): 22, 75

Concepts

Metallacycles

Pt complexes; electrophilic fluorination of organoplatinum(II) iodides to give difluoro Pt complexes via competing fluorination sites of iodine and platinum atoms

Physical, engineering or chemical process; Properties; Reactant; Synthetic preparation; Preparation; Process; Reactant or reagent

Total energy

electronic; electrophilic fluorination of organoplatinum(II) iodides to give difluoro Pt complexes via competing fluorination sites of iodine and platinum atoms

Activation energy
Potential energy surface
Free energy
Transition state structure

electrophilic fluorination of organoplatinum(II) iodides to give difluoro Pt complexes via competing fluorination sites of iodine and platinum atoms

Substances

1394239-14-5P
1394239-15-6P
1394239-23-6P

DFT calcns., crystal structure; electrophilic fluorination of organoplatinum(II) iodides to give difluoro Pt complexes via competing fluorination sites of iodine and platinum atoms

Properties; Reactant; Synthetic preparation; Preparation; Reactant or reagent

13709-36-9 Xenon fluoride (XeF2)

DFT calcns.; electrophilic fluorination of organoplatinum(II) iodides to give difluoro Pt complexes via competing fluorination sites of iodine and platinum atoms

Physical, engineering or chemical process; Properties; Reagent; Process; Reactant or reagent

1394239-16-7P

Supplementary Terms

arylplatinum iodide prepn electrophilic fluorination fluoroxenon reagent; fluoroaryl diphosphine platinum iodide complex prepn crystal structure fluorination; mol structure fluoroaryl diphosphine platinum iodide complex

Citations

Engle, K; Angew Chem, Int Ed 2011, 50, 1478
Vigalok, A; Organometallics 2011, 30, 4802
Furuya, T; Synthesis 2010, 11, 1804
Furuya, T; Nature 2011, 473, 470
Kirk, K; Org Process Res Dev 2008, 12, 305
Chambers, R; Fluorine in Organic Chemistry 2004
Hull, K; J Am Chem Soc 2006, 128, 7134
Wang, X; J Am Chem Soc 2009, 131, 7520
Chan, K; Angew Chem, Int Ed 2011, 50, 9081
Kaspi, A; J Am Chem Soc 2010, 132, 10626
Yahav, A; J Am Chem Soc 2003, 125, 13634
Ball, N; J Am Chem Soc 2010, 132, 2878
Ball, N; J Am Chem Soc 2011, 133, 7577
Kaspi, A; Inorg Chem 2008, 47, 5
Zupan, M; J Fluor Chem 1976, 7, 445
Ruppert, I; J Fluor Chem 1980, 15, 173
Della, E; J Org Chem 1992, 57, 2850
Clark, H; J Organomet Chem 1973, 59, 411
Eaborn, C; J Chem Soc, Dalton Trans 1978, 357
Kuniyasu, H; Organometallics 2006, 25, 566
Yahav-Levi, A; J Am Chem Soc 2008, 130, 724
Grushin, V; Angew Chem, Int Ed 1998, 37, 994
Gorol, M; Eur J Inorg Chem 2004, 13, 2678
Yahav, A; Inorg Chem 2005, 44, 1547
Coulson, D; J Am Chem Soc 1976, 98, 3111
Jasim, N; J Am Chem Soc 2000, 122, 8685

Conceptos, sustancias y términos suplementarios asociados a la referencia.

Bibliografía (Las indexadas aparecen en azul).

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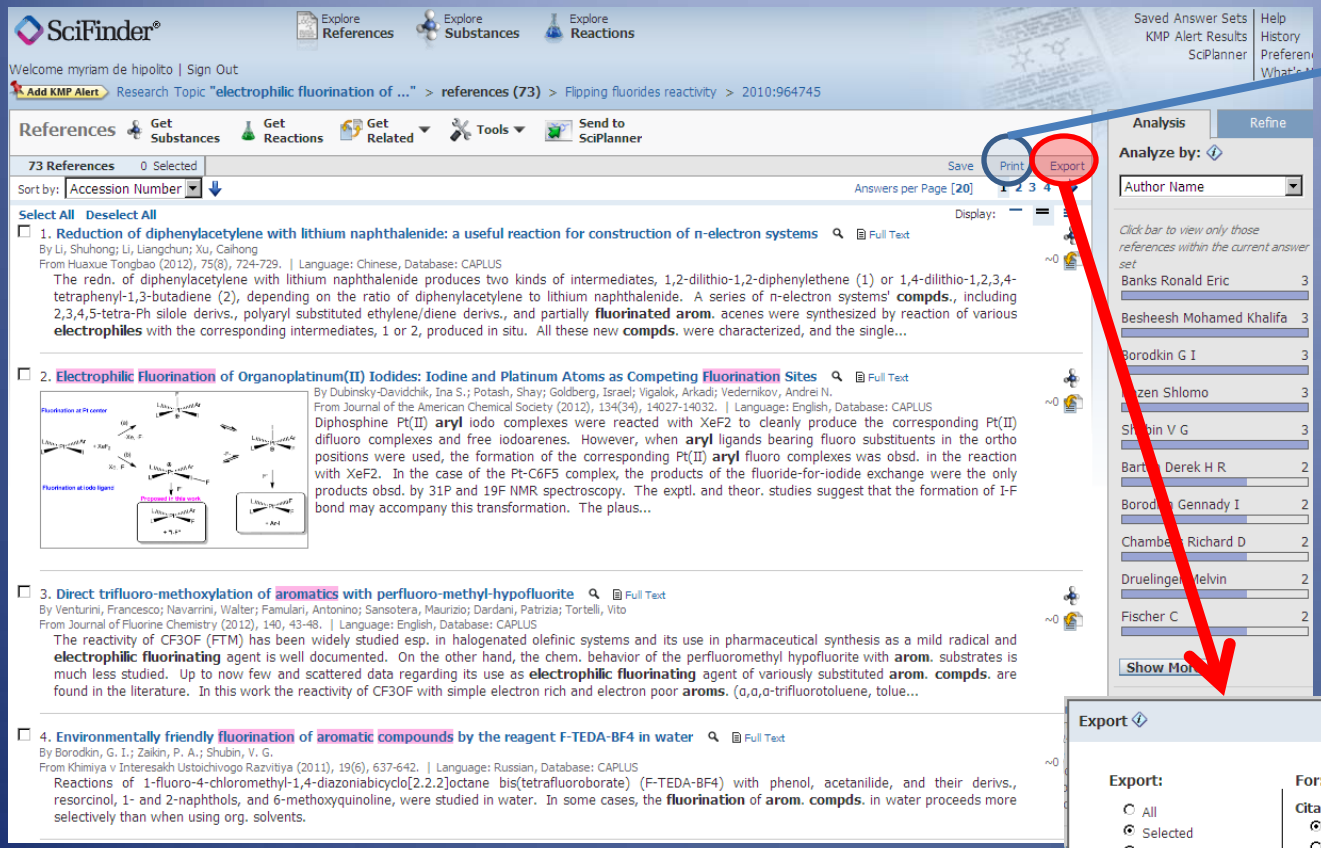

