MSDE

Molecular Systems Design & Engineering rsc.li/molecular-engineering

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EDITORIAL

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New Editor-in-Chief and Deputy Editor-in-Chief for MSDE: reflections and vision

Claire S. Adjiman* and Andrew L. Ferguson*

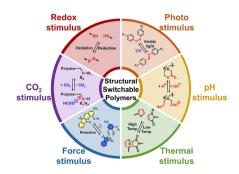


REVIEW

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Stimuli-responsive structure-property switchable polymer materials

Zhuang Mao Png, Chen-Gang Wang, Jayven Chee Chuan Yeo, Johnathan Joo Cheng Lee, Nayli Erdeanna Surat'man, Yee Lin Tan, Hongfei Liu, Pei Wang, Beng Hoon Tan, Jian Wei Xu,* Xian Jun Loh* and Qiang Zhu*



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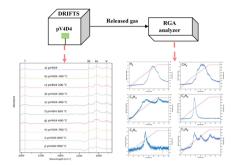


PAPERS

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Time-resolved operando analysis of the pyrolysis of a PECVD-deposited siloxane polymer using a combined DRIFTS-MS system

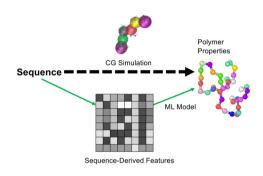
Bryan Nguyen, Farnaz Tabarkhoon, Linghao Zhao, Ankit Mishra, Malancha Gupta, Priya Vashishta and Theodore Tsotsis*



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Data-driven models for predicting intrinsically disordered protein polymer physics directly from composition or sequence

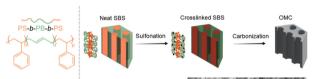
Tzu-Hsuan Chao, Shiv Rekhi, Jeetain Mittal and Daniel P. Tabor*



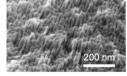
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Precursor design for efficient synthesis of largepore, sulfur-doped ordered mesoporous carbon through direct pyrolysis

Mark Robertson, Anthony Griffin, Alejandro Guillen Obando, Andrew Barbour, Ryan Davis and Zhe Qiang*

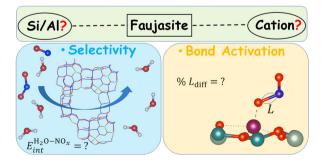


- · Rapid reaction kinetics
- · Highly ordered, large mesopores
- · Sulfur doped framework
- · Low cost and widely available precursors



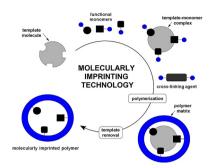
A systematic DFT screening of cationic faujasitetype zeolites for the adsorption of NO, NO₂ and H₂O

Ioannis Karamanis, Ayoub Daouli, Hubert Monnier, Marie-Antoinette Dziurla, Guillaume Maurin and Michael Badawi*



PAPERS

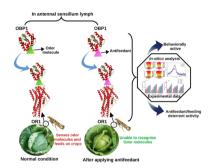
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Theoretical design of molecularly imprinted polypyrrole biosensor for the detection of renal failure biomarkers

Elham Rajaee, Mohammad Izadyar* and Mohammad Reza Housaindokht

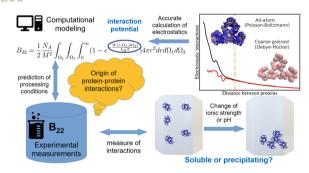
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Bioactive molecules of Triadica sebifera as ecofriendly antifeedants against Plutella xylostella: a pest management approach

Rahul Singh, Vijay Kumar Bhardwaj, Shudh Kirti Dolma, Sandeep Kumar, S. G. Eswara Reddy* and Rituraj Purohit*

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Accurate calculation of second osmotic virial coefficients of proteins using mixed Poisson-Boltzmann and extended DLVO theory

Srdjan Pusara, Wolfgang Wenzel and Mariana Kozlowska*