

# Narayana Aluru

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

277  
papers

13,307  
citations

60  
h-index

108  
g-index

298  
ext. papers

15,217  
ext. citations

5.9  
avg, IF

7.03  
L-index

#	Paper	IF	Citations
277	Nonlinear electrohydrodynamic ion transport in graphene nanopores.. <i>Science Advances</i> , <b>2022</b> , 8, eabj2514	10.3	3
276	Interstitial proton transport through defective MXenes. <i>Applied Physics Letters</i> , <b>2022</b> , 120, 211601	3.4	1
275	Toward Durable Protonic Ceramic Cells: Hydration-Induced Chemical Expansion Correlates with Symmetry in the Y-Doped BaZrO <sub>3</sub> BaCeO <sub>3</sub> Solid Solution. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 26216-26228	3.8	1
274	Pore-Scale Modeling of Electrokinetics in Geomaterials. <i>Transport in Porous Media</i> , <b>2021</b> , 137, 651-666	3.1	0
273	Dynamic and weak electric double layers in ultrathin nanopores. <i>Journal of Chemical Physics</i> , <b>2021</b> , 154, 134703	3.9	3
272	Highly Strain-Tunable Interlayer Excitons in MoS/WSe Heterobilayers. <i>Nano Letters</i> , <b>2021</b> , 21, 3956-3964	11.5	16
271	Super-resolved Optical Mapping of Reactive Sulfur-Vacancies in Two-Dimensional Transition Metal Dichalcogenides. <i>ACS Nano</i> , <b>2021</b> , 15, 7168-7178	16.7	2
270	Understanding simple liquids through statistical and deep learning approaches. <i>Journal of Chemical Physics</i> , <b>2021</b> , 154, 204503	3.9	1
269	Electronic Structure and Transport in Graphene Nanoribbon Heterojunctions under Uniaxial Strain: Implications for Flexible Electronics. <i>ACS Applied Nano Materials</i> , <b>2021</b> , 4, 5816-5824	5.6	2
268	Accelerated design and discovery of perovskites with high conductivity for energy applications through machine learning. <i>Npj Computational Materials</i> , <b>2021</b> , 7,	10.9	9
267	A multiscale framework to predict electrochemical characteristics of yttrium doped Barium Zirconate based solid oxide cells. <i>Journal of Power Sources</i> , <b>2021</b> , 481, 228969	8.9	5
266	Selective filling of n-hexane in a tight nanopore. <i>Nature Communications</i> , <b>2021</b> , 12, 310	17.4	10
265	Diameter Dependence of Water Filling in Lithographically Segmented Isolated Carbon Nanotubes. <i>ACS Nano</i> , <b>2021</b> , 15, 2778-2790	16.7	4
264	Strain-resilient electrical functionality in thin-film metal electrodes using two-dimensional interlayers.. <i>Nature Electronics</i> , <b>2021</b> , 4, 126-133	28.4	20
263	Ion Solvation and Transport in Narrow Carbon Nanotubes: Effects of Polarizability, Cation- $\pi$ Interaction, and Confinement. <i>Journal of Chemical Theory and Computation</i> , <b>2021</b> , 17, 1596-1605	6.4	9
262	Culture-free biphasic approach for sensitive detection of Escherichia coli O157:H7 from beef samples. <i>Biotechnology and Bioengineering</i> , <b>2021</b> , 118, 4516-4529	4.9	1
261	Ultrasensitive Detection of Dopamine, IL-6 and SARS-CoV-2 Proteins on Crumpled Graphene FET Biosensor.. <i>Advanced Materials Technologies</i> , <b>2021</b> , 6, 2100712	6.8	11

260	Anomalous interfacial dynamics of single proton charges in binary aqueous solutions. <i>Science Advances</i> , <b>2021</b> , 7, eabg8568	14.3	2
259	Prospects for sub-nanometer scale imaging of optical phenomena using electron microscopy. <i>Applied Physics Letters</i> , <b>2021</b> , 118, 033104	3.4	2
258	Confinement-Induced Enhancement of Parallel Dielectric Permittivity: Super Permittivity Under Extreme Confinement. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 10532-10537	6.4	6
257	Intrinsic Dissipation Due to Mode Coupling in Two-Dimensional-Material Resonators Revealed Through a Multiscale Approach. <i>Physical Review Applied</i> , <b>2020</b> , 14,	4.3	2
256	Chevron-type graphene nanoribbons with a reduced energy band gap: Solution synthesis, scanning tunneling microscopy and electrical characterization. <i>Nano Research</i> , <b>2020</b> , 13, 1713-1722	10	3
255	Ultrasensitive detection of nucleic acids using deformed graphene channel field effect biosensors. <i>Nature Communications</i> , <b>2020</b> , 11, 1543	17.4	123
254	Current understanding and emerging applications of 3D crumpling mediated 2D material-liquid interactions. <i>Current Opinion in Solid State and Materials Science</i> , <b>2020</b> , 24, 100836	12	5
253	Optimization of solidification in die casting using numerical simulations and machine learning. <i>Journal of Manufacturing Processes</i> , <b>2020</b> , 51, 130-141	5	8
252	Revisiting Sampson's theory for hydrodynamic transport in ultrathin nanopores. <i>Physical Review Research</i> , <b>2020</b> , 2,	3.9	7
251	Kirigami-inspired strain-insensitive sensors based on atomically-thin materials. <i>Materials Today</i> , <b>2020</b> , 34, 58-65	21.8	33
250	The role of A-site ion on proton diffusion in perovskite oxides (ABO <sub>3</sub> ). <i>Journal of Power Sources</i> , <b>2020</b> , 445, 227327	8.9	16
249	Nanofluidic Transport Theory with Enhancement Factors Approaching One. <i>ACS Nano</i> , <b>2020</b> , 14, 272-281	16.7	19
248	Three-Dimensional Molecular Mapping of Ionic Liquids at Electrified Interfaces. <i>ACS Nano</i> , <b>2020</b> ,	16.7	20
247	Curved neuromorphic image sensor array using a MoS <sub>2</sub> -organic heterostructure inspired by the human visual recognition system. <i>Nature Communications</i> , <b>2020</b> , 11, 5934	17.4	60
246	Ion Transport in Electrically Imperfect Nanopores. <i>ACS Nano</i> , <b>2020</b> , 14, 10518-10526	16.7	16
245	Water-Assisted Increase of Ionic Conductivity of Lithium Poly(acrylic acid)-Based Aqueous Polymer Electrolyte. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 10119-10130	6.1	9
244	Universal Reduction in Dielectric Response of Confined Fluids. <i>ACS Nano</i> , <b>2020</b> , 14, 12761-12770	16.7	20
243	Interfacial Properties of Water on Hydrogenated and Fluorinated Graphene Surfaces: Parametrization of Nonbonded Interactions. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 21467-21475	3.8	8

