



**ATMIYA
UNIVERSITY**

**NAAC – Cycle – 1
AISHE: U-0967**

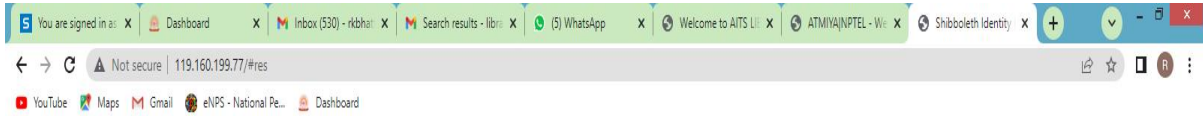
Criterion 4

I&LR

KI 4.2

M 4.2.1

INFED



[HOME](#) [E-RESOURCES](#) [FORGOT PASSWORD](#) [CONTACT](#)



WELCOME TO ATMIYA UNIVERSITY

Figure 1: online resource search home page- INFED

**Registrar
Atmiya University
Rajkot**

Atmiya University, Rajkot-Gujarat-India



 ATMIYA UNIVERSITY	NAAC – Cycle – 1	
	AISHE: U-0967	
	Criterion 4	I&LR
	KI 4.2	M 4.2.1

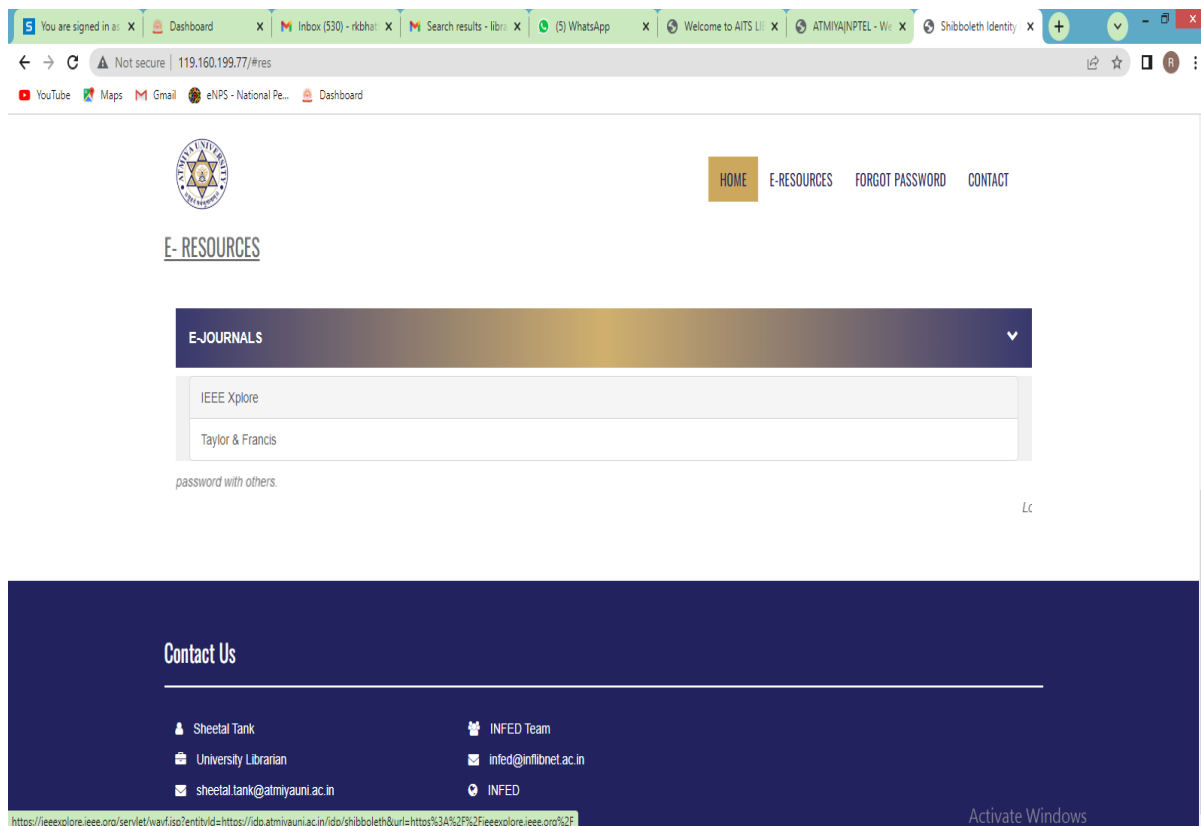


Figure 2: E- resource search page- INFED

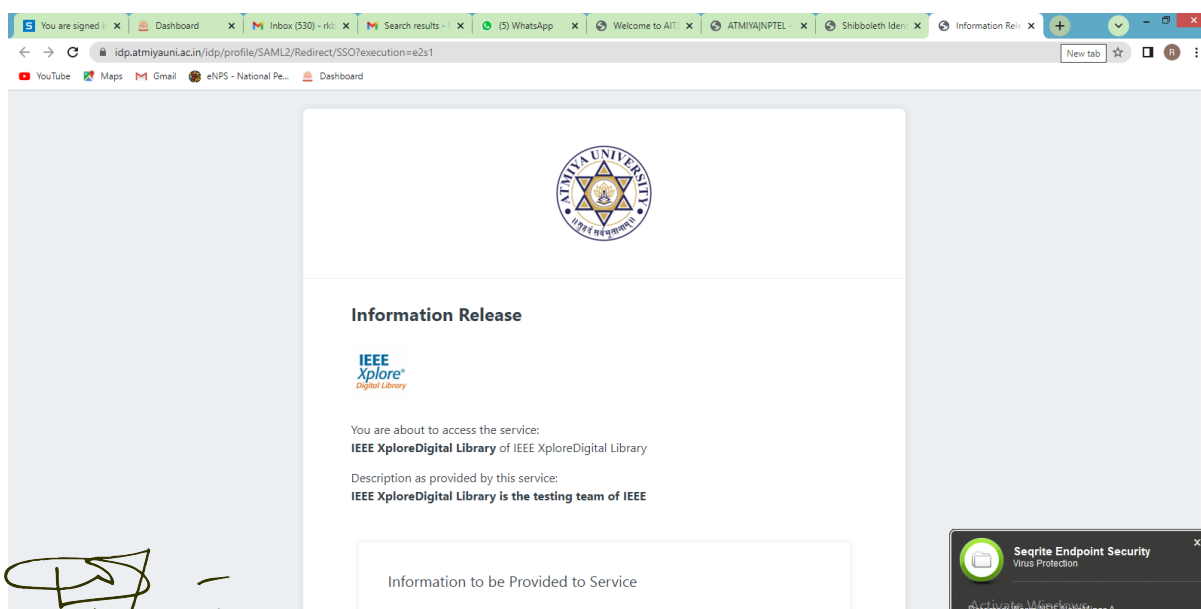


Figure 3: E- Journals IEEE search page- INFED





**ATMIYA
UNIVERSITY**

**NAAC – Cycle – 1
AISHE: U-0967**

Criterion 4

I&LR

KI 4.2

M 4.2.1