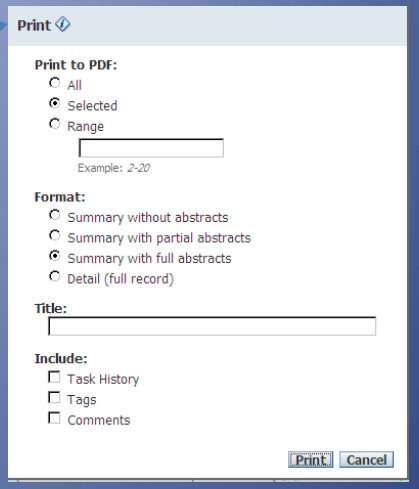

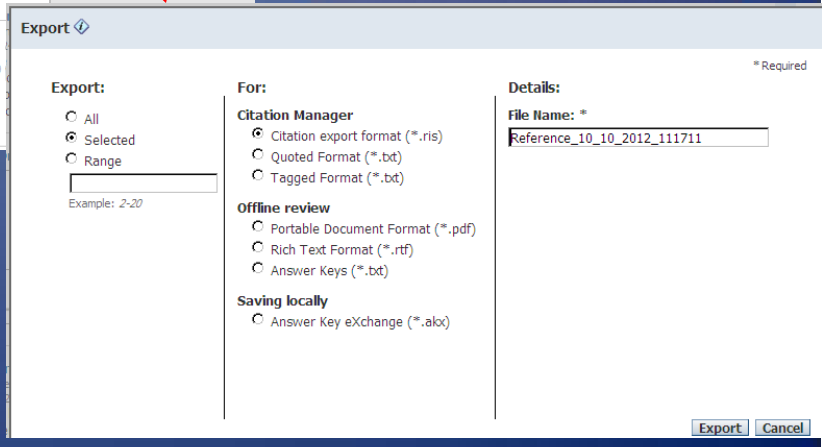

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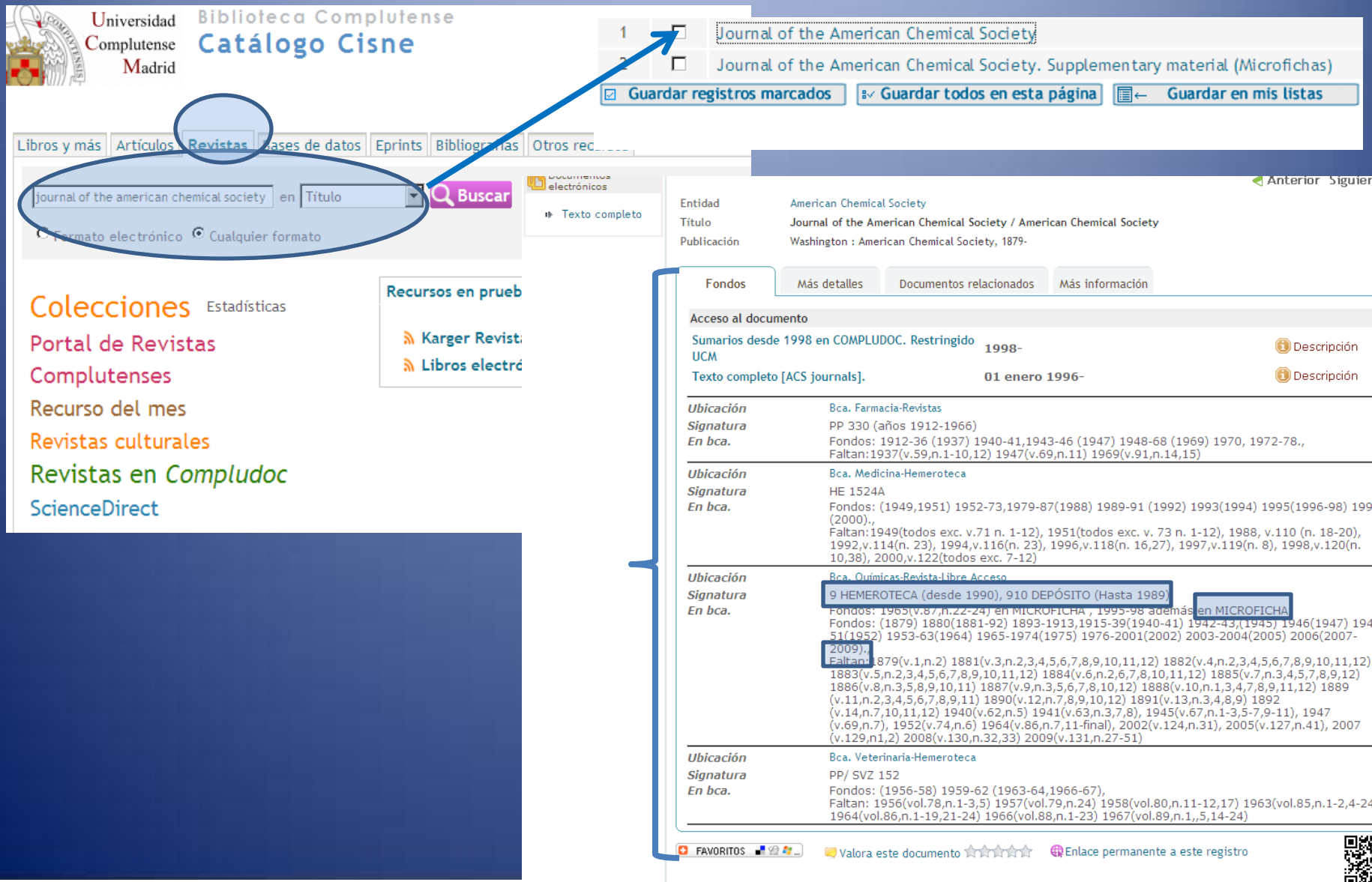