242	Highly Efficient Solar-Driven Carbon Dioxide Reduction on Molybdenum Disulfide Catalyst Using Choline Chloride-Based Electrolyte. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1803536	21.8	26
241	Understanding the effect of Ce and Zr on chemical expansion in yttrium doped strontium cerate and zirconate by high temperature X-ray analysis and density functional theory. <i>Solid State Ionics</i> , <b>2019</b> , 333, 1-8	3.3	6
240	Electrical Double Layer of Supported Atomically Thin Materials. <i>Nano Letters</i> , <b>2019</b> , 19, 4588-4593	11.5	15
239	Uncertainty quantification in three dimensional natural convection using polynomial chaos expansion and deep neural networks. <i>International Journal of Heat and Mass Transfer</i> , <b>2019</b> , 139, 613-634	4.9	3
238	Measurements of the size and correlations between ions using an electrolytic point contact. <i>Nature Communications</i> , <b>2019</b> , 10, 2382	17.4	25
237	Anomalous scaling of flexural phonon damping in nanoresonators with confined fluid. <i>Microsystems and Nanoengineering</i> , <b>2019</b> , 5, 2	7.7	5
236	Critical Knowledge Gaps in Mass Transport through Single-Digit Nanopores: A Review and Perspective. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 21309-21326	3.8	121
235	Finite volume simulation framework for die casting with uncertainty quantification. <i>Applied Mathematical Modelling</i> , <b>2019</b> , 74, 132-150	4.5	3
234	Spatial Uncertainty Modeling for Surface Roughness of Additively Manufactured Microstructures via Image Segmentation. <i>Applied Sciences (Switzerland)</i> , <b>2019</b> , 9, 1093	2.6	3
233	Transfer-Learning-Based Coarse-Graining Method for Simple Fluids: Toward Deep Inverse Liquid-State Theory. <i>Journal of Physical Chemistry Letters</i> , <b>2019</b> , 10, 1242-1250	6.4	19
232	Cluster Expansion Framework for the Sr(Ti <sub>1-x</sub> Fex)O <sub>3-x/2</sub> (0 Chemistry of Materials, <b>2019</b> , 31, 3144-3153	9.6	3
231	Simulations of Die Casting With Uncertainty Quantification. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , <b>2019</b> , 141,	3.3	3
230	Strong Electroosmotic Coupling Dominates Ion Conductance of 1.5 nm Diameter Carbon Nanotube Porins. <i>ACS Nano</i> , <b>2019</b> , 13, 12851-12859	16.7	25
229	Molecular Dynamics Properties without the Full Trajectory: A Denoising Autoencoder Network for Properties of Simple Liquids. <i>Journal of Physical Chemistry Letters</i> , <b>2019</b> , 10, 7568-7576	6.4	9
228	Strain Modulation of Graphene by Nanoscale Substrate Curvatures: A Molecular View. <i>Nano Letters</i> , <b>2018</b> , 18, 2098-2104	11.5	42
227	Energy Dissipation in Fluid Coupled Nanoresonators: The Effect of Phonon-Fluid Coupling. <i>ACS Nano</i> , <b>2018</b> , 12, 368-377	16.7	13
226	Ab initio based interionic potential for silver iodide. <i>Solid State Ionics</i> , <b>2018</b> , 325, 102-111	3.3	3
225	A multiscale model for charge inversion in electric double layers. <i>Journal of Chemical Physics</i> , <b>2018</b> , 148, 214102	3.9	10

224	Mechanistic Insights into Hydration of Solid Oxides. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 138-144	9.6	18
223	A Multiscale Model for Electrochemical Reactions in LSCF Based Solid Oxide Cells. <i>Journal of the Electrochemical Society</i> , <b>2018</b> , 165, F1232-F1241	3.9	10
222	Extended coarse-grained dipole model for polar liquids: Application to bulk and confined water. <i>Physical Review E</i> , <b>2018</b> , 98,	2.4	10
221	Asymmetric-Fluidic-Reservoirs Induced High Rectification Nanofluidic Diode. <i>Scientific Reports</i> , <b>2018</b> , 8, 13941	4.9	16
220	Identification of amino acids with sensitive nanoporous MoS <sub>2</sub> : towards machine learning-based prediction. <i>Npj 2D Materials and Applications</i> , <b>2018</b> , 2,	8.8	29
219	Coarse-Grained Force Field for Imidazolium-Based Ionic Liquids. <i>Journal of Chemical Theory and Computation</i> , <b>2018</b> , 14, 3252-3261	6.4	23
218	Integral equation theory based direct and accelerated systematic coarse-graining approaches. <i>Journal of Chemical Physics</i> , <b>2018</b> , 148, 214105	3.9	9
217	Langevin-Poisson-EQT: A dipolar solvent based quasi-continuum approach for electric double layers. <i>Journal of Chemical Physics</i> , <b>2017</b> , 146, 044108	3.9	12
216	Nonlinear intrinsic dissipation in single layer MoS <sub>2</sub> resonators. <i>RSC Advances</i> , <b>2017</b> , 7, 6403-6410	3.7	9
215	Multiscale modeling of electroosmotic flow: Effects of discrete ion, enhanced viscosity, and surface friction. <i>Journal of Chemical Physics</i> , <b>2017</b> , 146, 184106	3.9	20
214	Size effect on brittle and ductile fracture of two-dimensional interlinked carbon nanotube network. <i>Physica B: Condensed Matter</i> , <b>2017</b> , 520, 82-88	2.8	4
213	An EQT-based cDFT approach for thermodynamic properties of confined fluid mixtures. <i>Journal of Chemical Physics</i> , <b>2017</b> , 146, 154102	3.9	7
212	Antibody Subclass Detection Using Graphene Nanopores. <i>Journal of Physical Chemistry Letters</i> , <b>2017</b> , 8, 1670-1676	6.4	22
211	DNA Origami-Graphene Hybrid Nanopore for DNA Detection. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 92-100	9.5	67
210	Solution-Synthesized Chevron Graphene Nanoribbons Exfoliated onto H:Si(100). <i>Nano Letters</i> , <b>2017</b> , 17, 170-178	11.5	42
209	Quantitative Chemical Imaging of Nonplanar Microfluidics. <i>Analytical Chemistry</i> , <b>2017</b> , 89, 1716-1723	7.8	9
208	1/f pink chaos in nanopores. <i>RSC Advances</i> , <b>2017</b> , 7, 46092-46100	3.7	2
207	Laterally extended atomically precise graphene nanoribbons with improved electrical conductivity for efficient gas sensing. <i>Nature Communications</i> , <b>2017</b> , 8, 820	17.4	79