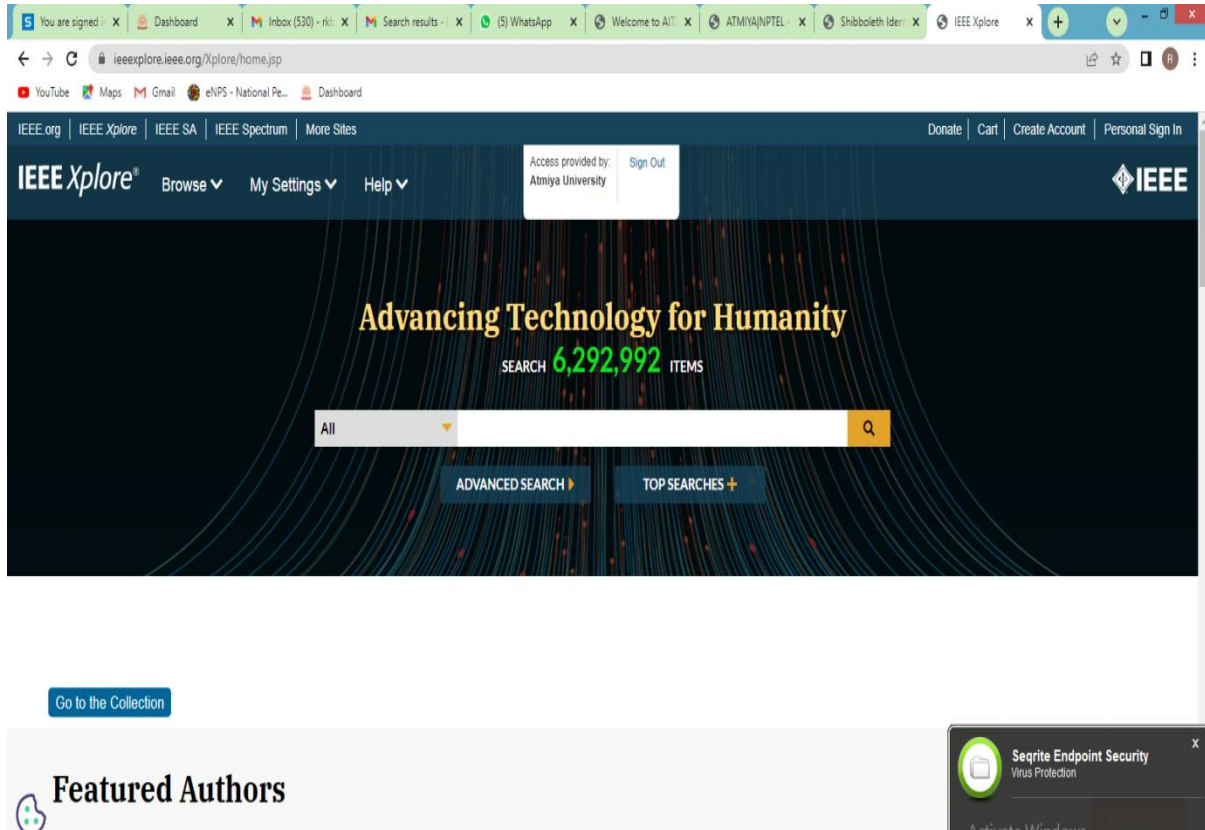


Figure 4: IEEE Home page- INFED

**Registrar
Atmiya University
Rajkot**

Atmiya University, Rajkot-Gujarat-India



 ATMIYA UNIVERSITY	NAAC – Cycle – 1	
	AISHE: U-0967	
	Criterion 4	I&LR
	KI 4.2	M 4.2.1

IEEE.org | IEEE Xplore | IEEE SA | IEEE Spectrum | More Sites

Access provided by: Atmiya University | Sign Out

IEEE Xplore® Browse ▾ My Settings ▾ Help ▾

Conferences Chemistry

Download PDFs Items Per Page ▾ Export Set Search Alerts Search History

Showing 1-25 of 3,503 results for Chemistry

Filters Applied: Conferences

Publications You May Be Interested In:

- Structural Analysis using Computational Chemistry
- Designing the Molecular World: Chemistry at the Frontier
- Quantum Chemistry and Computing for the Curious: Illustrated with Python and
- Basics of Polymer Chemistry

Sort By: Relevance

Theoretical Analysis of Free Radical Chemistry at a Plasma-Liquid Interface
 Paul Rumbach; Hernan E. Delgado; David M. Bartels; David B. Go
 2018 IEEE International Conference on Plasma Science (ICOPS)
 Year: 2018 | Conference Paper | Publisher: IEEE

FREE Virtual IEEE Authorship and Open Access Symposium for your region on 31 August!

Figure 5: Chemistry subject conferences paper search in subscribe content IEEE Xplore online resource

IEEE.org | IEEE Xplore | IEEE SA | IEEE Spectrum | More Sites

Access provided by: Atmiya University | Sign Out

IEEE Xplore® Browse ▾ My Settings ▾ Help ▾

All

Conferences > 2018 IEEE International Confe...