Búsqueda por reacción

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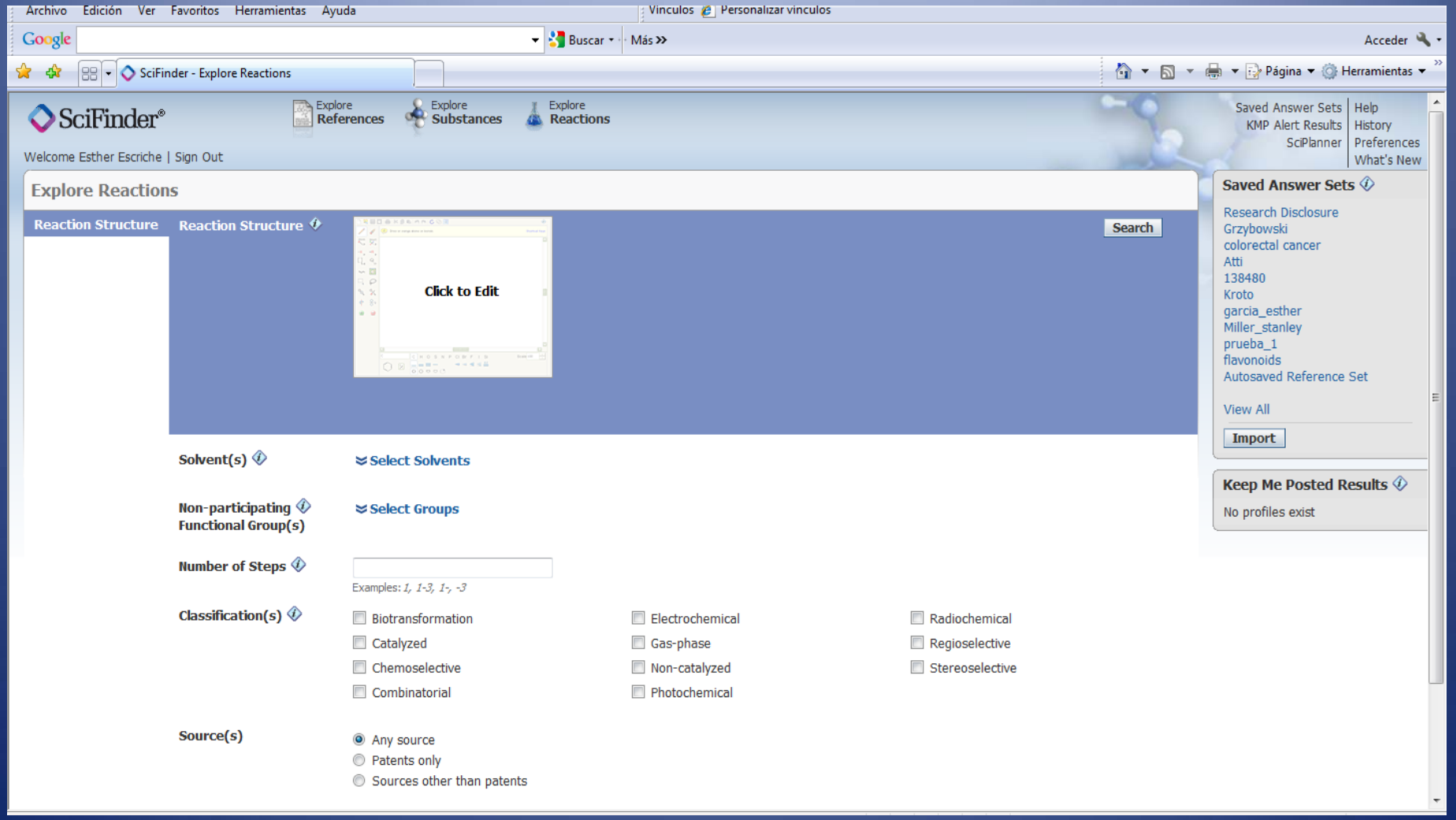