206	Molybdenum disulfide and water interaction parameters. <i>Journal of Chemical Physics</i> , <b>2017</b> , 147, 1047063.9	3.9	16
205	Modeling Water Flow Through Carbon Nanotube Membranes with Entrance/Exit Effects. <i>Nanoscale and Microscale Thermophysical Engineering</i> , <b>2017</b> , 21, 247-262	3.7	45
204	Dissolution of Monocrystalline Silicon Nanomembranes and Their Use as Encapsulation Layers and Electrical Interfaces in Water-Soluble Electronics. <i>ACS Nano</i> , <b>2017</b> , 11, 12562-12572	16.7	61
203	A multiscale transport model for non-classical nanochannel electroosmosis. <i>Journal of Chemical Physics</i> , <b>2017</b> , 147, 214105	3.9	5
202	Anomalous characteristics of pore formation in Graphene induced by Si-nanoparticle bombardment. <i>MRS Communications</i> , <b>2017</b> , 7, 840-847	2.7	1
201	Avalanche effects near nanojunctions. <i>Physical Review E</i> , <b>2016</b> , 94, 012402	2.4	3
200	Single-layer MoS <sub>2</sub> nanopores as nanopower generators. <i>Nature</i> , <b>2016</b> , 536, 197-200	50.4	560
199	Ultrathin, transferred layers of thermally grown silicon dioxide as biofluid barriers for biointegrated flexible electronic systems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 11682-11687	11.5	133
198	Characterizing phonon dynamics using stochastic sampling. <i>Journal of Applied Physics</i> , <b>2016</b> , 119, 115101.5	2.5	6
197	Mixed role of surface on intrinsic losses in silicon nanostructures. <i>Journal of Applied Physics</i> , <b>2016</b> , 119, 114304	2.5	6
196	Doping-Induced Tunable Wettability and Adhesion of Graphene. <i>Nano Letters</i> , <b>2016</b> , 16, 4708-12	11.5	97
195	Nano-electro-mechanical pump: Giant pumping of water in carbon nanotubes. <i>Scientific Reports</i> , <b>2016</b> , 6, 26211	4.9	9
194	Analysis of the Effect of Spatial Uncertainties on the Dynamic Behavior of Electrostatic Microactuators. <i>Communications in Computational Physics</i> , <b>2016</b> , 20, 279-300	2.4	
193	A multiscale transport model for Lennard-Jones binary mixtures based on interfacial friction. <i>Journal of Chemical Physics</i> , <b>2016</b> , 145, 074115	3.9	4
192	Hexagonal boron nitride and water interaction parameters. <i>Journal of Chemical Physics</i> , <b>2016</b> , 144, 164118.9	3.9	65
191	Memory effects in nanoparticle dynamics and transport. <i>Journal of Chemical Physics</i> , <b>2016</b> , 145, 134108	3.9	7
190	Existence of Multiple Phases of Water at Nanotube Interfaces. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 23763-23771	3.8	41
189	The interaction between hexagonal boron nitride and water from first principles. <i>Journal of Chemical Physics</i> , <b>2015</b> , 142, 234702	3.9	23