Theoretical Analysis of Free Radical Chemistry at a Plasma-Liquid Interface

Publisher: IEEE Cite This PDF

Paul Rumbach; Hernan E. Delgado; David M. Bartels; David B. Go All Authors

42 Full Text Views

Abstract:
 Low temperature plasma can be used to generate a variety of free radicals in an aqueous environment, and the resultant chemistry has found applications in chemical synthesis, biology, water purification, and medicine. In this work, we focus on two plasma-produced radicals: the solvated electron (e_{aq}^-) and the hydroxyl radical (OH_{aq}^{\cdot}). Both radicals have been studied for several decades using pulse radiolysis techniques, and many of their relevant parameters, such as diffusion coefficients and reaction rate constants, are well known for the liquid phase¹. Using these parameters, we analytically predict many important features of the interfacial chemistry by solving reaction-diffusion equations for the radicals in the liquid phase. For example, we derive approximate spatial profiles for the concentration of e_{aq}^- and OH_{aq}^{\cdot} in terms of various plasma parameters. Our model also sets hard limits on the radical concentration and penetration depth into the solution, and it is able to predict various experimentally observed trends, such as the dependence of H_2O_2 yield on solution pH². Overall, this work elucidates some of the dominant

IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS
 9–13 June 2024
 Denver, CO, USA
 CALL FOR PAPERS
 Submit A Paper

More Like This
 Numerical Study to Coupled Three Dimensional Reaction Diffusion System
 IEEE Access
 Published: 2019
 Activate Windows
 Go to PC settings to activate Windows.
 Practical Exponential Stability of Impulsive Stochastic Diffusion Systems With
 Feedback

Figure 6: Chemistry subject conferences paper abstract in subscribe content IEEE Xplore online resource



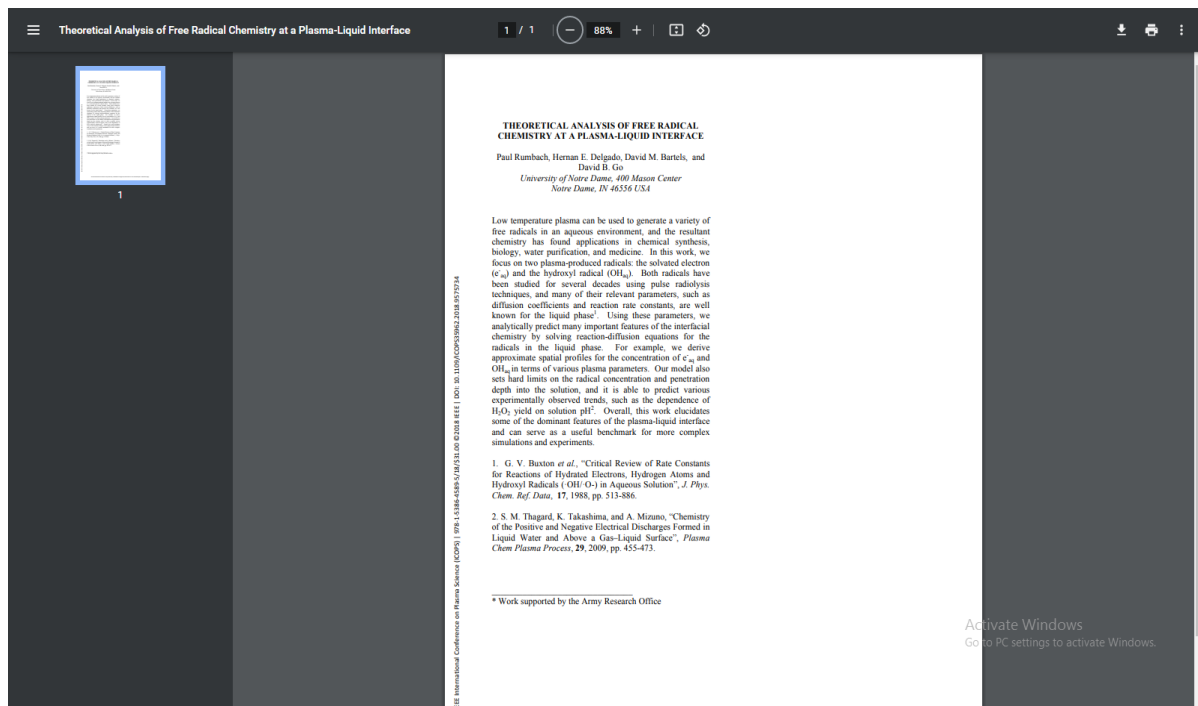


Figure 7: Chemistry subject conferences paper full text in subscribe content IEEE Xplore online resource

**Registrar
Atmiya University
Rajkot**

Atmiya University, Rajkot-Gujarat-India