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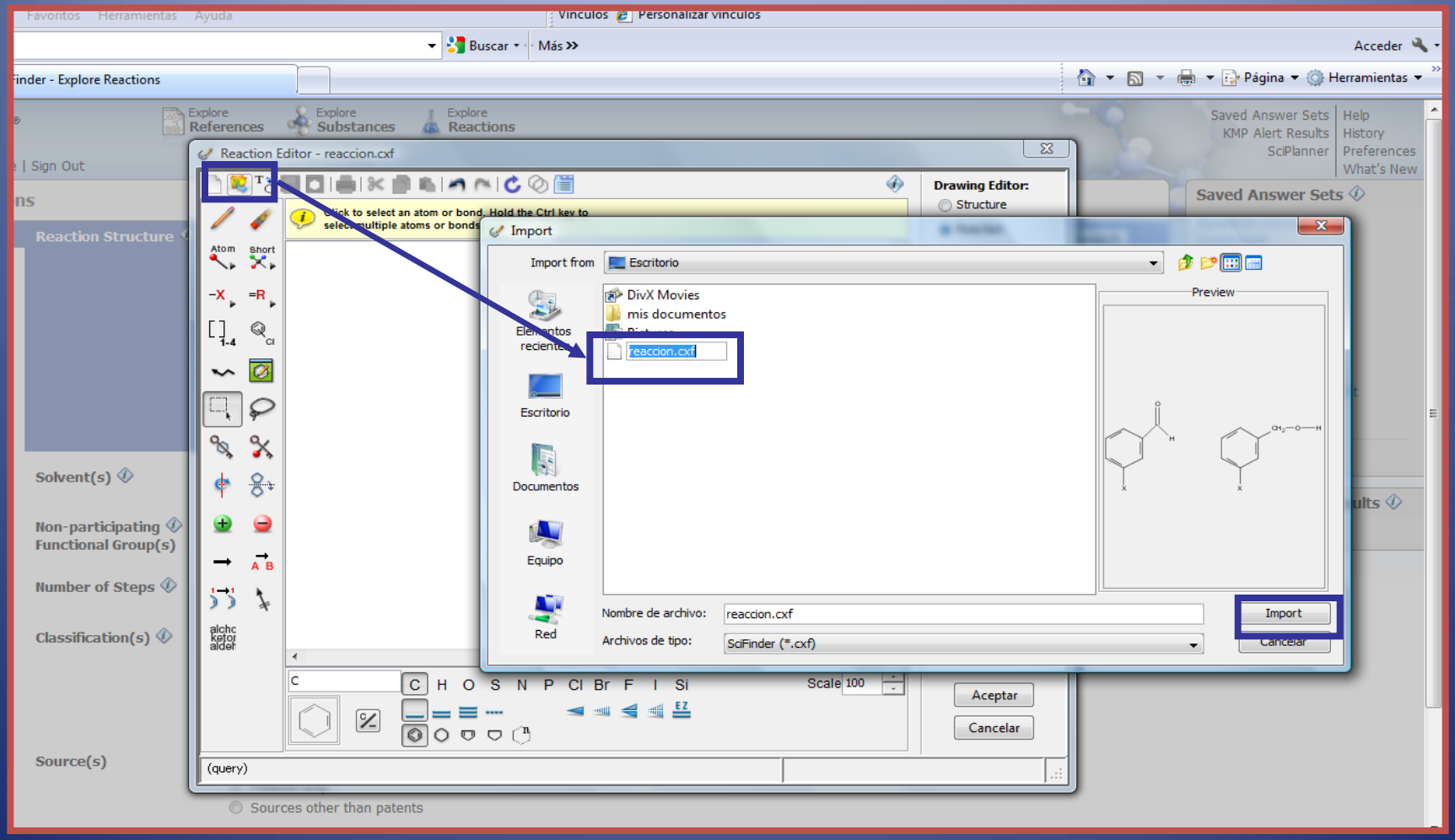