188	Controlling the ionic current rectification factor of a nanofluidic/microfluidic interface with symmetric nanocapillary interconnects. <i>Analytical Chemistry</i> , <b>2015</b> , 87, 3598-605	7.8	14
187	Water desalination with a single-layer MoS2 nanopore. <i>Nature Communications</i> , <b>2015</b> , 6, 8616	17.4	435
186	An EQT-cDFT approach to determine thermodynamic properties of confined fluids. <i>Journal of Chemical Physics</i> , <b>2015</b> , 142, 244116	3.9	11
185	Capacitive Sensing of Intercalated H2O Molecules Using Graphene. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 25804-12	9.5	26
184	Mechanically modulated electronic properties of water-filled fullerenes. <i>MRS Communications</i> , <b>2015</b> , 5, 305-310	2.7	6
183	Silicon Nanomembranes: Mechanisms for Hydrolysis of Silicon Nanomembranes as Used in Bioresorbable Electronics (Adv. Mater. 11/2015). <i>Advanced Materials</i> , <b>2015</b> , 27, 1856-1856	24	2
182	Interfacial friction based quasi-continuum hydrodynamical model for nanofluidic transport of water. <i>Journal of Chemical Physics</i> , <b>2015</b> , 143, 174702	3.9	18
181	Multiscale modeling of droplet interface bilayer membrane networks. <i>Biomicrofluidics</i> , <b>2015</b> , 9, 064101	3.2	11
180	An EQT-based cDFT approach for a confined Lennard-Jones fluid mixture. <i>Journal of Chemical Physics</i> , <b>2015</b> , 143, 124106	3.9	7
179	Data-driven stochastic models for spatial uncertainties in micromechanical systems. <i>Journal of Micromechanics and Microengineering</i> , <b>2015</b> , 25, 115009	2	1
178	A NONSTATIONARY COVARIANCE FUNCTION MODEL FOR SPATIAL UNCERTAINTIES IN ELECTROSTATICALLY ACTUATED MICROSYSTEMS <b>2015</b> , 5, 99-121		4
177	Adsorption Kinetics Dictate Monolayer Self-Assembly for Both Lipid-In and Lipid-Out Approaches to Droplet Interface Bilayer Formation. <i>Langmuir</i> , <b>2015</b> , 31, 12883-93	4	48
176	Electromechanical Signatures for DNA Sequencing through a Mechanosensitive Nanopore. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 650-7	6.4	17
175	Mechanisms for hydrolysis of silicon nanomembranes as used in bioresorbable electronics. <i>Advanced Materials</i> , <b>2015</b> , 27, 1857-64	24	77
174	Relative Entropy and Optimization-Driven Coarse-Graining Methods in VOTCA. <i>PLoS ONE</i> , <b>2015</b> , 10, e0131754	3.1754	48
173	Thermal noise in confined fluids. <i>Journal of Chemical Physics</i> , <b>2014</b> , 141, 174707	3.9	6
172	Effect of intermolecular force on the static/dynamic behaviour of M/NEM devices. <i>Nanotechnology</i> , <b>2014</b> , 25, 485204	3.4	3
171	DNA base detection using a single-layer MoS2. <i>ACS Nano</i> , <b>2014</b> , 8, 7914-22	16.7	251

170	Ion transport in sub-5-nm graphene nanopores. <i>Journal of Chemical Physics</i> , <b>2014</b> , 140, 084707	3.9	75
169	Intrinsic dissipation in a nano-mechanical resonator. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 094304	2.5	10
168	Spectroscopic investigation of the wettability of multilayer graphene using highly ordered pyrolytic graphite as a model material. <i>Langmuir</i> , <b>2014</b> , 30, 12827-36	4	73
167	Crosslinking PMMA: Molecular dynamics investigation of the shear response. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2014</b> , 52, 444-449	2.6	25
166	Thermodynamic insight into spontaneous hydration and rapid water permeation in aquaporins. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 083702	3.4	19
165	Scanning tunneling spectroscopy and density functional calculation of silicon dangling bonds on the Si(100)-2 $\times$ 1:H surface. <i>Surface Science</i> , <b>2013</b> , 609, 147-151	1.8	17
164	Mechanical properties of a silicon nanofilm covered with defective graphene. <i>Surface Science</i> , <b>2013</b> , 611, 80-85	1.8	9
163	Improved statistical models for limited datasets in uncertainty quantification using stochastic collocation. <i>Journal of Computational Physics</i> , <b>2013</b> , 255, 521-539	4.1	3
162	Intrinsic loss due to unstable modes in graphene. <i>Nanotechnology</i> , <b>2013</b> , 24, 275701	3.4	4
161	Rotational motion of a single water molecule in a buckyball. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 17993-8000	3.6	49
160	Water-solubility-driven separation of gases using graphene membrane. <i>Journal of Membrane Science</i> , <b>2013</b> , 428, 546-553	9.6	44
159	Characterization of electrochemical properties of a micro/nanochannel integrated system using computational impedance spectroscopy (CIS). <i>Electrochimica Acta</i> , <b>2013</b> , 105, 514-523	6.7	15
158	A quasi-continuum hydrodynamic model for slit shaped nanochannel flow. <i>Journal of Chemical Physics</i> , <b>2013</b> , 139, 074109	3.9	36
157	The role of external defects in chemical sensing of graphene field-effect transistors. <i>Nano Letters</i> , <b>2013</b> , 13, 1962-8	11.5	107
156	Simulation and experiment of substrate aluminum grain orientation dependent self-ordering in anodic porous alumina. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 204903	2.5	15
155	Molecular and continuum hydrodynamics in graphene nanopores. <i>RSC Advances</i> , <b>2013</b> , 3, 9365	3.7	89
154	Electrochemistry at the edge of a single graphene layer in a nanopore. <i>ACS Nano</i> , <b>2013</b> , 7, 834-43	16.7	95
153	A combined quasi-continuum/Langevin equation approach to study the self-diffusion dynamics of confined fluids. <i>Journal of Chemical Physics</i> , <b>2013</b> , 138, 124109	3.9	5



