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Publications List – Haim Gizbar

Peer reviewed journals

1. Development of novel rechargeable non-aqueous magnesium batteries. D. Aurbach, L. Zhongua, A. Schechter, Y. Gofer, **H. Gizbar**, R. Turgeman, Y. Cohen, M. Moshkovich and E. Levi. ***Nature,*** *407*, 724 (**2000**).

2. Electrolyte solutions for rechargeable magnesium batteries based on organo magnesium chloro aluminate complexes. D. Aurbach, **H. Gizbar**, A. Schechter, O. Chusid, H.E. Gottlieb, Y. Gofer, and I. Goldberg, ***J. Electrochem. Soc.***, *149*, A115 (**2002**).

3. A comparison between the electrochemical behavior of reversible magnesium and lithium electrodes. D. Aurbach, Y. Gofer, A. Schechter, O. Chusid, **H. Gizbar**, Y. Cohen, M. Moshkovich, and R. Turgeman, ***J. Power Sources*** *97-98*, 269 (**2001**).

4. A short review on the comparison between Li battery systems and rechargeable Mg battery technology. D. Aurbach, L. Zhongua, a. Schechter, Y. Gofer, **H. Gizbar**, R. Turgeman, Y. Cohen, M. Moshkovich, and E. Levi, ***J. Power Sources*** *97-98*, 28 (**2001**).

5. Solid state rechargeable magnesium batteries, O. Chusid, Y. Gofer, **H. Gizbar**, Y. Vestfrid, E. Levi, and D. Aurbach, ***Advanced Materials*** *15*, 627 (**2003**).

6. Comparative kinetic and thermodynamic studies of Mg^{2+} and Li^{+} ion insertions into the Mo_6S_8 Chevrel phase as a function of solvent nature and temperature, M.D. Levi, E. Lancry, **H. Gizbar**, Z. Lu, E. Levi, Y. Gofer, and D. Aurbach, ***J. Electrochem. Soc.*** 151, A1044-A1051 (**2004**).

7. Comparative study of Mg^{2+} and Li^{+} ion insertions into the Mo_6S_8 Chevrel phase using electrochemical impedance spectroscopy, M. D. Levi, H. **Gizbar,** E. Lancry, Y. Gofer, E. Levi, and D. Aurbach, ***J. Electroanal. Chem***. *569*, 211-223 (**2004**).

8. Phase transitions and diffusion kinetics during Mg^{2+} and Li^{+} ion insertions into the Mo_6S_8 Chevrel phase compound studied by PITT, M. D. Levi, E. Lancry, H. **Gizbar**, Y. Gofer, E. Levi, and D. Aurbach, ***Electrochim. Acta***. 49, 3201-3209 (**2004**).

9. Alkyl group transmetallation reactions in electrolytic solutions studied by multinuclear NMR, **H. Gizbar**, Y. Viestfrid, O. Chusid, Y. Gofer, H. E. Gottlieb, V. Marks, and D. Aurbach, ***Organometallics*** *23*, 3826-3831 (**2004**).

10. The effect of the anionic framework of Mo_6X_8 Chevrel Phase (X=S, Se) on the thermodynamics and the kinetics of the electrochemical insertion of Mg^{+2} ions, Levi-MD, Lancri-E, Levi-E, **Gizbar-H**, Gofer-Y, Aurbach-D. *Solid State Ionics Diffusion and-Reactions, 176(19-22)*, 1695-9 June (**2005**).

11. Improved electrolyte solutions for rechargeable magnesium batteries, Gofer-Y, Chusid-O, **Gizbar-H**, Viestfrid-Y, Gottlieb-HE, Marks-V, Aurbach-D. ***Electrochemical-and-Solid-State-Letters.*** *9(5),* A257-60 (**2006**).

12. Unique Behavior Of Dimethoxyethane (DME) / $Mg(N(SO_2CF_3)_2)_2$ Solutions, M. Salama, I. Shterenberg, **H. Gizbar**, N. Eliad, M. Kosa, K. adamsky, M. Afri, L. shimon, H. Gottlib, D. Major, Y. Gofer, D. Aurbach, **J. Physical Chemistry C 120(35), 19586-19594, 2016**.

13. Offer Zeiri. Noa Fruchter, Eyal Elish, **Haim Gizbar**, Dror Shamir, Itzhak Sedgi, " Determination of uranium istopic ratio by ICP-OES using optimal sensitivity position analysis" , **Analytical Chemistry**, 93, 5123, **(2021)**.

Patents

14. High energy rechargeable electrochemical cells with nonaqueous electrolytes (rechargeable magnesium batteries). D. Aurbach, L. Zhongua, A. Schechter, Y. Gofer and **H. Gizbar**. **U.S. patent No. 6,316,141**, Nov. 2001.

15. High energy, rechargeable batteries with nonaqueous gel polymer electrolyte, an intercalation cathode and magnesium anode. **US Pat. Appl. (2001). Cont. in part of US 6316141.**