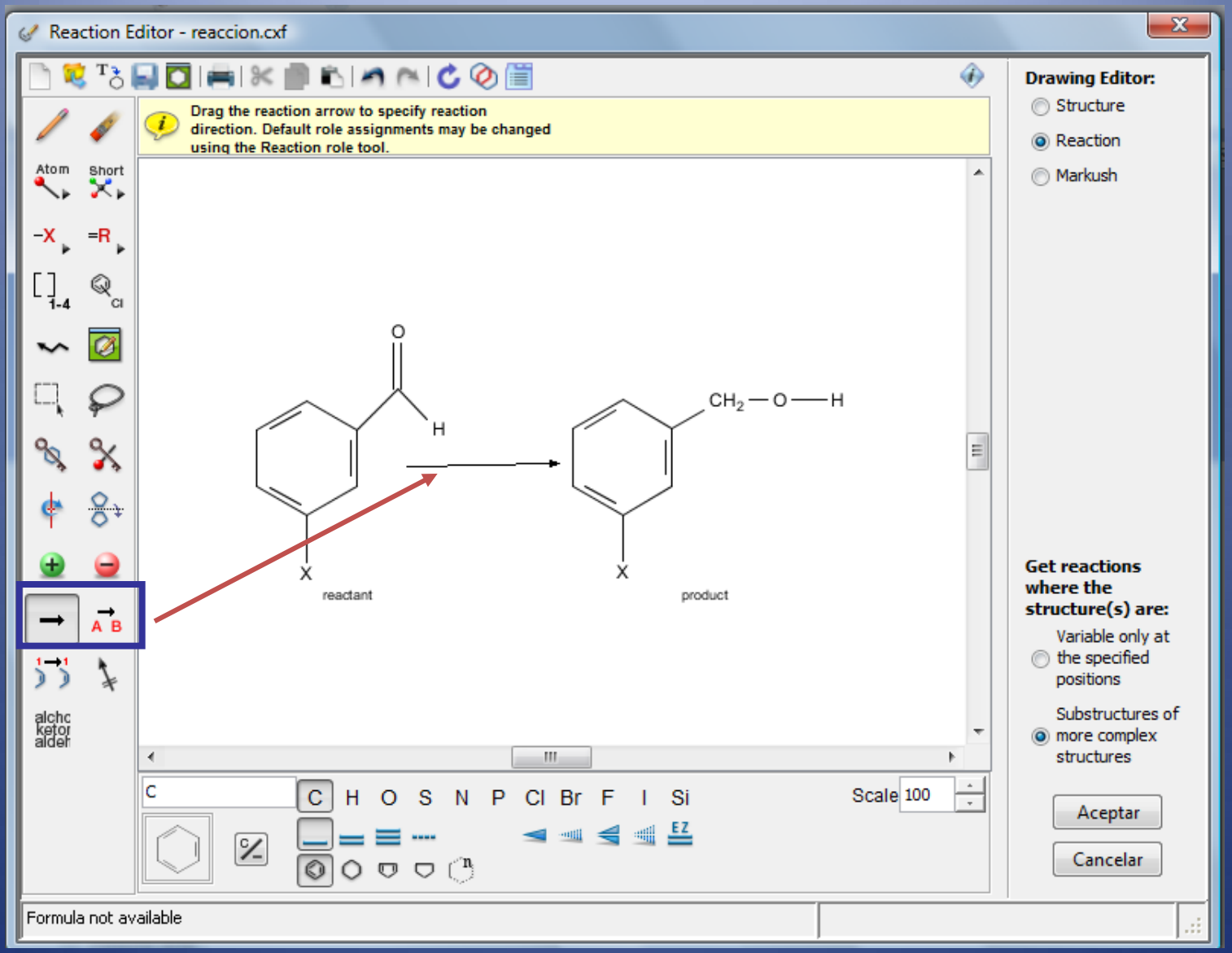
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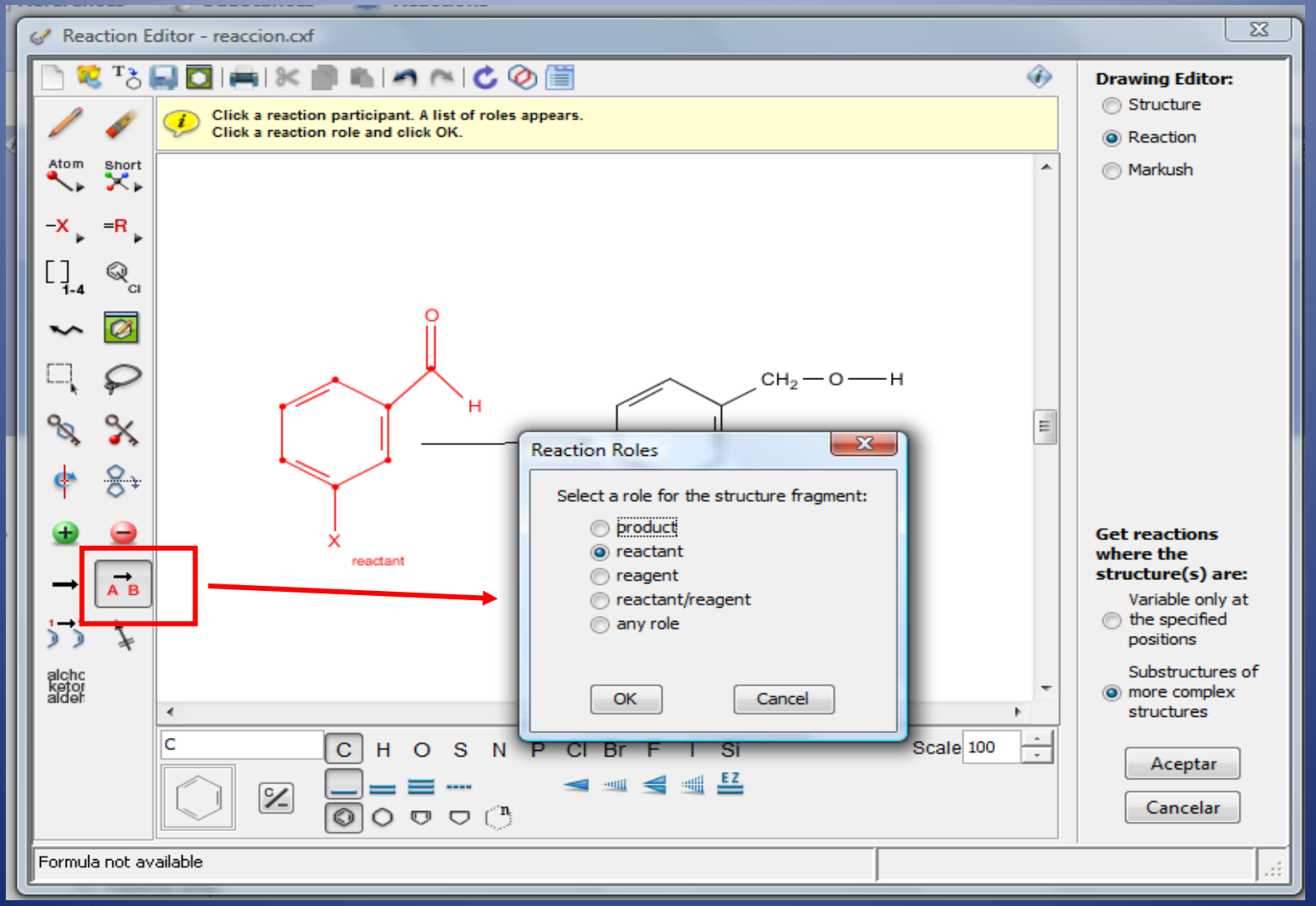