152	Graphitic carbon-water nonbonded interaction parameters. <i>Journal of Physical Chemistry B</i> , <b>2013</b> , 117, 8802-13	3.4	109
151	Phonon mediated loss in a graphene nanoribbon. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 084302	2.5	6
150	Modeling mechanophore activation within a crosslinked glassy matrix. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 023504	2.5	41
149	Mechanical behavior of water filled C60. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 263112	3.4	6
148	Nonlinear Electrokinetic Transport Under Combined ac and dc Fields in Micro/Nanofluidic Interface Devices. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , <b>2013</b> , 135,	2.1	8
147	Resonant MEMS Mass Sensors for Measurement of Microdroplet Evaporation. <i>Journal of Microelectromechanical Systems</i> , <b>2012</b> , 21, 702-711	2.5	40
146	. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2012</b> , 60, 301-309	4.9	63
145	Understanding anomalous current-voltage characteristics in microchannel-nanochannel interconnect devices. <i>Journal of Colloid and Interface Science</i> , <b>2012</b> , 384, 162-71	9.3	20
144	Coarse-grained potential models for structural prediction of carbon dioxide (CO2) in confined environments. <i>Journal of Chemical Physics</i> , <b>2012</b> , 136, 024102	3.9	23
143	Stacked graphene-Al2O3 nanopore sensors for sensitive detection of DNA and DNA-protein complexes. <i>ACS Nano</i> , <b>2012</b> , 6, 441-50	16.7	173
142	Coarse-Grained Potential Model for Structural Prediction of Confined Water. <i>Journal of Chemical Theory and Computation</i> , <b>2012</b> , 8, 1828-40	6.4	31
141	Thermodynamic state-dependent structure-based coarse-graining of confined water. <i>Journal of Chemical Physics</i> , <b>2012</b> , 137, 214707	3.9	21
140	Mechanical properties of graphene under shear deformation. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 013113	3.4	243
139	Spatial diffusion of water in carbon nanotubes: from fickian to ballistic motion. <i>Journal of Physical Chemistry B</i> , <b>2011</b> , 115, 12145-9	3.4	115
138	Atomistic simulations on the mechanical properties of a silicon nanofilm covered with graphene. <i>Computational Materials Science</i> , <b>2011</b> , 50, 3063-3066	3.2	17
137	Uncertainty quantification of MEMS using a data-dependent adaptive stochastic collocation method. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2011</b> , 200, 3169-3182	5.7	4
136	Akhiezer damping in nanostructures. <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	42
135	Gated transport in nanofluidic devices. <i>Microfluidics and Nanofluidics</i> , <b>2011</b> , 11, 297-306	2.8	40

134	A conformal mapping-based approach for fast two-dimensional FEM electrostatic analysis of MEMS devices. <i>International Journal of Numerical Modelling: Electronic Networks, Devices and Fields</i> , <b>2011</b> , 24, 194-206	1	5
133	Weighted Smolyak algorithm for solution of stochastic differential equations on non-uniform probability measures. <i>International Journal for Numerical Methods in Engineering</i> , <b>2011</b> , 85, 1365-1389	2.4	11
132	Mechanistic Analysis of Gas Enrichment in Gas/Water Mixtures near Extended Surfaces. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 17495-17502	3.8	7
131	Inducing electronic changes in graphene through silicon (100) substrate modification. <i>Nano Letters</i> , <b>2011</b> , 11, 2735-42	11.5	50
130	Self-assembly of graphenes. <i>Surface Science</i> , <b>2011</b> , 605, 1616-1620	1.8	15
129	DNA translocation through an array of kinked nanopores. <i>Nature Materials</i> , <b>2010</b> , 9, 667-75	27	98
128	Separation of gases from gas/water mixtures using carbon nanotubes. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 133108	3.4	28
127	Water film thickness-dependent conformation and diffusion of single-strand DNA on poly(ethylene glycol)-silane surface. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 123703	3.4	8
126	Order reduction of finite element models of passive electromagnetic structures with statistical variability <b>2010</b> ,		1
125	A sparse grid based collocation method for model order reduction of finite element approximations of passive electromagnetic devices under uncertainty <b>2010</b> ,		12
124	Measurement of adherent cell mass and growth. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2010</b> , 107, 20691-6	11.5	153
123	A transferable coarse-grained potential to study the structure of confined, supercritical Lennard-Jones fluids. <i>Journal of Chemical Physics</i> , <b>2010</b> , 132, 044703	3.9	18
122	Temperature and strain-rate dependent fracture strength of graphene. <i>Journal of Applied Physics</i> , <b>2010</b> , 108, 064321	2.5	258
121	Water Transport through Ultrathin Graphene. <i>Journal of Physical Chemistry Letters</i> , <b>2010</b> , 1, 1590-1594	6.4	399
120	Suk and Aluru Reply:. <i>Physical Review Letters</i> , <b>2010</b> , 105,	7.4	9
119	Ordering-Induced Fast Diffusion of Nanoscale Water Film on Graphene. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 2595-2599	3.8	43
118	Corrections to Analysis of Hybrid Electrothermomechanical Microactuators With Integrated Electrothermal and Electrostatic Actuation [Oct 09 1126-1136]. <i>Journal of Microelectromechanical Systems</i> , <b>2010</b> , 19, 430-430	2.5	
117	A data-driven stochastic collocation approach for uncertainty quantification in MEMS. <i>International Journal for Numerical Methods in Engineering</i> , <b>2010</b> , 83, 575-597	2.4	18

116	Analysis of Hybrid Electrothermomechanical Microactuators With Integrated Electrothermal and Electrostatic Actuation. <i>Journal of Microelectromechanical Systems</i> , <b>2009</b> , 18, 1126-1136	2.5	18
115	Detection of defective DNA in carbon nanotubes by combined molecular dynamics/tight-binding technique. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 113116	3.4	6
114	Size and surface orientation effects on thermal expansion coefficient of one-dimensional silicon nanostructures. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 104309	2.5	12
113	Temperature-dependent wettability on a titanium dioxide surface. <i>Molecular Simulation</i> , <b>2009</b> , 35, 31-37		38
112	An empirical potential based quasicontinuum theory for structural prediction of water. <i>Journal of Chemical Physics</i> , <b>2009</b> , 131, 184703	3.9	3
111	A node-based agglomeration AMG solver for linear elasticity in thin bodies. <i>Communications in Numerical Methods in Engineering</i> , <b>2009</b> , 25, 219-236		5
110	A compact model for dielectric charging in RF MEMS capacitive switches. <i>International Journal of RF and Microwave Computer-Aided Engineering</i> , <b>2009</b> , 19, 197-203	1.5	7
109	A methodology for fast finite element modeling of electrostatically actuated MEMS. <i>International Journal for Numerical Methods in Engineering</i> , <b>2009</b> , 77, 1789-1808	2.4	7
108	A domain adaptive stochastic collocation approach for analysis of MEMS under uncertainties. <i>Journal of Computational Physics</i> , <b>2009</b> , 228, 7662-7688	4.1	65
107	A chloride ion-selective boron nitride nanotube. <i>Chemical Physics Letters</i> , <b>2009</b> , 478, 185-190	2.5	28
106	Size and chirality dependent elastic properties of graphene nanoribbons under uniaxial tension. <i>Nano Letters</i> , <b>2009</b> , 9, 3012-5	11.5	653
105	Effect of cross-linking on the diffusion of water, ions, and small molecules in hydrogels. <i>Journal of Physical Chemistry B</i> , <b>2009</b> , 113, 3512-20	3.4	132
104	Pull-in/out analysis of nano/microelectromechanical switches with defective oxide layers. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 073112	3.4	6
103	Stochastic Analysis of Electrostatic MEMS Subjected to Parameter Variations. <i>Journal of Microelectromechanical Systems</i> , <b>2009</b> , 18, 1454-1468	2.5	32
102	Effect of induced electric field on single-file reverse osmosis. <i>Physical Chemistry Chemical Physics</i> , <b>2009</b> , 11, 8614-9	3.6	38
101	Water phase transition induced by a Stone-Wales defect in a boron nitride nanotube. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 13649-52	16.4	21
100	Structure and Dynamics of Water Confined in a Boron Nitride Nanotube. <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 1812-1818	3.8	136
99	Diffusion of water submonolayers on hydrophilic surfaces. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 253104	3.4	16

