Ronald R Chance

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5168597/publications.pdf

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46 papers 8,328 citations

32 h-index 223800 46 g-index

47 all docs

47 docs citations

47 times ranked

6423 citing authors

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Chain-length dependence of electronic and electrochemical properties of conjugated systems: polyacetylene, polyphenylene, polythiophene, and polypyrrole. Journal of the American Chemical Society, 1983, 105, 6555-6559. | 13.7 | 1,156 |
| 2 | Highly conducting polyparaphenylene, polypyrrole, and polythiophene chains: Anab initiostudy of the geometry and electronic-structure modifications upon doping. Physical Review B, 1984, 29, 6761-6773. | 3.2 | 693 |
| 3 | Optical Nonlinearities in One-Dimensional-Conjugated Polymer Crystals. Physical Review Letters, 1976, 36, 956-959. | 7.8 | 623 |
| 4 | Comparative theoretical study of the doping of conjugated polymers: Polarons in polyacetylene and polyparaphenylene. Physical Review B, 1982, 26, 5843-5854. | 3.2 | 568 |
| 5 | Highly conducting chargeâ€transfer complexes of poly(pâ€phenylene). Journal of Chemical Physics, 1979, 71, 1506-1507. | 3.0 | 433 |
| 6 | A nonempirical effective Hamiltonian technique for polymers: Application to polyacetylene and polydiacetylene. Journal of Chemical Physics, 1981, 75, 255-267. | 3.0 | 347 |
| 7 | Structural basis for semiconducting and metallic polymer dopant systems. Chemical Reviews, 1982, 82, 209-222. | 47.7 | 332 |
| 8 | Electrical and optical properties of highly conducting charge-transfer complexes of poly(p-phenylene). Synthetic Metals, 1980, 1, 307-320. | 3.9 | 318 |
| 9 | A planar–nonplanar conformational transition in conjugated polymer solutions. Journal of Chemical Physics, 1979, 70, 4387-4392. | 3.0 | 314 |
| 10 | Alcohol and water adsorption in zeolitic imidazolate frameworks. Chemical Communications, 2013, 49, 3245. | 4.1 | 278 |
| 11 | Exploring the Framework Hydrophobicity and Flexibility of ZIF-8: From Biofuel Recovery to Hydrocarbon Separations. Journal of Physical Chemistry Letters, 2013, 4, 3618-3622. | 4.6 | 277 |
| 12 | Comments on the classical theory of energy transfer. Journal of Chemical Physics, 1975, 62, 2245-2253. | 3.0 | 238 |
| 13 | Thermochromism in a polydiacetylene crystal. Journal of Chemical Physics, 1977, 67, 3616-3618. | 3.0 | 222 |
| 14 | Ab initio effective Hamiltonian study of the electronic properties of conjugated polymers. Journal of Chemical Physics, 1982, 76, 3673-3678. | 3.0 | 207 |
| 15 | Thermal effects on the optical properties of single crystals and solutionâ€east films of urethane substituted polydiacetylenes. Journal of Chemical Physics, 1979, 71, 206-211. | 3.0 | 204 |
| 16 | Chromism in Polydiacetylene Solutions and Crystals. Macromolecules, 1980, 13, 396-398. | 4.8 | 200 |
| 17 | Highly Tunable Molecular Sieving and Adsorption Properties of Mixed-Linker Zeolitic Imidazolate Frameworks. Journal of the American Chemical Society, 2015, 137, 4191-4197. | 13.7 | 192 |
| 18 | Hollow Fiber Adsorbents for CO ₂ Removal from Flue Gas. Industrial & Engineering Chemistry Research, 2009, 48, 7314-7324. | 3.7 | 172 |