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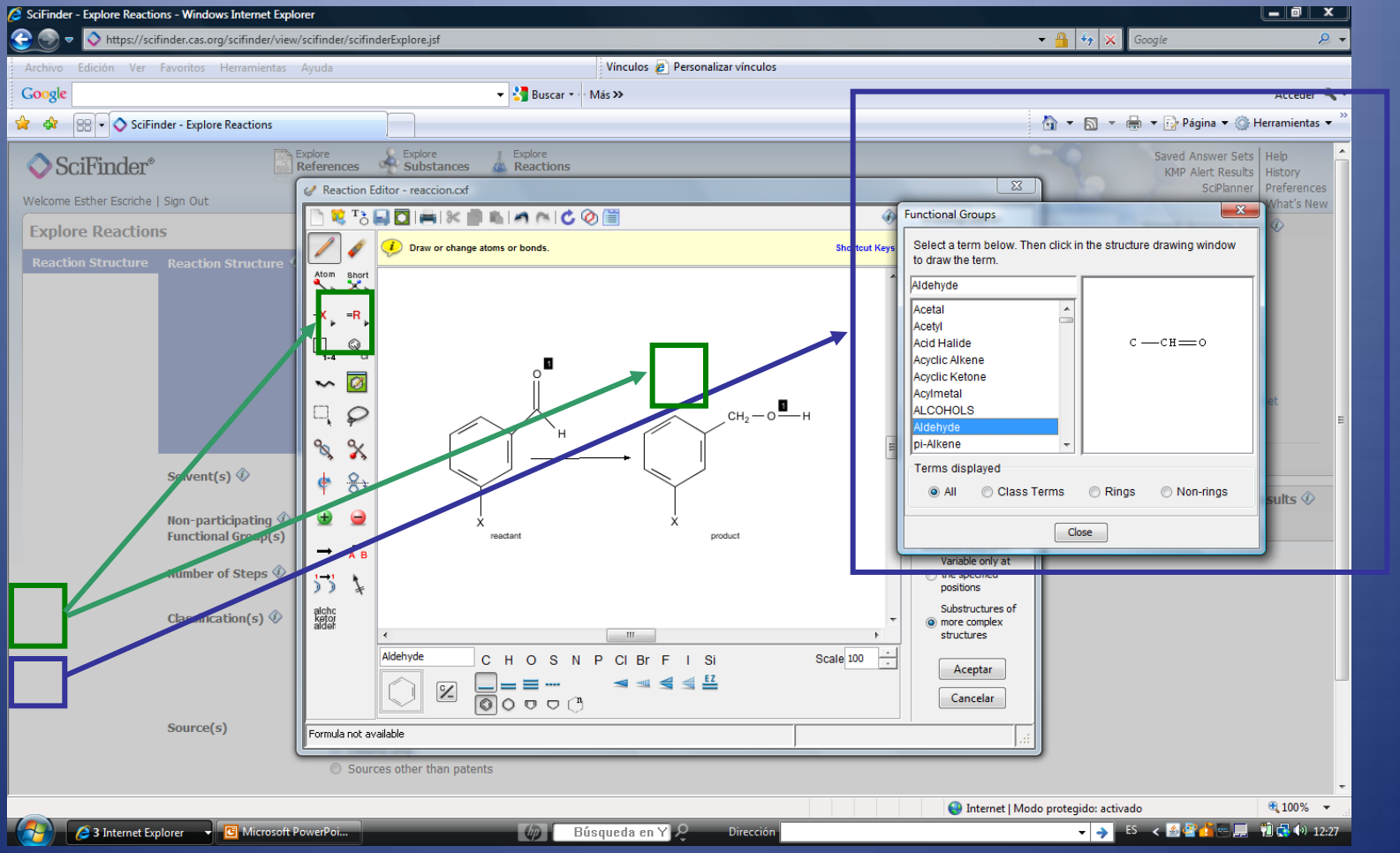