98	Multiscale electrostatic analysis of silicon nanoelectromechanical systems (NEMS) via heterogeneous quantum models. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	12
97	Why are carbon nanotubes fast transporters of water?. <i>Nano Letters</i> , <b>2008</b> , 8, 452-8	11.5	629
96	Fast reverse osmosis using boron nitride and carbon nanotubes. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 133120.4	10.4	108
95	Perturbation of Microfluidic Transport Following Electrokinetic Injection through a Nanocapillary Array Membrane: Injection and Biphasic Recovery. <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 19242-19247	2.8	6
94	Nonlinear Dynamics of Electrostatically Actuated MEMS. <i>Computational and Experimental Methods in Structures</i> , <b>2008</b> , 235-286		
93	Carbon nanotube screening effects on the water-ion channels. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 43122	3.4	12
92	Pumping of confined water in carbon nanotubes by rotation-translation coupling. <i>Physical Review Letters</i> , <b>2008</b> , 101, 064502	7.4	126
91	Multiscale mechanical analysis of silicon nanostructures by combined finite temperature models. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2008</b> , 197, 3215-3224	5.7	6
90	Stochastic modeling of coupled electromechanical interaction for uncertainty quantification in electrostatically actuated MEMS. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2008</b> , 197, 3456-3471	5.7	16
89	Charge distribution on thin semiconducting silicon nanowires. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2008</b> , 197, 3366-3377	5.7	7
88	Induced electrokinetic transport in micro-nanofluidic interconnect devices. <i>Langmuir</i> , <b>2007</b> , 23, 13209-224		73
87	A semi-local quasi-harmonic model to compute the thermodynamic and mechanical properties of silicon nanostructures. <i>Journal of Physics Condensed Matter</i> , <b>2007</b> , 19, 226202	1.8	2
86	Modeling of dielectric charging in RF MEMS capacitive switches. <i>Microwave and Optical Technology Letters</i> , <b>2007</b> , 49, 3188-3192	1.2	16
85	Surface diffusion of n-alkanes: Mechanism and anomalous behavior. <i>Chemical Physics Letters</i> , <b>2007</b> , 447, 310-315	2.5	14
84	A stochastic Lagrangian approach for geometrical uncertainties in electrostatics. <i>Journal of Computational Physics</i> , <b>2007</b> , 226, 156-179	4.1	23
83	Interatomic potential-based semiclassical theory for Lennard-Jones fluids. <i>Journal of Chemical Physics</i> , <b>2007</b> , 127, 174701	3.9	33
82	Self-consistent molecular dynamics formulation for electric-field-mediated electrolyte transport through nanochannels. <i>Physical Review E</i> , <b>2007</b> , 76, 011202	2.4	21
81	Combined semiclassical and effective-mass Schrödinger approach for multiscale analysis of semiconductor nanostructures. <i>Physical Review B</i> , <b>2007</b> , 76,	3.3	6

80	Water permeation through a subnanometer boron nitride nanotube. <i>Journal of the American Chemical Society</i> , <b>2007</b> , 129, 2748-9	16.4	169
79	A hybrid full-Lagrangian technique for the static and dynamic analysis of magnetostatic MEMS. <i>Journal of Micromechanics and Microengineering</i> , <b>2006</b> , 16, 2646-2658	2	8
78	Coupling of hierarchical fluid models with electrostatic and mechanical models for the dynamic analysis of MEMS. <i>Journal of Micromechanics and Microengineering</i> , <b>2006</b> , 16, 1705-1719	2	23
77	Carbon nanotubes as nanoelectromechanical systems components <b>2006</b> , 361-488		1
76	Theory of thermoelastic damping in electrostatically actuated microstructures. <i>Physical Review B</i> , <b>2006</b> , 74,	3.3	63
75	Effect of size-asymmetric electrolyte on single-file osmosis. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 064107	3.4	6
74	Ion separation using a Y-junction carbon nanotube. <i>Nanotechnology</i> , <b>2006</b> , 17, 895-900	3.4	91
73	Quasiharmonic models for the calculation of thermodynamic properties of crystalline silicon under strain. <i>Journal of Applied Physics</i> , <b>2006</b> , 99, 064314	2.5	51
72	Molecular understanding of osmosis in semipermeable membranes. <i>Physical Review Letters</i> , <b>2006</b> , 97, 024501	7.4	61
71	Differential ion transport induced electroosmosis and internal recirculation in heterogeneous osmosis membranes. <i>Nano Letters</i> , <b>2006</b> , 6, 995-9	11.5	31
70	Effect of quantum partial charges on the structure and dynamics of water in single-walled carbon nanotubes. <i>Journal of Chemical Physics</i> , <b>2006</b> , 125, 114701	3.9	102
69	Algorithms in FastStokes and Its Application to Micromachined Device Simulation. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , <b>2006</b> , 25, 248-257	2.5	12
68	U -sequence in electrostatic microelectromechanical systems (MEMS). <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2006</b> , 462, 3435-3464	2.4	9
67	Complex nonlinear oscillations in electrostatically actuated microstructures. <i>Journal of Microelectromechanical Systems</i> , <b>2006</b> , 15, 355-369	2.5	66
66	Finite-temperature quasicontinuum method for multiscale analysis of silicon nanostructures. <i>Physical Review B</i> , <b>2006</b> , 74,	3.3	79
65	Hierarchical multiscale simulation of electrokinetic transport in silica nanochannels at the point of zero charge. <i>Langmuir</i> , <b>2006</b> , 22, 9041-51	4	60
64	A Lagrangian approach for quantum-mechanical electrostatic analysis of deformable silicon nanostructures. <i>Engineering Analysis With Boundary Elements</i> , <b>2006</b> , 30, 925-939	2.6	8
63	Applications in micro- and nanoelectromechanical systems. <i>Engineering Analysis With Boundary Elements</i> , <b>2006</b> , 30, 909	2.6	5

