

# The top CRISMAT articles with a higher IF in 2020

Among the 112 papers published in 2020, more than 10% appeared in Journals with an Impact Factor (IF) greater than 10. Some examples :

## **With an IF= 23,3, 1 article published in Advanced Energy Materials:**

*Li<sub>2</sub>O:Li-Mn-O Disordered Rock-Salt Nanocomposites as Cathode Prelithiation Additives for High-Energy Density Li-Ion Batteries.*

By : Diaz-Lopez, M.; Chater, P. A.; Bordet, P.; Freire, M.; Jordy, C.; Lebedev, O.; Pralong, V.- *Advanced Energy Materials* 2020, 10 (7), 1902788, <https://doi.org/10.1002/aenm.201902788>.

## **With an IF=12,6 , 3 articles published in Angewandte Chemie-International Edition :**

*Synthesis of Discrete CHA Zeolite Nanocrystals without Organic Templates for Selective CO<sub>2</sub> Capture*

By: Debost, M; Klar, PB; Barrier, N; Clatworthy, EB; Grand, J; Laine, F; Brazda, P; Palatinus, L; Nesterenko, N; Boullay, P; Mintova, S – *Angewandte Chemie* 2020, 59 (52) 23491-23495, <https://doi.org/10.1002/anie.202009397>

*Exotic Compositional Ordering in Manganese-Nickel-Arsenic (Mn-Ni-As) Intermetallics*

By: Gonano, B; Fjellvag, OS; Steciuk, G; Saha, D; Pelloquin, D; Fjellvag, H - *Angewandte Chemie* 2020, 59 (50): 22382-22387, <https://doi.org/10.1002/anie.202006135>

*Clathrate XI K<sub>58</sub>Zn<sub>122</sub>Sb<sub>207</sub>: A New Branch on the Clathrate Family Tree*

By: Cox, T; Gvozdetkyi, V; Bertolami, M; Lee, S; Shipley, K; Lebedev, OI; Zaikina, JV - *Angewandte Chemie* 2020, 60 (1): 415-423

## **With an IF=10.7, 2 articles published in Journal of Chemistry A :**

*Reversible densification in nano-Li<sub>2</sub>MnO<sub>3</sub> cation disordered rock-salt Li-ion battery cathodes*

By : Diaz-Lopez, M.; Chater, P. A.; Joly, Y.; Proux, O.; Hazemann, J.L.; Bordet, P.; Pralong, V. – *Journal of Materials Chemistry A*. 2020, 8 (25), 10998-11010, <https://doi.org/10.1039/d0ta03372c>

Defect-engineered zeolite porosity and accessibility

By: Qin, ZX; Hafiz, L; Shen, YF; Van Daele, S; Boullay, P; Ruaux, V; Mintova, S; Gilson, JP; Valtchev, V - Journal of Materials Chemistry A. 2020, 8 (7), 3621-3631, <https://doi.org/10.1039/c9ta11465c>

**With an IF=10.6, 1 article published in Small:**

*Unveiling Pseudocapacitive Charge Storage Behavior in FeWO<sub>4</sub> Electrode Material by Operando X-Ray Absorption Spectroscopy*

By: Goubard-Bretesche, N; Crosnier, O; Douard, C; Iadecola, A; Retoux, R; Payen, C; Doublet, ML; Kisu, K; Iwama, E; Naoi, K; Favier, F; Brousse, T, Small 2020, 16 (33), <https://doi.org/10.1002/sml.202002855>

**With an IF= 10.1, 4 articles published in Chemistry Materials :**

*Flexible Template-Free RHO Nanosized Zeolite for Selective CO<sub>2</sub> Adsorption*

By: Grand, J; Barrier, N; Debost, M; Clatworthy, EB; Laine, F; Boullay, P; Nesterenko, N; Dath, JP; Gilson, JP; Mintova, S, Chem. Mater. 2020, 32, (14) 5985–5993, <https://doi.org/10.1021/acs.chemmater.0c01016>

*Spin-Induced Multiferroic Behavior in Centrosymmetric Mn<sub>3</sub>WO<sub>6</sub>*

By: Maignan, A; Peng, W; Komarek, AC; Kuo, CY; Chang, CF; Wang, X; Hu, ZW; Chen, CT; Tanaka, A; Tjeng, LH; Lebedev, OI; Martin, C Chem. Mater. 2020, 32 (13), 5664–5669, <https://doi.org/10.1021/acs.chemmater.0c01303>

*Thermal Stability of the Crystal Structure and Electronic Properties of the High Power Factor Thermoelectric Colusite Cu<sub>26</sub>Cr<sub>2</sub>Ge<sub>6</sub>S<sub>32</sub>*

By: Lemoine, P; Kumar, VP; Guelou, G; Nassif, V; Raveau, B; Guilmeau, E Chem. Mater. 2020, 32 (2), 830–840, <https://doi.org/10.1021/acs.chemmater.9b04378>

*Time-Resolved In Situ Neutron Diffraction Study of Cu<sub>22</sub>Fe<sub>8</sub>Ge<sub>4</sub>S<sub>32</sub> Germanite: A Guide for the Synthesis of Complex Chalcogenides*

By: Paradis-Fortin, L; Lemoine, P; Prestipino, C; Kumar, VP; Raveau, B; Nassif, V; Cordier, S; Guilmeau, E Chem. Mater. 2020, 32 (20) 8993–9000,, <https://doi.org/10.1021/acs.chemmater.0c03219>