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|----|--|------|-----------|
| 19 | Adsorption of Water and Ethanol in MFI-Type Zeolites. Langmuir, 2012, 28, 8664-8673. | 3.5 | 161 |
| 20 | Investigating the Intrinsic Ethanol/Water Separation Capability of ZIF-8: An Adsorption and Diffusion Study. Journal of Physical Chemistry C, 2013, 117, 7214-7225. | 3.1 | 153 |
| 21 | Electrochemical doping of poly-(p-phenylene) with application to organic batteries. Journal of the Chemical Society Chemical Communications, 1982, , 361. | 2.0 | 115 |
| 22 | Intrinsic photoconduction in anthracene single crystals: Electric field dependence of hole and electron quantum yields. Journal of Chemical Physics, 1973, 59, 2269-2272. | 3.0 | 113 |
| 23 | Life Cycle Energy and Greenhouse Gas Emissions for an Ethanol Production Process Based on Blue-Green Algae. Environmental Science & Environmental Scie | 10.0 | 111 |
| 24 | Effect of Short Chain Branching on the Coil Dimensions of Polyolefins in Dilute Solution. Macromolecules, 2001, 34, 6812-6820. | 4.8 | 107 |
| 25 | Ethanol and water adsorption in methanol-derived ZIF-71. Chemical Communications, 2011, 47, 8667. | 4.1 | 97 |
| 26 | Enabling Low-Cost CO ₂ Capture via Heat Integration. Industrial & Engineering Chemistry Research, 2010, 49, 7550-7562. | 3.7 | 96 |
| 27 | Highly conducting charge-transfer complexes of a processible polymer: poly(p-phenylene sulphide). Journal of the Chemical Society Chemical Communications, 1980, , 348. | 2.0 | 86 |
| 28 | A Study of the Separation Principle in Size Exclusion Chromatography. Macromolecules, 2004, 37, 4304-4312. | 4.8 | 68 |
| 29 | Butane isomer transport properties of 6FDA–DAM and MFI–6FDA–DAM mixed matrix membranes. Journal of Membrane Science, 2009, 343, 157-163. | 8.2 | 59 |
| 30 | Functionalization of the Internal Surface of Pure-Silica MFI Zeolite with Aliphatic Alcohols. Journal of Physical Chemistry C, 2008, 112, 3543-3551. | 3.1 | 56 |
| 31 | Hollow fiber adsorbents for CO2 capture: Kinetic sorption performance. Chemical Engineering Journal, 2011, 171, 801-810. | 12.7 | 56 |
| 32 | CO2 sorption and desorption performance of thermally cycled hollow fiber sorbents. International Journal of Greenhouse Gas Control, 2012, 10, 285-294. | 4.6 | 47 |
| 33 | Global Warming and Carbon-Negative Technology: Prospects for a Lower-Cost Route to a Lower-Risk Atmosphere. Energy and Environment, 2009, 20, 973-984. | 4.6 | 34 |
| 34 | In situ determination of the adsorption characteristics of a zeolite membrane. Journal of Membrane Science, 2004, 230, 91-98. | 8.2 | 26 |
| 35 | Formation of Defect-Free Latex Films on Porous Fiber Supports. ACS Applied Materials & Samp; Interfaces, 2011, 3, 3568-3582. | 8.0 | 26 |
| 36 | Diffusion of water and ethanol in silicalite crystals synthesized in fluoride media. Microporous and Mesoporous Materials, 2013, 170, 259-265. | 4.4 | 24 |

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|----|--|------|----------|
| 37 | Torsion Potential in Polydiacetylene: Accurate Computations on Oligomers Extrapolated to the Polymer Limit. Journal of the American Chemical Society, 2010, 132, 13313-13319. | 13.7 | 23 |
| 38 | Fluorescence reabsorption in anthracene single crystals: Lifetime variations with emission wavelength and temperature. Chemical Physics, 1974, 4, 402-408. | 1.9 | 17 |
| 39 | Effect of Crystal Size on Framework Defects and Water Uptake in Fluoride Mediated Silicalite-1. Chemistry of Materials, 2014, 26, 4368-4376. | 6.7 | 16 |
| 40 | Anthropogenic <scp>CO₂</scp> as a feedstock for the production of algalâ€based biofuels. Biofuels, Bioproducts and Biorefining, 2015, 9, 72-81. | 3.7 | 14 |
| 41 | Membrane-Mediated Delivery of Carbon Dioxide for Consumption by Photoautotrophs: Eliminating Thermal Regeneration in Carbon Capture. Industrial & Engineering Chemistry Research, 2012, 51, 4673-4681. | 3.7 | 12 |
| 42 | Life cycle greenhouse gas emissions of different CO2 supply options for an algal biorefinery. Journal of CO2 Utilization, 2020, 40, 101213. | 6.8 | 11 |
| 43 | Biomass and pigment production for <i>Arthrospira platensis</i> via semiâ€continuous cultivation in photobioreactors: Temperature effects. Biotechnology and Bioengineering, 2020, 117, 3081-3093. | 3.3 | 10 |
| 44 | Flow induced birefringence of conjugated polymer solutions. Synthetic Metals, 1989, 28, D689-D697. | 3.9 | 6 |
| 45 | Global evaluation of economics of microalgae-based biofuel supply chain using GIS-based framework. Korean Journal of Chemical Engineering, 2022, 39, 1524-1541. | 2.7 | 6 |
| 46 | Lifecycle greenhouse gas emissions for an ethanol production process based on genetically modified cyanobacteria: CO 2 sourcing options. Biofuels, Bioproducts and Biorefining, 2020, 14, 1324-1334. | 3.7 | 3 |