62	Calculation of thermodynamic and mechanical properties of silicon nanostructures using the local phonon density of states. <i>Physical Review B</i> , <b>2006</b> , 74,	3.3	23
61	Combined circuit/device modeling and simulation of integrated microfluidic systems. <i>Journal of Microelectromechanical Systems</i> , <b>2005</b> , 14, 81-95	2.5	46
60	Scaling of electrokinetic transport in nanometer channels. <i>Langmuir</i> , <b>2005</b> , 21, 8972-7	4	57
59	Development and modeling of electrically triggered hydrogels for microfluidic applications. <i>Journal of Microelectromechanical Systems</i> , <b>2005</b> , 14, 1198-1207	2.5	58
58	Physical models for coupled electromechanical analysis of silicon nanoelectromechanical systems. <i>Journal of Applied Physics</i> , <b>2005</b> , 97, 114304	2.5	31
57	Accurate Simulation of RF MEMS VCO performance including phase noise. <i>Journal of Microelectromechanical Systems</i> , <b>2005</b> , 14, 313-325	2.5	6
56	Atomistic simulation of KCl transport in charged silicon nanochannels: Interfacial effects. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2005</b> , 267, 103-109	5.1	79
55	New approximations and collocation schemes in the finite cloud method. <i>Computers and Structures</i> , <b>2005</b> , 83, 1366-1385	4.5	25
54	Modeling and Simulation of Ionic Currents in Three-Dimensional Microfluidic Devices with Nanofluidic Interconnects. <i>Journal of Nanoparticle Research</i> , <b>2005</b> , 7, 507-516	2.3	50
53	Surface-charge-induced asymmetric electrokinetic transport in confined silicon nanochannels. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 143105	3.4	45
52	Mechanism for stamp collapse in soft lithography. <i>Applied Physics Letters</i> , <b>2005</b> , 87, 251925	3.4	53
51	Complex oscillations and chaos in electrostatic microelectromechanical systems under superharmonic excitations. <i>Physical Review Letters</i> , <b>2005</b> , 94, 204101	7.4	45
50	Electrolytic transport through a synthetic nanometer-diameter pore. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 10445-50	11.5	198
49	Hybrid techniques for electrostatic analysis of nanoelectromechanical systems. <i>Journal of Applied Physics</i> , <b>2004</b> , 96, 2221-2231	2.5	13
48	Static and Dynamic Analysis of Carbon Nanotube-Based Switches. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , <b>2004</b> , 126, 230-237	1.8	84
47	Charge inversion and flow reversal in a nanochannel electro-osmotic flow. <i>Physical Review Letters</i> , <b>2004</b> , 92, 198301	7.4	182
46	Numerical analysis of 3D electrostatics of deformable conductors using a Lagrangian approach. <i>Engineering Analysis With Boundary Elements</i> , <b>2004</b> , 28, 583-591	2.6	14
45	A chemo-electro-mechanical mathematical model for simulation of pH sensitive hydrogels. <i>Mechanics of Materials</i> , <b>2004</b> , 36, 395-410	3.3	85

44	A fast boundary cloud method for 3D exterior electrostatic analysis. <i>International Journal for Numerical Methods in Engineering</i> , <b>2004</b> , 59, 2019-2046	2.4	3
43	Positivity conditions in meshless collocation methods. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2004</b> , 193, 1171-1202	5.7	56
42	Full-Lagrangian schemes for dynamic analysis of electrostatic MEMS. <i>Journal of Microelectromechanical Systems</i> , <b>2004</b> , 13, 737-758	2.5	106
41	Multiscale Simulation of Electroosmotic Transport Using Embedding Techniques. <i>International Journal for Multiscale Computational Engineering</i> , <b>2004</b> , 2, 173-188	2.4	24
40	Simulating Ion Permeation Through the ompF Porin Ion Channel Using Three-Dimensional Drift-Diffusion Theory. <i>Journal of Computational Electronics</i> , <b>2003</b> , 2, 29-47	1.8	32
39	A fast boundary cloud method for exterior 2D electrostatic analysis. <i>International Journal for Numerical Methods in Engineering</i> , <b>2003</b> , 56, 239-260	2.4	11
38	Transient analysis of electro-osmotic transport by a reduced-order modelling approach. <i>International Journal for Numerical Methods in Engineering</i> , <b>2003</b> , 56, 1023-1050	2.4	13
37	Improved multi-level Newton solvers for fully coupled multi-physics problems. <i>International Journal for Numerical Methods in Engineering</i> , <b>2003</b> , 58, 463-480	2.4	9
36	Coupling of the mesh-free finite cloud method with the boundary element method: a collocation approach. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2003</b> , 192, 2355-2375	5.7	20
35	Dispersion control in nano-channel systems by localized potential variations. <i>Sensors and Actuators A: Physical</i> , <b>2003</b> , 104, 268-274	3.9	13
34	A boundary cloud method with a cloud-by-cloud polynomial basis. <i>Engineering Analysis With Boundary Elements</i> , <b>2003</b> , 27, 57-71	2.6	25
33	Electrolytic Transport in Modified Carbon Nanotubes. <i>Nano Letters</i> , <b>2003</b> , 3, 1399-1403	11.5	164
32	Surface-Modified Hydrogels for Chemoselective Bioconjugation. <i>Macromolecules</i> , <b>2003</b> , 36, 8846-8852	5.5	6
31	Anomalously Immobilized Water: A New Water Phase Induced by Confinement in Nanotubes. <i>Nano Letters</i> , <b>2003</b> , 3, 589-592	11.5	377
30	Efficient mixed-domain analysis of electrostatic MEMS. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , <b>2003</b> , 22, 1228-1242	2.5	35
29	Atypical Dependence of Electroosmotic Transport on Surface Charge in a Single-wall Carbon Nanotube. <i>Nano Letters</i> , <b>2003</b> , 3, 1013-1017	11.5	78
28	Mathematical Modeling and Simulation of Dissolvable Hydrogels. <i>Journal of Aerospace Engineering</i> , <b>2003</b> , 16, 55-64	1.4	19
27	Ion concentrations and velocity profiles in nanochannel electroosmotic flows. <i>Journal of Chemical Physics</i> , <b>2003</b> , 118, 4692-4701	3.9	263