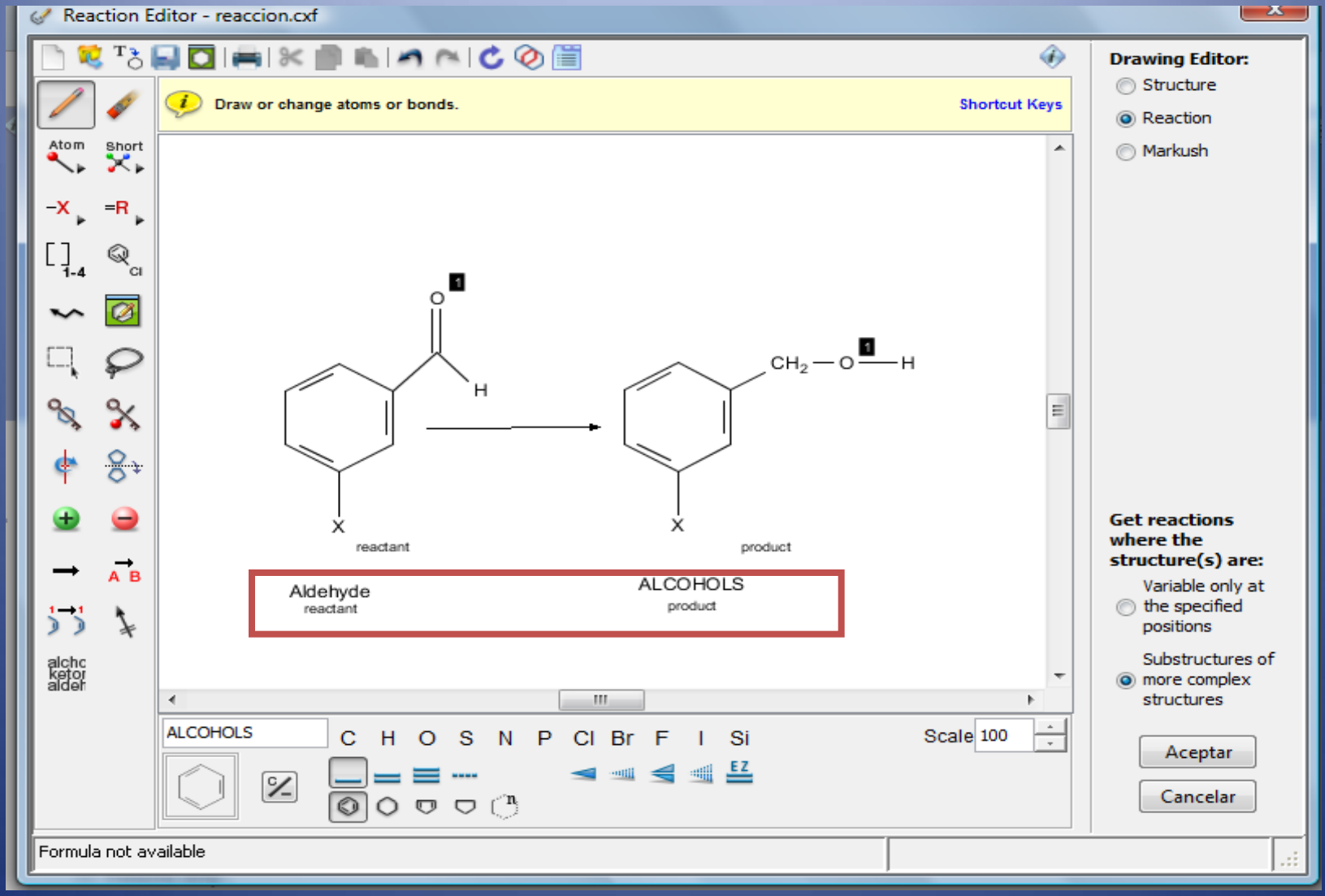
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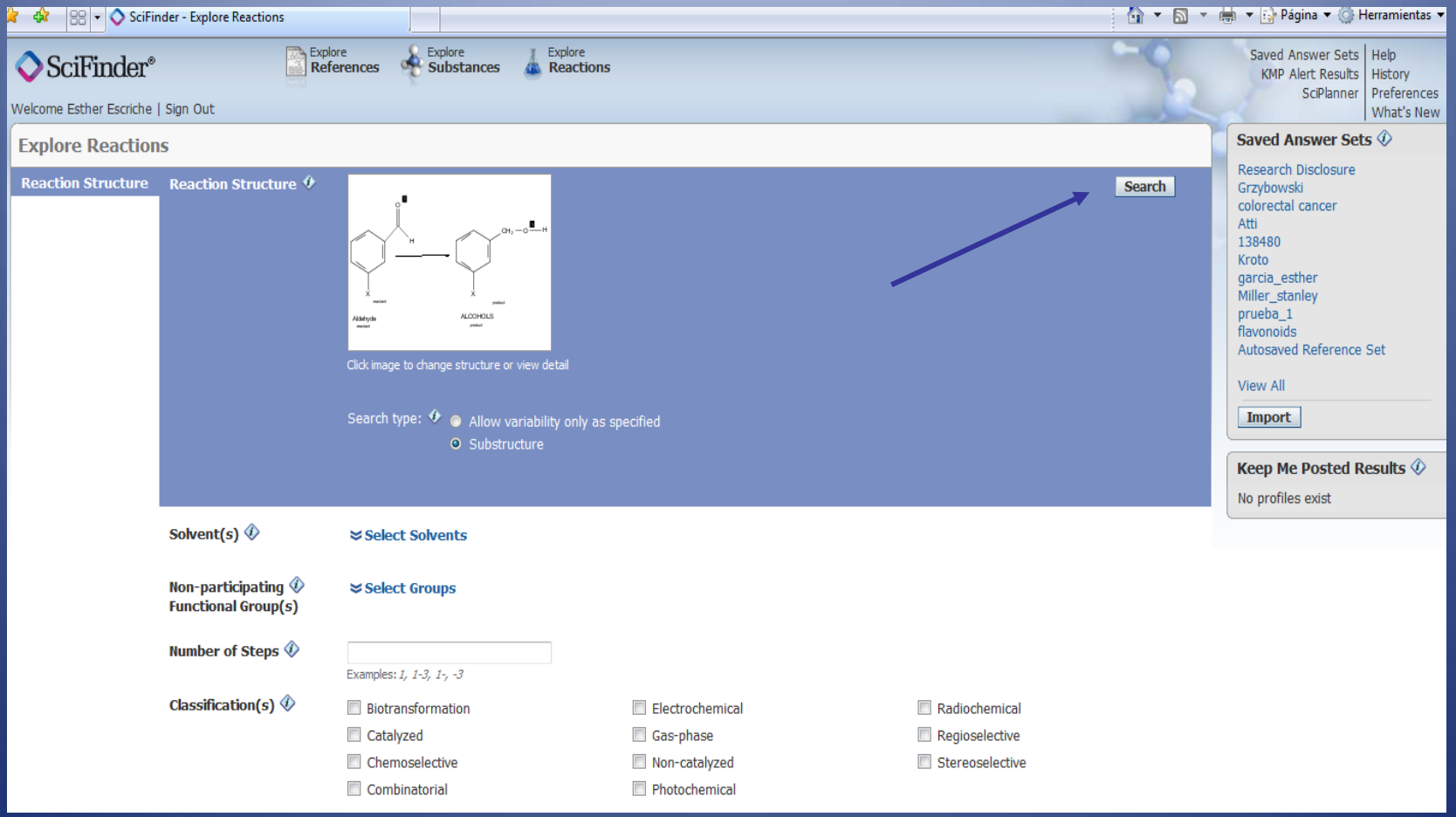
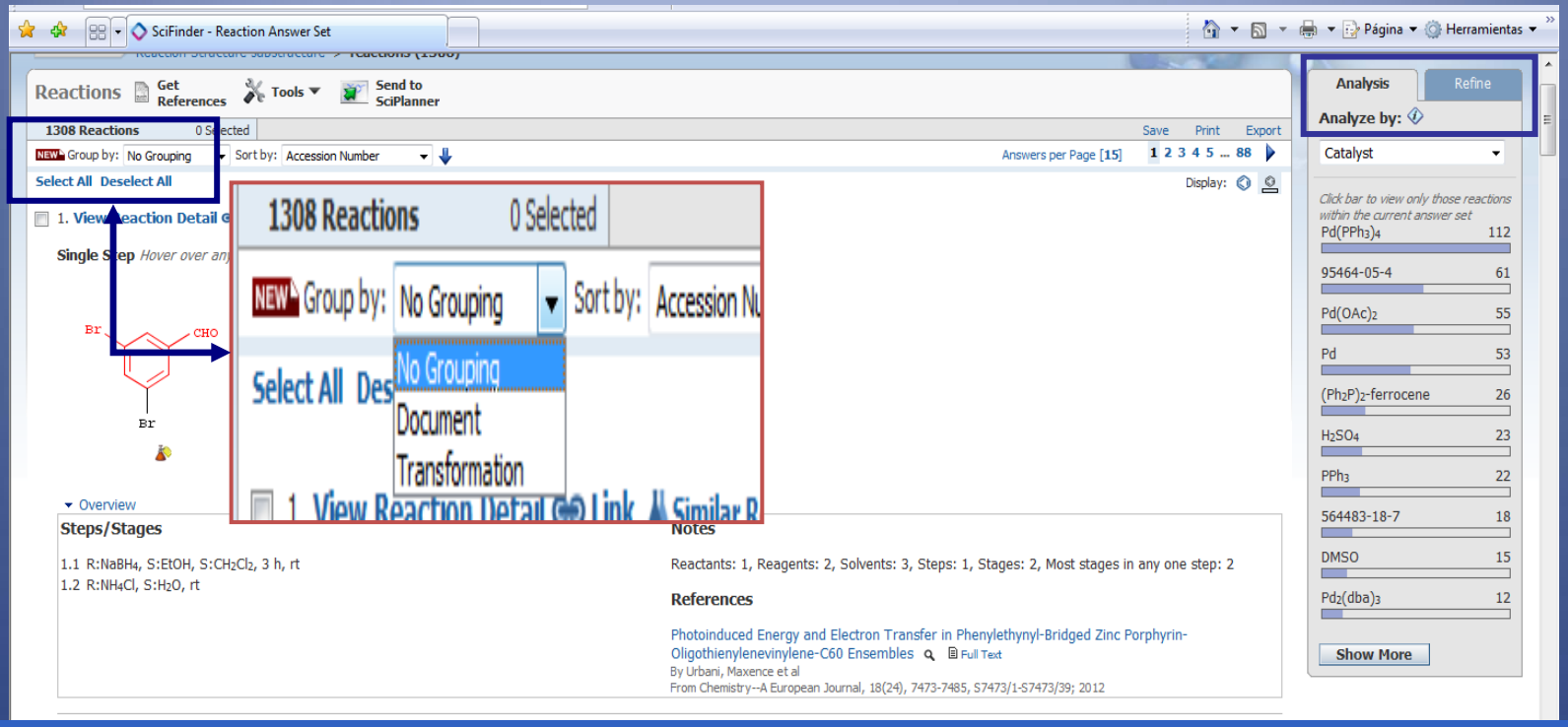


Se obtienen los resultados de búsqueda. Al igual que en la búsqueda por sustancias se puede limitar por “Analyze” o “Refine”



•Y, podemos ver las referencias asociadas a esas reacciones desde “Group by” o “Transformation” que permite:

Evaluar rápidamente las opciones de síntesis y las rutas de síntesis favoritas agrupando las reacciones de una etapa por tipo de transformación.

Utilizar esta opción permite clasificar rápidamente cientos de tipos de reacciones de transformación.

Al cambiar de opción, aparecen distintas formas de limitar