26	A Combined Continuum/DSMC Technique for Multiscale Analysis of Microfluidic Filters. <i>Journal of Computational Physics</i> , <b>2002</b> , 178, 342-372	4.1	67
25	Boundary cloud method: a combined scattered point/boundary integral approach for boundary-only analysis. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2002</b> , 191, 2337-2370	5.7	46
24	Parameterization of Continuum Theories for Single Wall Carbon Nanotube Switches by Molecular Dynamics Simulations. <i>Journal of Computational Electronics</i> , <b>2002</b> , 1, 313-316	1.8	25
23	Three-Dimensional Continuum Simulations of Ion Transport Through Biological Ion Channels: Effect of Charge Distribution in the Constriction Region of Porin. <i>Journal of Computational Electronics</i> , <b>2002</b> , 1, 335-340	1.8	20
22	ATOMISTIC CAPACITANCE OF A NANOTUBE ELECTROMECHANICAL DEVICE. <i>International Journal of Nanoscience</i> , <b>2002</b> , 01, 337-346	0.6	19
21	Efficient mixed-domain analysis of electrostatic MEMS. <i>IEEE/ACM International Conference on Computer-Aided Design, Digest of Technical Papers</i> , <b>2002</b> ,		10
20	A compact model for electroosmotic flows in microfluidic devices. <i>Journal of Micromechanics and Microengineering</i> , <b>2002</b> , 12, 625-635	2	47
19	A Lagrangian approach for electrostatic analysis of deformable conductors. <i>Journal of Microelectromechanical Systems</i> , <b>2002</b> , 11, 245-254	2.5	39
18	Equilibrium swelling and kinetics of pH-responsive hydrogels: models, experiments, and simulations. <i>Journal of Microelectromechanical Systems</i> , <b>2002</b> , 11, 544-555	2.5	322
17	Calculation of pull-in voltages for carbon-nanotube-based nanoelectromechanical switches. <i>Nanotechnology</i> , <b>2002</b> , 13, 120-131	3.4	360
16	Modeling of hydrogel swelling in buffered solutions <b>2001</b> ,		1
15	Meshless analysis of piezoelectric devices. <i>Computational Mechanics</i> , <b>2001</b> , 27, 23-36	4	58
14	Linear, nonlinear and mixed-regime analysis of electrostatic MEMS. <i>Sensors and Actuators A: Physical</i> , <b>2001</b> , 91, 278-291	3.9	42
13	Finite cloud method: a true meshless technique based on a fixed reproducing kernel approximation. <i>International Journal for Numerical Methods in Engineering</i> , <b>2001</b> , 50, 2373-2410	2.4	118
12	. <i>Journal of Microelectromechanical Systems</i> , <b>2001</b> , 10, 538-549	2.5	20
11	Simulation of Biological Ionic Channels by Technology Computer-Aided Design. <i>VLSI Design</i> , <b>2001</b> , 13, 179-187		4
10	A point collocation method based on reproducing kernel approximations. <i>International Journal for Numerical Methods in Engineering</i> , <b>2000</b> , 47, 1083-1121	2.4	167
9	Meshless analysis of steady-state electro-osmotic transport. <i>Journal of Microelectromechanical Systems</i> , <b>2000</b> , 9, 435-449	2.5	46



8	A reproducing kernel particle method for meshless analysis of microelectromechanical systems. <i>Computational Mechanics</i> , <b>1999</b> , 23, 324-338	4	50
7	A multilevel Newton method for mixed-energy domain simulation of MEMS. <i>Journal of Microelectromechanical Systems</i> , <b>1999</b> , 8, 299-308	2.5	26
6	Simulating the behavior of MEMS devices: computational methods and needs. <i>IEEE Computational Science and Engineering</i> , <b>1997</b> , 4, 30-43		93
5	An efficient numerical technique for electrochemical simulation of complicated microelectromechanical structures. <i>Sensors and Actuators A: Physical</i> , <b>1997</b> , 58, 1-11	3.9	78
4	Simulation of the hydrodynamic device model on distributed memory parallel computers. <i>IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems</i> , <b>1996</b> , 15, 1029-1047	2.5	3
3	Numerical solution of two-carrier hydrodynamic semiconductor device equations employing a stabilized finite element method. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>1995</b> , 125, 187-220	5.7	13
2	AN ANALYSIS OF THE HYDRODYNAMIC SEMICONDUCTOR DEVICE MODEL BOUNDARY CONDITIONS AND SIMULATIONS. <i>COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering</i> , <b>1995</b> , 14, 157-185	0.7	7
1	A finite element formulation for the hydrodynamic semiconductor device equations. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>1993</b> , 107, 269-298	5.7	19